



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

ADMINISTRATION, FINANCE & AUDIT COMMITTEE MEETING

Chair: J. Foti
Vice-Chair: J. Barrera
Committee Members:
J. Carroll
K. Cotter
V. Mannering
A. Pappastergion
B. Swett
J. Walsh

to be held on

Wednesday, November 14, 2012

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

Time: 10:00 a.m.

AGENDA

A. Information

1. FY13 First Quarter Orange Notebook
2. Delegated Authority Report – September and October 2012
3. FY13 Financial Update and Summary as of October 2012

B. Contract Awards

1. Dental Insurance: Blue Cross and Blue Shield of Massachusetts, Inc., Contract
2. Workers' Compensation Third Party Administrator Services: PMA Management Corporation of New England, Contract A583
3. Annual Maintenance of the Maximo System: IBM Corporation

C. Contract Amendments/Change Orders

1. Renewable Energy Technical Assistance Consulting Services – Energy Efficiency: Fay, Spofford & Thorndike, LLC, Contract 7274A, Amendment 2

AF+A(i)
11/14/12

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the
Administration, Finance and Audit Committee

October 17, 2012

A meeting of the Administration, Finance and Audit Committee was held on October 17, 2012 at the Authority headquarters in Charlestown. Chairman Pappastergion presided. Present from the Board were Messrs. Barrera, Carroll, Cotter, Flanagan, Foti, Mannering, and Walsh. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Rachel Madden, Kathy Soni, Mike Hornbrook, Russ Murray, Michele Gillen, and Bonnie Hale. The meeting was called to order at 10:25 a.m.

Information

FY13 Financial Update and Summary as of September 2012

Staff summarized the financial update, and there was general discussion and question and answer.

Approvals

*Lawson Professional Services: Infor Global Solutions

Staff provided an overview of the contract for professional services to implement three eProcurement modules as part of the Integrated Financial, Procurement and Human Resources/Payroll Management System. There was general discussion and question and answer. The Committee recommended approval of the sole source award (ref. agenda item A.1).

The meeting adjourned at 10:45 a.m.

* Approved as recommended at October 17, 2012 Board of Directors meeting.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: November 14, 2012
SUBJECT: FY13 First Quarter Orange Notebook




COMMITTEE: Administration, Finance & Audit

X INFORMATION
VOTE


Michael J. Hornbrook

Chief Operating Officer


Rachel C. Madden, Director
Administration and 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. This report covers the period from July to September 2012.

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.

Deer Island Operations

Staff have developed a new chart, which is on page 2, that tracks sludge detention time in the digesters at Deer Island. Longer detention time will generally result in more solids destruction and increased methane production. Detention time is dependent upon the number of digesters available (Deer Island normally has seven in use) and the amount of solids produced by the primary and secondary treatment processes. Staff's principle tool for increasing detention time is maximizing the up-time for the each of the digesters.

This quarter's flows at the Deer Island Treatment Plant (as well as at the Clinton Plant) reflect the influence of the earlier dry conditions. While precipitation this quarter was slightly above average (approximately 7%), flows were significantly lower than average (approximately 12%) at Deer Island due to the dry ground conditions, which soaked up much of the precipitation. (Page 2) At the Clinton Plant, the significantly lower flows from Clinton and Lancaster allowed the running annual average flow to dip back to within the permit limit after being above the limit for 10 months. (Pages 3 and 28)

Deer Island Maintenance Metrics - Proactive and Productivity Measures

The goals were adjusted upward for two of these measures at the beginning of this fiscal year. The FY13 goal for predictive maintenance was raised from 18% to 20% of all work orders, recognizing the continuing trend of improvement from approximately 1% in FY02 to the current approximately 19%. (Page 5) The goal for maintenance kitting, which is the practice of staging all of the material and parts necessary for a work order to increase “wrench time” and productivity, was increased from 43% to 45% of work orders for FY13. (Page 5)

Source Water – Algae

Algae levels within the reservoirs are monitored by DCR and MWRA staff, and MWRA has established trigger levels for certain “nuisance” algae that may cause objectionable taste or odors at high enough levels. The triggers are set to catch the growth of an algae bloom early, and to avoid the possibility of consumer dissatisfaction. These triggers are set based on historical data and are likely conservative as the Carroll Water Treatment Plant’s ozone process is considered effective at reducing the levels of taste- and odor-causing compounds in the water. During July, levels of one nuisance species, *Chrysosphaerella*, exceeded trigger levels and MWRA had to treat the Wachusett Reservoir with copper sulfate three times. No taste and odor complaints related to algae were reported by local water departments during the episode. (Page 21)

Drinking Water Test Results – Community Bacteria Data

As has been reported to the Board, several MWRA communities had local water quality issues during this past summer resulting in total coliform positives. Total coliform bacteria are used as an early indicator of excess biological activity within the distribution system; they are not considered a health indicator and EPA will shortly be issuing revised rules diminishing their regulatory significance. Slightly more than 4% of the community samples analyzed at MWRA’s laboratories were positive for total coliform during this quarter; 261 of 6,244 were positive (4.2%). (Page 24) The principle driver for these results was the 200 positive samples from the partially supplied community of Bedford. Bedford has been experiencing very low disinfectant residual levels due to long water age, lack of storage tank turnover, circuitous flow patterns likely due to closed valves, and the resulting nitrification. DEP has issued a consent order to the town and Bedford is working with a consultant to develop a plan to improve the operation of its distribution system.

MASSACHUSETTS WATER RESOURCES AUTHORITY

Board of Directors Report
On
Key Indicators of MWRA Performance
For
First Quarter FY2013

Q1	Q2	Q3	Q4



Frederick A. Laskey, Executive Director
Michael J. Hornbrook, Chief Operating Officer
November 14, 2012

Board of Directors Report on Key Indicators of MWRA Performance First Quarter FY2013

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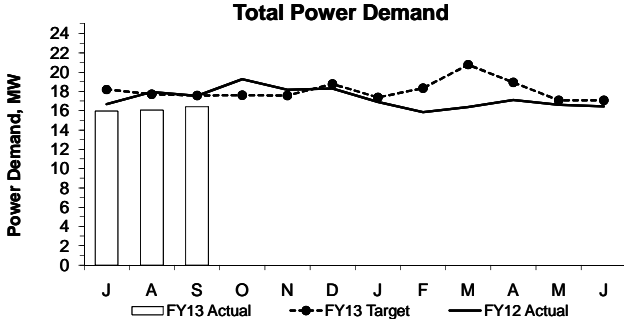
This quarterly report is prepared by MWRA staff to track a variety of MWRA performance measures for routine review by MWRA's board of directors. The content and format of this report is expected to develop as time passes. Information is reported on a preliminary basis as appropriate and available for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

Frederick A. Laskey, Executive Director
Michael J. Hornbrook, Chief Operating Officer
November 14, 2012

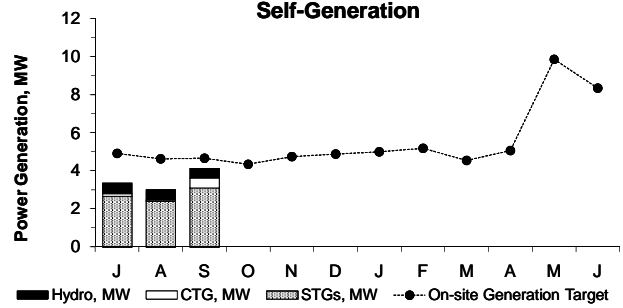
OPERATIONS AND MAINTENANCE

Deer Island Operations

1st Quarter - FY13



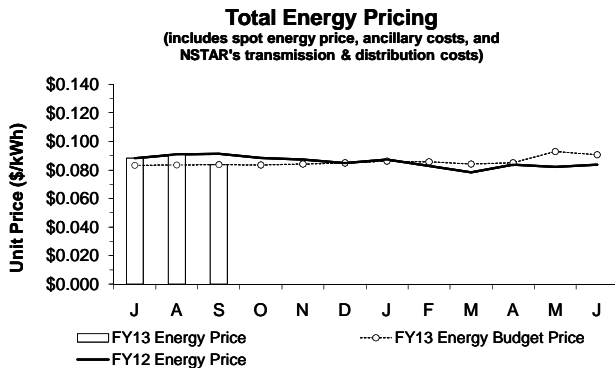
Total Power Demand in the 1st Quarter was 9% lower than the target for the quarter as Total Plant Flow was 12% lower-than-expected. Total Power Demand was 7% lower than in FY12 for the same period.



Power generated on-site was 21% below target for the 1st Quarter mainly due to lower-than-expected generation by the STGs, Hydro Turbines, and Wind Turbines. Generation by the Solar Panels and the CTGs was higher than target for the quarter.

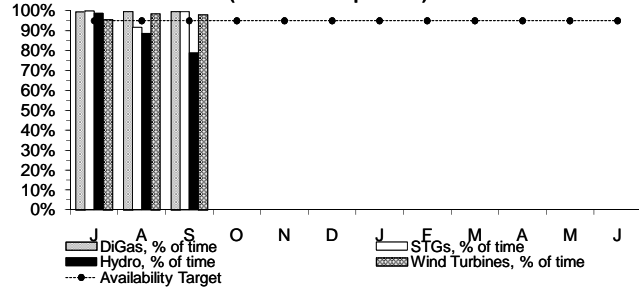
Generation by the STGs was 26% low as the BP STG was operated in test mode during system optimization and sludge feed to the digesters was also suspended several times due to contractor valve work in the digester area which greatly reduced the production of digester gas (the main fuel source for the boiler which produces the steam for the STG). Hydro Turbine generation was 19% low due to scheduled annual maintenance and essential repairs on Turbine #2. Generation by the Wind Turbines was 30% low due to lower-than-expected wind. CTG generation was more than two times higher than target mainly due to operation during seasonal peak demand, as well as during NSTAR annual maintenance which required DITP to be disconnected from the electrical grid. Generation by the Solar Panels was 4% higher than target.

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); 0.403 MW was generated by the Solar Panels and 0.304 MW was generated by the Wind Turbines in the 1st Quarter.

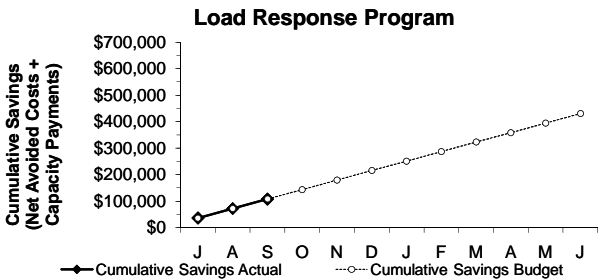


Under DI's energy supply contract, a block portion of DI's energy is a fixed rate and the variable load above the block is purchased in real time. Overall, the total energy price in the 1st Quarter was 5% higher than the FY13 budget estimate. The total energy price includes a fixed block price, spot energy price, transmission & distribution charges, and ancillary charges. Please note the September total energy price is an estimate as the completed invoices have not been received. Year-to-date costs are estimated at approximately \$31,156 (+1.3%) more than budgeted as of the end of the quarter due to higher total energy prices in July and August that were 6% and 9% higher-than-expected (once the actual total energy price was available).

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



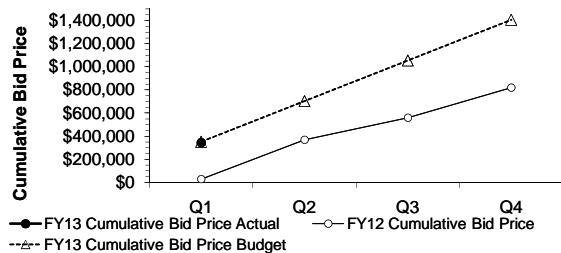
The DiGas, STGs, and Wind Turbine systems all met their 95% Availability Target for the 1st Quarter. The Hydro Turbine availability for the 1st Quarter was 6% below the 95% target due to scheduled annual maintenance and essential repairs on Hydro Turbine #2 that resulted in significant periods of downtime for the Hydro Turbine system.



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, Deer Island 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 \$107,561 at the end of the 1st Quarter. Please note the capacity payment for September is an estimate as the actual payment has not yet been received.

DITP did not participate in any demand response events this quarter.

MA Renewable Portfolio Standard

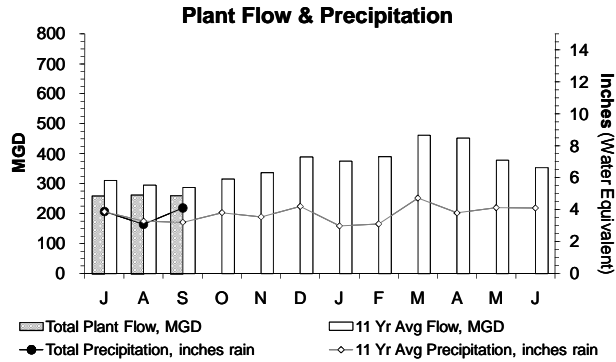


Bids were awarded in July for the sale of 60 Solar Renewable Energy Certificates (S-RECs) for a total value of \$25,181 and 6,446 Class I RECs for a total value of \$319,270. The value of the S-RECs is approximately 8.5 times higher than the current value of Class I RECs (for STG, hydro and wind).

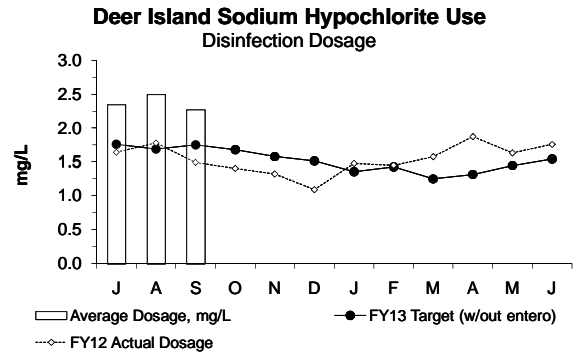
REC prices reflect the bid prices on the date that bids are accepted. Cumulative bid price reflects the total value of bids received to date. The FY13 budgeted cumulative bid estimate at the end of the 1st Quarter is \$351,764 while the actual bid total is \$344,451.

Deer Island Operations

1st Quarter - FY13



The Total Plant Flow for the 1st Quarter was 12% lower than target (260.6 MGD actual vs. 297.6 MGD expected) even though precipitation was 7% higher-than-expected for the quarter (11.06 inches actual vs. 10.34 inches expected). Much of the rain was quickly absorbed into the ground due to the very dry conditions that still exist as a result of the much lower-than-expected rainfall for much of this year and therefore did not significantly impact overall plant flow.



The disinfection dosing rate was 37% higher than the target for the 1st Quarter. The average dosing rate for the quarter was 2.37 mg/L compared to the target of 1.74 mg/L. Dosing was much higher-than-expected due to a higher chlorine demand as a result of stronger wastewater caused by the lengthy period of much lower-than-normal plant flows since January.

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.

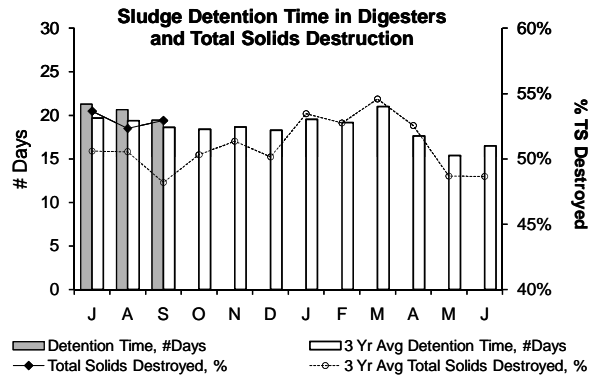
Secondary Blending Events

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	2	2	0	99.7%	5.78
A	1	1	0	99.9%	2.04
S	2	2	0	99.8%	4.35
O					
N					
D					
J					
F					
M					
A					
M					
J					
Total	5	5	0	99.8%	12.17

There were a total of five (5) separate secondary blending events during the 1st Quarter of FY13; all were due to high plant flows resulting from heavy rain. There was a single secondary blending event in August and two (2) separate events in July and in September.

All five (5) blending events combined produced a total of 12.17 hours of blending and 46.92 Mgal of flow blended with secondary effluent.

Secondary permit limits were met at all times during the 1st Quarter.



Total solids (TS) destruction averaged 53% following anaerobic sludge digestion during the 1st Quarter with an average sludge detention time in the digesters of 20.4 days. Solids destruction was 3% higher than the 3-year average for the quarter as the detention time was 6% higher than the 3-year average. DI operated with seven (7) active digesters during the entire quarter.

Total solids (TS) destruction is dependent on sludge detention time which is determined by primary and secondary solids production, plant flow, and the number of active digesters in

Deer Island Operations & Maintenance Report

Environmental/Pumping:

The total precipitation of 11.06 inches in the 1st Quarter of FY13 was 7% higher than the 11-year average of 10.34 inches, and 22% lower than the 14.18 inches in 1st Quarter FY12. Measureable rain fell on 26 of the 92 days in the quarter. The plant achieved a maximum average hourly flow rate of only 919.3 MGD during the evening hours of July 18 as a result of storm system that brought a total of 1.74 inches of rain.

A new low flow record for July North System influent was set. The 174.39 MGD monthly average for North System influent flow broke the previous low flow record from July 2010 of 175.16.

Deer Island Operations

1st Quarter - FY13

Deer Island Operations & Maintenance Report (continued)

Odor Control:

Activated carbon media was changed out for carbon adsorber (CAD) units #2 in the East Odor Control Facility, and #1 and #7 in the West Odor Control Facility in July.

Both the Gravity Thickener and Centrifuge Thickener airflows in the Residuals Odor Control Facility (ROC) were shut down on two separate days on July 31 and on August 1 to replace the heat exchanger and to manually clean the air duct around the heater on CAD #2. The total duration of the combined shutdowns was 12 hours and 35 minutes.

Two (2) separate facility-wide shutdowns of the West Odor Control (WOC) Facility were scheduled in September to allow staff to safely and completely remove the failed airflow scrubber fan for wet chemical scrubber #5. A new replacement fan is scheduled to be installed, inspected, and tested operationally in October. There were also three (3) separate shorter facility-wide shutdowns of the East Odor Control (EOC) Facility in September to allow for essential maintenance activities.

Energy:

Solar Power generation was 3.6% (0.403 MW) and Wind Turbine generation was 2.72% (0.304 MW) of the total power generated on-site for the 1st Quarter. Overall, total power generated on-site accounted for 23.1% of Deer Island's total power demand for the 1st Quarter of FY13.

"Renewable Energy Certificate (REC)" - Bids were awarded in July for the sale of 60 Solar Renewable Energy Certificates (S-RECs) for a total value of \$25,181 and 6,446 Class I RECs for a total value of \$319,270. There were no Renewable Energy Certificate (REC) bids in August or September.

Annual scheduled maintenance on the Hydro Turbine system began in mid-August with maintenance being completed on both turbines by the end of August. Work on Hydro Turbine #2 uncovered a worn seal on the unit's speed increaser. Replacement required an almost complete disassembly of the turbine from the water side taking several weeks, and resulted in significant periods of downtime for both turbines for much of September. For safety reasons, both turbines were locked out and remained offline during the day while repair activities were in progress. Hydro Turbine #2 was back in operation on September 27.

Regulatory:

Emissions compliance testing on the Residuals Odor Control (ROC) treatment system on DITP was conducted by consultants during the week of August 6. The DEP requires that DITP conduct emissions compliance testing for the various emission units once every five (5) years. The draft report, received from the consultants in mid-September, shows that DITP was in compliance.

Kevin Brander with the DEP was onsite at DITP on August 29 for an unannounced site visit. He was given a comprehensive plant tour covering the entire wastewater and residuals treatment facilities and process areas. Initial communications indicate the inspection went well and a formal report by the DEP will be forwarded to the EPA.

Clinton AWWTP

The construction contract for the fine bubble diffused air system, the influent and intermediate redundant pumps and all associated piping, instrumentation and controls is progressing as scheduled. The project should be substantially complete by the end of the calendar year. The MWRA will then receive an energy grant from NGRID for approximately \$177,000.

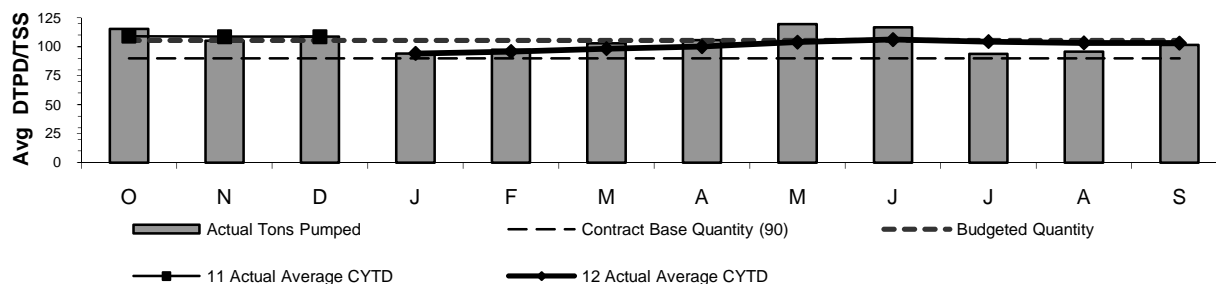
The plant met its running average flow limit for the month of September. This is the first time in ten consecutive months this permit limit was met. The DEP annual inspection was conducted in July, reviewing all aspects of plant operations, compliance, maintenance and general cleanliness of the plant. The plant received a very favorable inspection. Installation of the effluent chlorine analyzer has been completed, providing a second level of alarm for loss of chlorination (a chlorine flow alarm is also in use). The duplicate methods insure plant operators are alerted in the event of loss of chlorination during the 16 hours per day the plant is unstaffed. Low effluent chlorine levels could lead to a permit violation.

Deer Island Residuals

1st Quarter - FY13

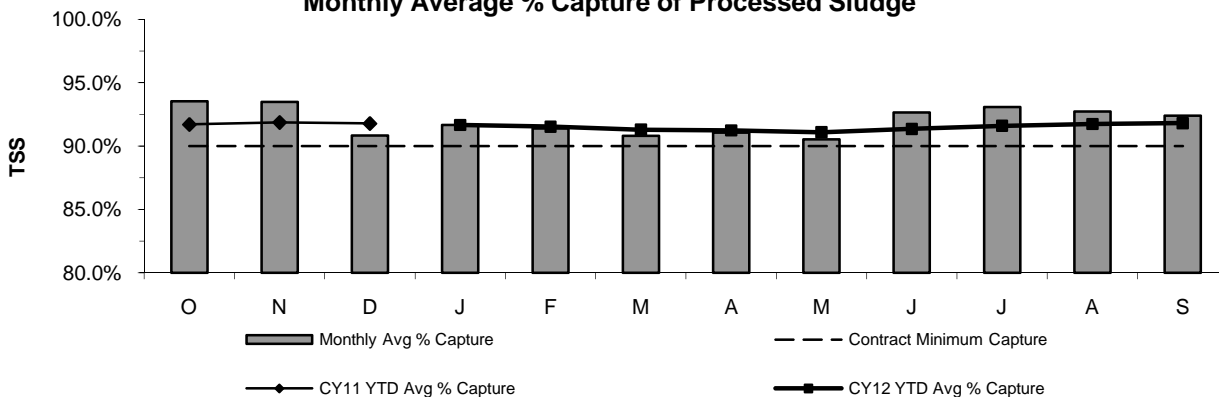
MWRA pays a fixed monthly amount for the calendar year to process up to 90 DTPD/TSS as an annual average. The monthly invoice is based on 90 DTPD/TSS (Dry Tons Per Day/Total Suspended Solids) times 365 days divided by 12 months. At the end of the year, the actual totals are calculated and additional 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 (FY13's budget is 105.5 DTPD/TSS).

Sludge Pumped From Deer Island



The average total quantity of sludge pumped in the 1st Quarter was 97.0 DTPD - lower than FY13's budget of 105.5 DTPD. The lower amount is due to lower flow and longer digestion resulting in better solids destruction.

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 1st Quarter was 92.7%.

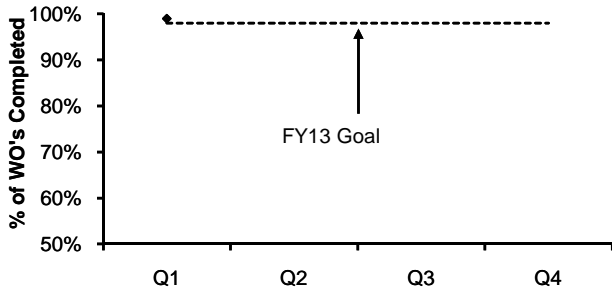
Deer Island Maintenance

1st Quarter - FY13

Productivity Initiatives

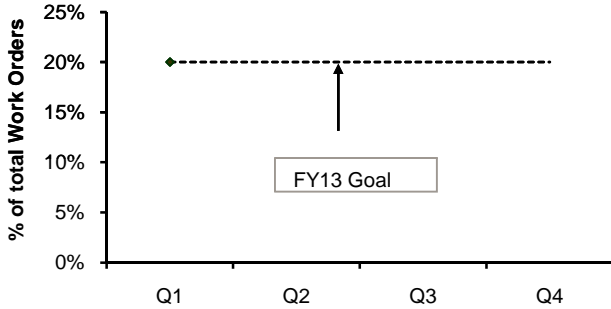
Productivity initiatives include increasing predictive maintenance tasks. Accomplishing this initiative should result in a decrease in the overall maintenance backlog.

Predictive Maintenance Compliance



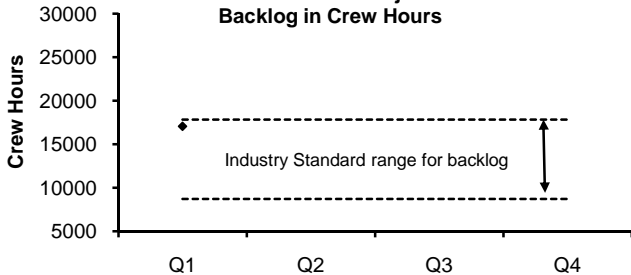
Deer Island FY13 predictive maintenance goal is 98%. DITP completed 99% of all PDM work orders this quarter. DITP is continuing with an aggressive predictive maintenance program.

Predictive Maintenance



Deer Island's FY13 predictive maintenance goal is 20% of all work orders to be predictive maintenance, up from 18% in FY12. 19% of all work orders were predictive maintenance this quarter. The industry is moving toward increasing predictive maintenance work to reduce down time and better predict when repairs are needed.

Maintenance Project Backlog in Crew Hours

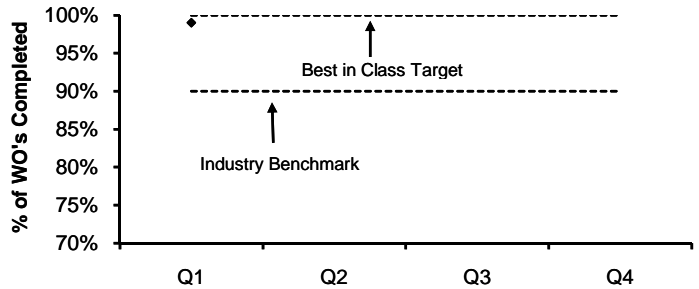


DITP's maintenance backlog at Deer Island is 17,073 hours. DITP is within, but at the upper end, of the industry average for backlog. The industry Standard for maintenance backlog with 97 staff (currently planned staffing levels) is between 8,730 hours and 17,460 hours. Backlog has been adversely effected due to eleven staff members out on I/A and medical leave. Management continues to monitor backlog and to ensure all

Proactive Initiatives

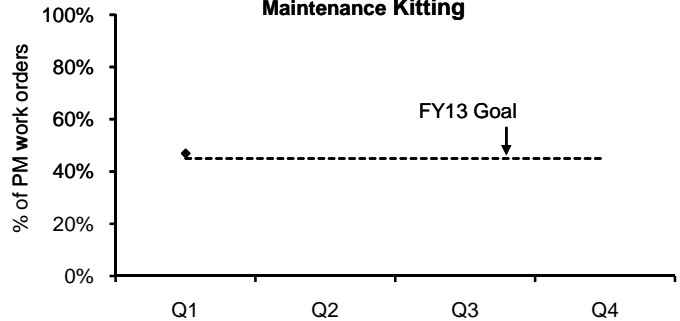
Proactive initiatives include completing 100% of all preventive maintenance tasks and increasing preventive maintenance kitting. These tasks should result in lower maintenance costs.

Preventive Maintenance Compliance



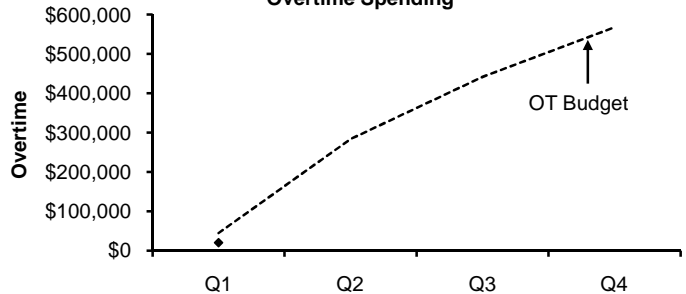
Deer Island's FY13 preventive maintenance goal is 100% completion of all PM work orders from Operations and Maintenance. DITP completed 99% of PM work orders this quarter.

Maintenance Kitting



Deer Island's FY13 maintenance kitting goal is 45% of all work orders to be kitted, up from 43% in FY12. 47% of all work orders were kitted this quarter. Kitting is staging of parts or material necessary to complete maintenance work. This has resulted in more wrench time and increased productivity.

Overtime Spending



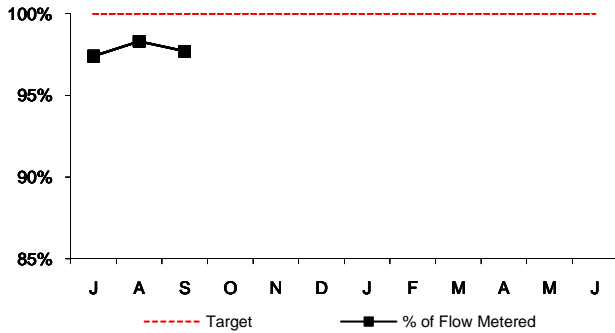
Maintenance overtime was under by \$24 K this quarter. Management continues to monitor backlog and to ensure all critical systems and equipment are available. This quarter overtime was used for storm and high flow events, removal and installation of three chillers located in Winthrop, Primary and secondary, rebuild #1 pump in South System Pump Station, repair harmonic filter in North Main Pump Station, and Electrical switching during NSTAR schedule maintenance on the main.

Operations Division Metering

1st Quarter - FY13

WATER METERS

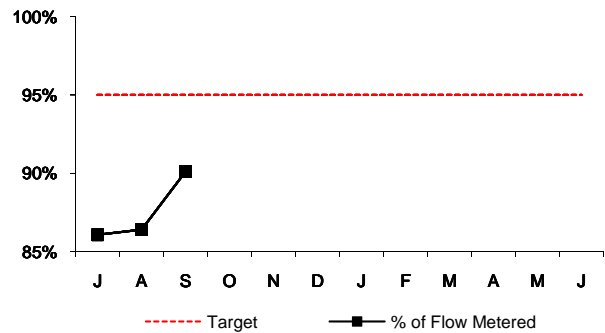
Percent of Total Revenue Water Deliveries Calculated Using Meters



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 1st Quarter of FY13, meter actuals accounted for 98.0% of flow; only 2.0% of total revenue water deliveries were estimated. The following is the breakdown of estimations:
 In-house and Capital Construction Projects - 1.0%
 Instrumentation Failure - 1.0%

WASTEWATER METERS

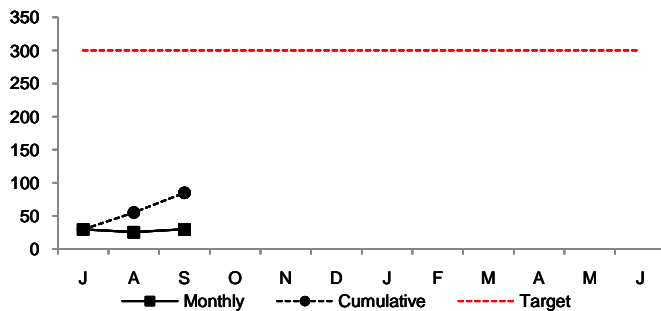
Percent of Total Wastewater Transport Calculated Using Meters



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 1st Quarter of FY13, meter actuals accounted for 87.5% of flow; 12.5% of wastewater transport was estimated, of which, 7.14% was attributable to one meter BO-MI -1. This meter was producing valid depths and was estimated using Mannings Equation. Staff increased maintenance at site to reduce estimations. Diver installed new meter on 10/9/2012.

WATER DISTRIBUTION SYSTEM PIPELINES

Miles Surveyed for Leaks



During the 1st Quarter of FY13, 89.41 miles of water mains were inspected.

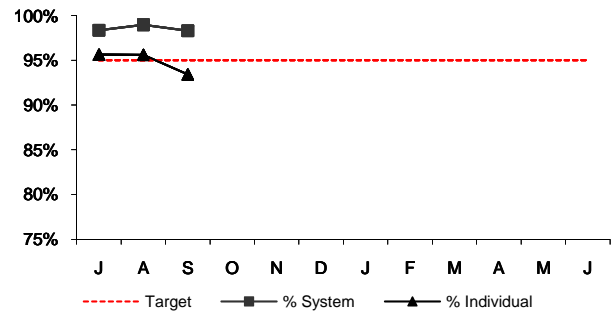
Water Distribution System

Month	J	A	S	O	N	D	J	F	M	A	M	J
Leaks Detected	2	2	1									
Leaks Repaired	2	1	2									
Backlog	0	1	0									
Avg. Lag Time	1.0	2.3	3.0									

During the 1st Quarter of FY13, five leaks were detected. All leaks with the exception of Blue Hill Avenue in Dorchester were repaired within one day. The leak at Blue Hill Avenue, originally detected on August 26, 2012 was repaired on September 6, 2012. For the 1st Q of FY13 all leaks have been repaired.

The Pipeline Program's goal is to repair all leaks found during the fiscal year. However, if the goal cannot be reached due to restrictions, isolations, communities, or degree of difficulty, then the goal is to have not more than two leaks outstanding at year's end.

% Wastewater Meter Uptime



During the 1st Quarter of FY13, out of a possible 1,610,400 data points, only 23,528 points were missed resulting in a system-wide up time of 98.5%. Of the 182.3 revenue meters installed, on average 9.3 meters/mth. experienced down time greater than the 5% target resulting in a 94.9% individual meter uptime. For the 1st Quarter of FY13, down time for an individual meter is defined by any individual meter having on average less than 2796.7 data points out of a potential 2,944 data points.

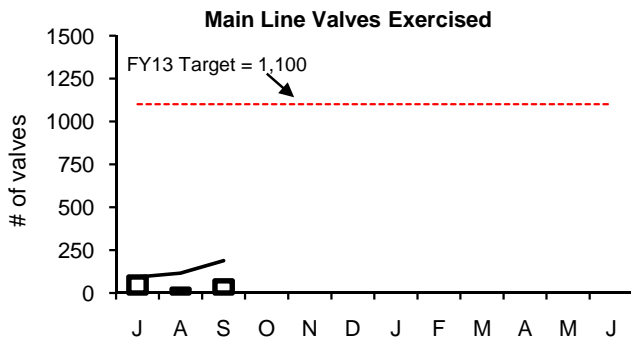
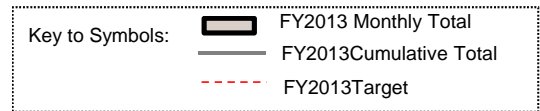
Water Distribution System Valves

1st Quarter - FY 13

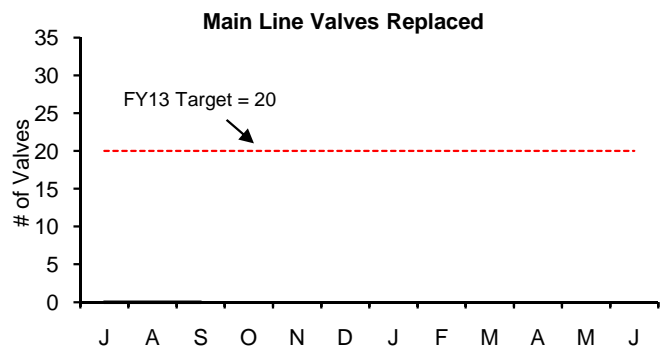
Background

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.

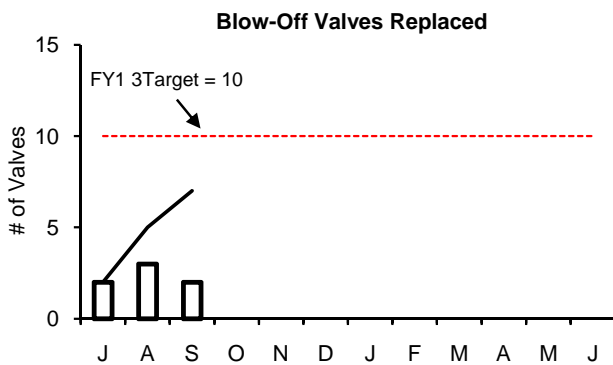
Type of Valve	Inventory #	Operable Percentage	
		FY13 to Date	FY13 Targets
Main Line Valves	2,092	97.3%	92%
Blow-Off Valves	1,206	95.2%	94%
Air Release Valves	1,335	93.0%	92%
Control Valves	48	100.0%	95%



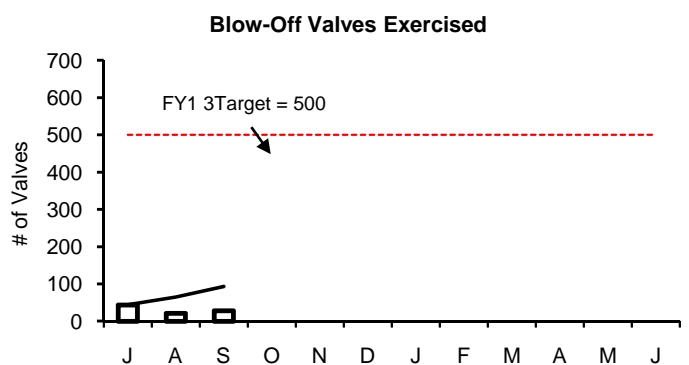
During Q1 of FY13, staff exercised only 189 main line valves due to emergency support, including but not limited to, emergency disinfection in Bedford, water quality issues at Fells Covered Storage, as well as contractor support for water main shutdowns, flushings, etc.



During Q1 of FY13, staff replaced zero main line valves due to high water demands during the Summer months.



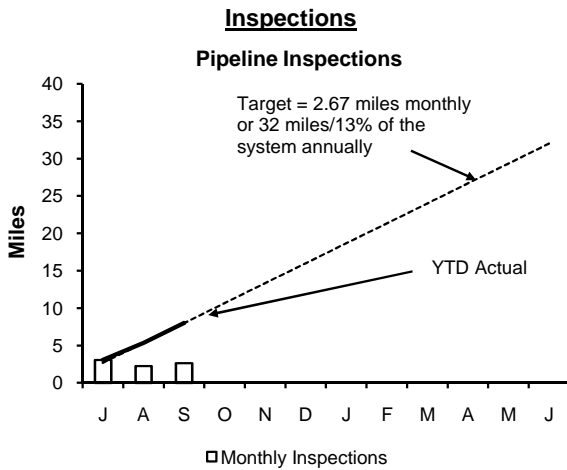
During Q1 of FY13, staff replaced seven blow off valves.



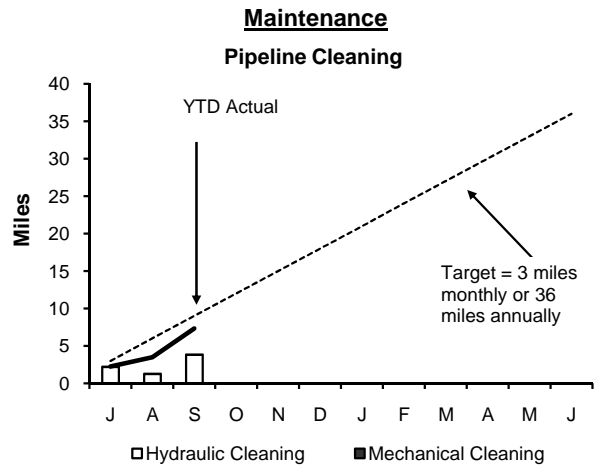
During Q1 of FY13, staff exercised 93 blow-off valves .

Wastewater Pipeline and Structure Inspections and Maintenance

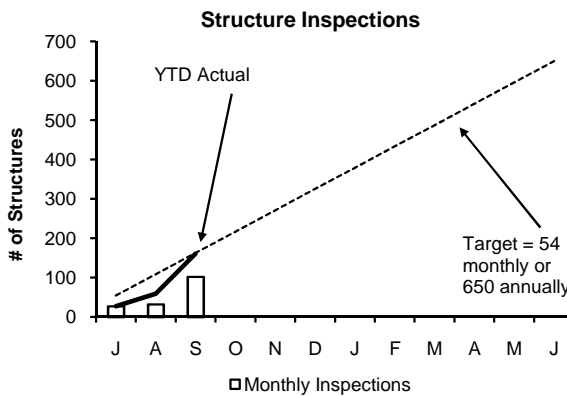
1st Quarter - FY 13



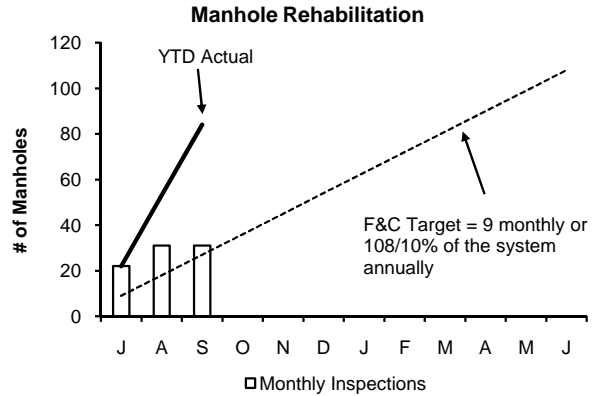
Staff internally inspected 7.99 miles of MWRA sewer pipeline during the first quarter. Community Assistance was provided to the city of Somerville, 1.37 miles and the town of Arlington, 0.56 miles this quarter.



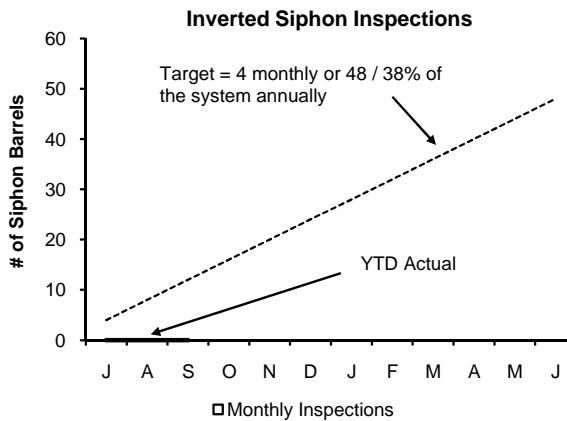
Staff cleaned 7.31 miles of MWRA's sewer system and removed 43 yards of grit and debris during the first quarter. Community Assistance was provided to the city of Everett, staff by-pass pumped a collapsed drain culvert that was causing street flooding.



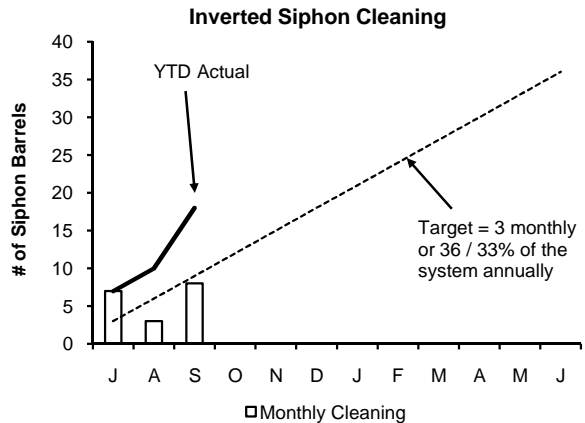
Staff inspected the 36 CSO structures and performed 125 additional manhole/structure inspections during the first quarter.



Staff replaced 84 frames & covers during the first quarter.



Staff did not inspect any siphon barrels during the first quarter. During this quarter, the inspection crew focused more heavily on manhole and sewer inspections.



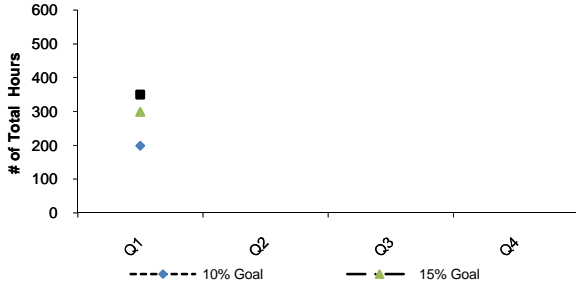
During the first quarter, staff cleaned 18 siphon barrels.

Field Operations' Metropolitan Equipment & Facility Maintenance

1st Quarter - FY13

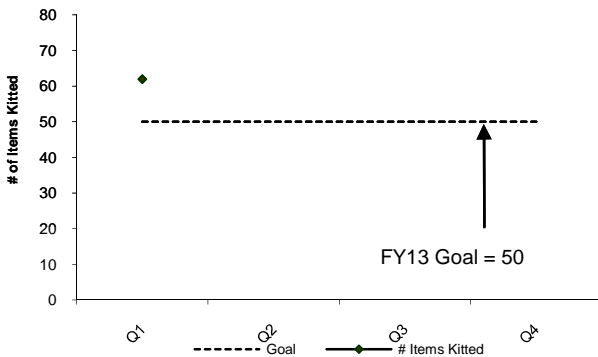
Staff are continuing with several maintenance and productivity initiatives; The Operator PM and kitting initiatives frees up maintenance staff to perform corrective maintenance and project work, thus reducing maintenance spending. Backlog and overtime metrics monitor the success of these maintenance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

Operations Light Maintenance PM Hours



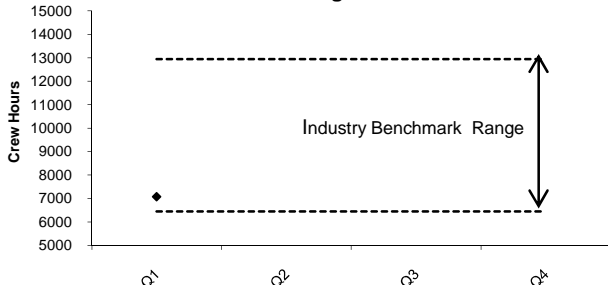
Operations staff averaged 350 hours of preventive maintenance during the 1st Quarter, an average of 18% of the total PM hours for the 1st Quarter, which is above the industry benchmark of 10% to 15%.

Items Kitted Utilizing Maximo



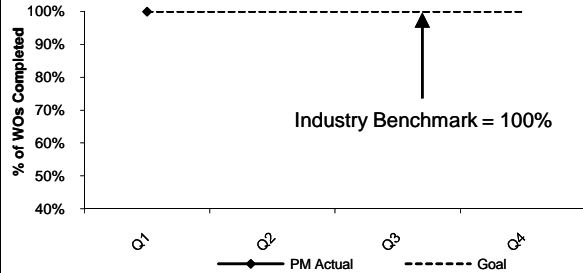
In an effort to more efficiently complete work, maintenance staff and work coordination staff have utilized the Lawson/Maximo interface to better kit stock and non stock material. The goal for FY13 is to "kit" 50 stock and non stock items total per month. An average of 62 items were kitted during the 1st Quarter

Maintenance Backlog in Crew Hours



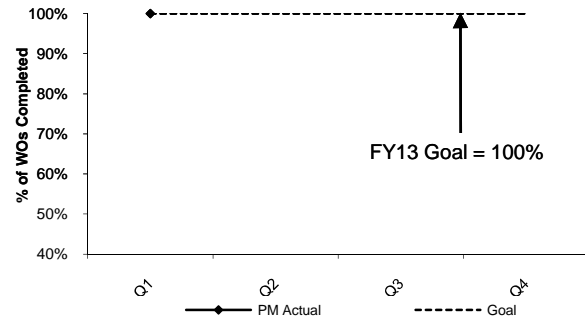
The 1st Quarter backlog average is 7077 hours. Management's goal is to continue to control overtime and still stay within the industry benchmark of 6450 to 12,940 hours. There are currently 2 vacant positions: a facility specialist and an electrician.

Overall Preventive Maintenance



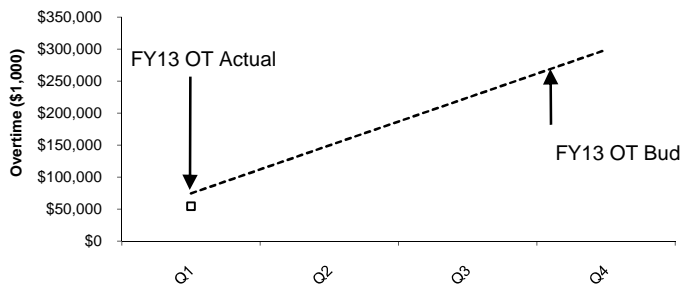
The Field Operations Department (FOD) preventive maintenance goal for FY13 is 100% of all PM work orders. Staff completed an average of 100% of all PM work orders in the 1st Quarter.

Operations Light Maintenance % PM Completion



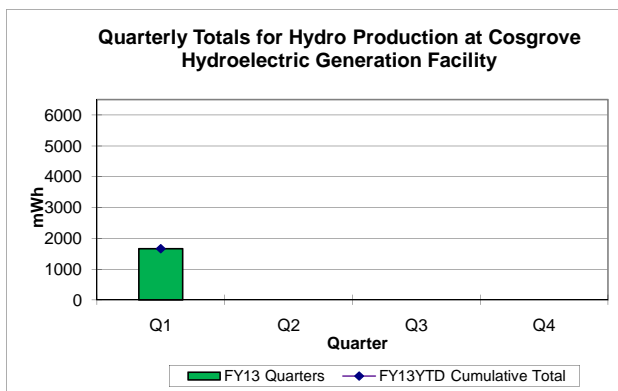
Wastewater Operators complete light maintenance PM's which frees up maintenance staff to perform corrective maintenance. Operations' FY13 PM goal is completion of 100% of all PM work orders assigned. Operations completed an average of 100% of PM work orders in the 1st Quarter.

Overtime Spending

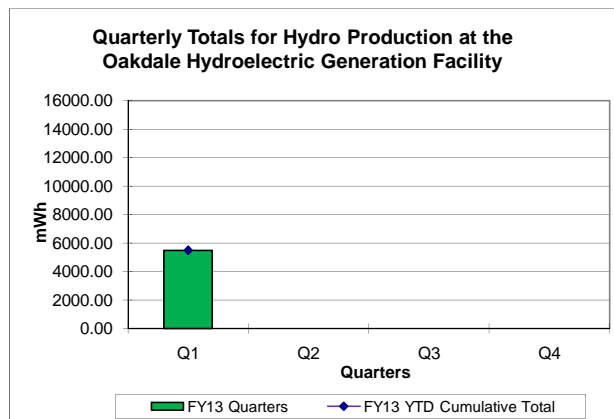


Maintenance overtime was \$20k under budget for the 1st Quarter. Overtime was used for Chelsea Administration Building improvements and electrical testing at various facilities as well as emergency repairs and wet weather coverage.

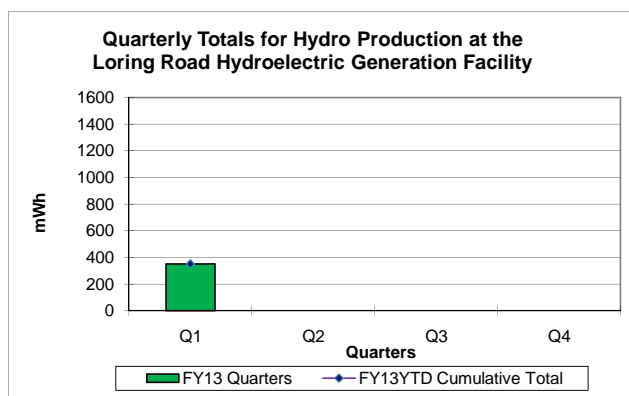
Field Operations Hydroelectric Generation Quarterly Report 1st Quarter - FY13



In the 1st Quarter, the **Cosgrove Hydroelectric Station** generated a net of 1664 MWh; approximately 13% more power than was generated during the same quarter in FY12. The revenue generated at Cosgrove in the first quarter was \$71,586 exclusive of Renewable Energy Certificates.



In the 1st Quarter, the **Oakdale Hydroelectric Station** generated a net of 5489 MWh; approximately 35% more power than was generated during the same quarter in FY12. The revenue generated at Oakdale in the first quarter was \$239,448 (Power is generated when water is transferred from Quabbin to Wachusett.)



In the 1st Quarter, the **Loring Road** hydroelectric 200 kW station generated 351 MWh; approximately 8% less power than was generated during the same quarter in FY12. 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.

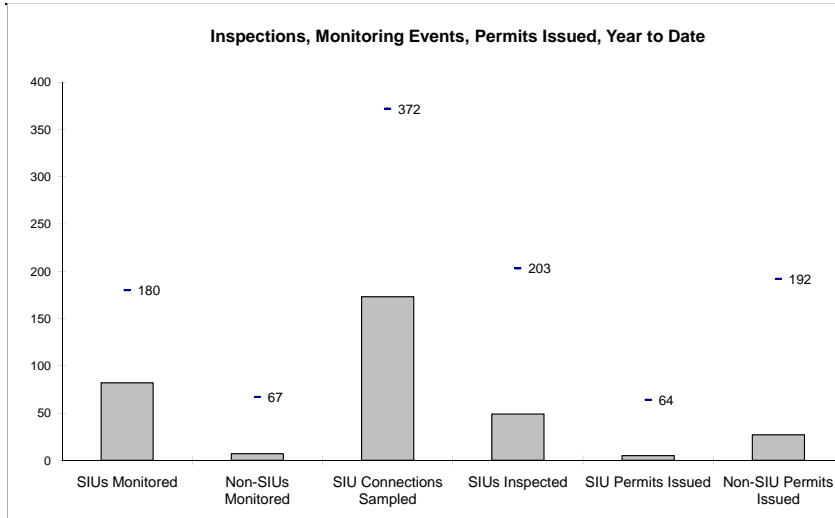
Southborough: Based on the energy audit of the Southborough facility, an energy management system is being installed at the Southborough Facility. NSTAR has committed to providing a \$30,000 incentive to this project based on the projected energy savings. This project falls under the requirements of the Green Communities Act since it would be under \$100,000. The work began in September 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. This project was completed during the first quarter of FY13. NSTAR will be providing a \$168,000 rebate to MWRA for the installation of the EMS.

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. VFDS on the HVAC systems and scrubber pumps at Ward Street and Columbus Park Headworks were installed during the 4th quarter of FY12. Energy efficient lighting was installed at Prison Point during the fourth quarter also. Audits of an additional 6 facilities began in the second quarter of FY12 and are on-going. Implementation of some of the audit recommendations will begin in the second quarter of FY13.

Toxic Reduction and Control

1st Quarter - FY 2013



EPA Required SIU Monitoring Events for FY13: 180
YTD: **82**

Required Non-SIU Monitoring Events for FY13: 67
YTD: **7**

SIU Connections to be Sampled For FY13: 372
YTD: **173**

EPA Required SIU Inspections for FY13: 203
YTD: **49**

SIU Permits due to Expire In FY13: 64
YTD: **5**

Non-SIU Permits due to Expire for FY13: 192
YTD: **27**

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 in the month. 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.

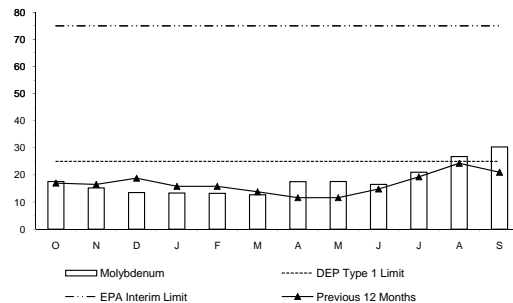
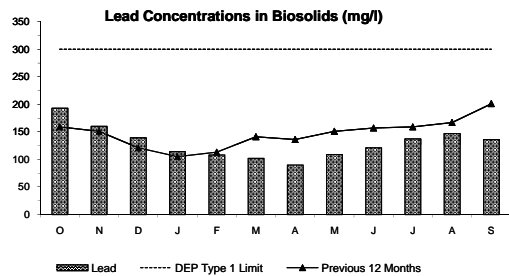
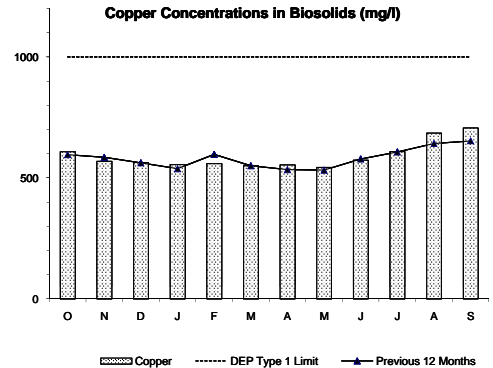
TRAC's annual monitoring and inspection goals are set at the beginning of each fiscal year but they can fluctuate due to the actual number of SIUs at any given time. During the course of the year, some SIUs do not discharge and cannot be monitored. TRAC also monitors one-third of the non-SIUs each year.

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
Jul	2	8	0	0	0	0	2	8
Aug*	1	9	1	0	0	0	2	9
Sep	1	8	0	1	0	1	1	10
Oct							0	0
Nov							0	0
Dec							0	0
Jan							0	0
Feb							0	0
Mar							0	0
Apr							0	0
May							0	0
Jun							0	0
% YTD	80%	93%	20%	4%	0%	4%	5	27

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 August, one SIU permit was issued more than 120 days after receipt of its application; the complex permit required coordination with EPA and DEP. In September, one non-SIU permit was delayed while awaiting payment and the other was delayed while the appropriate permit conditions were established. *In August, TRAC also issued 106 Group Permits to Photodevelopers and Printers and 9 Combined Permits to facilities with low flows and photo-developing or printing operations.

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. In August, levels of molybdenum exceeded the DEP Type 1 Limit due to the warmer weather. MWRA and its contractor (NEFCO) do not distribute product in Massachusetts between July and January under its approval of suitability.



Field Operations Highlights

1st Quarter – FY13

Western Water Operations and Maintenance

- Hultman Aqueduct: Staff isolated and dewatered the aqueduct between Valve Chambers E-3 and L-2 to support contractor repairs of a failed joint just west of L-2. Once the joint was welded, the area was spray disinfected, the line filled and placed back into service.
- Chicopee Valley Aqueduct: Staff made repairs to the access road, culverts and headwalls in the area around Shea Avenue in Belchertown to improve drainage and allow for better vehicle access to three air valves. The work was reviewed by the local conservation commission.
- Canton: Operations Staff set up and ran mobile disinfection to support the town while addressing local positive coliform test results.
- Wachusett Reservoir: Staff applied copper sulfate to the reservoir to treat for Chryso-sphaerella three times during the quarter. Also, staff supported the Federal Energy Regulatory Commission (FERC) inspection of the hydro turbines at the Cosgrove and Oakdale Power Stations.
- MWWST: Staff supported the Hultman Aqueduct Interconnections Contractor while replacing the actuators on two 120- inch butterfly valves and one 96-inch butterfly valve in Valve Chamber 5A-1.

Metro Water Operations & Maintenance

- Bedford Water Quality Issue: Metro Operations, Quality Assurance, and Planning Staff met repeatedly with Bedford and DEP staff to assist in resolution of water quality issues within the town's water system. On July 23, MWRA staff assisted the town with the booster chlorination of their Crosby Drive Tank. Assistance to Bedford that began in July continued through the month of August. Metro Operations staff deployed and staffed the Mobile Disinfection Unit (MDU) at several locations through the month of August. Staff also assisted with hydrant flow testing to determine actual flushing flow rates.
- Fells Covered Storage Facility: The chlorine residual in the Fells tank started dropping towards 1.0 mg/l in late August, and by early September, had dropped below 1.0 mg/l. The nitrate levels in the tank rose as the chlorine residual dropped. Cell 3 (10 million gallons) was isolated, drained, and received a chlorine boost. The water quality in Cell 3 returned to normal (good chlorine residual and low nitrate levels) once it was returned to service. Cell 3 was returned to service mid month, and then Cells 1 and 2 (5 million gallons each) were drained, disinfected, and then returned to service in early October. Water supply in the Fells service area remained normal throughout the operation.
- Waltham PRV Operation/WASM Isolation: Isolation of WASM 3 and 4 to allow work on the Hultman Rehabilitation Project valve replacements on River Road in Weston, required that several Pressure Reducing Valves (PRVs) be activated in the Waltham water system to replicate supply from the city's Cedarwood Pump Station and Meter 131 normally supplied from WASM 3. The PRV will remain in operation until a new valve is installed to replace an existing valve on WASM 3 at River Road (Expected mid- October). Service remains normal in the Waltham system, although one PRV requires pressure adjustments for week-day and week-end demand variations.
- Valve Program: Preventative maintenance (PM) tasks included Main Line Valve Exercising, PRV maintenance and fire flow bypass valve maintenance. The portable water fountain was deployed on several occasions. Specific project work included the replacement of a valve actuator at the Gillis Pump Station to allow for the eventual gravity operation of the Fells Covered Storage Facility, isolation and reactivation of the 8-inch Lynnfield pipeline for the CIP contractor; assistance to Woburn with the isolation of their Meter 230 so the city could replace their existing Pressure Reducing Valve, the MDU deployment in Bedford noted above (staffing the MDU, measuring chlorine residuals from hydrants, assisting town staff with flushing, and shuttling sodium hypochlorite to the various MDU deployment sites), and assisting Waltham Water Department Staff with the activation of the city's Lunda Street PRV for testing. Section 72 on Route 1 in Saugus was isolated mid September to allow for the Phase 7 Valve Replacement contractor to install a new valve on Kennedy Drive in Malden. The valves that needed to be operated were located on Route 1 which required extensive coordination with Mass DOT, and extensive traffic safety operations by MWRA staff (valve and pipeline staff). The work was safely performed on Route 1 and the isolation was successfully completed.
- Water Pipeline Program: Work on Deer Island was completed with the replacement of two fire hydrants and three valves. Seven blow-off retrofits were completed during the quarter. Several leaks were dealt with during the quarter. Section 70 on the Lynn Fells Parkway in Saugus had to be briefly isolated to plug a leak on July 2. A leak on Morton Street in Dorchester was plugged with the line live and in service. Section 56 on the General Edwards Bridge between Revere and Lynn was successfully repaired. A second leak had been identified on the run from the tower to the vertical riser shaft of the piping on the bridge. Disinfection and reactivation are planned for next quarter. A leak on Second Street in Everett on September 12 was first believed to be on the Everett water system but was finally determined to be on Section 8, a 42" cast iron MWRA water main. The leak was repaired with the line live and in service by installing a bell joint clamp on the leaking joint. A 4-inch gas main was discovered perpendicular to our pipe, and lying directly on top of it, and gas company has been directed to relocate it. Numerous vandalized and damaged cathodic protection test stations that span the length of Yirell Beach in Winthrop along Shirley Street on Section 98 were restored to their original condition and new security plates installed.
- Dig Safe Pilot Program: The Dig Safe Pilot Program continues to function successfully. Brookline, Chelsea and Saugus are included in the program that is related to MWRA water pipelines. During the first quarter, MWRA received 559 notices, of which 94 were of an emergency nature. Twenty-seven (27) emergency mark outs and 71 regular mark outs were required from the 559 total notices.
- Leak Detection: 84.91 miles of the Metropolitan water system piping was surveyed for leaks during the quarter. No leaks were found as a result of the survey work.

Wastewater Operations & Maintenance

- Marginal Street Oil Tank Fire: On July 23, 2012, Wastewater Operations staff worked with the Chelsea Fire Department and DEP during a fire in determining if any possible water/foam runoff from the site may have entered the sewer system. MWRA facilities downstream from this area's sewer infrastructure were notified and conditions monitored by staff. No hazardous impacts were experienced.
- Underground Storage Tank (UST) Class C Operator Training: Operations Staff participated in a EPA mandated UST Training. Staff were provided facility photographic overviews of the underground oil tank configurations, the emergency fuel pump shut-off locations and a review of response actions. Spill Prevention Control and Countermeasures (SPCC) Refresher Training: Operations completed the Biannual SPCC Refresher Training to provide staff with necessary information regarding oil spill or release detection and the related prevention and response. Annual Right-to-Know (RTK) Training: Staff completed RTK training on chemical classifications, labeling and related Material Safety Data Sheets (MSDS), and related personal safety protections as required by MA State and Federal regulations.
- NSTAR Electric Utility Repairs Impacting Prison Point: On two (2) separate occasions, Authority Operations & Maintenance Staff coordinated back-up power supply for Prison Point due to emergency repairs on NSTAR power lines outside the facility boundaries. This required staff, with NSTAR personnel, to install a portable electric generator and connections in order to maintain electricity supply to operate the facility.
- Spill Prevention Control and Countermeasures (SPCC) Inspections: Operations performed SPCC Inspections at Cottage Farm CSO, Prison Point CSO and Braintree Weymouth Pump Station. The DEP requires inspections to be performed monthly with records placed onsite.
- MWR010 Cleaning Project: Cleaning of the MWR010 outfall in preparation its future use by Brookline to convey storm water is substantially complete. Inspection indicates that it is structurally sound. The site has been fully restored to the satisfaction of MWRA and Boston University.

Toxics Reduction and Control

- Settlement Agreement between Environmental Compliance Corporation (ECC) and MWRA: TRAC and ECC entered into a Settlement Agreement, effective July 11, 2012 to resolve all issues related to the March 13, 2012 Penalty Assessment Notice (PAN). The PAN, for \$58,100 resulted from ECC's discharge of excessive levels of arsenic, antimony, vanadium, chloroform, copper, formaldehyde and Total Toxic Organics into the MWRA's sanitary sewer system after the September 28, 2010 compliance deadline. The Settlement Agreement requires ECC to pay a \$43,000.00 administrative penalty and pay stipulated penalties for a year. ECC returned to compliance with its permit.
- G1 Penalties: On July 17, 2012, TRAC issued 4 Penalty Assessment Notices (PANs), totaling \$2,825 to companies that failed to submit the annual Compliance Report or annual silver sample result as required by the Group Permit for Photo Processing and Printing Operations by April 2, 2012. The penalty amounts ranged from \$275 to \$1,000.
- Permitting: On August 16, 2012, TRAC renewed 106 Group Permits for Photo-Developers and Printers, and 9 Combined Permits, which cover operations from low-flow/low-pollutant facilities that also have photo developing and/or printing operations for five years. In 2007 there were 318 of these type permits. This type of operation has seen a steep decline with the increase in digital photography and x-rays.

Metro Equipment and Facility Maintenance

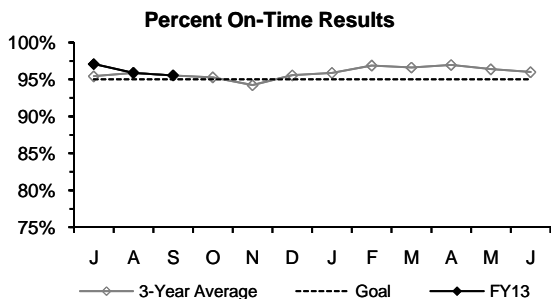
- Ward Street Channel #2: As part of the Equipment Maintenance Channel Rebuild Program, Ward Street Headworks Channel #2 was rebuilt, including the removal and replacement of channel flights, chain, wear strips, sprockets and bearings by Mechanical and Welding staff.
- Chelsea Headworks: Mechanical staff installed new grit screws and bearings in Channel#2 to replace ones which were worn and beyond their useful life. Odor Control Intake Fan Motor #, which is located on the roof, experienced a bearing failure. Replacement by Mechanical, HVAC and Electrical Staff required a crane rental.
- Nut Island: The #2 Screening Conveyor was rebuilt with new drums, shafts, rollers and bearings. The #3 grit belt, which was worn and coming apart at a seam was replaced along with new bearings, repaired shafts, drums, and rollers. Classifier #6 Screw and Trough were worn and beyond useful life, and the trough had developed a hole because of wear. MWRA Machinist and Welder rebuilt the existing trough, and installed a new screw.
- Columbus Park/Chelsea Headworks: Operations Staff recorded ultra sonic thickness readings of grit pipe in both facilities. MWRA Plumbers replaced all piping which did not meet minimum thickness requirements.

Operations Support

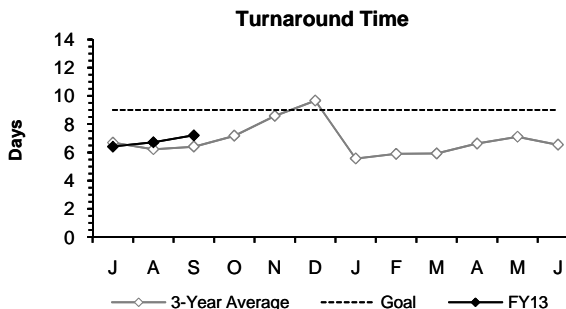
- Review of Metering Wastewater Benefit/Cost Analyses: Staff have begun reviewing where updating may be necessary for community flow formulas to reflect changed local system conditions. The issue was presented initially at the September Advisory Board meeting. Further Advisory Board Operations Committee Meetings are planned to allow input before implementation.
- Online Water Quality Monitoring: Twelve of the distribution water quality monitoring analyzer units have been installed and made operational via SCADA through the 1st Quarter and several more are in progress. Central data collection equipment and its associated server installation are operational. Verizon connections now being available for 7 of the 11 sites. Response SOPs are being developed for alarm response. Planned startup of alarm monitoring is late 2012 to allow for establishing enough performance data for alarm setting.

Laboratory Services

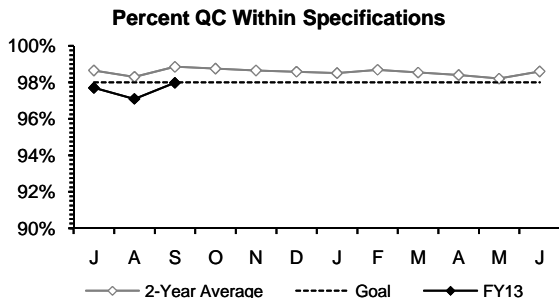
1st Quarter - FY13



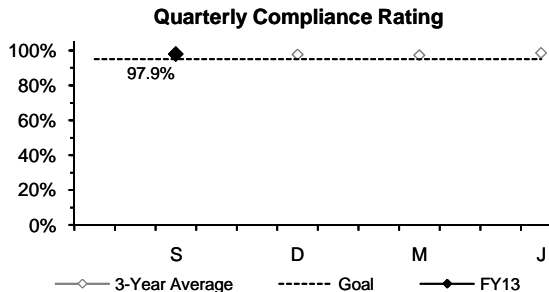
The Percent On-Time measurement exceeded the 95% goal each month this quarter.



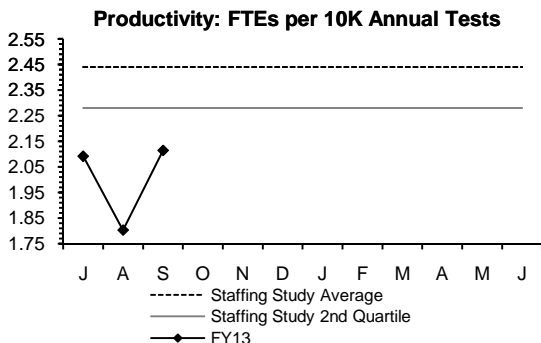
Turnaround Time was faster than the 9-day goal each month this quarter.



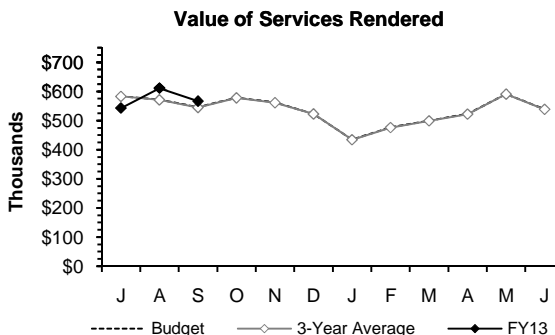
Percent of QC tests meeting specifications was below the 98% goal two months of the quarter due to difficult fish tissue tests.



An audit of SOPs found good compliance with requirements. Compliance audits are performed in September, December, March, and June.



This new productivity metric is based on the recent Staffing Study. Lower values indicate higher productivity because fewer Full Time Equivalents are needed to perform the same number of tests.



Value of Services Rendered was above the seasonally adjusted budget projection two months of the quarter.

Highlights: The on-site construction work to replace six chemical fume hoods used to prepare samples for metals testing at the Central Lab was completed in July. 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.

Productivity: A new productivity metric has been added to the Laboratory Services page. Based on the recent Staffing Study the metric of Full Time Equivalents needed to perform 10,000 annual tests shows that MWRA is more productive than over half of the comparable agencies. In this metric lower values indicate higher productivity because fewer FTEs are needed to perform the same number of tests. So far in FY13 we have been more productive than the second quartile level.

Quality Assurance: The final audit report from DEP on the May Central Lab audit acknowledged that the several minor items identified in the audit had been adequately addressed.

Clinton: Beginning in September all quality control test results are being entered into LIMS. This allows the results to be automatically checked against quality control goals and to observe trends over time.

ENQUAD: Completed testing of special Boston Harbor and Mass Bay nutrients samples collected for Red Tide investigations. Tested background mussel samples and flounder samples for Harbor and Outfall Monitoring (HOM).

TRAC: Tested rush samples from a pump station.

Wastewater Operations: Performed rush testing for Brookline Conduit project.

Water Quality Assurance: Performed extra bacteria testing to assist Bedford. Tested special nitrification samples for Canton and complaint samples from Revere, Waltham, Weston, and Winthrop. Tested special school lead and copper samples for Revere. The use of Colilert for testing Total Coliform Rule samples began in January. For the first nine months there were no E. coli positive and only 277 Total Coliform positive sample out of 19,061 samples. Many of the positive samples were from Bedford.

Outside Customers: Beach testing continued for the DCR Boston Harbor, Revere and Winthrop beaches and has now ended for the season.

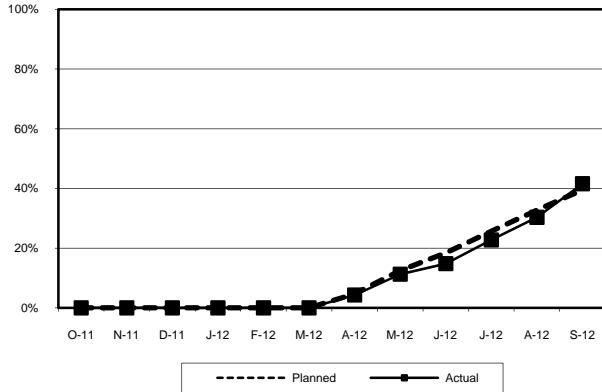
CONSTRUCTION PROGRAMS

Projects In Construction

1ST Quarter- FY13

(Progress Percentages based on Construction Expenditures)

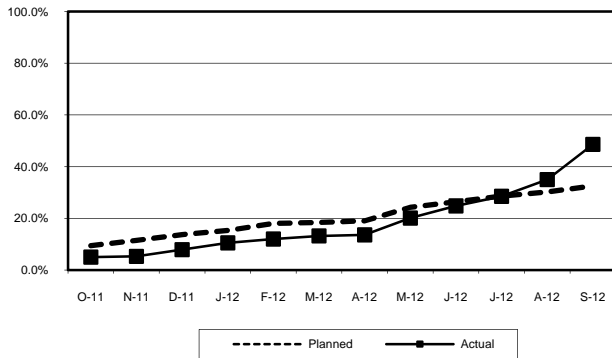
Hultman Aqueduct Interconnection CP-6B
Progress – September 2012



Project Summary: This project includes the replacement and rehabilitation of valves and piping in the Shaft 4 Headhouse, adjoining aqueduct chamber and the sections of the Hultman Aqueduct located in Marlborough and Southborough.

Status and Issues: As of September, the Contractor began the fit up and welding of the closure piece at Sta 70+02, installed a valve at the Hosmer Pump Station and continued the selective demolition of large diameter valves and the replacement of small diameter piping and valves.

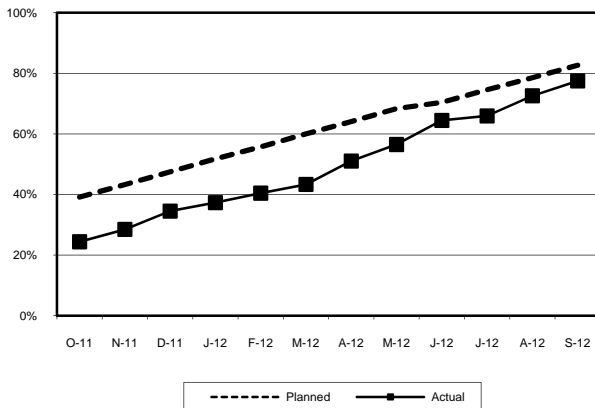
UV Disinfection Facilities CWTP
Progress – September 2012



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 completed the installation of the embedded conduits and placed concrete topping slab for the electrical building on the A side and also continued with installing conduits inside the topping slab of the UV room, B side. Completed the placement of all internal baffle wall concrete. Continued with rebar, formwork and concrete for B side roof slab. Set bridge crane on A side.

Lynnfield/Saugus Pipelines
Progress - September 2012



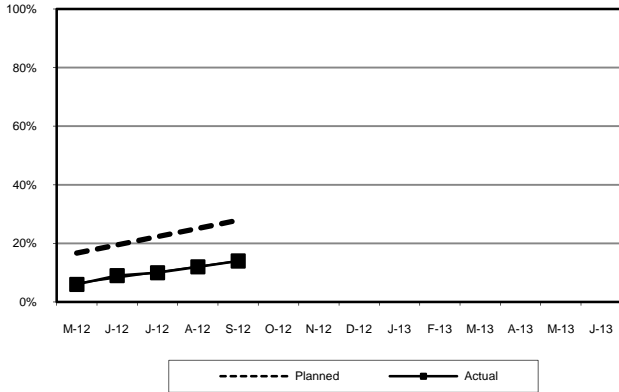
Project Summary: Installation of MWRA water mains including 1,800 linear feet of 36-inch pipe and 4,700 feet of 24-inch pipe. Project also includes 6,000 linear feet of 12-inch pipeline for the Town of Saugus. Pipeline construction is located along Route 1 in Saugus.

Status and Issues: Through September, the Contractor installed 495.25 LF of 12-inch and 941.50 LF of 36-inch water main on Route 1 Northbound and completed the tie in of the new 12-inch main into the existing main at Spring Street and Ila Road. Also, they installed 3 new service connections on Route 1 Southbound.

Projects In Construction 1ST Quarter- FY13

(Progress Percentages based on Construction Expenditures)

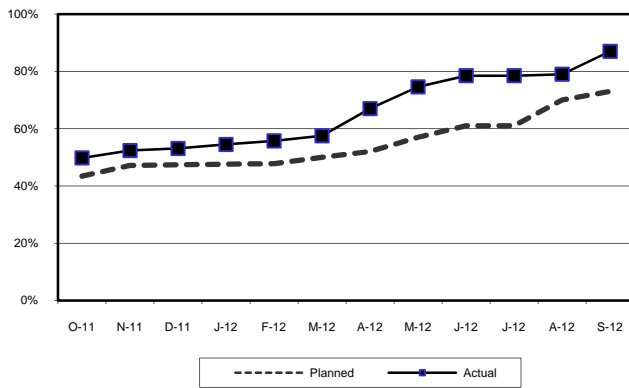
Spot Pond Water Storage Facility
Progress – September 2012



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: During September, the Contractor completed the Phase 3 excavation to elevation 180, and began the Phase 4 excavation to elevation 160. In addition, they conducted test blasting, after which daily blasting at 10 am and at 2 pm began.

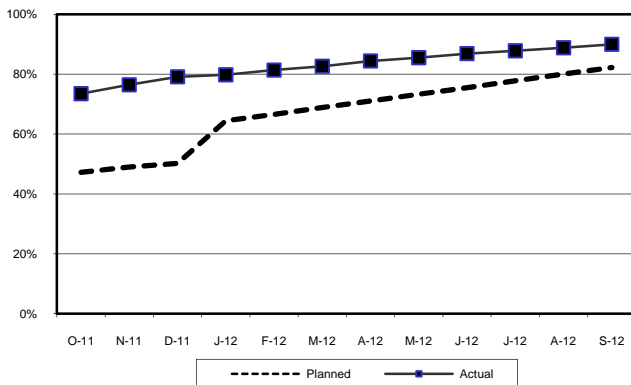
Phase 7 Valve Replacement
Progress – September 2012



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: During September, the Contractor excavated and removed the 36-inch water line at Kennedy Drive, Malden and set two lengths of 36-inch water main. In addition, they formed, erected steel and placed concrete for the thrust block.

Hultman Aqueduct Interconnections Project
Progress - September 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: As of September, the Contractor poured a protective concrete slab over the waterproofing membrane on the roof of VC-5A-2 and replaced the MWWST valve actuators at VC-5A-1. In addition, the trench over valve W-5 at Loring Road and the temporary by-pass road on River Road were paved. Contractor prepared for River Rd. work to start on October 1st.

CSO CONTROL PROGRAM

1st Quarter - FY13

The City of Cambridge issued notice to proceed with construction of the first of its three remaining CAM004 (Alewife Brook) sewer separation contracts effective September 29, 2012, in compliance with Schedule Seven. 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. In March 2012, MWRA 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 work to complete the CSO plan is described below.

Project	Court Milestones in Schedule Seven (Shaded milestones are complete.)			Status as of September 30, 2012															
	Commence Design	Commence Construction	Complete Construction																
Brookline Sewer Separation	Nov 06	Nov 08	Jul 13	<p>The \$26.0 million 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 Phase 1</u> Brookline attained substantial completion of its \$1.4 million first construction contract in January 2010. The contract involved the installation of 5,658 linear feet of new storm drain.</p> <p><u>Town of Brookline Sewer Separation Phase 2</u> The \$16.6 million second construction contract, which Brookline commenced in January 2011, is approximately 80% complete. 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. Brookline expects the sewer separation work to be complete by February 2013, ahead of the July 2013 milestone in Schedule Seven. Surface restoration activities will continue into the spring of 2013.</p> <p><u>MWRA Outfall MWR010 Cleaning Contract</u> MWRA issued the Certificate of Substantial Completion effective August 31, 2012.</p>															
Reserved Channel Sewer Separation	Jul 06	May 09	Dec 15	<p>BWSC continues to make construction progress with five of nine planned contracts for the \$64.3 million Reserved Channel Sewer Separation project.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Contract 1 - CSO outfall rehab</td> <td style="width: 10%;">\$ 4.2M</td> <td style="width: 20%;">Complete</td> </tr> <tr> <td>Contract 2 – sewer separation</td> <td>\$ 7.0M</td> <td>Complete</td> </tr> <tr> <td>Contract 3A – sewer separation</td> <td>\$10.8M</td> <td>95% complete</td> </tr> <tr> <td>Contract 3B – sewer separation</td> <td>\$10.9M</td> <td>50% complete</td> </tr> <tr> <td>Contract 7 – pavement restoration</td> <td>\$ 1.2M</td> <td>Complete</td> </tr> </table> <p>BWSC issued Notice to Proceed with the \$6.8 million Contract 8 (pavement restoration 2) on October 1, 2012. Contract 8 includes roadway resurfacing associated with sewer separation contracts 3A, 3B and 4. BWSC also issued Notice to Proceed with its \$9.1 million Contract 4 on October 1, 2012. Contract 4 is the last of the major Reserved Channel sewer separation contracts and includes two areas of South Boston totaling 182 acres tributary to outfalls BOS076, BOS078 and BOS079. In the meantime, BWSC continues with the design of the remaining contracts – Contract 5 (existing sewer cleaning and lining) and Contract 6 (downspout disconnections), both of which BWSC plans to award in 2013. BWSC plans to complete all work for the Reserved Channel sewer separation project by December 2015, in compliance with Schedule Seven.</p>	Contract 1 - CSO outfall rehab	\$ 4.2M	Complete	Contract 2 – sewer separation	\$ 7.0M	Complete	Contract 3A – sewer separation	\$10.8M	95% complete	Contract 3B – sewer separation	\$10.9M	50% complete	Contract 7 – pavement restoration	\$ 1.2M	Complete
Contract 1 - CSO outfall rehab	\$ 4.2M	Complete																	
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Project		Court Milestones in Schedule Seven (Shaded milestones are complete.)			Status as of September 30, 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 \$16.8 million CAM004 stormwater outfall and wetland basin (\$3.9 million MWRA share), which Cambridge commenced in April 2011. The contract is more than 75% complete. Cambridge has completed all major excavation and forming of the main basin, the forebay area and the ‘Oxbow,’ a meandering channel off the Little River that is intended to provide spawning habitat for migratory fish. Cambridge has also completed the installation of wetland vegetation and continues to construct pedestrian boardwalks and overlooks. Cambridge has also completed the inlet structure to the forebay and installed and connected the storm drain box culvert to this structure, thereby tying together the storm drain box conduit and wetland basin components of the project. Progress also continues with construction of the remaining sections of the storm drain box conduit that will convey the stormwater to be separated from Cambridge’s combined sewer system (CAM004 Sewer Separation) to the basin. Cambridge expects to complete the outfall and wetland basin by 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 project. Cambridge issued NTP for Contract 8A effective September 29, 2012, in compliance with Schedule Seven. Cambridge is also making progress with the design of Contract 8B, which it commenced in May 2012, and with the field investigations that will support the design of Contract 9 scheduled to commence in 2013. MWRA’s FY13 CIP includes \$35 million for this project.
			Sep 12		
	MWR003 Gate and Rindge Ave. Siphon	Apr 12	Aug 14	Oct 15	MWRA’s consultant for design services (Contract 6952; NTP March 2012) has completed the field investigations and the updating and recalibration of MWRA’s hydraulic model. MWRA received the draft preliminary design report for the SOM01A project on September 10, and a preliminary design workshop was held on September 27. The consultant has commenced preliminary design evaluations for the MWR003/Rindge Avenue project. Staff have coordinated with DCR and the Cambridge Conservation Commission as needed. MWRA’s FY13 CIP includes \$4.1 million for this project.
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		As reported last quarter, BWSC continues to investigate the causes of localized system flooding during extreme storms following the completion of the South Dorchester Bay sewer separation project and closing of the related CSO regulators in 2007. With ongoing flow monitoring and field investigations, BWSC has detected numerous locations of remaining stormwater inflow into sanitary sewers, mostly catch basin laterals. BWSC is sealing lateral connections that can be eliminated, and is planning to advertise a construction contract this fall for the removal of other connections that require excavation. BWSC plans to issue an interim report on the results of the investigations in November 2012 and a final report with recommendations by March 2013. MWRA’s FY13 CIP includes \$5.3 million for these investigations and related construction work.

CIP Expenditures First Quarter FY13

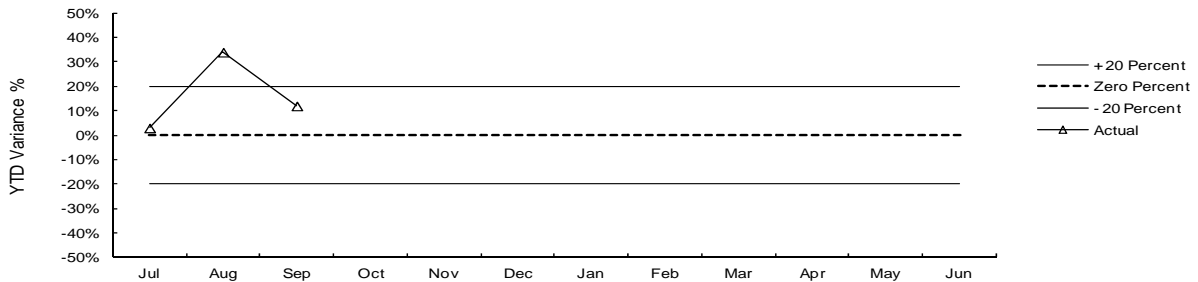
The Year-To-Date variances are highlighted below:

FY13 Capital Improvement Program Expenditure Variances through September by Program (\$000)				
Program	FY13 Budget Through September	FY13 Actual Through September	Variance Amount	Variance Percent
Wastewater	14,954	24,553	9,599	64%
Waterworks	22,607	19,176	(3,431)	-15%
Business and Operations Support	1,919	664	(1,255)	-65%
Total	\$39,480	\$44,393	\$4,913	12%

Overspending within Wastewater is primarily due to greater than anticipated requests for community grants and loans for the I/I program and progress for Clinton Aeration Efficiency work. This was partially offset by timing of payment for Cambridge Sewer Separation, North Main Pump Station Variable Frequency Drives Construction and Melrose Sewer reimbursement. Underspending in Waterworks is due to: timing of community requests for loans and repayments, delay in start of excavation for the Spot Pond Storage Facility Design/Build contract, timing of work for the Lower Hultman Rehabilitation CP-6A, and differing site conditions for the Lynnfield/Saugus Pipeline Rehabilitation Construction 2 contract. This was partially offset by greater than anticipated contractor progress for the Carroll Plant Ultraviolet Disinfection and Upper Hultman Rehabilitation (CP-6B) contracts.

CIP Expenditure Variance

Total FY13 CIP Budget of \$164,912,000.



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 9/29/2012	\$192 million
Unused capacity under the debt cap:	\$604 million
Estimated date for exhausting construction fund without new borrowing:	May-13
Estimated date for debt cap increase to support new borrowing:	FY2020
Commercial paper outstanding:	\$144 million
Commercial paper capacity:	\$350 million
Budgeted FY13 capital spending*:	\$135 million

* Cash based spending is discounted for construction retainage.

DRINKING WATER QUALITY AND SUPPLY

Source Water – Microbial Results

1st Quarter – FY13

Background

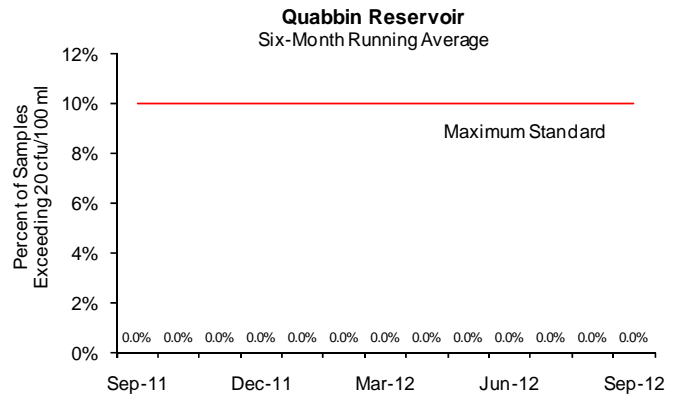
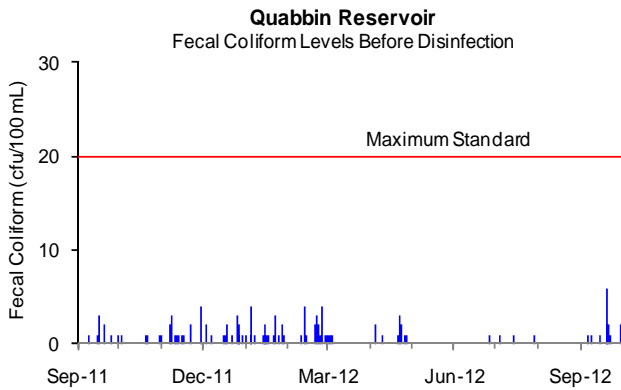
Total coliform bacteria are monitored in both source and treated water to provide an indication of overall bacteriological activity. Most coliforms are harmless. However, fecal coliform, a subclass of the coliform group, are identified by their growth at temperatures comparable to those in the intestinal 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 1st 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.



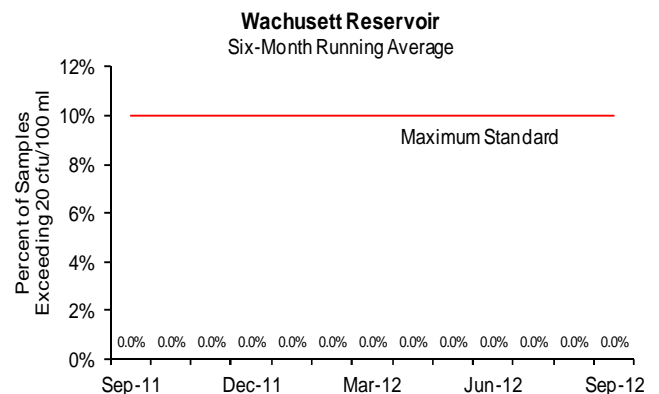
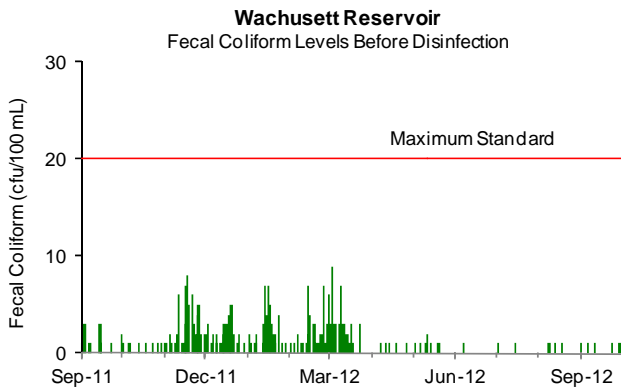
Sample Site: Wachusett Reservoir

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 1st 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

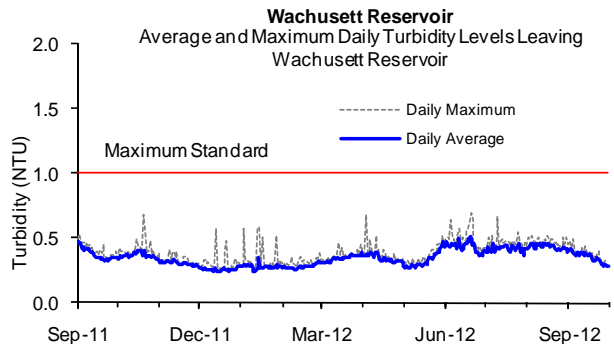
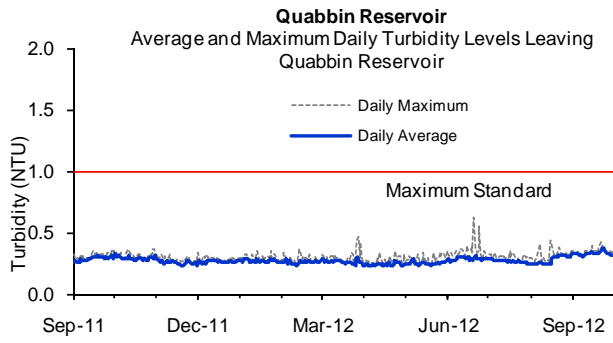
1st Quarter – FY13

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.

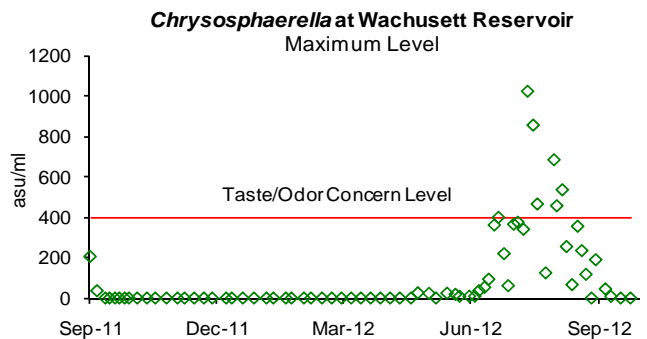
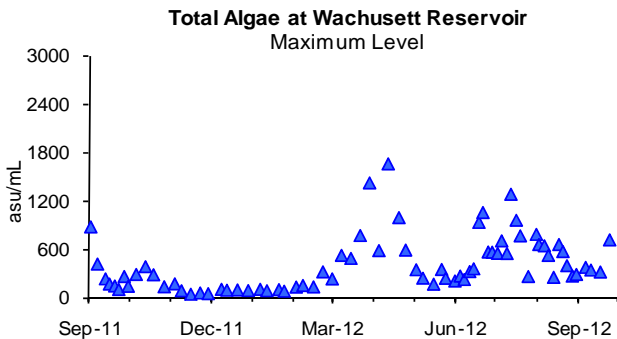


Source Water – Algae

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 algicide. 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 1st Quarter, there were no complaints related to algae reported from local water departments. Wachusett Reservoir was treated with copper sulfate three times on July 6, 16, and 25 to control the growth of *Chrysothrix*, a taste and odor causing algae species.



Treated Water – Disinfection Effectiveness

1st Quarter – FY13

Background

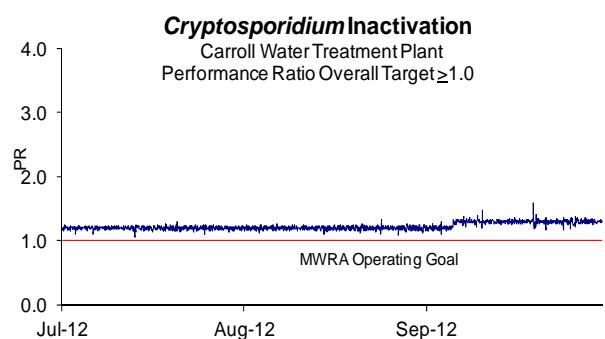
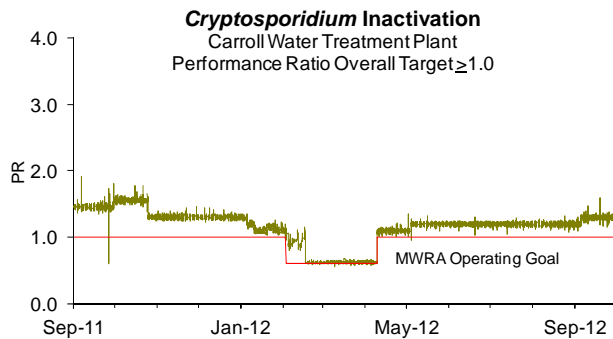
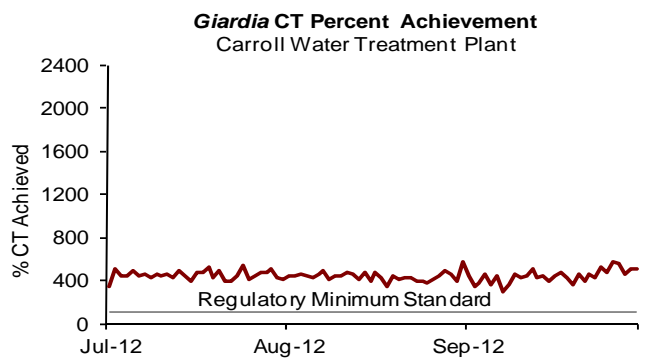
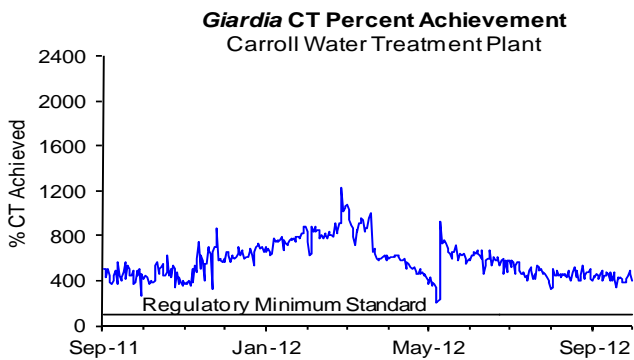
At the Carroll Water Treatment Plant (CWTP), MWRA reports on both regulatory required 99.9% inactivation for *Giardia* (reported as "CT"), and its voluntary operating goal of 99% inactivation for *Cryptosporidium*. MWRA calculates hourly CT inactivation rates and reports daily CT inactivation rates at 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:

*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.

*MWRA's operating goal to meet a *Cryptosporidium* PR of 1 was met for every hour in the quarter.

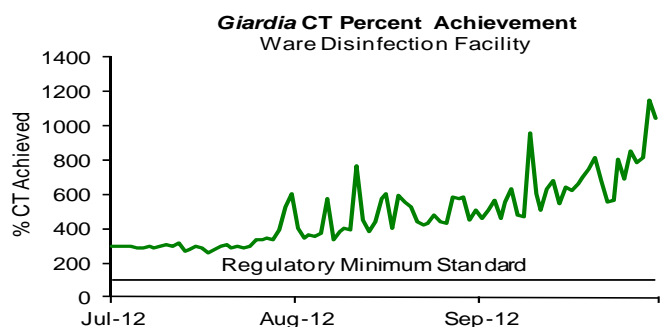
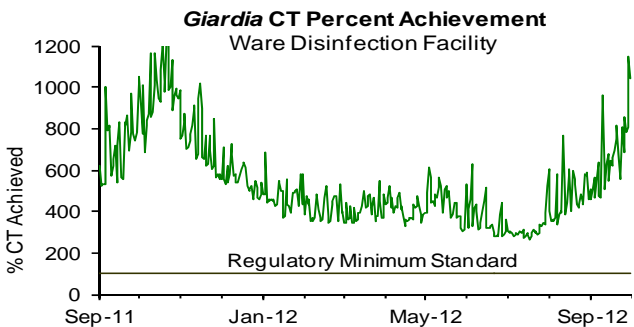
*Ozone dose at the CWTP varied between 1.5 to 2.8 mg/L for the quarter.



Note: Performance Ratio Overall Target for *Cryptosporidium* inactivation was raised from ≥ 0.6 to ≥ 1.0 on April 9, 2012.

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 1.5 mg/L to 1.6 mg/L for the quarter.

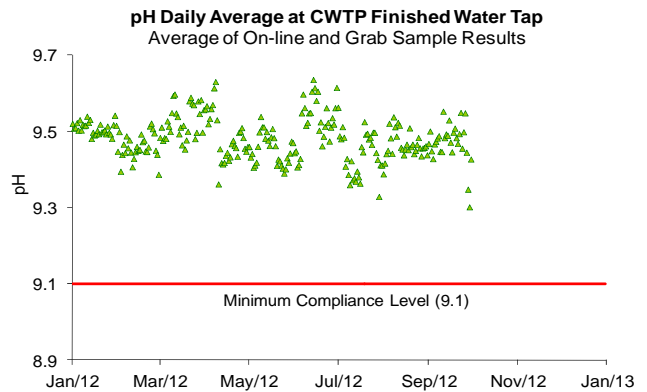
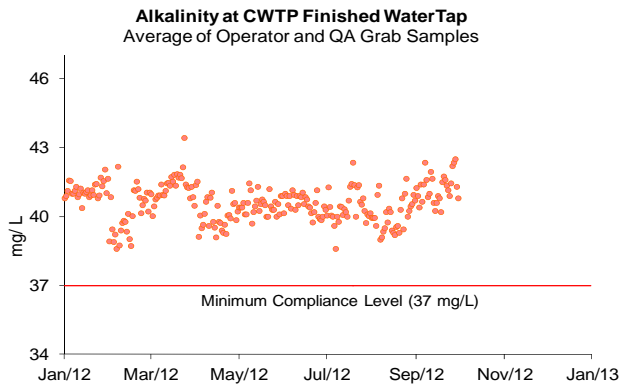


Treated Water – pH and Alkalinity Compliance

1st Quarter – FY13

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 September 5 and 6, 2012. Distribution system sample pH ranged from 9.4 to 9.5. The alkalinity did not fluctuate and was 40 mg/L. No sample results were below DEP limits for this quarter.



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

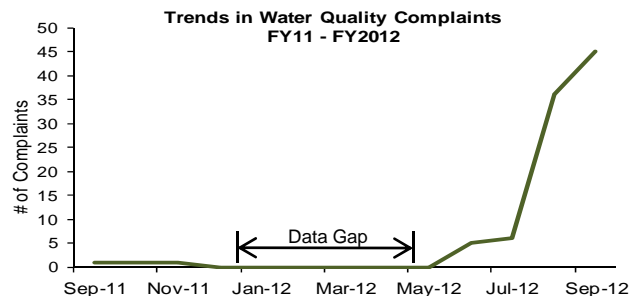
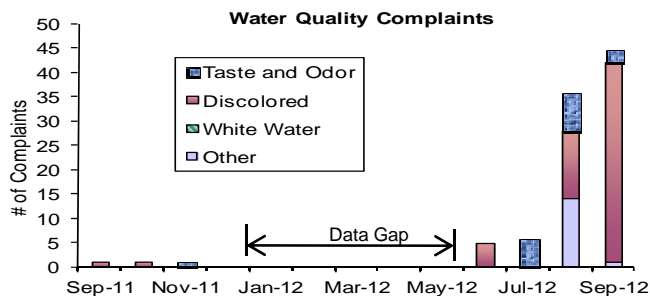
Background

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 86 complaints during the quarter compared to 4 complaints for the 1st Quarter of FY13. Of these complaints, 54 were for "discolored water", 17 were for "taste and odor" and 15 were for "discolored water". On 9/12, twenty discolored water complaints were reported from Malden due to hydrant flow tests being performed. Area residents were informed of the tests and were instructed to wait a few hours for the water to clear up. From 9/17 thru 9/27, Waltham received ten discolored water complaints due to MWRA valve activations or local hydrant flow tests.



Bacteria & Chlorine Residual Results for Communities in MWRA Testing Program

1st Quarter – FY13

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 1st Quarter, two hundred and sixty-one of the 6,244 community samples (4.2% system-wide) submitted to MWRA labs for analysis tested positive for coliform (Bedford, Hanscom AFB, Newton, Somerville, South Hadley FD – in July; Bedford, Boston, Framingham, Hanscom AFB, Needham, Waltham, Wellesley, Westboro SH – in August; Bedford, Boston, Hanscom AFB, Waltham, Westboro SH – in September). Of the 1,957 (0.02%) MWRA samples taken, four tested positive for total coliform. No sample tested positive for *E.coli*. Several communities had local water quality issues and failed the TCR. South Hadley violated the TCR in July. Bedford and Hanscom AFB violated the TCR in July, August and September. Waltham and Westboro SH violated the TCR in August and September. All 42 systems that submitted chlorine residual data maintained an average disinfectant residual of at least 0.2 mg/L. Only 10.7% 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	174	0 (0%)	0.0%		0.01	0.94
BEDFORD	336	200 (59.5%)	0.0%	Yes	0.01	0.31
BELMONT	104	0 (0%)	0.0%		0.04	1.15
BOSTON	788	2 (0.3%)	0.0%	No	0.13	1.91
BROOKLINE	221	0 (0%)	0.0%		0.12	1.92
CHELSEA	170	0 (0%)	0.0%		0.93	1.73
DEER ISLAND	63	0 (0%)	0.0%		0.90	1.82
EVERETT	130	0 (0%)	0.0%		0.84	1.05
FRAMINGHAM	219	1 (0.5%)	0.0%	No	0.21	1.60
HANSCOM AFB (b)	63	19 (30.16%)	0.0%	Yes	0.01	0.56
LEXINGTON	116	0 (0%)	0.0%		0.46	1.69
LYNNFIELD	18	0 (0%)	0.0%		0.25	0.99
MALDEN	215	0 (0%)	0.0%		0.10	1.50
MARBLEHEAD	72	0 (0%)	0.0%		0.17	1.49
MARLBOROUGH (b)	126	0 (0%)	0.0%		0.17	1.96
MEDFORD	221	0 (0%)	0.0%		0.39	1.65
MELROSE	117	0 (0%)	0.0%		0.01	0.65
MILTON	96	0 (0%)	0.0%		0.48	1.52
NAHANT	30	0 (0%)	0.0%		0.08	1.20
NEEDHAM (b)	129	2 (1.6%)	0.0%	No	0.01	0.94
NEWTON	280	1 (0.4%)	0.0%	No	0.02	1.51
NORTHBOROUGH	48	0 (0%)	0.0%		0.01	1.11
NORWOOD	108	0 (0%)	0.0%		0.05	0.87
QUINCY	299	0 (0%)	0.0%		0.05	1.19
READING	126	0 (0%)	0.0%		0.02	1.07
REVERE	195	0 (0%)	0.0%		0.99	1.64
SAUGUS	103	0 (0%)	0.0%		0.41	1.35
SOMERVILLE	292	2 (0.7%)	0.0%	No	0.75	1.60
SOUTH HADLEY FD1 (c)	56	5 (8.9%)	0.0%	Yes	0.10	0.65
SOUTHBOROUGH	30	0 (0%)	0.0%		0.10	1.51
STONEHAM	91	0 (0%)	0.0%		0.57	1.80
SWAMPSCOTT	52	0 (0%)	0.0%		0.02	1.02
WAKEFIELD (b)	143	0 (0%)	0.0%		0.20	1.00
WALTHAM	275	22 (8.0%)	0.0%	Yes	0.17	1.79
WATERTOWN	130	0 (0%)	0.0%		0.25	1.64
WELLESLEY (b)	114	2 (1.8%)	0.0%	No	0.02	0.72
WESTBORO HOSPITAL	27	5 (18.5%)	0.0%	Yes	0.02	0.25
WESTON	48	0 (0%)	0.0%		0.12	1.90
WILMINGTON (b)	87	0 (0%)	0.0%		0.10	1.43
WINCHESTER (b)	65	0 (0%)	0.0%		0.27	1.44
WINTHROP	72	0 (0%)	0.0%		0.25	1.10
WOBBURN (b)	195	0 (0%)	0.0%		0.01	1.05
Total:	6244	261 (4.2%)				
MASS. WATER RESOURCES AUTHORITY (d,e)	1957	4 (0.2%)	0.0%	No	0.01	1.75

(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

1st Quarter – FY13

Background

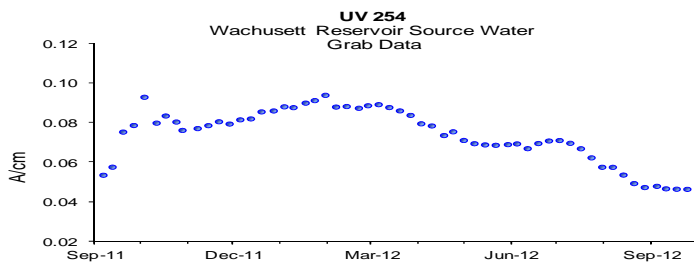
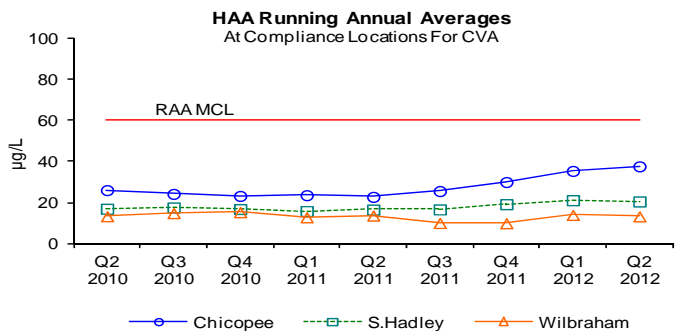
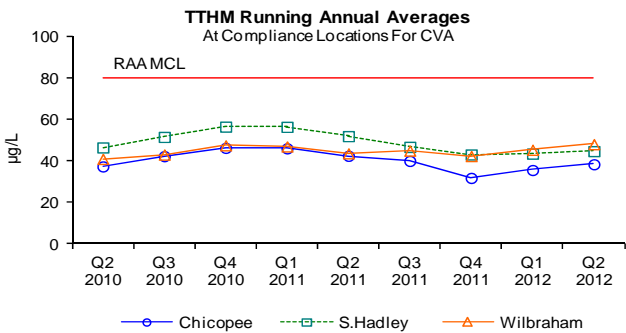
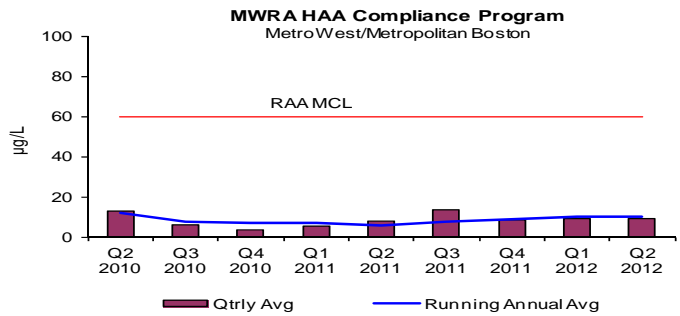
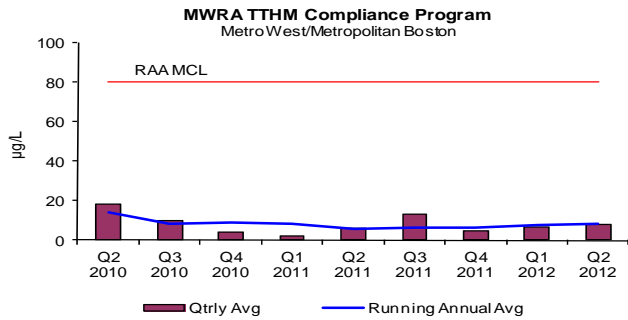
Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s) are by-products of disinfection treatment with chlorine. TTHMs and HAA5s are of concern due to their potential adverse health effects at high levels. EPA's running annual average (RAA) standard is 80 µg/L for TTHMs and 60 µg/L for HAA5s. Effective Q2 2013, under the Stage 2 DBPR compliance will be based on a LOCATIONAL running annual average, rather than an overall average. MWRA initiated monitoring under this new Stage 2 rule May 2012. Sampling locations have increased from 16 to 32 each quarter. Until May 2013, MWRA will continue to report an overall quarterly and running annual average. After May 2013, LRAA's will be reported for each site. 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. Absorbance levels dropped over the summer months due to numerous Quabbin transfers. 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 = 7.4 ug/L; HAA5s = 8.7 ug/L. CVA's DBP levels continue to be below current standards. UV-254 levels are currently around 0.05 A/cm. The current RAA for Bromate = 0.0 ug/L.



Water Supply and Source Water Management

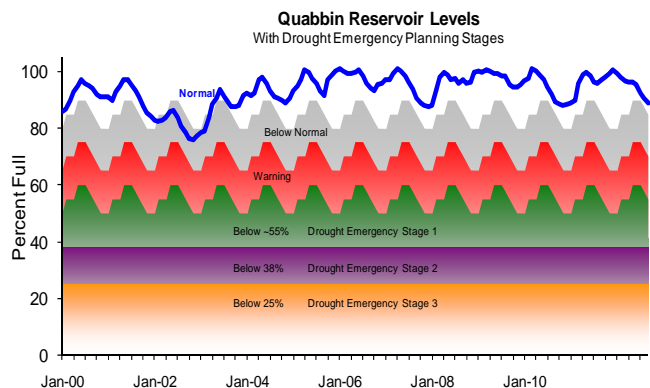
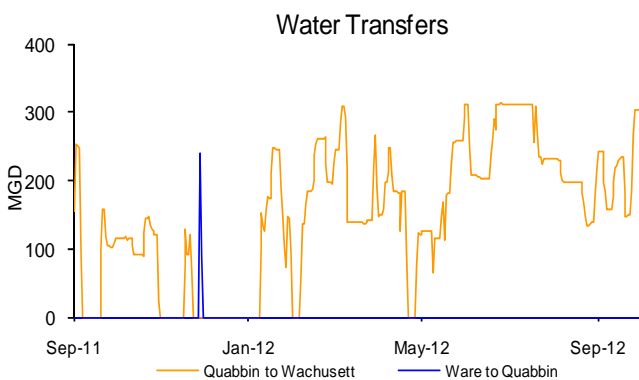
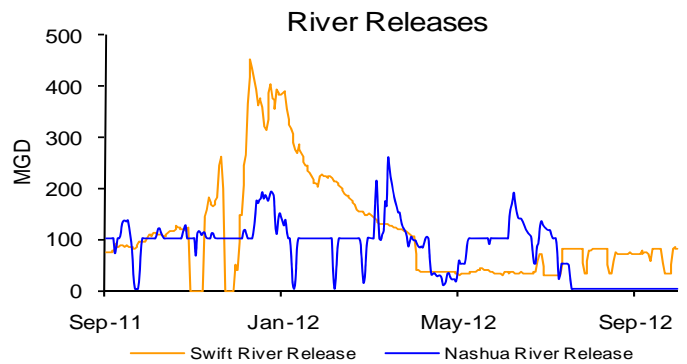
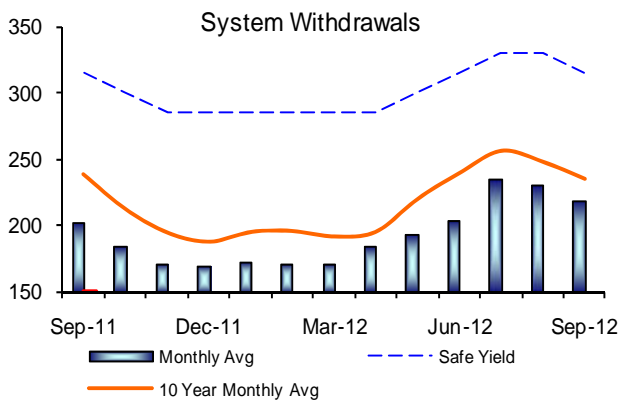
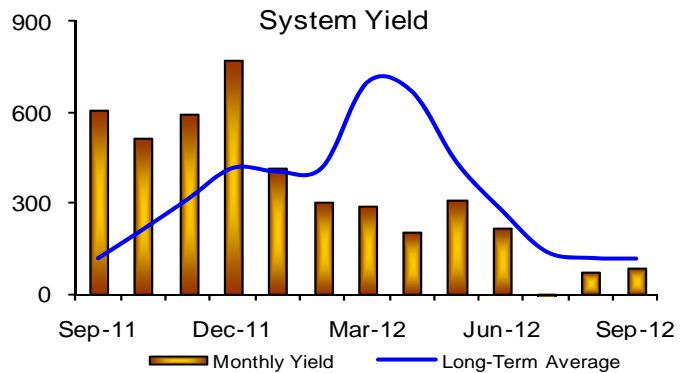
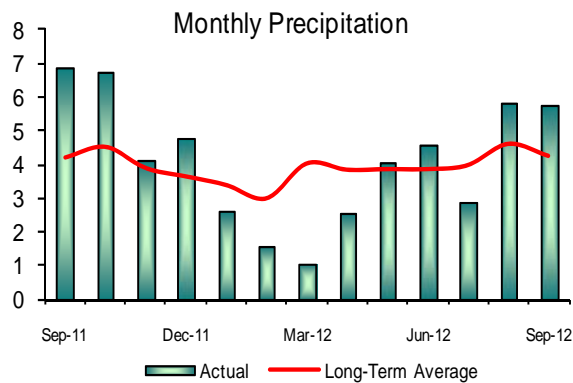
1st Quarter – FY13

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 Reservoir level remains within the normal operating range for this period of the year. The reservoir was at 89.0% of capacity as of September 30, 2012; a 6.1% decrease for the quarter, which represents a decrease of 24.9 billion gallons of storage. Yield for the quarter was below its long term averages. Monthly withdrawals continue to be below the long-term average.



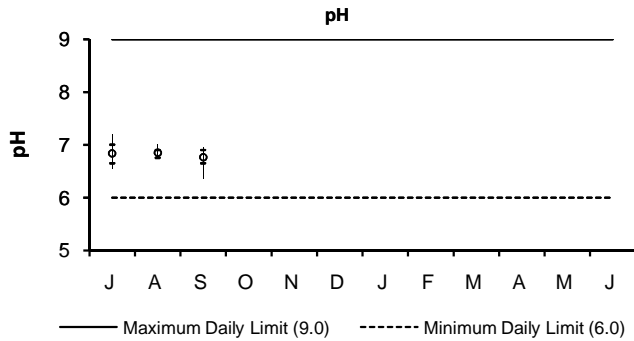
WASTEWATER QUALITY

NPDES Permit Compliance: Deer Island Treatment Plant
1st Quarter - FY13

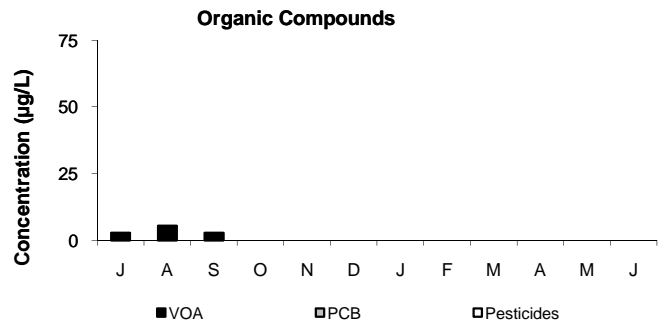
NPDES Permit Limits

Effluent Characteristics		Units	Limits	July	August	September	1st Quarter Violations	FY13 YTD Violations
Dry Day Flow:		mgd	436	303.5	298.5	292.1	0	0
cBOD:	Monthly Average	mg/L	25	5.1	3.8	4.1	0	0
	Weekly Average	mg/L	40	6.9	4.4	4.9	0	0
TSS:	Monthly Average	mg/L	30	7.1	7.7	6.0	0	0
	Weekly Average	mg/L	45	8.9	8.0	8.9	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	14	25	69	0	0
	Weekly Geometric Mean	col/100mL	14000	7	9	9	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	6.6-7.2	6.8-7.0	6.4-7.0	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	50	25	12.5	0	0
	Inland Silverside	%	1.5	25	100	50	0	0

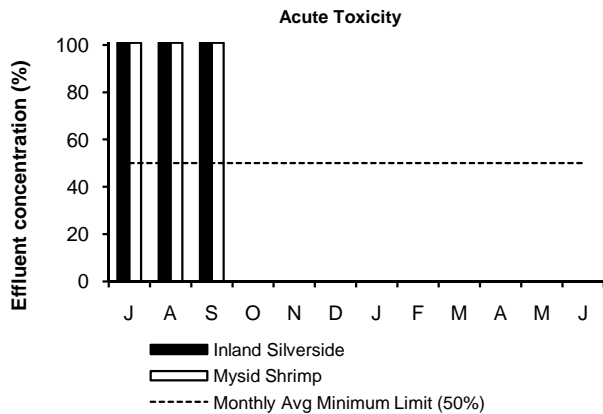
There have been no permit violations in FY13 at the Deer Island Treatment Plant.



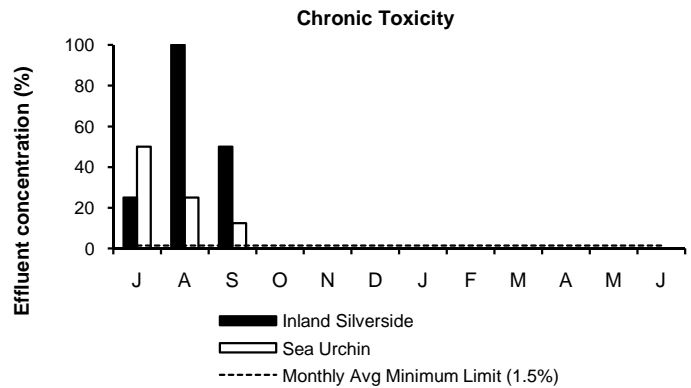
pH is a measure of the alkalinity or acidity of the effluent. Fluctuations in pH do not have an adverse effect on marine environments. Because of the pure oxygen used in the activated sludge reactor, the effluent pH tends to be at the lower pH range. pH measurements for the 1st Quarter were within the daily permit limits.



An important wastewater component to be monitored in the effluent is organic compounds, including volatile organic acids, pesticides, and polychlorinated biphenyls. The secondary treatment process has significantly reduced organic compounds 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 1st 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 1st Quarter for both the inland silverside and sea urchin.

NPDES Permit Compliance: Clinton Wastewater Treatment Plant
1st Quarter - FY13

NPDES Permit Limits

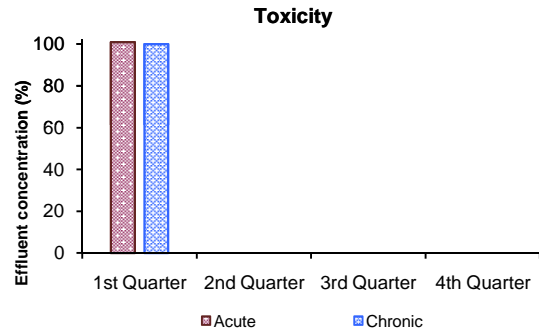
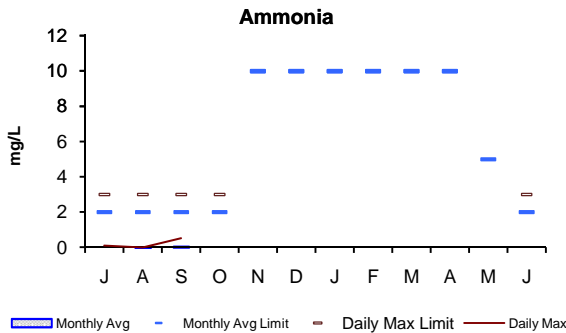
Effluent Characteristics	Units	Limits	July	August	September	1st Quarter Violations	FY13 YTD Violations
Flow:	mgd	3.01	3.22	3.16	2.97	2	2
BOD:	Monthly Average:	mg/L	20	2.7	2.2	0	0
	Weekly Average:	mg/L	20	3.1	2.4	0	0
TSS:	Monthly Average:	mg/L	20	2.8	1.7	0	0
	Weekly Average:	mg/L	20	3.3	2.5	0	0
pH:	SU	6.5-8.3	6.9-7.6	6.6-7.6	6.9-7.5	0	0
Dissolved Oxygen:	Daily Minimum:	mg/L	6	7.1	6.8	0	0
Fecal Coliform:	Daily Geometric Mean:	col/100mL	400	17	10	0	0
	Monthly Geometric Mean:	col/100mL	200	4	5	0	0
TCR:	Monthly Average:	ug/L	50	0	0.7	0	0
	Daily Maximum:	ug/L	50	0	6.7	0	0
Total Ammonia Nitrogen: May 1 - May 31							
	Monthly Average:	mg/L	10.0	0.01	0.00	0	0
	Daily Maximum:	mg/L	35.2	0.10	0.00	0	0
Copper:	Monthly Average:	ug/L	20	5.8	6.0	0	0
Phosphorus: May 1 - Oct 31							
	Monthly Average:	mg/L	1.0	0.53	0.18	0	0
Acute Toxicity:	Daily Minimum:	%	100	*N/A	*N/A	0	0
Chronic Toxicity:	Daily Minimum:	%	62.5	*N/A	*N/A	0	0

There have been two permit violations in FY13 at the Clinton Treatment Plant.

1st Quarter:

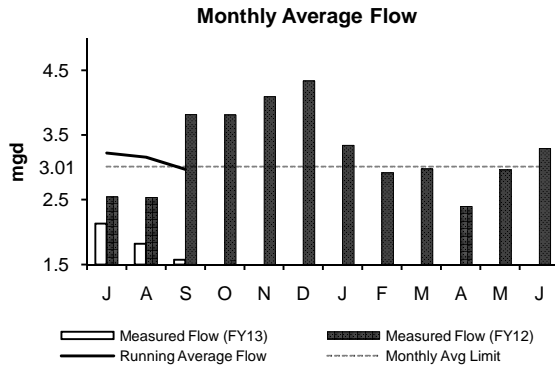
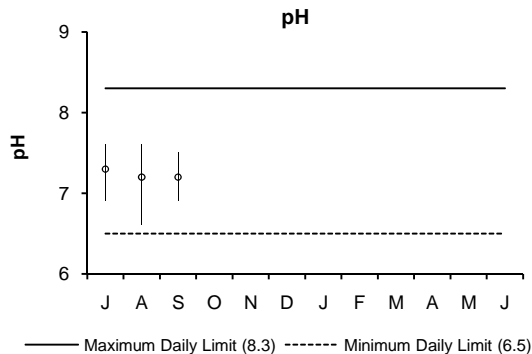
There were two permit violation in the 1st Quarter of FY13. In July and August 2012 the running average flow was 3.22 and 3.16 MGD respectively, above the permit limit of 3.01 MGD. The actual measured flow at the plant for July and August was 2.13 and 1.82 MGD.

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



The 1st Quarter's monthly average and daily maximum concentrations were below the permit limits. The monthly average and daily maximum limits for the 4th 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 1st Quarter.



pH is a measure of the alkalinity or acidity of the effluent. All daily pH results for the 1st 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 1st Quarter were above the NPDES permit limit in July and August, but below in September.

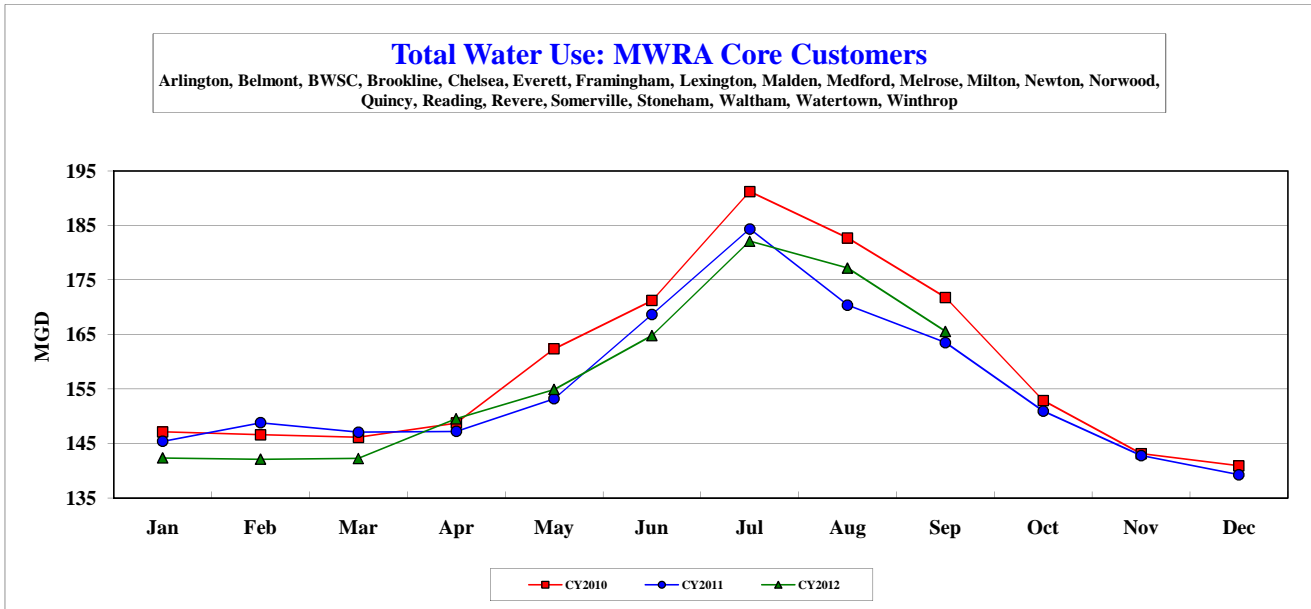
COMMUNITY FLOWS AND PROGRAMS

Water Supplied: MWRA Core Communities

First Quarter FY13

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	142.769	139.250	155.164
CY2012	142.313	142.093	142.231	149.527	154.903	164.777	182.125	177.164	165.538	0.000	0.000	0.000	157.944

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	4,283.058	4,316.759	56,634.829
CY2012	4,411.716	4,120.685	4,409.148	4,485.812	4,801.999	4,943.308	5,645.866	5,492.091	4,966.141	0.000	0.000	0.000	43,276.768



Each community's annual water use relative to the system as a whole is the primary factor in allocating the annual water rate revenue requirement to MWRA water communities. Calendar year 2012 water use will be used to allocate the FY14 water utility rate revenue requirement.

September 2012 water supplied of 205.4 mgd (for revenue generating users) is up 5.8 mgd or 2.9% compared to September 2011. Year-to-date system-wide water consumption for CY12 is also higher than CY11 with 195.1 mgd being supplied to MWRA customers through September. This is 0.7 mgd higher than CY11, an increase of 0.3%.

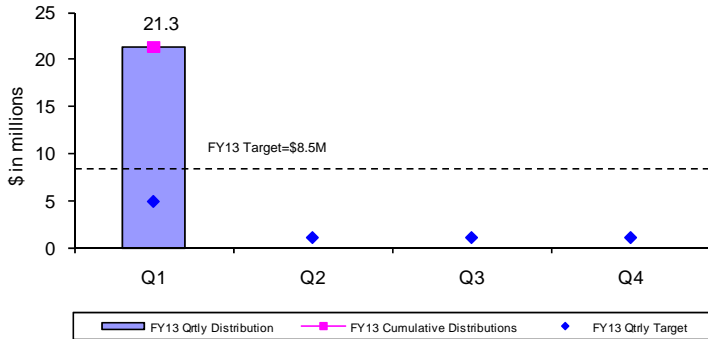
Community Support Programs

1st Quarter – FY13

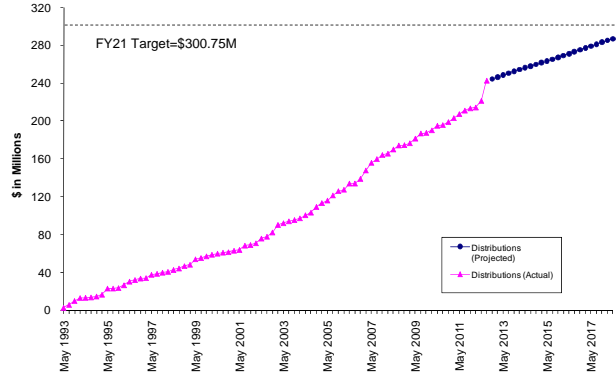
Infiltration/Inflow Local Financial Assistance Program

MWRA's Infiltration/Inflow (I/I) Local Financial Assistance Program provides \$300.75 million in grants and interest-free loans (average of about \$10 million per year from FY93 through FY21) 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.

FY13 Quarterly Distributions of Sewer Grant/Loans



I/I Local Financial Assistance Program Distribution FY93-FY21

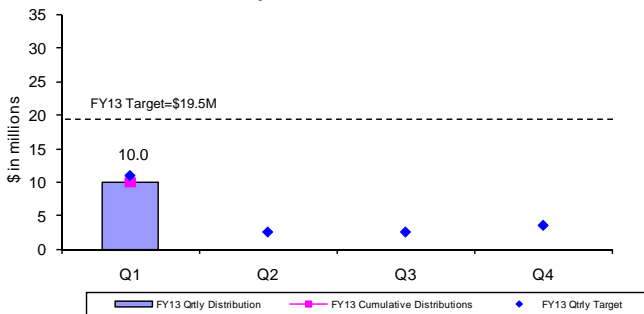


During the 1st Quarter of FY13, \$21.3 million in financial assistance (45% grants and 55% interest-free loans) was distributed to fund local sewer rehabilitation projects in Boston. Total grant/loan distribution for FY13 is \$21.3 million (which includes new Phase 8 funds). From FY93 through the 1st Quarter of FY13, all 43 member sewer communities have participated in the program and more than \$242 million has been distributed to fund 434 local I/I reduction and sewer system rehabilitation projects. Distribution of the remaining funds has been approved through FY21 and community loan repayments will be made through FY26. All scheduled community loan repayments have been made.

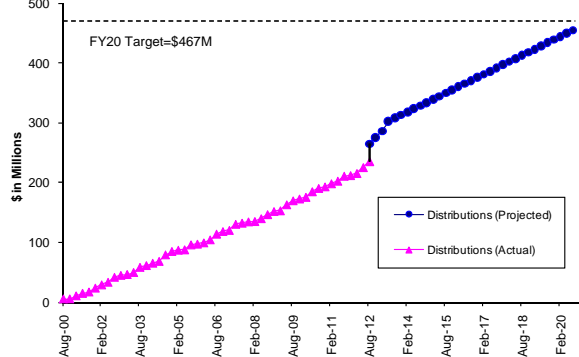
Water Local Pipeline and Water System Assistance Programs

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.

FY13 Quarterly Distributions of Water Loans



Local Pipeline and Water System Assistance Programs Distribution FY01-FY20



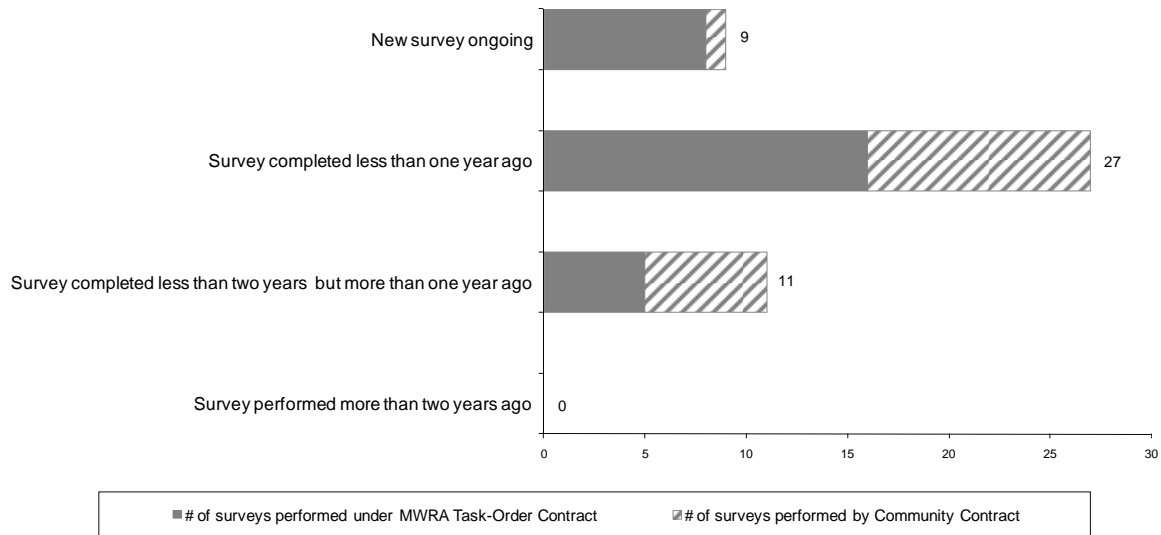
During the 1st Quarter of FY13, \$10.0 million in interest-free loans was distributed to fund local water projects in Arlington, Bedford, Chelsea, Chicopee, Malden, Newton, Norwood, Saugus, Wakefield and Wellesley. Total loan distribution for FY13 is \$10.0 million. From FY01 through the 1st Quarter of FY12, more than \$235 million has been distributed to fund 283 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).

Community Support Programs

1st Quarter – FY13

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 1st Quarter of FY13, 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. 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. Distributions of water conservation materials are made based on requests from member communities and individual customers.

FY13 DISTRIBUTION	Annual Target	Q1	Q2	Q3	Q4	Annual Total
Educational Brochures	100,000	45,178				45,178
Low-Flow Fixtures (showerheads and faucet aerators)	10,000	1,566				1,566
Toilet Leak Detection Dye Tablets	-----	1,196				1,196

During FY12, requests for educational brochures (indoor and outdoor bill stuffers) were lower than in prior years. For FY13, the target for educational brochure distribution has been lowered from 150,000 to 100,000.

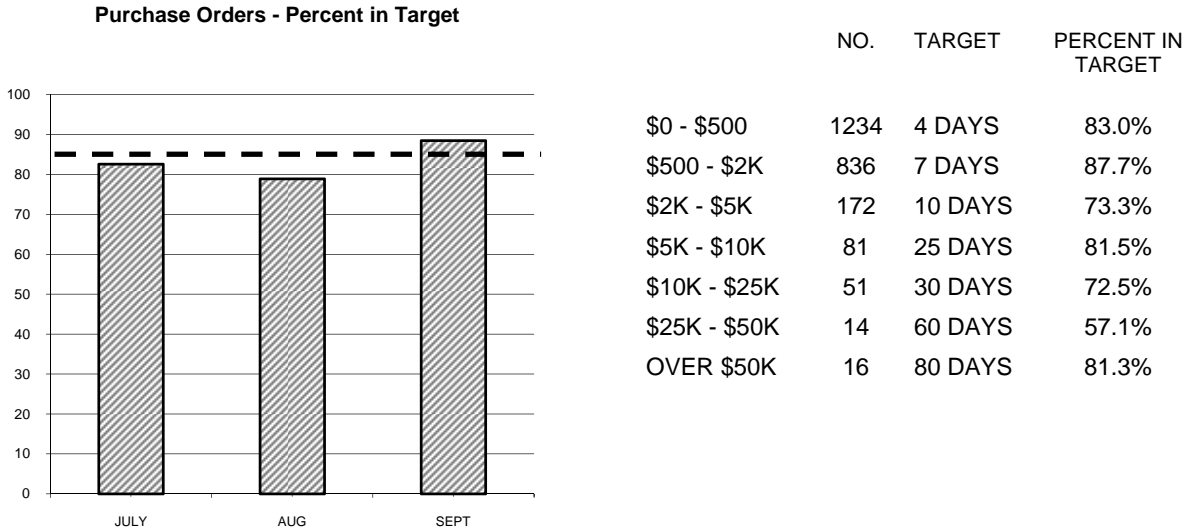
BUSINESS SERVICES

Procurement: Purchasing and Contracts First Quarter FY13

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

Outcome: Processed 83% of purchase orders within target; Avg. Processing Time was 5.95 days vs. 6.73 days in Qtr 1 of FY12. Processed 53% (10 of 19) contracts within target timeframes; Avg. Processing Time was 141 days vs. 151 days in Qtr 1 of FY12.

Purchasing

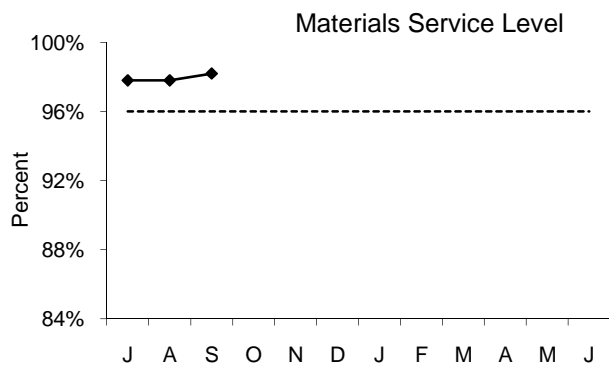


- Purchasing Unit processed 2404 purchase orders, 221 more than the 2183 processed in Qtr 1 of FY12, for a total value of \$7,191,468 vs. a dollar value of \$7,957,347 in Qtr 1 of FY12.
- The target was not achieved for the \$2k - \$5k category due to sourcing of vendors, the \$5k - \$10k category due to pricing confirmation, the \$10k - \$25k category due to extended negotiations, timing of the need for the service and confirmation of end user needs, the \$25k - \$50k category because of several extended bid reviews and a re-bid, and the over \$50k category because of an extended bid review.

Contracts, Change Orders and Amendments

- Nine contracts were not processed within target timeframes. Reasons included extended specification development or extensive revisions during bidding, re-bid of a filed sub-bid, failure of a low bidder to execute the contract, and an extended bid phase to promote competition. In three instances, the contractor delayed submitting documents, and three contracts were processed within two to three weeks of target.
- Procurement processed nineteen contracts with a value of \$5,637,184 and seven amendments with a value of \$160,929.
- Thirty 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 1st quarter FY13 was \$645,923 and the value of credit change orders was (\$216,725).
- In addition, staff reviewed 43 proposed change orders and 31 draft change orders.

Materials Management 1st Quarter, FY13



The service level is the percentage of stock requests filled. The goal is to maintain a service level of 96%. Staff issued 8,293 (97.9%) of the 8,467 items requested in Q1 from the inventory locations for a total dollar value of \$1,619,624.

Inventory Value - All Sites

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 FY13 goal is to reduce consumable inventory from the July '12 base level (\$7.7 million) by 4.0% (approximately \$310,231), to \$7.4 million by June 30, 2013 (see chart below).

Items added to inventory this quarter include:

- Deer Island - shim sets, lip seals, wearplates for XR6-12 pump, spacers, connector kit for rotary scum screen and inside collars for Residuals; rosemount analyzer, rosemount probe, graphic plate and membrane and dual function fuse and amp for Core; gate for Liquid Train.
- Chelsea – air pump, mirror assembly, lantern battery, guide pin, wheel nut, oil drain plug and cabin filter for VMM; roller lever, cam bearing, pressure switch, water heater and impeller for Work Order Coordination Group; oxygen and conductivity sensor for Operations.
- Southboro – delfin lift nut, band saw blade for Maintenance and MWRA logo sign, locks and repellent wipes for Operations.

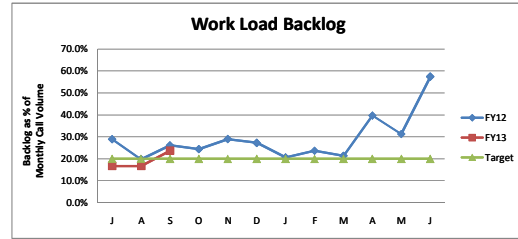
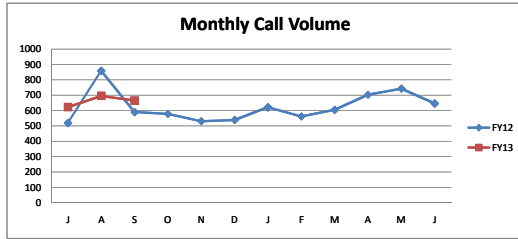
Property Pass Program:

- Audits were conducted at Chelsea TRAC, Sewer Pipe Maintenance, SCADA and Tech Inspections during Q1.
- Numerous obsolete network switches, computers, monitors, printers, keyboards, tape drives, laptops, televisions and cameras 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 \$6,096.85.

Items	Base Value July-12	Current Value w/o Cumulative New Adds	Reduction / Increase To Base
Consumable Inventory Value	7,755,777	6,743,695	-1,012,082
Spare Parts Inventory Value	7,368,162	6,035,420	-1,332,742
Total Inventory Value	15,123,939	12,779,115	-2,344,824

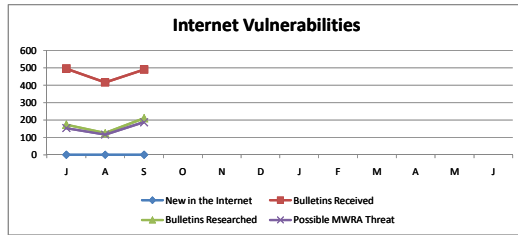
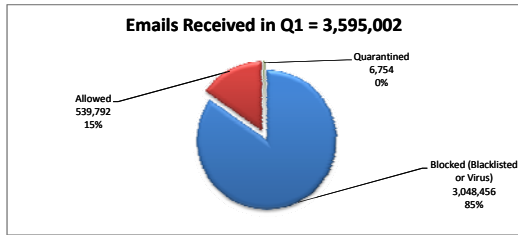
Note: New adds are items added at an inventory location for the first time for the purpose of servicing a group/department to meet their business needs/objectives.

MIS Program 1st Quarter FY13



Performance:

For Q1, call volume peaked in August and calls decreased by 5.21% from Q1 last year. Call backlog peaked in September making the backlog 3.8% above the targeted benchmark of 20%.



Information Security:

During Q1, staff pushed security fixes and updates to desktops and servers throughout the quarter in order to protect against 36 vulnerabilities.

LANDesk Antivirus quarantined 43 distinct viruses from 33 MWRA computers. MWRA's systems are current with anti-virus providers' signatures for all known malware.

Infrastructure:

Cellular services migration: 215 devices were identified and the migration effort began in March. By the end of September, 157 devices have been migrated. This effort is scheduled to be complete in conjunction with the in-building distributed antenna system deployment.

Oracle Database Consolidation: The Maximo FOD development database has been moved to DIAPPOLO on Oracle 10g. Larger hard drives were installed on Chelsea19 so that PIMS, LIMS, and WWQ databases could be moved.

Applications/Training/Records Center:

Rain Gauge Portal: Data was extracted for some rain gauges for review by staff in the Operations Division. Based on feedback, MIS staff revised the calculations for the SCADA rain gauges for further review. MIS designed and developed a web application to display the last five day daily rain totals. Staff created an evaluation document for StreamerRT (a 3rd party application that provides real-time weather data display) that included mobile application information and weather station camera options, as well as list of locations of WeatherBug weather stations found in MWRA communities. Staff completed the portal web application and conducted peer testing on 8/23/2012 and 8/31/2012, created a web service to access weather data from WeatherBug via StreamerRT, developed a console application to download the data, and created a SQL job on the development server to run the console application every 5 minutes. MWRA Telog data was selected due to its ability to upload data following network interruptions. The test database has collected over 20,000 records from 30 weather stations in the first weekend. Completed testing and remediation of the application for multiple non-Internet Explorer (IE) web browsers and reviewed the application for ADA compliance for web site accessibility. The application was also tested on the Blackberry. The application works on the hand held device without any need to revise the style sheet or codes.

Lawson 9.0.1 Upgrade: Assisted the Payroll department with a parallel payroll run on the upgraded development system. Staff reviewed the results with the Payroll department who were satisfied with the outcome. Staff assisted Procurement and HR/Payroll staff with user tests and completed roll-out of 9.0.1 application to the production server over the weekend of Sept 22nd/23rd. Program code was brought over from development server and staff validated system functions, updated custom database fields, recompiled programs, etc. Minor problems with the 9.0.1 upgrade such as Oracle grants, synonyms, and permission updates, Mobile Supply Chain Management printing and a couple minor screen issues were fixed. Go Live occurred with minimal impact to the users.

Lawson Maintenance: Staff monitored weekly payroll processing at year end to ensure that the new 5 day personal plan worked properly by awarding these days for all union employees. In addition, after payroll was completed staff provided the following support: 1) Uploaded vacation milestone adjustments prepared in June for units 2, 3 and 9 from the file supplied by HR dept.; 2) Monitored salary increases put in by HR dept for Units 1, 3, 6 and 9; and; 3) Ran queries to identify employees with optional life/long term disability insurance to see if their coverage amounts were adjusted to their new salaries. Staff also assisted HR dept by loading non-union retroactive pay raises from the file provided by HR.

Construction Photo Project: Staff, with input from the Executive Office, evaluated services provided by the Digital Commonwealth Organization and decided to have the Organization scan the photo books in the Library. MWRA's Application for Services with Digital Commonwealth Organization was for scanning selected collections including glass negatives, largely housed at State Archives, and MWRA photo albums. The first 5 boxes of glass negatives were delivered to the Digital Commonwealth (DigiCom) Team for free scanning.

Maximo Upgrade: On September 13, 2012 the MWRA sent out a Request for Quote to six companies for the Maximo upgrade project. The current 5.2 version of Maximo is no longer supported by IBM. The upgrade from version 5.2 to 7.5 will bring the MWRA back into full support with IBM. The quote from these companies is due back to the MWRA on October 19, 2012 to be opened.

Library & Records Center: The Library completed 53 research requests added 51 books, distributed 93 periodicals and 2,050 electronically linked articles to staff. The Records Center added 81 boxes, conducted 2 training sessions, and attended 3 Record Conservation Board Meetings. Reviewed and disposed of 133 boxes. Shaft 5 litigation support included hosting attorney visit to review microfilm and research.

IT Training: For the quarter, 40 staff attended 5 classes and 3 workshops. 3% of the workforce have attended at least one class year-to-date. SMART Technology training classes were offered. SMART Board job aids completed and placed in the EOC job-aids binder.

Legal Matters

1st Quarter FY 2013

PROJECT ASSISTANCE

COURT AND ADMINISTRATIVE ORDER

- **Boston Harbor Litigation and CSO:** Drafted compliance and progress report for September; filed quarterly compliance and progress report.
- **NPDES:** Reviewed and revised Cottage Farm outline relative to 2010 oil release; reviewed fact sheet for draft NPDES permit for Carroll Water Treatment Plant and drafted MWRA comments and cover letter and submitted to EPA.

REAL ESTATE, CONTRACT AND OTHER SUPPORT

- **Lynnfield – Saugus Pipeline Project:** Recorded Order of Conditions DEP #67- 695.
- **Fore River Shipyard:** Finalized Letter of Intent with March Fourth, LLC (Quirk) to swap interests in real property located at the Fore River Shipyard in Quincy.
- **MWRA/City of Boston Wind Turbine:** Negotiated final language of 8(m) permit for the City of Boston to site a wind turbine at Deer Island.
- **Northern Low Service Storage Project:** Finalized Amendment #1 to the License for Entry Agreement with the developer of the adjacent property to provide for the use of Parcel M-1 during construction
- **John Carroll Treatment Plant:** Recorded Order of Conditions DEP #212-1097.
- **MassDOT License – Chelsea:** Finalized the negotiations with MassDOT regarding a License for Entry for use of an abandoned rail right-of-way adjacent to the MWRA facility in Chelsea.
- **St. Mary's Street Pump Station Easement – Needham:** Recorded the Grant of Easement from the Town of Needham and the Plan for the easement located at the St. Mary's Street Pump Station.
- **License – 12 Cleverly Court, Quincy, Massachusetts:** Finalized License Agreement with J.F. White Contracting Co. for use of the premises located at 12 Cleverly Court in Quincy for a construction staging area.
- **Miscellaneous:** Reviewed and approved twenty-two (22) Section 8(m) Permits and one (1) Direct Connect Permit.

ENVIRONMENTAL

- **Food Waste Co-Digestion:** Worked with bond counsel to obtain opinion concerning limits upon use of DITP digesters for food wastes.

LABOR, EMPLOYMENT AND ADMINISTRATIVE

New Matters Five demands for arbitration were filed.

Matters Concluded Settled an arbitration in which a union claimed the MWRA violated a collective bargaining agreement when an employee was suspended.

LITIGATION/TRAC

New Matters During the First Quarter of FY 2013 one new lawsuit was received.

Nikeala Porter v. Massachusetts Water Resources Authority: This is an action in which plaintiff seeks to recover money for damage to her car allegedly caused by a "road hazard on River Street, Boston" on or about May 18, 2012. Plaintiff's claim appears to be for property damage, filing fees and "traveling expenses", apparently totaling less than \$300.00. No personal injuries are alleged.

Significant Developments

(Former Employee) v. MWRA: Suffolk Superior Court Civil Action No. SUCV2010-4116-C: In this Superior Court action, Plaintiff challenged his termination on April 28, 2010 as Facilities Manager at the Deer Island Treatment Plant. Plaintiff was terminated pursuant to the terms of a Last Chance Agreement executed by Plaintiff and his bargaining unit, United Steelworkers, Local 9360 on or about June 19, 2008. MWRA staff counsel precluded Plaintiff from taking unwarranted discovery and depositions of MWRA employees in a pending Superior Court case where all claims against MWRA were previously dismissed.

(Former Employee) v. MWRA & USW 9360; Mass. Commission Against Discrimination (MCAD) Docket No. 11BEM00424: The same set of allegations contained in the Superior Court complaint, (Former Employee) v. MWRA & USW 9360; Suffolk Superior Court Civil Action SUCV2010-4116-C were the basis for a complaint in a separate proceeding commenced at MCAD in February 2011 by this former employee against MWRA. The employee, a white male supervisor, claimed that he was the subject of discrimination in connection with his dismissal in April 2010. Following an investigation by MCAD, the Commission dismissed the complaint in its entirety as to all parties finding that there was no probable cause to find any discriminatory conduct by any of the named respondents. A hearing on the Petitioner's motion to reconsider the dismissal of the complaint was heard on August 16, 2012. On September 17, 2012 MCAD affirmed the lack of probable cause finding.

SUMMARY OF PENDING LITIGATION MATTERS

TYPE OF CASE/MATTER	As of Sept 2012	As of June 2012	As of Mar 2011
Construction/Contract/Bid Protest (other than BHP)	2	3	2
Tort/Labor/Employment	7	6	7
Environmental/Regulatory/Other	1	1	1
Eminent Domain/Real Estate	1	1	1
total – all defensive cases	11	11	11
Affirmative Cases: <u>MWRA v. (current employee)- closed</u> <u>MWRA v. J. F. Shea Co., Inc., et al.</u>	1	2	2
Other Litigation matters (restraining orders, etc.)	0	0	0
total – all pending lawsuits	12	13	13
Significant claims not in suit: <u>Giaquinto/Geico Automobile Accident Claims</u> <u>Oscar Malera personal injury claim</u> <u>Trooper Walker Injury Claim</u>	3	3	2
Bankruptcy	1	1	3
Wage Garnishment	14	15	8
TRAC/Adjudicatory Appeals	2	1	0
Subpoenas	3	6	4
TOTAL – ALL LITIGATION MATTERS	35	39	30

Matters Concluded	<p><u>P.J. Kennedy & Sons v. J.F. White</u>: The MWRA provided documents to P.J. Kennedy's counsel in response to two third-party subpoenas during the past year. In accordance with the court docket, the parties have reached a settlement, with no further involvement by MWRA. The case has been dismissed.</p> <p><u>(Former Employee) v. MWRA</u>: On August 13, 2012, Plaintiff withdrew his appeal which he filed after the Superior Court entered summary judgment in favor of MWRA on March 23, 2012, thus upholding the Separation Agreement and General Release which was signed in 2008 when he left MWRA's employment. A Judgment of Dismissal was entered by the Superior Court on August 21, 2012.</p> <p><u>MWRA v. (Former Employee)</u>: This is a civil action against a former employee for reimbursement to MWRA for overpayment of workers compensation benefits. A judgment has been recovered and the execution has been sent for recordation against the former employee's real property where it serve as a formal lien against the owner's title and will be paid when the owner next refinances or sells the property.</p>
Subpoenas	During the First Quarter of FY 2013, three new subpoenas were received, one subpoena was re-activated and three subpoenas were pending at the end of the First Quarter FY 2013.
Public Records	During the First Quarter of FY 2013 six new public records requests were received and two remained pending at the end of the First Quarter FY 2013.
TRAC/MISC.	
New Appeals	<p>Two new appeals were received in the 1st Quarter FY 2013.</p> <p><u>Advanced Imaging, Inc.; MWRA Docket No. 12-02</u></p> <p><u>Kirkwood Printing; MWRA Docket No. 12-03</u></p>
Settlement by Agreement of Parties	<p>One case was settled by Agreement of Parties in the 1st Quarter FY 2013.</p> <p><u>Environmental Compliance Corporation ("ECC"); MWRA Docket No. 12-01</u></p>
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 the 1 st Quarter FY 2013.
Final Decisions	No Final Decision were issued during the 1 st Quarter FY 2013.

Internal & Contract Audit Program 1st Quarter FY13

Highlights

MIS Equipment Controls

A discussion draft report was issued to management in September. A number of deficiencies were identified, including incomplete recordkeeping, missing equipment, and the storage of equipment in insecure locations. Management was kept informed of deficiencies and has instituted corrective actions. The nature of the deficiencies and corrective actions will require an Internal Audit follow-up in six months.

Chelsea Physical Security

During the audit of MIS Equipment Controls a number of observations were made regarding the physical security at the Chelsea facility. A discussion draft is being prepared recommending the strengthening of controls for the entire facility.

Status of Open Audit Recommendations (4 recommendations closed in the 1st 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)*	3	2
Warehouse Practices (9/30/10)	2	8
Facility Card Access Controls (2/22/11)	3	17
DITP Data Center Access Controls (10/14/11)	11	11
FRRC Financial and Management Controls (12/14/11)	1	6
Review of Fleet Services Activities (1/9/12)	<u>2</u>	<u>3</u>
Total Recommendations	23	49

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

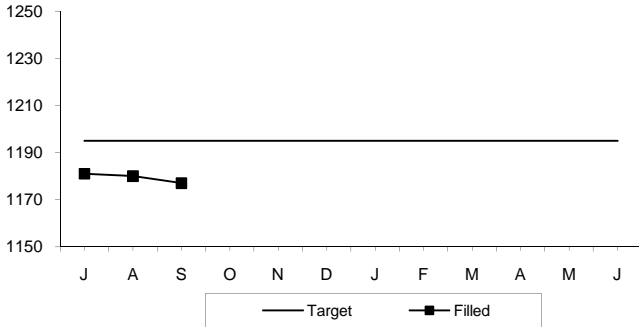
Savings	FY09	FY10	FY11	FY12	FY13	TOTAL
Consultants	\$316,633	\$194,238	\$520,176	\$259,245	\$171,766	\$1,462,058
Contractors & Vendors	\$1,262,088	\$599,835	\$3,129,538	\$435,760	\$149,694	\$5,576,915
Internal Audits	\$438,027	\$206,282	\$152,478	\$407,350	\$36,946	\$1,241,083
Total	\$2,016,748	\$1,000,355	\$3,802,192	\$1,102,355	\$358,406	\$8,280,056

OTHER MANAGEMENT

Workforce Management

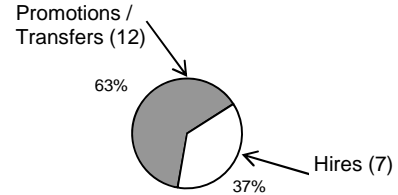
1st Quarter FY13

Filled Position Tracking



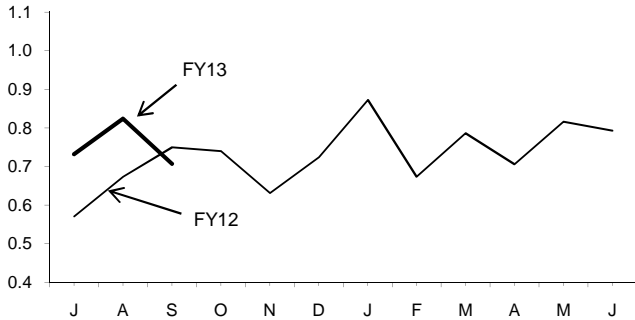
FY13 Target for Filled Positions = 1195
 Filled Positions as of September 2013 = 1177

Positions Filled by Hires/Promotions
 FY13-YTD



	Pr/Trns	Hires	Total
FY10	66 (76%)	21 (24%)	87
FY11	48 (62%)	30 (38%)	78
FY12	42 (61%)	27 (39%)	69

Average Monthly Sick Leave Usage
 Per Employee

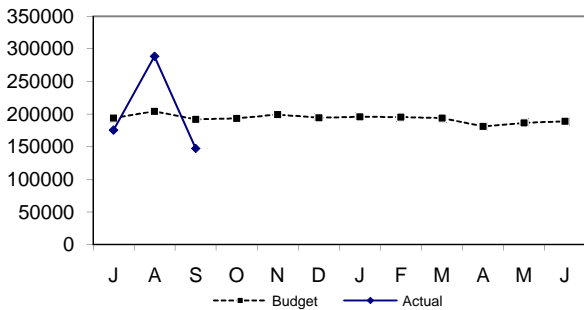


In FY13, the average quarterly sick leave usage has increased 1.13% from the same time last year.

	Number of Employees	YTD	Annualized Total	Annual FMLA %	FY12
A&F	188	1.68	6.71	22.5%	8.18
Aff. Action	7	4.37	17.47	49.4%	13
Executive	5	1.41	5.65	0.0%	6.5
Int. Audit	8	1.00	4.00	0.0%	5.9
Law	17	3.17	12.68	5.3%	11
OEP	4	2.06	8.23	0.0%	5.2
Operations	920	2.41	9.65	29.5%	8.8
Planning	21	0.81	3.24	0.0%	6.6
Pub. Affs.	13	1.44	5.75	0.0%	7.8
MWRA Avg	1183	2.26	9.05	27.9%	8.7

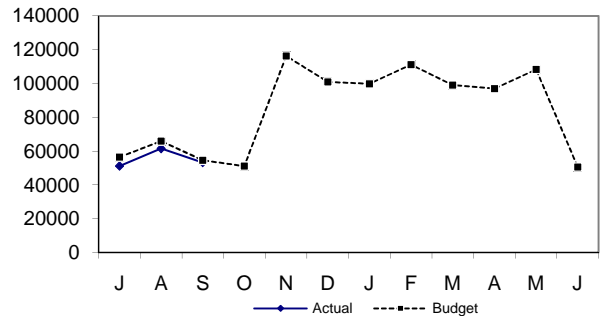
Percent of sick leave usage attributable to Family and Medical Leave Act (FMLA) leave is 27.9% ending September 30, 2012.

Field Operations
 Current Month Overtime \$



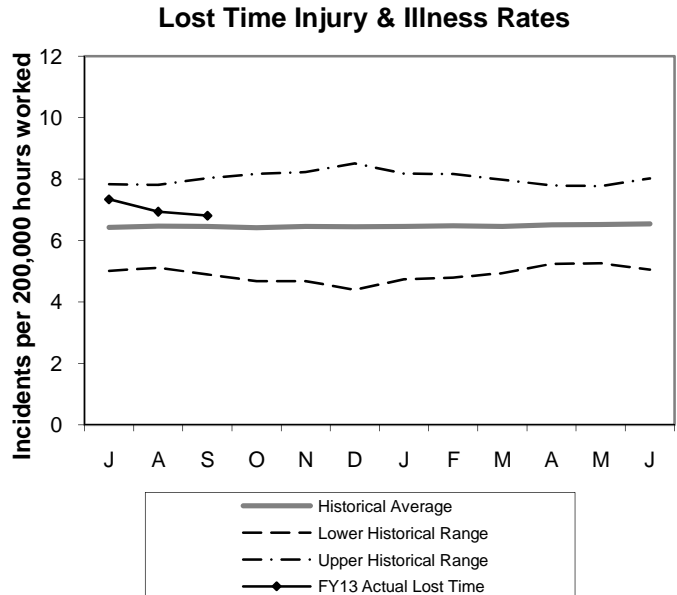
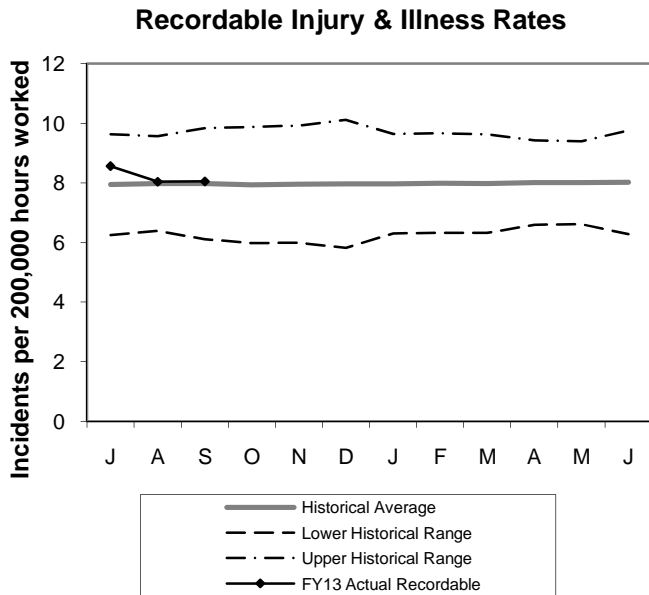
Total Overtime for Field Operations in September was \$147,276 which is \$45k over budget. Emergency overtime was \$80k, which was (\$15k) under budget. Of that amount, \$17k was spent emergency maintenance, \$17k on rain event pre-staging, \$15k on rain events, \$12k on CSO activation, \$10k on emergency operations. Coverage overtime was \$39k, which was (\$11k) under budget. Vacation coverage was \$19k; sick coverage was \$8k; personal coverage was \$5k. Planned overtime was \$29k or (\$19k) under budget. Of that amount, planned operations was \$11k, maintenance off hours work was \$6k, and maintenance work completion was \$3k.

Deer Island Treatment Plant
 Current Month Overtime \$



Deer Island's total overtime expenditure in September 2012 was \$53k, which was (\$1k) or (2.2%) under budget. Maintenance's planned/unplanned overtime was (\$7k) under budget primarily due Management's continued efforts to control overtime spending by allowing overtime for maintenance or repair of critical systems and equipment only. This was offset in part by higher than budgeted storm coverage, \$4K and shift coverage, \$2K. The budget, which was based upon historical actuals, did not anticipate any storm coverage, while 95 hours were actually required and shift coverage was higher due to more than anticipated vacation time.

Workplace Safety First Quarter FY 13



- 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 FY12. The "Upper" and "Lower Historical Ranges" are computed using these same data – adding and subtracting two standard deviations respectively. FY13 actual incident rates can be expected to fall within this historical range.

Workers Compensation Claims Highlights - First Quarter FY13

	New	Closed	Open Claims
Lost Time	7	12	50
Medical Only	45	40	49
	New	YTD Light Duty Returns	
Light Duty Returns	4		4

Highlights/Comments:

Light Duty Returns

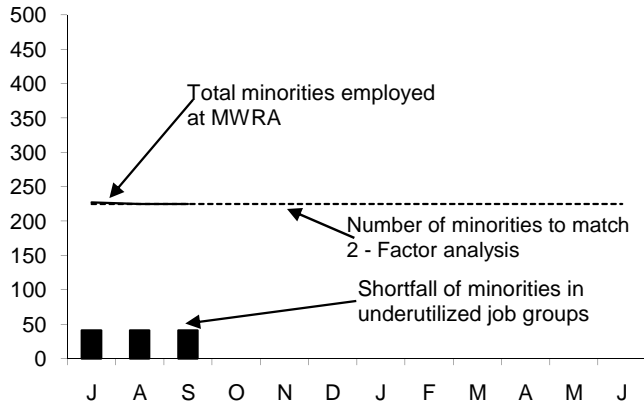
- July** 1 employee returned to work light duty from IA
- Aug** 2 employees returned to work light duty from IA
- Sept** 1 employee returned to work light duty from IA

Regular Duty Returns

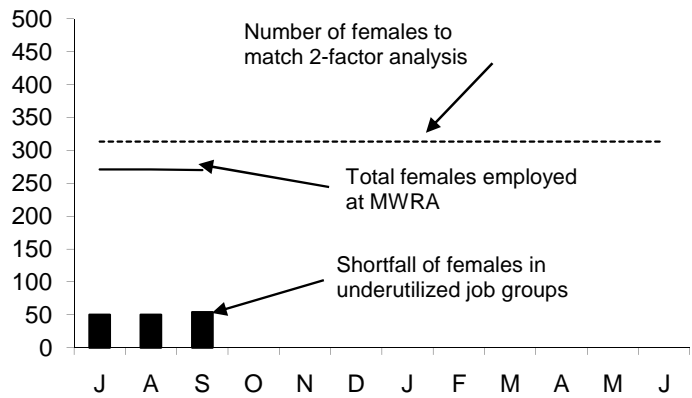
- July** 2 employees returned to work full duty from IA
- Aug** 2 employees returned to work full duty from IA
- 2 employees returned to work full duty from light duty
- Sept** 2 employees returned to work full duty from IA
- 1 employee returned to work full duty for 13 hours then returned to IA

MWRA Job Group Representation First Quarter FY13

Minority - Affirmative Action Plan Goals



Female - Affirmative Action Plan Goals



Highlights:

At the end of Q1 FY13, 8 job groups or a total of 44 positions are underutilized by minorities as compared to 8 job groups or a total of 40 positions at the end of Q1 FY12; for females 13 job groups or a total of 101 positions are underutilized by females as compared to 12 job groups or a total of 87 positions at the end of Q1FY12. During Q1, 1 minorities and 2 females were hired. During this same period, 4 minorities and 1 females terminated.

Underutilized Job Groups - Workforce Representation

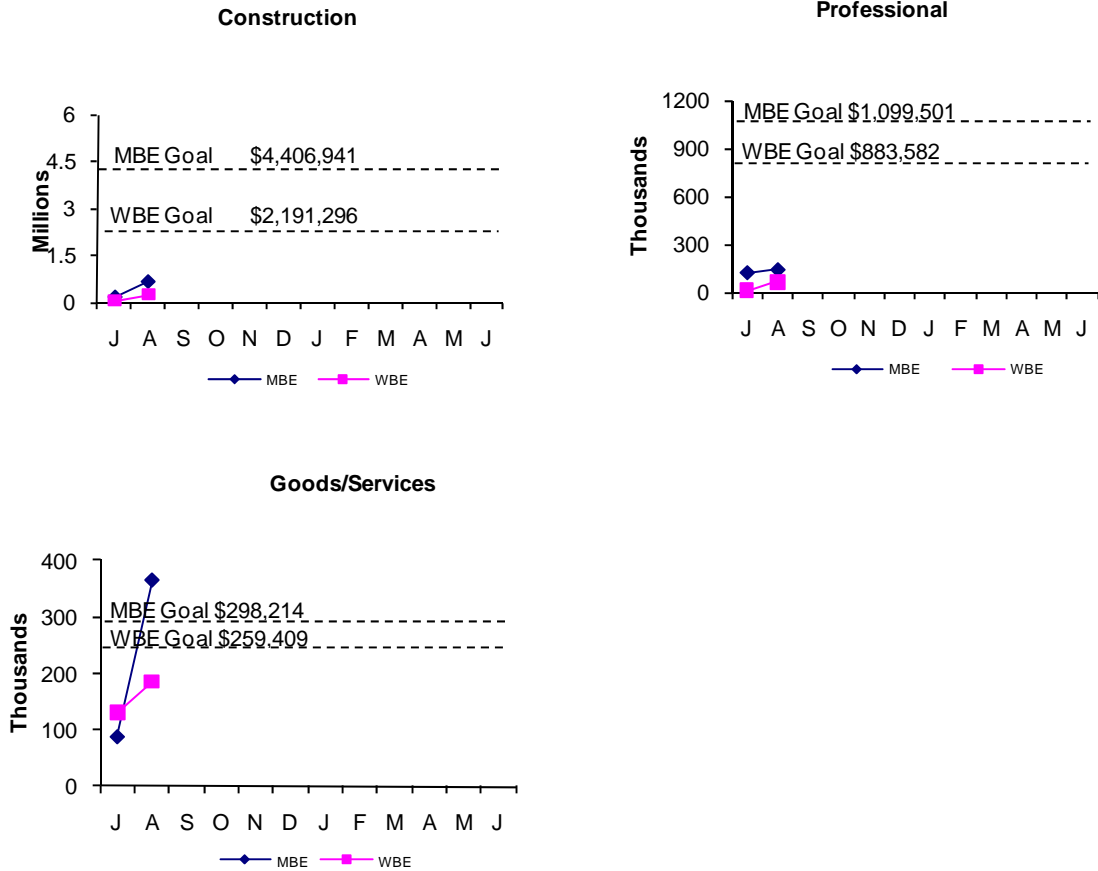
Job Group	Employees as of 9/30/2012	Minorities as of 9/30/2012	Achievement Level	Minority Over or Under Under utilized	Females As of 9/30/2012	Achievement Level	Female Over or Under Under utilized
Administrator A	18	3	2	1	3	5	-2
Administrator B	20	0	3	-3	5	5	0
Clerical A	46	20	11	9	40	4	36
Clerical B	34	8	8	0	15	3	12
Engineer A	84	15	17	-2	12	17	-6
Engineer B	50	12	5	6	6	18	-12
Craft A	114	14	21	-8	0	4	-4
Craft B	146	26	21	6	3	9	-6
Laborer	66	17	11	4	4	16	-12
Management A	102	16	21	-6	31	45	-14
Management B	51	10	11	0	15	25	-11
Operator A	66	5	6	-1	2	3	-1
Operator B	67	7	13	-6	4	5	-1
Para Professional	55	12	24	-14	26	48	-24
Professional A	37	3	7	-4	22	16	6
Professional B	165	39	31	8	76	76	0
Technical A	54	17	10	7	5	11	-6
Technical B	8	1	2	0	1	3	-2
Total	1183	225	224	41/-44	270	313	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	M&O Specialist	1	Int	0	0	Pending
Craft B	Instrument Technician	1	Ext	0	1	Pending
Craft B	Electrician	1	Int/Ext	0	1	New Hire - W/M
Craft B	Facilities Specialist I	6	Int	0	0	Pending
Craft B	Plumber/Pipefitter	1	Ext	0	0	Pending
Craft B	Heavy Equipment Operator	1	Ext	0	0	Pending
Laborer	Building & Grounds Worker	2	Int/Ext	0	0	New Hire - W/M Lat Trans-W/M
Laborer	Skilled Laborer	1	Int/Ext	0	0	Pending
Laborer	OMC Laborer	2	Int/Ext	0	0	New Hire - W/M
Management B	Asst. Contract Mgr.	1	Int/Ext	0	0	Pending

MBE/WBE Expenditures First Quarter FY-13

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 August.



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

	MBE				WBE			
	FY13 Year-to-Date		FY12		FY13 Year-to-Date		FY12	
	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>
Construction	676,907	15.4%	3,771,155	112.8%	249,296	11.4%	6,992,984	305.0%
Professional Svc.	137,694	12.5%	1,216,840	97.2%	64,773	7.3%	524,130	52.1%
Goods & Svcs.	366,177	122.8%	879,467	303.3%	185,548	71.5%	737,776	292.5%
Total	\$1,180,778	20.3%	\$5,867,462	120.1%	\$499,617	15.9%	\$8,184,890	232.0%

MWRA FY13 CEB Expenses through First Quarter FY13

	September 2012 Year-to-Date					
	Period 3 YTD Budget	Period 3 YTD Actual	Period 3 YTD Variance	%	FY13 Approved	% Expended
EXPENSES						
WAGES AND SALARIES	\$ 21,797,683	\$ 21,238,844	\$ (558,839)	-2.6%	\$ 94,059,400	22.6%
OVERTIME	825,202	839,102	13,900	1.7%	3,573,495	23.5%
FRINGE BENEFITS	4,525,228	4,400,098	(125,130)	-2.8%	18,241,926	24.1%
WORKERS' COMPENSATION	525,000	457,065	(67,935)	-12.9%	2,100,000	21.8%
CHEMICALS	2,883,650	2,958,004	74,354	2.6%	9,963,496	29.7%
ENERGY AND UTILITIES	4,742,720	4,786,815	44,095	0.9%	23,127,198	20.7%
MAINTENANCE	5,586,110	6,016,493	430,383	7.7%	28,229,070	21.3%
TRAINING AND MEETINGS	120,083	33,577	(86,506)	-72.0%	385,617	8.7%
PROFESSIONAL SERVICES	1,409,238	1,328,605	(80,633)	-5.7%	5,900,785	22.5%
OTHER MATERIALS	732,999	830,715	97,716	13.3%	5,591,291	14.9%
OTHER SERVICES	6,125,607	5,774,388	(351,219)	-5.7%	23,743,608	24.3%
TOTAL DIRECT EXPENSES	\$ 49,273,520	\$ 48,663,706	\$ (609,813)	-1.2%	\$ 214,915,886	22.6%
INSURANCE	\$ 524,469	\$ 494,365	\$ (30,104)	-5.7%	\$ 2,097,875	23.6%
WATERSHED/PILOT	6,603,294	6,369,801	(233,493)	-3.5%	26,413,175	24.1%
BEC _o PAYMENT	891,824	875,520	(16,304)	-1.8%	3,741,915	23.4%
MITIGATION	391,731	377,138	(14,593)	-3.7%	1,566,923	24.1%
ADDITIONS TO RESERVES	349,582	349,582	-	0.0%	1,398,329	25.0%
RETIREMENT FUND	8,112,230	8,128,101	15,871	0.2%	10,474,376	77.6%
POST EMPLOYEE BENEFITS	-	-	-	---	-	---
TOTAL INDIRECT EXPENSES	\$ 16,873,130	\$ 16,594,507	\$ (278,623)	-1.7%	\$ 45,692,593	36.3%
DEBT SERVICE	\$ 92,542,541	\$ 92,542,541	\$ -	0.0%	\$ 375,248,070	24.7%
DEBT SERVICE ASSISTANCE	(87,500)	(87,500)	-	0.0%	-	---
TOTAL DEBT SERVICE	\$ 92,455,041	\$ 92,455,041	\$ -	0.0%	\$ 375,248,070	24.7%
TOTAL EXPENSES	\$ 158,601,691	\$ 157,713,254	\$ (888,435)	-0.6%	\$ 635,856,549	24.8%
REVENUE & INCOME						
RATE REVENUE	\$ 151,878,000	\$ 151,878,000	\$ -	0.0%	\$ 607,512,000	25.0%
OTHER USER CHARGES	1,998,533	1,986,906	(11,627)	-0.6%	7,766,692	25.6%
OTHER REVENUE	916,795	1,333,678	416,883	45.5%	6,116,845	21.8%
RATE STABILIZATION	-	-	-	---	-	---
INVESTMENT INCOME	3,765,736	3,423,115	(342,621)	-9.1%	14,461,012	23.7%
TOTAL REVENUE & INCOME	\$ 158,559,064	\$ 158,621,699	\$ 62,636	0.0%	\$ 635,856,549	24.9%

As of September 2012, total revenue was \$158.6 million, \$63,000 higher than budget. Total expenses were \$157.7 million, \$888,000 or 0.6% less than budget, resulting in a net variance of \$951,000 after the transfer of \$3.3 million to the defeasance account.

Expenses –

- **Direct Expenses** are \$48.7 million, \$610,000 or 1.2% less than budget.
- **Wages and Salaries** are underspent by \$559,000 or 2.6% due to lower headcount and employees on unpaid time off.
- **Maintenance** is \$430,000 or 7.7% more than budget. Material purchases are greater than budgeted by \$467,000 and Services are underspent by \$36,000 mainly due to timing.
- **Other Services** are \$351,000 or 5.7% under budget mainly for lower Sludge Pelletization of \$299,000 and Other Services of \$128,000 mainly for timing of remediation activities.
- **Fringe Benefits** are under budget by \$125,000 or 2.8% mainly due to lower spending for Health Insurance of \$108,000 and Medicare of \$19,000.
- **Other Materials** are \$98,000 or 13.3% over budget due to timing of Computer Hardware of \$95,000, Lab & Testing Supplies of \$45,000, and Work Clothes of \$43,000 offset by lower spending for Other Materials of \$46,000.
- **Training & Meetings** is underspent by \$87,000 or 72.0% mainly due to timing.
- **Professional Services** are \$81,000 or 5.7% under budget due to Lab & Testing Analysis of \$52,000 mainly due to timing of HOM initiatives and Legal expenses of \$23,000.
- **Chemicals** are overspent by \$74,000 or 2.6% due to higher spending for Soda Ash of \$131,000 offset by lower spending for Nitrazyme of \$66,000.
- **Workers' Compensation** is underspent by \$68,000 or 12.9% due to lower actual payments of \$43,000 and reserves of \$25,000.
- **Utilities** are overspent by \$44,000 or 0.9% mainly for higher spending for Electricity of \$67,000 mainly at Deer Island offset by lower spending for Diesel Fuel of \$31,000 mainly in Field Operations.
- **Indirect Expenses** are \$16.6 million, \$279,000 or 1.7% under budget mainly due to an FY12 overaccrual for Watershed Reimbursement of \$233,000 and lower spending for Insurance of \$30,000.
- **Debt Service Expenses** total \$92.5 million, after transferring \$3.3 million to the defeasance account as a result of favorable short-term rates.

Revenue and Income –

- **Total Revenue / Income** for September is \$158.6 million, \$63,000 higher than budget mainly due to higher Other Revenue of \$417,000 mainly for the Federal Emergency Management Agency (FEMA) reimbursement for Tropical Storm Irene costs \$264,000 offset by lower investment Income of \$343,000 due to lower than budgeted short-term rates.

Cost of Debt

First Quarter FY13

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.

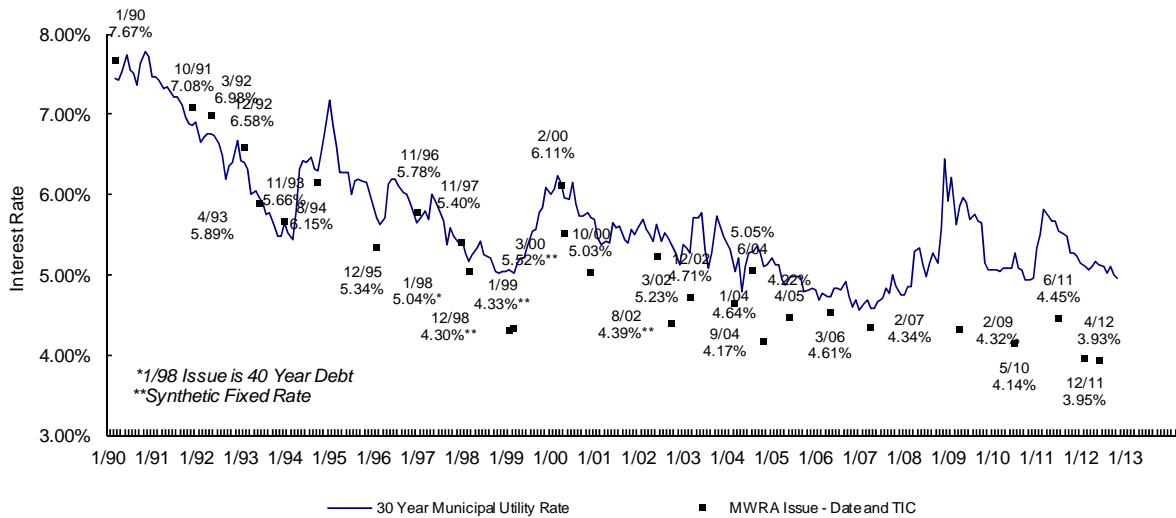
Average Cost of MWRA Debt

Fixed Debt (\$4,071)	4.43%
Variable Debt (\$561)	0.89%
SRF Debt (\$1,037)	1.17%
 Weighted Average Debt Cost (\$5,669)	 3.48%

Most Recent Senior Fixed Debt Issue April 2012

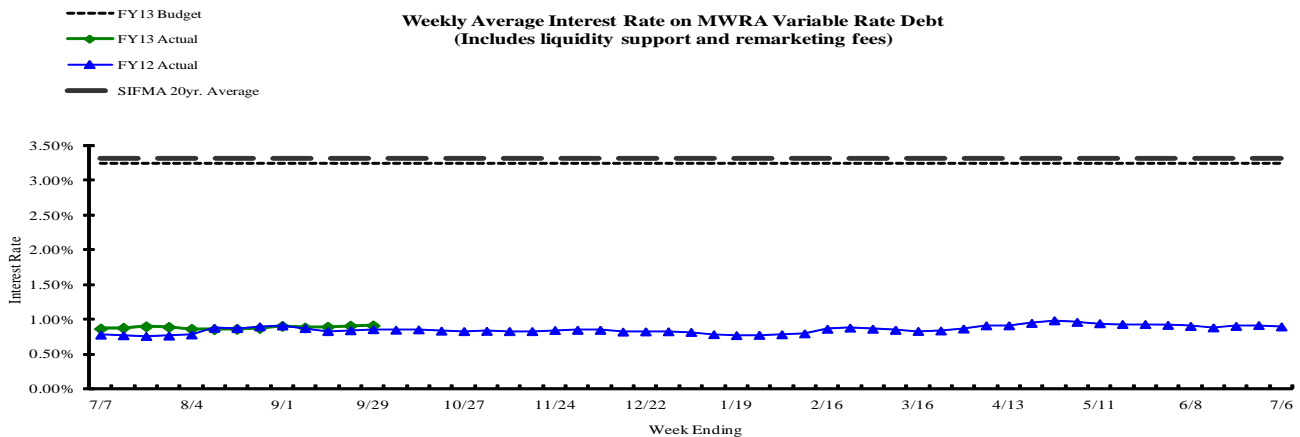
2012 Series A & B (\$236.8)	3.93%
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MWRA Fixed Rate Debt vs. 30 Year Municipal Utility Interest Rate



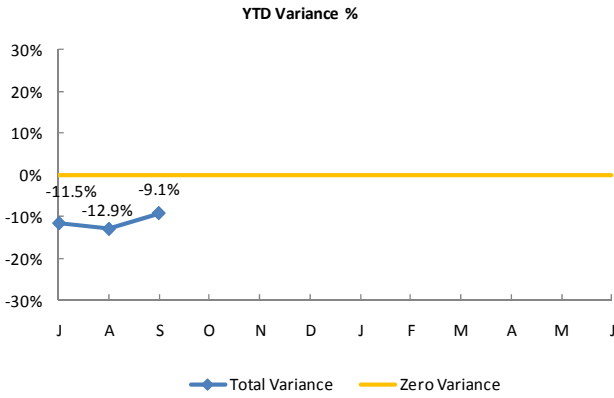
Weekly Average Variable Interest Rates vs. Budget

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 September, SIFMA rates fluctuated with a high of 0.18% and a low of 0.15%. 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 First quarter FY13

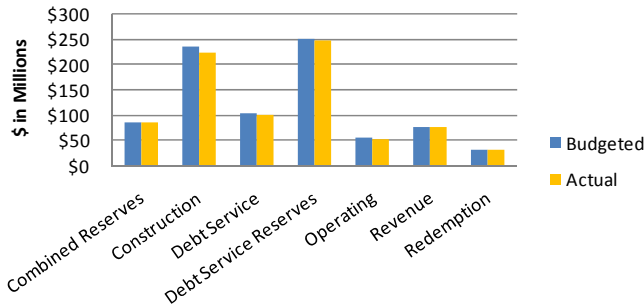
Year To Date



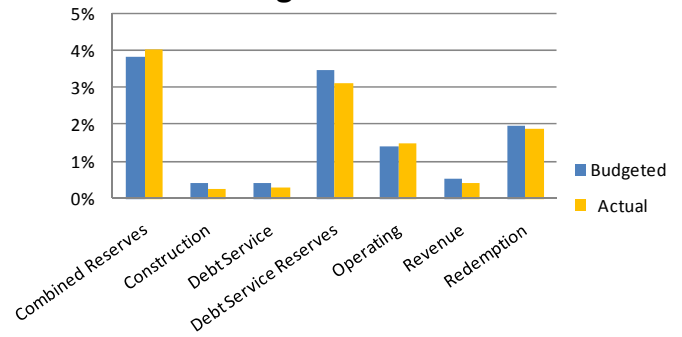
	YTD BUDGET VARIANCE (\$000)			
	BALANCES IMPACT	RATES IMPACT	TOTAL	%
Combined Reserves	\$2	\$42	44	5.4%
Construction	(\$9)	(\$75)	(84)	-35.6%
Debt Service	(\$1)	(\$34)	(36)	-33.6%
Debt Service Reserves	(\$2)	(\$229)	(231)	-10.7%
Operating	(\$14)	\$10	(4)	-2.1%
Revenue	(\$2)	(\$24)	(26)	-25.4%
Redemption	\$0	(\$7)	(7)	-4.2%
Total Variance	(\$27)	(\$316)	(\$343)	-9.1%

➤ The negative balance is attributed to the lower than budgeted interest rates.

YTD Average Balances Budgeted vs. Actual

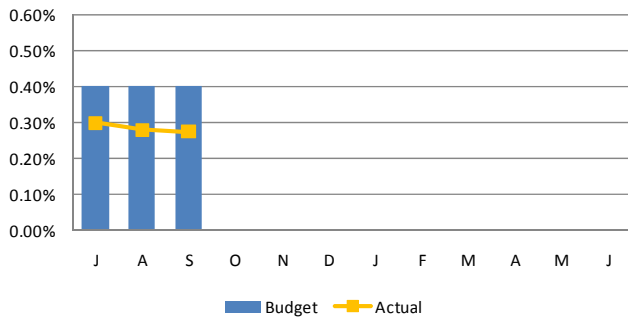


YTD Average Interest Rate Budgeted vs. Actual

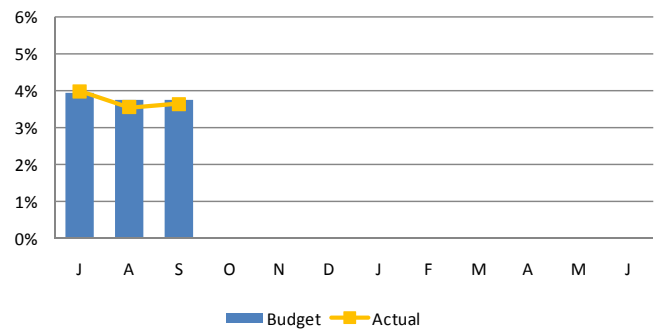


Monthly

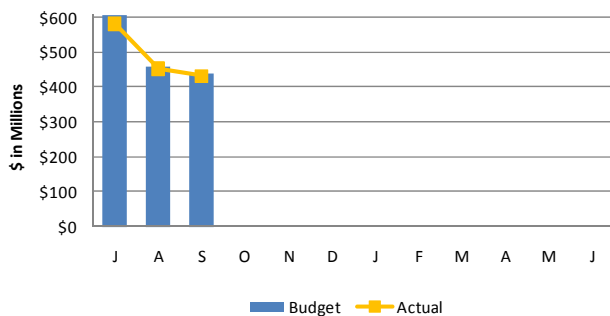
Short-Term Interest Rates



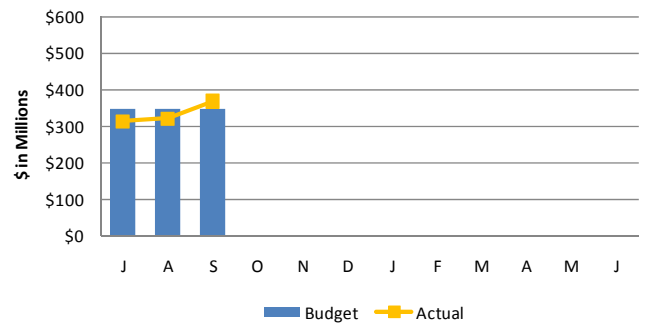
Long-Term Interest Rates



Short-Term Average Balances



Long-Term Average Balances



STAFF SUMMARY

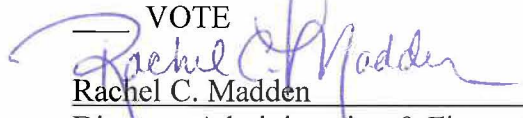
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: November 14, 2012
SUBJECT: Delegated Authority Report – September and October 2012



COMMITTEE: Administration, Finance & Audit

X INFORMATION

 VOTE



Rachel C. Madden
Director, Administration & Finance



Michele Gillen
Deputy Director, Administration & Finance

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

RECOMMENDATION:

For information only. Attached is a listing of actions taken by the Executive Director under delegated authority for the period September 1, 2012 through October 31, 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
10/01/12	NORTHERN INTERMEDIATE HIGH STONEHAM-READING CONNECTIONS DECREASE FOLLOWING BID ITEMS TO REFLECT ACTUAL QUANTITIES USED: 36-INCH DUCTILE-IRON WATER MAIN; EARTH EXCAVATION FOR TEST PITS; COLD PLANE EXCAVATION AND PAVEMENT OVERLAY; BITUMINOUS CONCRETE SIDEWALKS, DRIVEWAYS AND APRONS; ADDITIONAL TRAFFIC CONTROL REQUIRED BY CHANGER ORDER WORK; FIRE DEPARTMENT SERVICES; REMOVE, HANDLE AND DISPOSE OF ELECTRICAL ASBESTOS TRANSIT PIPE AT IN-STATE, LINED LANDFILL; ROCK EXCAVATION; PAY DIFFERENTIAL TO STONEHAM/READING POLICE IN LIEU OF STATE POLICE	7261	6	ALBANESE D&S, INC.	(\$175,730.41)
10/01/12	SOUTHERN SPINE DISTRIBUTION MAINS SECTION 107 - PHASE 2 DECREASE FOLLOWING BID ITEMS TO REFLECT ACTUAL QUANTITIES USED: REMOVAL AND DISPOSAL OF GROUP I-3, GROUP II-1, GROUP III-2 AND GROUP IV EXCAVATED MATERIALS; REMOVAL AND DISPOSAL OF EXISTING MILTON WATER MAIN AND INSTALLATION OF NEW MILTON WATER MAIN; STEEL PIPE WALL REPAIR USING 7/16-INCH-THICK STEEL PLATE; INSTALLTION OF BUTT STRAPS WITHIN SECTION 22 48-INCH STEEL PIPELINE; CONCRETE BASE BITUMINOUS PERMANENT PAVEMENT; GRAVEL BASE BITUMINOUS PAVEMENT; BITUMINOUS CONCRETE OVERLAY WITHIN MILTON; POLICE DETAILS; PULVERIZE EXISTING PAVEMENT; ADD MILL AND OVERLAY PAVEMENT	7099	18	RJV CONSTRUCTION CORPORATION, INC.	(\$322,390.84)
10/01/12	SWITCHGEAR RELAY UPGRADE DEER ISLAND TREATMENT PLANT DELETE REMAINING CONTRACT WORK TO FURNISH AND INSTALL NEW DIGITAL CONTROLLED GE PROTECTIVE RELAYS IN 43 ELECTRICAL SUBSTATIONS ON DEER ISLAND. CONTRACT WORK WILL BE RE-DESIGNED AND RE-BID	7061	4	FISCHBACH & MOORE, LLC	(\$1,897,478.00)
10/09/12	PHASE 3 SEWER MANHOLE REHABILITATION AWARD OF CONTRACT TO LOWEST RESPONSIVE BIDDER FOR THE REHABILITATION OF 36 SEWER MANHOLES AT VARIOUS LOCATIONS FOR A TERM OF 180 CALENDAR DAYS	OP-194	AWARD	NATIONAL WATER MAIN CLEANING COMPANY	\$138,661.00
10/18/12	NUT ISLAND SWITCHGEAR MODIFICATIONS AWARD OF CONTRACT TO LOWEST RESPONSIVE BIDDER FOR MODIFICATION OF EXISTING ELECTRICAL EQUIPMENT AT THE NUT ISLAND HEADWORKS FACILITY TO REDUCE THE POSSIBILITY OF POWER OUTAGES, EQUIPMENT DAMAGE AND FACILITY FAILURES FOR A TERM OF 180 CALENDAR DAYS	7244A	AWARD	J.F. WHITE CONTRACTING COMPANY	\$92,900.00
10/23/12	THERMAL AND HYDRO POWER PLANT MAINTENANCE DEER ISLAND TREATMENT PLANT INSTALL ELECTRICAL CONDUIT, WIRE AND CONTROLS FOR NEW ELECTRONIC ACTUATOR ON 18-MEGAWATT STEAM TURBINE GENERATOR	5500	2	O'CONNOR CONSTRUCTORS, INC.	\$26,390.00
10/23/12	MASONRY AND PRIMARY SPILLWAY REPAIRS AT BLUE HILLS DAM AWARD OF CONTRACT TO LOWEST RESPONSIVE BIDDER FOR THE MASONRY AND PRIMARY SPILLWAY REPAIRS AT BLUE HILLS DAM FOR A TERM OF 100 CALENDAR DAYS, AS AGREED PRIOR TO TURNING OVER THE RESERVOIR AND DAM TO DCR-STATE PARKS	OP-196	AWARD	T. FORD COMPANY, INC.	\$88,800.00
10/23/12	DAM REPAIRS - SUDBURY, WACHUSETT OPEN CHANNEL LOWER, CHESTNUT HILL, WESTON AND FOSS RESERVOIR DAMS RESTORE EXISTING ARCHITECTURALLY SIGNIFICANT FENCE, AT AN OFF-SITE FACILITY, IN LIEU OF CONTRACT-SPECIFIED REMOVAL AND INSTALLATION OF NEW TUBE STEEL FENCE, INSTALL AND REMOVE A TEMPORARY FENCE DURING RESTORATION AT WACHUSETT OPEN CHANNEL LOWER SITE, ACCESS, EVALUATE AND REPAIR CHIMNEY AND ROOF AT FOSS DAM GATEHOUSE	7194	7	T. FORD COMPANY, INC.	\$116,981.29
10/23/12	DIGESTER SLUDGE OVERFLOW PIPING AND PLUG VALVE REPLACEMENT DEER ISLAND TREATMENT PLANT REMOVE, DISPOSE AND REPLACE 39 ADDITIONAL GLASS LINED PLUG VALVES; FURNISH AND INSTALL ELECTRICAL EXPANSION FITTINGS WHERE CONDUITS CROSS STRUCTURAL EXPANSION JOINTS AS REQUIRED BY THE NATIONAL ELECTRIC CODE; FURNISH AND INSTALL 12 HOSE CONNECTIONS WITH HEAT TRACING AND INSULATION ON HIGH-PRESSURE PLANT WATER FLUSHING SYSTEM	7055	3	WALSH CONSTRUCTION COMPANY	\$211,935.04
10/24/12	DEER ISLAND TREATMENT PLANT - LIGHTING IMPROVEMENTS PLAN, EXTERIOR ROADWAY LIGHTING AWARD OF ENERGY EFFICIENCY CONTRACT TO NSTAR PREQUALIFIED VENDOR FOR LIGHTING IMPROVEMENTS PLAN, EXTERIOR ROADWAY LIGHTING AT THE DEER ISLAND TREATMENT PLANT FOR A TERM OF 90 CALENDAR DAYS	5515	AWARD	HORIZON SOLUTIONS, LLC	\$53,222.40

PURCHASING DELEGATED AUTHORITY ITEMS - SEPTEMBER 1 - 30, 2012

DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT #	AMENDMENT	COMPANY	FINANCIAL IMPACT
09/01/12	ORACLE DATABASE APPLIANCE LICENSES AND SUPPORT AWARD OF A PURCHASE ORDER FOR AN INCREASE IN LICENSING FOR SIX ORACLE DATABASE PRODUCTS, TO RESOLVE A LICENSE DEFICIENCY AND PROVIDE FAILOVER CAPABILITY FOR ALL ORACLE DATABASES, AND ONE NEW LICENSING FOR REAL APPLICATION TESTING TOOL AND SOFTWARE SUPPORT	GSA AGREEMENT # GS-35F-0153M		MYTHICS, INC	\$123,746.58
09/04/12	REBUILDING CUTTER CARTRIDGE AND PURCHASE ONE NEW CHANNEL MONSTER GRINDER AWARD OF A SOLE SOURCE PURCHASE ORDER FOR THE REBUILDING OF ONE CHANNEL MONSTER CUTTER CARTRIDGE FOR THE BRAINTREE-WEYMOUTH PUMP STATION, AS A MORE ECONOMICALLY SOUND WAY TO EXTEND THE USEFUL LIFE OF THE EQUIPMENT WHILE ENSURING OPTIMUM PERFORMANCE, AND THE PURCHASE OF ONE NEW CHANNEL MONSTER GRINDER FOR THE HINGHAM PUMP STATION, TO BE USED AS A SPARE IN THE EVENT OF AN UNANTICIPATED FAILURE OF EXISTING UNITS			JWC ENVIRONMENTAL	\$87,067.00
09/10/12	ANNUAL MAINTENANCE AND SUPPORT OF PORTIA INVESTMENT SOFTWARE AWARD OF A SOLE SOURCE PURCHASE ORDER FOR THE MAINTENANCE AND SUPPORT OF THE PORTIA SOFTWARE PACKAGE, USED BY THE FINANCE DIVISION TO MANAGE MWRA'S INVESTMENT PORTFOLIO, FOR THE SERVICE PERIOD OF NOVEMBER 1, 2012 TO OCTOBER 31, 2013			THOMSON REUTERS	\$28,810.95
09/10/12	SUPPLY AND DELIVERY OF FERRIC CHLORIDE - DEER ISLAND AND CLINTON AWARD OF AMENDMENT #1 TO PURCHASE ORDER CONTRACT WRA-3366, FOR THE SUPPLY AND DLEIVERY OF FERRIC CHLORIDE TO THE DEER ISLAND TREATMENT PLANT AND THE CLINTON WASTEWATER TREATMENT PLANT, WITH NO INCREASE IN CONTRACT TERM, DUE TO UNANTICIPATED INCREASE IN USAGE DURING FY12	WRA-3366	AMEND #1	KEMIRA WATER SOLUTIONS, INC	\$180,000.00

PURCHASING DELEGATED AUTHORITY ITEMS - OCTOBER 1 - 31, 2012

DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT #	AMENDMENT	COMPANY	FINANCIAL IMPACT
10/01/12	UNINTERRUPTIBLE POWER SUPPLY BATTERIES AWARD OF A PURCHASE ORDER, TO THE LOWEST RESPONSIVE BIDDER, FOR 150 UNINTERRUPTIBLE POWER SUPPLY BATTERIES FOR THE DEER ISLAND TREATMENT PLANT, REPLACING EXISTING BATTERIES UNDER DEER ISLAND'S BATTERY MAINTENANCE PROGRAM TO ENSURE MAXIMUM RELIABILITY	WRA-3487		ATLANTIC BATTERY	\$25,645.90
10/01/12	REPAIR CENTRIFUGAL COMPRESSOR AWARD OF A PURCHASE ORDER, TO THE LOWEST RESPONSIVE BIDDER, FOR THE REPAIR OF ONE DRESSOR ROOTS CENTRIFUGAL COMPRESSOR AT THE DEER ISLAND TREATMENT PLANT, AS PART OF THE ONGOING OVERHAUL OF THE THREE COMPRESSORS IN THE CENTRAL BLOWER FACILITY OPERATING BELOW SPECIFIED CAPACITY	WRA3471Q		ASSOCIATED ELECTRO-MECHANICS, INC	\$28,740.00
10/01/12	FIBER OPTIC INFRASTRUCTURE EXPANSION AWARD OF A PURCHASE ORDER, TO THE LOWEST RESPONSIVE BIDDER, FOR THE UPGRADE OF THE FIBER OPTIC NETWORK BACKBONE AT THE CHELSEA FACILITY, TO INCREASE THE BANDWIDTH CAPABILITIES TO MEET THE DEMANDS OF THE NEXT 5 TO 7 YEARS AS SET FORTH IN THE MIS 5-YEAR STRATEGIC PLAN	WRA-3477Q		LAN-TEL COMMUNICATIONS, INC	\$31,242.58
10/01/12	SLUDGE PUMP DRIVE ASSEMBLIES AWARD OF A PURCHASE ORDER, TO THE LOWEST RESPONSIVE BIDDER, FOR 36 DRIVE ASSEMBLIES FOR THE PRIMARY SLUDGE PUMPS AT THE DEER ISLAND TREATMENT PLANT, AS PART OF A THREE-PHASE, MULTI-YEAR PROCESS TO REPLACE ALL OF THE SLUDGE PUMP DRIVE ASSEMBLIES DUE TO INCREASING MAINTENANCE AND REPAIR	WRA-3503		EASTERN INDUSTRIAL AUTOMATION INC	\$175,464.00
10/01/12	SUPPLY AND DELIVERY OF AQUA AMMONIA AWARD OF A ONE-YEAR PURCHASE ORDER CONTRACT, TO THE LOWEST RESPONSIVE BIDDER, FOR THE SUPPLY AND DELIVERY OF AQUA AMMONIA TO THE JOHN J CARROLL WATER TREATMENT PLANT	WRA-3517		UNIVAR USA, INC	\$293,776.00
10/09/12	CENTRIFUGAL PUMP AWARD OF A PURCHASE ORDER, TO THE LOWEST RESPONSIVE BIDDER, FOR ONE DRI-PRIME, SIX-INCH CENTRIFUGAL PUMP FOR THE VALVE MAINTENANCE UNIT, REPLACING AN EXISTING UNIT, WRA-221, WHICH IS 13 YEARS OLD AND NO LONGER COST-EFFECTIVE TO REPAIR	WRA-3512		XYLEM DEWATERING SOLUTIONS	\$31,591.00
10/09/12	LONGITUDINAL FLIGHTS AWARD OF A PURCHASE ORDER, TO THE LOWEST RESPONSIVE BIDDER, FOR 200 LONGITUDINAL FLIGHTS FOR THE PRIMARY CLARIFIERS AT THE DEER ISLAND TREATMENT PLANT, TO REPLENISH THE CURRENT INVENTORY OF PRIMARY LONGITUDINAL FLIGHTS	WRA-3506		SIEMENS INDUSTRY, INC	\$36,400.00
10/18/12	REBUILDING OF FOUR MUFFIN MONSTER GRINDERS AWARD OF A SOLE SOURCE PURCHASE ORDER FOR THE REBUILDING OF FOUR OF DEER ISLAND'S 29 SMALLER MUFFIN MONSTERS IN THE RESIDUALS COMPLEX, DUE TO NORMAL WEAR AND TEAR CAUSED BY CONSTANT OPERATION			JWC ENVIRONMENTAL	\$29,840.00
10/18/12	PORTABLE AIR COMPRESSORS AWARD OF A PURCHASE ORDER, TO THE LOWEST RESPONSIVE BIDDER, FOR THREE PORTABLE AIR COMPRESSORS FOR THE FIELD OPERATIONS UNIT, TWO WILL BE REPLACEMENTS OF EXISTING 12 YEAR OLD UNITS THAT ARE NO LONGER COST-EFFECTIVE TO MAINTAIN AND THE THIRD WILL REPLACE A NON-FUNCTIONING UNIT	WRA-3508		C & J EQUIPMENT, INC	\$38,304.00
10/23/12	DIGESTER MIXER ASSEMBLY AWARD OF A SOLE SOURCE PURCHASE ORDER FOR ONE DIGESTER MIXER ASSEMBLY, TO HAVE ON HAND AS A SPARE, TO ENSURE THAT DIGESTER DOWN TIME AND THE ASSOCIATED ADDITIONAL COSTS ARE KEPT TO A MINIMUM			SIHI PUMPS, INC	\$197,000.00
10/23/12	DEWATERING PUMPS AWARD OF A PURCHASE ORDER, TO THE LOWEST RESPONSIVE BIDDER, FOR SIX DEWATERING PUMPS FOR THE THREE REMOTE HEADWORKS FACILITIES, CHELSEA CREEK, COLUMBUS PARK AND WARD STREET, TO REPLACE EXISTING PUMPS WHICH HAVE EXCEEDED THEIR SERVICEABLE LIFE SPAN AND NO LONGER PUMP AT THEIR RATED CAPACITY	WRA-3507		MECHANICAL SOLUTIONS, INC	\$277,302.00
10/25/12	AIR HANDLING UNIT AWARD OF A PURCHASE ORDER, TO THE LOWEST RESPONSIVE BIDDER, FOR ONE REPLACEMENT AIR HANDLING UNIT FOR THE NEW NEPONSET PUMP STATION, REPLACING THE EXISTING UNIT THAT HAS SUFFERED SIGNIFICANT CORROSION AND IS NEARING THE END OF ITS NORMAL EXPECTED USEFUL LIFE	WRA-3519		STEBBINS-DUFFY, INC	\$33,650.00

POSITION CONTROL REGISTER (PCR) LOCATION CHANGES September 2012

<u>DATE OF CHANGE</u>	<u>POSITION TITLE</u>	<u>CURRENT PCR#</u>	<u>CURRENT COST CENTER</u>	<u>NEW PCR #</u>	<u>NEW COST CENTER</u>	<u>REASON FOR CHANGE</u>
9/1/2012	Facilities Specialist	2910015	Clinton	5410034	Facilities Maint Metro	To meet staffing needs in Facilities Maint Metro and a union settlement.
9/22/2012	Staff Engineer, PC&PS	24700140	WW Operations	55250152	Engineering & Construction	To meet staffing needs in Engineering & Construction Department
9/22/2012	Program Manager, Operations	24700126	WW Operations	2971022	DO - Capital Engineering	To meet staffing needs in DI - Capital Engineering Department.
9/22/2012	Staff Engineer	55250150	Engineering & Construction	5811024	Operations Engineering	To meet staffing needs in Operations Engineering Department

POSITION CONTROL REGISTER (PCR) LOCATION CHANGES October 2012

<u>DATE OF CHANGE</u>	<u>POSITION TITLE</u>	<u>CURRENT PCR#</u>	<u>CURRENT COST CENTER</u>	<u>NEW PCR #</u>	<u>NEW COST CENTER</u>	<u>REASON FOR CHANGE</u>
10/6/2012	Skilled Laborer	5411015	Grounds Maint - Metro	3394081	Grounds Maint - West	To meet staffing needs in Western Maintenance
10/20/2012	Metal Fabricator/ Welder	5470022	EQ Maintenance	29880158	Trade Labor Maint (DI)	To meet staffing needs in Trade Labor Maintenance (DI)
10/27/2012	Technical IS Administrator	2971004	Capital Engineering	55250153	E&C	To meet staffing needs in E&C


STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: November 14, 2012
SUBJECT: FY13 Financial Update and Summary



COMMITTEE: Administration, Finance & Audit

INFORMATION
 VOTE


Kathy Soni, Budget Director
David Whelan, Budget Manager
Preparer/Title

(D)


Rachel C. Madden
Director, Administration and Finance

RECOMMENDATION:

For information only. This staff summary provides the financial update and variance highlights through October 2012.

DISCUSSION:

As part of MWRA's multi-year rates management strategy, the Authority is continuing the practice of setting aside favorable Capital Finance variances into the Defeasance Account established in FY12 with the intention of using these funds to defease debt and provide rate relief in future years. As such, \$4.3 million of favorable year-to-date debt service variance has been moved to the Defeasance Account through October. This variance is the result of the continued low variable rate environment.

Without the transfer of the \$4.3 million in debt service savings to the Defeasance Account, the total year-to-date variance through October would have been \$5.8 million.

Direct and Indirect Expenses were lower than budget by \$1.5 million or 0.7% and total Revenues were higher than budgeted by \$28,000.

The largest non-debt related variances year-to-date are:

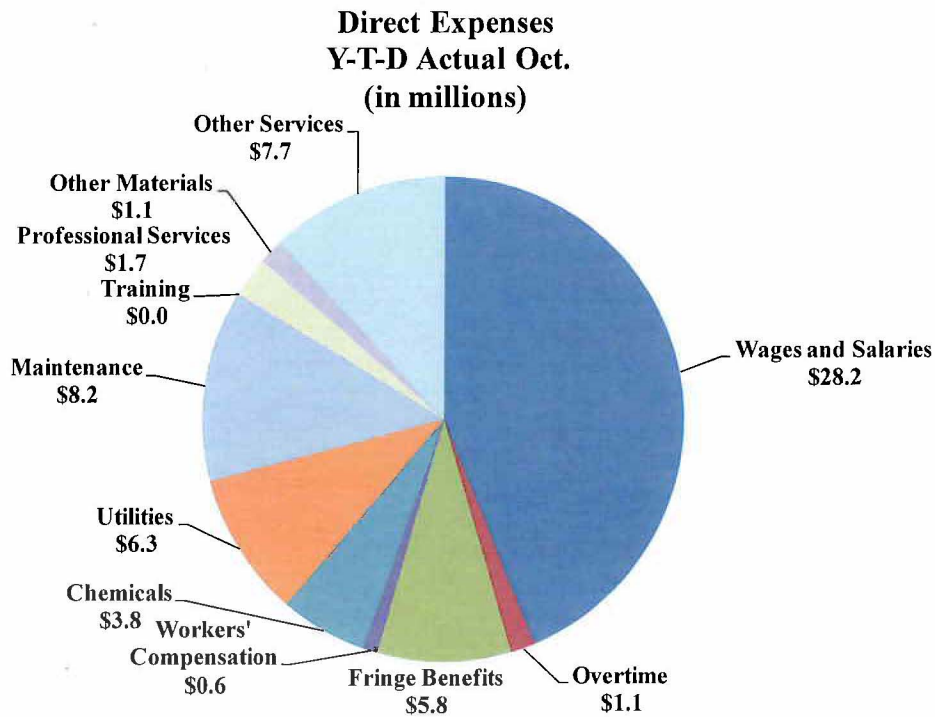
- Direct Expenses are lower than budget by \$1.2 million for wages and salaries, other services, fringe benefits, professional services, and workers' compensation offset by overspending for maintenance, other materials, and chemicals;
- Indirect Expenses are lower than budget by \$298,000 for lower Watershed expenses due to an FY12 overaccrual and lower insurance expenses; and
- Revenues exceed budget by \$28,000 due to higher Non-Rate Revenue of \$417,000 mainly for Federal Emergency Management Agency (FEMA) reimbursement for last year's Tropical Storm Irene costs of \$264,000 offset by lower investment income of \$359,000 due to lower than budgeted short- term rates.

Total FY13 expenses are lower than budget by \$1.5 million or 0.7% as indicated below:

	FY13 Budget (Oct.)	FY13 Actual (Oct.)	\$ Variance	% Variance
Direct Expenses	\$65.7	\$64.5	-\$1.2	-1.8%
Indirect Expenses	\$19.6	\$19.3	-\$0.3	-1.5%
Debt Service	\$121.2	\$121.2	\$0.0	0.0%
Total	\$206.5	\$205.0	-\$1.5	-0.7%

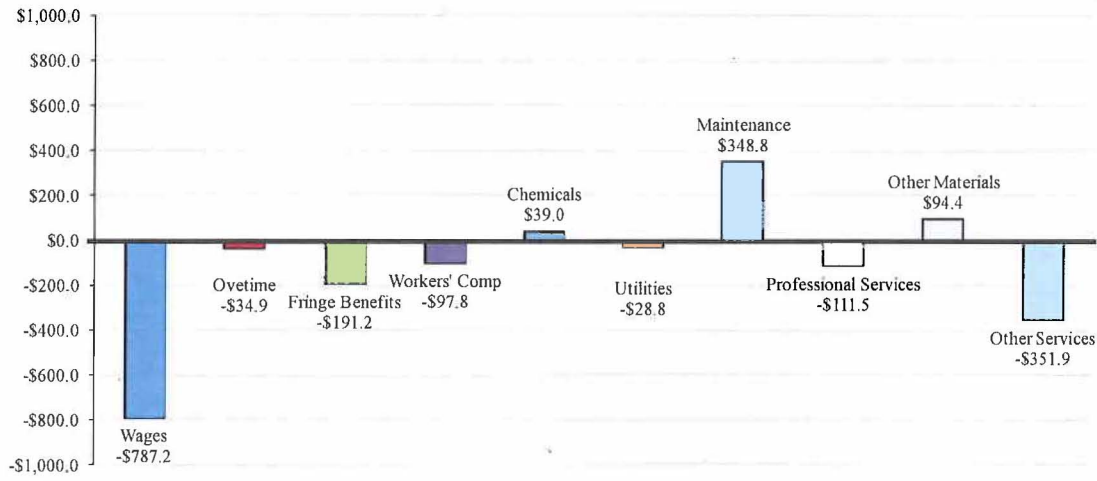
Direct Expenses

Direct expenses total \$64.5 million, \$1.2 million or 1.8% less than budget.



The primary reasons for underspending on direct expenses are lower spending for: wages and salaries, other services, fringe benefits, professional services, and workers' compensation. The underspending was offset by higher than budgeted spending for maintenance, other materials, and chemicals. Please refer to Attachment 2 for a more detailed comparison by line item.

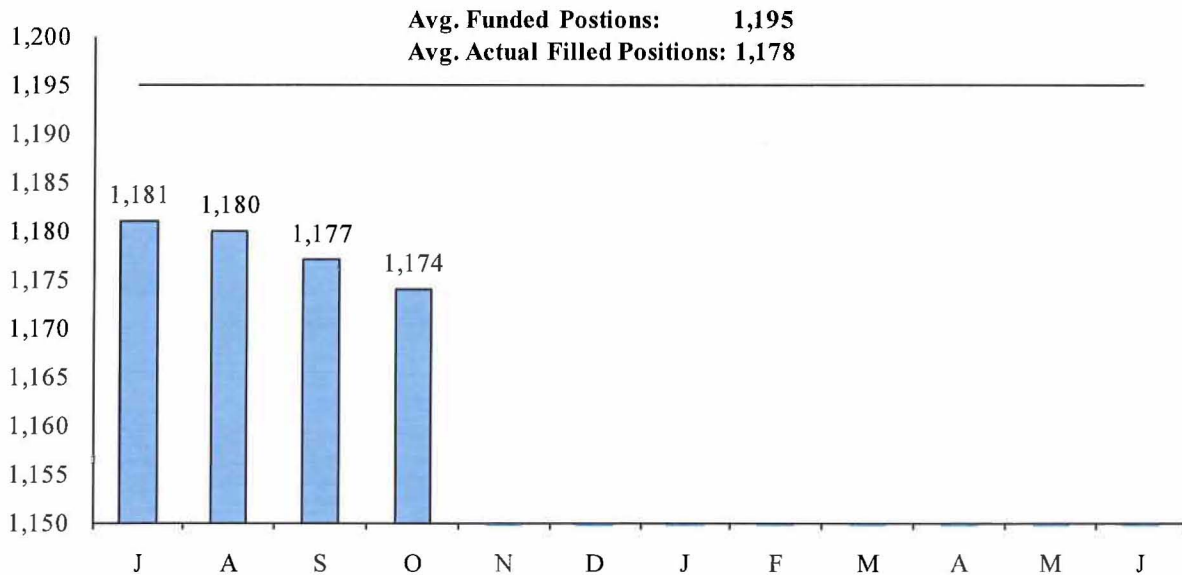
FY13 Direct Expense Variance (Year-To-Date October)
(in 000's)



Wages and Salaries

Wages and Salaries are underspent by \$787,000 or 2.7% mainly as a result of lower than budgeted filled positions and employees on unpaid time off. The average actual filled positions were 1,178 which are 17 positions lower than the 1,195 positions funded. Additionally, MWRA currently has 10 temporary employees on staff.

FY13 MWRA Headcount Trend



Other Services

Other Services are lower than budget by \$352,000 or 4.4% mainly due to lower than budgeted sludge quantities. Sludge quantities in FY13 are approximately 5% lower than budget, 101.4 tons per day versus 107.1 budgeted. The Other Services category is also underspent due to the timing of water quality projects, contaminant monitoring, and remediation activities.

Fringe Benefits

Fringe Benefits are underspent by \$191,000 or 3.2% year-to-date in FY13 due to lower than budgeted health insurance costs resulting from lower headcount and because new employees contribute at a higher percentage (25% versus 20%) than employees hired before July 2003.

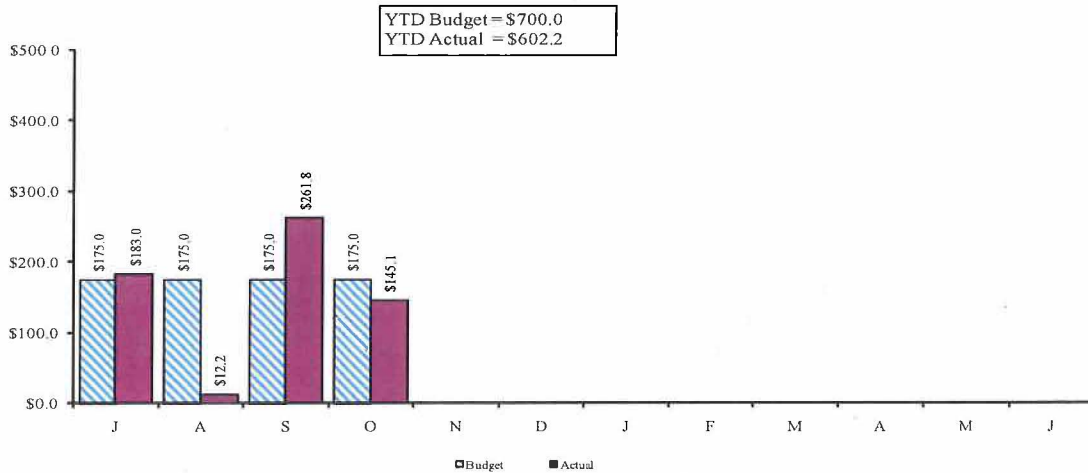
Professional Services

Professional Services are underspent by \$112,000 or 6.2% mainly due to lower than budgeted report preparation and as-needed services for the Harbor Monitoring program, legal, and security expenses.

Workers' Compensation

Workers' Compensation expenses are lower than budget by \$98,000 or 14.0%. To date, actual reserves are lower than budget by \$187,000 while actual payments are trending higher than budget by \$89,000.

FY13 Workers' Compensation Spending (Year-To-Date October)
(in thousands)



# of Open Claims-Lost Time	48	52	50	52							
# of Open Claims-Medical Only	46	56	49	42							

Maintenance

Maintenance is overspent by \$349,000 or 4.4% year-to-date. Material purchases are greater than budgeted by \$597,000 mainly due to timing of purchases scheduled for FY12, received this year offset by \$248,000 underspending in services.

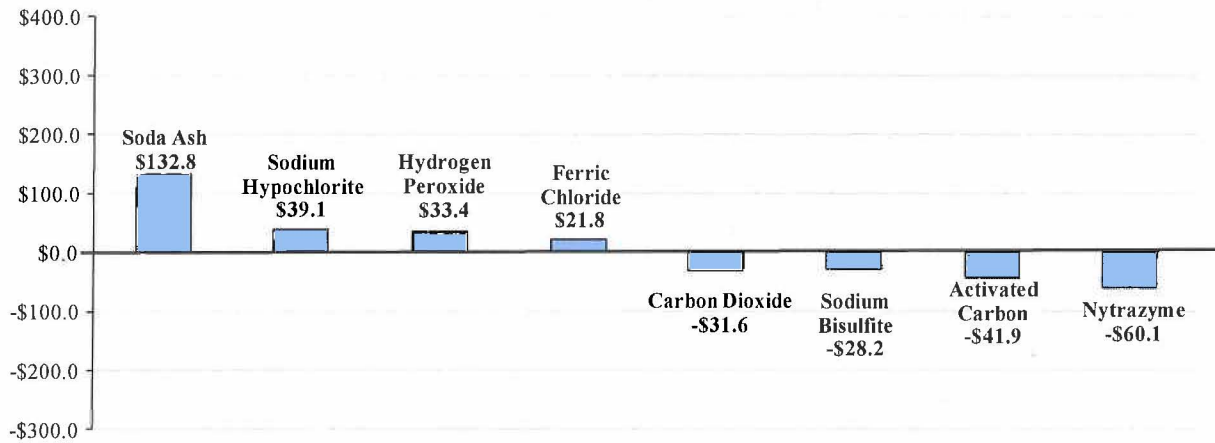
Other Materials

Other Materials are higher than budget by \$94,000 or 9.63% due to timing of computer hardware purchases and lab and testing supplies offset by lower than projected spending on gravel purchases at Clinton.

Chemicals

Chemicals are overspent by \$39,000 or 1.0% year-to-date. The majority of the variance is attributable to higher spending on Soda Ash due to price increases offset by lower than budgeted spending for Nitrazyme for corrosion control.

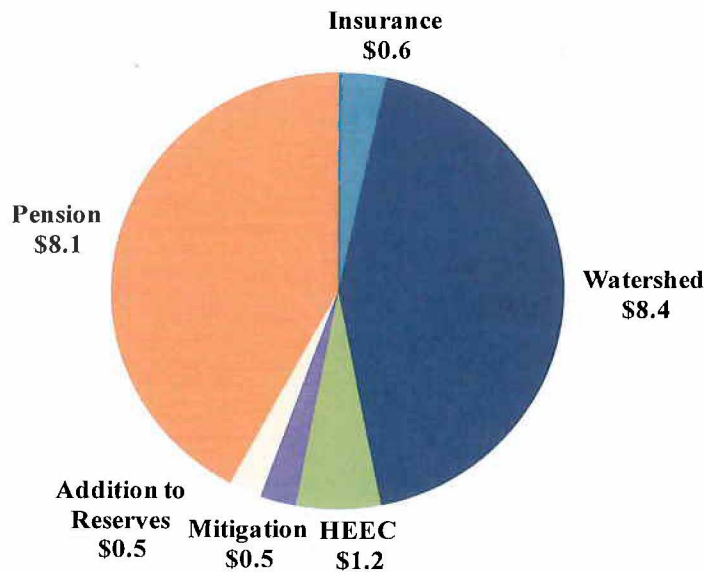
FY13 Chemical Expense Variances (Year-To-Date October)
(in 000's)



Indirect Expenses

Indirect Expenses year-to-date total \$19.3 million, \$298,000 or 1.5% less than budget.

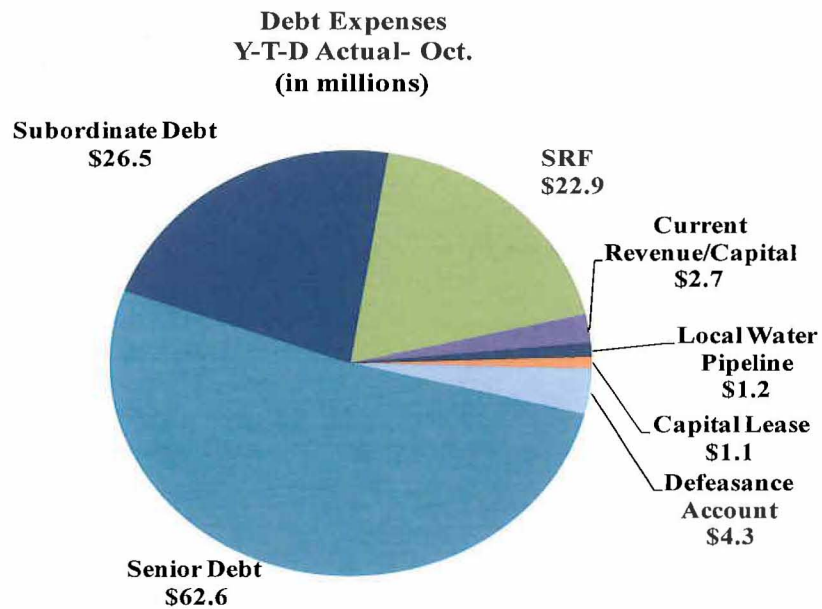
Indirect Expenses
Y-T-D Actual Oct.
(in millions)



The majority of the year-to-date underspending on Indirect Expenses is for watershed expenses of \$233,000 due to an FY12 overaccrual and lower insurance expenses of \$40,000.

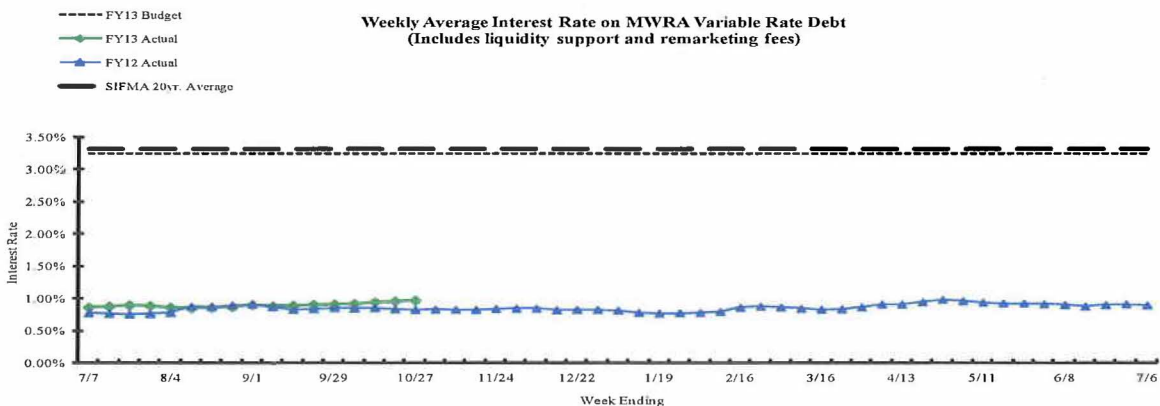
Debt Service Expenses

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



Debt Service expenses through October totaled \$121.2 million which is at budgeted levels after the transfer of \$4.3 million of a favorable year-to-date variance to the Defeasance Account established in FY12.

The graph below reflects the variable rate trend by month over the past year in comparison with FY12 Actuals and the FY13 Budget for the same period.



Revenue

Total Revenue and Income for FY13 year-to-date total \$207.9 million, \$28,000 higher than budget due to higher non-rate revenue of \$417,000 mainly for the Federal Emergency Management Agency (FEMA) reimbursement for last year's Tropical Storm Irene costs offset by lower investment income of \$359,000 due to lower than budgeted short-term rates.

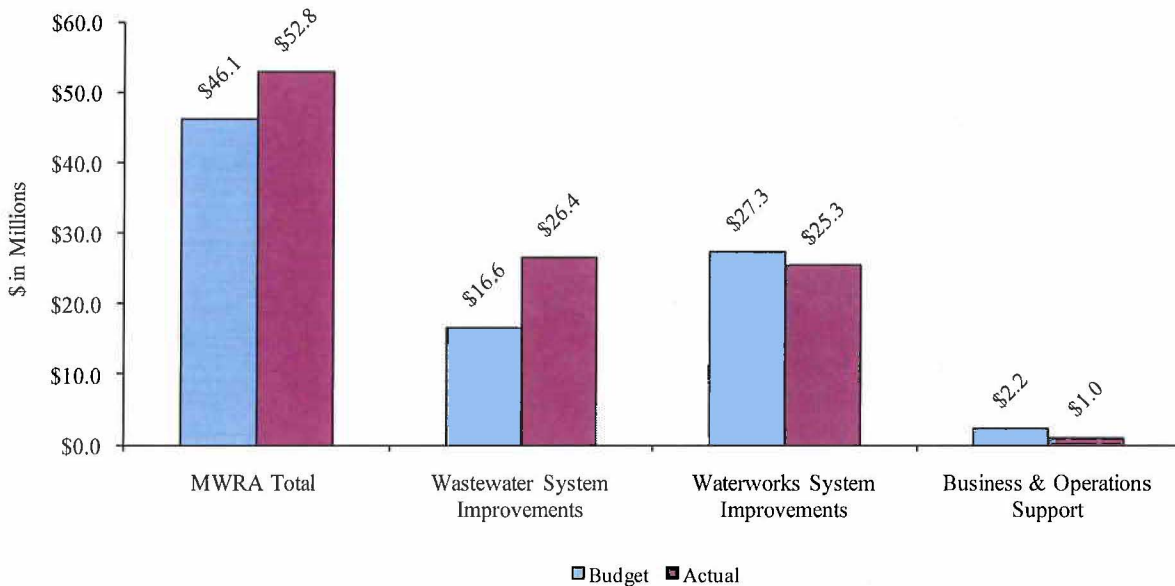
FY13 Capital Improvement Program

Spending year-to-date in FY13 totals \$52.8 million, \$6.7 million or 14.5% higher 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 \$108,000 or nearly at budgeted levels.

Overspending was reported in the Wastewater program of \$9.8 million offset by underspending in Waterworks of \$1.9 million and Business and Operations Support of \$1.2 million.

Spending By Program:

**FY13 CIP Spending
(Year-To-Date October)**



\$ in Millions	Budget	Actuals	\$ Var.	% Var.
Wastewater System Improvements				
Interception & Pumping	0.8	0.5	-0.3	-34.2%
Treatment	5.0	5.3	0.3	6.0%
Residuals	0.1	0.0	-0.1	-100.0%
CSO	7.6	1.2	-6.4	-84.2%
Other	3.0	19.3	16.3	540.3%
Total Wastewater System Improvements	\$16.6	\$26.4	\$9.8	59.2%
Waterworks System Improvements				
Drinking Water Quality Improvements	13.1	14.1	1.0	7.5%
Transmission	5.1	6.7	1.6	30.5%
Distribution & Pumping	2.9	2.1	-0.8	-27.8%
Other	6.1	2.4	-3.7	-60.3%
Total Waterworks System Improvements	\$27.3	\$25.3	-\$1.9	-7.2%
Business & Operations Support	\$2.2	\$1.0	-\$1.2	-53.5%
Total MWRA	\$46.1	\$52.8	\$6.7	14.5%

The main reasons for FY13 overspending were:

1. Wastewater Other of \$16.3 million – Inflow and Infiltration (I/I) due to community requests for grants and loans being greater than budgeted.
2. Water Transmission of \$1.6 million – mainly due to higher than budgeted spending on Upper Hultman of \$1.9 million due to accelerated contractor progress and Oakdale Phase 1A Electrical construction of \$299,000 offset by lower than projected spending on the Lower Hultman project of \$482,000.
3. Wastewater Treatment of \$303,000 – mainly due to greater than budgeted progress on the Clinton Aeration Efficiency project, Digester Modifications 1 & 2 Pipe Replacement, and Metals Lab Fume Hood replacement offset by delay for North Main Pump Station Variable Frequency Drive Construction.
4. Drinking Water Quality Improvements of \$981,000 – due to greater than budgeted progress on the Carroll Plant Ultraviolet Disinfection of \$2.3 million and Ancillary Modifications Construction 2 of \$361,000 offset by underspending for Spot Pond of \$1.1 million.

The overspending was offset by underspending of \$6.4 million in the Combined Sewer Overflow (CSO) program due to the timing of the payments for the Cambridge Sewer Separation project of \$6.0 million which was originally budgeted for September but is now projected for November and for North Dorchester Bay of \$317,000 mainly for less than anticipated Construction Management Services. The Local Water Pipeline Assistance Program is also below budget due to lower community requests for loans of \$3.7 million; Distribution and Pumping Southern Spine Distribution Mains of \$334,000 mainly due to pending credit change order on Section 107 Phase 2 Construction and Lynnfield Pipeline of \$271,000 due to differing site conditions; and Interception and Pumping mainly due to a net reimbursement for Melrose work of \$654,000.

Construction Fund Balance

The construction fund balance was at \$184 million as of October 2012. Commercial Paper availability was at \$206 million to fund construction projects.

- Attachment 1 – Variance Summary October 2012
- Attachment 2 – Current Expense Variance Explanations
- Attachment 3 – Capital Improvement Program Variance Explanations

ATTACHMENT 1

	October 2012 Year-to-Date					
	Period 4 YTD Budget	Period 4 YTD Actual	Period 4 YTD Variance	%	FY13 Approved	% Expended
EXPENSES						
WAGES AND SALARIES	\$ 29,023,270	\$ 28,236,064	\$ (787,206)	-2.7%	\$ 94,059,400	30.0%
OVERTIME	1,089,806	1,054,939	(34,867)	-3.2%	3,573,495	29.5%
FRINGE BENEFITS	6,020,978	5,829,801	(191,177)	-3.2%	18,241,926	32.0%
WORKERS' COMPENSATION	700,000	602,163	(97,837)	-14.0%	2,100,000	28.7%
CHEMICALS	3,740,198	3,779,154	38,956	1.0%	9,963,496	37.9%
ENERGY AND UTILITIES	6,283,695	6,254,936	(28,759)	-0.5%	23,127,198	27.0%
MAINTENANCE	7,869,830	8,218,639	348,809	4.4%	28,229,070	29.1%
TRAINING AND MEETINGS	129,076	76,479	(52,597)	-40.7%	385,617	19.8%
PROFESSIONAL SERVICES	1,789,599	1,678,077	(111,522)	-6.2%	5,900,785	28.4%
OTHER MATERIALS	984,983	1,079,465	94,482	9.6%	5,591,291	19.3%
OTHER SERVICES	8,081,144	7,729,279	(351,865)	-4.4%	23,743,608	32.6%
TOTAL DIRECT EXPENSES	\$ 65,712,579	\$ 64,538,996	\$ (1,173,581)	-1.8%	\$ 214,915,886	30.0%
INSURANCE	\$ 685,844	\$ 646,302	\$ (39,542)	-5.8%	\$ 2,097,875	30.8%
WATERSHED/PILOT	8,635,077	8,401,583	(233,494)	-2.7%	26,413,175	31.8%
BEC _o PAYMENT	1,189,099	1,167,360	(21,739)	-1.8%	3,741,915	31.2%
MITIGATION	512,263	493,565	(18,698)	-3.7%	1,566,923	31.5%
ADDITIONS TO RESERVES	457,146	457,146	-	0.0%	1,398,329	32.7%
RETIREMENT FUND	8,112,230	8,128,101	15,871	0.2%	10,474,376	77.6%
TOTAL INDIRECT EXPENSES	\$ 19,591,659	\$ 19,294,057	\$ (297,602)	-1.5%	\$ 45,692,593	42.2%
STATE REVOLVING FUND	\$ 22,913,619	\$ 22,913,619	\$ -	0.0%	\$ 73,804,552	31.0%
SENIOR DEBT	62,638,068	62,638,068	-	0.0%	193,432,134	32.4%
DEBT SERVICE ASSISTANCE	(114,423)	(114,423)	-	0.0%	(350,000)	32.7%
CURRENT REVENUE/CAPITAL	2,680,769	2,680,769	-	0.0%	8,200,000	32.7%
SUBORDINATE MWRA DEBT	30,844,707	30,844,707	-	0.0%	93,303,807	33.1%
LOCAL WATER PIPELINE CP	1,190,169	1,190,169	-	0.0%	3,640,517	32.7%
CAPITAL LEASE	1,051,731	1,051,731	-	0.0%	3,217,060	32.7%
VARIABLE DEBT	-	(4,269,796)	(4,269,796)	---	-	0.0%
DEFEASANCE ACCOUNT	-	4,269,796	4,269,796	---	-	0.0%
TOTAL DEBT SERVICE	\$ 121,204,640	\$ 121,204,640	\$ -	0.0%	\$ 375,248,070	32.3%
TOTAL EXPENSES	\$ 206,508,879	\$ 205,037,694	\$ (1,471,183)	-0.7%	\$ 635,856,549	32.2%
REVENUE & INCOME						
RATE REVENUE	\$ 198,609,692	\$ 198,609,692	\$ -	0.0%	\$ 607,512,000	32.7%
OTHER USER CHARGES	3,329,280	3,299,725	(29,555)	-0.9%	7,766,692	42.5%
OTHER REVENUE	1,051,631	1,468,280	416,649	39.6%	6,116,845	24.0%
INVESTMENT INCOME	4,895,086	4,536,296	(358,790)	-7.3%	14,461,012	31.4%
TOTAL REVENUE & INCOME	\$ 207,885,689	\$ 207,913,993	\$ 28,304	0.0%	\$ 635,856,549	32.7%

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY13 Budget YTD October	FY13 Actuals YTD October	FY13 YTD Actual vs. FY13 Budget		Explanations
			\$	%	
Direct Expenses					
Wages & Salaries	29,023,270	28,236,064	(787,205)	-2.7%	Underspending is due to lower headcount and employees on unpaid leave status. As of October, the average filled positions were 1,178, 17 positions less than the 1,195 funded positions.
Overtime	1,089,806	1,054,939	(34,866)	-3.2%	Underspending in Field Operations of \$28k, Deer Island of \$13k, and Admin & Finance of \$7k, offset by higher spending in Engineering & Construction of \$20k.
Fringe Benefits	6,020,978	5,829,801	(191,177)	-3.2%	Underspending for Health Insurance of \$153k and Medicare of \$27k mainly due to lower headcount.
Worker's Compensation	700,000	602,163	(97,837)	-14.0%	Underspending due to lower reserves of \$187k offset by higher actual payments of \$89k.
Chemicals	3,740,198	3,779,154	38,956	1.0%	Overspending for Soda Ash of \$133k, Sodium Hypochlorite of \$39k, Hydrogen Peroxide of \$33k, and Copper Sulfate of \$24k offset by lower spending for Nitrazyme of \$60k, Activated Carbon of \$42k, Carbon Dioxide of \$32k, and Sodium Bisulfite of \$28k.
Utilities	6,283,695	6,254,936	(28,759)	-0.5%	Underspending for Diesel Fuel of \$31k and Natural Gas of \$23k, offset by higher spending for Electricity of \$18k.
Maintenance	7,869,830	8,218,639	348,809	4.4%	Maintenance Materials are overspent by \$597k offset by underspending for Services of \$248k mainly due to timing.
Training & Meetings	129,076	76,479	(52,597)	-40.7%	Underspending in all divisions related to timing.
Professional Services	1,789,599	1,678,077	(111,522)	-6.2%	Underspending for Lab & Testing Analysis of \$57k mainly due to lower than budgeted report preparation and as-needed services for the Harbor Monitoring program, legal, and security expenses.

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY13 Budget YTD October	FY13 Actuals YTD October	FY13 YTD Actual vs. FY13 Budget		Explanations
			\$	%	
Other Materials	984,983	1,079,465	94,482	9.6%	Overspending for Computer Hardware of \$96k, Lab & Testing Supplies of \$46k, Vehicle Purchases of \$21k, and Work Clothes of \$21k mainly due to timing. Offset by lower spending for Other Materials of \$61k mainly due to timing of gravel purchases at Clinton.
Other Services	8,081,144	7,729,279	(351,865)	-4.4%	Underspending for Sludge Pelletization of \$207k due to lower quantities and Other Services of \$162k mainly due to the timing of water quality projects, contaminant monitoring, and remediation projects. Offset by overspending for Membership/Dues of \$54k due to timing.
Total Direct Expenses	65,712,579	64,538,996	(1,173,581)	-1.8%	
Indirect Expenses					
Insurance	685,844	646,302	(39,542)	-5.8%	Underspending due to lower payments/claims of \$62k offset by higher premiums of \$22k.
Watershed/PILOT	8,635,077	8,401,583	(233,494)	-2.7%	Underspending for lower Watershed Reimbursement due to a FY12 overaccrual.
HEEC Payment	1,189,099	1,167,360	(21,739)	-1.8%	Underspending due to lower O&M charges of \$32k offset by higher Capacity Charges of \$11k.
Mitigation	512,263	493,565	(18,698)	-3.7%	Underspending due to lower mitigation charges.
Addition to Reserves	457,146	457,146	-	0.0%	
Pension Expense	8,112,230	8,128,101	15,871	0.2%	
Post Employee Benefits	-	-	-		
Total Indirect Expenses	19,591,659	19,294,057	(297,602)	-1.5%	
Debt Service					
Debt Service	121,319,063	121,319,063	-	0.0%	Debt Service expenses are at budgeted levels after the transfer of \$4.3 million favorable short-term rate year-to-date variance to the Defeasance Account.
Debt Service Assistance	(114,423)	(114,423)	-	0.0%	
Total Debt Service Expenses	121,204,640	121,204,640	-	0.0%	

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY13 Budget YTD October	FY13 Actuals YTD October	FY13 YTD Actual vs. FY13 Budget		Explanations
			\$	%	
Total Expenses	206,508,878	205,037,693	(1,471,184)	-0.7%	
Revenue & Income					
Rate Revenue	198,609,692	198,609,692	-	0.0%	
Other User Charges	3,329,280	3,299,725	(29,555)	-0.9%	Underspending mainly due to lower Deer Island Water
Other Revenue	1,051,631	1,468,279	416,648	39.6%	Overspending due to higher Non-Rate Revenue of \$417k mainly for Federal Emergency Management Agency (FEMA) reimbursement receipt for last year's Tropical Storm Irene costs.
Rate Stabilization	-	-	-		
Investment Income	4,895,086	4,536,296	(358,790)	-7.3%	Lower investment income mainly due to lower than budgeted short-term interest rates.
Total Revenue	207,885,689	207,913,992	28,303	0.0%	
Net Revenue in Excess of Expenses	1,376,811	2,876,299	1,499,487		

**ATTACHMENT 3
Capital Improvement Program Variance Explanations**

	FY13 Budget YTD October	FY13 Actuals YTD October	YTD Actuals vs. Budget		Explanations
			\$	%	
Interception & Pumping (I&P)	\$835	\$549	(\$286)	-34.2%	Underspending for Melrose Sewer reimbursement of \$654,000 for prior year's contractual obligations and North System Hydraulic Systems of \$152,000 due to delays. Offset by Cottage Farm Fuel System Upgrade of \$110,000 due to contractor progress.
Treatment	\$5,030	\$5,333	\$303	6.0%	Overspending for Clinton Aeration Efficiency work of \$878,000, Digester Modifications 1&2 of \$246,000, and Metals Lab Fume Hood Replacement of \$128,00 due to greater contractor progress. Offset by underspending due to longer than anticipated lead time for specialized equipment for the North Main Pump Station VFD Replacement Construction of \$838,000 and lower award and schedule shift for Fuel Pipe Abandonment project of \$229,000.
Residuals	\$119	\$0	(\$119)	-100.0%	
CSO	\$7,601	\$1,204	(\$6,397)	-84.2%	Underspending on Cambridge Sewer Separation of \$6.0 million due to timing of payments and North Dorchester Bay of \$317,000 for less than anticipated Construction Management Services on the Tunnel & Facilities.
Other Wastewater	\$3,021	\$19,342	\$16,322	540.3%	Overspending on Inflow and Infiltration (I/I) due to community requests for grants and loans being greater than budgeted.
Total Wastewater	\$16,605	\$26,429	\$9,824	59.2%	
Drinking Water Quality Improvements	\$13,120	\$14,101	\$981	7.5%	Overspending for Carroll Plant Ultraviolet Disinfection Construction of \$2.3M and Ancillary Modifications Construction 2 of \$361,000 due to contractor progress. Offset by underspending for Spot Pond Storage Facility of \$1.1 million primarily due to delayed start of
Transmission	\$5,116	\$6,677	\$1,560	30.5%	Overspending for the Upper Hultman rehabilitation work of \$1.9 million due to contractor progress and acceleration of the project. Also, Quabbin Transmission System of \$297,000 due to contractor progress on Oakdale Phase 1A Electrical Construction contract. Offset by underspending on Lower Hultman rehabilitation project of \$482,000 due to timing of work.
Distribution & Pumping	\$2,911	\$2,103	(\$809)	-27.8%	Underspending on Southern Spine Distribution Mains of \$334,000 mainly due to pending credit change order on Section 107 Phase 2 Construction, and Lynnfield Pipeline of \$271,000 due to site conditions.

ATTACHMENT 3
Capital Improvement Program Variance Explanations

	FY13 Budget YTD October	FY13 Actuals YTD October	YTD Actuals vs. Budget		Explanations
			\$	%	
Other Waterworks	\$6,108	\$2,427	(\$3,682)	-60.3%	Underspending on Local Water Pipeline Assistance Program due to community requests for loans being less than budgeted by \$1.0M and repayments being greater than anticipated by \$2.7M.
Total Waterworks	\$27,256	\$25,307	(\$1,949)	-7.2%	
Business & Operations Support	\$2,201	\$1,023	(\$1,178)	-53.5%	Underspending due to MIS-related projects of \$537,000 due to timing of IT Strategic Plan implementation, Centralized Equipment Purchases of \$314,000 for timing of vehicle purchases, and Alternative Energy Initiatives of \$253,000.
Total MWRA	\$46,063	\$52,759	\$6,696	14.5%	

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: November 14, 2012
SUBJECT: Dental Insurance
Blue Cross and Blue Shield of Massachusetts, Inc.
Contract A582



COMMITTEE: Administration, Finance and Audit INFORMATION

X VOTE


Robert Donnelly, Director, Human Resources
Preparer/Title


Rachel Madden, Director of Admin & Finance
Division Director Approval

RECOMMENDATION:

To approve the recommendation of the Consultant Selection Committee to select Blue Cross and Blue Shield of Massachusetts, Inc. to provide dental insurance to eligible employees under a dual option coverage plan as described herein and authorize the Executive Director, on behalf of the Authority, to execute a contract with Blue Cross and Blue Shield of Massachusetts, Inc. under which the Authority pays an amount not to exceed \$342,000 for a contract term of twelve months from January 1, 2013 through December 31, 2013. Further, options to renew the contract for up to three additional twelve-month periods may be approved by the Board of Directors.

BACKGROUND:

MWRA has been providing dental insurance to all non-union employees since July 1, 1985. This benefit covers Non-Union and Unit 6 employees and employees accreted into Units 1 and 9. Other MWRA union employees receive coverage through the Health and Welfare funds of their respective unions. This contract would maintain the level of coverage currently offered to eligible employees in the areas of diagnostic, preventive, basic and major restorative services with an annual maximum of \$1,000 as well as limited orthodontic coverage. The MWRA annual maximum is lower than the current maximum GIC offers its managers (\$1,250). MWRA employees are currently ineligible to participate in the GIC's plan which offers both dental and vision care benefits because the plan is limited to Commonwealth non-union managers. The dollar amount requested is the estimated amount of the MWRA's share of the premium and does not include the employees' share of the premium or the amount reimbursed by those insured under COBRA.

DISCUSSION:

An RFQ/P was issued in September 2012 using an evaluative procurement process in which proposals were judged by the following criteria, with points assigned as noted:

1. cost (50 points);
2. technical approach/capacity/organization and management approach (30 points);
3. experience/past performance/qualifications and key personnel (20 points).

In October 2012, MWRA received timely proposals from three proposers: Altus Dental, Blue Cross and Blue Shield of Massachusetts, Inc. (“Blue Cross”) and Delta Dental. One additional proposal was received after the deadline, and was not forwarded for review.

As noted below, Altus Dental submitted the lowest price proposal, but its price was non-responsive, because its quote was contingent on a three-year agreement, not a one-year agreement as required by the RFQ/P; and it was also defective in that it was based on an incorrect (inflated) number of plan participants. Altus Dental’s technical proposal also failed to distinguish clearly between the two options.

Blue Cross (the MWRA’s current provider) provided the second-lowest price proposal, and Blue Cross also ranked highly on each of the selection criteria. References for Blue Cross checked by MWRA staff were positive. Blue Cross also requested some proposed changes to the MWRA’s standard contract, which were acceptable to the MWRA.

Delta Dental met all criteria, and had positive references, but submitted the highest cost proposal and also requested changes to the contract terms. For these reasons, the committee scored the proposal accordingly.

The selection committee’s final scores and rankings were as follows:

	Altus		Blue Cross		Delta Dental	
MWRA Cost	\$ 304,122		\$ 339,119		\$ 363,387	
	Points	Rank*	Points	Rank*	Points	Rank*
Total	321	15	407	5	434	12

*Rank represents the sum of the individual Selection Committee members’ rankings where the firm receiving the highest number of points is assigned a “1”; the firm receiving the next highest number of points is assigned a “2”, and so on.

BUDGET/FISCAL IMPACT:

This contract will impact the second half of FY13 and the first half of FY14. The FY13 Current Expense Budget includes the estimated cost of the dental insurance for eligible employees. Although the total cost of the plan is dependent upon the number of employees enrolled, the cost of the dental insurance program is not expected to exceed the budgeted amount for FY13. The FY14 budget will include funding for this contract.

MBE/WBE UTILIZATION:

There are no MBE/WBE participation requirements for this contract.

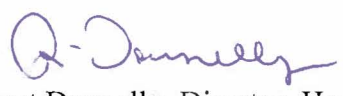
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: November 14, 2012
SUBJECT: Workers' Compensation Third Party Administrator Services
PMA Management Corp. of New England
Contract A583

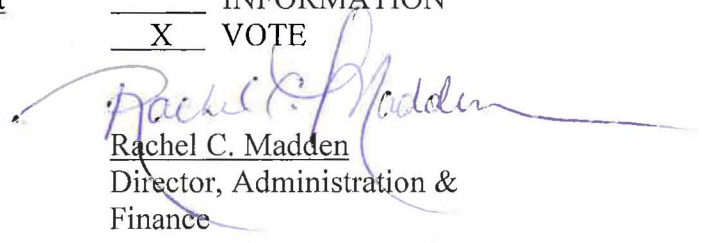


COMMITTEE: Administration, Finance and Audit

 INFORMATION
 X VOTE



Robert Donnelly, Director, Human Resources
Preparer/Title



Rachel C. Madden
Director, Administration &
Finance

RECOMMENDATION:

To approve the recommendation of the Consultant Selection Committee to select PMA Management Corp. of New England to provide workers' compensation third party administrator services and authorize the Executive Director, on behalf of the Authority, to execute Contract A583 with PMA Management Corp. of New England in a not-to-exceed amount of \$225,250, for a contact term from December 10, 2012 through December 31, 2015.

BACKGROUND:

MWRA is a self insurer for workers' compensation by the Commonwealth of Massachusetts through the Department of Industrial Accidents in accordance with Chapter 152 of the Massachusetts General Law. Since 1987, the MWRA has utilized the services of a third party administrator (TPA) to process workers' compensation claims, set and adjust claim reserves, issue indemnity payments, review and pay medical expenses, notify and seek payment from excess carriers as needed, and file necessary reports all within strict adherence to Department of Industrial Accidents' rules. The TPA maintains an automated web based claim management system to manage this process which includes medical claim history, financial claim history, and legal claim history. Additionally the TPA advises the MWRA on appropriate measures for complex cases. Presently the TPA services are being provided to MWRA by Cannon Cochran Management Services, Inc. (CCMSI) under Contract A538 which is set to expire on December 31, 2012. Staff recommend that the successor contract commence on December 10, 2012 for the purposes of providing a seamless transition of all historical data associated with all workers' compensation claims to the new TPA provider who will accept transfer of and manage all claims open as of January 1, 2013.

DISCUSSION:

An RFQ/P was issued in September 2012 using an evaluative process in which proposals were judged by the following criteria, with points assigned as noted.

1. Cost (35 points)
2. Experience and Past Performance on Similar Non-Authority Projects (15 points)
3. Technical Approach, Capacity, Organization and Management Approach (25 points)
4. Qualifications and Key Personnel (15)
5. Past Performance on Authority Projects (10)

In October 2012, the MWRA received proposals from seven proposers: Claim Strategies, Corvel Corporation, CCMSI, FutureComp, Meadowbrook, PMA Management Corp. of New England (PMA) and Tristar.

The PMA Management Corp. of New England proposal offered workers' compensation and risk management services experience throughout New England and in both public and unionized settings. PMA currently provides third party administration services for many public entities including the Massachusetts Port Authority (Massport) and Rockland County, New York. Rockland County provides coverage for 5000 employees while Massport provides coverage for 450 longshoremen. Positive references were received from both agencies.

Although the other proposals reflected substantial related experience and qualifications, the Selection Committee determined that PMA's proposed cost, and industry and municipal experience led to the firm's first-ranked finish. CCMSI, ranked 5th, has provided TPA services to the MWRA since 1998, however, the Selection Committee determined that the Proposal submitted by PMA offered a more competitive price, stronger credentials and a more comprehensive approach to claims and loss management.

The Selection Committee's final scores and rankings were as follows:

<u>Firm</u>	<u>MWRA Cost*</u>	<u>Total Points</u>	<u>Order of Preference Total Score</u>	<u>Final Ranking</u>
PMA	\$225,250	419	10	1
Meadowbrook	\$207,250	406	11	2
FutureComp	\$222,250	410	12	3
Claim Strategies	\$243,250	345	23	4
CCMSI	\$261,250	354	25	5
TriStar	\$250,450	335	28	6
Corvel	\$313,750	311	31	7

*To ensure that all the proposers were evaluated equally, the RFQ/P included a one time allowance of up to \$53,500 for the transfer of existing claims for all proposers. This allowance was for both data migration of the large database (\$8,500) and to assume responsibility for open claims (\$45,000).

** Order of Preference represents the sum of the individual Selection Committee members' rankings where the firm receiving the highest number of points is assigned a "1;" the firm receiving the next highest number of points is assigned a "2," and so on. Those Order of Preference points are then summed up to determine Final Ranking.


BUDGET IMPACT:

The FY13 budget includes sufficient funds for Workers' Compensation claims administration. Funds for the remainder of the contract included in FY14 and subsequent future fiscal year CEB requests.

MBE/WBE UTILIZATION:

No minimum MBE/WBE participation requirements were established for this project, due to the specialized nature of the services.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: November 14, 2012
SUBJECT: Purchase Order for Annual Maintenance of the Maximo System
IBM Corporation

COMMITTEE: Administration, Finance & Audit

 INFORMATION

X VOTE

Janice Watts/Buyer
Richard DaPrato/Data Resource Manager

Russell J. Murray, Jr.
Director MIS

Michele S. Gillen
Deputy Director, Administration & Finance


Rachel C. Madden
Director, Administration & Finance

RECOMMENDATION:

To approve the award of a sole source purchase order for the renewal of the annual maintenance agreement for the Maximo System to IBM Corporation, and authorize the Executive Director to execute said purchase order in the amount of \$142,867 for the service period of January 1, 2012 through December 31, 2012.

DISCUSSION:

Maximo is MWRA's standard maintenance management tracking system used for materials management, work orders, overall costs, and prioritization of work schedules. In 1989, the Maximo application was purchased for the MWRA under the Boston Harbor Project to support asset tracking for the Deer Island Treatment Plant. In 1994, the Maximo application was extended through a competitive bid process to support Field Operations and Fleet Services. Maximo interfaces with Lawson as the "system-of-record" to generate reports and track multiple inventory items and work orders.

The Maximo system generates over 5,000 work orders per month. It also tracks the cost of 140,000 assets throughout their life cycles.

The annual support agreement provides standard software upgrades and technical support. The agreement covers 250 registered users across the Authority. IBM is the sole source provider of this product and therefore the only vendor that can provide software maintenance. The total cost of the consolidated license agreement for this period is \$142,867.

BUDGET/FISCAL IMPACT:

There are sufficient funds contained in the FY13 Current Expense Budget for this purchase under the Software Licenses line item.

MBE/WBE PARTICIPATION:

IBM Corporation, Inc. is not a certified Minority or Woman-Owned Enterprise.

STAFF SUMMARY

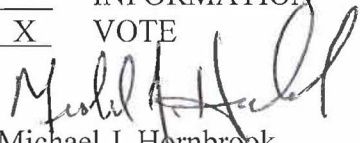
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: November 14, 2012
SUBJECT: Renewable Energy Technical Assistance Consulting Services, Energy Efficiency
Fay, Spofford & Thorndike, LLC
Contract 7274A, Amendment 2



COMMITTEE: Administration, Finance & Audit

 INFORMATION
 X VOTE

Kristen Patneaude, Program Manager, Energy Management
Daniel K. O'Brien, PE, Director, Deer Island WWTP
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 2 to Contract 7274A, Renewable Energy Technical Assistance Consulting Services, Energy Efficiency, with Fay, Spofford & Thorndike, LLC, extending the contract term by 365 days, from December 1, 2012 to November 30, 2013, with no increase in contract amount.

DISCUSSION:

On April 15, 2009, the Board approved the award of Contract 7274A to Fay, Spofford & Thorndike, LLC (FST) in an amount not to exceed \$500,000 for a period of three years from the Notice to Proceed. While approving the full three-year term, the Board authorized a Notice to Proceed for only the first two years, and authorized the Executive Director, on behalf of the Authority, to issue a separate Notice to Proceed for the third year, at no additional cost, if recommended by staff. The Executive Director approved the third year in June 2011 and also approved an additional six-month extension under delegated authority through Amendment 1 in May 2012.

Contract 7274A was one of five contracts awarded to provide as-needed technical assistance in four specialized renewable energy categories: solar power (photovoltaic or thermal), wind power, energy efficiency, and emerging technologies. This multiple-contract award strategy was to ensure that MWRA had at its disposal the required expertise and resources necessary to adequately support the planning, evaluation, and development of a number of anticipated "shovel-ready" economic recovery infrastructure energy projects. In addition, these technical assistance contracts provide support to MWRA staff continue to they continue to identify and implement energy efficiency practices at all of MWRA's facilities in an effort to reduce both operating costs and the environmental impacts of daily operations.

This Amendment

To date under this contract, FST has provided technical assistance on a variety of energy-efficiency assessments. FST has worked on seven task orders and not all of the task orders are complete. In addition, there is still a total uncommitted balance of \$124,000 remaining in the contract. Therefore, staff recommend that Contract 7274A be extended for another year so that remaining work on incomplete task orders can be finished and additional energy-savings opportunities be explored and further evaluated or implemented.

Major task order efforts under this contract have included the following:

- **Food Waste Co-Digestion Bench-Scale Study (10% complete)** – FST will be conducting a bench scale pilot study to evaluate feasibility of co-digestion of food wastes at the Deer Island Treatment Plant (DITP). The pilot study will be conducted at UMass Amherst’s Environmental Engineering Laboratory. The scope of the study includes an assessment of the methane generation potential, volatile solids destruction quantification, and a review of side-stream impacts for toxicity and/or nutrient loading, using various mix ratios of food waste to sludge. The follow-on plan, contingent upon the results of the pilot study, will include a full-scale pilot implementation at DITP. (This study has been awarded a \$60,000 technical study grant from the MA Clean Energy Center as part of its Organics-To-Energy Program.)
- **Optimization of the Existing Pure Oxygen Aeration System to Improve Power Savings at DITP (90% complete)** – FST has evaluated the existing aeration system operations with a focus on identifying opportunities for power savings in the existing pure oxygen system. Initial findings have led to changes to the mechanical aeration system including shutting off redundant aerators and the installation of more sophisticated dissolved oxygen probes and control panels for the last stage of the aeration trains.

By implementing this change, staff have been able to slowly reduce oxygen generation to better match the secondary treatment oxygen demand resulting in reduced operation of one of the two cryogenic “cold boxes” in the Cryogenics Facility (pictured on the right). In FY12, this change resulted in electricity savings of more than 3 million kWh (or more than \$250,000) compared to historical operations. FST will be submitting a report on additional findings from its



aeration system evaluation, including potential for additional savings with VFD and premium motor installations in the secondary reactors.

- **Evaluation of Existing Odor Control Fans and Ductwork (95% complete)** – FST conducted a study on energy optimization and performance evaluation of Deer Island’s Odor Control Facilities. FST’s draft findings include potential energy-saving opportunities by installing premium-efficiency motors and VFDs on the East and West Odor Control Facility fans and adjustments of air change requirements in certain process areas. Pictured on the right is one of the West Odor Control Facility – the configuration is similar for the East Odor Control Facility.



Staff anticipate that modifications to the operation of the odor control fans may result in electricity savings of up to 40% compared to design requirements. Staff are reviewing FST’s draft report and would like to continue efforts investigating and conducting trials of some of the suggested modified fan operations.

- **Digester Gas Capacity Analysis (complete)** – FST investigated the design and operational capacity of various components that comprise DITP’s digester gas transportation and treatment systems. The study focused on the capacity of each component to determine where “bottlenecks” may occur within the system. Staff are currently evaluating the findings and recommendations from this study. It should be noted that gas capacity analysis is a crucial component of the ongoing Residuals Processing Facilities Assessment contract.
- **Facility Energy Use Summary (75% complete)** - FST is developing a facility energy use summary for up to 50 of MWRA’s highest energy consuming facilities. The energy usage data will be used in benchmarking studies, such as EPA Energy Star and Portfolio Manager, and compared to similar process facilities and administration buildings to help better understand energy use and also identify potential efficiency improvement projects.

FST’s knowledge, experience, and expertise in the wastewater and water treatment industry has been a useful asset to MWRA as staff continue to identify and implement energy-efficiency improvements to process operations at Deer Island and other water and wastewater facilities.

Staff believe that continuation of the analysis of DITP’s digester gas transportation and treatment system and the food waste co-digestion studies are critical to MWRA’s ongoing efforts to evaluate the potential to expand its current organics-to-energy program. Staff anticipate that many of the energy efficiency efforts described above will continue to result in the identification of additional opportunities for energy-savings.

Staff have been satisfied with FST’s performance under this contract. Since additional uncommitted funds remain and since there are still yet-to-be-completed important task orders, staff recommend that Contract 7274A be extended for another year.

CONTRACT SUMMARY:

	AMOUNT	TIME	DATED
Original Contract:	\$500,000	1,096 Days	6/1/09
AMENDMENTS			
Amendment 1:*	\$0.00	184 Days	5/25/12
Proposed Amendment 2:	<u>\$0.00</u>	<u>365 Days</u>	Pending
Adjusted Contract:	\$500,000	1,645 Days	

*approved under delegated authority

BUDGET/FISCAL IMPACT:

Amendment 2 is for a time extension only and will have no budgetary impact.

MBE/WBE PARTICIPATION:

There were no MBE/WBE participation requirements established for this contract due to 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

WASTEWATER POLICY & OVERSIGHT COMMITTEE MEETING

Chair: J. Walsh
Vice-Chair: P. Flanagan
Committee Members:
J. Carroll
M. Gove
A. Pappastergion
B. Swett

to be held on

Wednesday, November 14, 2012

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

Time: Immediately following AF&A Comm.

AGENDA

A. Information

1. 2011 Deer Island Outfall Monitoring Overview
2. Progress of City of Cambridge-Implemented CSO Projects and Projected Financial Assistance through March 2013

B. Approvals

1. Memorandum of Understanding and Financial Assistance Agreement with BWSC for Implementation of CSO Control Projects, Amendment 13, and Progress of BWSC-Implemented CSO Projects and Projected Financial Assistance through June 2013

C. Contract Awards

1. Supply, Delivery, and Disposal of Regenerated Activated Carbon for the Deer Island Treatment Plant: Carbon Activated Corporation, Bid WRA-3528
2. Supply and Delivery of Sodium Hypochlorite to the Deer Island Treatment Plant: Borden & Remington Corporation, Bid WRA-3524

WW(i)
11/14/12

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the
Wastewater Policy and Oversight Committee

October 17, 2012

A meeting of the Wastewater Policy and Oversight Committee was held on October 17, 2012 at the Authority headquarters in Charlestown. Chairman Foti presided. Present from the Board were Messrs. Barrera, Carroll, Cotter, Flanagan, Mannering, Pappastergion, and Walsh; Mr. Swett joined the meeting in progress. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Rick Trubiano, Carolyn Fiore, Dan O'Brien, Carl Pawlowski, Dave Duest, Rick Adams, Michele Gillen, and Bonnie Hale. The meeting was called to order at 10:45 a.m.

Information

Pretreatment Program Annual Industrial Waste Report Number 28

Staff summarized the report and discussed the highlights.

Report on Incident at the Pelletizing Plant in Quincy

Staff explained the causes of the small fire on 9/13/12 in one of the dryer trains at the Pelletizing Plant, as well as the response and follow-up actions.

(Mr. Swett joined the meeting.)

Update on Residuals Processing Facilities - Technology Options Assessment, Contract 7147A

Staff discussed the various co-generation technologies being evaluated as part of this contract, focusing on co-digestion.

Contract Awards

*Technical Assistance Consulting Services, Deer Island Treatment Plant: AECOM Technical Services Inc., Contract 7399; Fay, Spofford & Thorndike, LLC, Contract 7400; and Brown and Caldwell, Contract 7434 (ref. WW B.2)

There was discussion of the consultant selection process, as well as general discussion and question and answer on the types of tasks covered under these contracts. (Mr. Pappastergion left the meeting.) The Committee recommended approval of the three contract awards (ref. agenda item B.1).

The meeting adjourned at 11:45 a.m.

* Approved as recommended at October 17, 2012 Board of Directors meeting.

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: November 14, 2012
SUBJECT: 2011 Deer Island Outfall Monitoring Overview



COMMITTEE: Wastewater Policy & Oversight

X INFORMATION
 VOTE

Andrea Rex, Director, ENQUAD
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

The Outfall Monitoring Overview is an annual report that summarizes the results of MWRA's monitoring of the environmental effects of the effluent discharges from the Deer Island Treatment Plant. MWRA monitors effluent, and the water, sediment, and health of fish and shellfish in Massachusetts and Cape Cod Bays. 2011 was the first year monitoring was conducted according to a more streamlined monitoring plan. The new design continued to capture important ecological events in the bay, and no adverse impacts of the outfall were found.

RECOMMENDATION:

For information only. Under its current National Pollutant Discharge Elimination System (NPDES) permit for Deer Island, MWRA is required to submit a report annually by November 15 to federal and state regulatory agencies on the results of its outfall monitoring. This staff summary provides the Board with the highlights of MWRA's Outfall Monitoring Overview report for 2011. Copies of the report will be available in the Board Lounge and on MWRA's website.

BACKGROUND:

Monitoring the environment around the MWRA Massachusetts Bay outfall is a requirement in the Deer Island NPDES permit. Key monitoring results are compared to 96 thresholds contained in MWRA's Contingency Plan.¹ Required monitoring includes measurements of the Deer Island Treatment Plant's effluent quality, and environmental measurements of water, sediments, and fish and shellfish. Other studies include modeling water quality and continuous monitoring of water quality using instruments on two buoys.

¹ The Contingency Plan is a requirement of MWRA's NPDES discharge permit for the Deer island Treatment Plant. It contains a series of more than 20 effluent thresholds and more than 50 thresholds calculated from MWRA's environmental monitoring data. An exceedance of a threshold requires rapid notification of EPA, DEP, their Science Advisory Panel, and the public.

MWRA has been monitoring Boston Harbor and the outfall area since 1992, and discharge monitoring began in 2000 when the outfall came on-line. One way potential effects are evaluated is to compare results collected after the outfall went on-line to results collected before the outfall went on-line (baseline conditions).

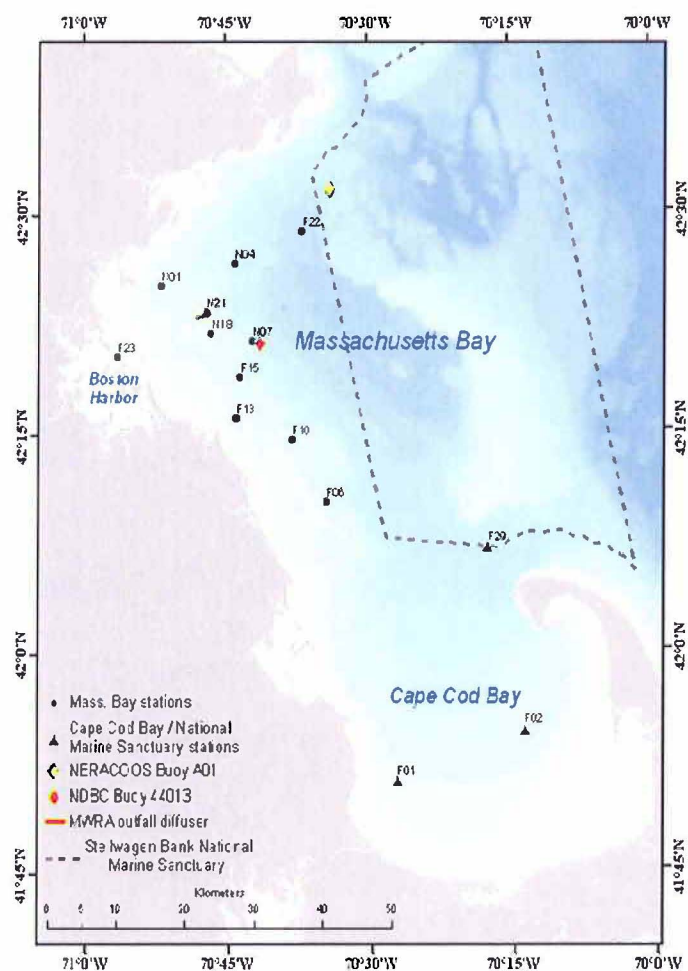
DISCUSSION:

Overall in 2011, as in previous years, the environmental monitoring found that the Deer Island Treatment Plant continued to operate as designed and that discharges through the outfall had no adverse impacts on the ecology (plankton, flounder, water quality, bottom-dwelling communities) of Massachusetts and Cape Cod Bays or Stellwagen Bank Marine Sanctuary. Meanwhile, Boston Harbor continues to see substantial improvements. A red tide event occurred in late May and early June as had been predicted by Woods Hole scientists based on spore counts in the sediment the previous fall. Data collected during intensive monitoring of the bloom showed that the outfall did not cause or exacerbate the bloom.

Outfall Monitoring Results

2011 was the eleventh year of monitoring since the outfall came on-line and was yet another year with no adverse effects from the discharge in the areas monitored. Monitoring results from the areas shown in the diagram to the right found that:

- Bottom-water dissolved oxygen remains at healthy normal levels;
- Plankton communities remain diverse and normal;
- Naturally-occurring nuisance algal blooms have not been aggravated by the discharge;
- Flounder liver disease remains low;
- The bottom animal community is healthy and diverse; and sediment contaminants remain at or below baseline levels; and
- Stellwagen Bank Marine Sanctuary waters and sediments are unchanged since the outfall went on-line.

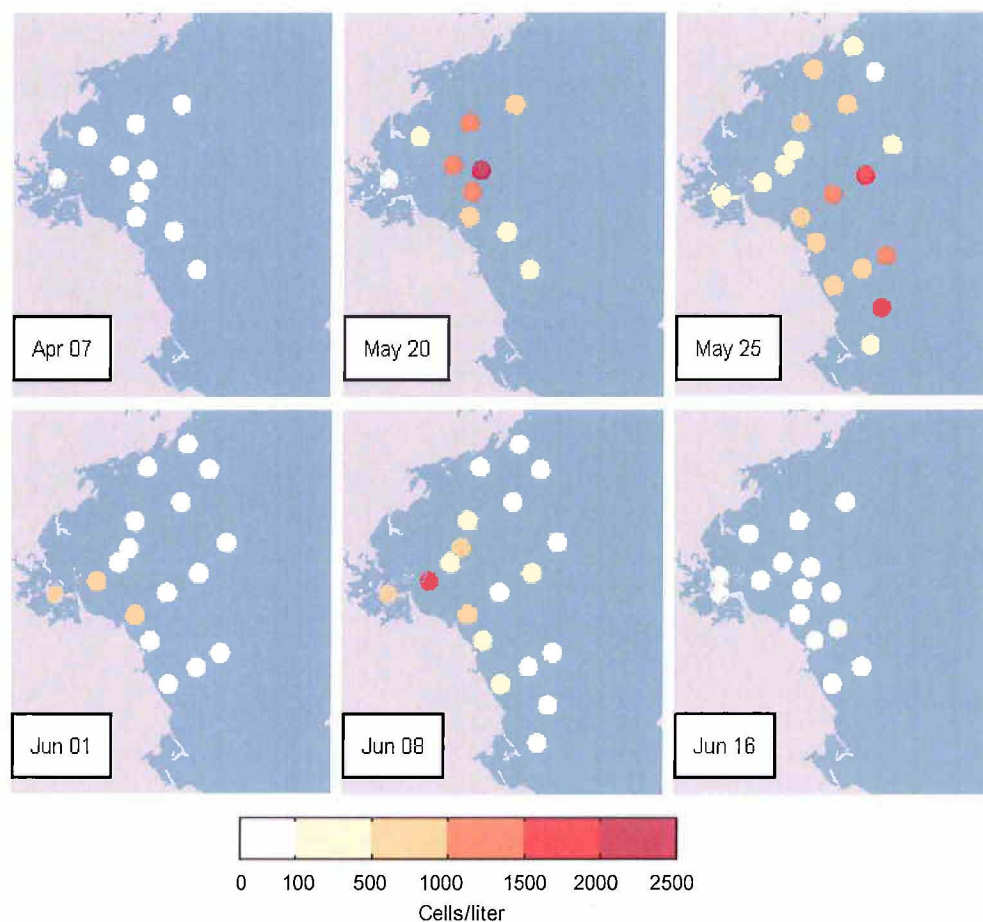


Locations of MWRA's water quality monitoring stations

Water Column

Monitoring in the water column focuses on the potential impact of nitrogen discharged by the outfall because nitrogen is not removed during treatment. The monitoring was designed to address concerns about whether nitrogen could increase blooms of harmful algal species, change the types or amount of plankton (adversely impacting the food web), or whether excess algal growth could decrease the amount of oxygen in the water.

In 2011, plankton communities in the bays were normal and dissolved oxygen levels in the water were healthy. Region-wide blooms of two nuisance algae species, *Phaeocystis* and *Alexandrium* (red tide), occurred, but both events were moderate, and *Phaeocystis* near the outfall was unusually low. Neither bloom originated near the outfall. The red tide event in 2011 (see figure below) was high enough to cause a Contingency Plan threshold exceedance, and did impact shellfishing across Massachusetts Bay, including Boston Harbor, but was less severe than in some previous years. The bloom ended by mid-June.

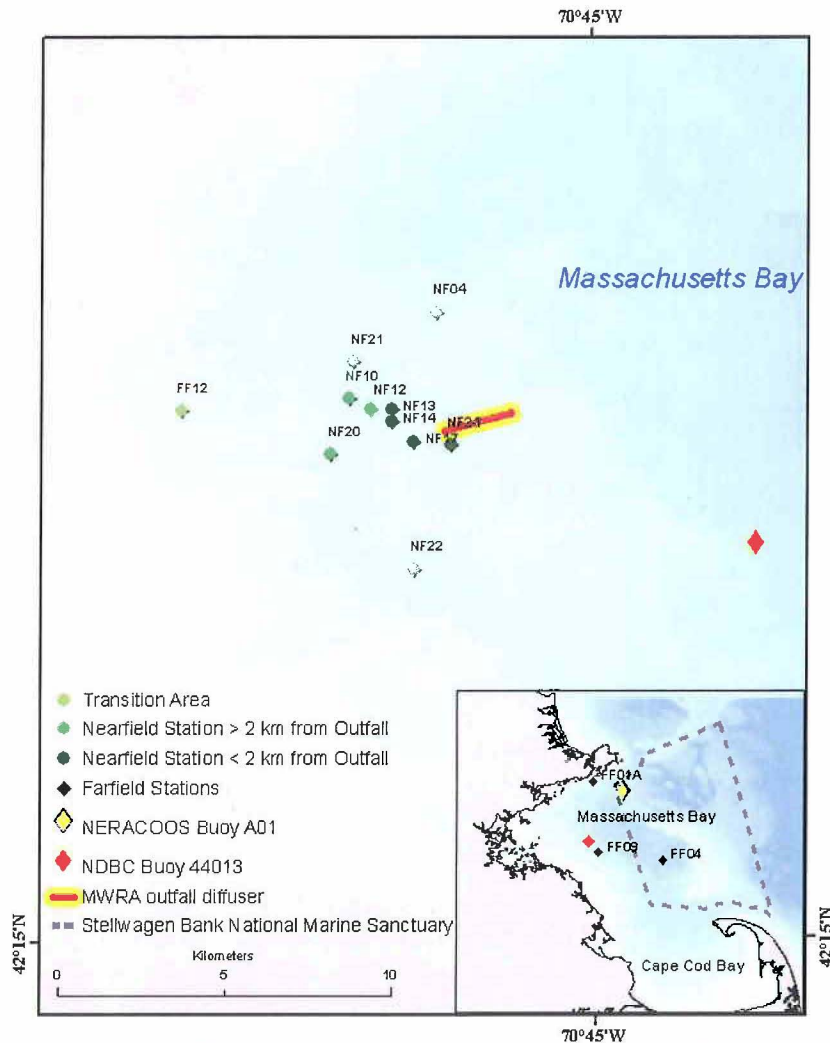


MWRA data show the progress of the 2011 red tide bloom in Massachusetts Bay from April 7 through June 16. Boston Harbor was affected, which is relatively unusual. Counts below 100 cells per liter (white dots) are generally not a concern for toxicity.

The Provincetown Center for Coastal Studies is collaborating with MWRA to monitor nutrients and plankton in Cape Cod Bay. The center's data showed that the zooplankton upon which right whales feed were abundant in March, April and May, as were right whales.

Sea Floor

Sea-floor habitat (the benthos) is a major component of a healthy marine ecosystem and is of particular interest in studies of pollutant effects because contaminants ultimately end up on the bottom. MWRA's sea floor monitoring assesses the health of animal communities and concentrations of sediment contaminants. Studies of the animal communities living in mud found healthy, diverse groups of animals (worms, mollusks, crustaceans) normal to New England. Long-term, the abundance and diversity of animals near the outfall and at reference sites appear to follow a cyclical pattern that is likely to be driven by large-scale climatic factors and ecological interactions within the benthos.

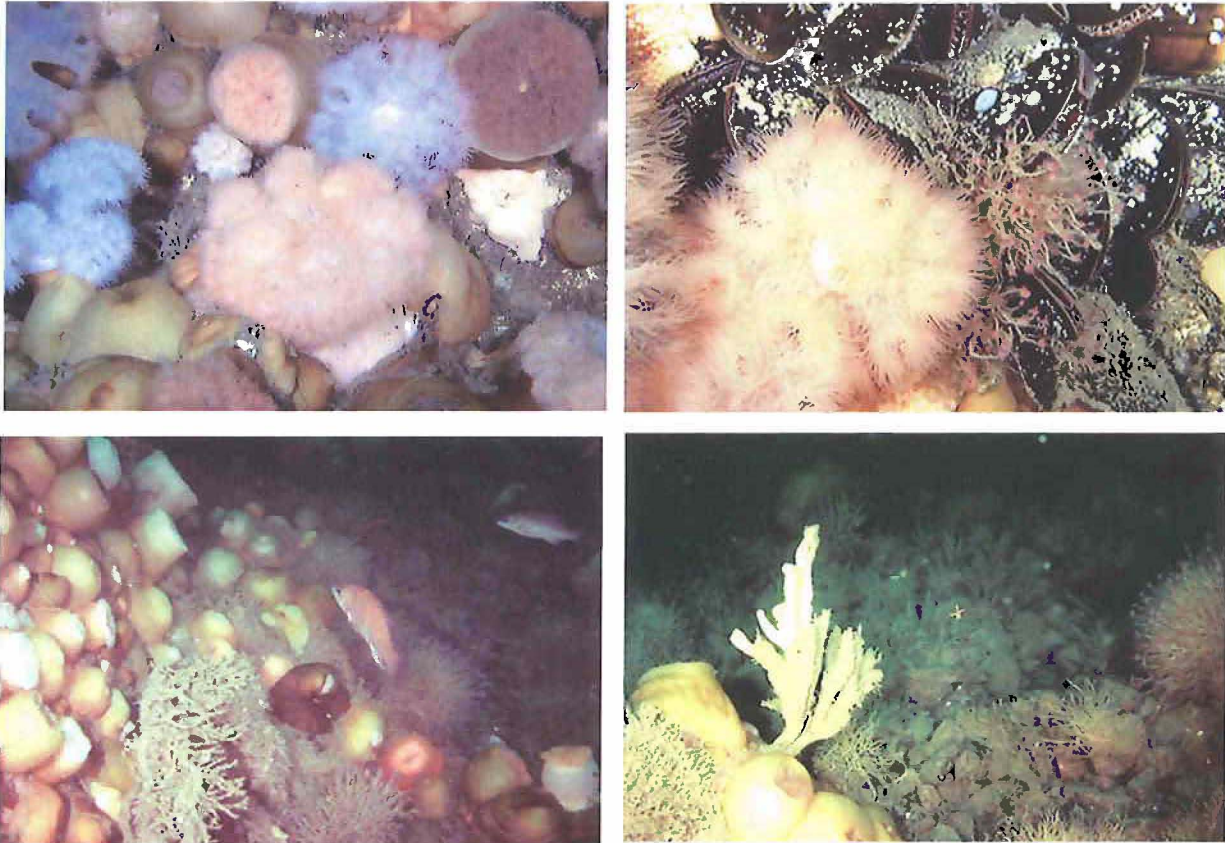


Locations of MWRA's stations for monitoring the animal communities that live in the bottom sediments.

In 2011, similar to 2010, there was a Contingency Plan threshold exceedance for the benthic community: two metrics showed the community was more diverse than the threshold. In June 2011, EPA's Outfall Monitoring Science Advisory Panel reviewed the 2010 exceedances. The Science Panel agreed with MWRA's evaluation that this was a normal fluctuation, not an adverse effect, and not caused by the outfall. The 2011 pattern was similar to 2010, which would be expected.

The sediments are sampled for chemical contaminants every three years; 2011 was a year for chemistry sampling. Concentrations of organic compounds and metals were within or below the baseline range, and there were no Contingency Plan threshold exceedances.

Monitoring of the rocky bottom (including two outfall diffuser heads) showed rich communities of coralline algae, starfish, sea urchins, and sea anemones, typical of New England waters, with no findings of adverse outfall effects.



Photos taken at Diffuser #2, which is active, show a lush growth of anemones, shellfish, and other animals normally found on the rocky bottom.

Winter Flounder

Because flounder live in close contact with the bottom sediments, their health, especially rates of liver disease, is an indication of the effects of contaminants in the sea floor. Flounder from Boston Harbor, Cape Cod Bay, Nantasket Beach, and the outfall site were tested. Liver disease continued to be low at all sites, and there were no liver tumors. Skin ulcers, which had been so pronounced in 2004, were very rare in 2010 and found in only one fish from the harbor; none were found in fish caught near the outfall. However, in 2011 there was a recurrence of skin ulcers in flounder caught at Deer Island Flats in 6 of 50 fish, and at the Outfall Site in 10 of 50 fish. This finding was reported to the Outfall Monitoring Science Advisory Panel in June 2011, and no additional action was recommended. The cause of these lesions is not known. Previous studies conducted by MWRA of the occurrence of these skin lesions found that they showed a seasonal pattern, and there was evidence that the lesions healed. There is no evidence that the outfall discharge is causing this condition.

Modeling

MWRA's permit requires that the outfall effects be modeled every year in order to maintain the availability of a well-calibrated model to be used to evaluate long-term trends and impacts from significant events. The modeling uses a combined physical and biological model to predict outfall effects on dissolved oxygen and algal growth. The model was upgraded in 2009. This improved model was used to simulate 2011 currents, temperature, salinity, and water column variables, including nutrients and phytoplankton biomass. Modeled horizontal and vertical dispersal of the effluent plume was consistent with monitoring data. The simulations allowed analysis of the possible influence of the outfall on water quality and ecosystem function. Model results show no effect of the outfall on the ecosystem of Massachusetts Bay. In addition, MWRA asked the modelers to model a transect from Deer Island, through Stellwagen Bank National Marine Sanctuary, passing through the outfall area (MWRA is required to report on the effects of the outfall on the sanctuary). The modeling looked at nutrients, dissolved oxygen, and algae, and showed no impact on the sanctuary from the discharge.

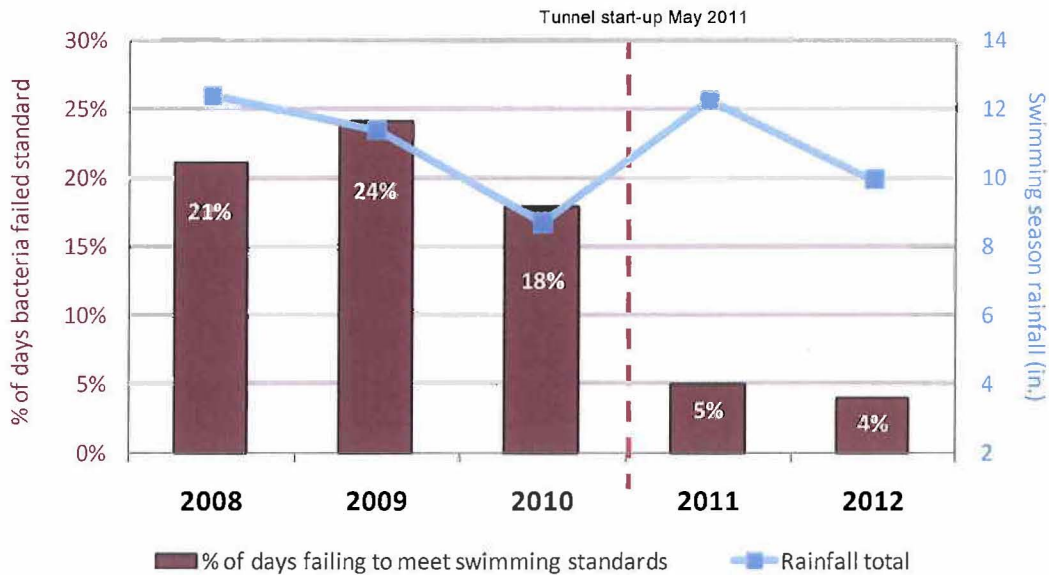
Contingency Plan Thresholds

Except for benthic diversity and red tide, all other Contingency Plan thresholds were met in 2011; this includes all effluent quality thresholds. The ambient monitoring measurements of algae biomass, dissolved oxygen, sediment oxygenation, and flounder liver disease were all normal.

Some Boston Harbor Monitoring Results

South Boston Beaches

MWRA provides technical support and laboratory services to the Department of Conservation and Recreation (DCR) in its Boston Harbor beach monitoring program to enable DCR to monitor beach water quality every day during the swimming season. The graph on the following page shows that South Boston beaches have seen a significant decrease in the number of days that the beaches were posted after the North Dorchester Bay CSO Storage Tunnel came on line in May 2011, even though the summers of 2011 and 2012 were quite rainy. For the few days that failed to meet water quality swimming standards, staff are certain that the cause was neither CSO-related nor stormwater from any of the South Boston outfalls because there were no such discharges during this period. (During the Hurricane Irene storm, there was a relatively brief planned discharge of stormwater only in accordance with the design and regulatory approval of the project, but the beach had been already closed and no monitoring data were collected.) The South Boston beaches are now, by far, the cleanest in Boston Harbor, and rank in the top tier of all metro-area beaches.



Harbor Bottom Habitat

Less obvious than swimming-beach postings but equally important is the ecosystem of tiny animals (mostly worms and shrimp-like creatures) living in the harbor's sediments. This community recycles nutrients, stabilizes and aerates the sediments, and is at the base of food webs that support fisheries. Some parts of Boston Harbor used to be so polluted that virtually none of these animals could survive. MWRA has been monitoring the quality of the sediments and sediment communities by image analysis (sediment profile imaging, or SPI) for more than 20 years, and has found a direct correlation between improvements in wastewater management and improvement in the harbor's largely unseen bottom environment. In Boston Harbor, the sediment habitat improved after the end of sludge discharges in 1991, the implementation of secondary treatment in 1998, and the new outfall in 2000. Now, the harbor's bottom habitats, including formerly heavily impacted areas in the inner harbor, have healthy levels of oxygen and are full of life.

MWRA also measures dissolved oxygen in the bottom waters of the harbor and has found significant increases in bottom-water oxygen in the years since treatment was improved and the outfall came on line, and these results are correlated to the dramatic reduction in loadings of solids and nutrients to the harbor because of the Boston Harbor project.

BUDGET/FISCAL IMPACT:

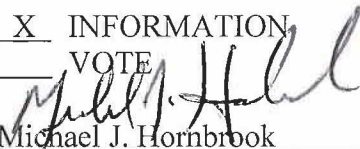
In FY10, before the changes to the monitoring plan were implemented, the cost of professional services for a year of outfall monitoring was \$2.35 million. ENQUAD's FY13 Current Expense Budget for required harbor and outfall monitoring, including the water column, sediment, fish and shellfish, instrumented buoys and water quality modeling, is \$1.44 million, reflecting the savings resulting from changes to the monitoring requirements.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: November 14, 2012
SUBJECT: Progress of Cambridge-Implemented CSO Projects and Projected Financial Assistance through March 2013

COMMITTEE: Wastewater Policy & Oversight

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

INFORMATION
 VOTE

Michael J. Hornbrook
Chief Operating Officer

Cambridge recently informed MWRA that the cost estimates for the final three construction contracts have increased by almost \$28 million. Furthermore, Cambridge has indicated that the current estimated design and construction durations for remaining work associated with these contracts may not be sufficient to meet the Court-ordered completion date of December 2015. At a meeting to discuss these issues, MWRA staff informed Cambridge that not meeting the court milestone for completion would be unacceptable. In response, Cambridge staff requested a one-month time period to obtain more information from ongoing design efforts and to evaluate means to mitigate potential delays, including, but not limited to, commencing design of the final construction contract earlier.

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 \$5,991,525.53 into the City of Cambridge CSO account to cover anticipated eligible costs in the period October 2012 through March 2013, bringing the total amount of MWRA funds transferred into the Cambridge CSO account to \$42,567,806.99.

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 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.

By two letters dated October 17, 2012, the City of Cambridge informed MWRA of its recently updated review of project cost estimates and schedules for the City's remaining work to complete the CSO control plan for Alewife Brook. The work includes completion of the ongoing contract to construct the CAM004 stormwater outfall and wetland basin, now approximately 85% complete, and design and construction of three sewer separation contracts in areas surrounding Huron Avenue and Concord Avenue, upstream of the new stormwater outfall and basin.

Cambridge issued a Notice to Proceed for construction of Contract 8A (Huron A) on September 29, 2012, in compliance with a Schedule Seven milestone. The portion of the Contract 8A award amount eligible for MWRA funding exceeds the cost estimate in MWRA's FY13 CIP by \$3.7 million. Cost estimates for related activities, including construction services and police details, have also increased. Cambridge is currently designing Contract 8B (Huron B). Like the Contract 8A costs, Cambridge's new cost estimates for Contract 8B and Contract 9 (Concord Avenue) have increased (an additional \$22 million in eligible costs). In addition, Cambridge has reported that based upon the actual bid costs received for Contract 8A, the original construction durations for the remaining two construction contracts may not be sufficient, potentially threatening compliance with the court completion date. Staff have met with Cambridge Department of Public Works managers and consultants to review the updated cost estimates and schedules, and additional discussions and information exchanges are planned before the cost and schedule impacts can be confirmed. Staff will continue to update the Board on the progress of these discussions.

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.

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

Cambridge completed these two projects with one \$5.95 million construction contract (of which \$4.11 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 area 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. With this project, Cambridge also permanently closed Outfall CAM400.

CAM004 Stormwater Outfall and Wetland Basin (Cambridge Contract 12)

The City of Cambridge continues to make progress with construction of the \$17.3 million CAM004 stormwater outfall and wetland basin, of which up to \$4.9 million is funded by MWRA. The contract is approximately 85% complete and is scheduled to be substantially complete by 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 and 150/180 Cambridge Park Drive, and restoration of these properties is complete. Installation of the box culvert passing over the MWRA interceptor pipes behind 125 Cambridge Park Drive – the “Belmont Crossing Structure” – is also complete. The contractor has also completed a section of box conduit from this structure toward the Forebay of the wetland basin. All of the utility relocation and box culvert installation within Cambridge Park Drive is complete.

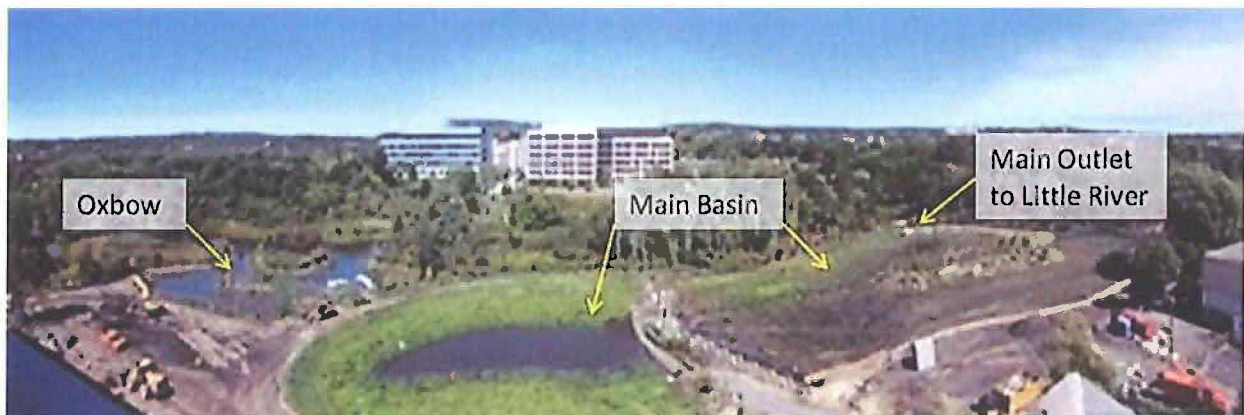


Figure 1: Progress of wetland basin construction

With reference to Figure 1 above, the contractor is continuing with excavation and grading of the main basin in the Alewife Reservation. Planting of wetland and upland vegetation is continuing in prepared areas.

Cambridge held a Community Planting Day on July 14, 2012, during which 1,000 wetland plugs were planted in a 1,000 square foot area of high and emergent marsh. Planting has been completed in the west end of the wetland basin (see Figure 2 below).

Grading and soils placement has been completed in the Oxbow area, and the Oxbow is fully connected to the Little River. Sandbags were removed from the banks allowing the river, fish and ducks to circulate through the Oxbow (see Figure 3, below). Grading and shaping continues on the wetland meadow south of the Oxbow and in the vegetated swale between the Forebay and main basin. Planting of upland shrubs and trees continues around the Forebay and main basin. Placement of footings and framings for the Oxbow overlook and boardwalk and



Figure 2: A hawk explores the newly planted wetland.

framing for the boardwalk across the main basin has begun (Figure 4, below right).



Figure 3: Ducks have moved into the new Oxbow.



Figure 4: Framing of boardwalk across main basin

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 progress on the 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. Cambridge recently awarded the \$15.4 million Contract 8A, of which \$9.7 million is eligible for MWRA funding. Cambridge issued a Notice to Proceed on September 29, 2012, in compliance with Schedule Seven. This contract has a scheduled completion date of December 2014. Design of Contract 8B is approximately 30% complete, and Cambridge plans to award this contract in July 2013. The current schedule for Contract 9 calls for Cambridge to commence design no later than January 2013. Schedule Seven requires the last of the three contracts to be complete by December 2015. As previously discussed, staff will continue to update the Board regarding Cambridge's ongoing evaluations to maintain the December 2015 completion date.

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.

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 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 Internal Audit Department is presently reviewing Cambridge's force account costs for years 2010 and 2011.

Funding and Eligible Expenditures through September 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 \$36,576,281 to Cambridge's CSO account to cover eligible design and construction costs through September 2012. In addition, Cambridge is able to use accumulated interest in the account to fund eligible costs. The estimated eligible cost incurred by Cambridge from MOU/FAA inception through September 2012 is \$35.5 million, and the estimated available balance in the CSO account as of the end of September 2012 is \$1.1 million.

Funding through March 2013

Cambridge recently submitted a projected work progress report and estimate of the eligible contract and force account expenditures for the period October 2012 through March 2013 in the amount of \$5,457,443. Over this period, Cambridge will continue with construction and

construction supervision services for Contracts 12 and 8A. Cambridge will also continue with Contract 8B final design services and commence final design services for Contract 9.

Staff have reviewed Cambridge's request and have approved a transfer of \$5,991,525.53 to cover the anticipated eligible cost in this period. The difference between the Cambridge estimate and the MWRA approved transfer amount includes staff's intent to transfer the remaining eligible funds for Contract 12 ESDC, construction and release of retainage, as well as remaining eligible funds for Contract 8A design, which is complete, both of which were not fully included in Cambridge's request. The approved transfer amount also includes \$1 million for anticipated eligible costs associated with proposed Change Orders 6 and 7 for Contract 12. Staff plan to transfer \$5,991,525.53 to the Cambridge CSO account soon. Table 1 below shows a breakdown of previously provided funds and the pending transfer.

Table 1: Breakdown of MWRA Funds by Contract and Activity

Engineering Services and Construction Contracts	Funds Previously Provided	Pending Transfer for Oct 12-Mar 13	Total
Preliminary/Final Design for Contracts 1, 2A, 2B and 3	\$ 1,650,270.00	\$ -	\$ 1,650,270.00
Construction Phase Services for Contracts 1, 2A, 2B and 3	\$ 1,787,068.00	\$ -	\$ 1,787,068.00
CAM002-004 Sewer Separation (Contracts 1, 2A, 2B and 3)	\$ 10,411,903.00	\$ -	\$ 10,411,903.00
Final Design/Field Investigations for Contracts 8, 9, and 12 (including Notice of Project Change and Supplemental Design Reports)	\$ 1,498,117.00	\$ -	\$ 1,498,117.00
Design/ESDC Floatables & CAM400 Manhole Separation Contract 4/13	\$ 2,048,802.61	\$ 30,551.00	\$ 2,079,353.61
Design 8A, 8B, & 9	\$ 1,822,570.00	\$ 1,634,239.89	\$ 3,456,809.89
ESDC 8A, 8B, & 9	\$ 209,749.00	\$ 215,369.00	\$ 425,118.00
Final Design 12	\$ 3,875,059.00	\$ -	\$ 3,875,059.00
ESDC Contract 12	\$ 2,369,924.17	\$ 801,953.83	\$ 3,171,878.00
Construction of Floatables Controls (Charles and partial Alewife)	\$ 658,639.00	\$ -	\$ 658,639.00
Construction/Police Contract 4/13	\$ 4,921,525.20	\$ -	\$ 4,921,525.20
Construction/Police Contract 12	\$ 3,914,752.00	\$ 1,440,205.81	\$ 5,354,957.81
Easements Contract 12	\$ 317,706.00	\$ -	\$ 317,706.00
Construction/Police 8A, 8B, & 9	\$ 515,000.00	\$ 1,834,226.00	\$ 2,349,226.00
City of Cambridge Force Account/Expenses	\$ 575,196.48	\$ 34,980.00	\$ 610,176.48
Total	\$36,576,281.46	\$ 5,991,525.53	\$ 42,567,806.99

BUDGET/FISCAL IMPACT:

The FY13 CIP budget includes \$57,877,890 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.

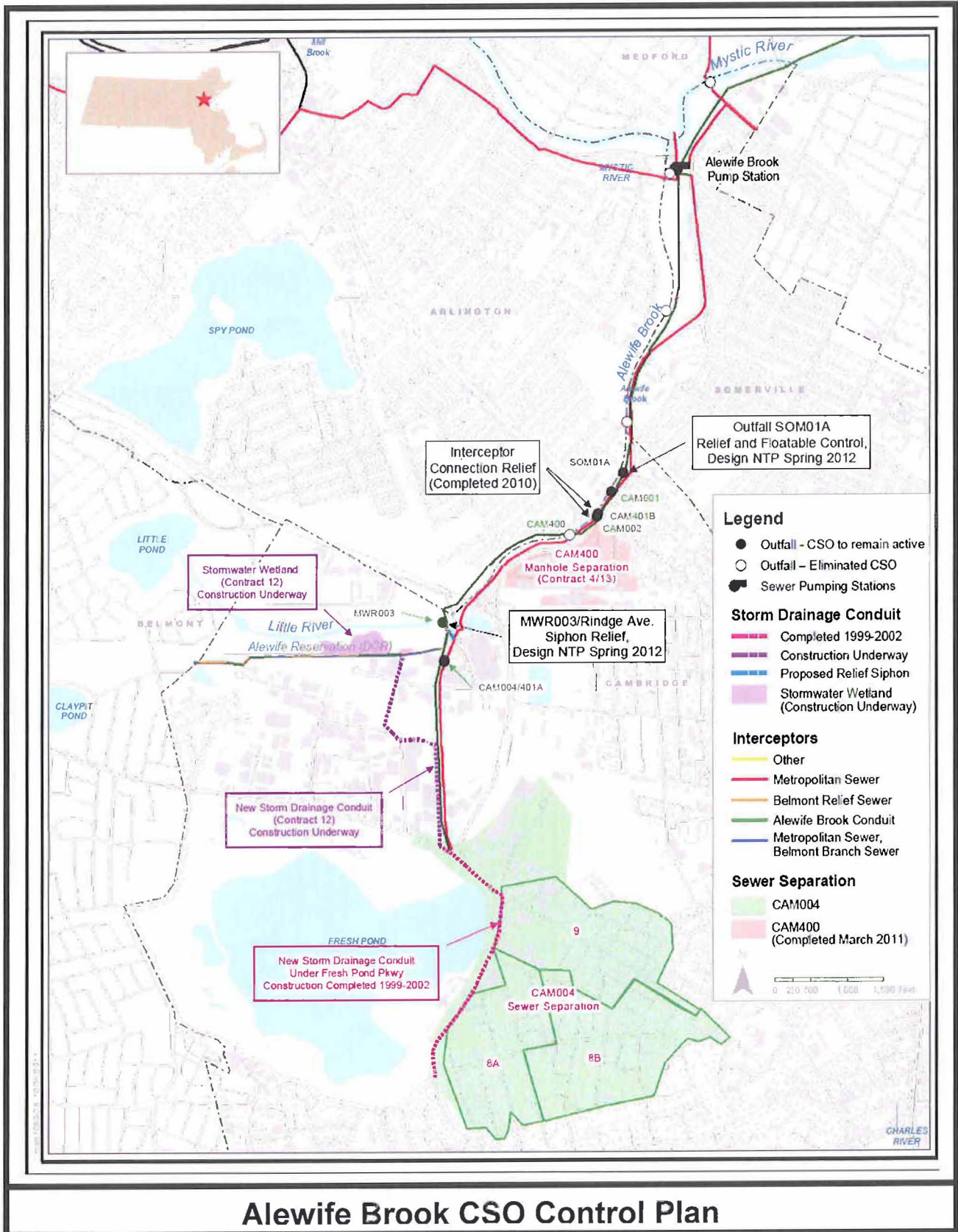
MBE/WBE PARTICIPATION:

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.

ATTACHMENT:

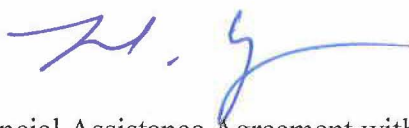
Attachment 1 – Map of Alewife Brook CSO Control Plan

Attachment 1



Alewife Brook CSO Control Plan

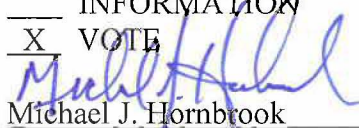
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: November 14, 2012
SUBJECT: Memorandum of Understanding and Financial Assistance Agreement with BWSC for Implementation of CSO Control Projects, Amendment 13

COMMITTEE: Wastewater Policy & Oversight

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

 INFORMATION
 X VOTE


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to execute Amendment 13 to the *Memorandum of Understanding and the Financial Assistance Agreement with Boston Water and Sewer Commission for Implementation of CSO Control Projects*, increasing the award amount by \$1,865,818.34 from \$287,585,597.90 to \$289,451,416.24, and revising the language of the agreements in regard to the use of interest to fund eligible costs. Funds for the proposed amendment are included in MWRA's approved FY13 CIP.

DISCUSSION:

Staff plan to transfer \$8,388,076.30 into the Boston Water and Sewer Commission's (BWSC) CSO account for anticipated eligible costs through June 2013, which will bring the total amount of MWRA funds transferred to the BWSC CSO account to \$270,187,986.83.

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. In addition, BWSC has completed 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.

Amendment 13

Pursuant to the terms of the MOU and FAA, BWSC submits updated project cost estimates for MWRA review and approval as design and construction work proceed. Amendment 13 will revise the project funding limits for eligible work based on updated cost estimates that were incorporated into MWRA's FY13 CIP. The primary reason for the higher cost estimate and requested increase is the recent contract award amount for Reserved Channel Contract 8, Final Pavement Restoration 2, partially offset by a lower recent contract award amount for Contract 4, the last of the major Reserved Channel sewer separation contracts. Amendment 13 also includes anticipated change orders and higher police detail costs for the Reserved Channel project and less significant cost changes to other CSO projects in the BWSC MOU/FAA.

Table 1: Current Authorizations and Proposed Amendment 13

Project	Current Authorization	Amendment 13	Amended Authorization
South Dorchester Bay BOS088/089 Sewer Separation	\$ 54,171,205.10	\$ 16,250.48	\$ 54,187,455.58
South Dorchester Bay BOS090 Sewer Separation	\$ 64,725,351.10	\$ 55,661.13	\$ 64,781,012.23
Neponset River BOS093/095 Sewer Separation	\$ 2,444,394.10	\$ -	\$ 2,444,394.10
Constitution Beach BOS002 Sewer Separation	\$ 3,768,888.10	\$ -	\$ 3,768,888.10
Stony Brook Sewer Separation	\$ 44,332,716.10	\$ -	\$ 44,332,716.10
Independent Floatables Control and Outfall/Regulator Closings	\$ 933,333.10	\$ -	\$ 933,333.10
Fort Point Channel Sewer Separation and System Optimization	\$ 10,017,018.10	\$ (39,842.79)	\$ 9,977,175.31
Regulator RE070/11-2 Relocation and Sewer Separation	\$ 2,030,000.00	\$ -	\$ 2,030,000.00
Morrissey Boulevard Drain	\$ 32,898,545.10	\$ 6,000.00	\$ 32,904,545.10
Reserved Channel Sewer Separation	\$ 62,278,032.00	\$ 1,827,749.52	\$ 64,105,781.52
Bulfinch Triangle Sewer Separation	\$ 9,986,115.10	\$ -	\$ 9,986,115.10
Total	\$287,585,597.90	\$ 1,865,818.34	\$289,451,416.24

During the planning phase, BWSC estimated the permanent trench repair be 10,000 square yards per paving contract. Based on BWSC's experience with the first paving contract (Contract 7) it increased the permanent trench repair from 10,000 square yards to 89,000 square yards in the second paving contract (Contract 8). This change in quantity resulted in the bids coming in \$3,871,000 higher than the planning phase estimate.

The proposed increase in the award amount for the South Dorchester Bay BOS088/089 project will bring the award in line with the actual eligible costs for this project, which is now complete. The proposed increase for South Dorchester Bay BOS090 is related to escalation of the current budget estimate for proposed construction on the Dorchester Interceptor Relief phase of this project. BWSC has been investigating the remaining source(s) of inflow to the Dorchester Interceptor system, since completing the sewer separation project and closing the CSO overflow points in 2007. The cost increase for the Morrissey Boulevard Drain project is related to police details associated with BWSC's water quality monitoring in Savin Hill Cove that environmental approvals require be conducted for a two-year period following start-up of the South Boston CSO Tunnel and the Morrissey Boulevard Drain in May 2011. The lower cost for the Fort Point Channel Sewer Separation and System Optimization project, relates to the Lower Dorchester Brook Sewer regulator relocation work, which BWSC completed earlier this year.

Amendment 13 will also add language to the Financial Assistance Agreement ensuring that the use of interest earned on the CSO account is expended first, before transferred funds.

Progress of Work

This staff summary also presents information on the status of projects in the Long-Term Combined Sewer Overflow (CSO) Control Plan that are funded by MWRA and implemented by BWSC as further detailed below.

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 December 2012, BWSC will have spent approximately \$264.5 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). 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.

Reserved Channel Sewer Separation

BWSC continues to make scheduled progress with its nine construction contracts for the \$62.5 million Reserved Channel Sewer Separation project (see Figures 1 and 2). Table 2, next page, describes each contract, progress made, and current schedule for completion.

Figure 1: Reserved Channel Sewer Separation Project Area and Contracts

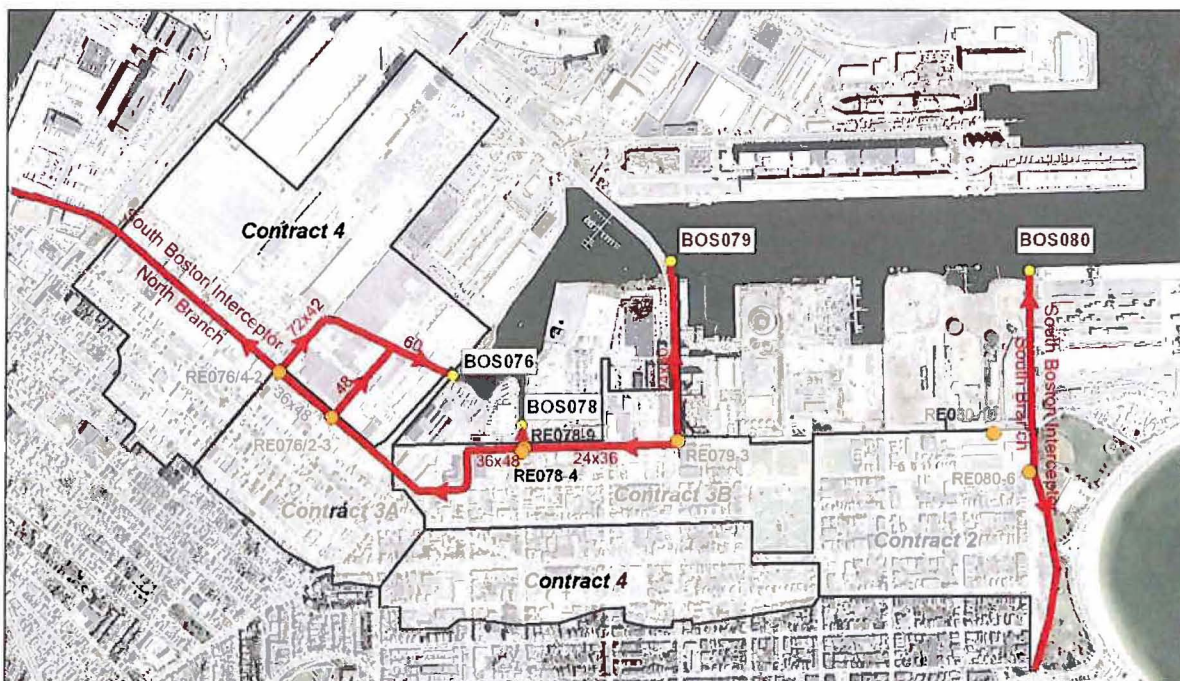


Table 2: Reserved Channel Sewer Separation Project Status

BWSC Contract	Description	Eligible Cost Estimate	Status
1	Restoration of four outfalls: 076, 078, 079 and 080. Also includes tidegate installation and culvert installation.	\$4,162,084	Substantially complete
2	Installation of approximately 3,690 linear feet of 4 to 20 inch water pipe, 13,050 linear feet of 10 to 66 inch sewer and drain pipe, 63 four to six foot diameter manholes, 27 special manholes, 12 catch basins, and 3,500 linear feet of minor drain.	\$5,874,700	Substantially complete
3A	Installation of approximately 9,220 linear feet of 4 to 16 inch water pipe, 12,380 linear feet of 8 to 84 inch sewer and drain, 80 four to seven foot diameter manholes, 6 special manholes, 22 catch basins, and 5,300 linear feet of minor drain.	\$11,055,596	95% complete
3B	Installation of approximately 10,840 linear feet of 12 to 72 inch storm drain, 4,350 linear feet of 12 to 72 inch replacement sanitary sewer, replacement of 10,700 linear feet of 4 to 20 inch water pipe, 90 four to six foot diameter manhole, 9 special manholes, 6 catch basins, and 5,000 linear feet of minor drain.	\$9,380,760	50% complete
4	Installation of approximately 12,200 linear feet of 12 to 48 inch storm drain,, 1,700 linear feet of 12 to 24 inch replacement sanitary sewer pipe, replacement of 9,700 linear feet of 8 to 16 inch water pipe, 104 four to six foot diameter manholes, one catch basin, and 5,400 linear feet of minor drain.	\$7,291,921	NTP issued 10/1/12
5	Sewer cleaning and lining.	Ineligible	To be awarded late 2012
6	Downspout disconnections.	\$173,048	To be awarded March 2013
7	Permanent pavement restoration of approximately 16,000 linear feet of roadway.	\$1,018,029	Substantially complete
8	Permanent pavement restoration of approximately 37,500 linear feet of roadway.	\$5,421,856	NTP issued 10/1/12



Figure 2: 72-inch storm drain installation in East First Street (Reserved Channel Contract 3B)

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 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 \$5.3 million of the \$118.9 million budget in MWRA's FY13 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 being performed. BWSC expects to issue an interim report by the end of 2012 and the final results and recommendations by March 2013.

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

On August 16, 2010, BWSC issued the Notice to Proceed with 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 as part of its ongoing separation project in Massachusetts Avenue.

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 monthly 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 June 2012, reviewed the engineering, construction and force account costs for calendar year 2011. The audit found that 78% 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 2011, BWSC paid \$134,486 of eligible cost from its own funds and is allowed to withdraw this amount from the CSO account for reimbursement.

Funding and Expenditures through December 2012

Since execution of the MOU and FAA in 1996, MWRA has transferred a total of \$261,799,910.53 into BWSC's CSO account to cover eligible design and construction costs through December 2012. In addition, the account has accumulated \$1,760,686.45 in interest which BWSC has used to pay eligible project costs, in accordance with the FAA. Total eligible cost incurred by BWSC through December 2012 is estimated to be \$261,332,809.70. Total balance in the CSO account is estimated to be \$2,227,787.28 as of December 31, 2012.

Funding for First Half of Calendar Year 2013

BWSC recently submitted a request for transfer of funds into the account that estimates it will perform \$7,486,004.85 of eligible work in the period January through June 2013. Staff have reviewed the request and propose a transfer of \$8,388,076.30 to cover the anticipated eligible expenditures through June 2013. Staff plan to transfer \$8,388,076.30 to the BWSC CSO account soon. The difference between the transfer and requested amounts includes monies for potential change orders currently under review as part of close-out for Reserved Channel Contract 2 and for higher than anticipated spending for police details on the Reserved Channel contracts during the period June through December, 2012.

The total award amount of the BWSC MOU/FAA is \$289,451,416 through Amendment 13. Including the pending transfer, the total amount of MWRA funds transferred into the BWSC CSO account is \$270,187,986.83. Staff expect to make additional transfers to the BWSC CSO account totaling \$19.3 million through December 2016 (the termination date of the MOU/FAA with BWSC) to cover the remaining eligible costs for design and construction of the Reserved Channel sewer separation project (schedule to be completed December 2015), water quality monitoring of Savin Hill Cove associated with the Morrissey Boulevard Drain, and additional South Dorchester Bay sewer separation inflow removal.

Table 3 below presents the total funds provided by MWRA, including the pending transfer, to cover past and anticipated eligible costs through June 2013 for each project and phase.

Table 3: Pending and Total Funding for BWSC Implemented Projects

Project	Phase	Project Budget (FY13 CIP)	MWRA Funding Jan-Jun 2013	Funding thru Jun 2013	Status*
South Dorchester Bay Sewer Separation (Fox Point area)	Engineering	\$ 11,432,929	\$ -	\$ 11,425,649	Substantially
	Construction	\$ 42,754,139	\$ -	\$ 42,754,376	Complete
South Dorchester Bay Sewer Separation (Commercial Point area)	Engineering	\$ 17,737,961	\$ 111,445	\$ 16,390,044	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	\$ 10,137,127	\$ -	\$ 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	\$ -	\$ -	\$ -	Substantially
	Construction	\$ 2,030,000	\$ -	\$ 2,030,000	Complete
Morrissey Boulevard Drain	Engineering	\$ 4,584,099	\$ -	\$ 4,026,143	Substantially
	Construction	\$ 28,320,645	\$ -	\$ 28,320,646	Complete
Reserved Channel Sewer Separation	Engineering	\$ 14,199,092	\$ 404,343	\$ 11,227,330	Design/
	Construction	\$ 50,130,543	\$ 7,872,288	\$ 38,579,292	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	\$ 63,022,841	\$ 515,788	\$ 58,050,306	
	Construction	\$ 226,595,804	\$ 7,872,288	\$ 212,137,681	
TOTAL		\$ 289,618,645	\$ 8,388,076.30	\$ 270,187,987	

*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 FY13 CIP budget includes \$289,618,645 for design and construction of the BWSC-implemented CSO projects in the MOU and FAA. Amendment 13 will increase the Total Award Amount of the MOU and FAA to \$289,451,416.24. Reserved Channel Contract 2 received \$2.2 million of American Recovery and Reinvestment Act funds.

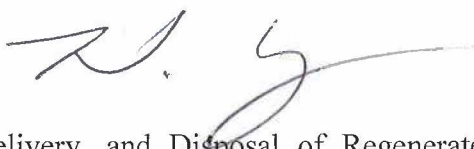
MBE/WBE PARTICIPATION:

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

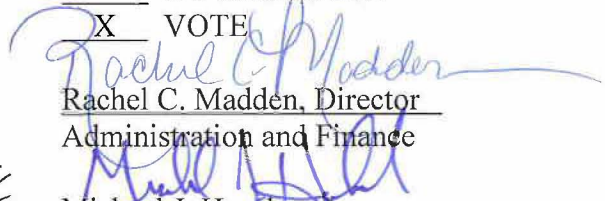
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: November 14, 2012
SUBJECT: Three-Year Contract for the Supply, Delivery, and Disposal of Regenerated Activated Carbon for the Deer Island Treatment Plant.
Carbon Activated Corporation
Bid WRA-3528



COMMITTEE: Wastewater Policy & Oversight

INFORMATION

VOTE



Rachel C. Madden, Director
Administration and Finance

Daniel K. O'Brien, P.E., Director, Deer Island WWTP
Michele S. Gillen, Deputy Director, Administration and Finance
Preparer/Title

M.S.G.

Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the award of Purchase Order Contract WRA-3528, a three-year purchase order contract for the supply, delivery, and disposal of regenerated activated carbon for the Deer Island Treatment Plant, to the lowest responsive bidder, Carbon Activated Corporation, and authorize the Director of Administration and Finance to execute said purchase order contract in an amount not to exceed \$908,850.

DISCUSSION:

The Deer Island Treatment Plant's air permit requires that any air contaminated during wastewater treatment also be treated to remove odor-causing compounds prior to their release into the atmosphere. Therefore, odorous gases from the areas above the primary clarifiers, secondary reactors, and gravity thickeners, as well as air from grit removal, centrifuge operations, and pump station wet wells, must be drawn off and treated. Deer Island's permit sets a maximum emissions limit of 1 part per million (ppm) for hydrogen sulfide (H₂S); the permit limits for other total non-methane hydrocarbons vary.

To reduce these compounds as required, Deer Island operates either single-stage or dual-stage odor control systems, consisting of wet scrubbers and/or carbon adsorbers¹.

¹ Adsorption occurs when one substance holds another via physical bonds. In Deer Island's application, the odor causing compounds - H₂S - adhere to the surface of the carbon as the air is blown through the carbon adsorption vessels before the air is transported to the stack and out to the atmosphere.

There are 29 carbon adsorption drums throughout the plant of varying capacities, ranging from 12,000 to 31,000 pounds. Pictured (below left) is one of eight carbon adsorption drums in the West Odor Control facility. Large fans can be seen in the left side of the picture (below right) that blow the air from the wet scrubbers (unseen, located on the opposite side of the wall) up to a large common feed pipe where the air is then routed into the adsorption drums.



A drum is removed from service for carbon replacement when the air samples from the outermost layer of the carbon bed indicate that the carbon is no longer effectively removing the target compounds. There is a large range of time (typically from one to five years) between the need for changing out carbon depending on the size of the drum and the particular process air stream being treated.

The fully treated air is then transported to large stacks located outside each odor control facility on the island, where it is released to the atmosphere. The picture on the right shows the Residuals Odor Control Facility and its stack.



This purchase order contract will provide for the supply, delivery, and installation of regenerated activated carbon for a period of three years. Staff estimate that Deer Island will require approximately 400,000 pounds of regenerated carbon each year (1,200,000 pounds in total) under this contract. The scope of work includes the removal and disposal of spent carbon, which is often shipped to a reprocessing plant, where it is sorted by granular size and “regenerated.” If the carbon is not re-usable, the vendor is responsible for its disposal, which may be incineration or placement in a landfill.

Procurement Process

Bid WRA-3528 was advertised in the Boston Herald, Central Register, Goods & Services, Dodge Reports, El Mundo, and Banner Publications. In addition, bids were made available for public downloading on Comm-PASS, the Commonwealth of Massachusetts' procurement website.

On September 26, 2012, two bids were received and opened with the following results:

VENDOR	1,200,000 Pounds of Removed and Disposed Carbon	1,200,000 Pounds of Newly Delivered and Installed Carbon	NYLON SCREEN 15,000 Square Feet	TOTAL BID
Carbon Activated Corp.	\$0.148/lb = \$177,600	\$0.60/lb = \$720,000	\$0.75/s.f. = \$11,250	\$908,850
Prominent Systems, Inc.	\$0.24/lb = \$288,000	\$0.71/lb = \$852,000	\$0.75/s.f. = \$11,250	\$1,151,250

Bidders were instructed to submit bids on a price-per-pound basis that would include all costs for removal and disposal of spent carbon and a separate line item for the installation of newly delivered carbon. Bidders were also asked to submit a bid price for nylon screen material that is placed on top of the carbon inside the drum to maintain an evenly distributed bed of carbon in each drum; air up-draft could otherwise disrupt the carbon bed.

Under the current contract, with Carbon Activated Corporation, which expires on December 2, 2012, MWRA is paying a price of \$0.138 per pound for removal/disposal, \$0.60 per pound for delivery and installation, and \$0.75 a square foot for nylon screen. Based on the new unit bid prices, the lowest bid was again submitted by Carbon Activated Corporation with only a one-cent-per-pound increase in removal/disposal cost, or an overall three-year cost increase of \$12,000.

Staff have reviewed all bids and have determined that Carbon Activated Corporation's bid meets all of the requirements of the bid specifications. Staff have been satisfied with the product and service provided by Carbon Activated Corporation under its current contract. The company has been responsive to requests and has performed in accordance with the terms of the contract.

Therefore, staff recommend the award of this purchase order contract to Carbon Activated Corporation as the lowest responsive bidder.

BUDGET/FISCAL IMPACT:

The Operations Division's FY13 Current Expense Budget contains sufficient funding for the first portion of this contract. Appropriate funding will be included in subsequent Proposed CEB requests for the remaining term of the contract.

MBE/WBE PARTICIPATION:

Carbon Activated Corporation is not a certified Minority- or Woman-owned business.

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STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: November 14, 2012
SUBJECT: One-Year Purchase Order Contract for the Supply and Delivery of Sodium Hypochlorite to the Deer Island Treatment Plant
Borden & Remington Corporation
Bid WRA-3524

COMMITTEE: Wastewater Policy & Oversight

INFORMATION
 VOTE
Rachel C. Madden
Rachel C. Madden, Director
Administration and Finance
Michael J. Hornbrook
Michael J. Hornbrook
Chief Operating Officer

Daniel K. O'Brien, P.E., Director, Wastewater Treatment
Michele S. Gillen, Deputy Director, Administration and Finance
Preparer/Title

msg

RECOMMENDATION:

To approve the award of Purchase Order Contract WRA-3524, a one-year contract for the supply and delivery of 15% and 19% solution of sodium hypochlorite to the Deer Island Treatment Plant, to the lowest responsive bidder, Borden & Remington Corporation, and to authorize the Director of Administration and Finance to execute said purchase order contract in an amount not to exceed \$1,342,740¹ for a period of one year, from November 17, 2012 through November 16, 2013.

DISCUSSION:

MWRA uses sodium hypochlorite, which is a combination of chlorine and caustic soda, at the Deer Island Treatment Plant primarily to disinfect the plant's effluent. However, sodium hypochlorite is also used in the plant's non-potable, process water system and in the odor control system.

Sodium hypochlorite is manufactured in different strengths, including 15%, 19%, and 20% grade solution. The differing strengths of chemical do not affect the treatment processes in any way. Deer Island's target strength for dosing is between 10% and 12% so regardless of the grade strength purchased, the delivered product is diluted to the target strength in the storage tanks.

¹ The recommended not-to-exceed award amount is based on the total estimated quantity of 15% solution although MWRA will purchase 19% solution based on its availability.

The only differences in strength are unit cost and availability. The most common and widely available strength is the 15% grade solution. During the past contract, MWRA purchased both 15% and 19% grade solution. Although the unit cost for 19% is higher, the net result is less volume is needed.

MWRA's preference would be to use only 19% grade solution because it means coordinating and monitoring the off-loading of fewer delivery trucks. However, staff have found that vendors are unable to successfully meet MWRA's delivery requirements for 19% solution at all times because that strength is not manufactured locally. Vendors must rely on railcars to ship the product to their facilities and then transfer the product to tanker trucks. Unreliability of railroad scheduling results in MWRA using both 15% and 19%. Under the current agreement, which began on November 17, 2011, MWRA has received 950,565 gallons of 19% solution compared to 442,598 gallons of 15% solution through November 2, 2012. Under this purchase order, MWRA will continue to take deliveries of the 19% grade solution whenever possible.

Staff estimate that Deer Island would use approximately 2,100,000 gallons of sodium hypochlorite if purchased entirely at 15% grade and approximately 1,657,894 gallons if purchased entirely at 19% grade.

Procurement Process

Bid WRA-3524 was advertised in the Boston Globe, Central Register, Goods & Services, Dodge Reports, El Mundo, and Banner Publications. In addition, bids were made available for public downloading on Comm-PASS, the Commonwealth of Massachusetts' procurement website. On September 26, 2012, sealed bids were received from three vendors and were publicly opened with the following results:

Borden & Remington	Estimated Gallons	Percentage Solution	Unit Price Per Gallon	Extended Bid Price
	2,100,000	15% Solution	\$0.6394	\$1,342,740.00
	1,657,894	19% Solution	\$0.7695	\$1,275,749.40
	1,575,000	20% Solution	No Bid	No Bid
Univar USA, Inc.	Estimated Gallons	Percentage Solution	Unit Price Per Gallon	Extended Bid Price
	2,100,000	15% Solution	\$0.7131	\$1,497,510.00
	1,657,894	19% Solution	No Bid	No Bid
	1,575,000	20% Solution	No Bid	No Bid
Kuehne Chemical Corporation	Estimated Gallons	Percentage Solution	Unit Price Per Gallon	Extended Bid Price
	2,100,000	15% Solution	\$1.05	\$2,205,000.00
	1,657,894	19% Solution	No Bid	No Bid
	1,575,000	20% Solution	\$1.40	\$2,205,000.00

Bid WRA-3524 was structured as a one-year contract similar to the existing contract with Borden & Remington, which expires on November 16, 2012. Staff requested that vendors provide a unit bid price for each of the three available grades of sodium hypochlorite even

though 19% is not always available. Under the current contract, MWRA is paying a fixed price of \$0.7719 per gallon for 19% solution, when available, and \$0.6194 per gallon for 15% solution.

Staff recommend that the not-to-exceed amount of the contract be established based on the total estimated usage of 15% solution (2,100,000 gallons) with the understanding that MWRA will purchase 19% solution whenever it is available from the vendor. The not-to exceed amount of the contract is not a firm commitment of cost or a guarantee of purchase to the vendor; MWRA will only pay for product delivered and received. Awarding at the 15% grade solution total amount will ensure sufficient funds are available for MWRA to purchase either grade during the contract term. MWRA will pay \$0.6394 per gallon for 15% grade and \$0.7695 per gallon for 19% grade.

Staff have reviewed Borden & Remington Corporation's bid and have determined that it meets all of the requirements of the bid specifications. Therefore, staff recommend the award of this one-year purchase order contract to Borden & Remington Corporation as the lowest responsive bidder.

BUDGET/FISCAL IMPACT:

There are sufficient funds available for this contract in Deer Island's FY13 Current Expense Budget. Appropriate funding will be included in the Proposed FY14 CEB request for the remaining term of the contract.

MBE/WBE/PARTICIPATION:

Borden & Remington Corporation is not a certified Minority- or Women-owned business.



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

to be held on

Wednesday, November 14, 2012

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

Time: Immediately following Wastewater Comm.

AGENDA

A. Information

1. Southern Extra High Service Area Redundancy

B. Contract Amendments/Change Orders

1. South Dike Tree Removal at Wachusett Reservoir: Aldore Tetreault and Sons, Inc., Contract OP-182, Change Order

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MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the
Water Policy and Oversight Committee

October 17, 2012

A meeting of the Water Policy and Oversight Committee was held on October 17, 2012 at the Authority headquarters in Charlestown. Vice-Chair Mannering presided. Present from the Board were Messrs. Barrera, Carroll, Cotter, Flanagan, Foti, Pappastergion, Swett, and Walsh. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Mike Hornbrook, Steve Estes-Smargiassi, Josh Das, Nava Navanandan, and Bonnie Hale. The meeting was called to order at 11:45 a.m.

Information

Update on Lead and Copper Rule Compliance – Fall 2012

Staff reviewed the sampling program and the most recent results.

Contract Awards

*Supply and Delivery of Soda Ash for the John J. Carroll Water Treatment Plant: OCI Chemical Corporation, WRA-3518

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

Amendments/Change Orders

*Lynnfield/Saugus Pipeline: Albanese Brothers, Inc., Contract 6584, Change Order 23

Staff described various problems encountered during construction that contributed to the high percentage of change orders. (Mr. Carroll left the meeting.) There was general discussion and question and answer. The Committee recommended approval of Change Order 23 (ref. agenda item C.1).

The meeting adjourned at 12:00 p.m.

* Approved as recommended at October 17, 2012 Board of Directors meeting.

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: November 14, 2012
SUBJECT: Southern Extra High Service Area Redundancy Plan



COMMITTEE: Water Policy & Oversight

X INFORMATION
 VOTE

Mike Rivard, Design Manager
Jae R. Kim, Chief Engineer
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

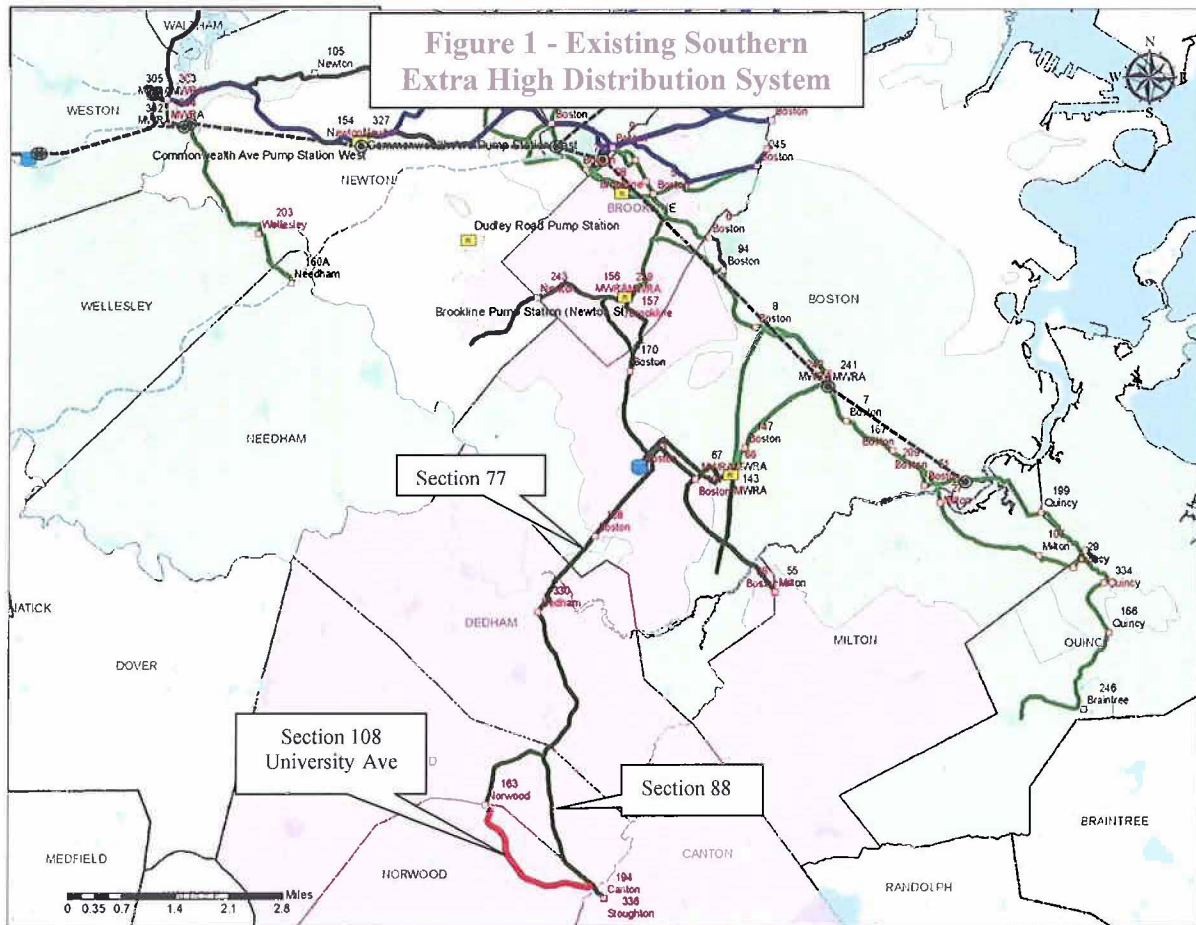
Staff have completed a comprehensive evaluation process for providing redundancy to the southern portion of the Southern Extra High service area. This staff summary provides the Board with a detailed discussion of the results of the process and staff's selection of a proposed alternative. Staff plan to meet with the impacted communities this coming winter and will file an Environmental Notification Form with the Massachusetts Environmental Policy Act (MEPA) unit of the Executive Office of Energy and Environmental Affairs in spring 2013. Staff will return to the Board in early 2013 with a recommendation to extend an ongoing consultant contract to complete the MEPA process with no increase in cost. Staff also plan to competitively bid a separate consultant contract for final design of the redundant pipeline upon completion of the MEPA process.

RECOMMENDATION:

For information only.

BACKGROUND:

MWRA's Southern Extra High service area provides water to Canton, Dedham, Norwood, Stoughton, Westwood, portions of Brookline and Milton, and the Roslindale and West Roxbury sections of Boston. The five communities in the southern portion of the service area (Canton, Norwood, Dedham, Westwood, and Stoughton) are served by a single 36-inch-diameter transmission main (Section 77), which is five miles long. Canton and Stoughton are served by a branch (Section 88) off of Section 77 (refer to Figure 2 on page 3). Although several of these communities are partially supplied by MWRA, the loss of this single transmission main (Section 77) would result in a rapid loss of service in Norwood and Canton, and potential water restrictions for Stoughton and Dedham/Westwood.



The Southern Extra High service area has been identified as being deficient in distribution storage and lacking redundant distribution pipelines. Correction of these deficiencies has been assigned a Priority One under MWRA’s Water Master Plan due to the potential critical threat to public health that could result from a failure in this single transmission main.

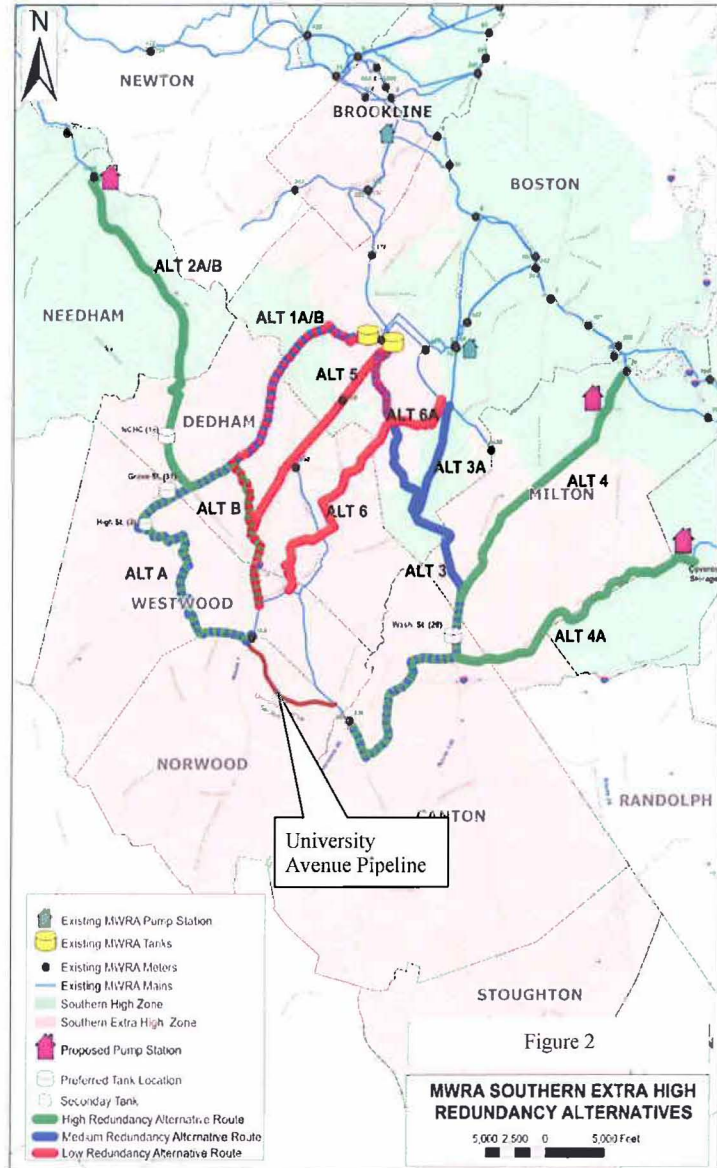
In addition, a major goal of system redundancy is to provide a secondary means of supplying the service area that will reduce vulnerabilities and enhance operational flexibility in the event of unforeseen conditions.

DISCUSSION:

Evaluation of Alternatives

On February 7, 2007, the Board approved the award of Contract 6452 to SEA Consultants, Inc. to provide concept planning services for the Southern Extra High Distribution Storage and Redundancy Plan. An early recommendation of the study was to construct a connection between the terminus of Section 88 and Section 77 along University Avenue in Norwood to create a loop at the bottom of the system. This loop was a common element of all the alternatives identified and was constructed in 2008.

In January 2009, staff presented the Board with eleven alternatives that were initially evaluated in the study to provide redundancy (shown in Figure 2 on the right). At that time, staff had not yet recommended a preferred alternative and Contract 6452 was extended several times to coordinate this project with a larger MWRA study to provide transmission redundancy for the metropolitan tunnel system and to coordinate the project with the potential expansion of MWRA's water system to serve the communities of Braintree, Holbrook, and Randolph (also known as "Tri-Town").



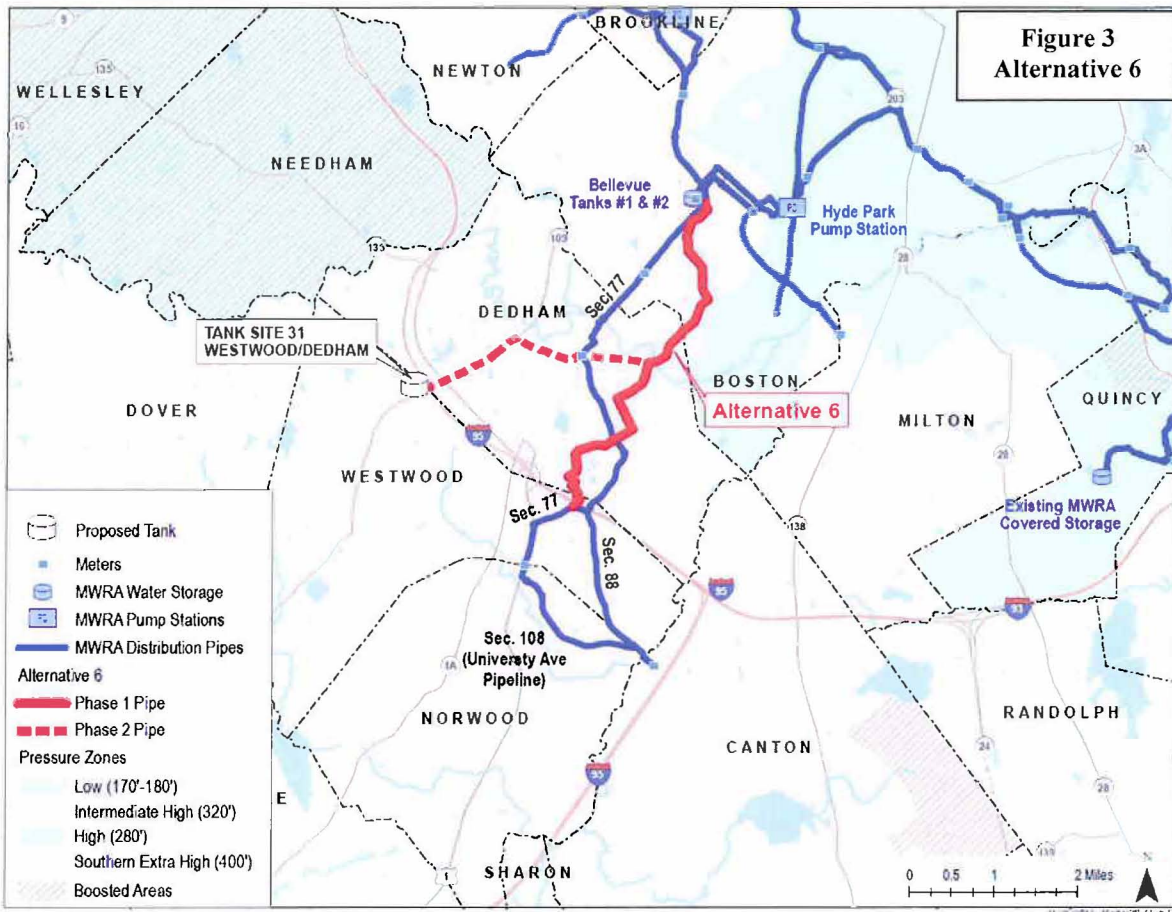
Staff last briefed the Board on this project in January 2012. At that time, the Board approved Amendment 5 to Contract 6452, Southern Extra High Distribution Storage and Redundancy Plan with SEA Consultants, Inc., which extended the contract for an additional year to allow staff additional time to coordinate with Tri-Town regarding system expansion.

After extensive evaluations, staff have determined that both redundancy for the metropolitan tunnel system and the potential expansion of the system to the south to serve Tri-Town and possibly the Southfield development in South Weymouth would not require any modifications to

the Southern Extra High service area and could proceed independent of the Southern Extra High Redundancy project.

Proposed Alternative

Staff recommend that MWRA move forward with Phase 1 of Alternative 6 shown in the figure below.



The proposed alternative would provide a redundant pipeline from the Bellevue Tanks in West Roxbury to Norwood, Canton, Stoughton, and Dedham-Westwood. This alternative has the third-lowest Phase 1 cost and avoids several congested streets by using Department of Conservation and Recreation (DCR) roadways within the Stony Brook Reservation. Table 1 on the following page presents a summary of Phase 1 costs for all of the alternatives.

**Table 1
Phase 1 Cost Summary of All Alternatives**

Routing Option	Phase 1 Pipeline Cost	Reasons for Selection/Rejection
5	\$32.0	Significant Traffic and Utility Impacts; Shared Alignment with Exiting Pipeline
6A	\$32.3	Less Operational Flexibility; Greater Traffic Impacts
6	\$33.4	Most Operational Flexibility at Lower Cost; Moderate Traffic and Utility Impacts
1B	\$38.2	Greater Traffic and Utility Impacts; Higher Cost
3A	\$44.9	Greater Traffic and Utility Impacts; Higher Cost
1A	\$54.4	Greater Traffic and Utility Impacts; Higher Cost
3	\$54.4	Greater Traffic and Utility Impacts; Higher Cost
4A	\$62.7	Higher Cost
2B	\$65.2	Higher Cost
4	\$65.2	Higher Cost
2A	\$72.4	Higher Cost

* Project Costs are in Millions and based on an August 2012 ENR Boston CCI value of 12029.97

** Project Costs include 25% contingency and 20% engineering.

Alternative 6 has a Phase 1 capital cost of approximately \$33.4 million compared to a cost range of \$32 million to \$72.4 million for the other alternatives. In the future, additional storage could be added in a Phase 2 project at an additional cost of \$44.8 million. Total cost of Alternative 6 is approximately \$78.1 million compared to a total cost range of \$68.1 million to \$95.5 million for all of the original alternatives.

Staff's selection of Alternative 6 as the preferred route was based on the fact that it allows for a connection to several pipelines in the Bellevue Tank vicinity, thus providing more operational flexibility for supply to the communities from either the Newton Street Pump Station or the Hyde Park Pump Station. Staff also found that it has moderate utility and traffic interference relative to the other alternatives. Alternative 5, although the shortest route, involved construction in Washington Street in Dedham and West Roxbury, which follows a portion of the same alignment as Section 77, and would involve significant traffic and utility interference. Staff believe that Alternative 6 is preferable to minimize the areas where redundant pipelines share the same alignment to reduce the risk of a failure in one pipe impacting the other.

Additional distribution storage was also a goal of the study. However, Canton, Norwood and Dedham-Westwood have their own distribution storage for local needs. In the future, if a suitable tank site is identified and can be obtained, staff will make a subsequent recommendation to the Board. The immediate need is to complete the redundant pipeline to provide full redundancy to the southern communities, thus allowing much needed inspection and rehabilitation of the Section 77 and 88 pipelines.

Prior to filing the Environmental Notification Form (ENF), staff will meet with DCR and the impacted cities and towns including Boston, Dedham, and Westwood.

The proposed project schedule is as follows:

Meet with Communities and Agencies	November 2012 – January 2013
Prepare/File ENF	January 2013 – May 2013
Secretary’s MEPA Certificate	July 2013
Procure Final Design Consultant	July 2013 – January 2014
Final Design Notice to Proceed	January 2014
Construction Notice to Proceed	Spring 2016
Substantial Completion	2018

BUDGET/FISCAL IMPACT:

The FY13 CIP includes \$33.4 million for design and construction of Phase 1, a fully redundant pipeline to Section 77. Phase 2, which consists of a storage tank and connection at an estimated cost of \$44.8 million, is also included in the FY13 CIP. However, projected spending for Phase 2 is scheduled beyond the next five-year CIP cap period. Staff will return to the Board prior to expending any Phase 2 funds if a suitable tank site is identified in the future.

W B.1
IV c.2
11/14/12

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: November 14, 2012
SUBJECT: South Dike Tree Removal at Wachusett Reservoir
Aldore Tetreault and Sons, Inc.
Contract OP-182, Change Order 2



COMMITTEE: Water Policy & Oversight

 INFORMATION
 X VOTE

John Gregoire, Program Manager, Reservoir Operations
David Coppes, Director, Western Operations
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Change Order 2 to Contract OP-182, South Dike Tree Removal at Wachusett Reservoir, with Aldore Tetreault and Sons, Inc., for a lump sum amount of \$34,500, increasing the contract amount from \$412,950 to \$447,450, with no increase in contract term.

DISCUSSION:

Under Contract OP-182, to meet the Office of Dam Safety regulatory requirements, the Contractor was required to remove approximately 1,600 trees and stumps on the earthen South Dike of the Wachusett Reservoir to ensure its long-term structural integrity. The trees ranged in size from saplings up to 32 inches in diameter, with the majority of trees in the 10-inch to 20-inch-diameter range. All trees and stumps were removed, the site was then graded and hydroseeded with the intent to restore the dike to its original grass-cover design.

The contract is substantially complete with only punchlist items remaining to be addressed.

This Change Order

Change Order 2 consists of the following item:

Mow Weeds on the Dike Twice and Install "Brilliant Seed" in Zones 1 through 5 \$34,500

In accordance with the specifications of the contract, the Contractor hydroseeded areas of the South Dike that had been cleared of trees and provided appropriate watering to ensure proper grass growth. However, an unanticipated and massive bloom of aggressive, rapidly growing

“Pokeweed” overtook the entire area that had been cleared and hydroseeded, as can be seen in the picture on the right (the orange marker is four feet tall). Staff have since learned that the Pokeweed seeds, which had been dormant until they were disturbed, can remain viable for decades.



The Pokeweed had to be cleared so the Contractor was required to mow the area twice to ensure its elimination. The Contractor then was required to “brilliant seed” the area. This technique physically places the specified seed directly into the soil for better germination.

Staff have now determined that this process was successful in eliminating the Pokeweed as can be seen in the picture on the right. The grass seed is now coming in well.



This item of work has been identified by MWRA staff as an unforeseen condition. MWRA staff and the Contractor have agreed to a lump sum amount of \$34,500 for this additional work with no increase in contract term.

CONTRACT SUMMARY:

	<u>Amount</u>	<u>Time</u>	<u>Dated</u>
Original Contract:	\$352,950.00	90 Days	04/09/12
CHANGE ORDERS			
Change Order 1*:	\$60,000.00	0 Days	08/14/12
Change Order 2:	<u>\$34,500.00</u>	<u>0 Days</u>	Pending
Total of Change Orders	\$94,500.00	0 Days	
Adjusted Contract:	\$447,450.00	90 Days	

*Approved under delegated authority

If Change Order 2 is approved, the cumulative value of all change orders to this contract will be \$94,500 or 27% of the original contract amount. Work on this contract is approximately 99% complete and staff expect Change Order 2 to be the final change order under this contract.

BUDGET/FISCAL IMPACT:

Funding for this contract, including this change order, is included in Field Operations' FY13 Current Expense Budget.

MBE/WBE PARTICIPATION:

There were no MBE/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

PERSONNEL & COMPENSATION COMMITTEE MEETING

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

to be held on

Wednesday, November 14, 2012

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

Time: Immediately following Water Comm.

A. Approvals

1. PCR Amendments – November 2012
2. Appointment of Manager, Contract Administration, Operations Division
3. Appointment of Assistant Director, Engineering, Operations Division

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the
Personnel and Compensation Committee

October 17, 2012

A meeting of the Personnel and Compensation Committee was held on October 17, 2012 at the Authority headquarters in Charlestown. Chairman Cotter presided. Present from the Board were Messrs. Barrera, Flanagan, Foti, Mannering, Pappastergion, Swett, and Walsh. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Rachel Madden, Bob Donnelly, and Bonnie Hale. The meeting was called to order at 12:00 p.m.

Approvals

*PCR Amendments – October 2012

The Committee recommended approval of amendments to the Position Control Register (ref. agenda item A.1).

*Appointment of Program Manager, Wastewater Operations

The Committee recommended approval of the appointment of Daniel R. Thompson to the above position (ref. agenda item B.2).

The meeting adjourned at 12:05 p.m.

* Approved as recommended at October 17, 2012 Board of Directors meeting.

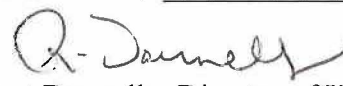
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: November 14, 2012
SUBJECT: November PCR Amendments



COMMITTEE: Personnel and Compensation

 INFORMATION

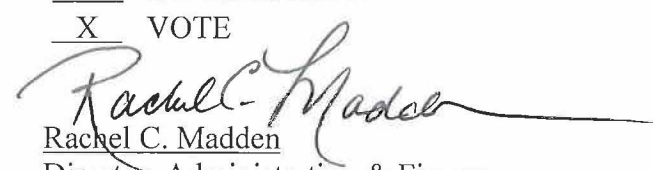


 X VOTE

Robert Donnelly, Director of Human Resources

Joan C. Carroll, Manager, Compensation

Preparer/Title



Rachel C. Madden

Director, Administration & Finance

RECOMMENDATION:

To approve the amendments to the Position Control Register (PCR) included in the attached chart¹.

DISCUSSION:

The PCR amendments included in this package reflect organizational changes aimed at improving the cost-effectiveness, structural soundness and staffing patterns in the Operations Division and the Office of Emergency Preparedness.

These amendments include:

1. Title change for a position (IS Project Leader to Security Services Administrator) to meet the staffing needs in the Office of Emergency Preparedness.
2. Title change for a vacant position (Assistant Director, Wastewater Engineering to Assistant Director, Engineering) to better address the current engineering needs within the Operations Division.
3. Title change and salary adjustment for a filled position (Assistant Director, Water Engineering to Assistant Director, Engineering) to better address the current engineering needs within the Operations Division. In addition, a salary adjustment is recommended in order to bring the salary of the incumbent in-line with the two similar positions in this unit, as depicted on the attached organizational chart.
4. Title, grade and location change for a filled position (Finance and Technical Support Analyst to Manager, Coordination and Control) in Operations to meet a staffing need.
5. Title, grade and location change for a vacant position (Area Supervisor to Sr. Medium Electrical Voltage Specialist) in Operations to meet the staffing needs in Western Operations.

¹ The Position Control Register lists all regular positions in this fiscal year's Current Expense Budget. Any changes to positions during the year are proposed as amendments to the PCR. The Personnel and Compensation Committee of the Board of Directors must approve all PCR amendments. In addition, any amendments resulting in an upgrade of a position by more than one grade level or increasing a position's annual cost by \$10,000 or more must be approved by the Board of Directors after review by the Personnel and Compensation Committee.

6. Title and grade change for a vacant position (Electrician to Medium Voltage Electrical Specialist) in Operations to meet the staffing needs in Equipment Maintenance.
7. Title and grade change for a filled position (Chemist II to Chemist III) in Laboratory Services in Operations as a result of a union agreement.

Five amendments require approval by the Personnel and Compensation Committee. Two amendments require Board approval after review by the Personnel and Compensation Committee.

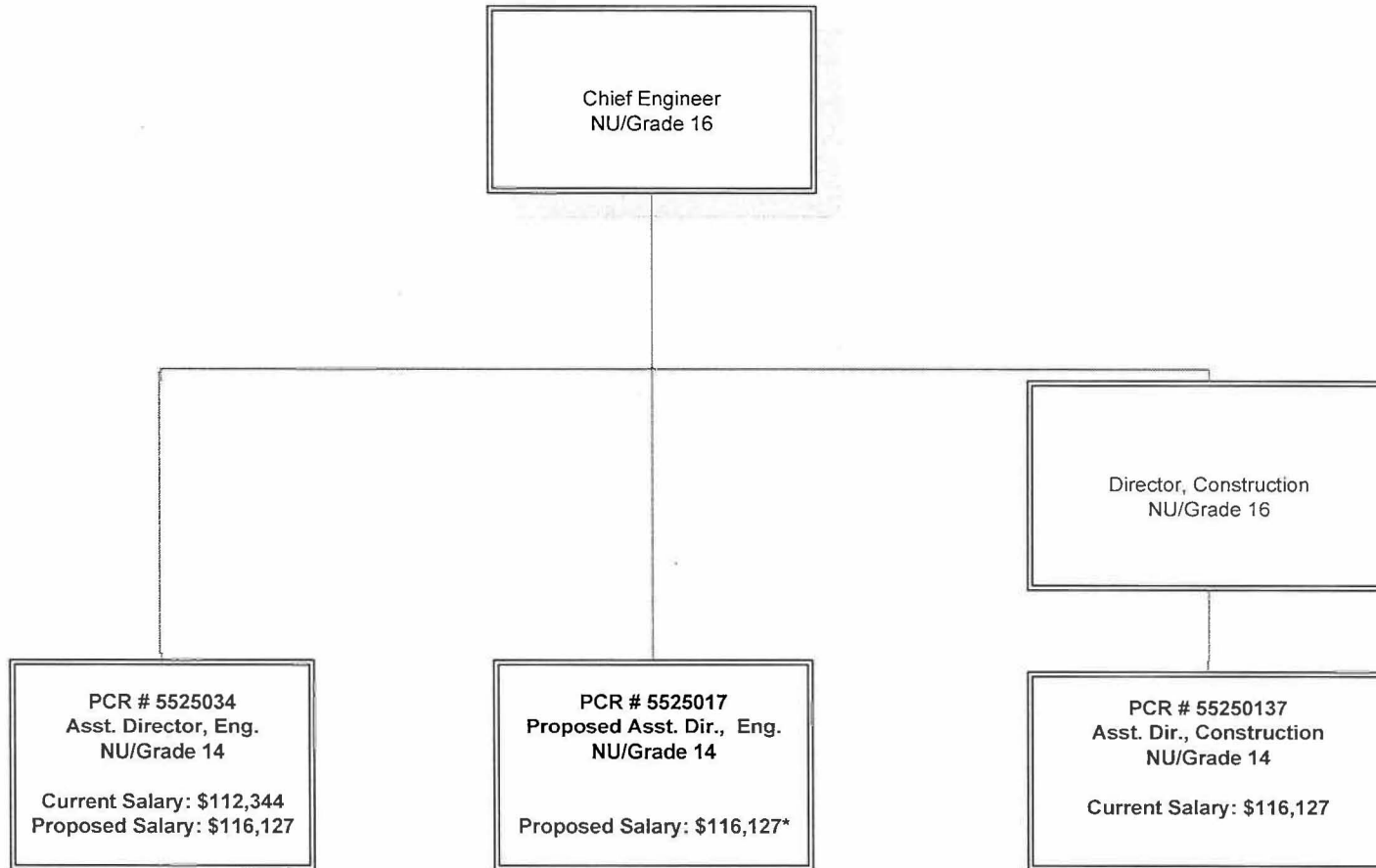
BUDGET/FISCAL IMPACT:

These amendments will result in a cost increase of approximately \$32,456. Staff will ensure that any cost increase associated with these PCR amendments will not result in spending over the approved FY13 Wages and Salaries budget.

ATTACHMENTS:

New/Old Job Descriptions

Engineering and Construction
Proposed Structure-Nov. 2012



*Subject to Approval of Staff
Appointment presented at the
November 14, 2012 Board Meeting

MASSACHUSETTS WATER RESOURCES AUTHORITY
POSITION CONTROL REGISTER AMENDMENTS
FISCAL YEAR 2013

PCR AMENDMENTS REQUIRING PERSONNEL & COMPENSATION COMMITTEE APPROVAL - November 14, 2012

Number	Current PCR #	V/F	Type	Current Title	UN	GR	Amended Title	UN	GR	Current/Budget Salary	Estimated New Salary	Estimated Annual \$ Impact	Reason For Amendment
P5	Executive Emergency Preparedness 1710005	V	T	IS Project Leader	6	10	Security Services Administrator	6	10	N/A	N/A - N/A	\$0 - \$0	To meet the staffing needs in Office of Emergency Preparedness. Note: Change to be effective Dec 15, 2012
P5	Operations Engineering 5525017	V	T	Assistant Director, Wastewater Engineering	NU	14	Assistant Director, Engineering	NU	14	N/A	N/A - N/A	\$0 - \$0	To better address the current engineering needs within the Operations Division.
P6	Operations Engineering 5525034	F	T,SA	Assistant Director, Water Engineering	NU	14	Assistant Director, Engineering	NU	14	\$112,345	\$116,127 - \$116,127	\$3,782 - \$3,782	To better address the current engineering needs within the Operations Division.
P7	Operations DI Admin & Finance 2945011	F	T,G,L	Finance & Tech Support Analyst	6	11	Manager, Coordination & Control	6	12	\$86,633	\$95,272 - \$95,272	\$8,639 - \$8,639	To meet a staffing need in Operations.
P8	Operations WW Operations 2937536	V	T,G,L	Area Supervisor	3	19	Sr. Medium Voltage Elec. Specialist	3	20	\$71,121	\$74,245 - \$74,245	\$3,124 - \$3,124	To more effectively meet staffing needs in the EQ Maintenance (West)
PERSONNEL & COMP COMMITTEE TOTAL=					5		TOTAL					\$15,545 - \$15,545	

Legend.
V = Vacant position, F = Filled position
T = Title change, L = Location change, transfer to another Cost Center, G = Grade Change, SA= Salary Adjustment, E = Elimination

MASSACHUSETTS WATER RESOURCES AUTHORITY
 POSITION CONTROL REGISTER AMENDMENTS
 FISCAL YEAR 2013

PCR AMENDMENTS REQUIRING BOARD APPROVAL - November 2012

Number	Current PCR #	V/F	Type	Current Title	UN	GR	Amended Title	UN	GR	Current/Budget Salary	Estimated New Salary	Estimated Annual \$ Impact	Reason For Amendment
B12	Operations EQ-General 5470051	V	T,G	Electrician	3	16	Medium Voltage Specialist	3	19	\$61,648	\$71,121 - \$71,121	\$9,473 - \$9,473	To more effectively meet staffing needs in the EQ Maintenance Unit.
B13	Operations Laboratory Services 5710028	F	T,G	Chemist II	9	20	Chemist III	9	22	\$70,937	\$78,375 - \$78,375	\$7,438 - \$7,438	Union Agreement
BOARD TOTAL =					2		SUBTOTAL:					\$16,911 - \$16,911	
GRAND TOTAL =					7		TOTAL ESTIMATED COSTS:					\$32,456 - \$32,456	

Legend:
 V = Vacant position, F = Filled position
 T = Title change, L = Location change, transfer to another Cost Center, G = Grade Change, SA = Salary Adjustment, E = Elimination

STAFF SUMMARY

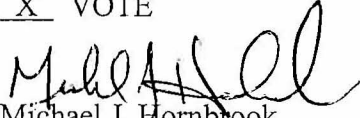
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: November 14, 2012
SUBJECT: Appointment of Manager, Contract Administration



COMMITTEE: Personnel and Compensation

INFORMATION
 VOTE

John P. Vetere, Deputy Chief Operating Officer
Richard P. Trubiano, Deputy Chief Operating Officer
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the appointment of Marcel R. Brady to the position of Manager, Contract Administration (Unit 6, Grade 12) at the recommended salary of \$95,271, effective on November 17, 2012.

DISCUSSION:

The position of Manager, Contract Administration, became vacant upon the retirement of the previous incumbent in September 2012. This position directs the oversight and management of all administrative aspects of MWRA's technical assistance and professional services contracts to ensure compliance with MWRA's financial policies and procedures and applicable federal and state laws.

The Manager, Contract Administration duties and responsibilities include:

- Developing and ensuring compliance with procurement policies and procedures related to contract preparation, invoice review and payment, and contract close-out;
- Assisting in consultant selections through participation on selection committees and conducting financial analyses;
- Reviewing professional services contract amendments;
- Assisting operations and engineering staff with tracking contract status and addressing consultant questions; and
- Supervising contract administration staff in day-to-day duties.

Organizationally, the position reports to the Deputy Chief Operating Officer, Programs, Policy and Planning, in the Operations Division (see attached Organization Chart).

Selection Process

This position was posted internally and externally on September 20, 2012 and seven applications were referred by Human Resources (three external and four internal candidates). Senior staff from Operations and the Affirmative Action and Compliance Unit interviewed all candidates. An internal candidate, Mr. Marcel R. Brady, was determined to possess the knowledge, skills, and experience for this position and has been recommended for promotion. Mr. Brady has held the position of Assistant Manager, Contract Administration at MWRA for more than 15 years and held a Senior Contract Administrator position at MWRA for three years before that. He has a solid understanding of all aspects of contract administration and he possesses excellent written, verbal, and computer skills. Mr. Brady successfully performed the work of the former Manager, Contract Administration during a prolonged absence and has worked on a range of professional services and maintenance services contracts while at MWRA.

Mr. Brady holds a Master of Education Degree with a concentration in administration, planning and policy from Harvard University. He has completed accounting and procurement coursework at UMass, Boston and at Lorman Education Services. He has also completed a wide range of various MWRA training courses.

It should be noted that staff are reviewing the need to backfill Mr. Brady's former position, Assistant Manager, Contract Administration, considering several factors that include an overall reorganization of administrative functions in the Operations Division, and succession planning in light of the large number of anticipated retirements during the next few years.

BUDGET/FISCAL IMPACT:

There are sufficient funds in the Operations Division's FY12 Current Expense Budget to fund this position. The recommended salary is in accordance with guidelines established in the current Unit 6 collective bargaining agreement.

ATTACHMENTS:

Resume of Marcel R. Brady
Position Description
Organization Chart

MARCEL R. BRADY
189 Colorado Street
Mattapan, MA. 02126
Tel. # Home (617) 296-5144
Work (617) 305-5709

EMPLOYMENT HISTORY

8/94 – Present **MASSACHUSETTS WATER RESOURCES AUTHORITY,** **BOSTON, MA.**
Assistant Manager, Contract Administration – Operations (11/97-present)

Responsibilities include:

- Working with Assistant Contract Manager to procure and manage Technical Assistance Services Contracts.
- Administrative Manger for multi-discipline and individual discipline Technical Assistance Consulting Services Contracts managed by other Project Managers.
- Attending selection committee meetings and perform the duties of committee secretary.
- Performing reference checks and provides findings to selection committee.
- Supervising staff
- Provided support for monthly 5B reporting by providing tables for monthly meeting, create/maintain 5B spreadsheets used by Construction Managers and others, attend meetings and take minutes. (FY 04-FY 05)
- Drafted and finalize non-CM Chapter 30 and 149 construction project change order and supporting documents such as proposed change orders; PCO summary sheets and staff summaries; review Article 13 analyses and memorandum of negotiation. (FY 04-FY 05)
- Acting as back-up support for Manager, Contract Administration

Senior Contract Administrator (8/94-11/97)

Responsibilities included:

- Providing oversight and management of administrative aspects of construction and professional services contracts.
- Providing assistance in negotiation and preparation of contract documents for division engineering and construction managers.
- Conducting performance audits of consultants.
- Ensuring compliance with state and federal laws and regulations as well as MWRA's policies and procedures.

7/88-8/89 **NYNEX – NEW ENGLAND** **HAVERHILL, MA.**
(Contracting through continental Field Services, Inc.)

Senior Project Engineer

Responsibilities included:

- Project and Routine Work Order design.
- Coordinating with NYNEX Construction, contractors and utilities to completion of jobs.
- Conducting manhole survey, underground and aerial plant facilities for new job designs and updating record plans.
- Providing cost estimate, including contractor cost, for new design jobs.
- Preparing contract work orders put out for bid.
- Inspecting work done by NYNEX Construction and contractors, for conformance to work plans and NYNEX specifications.
- Designing and provide cost estimate for work change orders.

3/87-7/88 **NEW ENGLAND TELEPHONE** **WORCESTER & DEDHAM, MA.**
(Contracting through sierra Telecom Services, Inc.)
Senior Project Engineer

Responsibilities same as above at NYNEX –New England

6/83-2/87

WANG LABORATORIES

BURLINGTON, MA.

Course Developer

Responsibilities included:

- Planning, developing and documenting customer courses for Office Automated products

Strategic planner

Responsibilities included:

- Developing and documenting Corporate Education Center Training Skills Program for new-hire Course Developers and Instructors.

1/80-12/82

ROXBURY COMMUNITY COLLEGE

ROXBURY, MA.

Mathematics Instructor

- Taught course in pre-calculus, basic and intermediate algebra, statistics, reading and study skills.

Other activities included:

- Developing and conducting research project focusing on correlation between entering freshmen placement scores and their first and second semester test scores.
- Consultant, Learning-to-Learn Program (6/80-9/80)
Developed and wrote Programmed skills in Basic Mathematics.
- Assistant Director, Learning-to-Learn Program (6/80-9/80)
Trained and supervised staff, planned, developed and administered new curriculum.

EDUCATION

1982

**HAVARD UNIVERSITY GRADUATE SCHOOL OF
EDUCATION**

CAMBRIDGE, MA.

Ed. M., Concentration in Administration, Planning and Social Policy.

**MWRA
POSITION DESCRIPTION**

POSITION: Manager, Contract Administration

PCR#: 5210043, 5210059

DIVISION: Operations

DEPARTMENT: Operations Administration

BASIC PURPOSE:

May either direct the oversight and management of administrative aspects of the Authority's professional service & technical assistance contracts, develop and oversee administrative and financial policies and procedures to ensure that contracts are administered in compliance with MWRA policies and applicable federal and state laws, or manage the Quality Assurance/Quality Control (QA/QC) programs for Engineering and Construction projects as established by the Authority.

SUPERVISION RECEIVED:

Works under the general supervision of the Deputy Chief Operating Officer

SUPERVISION EXERCISED:

Exercises supervision of office staff, professionals, technical staffs and administrative personnel as assigned.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Develops, maintains and revises policies and procedures for the procurement, tracking, administration and management of professional service, consultant and construction contracts.
- Reviews contract amendments and change orders; participates in closeout and final payment of contracts; and assists in the defense of contract claims and in dispute resolution procedures.

For Professional Services and Technical Assistance Contracts:

- Manages administrative functions related to the preparation, review and processing of professional service contract requisitions and amendments, including the preparation of staff summaries.
- Works with Assistant Contract Managers (ACM) to procure and manage professional service contracts.
- Assists Project Managers through the contract closeout of professional service contracts.
- Prepare analysis of E-Tables submitted for professional service contracts.

- Attends selection committee meeting and performs the duties of committee secretary.
- Receive and route Board and Delegated staff summaries with accompanying précis.
- Performs reference checks and provides findings to selection committee.
- Represents the division, as delegated, on various committees related to administrative issues
- Advises senior management on procurement/contract related matters.

For QA/QC Programs:

- Designs and administers contract administration and procurement management systems.
- Develops and maintains databases and systems to maintain contract logs, and to track contract progress and advertising, bidding and contract award phases.
- Manages the preparation and updates the provisions of current/future MWRA standard specifications and contract provisions.
- Negotiates professional service consultant contracts in financial and administrative areas.
- Develops contract documents with design and construction managers.
- Maintains current wage rates applicable to state and federal contracts.
- Reviews invoices and audit payments.
- Conducts performance audits, in concert with Internal Audit of contractors as required.
- Reviews provisions, consults with appropriate MWRA staff and ensures compliance in legal, financial and affirmative action areas.

SECONDARY DUTIES:

Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year college program in business administration or related field. Graduate degree in law, business or public administration is preferred; and
- (B) Understanding of contract administration acquired by at least seven (7) to nine (9) years contract management experience; or

(C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of and experience with MGL Chapters 149 and 30 and construction procedures.
- (B) Knowledge and experience with automated systems for tracking change orders and other contract management information.
- (C) Familiarity with personal computers and working knowledge of standard MWRA office automation products; Excel, Microsoft Windows, Microsoft Word, Access.
- (D) Experience in federal and state government contracting preferred.
- (E) Excellent written and oral communication skills are required.

SPECIAL REQUIREMENTS:

None.

TOOLS AND EQUIPMENT USED:

Office machines as normally associated, with the use of telephone, personal computer including word processing and other software, copy and fax machine.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform essential functions.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, tools or controls and reach with hands and arms. The employee frequently is required to sit and talk or hear. The employee is occasionally required to walk and stand.

The employee must frequently lift and/or move up to 10 pounds and occasionally lift and/or move up to 25 pounds. Specific vision ability required by this job includes close vision and color vision, and the ability to adjust focus.

WORK ENVIRONMENT:

The work characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee may occasionally work in outside weather conditions. The employee may occasionally work near moving mechanical parts, and may occasionally be exposed to wet and/or humid conditions and vibrations. The employee may occasionally work in high precarious places and may occasionally be exposed to fumes or

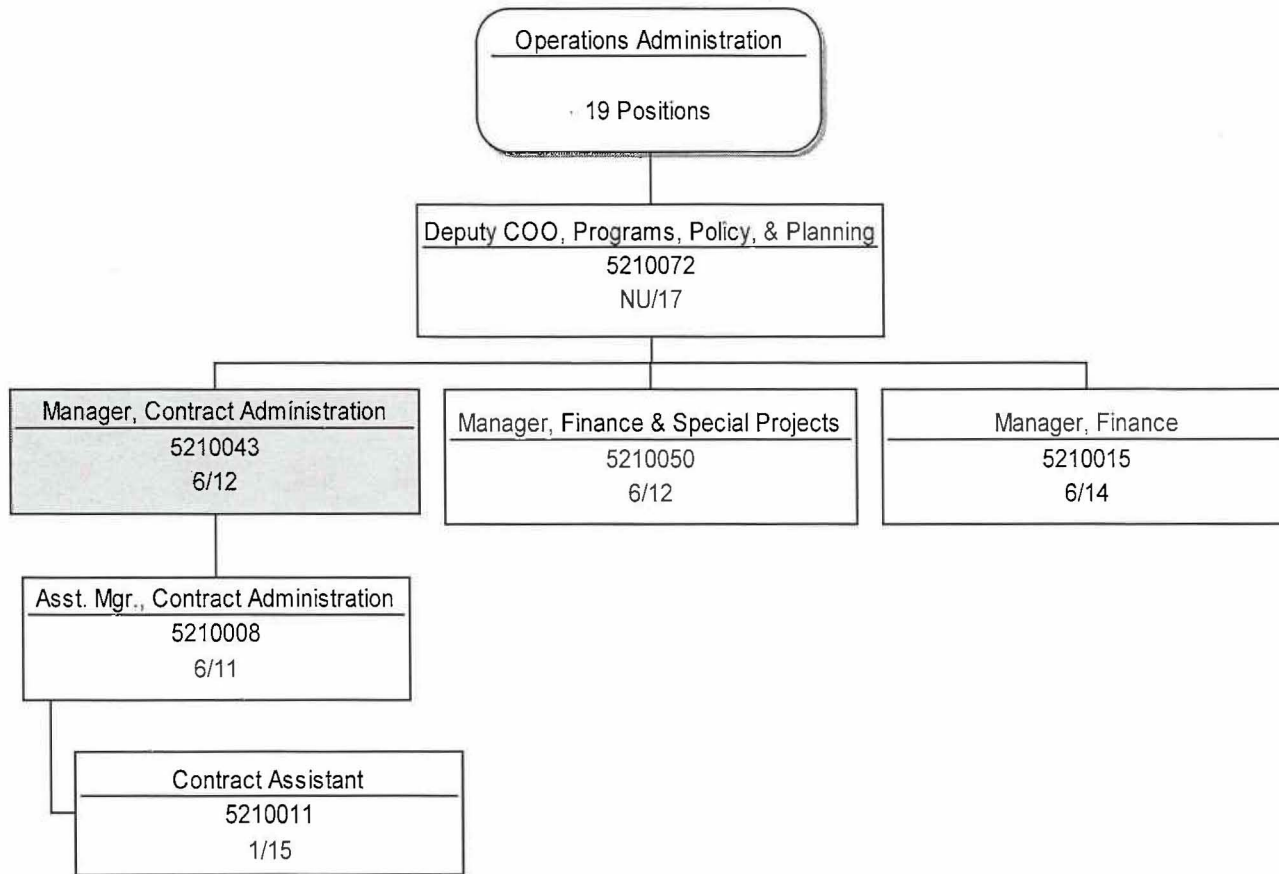
airborne particles, toxic or caustic chemicals and risk of electrical shock. While performing the duties of this job, the employee may occasionally work in various field settings and in an office environment.

The noise level in the work environment is usually loud in field settings and moderately quiet in an office setting.

September 2012

Operations Administration

November 2012



STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: November 14, 2012
SUBJECT: Appointment of Assistant Director, Engineering Operations Division



COMMITTEE: Personnel and Compensation

 INFORMATION
X VOTE

John P. Vetere, Deputy Chief Operating Officer
Jae R. Kim, Chief Engineer


Michael J. Hornbrook
Chief Operating Officer

The title of this position has been Assistant Director, Wastewater Engineering. In a separate staff summary at this meeting, staff are recommending that the Board approve amendments to the Position Control Register, which will change the title of this position to Assistant Director, Engineering. Staff are further recommending that a second title be similarly changed from Assistant Director, Water Engineering to Assistant Director, Engineering. That PCR amendment will also address a salary equity issue. Staff are recommending these changes to better address the current engineering needs within the Operations Division.

RECOMMENDATION:

To approve the appointment of Mr. Frederick O. Brandon to the position of Assistant Director, Engineering, in the Engineering and Construction Department (Non-Union/Grade 14) at an annual salary of \$116,127, to be effective on November 17, 2012.

DISCUSSION:

This position became vacant upon the retirement of the previous incumbent, Ms. Elizabeth Gowen, in October 2012.

The Operations Division's Engineering and Construction Department, under the direction of the Chief Engineer (see attached organizational chart), manages all water and wastewater (non-Deer Island) engineering design and construction projects. The department also provides technical engineering services (electrical, mechanical, structural, and civil), and design information system services (CADD, surveying, record drawings, and document control).

The Assistant Director, Engineering position reports to the Chief Engineer and assists in the direction of all aspects of capital and current expense engineering projects, including conceptual development planning, design, and pre-construction.

Some of the duties and responsibilities of this position include:

- Overseeing and assigning engineering projects;
- Overseeing the coordination of projects and engineering functions to ensure compliance with MWRA policy and procedures;
- Overseeing the work of staff and consultant firms to ensure adherence to project budgets, schedules, quality, and specifications, and
- Assisting in the evaluation of alternatives and solutions to complex engineering problems and developing environmentally sound solutions.

Selection Process

This position was posted internally and five candidates applied; all five candidates were interviewed. Upon completion of the interview process, Mr. Frederick O. Brandon was selected as the best and most qualified candidate for the position.

Mr. Brandon has more than 24 years of progressively responsible management experience in the engineering functions at MWRA, as well as an additional six years experience in the consulting field. For the past four years he has held the position of Senior Program Manager, Water Engineering, and prior to that he served as both Design Manager and Project Manager.

In his time at MWRA, Mr. Brandon has managed a number of important projects, including, Covered Distribution Storage, Distribution System Improvement, as well as Long-Term Redundancy projects such as the Norumbega Covered Storage Facility, Long-Term Transmission Redundancy Plan, Blue Hills Covered Storage Facility, and the Spot Pond Covered Storage and Pump Station.

He has earned the respect of his supervisors and colleagues.

Mr. Brandon possesses a Bachelor of Science degree in Civil Engineering from Northeastern University and a Professional Engineering license in Massachusetts.

BUDGET/FISCAL IMPACT:

There are sufficient funds in the FY13 Current Expense Budget for this position.

ATTACHMENTS:

Resume of Frederick O. Brandon
Position Description
Proposed Organizational Chart

Frederick O. Brandon, P.E.

13 Crestwood Drive
Andover, MA 01810

Work: (617) 570-5447
Home: (978) 470-0049
fo Brandon@comcast.net

QUALIFICATIONS

- Thirty years of engineering experience in the field water supply and distribution
- Experienced in providing technical, cost and schedule oversight of large engineering projects
- Coordination with federal, state and local agencies and the general public
- Supervision of engineering staff with varying experience and responsibilities

WORK HISTORY

Massachusetts Water Resources Authority

2008-Present: Senior Program Manager, Water Engineering Department

Manager of the Distribution and Storage Section of the Water Engineering Department. Directs engineering projects for water system improvements and supervises a staff of eight engineers. Develops, tracks and reports on capital improvement plan schedule and budget objectives.

1995-2008: Design Manager, Water Engineering Department

Project Manager for large projects up to a value of \$100 million from initial concept and planning through public review, permitting, design, construction, commissioning and start up. Prepared design contract scopes of services and negotiated contract terms with consultants. Provided technical oversight of consultants, tracked progress, prepared schedule and budget status reports and developed capital expenditure forecasts.

1988-1995: Project Manager, Capital Engineering and Construction Department

Managed engineering designs for water supply improvements and studies for development and protection of local water supplies within the MWRA water service area.

Southern New Hampshire Water Company

1988-1988: Engineering Manager

Prepared water supply studies and pipeline designs. Conducted public meetings to describe water company projects. Administered pipeline construction contracts.

Metcalf & Eddy, Inc.

1982-1988: Engineer/Project Engineer

Prepared water system master plans. Performed hydraulic modeling of water distribution systems and pump stations. Designed pipelines, water storage tanks and pumping stations. Coordinated architectural, structural, mechanical, electrical, and instrumentation disciplines.

EDUCATION

1982 Bachelor of Science, Civil Engineering, Northeastern University

Graduate courses in environmental engineering, University of Lowell (Environmental Chemistry, Physical Chemical Treatment, and Groundwater Hydrology), 1987-1989.

LICENSES & CERTIFICATES

Registered Professional Engineer – Massachusetts

PROFESSIONAL MEMBERSHIPS

American Waterworks Association

New England Waterworks Association

Tau Beta Pi - National Engineering Honor Society

Chi Epsilon - National Civil Engineering Honor Society

**MWRA
POSITION DESCRIPTION**

POSITION: Assistant Director, Engineering

PCR#: 5525017, 5525034

DIVISION: Operations

DEPARTMENT: Engineering and Construction

BASIC PURPOSE:

Assists in the direction of all aspects of engineering capital projects and current expense projects, including conceptual development planning, design and pre-construction for assigned unit.

SUPERVISION RECEIVED:

Works under the general supervision of the Chief Engineer

SUPERVISION EXERCISED:

Exercises close supervision of the assigned unit.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Directs the development and administration of capital improvement and current expense projects within the assigned unit. Develops funding plans for projects; assists in the preparation of and oversees the department's capital improvement budget.
- Assists in the evaluation of solutions to engineering problems and develops environmentally sound solutions.
- Oversees the work of staff and consulting engineers to insure adherence to budgets, schedules, quality of outputs and compliance with scope of services and contract terms.
- Oversees coordination of projects and engineering functions with appropriate MWRA Divisions and sees that projects comply with MWRA policies and procedures.
- Recommends and develops agency, program, or department policy by analyzing all pertinent issues and information regarding the impact of proposed policy on the provision of services

to clients, consumers, or the general public and by determining the resources necessary to implement such policy.

- Maintains communication with local, State, and Federal agencies, professional organizations and community groups to provide information on and gain support for programs.
- Participates in preparing for collective bargaining and hears Step One Grievances.
- Develops and oversees current expense budget for assigned unit.
- Oversees and coordinates staffing with project workload to assure consistency of project execution and quality, and adherence to Massachusetts Water Resources Authority's policy and procedures.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year college program in engineering or a related field. Graduate degree preferred; and
- (B) An understanding of water and/or wastewater engineering and contract construction management as acquired by a minimum of twelve (12) years experience including at least four (4) years in a supervisory position; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of engineering practices and principles.
- (B) A general understanding of engineering principles and practices.
- (C) Demonstrated verbal and written communication skills.

SPECIAL REQUIREMENTS:

A Massachusetts Registered Professional Engineer.

TOOLS AND EQUIPMENT USED:

Office machines as normally associated, with the use of telephone, personal computer including word processing and other software, copy and fax machine.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to sit, talk or hear. The employee is regularly required to use hands to finger, handle, feel or operate objects, including office equipment, or controls and reach with hands and arms. The employee frequently is required to stand and walk.

The employee must regularly lift and/or move up to 10 pounds. Specific vision abilities required by this job include close vision, and the ability to adjust focus.

WORK ENVIRONMENT:

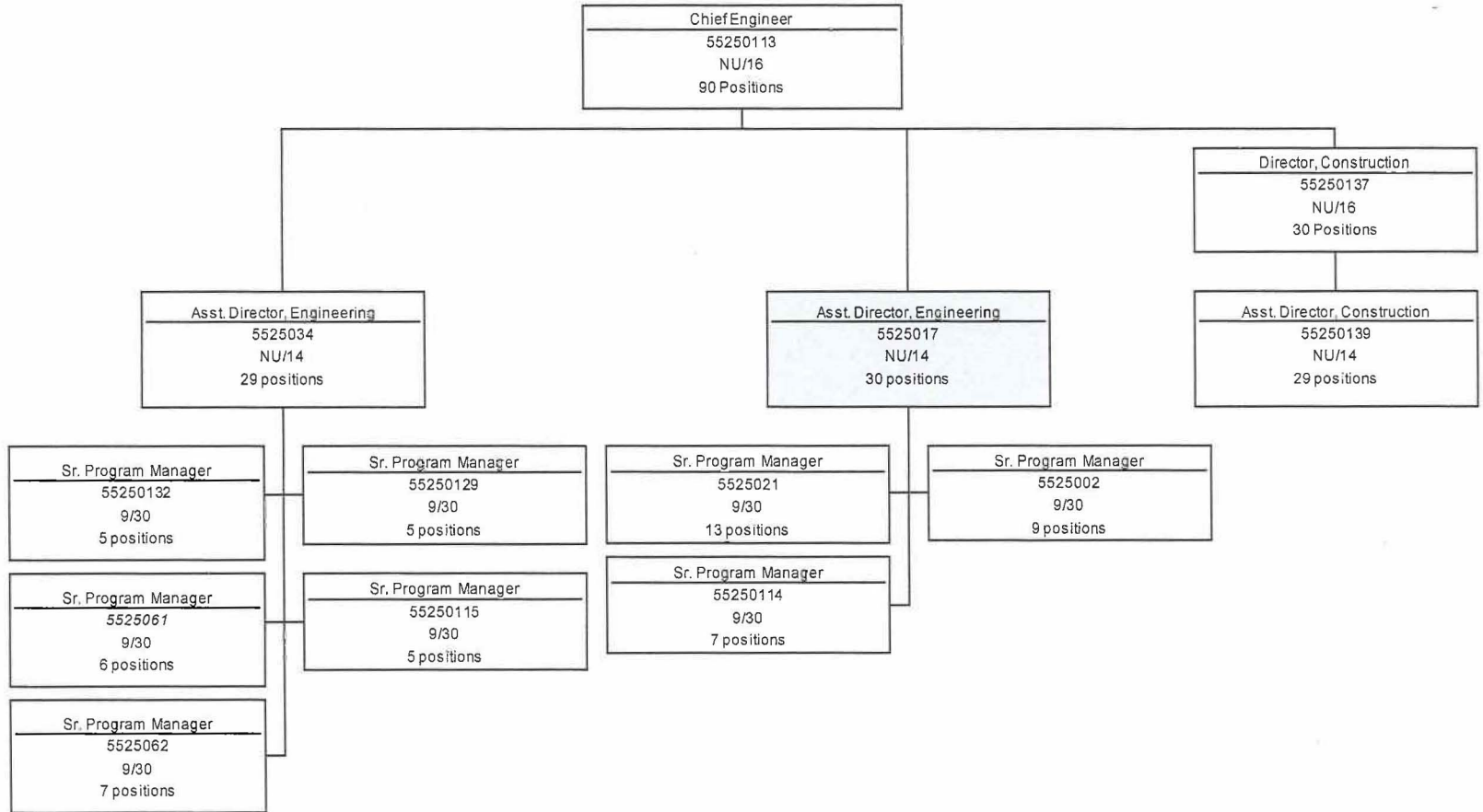
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. While performing the duties of this job, the employee regularly works in an office environment.

The noise level in the work environment is usually a moderately quiet office setting.

April 2009

Engineering and Construction Organizational Chart

November 2012





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

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

BOARD OF DIRECTORS' MEETING

to be held on

Wednesday, November 14, 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

- A. Update on STAC Forestry Report and December 10 Public Presentation of Recommendations to Quabbin and Ware River Advisory Committees

III. REPORT OF THE EXECUTIVE DIRECTOR

IV. BOARD ACTIONS

A. Approvals

1. Memorandum of Understanding and Financial Assistance Agreement with BWSC for Implementation of CSO Control Projects, Amendment 13, and Progress of BWSC-Implemented CSO Projects and Projected Financial Assistance through June 2013 (ref. WW B.1)
2. PCR Amendments – November 2012 (ref. P&C A.1)
3. Appointment of Manager, Contract Administration, Operations Division (ref. P&C A.2)
4. Appointment of Assistant Director, Engineering, Operations Division (ref. P&C A.3)

B. Contract Awards

1. Dental Insurance: Blue Cross and Blue Shield of Massachusetts, Inc., Contract (ref. AF&A B.1)
2. Workers' Compensation Third Party Administrator Services: PMA Management Corporation of New England, Contract (ref. AF&A B.2)
3. Annual Maintenance of the Maximo System: IBM Corporation (ref. AF&A B.3)
4. Supply, Delivery, and Disposal of Regenerated Activated Carbon for the Deer Island Treatment Plant: Carbon Activated Corporation, Bid WRA-3528 (ref. WW C.1)
5. Supply and Delivery of Sodium Hypochlorite to the Deer Island Treatment Plant: Borden & Remington Corporation, Bid WRA-3524 (ref. WW C.2)

C. Contract Amendments/Change Orders

1. Renewable Energy Technical Assistance Consulting Services – Energy Efficiency: Fay, Spofford & Thorndike, LLC, Contract 7274A, Amendment 2 (ref. AF&A C.1)
2. South Dike Tree Removal at Wachusett Reservoir: Aldore Tetreault and Sons, Inc., Contract OP-182, Change Order (ref. W B.1)

V. CORRESPONDENCE TO THE BOARD

VI. OTHER BUSINESS

VII. EXECUTIVE SESSION

1. Approval of Minutes
2. Real Estate:
 - a. Watershed Land Acquisition Approval
3. Litigation:
 - a. Increase in Authorized Budget for Professional Services Contract re: Cottage Farm Investigation - Martin F. Murphy, Foley Hoag LLP

VIII. ADJOURNMENT

Meeting of the Board of Directors**October 17, 2012**

A meeting of the Board of Directors of the Massachusetts Water Resources Authority was held on October 17, 2012 at the Authority headquarters in Charlestown. Chairman Sullivan presided. Present from the Board were Messrs. Carroll, Cotter, Flanagan, Foti, Mannering, Pappastergion, Swett and Walsh; Mr. Barrera joined the meeting in progress. Mr. Gove was 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 1:00 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

September 12, 2012, as presented and filed with the records of the meeting.

REPORT OF THE CHAIR**Annual Meeting: Election and Appointment of MWRA Officers, Retirement Board Member, and Committee Assignments**

Upon a motion duly made and seconded, it was

Voted to (1) designate this October 17, 2012 meeting as the Annual Meeting which, as provided in the Authority's by-laws, will be deemed a special meeting of the Board for the purpose of election of officers; (2) elect John Carroll as Vice-Chairman of the Board; (3) appoint Joseph Foti as Secretary of the Board and

Bonnie Hale and Rose Marie Convery as Assistant Secretaries; Thomas Durkin as Treasurer and member of the MWRA Retirement Board for a three-year term, and Matthew Horan and Kathy Soni as Assistant Treasurers; and (4) ratify the appointment of Board members to standing committees, as presented and filed with the records of the meeting. New Committee Chairs will be appointed approximately every two years.

(Mr. Barrera joined the meeting.)

CORRESPONDENCE TO THE BOARD

Letter from the Advisory Board regarding DCR Forestry Program

Secretary Sullivan reported that Dr. Barten had forwarded his report to the Science and Technical Advisory Committee with a short timeframe to review/respond, and intended to issue the report on October 23. Mr. Favaloro of the MWRA Advisory Board reiterated the position stated in its letter and asked what would happen if yet another deadline was missed and the report was not issued on October 23. Mr. Sullivan responded that he would then embark on the recommended process to move forward as stated in the Advisory Board's letter.

REPORT OF THE EXECUTIVE DIRECTOR

Mr. Laskey reported on the pilot program to issue the Board packages electronically on iPads to Messrs. Barrera and Gove, noting that some kinks had been worked out and that MWRA was now ready to offer iPads for this purpose to any Board members who indicated that they were interested. Mr. Laskey reported on other matters, including: a grant received for smart boards; that staff were exploring repair options for some corrosion observed on the piping at the Prison Point CSO facility; an event scheduled in Framingham to celebrate the opening of a portion of the public walking trail along the Weston Aqueduct; inquiries received about providing water to SouthField, the development at the former

Weymouth Naval Air Station; and that information had been posted on the MWRA website in response to a number of flyers being mailed to homeowners with misleading information about water quality.

BOARD ACTIONS

APPROVALS

PCR Amendments – October 2012

Upon a motion duly made and seconded, it was

Voted to approve amendments to the Position Control Register, as presented and filed with the records of the meeting.

Appointment of Program Manager, Wastewater Operations

Upon a motion duly made and seconded, it was

Voted to approve the Executive Director's recommendation to appoint Daniel R. Thompson to the position of Program Manager, Wastewater Operations in the Operations Division (Unit 9, Grade 29) at an annual salary of \$95,932.00 to be effective on the date designated by the Executive Director.

CONTRACT AWARDS

Lawson Professional Services: Infor Global Solutions

Upon a motion duly made and seconded, it was

Voted to approve the award of a sole source purchase order for professional services to implement three eProcurement modules (Contract Management, Strategic Sourcing and Supplier Order Management), which were previously approved by the Board of Directors for procurement in April 2012 as part of the Integrated Financial, Procurement and Human Resources/Payroll Management System Maintenance and Support contract, to Infor Global Solutions (formerly Lawson Associates, 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 \$276,701.00.

Technical Assistance Consulting Services, Deer Island Treatment Plant: AECOM Technical Services Inc., Contract 7399; Fay, Spofford Thorndike, LLC, Contract 7400; and Brown and Caldwell, Contract 7434

Upon a motion duly made and seconded, it was

Voted to approve the recommendation of the Consultant Selection Committee to select AECOM Technical Services, Inc., Fay, Spofford & Thorndike, LLC, and Brown & Caldwell to provide as-needed technical assistance consulting services for the Deer Island Treatment Plant and to authorize the Executive Director, on behalf of the Authority, to execute Contract 7399 with AECOM Technical Services, Inc., Contract 7400 with Fay, Spofford & Thorndike, LLC, and Contract 7434 with Brown & Caldwell, each in an amount not to exceed \$1,600,000.00 and for a term of three years from the Notice to Proceed.

Supply and Delivery of Soda Ash for the John J. Carroll Water Treatment Plant: OCI Chemical Corporation, WRA-3518

Upon a motion duly made and seconded, it was

Voted to approve the award of Contract WRA-3518, a three-year purchase order contract for the supply and delivery of soda ash to the John J. Carroll Water Treatment Plant, to the lowest eligible and responsible bidder, OCI Chemical Corporation, and to authorize the Director of Administration and Finance, on behalf of the Authority, to execute and deliver said contract in an amount not to exceed \$11,700,000.00.

CONTRACT AMENDMENTS/CHANGE ORDERS

Lynnfield/Saugus Pipeline: Albanese Brothers, Inc., Contract 6584, Change Order 23

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. 23 to increase the amount of Contract No. 6584 with Albanese Brothers, Inc., Lynnfield/Saugus Pipelines Project, in an amount not to exceed \$300,279.37 and to extend the time for completion by 7 calendar days to February 14, 2013; and to authorize the Executive Director to approve additional change orders as may be needed to Contract No. 6584 in amounts not to exceed the aggregate of \$250,000.00, in accordance with the Management Policies of the Board of Directors.

EXECUTIVE SESSION

It was moved to enter executive session for the purpose of discussing strategy with respect to litigation and real estate.

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		
Carroll		
Cotter		
Flanagan		
Foti		
Mannering		
Pappastergion		
Swett		
Walsh		
Sullivan		

Voted to enter executive session for the purpose of discussing strategy with respect to litigation and to consider the purchase, exchange, lease or value of real property, 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.

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EXECUTIVE SESSION

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The meeting returned to open session at 1:45 p.m. and adjourned.