



MASSACHUSETTS WATER RESOURCES AUTHORITY

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Boston, MA 02129

Frederick A. Laskey
Executive Director

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ADMINISTRATION, FINANCE & AUDIT COMMITTEE MEETING

Chair: A. Pappastergion
Vice-Chair: M. Gove
Committee Members:
J. Barrera
J. Carroll
K. Cotter
J. Foti
J. Hunt
V. Mannering

to be held on

Wednesday, May 16, 2012

Location: 100 First Avenue, 2nd Floor
Charlestown Navy Yard
Boston, MA 02129

Time: 10:00 a.m.

AGENDA

A. Information

1. Delegated Authority Report – April 2012
2. Updating of MWRA's Radio System
3. FY2012 3rd Quarter Orange Notebook
4. Staffing Study Report: Amawalk Consultant Group, Contract A550
5. FY12 Financial Update and Summary as of April 2012

B. Approvals

1. Bond Defeasance of Future Debt Service

C. Contract Amendments/Change Orders

1. Renewable and Alternative Energy Portfolio Services: Nexant, Inc., Contract RPS-36, Amendment 2
2. Security Guard Services for Various MWRA Facilities: U. S. Security Associates, Inc., Contract EXE-025, Amendment 6

AF&A (i)
5/16/12

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the
Administration, Finance and Audit Committee

April 11, 2012

A meeting of the Administration, Finance and Audit Committee was held on April 11, 2012 at the Authority headquarters in Charlestown. Chairman Pappastergion presided. Present from the Board were Ms. Turner and Messrs. Barrera, Carroll, Foti and Walsh; Messrs. Mannering, Hunt and Gove joined the meeting in progress. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Mike Hornbrook, Rachel Madden, John Vetere, Kristen Patneau, Michele Gillen, Rick Trubiano, Leon Lataille, Kathy Soni, Russ Murray and Bonnie Hale. The meeting was called to order at 10:15 a.m.

Information

Delegated Authority Report – March 2012

There was question and answer on a couple of the delegated authority items.

(The following two items, which were initially listed as informational, were approved and added to the full Board agenda for approval.)

(Messrs. Mannering and Hunt joined the meeting.)

*Deer Island Ambulance Services

The Committee recommended approval of an amendment to the MOA with Winthrop (ref. agenda item A.2).

**Deer Island Wind Turbine/City of Boston

Staff summarized discussions being held with the City of Boston regarding it possibly siting a wind turbine on Deer Island, as the City currently has grant funds for that purpose but no site (and MWRA has FAA approval for additional wind turbines on the island, but no current grant funding). (Mr. Gove joined the meeting.) It was moved, seconded and voted (with Mr. Hunt abstaining) that the Executive Director be authorized to pursue negotiation with the City of Boston in this regard (ref. agenda item A.3).

* Approved as amended at April 11, 2012 Board of Directors meeting.

** Approved as recommended at April 11, 2012 Board of Directors meeting.

On a related note, Ms. Turner asked that MWRA look into the possibility of obtaining a parcel of land adjacent to Deer Island (which is partly in Winthrop and partly in Boston) to put additional wind turbines on. Mr. Laskey indicated that staff will look into it, and return to the Board with a report.

Staff provided updates on the remaining information items, and there was general discussion and question and answer:

- Update on Potential Chelsea Real Property Transactions
- Update on MWRA's Non-Emergency Engine Upgrades Required by EPA National Emissions Standards Regulations
- FY12 Financial Update and Summary as of April 2012.

Contract Awards

**Integrated Financial, Procurement and Human Resources/Payroll Management System Maintenance and Support: Lawson Software, Inc.

There was general discussion and question and answer; the Committee recommended approval of the contract award (ref. agenda item B.1)

**Groundskeeping Services – Metropolitan Boston: UGL Services, Contract OP-183

There was question and answer on bids received and bids withdrawn. Staff stated that they spoke with the above-listed lowest responsive bidder to make sure it understood the scope of work; the company said that it did, and could do the work for the bid price. The Committee recommended approval of the contract award (ref. agenda item B.2).

**Technical Assistant Consultant Services, Hazardous Materials, EnviroSense, Inc. Contract 596TA, and Geosphere Environmental Management, Inc., Contract 595TA

The Committee recommended approval of the two contract awards (ref. agenda item B.3).

The meeting adjourned at 11:25 a.m.

* Approved as recommended at April 11, 2012 Board of Directors meeting.


STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: May 16, 2012
SUBJECT: Delegated Authority Report – April 2012




COMMITTEE: Administration, Finance & Audit

X INFORMATION
VOTE


Rachel C. Madden
Director, Administration & Finance

Barbie Aylward, Administrator
Frank Renda, Data & Information Coordinator
Preparer/Title


Michele Gillen
Deputy Director, Administration & Finance

RECOMMENDATION:

For information only. Attached is a listing of actions taken by the Executive Director under delegated authority for the period April 1, 2012 through April 30, 2012.

This report is broken down into three sections:

- Awards of Construction, non-professional and professional services contracts and change orders and amendments in excess of \$25,000, including credit change orders and amendments in excess of \$25,000;
- Awards of purchase orders in excess of \$25,000; and
- Amendments to the Position Control Register, if applicable.

BACKGROUND:

The Board of Directors' Management Policies and Procedures, as amended by the Board's vote on October 14, 2009, delegate authority to the Executive Director to approve the following:

Construction Contract Awards:

Up to \$1 million if the award is to the lowest bidder; or up to \$500,000 if the award is to other than the lowest bidder.

Change Orders:

Up to 25% of the original contract amount or \$250,000, whichever is less, where the change increases the contract amount, and for a term not exceeding an aggregate of six

months; and for any amount and for any term, where the change decreases the contract amount. The delegations for cost increases and time can be restored by Board vote.

Professional Service Contract Awards:

Up to \$100,000 and one year with a firm; or up to \$50,000 and one year with an individual.

Non-Professional Service Contract Awards:

Up to \$250,000 if a competitive procurement process has been conducted, or up to \$100,000 if a procurement process other than a competitive process has been conducted.

Purchase or Lease of Equipment, Materials or Supplies:

Up to \$1 million if the award is to the lowest bidder; or up to \$500,000 if the award is to other than the lowest bidder.

Amendments:

Up to 25% of the original contract amount or \$250,000, whichever is less, and for a term not exceeding an aggregate of six months.

Amendments to the Position Control Register:

Amendments which result only in a change in cost center.

BUDGET/FISCAL IMPACT:

Recommendations for delegated authority approval include information on the budget/fiscal impact related to the action. For items funded through the capital budget, dollars are measured against the approved capital budget. If the dollars are in excess of the amount authorized in the budget, the amount will be covered within the five-year CIP spending cap. For items funded through the Current Expense Budget, variances are reported monthly and year-end projections are prepared at least twice per year. Staff review all variances and projections so that appropriate measures may be taken to ensure that overall spending is within the MWRA budget.

DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT	AMENDMENT/CO	COMPANY	FINANCIAL IMPACT
04/02/12	NORTH DORCHESTER BAY COMBINED SEWER OVERFLOW PROJECT: CONSTRUCTION MANAGEMENT SERVICES REALLOCATION OF AVAILABLE FUNDS WITHIN THE CONTRACT RESULTING IN A CREDIT FOR THE FOLLOWING TASKS: PROJECT MANAGEMENT, RESIDENT INSPECTION, QUALITY ASSURANCE/ENVIRONMENTAL COMPLIANCE, FACILITY TESTING AND START-UP, CM SUPPORT DURING PERFORMANCE CERTIFICATION; INCREASE LEVEL OF EFFORT FOR THE FOLLOWING SUBTASKS: DOCUMENT CONTROL, SCADA/INSTRUMENTATION IMPLEMENTATION, FACILITY HANDBOOKS; EXTEND CONTRACT TERM BY 90 CALENDAR DAYS FROM APRIL 17, 2012 TO JULY 16, 2012	6993	1	HATCH MOTT MACDONALD, MASSACHUSETTS, LLC/ SHAW ENVIRONMENTAL, INC., JOINT VENTURE	(\$1,864,674.00)
04/02/12	PRISON POINT CSO FACILITY HVAC AND ODOR CONTROL SYSTEMS UPGRADE FURNISH AND INSTALL ADDITIONAL DUCTWORK, EXHAUST HOOD AND EXHAUST FAN; INSTALL THE NEW HOT WATER BOILER PIPING, VALVES, SUPPORTS AND APPURTENANCES AT A REVISED LOCATION; FURNISH, INSTALL AND REMOVE A TEMPORARY EXHAUST VENTILATION IN SAMPLE ROOM	6795	6	ARDEN ENGINEERING CONSTRUCTORS, LLC	\$42,731.33
04/02/12	SECTIONS 18, 50 AND 51 REHABILITATION PERFORM ADDITIONAL WORK AT THE INTERSECTION OF BROADWAY AND CEDAR STREET IN SOMERVILLE TO INSTALL METER BY-PASS; REMOVE AND REPLACE DOMESTIC WATER CONNECTIONS FOR 197 AND 207 BOSTON AVENUE IN MEDFORD AND FURNISH AND INSTALL ADDITIONAL PAVING; PERFORM ADDITIONAL WORK ON THE CITY OF MEDFORD'S WATER MAIN LINES AT THE INTERSECTION OF BOSTON AVENUE AND COLLEGE AVENUE; PERFORM ADDITIONAL WORK TO INSTALL MANHOLE ON BOSTON AVENUE; EXCAVATE, REMOVE AND DISPOSE OF LEDGE TO INSTALL PIPE, FITTINGS AND GATE VALVE AT SECTION 18 ON BOSTON AVENUE; PERFORM 10 FEET OF MANUAL EXCAVATION AT METER 32 CONNECTION; PERFORM ADDITIONAL WORK TO INSTALL A 10-INCH IRON PIPE WITH GATE VALVE ON CEDAR STREET IN SOMERVILLE; EXCAVATE, TRANSPORT AND DISPOSE OF 75 TONS OF PETROLEUM-CONTAMINATED SOIL AT A LINED LANDFILL; FURNISH AND INSTALL CONTROL DENSITY FILL AT METER 32 IN LIEU OF EXCAVATED MATERIAL	6394	3	THE DOW COMPANY, INC.	\$244,798.66
04/03/12	EMERGENCY REPAIR OF ANGLE PATTERN SLEEVE VALVE AWARD OF EMERGENCY CONTRACT TO LOWEST RESPONSIVE BIDDER FOR REPAIR OF 30-INCH ANGLE PATTERN SLEEVE VALVE AT WACHUSETT DAM FOR A TERM OF 30 CALENDAR DAYS	OP-189	AWARD	R. ZOPPO CORP.	\$55,000.00
04/03/12	DAM REPAIRS - SUDBURY, WACHUSETT OPEN CHANNEL LOWER, CHESTNUT HILL, WESTON AND FOSS RESERVOIR DAMS CLEAN AND RE-POINT THE RIGHT TRAINING WALL AND GATEHOUSE; CLEAN, RE-POINT AND GROUT THE DOWNSTREAM FACE OF THE FOSS DAM; RE-POINT RIGHT TRAINING WALL CAPSTONES, RE-CAULK UPSTREAM SIDE OF THE DAM EXPANSION JOINTS; GROUT THE DOWNSTREAM FACE OF THE FOSS DAM AND THE RIGHT TRAINING WALL	7194	3	T. FORD COMPANY, INC.	\$70,096.09
04/09/12	CENTRIFUGE SERVICE DEER ISLAND TREATMENT PLANT AWARD OF CONTRACT TO LOWEST RESPONSIVE BIDDER FOR MAINTENANCE REPAIR AND TECHNICAL SUPPORT SERVICES REQUIRED FOR FIVE CENTRIFUGE UNITS LOCATED AT THE DEER ISLAND TREATMENT PLANT FOR A TERM OF 1,095 CALENDAR DAYS	5509	AWARD	ALFA LAVAL, INC.	\$447,000.00
04/13/12	POWER BOILER MAINTENANCE DEER ISLAND TREATMENT PLANT DECREASE FOLLOWING BID ITEMS TO REFLECT ACTUAL QUANTITIES USED: NON-EMERGENCY AND EMERGENCY MAINTENANCE AND REPAIR SERVICES; REPLACEMENT PARTS; MARK-UP ON PARTS; AUTHORIZED FACTORY SERVICE REPRESENTATIVES, MARK-UP ON FACTORY REPRESENTATIVES	5466	4	O'CONNOR CONSTRUCTORS, INC.	(\$227,352.69)
04/13/12	WESTERN OPERATIONS FACILITIES GROUNDSKEEPING SERVICES AWARD OF CONTRACT TO LOWEST RESPONSIVE BIDDER FOR GROUNDSKEEPING SERVICES AT THE JOHN J. CARROLL WATER TREATMENT PLANT, NORUMBEGA COVERED STORAGE FACILITY AND RESERVOIR 3 IN FRAMINGHAM FOR A TERM OF 245 CALENDAR DAYS	OP-184	AWARD	GREENSCAPE LAND DESIGN, INC.	\$48,544.00
04/13/12	KEY PROJECT WORK CREW SERVICES AT DEER ISLAND AND NUT ISLAND AWARD OF CONTRACT TO A NON-PROFIT, DEPARTMENT OF CHILDREN AND FAMILIES APPROVED, ORGANIZATION TO PERFORM ADDITIONAL LANDSCAPING AND PUBLIC ACCESS AREA CLEANING SERVICES AT DEER ISLAND AND NUT ISLAND FOR A TERM OF SIX MONTHS	5511	AWARD	ROCA, INC.	\$50,000.00
04/17/12	HVAC SYSTEMS MAINTENANCE AWARD OF CONTRACT TO LOWEST RESPONSIVE BIDDER TO PROVIDE PREVENTIVE MAINTENANCE AND REPAIR SERVICES FOR THE ENTIRE HVAC SYSTEM AT THE JOHN J. CARROLL WATER TREATMENT PLANT AND 29 OTHER LOCATIONS LOCATED IN WESTERN OPERATIONS FOR A TERM OF 730 CALENDAR DAYS	OP-185	AWARD	ENE SYSTEMS, INC.	\$208,544.00
04/17/12	GROUNDSKEEPING SERVICES DEER ISLAND TREATMENT PLANT AWARD OF CONTRACT TO LOWEST RESPONSIVE BIDDER FOR GROUNDSKEEPING SERVICES AT THE DEER ISLAND TREATMENT PLANT FOR A TERM OF 730 CALENDAR DAYS	5510	AWARD	UGL SERVICES UNICCO OPERATIONS CO.	\$217,980.00
04/30/12	REPLACEMENT OF ELECTRICAL EQUIPMENT IN VARIOUS SEWAGE PUMPING STATIONS FURNISH AND INSTALL ELECTRIC CONDUITS AND CABLES IN THE GENERAL STORAGE ROOM INSTEAD OF ELECTRIC ROOM AT PRISON POINT; REMOVE AND REPLACE EXISTING CABLES AT CARUSO PUMP STATION; EXTEND CONTRACT TERM BY 59 CALENDAR DAYS FROM MARCH 27, 2012 TO MAY 25, 2012	OP-155	1	FALL RIVER ELECTRICAL ASSOCIATES COMPANY, INC.	\$30,380.61

PURCHASING DELEGATED AUTHORITY ITEMS - APRIL 1 - 30, 2012

DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT #	AMENDMENT	COMPANY	FINANCIAL IMPACT
04/02/12	SUPPLY AND DELIVERY OF SODIUM HYDROXIDE - WARD ST AND COLUMBUS PARK AWARD OF A PURCHASE ORDER, TO THE LOWEST RESPONSIVE BIDDER, FOR THE SUPPLY AND DELIVERY OF SODIUM HYDROXIDE TO THE WARD STREET AND COLUMBUS PARK HEADWORKS FACILITIES	WRA-3423		PVS CHEMICAL	\$25,200.00
04/03/12	SUPPLY AND DELIVERY OF ULTRA-LOW-SULFUR #2 DIESEL FUEL - DEER ISLAND AWARD OF A PURCHASE ORDER, TO THE LOWEST RESPONSIVE BIDDER, FOR THE SUPPLY AND DELIVERY OF 252,000 GALLONS OF ULTRA-LOW-SULFUR #2 DIESEL FUEL FOR THE DEER ISLAND ON-SITE THERMAL POWER PLANT, UNDER STATE BLANKET CONTRACT #ENE32	SC-#ENE32		GLOBAL MONTELLO GROUP	\$885,049.20
04/13/12	DISPOSAL/RECYCLING OF EXCAVATED MATERIAL AWARD OF A ONE-YEAR PURCHASE ORDER CONTRACT, TO THE LOWEST RESPONSIVE BIDDER, FOR THE DISPOSAL AND/OR RECYCLING OF EXCAVATED MATERIAL	WRA-3429Q		NORTHGATE RECYCLING, INC	\$49,400.00
04/13/12	FUME HOOD MAINTENANCE AWARD OF A THREE-YEAR SOLE SOURCE PURCHASE ORDER CONTRACT FOR FUME HOOD MAINTENANCE FOR THE CENTRAL LABORATORY AT THE DEER ISLAND TREATMENT PLANT			SIEMENS BUILDING TECHNOLOGIES, INC	\$64,110.00
04/19/12	TRAILER-MOUNTED PORTABLE AIR CONDITIONING UNITS AWARD OF A PURCHASE ORDER, TO THE LOWEST RESPONSIVE BIDDER, FOR TWO TRAILER-MOUNTED PORTABLE AIR CONDITIONING UNITS FOR THE DEER ISLAND TREATMENT PLANT, THAT CAN BE QUICKLY DEPLOYED TO AUGMENT EXISTING FAILING OR NON-FUNCTIONAL AIR CONDITIONING UNITS	WRA-3427		TOPP CONSTRUCTION SERVICES	\$61,932.00
04/27/12	SMART BOARDS AND RELATED SOFTWARE TRAINING AND SUPPORT AWARD OF A PURCHASE ORDER FOR THREE SMART INTERACTIVE BOARDS, ONE LCD SCREEN, SOFTWARE, RELATED EQUIPMENT, TRAINING AND SUPPORT FOR THE CHELSEA EOC, ALLOWING REAL TIME, SECURE LOCAL AND REMOTE INSTANT COMMUNICATION	RFM#166751-Q		AVI, INC	\$42,954.00
04/30/12	LABORATORY INSTRUMENTS MAINTENANCE AWARD OF A SOLE SOURCE PURCHASE ORDER CONTRACT FOR A PREVENTIVE MAINTENANCE SERVICE AGREEMENT FOR THE ORGANICS INSTRUMENTS AT THE CENTRAL LABORATORY AT THE DEER ISLAND TREATMENT PLANT			AGILENT TECHNOLOGIES, INC	\$39,317.10
04/30/12	SUPPLY AND DELIVERY OF SODIUM BISULFITE - DEER ISLAND AWARD OF A ONE-YEAR PURCHASE ORDER CONTRACT, TO THE LOWEST RESPONSIVE BIDDER, FOR THE SUPPLY AND DELIVERY OF SODIUM BISULFITE TO THE DEER ISLAND TREATMENT PLANT	WRA-3442		JONES CHEMICAL, INC	\$176,550.00

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: May 16, 2012
SUBJECT: Updating of MWRA's Radio System



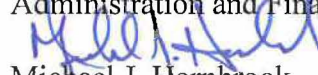
COMMITTEE: Administration, Finance & Audit

X INFORMATION

VOTE



Rachel C. Madden, Director
Administration and Finance



Michael J. Hornbrook
Chief Operating Officer

Marcis Kempe, Director, Ops. Support & Emergency Prep.
Preparer/Title

MWRA's oldest and most-widely used field communication tool is its Motorola radio system, which operates on the Department of Conservation & Recreation (DCR)/State Police 800 MHz Trunked Radio System. MWRA has relied on the DCR system since July 1988 when MWRA's Board first authorized its use. DCR (and its partners, Massachusetts State Police and City of Boston) will be making a modernization transition in 2014, switching from analog to digital signal transmission. DCR will be upgrading the central tower network and plans to broadcast simultaneously in analog and digital for an unspecified but limited period of time after the end of 2014. None of MWRA's radios are currently capable of digital transmission.

Staff are about to procure 250 new radios, at a total cost of \$923,764, to take advantage of aggressive price discounts being offered by Motorola. Because this is an unusual and large purchase, staff wanted to give the Board a more detailed description before it appears in the May Delegated Authority Report next month.

RECOMMENDATION:

For information only.

DISCUSSION:

Two-way radio communication represents the most widely used tool available to operations and maintenance field staff. Radios are installed in most MWRA vehicles. Senior managers, mid-level managers, supervisory staff and foremen are also assigned radios. The radio system allows for broad communication of information to large numbers of staff simultaneously. Radios are used on a daily basis to broadcast water system hydraulic information from the Operations Control Centers in Southboro and Chelsea to Valve, Pipeline, Metering, SCADA, and Inspection crews operating and maintaining the system. In addition, staff use the radio system to manage wet-weather events, normal maintenance functions, crew locations, confined space entry monitoring, and emergency response.

Wastewater operations and maintenance staff, both in the field and at the treatment plants, also rely heavily on the radio system. Radio use is an integral part of MWRA's overall safety program and provides management with access to Local Public Safety Channels for Interagency Communications with Massachusetts Emergency Management Agency (MEMA), State Police, National Guard, DCR and the State Fire Marshal. Radios also provide a means of back-up communication when land line and cell phone systems become overloaded during a national emergency event.

MWRA presently owns approximately 840 Motorola radios. Of this total, 20 are base units, 341 are vehicle-installed mobile units, and 479 are portable, hand-held units (pictured to the right). MWRA is responsible for purchasing and maintaining its inventory of radios. The original cost of each hand-held unit was approximately \$2,000; each vehicle-mounted unit was approximately \$2,700 (including installation), and the base units were almost \$5,000 each (including installation and antenna).



The existing radios were purchased either in an original contract in 1988 when MWRA committed to join the DCR system or in 2001 when 306 of the radios were updated to remove the oldest models from service. Since that time, there have been very few replacements, mainly only as a result of individual radio failures. This means that the majority of MWRA's radios are older, obsolete models, most of which are no longer supported by Motorola for parts or service. MWRA has been able to keep field crews equipped by reassigning an older model unit whenever a radio fails but the available stock will not allow this to continue much longer.

Of greater concern is the fact that DCR has informed MWRA of its plan for a modernization transition in 2014 to switch from analog to digital signal transmission and none of MWRA's radios are currently capable of digital transmission. DCR (and its partners, State Police and City of Boston) will be upgrading its central tower network and plan to broadcast simultaneously in analog and digital for an unspecified but limited period of time after the end of 2014 to allow other users to replace radios to compatible models. This means that MWRA not only needs to begin replacing radios for age and condition reasons, but more importantly, must soon replace its entire radio inventory to maintain functionality after DCR abandons the analog system.

Staff have begun reviewing individual radio assignments. With an increased cellular telephone use for managers, supervisors, and key personnel, staff expect to be able to reduce the original number of 840 total radios needing replacement.

A single large replacement purchase would carry an extremely high cost. Therefore, staff recommend a phased approach to MWRA's radio replacements. All of MWRA's radios are purchased under pricing established by a competitively-bid Commonwealth of Massachusetts contract, which is normally approximately 19% off list price. However, Motorola is offering an end-of-the-year discounted pricing structure under which MWRA can receive a 33% discount if

it purchases a minimum of 250 radios. This pricing offer will end on June 30, 2012. Staff will soon be preparing a staff summary, for approval under delegated authority, for the purchase of 200 mobile vehicle radios and 50 handheld radios in the amount of \$923,764. This will allow for replacement of MWRA's radios in central Massachusetts where existing analog reception is inconsistent, as well as an initial number of radios in MWRA's eastern service area. The remaining radio replacements will be completed in FY13 and FY14, after a comprehensive analysis of MWRA's full needs is completed. Staff will report back to the Board if any significant changes in DCR's plans occur or as warranted.

BUDGET/FISCAL IMPACT:

Although unanticipated, the cost of the initial 250 radio purchase will be absorbed within the Operations Division's FY12 Current Expense Budget. Appropriate funding for remaining radio purchases will be spread out across both the Proposed FY13 and FY14 CEBs.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: May 16, 2012
SUBJECT: FY12 Third Quarter Orange Notebook



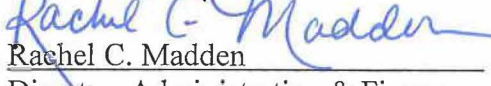
COMMITTEE: Administration, Finance & Audit

X INFORMATION

 VOTE


Michael J. Hornbrook

Chief Operating Officer



Rachel C. Madden

Director, Administration & Finance

Stephen Estes-Smargiassi, Director Planning
Preparer/Title

RECOMMENDATION:

For information only. The Board of Directors Report on Key Indicators of MWRA Performance (the Orange Notebook) is prepared at the close of each quarter of the fiscal year.

DISCUSSION:

The Orange Notebook presents performance indicators for operational, financial, workforce and customer service parameters tracked by MWRA management each month. Significant outcomes for the quarter are noted below.

Watershed and Reservoir Operations

Precipitation in the third quarter was markedly different than the second. Monthly precipitation in each of the months of the third quarter was well under the long term average. In March, Quabbin received only 0.5 inches of precipitation, the lowest since 1985. Total precipitation in the watersheds for the first 3 months of 2012 was only 5.28 inches, only half of the typical 10.52 inches.

In contrast, summer and fall precipitation was well above average. Accordingly, system yield was high over the summer and fall, and then fell sharply in late winter. Nonetheless, Quabbin Reservoir levels stayed within normal operating range, and Quabbin continued to spill continuously through the late fall and winter. (Page 26)

Carroll Water Treatment Plant

As discussed last quarter, the high precipitation and thus higher Wachusett Reservoir yields caused reactive organic carbon loadings to rise (as measured by UV254 absorbance). (Page 25) Higher levels of UV254 require higher disinfection doses. As Wachusett Reservoir watershed yields decreased over the winter, Quabbin water could be transferred, starting a decline in the UV 254 levels over the winter. (Page 26) Staff expect to see a gradual improvement in UV254

levels over the spring and early summer, with a more rapid improvement once the Wachusett Reservoir stratifies this summer and the Quabbin transfer can flow more directly to the intake.

Construction of the UV upgrade at the Carroll Water Treatment Plant continued, with preparatory work on the A side completed on January 20th, and work on the B side continuing through the end of the quarter. As planned, elimination of the extended contactors on the A side meant that when the A side was placed back into service in February, the voluntary target for *Cryptosporidium* inactivation needed to be reduced. The “performance ratio” target was lowered from 1 to 0.6, representing at least 93.7% inactivation. As this is a voluntary target, there are no impacts on regulatory compliance, and DEP approved the reduction during their review. (Page 22) *(With the return to full plant operation in April, the target was raised back up to a PR of 1 (at least 99% inactivation). During cold water season next winter, the target will be reduced again.)*

Deer Island Wastewater Treatment Plant

The lower precipitation also affected wastewater operations. Less precipitation meant less flow at Deer Island, with total plant flow about 25% lower than expected during the quarter. Lower flows result in more concentrated wastewater, as evidenced by the higher than targeted sodium hypochlorite dose. However, the total quantity of disinfectant use was still lower than expected with the lower flows. (Page 2)

Less flow into the DITP resulted in about a 12 percent reduction in total power demand. Total energy cost to date this fiscal year is still about \$432,104 above budget due to higher unit costs than budgeted and higher flows earlier in the year. (Page 2)

Workforce Management

Fewer wet weather events also helped reduce overtime in both field operations and at Deer Island, offsetting higher overtime use earlier in the fiscal year from Hurricane Irene and the October storm. (Page 40)

MASSACHUSETTS WATER RESOURCES AUTHORITY

Board of Directors Report

on

Key Indicators of MWRA Performance

for

Third Quarter FY2012

Q1	Q2	Q3	Q4



Frederick A. Laskey, Executive Director
Michael J. Hornbrook, Chief Operating Officer
May 16, 2012

**Board of Directors Report on Key Indicators of MWRA Performance
for
Third Quarter FY2012**

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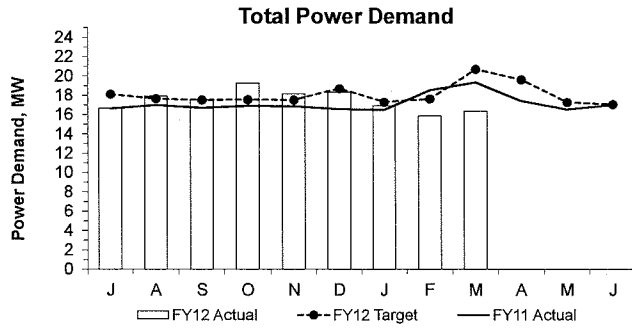
This quarterly report is prepared by MWRA staff to track a variety of MWRA performance measures for routine review by MWRA's board of directors. The content and format of this report is expected to develop as time passes. Information is reported on a preliminary basis as appropriate and available for internal management use and is subject to correction and clarification.

Frederick A. Laskey, Executive Director
Michael J. Hornbrook, Chief Operating Officer
May 16, 2012

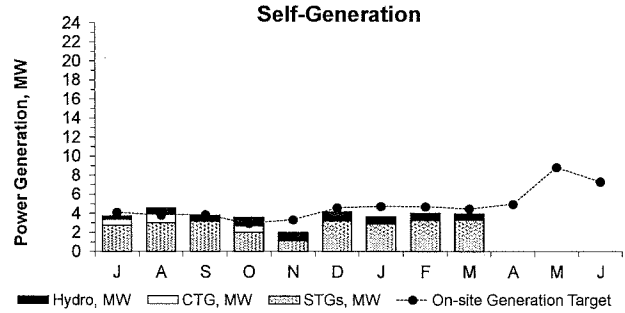
OPERATIONS AND MAINTENANCE

Deer Island Operations

3rd Quarter - FY12

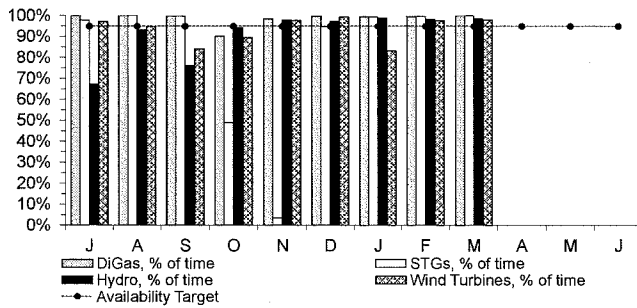


Total Power Demand in the 3rd Quarter was 12% lower than the target for the quarter as Total Plant Flow was 25% lower-than-expected. Total Power Demand was 10% lower than in FY11 for the same period.



Power generated on-site was below target by 9% for the 3rd Quarter. Generation by the Hydro Turbines was 11% higher than target for the quarter and generation by the Wind Turbines met target. Generation by the STGs and Solar Panels were 12% and 17% lower than their targets, respectively. Even though the STGs were available for operation all quarter, performance testing being conducted within the Thermal Power Plant in January and February required the STGs to be operated under a variety of operating conditions and resulted in the lower-than-expected power generation by the STGs. Monthly variances for Wind Turbine and Solar Panel generation are to be expected for the time being as we continue to compile historical monthly data for these units. The CTGs operated for routine maintenance/checkout purposes and for annual compliance opacity testing on February 8.

Self-Generation Equipment On-Line (% of Time in Operation)

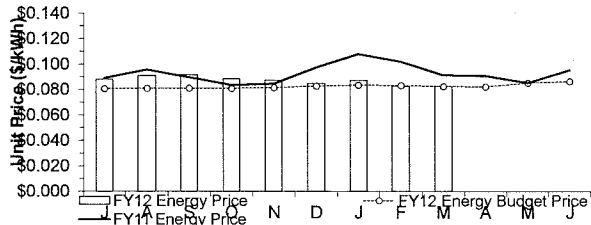


The DiGas, STGs, and Hydro Turbine systems all met their 95% Availability Target for the 3rd Quarter. The Wind Turbines' Availability for the 3rd Quarter was just shy of the 95% target due to lower than target availability in January as a result of scheduled maintenance on the Wind Turbines in the South Parking Lot. Also, Wind Turbine #2 in the South Parking Lot remained offline for a number of additional days following the maintenance as repairs were made to the yaw motors.

Note: Power generation by the Solar Panels and the Wind Turbines are not included in the graph as the amounts generated cannot be seen within the current scale of this graph; 0.232 MW was generated by the Solar Panels and 0.794 MW was generated by the Wind Turbines in the 3rd Quarter.

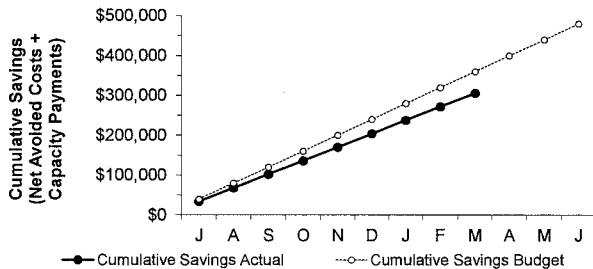
Total Energy Pricing

(includes spot energy price, ancillary costs, and NSTAR's transmission & distribution costs)



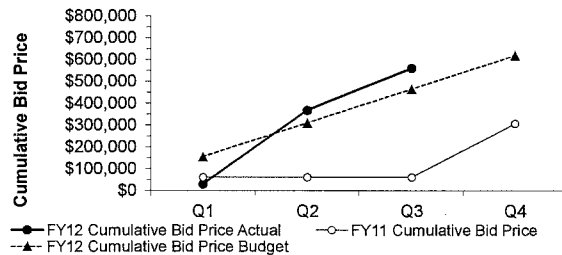
Under DI's energy supply contract, a block portion of DI's energy is a fixed rate and the variable load above the block is purchased in real time. Overall, the total energy price in the 3rd Quarter was within 1% of the FY12 budget estimate and 16% lower than the 3rd Quarter FY11 actual. The total energy price includes a fixed block price, spot energy price, transmission & distribution charges, and ancillary charges. Please note the March total energy price is an estimate as the invoice has not been received. Year-to-date costs are estimated at approximately \$432,104 more than budgeted through the 3rd Quarter of FY12 due to higher-than-expected total energy prices through the first seven (7) months of FY12 (once the actual total energy prices were available) and also to higher-than-expected power demand in four (4) of the nine (9) months in this fiscal year.

Load Response Program



Deer Island participates in the ISO-New England Load Response Programs. By agreeing to have its Combustion Turbine Generators available to run and thus relieve the New England energy grid of Deer Island's load during times of high energy demand or high pricing, MWRA receives monthly Capacity Payments from ISO-NE. When it runs the CTGs at ISO-NE's request, MWRA receives energy payments from ISO-NE and also avoids NSTAR transmission and distribution charges. "Net Avoided Cost" is the avoided NSTAR payments offset by the cost of running the CTGs, and the energy payments from ISO-NE. Cumulative savings are the sum of Net Avoided Costs and monthly Capacity Payments - totaling \$305,896 through March compared to estimated budget savings of \$359,919.

MA Renewable Portfolio Standard

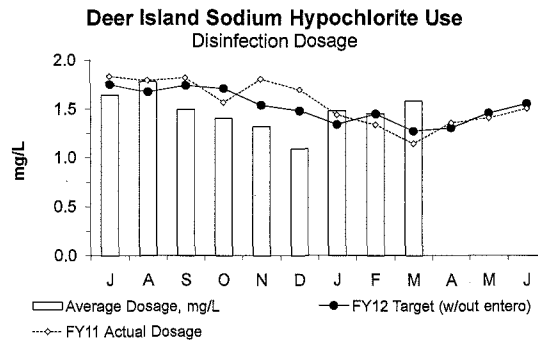
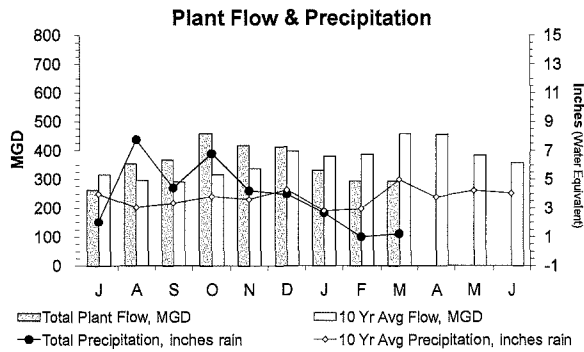


Bids were awarded in January for the sale of 98 Solar Renewable Energy Certificates (S-RECs) for a total value of \$45,363 and 6,204 Class I RECs for a total value of \$156,575. The value of the S-RECs is approximately 18 times higher than the current value of Class I RECs (for hydro and wind).

REC prices reflect the bid prices on the date that bids are accepted. Cumulative bid price reflects the total value of bids received to date. The FY12 budgeted cumulative bid estimate through the 3rd Quarter is \$464,598 while the actual bid total is \$560,685.

Deer Island Operations

3rd Quarter - FY12



The Total Plant Flow for the 3rd Quarter was 25% lower than target (306.2 MGD actual vs. 408.5 MGD expected) as precipitation was 55% lower-than-expected for the quarter (4.88 inches actual vs. 10.76 inches expected). Total Plant Flow and precipitation were below target for each month this quarter. Precipitation was 72% lower-than-expected during the February through March period alone resulting in mild to moderate drought conditions in the region by the end of the quarter.

The disinfection dosing rate was 11% higher than the target for the 3rd Quarter. The average dosing rate for the quarter was 1.50 mg/L compared to the target of 1.35 mg/L. Dosing was higher-than-expected due to a higher chlorine demand as a result of stronger wastewater from the lower plant flows over the last several months. However, actual sodium hypochlorite usage for disinfection in gallons was 16.5% lower than target due to the lower plant flow.

The overall disinfection dosing rate (target and actual) is dependent on plant flow, target effluent total chlorine residual levels, effluent quality and NPDES permit levels for fecal coliform.

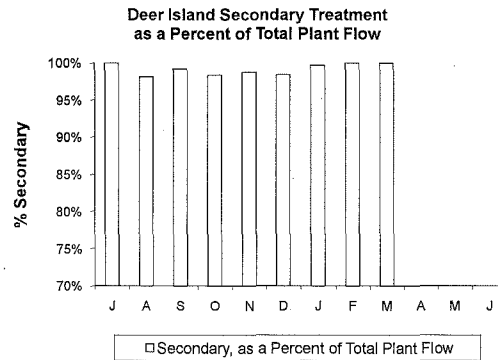
Secondary Blending Events

Month	Count of Blending Events	Count of Blending Events Due to Rain	Count of Blending Events Due to Non-Rain-Related Events	Secondary, as a Percent of Total Plant Flow	Total Hours Blended During Month
J	0	0	0	100.0%	0.00
A	7	7	0	98.1%	27.25
S	3	3	0	99.2%	10.25
O	10	10	0	98.4%	43.94
N	5	5	0	98.8%	20.72
D	2	3	0	98.4%	28.35
J	2	2	0	99.7%	6.48
F	0	0	0	100.0%	0.00
M	0	0	0	100.0%	0.00
A					
M					
J					
Total	29	30	0	99.1%	137.0

There were only a total of two (2) separate secondary blending events during the 3rd Quarter and both occurred in the month of January due to high plant flows resulting from rain events.

Each of the two blending events occurred following a rainfall of approximately one (1) inch of rain. These events resulted in a total of 6.48 hours of blending and 30.1 Mgal of flow blended with secondary effluent.

Secondary permit limits were met at all times during the 3rd Quarter.



Overall, 99.9% of the total plant flow to DITP received Secondary treatment during the 3rd Quarter of FY12. The Maximum Secondary Capacity for the entire quarter was 700 MGD.

Deer Island Operations & Maintenance Report

Environmental/Pumping:

The total precipitation of 4.88 inches for the 3rd Quarter of FY12 was 57% lower than the FY11 Q3 precipitation of 11.24 inches and 55% lower than the 10-year average precipitation of 10.76 inches. Measureable rain fell on 28 of the 91 days in the quarter.

Several DITP low flow records (post startup of the South System Pump Station in July 1998) were broken in March, including the average monthly total plant flow and the average monthly North System influent flow. The 293.7 MGD average monthly total plant flow this March surpassed the previous average monthly low of 294.83 MGD set in March 2006. Also, the 188.96 MGD average North System influent flow this March was lower than the previous low flow record of 196.96 MGD also set back in March 2006. Additionally, several other daily low flow records were broken this March.

The plant achieved a maximum average hourly flow rate of 961.5 MGD on January 12 as a result of a northeastern storm system with high winds and heavy rainfall totaling nearly one inch.

Deer Island Operations

3rd Quarter - FY12

Deer Island Operations & Maintenance Report (continued)

Primary and Secondary Treatment:

The Primary and Secondary Clarifier Rehabilitation Project, MWRA contract #6899, was completed in January, three (3) months ahead of schedule. The primary scope of this \$59.4 million contract project was to replace all the longitudinal chains and sprockets in the Primary and Secondary Clarifiers, as well as replacement of broken flights and other limited repairs.

Odor Control:

A number of air duct expansion joint leaks were identified in the Residuals Odor Control (ROC) process area during a comprehensive survey conducted by DITP staff during the latter part of 2011. These leaks are a safety hazard for staff since the leaks vent within a building or structure. DITP staff is about half way through a significant project replace these leaking expansion joints which began in January and will continue into Quarter 4.

Energy:

A new DITP record for the highest percent of self generation was set on February 26 when the total power generated on-site accounted for 38.2% of Deer Island's total power demand. The previous record was set on June 2, 2011 when self generation accounted for 34.8% of the total power demand. Overall, total power generated on-site accounted for 25.8% of Deer Island's total power demand for the 3rd Quarter. Solar Power generation was 1.83% (0.232 MW) and Wind Turbine generation was 6.25% (0.794 MW) of the total power generated on-site for the 3rd Quarter.

Lumus Construction performed scheduled maintenance on both Wind Turbines in the South Parking Lot during the week of January 23 which required each turbine to be taken offline for several hours during the day while the maintenance was being performed. Damage to one of the two yaw motors on Turbine #2 was discovered during this maintenance. Repairs, including the replacement of both yaw motors (to ensure proper synchronization), were necessary before turbine operation could be restored. A general inspection of the main bearings on both Wind Turbines indicated that they were in good condition; some additional maintenance activities were suggested as a preventative maintenance measure.

The next phase of the major project to replace and upgrade the dump condenser in the Thermal Power Plant continued into the 3rd Quarter and involved the complete replacement of the old dump condenser with its associated equipment. The dump condenser is used to recover excess or spent steam from the boilers and the STGs. Performance testing in the Thermal Power Plant with both the Back Pressure STG and the new dump condenser now fully installed has been completed.

Opacity Testing was performed and completed successfully on February 8 as part of the annual requirements for emissions reporting on the CTGs. The test requires each CTG to be run while a certified "smoke reader" observes the condition of the stack exhaust and records the results.

During the week of February 6, DITP PICS (Process Information Control System) staff witnessed and approved the Factory Acceptance Test on the new Emerson Human Machine Interface ("HMI") project. All hardware and software associated with the new HMI was tested to demonstrate compliance with MWRA specifications. Emerson is now authorized to ship all of the HMI equipment and will be doing so over the next few months to start the installation and commissioning part of the project.

DITP experienced a momentary power surge on March 13 caused by the NSTAR transformer explosion and fire in Boston's Back Bay. The power surge on DITP only resulted in the shutdown of several pieces operating equipment, including the Back Pressure Steam Turbine Generator, an air compressor in the Cryogenic Oxygen Facility, and several mixers in the secondary reactors. The operation of all these units was quickly restored and there were no long term impacts on DITP as a result of this power surge.

MWRA received approval from the Federal Aviation Administration (FAA) for the installation of a wind turbine on DITP to be located on the site previously occupied by the former Construction Support Building.

Phase 4 of the DI Lighting project involving the upgrade to energy efficient light fixtures began in March in the Residuals Centrifuge building. The remaining facilities awaiting this upgrade are the Thermal Power Plant (TPP), the North Main Pump Station (NMPS), and the Reception/Training buildings.

Clinton Wastewater Treatment Plant Operations and Maintenance Report

The final digester rehab project and the new influent gates plans and specifications have been received from the consultant and final review is underway. The preliminary design for the new phosphorous treatment system is well underway. Test borings have been completed; the plant has been surveyed; and wetlands have been delineated and marked. The Aeration System Improvements and Redundant Pumps at the Influent and Intermediate Lift Stations construction job was awarded to R.H. White and a notice to proceed is expected soon. A construction trailer to support the construction staff assigned to oversee the 4 major construction projects planned for the plant over the next 4 years is now on site.

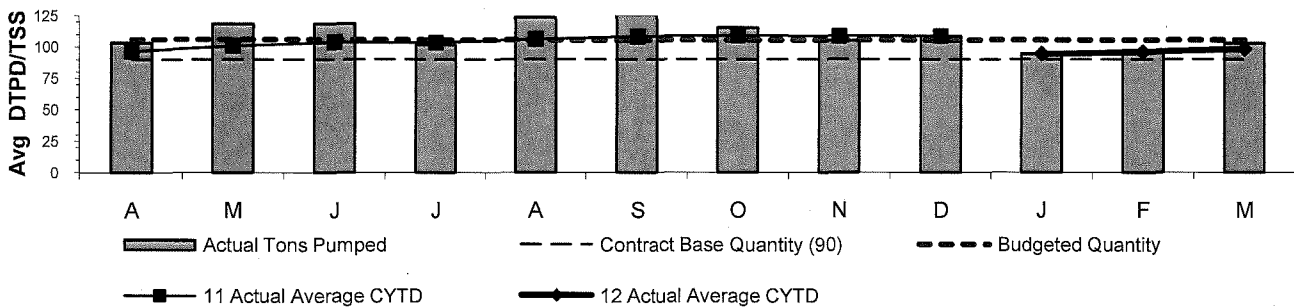
Routine maintenance and repair activities were conducted in the Headworks, Dewatering, Chemical and Digester Buildings.

Deer Island Residuals

3rd Quarter - FY12

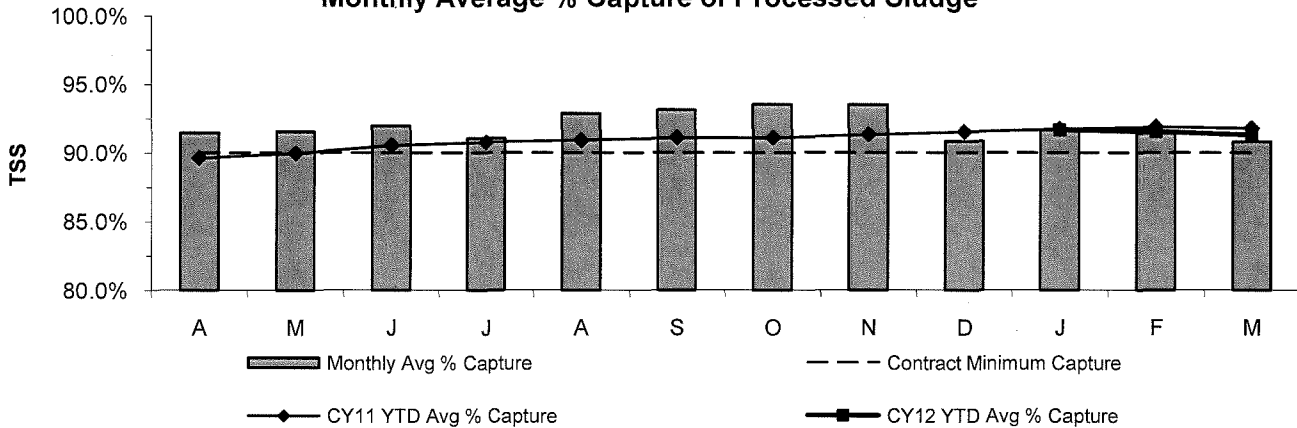
MWRA pays a fixed monthly amount for the calendar year to process up to 90 DTPD/TSS as an annual average. The monthly invoice is based on 90 DTPD/TSS (Dry Tons Per Day/Total Suspended Solids) times 365 days divided by 12 months. At the end of the year, the actual totals are calculated and additional payments are made on any quantity above the base amount. The base quantity of 90 DTPD/TSS was set for the 15-year term of the contract, even though, on average, MWRA processes more than 90 DTPD/TSS each year (FY12's budget is 105.5 DTPD/TSS).

Sludge Pumped From Deer Island



The average total quantity of sludge pumped in the 3rd Quarter was 98.2 DTPD, which is lower than FY12's budget of 105.5 DTPD.

Monthly Average % Capture of Processed Sludge



The contract requires NEFCo to capture at least 90% of the solids delivered to the Biosolids Processing Facility in Quincy; the solids capture rate for the 3rd Quarter was 91.5%.

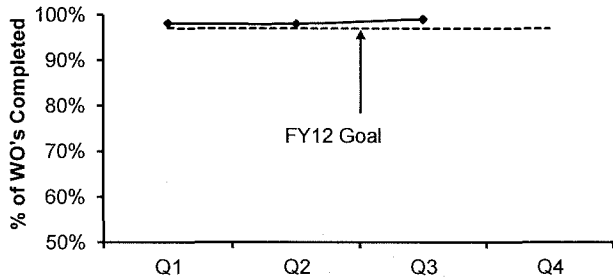
Deer Island Maintenance

3rd Quarter - FY12

Productivity Initiatives

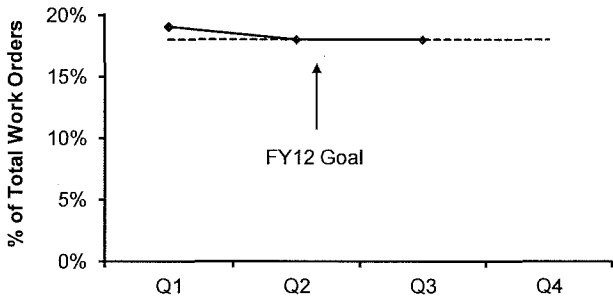
Productivity initiatives include increasing predictive maintenance tasks. Accomplishing this initiative should result in a decrease in the overall maintenance backlog.

Predictive Maintenance Compliance



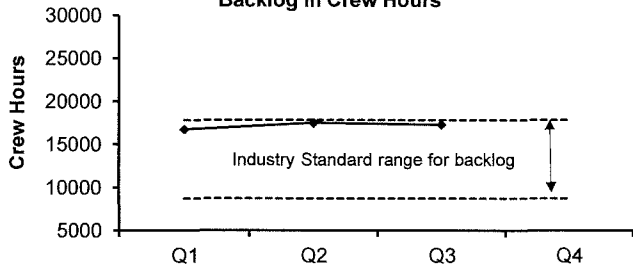
Deer Island is continuing with an aggressive predictive maintenance program. Deer Island's FY12 predictive maintenance goal is completion of 97% of all PdM work orders; Deer Island met this goal as it completed 99% of its PdM work orders this quarter.

Predictive Maintenance



Deer Island's FY12 goal is to increase PdM work orders to 18% of total work orders. The industry is moving toward increasing predictive maintenance work to reduce down time and to better predict when repairs are needed. DITP met the goal as 18% of total work orders this quarter were PDM.

Maintenance Project Backlog in Crew Hours

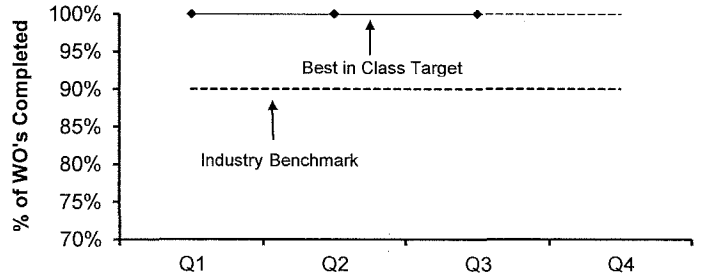


DITP's average backlog this quarter was 17,293 hours. The industry standard for maintenance backlog with 97 staff (currently planned staffing levels) is between 8,730 hours 17,820 hours. Maintenance is currently within the industry benchmark. Management continues to monitor backlog to ensure that all critical equipment and systems are available.

Proactive Initiatives

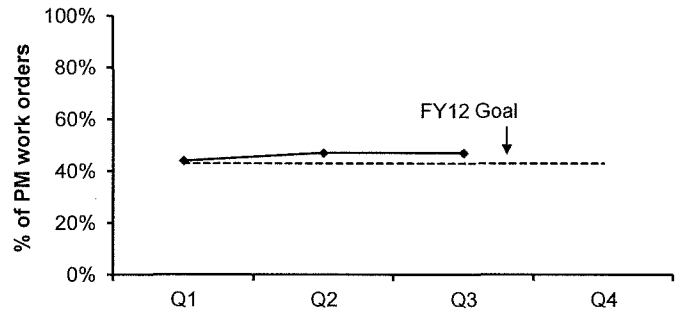
Proactive initiatives include completing 100% of all preventive maintenance tasks and increasing preventive maintenance kitting. These tasks should result in lower maintenance costs.

Preventive Maintenance Compliance



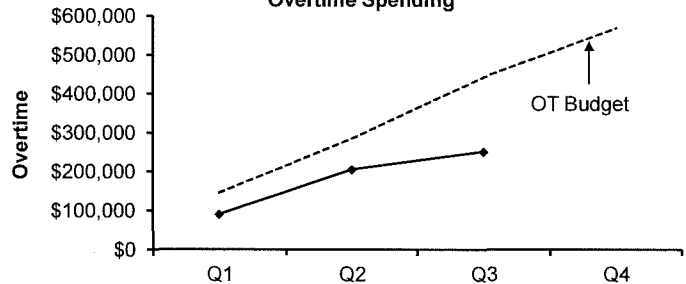
Deer Island's FY12 preventive maintenance goal is completion of 100% of all PM work orders from Operations and Maintenance. DITP met this goal as it completed 100% of PMs this quarter.

Maintenance Kitting



Deer Island's FY12 maintenance kitting goal is 43%; Deer Island completed 47% of maintenance kitting this quarter. Kitting is staging of parts/materials necessary to complete maintenance work. This has resulted in more wrench time and increased productivity.

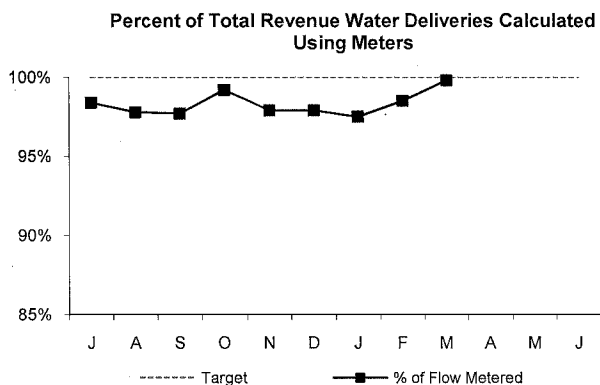
Overtime Spending



Overtime spending was \$113K under budget for the 3rd Quarter. 3rd Quarter overtime was used for storm coverage, rebuilding #2 cryogenics compressor, replacing gravity thickener upright bar, repairing conveyor belt #3 in grit facility, replacing plastic chain with stainless steel drive chain in east disinfection basin, and rebuilding thickened primary sludge pump #8.

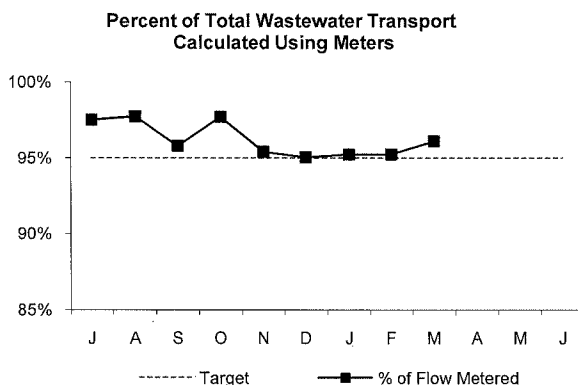
Operations Division Metering 3rd Quarter - FY12

WATER METERS



The target for revenue water deliveries calculated using meters is 100%. Estimates are generated for meters that are out of service due to instrumentation problems or in-house and capital construction projects. During the 3rd Quarter of FY12, meter actuals accounted for 98.6% of flow; only 1.4% of total revenue water deliveries were estimated. The following is the breakdown of estimations:
 In-house and Capital Construction Projects - 0.9%
 Instrumentation Failure - 0.5%

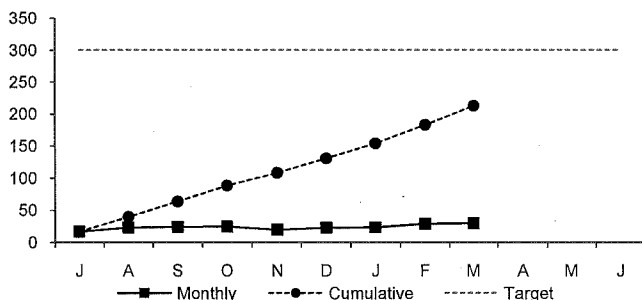
WASTEWATER METERS



The target for revenue wastewater transport calculated using meters is 95%. Estimates are generated for meters missing data due to instrument failure and/or erratic meter behavior. Estimates are produced using data from previous time periods under similar flow conditions. During the 3rd Quarter of FY12, meter actuals accounted for 95.52% of flow; 4.48% of wastewater transport was estimated.

WATER DISTRIBUTION SYSTEM PIPELINES

Miles Surveyed for Leaks



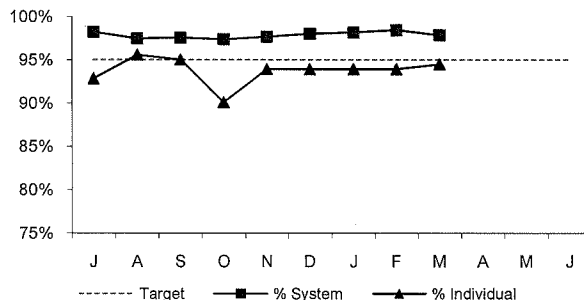
During the 3rd Quarter of FY12, 82.22 miles of water mains were inspected; this brings the YTD total to 213.11.

Water Distribution System

Month	J	A	S	O	N	D	J	F	M	A	M	J
Leaks Detected	0	0	0	0	0	4	2	2	1			
Leaks Repaired	0	1	0	0	0	4	0	2	1			
Backlog	1	0	0	0	0	0	2	2	2			
Avg. Lag Time	31.0	47.0	47.0	47.0	47.0	13.2	13.0	15.5	20.3			

The first leak repair in FY 12 took 47 days. It was a carryover from FY11. Although minor in nature, it required a coordinated, scheduled isolation of two pipeline sections. During the 3rd Quarter of FY12, 5 leaks were detected and 3 of them were repaired. The remaining two leaks, detected in January and February, will be repaired later this fiscal year. A leak on Section 57 in Medford could only be worked on during school vacation weeks. It was excavated and measured during the February vacation, and repaired during April vacation. Repair of a leak on Section 56 under the General Edwards Bridge on the Revere/Lynn line requires complicated on-water staging from a barge which is being procured. The line is isolated until the repair can be made.

% Wastewater Meter Uptime



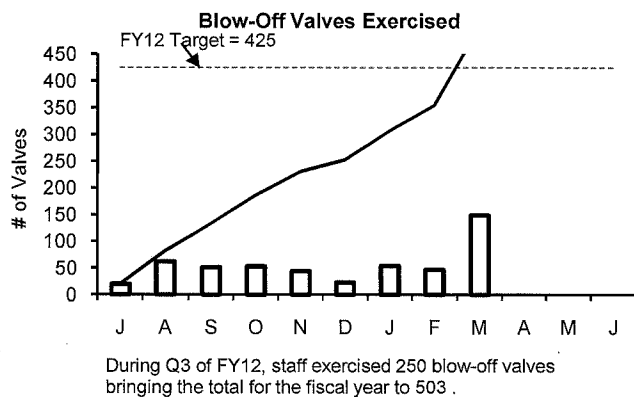
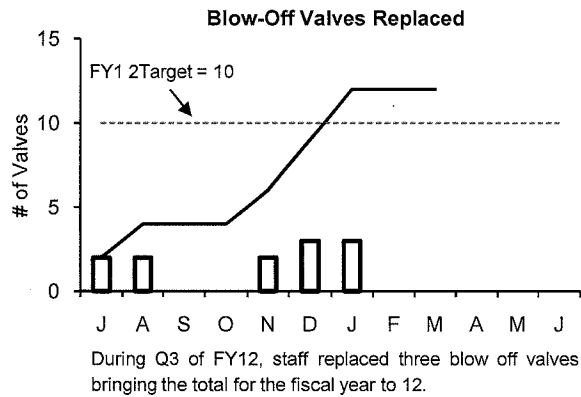
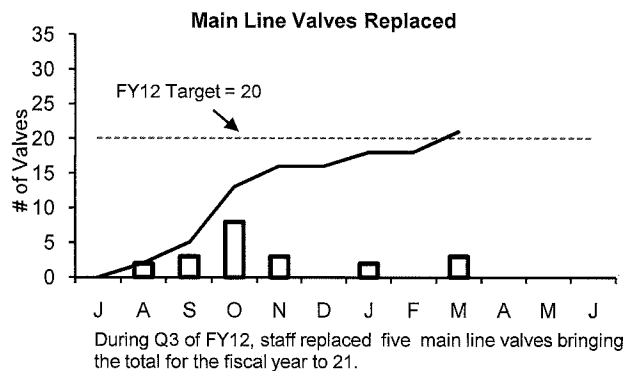
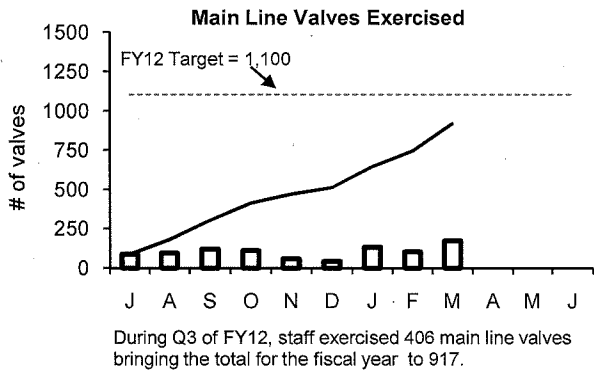
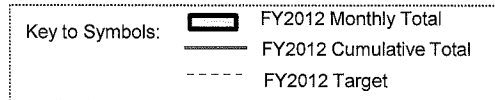
During the 3rd Quarter of FY12, out of a possible 1,589,952 data points, only 29,038 points were missed resulting in a system-wide uptime of 98.2%. Of the 182 revenue meters installed, on average 10.67 meters/mth. experienced down time greater than the 5% target resulting in a 94.2% individual meter uptime. For the 3rd Quarter of FY12, down time for an individual meter is defined by any individual meter having on average less than 2,766.4 data points out of a potential 2,912 data points.

Water Distribution System Valves 3rd Quarter - FY 12

Background

Valves are exercised, rehabilitated, or replaced in order to improve their operating condition. This work occurs year round. Valve replacements occur in roadway locations during the normal construction season, and in off-road locations during the winter season. Valve exercising can occur year round but is often displaced during the construction season. This is due to the fact that a large number of construction contracts involving rehabilitation, replacement, or new installation of water lines, requires valve staff to operate valves and assist with disinfection, dechlorination, pressure-testing, and final acceptance. Valve exercising can also be impacted due to limited redundancy in the water system; valve exercising cannot be performed in areas where there is only one source of water to the community meters or flow disruptions will occur.

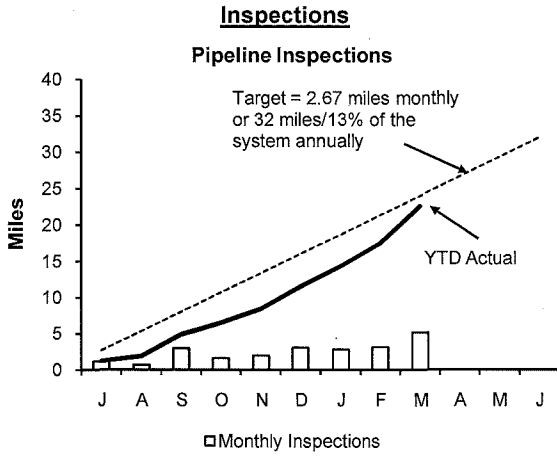
Type of Valve	Inventory #	Operable Percentage	
		FY12 to Date	FY12 Targets
Main Line Valves	2,092	96.7%	92%
Blow-Off Valves	1,206	92.8%	94%
Air Release Valves	1,335	92.9%	92%
Control Valves	48	100.0%	95%



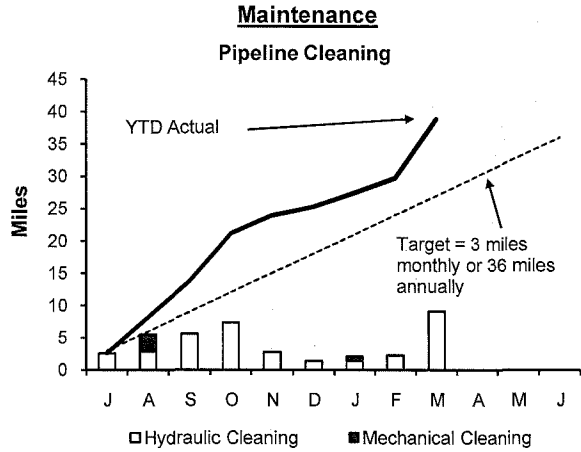
Wastewater Pipeline and Structure Inspections and Maintenance

Field Operations Highlights

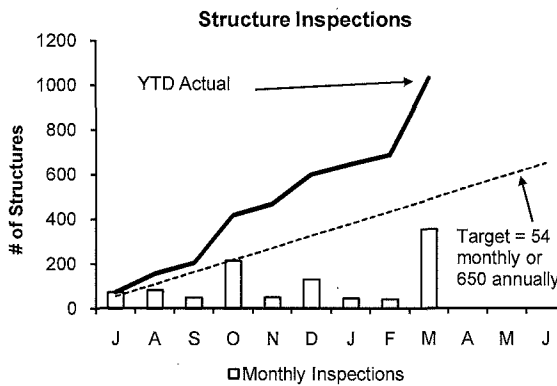
3rd Quarter - FY 12



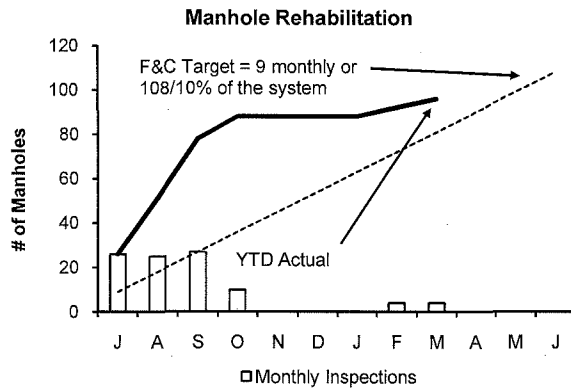
Staff internally inspected 11.12 miles of MWRA sewer pipeline during this quarter. The year to date total for FY12 is 22.60 miles. Community Assistance was provided to the cities of Everett and Somerville, resulting in 388 linear feet (0.073 miles) was inspected this quarter.



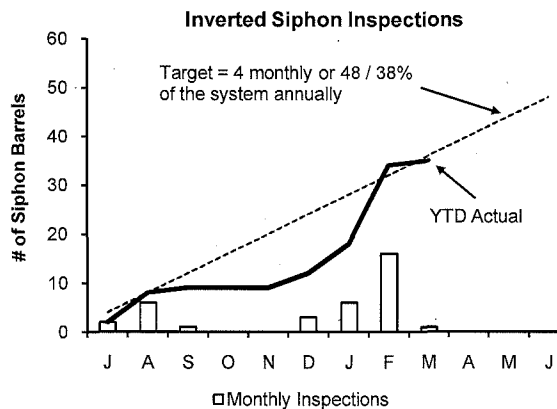
Staff cleaned 13.54 miles of MWRA's sewer system and removed 54 yards of grit and debris during this quarter, bringing the year to date total to 38.83 miles. Community Assistance was provided to the city of Everett, resulting in 1.23 miles (6,500 linear feet) this quarter.



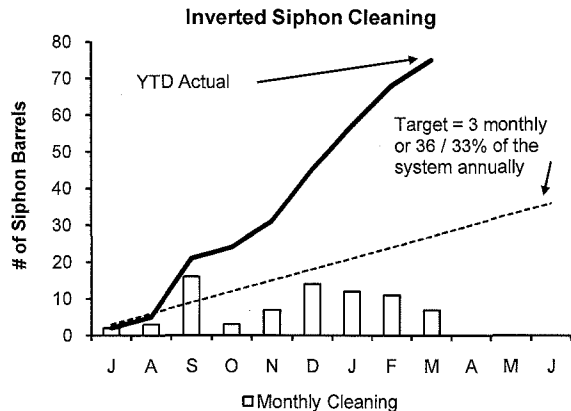
Staff inspected the 36 CSO structures and performed 408 additional manhole/structure inspections during this quarter, the year to date total to 1,030 inspections.



Staff replaced 8 frames & covers this quarter as part of a construction project. Staff has been reassigned to inside masonry projects at water and sewer facilities for the winter months. Outside work will resume in April.



Staff inspected 23 siphon barrels this quarter. The year to date total is 35 barrels.



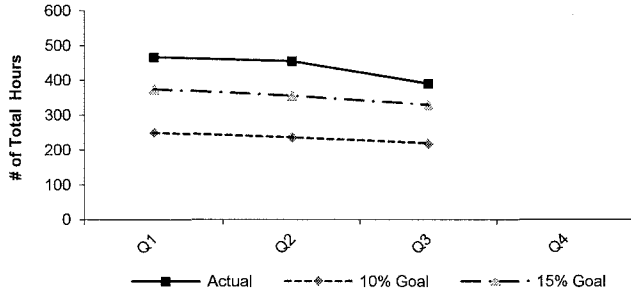
This quarter, staff cleaned 30 siphon barrels. The year to date total is 75 barrels.

Field Operations' Metropolitan Equipment & Facility Maintenance

3rd Quarter - FY12

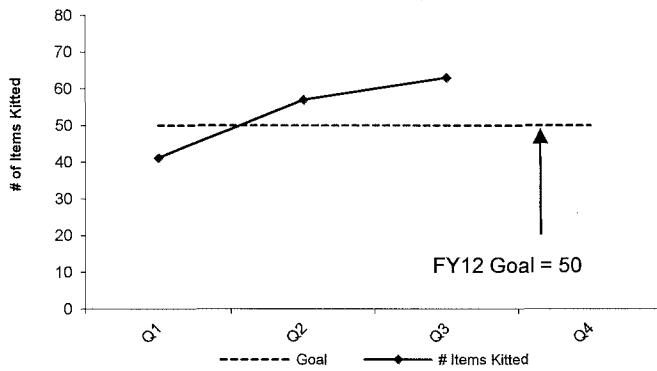
Staff are continuing with several maintenance and productivity initiatives; The Operator PM and kitting initiatives frees up maintenance staff to perform corrective maintenance and project work, thus reducing maintenance spending. Backlog and overtime metrics monitor the success of these maintenance initiatives.

Operations Light Maintenance PM Hours



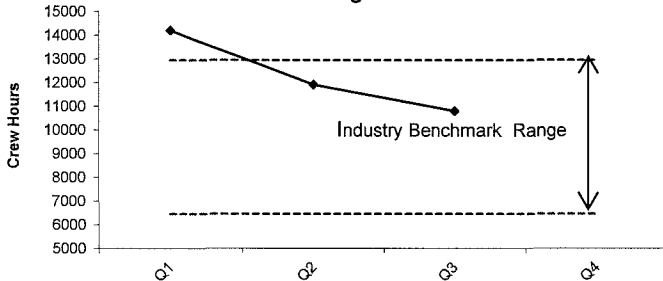
Operations staff averaged 390 hours of preventive maintenance during the 3rd Quarter, an average of 18% of the total PM hours for the 3rd Quarter, which is slightly above the industry benchmark of 10% to 15%.

Items Kitted Utilizing Maxim



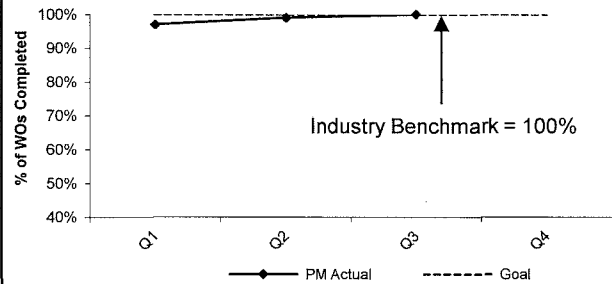
In an effort to more efficiently complete work, maintenance staff and work coordination staff have utilized the Lawson/Maxim interface to better kit stock and non stock material. The goal for FY12 is to "kit" 50 stock and non stock items total per month. An average of 63 items were kitted during the 3rd Quarter

Maintenance Backlog in Crew Hours



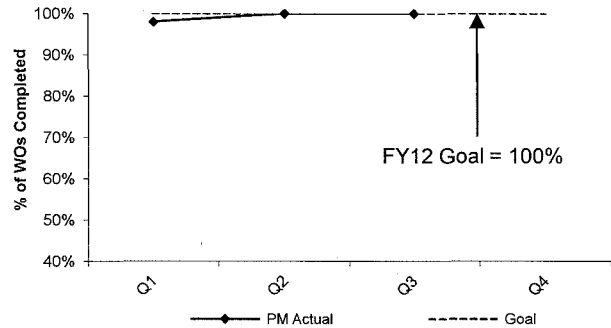
The 3rd Quarter backlog average is 10,798 hours, within the industry benchmark range. While the Mechanical backlog is above the industry average due to the addition of multiple projects including the Chelsea Screen House Screens, Alewife Screens and Nut Island Conveyor Repairs, other trades are within the range. Management's goal is to control overtime and still stay within the industry benchmark of 6450 to 12,940 hours.

Overall Preventive Maintenance



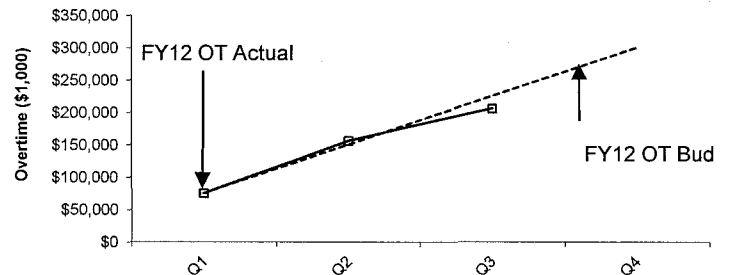
The Field Operations Department (FOD) preventive maintenance goal for FY12 is 100% of all PM work orders. Staff completed an average of 100% of all PM work orders in the 3rd Quarter.

Operations Light Maintenance % PM Completion



Wastewater Operators complete light maintenance PM's which frees up maintenance staff to perform corrective maintenance. Operations' FY12 PM goal is completion of 100% of all PM work orders assigned. Operations completed an average of 100% of PM work orders in the 3rd Quarter.

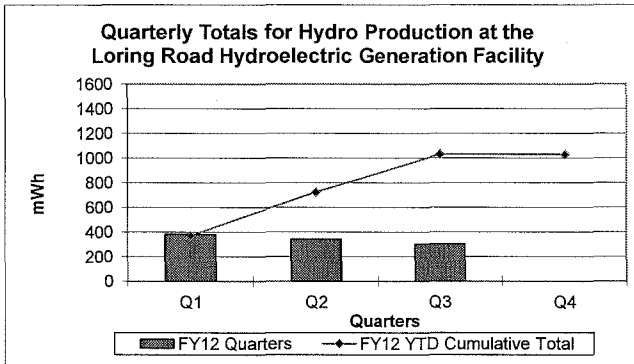
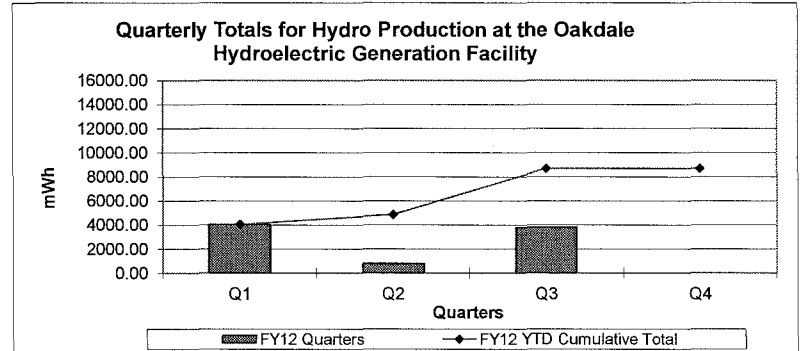
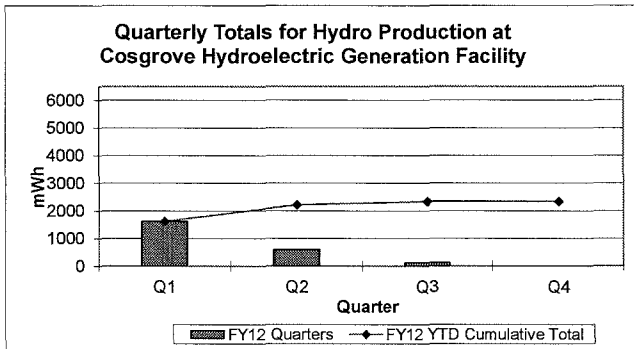
Overtime Spending



Maintenance overtime was \$18k under budget for the 3rd Quarter. Overtime was used to complete emergency repairs due to a variety of critical operational needs including the Chelsea Screen House screen repairs.

Field Operations Hydroelectric Generation Quarterly Report

3rd Quarter - FY12



In the 3rd Quarter, the **Cosgrove Hydroelectric Station** generated a net of 125 MWh; approximately 80% less than was generated during the same quarter in FY11. The reduced power generation in this quarter is due to the extended half-plant operation at CWTP related to UV construction. The revenue generated at Cosgrove in the third quarter was \$3,261, exclusive of Renewable Energy Certificates.

In the 3rd Quarter, the **Oakdale Hydroelectric Station** generated a net of 3,815 MWh; approximately 2,000% more than was generated during the same quarter in FY11. The revenue generated at Oakdale in the third quarter was \$117,268, exclusive of Renewable Energy Certificates. (Power is generated when water is transferred from Quabbin to Wachusett.)

In the 3rd Quarter, the **Loring Road hydroelectric 200 kW station** generated 305 MWh. Power is generated as water conveyed from Norumbega to the Loring Road storage tanks is reduced in pressure and the energy available in this pressure reduction is captured by the new turbine. The facility operates continuously. Some power is consumed on site, with the bulk exported to the grid.

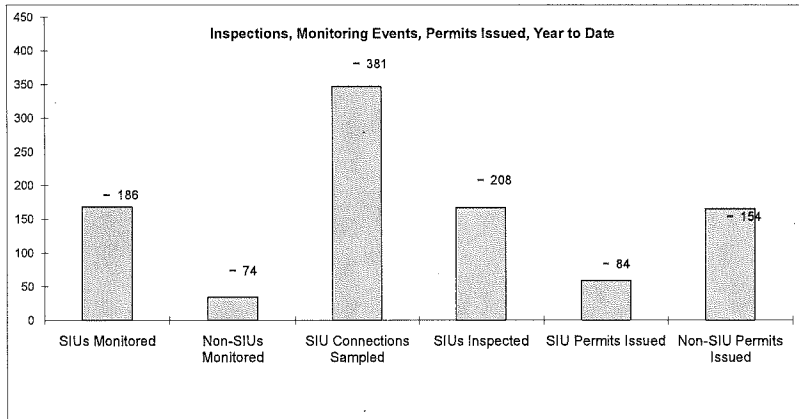
Southborough: An audit of the Southborough facility recommended a review of the HVAC system. Staff completed that work and have recommended the installation of an energy management system similar to the one being installed at the Chelsea Facility. Staff are working with NSTAR and its contractor to evaluate the work necessary to implement this project. NSTAR has committed to providing a \$30,000 incentive to this project based on the projected energy savings. This project falls under the requirements of the Green Communities Act since it would be under \$100,000. In addition, NSTAR provided ARRA funds in addition to its own incentive for the installation of energy efficient lighting at the Southborough complex that resulted in the installation of these lights at no cost to the MWRA. This work was completed in January 2012.

Chelsea Facility: The detailed audit of the Chelsea facility recommended installing an Energy Management System for the Admin. Building along with some equipment updates. NSTAR has agreed to provide a \$168,000 incentive to MWRA for the installation of the EMS. The project was bid and a contract was awarded during the second quarter of FY12. Work on this project began in the third quarter of FY12 and will be completed by during the first quarter of FY13. In addition, NSTAR provided ARRA funds in addition to its own incentive for the installation of lighting controls for all the common areas in the Chelsea Facility. This project was completed during the third quarter of FY12.

Energy Audits and Implementation of Audit Recommendations at FOD Facilities: MWRA staff identified multiple facilities that would benefit from a comprehensive energy audit. Audits of 24 facilities were performed in two phases from FY10 through the first quarter of FY12. The focus of these energy audits were lighting, HVAC, pumps, and motors. Implementation of the audit recommendations began at the end of the 1st Quarter of FY11 and are on-going. Two of these projects were completed during the third quarter of FY12 - a lighting retrofit at the Prison Point Facility and installation of VFDs on the HVAC system at the Chelsea Creek Screen House to provide for set-backs of the HVAC system when the facility is empty. This VFD project was 100% funded by NSTAR through its incentive program and ARRA funds. Four additional VFD projects at Ward and Columbus Headworks were begun during the third quarter of FY12 and will be completed by the end of the fourth quarter of FY12. Audits of an additional 6 facilities will begin in the second quarter of FY12.

Toxic Reduction and Control

3rd Quarter - FY 2012



EPA Required SIU Monitoring Events for FY12: 186
YTD: 168

Required Non-SIU Monitoring Events for FY12: 74
YTD: 35

SIU Connections to be Sampled For FY12: 381
YTD: 347

EPA Required SIU Inspections for FY12: 208
YTD: 167

SIU Permits due to Expire In FY12: 84
YTD: 59

Non-SIU Permits due to Expire for FY12: 154
YTD: 165

Significant Industrial Users (SIUs) are MWRA's highest priority industries due to their flow, type of industry, and/or their potential to violate limits. SIUs are defined by EPA and require a greater amount of oversight. EPA requires that all SIUs *with flow* be monitored at least once during the fiscal year. The "SIU Monitored" data above reflects the number of industries monitored. However, many of these industries have more than one sampling point and the "SIU Connections Sampled" data reflect samples taken from multiple sampling locations at these industries.

TRAC's annual monitoring and inspection goals are set at the beginning of each fiscal year but they can fluctuate due to the actual number of SIUs at any given time. During the course of the year, some SIUs do not discharge and cannot be monitored. TRAC's monitoring plan requires one additional sampling event for 40% of the SIUs and two additional sampling events for 10% of the SIUs. TRAC also monitors one-third of the non-SIUs each year. The number of SIUs inspected reflects the total number of facilities that were inspected throughout the year that were determined to be SIUs at some time during the year.

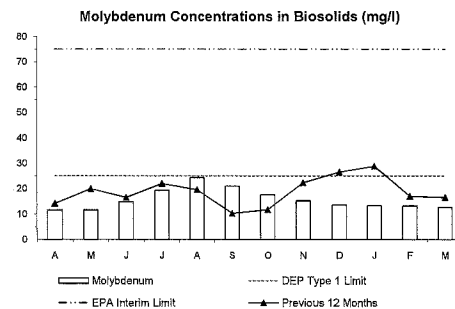
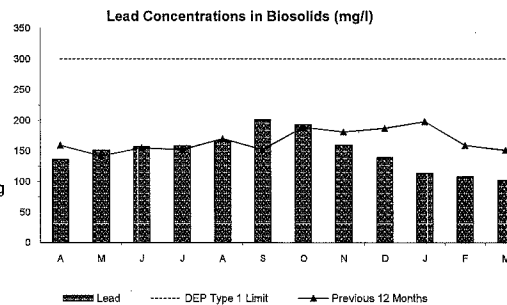
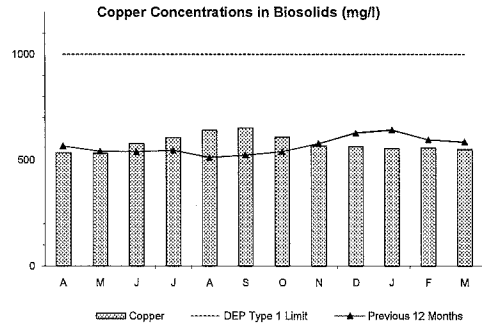
SIU and Non-SIU permits are issued with durations of two to five years, depending on the category of industry, varying the number of permits that expire in a given year.

	Number of Days to Issue a Permit						Total Permits Issued	
	0 to 120		121 to 180		181 or more		SIU	Non-SIU
	SIU	Non-SIU	SIU	Non-SIU	SIU	Non-SIU		
Jul	5	10	0	0	0	0	5	14
Aug	4	13	4	2	0	5	8	20
Sep	2	11	1	2	0	3	3	16
Oct	13	18	0	2	0	3	13	23
Nov	9	20	0	1	0	1	9	22
Dec	2	16	1	2	0	0	3	18
Jan	2	23	0	1	0	0	2	24
Feb	5	14	0	1	0	4	5	19
Mar	10	7	1	0	0	2	11	9
Apr								
May								
Jun								
% YTD	88%	80%	12%	7%	0%	13%	59	165

EPA requires MWRA to issue or renew 90% of SIU permits within 120 days of receipt of the application or the permit expiration date - whichever is later. EPA also requires the remaining 10% of SIU permits to be issued within 180 days. In March, one SIU permit was issued beyond 120 days because of a delay in paying permit charges. Two non-SIU permits were held longer than 180 days: one was awaiting payment and the other was held pending resolution of compliance schedule issues.

Copper, lead, and molybdenum are metals of concern for MWRA as their concentrations in its biosolids have, at times, exceeded regulatory standards for unrestricted use as fertilizer. Cooling tower usage typically causes a seasonal spike in molybdenum concentrations due to the blowdown on large AC systems that use corrosion inhibitors containing molybdenum. Levels drop again following the end of the cooling season. The hotter the season, the higher the spike. TRAC has an ongoing program to persuade cooling tower operators to switch to phosphate-based corrosion inhibitors.

Molybdenum levels were lower than standard each month this quarter.



Field Operations Highlights – Orange Notebook

3rd Quarter – FY12

Western Water Operations & Maintenance:

CWTP: The plant transitioned back to full plant operation upon completion of the UV Contractor's work on the "A" Side, and then returned to half plant operation with Treatment Train A in service without the extended contactor. Both winter maintenance and the UV Contractor's work were completed and Operations Staff started refilling the "B" Side Storage Tank at the end of the quarter.

Hultman Aqueduct: Staff supported the Hultman Aqueduct Interconnections Contractor during pressure testing of new valves and during leak detection. Staff filled and dewatered portions of the aqueduct from Shaft 5 to the bifurcation valves and the seven-foot branch line. Wachusett Aqueduct: Staff supported the designer during flow testing of the aqueduct as part of the Wachusett Aqueduct Pump Station Design Project.

Cosgrove Intake and Power Station: Staff adjusted the bearings on both hydro turbines, while the turbine was down for replacement of the main transformer for the facility.

Metro Water Operations & Maintenance:

Water Pipeline Program: Staff replaced surge control valves at several of the water pump stations, similar to last winter. (Commonwealth Avenue, Lexington Street and Newton Street Pump Stations) surge control valves. A test pit was excavated on Section 57 on Riverside Avenue in Medford Square at the site of a suspected leak. The leak was on the face plate of the transition between the 36" steel slip lining and the original 48" steel water main, and measurements were taken so that an encapsulating coupling could be ordered. The work to install the coupling will occur during the April school vacation week. Preparatory work began at the Section 89 pipe bridge over Rt. 128 in anticipation of the north globe valve's removal, including exposing the roof slab and loosening and retightening bolts in early April. This will reduce the headloss and increase carrying capacity from the Bear Hill Tank to community meters at Wilmington and Reading.

Valve Program: The portion of Section 22 on Adams Street that had been recently repaired was returned to service after being chlorinated, flushed, and sampled. This returns all of the Southern High Service Area to active operation, including the newly installed Section 107 that had been activated in December.

Incidents: Power was lost to the Bear Hill Tank in Stoneham on January 24. The cause of the power loss was traced to a scheduled NStar outage for maintenance, for which we did not receive notice. Service was not impacted, as the signal for the tank to the Gillis Pump Station was maintained via the SCADA UPS System. The notification issue has been clarified with NStar. Assistance was requested and provided to Waltham due to a local water main break. Pipeline Staff assisted the State Police dive team at the Chestnut Hill Reservoir by deploying and removing the dive team boats from the reservoir over a period of several days.

Wastewater Operations & Maintenance:

Hingham Pump Station: Metro Maintenance, Engineering & Construction and Wastewater Operations worked together to install a temporary in-ground bypass line into the Hingham Pump Station that will allow for the installation of a new influent gate at the station while maintaining normal pumping operations.

RICE Retrofit Program: Operations Staff worked with the design engineer (FS&T) during site visits at both Cottage Farm and Prison Point CSO Facilities as part of the Reciprocating Internal Combustion Engine Retrofit Project related to emissions control.

Prison Point CSO: Staff worked with a contractor to make necessary repairs to leaks found within two sodium hypochlorite tanks, while maintaining equipment availability for wet weather operation. Major construction work on the HVAC/Odor Control Systems Upgrades has been completed and staff training for new equipment operation and maintenance is being scheduled for April 2012.

Emergency Planning and Response Facility Handbook: Staff continue to update and review Integrated Contingency Plans for all wastewater facilities. These plans include emergency notification procedures, contact personnel and emergency action plans. Spill Prevention Control and Countermeasures (SPCC) inspections were performed at Cottage Farm CSO, Prison Point CSO and Braintree Weymouth Pump Station. The DEP required inspections are performed monthly with records placed onsite in the EAP Cabinets and in the Operations Chelsea Office for reference and recommendation tracking.

Toxics Reduction and Control:

Enforcement: Penalty Assessment Notices (PANs) were issued to Beth Israel Deaconess Medical Center (BIDMC) for discharging wastewater containing excessive levels of mercury and to Environmental Compliance Corporation (ECC) for wastewater containing excessive levels of arsenic and other pollutants. BIDMC paid the \$44,800 penalty in full and has appealed the Supplemental Order to Comply. ECC has appealed the \$58,100 penalty.

Emergency Response: On January 25, 2012, TRAC staff assisted in responding to a sewer blocked with grease near Norman Street in Everett. Staff worked with the representatives from City of Everett to determine the area that discharges to the blocked sewer, conducted a survey of the area, and inspected companies that could be sources of the grease. Two facilities in the area had already been ordered to take corrective action to reduce grease buildup, and as it appears that the blockage was the result of many years of grease build-up, it is expected that continued compliance of these two facilities will prevent a recurrence of a blockage in this line.

Metro Equipment and Facility Maintenance:

Chelsea Headworks and Screen House: Both Screens 3 and 4 failed and were rebuilt: each screen carriage was removed and rebuilt, and all the pins and rollers were replaced. Welds on Screen #1 Rake failed causing the rake to bend and making the screen inoperable. The rake was removed, straightened and repaired, and new rake pads were fabricated and welded in place. The housing to the headworks scrubber developed some leaks, which were patched and repaired.

IPS Screening Belt Conveyor: The screening conveyor at the IPS received major maintenance. The conveyor covers, belting, rollers, bearings, alignment drums and plows were removed. The entire carriage assembly was cleaned. New bearings, roller, drums and plows were installed. New belts were strung, vulcanized, tested and returned to operation.

Operations Support:

Capital Project Support: In the 3rd Quarter, staff continued support to major capital projects and in-house projects with significant activity in supporting improvements at a number of ongoing projects including: Hultman CP6, CWTP UV, Spot Pond Tank Design/build Project, Sections 18, 50 and 51 Rehabilitation, Section 107, Section 36, Valve Rehabilitation 7, Lynnfield/Saugus Pipeline, and the North Dorchester Bay CSO Project. Staff also supported system expansion planning to help identify possible supply extension routes for abutting communities with supply issues.

Development of ERP Training Program: Staff continued delivering a comprehensive annual emergency plan training program to comply with DEP requirements. This training is being provided for MWRA Staff and for staff from the MWRA water communities. The community training sessions began in December and 4 all day sessions have been delivered to date through the 3rd Quarter. Two more sessions are planned in April and other sessions will extend through the fall of 2012, then they will be repeated annually in a series of sessions each year. An additional series of community training meetings was held in March targeting selected service areas with particular redundancy issues (March session targeted Section 89 in the NEH).

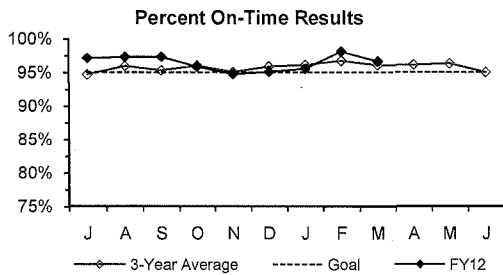
New Facility Startups: All work on water Sections 18, 50 and 51 was now complete and all associated pipelines are returned to service. Work on the Route 28, Reading-Stoneham connection, was completed and a test plan is being developed to verify gravity and temporary pumping flows. Lower Hultman return to service was being planned in March for April startup.

Meter Systems: Staff have begun implementing Rosemount flow transmitter replacement system-wide with a newer generation that allows a wider accurate span. Staff are also implementing converting water meter data collection to wireless transmission to cut costs.

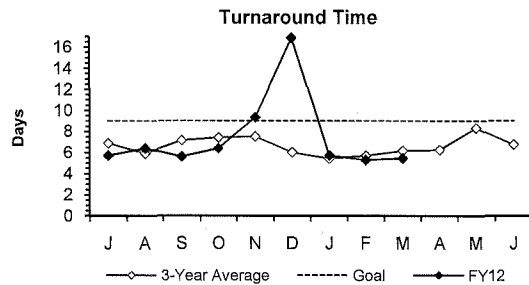
Online Water Quality Monitoring: Staff continued working on updating the distribution water quality monitoring analyzer system. Through the end of the 3rd Quarter, ten units have been installed and made operational via SCADA and several more are in progress. Central data collection equipment and its associated server installation were installed in September and are operational. Staff continued implementing the associated data collection network with Verizon field connection of necessary circuits being done site by site. Vendor training for Technicians and users was held in March. Response SOPs are being developed for alarm response when the system is fully operational.

Seasonal Work: Staff is continuing to do follow up with communities affected by summer nitrification issues to improve next summer's performance. Staff have also been supporting sampling and monitoring of half plant operations at CWTP in the 3rd Quarter.

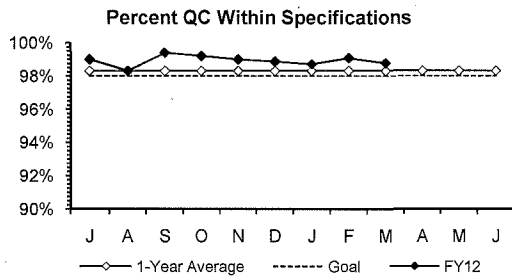
Laboratory Services Third Quarter FY 2012



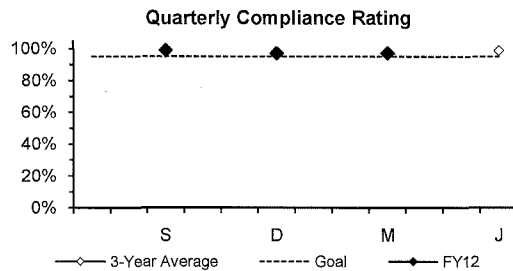
The Percent On-Time measurement exceeded the 95% goal.



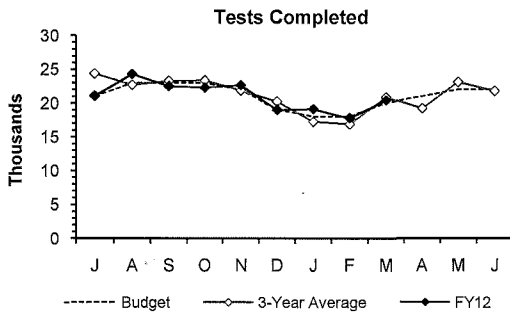
Turnaround Time was faster than the 9-day goal, recovering from completion of two longer turnaround projects in December.



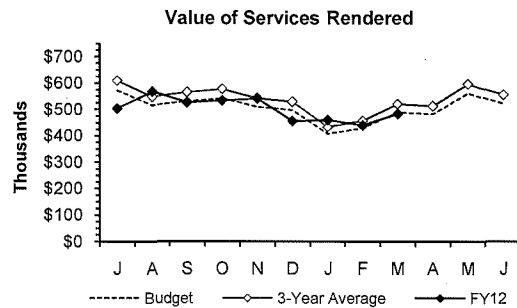
Percent of QC tests meeting specifications exceeded the 98% goal. The 1-year average is based on the new LIMS results.



An audit of all five lab locations on records archiving found good compliance with procedures. Compliance audits are performed in September, December, March, and June.



The Tests Completed was slightly above the seasonally adjusted budget goal. FY12 will be a transition year for this metric between the old and the new LIMS.



Value of Services Rendered was at the seasonally adjusted budget projection. FY12 will be a transition year for this metric between the old and new LIMS.

Highlights: The on-site construction work to replace six chemical fume hoods used to prepare samples for metals testing at the Central Lab is nearing completion. The new fume hoods and the lab's casework are made of polypropylene plastic to prevent samples to be tested for metals from getting contaminated in the lab. The project is scheduled to be completed in April.

Quality Assurance: Two white papers on statistical quality control procedures needed to maintain DEP certification were well received by the DEP Laboratory Advisory Committee meeting. The proposed approaches streamline the lab work and take advantage of the capabilities of the LIMS. This should aid our DEP audit at the Central Lab expected in May.

ENQUAD: Performed an experiment from Mass. Bay samples to see if alternatives in the Chlorophyll test affect the results. The current procedure appears to give more consistent results than the alternative procedure. Participated for the first time in a Performance Evaluation (PE) Study organized by the Northeast Laboratory Evaluation Officers and Managers (NELEOM) for compliance with the National Shellfish Sanitation Program (NSSP) standards in evaluating fecal coliform bacteria in shellfish growing waters. Our laboratory and all six analysts passed this PE study. A total of 31 laboratories with 76 analysts participated. We perform a monthly bacteria survey of Mass. Bay to comply with our NPDES permit. We are required to report fecal coliform levels to the Massachusetts Division of Marine Fisheries but also analyze eleven sites around the outfall for *enterococcus* bacteria.

Water Quality Assurance: The use of Colliert for testing Total Coliform Rule samples began in January. For the entire quarter, there were no E. coli positive and only a few Total Coliform positive samples out of about 6,000 samples. Tested final NPDES samples from annual half plant operation of CWTP. Tested Lead and Copper samples from Malden--this is the only community that needed to do twice a year Lead and Copper sampling. Tested special sulfate/chloride samples from Bedford to aid in an investigation of their distribution system.

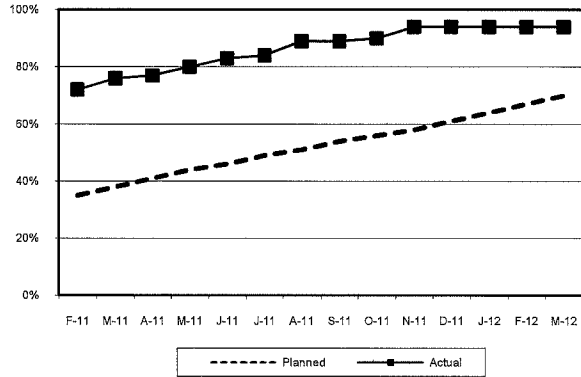
CONSTRUCTION PROGRAMS

Projects In Construction – 1

3rd Quarter FY 2012

(Progress Percentages based on Construction Expenditures)

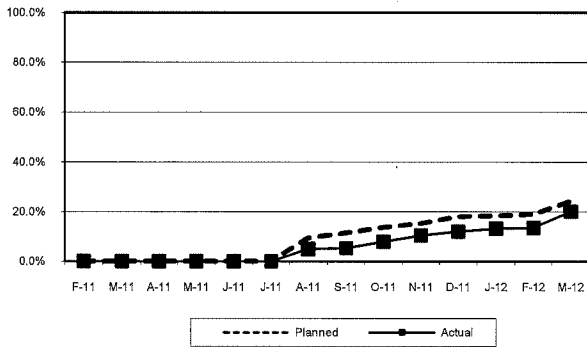
Southern Spine Water Mains Rehabilitation - Section 107
Progress - March 2012



Project Summary: This project for Section 107 includes the removal of 17,000-linear feet (lf) of 24-inch water main, installation of 9,400-lf of new 48-inch water main, replacement of three revenue meters, and the cleaning and lining of 1,000-lf of 24-inch & 1,500-lf of 48-inch water main.

Status and Issues: The Contractor, RJV Construction, worked on the completion of punch list work. Completed swing-tie as-builds and red line drawings. Black and Veatch, the Engineer, began work on the record drawings.

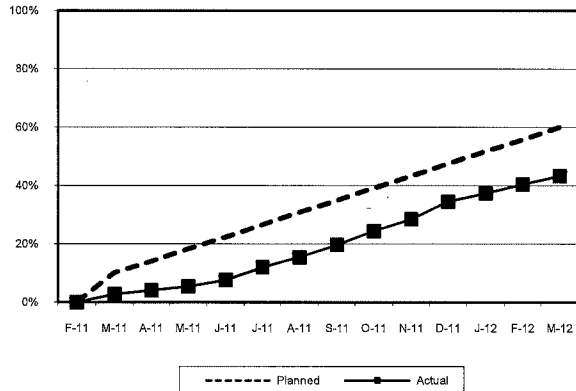
UV Disinfection Facilities CWTP
Progress - March 2012



Project Summary: In accordance with the EPA's requirement to have two primary methods of disinfection, the Authority will add an Ultraviolet (UV) light disinfection process at the Carroll Water Treatment Plant, which will render Cryptosporidium inactive.

Status and Issues: The Contractor continued demolition of both the A & B sides; separated demolished concrete and re-bar for off-site disposal and continued with general site and house keeping clean-up. In addition, the contractor continued with Ozone Destruct Unit piping demolition inside the Post Treatment Building, and began the demolition of Sodium Hypochlorite and Bisulfite piping at the Post Treatment Building.

Lynnfield/Saugus Pipelines
Progress - March 2012



Project Summary: Installation of MWRA water mains including 1,800 linear feet of 36-inch pipe and 4,700 feet of 24-inch pipe. Project also includes 6,000 linear feet of 12-inch pipeline for the Town of Saugus. Pipeline construction is located along Route 1 in Saugus.

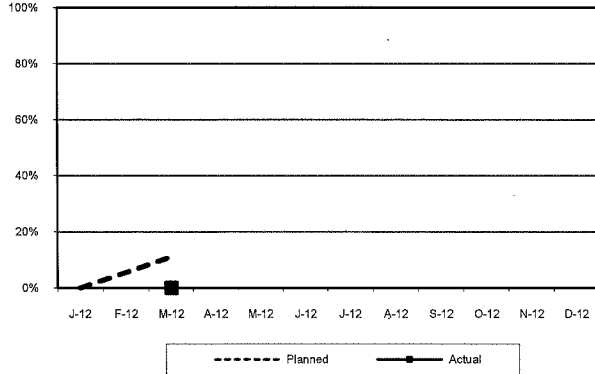
Status and Issues: The Contractor completed off road work in the Lynnfield Water District Pump Station property involving new piping and meter vault. They encountered a significant amount of unanticipated ledge that required the use of a non-explosive demolition agent because blasting is not allowed in the area of the pump station.

Projects In Construction – 2

3rd Quarter FY 2012

(Progress Percentages based on Construction Expenditures)

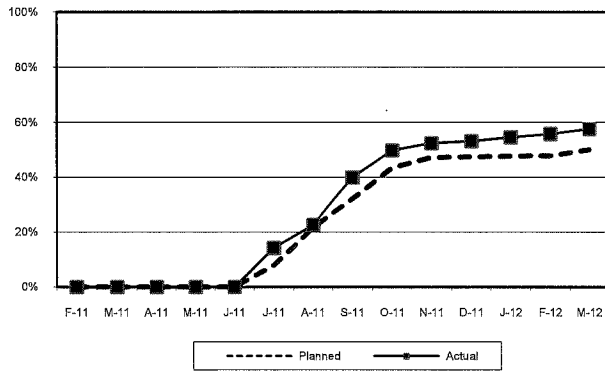
Spot Pond Water Storage Facility
Progress – March 2012



Project Summary: This is a design/build project for the construction of two, 10 million-gallon covered concrete storage tanks and a buried pump station, which will provide back-up redundancy for the Northern High and Northern Intermediate High distribution service areas.

Status and Issues: As of March, the Contractor installed the preliminary erosion controls and drainage swales on site and the site security fencing. The precharacterization of insitu soils was conducted, with the results to be provided prior to excavation.

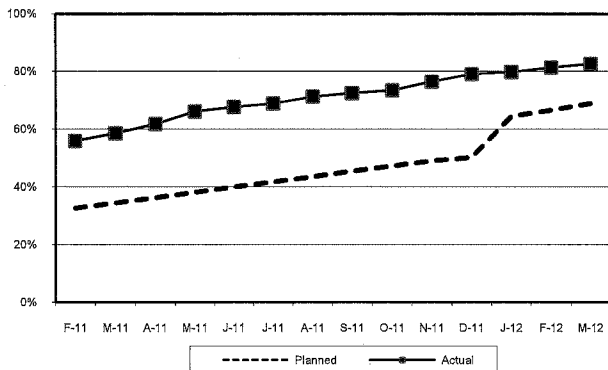
Phase 7 Valve Replacement
Progress – March 2012



Project Summary: This project consists of the replacement of 10 blow-off and 10 main line valves and the rehabilitation of various meters throughout the Authority's water distribution system.

Status and Issues: The Contractor began the excavation for Meter 48 on Perkins Street and the blowoff at Foss Park in Somerville.

Hultman Aqueduct Interconnections Project
Progress - March 2012



Project Summary: This project includes rehabilitation construction to the Hultman Aqueduct to provide redundancy to the MetroWest Tunnel from Southborough to Weston by adding five new MetroWest/Hultman interconnections, two surge relief structures, 13.5 miles of internal rehabilitation and 15 miles of external access work.

Status and Issues: The visual leakage test was completed for two 60-inch, one 48-inch and one 120-inch valve. The contractor welded and mortared the leaking Hultman joint at Bifurcation, and then repaired the areas of the concrete encasement that had been removed to find the leak. The exterior of the Bifurcation and Branchline walls were waterproofed.

CSO CONTROL PROGRAM

3rd Quarter - FY12

As reported last quarter, 29 of the 35 projects in MWRA's Long-Term CSO Control Plan are complete and 4 CSO projects are in construction. MWRA recently commenced design of the remaining two projects: Outfall MWR003 Gate and Floatables Control/Rindge Ave. Siphon Relief and Outfall SOM01A Interceptor Connection Relief and Floatables Control, both related to Alewife Brook. Progress of ongoing and planned work to complete the CSO plan is described below.

Project	Court Milestones in Schedule Seven (Shaded milestones are complete.)			Status as of March 31, 2012															
	Commence Design	Commence Construction	Complete Construction																
Brookline Sewer Separation	Nov 06	Nov 08	Jul 13	<p>The \$25.9M Brookline sewer separation project comprises three construction contracts. All work is scheduled to be complete by July 2013, in compliance with Schedule Seven.</p> <p><u>Town of Brookline Sewer Separation Contract 1</u> Brookline attained substantial completion of the \$1.4M first construction contract in January 2010. It involved the installation of 5,658 linear feet of new storm drain.</p> <p><u>Town of Brookline Sewer Separation Contract 2</u> The \$16.5M second construction contract, which Brookline commenced in January 2011, was approximately 60% complete as of 3/31/12. This contract involves the installation of 3,790 linear feet of storm drain and 1,290 linear feet of sanitary sewer by open trench method and 4,550 linear feet of sanitary sewer by micro-tunneling. Town of Brookline expects the work to be complete by December 2012.</p> <p><u>MWRA Outfall MWR010 Cleaning Contract</u> On 3/14/12, the MWRA Board of Directors awarded the construction contract for cleaning CSO Outfall MWR010 in the amount of \$1,134,891. The work is intended to ensure that the outfall will have adequate capacity to convey Brookline's separated stormwater to the Charles River. MWRA issued Notice to Proceed on 4/6/12, and the work is scheduled to be complete by September 2012.</p>															
Reserved Channel Sewer Separation	Jul 06	May 09	Dec 15	<p>BWSC continues to make progress with five of nine planned construction contracts for the \$62.3 million Reserved Channel Sewer Separation project.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Contract 1 - CSO outfall rehab</td> <td style="width: 15%;">\$ 4.0M</td> <td style="width: 25%;">Subst. complete</td> </tr> <tr> <td>Contract 2 – sewer separation</td> <td>\$ 6.9M</td> <td>Complete</td> </tr> <tr> <td>Contract 3A – sewer separation</td> <td>\$ 9.9M</td> <td>60% complete</td> </tr> <tr> <td>Contract 3B – sewer separation</td> <td>\$10.9M</td> <td>30% complete</td> </tr> <tr> <td>Contract 7 – pavement restoration</td> <td>\$ 1.2M</td> <td>Subst. complete</td> </tr> </table> <p>On 3/7/12, BWSC advertised Contract 8 at an estimated \$9.6 million cost to provide final pavement restoration related to the work of contracts 3A, 3B and 4. On 3/28/12, BWSC advertised Contract 4, which primarily involves the installation of new storm drains in extensive neighborhood areas south and west of Reserved Channel. BWSC expects to issue the Notice to Proceed with this estimated \$10.6 million contract this summer and plans to award the remaining three construction contracts – Contract 5 (sewer cleaning and relining), Contract 6 (downspout disconnections) and Contract 8 (additional final paving) – sequentially through April 2013 and complete all work by December 2015, in compliance with Schedule Seven.</p>	Contract 1 - CSO outfall rehab	\$ 4.0M	Subst. complete	Contract 2 – sewer separation	\$ 6.9M	Complete	Contract 3A – sewer separation	\$ 9.9M	60% complete	Contract 3B – sewer separation	\$10.9M	30% complete	Contract 7 – pavement restoration	\$ 1.2M	Subst. complete
Contract 1 - CSO outfall rehab	\$ 4.0M	Subst. complete																	
Contract 2 – sewer separation	\$ 6.9M	Complete																	
Contract 3A – sewer separation	\$ 9.9M	60% complete																	
Contract 3B – sewer separation	\$10.9M	30% complete																	
Contract 7 – pavement restoration	\$ 1.2M	Subst. complete																	

Project		Court Milestones in Schedule Seven (Shaded milestones are complete.)			Status as of March 31, 2012
		Commence Design	Commence Construction	Complete Construction	
Cambridge/ Alewife Brook Sewer Separation	CAM004 Outfall and Wetland Basin		Apr 11	Apr 13	Cambridge continues to make progress with construction of the \$16.1 million CAM004 stormwater outfall and wetland basin (\$3.6 million MWRA share), which Cambridge commenced in April 2011. The contract is more than 40% complete. Cambridge's contractor completed utility relocations and the wetland basin's perimeter berm and outlet structure and commenced excavation of the 3.4-acre basin in 2011. Deeper excavation and shaping of the wetland basin is ongoing. The contractor has also completed major sections of the box conduit outfall, including the sections beneath railroad tracks, as well as associated special structures. The contractor is currently installing additional sections of the outfall between the MBTA railroad tracks and Cambridge Park Drive. Cambridge expects to complete the outfall and wetland basin in April 2013, in compliance with Schedule Seven.
	CAM004 Sewer Separation	Jan 97	Jul 98	Dec 15	Cambridge completed four initial construction contracts for this project several years ago and plans to award three additional contracts (contracts 8A, 8B and 9) to complete the work. Final design of Contract 8A is approximately 60% complete, and Cambridge plans to advertise this contract this summer and issue the Notice to Proceed by September 2012, in compliance with Schedule Seven. Design investigations for contracts 8B and 9 are also in progress.
			Sep 12		
	MWR003 Gate and Rindge Ave. Siphon	Apr 12	Aug 14	Oct 15	
SOM01A Connection Relief and Floatables Control	Sep 13		Jun 14		
Other CSO Related Work					
South Dorchester Bay Sewer Separation Post-Construction Inflow Removal		N/A	N/A	N/A	BWSC continues to pursue additional stormwater inflow removal (i.e., downspout disconnections) from the sanitary sewer system, to mitigate the remaining risks of sewer system flooding in large storms. BWSC's receipt of its consultant's report on inflow removal recommendations has been delayed as its consultant performs additional hydraulic performance evaluations in part to address questions raised from MWRA staff review.
Lower Dorchester Brook Sewer Regulator Relocation and Sewer Separation		N/A	N/A	N/A	BWSC has nearly completed its \$6.0 million construction contract for Lower Dorchester Brook Sewer CSO Regulator Relocation and Sewer Separation, which is partially funded by MWRA. BWSC completed 25 acres of sewer separation and recently activated the new CSO regulator and plugged the old regulator, thereby removing the contract separated stormwater flows, as well as previously separated stormwater, from the BWSC and MWRA sewer systems. Remaining work includes the installation of two large tide gates in the BWSC's Dorchester Brook Conduit at the new regulator.

CIP Expenditures 3rd Quarter FY12

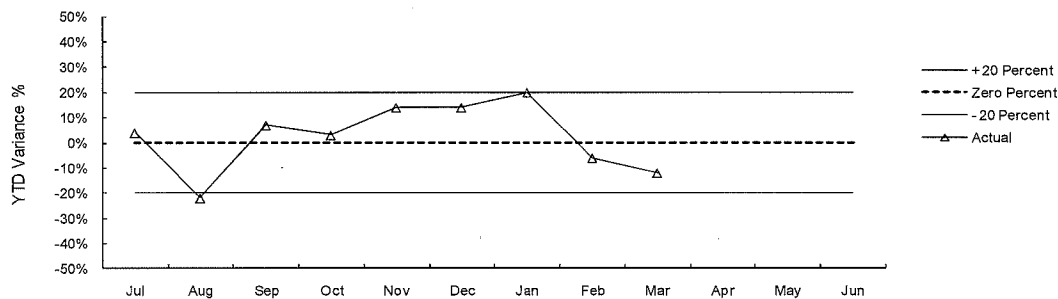
The Year-To-Date variances are highlighted below:

FY12 Capital Improvement Program Expenditure Variances through February by Program (\$000)				
Program	FY12 Budget Through March	FY12 Actual Through March	Variance Amount	Variance Percent
Wastewater	59,641	53,886	(5,755)	-10%
Waterworks	40,872	34,341	(6,531)	-16%
Business and Operations Support	6,059	5,026	(1,033)	-17%
Total	\$106,572	\$93,253	(\$13,319)	-12%

Underspending within Wastewater is due to: lower than budgeted award for the North Main Pump Station VFD Replacement, delays in Digester Modules 1 & 2 Pipe Replacement, Clarifier Flushing System, Process Information Control System (PICS) contracts, and less than anticipated CSO land easement expense due to favorable negotiation of temporary easement lease terms. This was partially offset by timing of payments for Brookline Sewer Separation, progress on Section 156 Rehabilitation Design/Build, timing of work for Primary & Secondary Clarifier Rehabilitation, greater than budgeted spending on North Dorchester Dewater Pump Station and Sewers due to timing and unanticipated work, and Cambridge Sewer Separation contracts. Underspending in Waterworks is due to: lower than anticipated community requests for loans and lower award for the Spot Pond Storage Facility Design/Build contract. This was partially offset by contractor progress on the Lower Hultman Aqueduct Rehabilitation (CP6A), Reading/Stoneham Interconnections, Dam Safety Modifications and Repairs, and timing of work for the Lynnfield/Saugus Pipeline Construction 2 project.

CIP Expenditure Variance

Total FY12 CIP Budget of \$165,497,000.



Construction Fund Management

All payments to support the capital program are made from the Construction Fund. Sources of fund in-flows include bond proceeds, commercial paper, SRF reimbursements, loan repayments by municipalities, and current revenue. Accurate estimates of cash withdrawals and grant payments (both of which are derived from CIP spending projections) facilitate planning for future borrowings and maintaining an appropriate construction fund balance.

Cash Balance 3/26/2012	\$64 million
Unused capacity under the debt cap:	\$666 million
Estimated date for exhausting construction fund without new borrowing:	May-12
Estimated date for debt cap increase to support new borrowing:	FY2020
Commercial paper outstanding:	\$144 million
Commercial paper capacity:	\$350 million
Budgeted FY12 capital spending*:	\$157 million

* Cash based spending is discounted for construction retainage.

DRINKING WATER QUALITY
AND SUPPLY

Source Water – Microbial Results

3rd Quarter – FY12

Background

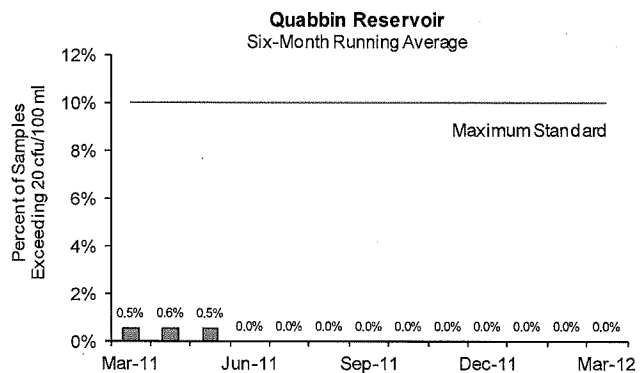
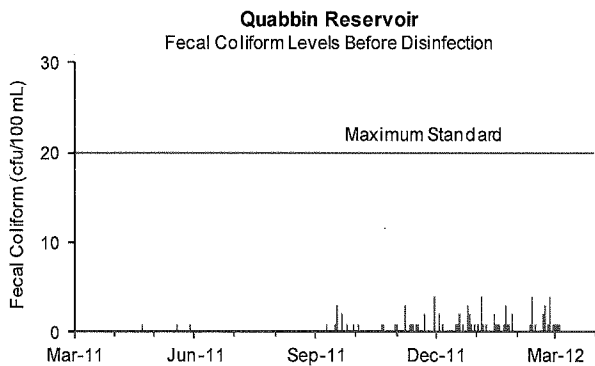
Total coliform bacteria are monitored in both source and treated water to provide an indication of overall bacteriological activity. Most coliforms are harmless. However, fecal coliform, a subclass of the coliform group, are identified by their growth at temperatures comparable to those in the intestinal tract of mammals. They act as indicators of possible fecal contamination. The Surface Water Treatment Rule for unfiltered water supplies allows for no more than 10% of source water samples prior to disinfection over any six-month period to have more than 20 fecal coliforms per 100ml.

Sample Site: Quabbin Reservoir

Quabbin Reservoir water is sampled at the Ware Disinfection Facility (WDF) raw water tap before being treated and entering the CVA system.

All samples collected during the 3rd Quarter were below 20 cfu/100ml.

For the current six-month period, 0.0% of the samples have exceeded a count of 20 cfu/100mL .



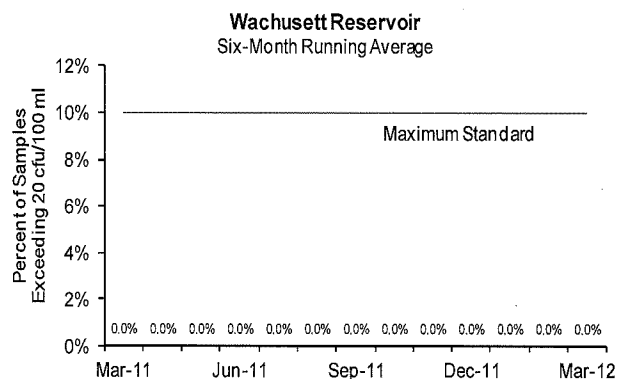
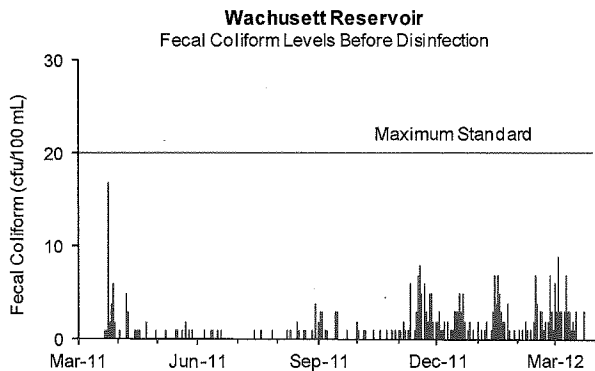
Sample Site: Wachusett Reservoir

Wachusett Reservoir water is sampled at the CWTP raw water tap in Marlborough before being treated and entering the MetroWest/Metropolitan Boston systems.

Fecal coliform levels tend to increase during the winter because, when water bodies near Wachusett ice over, waterfowl seek open water. Many roost at Wachusett, which tends to freeze later in the year than smaller ponds nearby. DCR has an active bird harassment program to move the birds away from the intake area.

All samples collected during the 3rd Quarter were below 20 cfu/100ml.

For the current six-month period, 0% of the samples exceeded a count of 20 cfu/ 100ml.



Source Water – Turbidity

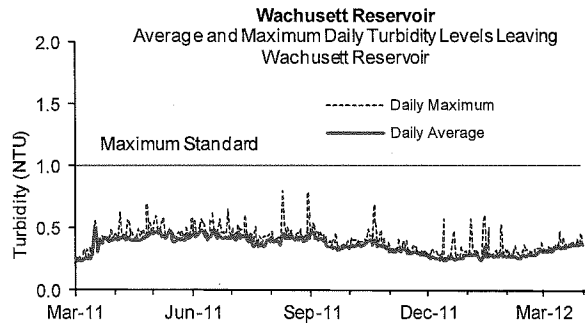
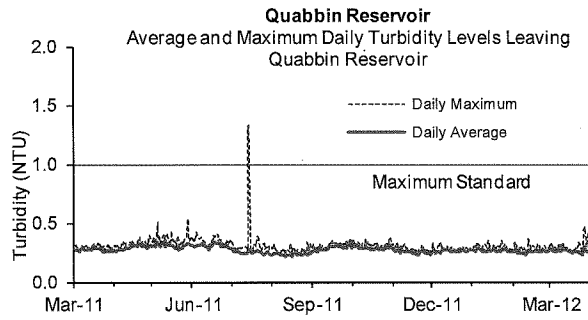
3rd Quarter – FY12

Background

Turbidity is a measure of suspended and colloidal particles including clay, silt, organic and inorganic matter, algae and microorganisms. The effects of turbidity depend on the nature of the matter that causes the turbidity. High levels of particulate matter may have a higher chlorine demand or may protect bacteria from the disinfectant effects of chlorine, thereby, interfering with the disinfectant residual throughout the distribution system.

There are two standards for turbidity: all water must be below 5 NTU (Nephelometric Turbidity Units), and water only can be above 1 NTU if it does not interfere with effective disinfection.

Turbidity of Quabbin Reservoir water is monitored continuously at the Ware Disinfection Facility (WDF) before chlorination. Turbidity of Wachusett Reservoir is monitored continuously at the Carroll Water Treatment Plant before ozonation. Maximum turbidity results at Quabbin and Wachusett were within DEP standards for the quarter.

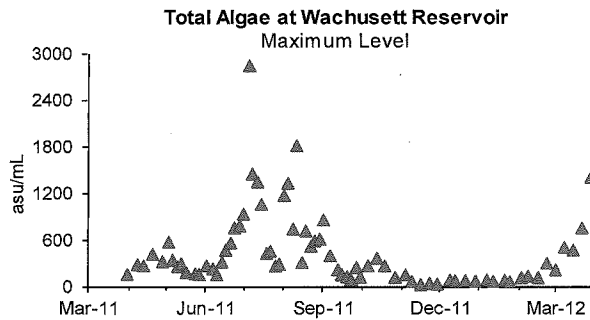


Source Water – Algae

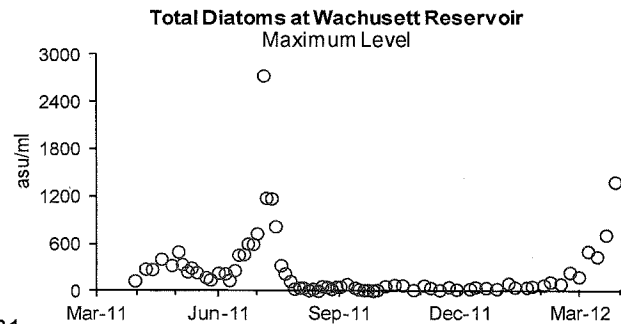
Algae levels in Wachusett Reservoir are monitored by DCR and MWRA. These results, along with taste and odor complaints, are used to make decisions on source water treatment for algae control.

Taste and odor complaints at the tap may be due to algae, which originate in source reservoirs, typically in trace amounts. Occasionally, a particular species grows rapidly, increasing its concentration in water. When *Synura*, *Anabaena*, or other nuisance algae bloom, MWRA may treat the reservoir with copper sulfate, an algacide. During the winter and spring, diatom numbers may increase. While not a taste and odor concern, consumers that use filters may notice a more frequent need to change their filters.

In the 3rd Quarter, there were no complaints related to algae reported from local water departments.



21



Treated Water – Disinfection Effectiveness

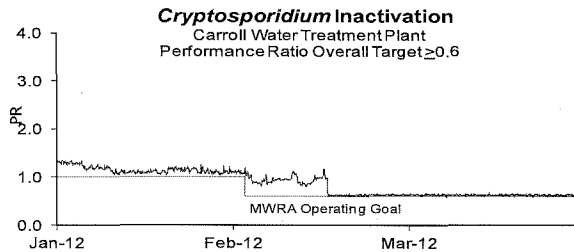
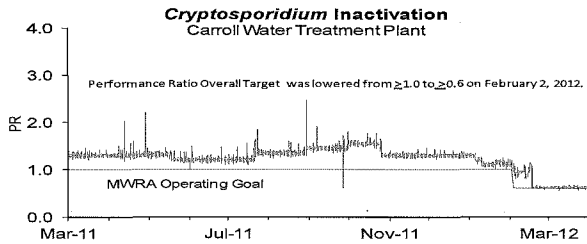
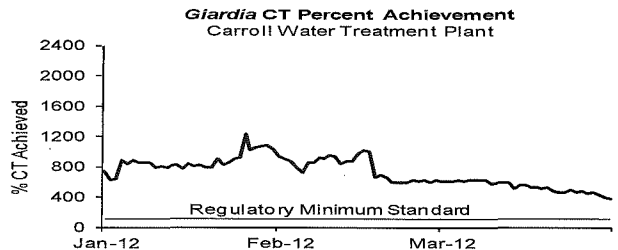
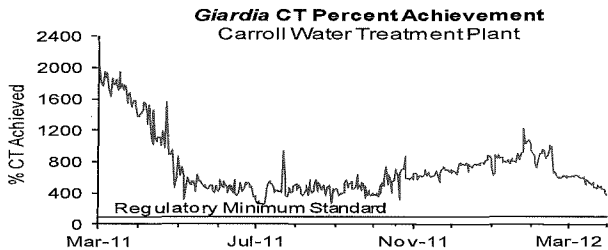
3rd Quarter – FY12

Background

At the Carroll Water Treatment Plant (CWTP), MWRA reports on both regulatory required 99.9% inactivation for *Giardia* (reported as "CT"), and its voluntary operating goal of 99% inactivation for *Cryptosporidium*. MWRA calculates hourly CT inactivation rates and reports daily CT inactivation rates at maximum flow, as specified by EPA regulations. The concentration (C) of the disinfectant over time (T) yields a measure of the effectiveness of disinfection. CT achievement for *Giardia* assures CT achievement for viruses, which have a lower CT requirement. The required CT for ozonated water varies with water temperature. Compliance with the *Giardia* standard is expressed as percent of required CT achieved; 100% is the minimum allowed. To avoid confusion with regulatory requirements, inactivation of *Cryptosporidium* is reported as Performance Ratio (PR); a PR of 1 demonstrates inactivation of 99% of *Cryptosporidium* based on site-specific data.

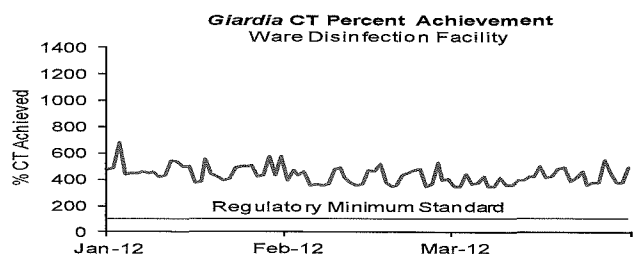
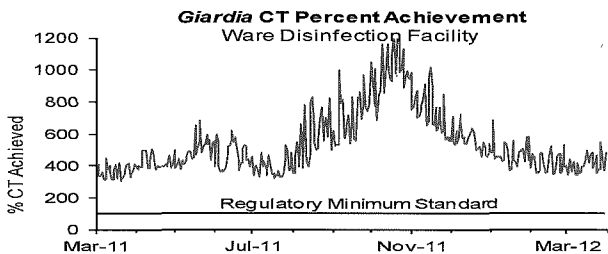
Wachusett Reservoir – MetroWest/Metro Boston Supply:

- *Ozone dose at the CWTP varied between 3.0 to 5.9 mg/L for the quarter.
- *CT was maintained above 100% at all times the plant was providing water into the distribution system this quarter, as well as every day for the last fiscal year.
- *Carroll Water Treatment Plant is undergoing winter maintenance and UV construction. Train A was off-line from October 26, 2011 through January 26, 2012. Train B was removed from service on February 2 and will remain off-line for approximately twelve weeks.
- *Ultraviolet light treatment will be added to CWTP and construction is underway. As part of this work the extended ozone contactors are being removed from service during half plant operations this winter, first on the A-side, and then on the B-side. When the extended contactors are no longer available, MWRA will not be able to meet the voluntary 2-log (99%) *Cryptosporidium* inactivation target. It is anticipated that at least 90% inactivation will be achieved. The transition to a reduced disinfection target occurred February 2, 2012 when Train B was removed from service. This change in treatment was reviewed and approved by the Massachusetts Department of Environmental Protection as part of its permitting for this project. The current PR target of 0.6 indicates at least 93.7% inactivation.



Quabbin Reservoir at Ware Disinfection Facility (CVA Supply):

CT was maintained above 100% at all times the plant was providing water into the distribution system for the quarter, as well as every day for the last fiscal year. The chlorine dose at Ware Disinfection Facility (WDF) is adjusted in order to achieve MWRA's target of ≥ 0.75 mg/L at Ludlow Monitoring Station. The chlorine dose at WDF varied between 1.4 mg/L to 1.5 mg/L for the quarter.

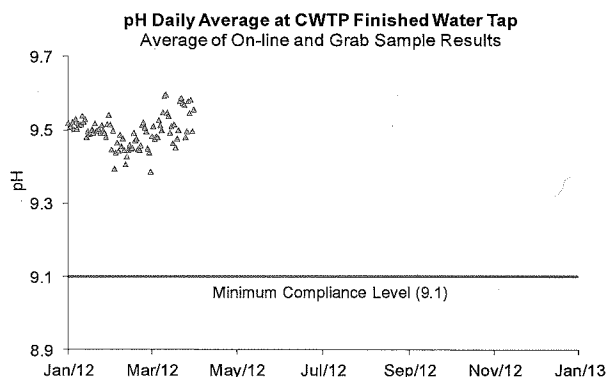
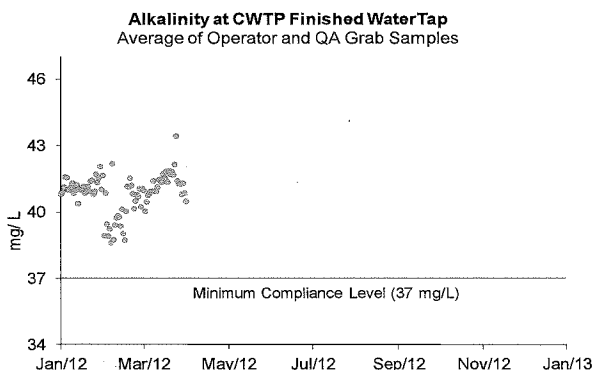


Treated Water – pH and Alkalinity Compliance

3rd Quarter – FY12

MWRA adjusts the alkalinity and pH of Wachusett water to reduce its corrosivity, which minimizes the leaching of lead and copper from service lines and home plumbing systems into the water. MWRA tests finished water pH and alkalinity daily at the CWTP's Fin B sampling tap. MWRA's target for distribution system pH is 9.3; the target for alkalinity is 40 mg/l. Per DEP requirements, CWTP samples have a minimum compliance level of 9.1 for pH and 37 mg/L for alkalinity. Samples from 27 distribution system taps have a minimum compliance level of 9.0 for pH and 37 mg/L for alkalinity. Results must not be below these levels for more than nine days in a six-month period. Distribution system samples are collected in March, June, September, and December.

Distribution system samples were collected on March 14 and 15, 2012. Distribution system sample pH ranged from 9.2 to 9.6 and alkalinity ranged from 41 to 43 mg/L. No sample results were below DEP limits for this quarter.



Drinking Water Quality Customer Complaints: Taste, Odor, or Appearance

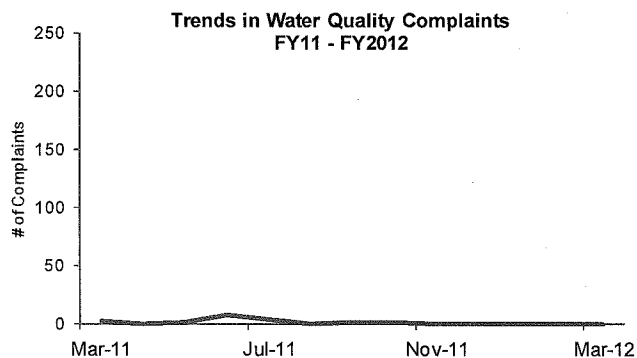
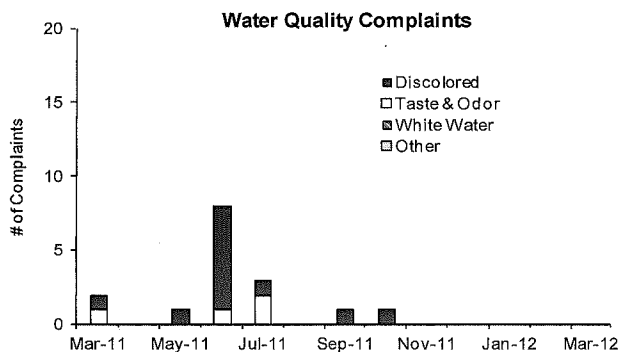
Background

MWRA collects information on water quality complaints that typically fall into four categories: 1.) discoloration due to MWRA or local pipeline work; 2.) taste and odor due to algae blooms in reservoirs or chlorine in the water; 3.) white water caused by changes in pressure or temperature that traps air bubbles in the water; or 4.) "other" complaints including no water, clogged filters or other issues.

MWRA routinely contacts communities to classify and tabulate water complaints from customers. This count, reflecting only telephone calls to towns, probably captures only a fraction of the total number of customer complaints. Field Operations staff have improved data collection and reporting by keeping track of more kinds of complaints, tracking complaints to street addresses and circulating results internally on a daily basis.

Outcome

Communities reported no water complaints during the quarter compared to 10 complaints for 3rd Quarter of FY11.



Bacteria & Chlorine Residual Results for Communities in MWRA Testing Program

3rd Quarter – FY12

While all communities collect bacteria samples for the Total Coliform Rule (TCR), 42 systems (including Deer Island and Westborough State Hospital) use MWRA's Laboratory for TCR compliance testing. These systems collect samples for bacteriological analysis and measure water temperature and chlorine residual at the time of collection. The other 10 MWRA customer communities (including Lynn's GE plant) have their samples tested elsewhere and these towns should be contacted directly for their monthly results.

There are 139 sampling locations for which MWRA is required to report TCR results. These locations include a subset of the community TCR locations, as well as sites along MWRA's transmission system, water storage tanks, and pumping stations.

The TCR requires that no more than 5% of all samples may be total coliform positive in a month (or that no more than one sample be positive when less than 40 samples are collected each month). Public notification is required if this standard is exceeded.

Escherichia coli (*E.coli*) is a specific coliform species that is almost always present in fecal material and whose presence indicates potential contamination of fecal origin. If *E.coli* are detected in a drinking water sample, this is considered evidence of a critical public health concern. Additional testing is conducted immediately and joint corrective action by DEP, MWRA, and the community is undertaken. Public notification is required if follow-up tests confirm the presence of *E.coli* or total coliform. A disinfectant residual is intended to maintain the sanitary integrity of the water; MWRA considers a residual of 0.2 mg/L a minimum target level at all points in the distribution system.

Highlights

In the 3rd Quarter, five of the 5,831 community samples (0.09% system-wide) submitted to MWRA labs for analysis tested positive for coliform (Somerville – in January; Hanscom AFB (Bedford) – in February; Boston, Waltham, Woburn – in March). Of the 1,851 (0.05%) MWRA samples taken, one tested positive for total coliform. No sample tested positive for *E.coli*. Hanscom AFB (Bedford) did not violate the TCR since only one sample was positive in their system which collects fewer than 40 samples/ month. All 42 systems that submitted chlorine residual data maintained an average disinfectant residual of at least 0.2 mg/L. Only 3.7% of samples had any results with a disinfectant residual lower than 0.2 mg/L for the quarter.

TCR results by Community						
Town	Samples Tested for Coliform (a)	Total Coliform # (%) Positive	E.coli % Positive	Public Notification Required?	Minimum Chlorine Residual (mg/L)	Average Chlorine Residual (mg/L)
ARLINGTON	180	0 (0%)	0.0%		0.03	1.59
BEDFORD	59	0 (0%)	0.0%		0.01	0.62
BELMONT	104	0 (0%)	0.0%		0.24	1.64
BOSTON	785	1 (0.13%)	0.0%	No	0.64	1.98
BROOKLINE	221	0 (0%)	0.0%		0.01	1.86
CHELSEA	169	0 (0%)	0.0%		0.71	1.74
DEER ISLAND	60	0 (0%)	0.0%		1.66	1.90
EVERETT	130	0 (0%)	0.0%		0.81	1.16
FRAMINGHAM	218	0 (0%)	0.0%		0.23	1.79
HANSCOM AFB (Bedford) (b)	31	1 (3.23%)	0.0%	No	0.01	1.10
LEXINGTON	117	0 (0%)	0.0%		0.86	1.94
LYNNFIELD	18	0 (0%)	0.0%		0.40	1.39
MALDEN	195	0 (0%)	0.0%		1.30	1.47
MARBLEHEAD	72	0 (0%)	0.0%		0.10	1.44
MARLBOROUGH (b)	126	0 (0%)	0.0%		0.03	1.59
MEDFORD	221	0 (0%)	0.0%		0.67	1.76
MELROSE	117	0 (0%)	0.0%		0.02	0.80
MILTON	96	0 (0%)	0.0%		1.01	1.60
NAHANT	30	0 (0%)	0.0%		0.09	1.34
NEEDHAM (b)	123	0 (0%)	0.0%		0.09	0.59
NEWTON	277	0 (0%)	0.0%		0.61	1.80
NORTHBOROUGH	48	0 (0%)	0.0%		0.07	1.27
NORWOOD	108	0 (0%)	0.0%		0.03	1.40
QUINCY	299	0 (0%)	0.0%		0.26	1.80
READING	130	0 (0%)	0.0%		0.01	1.37
REVERE	194	0 (0%)	0.0%		1.02	1.86
SAUGUS	104	0 (0%)	0.0%		1.26	1.76
SOMERVILLE	291	1 (0.34%)	0.0%	No	1.05	1.87
SOUTH HADLEY FD1 (c)	48	0 (0%)	0.0%		0.06	0.50
SOUTHBOROUGH	30	0 (0%)	0.0%		0.31	1.72
STONEHAM	91	0 (0%)	0.0%		0.42	1.80
SWAMPSCOTT	48	0 (0%)	0.0%		0.03	1.53
WAKEFIELD (b)	147	0 (0%)	0.0%		0.33	1.29
WALTHAM	220	1 (0.45%)	0.0%	No	0.26	1.78
WATERTOWN	130	0 (0%)	0.0%		0.91	1.84
WELLESLEY (b)	108	0 (0%)	0.0%		0.03	0.66
WESTBORO HOSPITAL	15	0 (0%)	0.0%		0.01	0.19
WESTON	48	0 (0%)	0.0%		1.48	1.94
WILMINGTON (b)	90	0 (0%)	0.0%		1.43	2.03
WINCHESTER (b)	65	0 (0%)	0.0%		0.15	0.83
WINTHROP	73	0 (0%)	0.0%		0.37	1.18
WOBURN (b)	195	1 (0.51%)	0.0%	No	0.11	0.88
Total:	5831	5 (0.09%)				
MASS. WATER RESOURCES AUTHORITY (d,e)	1851	1 (0.05%)	0.0%	No	0.01	1.79

(a) The number of samples collected depends on the population served and the number of repeat samples required.

(b) These communities are partially supplied, and may mix their chlorinated supply with MWRA chloraminated supply.

(c) Part of the Chicopee Valley Aqueduct System. Free chlorine system.

(d) MWRA sampling program includes a subset of community TCR sites as well as sites along the transmission system, tanks and pumping stations.

(e) MWRA total coliform and chlorine residual results include data from 125 community pipe locations as described above. In most cases these community results are accurately indicative of MWRA water as it enters the community system; however, some are clearly strongly influenced by local pipe conditions. Residuals in the MWRA system are typically between 1.0 and 2.8 mg/L.

Treated Water Quality: Disinfection By-Product (DBP) Levels in Communities

3rd Quarter – FY12

Background

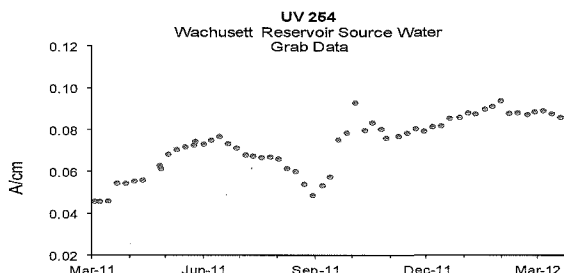
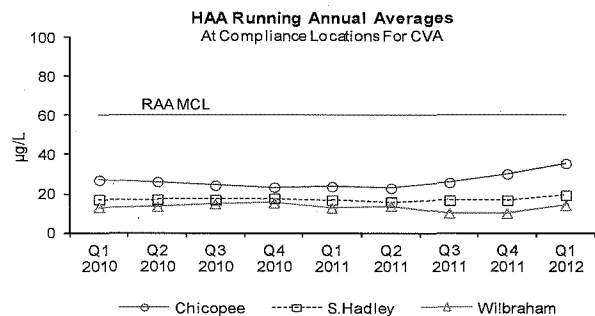
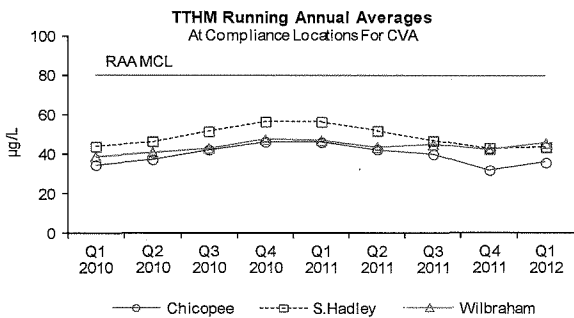
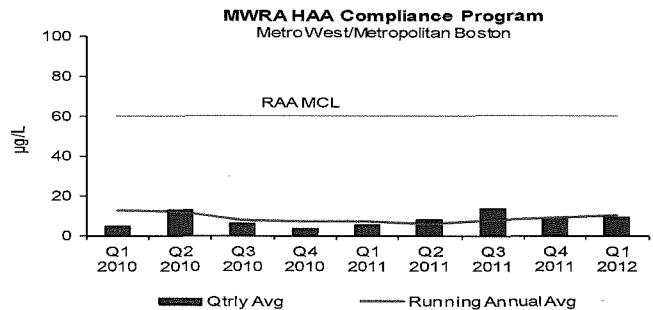
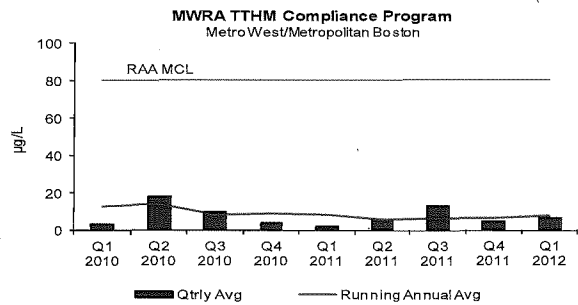
Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s) are by-products of disinfection treatment with chlorine. TTHMs and HAA5s are of concern due to their potential adverse health effects at high levels. EPA's running annual average (RAA) standard is 80 ug/L for TTHMs and 60 ug/L for HAA5s. The switch from chlorine to ozone for primary disinfection and the consolidation of treatment has lowered DBP formation and results are now more uniform. DEP requires that compliance samples be collected quarterly. Partially served communities are responsible for their own compliance monitoring and reporting and must be contacted directly for their results.

Absorbance, measured as UV-254, is one measurement of the amount and reactivity of natural organic material in source water. After Hurricane Irene, UV-254 measurements in Wachusett Reservoir rose sharply due to the action of the storm, increased tributary flows and above average fall precipitation. The higher UV-254 levels caused increased ozone and chlorine demand resulting in the need for higher ozone and chlorine doses. There were no impacts on regulatory compliance.

Bromate is tested monthly per DEP requirements for water systems that treat with ozone. Bromide in the raw water may be converted into bromate following ozonation. EPA's RAA MCL standard for bromate is 10 ug/L.

Outcome

The RAA for TTHMs and HAA5s for MWRA's Compliance Program (represented as the line in the top two graphs below) remained below current standards. The RAA for TTHMs = 7.8 ug/L; HAA5s = 9.7 ug/L. CVA's DBP levels continue to be below current standards. UV-254 levels are currently around 0.08 A/cm. The current RAA for Bromate = 0.0 ug/L.



Water Supply and Source Water Management

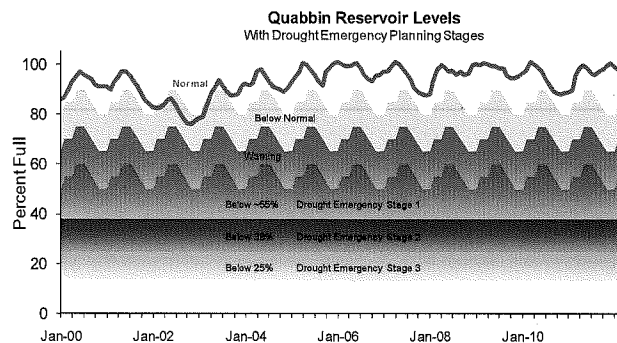
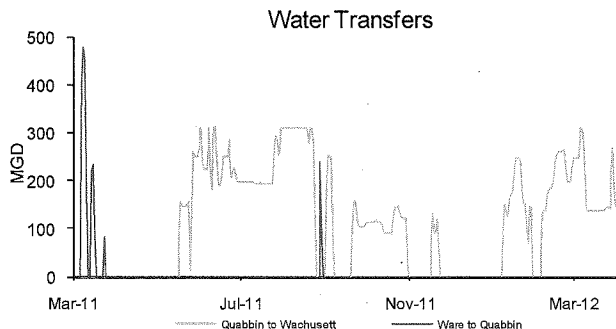
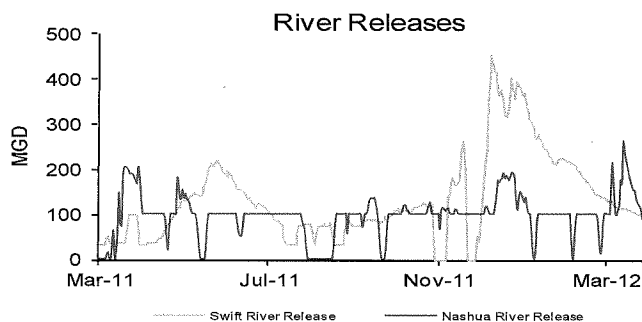
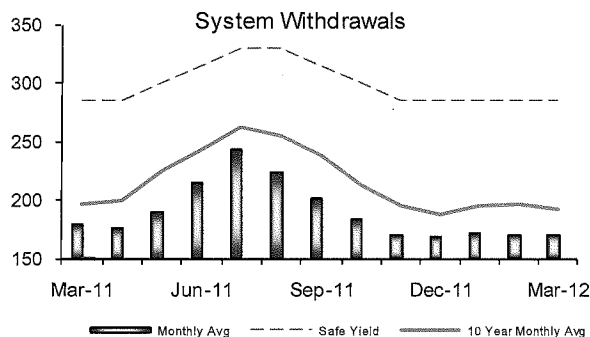
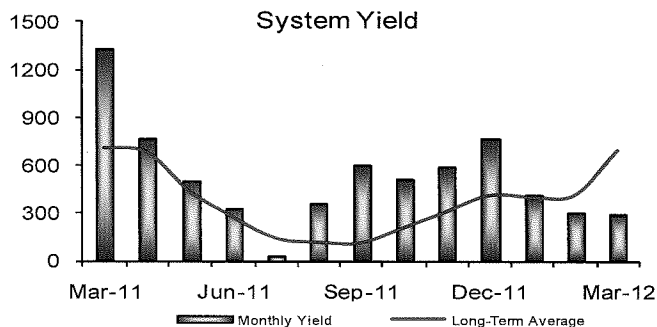
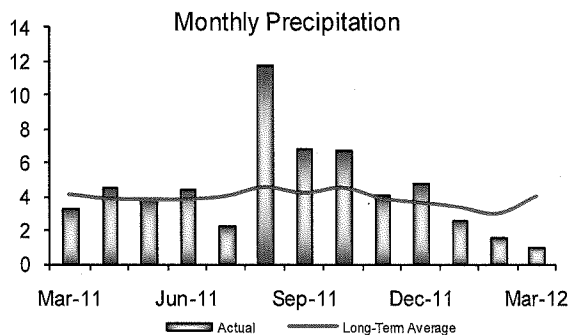
3rd Quarter – FY12

Background

A reliable supply of water in MWRA's reservoirs depends on adequate precipitation during the year and seasonal hydrologic inputs from watersheds that surround the reservoirs. Demand for water typically increases with higher summer temperatures and then decreases as temperatures decline. Quabbin Reservoir was designed to effectively supply water to the service areas under a range of climatic conditions and has the ability to endure a range of fluctuations. Wachusett Reservoir serves as a terminal reservoir to meet the daily demands of the Greater Boston area. A key component to this reservoir's operation is the seasonal transfer of Quabbin Reservoir water to enhance water quality during high demand periods. On an annual basis, Quabbin Reservoir accounts for nearly 50% of the water supplied to Greater Boston. The water quality of both reservoirs (as well as the Ware River, which is also part of the System Safe Yield) depend upon implementation of DCR's DEP-approved Watershed Protection Plans. System Yield is defined as the water produced by its sources, and is reported as the net change in water available for water supply and operating requirements.

Outcome

Quabbin's precipitation total for the month of March was only 0.50". This is the lowest monthly total out of any month since 1985. Quabbin's level is still above its normal operating band for this time of year, but with the lack of precipitation this spring in combination of virtually no snow pack recharge for the watershed; the reservoir level has dropped over 2' which represents a loss of storage of more than 16 billion gallons since Jan 1, 2012. Precipitation and Yield for the quarter were below their respective long term averages. Monthly withdrawals continue to be below the long-term average. Last Quarter, the USGS gauge used to measure the flow in the Swift River was found to be faulty. The gauge was replaced December 5, 2011. Debris such as fallen trees in the river from the various storm events caused backwater conditions resulting in inaccurate flows from the USGS meter. Debris was cleared from the river on December 2, 2011. The higher reservoir elevation this quarter even with the minimal rainfall, impacted the River releases which were significantly higher this quarter.



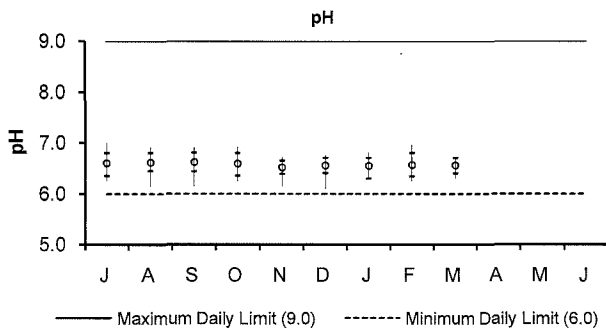
WASTEWATER QUALITY

NPDES Permit Compliance: Deer Island Treatment Plant
3rd Quarter - FY12

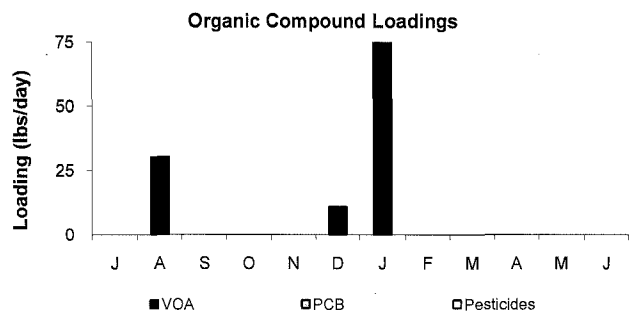
NPDES Permit Limits

Effluent Characteristics	Units	Limits	January	February	March	3rd Quarter Violations	FY12 YTD Violations	
Dry Day Flow:	mgd	436	327.0	321.9	316.1	0	0	
cBOD:	Monthly Average	mg/L	25	5.4	4.7	6.1	0	0
	Weekly Average	mg/L	40	7.2	5.3	6.9	0	0
TSS:	Monthly Average	mg/L	30	8.8	8.5	9.3	0	0
	Weekly Average	mg/L	45	11.7	10.1	10.8	0	0
TCR:	Monthly Average	ug/L	456	<40	<40	<40	0	0
	Daily Maximum	ug/L	631	<40	<40	<40	0	0
Fecal Coliform:	Daily Geometric Mean	col/100mL	14000	34.5	10.0	31.6	0	0
	Weekly Geometric Mean	col/100mL	14000	8.4	5.3	8.3	0	0
	% of Samples >14000	%	10	0	0	0	0	0
	Consecutive Samples >14000	#	3	0	0	0	0	0
pH:	SU	6.0-9.0	6.3-6.8	6.3-7.0	6.3-6.7	0	0	
PCB, Aroclors:	Monthly Average	ug/L	0.000045	UNDETECTED		0	0	
Acute Toxicity:	Mysid Shrimp	%	50	>100	>100	>100	0	0
	Inland Silverside	%	50	>100	>100	>100	0	0
Chronic Toxicity:	Sea Urchin	%	1.5	25	13	25	0	0
	Inland Silverside	%	1.5	100	100	100	0	0

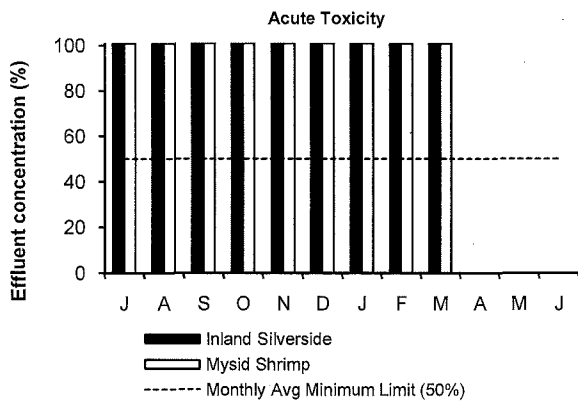
There have been no permit violations in FY12 at the Deer Island Treatment Plant.



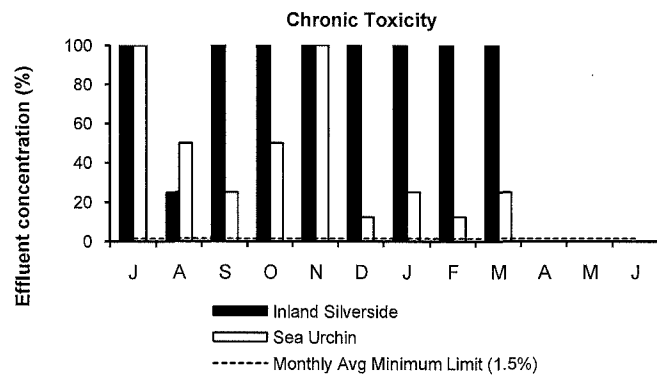
pH is a measure of the alkalinity or acidity of the effluent. Fluctuations in pH do not have an adverse effect on marine environments. Because of the pure oxygen used in the activated sludge reactor, the effluent pH tends to be at the lower pH range. pH measurements for the 3rd Quarter were within the daily permit limits.



An important wastewater component is the presence in the effluent of organic compounds, including volatile organic acids, pesticides, and polychlorinated biphenyls. The secondary treatment process has significantly reduced organic compound loadings in the effluent stream.



The acute toxicity test simulates the short-term toxic effects of chemicals in wastewater effluent on marine animals. The test measures the concentration (percent) of effluent that kills half the test organisms within four days. The higher the concentration of effluent required, the less toxic the effluent. For permit compliance, the effluent concentration that causes mortality to mysid shrimp and inland silverside must be at least 50%. Acute toxicity permit limits were met for the 3rd Quarter for both the inland silverside and mysid shrimp.



Typically, effects of chronic exposures differ from those of acute exposures. Because of this, chronic toxicity responses are not necessarily related to acute toxicity. The chronic toxicity test simulates the long-term toxic effects of chemicals in wastewater effluent on marine animals. To meet permit limits, a solution of 1.5% effluent and 98.5% dilution water must show no observed effect on the growth and reproduction of the test species. Chronic toxicity permit limits were met for the 3rd Quarter for both the inland silverside and sea urchin.

NPDES Permit Compliance: Clinton Wastewater Treatment Plant
3rd Quarter - FY12

NPDES Permit Limits

Effluent Characteristics	Units	Limits	January	February	March	3rd Quarter	FY12 YTD	
						Violations	Violations	
Flow:	mgd	3.01	3.52	3.56	3.41	3	6	
BOD:	Monthly Average:	20	5.8	4.9	6.2	0	0	
	Weekly Average:	20	6.0	6.1	7.3	0	0	
TSS:	Monthly Average:	20	5.9	5.6	5.7	0	0	
	Weekly Average:	20	6.5	6.7	6.7	0	0	
pH:	SU	6.5-8.3	7.3-7.8	7.2-7.7	6.9-7.7	0	0	
Dissolved Oxygen:	Daily Minimum:	6	6.9	7.6	6.2	0	1	
Fecal Coliform:	Daily Geometric Mean:	col/100mL	400	10.9	7.0	7.6	0	0
	Monthly Geometric Mean:	col/100mL	200	3.8	3.5	3.3	0	0
TCR:	Monthly Average:	ug/L	50	0	0	0	0	
	Daily Maximum:	ug/L	50	0	0	0	0	
Total Ammonia Nitrogen: 11/1 - 3/31	Monthly Average:	mg/L	10.0	0	0	0	0	
	Daily Maximum:	mg/L	35.2	0	0	0	0	
	Monthly Average:	ug/L	20	8.9	7.1	6.9	0	0
Copper:	May 1 - Oct 31							
Phosphorus:	Monthly Average:	mg/L	1.0	N/A	N/A	N/A	0	0
	Daily Minimum:	%	100	*N/A	*N/A	>100	0	0
Chronic Toxicity:	Daily Minimum:	%	62.5	*N/A	*N/A	100	0	0

There have been seven permit violation in Fiscal Year 2012 at the Clinton Treatment Plant.

3rd Quarter:

There were three permit violations in the 3rd Quarter of FY12. The monthly average flow limit of 3.01 mgd was exceeded three times during the 3rd Quarter. The official monthly average flow during January, February, and March were 3.52 mgd, 3.56 mgd, and 3.41 mgd, respectively. The high flow rates have historically been attributed to excessive wet weather conditions. The flow is calculated using a 12-month running average.

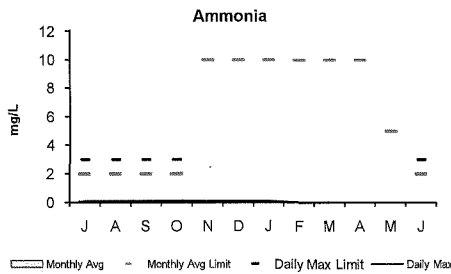
2nd Quarter:

There were three permit violations in the 2nd Quarter of FY12. The monthly average flow limit of 3.01 mgd was exceeded three times during October, November, and December were 3.09 mgd, 3.25 mgd, and 3.41 mgd, respectively. The high flow rates have historically been attributed to excessive wet weather conditions. The flow is calculated using a 12-month running average.

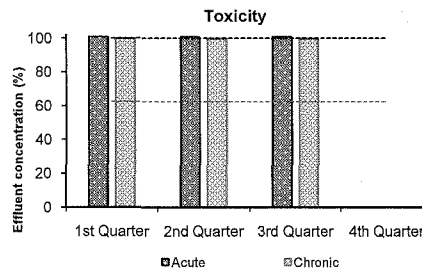
1st Quarter:

There was one permit violation in the 1st Quarter of FY12. The August 9, 2011 dissolved oxygen result of 5.1 mg/L did not meet the minimum permit limit of 6.0 mg/L. There was no known reason for this violation. The plant process and monitoring parameters were within the normal operating range on August 9 and there were no equipment failures or plant upsets reported during the monitoring period.

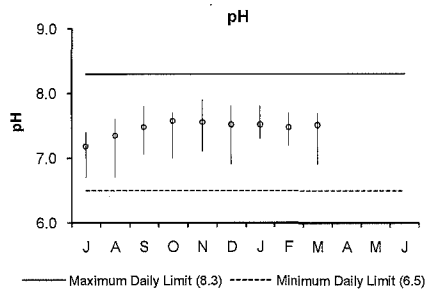
*Toxicity testing at the Clinton Treatment Plant is conducted on a quarterly basis.



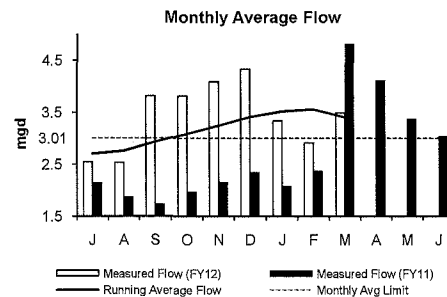
The 3rd Quarter's monthly average and daily maximum concentrations were below the permit limits. The monthly average and daily maximum limits for the 3rd Quarter are 10.0 mg/L and 35.2 mg/L, respectively. The permit limits are most stringent from June to October when warm weather conditions are most conducive to potential eutrophication.



Acute and chronic toxicity testing simulates the short- and long-term toxic effects of chemicals in wastewater effluent on aquatic animals. For permit compliance, the effluent concentration that causes mortality to the daphnid in acute and chronic testing must be at least >100% and 62.5%, respectively. Toxicity limits were met during the 3rd Quarter.



pH is a measure of the alkalinity or acidity of the effluent. All daily pH results for the 3rd Quarter were within the range set by the permit.



The graph depicts the running annual average monthly flow, measured in million gallons per day, exiting the plant. The average monthly flows during the 3rd Quarter were above the NPDES permit limit.

COMMUNITY FLOWS
AND PROGRAMS

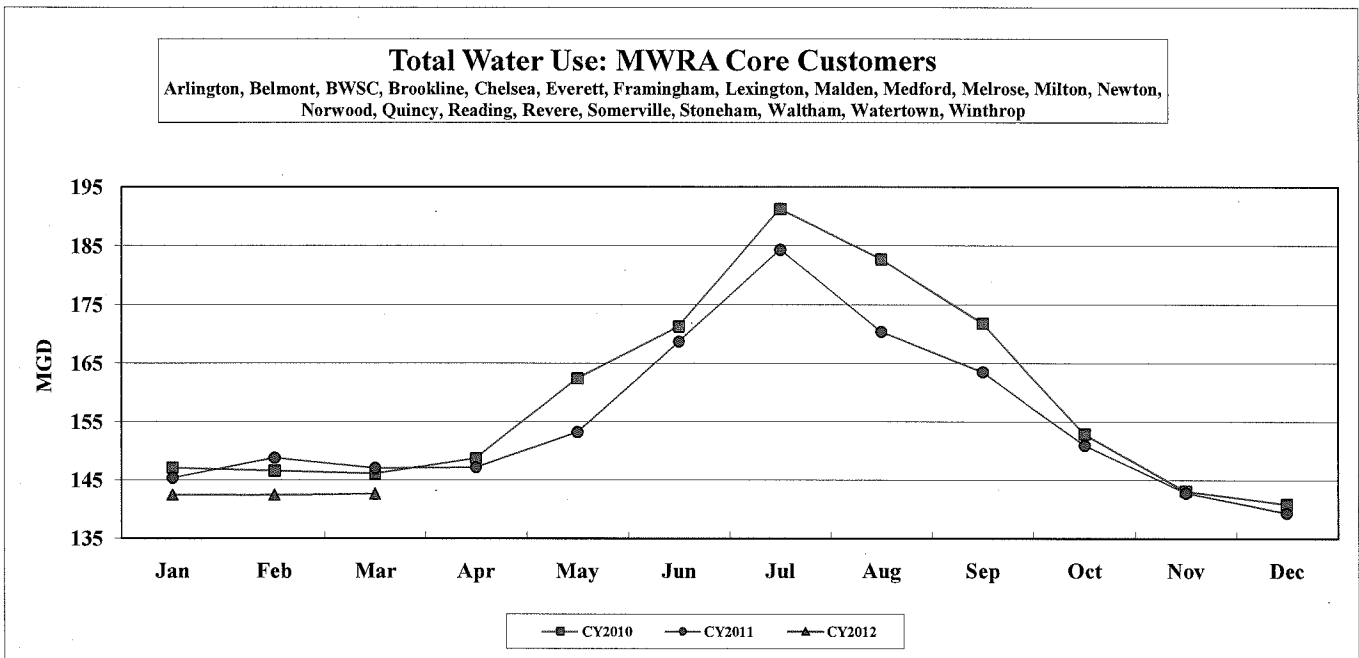
Water Supplied: MWRA Core Communities 3rd Quarter FY-12

MWRA

Water Supplied: MWRA Core Communities

MGD	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
CY2010	147.109	146.572	146.104	148.736	162.362	171.224	191.222	182.708	171.780	152.865	143.132	140.875	158.824
CY2011	145.371	148.782	147.051	147.188	153.188	168.673	184.336	170.378	163.482	150.928	142.805	139.350	155.175
CY2012	142.472	142.431	142.663	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	142.524

MG	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
CY2010	4,560.379	4,104.007	4,529.220	4,462.067	5,033.225	5,136.713	5,927.887	5,663.942	5,153.392	4,738.813	4,293.973	4,367.117	57,970.734
CY2011	4,506.504	4,165.900	4,558.577	4,415.643	4,748.836	5,060.182	5,714.425	5,281.711	4,904.458	4,678.774	4,284.158	4,319.858	56,639.028
CY2012	4,416.638	4,130.494	4,422.557	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	12,969.688

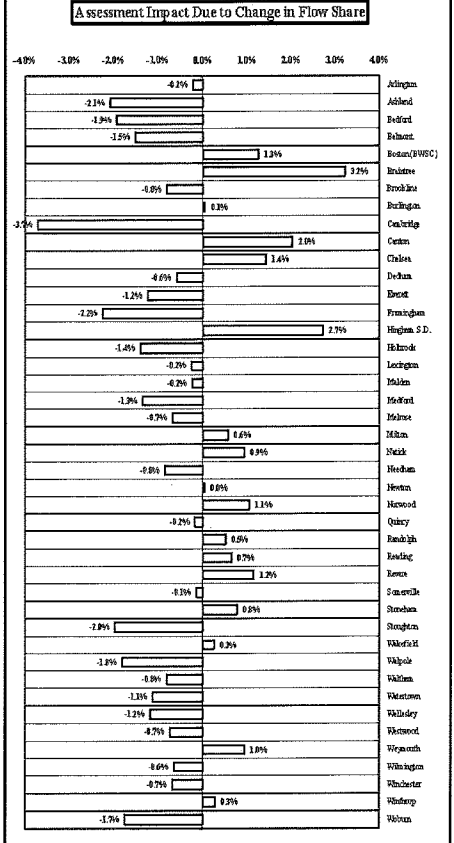
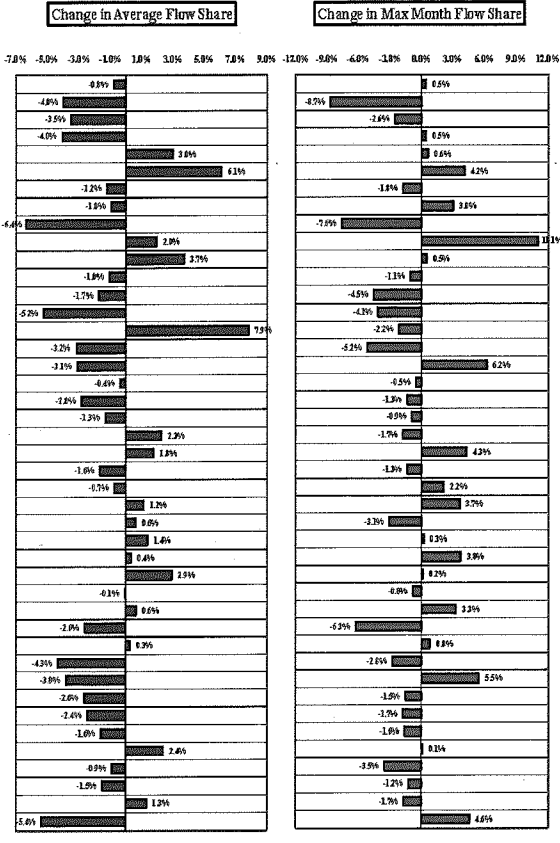
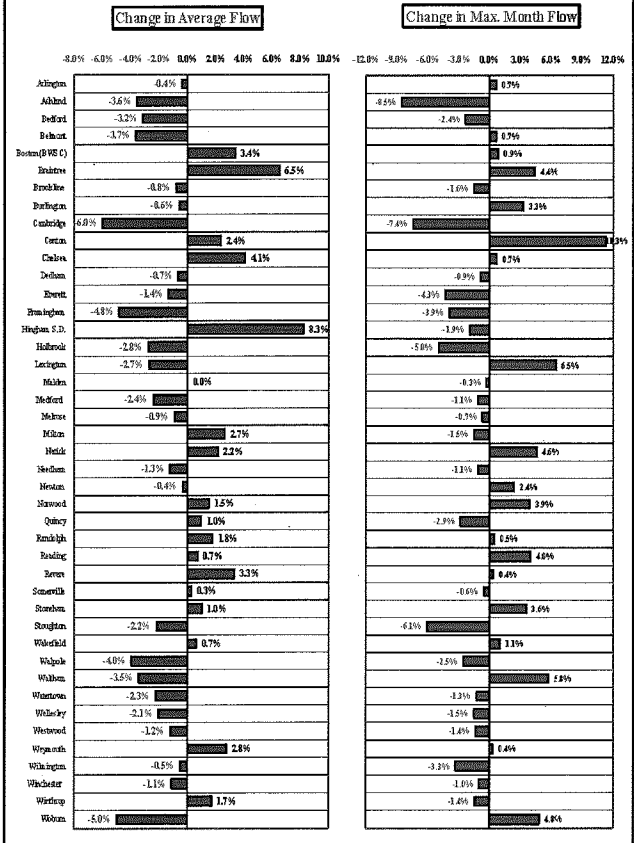


How Projected CY2011 Community Wastewater Flows Could Effect FY2013 Sewer Assessments ^{1,2,3}

The flow components of FY2013 sewer assessments will be calculated using a 3-year average of CY2009 to CY2011 wastewater flows compared to FY2012 assessments that used a 3-year average of CY2008 to CY2010 wastewater flows.

But as MWRA's sewer assessments are a ZERO-SUM calculation, a community's assessment is strongly influenced by the **RELATIVE** change in CY2009 to CY2011 flow share compared to CY2008 to CY2010 flow share, compared to all other communities in the system.

The chart below illustrates the change in the TOTAL BASE assessment due to FLOW SHARE CHANGES. ⁴



Community Wastewater Flows Second Quarter-FY12

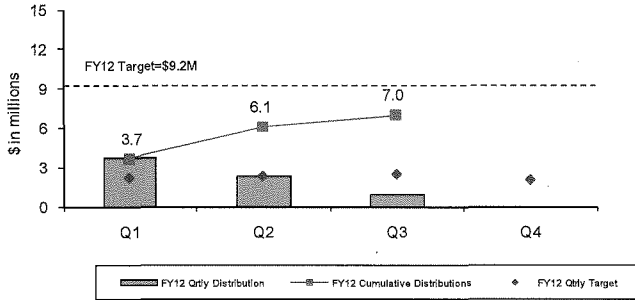
Notes:
¹ MWRA uses a 3-year flow average to calculate sewer assessments. Three-year averaging smoothes the impact of year-to-year changes in community flow share, but does not eliminate the long-term impact of changes in each community's relative contribution to the total flow.
² Based on CY2008 to CY2011 average wastewater flows as of 01/10/12. Flow data is preliminary and subject to change pending additional MWRA and community review.
³ CY2008 to CY2010 wastewater flows based on actual meter data. CY2011 flows based on actual meter data for January to October and projected flows for November to December.
⁴ Represents the impact on the total BASE assessment resulting from the changes in average and maximum wastewater FLOW SHARES.

Community Support Programs 3rd Quarter – FY12

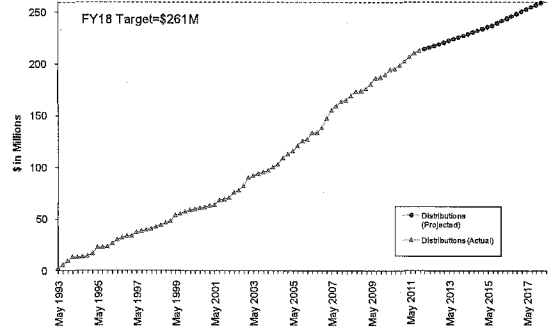
Infiltration/Inflow Local Financial Assistance Program

MWRA's Infiltration/Inflow (I/I) Local Financial Assistance Program provides \$260.75 million in grants and interest-free loans (average of about \$10 million per year from FY93 through FY18) to member sewer communities to perform I/I reduction and sewer system rehabilitation projects within their locally-owned collection systems. Eligible project costs include: sewer rehabilitation construction, pipeline replacement, removal of public and private inflow sources, I/I reduction planning, engineering design, engineering services during construction, etc. I/I Local Financial Assistance Program funds are allocated to member sewer communities based on their percent share of MWRA's wholesale sewer charge. Interest-free loans are repaid to MWRA over a five-year period beginning one year after distribution of the funds.

FY12 Quarterly Distributions of Sewer Grant/Loans



**I/I Local Financial Assistance Program
Distribution FY93-FY18**

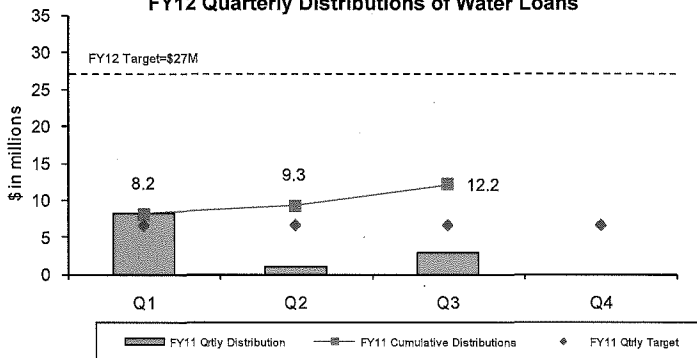


During the 3rd Quarter of FY12, \$0.9 million in financial assistance (45% grants and 55% interest-free loans) was distributed to fund local sewer rehabilitation projects in Needham, Stoughton and Westwood. Total grant/loan distribution for FY12 is \$7.0 million. From FY93 through the 3rd Quarter of FY12, all 43 member sewer communities have participated in the program and more than \$214 million has been distributed to fund 418 local I/I reduction and sewer system rehabilitation projects. Distribution of the remaining funds has been approved through FY18 and community loan repayments will be made through FY23. All scheduled community loan repayments have been made.

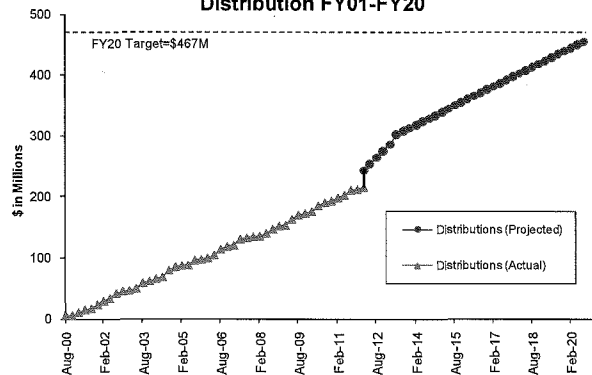
Water Local Pipeline and Water System Assistance Programs

MWRA's Local Pipeline and Water System Assistance Programs (LPAP and LWSAP) provide \$467 million in interest-free loans (an average of about \$23 million per year from FY01 through FY20) to member water communities to perform water main rehabilitation projects within their locally-owned water distribution systems. Eligible project costs include: water main cleaning/lining, replacement of unlined water mains, lead service replacements, valve, hydrant, water meter, tank work, engineering design, engineering services during construction, etc. MWRA partially-supplied communities receive pro-rated funding allocations based on their percentage use of MWRA water. Interest-free loans are repaid to MWRA over a ten-year period beginning one year after distribution of the funds.

FY12 Quarterly Distributions of Water Loans



**Local Pipeline and Water System Assistance Programs
Distribution FY01-FY20**



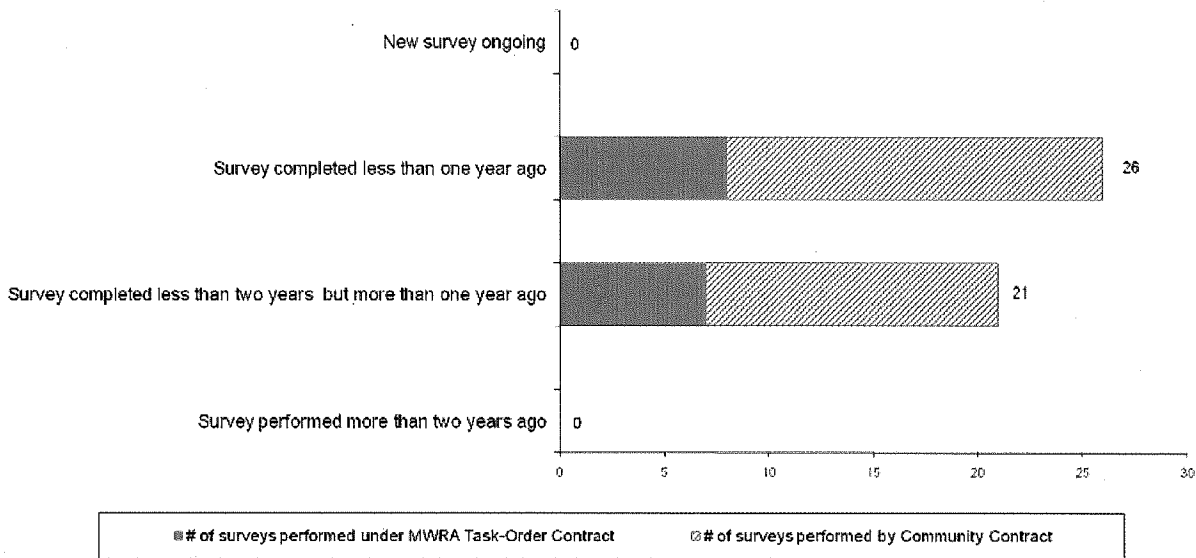
During the 3rd Quarter of FY12, \$2.9 million in interest-free loans was distributed to fund local water projects in Belmont, Chicopee and Medford. Total loan distribution for FY12 is \$12.2 million. From FY01 through the 3rd Quarter of FY12, more than \$215 million has been distributed to fund 252 local water system rehabilitation projects in 37 MWRA member water communities. Distribution of the remaining funds has been approved through FY20 and community loan repayments will be made through FY30. All scheduled community loan repayments have been made. FY13 is the last year of community loans under the Phase 1 Local Pipeline Assistance Program (Phase 2 Local Water System Assistance loans began in FY11 and will be distributed through FY20). A portion of the Phase 1 loan budget is not expected to be utilized by the communities. A revised Phase 1 budget has been developed for FY13.

Community Support Programs

3rd Quarter – FY12

Community Water System Leak Detection

To ensure member water communities identify and repair leaks in locally-owned distribution systems, MWRA developed leak detection regulations that went into effect in July 1991. Communities purchasing water from MWRA are required to complete a leak detection survey of their entire distribution system at least once every two years. Communities can accomplish the survey using their own contractors or municipal crews; or alternatively, using MWRA's task order leak detection contract. MWRA's task order contract provides leak detection services at a reasonable cost that has been competitively procured (3-year, low-bid contract) taking advantage of the large volume of work anticipated throughout the regional system. Leak detection services performed under the task order contract are paid for by MWRA and the costs are billed to the community the following year. During the 3rd Quarter of FY12, all member water communities were in compliance with MWRA's Leak Detection Regulation.



Community Water Conservation Outreach

MWRA's Community Water Conservation Program helps to maintain average water demand below the regional water system's safe yield of 300 mgd and provide customers the mean to manage their water and sewer bills. Current 5-year average water demand is less than 210 mgd. The local Water Conservation Program includes distribution of water conservation education brochures (indoor and outdoor bill-stuffers) and low-flow water fixtures and related materials (shower heads, faucet aerators, toilet leak detection dye tabs, and instructions), all at no cost to member communities or individual customers. The Program's annual budget is \$25,000 for printing and purchase of materials. Annual distribution targets and totals are provided in the table below. The largest distribution of brochures is typically in the spring.

FY12 DISTRIBUTION	Annual Target	Q1	Q2	Q3	Q4	Annual Total
Educational Brochures	150,000	1,994	4,796	19,470		26,260
Low-Flow Fixtures (showerheads and faucet aerators)	10,000	1,945	2,712	3,557		8,214
Toilet Leak Detection Dye Tablets	-----	3,683	1,535	3,631		8,849

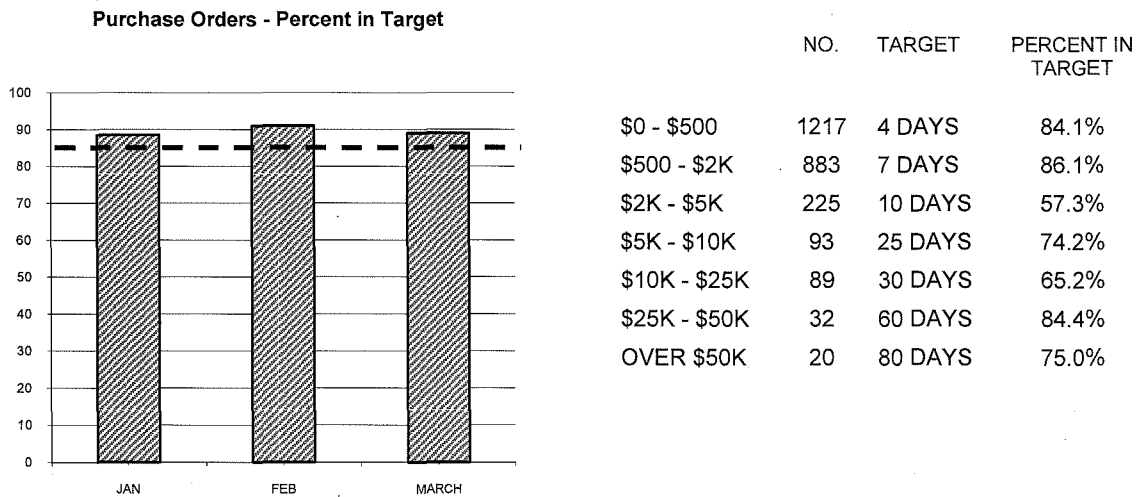
BUSINESS SERVICES

Procurement: Purchasing and Contracts Third Quarter FY12

Background: Goal is to process 85% of Purchase Orders and 80% of Contracts within Target timeframes.

Outcome: Processed 81% of purchase orders within target; Avg. Processing Time was 6.81 days vs. 4.99 days in Qtr 3 of FY11. Processed 83% (15 of 18) contracts within target timeframes; Avg. Processing Time was 118 days vs. 116 days in Qtr 3 of FY11.

Purchasing



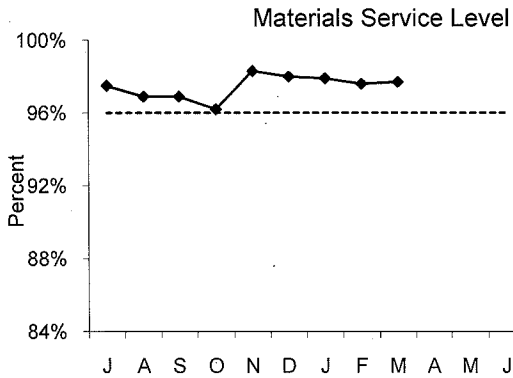
- Purchasing Unit processed 2559 purchase orders, 106 fewer than the 2453 processed in Qtr 3 of FY11, for a total value of \$8,866,584 vs. a dollar value of \$6,350,569 in Qtr 3 of FY11.
- The target was not achieved for the \$2k – \$5k category due to end user confirmation of specifications and an extended review of quotes, the \$5k - \$10k category because of delay in vendor response, vendor sourcing, and timing of the need for the services, the \$10k – \$25k category due to verifying end user needs, the \$25k - \$50k category due to extended bid development and review processes and the over \$50k category because of bid consolidation, extended bid development and bid review processes and determination of the scope of work needed.

Contracts, Change Orders and Amendments

- Three contracts were not processed within target timeframes. One was due to specification development and slow document submission after award, and one contract was postponed until market conditions were favorable, One contract was processed within two weeks of target.
- Procurement processed eighteen contracts with a value of \$9,291,335 and six zero dollar value amendments.
- Forty-nine change orders were executed during the period, but some were credit change orders and are recorded as negative numbers. The dollar value of all non-credit change orders during the 3rd quarter FY12 was \$3,460,746 and the value of credit change orders was (\$526,317).
- In addition, staff reviewed 118 proposed change orders and 62 draft change orders.

Materials Management

3rd Quarter, FY12



The service level is the percentage of stock requests filled. The goal is to maintain a service level of 96%. Staff issued 8,712 (97.7%) of the 8,916 items requested in Q3 from the inventory locations for a total dollar value of \$879,375.

Inventory goals focus on:

- Maintaining optimum levels of consumables and spare parts inventory
- Adding new items to inventory to meet changing business needs
- Reviewing consumables and spare parts for obsolescence
- Managing and controlling valuable equipment and tools via the Property Pass Program

The FY12 goal is to reduce consumable inventory from the July '11 base level (\$6.8 million) by 4.0% (approximately \$273,659), to \$6.5 million by June 30, 2012 (see chart below).

Items added to inventory this quarter include:

- Deer Island – pillow block bearing, Siemens relay, copper cable and indicators for Core; explosion proof elbows and alloy screw sets for Residuals.
- Chelsea –radiator hose, vacuum pump, plow light and grease gun for VMM; 75 HP motor, 2" couplers, contact assembly, pilot lights and vibration isolator for Work Order Coordination Group.
- Southboro – ballasts and threaded rod for Maintenance; Valve repair kit for Carroll Water Treatment Plant.

Property Pass Program:

- Audits were conducted at Southboro masons and paint shops, Chelsea masons, plumbers, paint and electric shops and leak inspection and Norumbega during Q3.
- Numerous obsolete network switches, monitors, fax machines, printers, keyboards, servers, cameras and cell phones have been received into property pass as surplus. Disposition is being handled as part of our ongoing recycling efforts.
- Scrap revenue received to date for the quarter amounted to \$5,012.

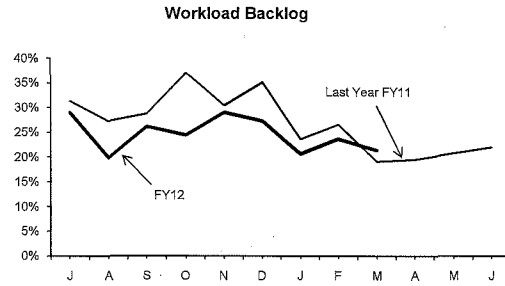
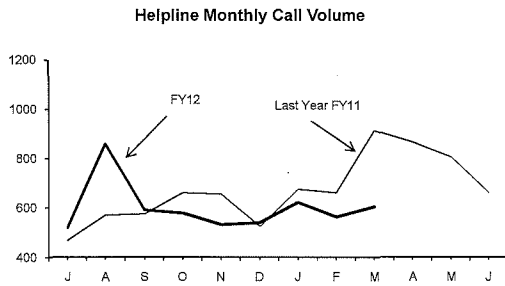
Items	Base Value July-11	Current Value w/o Cumulative New Adds	Reduction / Increase To Base
Consumable Inventory Value	6,841,475	6,325,255	-516,220
Spare Parts Inventory Value	7,057,082	7,036,039	-21,043
Total Inventory Value	13,898,557	13,361,294	-537,263

Note: New adds are items added at an inventory location for the first time for the purpose of servicing a group/department to meet their business needs/objectives.

MIS Program 3rd Quarter FY12

Operations

Highlights:



Performance

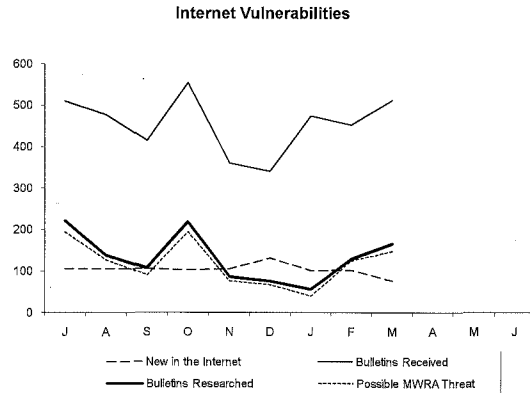
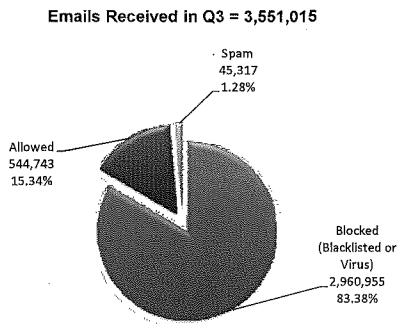
- Call volume for Q3 peaked in January and has decreased by 7.9% from Q2 last year. For Q3 the backlog peaked in February and is 3% above the targeted benchmark of 20%.

Infrastructure

- Uninterrupted Power Supply (UPS): Maximo work orders for quarterly inspections of UPS batteries have been set up. For Q3, all MIS related UPS batteries were inspected and labeled for identification.
- NET2020 project (LAN Switch replacement): In Q3 installed Local Area Network switch replacements at at Deer Island and Chelsea. To date 46 switches have been installed at multiple sites with 26 remaining to be done.

Information Security

- Cyber Security: During Q3, staff pushed security fixes and updates to desktops and servers throughout the quarter in order to protect against the 35 vulnerabilities. In addition, 279 new vulnerabilities were discovered throughout the Internet during Q3.
- LANdesk Antivirus quarantined 98 distinct viruses from 64 MWRA computers. MWRA's systems are current with anti-virus providers' signatures for all known malware.



Applications/Training/Records Center

Area	Significant Accomplishments
MWRA Emergency Notification Systems (ENS)	Trained Office of Emergency Preparedness (OEP) staff and Public Affairs staff in the systems that comprise the MWRA ENS (Community Contacts, MWRA 911, Communicator! NXT). Assisted OEP with three drills to contact the ESU group using the remote activation function of Communicator! NXT. Added three new Lawson users fields (personal email, personal cell, work cell phone #2), modified export and import files, and updated data as required for notifications.
Lawson	Application v9.0.1 Upgrade: Progress continues on the application upgrade and the testing. Target completion is for Q4 FY12. Electronic Time Entry/Approval: Implemented the electronic timesheet approvals process for DI Directors Office, DI Assets, Work Coordination and Condition Monitoring, and DI Safety and Security Departments eliminating the need for filling out and approving paper timesheets. These Departments have a total of 40 employees with 9 Summary approvers.
Maximo	Application v7.5 Upgrade: Database has been successfully upgraded from version 7.1.1.8 to 7.5, which was the final iteration before converting from the system from 5.2 to 7.5. A test environment using Deer Island data is ready to present to power users. A statement of work is being drafted under ITS43 for assistance with implementing a single Maximo 7.5 system by combining Deer Island and FOD.
Library & Records Center	The Library completed 52 research requests (154 YTD), added 42 books (93 YTD), distributed 82 periodicals and 2,557 electronically (8,647 YTD) linked articles to staff. The Records Center added 54 boxes (196 YTD), conducted 2 training sessions, and attended 3 Record Conservation Board Meetings. Relocated Shaft 5 evidence to new location and updated access procedures. Met with State Archivist on 3/21/12 and submitted Records Conservation Board forms for 228 boxes already reviewed by Law to be reviewed for disposition approval at 4/4/12 RCB meeting.
IT Training	For the quarter, 132 staff attended 21 classes and 11 workshops. 12% of the workforce have attended at least one class year-to-date.

Legal Matters

3rd Quarter FY2012

PROJECT ASSISTANCE

COURT AND ADMINISTRATIVE ORDER

- **Boston Harbor Litigation and CSO:** Drafted and filed quarterly compliance and progress report; filed CSO annual report.
- **NPDES:** Reviewed MWRA's draft nine minimum controls document; drafted memorandum relating to infiltration and inflow.

REAL ESTATE, CONTRACT AND OTHER SUPPORT

- **MassDOT License – Chelsea:** Drafted license agreement for MassDOT to grant MWRA use of the abandoned right-of-way.
- **Chelsea Headworks Land Sale:** Drafted legislation to authorize the sale of the property adjacent to the Chelsea headworks to the City of Chelsea.
- **Boston Bar Association Continuing Legal Education:** Represented the MWRA at a panel discussion on the intersection of Private and Public Real Estate issues organized by the Boston Bar Association as part of its Continuing Legal Education Program.
- **G.L. c. 148/527 CMR 1.00:** Drafted Opinion Letter to the Department of Fire Services which opined that MWRA was exempt from the requirements of G.L. c. 148 and regulations promulgated pursuant to that statute, 527 CMR 1.00 et seq, commonly referred to as the state fire code, relating to Above Ground Storage Tanks (AST).
- **Underground Storage Tanks:** advised staff regarding the new DEP regulations pertaining to UST operators' training and certification, and their application to the MWRA.
- **Weston Water Main:** Provided continued attention to matters regarding litigation claims and strategies arising out of the water main break on May 1, 2010; continued the process of attempting early settlement through mediation to take place on May 22 and 23, 2012; filed a Motion to Amend the First Amended Complaint to add Fay Spofford & Thorndike as a party defendant.
- **Miscellaneous:** Reviewed and approved twenty-two (22) Section 8(m) Permits; reviewed and made recommendations on eight (8) construction claims;

ENVIRONMENTAL

- **Clean Air Regulations:** Reviewed Clean Air regulations relating to the national emission standards for existing stationary compression ignition (CI) reciprocating internal combustion engines (RICE) located at an area source of hazardous air pollutant (HAP).
- **Miscellaneous:** Researched and advised on U.S. wastewater treatment plants that are combining organic solid wastes with wastewater treatment residuals in anaerobic digesters.

LABOR, EMPLOYMENT AND ADMINISTRATIVE

New Matters

Received an arbitrator's decision granting the MWRA's motion to dismiss a grievance regarding the assignment of employees for lack of substantive jurisdiction.

Received an arbitrator's decision in favor of the MWRA finding that the MWRA did not violate a collective bargaining agreement when it did not pay the grievant out of title pay.

Received an arbitrator's decision in favor of a union finding that the MWRA violated a collective bargaining agreement when it did not negotiate with the union about the grade of a reclassified position.

Received an arbitrator's decision in favor of a MWRA finding that the MWRA did not violate a collective bargaining agreement when it terminated the grievant.

Received a dismissal from the MCAD for lack of probable cause of a charge of discrimination on the basis of gender.

Settled an arbitration regarding the transfer of an employee.

Matters Concluded Six demands for arbitration were filed.

LITIGATION/TRAC

New Lawsuits During the Third Quarter of FY 2012 one new lawsuit was reported.

PDA Financial v. (current employee): This wage garnishment matter has been "reactivated" by the creditor's attorneys, with service of a new trustee summons on Feb. 13, 2012. The matter was initiated in September of 2010, and has been inactive since October 2010. The amount of the attachment is \$3,935.67. Previous Execution issued in Waltham District Court in this matter in the amount of \$2,944.36 from July 2008.

Significant Developments

Linebarger Googan Blair & Sampson, LLP: The Notice dated January 3, 2012 from Linebarger Googan Blair & Sampson, LLP concerning an alleged debt owed to the US Department of Health & Human Services. There are no specifics in the notice. Law Division has requested supporting information from Linebarger et al, and will follow up once the information is received.

(Former employee) v. MWRA: This is an employment litigation matter whereby the plaintiff is a former employee appealing the arbitration decision upholding his termination. He is seeking reinstatement. In August 2011, the MWRA filed its Motion for Summary Judgment. On February 6, 2012, the court allowed MWRA's Motion dismissing the plaintiff's complaint against the MWRA with costs.

(Former employee) v. MWRA: This is an employment matter whereby plaintiff alleged race discrimination in his conditions of employment and his termination from employment, all in violation of federal (42 USC 2000e) and state (G.L. C. 151 B Section 1) law. MWRA moved for summary judgment on all claims based upon plaintiff's execution of a release at the time of the termination of his employment, and his subsequent ratification of that release. On March 16, 2012, the court ruled in favor of MWRA's Motion for Summary Judgment dismissing the plaintiff's complaint against the MWRA with costs. Plaintiff filed a Notice of Appeal on March 23, 2012.

William A. Davison, Mary J. Davison, and Paul W. DiMaura, Trustees of Heather Realty Trust v. Massachusetts Water Resources Authority: In this eminent domain case, Heather Realty Trust, a real estate trust, sued MWRA for damages for the eminent domain takings of temporary and permanent easements approved by the Board in 2005 with respect to the Plaintiffs' adjoining parcels located at 1625, 1665 and 1675 VFW Parkway, Boston, MA (Route 1 South). The takings consisted of temporary easements during construction of the Upper Neponset Valley Relief Sewer ("UNVRS Project") and its connection to the Wellesley Extension Relief Sewer ("WERS"), including an expansion of the pre-existing permanent easements taken by MDC and the City of Boston on the property. The eminent domain case was tried to a 12-person jury before Suffolk Superior Court Judge Paul Troy. The jury was impaneled on March 8, 2012 and it returned its verdict late in the afternoon of Friday, March 23, 2012. In the intervening days, the jury took a "view" of Plaintiffs' premises, heard 10 days of testimony from 8 witnesses, including Michael Hornbrook, and had at its disposal 105 exhibits introduced in evidence by the parties. The jury deliberated for only 2 - 3 hours before returning a verdict very favorable to MWRA in that it exclusively used the lower land and rental values (\$431,500) relied upon by MWRA's expert, Steven Foster. The jury appears to have disregarded the values of Plaintiffs' expert, Robert Coleman, which were four times higher (\$1.73 million). Of greatest significance, the jury's verdict awarded zero dollars to the Plaintiffs for their claims that MWRA's takings had damaged their ability to continue to use and/or develop the parcels for any use other than parking. The amount of the verdict, \$431,500, will be reduced by the sum of \$161,800 which has previously been paid to the Plaintiffs. The balance, \$269,700, does not include pre-judgment interest from the date of the taking in 2005. Pre-judgment interest will amount to approximately \$43,000 through April, 2012. Interest will continue to accrue until a judgment enters and is paid. The current "per diem" is approximately \$2/day. The rate currently stands at a fraction of one percent per annum (0.2%). The interest rate will next re-set on or about April 14, 2012 and is expected to remain at a level well below one percent. Among the post-trial issues that Plaintiff may raise includes whether the variable interest rate has dropped so low, for so long, as to constitute an unconstitutional deprivation of property without "just compensation." MWRA has served a motion to use the low statutory interest rate and to have a final judgment entered as quickly as possible to minimize the payment required to be made to Plaintiffs. Following the entry of judgment, Plaintiffs and MWRA will have the right to appeal.

Closed Cases Midland Funding, Inc. vs. (Current Employee) and MWRA: In this wage garnishment action, MWRA received on March 23, 2012 a Voluntary Dismissal of Trustee Process as to the defendant and MWRA as Trustee was filed in Charlestown District Court.

D & C Construction Company, Inc. v. MWRA: On or about June 26, 2008, D&C entered into public construction contract with MWRA for a project known as "Cottage Farm/ Brookline Connection and Inflow Controls in Boston and Cambridge, MA in lump sum amount of \$1,976,000. The Contract for the Project was MWRA Project No. 7080. D&C's work under the Contract included dismantling, evacuation and cleanup of certain chambers related to anticipated overflow events during the course of the Project. Plaintiff claimed breach of contract by a general contractor on a public construction project to recover monies due under its lump sum contract with the Authority and is claiming damages in the amount of \$187,106.60. On March 5, 2012, the court ruled that D&C's Motion for Summary Judgment be denied and MWRA's Motion for Summary Judgment be allowed. The Complaint of the plaintiff, D&C Construction Company, Inc., has been dismissed against the MWRA, with costs, subject to appeal rights.

Subpoenas During the Third Quarter of FY 2012, one new subpoena was received, one subpoena was re-activated and three subpoenas were pending at the end of the Third Quarter FY 2012.

Public Records During the Third Quarter of FY 2012 eleven new public records requests were received and seven requests were closed at the end of the Third Quarter FY 2012.

SUMMARY OF PENDING LITIGATION MATTERS

TYPE OF CASE/MATTER	As of Mar 2011	As of Dec 2011	As of September 2011
Construction/Contract/Bid Protest (other than BHP)	2	4	5
Tort/Labor/Employment	7	6	8
Environmental/Regulatory/Other	1	1	1
Eminent Domain/Real Estate	1	2	2
total – all defensive cases	11	13	16
Affirmative Cases:			
<u>MWRA v. (current employee)</u>	2	2	2
<u>MWRA v. J. F. Shea Co., Inc., et al.</u>			
Other Litigation matters (restraining orders, etc.)	0	0	0
total – all pending lawsuits	13	15	18
Significant claims not in suit:			
<u>Giaquinto/Geico Automobile Accident Claims</u>	2	2	2
Bankruptcy	3	3	3
Wage Garnishment	8	8	8
TRAC/Adjudicatory Appeals	0	0	1
Subpoenas	4	3	3
TOTAL – ALL LITIGATION MATTERS	30	31	35

TRAC/MISC.

- New Appeals** No news appeals were received in the 3rd Quarter FY 2012.
- Settlement by Agreement of Parties** No cases were settled by Agreement of Parties in 3rd Quarter FY 2012.
- Stipulation of Dismissal** No cases were dismissed by Stipulation of Dismissal.
- Notice of Dismissal Fine paid in full** No cases were dismissed by Notice of Dismissal, fine paid in full.
- Tentative Decisions** No Tentative Decisions were issued in 3rd Quarter FY 2012.
- Final Decisions** No Final Decisions were issued during the 3rd Quarter FY 2012.

INTERNAL & CONTRACT AUDIT PROGRAM
3rd Quarter FY12

Highlights

Review of Fleet Services Activities

The review was performed at the request of the Director and Deputy Director of A&F. The review found that improvements are needed in scheduling and documenting preventative and corrective maintenance. Controls also need to be strengthened over the receipt, custody and use of automotive parts and shop tools and equipment.

Management took immediate corrective action by issuing new procedures for both preventative and corrective maintenance. The Maximo system will be used to schedule preventative maintenance; and to capture mechanic hours and automotive parts used to complete each work order. Internal Audit will re-evaluate Fleet Services' practices in six months.

Status of Open Audit Recommendations (1 recommendation closed in the 3rd quarter)

The Internal Audit Department follows up on open recommendations on a continuous basis. All pending recommendations have target implementation dates. When a recommendation has not been acted on in 48 months the appropriateness of the recommendation is re-evaluated during a subsequent audit. On closed assignments, 98% of recommendations have been implemented.

Report Title (date)	Recommendations Pending Implementation	Closed Recommendations
Boston Water & Sewer Commission CSO Financial Assistance Agreement (9/18/09)	1	2
Construction Change Order Pricing (12/31/09)*	4	1
Chelsea Data Center Physical Controls (5/5/10)	1	10
Review of Emergency Action Plans (6/30/10)	1	6
Warehouse Practices (9/30/10)	2	8
Facility Card Access Controls (2/22/11)	3	17
Review of TRAC Operations (5/19/11)	1	5
DITP Data Center Access Controls (10/14/11)	14	8
FRRC Financial and Management Controls (12/14/11)	4	3
Workers' Compensation (12/23/11)	3	1
Review of Fleet Services Activities	<u>4</u>	<u>1</u>
Total Recommendations	38	62

*Recommendations involve an updated construction manual with a target completion of June 2012.

Audit Savings

The Internal Audit Department's target is to achieve at least \$1 million in cost savings each year. Cost savings vary each year based upon many factors. In some cases, cost savings for one year may be the result of work in prior years.

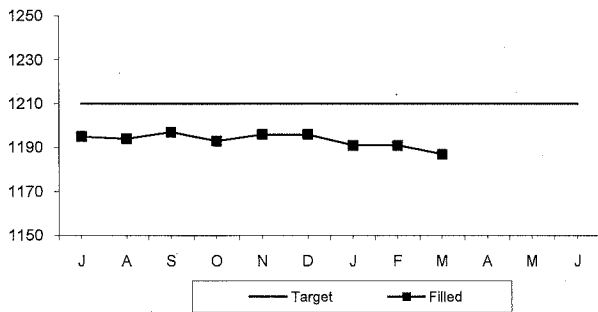
Savings	FY08	FY09	FY10	FY11	FY12 (3Q)	TOTAL
Consultants	\$55,901	\$316,633	\$194,238	\$520,176	\$219,426	\$1,225,204
Contractors & Vendors	\$2,147,311	\$1,262,088	\$599,835	\$3,129,538	\$130,199	\$7,268,971
Internal Audits	\$0	\$438,027	\$206,282	\$152,478	\$371,747	\$965,799
Total	\$2,203,212	\$2,016,748	\$1,000,355	\$3,802,192	\$721,372	\$9,459,974

OTHER MANAGEMENT

Workforce Management

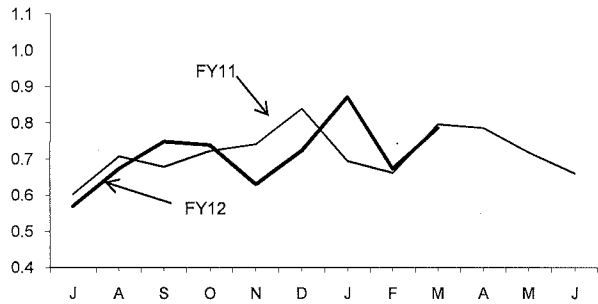
3rd Quarter FY12

Filled Position Tracking

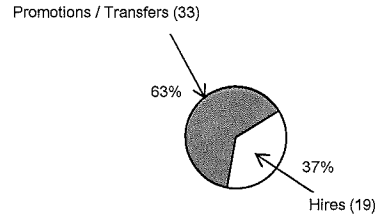


FY12 Target for Filled Positions = 1210
 Filled Positions as of March 2012 = 1187

Average Monthly Sick Leave Usage Per Employee



Positions Filled by Hires/Promotions FY12-YTD



	Pr/Trns	Hires	Total
FY09	63 (73%)	23 (27%)	86
FY10	66 (76%)	21 (24%)	87
FY11	48 (62%)	30 (38%)	78

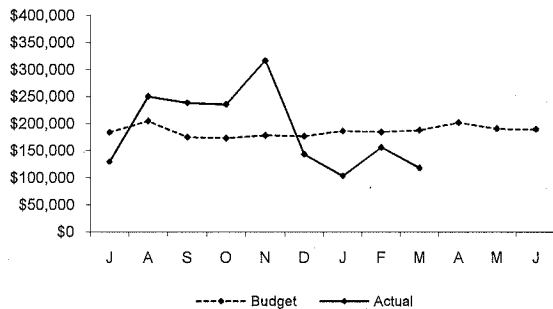
In FY12, the average monthly sick leave usage has decreased .48% from the same time last year.

	Number of Employees	YTD	Annualized Total	Annual FMLA %	FY11
A&F	191	5.88	7.83	17.9%	8.01
Aff. Action	7	8.98	11.97	23.4%	7.63
Executive	5	6.00	8.00	60.3%	3.29
Int. Audit	8	4.53	6.04	13.9%	4.47
Law	17	9.02	12.03	34.6%	9.95
OEP	4	2.66	3.54	0.0%	5.74
Operations	927	6.48	8.64	18.3%	8.86
Planning	21	4.82	6.43	15.2%	4.68
Pub. Affs.	12	4.85	6.46	0.0%	8.15
MWRA Avg	1192	6.42	8.56	18.5%	8.64

Percent of sick leave usage attributable to Family and Medical Leave Act (FMLA) leave is 18.5% ending March 31, 2012.

Field Operations

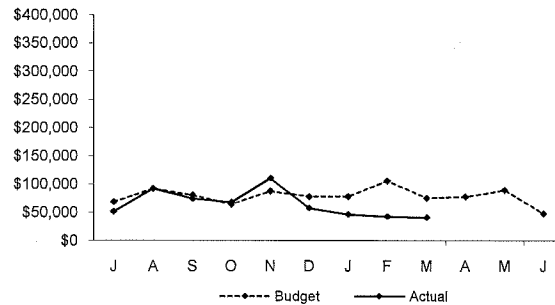
Overtime Expenditure Variance



Total overtime for Field Operations through the third quarter was \$1,691,449, which is (\$39k) under budget. Emergency overtime was \$843k, which is \$42k over budget. Of that amount, \$246k was for emergency maintenance, \$163k for rain events, \$147k for rain event pre-staging, \$54k for CSO activation. Coverage overtime was \$413k, which was \$94k over budget. Vacation coverage was \$214k; sick coverage was \$72k, coverage for vacancies in force was \$36k. Planned overtime was \$436k or (\$97k) under budget. \$86 was for planned operations, \$75k was for maintenance off-hours work, \$69k for maintenance work completion, \$65k was half plant operations at Carroll. The majority of under spending in the third quarter is attributed to the relatively dry weather, which is offset, year to date, by significant wet weather activity in the first quarter in response to Hurricane Irene and the October storm.

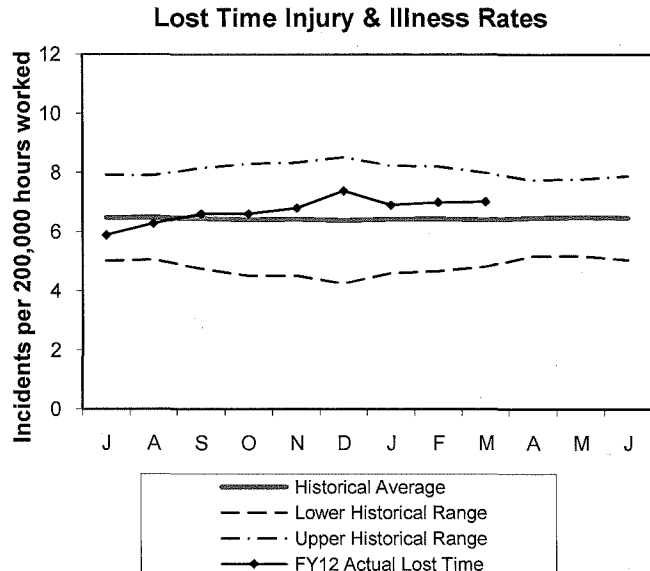
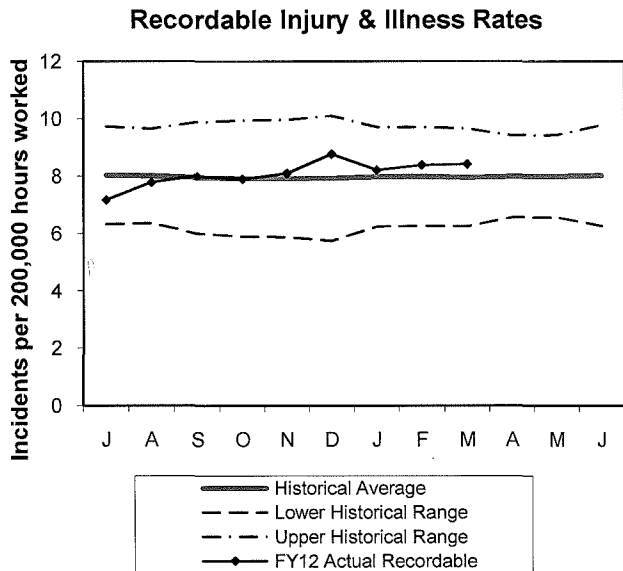
Deer Island Treatment Plant

Overtime Expenditure Variance



Total overtime for Deer Island through the third quarter was \$582k, which is (\$145k) under budget. Storm coverage overtime was (\$147k) under budget due to less than budgeted storm requirements. Shift coverage overtime was \$56k over budget due to higher than expected coverage needs, while Management's continued efforts to control overtime spending by allowing repairs of critical systems and equipment only, resulted in a combined savings in planned/unplanned overtime of \$54k.

Workplace Safety 3rd Quarter FY12



- 1 "Recordable" incidents are all work-related injuries and illnesses which result in death, loss of consciousness, restriction of work or motion, transfer to another job, or require medical treatment beyond first aid.
- 2 "Lost-time" incidents, a subset of the recordable incidents, are only those incidents resulting in any days away from work, days of restricted work activity or both - beyond the first day of injury or onset of illness.
- 3 The "Historical Average" is computed using the actual MWRA monthly incident rates for FY99 through FY11. The "Upper" and "Lower Historical Ranges" are computed using these same data – adding and subtracting two standard deviations respectively. FY12 actual incident rates can be expected to fall within this historical range.

Workers Compensation Claims Highlights - Third Quarter FY12

	New	Closed	Open Claims
Lost Time	4	15	46
Medical Only	52	55	54
	New		YTD Light Duty Returns
Light Duty Returns	3		7

Highlights/Comments:

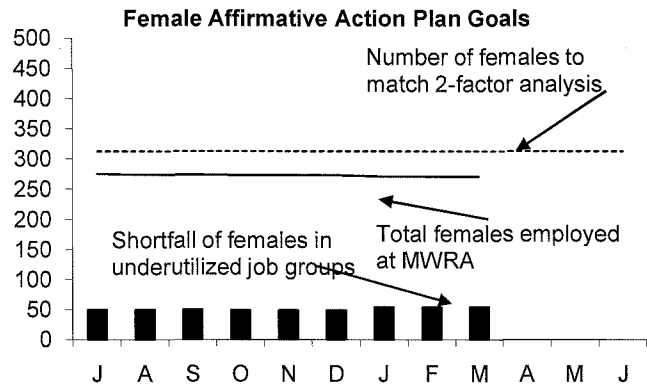
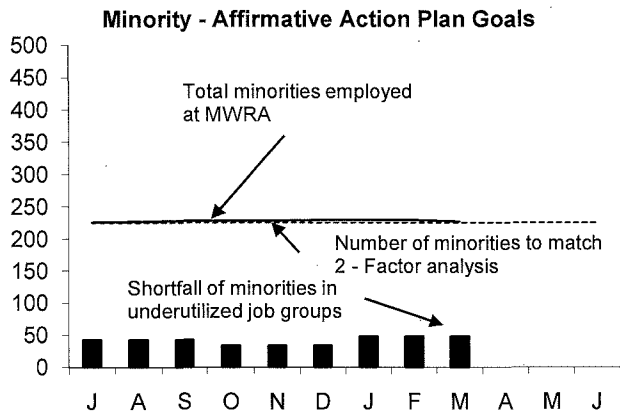
Light Duty returns

- Jan none
- Feb 1 employee returned to work in a light duty capacity from IA
- Mar 2 employees returned to work in a light duty capacity from IA (1 of whom was only out 6 days)

Regular Duty returns

- Jan 6 employees returned to work in a regular capacity (1 of whom returned to IA after 1 week)
- Feb 3 employees returned to work in a regular capacity (1 of whom was only out 1 week)
- Mar 4 employees returned to work in a regular capacity (1 of whom was only out 5 days)
- 1 employee returned to work in a light duty capacity from light duty
- 2 employees were cleared to return to work for their work related injuries but remained out on FMLA

MWRA Job Group Representation Third Quarter FY12



Underutilized Job Groups - Workforce Representation

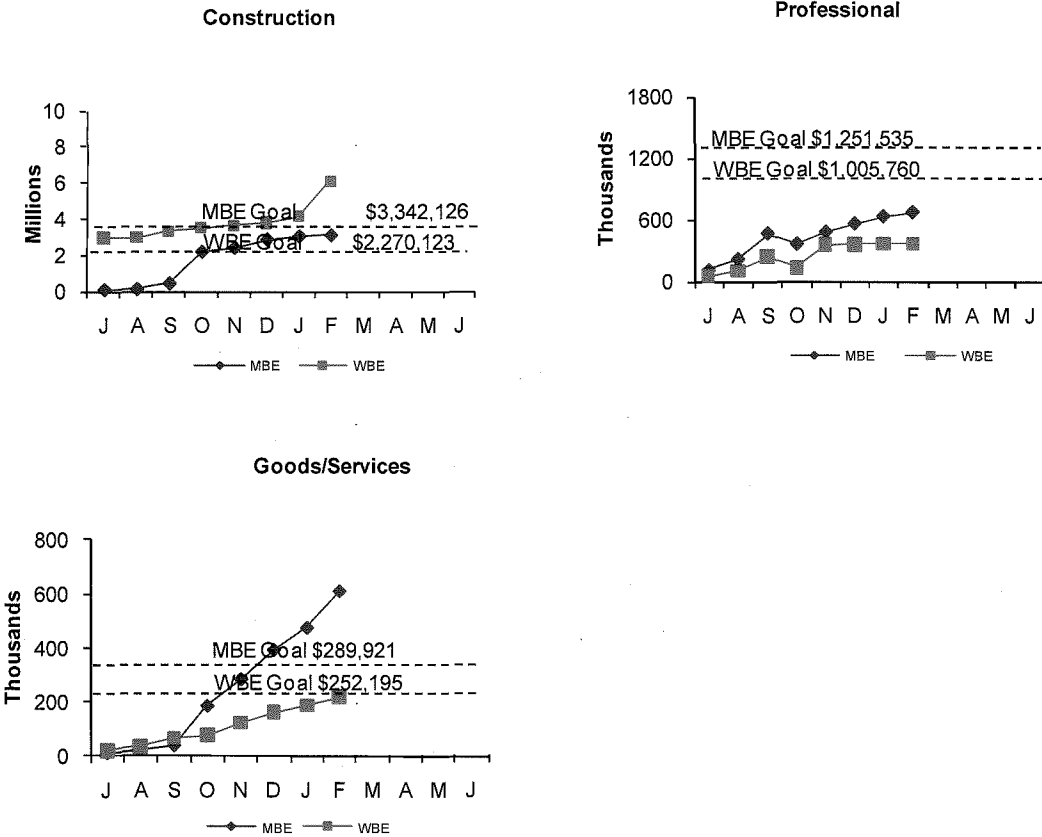
Job Group	Employees as of 3/31/2012	Minorities as of 3/31/2012	Achievement Level	Minority Over or Under Under utilized	Females As of 3/31/2012	Achievement Level	Female Over or Under Under utilized
Administrator A	18	3	2	1	3	5	-2
Administrator B	20	0	3	-3	5	5	0
Clerical A	46	20	11	9	40	4	36
Clerical B	35	9	9	0	15	3	12
Engineer A	83	16	17	-1	11	17	-6
Engineer B	47	10	5	5	6	17	-11
Craft A	115	13	21	-8	0	4	-4
Craft B	149	29	22	7	3	9	-6
Laborer	64	16	12	4	4	16	-12
Management A	106	16	22	6	33	47	-14
Management B	53	11	11	0	14	26	-12
Operator A	66	5	6	-1	2	3	-1
Operator B	67	7	13	-6	4	5	-1
Para Professional	57	11	25	-14	26	49	-23
Professional A	36	2	7	-5	22	16	6
Professional B	166	40	31	9	76	77	-1
Technical A	54	17	10	7	5	11	-6
Technical B	9	2	2	0	2	4	-2
Total	1191	227	229	48/-38	271	318	54/-101

AACU Candidate Referrals for Underutilized Positions

Job Group	Title	# of Vac	Requisition Int. / Ext.	Promotions/ Transfers	AACU Ref. External	Position Status
Craft A	Trades Foreman	1	Int	1	0	Promo-W/M
Craft A	WSS Foreman	1	Int	0	0	Pending
Craft B	Facilities Specialist	1	Ext	0	0	Pending
Craft B	HVAC Specialist	1	Int/Ext	0	0	Pending
Engineer A	Sr. Mon. & Contrl Eng.	1	Ext	0	0	Pending
Engineer A	Mechanical Designer	1	Int/Ext	0	0	Pending
Management B	Shift Operations Manager	1	Int	1	0	Promo-W/M

MBE/WBE Expenditures Third Quarter FY 2012

Background: MBE/WBE targets are determined based on annual MWRA expenditure forecasts in the procurement categories noted below. MBE/WBE percentage goals, resulting from a 2002 Availability Analysis, are applied to the MWRA CIP and CEB expenditure forecasts. As a result of the Availability Analysis, the category of Non-Professional Services is included in Goods/Services. Consistent with contractor reporting requirements, MBE/WBE expenditure data is available through February.



FY12 spending and percentage of goals achieved, as well as FY11 performance are as follows:

	MBE				WBE			
	FY12 Year-to-Date		FY11		FY12 Year-to-Date		FY11	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Construction	3,098,382	92.7%	6,672,772	129.2%	6,067,422	267.3%	7,871,501	184.8%
Professional Svc.	669,686	53.5%	2,045,576	160.6%	363,170	36.1%	1,212,947	118.3%
Goods & Svcs.	613,463	211.6%	393,060	56.9%	219,042	86.9%	345,590	57.5%
Total	\$4,381,531	89.7%	\$9,111,408	127.8%	\$6,649,634	188.5%	\$9,430,038	160.2%

MWRA FY12 CEB Expenses through 3rd Quarter FY12

	March 2012 Year-to-Date					
	Period 9 YTD Budget	Period 9 YTD Actual	Period 9 YTD Variance	%	FY12 Approved	% Expended
EXPENSES						
WAGES AND SALARIES	\$ 64,378,698	\$ 64,367,828	\$ (10,870)	0.0%	\$ 90,319,013	71.3%
OVERTIME	2,627,106	2,474,357	(152,749)	-5.8%	3,508,630	70.5%
FRINGE BENEFITS	13,343,654	13,147,230	(196,424)	-1.5%	17,954,076	73.2%
WORKERS' COMPENSATION	1,575,000	1,204,994	(370,006)	-23.5%	2,100,000	57.4%
CHEMICALS	6,730,401	6,730,068	(333)	0.0%	9,047,275	74.4%
ENERGY AND UTILITIES	16,843,590	17,177,952	334,362	2.0%	22,654,931	75.8%
MAINTENANCE	20,205,491	17,891,753	(2,313,738)	-11.5%	29,470,020	60.7%
TRAINING AND MEETINGS	151,400	124,394	(27,006)	-17.8%	251,550	49.5%
PROFESSIONAL SERVICES	4,195,486	3,706,180	(489,306)	-11.7%	5,892,441	62.9%
OTHER MATERIALS	2,497,080	2,589,832	92,752	3.7%	4,765,483	54.3%
OTHER SERVICES	16,969,422	16,944,001	(25,421)	-0.1%	23,323,074	72.6%
TOTAL DIRECT EXPENSES	\$ 149,517,328	\$ 146,358,589	\$ (3,158,738)	-2.1%	\$ 209,286,493	69.9%
INSURANCE	\$ 1,714,403	\$ 1,473,203	\$ (241,200)	-14.1%	\$ 2,285,870	64.4%
WATERSHED/PILOT	19,182,205	19,049,637	(132,568)	-0.7%	25,576,274	74.5%
BEC _o PAYMENT	2,888,752	2,685,610	(203,142)	-7.0%	3,965,500	67.7%
MITIGATION	1,146,525	1,120,934	(25,591)	-2.2%	1,528,700	73.3%
ADDITIONS TO RESERVES	146,600	146,600	-	0.0%	195,467	75.0%
RETIREMENT FUND	7,340,438	7,363,170	22,732	0.3%	7,340,438	100.3%
POST EMPLOYEE BENEFITS	-	-	-	-	-	-
TOTAL INDIRECT EXPENSES	\$ 32,418,923	\$ 31,839,154	\$ (579,769)	-1.8%	\$ 40,892,249	77.9%
DEBT SERVICE	\$ 270,443,817	\$ 270,443,817	\$ -	0.0%	\$ 367,979,918	73.5%
DEBT SERVICE ASSISTANCE	(262,500)	(262,500)	-	0.0%	-	-
TOTAL DEBT SERVICE	\$ 270,181,317	\$ 270,181,317	\$ -	0.0%	\$ 367,979,918	73.5%
TOTAL EXPENSES	\$ 452,117,568	\$ 448,379,060	\$ (3,738,508)	-0.8%	\$ 618,158,660	72.5%
REVENUE & INCOME						
RATE REVENUE	\$ 442,275,000	\$ 442,275,000	\$ -	0.0%	\$ 589,700,000	75.0%
OTHER USER CHARGES	4,957,611	5,049,990	92,379	1.9%	7,142,495	70.7%
OTHER REVENUE	4,004,281	4,463,675	459,394	11.5%	4,872,342	91.6%
RATE STABILIZATION	818,835	818,835	-	0.0%	1,091,780	75.0%
INVESTMENT INCOME	11,207,363	11,930,128	722,765	6.4%	15,352,043	77.7%
TOTAL REVENUE & INCOME	\$ 463,263,091	\$ 464,537,628	\$ 1,274,538	0.3%	\$ 618,158,660	75.1%

As of March 2012, total revenue was \$464.5 million, \$1.3 million or 0.3% more than budget. Total expenses were \$448.4 million, \$3.7 million or 0.8% less than budget, resulting in a net variance of \$5.0 million.

Expenses –

- **Direct Expenses** are \$146.4 million, \$3.2 million or 2.1% less than budget.
- **Maintenance** is \$2.3 million or 11.5% less than budget. Services are underspent by \$1.5 million and materials are underspent by \$800,000.
- **Professional Services** are \$489,000 or 11.7% under budget due to lower spending for Lab and Testing of \$263,000, as-needed Engineering of \$118,000, Security of \$69,000, and Legal of \$30,000.
- **Workers' Compensation** is \$370,000 or 23.5% lower than budget due to Compensation Payments of \$417,000, offset by Medical Payments of \$55,000.
- **Utilities** are overspent by \$334,000 or 2.0% mainly for Electricity of \$303,000 at Deer Island, Water usage of \$211,000 at Deer Island and FOD offset by lower spending for Natural Gas of \$151,000.
- **Fringe Benefits** are lower by \$196,000 or 1.5% mainly due to lower spending for Health Insurance of \$129,000, Unemployment Insurance of \$26,000, Medicare of \$19,000, and Dental Insurance of \$11,000.
- **Overtime** is \$153,000 or 5.8% under budget mainly due to lower than projected snow removal and managements' curtailment of non-emergency overtime due to higher spending for emergency overtime during the Fall.
- **Other Materials** are \$93,000 or 3.7% higher than budget mainly for Vehicle Purchase/Replace of \$171,000 due to timing, offset by lower spending for Equipment Furniture of \$47,000 due to lab equipment delays, Computer Hardware of \$37,000, and Postage of \$34,000.
- **Indirect Expenses** are \$31.8 million, \$580,000 or 1.8% under budget mainly due to lower Insurance claims of \$205,000 and premiums of \$37,000 and lower Watershed Reimbursement of \$137,000 due to an FY11 accrual.
- **Debt Service Expenses** total \$270.2 million. Debt Service Expenses are at budget level after the approved transfer of an additional \$2.0 million of year-to-date savings to the defeasance account in March. The defeasance account has a balance of \$13.1 million year-to-date March.

Revenue and Income –

- **Total Revenue / Income** for March is \$464.5 million, \$1.3 million or 0.3% higher than budget and is mainly due to higher Investment Income of \$723,000 and non-rate revenue of \$552,000.

Cost of Debt 3rd Quarter FY12

MWRA borrowing costs are a function of the fixed and variable tax exempt interest rate environment, the level of MWRA's variable interest rate exposure and the perceived creditworthiness of MWRA. Each of these factors has contributed to decreased MWRA borrowing costs since 1990.

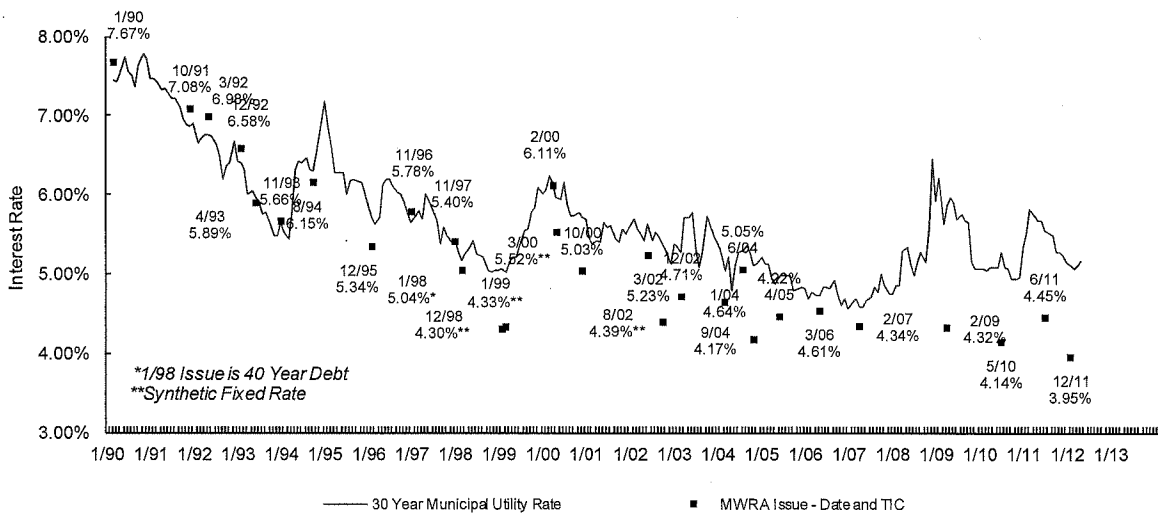
Average Cost of MWRA Debt

Fixed Debt (\$4,034)	4.48%
Variable Debt (\$544)	0.85%
SRF Debt (\$1,022)	1.07%
Weighted Average Debt Cost (\$5,610)	3.50%

Most Recent Senior Fixed Debt Issue December 2011

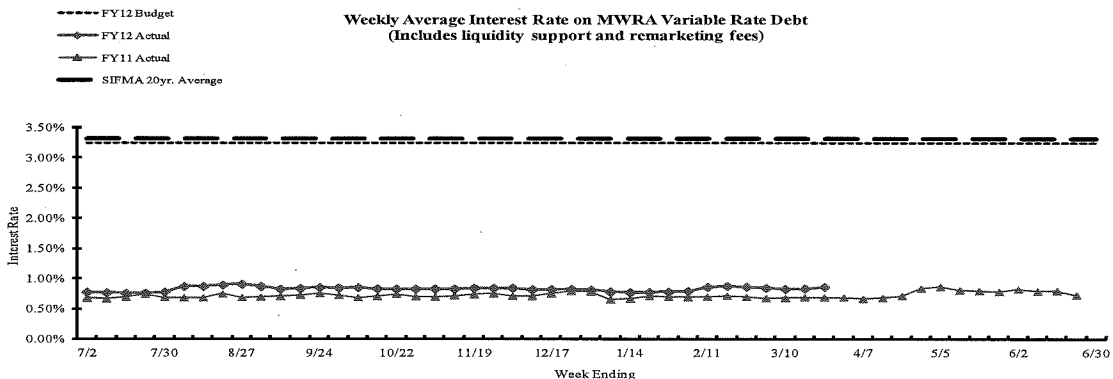
2011 Series C (\$327)	3.95%
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MWRA Fixed Rate Debt vs. 30 Year Municipal Utility Interest Rate



Weekly Average variable Interest Rates vs. Budget

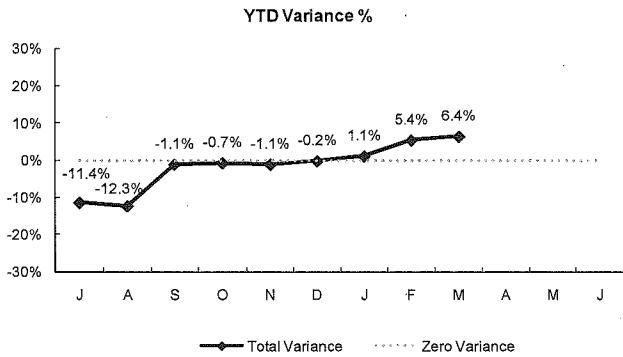
MWRA currently has nine variable rate debt issues with \$1.2 billion outstanding, excluding commercial paper. Of the nine outstanding series, five have portions which have been swapped to fixed rate. Variable rate debt has been less expensive than fixed rate debt in recent years as short-term rates have remained lower than long-term rates on MWRA debt issues. In March, SIFMA rates fluctuated with a high of 0.19% and a low of 0.13%. MWRA's issuance of variable rate debt, although consistently less expensive in recent years, results in exposure to additional interest rate risk as compared to fixed rate debt.



Investment Income

3rd Quarter FY12

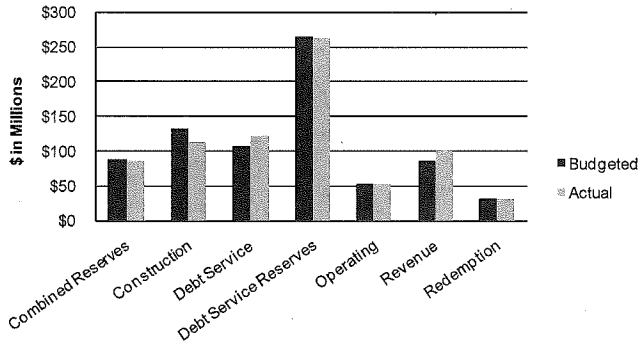
Year To Date



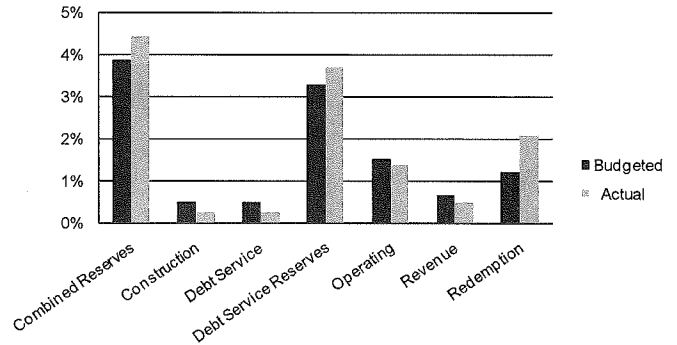
	YTD BUDGET VARIANCE			
	(\$000)			
	BALANCES IMPACT	RATES IMPACT	TOTAL	%
Combined Reserves	(\$59)	\$353	294	11.5%
Construction	(\$45)	(\$231)	(276)	-56.1%
Debt Service	\$52	(\$217)	(166)	-41.4%
Debt Service Reserves	(\$53)	\$820	768	11.9%
Operating	\$0	(\$48)	(48)	-8.1%
Revenue	\$52	(\$111)	(59)	-13.8%
Redemption	\$1	\$209	210	70.0%
Total Variance	(\$52)	\$775	\$723	6.4%

➤ The positive variance is attributed to the change in the liquidity requirements which allowed long-term investments to be made rather than reinvesting these funds at short-term rates.

YTD Average Balances Budgeted vs. Actual

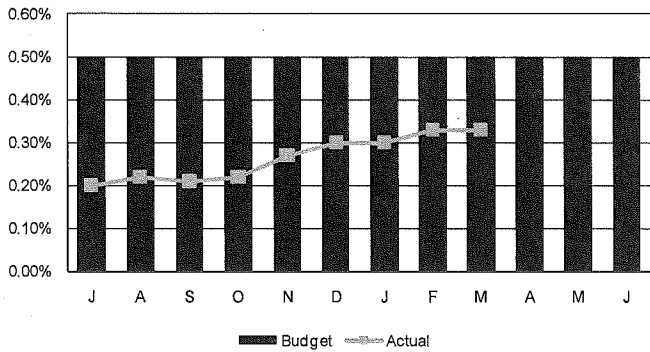


YTD Average Interest Rate Budgeted vs. Actual

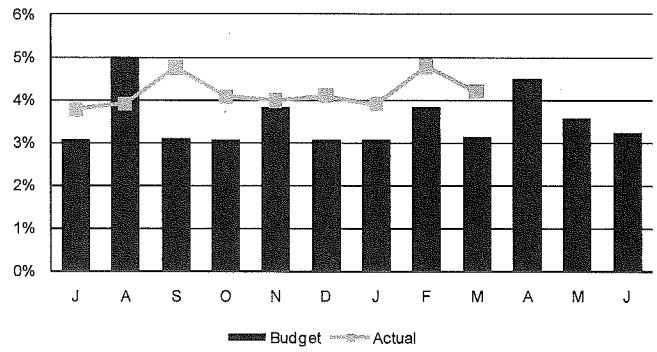


Monthly

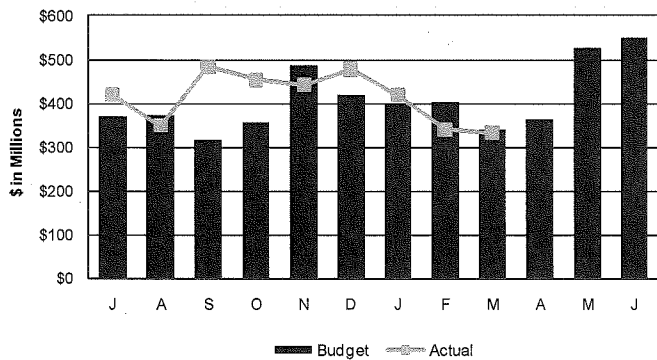
Short-Term Interest Rates



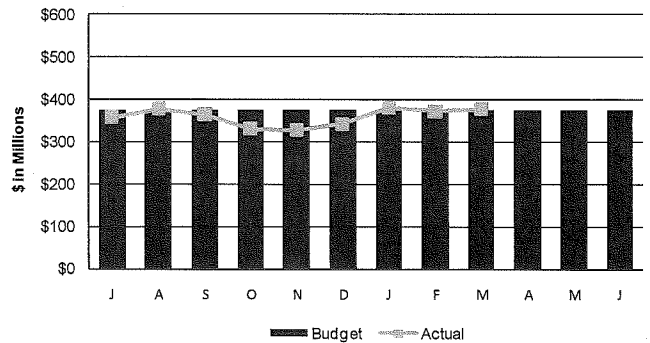
Long-Term Interest Rates



Short-Term Average Balances

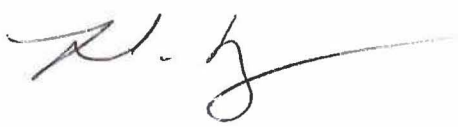


Long-Term Average Balances



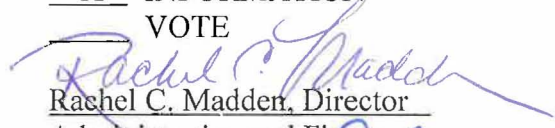
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: May 16, 2012
SUBJECT: Staffing Study Report
Amawalk Consultant Group, LLC
Contract A550

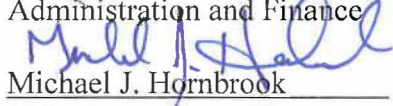


COMMITTEE: Administration, Finance & Audit

X INFORMATION
VOTE



Rachel C. Madden, Director
Administration and Finance



Michael J. Hornbrook
Chief Operating Officer

Robert Donnelly, Director of Human Resources
Preparer/Title

RECOMMENDATION:

For information only. The final Staffing Study Report will be delivered to the Board prior to the Board meeting.

DISCUSSION:

At the request of the MWRA Advisory Board, MWRA's Board of Directors authorized staff to conduct a staffing study to determine an appropriate staffing level for the agency for the next five years. In making its request, the Advisory Board noted that although MWRA's headcount had fallen from a high of more than 1,700 ten years ago to a current level of approximately 1,200 employees, it had been several years since a staffing level study had been conducted.

As a result of this request, an 11-member Staffing Study Committee was established to oversee the study. Members of this Committee include representatives of MWRA's Board of Directors, the Advisory Board, MWRA's Labor Coalition and MWRA management staff.

In March 2011, the Board approved the award of a contract to the Amawalk Consulting Group, LLC to conduct the staffing study. The goal of the study was to provide an independent review of how MWRA staffing levels compare to other water and/or wastewater utilities. To conduct this review, Amawalk identified comparable utilities to MWRA; collected staffing, operational, and financial information from these utilities; and assessed the level and use of overtime and stand-by status at these utilities in order to provide comparisons to MWRA. Additionally, Amawalk analyzed employee demographic information and included in its report a summary of that analysis. Finally, as part of its report, Amawalk provided recommended staffing levels by organizational units across the agency.

Completion of the Staffing Study was delayed, mainly due to Amawalk's difficulty in obtaining true comparable data from MWRA's peer organizations for several of MWRA's organizational units. Amawalk Consulting Group has now completed its report and has presented its findings and recommendations to the Staffing Study Committee. Staff from Amawalk Consulting Group will make a presentation of their findings and recommendations to the Board at this meeting.



STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: May 16, 2012
SUBJECT: FY12 Financial Update and Summary as of April 2012



COMMITTEE: Administration, Finance & Audit

INFORMATION
 VOTE


Kathy Soti, Budget Director

David Whelan, Budget Manager
Preparer/Title


Rachel C. Madden
Director, Administration and Finance

RECOMMENDATION:

For information only. This staff summary provides a financial update and variance highlights through April, comparing actual spending to the FY12 budget, and a preliminary year-end projection for the current expense budget.

DISCUSSION:

Total year-to-date expenses are lower than budget by \$4.2 million or 0.8% mainly due to lower direct expenses of \$3.6 million, indirect expenses of \$664,000, and higher total non-rate revenues of \$1.4 million for a net variance of \$5.6 million.

The month of April debt service savings were \$1.7 million, mostly related to the continued low short-term rates as well as the savings from last fall's refunding. At the end of April, the defeasance account balance is \$14.9 million and should these favorable trends continue the balance is projected to be \$19.0 million by year-end.

Beyond debt service savings, staff projects a surplus of approximately \$5.7 million at year-end of which \$3.6 million is for lower direct expenses, \$539,000 for lower indirect expenses, and \$1.6 million is for greater than budgeted revenues. Staff will continue to refine the year-end projections and update the Board in more detail during the June 6th budget briefings.

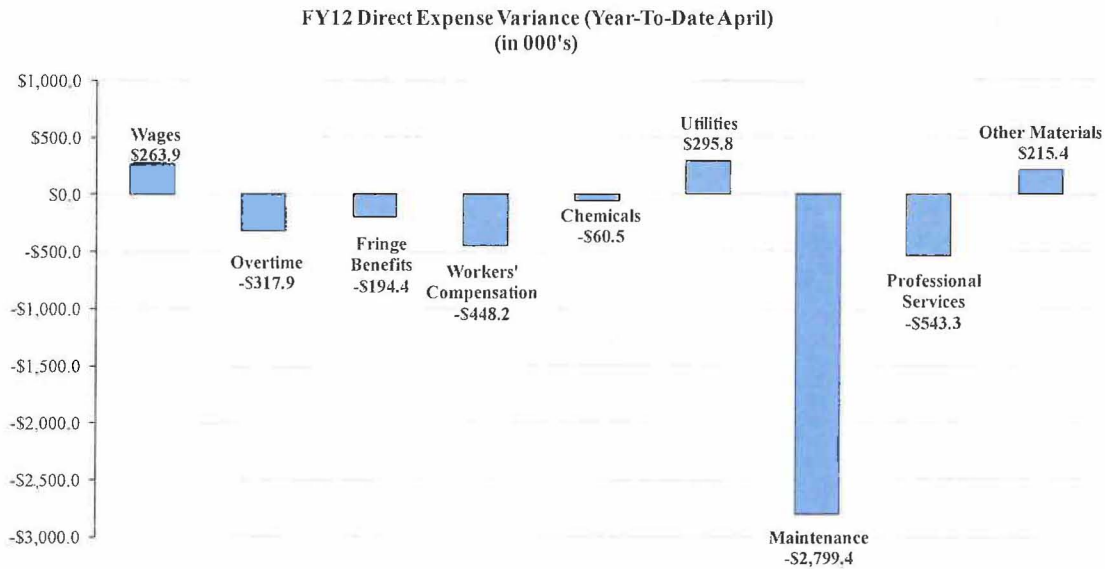
Please refer to Attachment 4 for a more detailed comparison by line item.

Total year-to-date expenses were lower than budget by \$4.2 million or 0.8% as indicated below.

	FY12 Budget (April)	FY12 Actual (April)	\$ Variance	% Variance
Direct Expenses	\$166.3	\$162.7	-\$3.6	-2.1%
Indirect Expenses	\$35.1	\$34.4	-\$0.7	-1.9%
Debt Service	\$298.4	\$298.4	\$0.0	0.0%
Total	\$499.7	\$495.5	-\$4.2	-0.8%

Direct Expenses

Direct expenses totaled \$162.7 million, \$3.6 million or 2.1% less than budget.



The primary reasons for year-to-date underspending on direct expenses is lower spending for maintenance, professional services, workers' compensation, overtime, and fringe benefits. The underspending is offset by greater than budgeted spending for utilities, wages and salaries, and other materials.

Maintenance

Maintenance is underspent by \$2.8 million or 12.4% year-to-date of which \$2.0 million is for services and \$848,000 is for materials. Staff estimate that maintenance spending will be approximately \$2.7 million underspent by year-end.

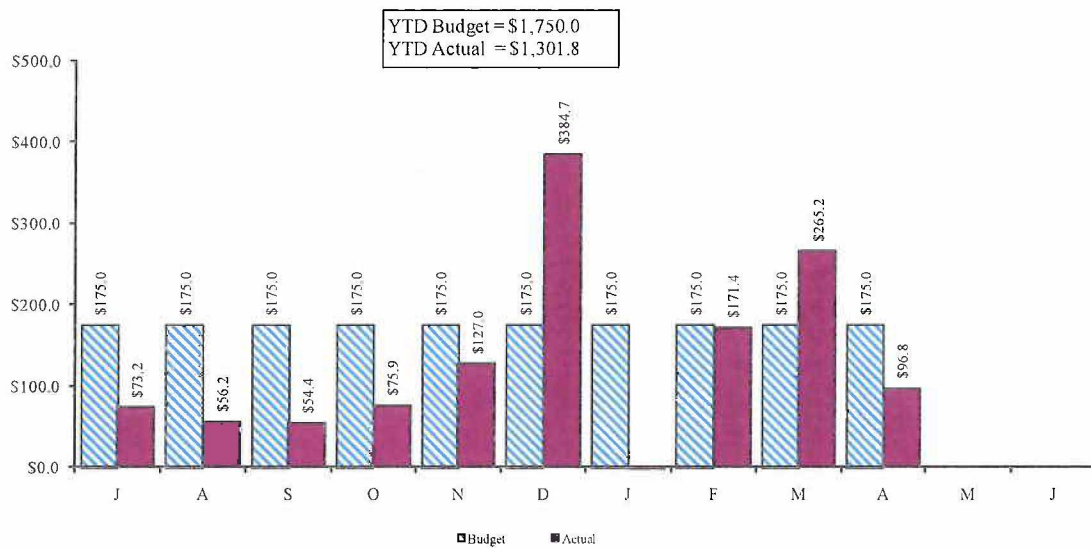
Professional Services

Professional Services are underspent by \$543,000 or 11.6% mainly due to lower Harbor Monitoring activities and lower than projected use of as-needed engineering services.

Workers' Compensation

Workers' Compensation is lower than budget by \$448,000 or 25.6% year-to-date. This year, contrary to the experience of FY11, both the reserves (\$306,000) and the actual payments (\$143,000) are trending below budget.

FY12 Workers' Compensation Spending (Year-To-Date April)
(in thousands)



# of Open Claims-Lost Time	43	40	41	42	44	51	49	48	46	52		
# of Open Claims-Medical Only	38	47	57	55	52	56	51	52	54	62		

Overtime

Overtime is underspent by \$318,000 or 10.9% mainly due lower than projected snow removal and less than budgeted wet weather events in April.

Fringe Benefits

Fringe Benefits are underspent by \$194,000 or 1.3% mainly due to lower than budgeted health insurance and medicare costs.

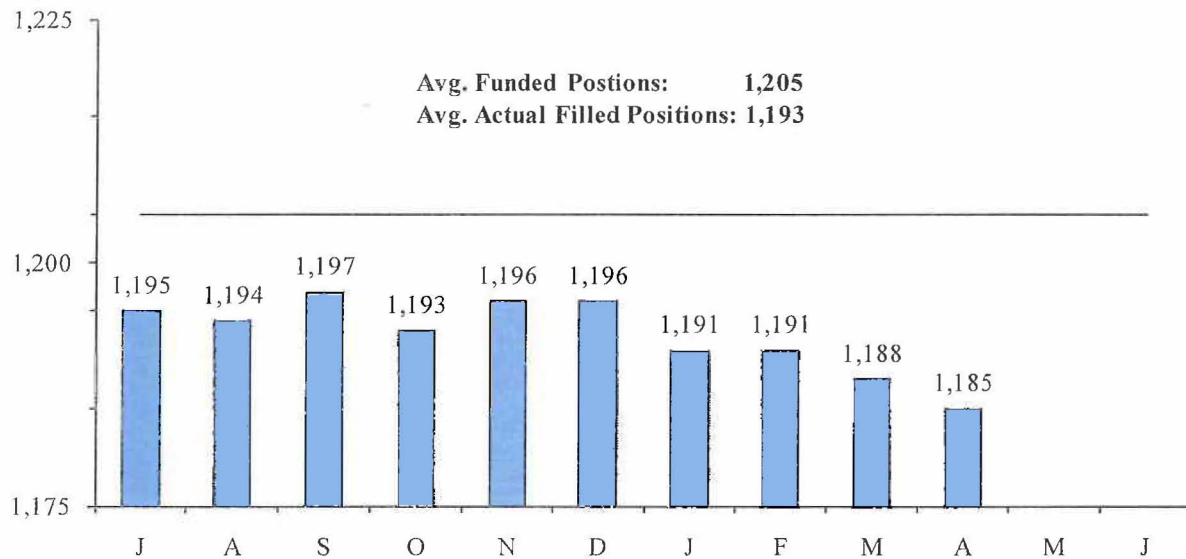
Utilities

Utilities are over budget by \$296,000 or 1.6% for higher diesel fuel of \$380,000 mainly for Deer Island due to purchase of fuel in April that was budgeted in May and higher water usage of \$181,000 at Deer Island and Field Operations. Overspending is offset by lower natural gas in Field Operations of \$157,000 mainly due to lower usage and pricing, and lower electricity of \$81,000.

Wages and Salaries

Wages and Salaries are overspent by a net of \$264,000 or 0.4% as a result of unbudgeted regular pay increases for recently settled collective bargaining agreements offset by lower than budgeted filled positions. As of April, all retroactive COLA adjustments were made. Year-to-date, the average actual filled positions have been 1,193 versus the 1,205 positions funded, or 12 positions lower.

FY12 MWRA Headcount Trend

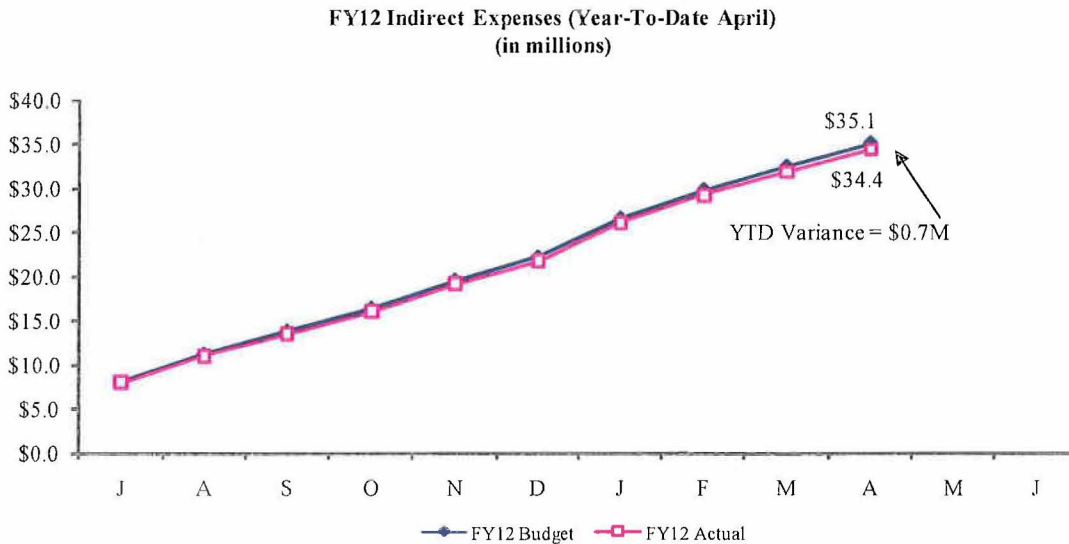


Other Materials

Other Materials are higher than budget by \$215,000 or 7.5% mainly due to the timing of vehicle purchases.

Indirect Expenses

Indirect Expenses through April total \$34.4 million, \$664,000 or 1.9% less than budget.



The majority of the year-to-date underspending on Indirect Expenses is for lower special maintenance projects for the Deer Island Cross Harbor cable of \$270,000, Insurance of \$258,000 mainly due to lower claims and Watershed Reimbursements of \$137,000 for an FY11 overaccrual.

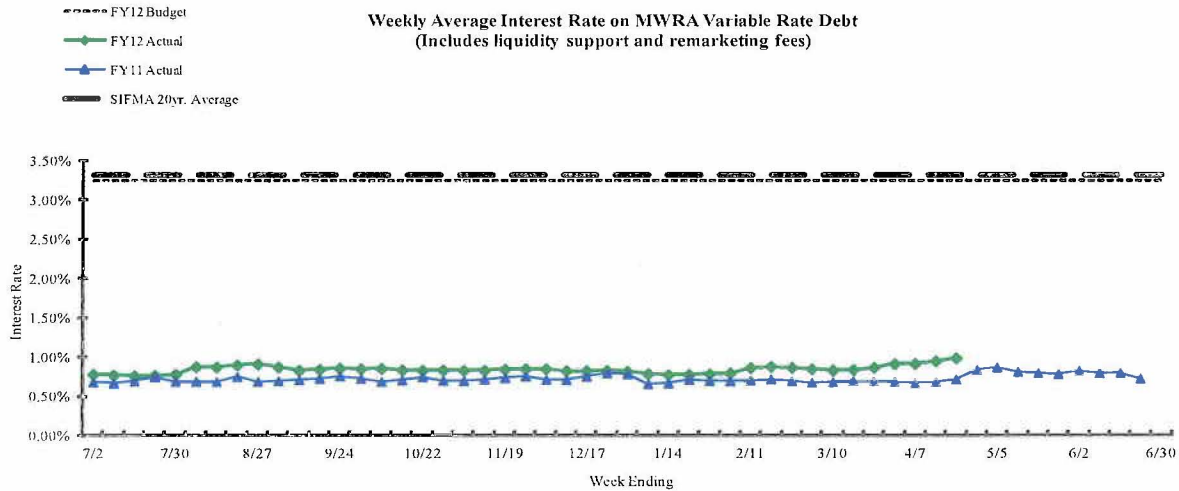
Debt Service Expenses

Debt Service Expenses through April totaled \$298.4 million. Debt Service Expenses are at budget level after the approved transfer of an additional \$1.7 million of year-to-date savings to the defeasance account in April. The defeasance account balance now stands at \$14.9 million. The intent in establishing this account is to allocate the funds for a targeted defeasance in FY12 which will result in rate relief in the next few years. Staff projects that the year-end defeasance account balance will be \$19.0 million.

It should be noted that the favorable variance in April of \$1.7 million was comprised of variable rate debt savings of \$1.1 million, State Revolving Fund (SRF) savings of \$552,000, and \$112,000 for last fall's refunding.

Debt Service expenses include the principal and interest payment for fixed debt, the variable subordinate debt, and the State Revolving Fund (SRF) obligation. Also, included are the commercial paper program for the local water pipeline projects, current revenue for capital, and the Chelsea facility lease payment.

The graph below reflects the variable rate trend by month over the past year in comparison with FY10 and FY11 Actuals and the FY12 Budget for the same period.



Revenue

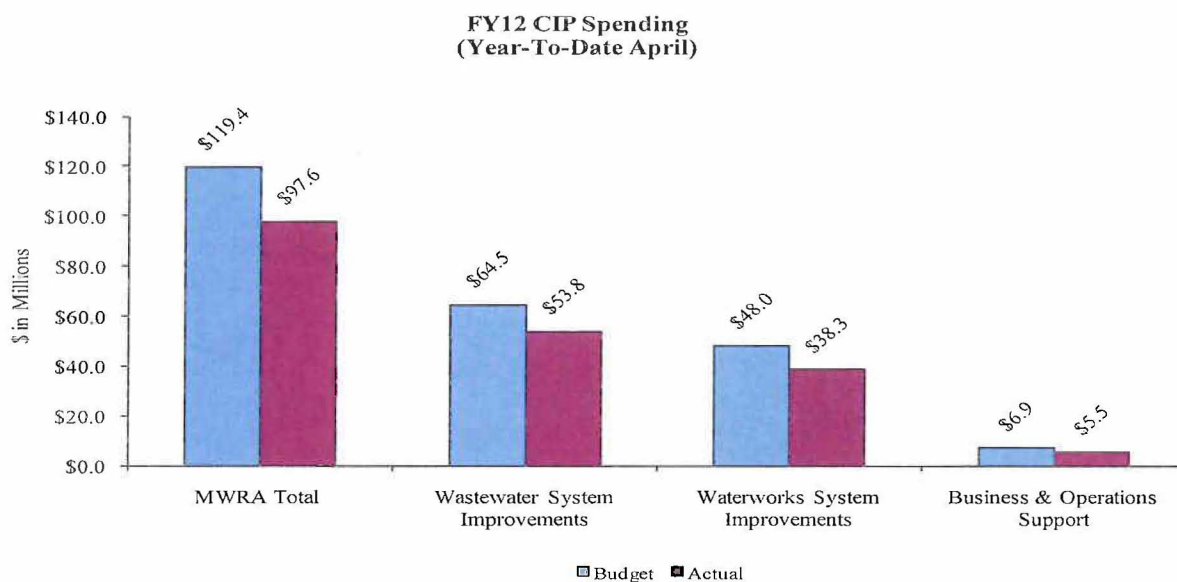
Total Revenue and Income through April is \$513.3 million, \$1.4 million or 0.3% higher than budget and is mainly due to higher investment income of \$918,000 due to lower level of liquidity requirements, which allowed for higher long-term investments, and non-rate revenue of \$463,000 due to a variety of smaller items such as Verizon and NSTAR credits for prior period adjustments and revenue from the disposal of obsolete equipment. It should be noted that year-to-date renewable portfolio standard credits are over budget by \$229,000 offset by lower than budgeted load reduction and hydropower revenue of \$177,000.

FY12 Capital Improvement Program

Spending through April totaled \$97.6 million, \$21.8 million or 18.3% lower than budget. After accounting for programs which are not directly under MWRA's control, most notably the Local Water Pipeline program, the Inflow and Infiltration (I/I) program, and the community managed Combined Sewer Overflow (CSO's) projects, the variance is \$17.5 million or 14.7%.

Underspending was reported in all three programs: Wastewater of \$10.7 million, Waterworks of \$9.6 million, and Business and Operations Support of \$1.5 million.

CIP Spending By Program:



\$ in Millions	Budget	Actuals	\$ Var.	% Var.
Wastewater System Improvements				
Interception & Pumping	6,614,309	5,709,163	-905,146	-13.7%
Treatment	28,249,832	16,611,389	-11,638,443	-41.2%
Residuals	555,780	0	-555,780	-100.0%
CSO	26,726,756	29,508,391	2,781,636	10.4%
Other	2,376,112	1,964,297	-411,814	-17.3%
Total Wastewater System Improvements	64,522,789	53,793,241	-10,729,546	-16.6%
Waterworks System Improvements				
Drinking Water Quality Improvements	16,730,068	12,249,613	-4,480,454	-26.8%
Transmission	17,107,688	15,027,361	-2,080,327	-12.2%
Distribution & Pumping	7,810,825	11,713,157	3,902,333	50.0%
Other	6,308,626	-666,049	-6,974,674	-110.6%
Total Waterworks System Improvements	47,957,207	38,324,083	-9,633,123	-20.1%
Business & Operations Support	6,943,333	5,489,145	-1,454,188	-20.9%
Total MWRA	119,423,329	97,606,470	-21,816,858	-18.3%

The main reasons for year-to-date underspending are:

1. Wastewater Treatment of \$11.6 million - due to lower award and delay for North Main Pump Station Variable Frequency Drive Construction and project delays such as the Digester Module 1 & 2 Pipe Replacement, Clarifier Flushing System, As-needed Design Contracts, and Process Information Control System (PICS) Replacement.
2. Local Water Pipeline Assistance Program of \$6.4 million – due to lower than anticipated requests for funding from communities. The underspending for the Local Water Pipeline Assistance Program is projected to be \$10.0 million by year-end.
3. Drinking Water Program of \$4.5 million – mainly due to lower than budgeted award for the Spot Pond Design/Build contract.
4. Water Transmission of \$2.1 million – mainly due to delays in Long-Term Redundancy, Quabbin Transmission System, and timing of Watershed land purchases.

The year-to-date underspending is offset by overspending of \$3.9 million in Water Distribution and Pumping program mainly due to greater than budgeted spending for Northern Intermediate High Redundancy & Storage – Reading/Stoneham Interconnections and Lynnfield Pipeline, \$2.8 million in the Wastewater Combined Sewer Overflow (CSO) program mainly due to the timing of payments for the Brookline Sewer Separation, \$1.0 million for Lower Hultman Rehabilitation activities and \$810,000 for Dam Projects Modifications and Repairs due to accelerated schedule and contractor progress.

Construction Fund Balance

The construction fund balance stood at \$210 million as of April 2012. Commercial Paper availability stands at \$206 million to fund construction projects.

Attachment 1 – Variance Summary April 2012

Attachment 2 – Current Expense Variance Explanations

Attachment 3 – Capital Improvement Program Variance Explanations

Attachment 4 – FY12 Final versus FY12 Preliminary Year-End Projection

ATTACHMENT 1

	April 2012 Year-to-Date					
	Period 10 YTD Budget	Period 10 YTD Actual	Period 10 YTD Variance	%	FY12 Approved	% Expended
EXPENSES						
WAGES AND SALARIES	\$ 71,482,240	\$ 71,746,135	\$ 263,895	0.4%	\$ 90,319,013	79.4%
OVERTIME	2,931,902	2,614,008	(317,894)	-10.8%	3,508,630	74.5%
FRINGE BENEFITS	14,854,287	14,659,849	(194,438)	-1.3%	17,954,076	81.7%
WORKERS' COMPENSATION	1,750,000	1,301,751	(448,249)	-25.6%	2,100,000	62.0%
CHEMICALS	7,443,833	7,383,374	(60,459)	-0.8%	9,047,275	81.6%
ENERGY AND UTILITIES	18,727,838	19,023,615	295,777	1.6%	22,654,931	84.0%
MAINTENANCE	22,585,891	19,786,518	(2,799,373)	-12.4%	29,470,020	67.1%
TRAINING AND MEETINGS	171,332	134,444	(36,888)	-21.5%	251,550	53.4%
PROFESSIONAL SERVICES	4,690,696	4,147,437	(543,259)	-11.6%	5,892,441	70.4%
OTHER MATERIALS	2,866,029	3,081,414	215,385	7.5%	4,765,483	64.7%
OTHER SERVICES	18,762,587	18,830,141	67,554	0.4%	23,323,074	80.7%
TOTAL DIRECT EXPENSES	\$ 166,266,635	\$ 162,708,686	\$ (3,557,947)	-2.1%	\$ 209,286,493	77.7%
INSURANCE	\$ 1,890,239	\$ 1,632,706	\$ (257,533)	-13.6%	\$ 2,285,870	71.4%
WATERSHED/PILOT	21,149,611	21,019,050	(130,561)	-0.6%	25,576,274	82.2%
BECo PAYMENT	3,247,669	2,977,450	(270,219)	-8.3%	3,965,500	75.1%
MITIGATION	1,264,117	1,235,902	(28,215)	-2.2%	1,528,700	80.8%
ADDITIONS TO RESERVES	161,636	161,636	-	0.0%	195,467	82.7%
RETIREMENT FUND	7,340,438	7,363,170	22,732	0.3%	7,340,438	100.3%
POST EMPLOYEE BENEFITS	-	-	-	---	-	---
TOTAL INDIRECT EXPENSES	\$ 35,053,710	\$ 34,389,914	\$ (663,796)	-1.9%	\$ 40,892,249	84.1%
DEBT SERVICE	\$ 298,711,018	\$ 298,711,018	\$ -	0.0%	\$ 367,979,918	81.2%
DEBT SERVICE ASSISTANCE	(289,423)	(289,423)	-	0.0%	-	---
TOTAL DEBT SERVICE	\$ 298,421,595	\$ 298,421,595	\$ -	0.0%	\$ 367,979,918	81.2%
TOTAL EXPENSES	\$ 499,741,940	\$ 495,520,195	\$ (4,221,744)	-0.8%	\$ 618,158,660	80.2%
REVENUE & INCOME						
RATE REVENUE	\$ 487,636,539	\$ 487,636,539	\$ -	0.0%	\$ 589,700,000	82.7%
OTHER USER CHARGES	6,379,120	6,460,284	81,164	1.3%	7,142,495	90.4%
OTHER REVENUE	4,212,408	4,594,052	381,644	9.1%	4,872,342	94.3%
RATE STABILIZATION	902,818	902,818	-	0.0%	1,091,780	82.7%
INVESTMENT INCOME	12,771,858	13,689,466	917,608	7.2%	15,352,043	89.2%
TOTAL REVENUE & INCOME	\$ 511,902,743	\$ 513,283,159	\$ 1,380,416	0.3%	\$ 618,158,660	83.0%

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY12 Budget April YTD	FY12 Actuals April YTD	FY12 Actual vs. FY12 Budget		Explanations
			\$	%	
Direct Expenses					
Wages & Salaries	71,482,240	71,746,135	263,895	0.4%	Overspending due to unbudgeted retroactive pay adjustments for COLA increases offset by lower than budgeted filled positions. As of April there were 1,185 filled positions, 20 positions lower than the 1,205 funded positions. Year-to-date average filled positions are 1,193.
Overtime	2,931,902	2,614,008	(317,894)	-10.8%	Underspending mainly due to lower than projected snow removal and lower than budgeted wet weather events.
Fringe Benefits	14,854,287	14,659,849	(194,438)	-1.3%	Lower spending for Health Insurance of \$148k, Medicare of \$19k, Overtime Meals of \$13k, and Dental of \$9k.
Worker's Compensation	1,750,000	1,301,751	(448,249)	-25.6%	Lower spending for reserve requirements of \$305k and compensation and medical payments of \$143k.
Chemicals	7,443,833	7,383,374	(60,459)	-0.8%	Lower spending mainly for Activated Carbon of \$192k, Soda Ash of \$123k, Carbon Dioxide of \$87k, Other of \$43k, Sodium Hydroxide of \$43k, and Hydrofluosilicic Acid of \$34k, offset by higher Nitrazyme of \$165k for Framingham Extension Relief Sewer, Ferric Chloride of \$130k, Sodium Hypochlorite of \$72k, Liquid Oxygen of \$62k and Polymer of \$45k.
Utilities	18,727,838	19,023,615	295,777	1.6%	Higher Diesel Fuel of \$380k due to pre-purchase at Deer Island and higher Water usage of \$181k at DITP and FOD, offset by lower spending for Natural Gas of \$157k and Electricity of \$81k.
Maintenance	22,585,891	19,786,518	(2,799,373)	-12.4%	Maintenance Services are underspent by \$2.0 million and Materials are underspent by \$848k.

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY12 Budget April YTD	FY12 Actuals April YTD	FY12 Actual vs. FY12 Budget		Explanations
			\$	%	
Training & Meetings	171,332	134,444	(36,888)	-21.5%	
Professional Services	4,690,696	4,147,437	(543,259)	-11.6%	Underspending for Lab & Testing of \$223k mainly for Enquad's Harbor Outfall Monitoring program, Engineering of \$106k, Security of \$97k, Other of \$71k, and Legal of \$35k.
Other Materials	2,866,029	3,081,414	215,385	7.5%	Higher spending for Vehicle Purchase/Replacement of \$210k due to timing, Equipment Furniture of \$41k due to timing of lab equipment purchases, and Office Supplies of \$35k, offset by lower spending for Postage of \$54k and Other Materials of \$42k.
Other Services	18,762,587	18,830,141	67,554	0.4%	Higher spending for Sludge Pelletization of \$443k and Police Details of \$68k, offset by lower spending for Other Services of \$200k mainly for delayed GPS implementation, Mem/Dues of \$80k, Health/Safety of \$62k, Telephones of \$47k, and Space Lease/Rentals of \$39k.
Total Direct Expenses	166,266,635	162,708,686	(3,557,947)	-2.1%	
Indirect Expenses					
Insurance	1,890,239	1,632,706	(257,534)	-13.6%	Underspending for Payments/Claims of \$246k and Premiums of \$11k.
Watershed/PILOT	21,149,611	21,019,050	(130,561)	-0.6%	Lower Watershed Reimbursement due to FY11 overaccrual.
HEEC Payment	3,247,669	2,977,450	(270,219)	-8.3%	Lower spending for Deer Island cable special maintenance projects of \$266k.
Mitigation	1,264,117	1,235,902	(28,215)	-2.2%	
Addition to Reserves	161,636	161,636	-	0.0%	
Pension Expense	7,340,438	7,363,170	22,732	0.3%	
Post Employee Benefits	-	-	-		
Total Indirect Expenses	35,053,710	34,389,914	(663,797)	-1.9%	

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY12 Budget April YTD	FY12 Actuals April YTD	FY12 Actual vs. FY12 Budget		Explanations
			\$	%	
Debt Service					
Debt Service	298,711,018	298,711,018	-	0.0%	Debt Service Expenses year-to-date are at budget level after the transfer of an additional \$1.7 million to the defeasance account in April. The defeasance account balance is \$14.9 million.
Debt Service Assistance	(289,423)	(289,423)	-	0.0%	
Total Debt Service Expenses	298,421,595	298,421,595	-	0.0%	
Total Expenses					
Total Expenses	499,741,940	495,520,195	(4,221,744)	-0.8%	
Revenue & Income					
Rate Revenue	487,636,539	487,636,539	-	0.0%	Mostly due to higher D.I. water usage of \$91k.
Other User Charges	6,379,120	6,460,284	81,164	1.3%	
Other Revenue	4,212,408	4,594,052	381,644	9.1%	Higher Permit Fees of \$151k, Energy Revenue of \$149k, Equipment Disposal of \$120k, and Miscellaneous Revenue of \$79k, offset by lower Hydro-power of \$97k and Penalties of \$48k.
Rate Stabilization	902,818	902,818	-	0.0%	
Investment Income	12,771,858	13,689,466	917,608	7.2%	Higher than budgeted Investment Income due to changes in liquidity requirements which allowed higher long-term investments.
Total Revenue	511,902,743	513,283,159	1,380,416	0.3%	
Net Revenue in Excess of Expenses	12,160,803	17,762,964	5,602,160		

ATTACHMENT 3
Capital Improvement Program Variance Explanations

	FY12 Budget YTD April	FY12 Actuals YTD April	YTD Actuals vs. Budget		Explanations
			\$	%	
Interception & Pumping (I&P)	\$6,614,309	\$5,709,163	(\$905,145)	-13.7%	Underspending for Chelsea Creek Upgrades Design/Construction Administration contract of \$519,000; schedule shift in Prison Point Pump & Gearbox Rebuilds of \$314,000; and delay in North System Hydraulic Study of \$261,000. Offset by overspending due to contractor progress on Section 156 Rehabilitation Design/Build contract of \$1.2M.
Treatment	\$28,249,832	\$16,611,389	(\$11,638,442)	-41.2%	Underspending due to lower than budgeted award and delays for the North Main Pump Station VFD Replacement Construction \$2.2M; Digester Modules 1 & 2 Pipe Replacement of \$1.3M; Clarifier Flushing System of \$1.1M; As-needed Design contracts of \$981,000; Process Information Control System (PICS) Replacement construction of \$864,000; HVAC Equipment Replacement Design/Engineering Services During Construction of \$583,000; Electrical Equipment Upgrades-Construction 4 of \$583,000; Switchgear Replacement-Construction of \$562,000; and Miscellaneous VFD Replacements of \$500,000. Offset by overspending for Transformer Replacement of \$238,000; and Digester Sludge Pump Replacement of \$168,000.
Residuals	\$555,780	\$0	(\$555,780)	-	Underspending due to delay in award of Residuals Technology contract.
CSO	\$26,726,756	\$29,508,391	\$2,781,635	10.4%	Overspending primarily due to Brookline Sewer Separation of \$3.1M mainly due to timing; Cambridge Sewer Separation of \$944,000 due to contractor progress; and North Dorchester Bay of \$841,000 due to timing and unanticipated work. Offset by underspending in CSO Support of \$1.1M mainly for favorable renegotiation of the North Dorchester temporary easement.
Other Wastewater	\$2,376,112	\$1,964,297	(\$411,814)	-17.3%	Underspending on Inflow and Infiltration (I/I) due to loan repayments being greater than budgeted and community requests for grants and loans being less than budgeted.
Total Wastewater	\$64,522,789	\$53,793,241	(\$10,729,547)	-16.6%	

ATTACHMENT 3
Capital Improvement Program Variance Explanations

	FY12 Budget YTD April	FY12 Actuals YTD April	YTD Actuals vs. Budget		Explanations
			\$	%	
Drinking Water Quality Improvements	\$16,730,068	\$12,249,613	(\$4,480,454)	-26.8%	Underspending primarily due to Spot Pond Storage Facility Design/Build of \$3.7M due to lower than budgeted award; Carroll Plant Technical Assistance of \$295,000; Spot Pond Early Construction Water Connection of \$268,000; Carroll Plant Existing Facilities Modifications - CP7 of \$231,000; and Quabbin Ultraviolet Design/Construction Administration/Resident Inspection of \$219,000. Offset by overspending due to contractor progress for Carroll Plant Ultraviolet Disinfection Construction of \$354,000.
Transmission	\$17,107,688	\$15,027,361	(\$2,080,326)	-12.2%	Underspending on Long Term Redundancy of \$1.6M due to Sudbury Aqueduct MEPA Review schedule change of \$846,000, Wachusett Aqueduct Redundancy Pump Station - Design/ESDC/RI of \$396,000, and study work being less than budgeted of \$366,000; Quabbin Transmission System's Oakdale Phase 1A Electrical Construction of \$667,000; Upper Hultman Rehabilitation - CP6B of \$516,000; Watershed Land acquisition of \$483,000 due to timing; and Quabbin Aqueduct/Winsor Station of \$366,000. Offset by overspending for the Lower Hultman rehabilitation work of \$1.0M due to contractor progress and acceleration of the project and Dam Projects of \$860,000 mainly for contractor progress on the Dam Safety Modifications & Repairs contract for Foss and Weston Reservoirs.
Distribution & Pumping	\$7,810,825	\$11,713,157	\$3,902,332	50.0%	Overspending due to Northern Intermediate High Redundancy & Storage of \$1.9M mainly for Reading/Stoneham Interconnections due to progress and unanticipated work of \$ 2.3M; Lynnfield Pipeline of \$1.7M due to timing; New Connecting Mains-Shaft 7 to WASM 3 Northeast Segment of \$468,000 for additional work; and Valve Replacement of \$226,000 mainly for contractor progress.
Other Waterworks	\$6,308,626	(\$666,049)	(\$6,974,675)	-	Underspending on Local Water Pipeline Assistance Program due to community requests for loans being less than budgeted by \$8.0M offset by repayments being less than anticipated by \$1.6M; and Central Monitoring of \$568,000 mainly due to schedule change for Winsor Dam Communication Line Replacement.
Total Waterworks	\$47,957,207	\$38,324,082	(\$9,633,124)	-20.1%	
Business & Operations Support	\$6,943,333	\$5,489,145	(\$1,454,187)	-20.9%	Underspending due to Business Systems Plan of \$517,000; As-Needed Design contracts of \$510,000; and MWRA Facilities Management & Planning of \$278,000.
Total MWRA	\$119,423,329	\$97,606,470	(\$21,816,858)	-18.3%	

ATTACHMENT 4
FY12 Preliminary Projection vs FY12 Final Budget

TOTAL MWRA	FY12 Approved Budget	FY12 Preliminary Projection	Change FY12 Preliminary Projection vs FY12 Approved Budget	
			\$	%
EXPENSES				
WAGES AND SALARIES	\$ 90,319,013	\$ 89,977,013	\$ (342,000)	-0.4%
OVERTIME	3,508,630	3,414,213	(94,417)	-2.7%
FRINGE BENEFITS	17,954,076	17,802,992	(151,084)	-0.8%
WORKERS' COMPENSATION	2,100,000	1,722,000	(378,000)	-18.0%
CHEMICALS	9,047,275	9,047,275	-	0.0%
ENERGY AND UTILITIES	22,654,931	22,734,056	79,125	0.3%
MAINTENANCE	29,470,020	26,804,770	(2,665,250)	-9.0%
TRAINING AND MEETINGS	251,550	220,247	(31,303)	-12.4%
PROFESSIONAL SERVICES	5,892,441	5,592,981	(299,460)	-5.1%
OTHER MATERIALS	4,765,482	5,604,073	838,591	17.6%
OTHER SERVICES	23,323,074	22,780,536	(542,538)	-2.3%
TOTAL DIRECT EXPENSES	\$ 209,286,493	\$ 205,700,156	\$ (3,586,336)	-1.7%
INSURANCE	\$ 2,285,866	\$ 1,985,376	\$ (300,490)	-13.1%
WATERSHED/PILOT	25,576,274	25,554,600	(21,674)	-0.1%
HEEC PAYMENT	3,965,499	3,765,499	(200,000)	-5.0%
MITIGATION	1,528,705	1,511,645	(17,060)	-1.1%
ADDITIONS TO RESERVES	195,467	195,467	-	0.0%
RETIREMENT FUND	7,340,438	7,340,438	-	0.0%
POSTEMPLOYMENT BENEFITS			-	
TOTAL INDIRECT EXPENSES	\$ 40,892,249	\$ 40,353,025	\$ (539,224)	-1.3%
DEBT SERVICE (before offsets)	\$ 368,329,918	\$ 366,204,646	\$ (2,125,272)	-0.6%
VARIABLE RATE DEBT		(16,822,029)	(16,822,029)	N/A
DEFEASANCE ACCOUNT	-	18,947,301	18,947,301	N/A
DEBT SERVICE ASSISTANCE	(350,000)	(350,000)	-	0.0%
TOTAL DEBT SERVICE	\$ 367,979,918	\$ 367,979,918	\$ -	0.0%
TOTAL EXPENSES	\$ 618,158,659	\$ 614,033,099	\$ (4,125,560)	-0.7%
REVENUE & INCOME				
RATE REVENUE	589,700,000	\$ 589,700,000	\$ -	0.0%
OTHER USER CHARGES	7,142,494	7,142,494	-	0.0%
OTHER REVENUE	4,872,342	5,516,714	644,372	13.2%
RATE STABILIZATION	1,091,781	1,091,781	-	0.0%
INVESTMENT INCOME	15,352,043	16,252,043	900,000	5.9%
TOTAL REVENUE & INCOME	\$ 618,158,660	\$ 619,703,032	\$ 1,544,372	0.2%
VARIANCE		\$ 5,669,931	\$ 5,669,931	

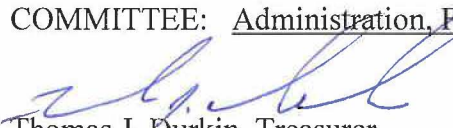
STAFF SUMMARY

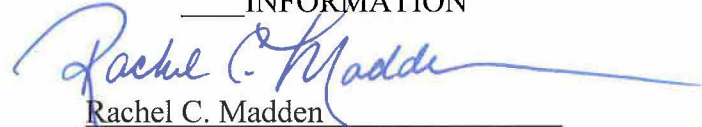
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: May 16, 2012
SUBJECT: Bond Defeasance of Future Debt Service



COMMITTEE: Administration, Finance & Audit

VOTE
 INFORMATION


 Thomas J. Durkin, Treasurer
Matthew R. Horan, Deputy Treasurer
 Preparer/Title


Rachel C. Madden
 Director, Administration & Finance

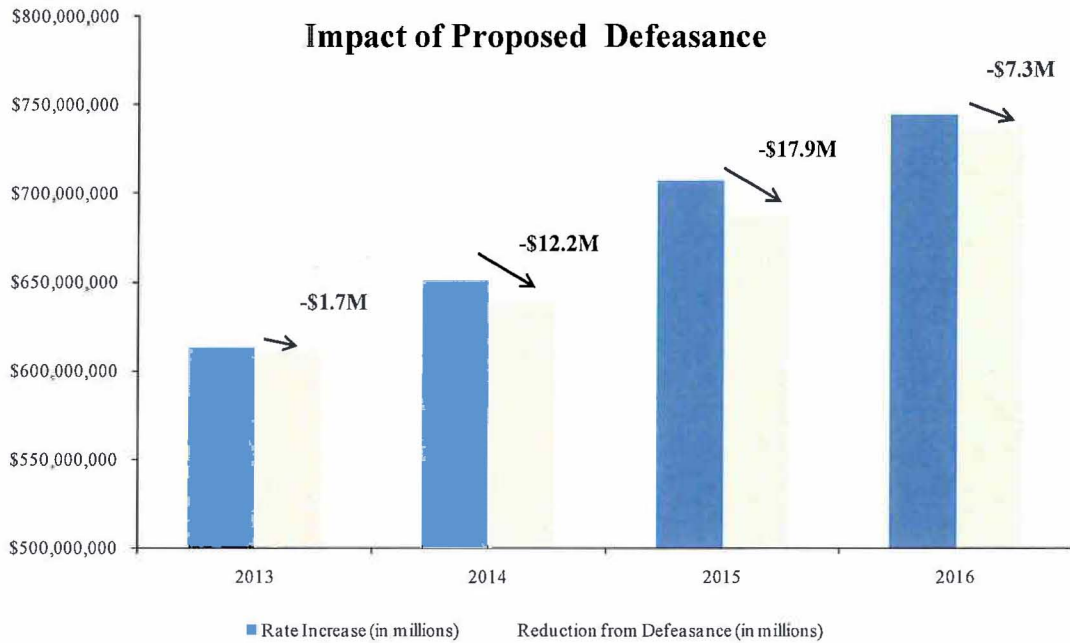
RECOMMENDATION:

To authorize the Executive Director or his designee, on behalf of the Authority, to enter into and execute all necessary agreements and other instruments to escrow cash and/or securities in an amount necessary to effectuate the redemption and defeasance of an aggregate principal amount of \$34,020,000 of outstanding MWRA senior bonds to maturity to reduce FY13 through FY16's debt service requirement by \$39,237,938.

DISCUSSION:

At the January 18, 2012 meeting, the Board approved the creation of an FY12 Defeasance account into which all surplus funds associated with debt service were allocated. It was the intent at that time to use those funds to defease outstanding debt to provide targeted rate relief in future years. Based on the FY12 approved budget, MWRA is showing rate increase of 6.2% in FY14, 8.6% in FY15 and 5.3% in FY16. In order to mitigate those rate increases, in February staff proposed using \$20 million from the FY12 surplus and certain debt service reserve funds to defease bonds for future rate relief. Now based on current year end projections, staff are requesting approval to use \$25 million in FY12 surplus funds and \$14.6 million of released debt service reserve fund to execute the defeasance. The following table and graph show the impact of the proposed defeasance on the future rate revenue requirement, versus the projections in the Final FY12 CEB. It's important to note that while the defeasance projections show a larger percentage increase in FY16, than the Final FY12 CEB projection, the actual dollar increase is reduced by approximately \$7.3 million as a result of the defeasance.

	2013	2014	2015	2016
FY12 Rate Revenue Percent Increase	3.9%	6.2%	8.6%	5.3%
Revised FY13 with Proposed Defeasance	3.9%	4.6%	7.8%	6.7%



MWRA’s General Bond Resolution requires that a Debt Service Reserve Fund be established for all series senior bonds as security to the bondholders. When the entire series of bonds reaches its final maturity date, the money in the Debt Service Reserve Fund must be applied to the final payment, since you cannot have a reserve outstanding after all the debt has been paid. MWRA currently has two series of bonds which will have their final maturities within the targeted defeasance period. Staff propose using the 1997 Series D (\$7.5 million) and the 1998 Series B (\$7.1 million) debt service reserve funds which total approximately \$14.6 million and the up to \$25 million projected to be available from FY12 to execute this defeasance.

In addition to the two series listed above, staff reviewed all available defeasance candidates, and have identified the maturities of the series listed in the table below as the most advantageous defeasance candidates.

Series	Maturity	Par	Coupon	Yearly Interest	Defeasance Cost ⁽¹⁾
1997D	8/1/2014	\$ 7,310,000	6.00%	\$438,600	\$ 8,187,200
1998B	8/1/2014	\$ 455,000	5.50%	\$ 25,025	\$ 505,050
1998B	8/1/2015	\$ 6,525,000	5.50%	\$358,875	\$ 7,601,625
1998B	8/1/2016	\$ 6,885,000	5.50%	\$378,675	\$ 8,399,700
2002J	8/1/2015	\$ 9,075,000	5.25%	\$476,438	\$ 10,504,313
2010A	8/1/2015	\$ 1,105,000	3.00%	\$ 33,150	\$ 1,204,450
2011B	8/1/2014	\$ 1,065,000	2.00%	\$ 21,300	\$ 1,107,600
2011B	8/1/2014	\$ 1,600,000	4.00%	\$ 64,000	\$ 1,728,000
Total		\$34,020,000			\$ 39,237,938

(1) Defeasance cost is only anticipated funds from surplus and does not included current year deposits. Assumes no interest earned on the escrow

The following table details the savings associated with the defeasance of the bonds shown above for FY13 through FY16:

	Budgetary Reduction by Fiscal Year				Total CEB Savings
	2013	2014	2015	2016	
Defeasance CEB Savings	\$ 1,796,063	\$ 12,226,063	\$ 17,952,138	\$ 7,263,675	\$ 39,237,938

Staff anticipate using funds from the projected FY12 surplus to purchase governmental securities in an amount sufficient to make all future interest and principal payments on the bonds to be defeased, offset by the interest earned on the Treasury securities. If the FY12 surplus is less than the amount necessary to complete the defeasance, staff are requesting authorization to use Bond Redemption as supplemental funding for the escrow. In order to provide the CEB savings in FY13, the defeasance must be completed prior to June 30, 2012.

The governmental securities are deposited with an escrow agent (bond trustee). Once established, an escrow is irrevocable, replacing any future debt service payments due for the bonds being escrowed, and therefore reducing the rate revenue requirement. Establishing an escrow reduces debt service requirements for each fiscal year from the time it is executed until the defeased bonds mature.

Establishing an escrow to defease debt requires that MWRA’s bond counsel draft an agreement to this effect and an independent verification agent must certify that the funds in the escrow are sufficient to pay the remaining debt service. Bonds that are escrowed to maturity are not included in the MWRA’s debt cap or debt service coverage calculations. Staff will continue to monitor market conditions and the maturities available to be defeased to ensure that the bonds selected provide MWRA with the highest available debt service savings.

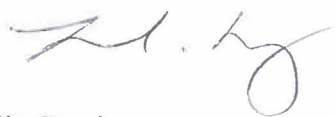
BUDGET/FISCAL IMPACT:

The defeasance of these bonds will decrease the FY13, FY14, FY15 and FY16 debt service requirement as shown above. The cost associated with bond counsel and financial advisory services will be paid out of the Treasury Department’s professional services budget.

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5/16/12

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: May 16, 2012
SUBJECT: Renewable and Alternative Energy Portfolio Services
Nexant, Inc.
Contract RPS-36, Amendment 2



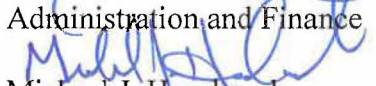
COMMITTEE: Administration, Finance & Audit

INFORMATION

X VOTE


Rachel C. Madden, Director
Administration and Finance

Kristen Patneau, Program Manager, Energy Management
Michele S. Gillen, Deputy Director, Administration and Finance
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director to approve Amendment 2 to Contract RPS-36, Renewable and Alternative Energy Portfolio Services, with Nexant, Inc., in accordance with the terms and conditions of an existing contract with the Commonwealth of Massachusetts, *Contract FAC68designatedDCAM*, for a share of revenue received from sales of MWRA's Class I Renewable Energy Certificates, in an amount not to exceed \$60,000, increasing the total revenue paid to Nexant from \$100,000 to \$160,000, and extending the contract term by 477 calendar days, from June 18, 2012 to October 8, 2013.

DISCUSSION:

In late 2009, the Commonwealth of Massachusetts, through the Division of Capital Asset Management (DCAM) solicited qualified firms to market and certify all attainable Renewable Energy Certificates (RECs) generated by the Commonwealth's facilities. Nexant, Inc. was awarded the state-wide contract resulting from that solicitation. DCAM's contract, *Contract FAC68designatedDCAM*, had an original term of one year but also included three annual options to renew. The contract commenced October 8, 2009 and has been extended through all options to October 2013.

The services procured under this solicitation are available to eligible state and public entities and in March 2011, MWRA executed Contract RPS-36 with Nexant, Inc. in the amount of \$80,000 to provide Renewable and Alternative Energy Portfolio Services for a one-year period. In March 2012, the Executive Director, under delegated authority, approved Amendment 1, which increased the contract amount from \$80,000 to \$100,000 and extended the contract term by three months from March 18, 2012 to June 18, 2012.

The Massachusetts Renewable Energy Portfolio Standard (RPS) is a statutory obligation requiring all retail electricity suppliers to provide a minimum percentage of kilowatt-hours (kWh) sales to end-use customers in Massachusetts from eligible renewable energy resources. The RPS began with an obligation of one percent in 2003 and then increased by one-half percent annually until it reached four percent in 2009. In 2009, as part of the Green Communities Act of 2008, the RPS was broken into RPS Class I and RPS Class II¹. Each RPS Class has different supplier compliance percentages, as well as different qualifying generation units used to meet the compliance percentage.

Suppliers must meet their annual RPS obligations by acquiring a sufficient quantity of RPS-qualified RECs and/or by making Alternative Compliance Payments to the Massachusetts Clean Energy Center. The Alternative Compliance Payments were established by the Massachusetts Division of Energy Resources (DOER). These rates are designed to be higher than the market price of RECs and are adjusted annually based on the Consumer Price Index of the previous year.

DOER has established the qualification process for renewable generation facilities. The following MWRA facilities are currently approved as qualified renewable generation units:

- Deer Island Steam Turbine Generator – Class I
- Deer Island Residuals Odor Control Solar – Solar Class I
- Deer Island Maintenance Building Solar – Solar Class I
- Carroll Water Treatment Plant Solar – Class I
- Deer Island Wind – Class I
- Charlestown Wind – Class I
- Deer Island Hydro – Class I
- Loring Road Hydro – Class I
- Oakdale Hydro – Class II
- Cosgrove Hydro – Class II

Electricity produced by new renewable energy generators qualified for the RPS program is broken into two products:

- 1.) The electricity production that is used on-site or delivered to the grid; or
- 2.) The positive environmental attributes associated with this clean energy production.

RECs represent the second product. One REC is created each time a qualified system generates 1 megawatt hour (MWh) of electricity. In order for suppliers to meet their compliance obligations as set by the RPS, they must purchase a number of RECs equal to the percentage for that particular compliance year. For example, in 2012 all suppliers are required to purchase an

¹ RPS Class I facilities generate electricity using eligible technologies (solar, wind, small hydroelectric, landfill methane, digester gas, marine or hydrokinetic, geothermal, and biomass) and began commercial operation *after* 1997. RPS Class II renewable facilities generate electricity using technologies similar to Class I but have an operation date prior to January 1, 1998.

amount of RECs equal to 7% of the total load they serve in Massachusetts in order to comply with the RPS Class I requirement.

Since December 2002, MWRA had been selling its Class I RECs through a competitive bid process. During the first six years of RPS sales the demand for RECs exceeded the supply and the bid prices MWRA received were close to the value of the Alternative Compliance Payments and each bidding process generated multiple bidders. However, in the past few years, there has been an emergence of many new qualified renewable generators resulting in an excess supply of Class I RECs. As a result, MWRA has seen a decline in both the number of bidders and in the prices bid for the RECs.

This Amendment

Contract RPS-36 with Nexant expires on June 18, 2012. Since DCAM has extended Nexant's contract, staff recommend that MWRA similarly extend its contract with Nexant to coincide with the end date of the DCAM contract on October 8, 2013.

Nexant will manage market risk on behalf of MWRA through a combination of spot and forward-market sales of RECs. Nexant will also be the counterparty on all contracts with buyers of the RECs generated by MWRA, which includes assuming all delivery risk, providing any necessary back-office functions such as legal and financial, and executing letters of credit (if required by buyers). In addition, Nexant will manage the certification of the RECs into the NEPOOL-GIS², deliver the RECs to buyers, invoice and process payments from buyers, and process payments to MWRA for its share of the revenue.

Some of the advantages to MWRA by continuing to use the Nexant contract include:

- Aggregation of RPS RECs with other state-controlled agencies and public entities potentially resulting in overall higher bid prices for MWRA based upon current market trends;
- Nexant engages in "forward" marketing, financial contracts for future supply of RPS RECs, which historically results in higher prices. Under the terms of the DCAM contract, Nexant will assume all risk for providing these future RECs when they are due to the buyer; and
- Nexant will also keep MWRA staff informed of any changes to the RPS market and/or regulations.

Under the original pricing structure of DCAM's contract, the percentage fee charged by Nexant was either 7.5% or 13.5% of the total bid prices received for the sale of RPS RECs, depending on when the asset was registered as a qualified unit. The fee structure is based on the aggregation of all facilities on the DCAM contract; the higher aggregations of total capacity have

² NEPOOL Generation Information System - a generation information database and certificate system, operated by the New England Power Pool, its designee, or successor entity, that accounts for Generation Attributes of electrical energy consumed within, imported into, or exported from the ISO-NE Control Area

lower fee payments. Staff successfully negotiated with Nexant to significantly lower its fee to 1.25% for all RECS sold under this contract. The new fee structure has been approved by DCAM in accordance with existing contract allowances. Staff estimate that the total payment to Nexant for selling MWRA's current RECs through the recommended extended contract term will be approximately \$60,000.

It should be noted that the market fundamentals for Class II RECs presently differ from the Class I REC market; the supply of qualified Class II RECs is less than the demand. Class II RECs are currently selling at or close to the Alternative Compliance Payments. Therefore, MWRA will continue to conduct its own quarterly requests for bids for the sale of RECs from the Cosgrove and Oakdale hydroelectric facilities. Staff will continue to evaluate the bids received and determine whether or not it is in MWRA's best interest to continue to bid them directly or add them to the Nexant contract.

CONTRACT SUMMARY:

	AMOUNT	TIME	DATED
Original Contract:	\$80,000	366 Days	3/18/11
AMENDMENTS			
Amendment 1*:	\$20,000	92 Days	3/26/12
Proposed Amendment 2:	<u>\$60,000</u>	<u>477 Days</u>	Pending
Adjusted Contract:	\$160,000	1,393 Days	

*Approved under delegated authority

BUDGET/FISCAL IMPACT:

The estimated total payment to Nexant for selling MWRA's RECs during this contract extension is \$60,000, which is deducted from the proceeds of the REC sales.

MBE/WBE PARTICIPATION:

There were no MBE/WBE participation requirements established for this contract due to limited opportunities for subcontracting.

AF1A c.2
IV c.2
5/16/12

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: May 16, 2012
SUBJECT: Security Guard Services for Various MWRA Facilities
U. S. Security Associates, Inc.
Contract EXE-025, Amendment 6



COMMITTEE: Administration & Finance

 INFORMATION
 X VOTE

Bruce McMillan, Security Administrator
Preparer/Title



Marcis Kempe, Director, Office of
Emergency Preparedness

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to execute Amendment 6 to Contract EXE-025, Security Guard Services For Various MWRA Facilities, with U.S. Security Associates, Inc., increasing the contract by an amount of \$2,487,086.79 and increasing the total price from \$8,108,587.74 to \$10,595,674.53 and reallocating certain unexpended funds within the contract, and extending the contract term by 18 months from August 5, 2012 to February 4, 2014.

DISCUSSION:

U.S. Security Associates, Inc. ("USSA") has been providing around-the-clock security, including video and alarm monitoring, gate access and mobile patrols, and has reported security and fire-related incidents at the Charlestown Headquarters, Deer Island Treatment Plant, Chelsea Facility, and Carroll Water Treatment Plant as well as remote locations since August 2007. In that year, the Board of Directors approved the award of a three-year contract to USSA. At the recommendation of the Director of Emergency Preparedness, that contract was extended over a six month period under the Executive Director's delegated authority, and on February 16, 2011, the Board approved an amendment further extending the contract for 18 months (through August 4, 2012) and increasing the price to \$8,108,587.74.

Both procurement and security considerations support this recommendation to extend the current contract by an additional 18 months. After reviewing procurement options, staff had planned to procure guard services for the next three-year period using the Commonwealth's existing statewide 'blanket' contract, but that contract will terminate in October 2014. Furthermore, due to changes in the marketplace, it is anticipated that the state may conduct a new procurement for a blanket contract for guard services prior to that date. Therefore, it would make sense to extend

the current contract for a short period (retaining a right of early termination) until the new statewide contract is in place.

In this proposed amendment, the contractor's billing rate for guards has been increased to \$19.87. Annualized for the first year of the contract (2007), this represents an average annual increase of 3.20%. It includes an increased guard hourly pay rate from \$12.61 per hour to \$14.50 per hour, but an approximately 3% decrease in USSA's overhead rate. The proposed guard pay rate has only been increased by \$0.61 since 2007. The new rate is consistent with other governmental building guard services contracts recently procured.

It is staff's view that the current security contractor's familiarity with the MWRA's layout and operations as well as the complex security technology that MWRA employs will most effectively assure continuity of security at this time.

Contract Summary

	<u>Amount</u>	<u>Time</u>	<u>Dated</u>
Original Contract	\$ 6,333,295.74	36 Months	August 1, 2007
Amendment 1 *	\$ -	3 Months	August 2, 2010
Amendment 2 *	\$ -	2 Months	November 4, 2010
Amendment 3 *	\$ -	1 Month	January 3, 2011
Amendment 4	\$ -	1 Month	January 31, 2011
Amendment 5	\$ 1,775,292.00	18 Months	February 28, 2011
Amendment 6	\$ 2,487,086.79	18 Months	Pending
Adjusted Contract Amount	\$10,595,674.53	79 Months	

* Approved under delegated authority

BUDGET/FISCAL IMPACT:

The current contract with USSA will have a surplus of an estimated \$30,000 as of August 4, 2012, due to unexpended overtime and close contract management. Amendment 6 will add a total of \$2,487,086.79 to the contract, for an additional 18 months of service. No increases in staffing are included. The FY12 budget includes \$1,605,947 for security related expenses, and adequate funds will be included in both the FY13 and FY14 budgets to fund this contract. This extension's yearly spending is estimated at \$1,658,058, which is \$36,340 or 2.2% higher than the average (\$1,621,718) of the prior 5-year contract.

MBE/WBE PARTICIPATION:

Due to the specialized nature of this contract and the limited opportunities for subcontracting, no MBE or WBE participation requirements were established for this contract.



MASSACHUSETTS WATER RESOURCES AUTHORITY

Charlestown Navy Yard
100 First Avenue, Building 39
Boston, MA 02129

Frederick A. Laskey
Executive Director

Telephone: (617) 242-6000
Fax: (617) 788-4899
TTY: (617) 788-4971

WASTEWATER POLICY & OVERSIGHT COMMITTEE MEETING

Chair: J. Foti
Vice-Chair: J. Walsh
Committee Members:
J. Carroll
M. Gove
J. Hunt
A. Pappastergion
M. Turner

to be held on

Wednesday, May 16, 2012

Location: 100 First Avenue, 2nd Floor
Charlestown Navy Yard
Boston, MA 02129

Time: Immediately following AF&A Comm.

AGENDA

A. Information

1. Progress of City of Cambridge-Implemented CSO Projects and Projected Financial Assistance through September 2012
2. Progress Update of BWSC-Implemented CSO Projects and Projected Financial Assistance through December 2012

B. Approvals

1. Memorandum of Understanding and Financial Assistance Agreement with the Town of Brookline for Implementation of CSO Control Project, Amendment 3, and Progress of Town of Brookline-Implemented CSO Project and Projected Financial Assistance through July 2013

C. Contract Awards

1. Primary and Secondary Clarifier W3H Flushing System, Deer Island Treatment Plant: Delta Control Engineers, Inc., d/b/a Harding and Smith, Contract 7374

WW(i)
5/14/12

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the
Wastewater Policy and Oversight Committee

April 11, 2012

A meeting of the Wastewater Policy and Oversight Committee was held on April 11, 2012 at the Authority headquarters in Charlestown. Chairman Foti presided. Present from the Board were Ms. Turner and Messrs. Barrera, Carroll, Hunt, Gove, Mannering, Pappastergion and Walsh. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Mike Hornbrook, Pam Heidell and Bonnie Hale. The meeting was called to order at 11:25 a.m.

Approvals

*Approval of FoxRock Research Realty, LLC Sewer Connection in Hingham

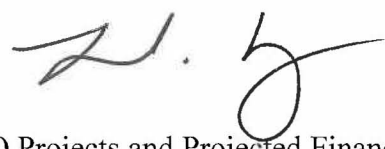
Staff summarized the details of the proposed project. Mr. Walsh had questions and concerns about I/I removal, which staff responded to. The Committee recommended approval (with Mr. Walsh abstaining) of the sewer connection agreement (ref. agenda item A.1).

The meeting adjourned at 11:35 a.m.

* Approved as recommended at April 11, 2012 Board of Directors meeting.

STAFF SUMMARY

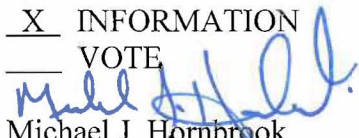
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: May 16, 2012
SUBJECT: Progress of Cambridge-Implemented CSO Projects and Projected Financial Assistance through September 2012



COMMITTEE: Wastewater Policy & Oversight

X INFORMATION
VOTE

David A. Kubiak, Sr. Program Manager
Jae R. Kim, Chief Engineer
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

For information only. This staff summary presents the status of the projects in the Long-Term CSO Control Plan that are funded by MWRA and implemented by the City of Cambridge. Staff plan to transfer \$4,360,706.11 into the City of Cambridge CSO account to cover anticipated eligible costs in the period April 2012 through September 2012, bringing the total amount of MWRA funds transferred into the Cambridge CSO account to \$36,576,281.46.

DISCUSSION:

Under the Memorandum of Understanding (MOU) and Financial Assistance Agreement (FAA) between MWRA and the City of Cambridge for the Implementation of CSO Control Projects, Cambridge is responsible for implementing five of the 35 projects in MWRA's long-term CSO control plan, including four of the six projects that comprise the long-term CSO control plan for Alewife Brook (see map, Attachment 1) and a project that provided floatables control to Cambridge's CSO outfalls on the Charles River. The MOU provides a framework for Cambridge and MWRA to cooperatively manage implementation of these projects. The FAA is the funding mechanism by which MWRA funds are made available to Cambridge to pay eligible design and construction costs. The MOU and FAA were originally executed in 1996. Amendment 8 to the MOU and FAA, approved by the Board on July 16, 2008, increased the total award amount to the current \$60,021,000.

Progress of Work

The following is a summary of Cambridge's progress with each of the five CSO projects it is responsible for implementing:

Charles River Floatables Control (Cambridge Contract 5)

In 2007, Cambridge completed the project to provide floatables control at its CSO outfalls along the Charles River Basin, for a total eligible design and construction cost of \$159,310. The project involved installing underflow baffles at two CSO outfalls, CAM007 and CAM017, and closing two other CSO outfalls, CAM009 and CAM011, that the long-term control plan had assumed would remain open and need floatables control.

Interceptor Connection Relief and Floatables Control and CAM400 Common Manhole Separation (Cambridge Contract 4/13)

Cambridge completed these two projects with one \$5.21 million construction contract (of which \$4.27 million was funded by MWRA) in October 2010 and March 2011, respectively. The Interceptor Connection Relief and Floatables Control project involved upgrading – including upsizing – certain connections between Cambridge’s local collection system and MWRA’s Alewife Brook interceptors, to lower CSO discharges at Cambridge’s Outfall CAM002 and Outfall CAM401B. The project also included the installation of underflow baffles for floatables control in the CSO regulators associated with these two outfalls and Outfall CAM001. The CAM400 Common Manhole Separation project involved the replacement of common storm drain and sewer manholes with separate manholes in the local, mostly residential, streets bounded by Alewife Brook Parkway, Massachusetts Avenue, Magoun Street and Whittemore Avenue, as well as a portion of the WR Grace property off Whittemore Avenue.

CAM004 Stormwater Outfall and Wetland Basin (Cambridge Contract 12)

The City of Cambridge continues to make progress with construction of the \$16.4 million CAM004 stormwater outfall and wetland basin, of which up to \$3.9 million is funded by MWRA. The contract is 58% complete and is scheduled to be substantially complete in April 2013 in compliance with Schedule Seven.

Since commencement of Contract 12 in April 2011, Cambridge’s contractor has completed work to establish new river crossings of an 8-inch gas main, a 36-inch electric bundle, and an 8-inch communications conduit that previously crossed the area of the planned wetland basin. At a nearby location, the contractor has completed construction of a large stormwater diversion structure that will direct stormwater to the basin but also allow a portion of the stormwater flows to bypass the wetland basin in extreme storms, using a bending weir.

The contractor has completed the stormwater outfall box conduit sections across 55 Wheeler Street, all associated utility relocation work, and temporary restoration of the work areas. The contractor has commenced installation of the box conduit sections across the parking lots at 150/180 Cambridge Park Drive and is continuing with work to construct a special structure (Figure 1) that will allow the box conduit to pass over the MWRA



Fig. 1 - Crossing structure at MWRA interceptors behind 125 Cambridge Park Drive

interceptor pipes behind 125 Cambridge Park Drive. The contractor has also completed a section of box conduit from this structure toward the forebay of the wetland basin.

With reference to Attachment 2 and Figure 2, the contractor has installed the wetland basin outlet structure and a PVC dewatering well to assist in construction site dewatering. Forming and stabilization of the forebay area is also complete, and work continues on grading the wetland and stabilizing the berms around its perimeter. The headwall of the outlet from the forebay to the vegetated swale is complete, and the footings for the overlook adjacent to the forebay are installed. The contractor is also constructing the overlook adjacent to the “Oxbow.”



Fig. 2 - Stormwater Wetland Basin Construction

CAM004 Sewer Separation (Cambridge Contracts 8A, 8B and 9)

In the period 1998-2002, Cambridge completed early construction contracts for CAM004 Sewer Separation at a total eligible cost of \$10.4 million. Cambridge is currently making design progress on three remaining contracts (8A, 8B and 9) to separate the CAM004 drainage area, which primarily involves the installation of new storm drains in areas near Fresh Pond Parkway and Huron Avenue. Design of Contract 8A is 90%, and Cambridge expects to award this contract in July 2012. Cambridge’s cost estimate for the remaining three construction contracts is \$22.4 million of which approximately \$14.4 million would be funded by MWRA per agreement with Cambridge.¹ Cambridge plans to complete the last construction contract by December 2015, in compliance with Schedule Seven.

MWRA Oversight and Financial Assistance

The FAA establishes eligible and ineligible costs. Generally, all reasonable force account and contract costs incurred by Cambridge as a direct result of implementing eligible portions of the CSO projects are funded by MWRA. The FAA calls for MWRA to disburse grant funds to Cambridge semiannually, based on a detailed, documented estimate of work progress and eligible costs for each projected six-month period. MWRA’s review and acceptance of the spending estimate is required prior to disbursement of funds to the Cambridge CSO account.

¹ The FAA includes an agreement by the City of Cambridge to fund \$20.5 million of what would otherwise be defined as eligible cost associated with the construction of the CAM004 Stormwater Outfall and Wetland Basin (Contract 12) and CAM004 Sewer Separation (Contracts 8A, 8B and 9). The agreement was reached during negotiations with the City when a major revision to the Alewife Brook CSO control was recommended in 2001.

Staff continue to review the scope and costs of engineering and construction contracts that are issued by Cambridge, as well as change orders and amendments. Staff also maintain regular contact with Cambridge staff and routinely review the progress of the Cambridge projects and expenditures. Cambridge submits quarterly reports that describe actual work progress and expenditures (force account and contract-related) for each project.

MWRA's Internal Audit Department routinely reviews Cambridge's compliance with the terms and conditions of the FAA. The latest audit, completed in November 2010, reviewed whether force account costs claimed by the City for years 2005 through 2009 were supported by the records of the City and were eligible for MWRA funding under the terms of the FAA. The audit resulted in a reimbursement by the City to the CSO account of \$3,652. The next Internal Audit Department review of the Cambridge MOU/FAA is presently underway.

Funding and Eligible Expenditures through March 2012

Cambridge pays the eligible costs of the project from a general City account and periodically reimburses its general account from the CSO account. Since execution of the MOU and FAA in 1996, MWRA has transferred a total of \$32,215,576 to Cambridge's CSO account to cover eligible design and construction costs through March 2012. In addition, Cambridge is able to use accumulated interest in the account for funding eligible costs. The estimated eligible cost incurred by Cambridge from MOU/FAA inception through March 2012 is \$32.9 million, and the estimated balance in the CSO account as of the end of March 2012 is -\$645,000. This negative balance is due to higher Contract 12 construction spending than was estimated in the last semiannual transfer, in the fall of 2011.

Funding through September 2012

Cambridge recently submitted a projected work progress report and an estimate of the eligible contract and force account expenditures for the period April 2012 through September 2012 in the amount of \$2,900,978. Over this period, Cambridge will continue with construction and construction supervision services for Contract 12 and with design services for Contract 8A. In addition, Contract 8A construction and construction supervision services will commence in July 2012. Final design services for Contract 8B have also recently commenced. Staff have reviewed the request and have approved a transfer of \$4,360,706.11 to cover the anticipated eligible cost in this period and the actual eligible cost that exceeded the transfer amount for the last period. The difference between the Cambridge estimate and the MWRA approved transfer includes the (negative) balance in the Cambridge CSO account, Contract 4/13 planned release of retainage, and Contract 8A construction and construction services, which were not included in the request but are expected to be incurred. Staff plan to transfer \$4,360,706.11 to the Cambridge CSO account soon.

The table on the next page shows a breakdown of previously provided funds and the pending transfer.

Engineering Services and Construction Contracts	Funds Previously Provided	Pending Transfer for Oct 11-Mar 12	Total
Preliminary/Final Design for Contracts 1, 2A, 2B and 3	\$ 1,650,270	\$ -	\$ 1,650,270
Construction Phase Services for Contracts 1, 2A, 2B and 3	\$ 1,787,068	\$ -	\$ 1,787,068
CAM002-004 Sewer Separation (Contracts 1, 2A, 2B and 3)	\$ 10,411,903	\$ -	\$ 10,411,903
Final Design/Field Investigations for Contracts 8, 9, and 12	\$ 1,498,117	\$ -	\$ 1,498,117
Design/ESDC Floatables & CAM400 Manhole Separation Contract 4/13	\$ 1,906,288	\$ 142,515.00	\$ 2,048,803
Design 8A, 8B, & 9	\$ 996,142	\$ 826,428.11	\$ 1,822,570
ESDC 8A, 8B, & 9	\$ -	\$ 209,749.00	\$ 209,749
Final Design 12	\$ 4,148,059	\$ (273,000.00)	\$ 3,875,059
ESDC Contract 12	\$ 1,462,512	\$ 907,412.00	\$ 2,369,924
Construction of Floatables Controls (Charles and partial Alewife)	\$ 658,639	\$ -	\$ 658,639
Construction/Police Contract 4/13	\$ 4,518,525	\$ 403,000.00	\$ 4,921,525
Construction/Police Contract 12	\$ 2,336,500	\$ 1,578,252.00	\$ 3,914,752
Easements Contract 12	\$ 317,706	\$ -	\$ 317,706
Construction/Police 8A, 8B, & 9	\$ -	\$ 515,000.00	\$ 515,000
City of Cambridge Force Account/Expenses	\$ 523,846	\$ 51,350.00	\$ 575,196
	\$32,215,575	\$ 4,360,706.11	\$ 36,576,281

BUDGET/FISCAL IMPACT:

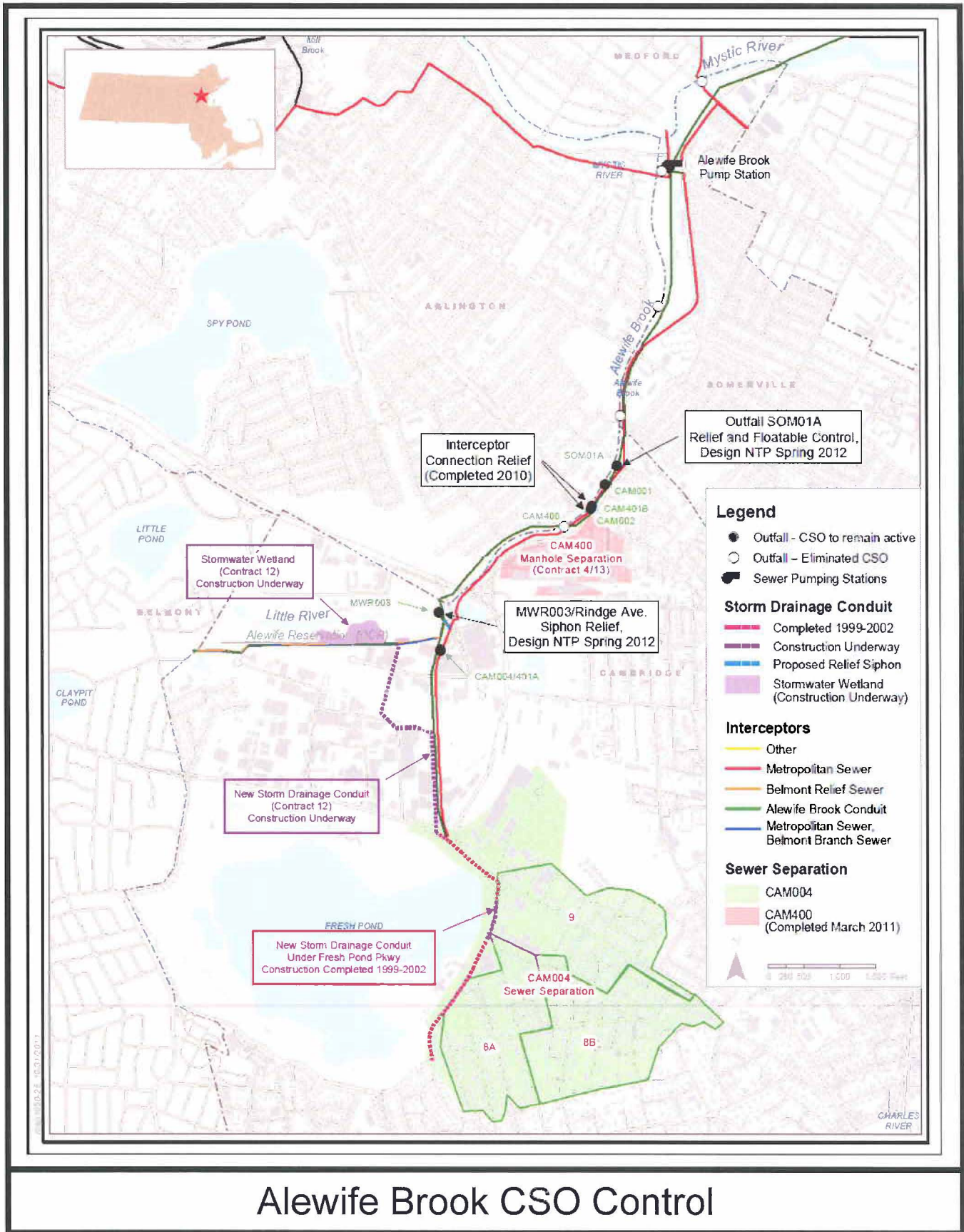
The FY12 CIP budget includes \$56,788,571 for design and construction of the Cambridge CSO projects. The Total Award Amount of the MOU and FAA with the City of Cambridge is \$60,021,000. The FY12 CIP budget reflects actual costs and updated estimates for future work since the MOU and FAA were last amended (Amendment 8) in 2008.

MBE/WBE PARTICIPATION:

In accordance with the MOU, MBE and WBE participation in the Cambridge Sewer Separation and Floatable Controls projects will comply with DEP requirements and City of Cambridge policy.

ATTACHMENTS:

- Attachment 1 – Alewife Brook CSO Control Plan
- Attachment 2 – Schematic of Alewife Wetland Basin



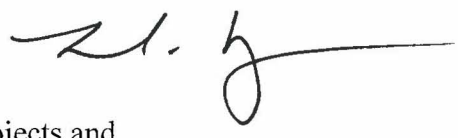
Alewife Brook CSO Control

Attachment 2 – Schematic of Alewife Wetland Basin



STAFF SUMMARY

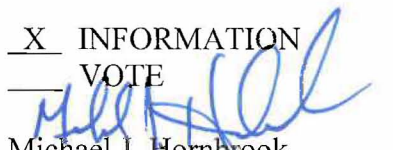
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: May 16, 2012
SUBJECT: Progress of BWSC-Implemented CSO Projects and Projected Financial Assistance through December 2012



COMMITTEE: Wastewater Policy & Oversight

INFORMATION
 VOTE

David A. Kubiak, Sr. Program Manager
Jae R. Kim, Chief Engineer
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

For information only. This staff summary presents the status of projects in the Long-Term Combined Sewer Overflow (CSO) Control Plan that are funded by MWRA and implemented by the Boston Water and Sewer Commission (BWSC). Staff plan to transfer \$8,386,949.22 into the BWSC CSO account for anticipated eligible costs through December 2012.

DISCUSSION:

Under the Memorandum of Understanding (MOU) and Financial Assistance Agreement (FAA) between MWRA and BWSC for the Implementation of CSO Control Projects, BWSC is responsible for implementing nine of the 35 projects in MWRA's Long-Term CSO Control Plan (LTCP). In addition, BWSC is constructing improvements to relieve a portion of its Lower Dorchester Brook Sewer to reduce CSO discharges to BWSC's Dorchester Brook Conduit and Fort Point Channel in accordance with the terms and conditions of Amendment 9 to the MOU and FAA approved by the Board on June 4, 2008.

The MOU provides a framework within which BWSC and MWRA cooperate in the management of the CSO projects. The FAA is the funding mechanism by which MWRA funds are made available to BWSC to pay eligible design and construction costs. The MOU and FAA were originally executed in 1996. The total award amount in the agreements through Amendment 12, executed on August 24, 2011, is \$287,585,598.

Progress of Work

BWSC continues to make significant progress toward completing the CSO projects it is responsible for implementing on schedules that comply with milestones in Schedule Seven of the Federal Court Order in the Boston Harbor Case. From 1996 through June 2012, BWSC spent approximately \$254.8 million for eligible CSO work funded by MWRA. BWSC has completed the South Dorchester Bay, Stony Brook, Neponset River, Constitution Beach, Fort Point Channel and Bulfinch Triangle sewer separation projects, the Morrissey Boulevard Storm Drain project and the Region-wide Floatables Control project (BWSC outfalls only) in accordance with the approved LTCP in the Federal Court Order. Together these projects involved the installation of

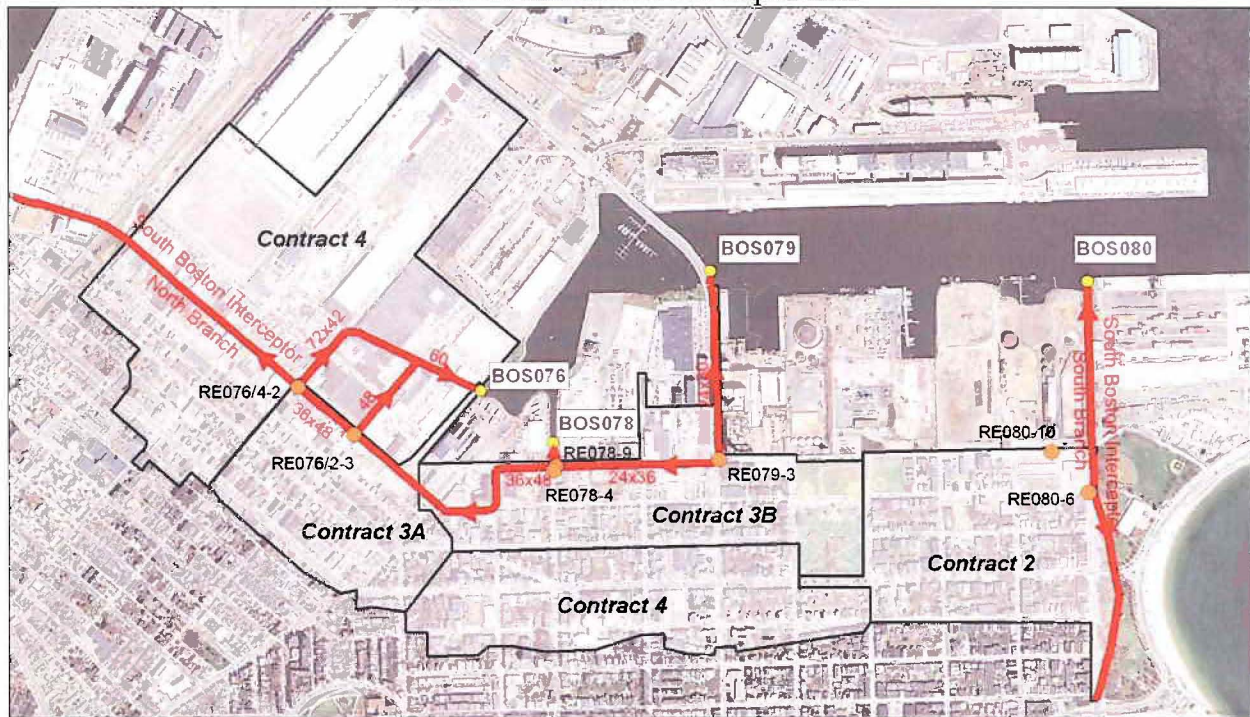
more than 245,000 linear feet (46 miles) of new storm drain and allowed the closing of CSO outfalls to the Neponset River and Tenean, Malibu, Savin Hill and Constitution beaches.

Described below is the progress of CSO work BWSC continues to perform that is eligible for MWRA funding. Beyond the pending transfer of \$8,386,949.22, staff expect to transfer an additional \$27,803,928 to the BWSC CSO account through 2016.

Reserved Channel Sewer Separation

BWSC continues to make scheduled progress with its nine planned construction contracts for the \$64.3 million Reserved Channel Sewer Separation project (see Figure 1). In December 2010, BWSC attained substantial completion of the first construction contract (Contract 2), which involved the installation of 8,379 linear feet of storm drain, approximately 3,961 linear feet of minor drain (8-inch-diameter or less), and 3,372 linear feet of sanitary sewer to separate combined sewers in an area of South Boston bounded by East First Street, Farragut Road, Broadway and M Street. The work removed stormwater from local sewers tributary to the upstream end of BWSC's South Boston Interceptor, South Branch, reducing CSO overflows to the Reserved Channel at Outfall BOS080.

Figure 1
Reserved Channel Sewer Separation



In December 2011, BWSC attained substantial completion on the second construction contract (Contract 1). This contract included the replacement or rehabilitation of four outfalls to the Reserved Channel. The outfalls are located at Pappas Way (BOS076), adjacent to I Street (BOS078), at the Summer Street Bridge (BOS079) and at Conley Terminal (BOS080). The work also included pipe installation to connect the outfalls to the existing and/or proposed drainage system. Temporary restoration of impacted roadways has been completed. Permanent pavement and landscaping restoration will be completed this spring.

BWSC issued the Notice to Proceed with the third construction contract (Contract 3A) in December 2010. This contract involves the installation of new storm drains and sanitary sewers to separate combined sewers tributary to Outfall BOS076. The contractor has completed installation of 84-inch diameter drain in Pappas Way and 72-inch x 48-inch drain on West First Street from Pappas Way to E Street. On F Street drains ranging from 12-inch to 36-inch have been installed between West First and Athens Streets. In addition a 24-inch sewer has been installed on F Street between West First and West Second Streets. Drains ranging from 12-inch to 18 inch have been installed on West Second Street from F Street to Dorchester Street (Figure 2). Construction is continuing on the 60-inch x 24-inch drain on E Street. Contract 3A is approximately 53% complete as of the end of March 2012 and has a completion date of July 2013.



Figure 2: sewer installation on West Second Street



Figure 3: Forms being removed from Special Drain Manhole "A" at East First St. and I St.

BWSC issued the Notice to Proceed for the fourth construction contract (Contract 3B) in March, 2011. This contract involves the installation of storm drains and sanitary sewers to separate combined sewers tributary to outfalls BOS078 and BOS079. Contract 3B also includes the decommissioning of Outfall BOS087, which was completed in October 2011. The majority of the work completed to date includes the relocation of water mains to allow for the installation of new sewers and/or drains. Storm drain work completed includes the installation of three special structures as well as a 60-inch drain on East First Street between I and H Streets (Figure 3). NStar ductbanks are a major issue resulting in redesigns to many stormdrains to avoid conflicts with the ductbanks. National Grid and NStar are relocating their infrastructure at several locations to accommodate the BWSC work. Contract 3B is approximately 8% complete as of mid March 2012 and has a completion date of October, 2014.

BWSC advertised Contract 4 on March 28, 2012. This contract includes separation of combined areas tributary to Outfalls BOS076, BOS078, and BOS079. BWSC expects to award Contract 4 this June.

BWSC has substantially completed Contract 7, which involves pavement restoration of impacted streets. The contractor has completed approximately 18,800 square yards of permanent trench repair. This pavement contract has been extended through May 2012 to maintain contractor availability until BWSC awards the follow-up pavement restoration contract, Contract 8. BWSC received bids for Contract 8 on April 5, 2012. This contract includes roadway resurfacing associated with separation contracts 3A, 3B, and 4. BWSC's Commissioners awarded Contract

8 on April 26, 2012, pending DEP State Revolving Fund approval to award. The estimated portion of the contract eligible for MWRA funding is \$5.5 million.

In the meantime, BWSC continues to make progress with the project design activities associated with the remaining two construction contracts, which BWSC plans to award through the spring of 2013. BWSC plans to complete all work associated with the Reserved Channel sewer separation project by December 2015, in compliance with Schedule Seven.

South Dorchester Bay Sewer Separation

BWSC substantially completed the South Dorchester Bay sewer separation project in 2007, eliminating CSO discharges to the Commercial Point and Fox Point CSO treatment facilities and the beaches of South Dorchester Bay. Confirmation from BWSC that CSOs were eliminated allowed MWRA to decommission the two facilities in November 2007. Since then, BWSC has continued to locate and remove private inflow sources (primarily by disconnecting downspouts) to further reduce the amount of stormwater in the sewer system and meet the sewer system performance objectives in the MOU and FAA.

For several years, MWRA's Capital Improvement Program (CIP) has included funds for additional work to adequately relieve the separated sewer system and control the potential for system flooding with the CSO relief points now eliminated. Approximately \$5.6 million of the \$118.9 million budget in MWRA's FY12 CIP for the South Dorchester Bay sewer separation project is allocated for this purpose.

On November 11, 2010, BWSC issued the Notice to Proceed with a design contract for the identification of additional inflow sources to be removed and the preparation of associated construction documents. The consultant has completed field investigations and a flow metering program, and has performed flow isolation in areas suspected to have high inflow amounts. BWSC presented the results of the investigations and recommendations for inflow removal at a workshop for MWRA staff in February 2012. Further modeling and alternatives analysis are to be performed. BWSC expects to issue an interim report including the approach for this analysis later this spring. BWSC expects to issue the final results of the analysis and the consultant's recommendations for inflow removal by the end of 2012.

CSO Regulator Relocation and Sewer Separation for Lower Dorchester Brook Sewer Relief

On August 16, 2010, BWSC issued the Notice to Proceed for construction of this project in the low bid amount of \$5,997,447.50. MWRA funding of this project is capped at \$2,030,000. The work includes relocating a dry weather flow connection from BWSC's Dorchester Brook Conduit to the BWSC and MWRA sewer systems in order to remove 125 acres of previously separated stormwater flow that continued to tie back into the sewer system. The work also included the additional separation of combined sewers in a 25-acre near the NStar property on Massachusetts Avenue and Norfolk Street. BWSC achieved substantial completion on March 12, 2012. The new CSO regulator is now active, the former CSO regulator is now permanently blocked, and all of the separated stormwater now drains to Fort Point Channel. BWSC plans to install an additional tide gate associated with the newly relocated CSO regulator within the next few months.

MWRA Oversight and Funding

The FAA establishes eligible and ineligible costs. Generally, all reasonable force account and contract costs incurred by BWSC as a direct result of implementing eligible portions of the CSO projects are funded. The FAA calls for MWRA to disburse grant funds to BWSC semiannually, based on a documented, detailed estimate of project costs for the projected six-month period. MWRA's review and acceptance of the cost estimate is required prior to disbursement of funds to the BWSC CSO account.

Staff review the scope and costs of engineering and construction contracts issued by BWSC, as well as BWSC's change orders and amendments. Staff also routinely review the progress of the BWSC projects and expenditures. Monthly meetings are held with BWSC to coordinate activities and resolve any critical issues. BWSC submits quarterly reports that describe actual work progress and the force account and contract-related expenditures for each project. Staff are satisfied with the progress of BWSC's work and the quality of project management and administration. MWRA's review of construction plans and change orders indicates that BWSC continues to take appropriate measures to control costs.

MWRA's Internal Audit Department (IAD) routinely reviews BWSC's compliance with the terms and conditions of the FAA. IAD's latest audit, completed in May 2011, reviewed the engineering, construction and force account costs for calendar year 2010. The audit found that 80% of BWSC's recorded force account work and associated costs were eligible for MWRA funding, based on an analysis of consultant and contractor eligible and ineligible costs. From this same analysis, IAD also determined that for a few of the dozens of eligible contract invoices paid by BWSC in 2010, BWSC's withdrawal from the CSO account was not consistent with the amounts determined to be eligible in the BWSC resident engineer's certification. The net effect of these incorrect withdrawals is that BWSC overpaid \$3,457 of eligible cost from its own funds and is allowed to withdraw this amount from the CSO account for reimbursement.

Funding and Expenditures through June 2012

Since execution of the MOU and FAA in 1996, MWRA has transferred a total of \$253,412,961.31 into BWSC's CSO account to cover eligible design and construction costs through June 2012. In addition, the account has accumulated \$1,787,081.62 in interest which BWSC has used to pay eligible project costs, in accordance with the FAA. Total eligible cost incurred by BWSC through June 2012 is estimated to be \$254,847,204.88, 88.6% of the total award amount. Total balance in the CSO account is estimated to be \$352,838.05 as of June 30, 2012.

Funding for Second Half of Calendar Year 2012

BWSC recently submitted a request for transfer of funds into the account that estimates it will perform \$7,737,537.00 of eligible work in the period July through December 2012. Staff have reviewed the request and propose a transfer of \$8,386,949.22 to cover the anticipated eligible expenditures through December 2012. Staff plan to transfer \$8,386,949.22 to the BWSC CSO account soon. The difference between the transfer and requested amounts includes an audited indirect cost rate increase for BWSC force account of \$116,000 for CY 2010 through CY 2012 and \$536,000 for actual eligible costs that exceeded estimates in past transfer.

The total award amount of the BWSC MOU/FAA is \$287,585,598 through Amendment 12. Including the pending transfer, the total amount of MWRA funds transferred into the BWSC CSO account is \$261,799,910.53. Staff expect to make additional transfers to the BWSC CSO account totaling \$27,803,928 through December, 2016 (the termination date of the MOU/FAA with BWSC) to cover the eligible costs remaining for design and construction of the Reserved Channel sewer separation project (construction completion date December 2015), water quality monitoring of Savin Hill Cove associated with Morrissey Blvd. Drain, and additional South Dorchester Bay sewer separation inflow removal.

Table 1 below presents the total funds provided by MWRA, including the pending transfer, to cover past and anticipated eligible costs through December 2012, for each project and phase.

Table 1: Pending and Total Funding for BWSC Implemented Projects

Project	Phase	Project Budget (FY12 CIP)	MWRA Funding Jul-Dec 2012	Funding thru Dec, 2012	Status*
South Dorchester Bay Sewer Separation (Fox Point area)	Engineering	\$ 11,416,679	\$ -	\$ 11,425,649	Substantially
	Construction	\$ 42,754,526	\$ -	\$ 42,754,376	Complete
South Dorchester Bay Sewer Separation (Commercial Point area)	Engineering	\$ 17,737,961	\$ -	\$ 16,278,599	Substantially
	Construction	\$ 46,987,390	\$ -	\$ 44,214,775	Complete
Neponset River Sewer Separation	Engineering	\$ 469,614	\$ -	\$ 469,614	Complete
	Construction	\$ 1,974,781	\$ -	\$ 1,974,781	
Constitution Beach Sewer Separation	Engineering	\$ 673,278	\$ -	\$ 673,278	Complete
	Construction	\$ 3,095,610	\$ -	\$ 3,095,610	
Stony Brook Sewer Separation	Engineering	\$ 10,137,304	\$ -	\$ 10,178,049	Complete
	Construction	\$ 34,195,412	\$ -	\$ 34,061,256	
Floatables Control	Engineering	\$ 554,979	\$ -	\$ 554,979	Complete
	Construction	\$ 378,000	\$ -	\$ 378,000	
Fort Point Channel Sewer Separation	Engineering	\$ 1,868,401	\$ -	\$ 1,868,274	Substantially
	Construction	\$ 8,108,774	\$ -	\$ 8,108,435	Complete
Regulator RE070/11-2 Relocation and Sewer Separation	Engineering	\$ 566,960	\$ (547,118)	\$ -	Substantially
	Construction	\$ 1,502,882	\$ 547,118	\$ 2,030,000	Complete
Morrissey Boulevard Drain	Engineering	\$ 4,578,099	\$ 3,000	\$ 4,026,143	Substantially
	Construction	\$ 28,320,446	\$ -	\$ 28,320,646	Complete
Reserved Channel Sewer Separation	Engineering	\$ 14,197,952	\$ 1,234,334	\$ 10,821,846	Design/
	Construction	\$ 48,125,016	\$ 7,149,615	\$ 30,708,144	Construction
Bulfinch Triangle Sewer Separation	Engineering	\$ 1,365,361	\$ -	\$ 1,236,947	Substantially
	Construction	\$ 8,620,510	\$ -	\$ 8,620,510	Complete
TOTAL BY PHASE	Engineering	\$ 63,566,588	\$ 690,216	\$ 57,533,378	
	Construction	\$ 224,063,347	\$ 7,696,733	\$ 204,266,534	
TOTAL		\$ 287,629,935	\$ 8,386,949.22	\$ 261,799,911	

*Substantially complete projects may incur additional eligible costs associated with water quality monitoring, additional inflow removal, construction claims and/or final contract closeout.

BUDGET/FISCAL IMPACT:


The FY12 CIP budget includes \$287,629,935 for design and construction of the BWSC-implemented CSO projects. The Total Award Amount of the MOU and FAA with BWSC is \$287,585,598. Reserved Channel Contract 2 received \$2.2 million of American Recovery and Reinvestment Act funds.

MBE/WBE PARTICIPATION:

For the BWSC-implemented projects funded by MWRA, MBE/WBE participation requirements are included in compliance with DEP SRF requirements and as required by BWSC policy.

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STAFF SUMMARY

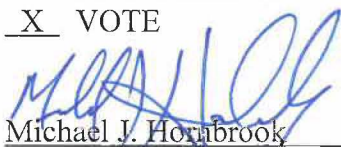
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: May 16, 2012
SUBJECT: Memorandum of Understanding and Financial Assistance Agreement with the Town of Brookline for Implementation of CSO Control Project Amendment 3 and Progress of Town of Brookline Implemented CSO Project and Projected Financial Assistance through July 2013

COMMITTEE: Wastewater Policy & Oversight

 INFORMATION

 X VOTE

David A. Kubiak, Sr. Program Manager
Jae R. Kim, Chief Engineer
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to execute Amendment 3 to the *Memorandum of Understanding and the Financial Assistance Agreement with the Town of Brookline for Implementation of CSO Control Project*, increasing the award amount by \$1,944,184 from \$22,919,000 to \$24,863,184, and to revise the language of the agreements in regard to the use of interest to fund eligible costs.

This staff summary also presents information on the status of project in the long-term CSO control plan that is funded by MWRA and implemented by the Town of Brookline. Staff plan to transfer \$4,444,471.00 into the Brookline CSO account to cover anticipated eligible costs through project completion in July 2013, which will bring the total amount of MWRA funds transferred to the Brookline CSO account to \$24,863,183.52.

BACKGROUND:

Under the Memorandum of Understanding (MOU) and Financial Assistance Agreement (FAA) between MWRA and the Town of Brookline for the Implementation of a CSO Control Project, Brookline is responsible for implementing the Brookline Sewer Separation project, one of 35 projects in MWRA's long-term CSO control plan. The Brookline project is intended to reduce treated discharges to the Charles River Basin from MWRA's Cottage Farm CSO facility. The MOU provides a framework within which Brookline and MWRA cooperate in managing the implementation of the project. The FAA is the funding mechanism by which MWRA funds are made available to Brookline to pay eligible design and construction costs. Amendment 2 to the MOU and FAA, approved by the Board on February 16, 2011, increased the Total Award Amount to \$22,919,000.

DISCUSSION:

MOU/FAA Amendment 3

Pursuant to the terms of the MOU and FAA, Brookline submits updated project cost estimates for MWRA review and approval as design and construction work proceed. Amendment 3 will revise the project funding limits for eligible work based on the updated costs to complete Construction Contract 2 (the last of two Brookline construction contracts for the project), including anticipated change orders, police details and engineering services during construction.

Item	Total Current Award Amount	Amendment 3	Proposed Total Award Amount
Design/CS/RI	\$ 3,806,235.90	\$ 1,537,893.82	\$ 5,344,129.72
Construction 1	\$ 1,439,652.00	\$ (3,147.39)	\$ 1,436,504.61
Construction 2	\$ 16,556,563.00	\$ 327,677.00	\$ 16,884,240.00
Police Details	\$ 1,116,585.20	\$ 147,158.00	\$ 1,263,743.20
Misc	\$ 39,529.56	\$ (37,573.49)	\$ 1,956.07
Interest Earned	\$ (39,565.66)	\$ (27,824.42)	\$ (67,390.08)
Total	\$ 22,919,000.00	\$ 1,944,183.52	\$ 24,863,183.52

Additional funding for Design/CS/RI is for the purpose of extending construction services beyond June 2012, including construction administration, resident engineering, preparation of record drawings and construction contract closeout. Presently, the award amount includes construction services through June 2012, only.

Additional funding for construction Contract 2 is for executed, pending, and potential change orders. Change Order 1, in the amount of \$27,636.32, was deemed eligible by MWRA in September 2011. The change order was primarily an allowance for the removal and replacement of existing street lighting, traffic signal and fire alarm conduit, conductors, and related facilities at various locations that were in conflict with the proposed work. The Town of Brookline and its engineering consultant, Beta Engineering, are in the process of reviewing two proposed change orders. The first is for previously unknown or unforeseen utilities and soil conditions discovered in the field. The second is for a changed condition encountered during microtunneling. In addition, Brookline has requested a placeholder for future change orders in the amount of \$100,000. At this time, there is at least one additional anticipated change order, which is associated with the removal of buried timbers that were discovered during construction.

Finally, the additional funding requested for police details is due to higher than anticipated details needs.

Amendment 3 will also correct the inconsistent language of the MOU and FAA to allow for the use of interest earned on the MMDT account to fund eligible project costs.

The Total Award Amount in the Agreement represents the funds that the MWRA agrees to transfer to Brookline for eligible work per the agreements. The funds are deposited into a

Massachusetts Municipal Depository Trust (MMDT) account and withdrawn by Brookline to pay for eligible project costs. The funds deposited in the MMDT account earn interest, which per Section I.C. of the agreement can also be used by Brookline to fund eligible project costs. However, the agreement also stipulates per Section II.C.1.c. that costs in excess of the Total Award Amount are ineligible. Since the Total Award Amount represents the funds that the MWRA agrees to transfer to the account, this section in the agreement does not allow the interest to be used to fund eligible project costs.

PROGRESS OF WORK:

Brookline continues to make significant progress completing the CSO project it is responsible for implementing, i.e. Brookline Sewer Separation, on a schedule that complies with milestones in Schedule Seven of the Federal Court Order in the Boston Harbor Case. Brookline completed the \$1.4 million first construction contract in January 2010 (see map, Attachment 1). Contract 1 involved the installation of 5,658 linear feet of storm drain in secondary streets on the north and south sides of Beacon Street.

On January 19, 2011, Brookline issued the Notice to Proceed with Contract 2 in the low bid amount of \$16,556,563, significantly lower than the Engineer's Estimate. This much larger contract includes microtunneling large diameter sewers at significant depths along Beacon and Monmouth Streets; installing or rehabilitating smaller-diameter sewers along Beacon, Monmouth and St. Mary's Streets; installing storm drains along Beacon, Monmouth and St. Mary's Streets; and converting a large-diameter combined sewer to a storm drain along St. Mary's Street. Several special structures will be constructed to connect the new town sewers to existing town laterals and to MWRA's interceptor system, including the Charles River Valley Sewer and the South Charles Relief Sewer.

To date, the Contractor has completed all microtunneling activities. This included a 670-foot-long, 57-inch-diameter sewer on Monmouth Street and a 1,375-foot-long, 18-inch-diameter sewer on St. Mary's Street as well as a 48-inch-diameter sanitary sewer on Beacon Street between Carlton Streets and Kent Streets. In addition, the open cut



**Figure 1 - Open Cut Trenching at Beacon St:
Installation of Drain Line Segments**



**Figure 2 - Open Cut for Drain Line Installation at
Carlton St**

portion of 57-inch sewer on Monmouth Street, installation of a 42-inch-diameter drain on Beacon Street (inbound side) between Carlton and St. Mary's Streets as well as the relocation of an MWRA 24-inch water main and meter have all been completed.

Since March, when construction resumed after a winter shut down, the contractor has commenced installation of 12-inch sewer and 30-inch drain in St Mary's Street, from Beacon Street to Monmouth Street. Lining of the 48-inch sewer beneath the MBTA tracks has been completed. Contract 2 has a completion date of January 2013, in advance of the July 2013 milestone in Schedule Seven.

Related to the separation work implemented by Brookline, MWRA awarded contract 7077C in March 2012 to clean CSO Outfall MWR010. This cleaning will ensure the outfall has adequate capacity to convey Brookline's separated stormwater, as well as existing BWSC stormwater and infrequent CSO discharges from MWRA's Charles River Valley Sewer. Outfall MWR010 discharges to the Charles River Basin. The cleaning will begin in June 2012 and be complete by September 2012, in advance of the completion of Brookline's sewer separation project and the need for stormwater discharge capacity.

MWRA Oversight and Financial Assistance

The FAA establishes eligible and ineligible costs. Generally, all reasonable force account and contract costs incurred by Brookline as a direct result of implementing eligible portions of the CSO project are funded. The FAA calls for MWRA to disburse grant funds to Brookline semiannually, based on a documented estimate of anticipated work progress and spending for each projected six-month period. MWRA review and acceptance of the cost estimate is required prior to disbursement of funds.

Staff routinely review the progress of the Brookline project and expenditures, as well as any change orders and amendments proposed by Brookline. As required by the FAA, Brookline submits quarterly reports that describe actual work progress and actual expenditures for force account and contract work.

MWRA's Internal Audit Department (IAD) routinely reviews Brookline's compliance with the terms and conditions of the FAA. IAD's latest audit, completed in May 2011, reviewed the engineering, construction and force account costs for calendar years 2009 and 2010, and made recommendations for certain administrative process improvements. Brookline has adopted and implemented these recommendations.

Funding and Expenditures through June 2012

Brookline pays the eligible costs of the project from a Town account and periodically reimburses the Town account from the CSO account. Since execution of the MOU and FAA with Brookline in 2006, MWRA has transferred a total of \$20,418,712.52 to the CSO account to cover eligible design and construction costs through June 2012. In addition, Brookline is able to use accumulated interest in the account to fund eligible costs. Total eligible cost paid by Brookline

through June 2012 is estimated to be \$19.2 million. This will leave approximately \$1.3 million in the account at the end of June 2012.

Funding for the Period July 2012 through July 2013

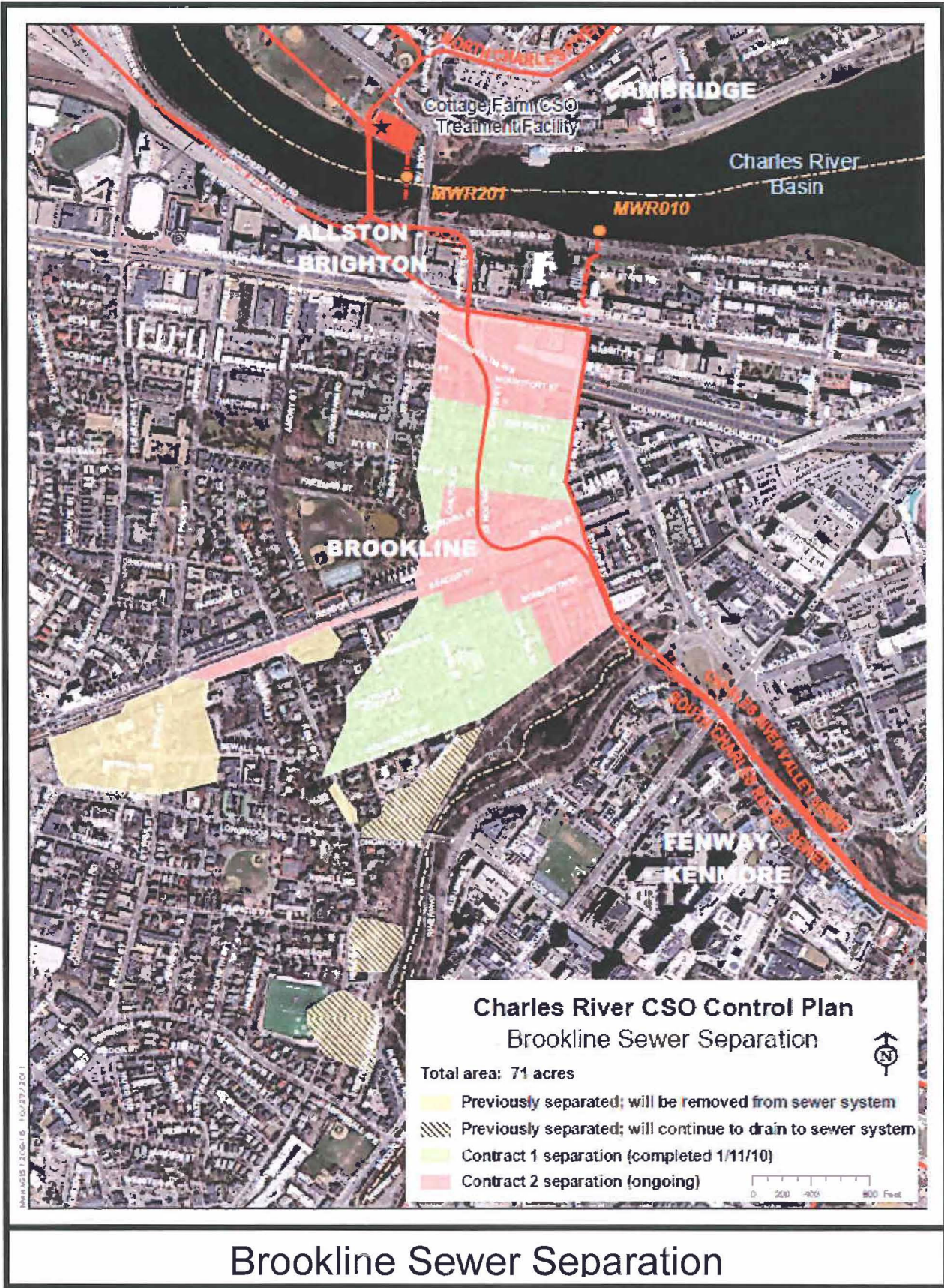
In March 2012, Brookline submitted a projected work progress report and associated estimate of the eligible contract and force account expenditures for the remaining work on the project through July 2013 in the amount of \$5,754,731.38. Over this period, Brookline will complete the construction of Contract 2. Since construction Contract 2 currently has an end date in January 2013, staff plan to transfer all remaining funding for this project. Staff have reviewed Brookline's cost projection and have approved a transfer of \$4,444,471.00 to the Brookline CSO account during June once the Amendment has been executed.

BUDGET/FISCAL IMPACT:

The FY12 CIP budget includes \$22,930,231 for design and construction of the Brookline Sewer Separation Project. Amendment 3 will increase the total award amount of the MOU/FAA to \$24,863,183.52. The FY12 CIP also includes \$3,000,000 for design and construction of the outfall cleaning portion of the project by MWRA. The outfall cleaning contract was approved by the Board and awarded on March 14, 2012 in the bid amount of \$1,134,891. Both of these changes will be reflected in the Final FY13 CIP.

MBE/WBE PARTICIPATION:

In accordance with the MOU, MBE/WBE participation in the Brookline Sewer Separation project will comply with DEP requirements and Town of Brookline policy.



Brookline Sewer Separation

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5/16/12

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: May 16, 2012
SUBJECT: Primary and Secondary Clarifier W3H Flushing System,
Deer Island Treatment Plant
Delta Control Engineers, Inc., d/b/a Harding & Smith
Contract 7374



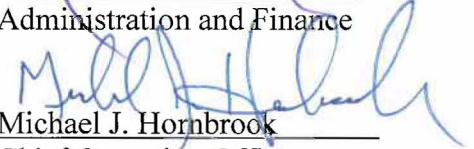
COMMITTEE: Wastewater Policy & Oversight

 INFORMATION

 X VOTE


Rachel C. Madden, Director
Administration and Finance

Richard Adams, Manager, Engineering Services
Daniel K. O'Brien, Director, Deer Island WWTP
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the award of Contract 7374, Primary and Secondary Clarifier W3H Flushing System, Deer Island Treatment Plant, to the lowest responsible and eligible bidder, Delta Control Engineers, Inc., d/b/a Harding & Smith, and authorize the Executive Director, on behalf of the Authority, to execute said contract in the bid amount of \$1,198,141, with a contract term of 365 calendar days from the Notice to Proceed.

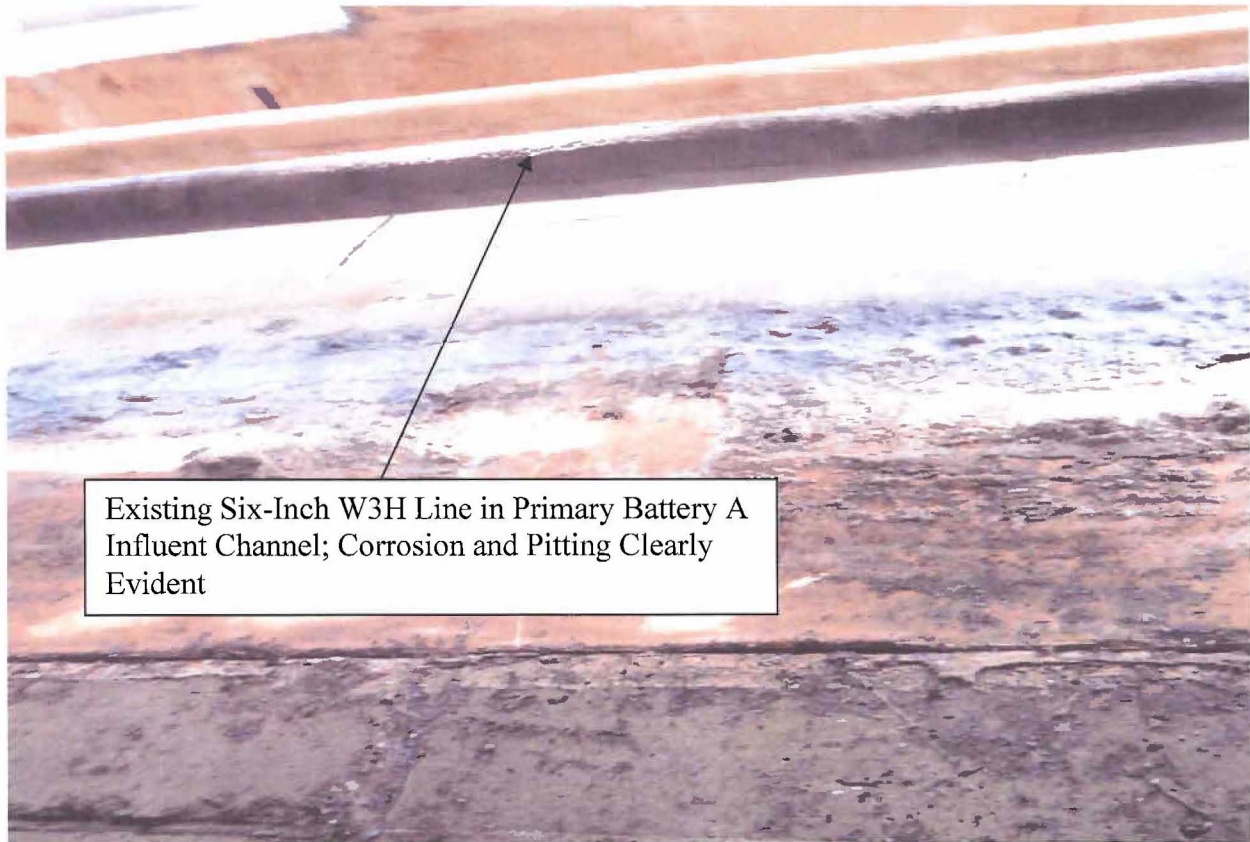
DISCUSSION:

The Primary Clarifiers and Secondary Clarifiers at Deer Island have been in service for 17 and 14 years, respectively. Sludge and scum are removed from each of the clarifiers by continuously operating flights (long, light-weight fiberglass "paddles" that extend across each clarifier). The flights push scum and other floatable materials into troughs at the top of each clarifier and scrape sludge at the bottom of each clarifier to collection hoppers. Periodic maintenance is required to ensure the overall reliability of this scum/sludge collection equipment. In order to perform this regularly scheduled maintenance and any related repair work, staff must drain and clean the clarifiers before tank entry.

The existing W3H¹ flushing system was installed under the Boston Harbor Project. Large lengths of the system's piping are installed in the primary and secondary clarifier galleries and

¹ "W3H" is the Deer Island designation for this system, which stands for "Plant Water/High Pressure." This water is non-potable effluent that has been treated and disinfected, and is used in a number of process applications throughout the plant, such as flushing, rinsing or cooling, with an operating pressure between 60-100 psi.

are routed through the influent channels of the clarifiers to the top of the clarifier tanks. The first picture below (taken when Primary Battery A was drained to replace the chains and sprockets under Contract 6899, Primary and Secondary Clarifier Rehabilitation), shows the pitting and corrosion of the line caused by its constant emersion in the influent channel. There are a number of small cracks throughout the entire piping distribution system.



Existing Six-Inch W3H Line in Primary Battery A Influent Channel; Corrosion and Pitting Clearly Evident

The piping system extends up through cored holes in the clarifier decks to “hose bibs” depicted in the picture to the right. Staff connect hoses to these hose bibs to utilize the process water for the required application. Many of the hose bibs are currently inoperable because of insufficient pressure due to leaks in the piping. Many of the hose bibs also leak, which leads to ice formation on the clarifier decks during the winter.



Under Contract 7374, the Contractor will remove

portions of the existing W3H system, including the hose bibs above the decks and the distribution piping in the galleries. The design of the new system includes stainless steel piping, which will increase useful life, and a different configuration of hose connections. The biggest change will be in the layout of the new distribution piping. It will be supported by hangers from the ceiling of the galleries rather than along the inside of the influent channels, which will greatly enhance staff's ability to access and inspect the piping at all times. Previously, the piping could not be inspected until and unless the influent in a clarifier was lowered or completely drained.

Procurement Process

Contract 7374 was advertised and bid in accordance with Chapter 149 of Massachusetts General Laws. On April 26, 2012, four bids were received and opened with the following results:

<u>Bidders</u>	<u>Bid Amount</u>
Delta Control Engineers, Inc., d/b/a Harding & Smith	\$1,198,141
Walsh Construction Company	\$1,311,700
Williams M. Collins Co, Inc.	\$1,398,000
<i>Engineer's Estimate</i>	<i>\$1,520,000</i>
Fraser Engineering Co, Inc.	\$1,672,024

The Engineer's Estimate for this contract was prepared in November 2011 based on 90% design completion. Delta Control Engineers, Inc. d/b/a Harding & Smith's ("Delta Control") bid is 21.1% lower than the Engineer's Estimate. In reviewing the bid, staff have determined that the Design Engineer, Fay, Spofford & Thorndike (FST) was overly conservative in its cost estimate. The largest variance between the Engineer's Estimate and Delta Control's bid is reflected in the pricing of pipe supports that FST assumed would require custom manufacturing; such is not the case. In addition, the cost of the specified stainless steel piping appears to have been over-estimated. After completing their review, staff have determined that Delta Control's bid price is reasonable, complete, and includes the payment of prevailing wage rates.

References were checked and found to be favorable. Staff are of the opinion that Delta Control Engineers, Inc., d/b/a/ Harding & Smith possesses the skill, ability and integrity necessary to perform the work under this contract and is qualified to do so. Therefore, staff recommend the award of this contract to Delta Control Engineers, Inc., d/b/a Harding & Smith as the lowest responsible and eligible bidder.

BUDGET/FISCAL IMPACT:

The FY12 CIP includes \$2.0 million for Contract 7374; the contract award is \$1,198,141.

MBE/WBE PARTICIPATION:

There were no minimum MBE or WBE participation requirements established for this contract due to the limited opportunities for subcontracting.



MASSACHUSETTS WATER RESOURCES AUTHORITY

Charlestown Navy Yard
100 First Avenue, Building 39
Boston, MA 02129

Frederick A. Laskey
Executive Director

Telephone: (617) 242-6000
Fax: (617) 788-4899
TTY: (617) 788-4971

WATER POLICY AND OVERSIGHT COMMITTEE MEETING

Chair: J. Hunt
Vice-Chair: V. Mannering
Committee Members:
J. Barrera
J. Carroll
J. Foti
M. Gove
A. Pappastergion
J. Walsh

to be held on

Wednesday, May 16, 2012

Location: 100 First Avenue, 2nd Floor
Charlestown Navy Yard
Boston, MA 02129

Time: Immediately following Wastewater Comm.

AGENDA

A. Information

1. Update on Major Dam Improvements
2. Update on EPA Unregulated Contaminant Monitoring Rule (UCMR)

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5/16/12

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Water Policy and Oversight Committee

April 11, 2012

A meeting of the Water Policy and Oversight Committee was held on April 11, 2012 at the Authority headquarters in Charlestown. Chairman Hunt presided. Present from the Board were Ms. Turner and Messrs. Barrera, Carroll, Foti, Gove, Mannering, Pappastergion and Walsh. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Mike Hornbrook, Kevin McCluskey, Tom Lindberg, Pam Heidell, Rick Trubiano, Fred Brandon, Tom Durkin, and Bonnie Hale. The meeting was called to order at 11:35 a.m.

Information

Update on Public Access on Water Supply Lands

Staff provided an update on progress since the Board approved the public access policy and guidelines last month, as well as on future plans.

Water System Redundancy/Improvement Projects Update

Staff gave a presentation on the status of six ongoing water construction projects.

Coordination of Southern Extra High System Redundancy Project and Tri-Town System Expansion

Staff discussed with Board members various options for water system expansion to Tri-Town (Braintree, Randolph and Holbrook). There was detailed discussion and question and answer on entrance fee and payment plan options. There was a general consensus that the communities must pay some connection fee and that 0% interest would be acceptable.

Contract Amendments/Change Orders

*Sections 18, 50 & 51 Rehabilitation: The Dow Company, Inc., Contract 6394, Change Order 4

The Committee recommended approval of Change Order 4 (ref. agenda item B.1).

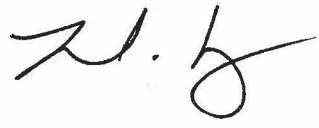
The meeting adjourned at 12:15 p.m.

* Approved as recommended at April 11, 2012 Board of Directors meeting.

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5/16/12

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: May 16, 2012
SUBJECT: Update on Major Dam Improvements



COMMITTEE: Water Policy & Oversight

X INFORMATION
 VOTE

Dave W. Coppes, Director, Western Operations
John Gregoire, Program Manager, Reservoir Operations
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

For information only. A number of major capital and maintenance dam projects identified through periodic safety inspection are nearing completion. A brief update was last provided to the Board in April 2012. Staff will make a PowerPoint presentation at the Board Meeting.

DISCUSSION:

There are presently six dam projects recently completed or nearing completion, and one pending. These represent most of the needed improvements stemming from the last regulatory dam safety inspections. These dams are:

- Wachusett Reservoir South Dike (large-scale tree clearing)
- Wachusett Open Channel Dam (spillway masonry and fencing)
- Weston Reservoir Dam (large-scale tree clearing and parapet wall)
- Sudbury Reservoir Dam (spillway masonry and riprap improvements)
- Foss Reservoir Dam (spillway and gatehouse masonry)
- Chestnut Hill Reservoir Dam (embankment earthwork, riprap and gatehouse repairs)
- Blue Hills Dam (embankment masonry and spillway improvements pending)


Remaining dam improvements will occur in FY13 at the following dams:

- Wachusett Reservoir North Dike (large-scale tree clearing)
- Wachusett Reservoir Dam (repair cornice stone cracks)
- Norumbega Reservoir Dam (tree clearing)

BUDGET/FISCAL IMPACT:

The FY12 CIP contains a total \$4,695,695 for Dams Safety Modifications and Repairs, which includes five of these projects. The remaining projects are funded under the FY12 and Proposed FY13 CEB.

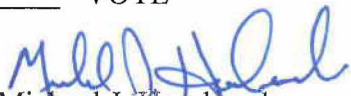
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: May 16, 2012
SUBJECT: Update on EPA Unregulated Contaminant Monitoring Rule (UCMR)

COMMITTEE: Water Policy & Oversight

X INFORMATION
 VOTE

Betsy Reilley, Senior Program Manager
Steve Rhode, Laboratory Manager
Stephen Estes-Smargiassi, Director, Planning
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

EPA issued the final 3rd round of the Unregulated Contaminant Monitoring Rule (UCMR3) on May 2, 2012. It will require monitoring between 2013 and 2015 for a group of 30 contaminants that EPA is considering developing regulations for, and will provide a national database of occurrence. For prior versions of the UCMR, only a single set of samples for the regional system was required and MWRA conducted all the monitoring on behalf of the entire system. UCMR3 will require that certain samples be collected from all systems serving more than 10,000 persons. Consistent with past practice MWRA staff are planning to work with the Advisory Board and communities on how to most efficiently and effectively implement this regional sampling program. The total cost, spread over three or four fiscal years, is anticipated to be as much as \$240,000. Final costs will depend on how many, if any, of MWRA's communities are selected for the full list of samples.

RECOMMENDATION:

Information only, no action required.

DISCUSSION:

Under the 1996 Safe Drinking Water Act (SDWA) amendments, EPA is required once every five years to develop a list of up to 30 unregulated contaminants which must be monitored by public water systems. Prior Unregulated Contaminant Monitoring Rules were issued in 1999 and 2007. In March 2011, EPA issued UCMR3 in draft and MWRA commented on it. The final Rule was issued on May 2, 2012. The UCMR monitoring provides one portion of the information needed by EPA to determine if a drinking water regulation is necessary. To justify a new regulation under the Safe Drinking Water Act, EPA must find that:

1. "the contaminant may have an adverse effect on the health of persons;
2. the contaminant is known to occur or there is a substantial likelihood that the contaminant will occur in public water systems with a frequency and at levels of public health concern; and

3. *in the sole judgment of the Administrator, regulation of such contaminant presents a meaningful opportunity for health risk reduction for persons served by public water systems.” (Section 1412 of the SDWA)*

The contaminant monitoring conducted under the UCMR provides the national occurrence data necessary to answer the second condition.

UCMR3 requires water systems to monitor for 30 contaminants (28 chemicals and two viruses) shown in the attached table. The contaminants are broken into three lists, and depending on the size of the water system, source type, and treatment, some or all of the contaminants are required to be monitored.

All water systems serving more than 10,000 persons, and a random sample of those serving less, are required to sample at their “entry point” for the 21 chemical contaminants on List 1 for four consecutive quarters between January 2013 and December 2015. This will require that at least 31 of MWRA’s fully-supplied communities provide samples. Seven List 1 parameters must also be sampled at a maximum residence time point within the distribution system.

All water systems serving more than 100,000 persons, and a random sample of those serving less, will be required to sample for the seven List 2 chemical contaminants requiring more specialized analytical methods. Only the Boston Water and Sewer Commission is definitely covered under List 2, but it is possible that others may be part of the random sample.

MWRA staff do not believe that any of MWRA’s communities will be required to monitor for the two List 3 viruses, which are targeted to certain untreated groundwater systems.

Meeting the requirements of the rule will be moderately complex. Staff anticipate that none of the samples will be able to be analyzed at Deer Island’s Central Laboratory due to the highly specialized methods required, and the fact that the sampling is not expected to continue after the UCMR requirement. A specialized EPA-approved commercial laboratory will be required. Based on which water systems will be definitely required to have samples collected, and, making an assumption about the randomly selected systems, staff estimate that the laboratory costs will total as much as \$240,000. Costs can be spread over three or four fiscal years, depending on when samples are collected from each system.

Sampling itself will be unusually complex. Typically, sampling runs require one to two bottles at a location, with relatively simple instructions. The UCMR samples will require 8 to 10 different bottles at each entry point, and an additional two bottles at the maximum residence sites. Each bottle will have somewhat different sampling or preservation instructions, including one parameter which requires multi-step sample preservation. The hormone samples will be analyzed to the picogram-per-liter sensitivity (less than one part per trillion) for compounds that everyone has in their bodies, so sample contamination is a real risk if proper techniques are not followed. Samplers will need to be trained to ensure sample integrity so as to avoid accidentally contaminating samples with substances that are not actually in the water. Any detections must be reported in the annual water quality report for five years after the date of detection.

Sampling plans with specific sites are due to EPA by October 1, 2012. The entry and maximum retention sites can be selected based on data MWRA already has.

The two previous Unregulated Contaminant Monitoring Rules required that a regional wholesaler like MWRA sample for the region at certain locations. The retail customer communities that received all their water from MWRA did not have to sample. (Partially served communities were separately regulated by the UCMR and had to do their own sampling.) In developing UCMR3, EPA determined that there had been certain problems in being able to generalize from the occurrence data collected from wholesale systems to the entire country, and suggested in the draft rule that each community would be treated separately. While there are some data handling advantages to this approach, MWRA staff believe that it provides little additional information which could not have been gathered with additional discussion with local or regional officials. MWRA commented on the draft rule on this specific point, as well as other related points, and while EPA did provide some flexibility on other points, it adopted this provision in the final rule. Staff have discussed the provision with EPA staff and there does not appear to be any flexibility in the requirement that each system over 10,000 population be sampled.

Staff propose that the UCMR3 be discussed with the Advisory Board to determine the most efficient and effective way to ensure that all communities meet their obligations under the rule. This has been the approach taken for several complicated new regulatory requirements over the years such as previous EPA data collection efforts, the annual water quality report, and Lead and Copper Rule activities. In some cases, a single regional effort represents the least-cost solution, and reduces the risk that any community will fail to meet EPA's complex requirements. Several other approaches are possible, ranging from assuming that each community water system will take all the necessary steps themselves; to having some minimal MWRA assistance in educating communities on the rule requirements; to having MWRA train local samplers from each of the 31 communities and have the samples analyzed by one contract laboratory procured by MWRA; to having MWRA staff, procure and pay for most of the compliance tasks. While the effort would be substantial, staff are leaning towards the last option as it seems to offer the simplest, most cost effective and technically sound solution. This option will likely require a coordinated effort of staff across a number of departments, and MWRA resource needs and program logistics require further review.

Staff propose to meet with the Advisory Board staff over the next few weeks to evaluate how best to approach compliance and will return to the Board of Directors with a recommendation in the near future.

BUDGET/FISCAL IMPACT:

Depending on how many systems are selected by EPA for the random sample of smaller communities, staff estimate that the cost of commercial laboratory services to meet the requirements of the UCMR3 will be as much as \$240,000. This cost would be spread over FY13 through FY16. If needed, adequate funds exist within the proposed FY13 to begin this program.

Attachment 1 -- UCMR3 Parameters

List 1 -- 21 chemical parameters – all systems over 10,000 and random sample of smaller systems:

1,4-dioxane	Vanadium*
Molybdenum*	Strontium*
Cobalt*	Hexavalent chromium* (also total chromium*)
1,2,3-trichloropropane	Chlorate*
1,3-butadiene	perfluorooctanesulfonic acid (PFOS)
chloromethane (methyl chloride)	perfluorooctanoic acid (PFOA)
1,1-dichloroethane	perfluorononanoic acid (PFNA)
bromochloromethane (Halon 1011)	perfluorohexanesulfonic acid (PFHxS)
bromomethane (methyl bromide)	perfluoroheptanoic acid (PFHpA)
chlorodifluoromethane (HCFC-22)	perfluorobutanesulfonic acid (PFBS)

*- must be sampled both at entry point and maximum residence point

List 2 -- 7 chemical parameters – all systems over 100,000 and random sample of smaller systems:

17-b-estradiol	estriol
17-a-ethynylestradiol (ethinyl estradiol)	equilin
estrone	testosterone
4-androstene-3,17-dione	

List 3 -- 2 biological contaminants -- sample of undisinfected groundwater systems in karst or fractured bedrock

Enterovirus	norovirus
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MASSACHUSETTS WATER RESOURCES AUTHORITY

Charlestown Navy Yard
100 First Avenue, Building 39
Boston, MA 02129

Frederick A. Laskey
Executive Director

Telephone: (617) 242-6000
Fax: (617) 788-4899
TTY: (617) 788-4971

PERSONNEL & COMPENSATION COMMITTEE MEETING

Chair: K. Cotter
Vice-Chair: J. Barrera
Committee Members:
J. Foti
V. Mannering
J. Walsh

to be held on

Wednesday, May 16, 2012

Location: 100 First Avenue, 2nd Floor
Charlestown Navy Yard
Boston, MA 02129

Time: Immediately following Water Comm.

A. Annual Meeting of the Personnel and Compensation Committee Independent of Management

1. Authority Accountability and Transparency Act (G.L. c. 29, §29K)

B. Approvals

1. Changes in Existing Sick Time Payout Benefits for Executives required by the Authority Accountability and Transparency Act
2. Renewal of Employment Contract, Part-Time Administrative Assistant at the Clinton Wastewater Treatment Plant
3. Renewal of Employment Contract, Part-Time Principal Civil Engineer, Deer Island Treatment Plant

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the
Personnel and Compensation Committee

April 11, 2012

A meeting of the Personnel and Compensation Committee was held on April 11, 2012 at the Authority headquarters in Charlestown. Vice-Chairman Barrera presided. Present from the Board were Ms. Turner and Messrs. Carroll, Foti, Gove, Hunt, Mannering, Pappastergion and Walsh. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Bob Donnelly, and Bonnie Hale. The meeting was called to order at 12:15 p.m.

Information

Discussion of Authority Accountability and Transparency Act

Staff discussed the intent of the above-referenced legislation and plans to ensure compliance with various provisions, including holding a Committee discussion of executive compensation without management present. There was detailed discussion on the interpretation of some of the provisions.

Approvals

*Renewal of Two Employment Contracts, Senior Laboratory Technicians, Department of Laboratory Services, Deer Island

Mr. Foti questioned having contract employees for longer than three years; staff explained that these particular contract employees were being kept on because MWRA is still waiting for a new NPDES permit. Mr. Barrera requested an update on the Authority's contract employee strategy in six months. The Committee recommended approval (with Mr. Foti abstaining) of the renewal of the two employment contracts (ref. agenda item B.1).

**Changes in Existing Sick Time Payout Benefits for Executives required by the Authority Accountability and Transparency Act

Mr. Hunt moved to postpone discussion of this item until the next meeting, so that it might be considered as part of the bigger picture in complying with other aspects of the legislation also scheduled for the May meeting. The motion was seconded and approved (ref. agenda item B.2).

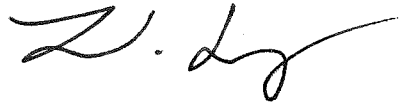
The meeting adjourned at 12:35 p.m.

* Approved as recommended at the April 11, 2012 Board of Directors meeting.

** Postponed to May 16, 2012 Board of Directors meeting.


STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: May 16, 2012
SUBJECT: Authority Accountability and Transparency Act (G.L. c. 29, §29K)

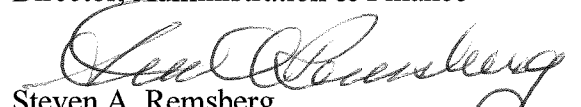


COMMITTEE: Personnel and Compensation

X INFORMATION
VOTE


Rachel C. Madden
Director, Administration & Finance

Robert Donnelly, Director, Human Resources
John Chinian, Associate General Counsel
Preparer/Title


Steven A. Remsberg
General Counsel

RECOMMENDATION:

For information only.

BACKGROUND:

Governor Patrick proposed legislation which became law in July 2011 known as the Authority Accountability & Transparency Act (G.L. c. 29, §29K). The legislation incorporated some of the recommendations of the Crosby Report produced under the leadership of former Secretary of the Executive Office for Administration & Finance (“A&F”), Stephen P. Crosby. Among the recommendations was the suggestion for the establishment by authorities of compensation committees to gauge salaries and benefits of comparable executive positions and to compare benefits’ packages offered by state authorities to those of similarly situated executives in the private sector, at non-profits and in state executive branch agencies. The provisions passed by the Legislature are substantially the same as originally proposed by the Patrick Administration and are summarized below.

To date, the Board has created a compensation committee by expanding and re-naming the Personnel Committee as the Personnel and Compensation Committee. The provisions of the statute requiring the formation of an Audit Committee have been satisfied by the expansion of the Administration and Finance Committee and renaming it as the Administration, Finance and Audit Committee. In September 2011, as required by the statute, the Board voted to amend the employment contracts of the Executive Director and the Chief Operating Officer to cap

severance payments at three months' salary. Section 29K(b)(2) has been the source of recent discussions among Board members and staff concerning the meaning of the requirement that the committees are to "meet independently of management" at least once annually.

DISCUSSION:

The items left to be accomplished by MWRA to fully comply with the provisions of the statute in the first annual cycle since its adoption include the following:

- Set a date and time, tentatively May 16, 2012, at which the members of the Personnel and Compensation Committee will "meet independently of management" to satisfy the provisions relative to compensation of "executives." (Section 29K(b)(2))
- Prepare an annual financial report which shall "disclose operating revenues and expenses, including the salaries and compensation of its executive director, officers, board members, senior management and other highly-compensated employees." (Section 29K(b)(3))
- Adjust compensation of "executives" for sick, vacation, and other leave time to amounts and extents not greater than granted to a state employee. (Section 29K(c)) (This topic is the subject of a separate staff summary to be presented to the Board on May 16, 2012.)

Additionally, section 29K(b)(1) requires that the Authority's Administration, Finance and Audit Committee "meet independently of management at least once per calendar year." However, that section also contains a qualifying provision which provides that "a state authority may rely upon an audit required by any other general or special law in meeting the requirements of this section." Since MWRA is in fact already required to and does conduct such an independent annual audit through an outside accounting firm under section 22 of the enabling act, no meeting independent of management is required. This reading of the subsection (b)(1) of the statute has been confirmed with A&F General Counsel. The Board may, of course, opt to have such a meeting if it so chooses.

Annual Meeting of the Committee Independent of Management

Section 29K(b)(2)'s requirement of an annual meeting of the Personnel and Compensation Committee applies to all Authorities and does not create any exceptions. The section provides for a method of annual review of compensation and benefits for "executives", as cited below.

(b) Each state authority shall:

(2) establish a compensation committee that shall: (i) **meet independently of management** at least once per calendar year and shall evaluate and establish **executive** compensation including, but not limited to, base salary, bonuses, severance, retirement or deferred compensation packages and policies relative to the accrual and payment of sick and vacation time, including payouts for unused sick and vacation time; and (ii) analyze and assess comparable compensation for positions with similar functions and

responsibilities at state agencies and, authorities, as well as for-profit and nonprofit private-sector employers;

Two of the terms used the statute “meet independently of management” and “executive” are highlighted above because they are its key provisions. The term “executive” has been defined by a set of temporary regulations issued by A&F to include “the authority’s chief executive officer or executive director, chief financial officer, general counsel, and other senior executives of the authority as determined by its compensation committee.” At MWRA, “executives” would include these three itemized positions and, at a minimum, would also include the Chief Operating Officer. The term “management” under the new statute is much broader in scope than the term “executive”. In order to comply with the statute’s requirements, a meeting that is “independent of management” must be held outside the presence of all “executives” and all “managers.”

While the phrase “meet independently of management” has not been defined by the temporary regulation, conversations with staff at A&F responsible for both the temporary and any eventual permanent regulation have resulted in the conclusion that managers are not to be in attendance at the meeting so that the “transparency” intended by the statute can be achieved in matters involving “executive” compensation and the meeting can be free of the potential influences of management participating in or otherwise affecting deliberations or decision-making by the committee or by the Board.

Implementation at May 16, 2012 Board Meeting

Staff have attached to this staff summary compensation data for comparable executive positions at private sector, non-profit, state authority and public agency organizations, as well as national water and wastewater utilities for review by members of the Committee prior to their meeting. These materials contain no recommendations by staff or management and especially make no comment about comparability of the positions of the executives contained in the data. There is no requirement that any vote be taken by the Committee to take any particular action as to the compensation or benefits of any “executive.” Should the Committee take a vote relating to executive compensation or benefits, staff believe that such an item must then be brought before the full Board of Directors as a recommendation of the Committee. Section 7 of the MWRA Enabling Act remains unchanged and thus decision-making regarding the compensation of the Executive Director, other officers, and other employees still remains the responsibility of the full Board and should be handled consistently with the past practices of the Board.

It is important to note that the evaluation process for the Executive Director and the Chief Operating Officer remains in place and can be conducted in accordance with standing practices. Staff can answer questions about the independent meeting, including options for open vs. executive session, at the May 16, 2012 meeting, i.e., prior to the separate meeting of the committee which will then be conducted “independent of management.”

BUDGET/FISCAL IMPACT:

The passage and implementation of section 29K of chapter 29 of the General Laws will not have any impact upon either the FY12 CEB or CIP.

Attachments

- Attachment A: Summary of Compensation Data for State Agencies, Authorities, Non-Profit Organizations and Private Companies
- Attachment B: Survey of National Water/Wastewater Utilities
- Attachment C: American Water Works Association – 2011 Water Utility Survey

Attachment A

Summary of Compensation Data for State Agencies, Authorities, Non-Profit and Private Companies

April 2012

MWRA Position:		Executive Director		
Organization	Sector	Title	Reporting Period	Annual Salary
N-Star	Private Utility	President and CEO	2010	\$1,058,333
Northeast Utilities	Private Utility	President and CEO	2010	\$1,035,000
Citizens Energy, Inc.	Non-Profit	President and CEO	2010	\$600,209
Boston Foundation Inc.	Non-Profit	President and CEO	2010	\$534,185
City Year, Inc.	Non-Profit	President and Co-Founder	2010	\$304,520
Greater Boston Food Bank Inc.	Non-Profit	President and CEO	2010	\$268,491
Mass Convention Center	Quasi Public	Executive Director	2012	\$250,016
Mass Education Financing Agency	Quasi Public	Executive Director	2012	\$210,585
Mass Housing Partnership	Quasi Public	Executive Director	2012	\$207,440
Mass Port Authority	Quasi Public	Chief Executive Officer (Interim)	2012	\$192,629
Mass Health Connector Authority	Quasi Public	Executive Director	2012	\$173,040
MWRA	Quasi Public	Executive Director	2012	\$163,937
Save the Harbor/Save the Bay	Non-Profit	President	2010	\$150,574
Mass Department of Transportation	State	Secretary, CEO MassDOT	2012	\$150,000
MBTA	State	General Manager (Acting)	2012	\$145,000
Mass Department of Revenue	State	Commissioner of Revenue	2012	\$140,000
Commonwealth of Massachusetts	State	Governor	2012	\$139,832
Commonwealth of Massachusetts	State	State Auditor	2012	\$137,426
Commonwealth of Massachusetts	State	Attorney General	2012	\$133,644
Commonwealth of Massachusetts	State	Secretary of State	2012	\$130,916
Commonwealth of Massachusetts	State	Lieutenant Governor	2012	\$124,295
Boston Harbor Association	Non-Profit	Executive Director	2010	\$123,769
Conservation Law Foundation	Non-Profit	President	2010	\$93,052

Attachment A

Summary of Compensation Data for State Agencies, Authorities, Non-Profit and Private Companies

April 2012

MWRA Position:		Chief Operating Officer		
Organization	Sector	Title	Reporting Period	Annual Salary
Northeast Utilities	Private Utility	Executive Vice President/COO	2010	\$550,000
N-Star	Private Utility	Senior Vice President-Operations	2010	\$440,000
Citizens Energy, Inc.	Non-Profit	Chief Operating Officer	2010	\$438,708
City Year, Inc.	Non-Profit	President	2010	\$227,363
Boston Foundation Inc.	Non-Profit	Chief Investment Officer	2010	\$212,497
Mass Education Financing Agency	Quasi Public	Deputy Executive Director	2012	\$197,000
Greater Boston Food Bank Inc.	Non-Profit	Chief Operating Officer	2010	\$172,220
Mass Health Connector Authority	Quasi Public	Chief Operating Officer	2012	\$160,000
Mass Housing Partnership	Quasi Public	Managing Director	2012	\$158,830
MWRA	Quasi Public	Chief Operating Officer	2012	\$153,327

Attachment A

Summary of Compensation Data for State Agencies, Authorities, Non-Profit and Private Companies

April 2012

MWRA Position:		Director, Administration and Finance		
Organization	Sector	Title	Reporting Period	Annual Salary
Northeast Utilities	Private Utility	Executive Vice President & CFO	2010	\$525,000
N-Star	Private Utility	Senior Vice President & CFO	2010	\$470,667
Citizens Energy, Inc.	Non-Profit	CFO/Treasurer & Clerk	2010	\$226,862
City Year, Inc.	Non-Profit	Chief Financial and Admin Officer	2010	\$189,578
Mass Port Authority	Quasi Public	Chief Financial Officer	2012	\$183,750
Mass Education Financing Agency	Quasi Public	Chief Financial Officer	2012	\$180,000
Boston Foundation Inc.	Non-Profit	VP/CFO/Treasurer	2010	\$176,449
Mass Health Connector Authority	Quasi Public	Chief Financial Officer	2012	\$164,740
Greater Boston Food Bank Inc.	Non-Profit	Chief Financial Officer	2010	\$149,039
Mass Housing Partnership	Quasi Public	Chief Finance & Admin Officer	2012	\$148,940
MWRA	Quasi Public	Director, Admin & Finance	2012	\$145,293
Conservation Law Foundation	Non-Profit	Vice President, Finance and Admin	2010	\$92,900

MWRA Position:		General Counsel		
Organization	Sector	Title	Reporting Period	Annual Salary
N-Star	Private Utility	Sr. Vice President/General Counsel	2010	\$440,000
Northeast Utilities	Private Utility	Sr. Vice President/General Counsel	2010	\$406,988
Mass Port Authority	Quasi Public	Chief Legal Counsel	2012	\$192,629
Mass Health Connector Authority	Quasi Public	General Counsel	2012	\$164,740
Mass Housing Partnership	Quasi Public	Deputy Director & General Counsel	2012	\$164,290
MWRA	Quasi Public	General Counsel	2012	\$135,639

Attachment B
 MWRA Survey of Comparable National Water/Wastewater
 Utilities - April 2012

Executive Director										
Organization	Location	Operating Budget	# Employees	Population Served	Title	Base Salary	Car Allowance	Deferred Comp	2011 Bonuses	Employment Contract
Fairfax Water	Fairfax, Virginia		412	1.7 million	General Manager	\$230,000	Car Provided		\$5,537 *	Yes
Metropolitan Water District of Southern California	Los Angeles, Ca	\$2.02 billion	1,803	19 million	General Manager	\$318,435	Car Provided	\$11,025		Yes
San Francisco Public Utilities Commission	San Francisco, CA	\$657 million	2,300	2.4 million	General Manager	\$296,290	\$220			Yes
Washington Suburban Sanitary Commission	Laurel, MD	\$626 million	1,557	1.8 million	General Manager	\$250,000	\$8,000	\$22,000	\$20,000	Yes
DC Water	Washington, DC	\$457 million	1,100	2.0 million	General Manager	\$230,000	Car Provided	\$19,500	\$0	Yes
Seattle Public Utilities	Seattle, WA	\$819 million	1,411	1.3 million	Director	\$191,383	\$0	\$0	\$0	No
					Average Salary	\$252,685				
MWRA					Executive Director	\$163,937	\$8,400			Yes

Chief Operating Officer										
Organization	Location	Operating Budget	# Employees	Population Served	Title	Base Salary	Car Allowance	Deferred Comp	2011 Bonuses	Employment Contract
Fairfax Water	Fairfax, Virginia		412	1.7 million	Deputy General Manager	\$200,000	Car Provided		\$4,747*	Yes
Metropolitan Water District of Southern California	Los Angeles, Ca	\$2.02 billion	1,803	19 million	Assist. GM/Chief Operating Officer	\$258,981	Car Provided	\$11,025	\$7,800	No
San Francisco Public Utilities Commission	San Francisco, CA	\$657 million	2,300	2.4 million	Deputy General Manager	\$219,804		\$20,500		No
Washington Suburban Sanitary Commission	Laurel, MD	\$626 million	1,557	1.8 million	Chief of Plant Operations	\$154,834	\$8,000			Yes
DC Water	Washington, DC	\$457 million	1,100	2.0 million	Chief of Staff	\$200,100	\$0	\$13,000	\$0	No
Seattle Public Utilities	Seattle, WA	\$819 million	1,411	1.3 million	Dep. Director, Field Ops & Maint.	\$158,809	\$0	\$0	\$0	No
					Average Salary	\$198,755				
MWRA					Chief Operating Officer	\$153,327	\$8,400			Yes

General Counsel										
Organization	Location	Operating Budget	# Employees	Population Served	Title	Base Salary	Car Allowance	Deferred Comp	2011 Bonuses	Employment Contract
Fairfax Water	Fairfax, Virginia		412	1.7 million	No Match					
Metropolitan Water District of Southern California	Los Angeles, Ca	\$2.02 billion	1,803	19 million	General Counsel	\$226,845	\$1,400	\$14,330		Yes
San Francisco Public Utilities Commission	San Francisco, CA	\$657 million	2,300	2.4 million	Assistant Chief Attorney I	\$190,162	\$840	\$15,900		No
Washington Suburban Sanitary Commission	Laurel, MD	\$626 million	1,557	1.8 million	General Counsel	\$166,710	\$8,000		\$15,480	Yes
DC Water	Washington, DC	\$457 million	1,100	2.0 million	General Counsel	\$200,100	\$0	\$14,100	\$0	No
Seattle Public Utilities	Seattle, WA	\$819 million	1,411	1.3 million	No Match (use city legal services)		\$0	\$0	\$0	No
					Average Salary	\$195,954				
MWRA					General Counsel	\$135,639				No

Director, Administration & Finance										
Organization	Location	Operating Budget	# Employees	Population Served	Title	Base Salary	Car Allowance	Deferred Comp	2011 Bonuses	Employment Contract
Fairfax Water	Fairfax, Virginia		412	1.7 million	Director, Finance	\$171,563	Car Provided			No
Metropolitan Water District of Southern California	Los Angeles, Ca	\$2.02 billion	1,803	19 million	Financial Officer	\$244,000	\$1,800	\$0	\$0	No
San Francisco Public Utilities Commission	San Francisco, CA	\$657 million	2,300	2.4 million	AGM, Business Services	\$202,282	\$270	\$16,500		No
Washington Suburban Sanitary Commission	Laurel, MD	\$626 million	1,557	1.8 million	Chief Financial Officer	\$192,370	\$3,000	\$15,600		No
DC Water	Washington, DC	\$457 million	1,100	2.0 million	Chief Financial Officer	\$200,100	\$8,000			Yes
Seattle Public Utilities	Seattle, WA	\$819 million	1,411	1.3 million	Chief Financial Officer	\$154,834	\$0	\$13,600	\$0	No
					Average Salary	\$194,191				
MWRA					Director, Administration & Finance	\$145,293				No

*2010 data


Survey Position:	Top Executive			
MWRA Position:	Executive Director			
Survey Scope:	All utilities serving a population in excess of 1,000,000			
	# of Utilities	# of Employees	50th Percentile Salary	Average Salary
	21	21	\$218,225	\$262,818
	MWRA Salary			
	\$163,937			
Survey Scope:	All water utilities serving a population in excess of 1,000,000			
	# of Utilities	# of Employees	50th Percentile Salary	Average Salary
	11	11	\$231,546	\$258,976
	MWRA Salary			
	\$163,937			
Survey Scope:	All water/wastewater utilities serving a population in excess of 1,000,000			
	# of Utilities	# of Employees	50th Percentile Salary	Average Salary
	10	10	\$171,128	\$267,045
	MWRA Salary			
	\$163,937			

Survey Position:	Top Operations and Maintenance Executive			
MWRA Position:	Chief Operating Officer			
Survey Scope:	All utilities serving a population in excess of 1,000,000			
	# of Utilities	# of Employees	50th Percentile Salary	Average Salary
	20	19	\$144,000	\$166,097
	MWRA Salary			
	\$153,327			
Survey Scope:	All water utilities serving a population in excess of 1,000,000			
	# of Utilities	# of Employees	50th Percentile Salary	Average Salary
	11	11	\$174,202	\$171,144
	MWRA Salary			
	\$153,327			
Survey Scope:	All water/wastewater utilities serving a population in excess of 1,000,000			
	# of Utilities	# of Employees	50th Percentile Salary	Average Salary
	9	8	\$142,001	\$159,157
	MWRA Salary			
	\$153,327			

Survey Position:	Top Finance Executive			
MWRA Position:	Director, Administration and Finance			
Survey Scope:	All utilities serving a population in excess of 1,000,000			
	# of Utilities	# of Employees	50th Percentile Salary	Average Salary
	21	19	\$150,000	\$175,185
	MWRA Salary			
	\$145,293			
Survey Scope:	All water utilities serving a population in excess of 1,000,000			
	# of Utilities	# of Employees	50th Percentile Salary	Average Salary
	11	9	\$164,964	\$173,399
	MWRA Salary			
	\$145,293			
Survey Scope:	All water/wastewater utilities serving a population in excess of 1,000,000			
	# of Utilities	# of Employees	50th Percentile Salary	Average Salary
	10	10	\$134,794	\$176,792
	MWRA Salary			
	\$145,293			

Survey Position:	Top Legal Executive			
MWRA Position:	General Counsel			
Survey Scope:	All utilities serving a population in excess of 1,000,000			
	# of Utilities	# of Employees	50th Percentile Salary	Average Salary
	9	9	\$166,710	\$170,444
	MWRA Salary			
	\$135,639			
Survey Scope:	All water utilities serving a population in excess of 1,000,000			
	# of Utilities	# of Employees	50th Percentile Salary	Average Salary
	5	5	\$215,010	\$198,137
	MWRA Salary			
	\$135,639			
Survey Scope:	All water/wastewater utilities serving a population in excess of 1,000,000			
	# of Utilities	# of Employees	50th Percentile Salary	Average Salary
	4	4	*	*
	MWRA Salary			
	\$135,639			
* No data , less than 5 responses				

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: May 16, 2012
SUBJECT: Changes in Existing Sick Time Payout Benefit for Executives Required by the Authority Accountability and Transparency Act (G.L. c. 29 §29K)

COMMITTEE: Personnel and Compensation

 INFORMATION

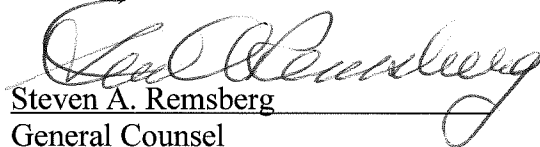
 X VOTE



Rachel C. Madden

Director, Administration & Finance

Robert Donnelly, Director, Human Resources
John Chinian, Associate General Counsel
Preparer/Title


Steven A. Remsberg
General Counsel

RECOMMENDATION:

To approve a change in the sick time payout benefit at retirement for “executives” of the Authority by reducing from 30% to 25% the percentage of accumulated unused sick time that may be paid to such “executives” upon their retirement from MWRA in order that the benefit not exceed the level of the benefit afforded to state employees, and further to designate the Executive Director, the Chief Operating Officer, the Chief Financial Officer and the General Counsel as “executives” of the Authority under the Authority Accountability and Transparency Act and its regulations.

BACKGROUND:

Section 29K(c) of the Authority Accountability and Transparency Act requires that “no executive of a state authority shall be compensated for sick, vacation or other leave time to an extent greater than the leave time granted to a state employee.” The Authority’s benefits package differs from that of state employees in only one way. Currently, MWRA’s sick time payout benefit at retirement is slightly more generous than that offered to state employees. State employees receive 15 days of sick leave annually and a 20% payout for unused leave upon retirement. MWRA employees receive 12 days of sick leave annually and a 30% payout. In order to be consistent with the state, and without increasing the total allotment of sick days, a minor reduction in the payout percentage from 30% to 25% makes the MWRA benefit equal to the state benefit. This slight benefit reduction would apply only to the four MWRA “executives” but not

to any other non-union managers and not to union employees.

DISCUSSION:

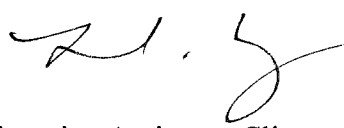
Full compliance with the statute requires the sick time payout benefit for “executives” of the Authority must be slightly reduced so that it will not exceed the benefit available to state employees. The Board or the Personnel and Compensation Committee have the authority under the temporary regulations established under the statute to designate who in the Authority will be designated as an “executive.” Compliance with the regulation will be met by designating four of the Authority’s employees as “executives” as they most closely fit the individuals listed in the regulation. Those four Authority employees would include the Executive Director, the Chief Operating Officer, the Chief Financial Officer and the General Counsel.

BUDGET/FISCAL IMPACT:

The passage and implementation of section 29K of chapter 29 of the General Laws will not have any impact upon either the FY12 CEB or CIP.

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: May 16, 2012
SUBJECT: Renewal of Employment Contract, Administrative Assistant, Clinton Wastewater Treatment Plant



COMMITTEE: Personnel & Compensation

John P. Vetere, Deputy Chief Operating Officer
Robert Donnelly, Director of Human Resources
Preparer/Title

INFORMATION

X VOTE

Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the renewal of a part-time employment contract for Ms. Jane Densmore, Administrative Assistant at the Clinton Wastewater Treatment Plant, for a period of one year, from July 1, 2012 to June 30, 2013, with an increase the hourly rate from \$21.00 to \$21.32, for an annual compensation amount not to exceed \$22,173.

DISCUSSION:

The Clinton Wastewater Treatment Plant continues to have a part-time need for assistance in completing routine administrative tasks related to maintaining accurate files for invoices, attendance records, purchasing requisitions, etc. These tasks do not require a full-time position.

Since March 2008, Ms. Jane Densmore has provided this administrative support and assistance to the Superintendent of the Clinton Wastewater Treatment Plant under a part-time employment contract. Ms. Densmore, who works a maximum of 20 hours per week, is extremely proficient in utilizing MWRA's Lawson computer program to prepare requisitions for the purchase of spare parts, equipment, and supplies. She also researches standardized industrial codes for parts and equipment, performs some basic accounting tasks, such as preparing monthly accrual reports, and maintains databases for the landfill leachate flows, generator readings, and water meter data. She assists in the preparation of the landfill groundwater and leachate analysis reports to the Clinton Conservation Commission and the Department of Environmental Protection.

At the present time, the need for a full-time position is not warranted. Therefore, staff recommend that Ms. Densmore's part-time employment contract be renewed for another year. The recommended hourly rate of compensation represents an increase of 1.5% over her current hourly rate.

BUDGET/FISCAL IMPACT:

Funding for this position is included in the Operations Division's FY12 and Proposed FY13 Current Expense Budgets.

STAFF SUMMARY

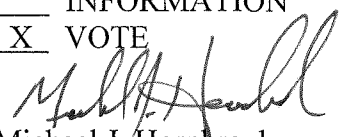
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: May 16, 2012
SUBJECT: Renewal of Employment Contract, Principal Civil Engineer, Deer Island Treatment Plant



COMMITTEE: Personnel & Compensation

 INFORMATION
 X VOTE

Robert G. Donnelly, Director, Human Resources
Daniel K. O'Brien, P.E., Director, Deer Island Treatment Plant
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the renewal of a part-time employment contract for Mr. William A. Haynes, Principal Civil Engineer, Deer Island Treatment Plant, for a period of one year, from June 1, 2012 to June 1, 2013, with an increase in the hourly rate from \$46.65 to \$47.35, for an annual compensation amount not to exceed \$55,400.

DISCUSSION:

There continues to be a significant amount of ongoing construction work taking place on Deer Island, which encompasses a number of different facilities spread across the island. With this construction work, the need for project-related support staff to assist in Resident Engineering, change order/contractor submittal review, and the performance of other important construction administration tasks also continues.

Since June 6, 2005, Mr. William A. Haynes, under a part-time employment contract (Principal Civil Engineer, 22.5 hours/week) has been supplementing existing Deer Island staff to ensure comprehensive oversight of the various construction projects. Present staffing needs do not warrant the creation of a permanent, full-time, position. However, based upon the projected schedule of construction work on Deer Island, staff have determined that there is a continuing need for this part-time position.

Mr. Haynes possesses 35 years of engineering and construction management experience working with the New England Corps of Engineers. His past experience includes work on wastewater treatment plant and wastewater collection system projects. His extensive background also includes negotiating and processing change orders and reviewing contractor pay estimates. Mr. Haynes possesses a Bachelor of Science degree in Civil Engineering from Northeastern University.

The recommended hourly rate represents an increase of 1.5% over the current hourly rate.

BUDGET/FISCAL IMPACT:

Funding for this contract is included in the FY12 and Proposed FY13 Current Expense Budgets.



MASSACHUSETTS WATER RESOURCES AUTHORITY

Charlestown Navy Yard
100 First Avenue, Building 39
Boston, MA 02129

Frederick A. Laskey
Executive Director

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Chairman: R. Sullivan
Vice-Chair: J. Carroll
Secretary: J. Foti
Board Members:
J. Barrera
K. Cotter
M. Gove
J. Hunt
V. Mannering
A. Pappastergion
M. Turner
J. Walsh

BOARD OF DIRECTORS' MEETING

to be held on

Wednesday, May 16, 2012

Location: 100 First Avenue, 2nd Floor
Charlestown Navy Yard
Boston, MA 02129

Time: 1:00 p.m.

AGENDA

I. APPROVAL OF MINUTES

II. REPORT OF THE CHAIR

III. REPORT OF THE EXECUTIVE DIRECTOR

IV. BOARD ACTIONS

A. Approvals

1. Bond Defeasance of Future Debt Service (ref. AF&A B.1)
2. Memorandum of Understanding and Financial Assistance Agreement with the Town of Brookline for Implementation of CSO Control Project, Amendment 3, and Progress of Town of Brookline-Implemented CSO Project and Projected Financial Assistance through July 2013 (ref. WW B.1)
3. Changes in Existing Sick Time Payout Benefits for Executives required by the Authority Accountability and Transparency Act (ref. P&C B.1)
4. Renewal of Employment Contract, Part-Time Administrative Assistant at the Clinton Wastewater Treatment Plant (ref. P&C B.2)
5. Renewal of Employment Contract, Part-Time Principal Civil Engineer, Deer Island Treatment Plant (ref. P&C B.3)

B. Contract Awards

1. Primary and Secondary Clarifier W3H Flushing System, Deer Island Treatment Plant: Delta Control Engineers, Inc., d/b/a Harding and Smith, Contract 7374 (ref. WW C.1)

C. Contract Amendments/Change Orders

1. Renewable and Alternative Energy Portfolio Services: Nexant, Inc., Contract RPS-36, Amendment 2 (ref. AF&A C.1)
2. Security Guard Services for Various MWRA Facilities: U. S. Security Associates, Inc., Contract EXE-025, Amendment 6 (ref. AF&A C.2)

V. CORRESPONDENCE TO THE BOARD

VI. OTHER BUSINESS

VII. EXECUTIVE SESSION

A. Real Estate

1. Watershed Land Acquisitions Approval

B. Litigation

1. Mediation of Cost Recovery Action – May 1, 2010 Water Main Break, MWRA v. Shea-Traylor-Healy, et al., Suffolk Superior C.A. No. 11-2184-BLS1

VIII. ADJOURNMENT

Meeting of the Board of Directors

April 11, 2012

A meeting of the Board of Directors of the Massachusetts Water Resources Authority was held on April 11, 2012 at the Authority headquarters in Charlestown. Vice-Chair Carroll presided. Present from the Board were Ms. Turner and Messrs. Barrera, Foti, Gove, Hunt, Mannering, Pappastergion and Walsh. Messrs. Cotter and Sullivan were absent. Among those present from the Authority staff were Frederick Laskey, Executive Director, Steven Remsberg, General Counsel, Michael Hornbrook, Chief Operating Officer, Rachel Madden, Director of Administration and Finance, and Bonnie Hale, Assistant Secretary. The meeting was called to order at 1:15 p.m.

APPROVAL OF MINUTES

Upon a motion duly made and seconded, it was

Voted to approve the minutes of the Board of Directors' meeting of March 14, 2012, as presented and filed with the records of the meeting.

REPORT OF THE EXECUTIVE DIRECTOR

Mr. Laskey reported on various matters, including plans underway to augment the foundation of the Charlestown wind turbine.

APPROVALS

Approval of FoxRock Research Realty, LLC Sewer Connection in Hingham

Upon a motion duly made and seconded, it was (with Mr. Walsh opposed on both votes)

Voted to approve an increase in wastewater discharged to MWRA via the Weymouth sewer system for 105 Research Road in Hingham, as set forth in FoxRock Research Realty, LLC's application to MWRA and in accordance with MWRA Policy #OP.11, *Admission of New Community to MWRA Sewer System and Other Requests for Sewer Service to Locations Outside MWRA Sewer Service Area*, and subject to final approval of the Governor and General Court.

Further, voted to authorize the Executive Director, on behalf of the Authority, to execute a Sewer Connection Agreement with FoxRock Research Realty, LLC, substantially in the form shown in Attachment A as filed with the records of the meeting, to increase the sewer flow from 2,025 gallons per day, as previously approved, to up to 5,336 gallons per day, subject to an additional entrance fee payment of \$12,750.00 and inflow removal.

Renewal of Two Employment Contracts, Senior Laboratory Technicians, Department of Laboratory Services, Deer Island

Upon a motion duly made and seconded, it was

Voted to approve the renewal of the employment contracts for Ms. Yuan Jiao Chen and Mr. Keith M. Stocks, Senior Laboratory Technicians in the Department of Laboratory Services, Deer Island, each for a period of one year, from May 1, 2012 to April 30, 2013, and increasing the hourly rate from \$18.00 to \$18.36, for an annual compensation not to exceed \$38,189.00

Changes in Existing Sick Time Payout Benefit for Executives Required by the Authority Accountability and Transparency Act

At the recommendation of the Personnel and Compensation Committee, consideration of this item was postponed to May 16, 2012.

Deer Island Ambulance Services – Amendment to Memorandum of Agreement with Town of Winthrop

Ms. Turner proposed an amendment adding some clarifying language, which was approved and incorporated into the vote below.

Upon a motion duly made, seconded and amended, it was

Voted to authorize the Executive Director to amend the Memorandum of Agreement (MOA) with the Town of Winthrop to eliminate the requirement in Part 2 of the MOA that obligates MWRA to continue to contract for ambulance services for both the Town of Winthrop and MWRA; and further to authorize the Executive Director to make a one-time payment of \$250,000.00 to the Town of Winthrop in consideration of the Town assuming the obligation to provide ambulance services to Deer Island for a five year period.

City of Boston Wind Turbine – Deer Island

Upon a motion duly made and seconded, it was (with Mr. Hunt abstaining)

Voted to authorize the Executive Director to negotiate with the City of Boston regarding the possibility of the City siting a wind turbine on Deer Island.

CONTRACT AWARDS

Integrated Financial, Procurement and Human Resources/Payroll Management System Maintenance and Support: Lawson Software, Inc.

Upon a motion duly made and seconded, it was

Voted to approve the award of a sole source purchase order contract for the annual maintenance and support of the integrated financial, procurement and human resources/payroll management system to Lawson Software, Inc., and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said purchase order contract in an amount not to exceed \$372,945.75 for a period of one year, from June 1, 2012 through May 31, 2013.

Groundskeeping Services – Metropolitan Boston: UGL Services UNICCO Operations Co., Contract OP-183

Upon a motion duly made and seconded, it was

Voted to approve the award of Contract OP-183, Groundskeeping Services – Metropolitan Boston, to the lowest eligible and responsible bidder, UGL Services UNICCO Operations Co., and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in the bid amount of \$300,720.00 for a term of 670 calendar days from the Notice to Proceed.

Technical Assistant Consultant Services, Hazardous Materials, EnviroSense, Inc. Contract 596TA, and Geosphere Environmental Management, Inc., Contract 595TA

Upon a motion duly made and seconded, it was

Voted to approve the recommendation of the Consultant Selection Committee to select EnviroSense, Inc. and Geosphere Environmental Management, Inc. to provide Technical Assistance Consulting Services for hazardous materials assessment and abatement, and to authorize the Executive Director, on behalf of the Authority, to execute Contract 595TA with EnviroSense, Inc. and Contract 596TA with Geosphere Environmental Management, Inc., each for a total amount not to exceed \$450,000.00 for a term of three years, and to authorize a Notice to Proceed for the first year of each contract in an amount not to exceed \$150,000.00. Further, to authorize the Executive Director to approve separate Notices to Proceed, if recommended by staff, to commence the second and third year terms of each contract for the same yearly not-to-exceed amounts.

CONTRACT AMENDMENTS/CHANGE ORDERS

Sections 18, 50 & 51 Rehabilitation: The Dow Company, Inc., Contract 6394, Change Order 4

Upon a motion duly made and seconded, it was

Voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order No. 4 to increase the amount of Contract No. 6394 with The Dow Company, Inc., Sections 18, 50 & 51 Rehabilitation, in an amount not to exceed \$79,849.32.

EXECUTIVE SESSION

It was moved to enter executive to discuss litigation and collective bargaining.

Upon a motion duly made and seconded, it was, upon a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Barrera		
Foti		
Gove		
Hunt		
Mannering		
Pappastergion		
Turner		
Walsh		
Carroll		

Voted to enter executive session for the purpose of discussing strategy with respect to litigation and collective bargaining, in that such discussion in open session may have a detrimental effect on the litigating and negotiating positions of the Authority.

It was noted that the meeting would return to open session solely for the consideration of adjournment.

* * * *

EXECUTIVE SESSION

* * * *

The meeting returned to open session at 2:05 p.m. and adjourned.