



MASSACHUSETTS WATER RESOURCES AUTHORITY

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ADMINISTRATION, FINANCE & AUDIT COMMITTEE MEETING

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

to be held on

Wednesday, December 17, 2014

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

Time: 10:00 a.m.

AGENDA

A. Information

1. First Quarter FY15 Orange Notebook
2. Delegated Authority Report – November 2014
3. FY15 Financial Update and Summary as of November 2014

B. Approvals

1. FY16 Proposed Capital Improvement Program (CIP)

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 17, 2014
SUBJECT: FY15 First Quarter Orange Notebook



COMMITTEE: Administration, Finance & Audit

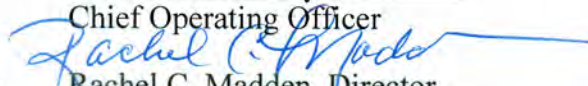
INFORMATION
 VOTE



Michael J. Hornbrook

Chief Operating Officer

Stephen Estes-Smargiassi, Director, Planning & Sustainability
Preparer/Title



Rachel C. Madden, Director
Administration and Finance

RECOMMENDATION:

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

DISCUSSION:

The Orange Notebook presents performance indicators for operational, financial, workforce, and customer service parameters tracked by MWRA management each month. Significant outcomes for the first quarter are noted below. (Because the presentation of the Orange Notebook was delayed from November to December, staff have updated this staff summary and presentation with October data where available)

Energy Tracking

As discussed with the last Orange Notebook staff summary, staff have revised and added a number of new indicators related to energy use and green energy production.

On page 1, staff are now presenting both the unit cost of electricity at Deer Island, which is a mixture of a fixed-price block and a variable load purchased in real time at market prices, and the total cost of electricity purchased, based on both the unit cost and the amount purchased each month. (bottom two graphs on page 1) Unit costs were approximately 20% below budget through October. Total electric power purchased was 13.6% below that budgeted resulting from less total power use (due to lower plant flows) and more self generation (top two graphs on page 1). The result of lower unit prices and less use than budgeted is that the total cost of electricity at Deer Island was \$1,105,127 below budget through October.

On page 10, staff are now presenting information on the production of all green energy facilities off Deer Island. These include: hydroelectric generation at Cosgrove Intake, Oakdale and Loring Road (these were previous reported on), the Charlestown wind turbine and the Carroll Water

Treatment Plant solar photovoltaic array. During the first quarter, these five facilities produced a total of 8,864 MWh of electricity with a value of more than \$450,000. Deer Island's self-generation continues to be tracked on page 1.

Also reported on page 10 is a summary of the percentage of total electrical demand that was met by renewable sources across all MWRA facilities. For the first quarter, green power generation represented approximately 38% of total electrical demand. There was a significant increase of 10 percentage points from last quarter, driven by the back-pressure stream generation improvements at Deer Island discussed on pages 1 and 3.

Savings and revenue associated with green power and self generation system-wide are presented on page 11. System-wide avoided electrical purchases and sales represented \$1,274,177 during the first quarter, tracking slightly above budget. Also shown on page 11 are revenues from the sales of Renewable Energy Certificates (RECs) and Demand Response Program participation at Deer Island and at other MWRA facilities. Revenue from RECs is based on production by MWRA's renewable assets; it totaled \$236,365 for the quarter. The Deer Island Demand Response program generated \$70,636 in Net Avoided Costs and capacity payments through August (slightly above budget) and the Field Operations facilities' participation generated \$12,437 (slightly above budget).

Staff are also working on additional indicators to better track and communicate all the energy-efficiency efforts that are underway across MWRA, and expect to "pilot" them in the next quarter's Orange Notebook.

Residuals

Indicators for both Deer Island residuals operations and the Pelletizing Plant are now presented together on page 4. Digester gas production was approximately 4.1% above the target four-year average. While the first quarter saw slightly-higher-than-budgeted sludge quantities pumped to the Pelletizing Plant, the contractual calendar-year-to-date totals are well within budget (100.4 dry tons per day (dtpd) vs. FY15's budget of 102.9 dtpd).

Workforce Management

Staff have reported to the Board several times over the past few years about the on-going retirements of staff and MWRA's succession planning efforts. Staff turnover has increased over the past couple of years, and promotions and hirings are up. During the first four months of FY15, 59 positions were filled, on track to be slightly above last year's totals, which were, in turn, higher than each of the prior three years. Promotions and transfers accounted for 71% of the total, slightly above last fiscal year. (Page 42)

Overall staffing numbers were at 1,146 at the end of the October, below the FY15 target of 1,175. (Page 42)

Water and Wastewater Flows

The latter part of the first quarter was very dry, with precipitation well below expected values in August, and especially in September. Overall precipitation was 38% lower than expected. As a result, Deer Island's plant flows for the quarter were 15.7% below expected, 250.8 million gallons per day (mgd) vs. 297.4 mgd expected, setting new dry-day, low-flow records for September. (Page 1)

Despite the lower precipitation and improving economy, through September, water use was approximately even with last year at 197.4 mgd. Including atypical or emergency use by Cambridge, Hudson, and Dedham-Westwood, total sales were up 1.4 percent (2.6 mgd). Excluding these communities' use, sales would have been down 0.1% (0.2 mgd). (Page 30) By the end of October, year to date water use was slightly lower at 196.1 mgd, up about 0.5 percent from last year at this time.

Storage at Quabbin Reservoir was at 91.5% of full at the end of the quarter, well within its normal operating range for this time of year, despite the reduced rainfall and yields. (Page 27) The state declared a drought advisory for Southeastern Massachusetts and the Cape and Islands, but noted in the advisory and press materials that MWRA's supplies are within normal operating range.

By December 12th, Quabbin had risen to 92.1 percent, well within normal operating range, and above the 5-year and long term averages for this time of year.

MASSACHUSETTS WATER RESOURCES AUTHORITY

Board of Directors Report
On
Key Indicators of MWRA Performance
For
First Quarter FY2015

Q1	Q2	Q3	Q4



Frederick A. Laskey, Executive Director
Michael J. Hornbrook, Chief Operating Officer
December 17, 2014

Board of Directors Report on Key Indicators of MWRA Performance

First Quarter FY15

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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.

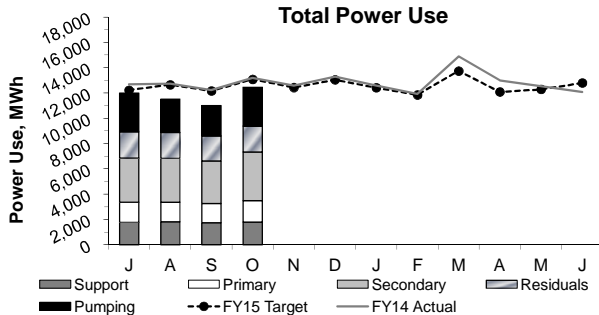
Frederick A. Laskey, Executive Director
Michael J. Hornbrook, Chief Operating Officer
December 17, 2014

OPERATIONS AND MAINTENANCE

Deer Island Operations

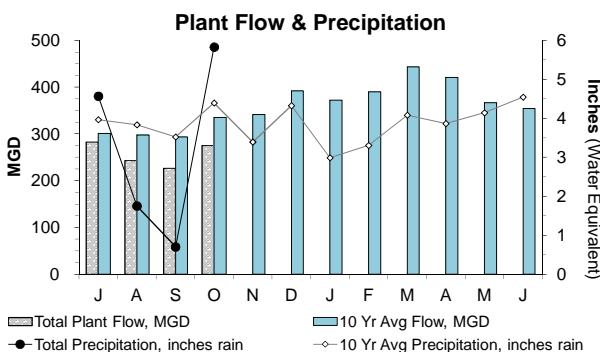
1st Quarter - FY15

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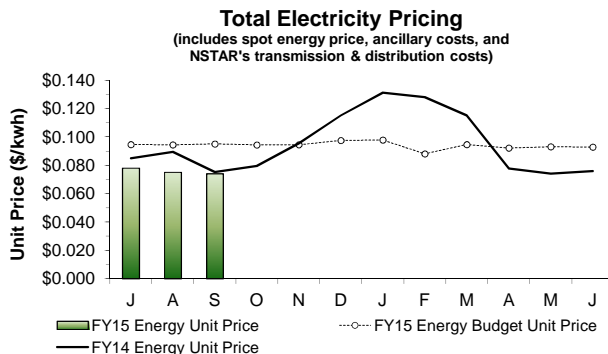
Total Power Use in the 1st Quarter was 6.8% lower than budgeted primarily due to 14.7% lower-than-expected usage for pumping operations as the 3 year average plant flow was 15.7% lower than projected for the quarter.

Note: Power usage projections are based on 3 year averages.

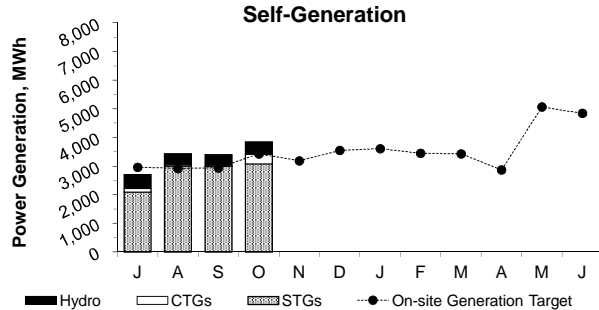


The total plant flow for the quarter was 15.7% lower than the 10 year average total plant flow (250.8 MGD actual vs. 297.4 MGD expected) as precipitation for the 1st Quarter was 38% lower than target (7.02 inches actual vs. 11.33 inches expected).

Several monthly low flow records for September were set as a result of the extended dry conditions. A record low Total Plant flow for September of 226.7 MGD broke the previous record of 243.4 MGD from 2013. New September low flow records for both the North System (159.1 MGD) and for the South System (67.7 MGD) also broke previous records of 164.1 MGD from 2013 and 72.0 MGD from 1993.

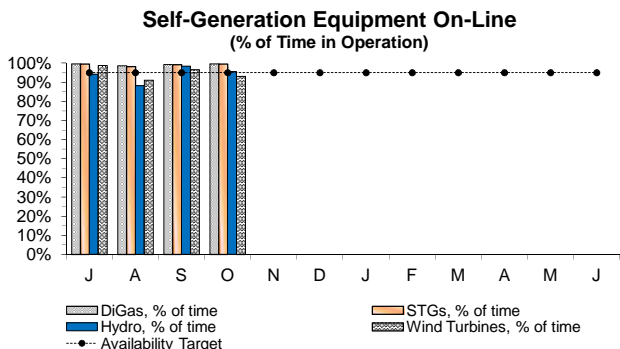


Under the current energy supply contract, a block portion of DI's energy is a fixed rate and the variable load above the block is purchased in real time. The actual Total Energy Unit Price in the 1st Quarter (actuals through September) as 20.0% lower than the FY15 budget estimate for the same period. The Total Energy Unit Price includes a fixed block price, spot energy price, transmission & distribution charges, and ancillary charges.

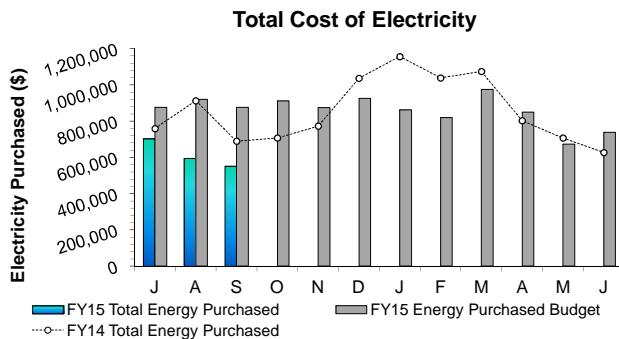


Power generated on-site during the 1st Quarter was 14.8% higher than target as generation by the STGs and the Wind Turbines were both higher-than-expected. Generation by the STGs was 20% higher-than-expected as the back pressure turbine system underwent optimization and testing during the quarter by running in "summer mode", or in a vacuum, with interim supplemental use of fuel oil. The CTGs, Hydro Turbines, and Solar Panels generated slightly lower than their targets. The CTGs ran for maintenance and checkout purposes and on three (3) occasions for peak demand avoidance.

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); a total of 274 MWh was generated by the Solar Panels and 298 MWh was generated by the Wind Turbines in the 1st Quarter .



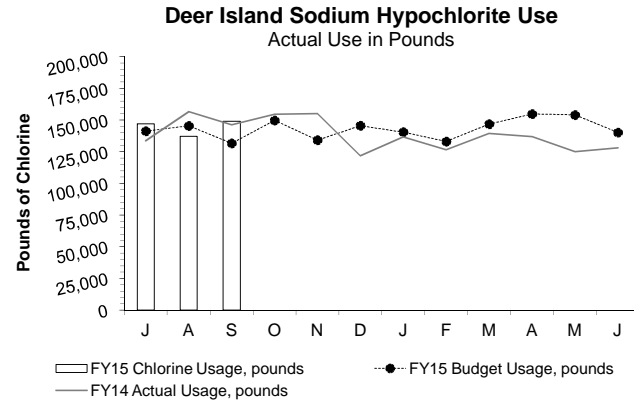
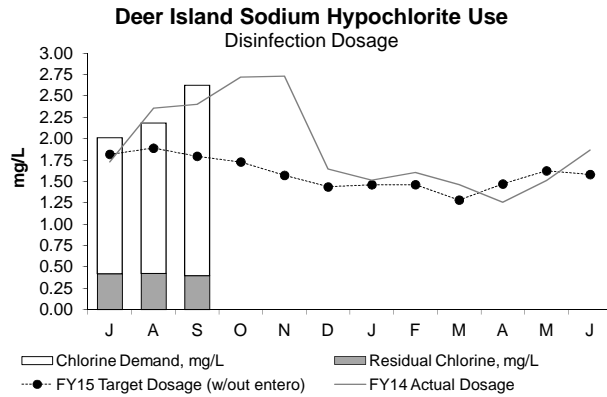
The DiGas, STG, Hydro Turbine, and Wind Turbine systems all met or exceeded the 95% availability target for the 1st Quarter. Wind Turbine and Hydro Turbine availability did fall slightly below target in August due mainly to scheduled maintenance.



The cost of electricity Purchased through the 1st quarter (actuals through September) was 30.8% lower than budgeted. Year-to-date costs are \$823,395 lower than budgeted through the quarter (actuals) as the Total Energy Unit Price and the Total Power Purchased were both lower than budgeted by 20.0% and 13.7% through the 1st quarter.

Deer Island Operations

1st Quarter - FY15



The disinfection dosing rate in the 1st Quarter was 24% higher than the target. DITP maintained an average disinfection chlorine residual of 0.41 mg/L this quarter with an average dosing rate of 2.27 mg/L (as chlorine demand was 1.86 mg/L). Dosing was higher-than-expected due to a higher chlorine demand as a result of stronger wastewater caused by the lower-than-expected plant flows. The actual hypochlorite usage in pounds of chlorine, however, was within 4% of the Q1 FY15 target.

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	99.4%	8.50
A	1	1	0	99.95%	1.90
S	0	0	0	100.0%	0.00
O					
N					
D					
J					
F					
M					
A					
M					
J					
Total	3	3	0	99.8%	10.40

99.8% of all flows were treated at full secondary for the 1st Quarter. There were a total of three (3) separate secondary blending events in the quarter; all due to high plant flows resulting from heavy rain. The three (3) blending events combined produced a total of 10.4 hours of blending and 53.01 Mgal of flow blended with secondary effluent. The Maximum Secondary Capacity for the entire quarter was 700 MGD.

Secondary permit limits were met at all times during the 1st Quarter of FY15.

Deer Island Operations & Maintenance Report

Environmental/Pumping:

The plant achieved a maximum average hourly flow rate of 953.7 MGD during the evening of July 3 as a result of a tropical rain system, remnants of Hurricane Arthur, that produced 2.51 inches of rain over three (3) days. Pumping and treatment operations at DITP continued without incident through this storm event, as well as throughout the entire quarter.

Primary and Secondary Treatment:

Progress on the major Primary and Secondary Scum Tip Tube Replacement Project that began on June 2 continued through Q1 FY15. The primary scope of this project is to replace 88 of the 96 primary treatment tip tubes, 72 treatment tip tubes in Secondary Batteries A and B, and modification of 36 secondary tip tubes in Secondary Battery C. The contractor is limited by the construction documents to working in no more than four (4) primary clarifiers (preferably limited to one battery) and three (3) secondary clarifiers (one or two per battery to minimize capacity constraints so as to not reduce the overall secondary capacity). Construction was approximately 33.3% complete for the primary clarifiers and 16.7% complete for the secondary clarifiers by the end of September.

Disinfection Treatment:

Staff performed essential maintenance on the existing effluent disinfection feed system on July 1 which required using an alternate backup chlorine feed system during the maintenance period. Chlorine feed and disinfection continued uninterrupted during this maintenance work and the normal disinfection feed system was returned to operation on the morning of July 2. Effluent disinfection system chlorine and fecal coliform results were all within permit levels and were at typical levels during this period. EPA and DEP were notified in advance of this maintenance.

Deer Island Operations

1st Quarter - FY15

Deer Island Operations & Maintenance Report (continued)

Odor Control Treatment:

Activated carbon media was changed out during this quarter in carbon adsorber (CAD) units #1, #2, and #6 in the East Odor Control (EOC), #5 in the West Odor Control (WOC), and #3 in the North Pumping Odor Control (NPOC) Facilities as part of routine practice to replace spent carbon media.

Energy and Thermal Power Plant:

Solar power generation accounted for 2.71% (273.8 MWh) of the total power generated on-site in the 1st Quarter while Wind Turbine generation accounted for 2.95% (297.8 MWh) of the total power generated on-site in the 1st Quarter. Overall, total power generated on-site accounted for 29.3% of Deer Island's total power use for the quarter. Renewable power generated on-site (by Solar, Wind, STGs, and Hydro Turbines) accounted for 28.6% of Deer Island's total electrical power use for the quarter.

Hydro Turbine #2, which had been out of service since June 15, was returned to service on July 21 after preventative maintenance and repairs to the wicket gate were completed. The cable for the influent flow gate on Hydro Turbine #1 unexpectedly broke on August 26 during maintenance, causing the gate to remain shut and leaving the unit isolated. This unit will remain unavailable for operation until the cable is replaced. Hydro Turbine #2 has remained in operation on a daily basis except during short periods of time for routine scheduled maintenance. It is as efficient operating with only a single Hydro Turbine unit, as it is with two (2) units, at current plant flow levels.

Optimization testing in the Thermal Power Plant began in August following the installation of a steam by-pass valve in the steam electricity generation system. The addition of this steam by-pass valve in conjunction with the operation of the back-pressure turbine (BP-STG) have allowed staff to operate the steam system at higher efficiencies by operating the main turbine in a vacuum, extracting the highest possible amount of electricity from the steam. The performance for average digester gas production with the original system would generate roughly 2.84 MW of power, while the revised system (based on the results from the optimization testing using supplemental fuel oil) will generate upwards of 4.04 MW of power, a 1.3 MW increase in electrical production. Staff estimate this increase will be sustainable from May through November each year, and will provide an additional 4.5 million kWh of renewable energy for MWRA annually.

Maintenance was performed for both CTG units in August which included replacing the duplex fuel filter as well as isolation valves. The software in both units was also upgraded. Each CTG was placed into operation briefly for testing purposes following the maintenance work and software upgrade and one (1) CTG unit was always available for operation as the backup while maintenance was being performed on the other unit. Additionally, electrical testing of the bus duct and other related components was performed while the CTGs were down for maintenance.

Scheduled preventative maintenance was also performed for both South Parking Lot Wind Turbines in August. Each unit was taken offline during this period in order to perform the maintenance and functionality testing.

The Annual Overhaul Maintenance of CTG -1A began on September 29 and was successfully completed and returned to service on October 6. The CTG was locked and tagged out each night, except during the weekend of October 4-5, when the unit was available for stand-by operation, due to a potential high flow forecast, but was never needed for operation.

Regulatory:

Emissions compliance testing on the West Odor Control (WOC) treatment system on DITP was conducted by consultants during the second week of July. The WOC treatment system treats process air from Primary Batteries C and D, from half of the Grit Facility, and from the South System Pump Station. The DITP Air Quality Operating Permit issued by the MA DEP requires that DITP conduct emissions compliance testing for the various emission units once every five (5) years to demonstrate compliance with applicable total reduced sulfur (TRS) and non-methane hydrocarbons (NMHC) emissions limits. For the WOC treatment system, this testing included the continuous emissions monitoring of the outlet (stack) and three (3) inlet locations to the odor control system over a 24-hour period for both Total Reduced Sulfur (TRS) and non-methane hydrocarbons (NMHC). All the test results show that DITP was in compliance. Staff have already reviewed and commented on the draft emissions report prepared by the consultant.

MA DEP were onsite at DITP on July 24 for an unannounced (annual) site visit of the treatment plant to review and inspect the plant's wastewater treatment operations and practices. They were given a comprehensive plant tour by the Director of DITP covering the entire wastewater and residuals treatment facilities and process areas. Initial communications indicate the inspection had gone well.

The Federal Energy Regulatory Commission (FERC) performed an annual inspection of both Hydro Turbine units on August 18. No outstanding issues were found and the units passed the inspection. No further action is needed and a copy of the inspection report is expected in a few months.

The annual RATA (Relative Accuracy Test Audit) of the boiler Continuous Emissions Monitoring System (CEMS) was conducted by a certified consultant on September 9 and 10. This test is a requirement of DITP's Air Quality Operating Permit issued by the DEP and validates the CEMS data generated by the individual boilers against the data generated by the consultant's CEMS which was located in a test trailer at the base of the emissions stack for the purpose of conducting this audit test.

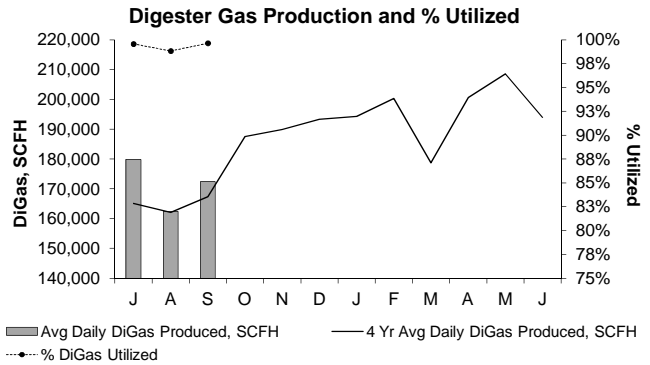
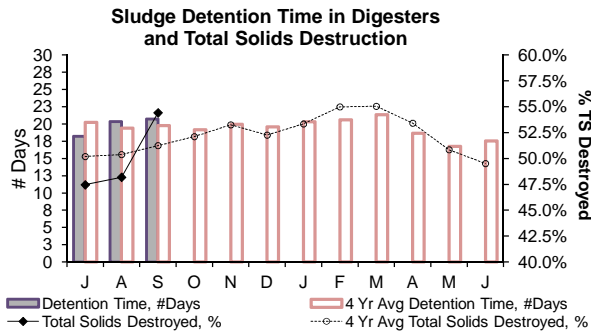
Clinton AWWTP:

Construction started July 1 on the rehabilitation of primary clarifiers and anaerobic digesters. The work is scheduled to be completed within 24 months. Following are the items completed to date:

The excavation of soil around tanks 3 & 4 and all mechanical components of tanks and railings were removed. The tanks were saw cut 2 feet down from top and the concrete was removed. New concrete was formed and pored. Tanks were sandblasted to prepare for Tnemec coating. The 93,000 pound floating cover was removed from the secondary digester and relocated to the staging area to begin sandblasting before painting. Modifications are being performed to accommodate new mixer. A total of 39 of the 98 sludge valves that are scheduled for replacement have been installed.

Deer Island Operations and Residuals

1st Quarter - FY15

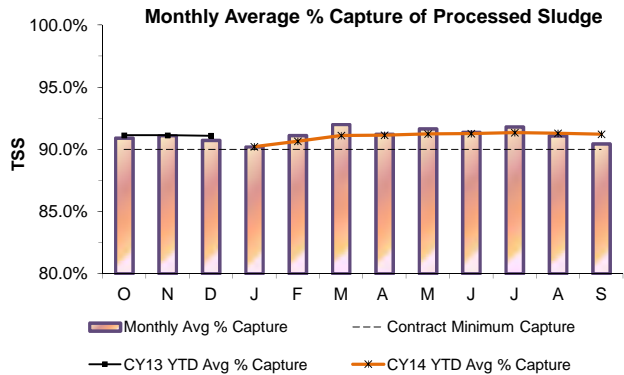
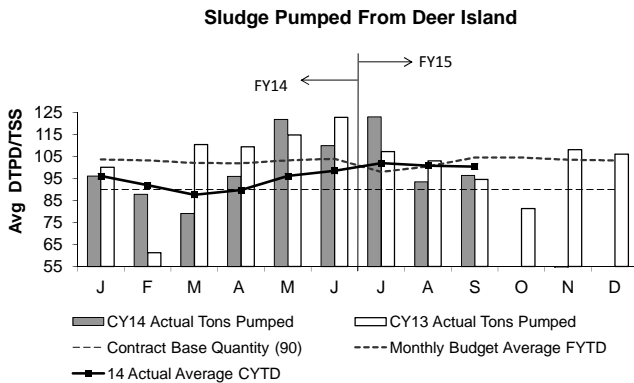


Total solids (TS) destruction following anaerobic sludge digestion averaged 50.0% during the 1st Quarter, similar to the 4 year average, as sludge detention time in the digesters (19.7 days) was also similar to the 4 year average. Eight (8) digesters were in operation during the entire 1st Quarter.

The Avg Daily DiGas Production in the 1st Quarter was 4.1% higher than the target 4 Year Avg Daily DiGas Production for the same period. On average, 99.4% of all the DiGas produced in the quarter was utilized at the Thermal Power Plant.

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 operation. Solids destruction is also significantly impacted by changes in the number of digesters and the resulting shifting around of sludge.

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 (FY15's budget is 102.9 DTPD/TSS).



The average total quantity of sludge pumped in the 1st Quarter was 104.2 DTPD - higher than FY15's budget of 102.9 DTPD. The higher amount is mainly due to higher sludge production going to digestion in July caused by several significant rain events which increased flows in the collection system sending the previously settled solids to DITP. The YTD average tonnage is 100.4.

The contract requires NEFCo to capture at least 90% of the solids delivered to the Biosolids Processing Facility in Quincy. The YTD average capture is 91.21%

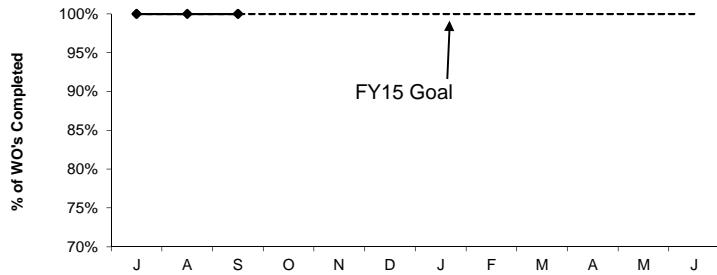
Deer Island Maintenance

1st Quarter FY 15

Productivity Initiatives

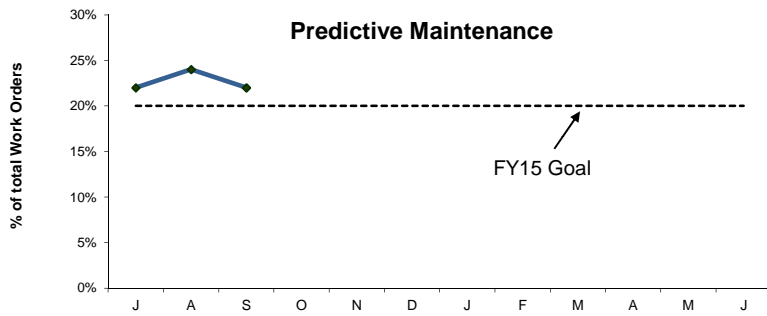
Productivity initiatives include increasing predictive maintenance compliance and increasing PdM work orders. Accomplishing these initiatives should result in a decrease in overall maintenance backlog.

Predictive Maintenance Compliance



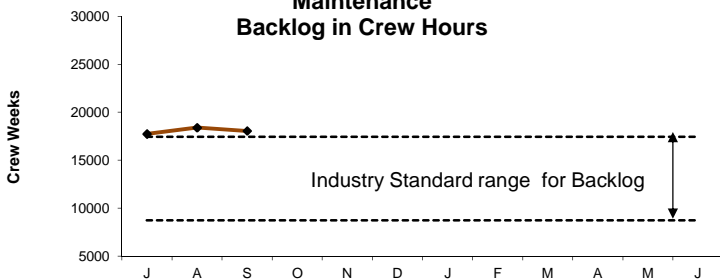
Deer Island's FY15 predictive maintenance goal is 100%. DITP completed 100% of all PdM work orders this quarter. DITP is continuing with an aggressive predictive maintenance program.

Predictive Maintenance



Deer Island's FY15 predictive maintenance goal is 20% of all work orders to be predictive. 23% of all work orders were predictive maintenance this quarter. The industry is moving toward increasing predictive maintenance work to reduce downtime and better predict when repairs are needed.

Maintenance Backlog in Crew Hours

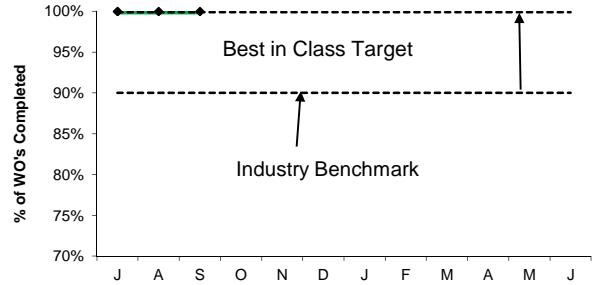


DITP's maintenance backlog at Deer Island is 18,067 hours this quarter. DITP is above the industry average for backlog. The industry Standard for maintenance backlog with 100 staff (currently planned staffing levels) is between 8,730 hours and 17,460 hours. Backlog is affected by two vacancies, a Plumber and an Instrument Tech, and two on medical leave, a B&G Worker and an Electrician. Also, the HVAC department has an extremely high backlog (15 weeks). Management continues to monitor backlog and to ensure all critical systems and equipment are available.

Proactive Initiatives

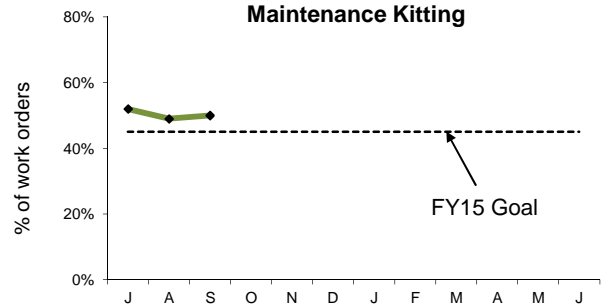
Proactive initiatives include completing 100% of all preventative maintenance tasks and increasing preventative maintenance kitting. These tasks should result in lower maintenance costs.

Preventative Maintenance Compliance



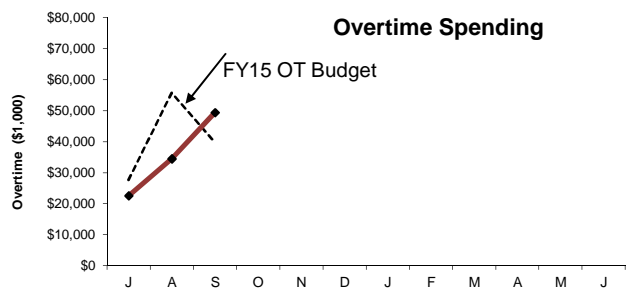
Deer Island's FY15 preventative maintenance goal is 100% completion of all work orders from Operations and Maintenance. DITP completed 100% of all PM work orders this quarter.

Maintenance Kitting



Deer Island's FY15 maintenance kitting goal is 45% of all work orders to be kitted. 50% 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



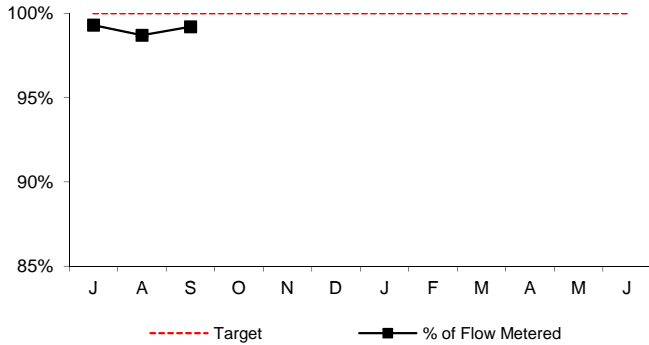
Maintenance overtime was under budget by \$17K this quarter. Management continues to monitor backlog and to ensure all critical equipment and systems are available. This quarter's overtime was predominately used for installation of HVAC units (coils, condensers, evaporators, fabricating and installing filter racks) throughout Deer Island, install dampener in West Odor Control, replace vent and drainage piping for all four foam separators in Digester MOD 2, community events and storm coverage.

Operations Division Metering

1st Quarter - FY15

WATER METERS

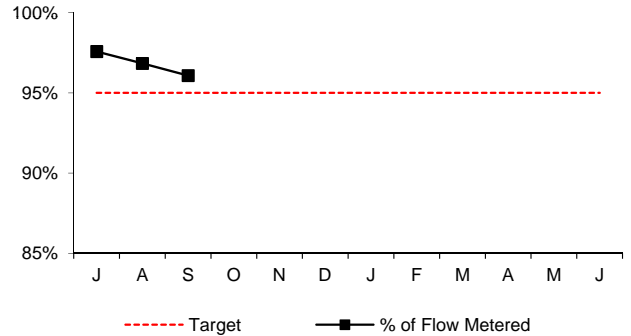
Percent of Total Revenue Water Deliveries Calculated Using Meters



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 FY15, meter actuals accounted for 99.07% of flow; only 0.93% of total revenue water deliveries were estimated. The following is the breakdown of estimations:
 In-house and Capital Construction Projects - 0.27%
 Instrumentation Failure - 0.66%

WASTEWATER METERS

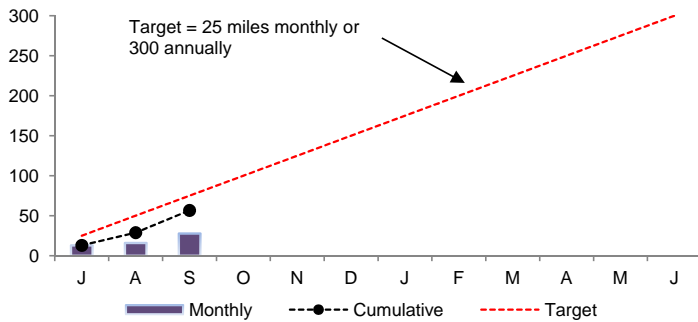
Percent of Total Wastewater Transport Calculated Using Meters



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 FY15, meter actuals accounted for 96.8% of flow; 3.2% of wastewater transport was estimated.

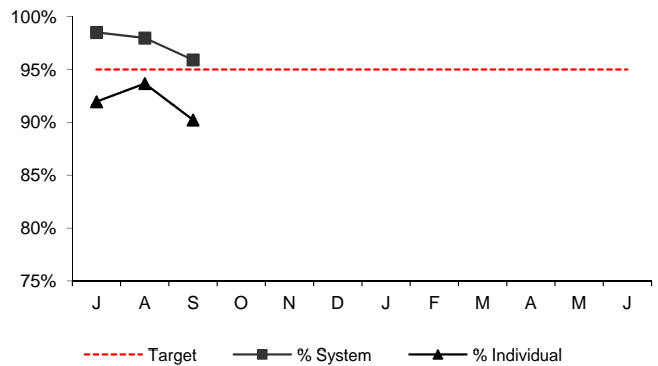
WATER DISTRIBUTION SYSTEM PIPELINES

Miles Surveyed for Leaks



During the 1st Quarter of FY15, 56.71 miles of water mains were inspected.

% Wastewater Meter Uptime



During the 1st Quarter of FY15, out of a possible 1,536,768 data points, only 38,672 points were missed resulting in a system-wide up time of 97.5%. Of the 174 revenue meters installed, on average 14 experienced down time greater than the 5% target resulting in a 92% individual meter uptime. For the 1st Quarter of FY15, down time for an individual meter is defined by any individual meter having less than 2,796.7 data points out of a potential 2,944 data points.

Water Distribution System

Month	J	A	S	O	N	D	J	F	M	A	M	J
Leaks Detected	6	1	7									
Leaks Repaired	8	1	1									
Backlog	4	4	10									
Avg. Lag Time	12.9	22.4	24.5									

During the 1st Quarter of FY15, fourteen new (14) leaks were detected and ten leaks were repaired (including 7 new leaks and 3 leaks from FY14.). The seven (7) new leaks not yet repaired were all detected in September, three (3) of which, were detected on September 29th. All the leaks in the backlog, except for Section 80, are of a very small nature (1 to 2 gallons per minute), and are non-surfacing. The Section 80 leak in Weston is off road, and cannot be repaired until lower demand periods when Wellesley and Needham are not using MWRA water.

Staff repaired 3 of the 6 leaks that carried over from FY14 including: Forest Street, Stoneham; Park Street, Chelsea, and Appleton Street, Everett. These leaks were repaired in July. The remaining three (3) leaks carried over from FY14 include: 1 at Walnut Street, Saugus; and 2 on the GE Bridge, Revere/Lynn line. These leaks were originally detected on October 23, 2013 and May 9, 2014 respectively. The leak at Walnut Street is a very small non-surfacing leak and remains unrepaired due to higher priorities as well as hydraulic issues. The two leaks on the GE Bridge have been isolated. They remain unrepaired due to the need for an extensive coordination of resources including the rental of a barge.

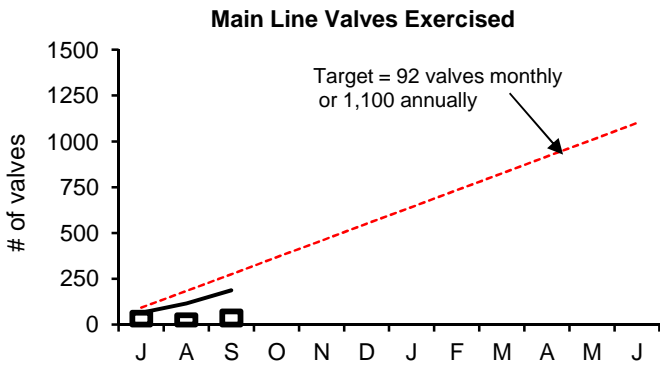
Water Distribution System Valves

1st Quarter - FY15

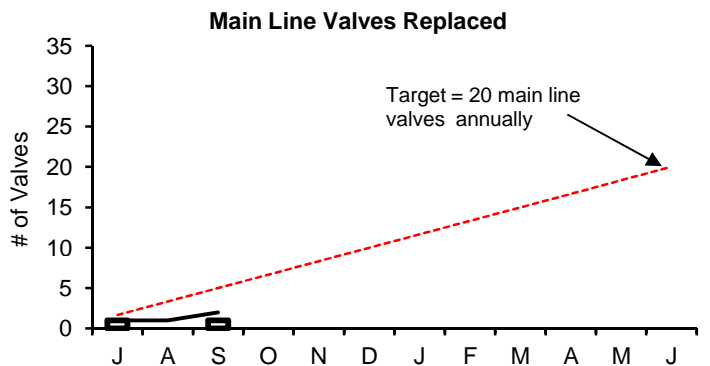
Background

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.

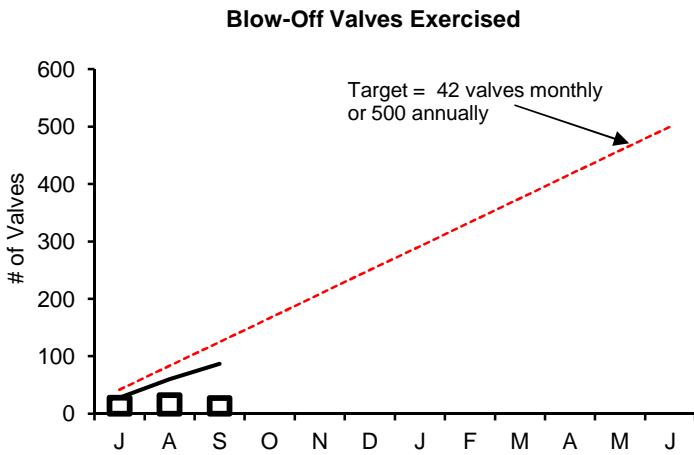
Type of Valve	Inventory #	Operable Percentage	
		FY15 to Date	FY15 Targets
Main Line Valves	2,092	96.6%	95%
Blow-Off Valves	1,206	92.1%	95%
Air Release Valves	1,335	91.7%	95%
Control Valves	48	100.0%	95%



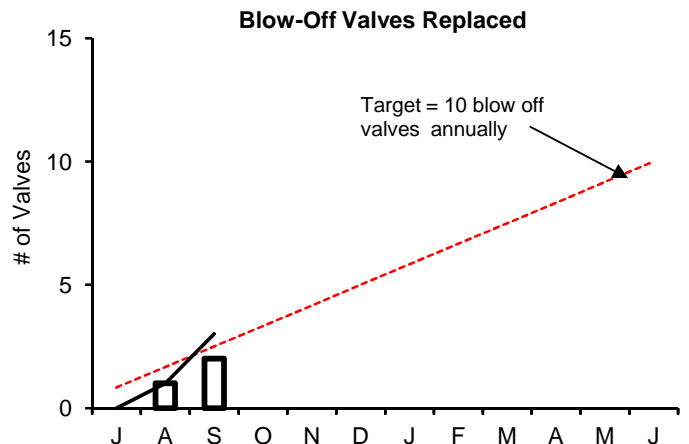
During the 1st Q of FY15 staff exercised 186 main line valves.



During the 1st Q of FY14 staff replaced two main line valves.



During the 1st Q of FY14 staff exercised 87 blow-off valves.



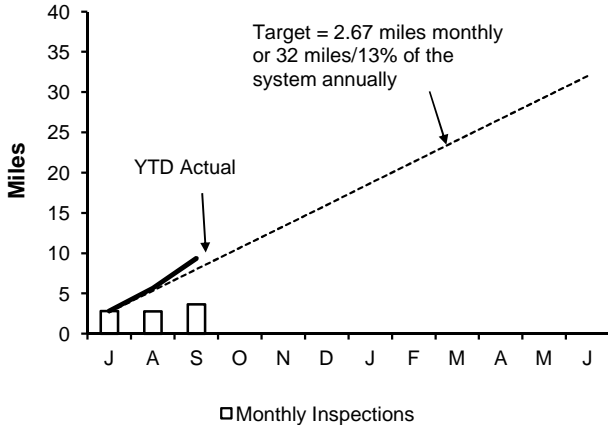
During the 1st Q of FY15 staff replaced three blow valves.

Wastewater Pipeline and Structure Inspections and Maintenance

1st Quarter - FY15

Inspections

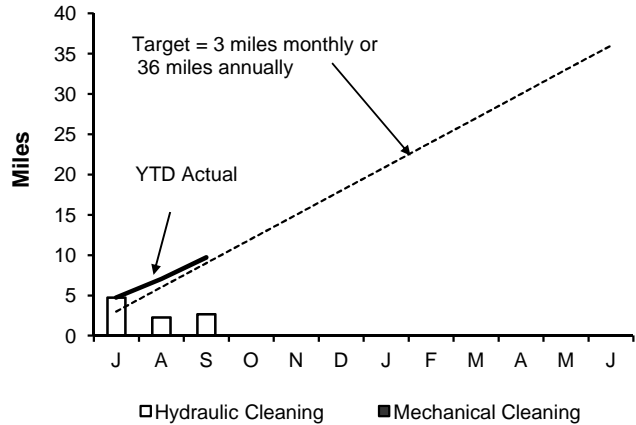
Pipeline Inspections



Staff internally inspected 9.34 miles of MWRA sewer pipeline during this quarter. The year to date total is 9.35 miles. Community Assistance was provided internal pipeline inspections to the city of Somerville, Boston and Brookline, resulting in 0.29 miles (1,530 linear feet), 0.45 miles (240 linear feet) and 0.6 miles (338 linear feet)

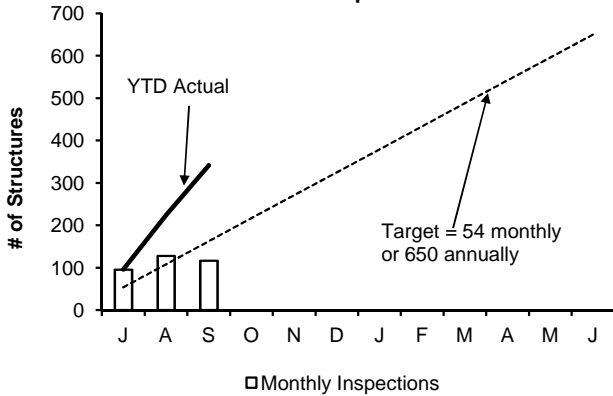
Maintenance

Pipeline Cleaning



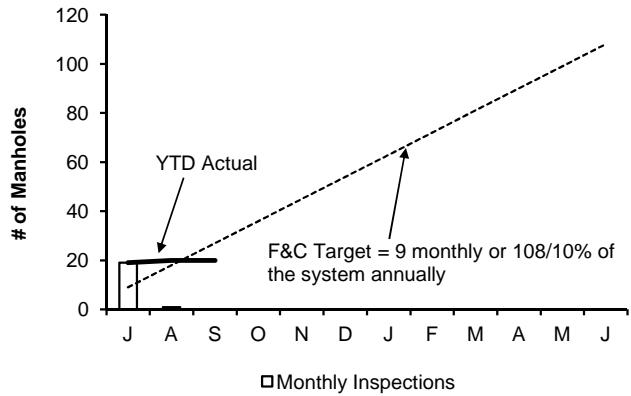
Staff cleaned 9.71 miles of MWRA's sewer system and removed 34 yards of grit and debris during this quarter. The year to date total is 9.71 miles. Community Assistance was provided to the city of Somerville; staff cleaned 0.32 miles (1,700 linear feet) of 12" and 28" diameter sewer line this quarter.

Structure Inspections



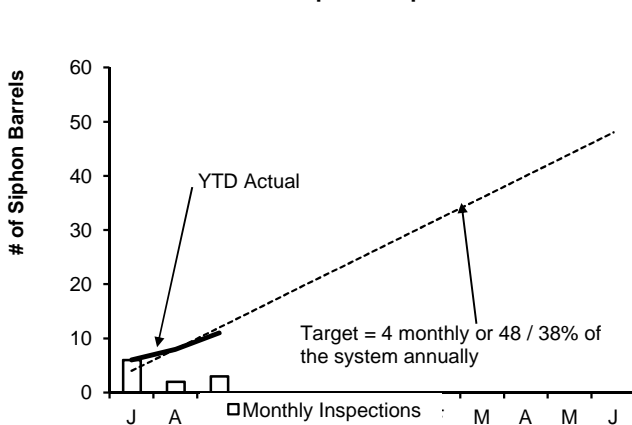
Staff inspected the 36 CSO structures and performed 305 additional manhole/structure inspections during this quarter. The year to date total is 341 inspections.

Manhole Rehabilitation



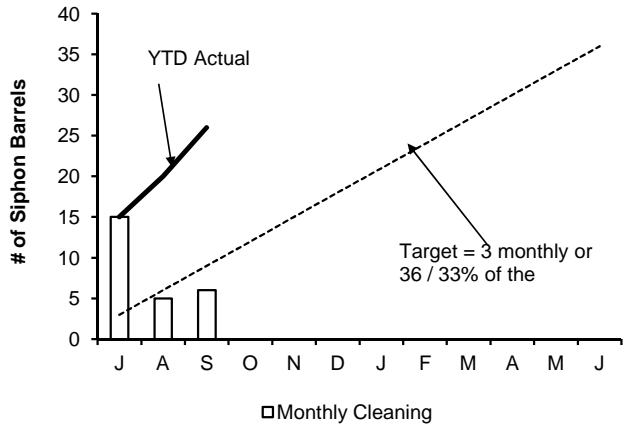
Staff replace 20 frames & covers during this quarter. The year to date total is 20.

Inverted Siphon Inspections



Staff inspected 11 siphon barrels during this quarter. Year to date total is 11 inspections.

Inverted Siphon Cleaning



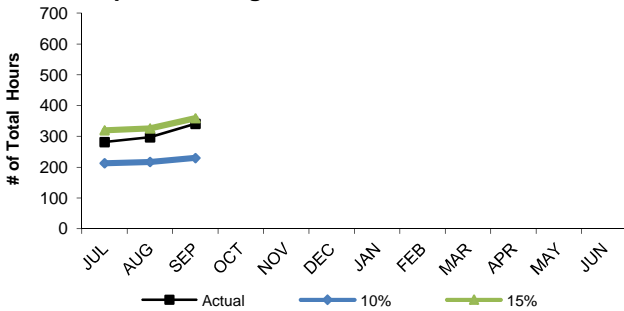
Staff cleaned 26 siphon barrels during this quarter. The year to date total is 26 barrels.

Field Operations' Metropolitan Equipment & Facility Maintenance

1st Quarter, FY15

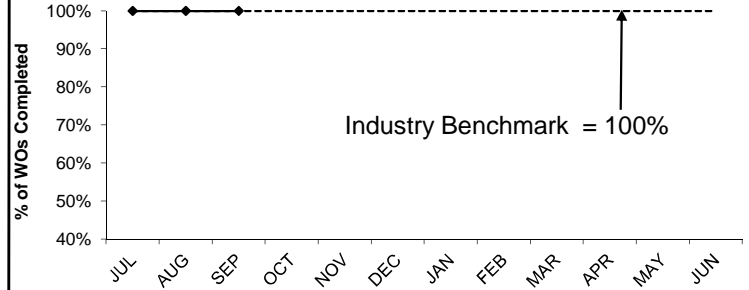
Several maintenance and productivity initiatives are in progress. The goal for the Overall PM completion and the Operator PM completion was raised to 100% for Fiscal Year 2010. The Operator PM and kitting initiatives frees up maintenance staff to perform corrective maintenance and project work, thus reducing maintenance spending. Backlog and overtime metrics monitor the success of these maintenance initiatives.

Operations Light Maintenance PM Hours



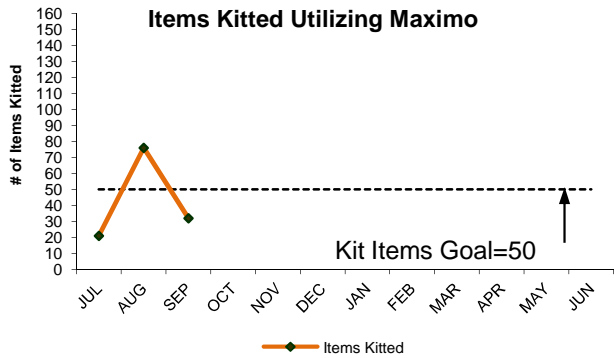
Operations staff averaged 307 hours of preventive maintenance during the 1st Quarter, an average of 14% of the total PM hours for the 1st Quarter, which is within the industry benchmark of 10% to 15%.

Overall Preventive Maintenance



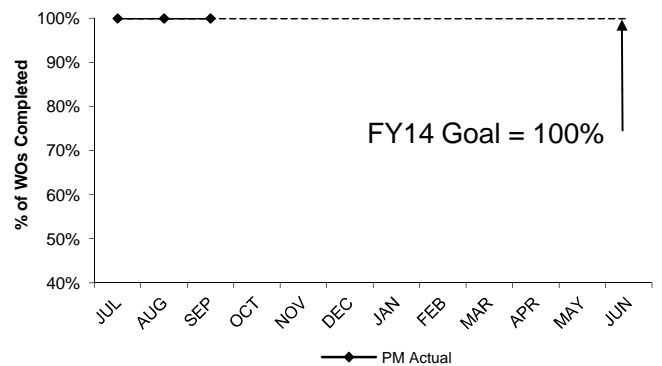
The Field Operations Department (FOD) preventive maintenance goal for FY15 is 100% of all PM work orders. Staff completed an average of 100% of all PM work orders in the 1st Quarter.

Items Kitted Utilizing Maximo



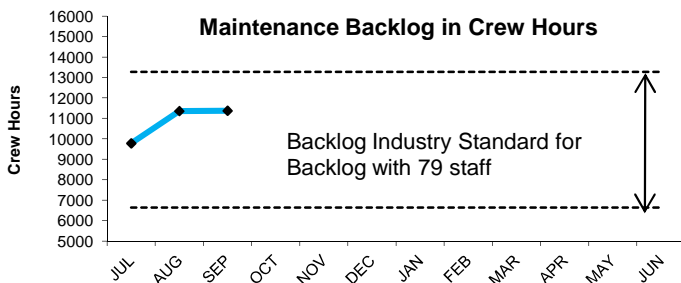
In an effort to more efficiently complete work, maintenance staff and work coordination staff have utilized the Lawson/Maximo interface to better kit stock and non stock material. The goal for FY15 is to "kit" 50 stock and non stock items total per month. An average of 43 items were kitted during the 1st Quarter.

Operations Light Maintenance % PM Completion



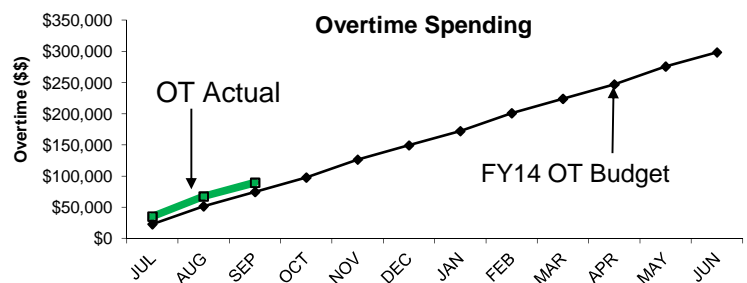
Wastewater Operators complete light maintenance PM's which frees up maintenance staff to perform corrective maintenance. Operations' FY15 PM goal is completion of 100% of all PM work orders assigned. Operations completed an average of 100% of PM work orders in the 1st Quarter.

Maintenance Backlog in Crew Hours



The 1st Quarter backlog average is 10,841 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 four vacant positions, two Facility Specialist, one Mechanic and one OMC Laborers.

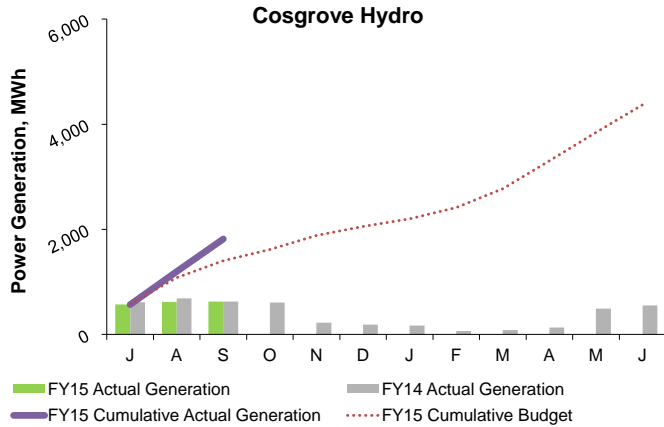
Overtime Spending



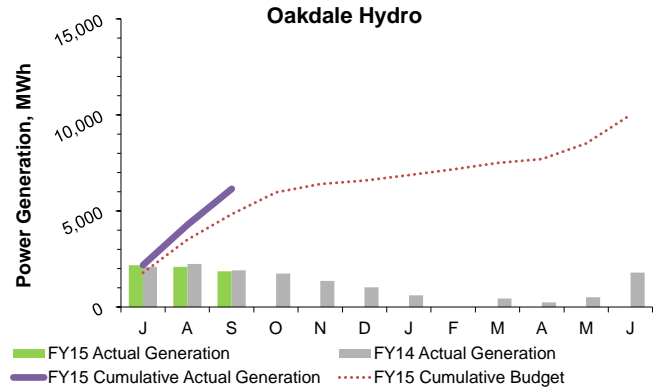
Maintenance overtime was \$15k over budget for the 1st Quarter. Overtime was used for staging for weather events, critical maintenance repairs, and upgrades to the Chelsea Administration Building.

Green Energy - Field Operations Renewable Electricity Generation Revenue

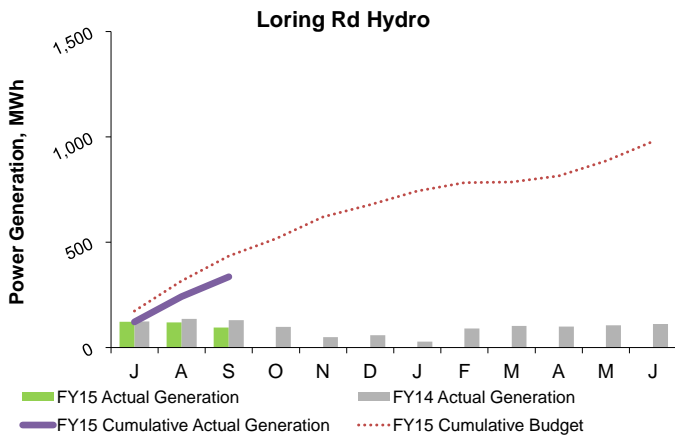
1st Quarter - FY15



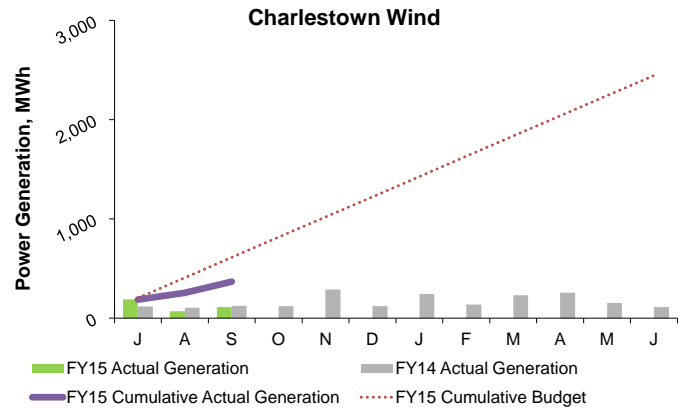
In the 1st Quarter, the Cosgrove Hydroelectric Station generated a net of 1,819 MWh; approximately 6% less power than was generated during the same quarter in FY14. The revenue generated in the 1st quarter was approximately \$69,796 (September revenue has not yet been received and is based on approximation).



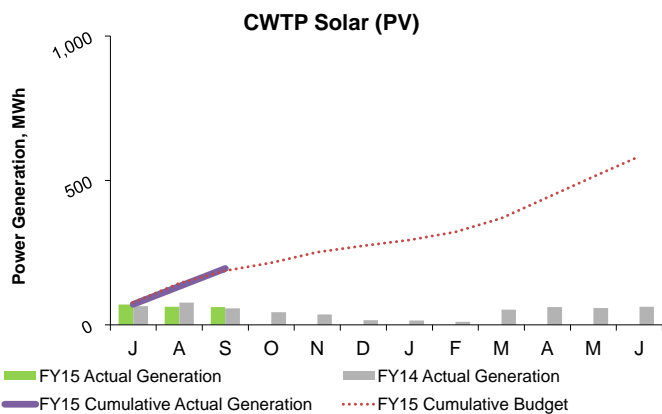
In the 1st Quarter, the Oakdale Hydroelectric Station generated a net of 6,146 MWh; approximately 2% less power than was generated during the same quarter in FY14. The revenue generated in the 1st quarter was approximately \$267,575 (September revenue has not yet been received and is based on approximation).



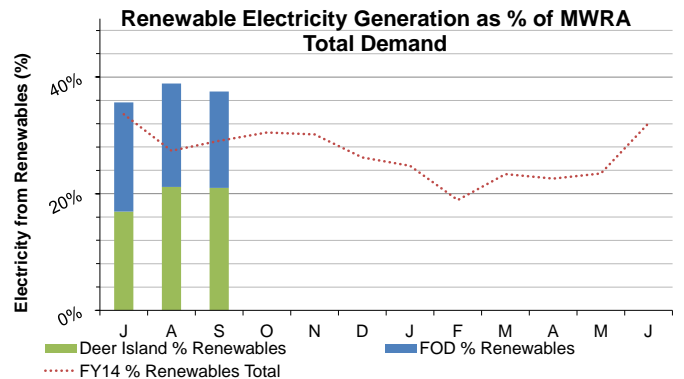
In the 1st Quarter, the Loring Rd hydroelectric Station generated a net of 336 MWh; approximately 14% less power than was generated during the same quarter in FY14. The revenue generated in the 1st quarter was \$10,589 (this only represents power sold to the grid, it does not reflect power used on-site). 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 turbine. The facility operates continuously. Some power is consumed on site, with the bulk exported to the grid.



In the 1st Quarter, the Charlestown Wind Turbine generated a net of 368 MWh; 7% more power than was generated during the same quarter in FY14. The revenue generated in the 1st quarter was \$74,227.



In the 1st Quarter, the CWTP Solar PV generated a net of 195 MWh; approximately 2% less power than was generated during the same quarter in FY14. The revenue generated in the 1st quarter was \$30,844.



In the 1st Quarter, DI generated an average of 20% of MWRA's total electrical demand and FOD generated an average of 18%. The MWRA Total Demand is based on the FY15 budget.

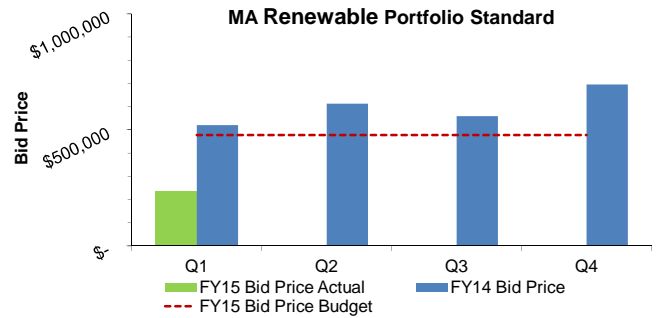
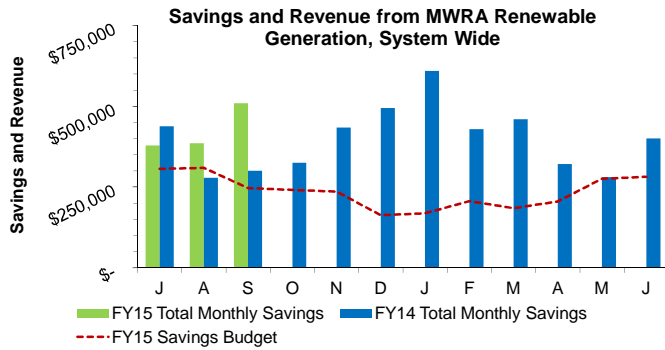
Field Operations Division (FOD) Renewables Generation includes power produced from all non-Deer Island Renewable Electricity Generation Facilities including Cosgrove Hydro, Oakdale Hydro, Loring Road Hydro, Charlestown Wind Turbine, and Carroll Water Treatment Plant solar PV.

In August and September the percentage of electricity production of total demand met by green power increased by 10% from last year, partly due to the BPSTG upgrades on DI.

In addition to electricity generation from on-site renewable sources MWRA also purchases additional green power. In FY14 approximately 7,110 MWh of green power (National Green-e Renewable Energy Certificates) was purchased. MWRA is currently in the process of contracting with a new vendor for the purchase of FY15 green power.

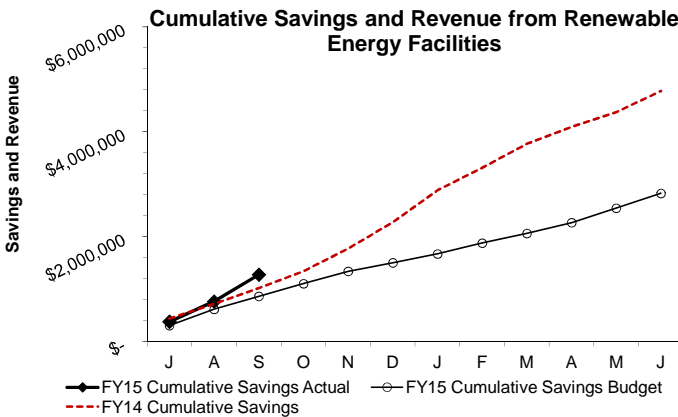
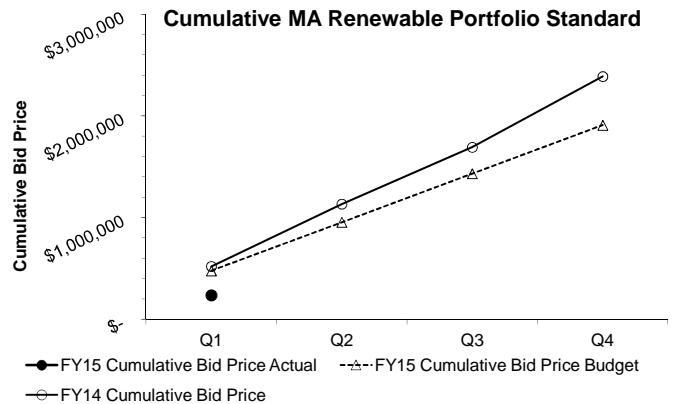
Green Energy - Savings and Revenue from MWRA Renewable Electricity Generation

1st Quarter - FY15



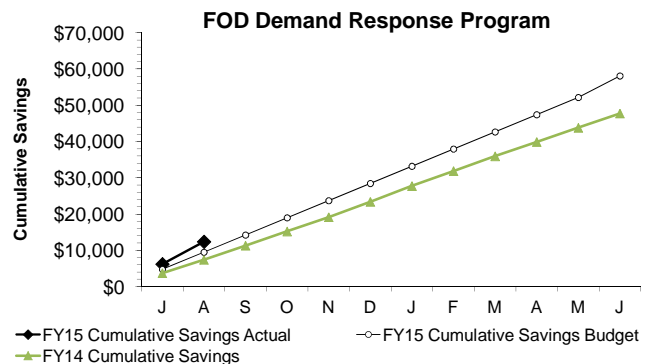
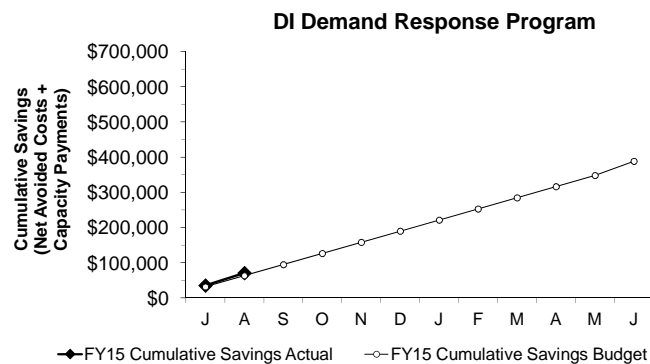
Savings and revenue from MWRA renewable generation in the 1st quarter was \$1,274,177. Savings and revenue from all renewable energy sources include wind turbines, hydroelectric generators, solar panels, and steam turbines (DI). This includes savings and revenue due to electricity generation (does not include avoided fuel costs, demand response program, and RPS RECs). Oakdale and Cosgrove have estimated savings values for September 2014, and DI electricity rate for September is based on FY15 budget.

The use of DITP digester gas as a fuel source provides the benefit of both electricity generation from the steam turbine generators, and provides thermal value for heating the plant, equivalent to approximately 5 million gallons of fuel oil per year.



Bids were awarded during the 1st Quarter from Deer Island's renewable energy assets for the sale of 4,080 Class I Renewable Energy Certificates (RECs) for a total value of \$199,614 and 53 Solar Renewable Energy Certificates (S-RECs) for a total value of \$14,321. The value of the S-RECs is currently more than 5 times higher than the current value of Class I RECs (for STG, hydro and wind). FOD bid total is \$22,430 for the 1st Quarter, for the sale of Class I and Class II RECs, for a total of \$236,365 for MWRA RPS revenue. The budgeted estimate for MWRA total RPS revenue in the 1st quarter was \$477,145.

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.



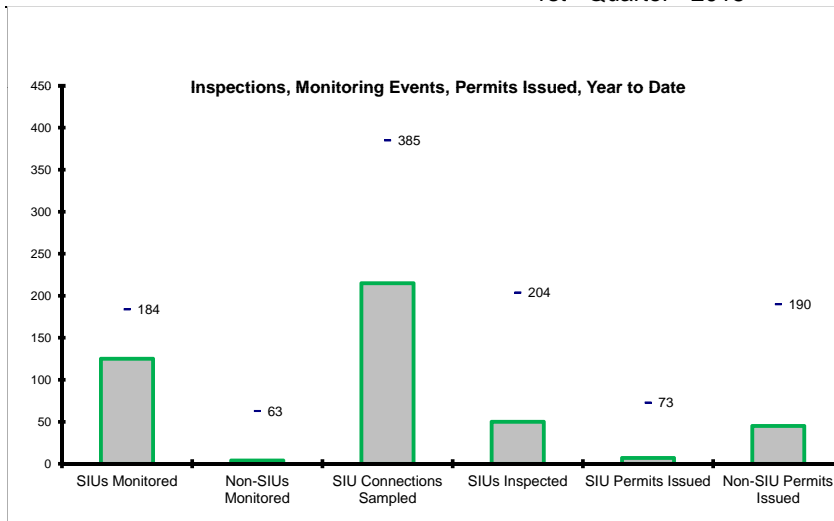
Deer Island, 2 Water, and 4 Wastewater facilities** participate in the ISO-New England Demand Response Programs. By agreeing to have its generators available to run and thus relieve the New England energy grid of some of MWRA's load during times of high energy demand, MWRA receives monthly Capacity Payments from ISO-NE. When MWRA operates back-up generators during an ISO-NE called event, MWRA receives energy payments from ISO-NE and also avoids the cost of purchasing electricity from the grid. "Net Avoided Cost" is the avoided electricity costs, offset by the cost of running the generators and the energy payments from ISO-NE. Cumulative savings are the sum of Net Avoided Costs and monthly Capacity Payments - totaling \$70,636 for DI and \$12,347 for FOD through August.

Note: *Only the actual payments received are now being reported.

** FOD Facilities: CWTP, Loring Road, Chelsea Creek, Columbus Park, Ward St., and Nut Island.

Toxic Reduction and Control

1st Quarter 2015



EPA Required SIU Monitoring Events for FY15: 184
YTD: **125**

Required Non-SIU Monitoring Events for FY15: 63
YTD: **4**

SIU Connections to be Sampled For FY15: 385
YTD: **215**

EPA Required SIU Inspections for FY15: 204
YTD: **50**

SIU Permits due to Expire In FY15: 73
YTD: **7**

Non-SIU Permits due to Expire for FY15: 190
YTD: **45**

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.

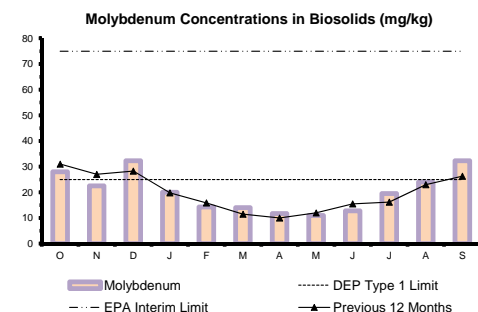
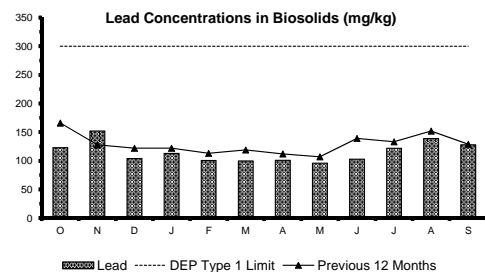
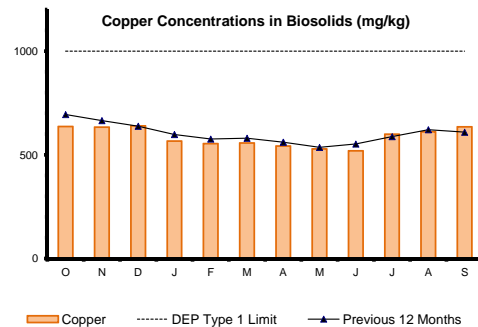
	Number of Days to Issue a Permit						Total Permits Issued	
	0 to 120		121 to 180		181 or more		SIU	Non-SIU
	SIU	Non-SIU	SIU	Non-SIU	SIU	Non-SIU		
Jul	0	10	0	1	0	1	0	12
Aug	2	9	0	1	0	2	2	12
Sep	5	19	0	2	0	0	5	21
Oct							0	0
Nov							0	0
Dec							0	0
Jan							0	0
Feb							0	0
Mar							0	0
Apr							0	0
May							0	0
Jun							0	0
% YTD	100%	84%	0%	9%	0%	7%	7	45

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 the period July to September 2014 representing the first quarter of the 2015 fiscal year, fifty-two permits were issued. Of the permits issued, three non-SIU permits were not issued within the 180-day timeframe. These were due to late payment of permit fees, facility construction delays and complex permit category determinations.

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, although this is delayed due to biosolids processing time. 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, but increases this year indicate that additional regulatory options must be considered.

In the first quarter of FY15, the level of molybdenum was below the DEP type 1 Limit for the first 2 months but above it in September. MWRA and its contractor (NEFCO) do not distribute product in Massachusetts between July and January under its approval of suitability.



Field Operations Highlights – Orange Notebook Bullets

1st Quarter – FY15

Western Water Operations and Maintenance

- John J. Carroll Water Treatment Plant: Staff removed the old chemical fill station for Hydrofluosilic Acid and installed a custom made fiberglass enclosure that will be more chemically resistant. Staff made preparations for the ribbon cutting ceremony of the new CWTP UV Facilities. Building exteriors were power washed, doors painted, the carbon dioxide storage tanks were painted and grounds work was completed.
- Oakdale Power Station: Staff supported the contractor performing the 5-year overhaul of the Woodward Gateshaft Governor on the power station's hydro turbine. The governor, a complex hydraulic-mechanical device, was completely disassembled, cleaned, reassembled and tested.
- Norumbega Cover Storage Tank Chamber N1: Staff removed the 12,000 square feet exterior roof covering, cleaned, and prepared the surface for new coating. A new three-part liquid applied Urethane membrane was applied to provide a waterproof barrier to the roof of the concrete structure.
- Rutland Holden Sewer Line: Staff, along with assistance from DCR equipment operators, repaired very wet section of the easement access road in Rutland, including 1,900 feet of roadway and 17 culvert crossings ranging in size from 36 inches to 6 inches. The majority of the materials (4,500 yards) were reclaimed tunnel spoils from Quabbin Shaft 5 and 7 in Rutland, reducing cost. This project will allow this section of the sewer line to be inspected by TV Inspections Crews and will enable staff to access the area for maintenance and inspection purposes.
- William A. Brutsch Water Treatment Facility: Staff supported the start up and completed reliability testing for the UV Treatment System, including a system shutdown for tie in work and having the UV equipment suppliers on site for testing and control system adjustment. Training for Operations and Maintenance Staff has been completed for all critical equipment. MWRA received DEP approval to operate the facility.

Metro Water Operations & Maintenance

Water Pipeline Program: A 24" valve on Section 33 and a 6" valve on a branch line in Chelsea were replaced. Two blow off retrofits were completed: Section 33, Washington Avenue in Chelsea, and Section 14, Main Street in Malden. Another blow off site was started at Addams and Pearl Streets in Malden on Section 84. Work to replace the existing 24" culvert with new box culverts and wing walls at the Great Esker Park began. Former Meter 96 to Chelsea, which has been inactive for many years, was disconnected during an overnight shutdown of a small portion of the Chelsea water system on September 24. The work was completed and water service restored to area residents with no discolored water complaints. Another shutdown of the same area will occur in early October, to create a new emergency connection between MWRA Section 15 and the Chelsea water system. On September 28, a walker reported water surfacing off of Recreation Road in Weston, determined to be from Section 80, a 48" steel main. The surfacing water is flowing overland and not creating any issues. Repair of the leak will be coordinated with Wellesley and Needham, as their source of MWRA water during high demand season is Section 80.

- Valve Program: Main Line Valve Exercising was performed on Sections 5, 6, 28, 32, 37, 38, 41, 42, 68, 70, 90, 97A, 98, Loring Road Sleeve Valves 1 and 4, Clinton Road, Fisher Hill, Harvard Street, and the Warren and Cottage lines. Fire flow bypass valve maintenance was performed at Meters 11, 47, 121, 135, 192, and 194. Pressure Reducing Valve (PRV) preventative maintenance was performed at Meters 93, 106, 157, 171 and 175; Arlington Covered Reservoir, Deer Island Tank, Section 28, Section 100, Shafts 7, 7B, 9, 9A, Oak Hill flow control valve, WASM 16 and Nonantum Road. Modifications to the control piping to the off-line PRV at Nonantum Road were completed, in anticipation of using this site for level control for the new Spot Pond Tanks. The Watertown Pipeline was returned to service, along with Meters 92 to Watertown and 148 to Waltham on August 11. Staff operated valves on Section 64 to temporarily convert it from Fells service area to the Northern Intermediate High (NIH) service area, prior to its use as the discharge pipe for the new Spot Pond Pump Station. The line was tested at this increased hydraulic grade line from September 16 through the 19, then returned to its normal configuration in the Fells service area. Valve staff coordinated valve operations with Needham for a trial isolation of the St. Mary's Pump Station, in anticipation of the construction of a new pump station by the town.
- Lynn Interconnection Planning: MWRA Waterworks Staff met with Lynn Water and Sewer Commission (LWSC) Staff on July 23 to discuss potential water supply to the city. LWSC needs to take their Low Service Covered Reservoir out of service to replace the existing floating cover. Initial discussions concluded that the work would be done in the spring of 2015. Planning will continue over the next several months the specific details of potentially supplying the city with some or all of its normal water supply during the maintenance period.
- Melrose Water Main Isolations: Work being done by the Spot Pond Storage Tank Contractor on Ravine Road in Stoneham is required to maintain service to existing Melrose water mains. Excavation to install the new 48" piping revealed that the Melrose mains would need to be temporarily removed to successfully complete the new piping. Several meetings were held with Melrose Public Works and Water Department Staff to plan the isolation and temporary removal of the city's mains. A trial-run isolation was performed over night on July 14, which demonstrated that the mains could be isolated without service impacts. Additional isolations were performed on July 17 and 24 to remove the existing mains and install new valves. No discolored water or pressure complaints were received during any of the valve operations.
- Section 91 Leak in Revere: On August 21, the Revere Water Department notified MWRA that there was water surfacing in the Rumney Marsh. Section 91, a 48" ductile iron water main is located adjacent to a former rail bed which parallels the marsh, and crosses under Route 1. The on-call Valve Crew responded and isolated the main, stopping the flow of water. Service in the Northern High Service (NHS) area remained normal. The Revere Conservation Commission was notified regarding the leak and the need to repair the water main. Work began on August 25, with clearing to gain access to the site. Excavation and shoring work continued into September. The leak was repaired by replacing the stretch of pipe that had a corrosion hole at its bottom. The line was flushed, disinfected, sampled, and was then returned to service on September 22.
- Wellesley E. Coli Incident: On August 21, water quality sample results within the Wellesley water system yielded a positive *E. coli* sample, resulting in DEP requiring a boil water notice. MWRA staff assisted the town with valve operations and system investigations. Two subsequent rounds of sampling resulted in the order being lifted on August 23. It is believed that the cause was an tank access hatch that had been buried for years. The hatch was uncovered and was found to be corroded. The tanks were isolated, dewatered, repaired, and then disinfected and activated.

Wastewater Operations & Maintenance

- July 16, 2014-Constellation Energy / ISO New England Demand Response Program: The Authority participates in the ISO-NE Demand Response Program at the Chelsea Creek, Columbus Park, Ward Street and Nut Island headworks. All four facilities were called upon for audit operation by Constellation requiring each facility to run on emergency facility generator power within 30 minutes of notification. All facilities maintained operations and returned to utility power within 90 minutes without issue.
- Nut Island Headworks Odor Control Chemical Systems: Maintenance Staff continued to install and test the rebuilt odor control chemical piping system and were assisted by Operations Staff during system testing.
- July 28, 2014-City of Revere-EF-2 Tornado Event: At approximately 9:30 a.m. during a thunder storm rain event a tornado touched down and swept through a section of Revere. The EOC was staffed prior to this time and monitoring the approaching weather conditions with anticipation of high system flows and possible CSO activations.
- August 13, 2014 - DEP Site-Visits CSO Facilities: DEP Regulators visited the Prison Point, Somerville Marginal and Cottage Farm CSOs for inspections regarding the facility operating conditions. Both Prison Point and Somerville Marginal facilities were staffed and activated during these visits due to an on-going rain event. There were no issues to report during the visit and resulted in continued positive dialogue with the DEP.
- CSO Evaluation Study: Staff worked with SCADA & Process Control Staff conducting an analysis of process control procedures at the three CSO facilities. This is part of the ongoing system optimization and provided recommendations that could be applied at all three facilities.
- North Main Pump Station Shutdown Planning Meetings: Staff from multiple departments attended a series of planning meetings in September in preparation for the North Main Pump Station contract equipment upgrades and modifications. Staff are providing wastewater system operating conditions, monitoring points, system modeling information and regulatory notification comments for this joint effort.
- Wastewater Operator Training Program: Wastewater Operations has implemented an Operator Training Program where in house staff are trained to become wastewater operators. Trainees shadowing Wastewater Operations staff one day a week at field facilities (pumping stations, headworks and CSOs) and/or at the Deer Island Treatment Plant. Trainees also attend wastewater exam training once per week. The program will culminate with the trainees taking the grade 2 wastewater operator's license examination in January 2015. The goal of the program is to have an adequate pool of internal candidates for future Wastewater Operator Positions.
- Nut Island Headworks Electrical and Conveyors Improvements: Operations Staff continues to work with Engineering and Construction Staff and the contractor on this project, coordinating facility operations with project work activities. The installation of cable trays, penetrations for electrical conduits, required equipment outages and the upgrade of the grit conveyors were completed. In September the contractor began switching over to the new power supply for ancillary equipment and continues work on the improvements to the screenings conveyors.
- Remote Headworks Upgrades: Operations Staff continues to work with Engineering & Construction and the contractor on the Remote Headworks Upgrades Project including reviewing possible screenings collection equipment layouts and review of proposed exterior facility façade options.
- Safety Awareness Orientation Training: Recently hired staff members attended the Authority's Safety Awareness Orientation Training Program. This program teaches new and existing staff the basic elements of the Authority's Safety Program with the intention of answering any questions regarding safety protocol, policy and procedures.
- Process Control Activities: Prepared description of staff responsibilities for Process Control and staffing needs to achieve objectives; continued development of Process book computer screens; coordinated with other process areas (DITP, CWTP, etc) on alarm management; assisted in the planning and analysis for the north main pump station shutdowns to support DITP equipment replacement; modified set points at Caruso to improve pump performance during high flows; working on headworks gate control adjustments to reduce flow oscillation during choking; supported Nut Island wet scrubber odor control chemical feed rehabilitation; developed alternate chemical pacing scheme for Prison Point CSO given problems with main flow meter; working to update MAXIMO data for instrumentation; provided logic adjustment for the Brookline Gate notification alarm, assisted with submittal reviews for Prison Point Pump Rehabilitation, coordinating fire alarm inventory, and supporting uninterrupted power supply criticality and replacement evaluation.

TRAC

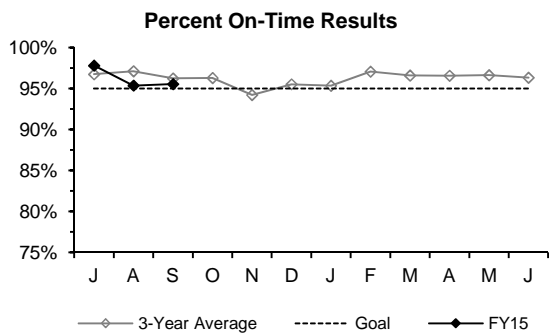
- Enforcement: TRAC and UMass Boston entered into a Settlement Agreement, effective August 5, 2014, to resolve violations related to the discharge of mercury. The Settlement Agreement requires UMass Boston to pay a \$ 16,000.00 administrative penalty, complete Supplemental Environmental Projects at cost of \$64,000.00, and pay stipulated penalties, for a period of two years, for reporting and discharge violations.
- Inspections and Permitting: On August 6, 2014, Wastewater Operations Staff requested that TRAC Staff investigate the source of large amounts of ramen noodle plastic packaging collecting on the Ward Street Pump Station screens. TRAC Staff contacted a number of potential sources and coordinated with community agencies, but the source of the packaging has not been determined.

Environmental Quality

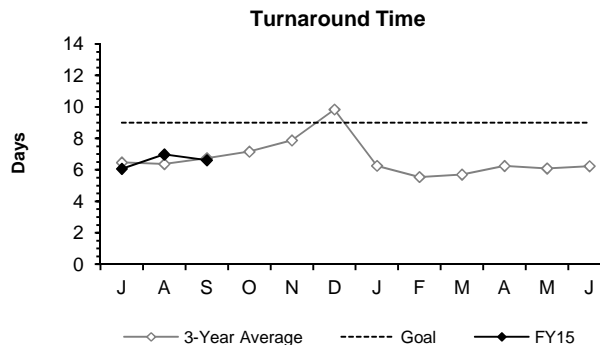
- Algae Program: Monitoring activity continues for nuisance taste and odor algae by both the Authority and MADCR. Frequency of sampling activity is being adjusted based upon monitoring results. Staff continued sampling to begin a preliminary investigation into algae taste and odor compounds in coordination with MADCR and with the support of UMASS-Amherst.
- Emergency Response Plan Training: As part of a multi-disciplinary team, Environmental Quality Water Staff helped present Emergency Response Plan Training to numerous client communities.
- Harbor and Outfall Monitoring: Three surveys were conducted during the quarter.
- Contingency Plan Thresholds: There was an exceedance of the contingency plan threshold for Phaeocystis. This was reported as required to EPA and others in the 5-day window.
- OMSAP Meeting: A meeting of the Outfall Monitoring Science Advisory Panel was held on September 23rd in Nahant.
- Community Support: ENQUAL provided support to BWSC to help address complaints about "brown water" observed in Boston's Inner Harbor in late August. Samples collected by BWSC in Fort Point Channel were inspected microscopically, and no apparent harmful algae or wastewater-derived solids were observed. ENQUAL also coordinated with Waltham to evaluate sample results from a Verizon Manhole, together with Inspection, TRAC and DLS Staff.

Laboratory Services

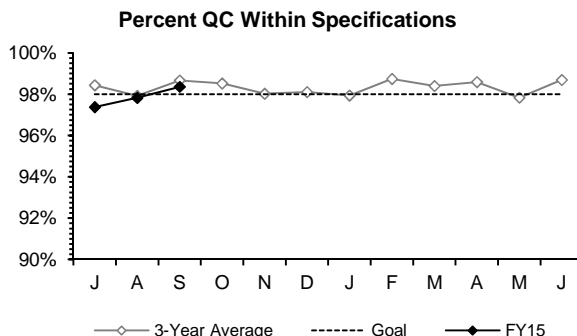
1st Quarter - FY15



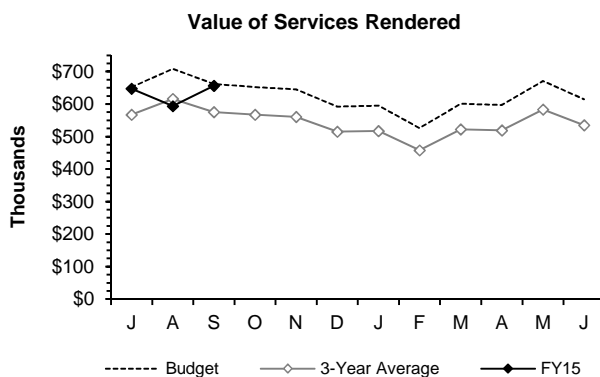
The Percent On-Time measurement was above the 95% goal, each month of the quarter.



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



Percent of QC tests meeting specifications was above or close to the 98% in-house goal each month of the quarter.



Value of Services Rendered was at the seasonally adjusted budget projection for two months of the quarter. The small shortage is due to retirements and hiring replacements.

Highlights:

Quality Assurance:

Completed work with Internal Audit on a management advisory on Lab QA/QC. The final proficiency test samples (PT) were passed, closing out the DEP-required PT program for 2014. The minor issues identified in the May 2014 DEP certification audit of the Central Lab have been resolved to DEP's satisfaction.

Mobile Lab:

The x-ray fluorescence instrument on the mobile lab was used to identify some suspicious material found at an emergency reservoir as aquarium gravel. Successfully completed two more drills of the mobile lab with the ESU at water facilities.

DITP: Provided details on lab tests to a consultant who is performing verification of the MWRA 2013 green house gas report.

TRAC:

The new automated cyanide instrument was put into operation for all wastewater cyanide samples. In addition to being faster than the classical method, it is less prone to interferences.

ENQUAL Clean Water:

Working with ENQUAL on the impact on MWRA's NPDES permits of EPA's "sufficiently sensitive methods" rule. The intent of this rule is to make sure that the lab test methods used for NPDES permits are sensitive enough to determine whether contaminants are at concentrations higher than water quality criteria.

ENQUAL Drinking Water:

Tested extra Total Coliform Rule samples from Wellesley to help them clear their boil water order. Continued nitrification monitoring for Waltham and Hanscom AFB as part of on-going response to past coliform positive samples. Provided context to a news item regarding the presence of Lithium in tap water.

Outside Customers:

Tested extra beach samples and also samples from a persistent leak for Winthrop to identify the source.

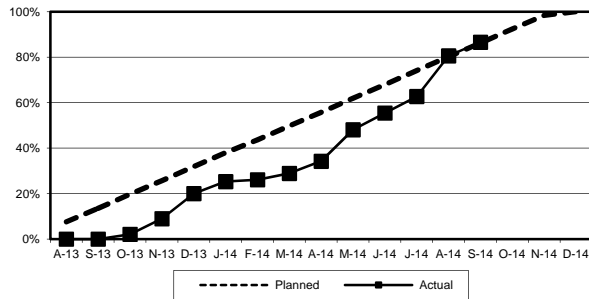
CONSTRUCTION PROGRAMS

Projects In Construction

1st Quarter - FY15

(Progress Percentages based on Construction Expenditures)

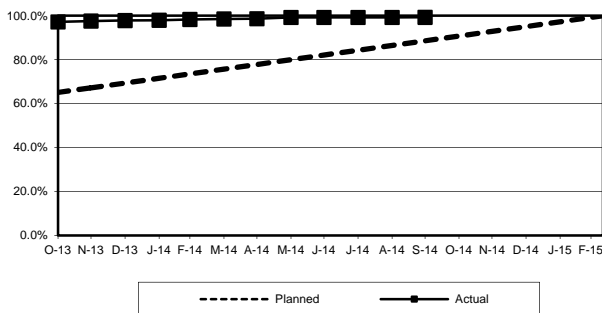
Nut Island Headworks Electrical and Conveyor Improvements Progress – September 2014



Project Summary: This project will replace the floor-slab-embedded electrical conduits in the bottom level of the headworks, as well as improvements to the grit and screenings conveyors.

Status and Issues: As of September the Contractor continued installing conduit for the existing equipment on the bottom level of the facility. They also began power feed cut-overs to the equipment in the pump and blower area and completed the grit conveyor modifications.

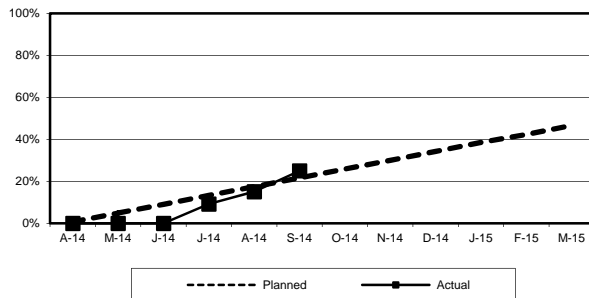
UV Disinfection Facilities CWTP Progress – September 2014



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: During September, the HVAC Contractor was called back to the site and directed to trouble-shoot new glitches found in the newly installed cooling water pumps inside the UV room for the air handling unit.

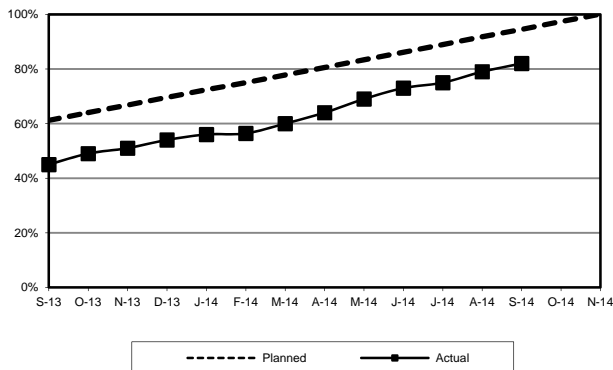
Clinton Digester and Primary Clarifier Rehab Progress - September 2014



Project Summary: This project involves the rehabilitation of the Plant's two digesters, as well as the replacement of the gas compressors, sludge collection equipment, isolation gates and repairs to the concrete.

Status and Issues: As of September, the Contractor removed the digester floating roof, and it is now on piers awaiting rehabilitation. Primary Clarifiers 3&4 have been poured and the forms have been stripped. The prep work is being done for the coating. The plug valves in the digester building are being replaced.

Spot Pond Water Storage Facility Progress – September 2014



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

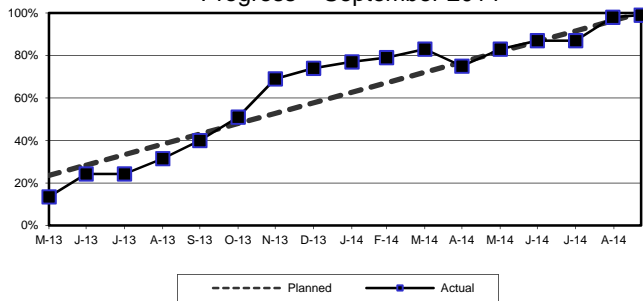
Status and Issues: As of September, the Contractor completed filling Tank 1 and began leakage testing. They continued backfilling Tank 2 and installing bioengineered slopes. The Internal remedial work on Tank 2 continues including final concrete placements. At the pump station, they worked on the plumbing, mechanical piping, electrical conduits and HVAC installations.

Projects In Construction

1st Quarter - FY15

(Progress Percentages based on Construction Expenditures)

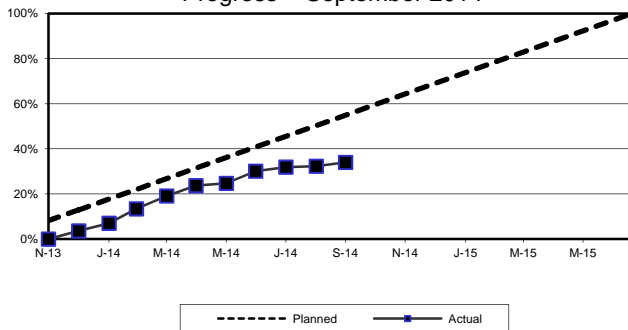
**Quabbin UV Disinfection
Progress – September 2014**



Project Summary: This project will improve the quality of the drinking water delivered to the CVA communities serviced by the MWRA. It involves the addition of UV disinfection at the Quabbin Disinfection Facility to meet the EPA's regulation for a second means of disinfection for unfiltered water systems.

Status and Issues: During September, the Contractor completed the 30-day Reliability Testing and UV units were placed into continuous service on September 5th. DEP granted approval to operate the new UV system. Substantial Completion was declared on September 22nd and the Contractor demobilized from site and continued working on punch list items.

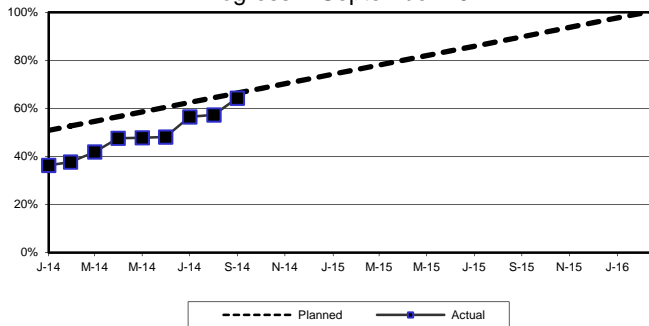
**Pump, Gear Box and Diesel Engine Upgrade
Prison Point and Cottage Farm CSO Facilities
Progress - September 2014**



Project Summary: This project involves the rebuilding of pumps right angle gear drives and engines as well as the installation of diesel oxidation catalysts at the Prison Point and Cottage Farm CSO facilities.

Status and Issues: During September, the Contractor made preparations for the removal of right angle gear number 1 at Prison Point. The gear manufacturer, Philadelphia Gear has begun the process of factory testing the new right angle gear in their Delaware facility.

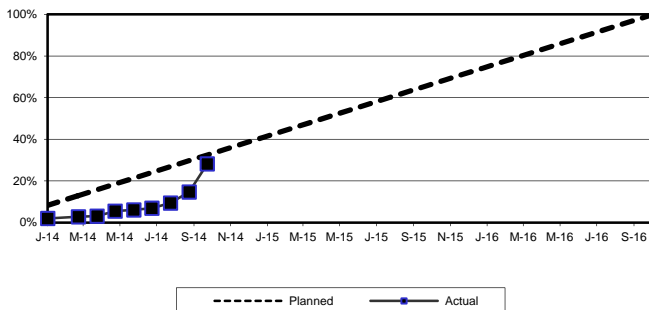
**North Main Pump Station VFDs & Motors
Progress - September 2014**



Project Summary: This project involves the replacement of the existing 3500 HP variable frequency drives and synchronous motors for the RWW pumps at the North Main Pump Station.

Status and Issues: VFD's 6 & 7 successfully completed the 90 day demonstration run. Existing VFD 1 has been removed and new VFD 1 has been installed and work on the units internal connections continues. Existing Motor 1 has been removed and the new motor has been installed and connected to the existing wiring.

**Primary and Secondary Clarifier Scum Tip Tubes
Progress - September 2014**



Project Summary: This project involves the replacement of the existing carbon steel tip tubes with 316 stainless steel in 48 primary and 54 secondary clarifiers to improve reliability and increase longevity.

Status and Issues: The Contractor, Walsh Construction, completed the installation of 29 of 188 scum skimmers. They continue with the installation of conduit for fiber optic cable from Primary Clarifier and Secondary Clarifier Area from control panel to site actuator.

CSO CONTROL PROGRAM

1st Quarter - FY15

MWRA and the CSO communities have completed 32 of the 35 projects in the Long-Term CSO Control Plan. The three remaining CSO projects are in construction: Reserved Channel Sewer Separation by BWSC, CAM004 Sewer Separation by City of Cambridge, and Automated Gate/ Floatables Control at Outfall MWR003 and Rindge Ave. Siphon Relief, for which MWRA issued the notice to proceed on August 28, 2014. The following table reports on the progress of the three CSO projects not yet complete, as well as BWSC's continuing inflow removal work associated with the completed South Dorchester Bay Sewer Separation project.

Project		Court Milestones in Schedule Seven (Shaded milestones are complete.)			Status as of September 30, 2014																																				
		Commence Design	Commence Construction	Complete Construction																																					
Reserved Channel Sewer Separation		Jul 06	May 09	Dec 15	<p>BWSC continues to make progress with the nine planned contracts for the Reserved Channel Sewer Separation project.</p> <table border="0"> <tr> <td>Contract 1</td> <td>CSO outfall rehab</td> <td>\$ 4.1 M</td> <td>Complete</td> </tr> <tr> <td>Contract 2</td> <td>Sewer separation</td> <td>\$ 5.9 M</td> <td>Complete</td> </tr> <tr> <td>Contract 3A</td> <td>Sewer separation</td> <td>\$11.8 M</td> <td>Complete</td> </tr> <tr> <td>Contract 3B</td> <td>Sewer separation</td> <td>\$12.8 M</td> <td>97% complete</td> </tr> <tr> <td>Contract 4</td> <td>Sewer separation</td> <td>\$11.4 M</td> <td>85% complete</td> </tr> <tr> <td>Contract 5</td> <td>Cleaning & Lining</td> <td>ineligible</td> <td>Awarded</td> </tr> <tr> <td>Contract 6</td> <td>Downspout Disconnect</td> <td>\$ 0.7M</td> <td>Awarded</td> </tr> <tr> <td>Contract 7</td> <td>Pavement restoration</td> <td>\$ 1.2 M</td> <td>Complete</td> </tr> <tr> <td>Contract 8</td> <td>Pavement restoration</td> <td>\$ 5.7 M</td> <td>35% complete</td> </tr> </table> <p>The MWRA Board approved Amendment 14 to the BWSC MOU/FAA on May 14, 2014, increasing the total award amount to \$292.6 million. BWSC recently reported higher cost estimates and need for an additional amendment to the MOU/FAA totaling nearly \$4 million associated with contracts 3B and 4. 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	\$ 4.1 M	Complete	Contract 2	Sewer separation	\$ 5.9 M	Complete	Contract 3A	Sewer separation	\$11.8 M	Complete	Contract 3B	Sewer separation	\$12.8 M	97% complete	Contract 4	Sewer separation	\$11.4 M	85% complete	Contract 5	Cleaning & Lining	ineligible	Awarded	Contract 6	Downspout Disconnect	\$ 0.7M	Awarded	Contract 7	Pavement restoration	\$ 1.2 M	Complete	Contract 8	Pavement restoration	\$ 5.7 M	35% complete
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Contract 7	Pavement restoration	\$ 1.2 M	Complete																																						
Contract 8	Pavement restoration	\$ 5.7 M	35% complete																																						
Cambridge/ Alewife Brook Sewer Separation	CAM004 Sewer Separation	Jan 97	Jul 98	Dec 15	<p>Cambridge completed four initial construction contracts for this project more than a decade ago and is presently managing three additional sewer separation contracts (contracts 8A, 8B and 9) to complete the project. Cambridge may complete sewer separation work on Concord Lane under an additional (fourth) contract.</p> <table border="0"> <tr> <td>Contract 8A</td> <td>Sewer separation</td> <td>\$10.6M</td> <td>Subst. complete</td> </tr> <tr> <td>Contract 8B</td> <td>Sewer separation</td> <td>\$18.7M</td> <td>25% complete</td> </tr> <tr> <td>Contract 9</td> <td>Sewer separation</td> <td>\$ 7.1M</td> <td>15% complete</td> </tr> </table> <p>Cambridge recently completed the 60% design for Concord Lane and plans to meet with the property owner to review the design plans and negotiate the final right to entry for construction. Cambridge plans to commence construction in Concord Lane by Spring 2015 and complete all work for the CAM004 sewer separation project by December 2015, in compliance with Schedule Seven.</p>	Contract 8A	Sewer separation	\$10.6M	Subst. complete	Contract 8B	Sewer separation	\$18.7M	25% complete	Contract 9	Sewer separation	\$ 7.1M	15% complete																								
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MWR003 Gate and Rindge Ave. Siphon Relief	Apr 12	Aug 14	Oct 15	<p>MWRA issued the notice to proceed with construction on August 28, 2014. The contract completion date is October 28, 2015, in compliance with Schedule Seven.</p>																																					

Other CSO Related Work				
Project	Court Milestones in Schedule Seven (Shaded milestones are complete.)			Status as of September 30, 2014
	Commence Design	Commence Construction	Complete Construction	
South Dorchester Bay Sewer Separation Post-Construction Inflow Removal	N/A	N/A	N/A	BWSC has completed its investigation of alternatives for removing additional stormwater inflow from its Dorchester Interceptor or otherwise relieving hydraulic conditions in the interceptor during extreme storms following the closing of CSO regulators with completion of the South Dorchester Bay sewer separation project in 2007. On August 6, 2014, BWSC presented updated information on its ongoing evaluations. Meanwhile, BWSC continues with a construction contract to remove some of the remaining inflow sources from its sewer system. The contract amount is \$562,261, of which \$204,000 is eligible for MWRA funding under the BWSC CSO MOU and FAA. MWRA's FY15 CIP includes \$5.4 million for the inflow removal effort, of which approximately \$2.7 million is allocated to awarded design and construction contracts.

CIP Expenditures

1st Quarter - FY15

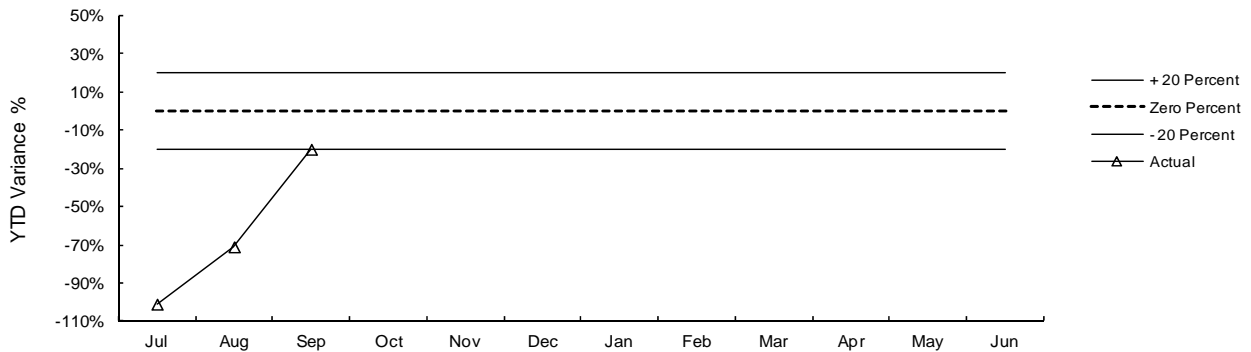
The Year-To-Date variances are highlighted below:

FY15 Capital Improvement Program Expenditure Variances through September by Program (\$000)				
Program	FY15 Budget Through September	FY15 Actual Through September	Variance Amount	Variance Percent
Wastewater	13,120	12,410	(710)	-5%
Waterworks	7,397	4,130	(3,266)	-44%
Business and Operations Support	1,453	837	(616)	-42%
Total	21,970	\$17,377	(\$4,592)	-20%

Underspending within Wastewater is primarily due to less than anticipated community requests for grants and loans for the Infiltration/Inflow (I/I) Program and actual costs being lower than the estimated expenditures for Centrifuge Backdrive Replacement and Electrical Upgrade Construction 4 contracts. This was partially offset by progress on the Scum Skimmer and Clinton Digester Tank Rehabilitation contracts and the timing of reimbursement for the Brookline Sewer Separation project. Underspending in Waterworks is primarily due to timing of work for the Spot Pond Storage Facility Design/Build contract offset by contractor progress for the Quabbin Ultraviolet Disinfection Construction contract.

CIP Expenditure Variance

Total FY15 CIP Budget of \$137,600,000.



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 9/27/2014	\$59 million
Unused capacity under the debt cap:	\$848 million
Estimated date for exhausting construction fund without new borrowing:	Nov-14
Estimated date for debt cap increase to support new borrowing:	Not anticipated at this time
Commercial paper outstanding:	\$170 million
Commercial paper capacity:	\$350 million
Budgeted FY15 capital spending*:	\$125 million

* Cash based spending is discounted for construction retainage.

DRINKING WATER QUALITY AND SUPPLY

Source Water – Microbial Results and UV Absorbance

1st Quarter – FY15

Source Water – Microbial Results

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 William A. Brutsch Water Treatment Facility (formerly Ware Disinfection Facility) 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.

In the wintertime when smaller water bodies near Wachusett Reservoir freeze up, many waterfowl will roost in the main body of the reservoir - which freezes later. This increased bird activity tends to increase fecal coliform counts. DCR has an active bird harassment program to move the birds away from the intake area.

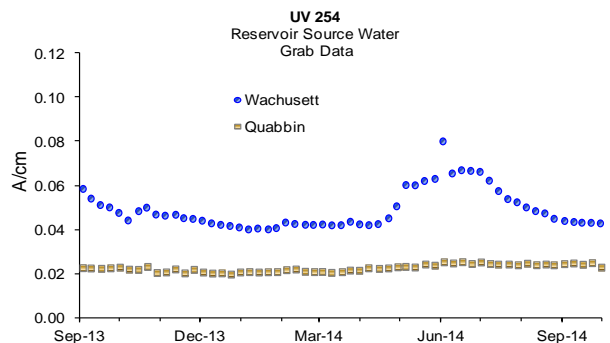
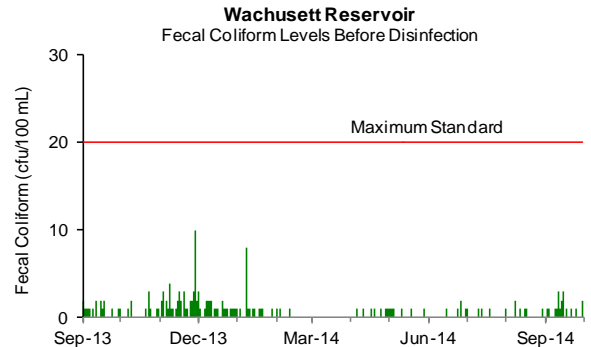
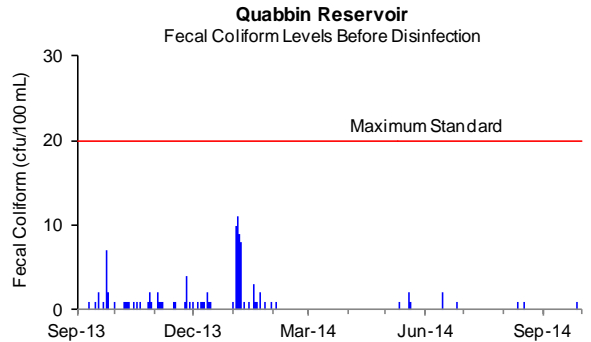
All samples collected during the 1st Quarter were below 20 cfu/100mL. **For the current six-month period, 0% of the samples exceeded a count of 20 cfu/100mL.**

Source Water – UV Absorbance

UV Absorbance at 254nm wavelength (UV-254), is a measure of the amount and reactivity of natural organic material in source water. Higher UV-254 levels cause increased ozone and chlorine demand resulting in the need for higher ozone and chlorine doses, and can increase the level of disinfection by-products. UV-254 is impacted by tributary flows, water age, sunlight and other factors. Hurricanes can have a significant and long lasting impact.

Quabbin Reservoir UV-254 levels are currently around 0.023 A/cm.

Wachusett Reservoir UV-254 levels are currently around 0.043 A/cm.



Source Water – Turbidity

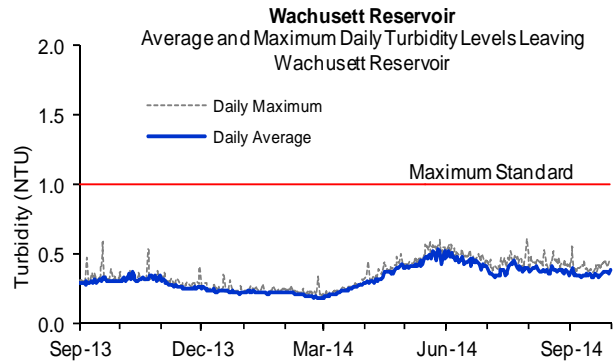
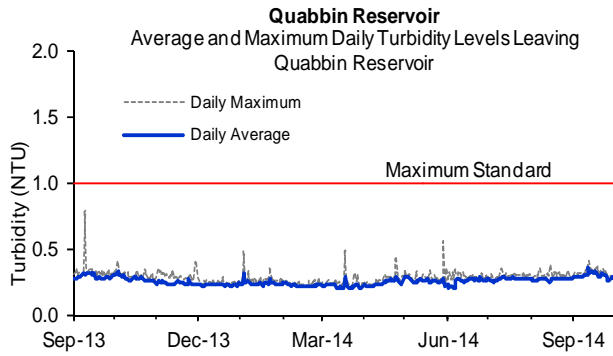
1st Quarter – FY15

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 disinfectant demand or may protect bacteria from disinfection effects, 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 William A. Brutsch Water Treatment Facility before chlorination. Turbidity of Wachusett Reservoir is monitored continuously at the Carroll Water Treatment Plant before ozonation.

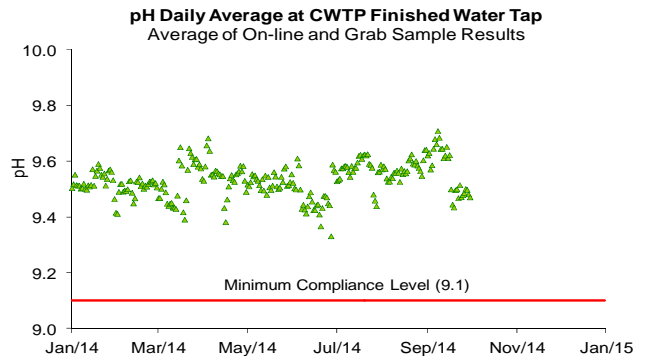
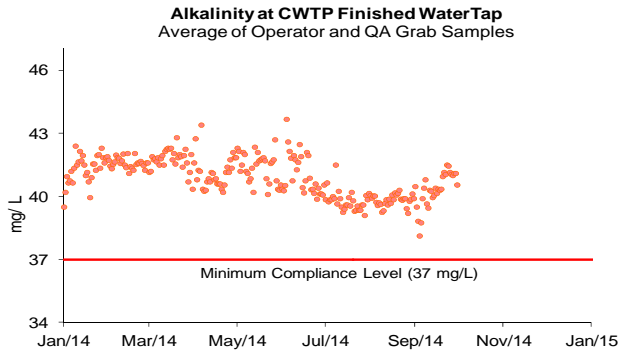
Maximum turbidity results at Quabbin and Wachusett were within DEP standards for the quarter



Treated Water – pH and Alkalinity Compliance

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 10 and 11, 2014. Distribution system sample pH ranged from 9.1 to 9.6 and alkalinity ranged from 38 to 41 mg/L. No sample results were below DEP limits for this quarter.



Treated Water – Disinfection Effectiveness

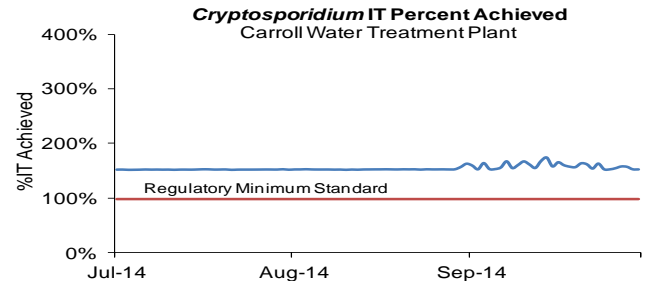
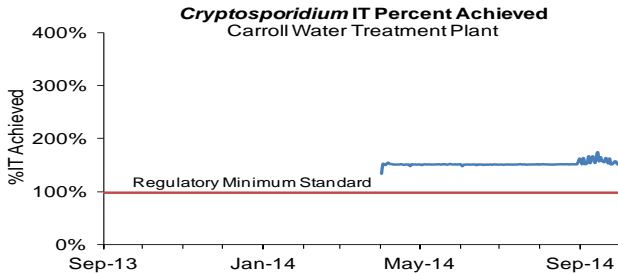
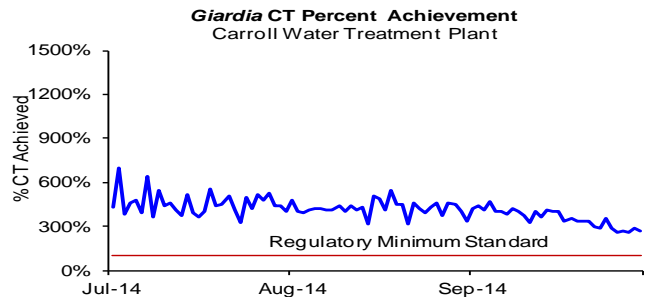
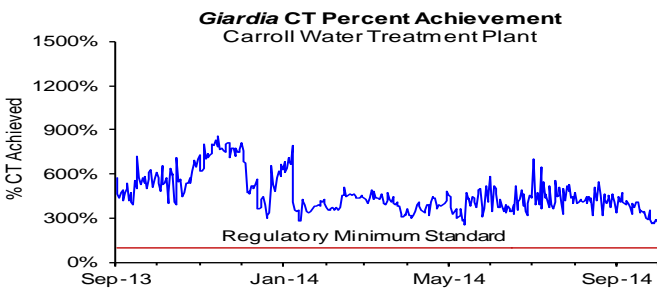
1st Quarter – FY15

At the Carroll Water Treatment Plant (CWTP), MWRA meets the required 99.9% (3-log) inactivation of *Giardia* using ozone (reported as CT: concentration of disinfectant x contact time) and the required 99% (2-log) inactivation of *Cryptosporidium* using UV (reported as IT: intensity of UV x time). MWRA calculates inactivation rates hourly and reports *Giardia* inactivation at maximum flow and *Cryptosporidium* inactivation at minimum UV dose. MWRA must meet 100% of required CT and IT.

CT achievement for *Giardia* assures CT achievement for viruses, which have a lower CT requirement. For *Cryptosporidium*, there is also an “off-spec” requirement. Off-spec water is water that has not reached the full required UV dose or if the UV reactor is operated outside its validated ranges. No more than 5% off-spec water is allowed in a month.

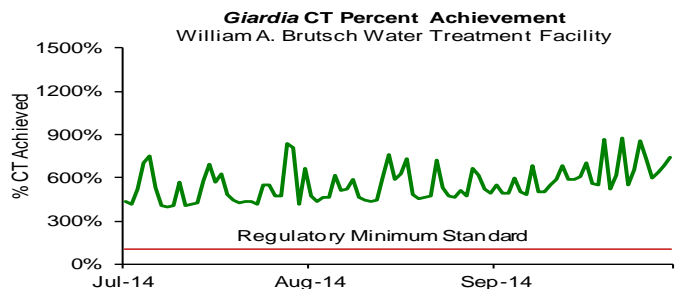
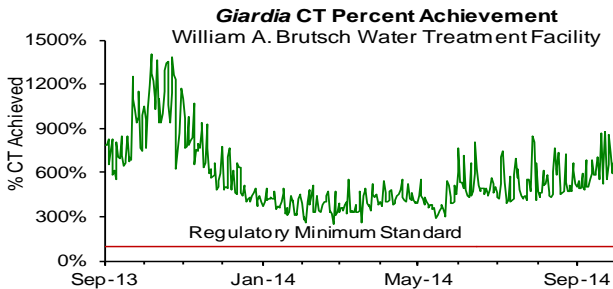
Wachusett Reservoir – MetroWest/Metro Boston Supply:

- Ozone dose at the CWTP varied between 1.5 to 2.3 mg/L for the quarter.
- *Giardia* 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.
- *Cryptosporidium* IT was maintained above 100% during the month. Off-spec water was less than 5%.



Quabbin Reservoir at William A. Brutsch Water Treatment 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 William A. Brutsch Water Treatment Facility is adjusted in order to achieve MWRA’s seasonal target of ≥ 0.75 mg/L (November 01 – May 31) and ≥ 1.0 mg/L (June 1– October 31) at Ludlow Monitoring Station. The chlorine dose at WDF was 1.6 mg/L for the quarter.



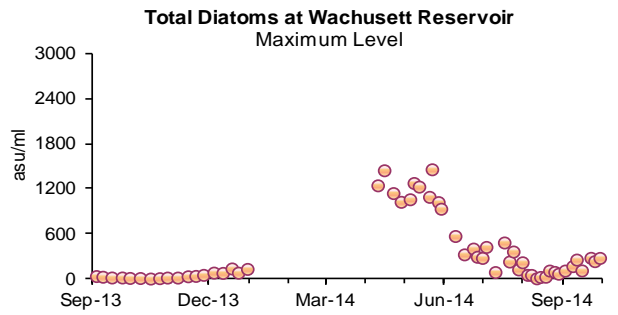
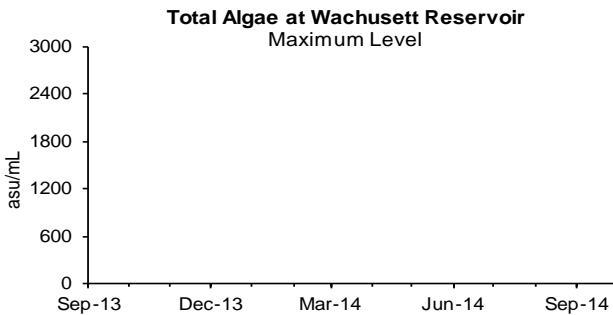
Source Water - Algae

1st Quarter – FY15

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 four complaints which may be related to algae reported from local water departments.

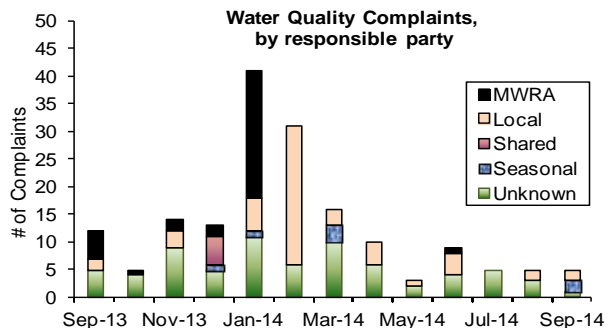
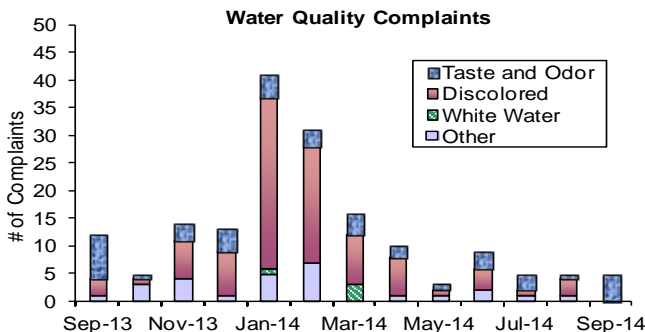


Drinking Water Quality Customer Complaints: Taste, Odor, or Appearance

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.

Communities reported 15 complaints during the quarter compared to 51 complaints for 1st Quarter of FY14. Of these complaints, 4 were for “discolored water”, 9 were for “taste and odor”, and 2 were for “other”. Of these complaints, 4 were local community issues, 2 were seasonal in nature, and 9 were unknown in origin.



Bacteria & Chlorine Residual Results for Communities in MWRA Testing Program

1st Quarter – FY15

While all communities collect bacteria samples and chlorine residual data for the Total Coliform Rule (TCR), data from the 43 systems that use MWRA's Laboratory are reported below.

The MWRA TCR program has 141 sampling locations. These locations include sites along MWRA's transmission system, water storage tanks and pumping stations, as well as a subset of the community TCR locations.

The TCR requires that no more than 5% of all samples in a month may be total coliform positive (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 whose presence likely 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. 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, 44 of the 6,123 community samples (0.72% system-wide) submitted to MWRA labs for analysis tested positive for coliform (Bedford – in July; Bedford, Wellesley – in August; Bedford, Hanscom AFB (Bedford) – in September). Twelve of the 1,982 MWRA samples (0.61%) tested positive for total coliform. Westboro Hospital did not violate the TCR since only one sample was positive in their system which collects fewer than 40 samples/ month. During a routine sampling in Wellesley, one sample indicated the presence of total coliform bacteria on August 19. Repeat samples showed the presence of total coliform, including one location with *E. coli*. Since the positive sample was located near a water storage tank, the town immediately removed the tank from service on August 21 and issued a Boil Order. All repeat samples collected afterwards were coliform free and the boil water order was lifted on August 23. Pierce Reservoir tank is undergoing repairs. No other MWRA or community sample tested positive for *E. coli*. Only 4.2% of the samples had any chlorine residuals lower than 0.2 mg/L for the quarter.

	# Coliform Samples (a)	Total Coliform # (%) Positive	E.coli # Positive	Public Notification Required?	Minimum Chlorine Residual (mg/L)	Average Chlorine Residual (mg/L)	
d	MWRA Locations	378	11 (2.91%)	0	No	1.15	2.49
	Communities in Program	1604	1 (0.06%)	0	No	0.01	1.93
	Total: MWRA	1982	12 (0.61%)	0	No	0.01	2.04
	ARLINGTON	168	0 (0%)	0		0.01	1.32
	BELMONT	104	0 (0%)	0		0.17	1.66
	BOSTON	795	0 (0%)	0		0.45	1.99
	BROOKLINE	238	0 (0%)	0		0.16	1.91
	CHELSEA	169	0 (0%)	0		1.11	1.92
	DEER ISLAND	52	0 (0%)	0		1.01	1.86
	EVERETT	169	0 (0%)	0		1.01	1.13
	FRAMINGHAM	216	0 (0%)	0		0.20	1.96
	LEXINGTON	116	0 (0%)	0		0.51	2.10
	LYNNFIELD	18	0 (0%)	0		0.25	1.09
	MALDEN	235	0 (0%)	0		0.66	1.95
	MARBLEHEAD	72	0 (0%)	0		0.27	1.91
	MEDFORD	221	0 (0%)	0		1.18	1.88
	MELROSE	117	0 (0%)	0		0.02	0.98
	MILTON	96	0 (0%)	0		1.29	1.82
	NAHANT	30	0 (0%)	0		0.09	1.46
	NEWTON	276	0 (0%)	0		0.11	1.84
	NORWOOD	99	0 (0%)	0		0.04	1.47
	QUINCY	300	0 (0%)	0		0.07	1.51
	READING	130	0 (0%)	0		0.01	1.25
	REVERE	195	0 (0%)	0		1.00	1.97
	SAUGUS	112	0 (0%)	0		1.42	1.85
	SOMERVILLE	273	0 (0%)	0		1.07	1.75
	SOUTHBOROUGH	30	0 (0%)	0		0.08	1.76
	STONEHAM	91	0 (0%)	0		0.86	1.91
	SWAMPSCOTT	53	0 (0%)	0		0.16	1.31
	WALTHAM	234	6 (2.56%)	0	No	0.56	2.09
	WATERTOWN	130	0 (0%)	0		0.63	2.01
	WESTBORO HOSPITAL	18	1 (5.56%)	0	No	0.08	0.41
	WESTON	48	0 (0%)	0		0.14	1.77
	WINTHROP	72	0 (0%)	0		0.11	1.47
	Total: Fully Served	4877	7 (0.14%)				
	BEDFORD ^b	119	31 (26.05%)	0	Yes	0.07	1.23
	CANTON	87	0 (0%)	0		0.02	0.77
	HANSCOM AFB	33	2 (6.06%)	0	Yes	0.04	1.22
	MARLBORO	126	0 (0%)	0		0.71	2.43
	NEEDHAM	123	0 (0%)	0		0.06	0.86
	NORTHBORO	48	0 (0%)	0		0.03	1.56
	WAKEFIELD	148	0 (0%)	0		0.25	1.30
	WELLESLEY	142	4 (2.82%)	1	Yes	0.02	0.86
	WILMINGTON	86	0 (0%)	0		0.11	1.59
	WINCHESTER	91	0 (0%)	0		0.12	1.50
	WOBURN	195	0 (0%)	0		0.02	1.11
c	SOUTH HADLEY FD1	48	0 (0%)	0		0.15	0.57
	Total: CVA & Partially Served	1246	37 (2.97%)				
	Total: Community Samples	6123	44 (0.72%)				

(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 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.

(e) Sample collection period extended until October 7, 2014 by DEP.

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

1st Quarter – FY15

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. For the MetroBoston system, effective Q2 2013, under the Stage 2 DBP Rule, compliance is based on locational running annual averages (LRAA). Sampling locations have increased from 16 to 32 each quarter. Data prior to Q1 2013 reports the running annual average, and since Q1 2013, the maximum LRAA is reported (in addition to min and max values).

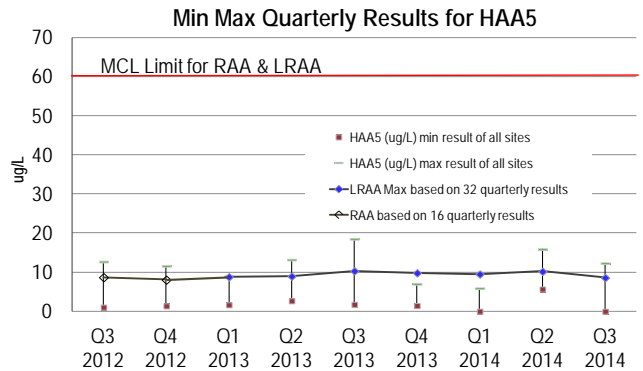
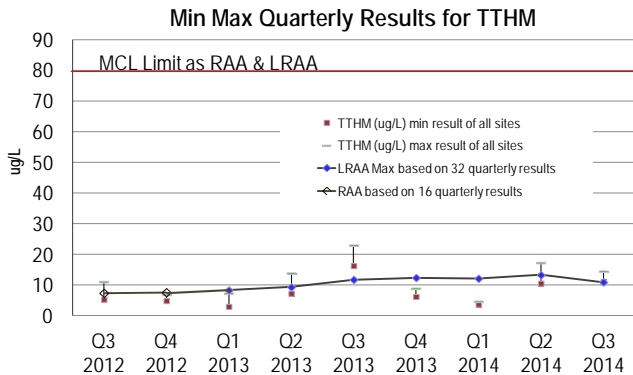
For the CVA communities, effective Q3 2013, under the Stage 2 DBP Rule, compliance is based on a LRAA for each community. Sampling locations have increased from 12 to 14 each quarter. Prior to Q3 2013, the running annual average is reported, and since Q3 2013, the maximum LRAA is reported (in addition to min and max values). The chart below combines all three CVA communities data.

Partially served and CVA communities are responsible for their own compliance monitoring and reporting, and must be contacted directly for their individual results.

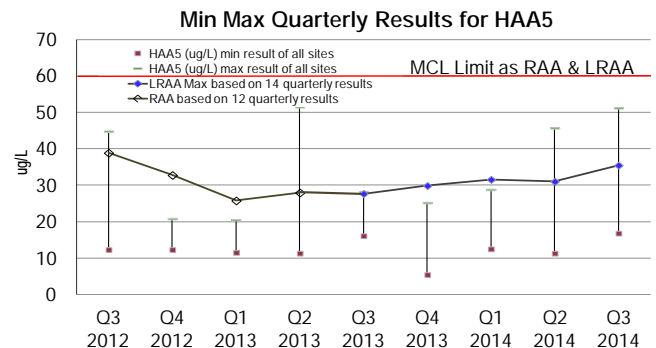
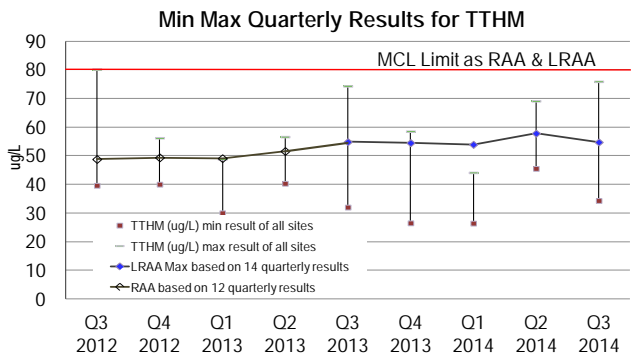
Bromate is tested monthly per DEP requirements for water systems that treat with ozone. Bromide in the raw water may be converted into bromate following ozonation. EPA's RAA MCL standard for bromate is 10 µg/L.

The RAA for TTHMs and HAA5s for MWRA's Compliance Program (represented as the line in the top two graphs below) remain below current standards. The LRAA for TTHMs = 11.0 µg/L; HAA5s = 8.6 µg/L. The current RAA for Bromate = 0.0 µg/L. CVA's DBP levels continue to be below current standards.

MetroBoston Disinfection By-Products



CVA Disinfection By-Products



Water Supply and Source Water Management

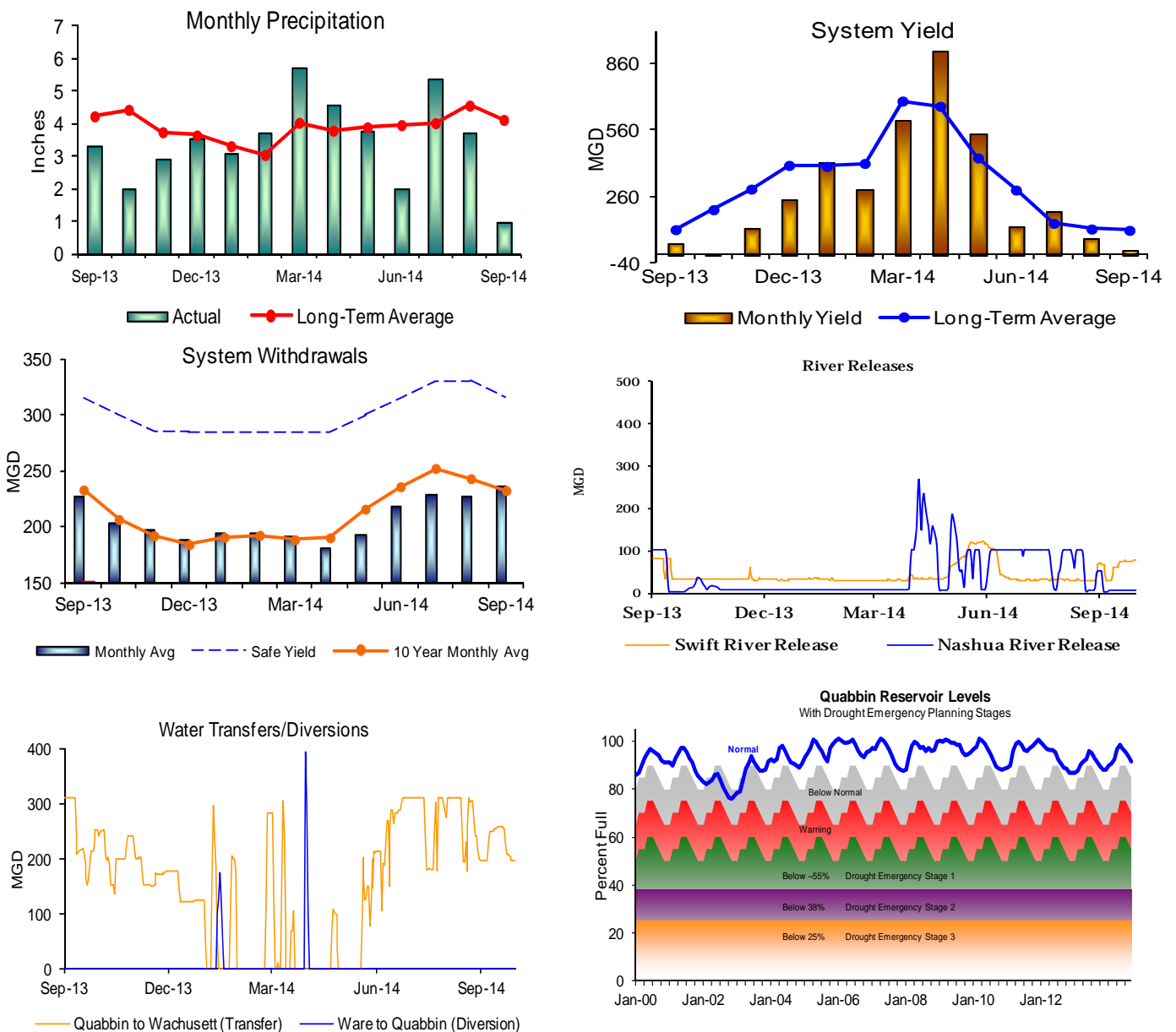
1st Quarter – FY15

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 volume of the Quabbin Reservoir was at 91.5% as of September 30, 2014; a 5.2% decrease for the quarter, which represents a decrease of 21.4 billion gallons of storage. Yield and precipitation for the quarter were below their quarterly long term averages. Monthly withdrawal continues to be below its long-term average.



WASTEWATER QUALITY

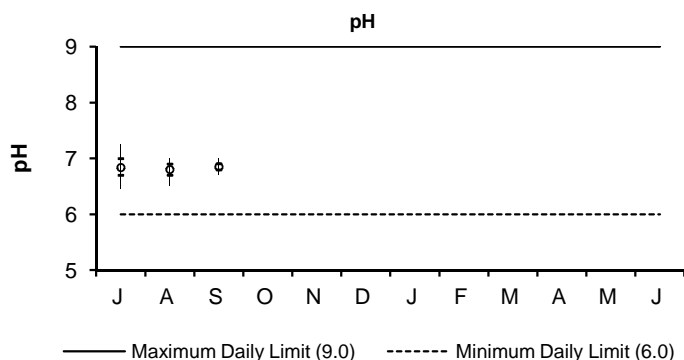
NPDES Permit Compliance: Deer Island Treatment Plant

1st Quarter - FY15

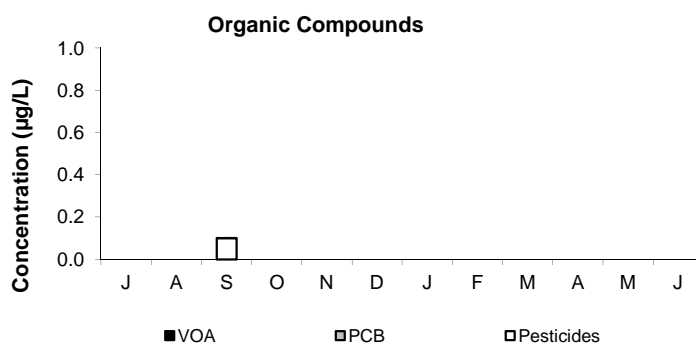
NPDES Permit Limits

Effluent Characteristics		Units	Limits	July	August	September	1st Quarter Violations	FY15 YTD Violations
Dry Day Flow:		mgd	436	265.0	263.5	262.3	0	0
cBOD:	Monthly Average	mg/L	25	4.2	4.1	4.7	0	0
	Weekly Average	mg/L	40	7.5	5.0	5.2	0	0
TSS:	Monthly Average	mg/L	30	6.8	5.9	5.8	0	0
	Weekly Average	mg/L	45	11.0	8.1	6.5	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	45	57	11	0	0
	Weekly Geometric Mean	col/100mL	14000	8	8	6	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	6.5-7.3	6.5-7.0	6.7-7.0	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	100	100	0	0
	Inland Silverside	%	≥1.5	100	50	100	0	0

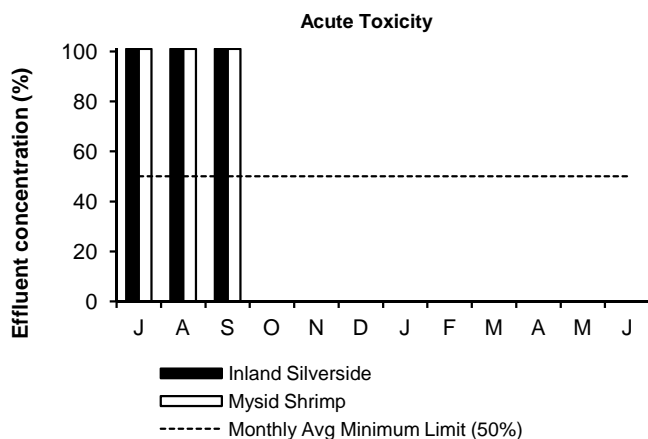
There have been no permit violations in FY15 at the Deer Island Treatment Plant.



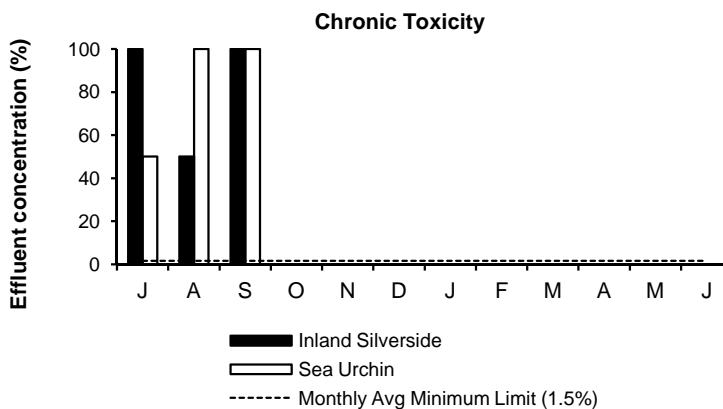
pH is a measure of the alkalinity or acidity of the effluent. Fluctuations in pH do not have an adverse effect on marine environments. Because of the pure oxygen used in the activated sludge reactor, the effluent pH tends to be at the lower pH range. pH measurements for the 1st Quarter were within the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



An important wastewater component monitored in the effluent is organic compounds, such as volatile organic acids, pesticides, and polychlorinated biphenyls, which are all sampled monthly. The secondary treatment process has significantly reduced organic compounds in the effluent stream. In the 1st Quarter, hexachlorobenzene was detected in the effluent in September. All other organic compounds were below the detection limit for the quarter.



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 - FY15

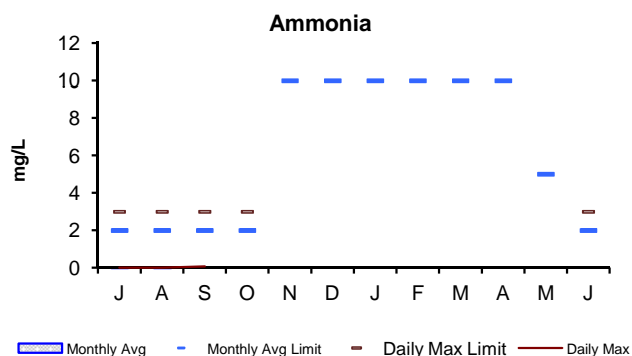
NPDES Permit Limits

Effluent Characteristics		Units	Limits	July	August	September	1st Quarter Violations	FY15 YTD Violations
Flow:		mgd	3.01	2.37	2.32	2.29	0	0
BOD:	Monthly Average:	mg/L	20	2.3	2.0	2.2	0	0
	Weekly Average:	mg/L	20	2.9	2.3	2.5	0	0
TSS:	Monthly Average:	mg/L	20	2.6	1.8	2.9	0	0
	Weekly Average:	mg/L	20	3.1	2.2	4.7	0	0
pH:		SU	6.5-8.3	7.0-7.6	7.2-7.5	6.8-7.6	0	9
Dissolved Oxygen: Daily Minimum:		mg/L	6	7.0	6.4	6.6	0	0
Fecal Coliform: Daily Geometric Mean:		col/100mL	400	6	9	17	0	0
Monthly Geometric Mean:		col/100mL	200	3	3	4	0	0
TCR: Monthly Average:		ug/L	50	0	0.4	0.4	0	0
Daily Maximum:		ug/L	50	7	6.7	12.5	0	0
Total Ammonia Nitrogen: June 1 - October 31								
Monthly Average:		mg/L	2.0	0.00	0.00	0.01	0	0
Daily Maximum:		mg/L	3.0	0.00	0.00	0.08	0	0
Copper: Monthly Average:		ug/L	20	9.0	7.6	6.7	0	0
Phosphorus: May 1 - Oct 31								
Monthly Average:		mg/L	1.0	--	0.00	0.00	0	0
Acute Toxicity: Daily Minimum:		%	≥100	*N/A	*N/A	> 100	0	0
Chronic Toxicity: Daily Minimum:		%	≥62.5	*N/A	*N/A	25	1	1

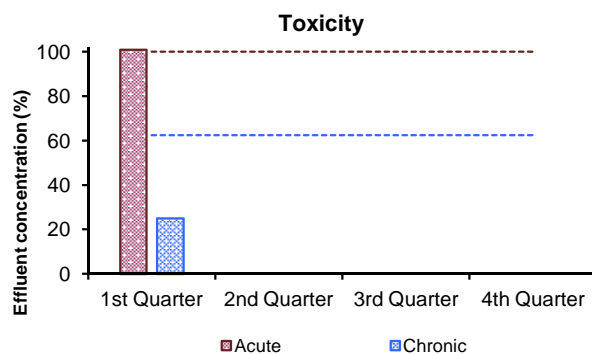
There has been one permit violation in FY15 at the Clinton Treatment Plant.

1st Quarter: There was one permit violation in the 1st Quarter of FY15. In September 2014, the chronic toxicity was 25%, which is below the permit minimum of 62.5%.

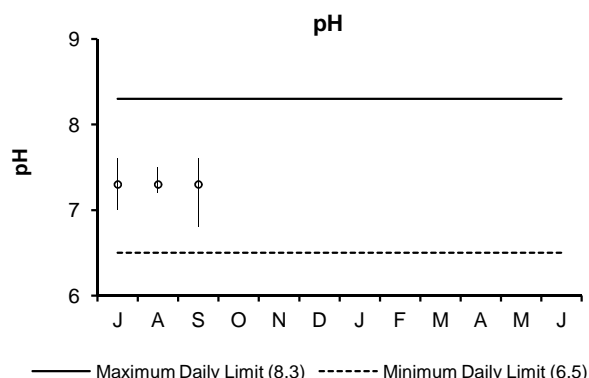
*Toxicity testing at the Clinton Treatment Plant is conducted on a quarterly basis.



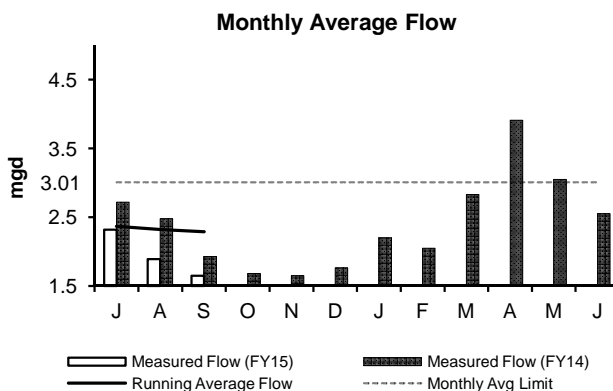
The 1st Quarter's monthly average and daily maximum concentrations were below the permit limits. The monthly average and daily maximum limits for the 1st Quarter are 10.0 mg/L and 35.2 mg/L respectively. The permit limits are most stringent from June to October when warm weather conditions are most conducive 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. The chronic toxicity was below the permit minimum, possibly due to the river control samples performing better than is typical. Therefore there was a permit violation in September 2014.



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 below the NPDES permit limit.

COMMUNITY FLOWS AND PROGRAMS

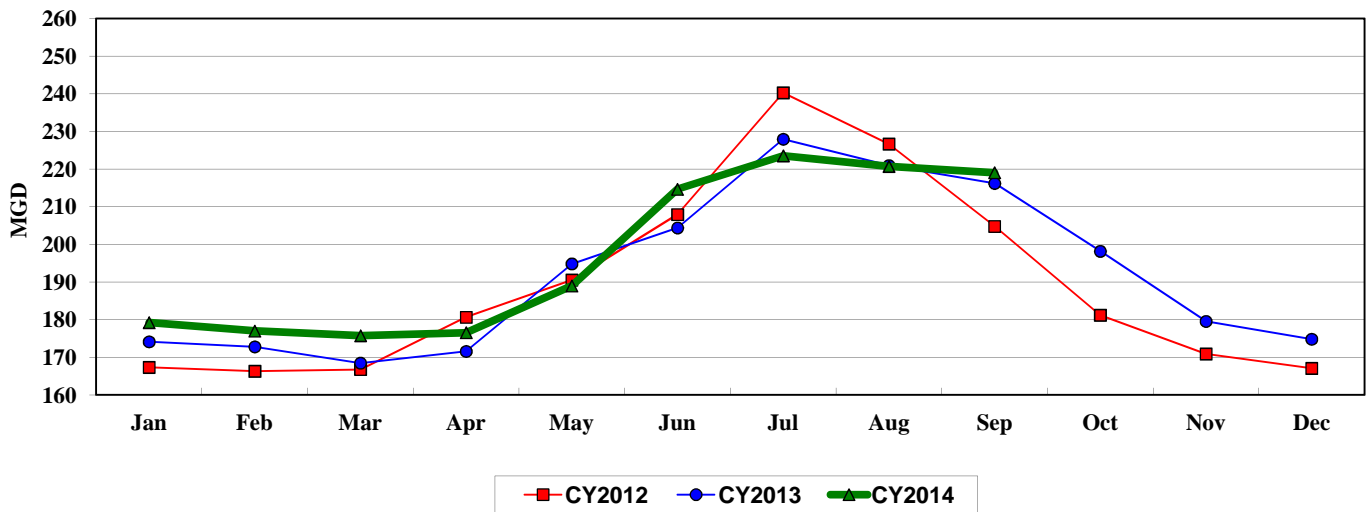
Total Water Use: MWRA Core Customers Water Supplied 1st Quarter - FY15

MWRA Water Supplied: All Revenue Customers

MGD	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
CY2012	167.323	166.293	166.754	180.645	190.542	207.946	240.313	226.681	204.802	181.186	170.881	167.060	189.307
CY2013	174.117	172.782	168.462	171.569	194.838	204.384	227.963	220.962	216.216	198.168	179.548	174.814	192.133
CY2014	179.212	176.987	175.736	176.536	188.974	214.660	223.544	220.734	219.070	0.000	0.000	0.000	197.428

MG	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
CY2012	5,187.018	4,822.495	5,169.362	5,419.336	5,906.792	6,238.376	7,449.711	7,027.100	6,144.072	5,616.755	5,126.421	5,178.864	69,286.302
CY2013	5,397.612	4,837.906	5,222.328	5,147.061	6,039.966	6,131.507	7,066.855	6,849.826	6,486.467	6,143.217	5,386.450	5,419.236	70,128.430
CY2014	5,555.575	4,955.629	5,447.807	5,296.068	5,858.182	6,439.790	6,929.849	6,842.752	6,572.085	0.000	0.000	0.000	53,897.738

MWRA Water Supplied: All Revenue Customers



The September 2014 Community Water Use Report recently distributed to communities served by the MWRA waterworks systems. 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 2014 water use will be used to allocate the FY16 water utility rate revenue requirement.

September 2014 water supplied of 219.1 mgd (for revenue generating users) is up 2.9 mgd or 1.3% compared to September 2013. This includes 0.389 mgd supplied to the Town of Hudson and 1.2 mgd supplied to the Dedham-Westwood Water District (DWWD). DWWD has been experiencing delays in work on one of their wells, creating a local supply deficit.

The City of Cambridge used MWRA water from September 2013 to June 2014.

Including the water supplied to Cambridge, Hudson and DWWD, annual system-wide consumption for CY14 remains higher than CY13 with 197.4 mgd being supplied to MWRA customers **through September**. This is 2.6 mgd higher than CY13, and is an increase of 1.4%.

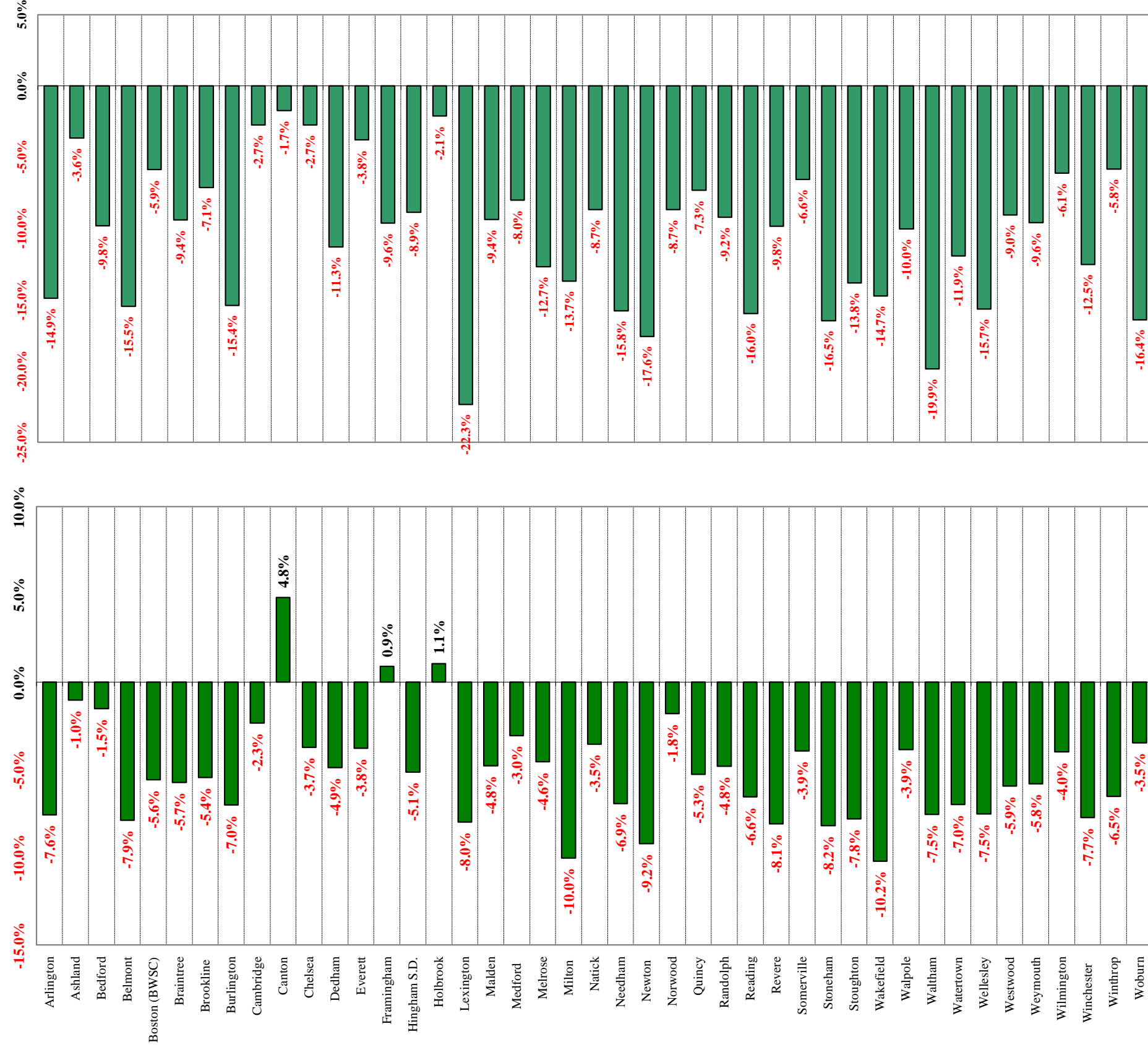
Excluding MWRA water provided to Cambridge, Hudson and DWWD, annual system-wide consumption through September has dropped 0.2 mgd or 0.1%.

Community Wastewater Flows

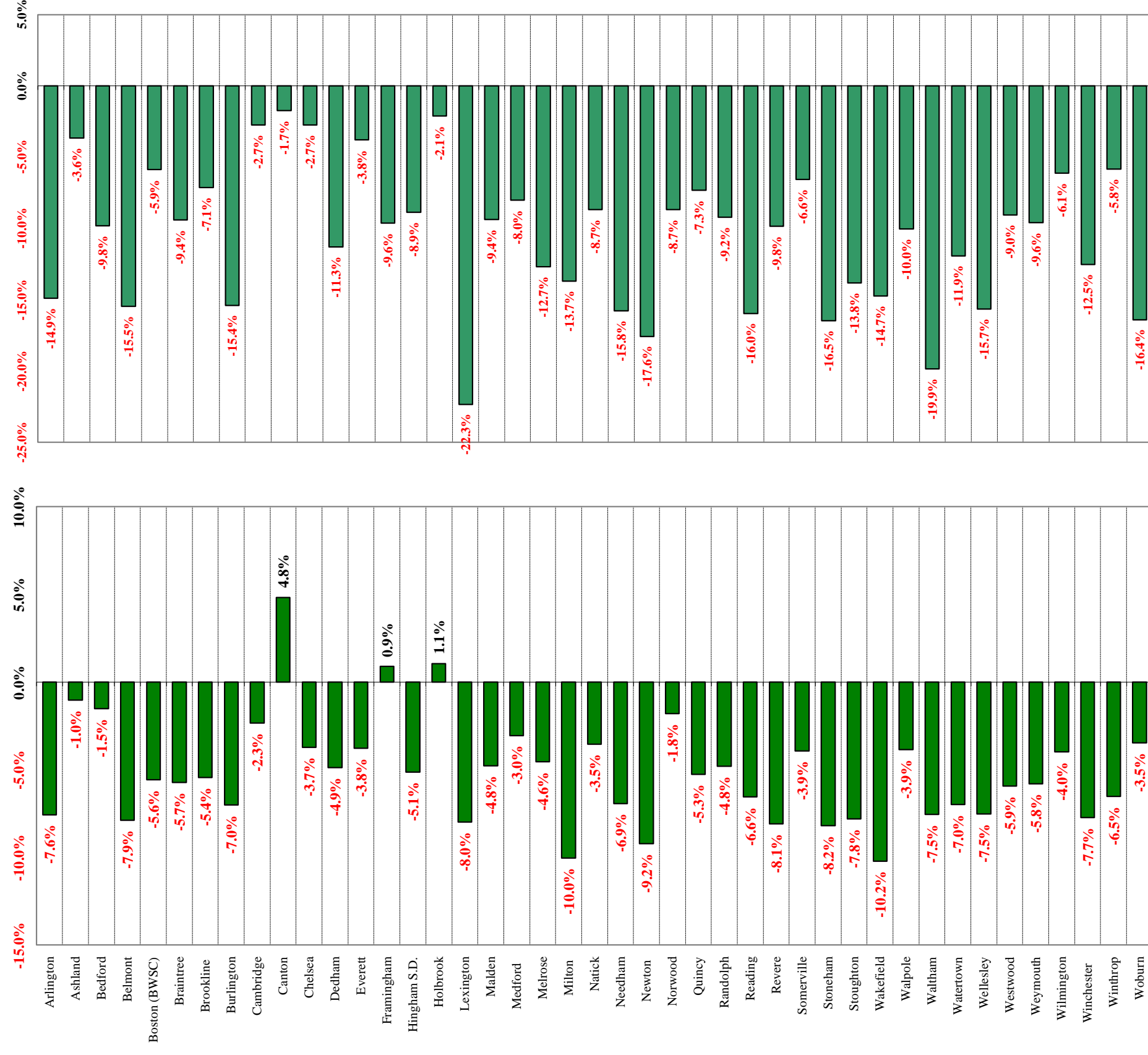
1st Quarter - FY15

The flow components of FY2016 sewer assessments will be calculated using a 3-year average of CY2012 to CY2014 wastewater flows compared to FY2015 assessments that used a 3-year average of CY2011 to CY2013 wastewater flows.

Change in Average Flow

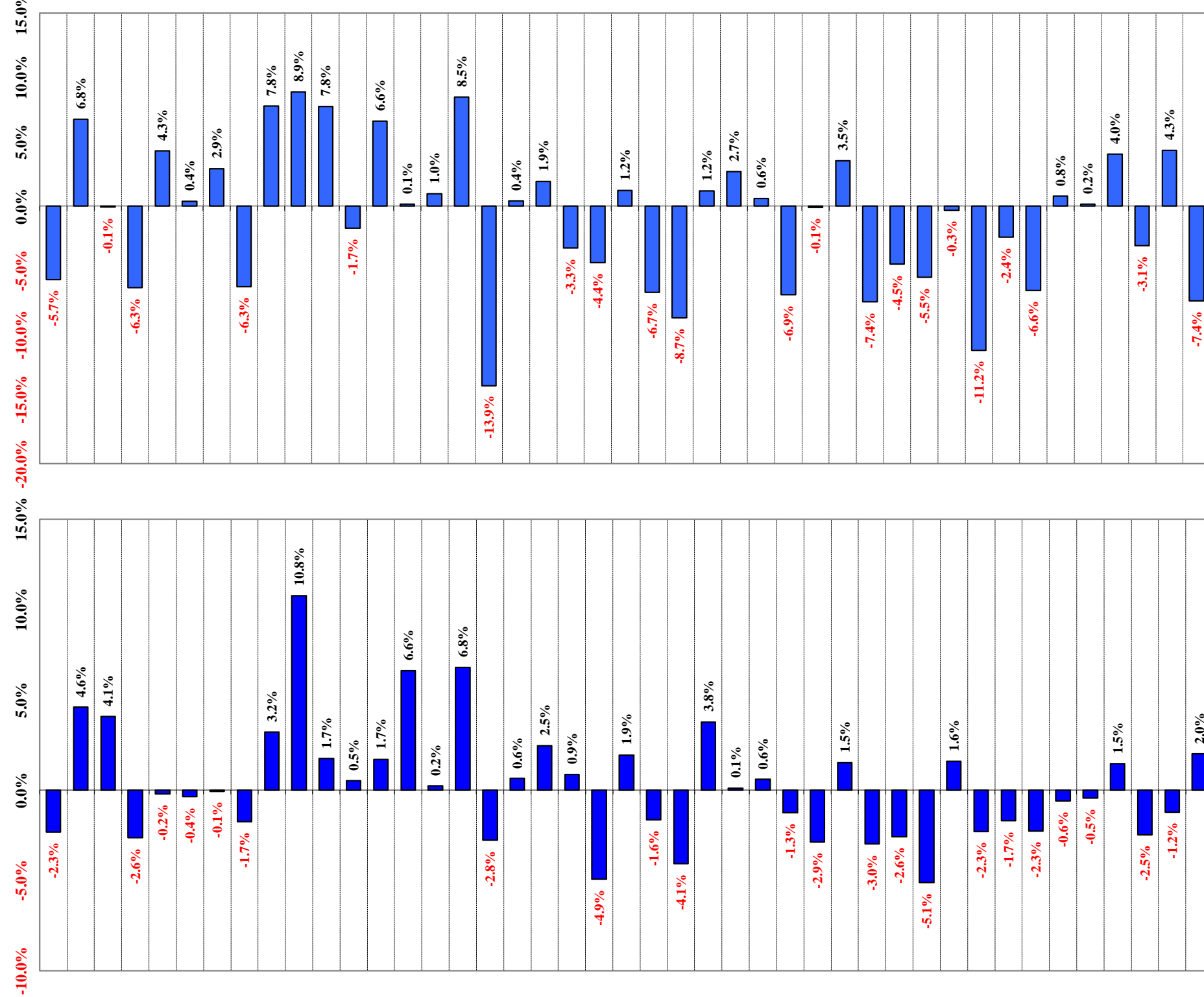


Change in Max. Month Flow

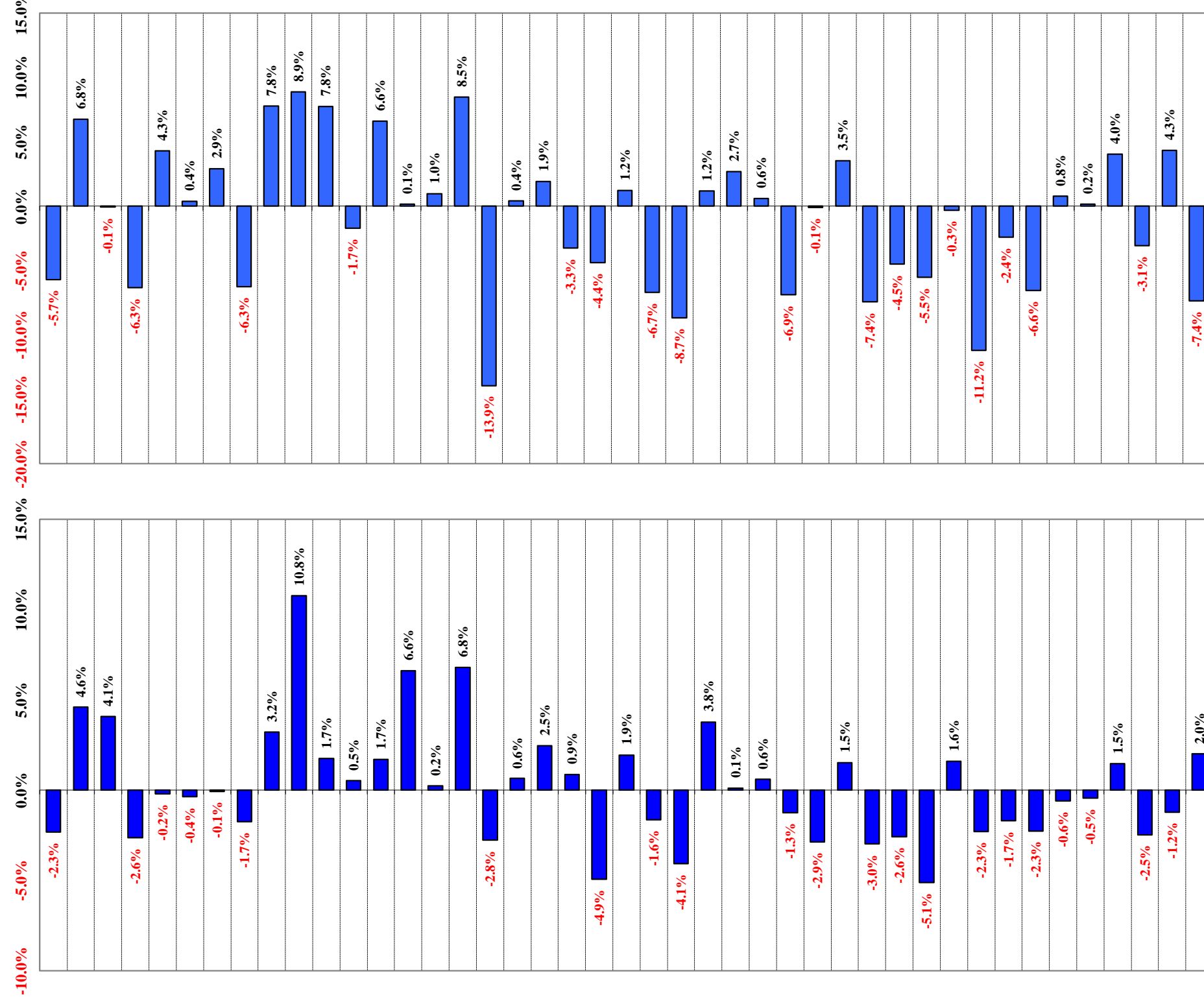


But as MWRA's sewer assessments are a ZERO-SUM calculation, a community's assessment is strongly influenced by the RELATIVE change in CY2012 to CY2014 flow share compared to CY2011 to CY2013 flow share, compared to all other communities in the system.

Change in Average Flow Share

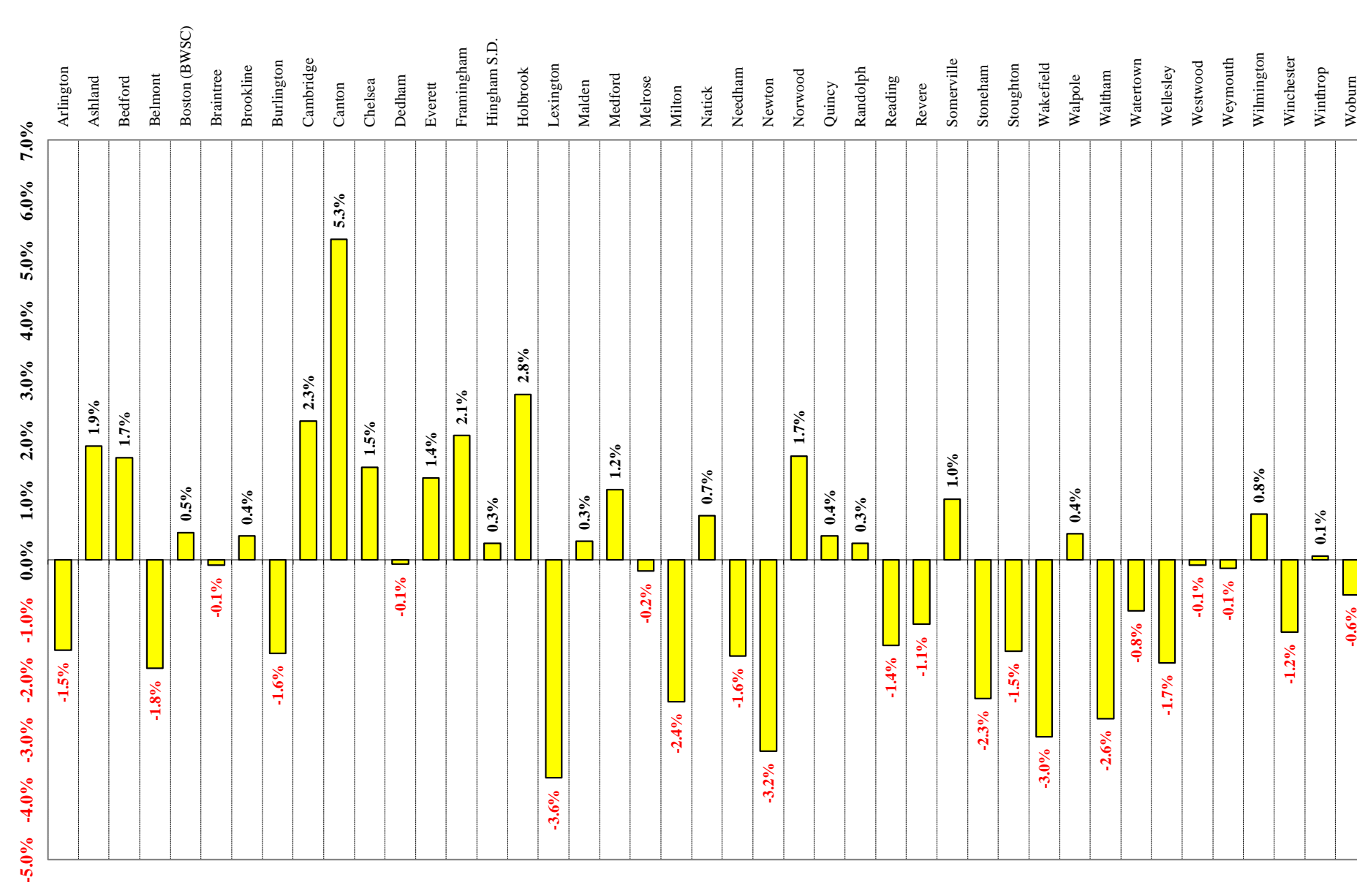


Change in Max Month Flow Share



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

Assessment Impact Due to Change in Flow Share



How Projected CY2014 Community Wastewater Flows Could Effect FY2016 Sewer Assessments ^{1,2,3}

Notes:

¹ MWRA uses a 3-year flow average to calculate sewer assessments. Three-year averaging smoothes the impact of year-to-year changes in community flow share, but does not eliminate the long-term impact of changes in each community's relative contribution to the total flow.

² Based on CY2011 to CY2014 average wastewater flows as of 09/30/14. Flow data is preliminary and subject to change pending additional MWRA and community review.

³ CY2011 to CY2013 wastewater flows based on actual meter data. CY2014 flows based on actual meter data for January to August and projected flows for September to December.

⁴ Represents ONLY the impact on the total BASE assessment resulting from the changes in average and maximum wastewater FLOW SHARES.

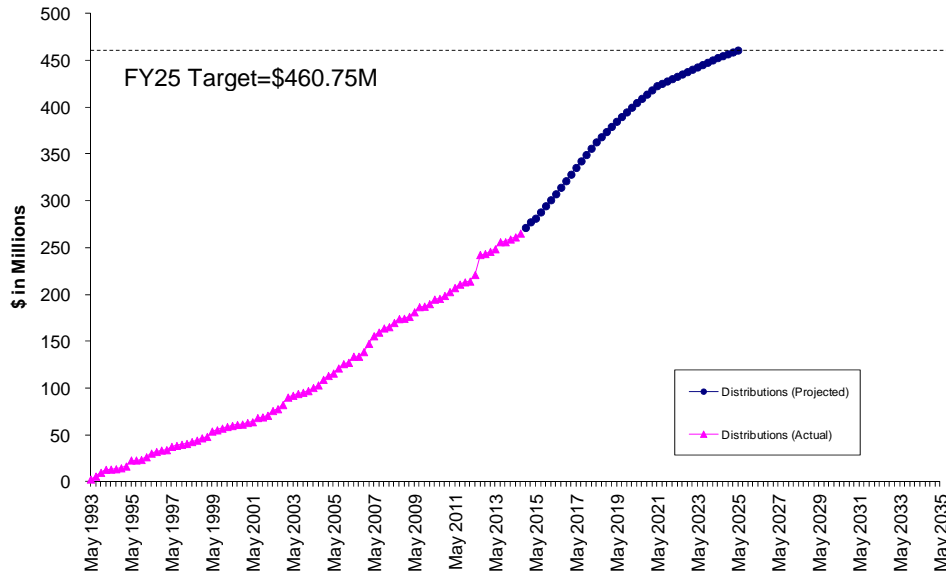
Community Support Programs

1st Quarter – FY15

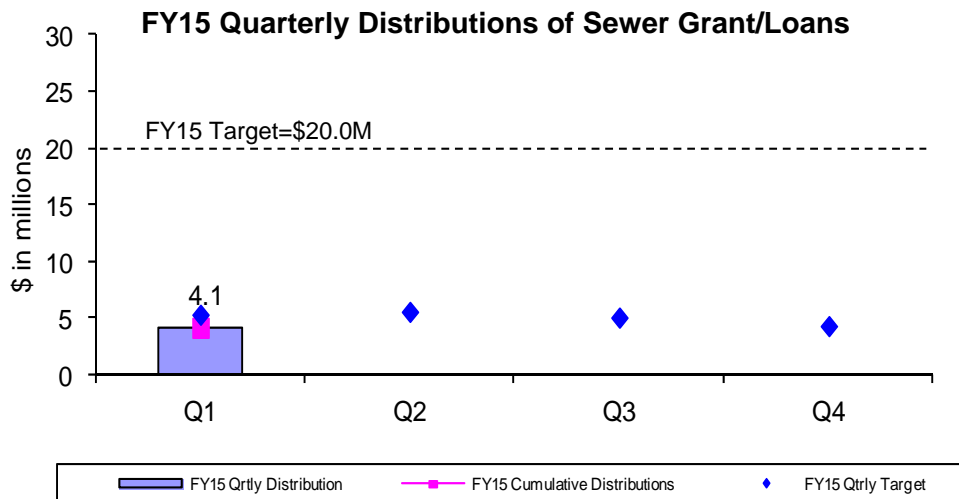
Infiltration/Inflow Local Financial Assistance Program

MWRA's Infiltration/Inflow (I/I) Local Financial Assistance Program provides \$460.75 million in grants and interest-free loans (average of about \$14 million per year from FY93 through FY25) 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. Phase 1-8 funds (total \$300.75 million) were distributed as 45% grants/55% loans with interest-free loans repaid to MWRA over a five-year period. Phase 9 and 10 funds (total \$160 million) are distributed as 75% grants and 25% loans with interest-free loans repaid to MWRA over a ten-year period.

I/I Local Financial Assistance Program Distribution FY93-FY25



During the 1st Quarter of FY15, \$4.1 million in financial assistance (45% grants and 55% interest-free loans) was distributed to fund local sewer rehabilitation projects in Newton and Quincy. Total grant/loan distribution for FY15 is \$4.1 million. From FY93 through the 1st Quarter of FY15, all 43 member sewer communities have participated in the program and more than \$265 million has been distributed to fund 461 local I/I reduction and sewer system rehabilitation projects. Distribution of the remaining funds has been approved through FY25 and community loan repayments will be made through FY36. All scheduled community loan repayments have been made.



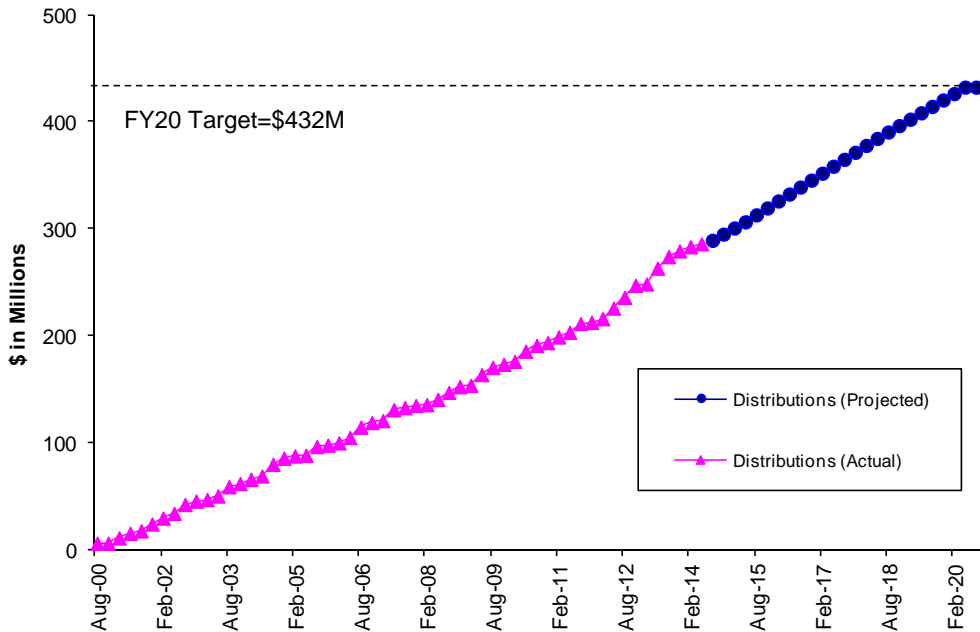
Community Support Programs

1st Quarter – FY15

Water Local Pipeline and Water System Assistance Programs

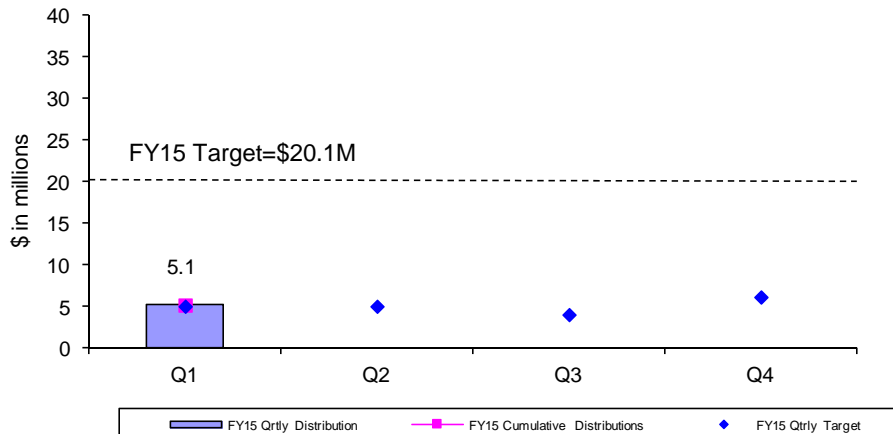
MWRA's Local Pipeline and Water System Assistance Programs (LPAP and LWSAP) provide \$432 million in interest-free loans (an average of about \$22 million per year from FY01 through FY20) to member water communities to perform water main rehabilitation projects within their locally-owned water distribution 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. The Phase 1 - LPAP concluded in FY13 with \$222 million in loan distributions. The Phase 2 - LWSAP continues through FY20.

Local Pipeline and Water System Assistance Programs Distribution FY01-FY20



During the 1st Quarter of FY15, \$5.1 million in interest-free loans was distributed to fund local water projects in Bedford, Lynnfield, Melrose, Norwood, Saugus, Somerville, Waltham and Weston. Total loan distribution for FY15 is \$5.1 million. From FY01 through the 1st Quarter of FY15, more than \$290 million has been distributed to fund 335 local water system rehabilitation projects in 38 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.

FY15 Quarterly Distributions of Water Loans

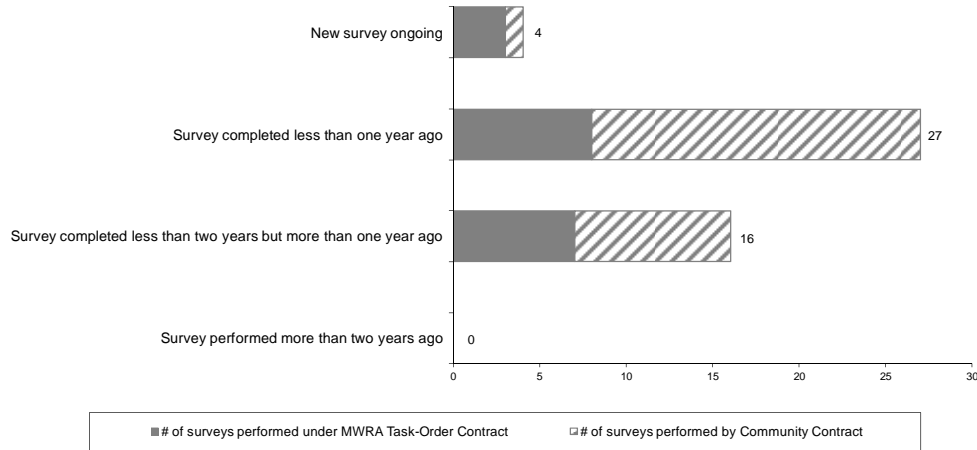


Community Support Programs

1st Quarter – FY15

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 FY15, 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.

	Annual Target	Q1	Q2	Q3	Q4	Annual Total
Educational Brochures	100,000	18,484				18,484
Low-Flow Fixtures (showerheads and faucet aerators)	10,000	6,382				6,382
Toilet Leak Detection Dye Tablets	-----	5,041				5,041

BUSINESS SERVICES

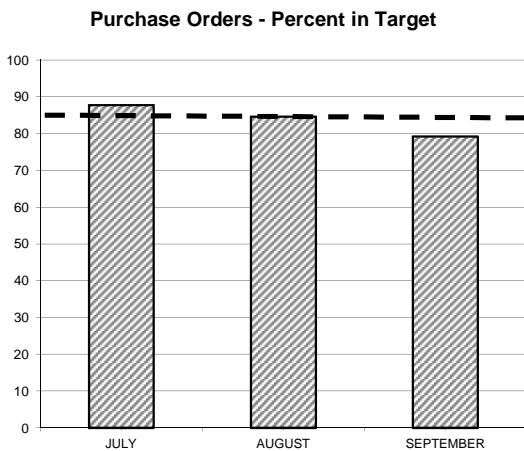
Procurement: Purchasing and Contracts

1st Quarter, FY15

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

Outcome: Processed 84% of purchase orders within target; Average Processing Time was 6.71 days vs. 8.42 days in Qtr 1 of FY14. Processed 62% (8 of 13) contracts within target timeframes; Average Processing Time was 118 days vs. 205 days in Qtr 1 of FY14.

Purchasing



	No.	TARGET	PERCENT IN TARGET
\$0 - \$500	1106	3 DAYS	83.0%
\$500 - \$2K	918	7 DAYS	89.6%
\$2K - \$5K	153	10 DAYS	63.3%
\$5K - \$10K	92	25 DAYS	76.0%
\$10K - \$25K	64	30 DAYS	79.6%
\$25K - \$50K	16	60 DAYS	50.0%
Over \$50K	22	90 DAYS	90.9%

The Purchasing Unit processed 2371 purchase orders, 36 more than the 2407 processed in Qtr 1 of FY14 for a total value of \$8,165,078 versus a dollar value of \$9,951,080 in Qtr 1 of FY14.

The purchase order processing target was not met for the \$0 - \$500 category due to end user price clarifications; the \$2k - \$5k due to end user confirmations; the \$5k - \$10k due to insurance issues and vendor sourcing; the \$10k-\$25k due to end user confirmation and specification development and the \$25k - \$50k due to contract expiration timeframes.

Contracts, Change Orders and Amendments

Five contracts were not processed within target timeframes. Reasons included: a contract held until services were needed; multiple revisions to specifications; bid withdrawal by a low bidder; delays in receipt of insurance certificates from successful bidders; and a lengthy qualification process of an apparent low bidder.

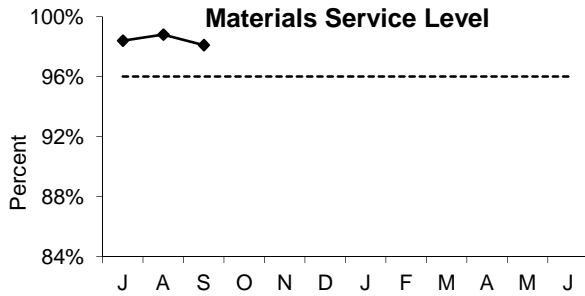
Procurement processed thirteen contracts with a value of \$7,334,622 and five amendments with a value of \$1,427,513.

Twenty three change orders were executed during the period. The dollar value of all non-credit change orders during Q1 FY15 was \$877,162 and the value of credit change orders was (\$341,825).

Staff reviewed 57 proposed change orders and 15 draft change orders.

Materials Management

1st Quarter, FY15



The service level is the percentage of stock requests filled. The goal is to maintain a service level of 96%. Staff issued 7,945 (98.5%) of the 8,070 items requested in Q1 from the inventory locations for a total dollar value of \$1,149,678.

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 FY15 goal is to reduce consumable inventory from the July '14 base level (\$7.7 million) by 2.0% (approximately \$154,987), to \$7.5 million by June 30, 2015 (see chart below).

Items added to inventory this quarter include:

- Deer Island – pressure switches, pilot mixer and tubing for I&C; sealants for HVAC; fluorescent lamps for Electrical.
- Chelsea – brake adapters, trailer connector, sensors, shocks, air flow sensors, brake calipers, compressor, probes, battery gloves and fuses for VMM; submersible pump, circuit breaker, mechanical seals, pipe straps and air filters for Work Order Coordination Group; calibrators for Metering.
- Southboro – gaskets, mortar and grout bags for Maintenance; oil, rotors, brake pads and gas caps for Fleet Services.

Property Pass Program:

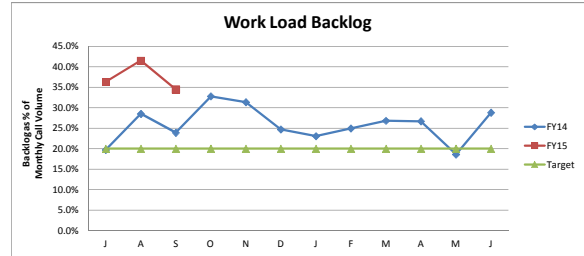
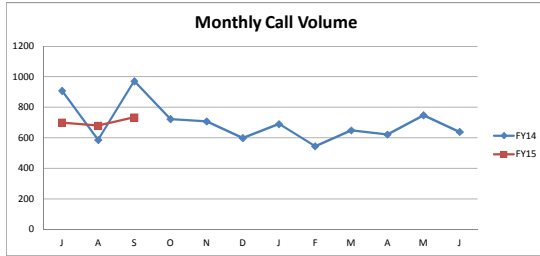
- Audits were conducted at HVAC, Metering and Chelsea grounds tool bags during Q1.
- Numerous obsolete monitors, computers, printers, scanners, keyboards, mice, fax machines and servers have been received into property pass as surplus. Disposition is being handled as part of our ongoing recycling efforts.
- Scrap revenue received for Q1 amounted to \$29,811.
- Revenue received from online vehicle auction held during Q1 amounted to \$17,899.

Items	Value of Cumulative New Adds	Current Value w/o Cumulative New Adds	Reduction / Increase To Base
Consumable Inventory Value	41,044	7,883,028	133,671
Spare Parts Inventory Value	31,304	7,963,556	604,864
Total Inventory Value	72,348	15,846,584	738,535

Note:

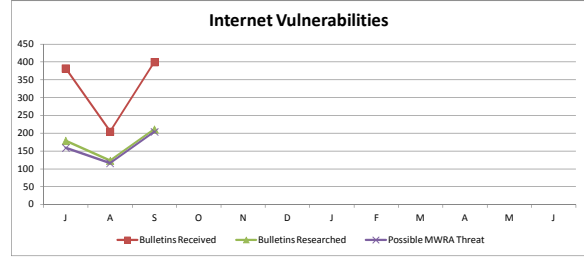
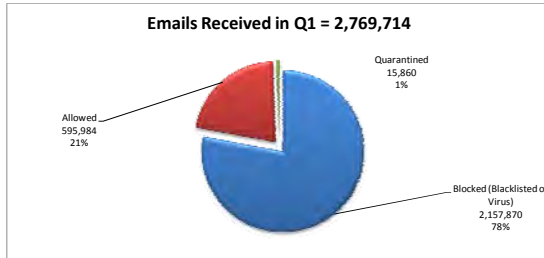
New adds are items added at an inventory location for the first time for the purpose of servicing a group/department to meet their business needs/objectives.

MIS Program 1st Quarter FY15



Performance:

Call Volume: Peaked in September. FY15-Q1 call volume decreased by 14% from FY14-Q1 last year. **Call Backlog:** Peaked in August. FY15-Q1 backlog average is 17% above the targeted benchmark of 20%. (Rise in backlog is due to a 20% reduction in TSA and Helpline staff due to vacations and sick time and an increase in project work, the Windows7/PC rollout.)



Information Security:

During Q1, staff pushed security fixes and updates to desktops and servers throughout the quarter in order to protect against 220 vulnerabilities.

LANDesk Antivirus quarantined 29 distinct viruses from 31 MWRRA computers. MWRRA's systems are current with anti-virus providers' signatures for all known malware.

Infrastructure:

Windows 7 Upgrade Project: Rollout is almost complete with some remote sites and unique cases remaining. A total of 878 PCs were upgraded, 436 in-lace upgrades and 442 replaced. This brings all PCs that have access to the internet up to Windows 7.

Citrix Mobile Application Design and Development: Access to several in house applications were made available in the internal App Store. A pilot program of fifteen (15) iPhones was implemented for testing, user feedback and proof of concept. New control policies impacting logins and PIN numbers were set up for Executive, user and test groups. An IntraSystems consultant worked onsite with IT staff to successfully upgrade WorxHome to v9. IT staff training was held onsite.

Applications/Training/Records Center:

Strategic Sourcing and Contract Management: Training was held for Contract Managers and Deputy Contract Managers who manage professional services and construction contracts. The production Landmark application environment, Strategic Sourcing, Contract Management and Supplier Portal modules system were successfully upgraded. Staff worked on the data migration of open and closed contracts including mapping 15-yr-old Mitchell-Humphries accounts that were never migrated to Lawson. Conversion accounts were provided by the users to assist in the conversion. Contract adjustments and retainage routines were incorporated into the contract card report for legacy contracts. Staff reviewed fixes that will be delivered in the Landmark Procurement 9.1.1 Critical Update 3 (CU3) patch and are scheduling an install of the new patch.

Miscellaneous Lawson Support: (1) FY End Support - Loaded mutual aid donation files for union employees. Received sick buy back file from Payroll and processed for eligible employees. (2) Union Contract Implementation and Non-Union pay rate increases - Worked with HR on pay increases and retro payments for all Non-Union and Unit 2 and 9 employees. (3) Business Continuity/Disaster Recovery Support - MIS and Treasury Staff ran a successful 'live' payroll check run at Deer Island using the new C-Series software. This run was the first live full run using the upgraded software and is part of our periodically scheduled tasks for testing/ensuring business continuity. (4) New Affirmative Action Reports - The U.S. Department of Labor requires six new reports; two are due by November 30th, 2014; the rest are due in 2015. Staff completed the reports due in November and the Affirmative Action Department is reviewing them. The completed reports focus on veteran and handicapped applicants. The specifications were forwarded to Infor/Lawson as an enhancement request to include in a future release.

Community Contacts Upgrade: The application was rolled out initially in 2010 to manage community contact information and send email notifications with attachments to specific community contacts. The contact information is uploaded daily to the MWRRA Reverse 911 database for emergency notifications via phone calls. Rolled out the new version following signoff from users. Enhancements included adding additional new reports, streamlining the attachment process, automating screen resolution changes for various devices, and improving the application navigation allowing for "bread crumb" forward and backward navigation.

Tellog: Installed the latest versions for TELOG Enterprise and Real time modules in production. Work, including system design and business rules, on a new Web and SQL Server reporting application began. This project will eliminate an unsupported legacy reporting tool and use current MWRRA standard database programming tools allowing for efficient maintenance and support.

Electronic Laboratory Notebook (ELN): The ELN project kicked off at DITP. ELN is integrated with the Laboratory Information Management System (LIMS) and will replace all paper based logbooks with an electronic equivalent. ELN is being implemented at all Department of Laboratory Services locations.

PIMS: The client server installs for PIMS has been eliminated by moving all TRAC users onto the Remote Desktop Connection server. This change fixed many issues TRAC users were having trying to log onto PIMS.

Library & Records Center: The Library completed 40 research requests, cataloged 69 books and reports, and provided 54 articles and standards as needed. New services evaluated for automatically generating and emailing staff topic based articles (143 YTD). The Records Center added 245 boxes, conducted 2 training sessions for 5 staff, and attended 2 Records Conservation Board Meetings.

IT Training: 153 staff attended 13 classes and 13 workshops. 13% of the workforce has attended at least one class year-to-date. 107 staff attended Windows 7 training held at the Chelsea, Charlestown, Southborough, CWTP, and Deer Island facilities. Information Technology Infrastructure Library (ITIL - the most widely accepted approach to IT service management in the world) training was offered in Q1 to a third round of MWRRA staff to support standardization of IT services at the MWRRA.

Legal Matters

1st Quarter- FY15

PROJECT ASSISTANCE

COURT AND ADMINISTRATIVE ORDER

- **Boston Harbor Litigation and CSO:** Filed quarterly compliance and progress report with Court on September 15, 2014; Filed update re: progress between Cambridge and owners of Fresh Pond Mall regarding access to site to complete sewer separation project.
- **NPDES:** Reviewed and edited draft SOP for proposed gates at influent channels to Clinton Wastewater Treatment Plant; drafted comments on the United States Environmental Protection Agency's and Army Corps of Engineers' proposed rule related to the definition of "waters of the United States" under the Clean Water Act.

REAL ESTATE, CONTRACT AND OTHER SUPPORT

- **Fox Point CSO Facility:** Conveyed Fox Point CSO facility to IBEW Local 103 Educational Corporation and recorded Release of Easement located on IBEW land abutting the Fox Point CSO facility.
- **Fore River Railroad/Fore River:** Drafted legislation for release of easement by MWRA in the Fore River Shipyard as it relates to an easement swap between Quincy Shipyard and MWRA/FRRC for railroad purposes; completed agreement between Fore River Railroad and Railpod regarding track inspection.
- **Deer Island PPA:** Finalized a Consent to an assignment from Broadway Electric Company Inc. to Nexamp Deer Island I, LLC; reviewed the assignment and assumption agreement; revised the Letter of Credit required to provide de-commissioning security.
- **Watershed Acquisition:** Reviewed and approved the proposed acquisition of a fee interest in the DeNubila Property - W0034 in Princeton, MA., and for a WPR on the Lockhart/Block property in Petersham, # W-00110. Finalized approval of Capa Corp. watershed parcel acquisition.
- **Great Esker Park:** Recorded Order of Conditions DEP File #81-1150 for Great Esker Park; Recorded Chapter 91 license for Great Esker Park in Weymouth related to Order of Conditions for IPS/Great Esker Park.
- **Waste Water Energy Recovery Pilot Program:** Provided staff with drafts of Pilot Program Agreements with Wentworth Institute of Technology and Huber Technologies, Inc. for the Waste Water Energy Pilot Program.
- **Miscellaneous Licenses:** Drafted amendment extending license for dog park located on a parcel of land which is part of the Columbus Park Headworks property; drafted a License for Entry for the Petrilli and Shapiro cancer walk/runs at Deer Island.
- **Dept of Homeland Security Regulations:** Reviewed and determined that "public water systems" are not subject to the Dept. of Homeland Security - Chemical Facility Anti-Terrorism Standards at 6 CFR 27.
- **TRAC Regulations:** Drafted guidance on requirements for the "Small Business Impact Statement" for submittal to the Secretary of State.
- **Annual Audit:** Completed review of litigation contingencies and provided reports of pending and completed cases for FY 2014 to A&F for KPMG.
- **Charlestown Wind Turbine:** Had communications with AMSC and U.S. District Court (Wisc.) re: Sinovel assertions regarding Charlestown Wind Turbine software change-over; completed all licensing and related agreements with AMSC re: software change-over.
- **Construction Contractor Claim:** Reviewed and made a recommendation on two (2) construction contractor claims.

MISCELLANEOUS

- Reviewed and approved forty-seven (47) Section 8(m) Permits.
- Finalized contract for four (4) donated Toyota vehicles.

LABOR, EMPLOYMENT AND ADMINISTRATIVE

New Matters

One demand for arbitration was filed.

A Charge was filed at the Massachusetts Commission Against Discrimination alleging that the MWRA discriminated against an employee on the basis of race, gender, national origin, retaliation and age.

A Charge was filed at the Massachusetts Commission Against Discrimination alleging that the MWRA discriminated against an employee on the basis of gender and retaliation.

A Charge was filed at the Massachusetts Commission Against Discrimination alleging that the MWRA discriminated against an employee on the basis of disability.

Matters Concluded

Received an arbitrator's decision in favor of MWRA finding that the MWRA did not violate Article 13 of a collective bargaining agreement when it did not supply the grievant with a non-selection form.

The Superior Court found that an arbitrator's decision concerning a promotional process provided a remedy that was beyond the arbitrator's authority. The court returned the case to the arbitrator for consideration of the appropriate remedy.

LITIGATION/TRAC

New Matters

During the First Quarter of FY 2015, no new lawsuits were received.

Significant Developments

Dow v. MWRA: MWRA served a Motion for Summary Judgment in March, 2014. Dow responded with a Cross-Motion for Summary Judgment and a Motion to Compel Production of Documents. The Court heard oral argument on the Motion to Compel on July 14, 2014, and on July 24, 2014, the Court ruled granting it in part and denying it in part. The Court has postponed oral argument on the Summary Judgment Motion; it is now scheduled for Monday, November 24, 2014.

Salvador Tejada v. Patnod Trucking, Barletta Co., Inc., and MWRA: Salvador Tejada was a truck driver for Patnod Trucking, a subcontractor to Barletta Engineering on MWRA Contract 6975, the Hultman Aqueduct Interconnections Project. Mr. Tejada was injured when the dump truck he was driving overturned at the work site. Mr. Tejada has alleged medical expenses of more than \$37,134.58, lost wages and compensation, permanent disability and pain and suffering. Barletta's insurer, Travelers, has accepted MWRA's tender of its defense in this matter. MWRA has filed cross-claims against co-defendant Patnod Trucking for indemnification and for failure to obtain required insurance. The entire case has been stayed as a result of the bankruptcy of co-defendant Patnod Trucking. The Superior Court has scheduled a status conference for October 20, 2014.

Matters Concluded

No cases closed during the First Quarter FY 2015.

Significant Claims Not in Suit:

Agostinho Braiani – Personal Injury Claim: This matter is a former Risk Management matter not yet in litigation concerning a personal injury claim arising out of a motor vehicle accident. The motor vehicle accident occurred on May 19, 2013 in the Deer Island parking lot, where an MWRA employee, driving an MWRA vehicle, struck a parked vehicle while backing up. Claimant Agostinho Braiani, an employee of SJ Services, the cleaning contractor for Deer Island, was standing beside the SJ Services vehicle when it was hit and he allegedly sustained injuries when the SJ Services vehicle struck him. Risk Management recently received a package of medical documents along with a demand for \$250,000 for personal injuries.

Antonio Rosa – Personal Injury Claim: This matter is a former Risk Management matter concerning a personal injury claim arising out of a motor vehicle accident. The accident occurred when an MWRA truck, operated by an MWRA employee, struck Antonio Rosa who was on a bicycle at the intersection of Griffin Way and Eastern Avenue, Chelsea, MA on November 22, 2013. No demand has been received nor litigation threatened, but Mr. Rosa does have legal representation and the MWRA has received a notice of lien from a medical provider.

Subpoenas

During the First Quarter of FY 2015, two new subpoenas were received and no subpoenas were pending at the end of the First Quarter FY 2015.

Public Records

During the First Quarter of FY 2015 three public records request were received and four public records requests were closed.

SUMMARY OF PENDING LITIGATION MATTERS

TYPE OF CASE/MATTER	As of Sept 2014	As of June 2014	As of March 2014
Construction/Contract/Bid Protest (other than BHP)	4	4	5
Tort/Labor/Employment	5	5	5
Environmental/Regulatory/Other	1	1	1
Eminent Domain/Real Estate	0	0	0
total – all defensive cases	10	10	11
Affirmative cases not in suit:	0	0	1
Other Litigation matters (restraining orders, etc.) <u>MWRA v. Thomas Mercer</u>	1	1	1
total – all pending lawsuits	11	11	13
Significant claims not in suit: <u>Deer Island Submarine Power Cable</u> <u>Braiani, Agostinho</u> <u>Rosa, Antonio</u>	3	0	0
Bankruptcy	1	0	1
Wage Garnishment	15	16	17
TRAC/Adjudicatory Appeals	1	1	4
Subpoenas	0	0	0
TOTAL – ALL LITIGATION MATTERS	31	28	35

TRAC/MISC.**New Appeals**

There were no new TRAC appeals received in the 1st Quarter FY 2015.

Settlement by Agreement of Parties**Cookies by Design: MWRA Docket No. 13-17**

An Appeal was received from the Petitioner on July 2, 2013 appealing the Enforcement Order and PAN in the amount of \$1,000 and issued by TRAC on May 13, 2013 for failure to submit its Group Permit Compliance Report by July 2, 2012. In September 2013, it was reported that the parties had settled in principle. By mid-April 2014, no settlement papers had been filed by the parties and a Scheduling Order was issued on April 17, 2014. On July 15, 2014 TRAC counsel submitted a status report stating that a revised proposed settlement had been sent to the Petitioner. A hearing on the merits was scheduled for September 30, 2014. The Petitioner did not appear as both parties had signed a Settlement Agreement prior to the hearing date.

Stipulation of Dismissal

No cases were dismissed by Stipulation of Dismissal, fine waived.

**Notice of Dismissal
Fine paid in full
Tentative
Decisions**

No cases were dismissed by Joint Stipulation of Dismissal with Prejudice, fine paid in full.

No Tentative Decisions were issued in the 1st Quarter FY 2015.

Final Decisions

No Final Decisions were issued during the 1st Quarter FY 2015.

INTERNAL & CONTRACT AUDIT PROGRAM 1st Quarter FY15

Highlights

A final report was issued on Affirmative Action's implementation of the U. S. Department of Labor's Office of Federal Contract Compliance Programs (OFCCP) expansive new regulations requiring government contractors to undertake greater efforts to employ veterans and individuals with disabilities. The following are some of the recommendations made to ensure compliance with the new regulations.

- Adjust contract language to incorporate revised EEO clauses
- Electronically post the EEO IS THE LAW poster on the Intranet and Internet where job announcements and application forms are posted
- Expand the distribution of job announcements to additional organizations
- Conduct a disability self-identification survey of all current employees
- Ensure disability and veteran self-identification forms are furnished to applicants at both the pre- and post offer stages

Status of Open Audit Recommendations (23 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
Warehouse Practices (9/30/10)	1	9
Facility Card Access Controls (2/22/11)	2	18
DITP Data Center Access Controls (10/14/11)	2	20
Chelsea Facility Physical Security (12/31/12)	3	29
Hardware Equipment Management (5/22/13)	9	27
Follow-Up Report on Fleet Services Activities (12/31/13)	4	13
MBE/WBE Program Contracting Goals (3/14/14)	5	5
Dept. of Lab Services Quality Assurance Program (7/11/14)	4	0
Bay State Fertilizer Follow-Up (9/30/14)	1	4
Expanded Affirmative Action Requirements (9/30/14)	<u>7</u>	<u>9</u>
Total Recommendations	38	134

Audit Savings

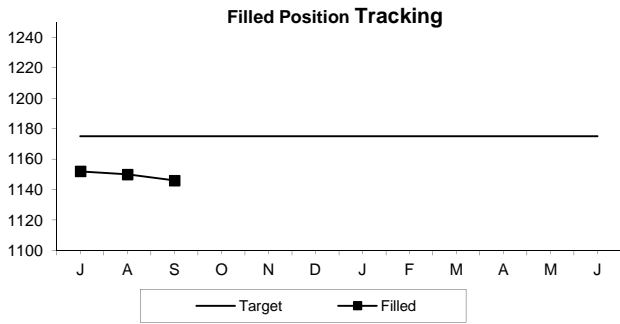
The Internal Audit Department's target is to achieve at least \$1 million in cost savings each year. Cost savings vary each year based upon many factors. In some cases, cost savings for one year may be the result of work in prior years.

Savings	FY11	FY12	FY13	FY14	FY15 (1Q)	TOTAL
Consultants	\$520,176	\$259,245	\$587,314	\$294,225	\$65,381	\$1,726,341
Contractors & Vendors	\$3,129,538	\$435,760	\$2,153,688	\$415,931	\$22,637	\$6,157,554
Internal Audits	\$152,478	\$407,350	\$391,083	\$923,370	\$43,322	\$1,917,603
Total	\$3,802,192	\$1,102,355	\$3,132,085	\$1,633,526	\$131,340	\$9,801,498

OTHER MANAGEMENT

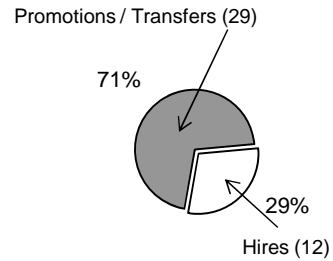
Workforce Management

1st Quarter - FY15



FY15 Target for Filled Positions = 1175
 Filled Positions as of September 2014 = 1146

Positions Filled by Hires/Promotions FY15-YTD

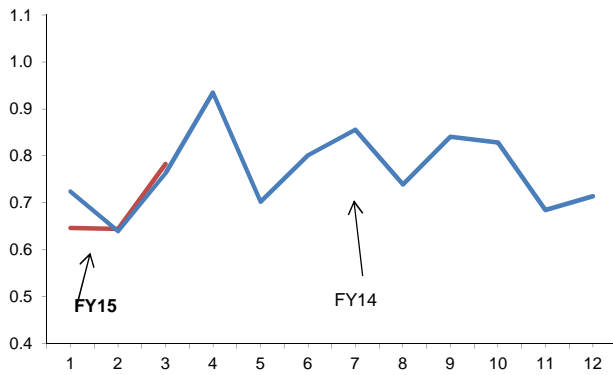


	Pr/Trns	Hires	Total
FY12	42 (61%)	27 (39%)	69
FY13	82 (64%)	47 (36%)	129
FY14	111 (69%)	51 (31%)	162
FY15	29 (71%)	12 (29%)	41

(To Date)

In Q1 of FY15, the average quarterly sick leave usage has decreased 9.14% from the same time last year.

Average Monthly Sick Leave Usage Per Employee

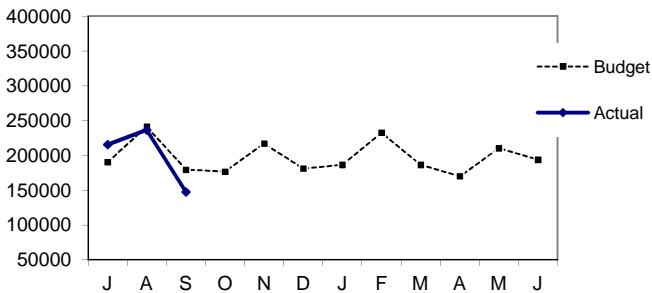


Average monthly sick leave for the 1st Quarter of FY15 decreased as compared to the 4th Quarter of FY14 (9.23 to 8.30 days).

	Number of Employees	YTD	Annualized Total	Annual FMLA %	FY14
A&F	178	2.35	9.40	15.4%	10.18
Aff. Action	6	1.98	7.90	0.0%	11.78
Executive	5	0.99	3.95	0.0%	4.37
Int. Audit	8	1.57	6.27	0.0%	7.46
Law	16	2.63	10.50	11.7%	10.35
OEP	6	5.00	20.00	0.0%	16.14
Operations	925	2.08	8.32	23.5%	8.98
Pub. Affs.	12	1.49	5.95	13.5%	12.21
MWRA Avg	1156	2.07	8.30	22.1%	9.23

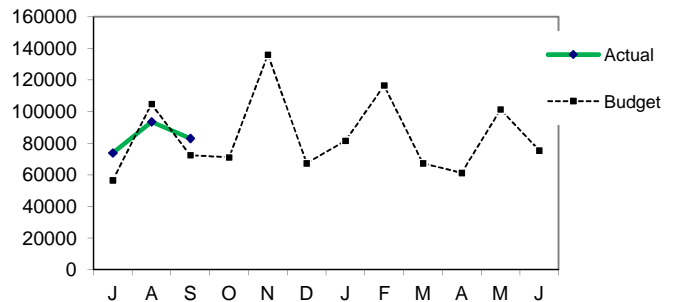
Percent of sick leave usage attributable to Family and Medical Leave Act (FMLA) leave is 22.1% for FY15.

Field Operations Current Month Overtime \$



Total Overtime for Field Operations for the first quarter of FY15 was \$599,687 which is (\$11k) under budget. Emergency overtime was \$240k, which was (\$60k) under budget mainly due to lack of rain events, which totaled \$170k for the quarter. Coverage overtime was \$198k, which was \$32k over budget, due mainly to higher than budgeted shift coverage requirements. Planned overtime was \$161k or \$16k over budget, mainly for off hours work, planned operations, and maintenance work completion.

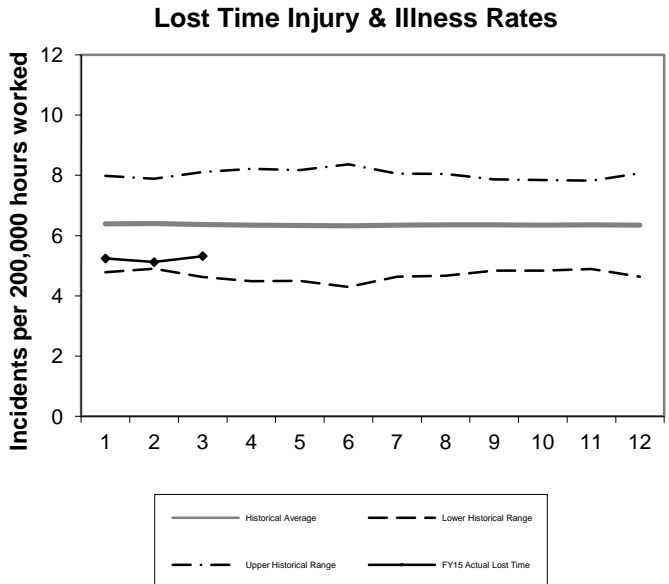
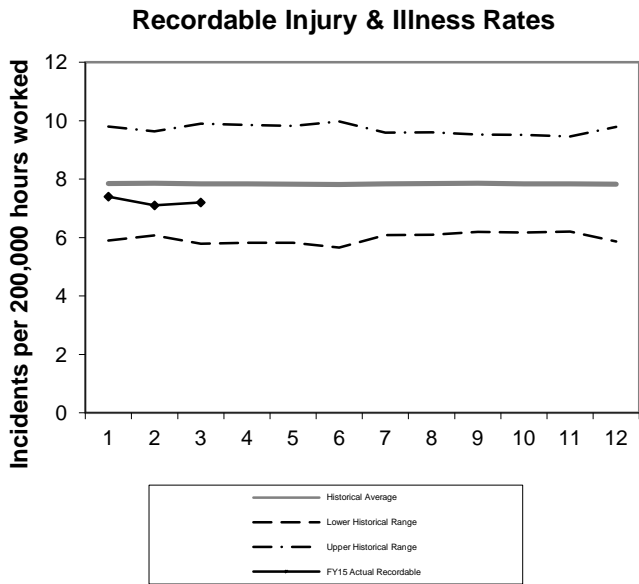
Deer Island Treatment Plant Current Month Overtime \$



Deer Island's total overtime for the first quarter of FY15 was \$251k which is \$17k over budget. Shift coverage overtime was \$114k, which was \$36k over budget mainly due minimum staffing requirements resulting from 3 vacant operator positions. Maintenance overtime was \$96k or \$23k over budget, mainly for off hours work, planned operations, and maintenance work completion. These items are partially offset by lower than budgeted storm coverage requirements, (\$39k).

Workplace Safety

1st Quarter FY15



- 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 FY14. The "Upper" and "Lower Historical Ranges" are computed using these same data – adding and subtracting two standard deviations respectively. FY15 actual incident rates can be expected to fall within this historical range.

Workers Compensation Claims Highlights - First Quarter FY15

	New	Closed	Open Claims
Lost Time	11	15	70
Medical Only	20	21	24
Report Only	21	21	
	New		YTD Light Duty Returns
Light Duty Returns	4		4

Highlights/Comments:

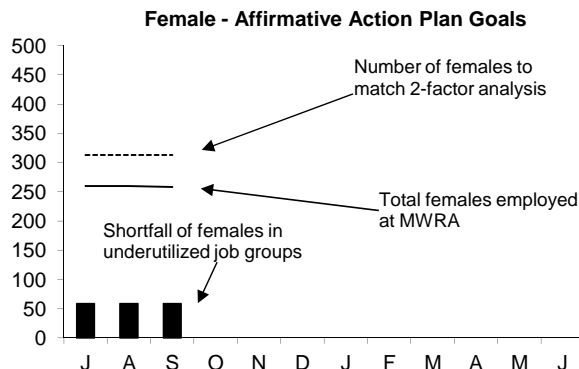
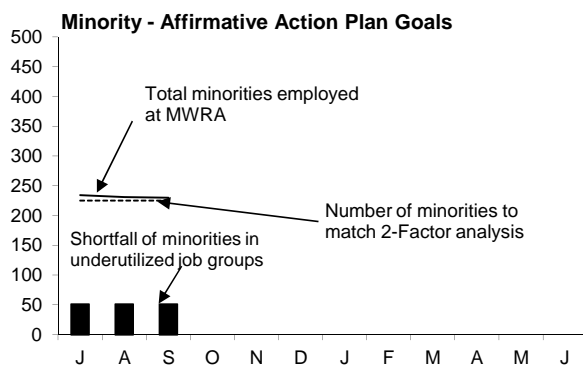
Light Duty Returns

July none
August 2 employees returned to work light duty from IA
Sept 2 employees returned to work light duty from IA
 1 employee went to LD from regular duty due to revised limitations, not considered 'return'

Regular Duty Returns

July 2 employees returned to a work full duty from IA
 1 employee returned to work full duty from light duty
August 2 employees returned to work full duty from IA
Sept none

MWRA Job Group Representation Q1, FY15



Highlights:

At the end of Q1 FY15, 10 job groups or a total of 51 positions are underutilized by minorities as compared to 9 job groups or a total of 41 positions at the end of Q1 FY14; for females 12 job groups or a total of 58 positions are underutilized by females as compared to 14 job groups or a total of 72 positions at the end of Q1 FY14. During Q4, 3 minorities and 1 females were hired. During this same period, 8 minorities and 4 females terminated.

Underutilized Job Groups - Workforce Representation

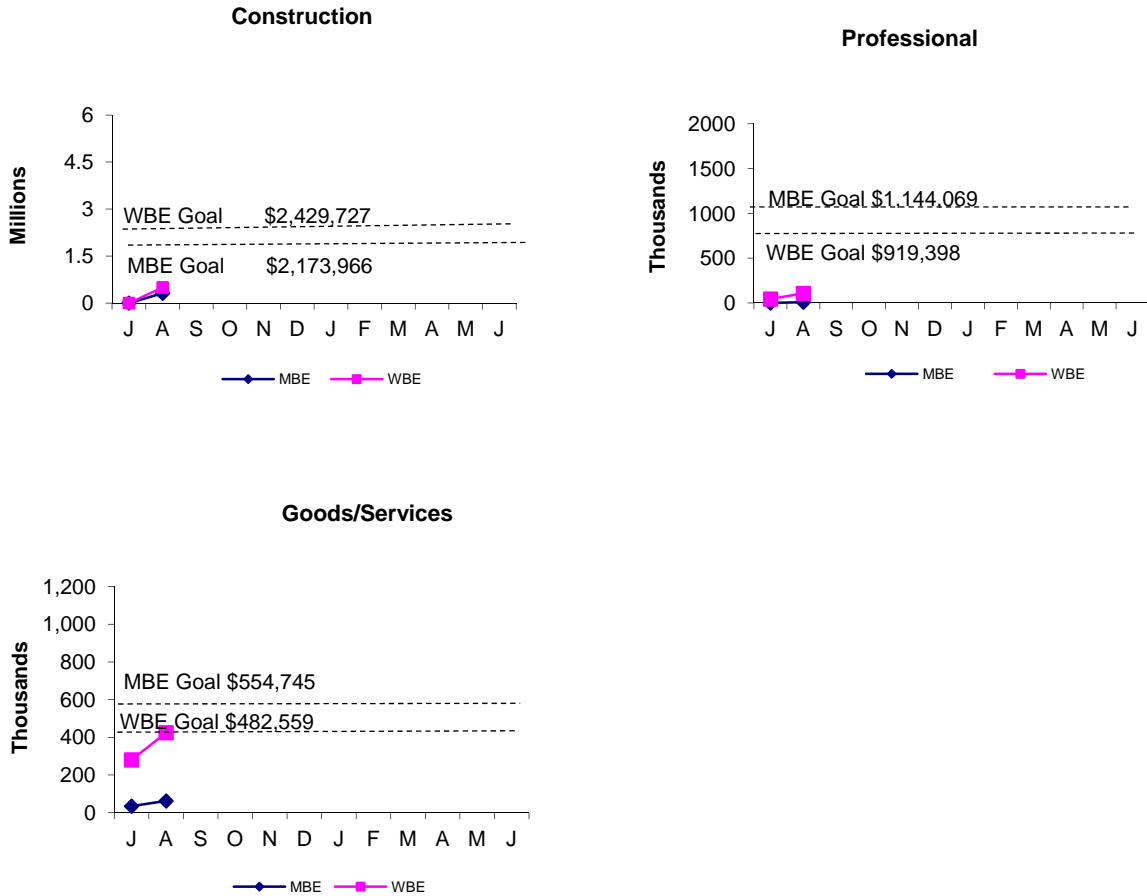
Job Group	Employees as of 9/30/2014	Minorities as of 9/30/2014	Achievement Level	Minority Over or Under Under utilized	Females As of 9/30/2014	Achievement Level	Female Over or Under Under utilized
Administrator A	20	2	2	0	5	6	-1
Administrator B	20	0	3	-3	3	6	-3
Clerical A	41	17	11	6	35	16	19
Clerical B	34	7	11	-4	12	2	10
Engineer A	81	18	21	-3	13	16	-3
Engineer B	52	15	12	3	7	13	-6
Craft A	116	13	22	-9	0	3	-3
Craft B	147	28	27	1	3	5	-2
Laborer	67	23	16	7	3	3	0
Management A	100	13	23	-10	33	45	-12
Management B	45	8	11	-3	12	19	-7
Operator A	66	5	7	-2	1	4	-3
Operator B	61	7	16	-9	3	2	1
Para Professional	54	12	16	-4	24	38	-14
Professional A	36	4	8	-4	24	14	10
Professional B	161	42	42	0	75	73	2
Technical A	49	15	8	7	5	7	-2
Technical B	6	1	1	0	0	2	-2
Total	1156	230	257	24/-51	258	274	42/-58

AACU Candidate Referrals for Underutilized Positions

Job Group	Title	# of Vac	Requisition Int. / Ext.	Promotions/ Transfers	AACU Ref. External	Position Status
Clerical A	Administrative Coordinator I	1	Int	1	0	P = WF
Clerical A	Secretary I	1	Int/Ext	0	0	NH = WF
Craft B	Facility Specialist	1	Int	0	0	Vol Demo = WM
Craft B	Toolmaker	1	Int	1	0	P = WM
Craft B	Electrician	1	Int/Ext	0	1	NH = WM
Engineer A	Manager, Western Maintenance	1	Int	1	0	P = WM
Engineer A	Sr. Staff Engineer, Structural	1	Int/Ext	0	0	NH=WF
Engineer A	Program Manager, Process Control	1	Int	1	0	P = AF
Engineer B	Project Manager Environmental Data	1	Int	1	0	P = AF
Engineer B	Project Manager	1	Int/Ext	0	1	In Progress
Laborers	Building & Grounds Worker	1	Int/Ext	0	1	In Progress
Management A	Manager, IT Security, Arch. & Eng.	1	Ext	0	0	NH = AF
Operator A	Sr. Transmission & Treatment Operator	1	Int	1	0	P = WM
Operator A	Transmission & Treatment Operator	1	Int/Ext	1	0	P = WM
Operator A	Area Supervisor	1	Int	1	0	P = BM
Professional B	Sr. Laboratory Technician	1	Int/ Ext	0	1	In Progress
Professional B	Source Coordinator	1	Int	1	0	P = WM
Professional B	Sampling Associate	2	Int/Ext	1	0	P=WF
Professional B	Regional Inspector	1	Int	1	0	T = WM
Professional B	Financial Planner	1	Int/Ext	0	0	NH = WM
Professional B	Chemist II	1	Int/Ext	1	0	P=WF
Professional B	Chemist III	2	Int/Ext	1	1	NH=WM; P=HM
Professional B	Microbiologist II	1	Int	1	0	P = WM
Technical A	Communication & Control Technician	2	Int	2	0	P=HM & AM
Technical A	Systems Administrator III	1	Int/Ext	0	1	In Progress

MBE/WBE Expenditures First Quarter FY 2015

Background: MBE/WBE targets are determined based on annual MWRA expenditure forecasts in the procurement categories noted below. MBE/WBE percentage goals are the results from a 2002 Availability Analysis, and MassDEP's 2010 Availability Analysis. As a result of the Availability Analyses, the category of Non-Professional Services is included in Goods/Services. Consistent with contractor reporting requirements, MBE/WBE expenditure data is available through August.



FY15 spending and percentage of goals achieved, as well as FY14 performance are as follows:

	MBE				WBE			
	FY15 Year-to-Date		FY14		FY15 Year-to-Date		FY14	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Construction	313,639	14.4%	1,053,966	25.5%	500,261	20.6%	3,407,380	165.9%
Professional Svc.	9,225	.8%	584,242	44.5%	107,764	11.7%	457,558	43.4%
<u>Goods & Svcs.</u>	<u>62,070</u>	<u>11.2%</u>	<u>359,270</u>	<u>45.8%</u>	<u>424,341</u>	<u>87.9%</u>	<u>966,425</u>	<u>141.6%</u>
Total	384,934	9.9%	1,997,478	32.1%	1,032,366	26.9%	3,890,658	102.6%

FY15 MBE/WBE dollar totals do not include MBE and WBE payments to prime contractors and consultants.

MWRA FY15 CEB Expenses

1st Quarter - FY15

	September 2014 Year-to-Date (\$000)					
	Budget	Actual	Variance	%	FY15 Budget	%
EXPENSES						
WAGES AND SALARIES	\$ 21,900	\$ 21,193	\$ (707)	-3.2%	\$ 96,555	21.9%
OVERTIME	896	931	35	3.9%	3,621	25.7%
FRINGE BENEFITS	4,598	4,532	(65)	-1.4%	18,299	24.8%
WORKERS' COMPENSATION	550	757	207	37.6%	2,200	34.4%
CHEMICALS	2,916	2,898	(18)	-0.6%	10,220	28.4%
ENERGY AND UTILITIES	5,070	4,512	(558)	-11.0%	23,472	19.2%
MAINTENANCE	5,653	7,468	1,815	32.1%	27,973	26.7%
TRAINING AND MEETINGS	29	48	20	68.8%	361	13.3%
PROFESSIONAL SERVICES	1,395	1,477	82	5.8%	5,957	24.8%
OTHER MATERIALS	761	842	81	10.7%	5,953	14.1%
OTHER SERVICES	6,039	5,979	(59)	-1.0%	22,538	26.5%
TOTAL DIRECT EXPENSES	\$ 49,806	\$ 50,637	\$ 831	1.7%	\$ 217,149	23.3%
INSURANCE	\$ 532	\$ 454	\$ (78)	-14.7%	\$ 2,128	21.3%
WATERSHED/PILOT	6,867	6,748	(119)	-1.7%	27,467	24.6%
BEC _o PAYMENT	835	830	(5)	-0.5%	3,198	26.0%
MITIGATION	401	365	(37)	-9.1%	1,606	22.7%
ADDITIONS TO RESERVES	121	121	-	0.0%	483	25.0%
RETIREMENT FUND	7,808	7,808	-	0.0%	12,629	61.8%
TOTAL INDIRECT EXPENSES	\$ 16,564	\$ 16,326	\$ (238)	-1.4%	\$ 47,512	34.4%
STATE REVOLVING FUND	\$ 18,909	\$ 18,909	\$ -	0.0%	\$ 78,461	24.1%
SENIOR DEBT	53,194	53,194	-	0.0%	220,836	24.1%
CORD FUND	219	219	-	0.0%	877	25.0%
DEBT SERVICE ASSISTANCE	(854)	(854)	-	0.0%	(854)	100.0%
CURRENT REVENUE/CAPITAL	2,550	2,550	-	0.0%	10,200	25.0%
SUBORDINATE MWRA DEBT	24,799	24,799	-	0.0%	99,686	24.9%
LOCAL WATER PIPELINE CP	1,037	1,037	-	0.0%	4,148	25.0%
CAPITAL LEASE	804	804	-	0.0%	3,217	25.0%
VARIABLE DEBT	-	(2,912)	(2,912)	---	-	0.0%
BOND REDEMPTION SAVINGS	(1,686)	(1,686)	-	0.0%	(6,746)	25.0%
DEFAESANCE ACCOUNT	-	-	-	---	-	---
TOTAL DEBT SERVICE	\$ 98,972	\$ 96,060	\$ (2,912)	-2.9%	\$ 409,825	23.4%
TOTAL EXPENSES	\$ 165,342	\$ 163,023	\$ (2,319)	-1.4%	\$ 674,485	24.2%
REVENUE & INCOME						
RATE REVENUE	\$ 162,579	\$ 162,579	\$ -	0.0%	\$ 650,316	25.0%
OTHER USER CHARGES	2,135	2,120	(16)	-0.7%	8,260	25.7%
OTHER REVENUE	944	1,394	449	47.6%	6,180	22.6%
RATE STABILIZATION	-	-	-	---	-	---
INVESTMENT INCOME	2,382	2,310	(72)	-3.0%	9,729	23.7%
TOTAL REVENUE & INCOME	\$ 168,041	\$ 168,403	\$ 361	0.2%	\$ 674,485	25.0%

As of September 2014, total expenses were \$163.0 million, \$2.3 million or 1.4% less than budget and total revenue was \$168.4 million, \$361,000 or 0.2% higher than budget, for a net variance of \$2.7 million.

Expenses –

- **Direct Expenses** are \$50.6 million, \$831,000 or 1.7% more than budget.
- **Maintenance** is \$1.8 million or 32.1% higher than budget. Material purchases are greater than budget by \$1.4 million and services are overspent by \$422,000 mainly due to timing.
- **Wages & Salaries** are underspent by \$707,000 or 3.2% due to lower headcount and the salary mix differential between staff retiring at higher rates and new hires coming on board at lower rates.
- **Utilities** are under budget by \$558,000 or 11.0% due to lower Electricity of \$492,000 mainly due to lower flows and pricing, Water use of \$43,000, and Diesel Fuel of \$32,000.
- **Workers Compensation** expenses are higher than budget by \$207,000 or 37.6%, due to higher Compensation Payments of \$133,000, Administrative and Legal costs of \$37,000, and Medical Expenses of \$37,000.
- **Professional Services** are higher than budget by \$82,000 or 5.8% due to timing of MIS initiatives of \$52,000 and higher Security of \$32,000.
- **Other Materials** are over budget by \$81,000 or 10.7% mainly due to timing of Work Clothes, Other Materials, and Computer Hardware.
- **Other Services** are lower than budget by \$59,000 or 1.0% due to timing of remediation activities of \$63,000, Grit of \$31,000 and Sludge Pelletization of \$17,000 mainly due to lower quantities.
- **Overtime** is overspent by \$35,000 or 3.9% due to some nominal overspending in several departments.
- **Chemicals** are underspent by \$18,000 or 0.6% due to lower Liquid Oxygen of \$83,000 due to lower dosing, Soda Ash of \$72,000 due to lower flows, and Nitrazyme of \$51,000 due to system modifications by the Town of Framingham offset by higher spending for Ferric Chloride of \$76,000 for struvite control, Hydrogen Peroxide of \$67,000 for lower flows which require increased pretreatment for hydrogen sulfide gas, Polymer of \$50,000 for sludge thickening, and Hydrofluosilicic Acid of \$46,000 due to delay in anticipated regulatory dosing change.
- **Indirect Expenses** are \$16.3 million, \$238,000 or 1.4% under budget mainly for lower Watershed Reimbursement expenses of \$119,000 due to FY14 overaccrual and lower Insurance expenses of \$78,000 mostly related to lower premiums.
- **Debt Service Expenses** totaled \$96.1 million, \$2.9 million or 2.9% less than budget. The lower Debt Service variance is the result of favorable short-term interest rates.

Revenue and Income –

- **Total Revenue / Income** for September is \$168.4 million, \$361,000 or 0.2% higher than budget due to Non-Rate Revenue of \$434,000 offset by lower Investment Income of \$72,000. The higher Non-Rate Revenue is due to \$421,000 for the Disposal of Equipment mainly for the surplus of the Fox Point CSO facility, \$333,000 for the sale of unbudgeted emergency water for the Town of Hudson, and \$70,000 for higher permit fees offset by lower Energy revenue of \$436,000 due to the timing of Renewable Portfolio Standard (RPS) sales.

Cost of Debt

1st Quarter - FY15

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.

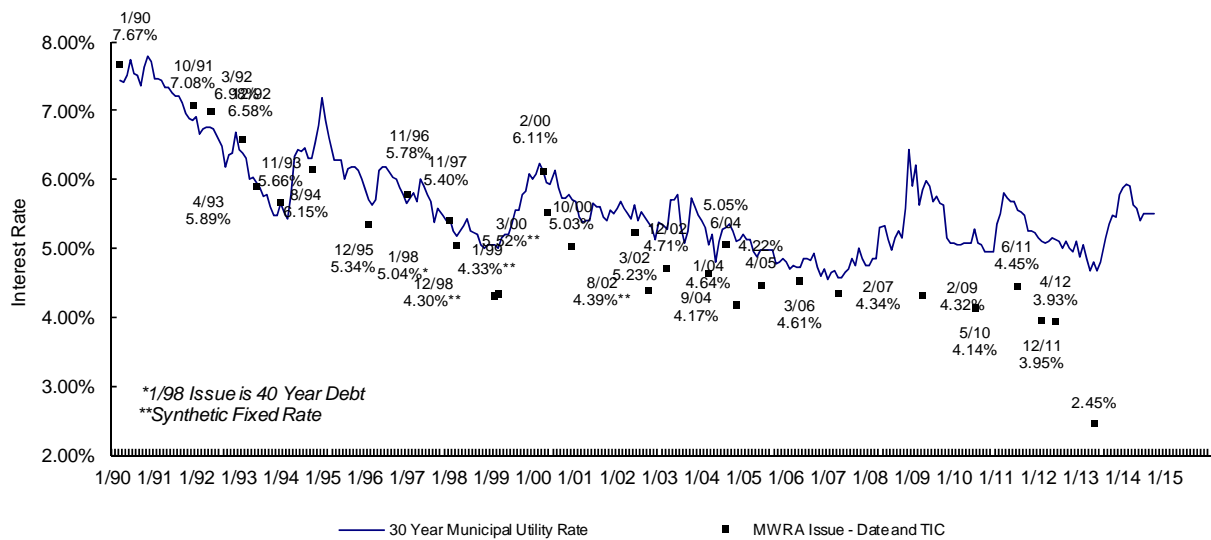
Average Cost of MWRA Debt

Fixed Debt (\$3,941)	4.33%
Variable Debt (\$484.3)	0.63%
SRF Debt (\$974.1)	1.24%
 Weighted Average Debt Cost (\$5,399)	 3.44%

Most Recent Senior Fixed Debt Issue March 2013

2013 Series A (\$170.6)	2.45%
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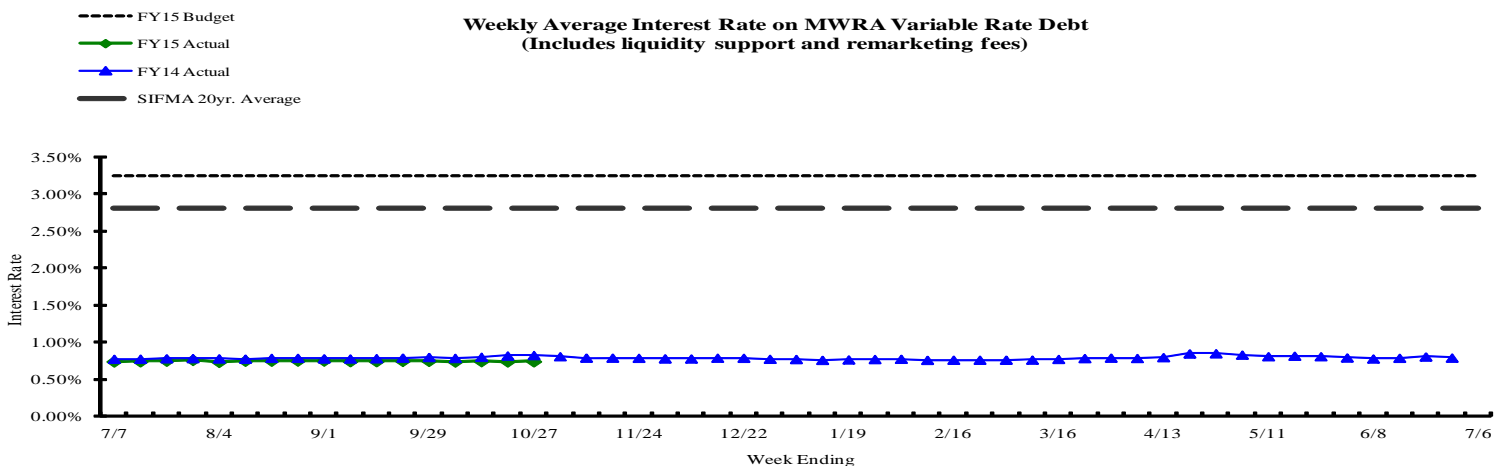
MWRA Fixed Rate Debt vs. 30 Year Municipal Utility Interest Rate



Weekly Average variable Interest Rates vs. Budget

MWRA currently has ten variable rate debt issues with \$1.0 billion outstanding, excluding commercial paper. Of the ten 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 0.06% and a low of 0.05%. 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.

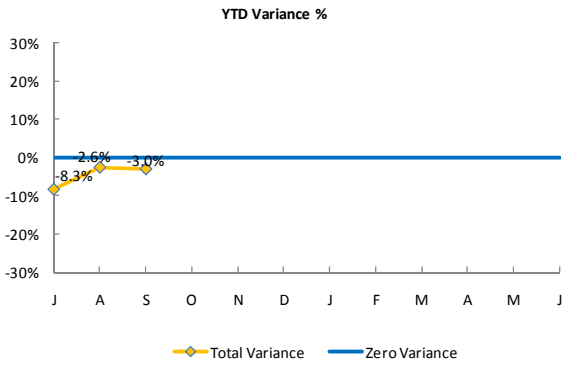
Weekly Average Interest Rate on MWRA Variable Rate Debt (Includes liquidity support and remarketing fees)



Investment Income

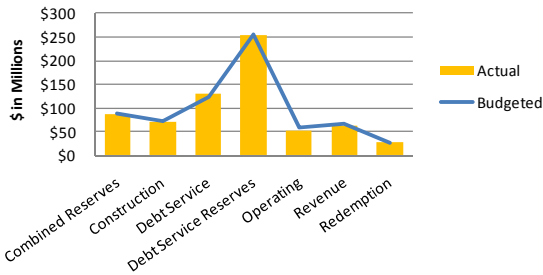
1st Quarter - FY15

Year To Date

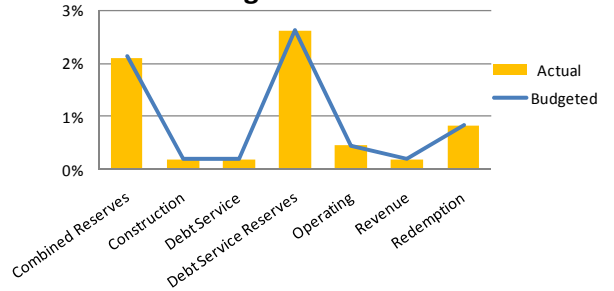


	YTD BUDGET VARIANCE			
	(\$000)			
	BALANCES IMPACT	RATES IMPACT	TOTAL	%
Combined Reserves	(\$1)	(\$11)	(11)	-2.4%
Construction	(\$1)	(\$2)	(3)	-9.2%
Debt Service	\$3	(\$5)	(2)	-3.7%
Debt Service Reserves	(\$17)	(\$28)	(45)	-2.7%
Operating	(\$7)	\$2	(6)	-8.6%
Revenue	(\$2)	(\$2)	(4)	-12.7%
Redemption	\$0	(\$1)	(1)	-2.1%
Total Variance	(\$25)	(\$47)	(\$72)	-3.0%

YTD Average Balances Budgeted vs. Actual

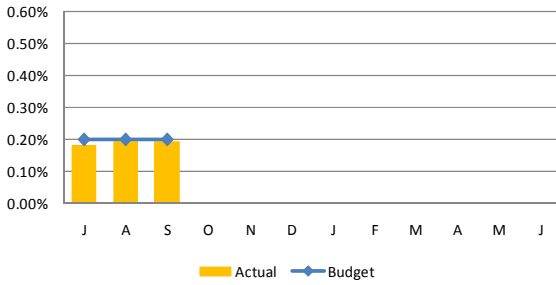


YTD Average Interest Rate Budgeted vs. Actual

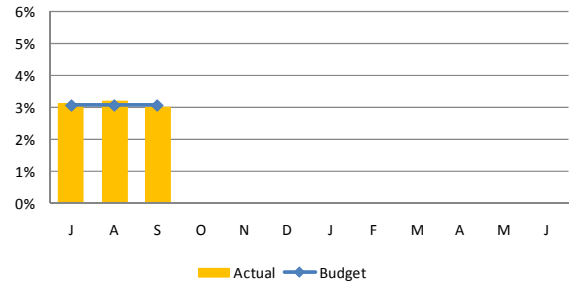


Monthly

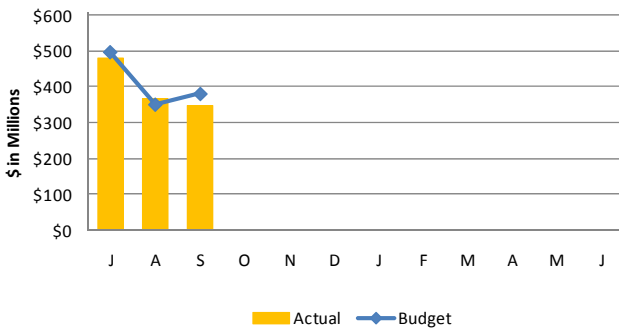
Short-Term Interest Rates



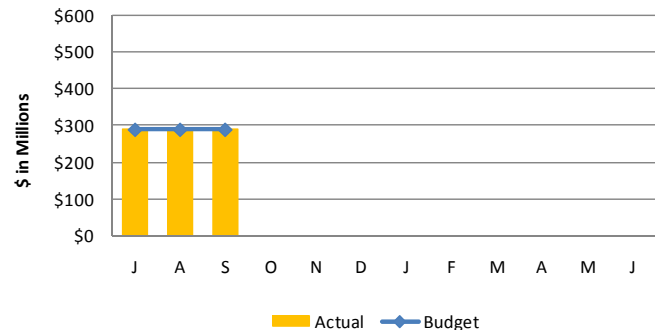
Long-Term Interest Rates



Short-Term Average Balances



Long-Term Average Balances



STAFF SUMMARY

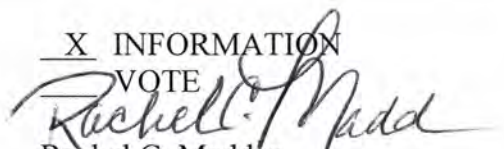
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 17, 2014
SUBJECT: Delegated Authority Report – November 2014

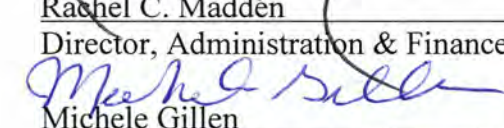


COMMITTEE: Administration, Finance & Audit

Barbie Aylward, Administrator A & F
Joanne Gover, Admin. Systems Coordinator
Preparer/Title

X INFORMATION
VOTE


Rachel C. Madden
Director, Administration & Finance


Michele Gillen
Deputy Director, Administration & Finance

RECOMMENDATION:

For information only. Attached is a listing of actions taken by the Executive Director under delegated authority for the period November 1 through November 30, 2014 .

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.

CONSTRUCTION/PROFESSIONAL SERVICES DELEGATED AUTHORITY ITEMS NOVEMBER 1 - 30, 2014

NO.	DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT	AMEND/CO	COMPANY	FINANCIAL IMPACT
C-1.	11/03/14	QUABBIN UV DISINFECTION FACILITIES FURNISH AND INSTALL WIRE, CABLE, CONDUITS, ENCLOSURES, SUPPORTS AND SWITCHES; FURNISH AND INSTALL THREE PROTECTIVE ENCLOSURES; PERFORM ADDITIONAL FIRE ALARM CONTROL WORK; FURNISH AND INSTALL A REMOTE CONTROL PANEL FOR THE DEHUMIDIFIER, RELOCATE THREE LIGHT FIXTURES IN NEW KITCHEN; FURNISH AND INSTALL A THREE-FOOT ACCESS GATE IN PERIMETER FENCE ADJACENT TO THE SECURITY GATE; FURNISH AND INSTALL A VENT VALVE ON THREE UV REACTORS; FURNISH AND INSTALL A DRAIN CONNECTION TO THE SPECIAL WASTE DRAIN SYSTEMS ON THREE UV REACTORS.	6776	14	DANIEL O'CONNELL'S SONS, INC.	\$50,725.76
C-2.	11/03/14	SECURITY IMPROVEMENTS AT VARIOUS FACILITIES FURNISH AND SURFACE-MOUNT CONDUIT ON THE INTERIOR OF THE BUILDINGS AT NUT ISLAND, PERFORM GROUND PENETRATING RADAR; RE-ROUTE CONDUIT FOR CAMERAS AT NUT ISLAND; FURNISH AND INSTALL TWO HIGH-DEFINITION INTERNET PROTOCOL CAMERAS IN LIEU OF PAN/TILT/ZOOM CAMERA AND INFRARED ILLUMINATORS.	6760W	1	EWING ELECTRICAL CO., INC.	\$81,250.24
C-3.	11/05/14	TECHNICAL ASSISTANCE CONSULTING SERVICES AT JOHN J. CARROLL WATER TREATMENT PLANT INCREASE LEVEL OF EFFORT TO ENSURE CONTINUED DESIGN SERVICES FOR ROOF REPLACEMENT FOR THE WACHUSETT AQUEDUCT TERMINAL CHAMBER, FIRE SUPPRESSION SYSTEM FOR SCADA AND CONTROL ROOMS, SODIUM HYPOCHLORITE FEED MODIFICATIONS, SOUTHBOROUGH CONTROL VALVE REPLACEMENT, ADDITIONAL LIQUID OXYGEN TANK AND FILL STATION COVER, ASSET PROTECTION ANALYSIS FOR PT BUILDING SODA ASH HANDLING SYSTEM, INVESTIGATE CONDITION OF BUTTERFLY VALVE 4A, DESIGN UPGRADE TO LOX FILL STATION INCLUDING ROOF; EXTEND CONTRACT TERM BY SIX MONTHS FROM MAY 14, 2015 TO NOVEMBER 14, 2015.	7406	1	FAY, SPOFFORD & THORNDIKE, LLC	\$185,000.00

PURCHASING DELEGATED AUTHORITY ITEMS - November 1 - 30, 2014

NO.	TITLE AND EXPLANATION	CONTRACT #	AMENDMENT	COMPANY	FINANCIAL IMPACT	
P-1.	11/3/14	ONE DIGITAL ULTRASONIC INSPECTION TOOL AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR ONE DIGITAL ULTRASONIC INSPECTION TOOL. MWRA EMPLOYS CONDITION MONITORING AS AN INTEGRAL COMPONENT OF ITS MAINTENANCE PROGRAMS. CONDITION MONITORING OF CRITICAL PIECES OF EQUIPMENT CAN IDENTIFY SIGNIFICANT CHANGES EARLY, WHICH MAY BE INDICATIVE OF A DEVELOPING FAULT OR EMINENT FAILURE. ONE ASPECT OF CONDITION MONITORING INVOLVES ACOUSTICS. ALTHOUGH ACOUSTICS TECHNOLOGY HAS BEEN UTILIZED AT DEER ISLAND, FIELD OPERATIONS IS NOW MOVING FORWARD WITH ADDING THIS TECHNOLOGY TO ITS MAINTENANCE PROGRAM. THIS REQUEST IS FOR AN ULTRASONIC TOOL THAT WILL ENABLE MAINTENANCE STAFF TO SAVE LABOR HOURS BY DETECTING FAULTS IN ADVANCE, ELIMINATING THE NEED TO DISASSEMBLE EQUIPMENT TO FURTHER TROUBLESHOOT, AND PERHAPS AVOID MAKING UN-PLANNED REPAIRS. THE SPECIFIC APPLICATIONS THAT STAFF PLAN TO USE THIS INSTRUMENT ON INCLUDE: LEAK DETECTION, MECHANICAL EQUIPMENT, ELECTRICAL EQUIPMENT, AND VALVE INSPECTIONS.			UE SYSTEMS INC.	\$26,589.00
P-2.	11/3/14	THREE ABOVE-GROUND ENCLOSURES FOR WATER METERS AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR THREE ABOVE-GROUND ENCLOSURES FOR WATER METERS. SINCE THE EARLY 1990'S, MWRA HAS BEEN INSTALLING ABOVE GROUND CABINETS FOR ALL WATER METER INSTALLATIONS. INSTALLING ABOVE GROUND ENCLOSURES ALLOWS ONLY LOW-VOLTAGE CIRCUITS ENTERING BELOW-GROUND MANHOLES, ENSURING THE SAFETY OF PEDESTRIANS, STAFF, AND ANIMALS. THESE CABINETS HOUSE THE EQUIPMENT NECESSARY TO POWER THE METER, THE DATALOGGER, AND COMMUNICATION EQUIPMENT.	WRA-3899		KIT ZELLER, INC.	\$53,925.00
P-3.	11/5/14	ONE 24-INCH HORIZONTAL GATE VALVE AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR ONE 24-INCH, HORIZONTAL GATE VALVE. AS A PART OF ITS OVERALL MAINTENANCE AND OPERATION OF THE METROPOLITAN WATER SYSTEM, FIELD OPERATIONS' WATER PIPELINE UNIT REPLACES APPROXIMATELY 20 MAIN LINE VALVES OF VARYING SIZE EACH YEAR. TO ENSURE THAT THE PROPER SIZED VALVE IS ALWAYS AVAILABLE TO MINIMIZE DOWN TIME AND TO BE ABLE TO IMMEDIATELY RESPOND IN THE EVENT OF A SUDDEN BREAK IN SERVICE, VALVES OF VARIOUS DIMENSIONS ARE STOCKED AT THE CHELSEA FACILITY. THESE VALVES ARE USED AS-NEEDED TO COMPLETE PIPELINE PROJECTS. THIS BID IS FOR THE PURCHASE OF ONE 24-INCH HORIZONTAL GATE VALVE TO REPLENISH THE INVENTORY.	WRA-3934Q		BILLERICA WINWATER WORKS, CO.	\$28,590.00
P-4.	11/19/14	RENEWAL OF AUTOCAD SUBSCRIPTION APPROVAL OF A PURCHASE ORDER FOR MAINTENANCE AND SUPPORT OF AUTOCAD PRODUCTS. AUTOCAD SOFTWARE IS USED FOR DRAFTING AND DESIGNING ENGINEERING, CONSTRUCTION, FACILITY AND MAINTENANCE PROJECTS, AND FOR DAY TO DAY BUSINESS MANAGEMENT. THE AUTOCAD AGREEMENT PROVIDES FOR A CONSOLIDATED RENEWAL OF ALL AUTOCAD PRODUCTS AND SOFTWARE LICENSES; STANDARD SOFTWARE UPDATES, AND ONLINE TECHNICAL ASSISTANCE, ENHANCEMENTS TO THE PRODUCTS AND FLEXIBLE LICENSING (TO BE ABLE TO USE THE SOFTWARE IN MULTIPLE VERSIONS AND AT MULTIPLE PCS OVER THE MWRA NETWORK). THE ANNUAL AGREEMENT COVERS AUTOCAD MAP 3D, RASTER DESIGN, CIVIL 3D, AND AUTOCAD LITE. THE CONTRACT PERIOD IS DECEMBER 13, 2014 THROUGH DECEMBER 12, 2015.	GS-35F-4543G		DLT SOLUTIONS INC.	\$29,389.39
P-5.	11/19/14	FOUR HP SERVERS AND SUPPORT AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR FOUR HP SERVERS AND SUPPORT AT THE CHELSEA FACILITY, DEER ISLAND TREATMENT PLANT AND CHARLESTOWN NAVY YARD. OVER THE PAST YEAR, THE MIS DEPARTMENT HAS BEEN AGGRESSIVELY UPGRADING THE EXISTING MWRA NETWORK INFRASTRUCTURE TO REFLECT THE MIS FIVE YEAR STRATEGIC PLAN. AS PART OF THE ENDEAVOR, THE CHELSEA CORE SWITCH HAS BEEN UPGRADED TO 10G ETHERNET AND ALL STORAGE SYSTEMS HAVE BEEN CONSOLIDATED INTO THE NEW HP 3-PAR STORAGE SYSTEM THAT RUNS AT 16 GB FIBER. IN ORDER TO BRING THE EXISTING SERVER TECHNOLOGY UP TO THE CURRENT INFRASTRUCTURE STANDARDS AND UTILIZE THE ADVANCES OF NEW TECHNOLOGY DEPLOYED OVER THE PAST YEAR AT THE MWRA, THE PURCHASE OF FOUR SERVERS IS REQUIRED.	WRA-3912Q ITC47		HUB TECHNICAL SERVICES, LLC	\$32,936.21
P-6.	11/19/14	TWO TRAILER-MOUNTED LIGHT TOWERS AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR TWO TRAILER-MOUNTED LIGHT TOWERS. THE PIPE MAINTENANCE WASTEWATER PROGRAM USES EMERGENCY LIGHT TOWERS TO ILLUMINATE WORKSITES AT NIGHT OR IN LOW LIGHT ENVIRONMENTS. THE LIGHTING ENSURES WORKER HEALTH AND SAFETY BY PROVIDING A WELL ILLUMINATED WORK SITE ON AND OFF ROAD AND BY INCREASING THE VISIBILITY OF THE CREWS TO ONCOMING DRIVERS. WRA004 AND WRA005 ARE 15-YEAR-OLD AMIDA PORTABLE LIGHT TOWERS. THE FUEL INJECTION SYSTEM ON WRA004 IS FAILING AND THE GENERATOR ON WRA005 WILL NOT CREATE ENOUGH POWER TO FULLY ILLUMINATE THE LAMPS. STAFF HAVE DETERMINED THAT IT IS NOT COST-EFFECTIVE TO INVEST IN REPAIR AND RECOMMEND THAT BOTH UNITS BE REPLACED.	WRA-3928		HERTZ EQUIPMENT RENTAL CORP.	\$35,162.44
P-7.	11/19/14	TEN MICROSOFT WINDOWS SERVER DATA CENTER 2012 R2 LICENSES AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR TEN MICROSOFT WINDOWS SERVER DATA CENTER 2012 R2 LICENSES. THIS REQUEST IS FOR THE PURCHASE OF TEN (10) WINDOWS SERVER DATA CENTER LICENSES. WINDOWS SERVER IS A SERVER OPERATING SYSTEM THAT ENABLES A COMPUTER TO HANDLE NETWORK ROLES SUCH AS PRINT SERVER, DOMAIN CONTROLLER, WEB SERVER, AND FILE SERVER. IT IS ALSO REQUIRED TO RUN MOST OF THE MWRA APPLICATIONS AND DATABASES.	WRA-3923Q GSA-6032		SHI INTERNATIONAL, INC.	\$41,000.00
P-8.	11/19/14	CISCO SYSTEMS CORE SWITCHES AND RELATED EQUIPMENT APPROVAL OF A PURCHASE ORDER FOR TWO CISCO SYSTEMS NEXUS 2248 SWITCHES AND RELATED EQUIPMENT. THE NET2020 PROJECT WAS APPROVED IN THE FY07 CAPITAL IMPROVEMENT PROGRAM (CIP) AS PART OF THE REQUIRED IMPROVEMENTS TO MAINTAIN THE MWRA NETWORK. AS PART OF NET2020 INFRASTRUCTURE PROJECT, MIS UPGRADED THE CORE SWITCHES IN CHELSEA AND CNY; WHICH PROVIDE CONNECTIVITY BETWEEN ALL MWRA SITES, THE DATA CENTER AND OTHER MIS RESOURCES FOR ALL USERS. THIS REQUEST WILL UPGRADE THE CORE SWITCHES AT THE DEER ISLAND TREATMENT PLANT IN ORDER TO BRING THEM UP TO THE SAME CAPACITY AS CHELSEA AND CNY. THE INTEGRITY AND THE AVAILABILITY OF THESE SWITCHES ARE ESSENTIAL TO ALL MIS' DATA COMMUNICATION, APPLICATIONS AND RESOURCES.	WRA-3913Q		PRESIDIO NETWORKED SOLUTIONS, INC.	\$129,635.30


PURCHASING DELEGATED AUTHORITY ITEMS - November 1 - 30, 2014

NO.	TITLE AND EXPLANATION	CONTRACT #	AMENDMENT	COMPANY	FINANCIAL IMPACT
P-9. 11/19/14	FIFTEEN NEW MWRA VEHICLES AWARD OF THREE SEPARATE PURCHASE ORDERS TO THE LOWEST RESPONSIVE BIDDERS FOR A TOTAL OF FIFTEEN NEW MWRA VEHICLES . THESE VEHICLES WERE COMPETITIVELY BID AS PART OF A LARGER "REVERSE AUCTION" PROCUREMENT OF A TOTAL OF 29 VEHICLES. THE FIRST 14 VEHICLES WERE PREVIOUSLY AWARDED TO LIBERTY CHEVROLET AFTER MWRA WAS INFORMED THAT THE GENERAL MOTORS PLANT WOULD BE SHUTTING DOWN PRODUCTION OF CERTAIN MODELS VERY SOON AND THAT ORDERS FOR THOSE MODELS NEEDED TO BE RECEIVED BY OCTOBER 31, 2014. ALL OF THESE VEHICLES ARE REPLACEMENTS FOR EXISTING FLEET VEHICLES IN ACCORDANCE WITH CURRENT REPLACEMENT PRACTICE, AND THE RECOMMENDATION OF MWRA'S VEHICLE COMMITTEE. ALL VEHICLES MEET OR EXCEED THE CURRENT REPLACEMENT CRITERIA FOR AGE, AND/OR MILEAGE, AND/OR CONDITION.	WRA-3917		BALISE CHEVROLET MERCEDES BENZ OF WESTWORD BOSTON FREIGHTLINER, INC.	\$382,499.00 \$178,500.00 \$67,274.00
P-10. 11/21/14	PVDF FITTINGS AND PIPING AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR PVDF FITTINGS AND PIPING FOR EAST/WEST ODOR CONTROL SCRUBBERS AT THE DEER ISLAND TREATMENT PLANT. THE DEER ISLAND TREATMENT PLANT OPERATES WET SCRUBBERS TO REMOVE ODOROUS COMPOUNDS FROM PROCESS AIR. WET SCRUBBERS REMOVE HYDROGEN SULFIDE FROM PROCESS AIR THROUGH THE ADDITION OF SODIUM HYPOCHLORITE AND SODIUM HYDROXIDE. THESE CHEMICALS ARE DRAWN FROM THEIR RESPECTIVE "DAY" STORAGE TANKS, PUMPED THROUGH A ONE-INCH CHLORINATED POLYVINYL CHLORIDE OR CPVC PIPE SYSTEM. CPVC PIPING SYSTEMS ARE FITTED SYSTEMS. THE CPVC PIPE AND FITTINGS ARE CLEANED WITH PRIMER, FIT TOGETHER BY HAND, AND PERMANENTLY GLUED TOGETHER WITH CPVC CEMENT. THESE SYSTEMS ARE ORIGINAL PLANT EQUIPMENT REPRESENTING "OLD TECHNOLOGY" FOR CHEMICAL CONTAINMENT. OVER TIME, DUE TO EXPOSURE TO HIGH CONCENTRATIONS OF SODIUM HYPOCHLORITE AND SODIUM HYDROXIDE, DEGRADATION OF THE GLUE HAS RESULTED IN NUMEROUS LEAKS IN THE CPVC PIPING SYSTEMS. THE BETTER AND MORE CURRENT TECHNOLOGY FOR CHEMICAL PIPING IS POLYVINYLIDENE FLUORIDE OR PVDF FUSION PIPE SYSTEMS.	WRA-3926Q		METROPOLITAN PIPE AND SUPPLY CO.	\$38,063.75
P-11. 11/21/14	TEN ELECTRIC BURDEN CARRIERS AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR TEN ELECTRIC BURDEN CARRIERS FOR THE DEER ISLAND TREATMENT PLANT. STAFF PERFORM MULTIPLE JOB-RELATED ACTIVITIES AND TASKS ALL AROUND THE LARGE EXPANSE OF THE DEER ISLAND TREATMENT PLANT AND ITS NUMEROUS BUILDINGS AND FACILITIES ON A DAILY BASIS. THE EXPANSIVE NATURE OF DEER ISLAND'S TERRAIN REQUIRES USE OF ELECTRIC CARTS TO ENSURE THE MOST EFFICIENT TRANSPORT OF STAFF, TOOLS, EQUIPMENT, AND SUPPLIES. BURDEN CARRIERS SAVE COUNTLESS STAFF HOURS THROUGHOUT THE YEAR. UTILIZING THESE SMALLER ELECTRIC VEHICLES IS LESS COSTLY THAN CONVENTIONAL VEHICLES, AND THEY ALSO ARE SIGNIFICANTLY MORE ENVIRONMENTALLY FRIENDLY. IN FY12, MWRA BEGAN A SYSTEMATIC REPLACEMENT PLAN UNDER WHICH 10 NEW EVS ARE PURCHASED EACH FISCAL YEAR. TO DATE, 30 EVS HAVE BEEN REPLACED. CURRENTLY, DEER ISLAND'S FLEET CONSISTS OF 63 EVS, 27 OF THESE ARE FROM THE ORIGINAL 1996 FIT-OUT FLEET AND THE 2002 GEM CAR GRANT. IT SHOULD BE NOTED THAT CHRYSLER NO LONGER SUPPORTS THE REPLACEMENT PARTS FOR THESE EVS, SO IT IS GETTING INCREASINGLY DIFFICULT TO MAINTAIN THEM. BID WRA-3919 IS FOR 10 MORE NEW EVS, WHICH REPRESENTS FY15'S PLANNED PURCHASE.	WRA-3919		BORTEK INDUSTRIES	\$103,950.00

POSITION CONTROL REGISTER (PCR) LOCATION CHANGES November 2014

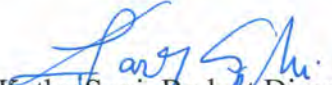

<u>DATE OF CHANGE</u>	<u>POSITION TITLE</u>	<u>CURRENT PCR#</u>	<u>CURRENT COST CENTER</u>	<u>NEW PCR #</u>	<u>NEW COST CENTER</u>	<u>REASON FOR CHANGE</u>
11/15/2014	Administrative Coordinator I	5910006	Policy & Administration	2210073	TRAC	To move position to the department the incumbent supports
11/15/2014	Administrative Coordinator I	5910016	Policy & Administration	3385032	Metro Water General	To move position to the department the incumbent supports
11/15/2014	Administrative Assistant I	5910018	Policy & Administration	5470077	Equipment Maintenance	To move position to the department the incumbent supports
11/15/2014	Executive Secretary	5910011	Policy & Administration	24700150	Wastewater General	To move position to the department the incumbent supports

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: December 17, 2014
SUBJECT: FY15 Financial Update and Summary

COMMITTEE: Administration, Finance & Audit

INFORMATION
 VOTE


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


 Rachel C. Madden
 Director, Administration and Finance

RECOMMENDATION:

For information only. This staff summary provides a financial update and variance highlights year-to-date through November, comparing actual spending to the budget.

DISCUSSION:

Total year-to-date expenses are lower than budget by \$5.2 million or 1.9% and total revenues are higher than budget by \$761,000 or 0.3% for a net variance of \$5.9 million.

The expense variances by major categories are represented in the table below:

	FY15 Budget (November)	FY15 Actual (November)	\$ Variance	% Variance
Direct Expenses	\$85.5	\$86.4	\$0.9	1.0%
Indirect Expenses	\$25.0	\$24.7	-\$0.4	-1.4%
Debt Service	\$169.3	\$163.7	-\$5.7	-3.4%
Total	\$279.9	\$274.7	-\$5.2	-1.9%

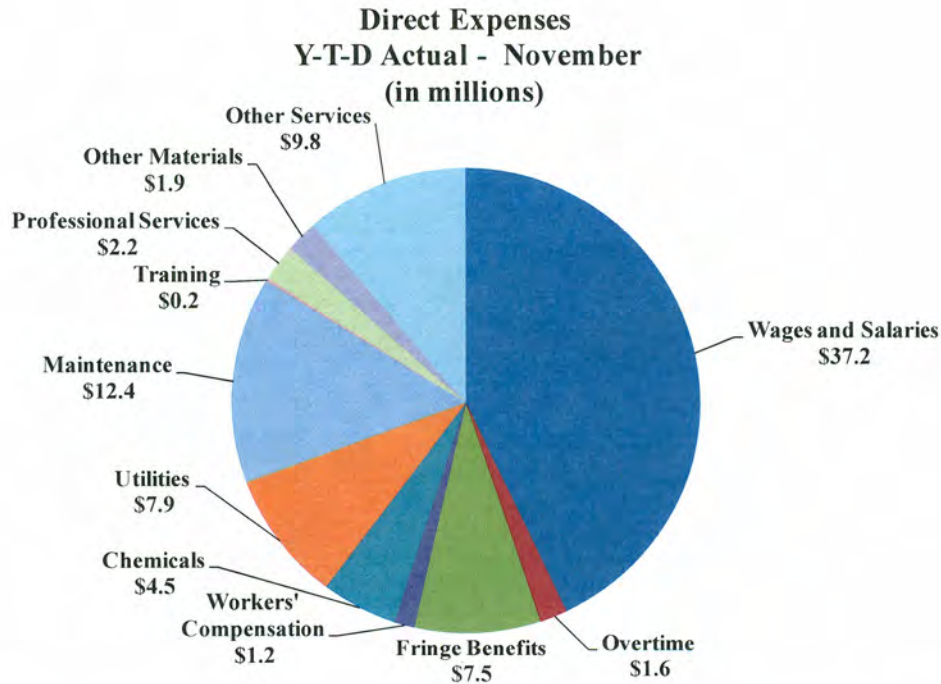
The largest variance year-to-date is the debt service expense which is below budget by \$5.7 million due to the continued favorable short-term rate environment. Indirect expenses are below budget by \$362,000 for lower Insurance and Watershed Reimbursement expenses. The underspending is offset by higher direct expenses of \$857,000 mainly due to maintenance, other materials, workers' compensation, training, and other services. The majority of higher than budgeted direct expense spending is a matter of timing.

After the first six months of actual expenses, staff intend to once again deposit any favorable debt service savings into the approved defeasance account.

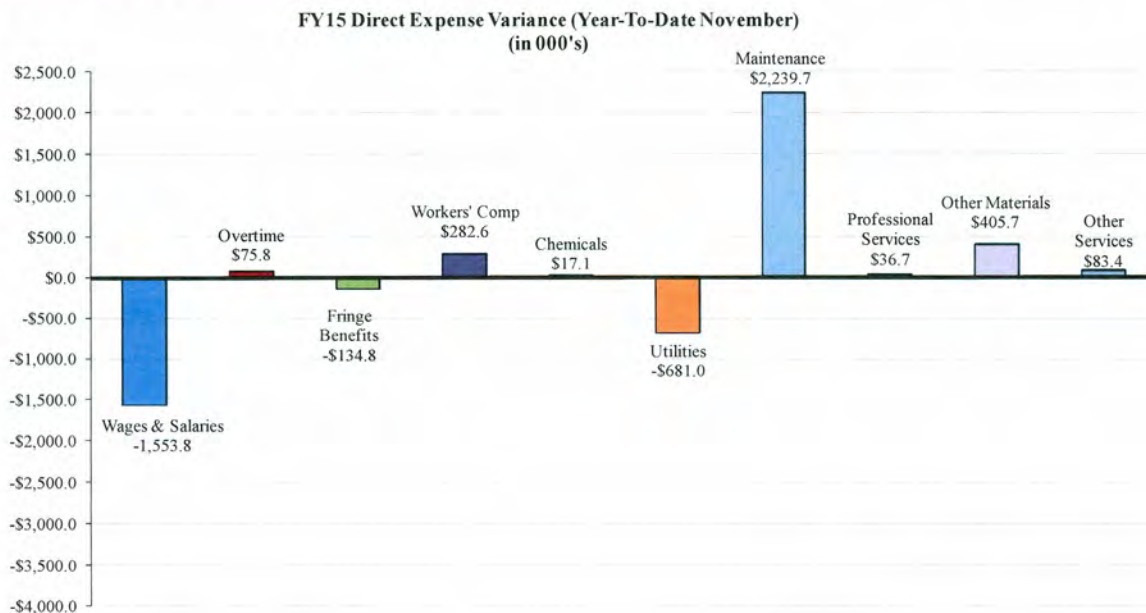
Please refer to Attachment 1 for a more detailed comparison by line item.

Direct Expenses

Direct Expenses totaled \$86.4 million, \$857,000 or 1.0% higher than budget. The chart below represents the make-up of direct expense spending by category:



The primary reason for overspending on Direct Expenses was higher spending for maintenance, other materials, workers' compensation, training, and other services offset by underspending for wages and salaries, utilities, and fringe benefits.



Maintenance

Maintenance was overspent by \$2.2 million or 22.0% year-to-date. Materials are overspent by \$1.8 million and services are overspent by \$477,000. The majority of the variance is timing related for projects scheduled for FY14 completed in FY15 such as the Quabbin Spillway fence rehabilitation, heat pump block heaters for various water and wastewater facilities, and ventilation controls at New Neponset and Framingham Pump Stations in Field Operations and the condenser unit services performed on the Back Pressure Steam Turbine Generator at Deer Island.

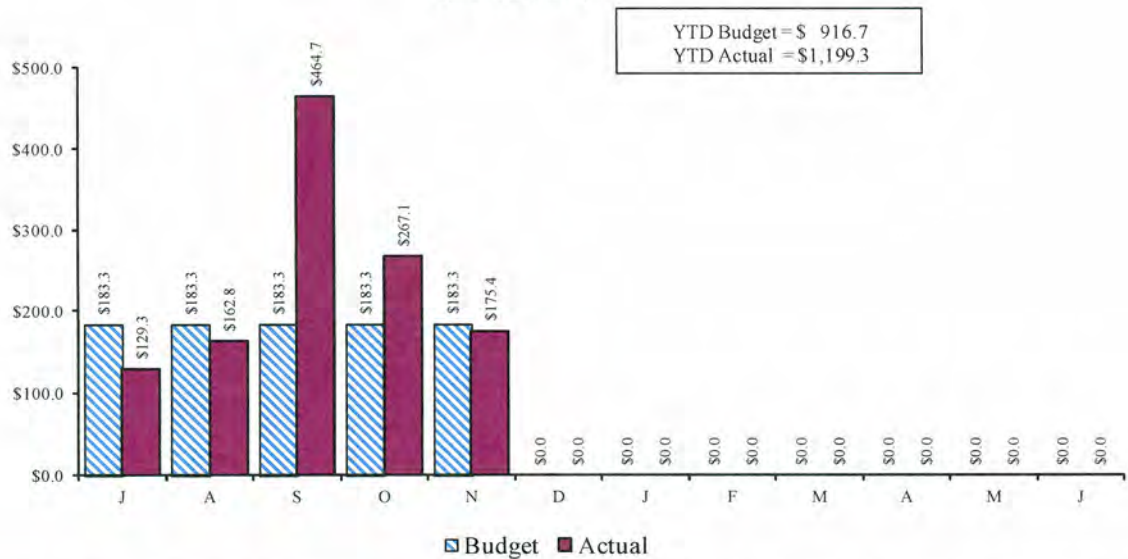
Other Materials

Other Materials are higher than budget by \$406,000 or 26.9% mainly due to timing of computer hardware purchases, Clinton gravel purchases, health and safety materials, work clothes, and equipment/furniture.

Workers' Compensation

Workers' Compensation expenses are higher than budget by \$283,000 or 30.8%, based on higher compensation payments of \$261,000 and administrative and legal costs of \$48,000.

FY15 Workers' Compensation Spending (Year-To-Date November)
(in thousands)



# of Open Claims-Lost Time	69	72	70	66	66	0	0	0	0	0	0	0
# of Open Claims-Medical Only	16	24	24	21	14	0	0	0	0	0	0	0

Training

Training expenses are higher than budget by \$86,000 or 104.6% mainly due to timing.

Other Services

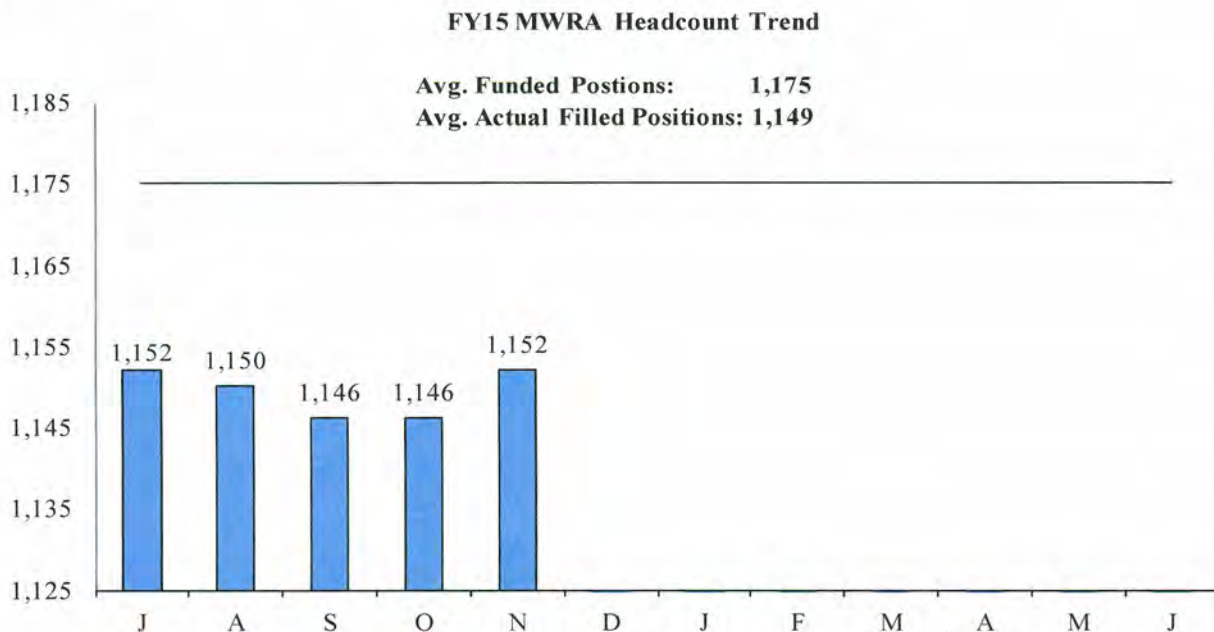
Other Services expenses are higher than budget by \$83,000 or 0.9% mainly due to higher than budgeted telecommunications expenses due to security data lines and Charlestown Navy Yard headquarters carpet and painting upgrades.

Overtime

Overtime expenses are higher than budgeted by \$76,000 or 4.9% due to higher than projected wet weather events and coverage requirements.

Wages and Salaries

Wages and Salaries were underspent by \$1.6 million or 4.0% mainly as a result of lower than budgeted filled positions, the salary mix differential between staff retiring at higher rates and new hires coming on board at lower rates, and the timing of projected cost of living increases for the currently unsettled union contracts. The average actual filled positions was 1,149 which is 26 positions lower than the 1,175 positions funded. Additionally, MWRA had 6 temporary employees.



Utilities

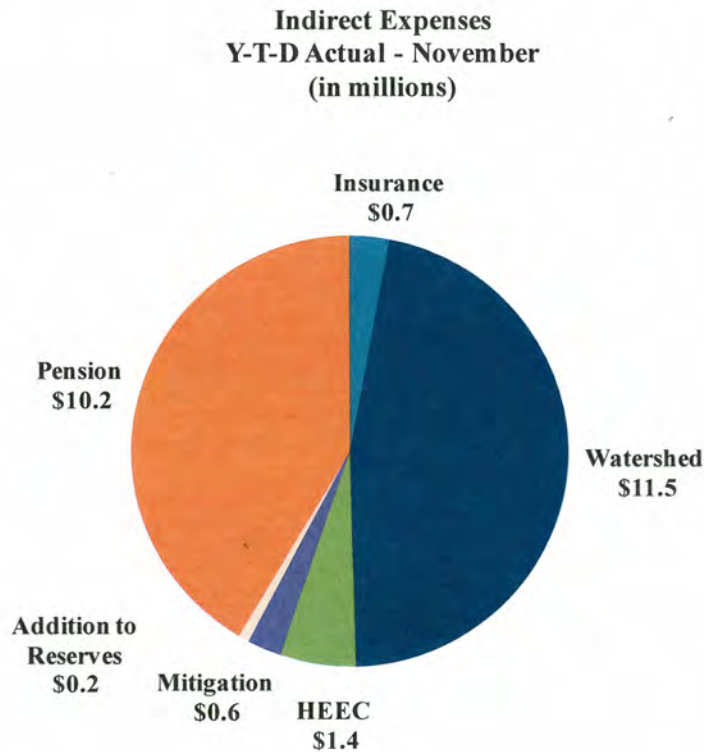
Utilities are underspent \$681,000 or 7.9% year-to-date primarily for lower Electricity of \$1.1 million mainly due to lower transmission and distribution costs and lower flows which resulted in less pumping demand at Deer Island and Water use of \$99,000. This underspending is partially offset by overspending on Diesel of \$566,000 due to the decision to purchase fuel at Deer Island to take advantage of favorable pricing of \$2.70 per gallon. Fuel purchase was budgeted in March.

Fringe Benefits

Fringe Benefits are lower than budget by \$135,000 or 1.8% mainly due to lower than budgeted health and unemployment insurance due to the lower headcount.

Indirect Expenses

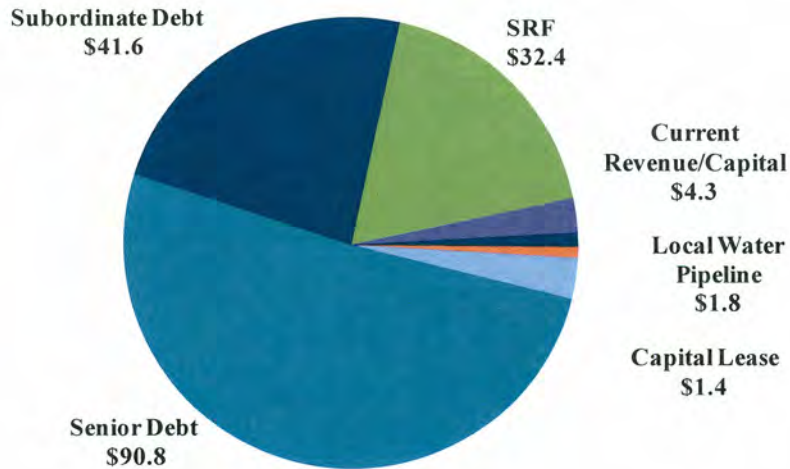
The majority of the year-to-date underspending on Indirect Expenses is for lower Insurance expenses of \$173,000 related to both lower premiums and claims, and lower Watershed Reimbursement expenses of \$119,000 due to FY14 overaccrual.



Debt Service Expenses

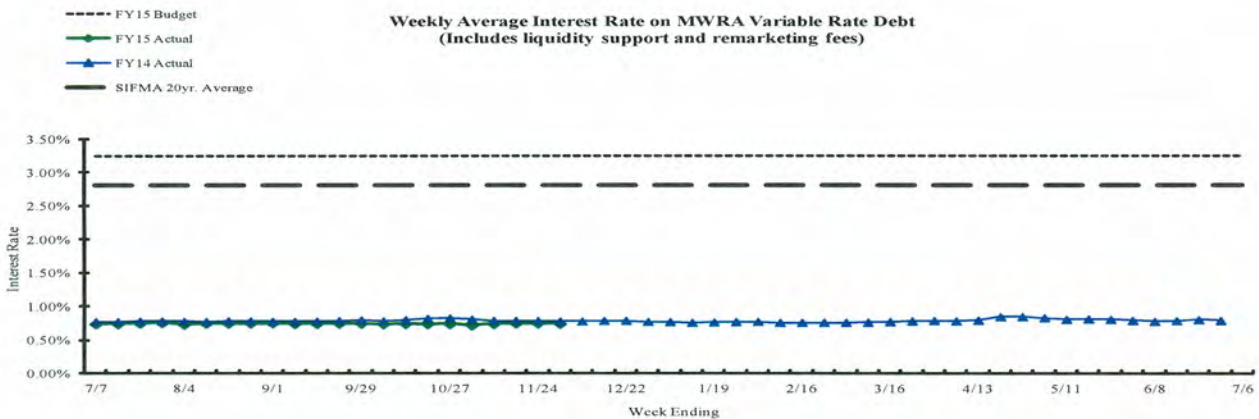
Debt Service Expenses include the principal and interest payment for fixed debt, the variable subordinate debt, and the State Revolving Fund (SRF) obligation, the commercial paper program for the Local Water Pipeline projects, current revenue for capital, and the Chelsea facility lease payment.

**Debt Expenses
Y-T-D Actual- November
(in millions)**



Debt Service expenses through November totaled \$163.7 million which is \$5.7 million or 3.4% lower than budgeted levels mainly due to favorable short-term interest rates. The short-term rates related variance is \$5.3 million year-to-date. In November the Authority also reflected the favorable impact of \$400,000 as a result of the recently completed debt refinancing.

The graph below reflects the variable rate trend by month over the past year in comparison with FY14 Actuals and the FY15 Budget for the same period.



Revenue

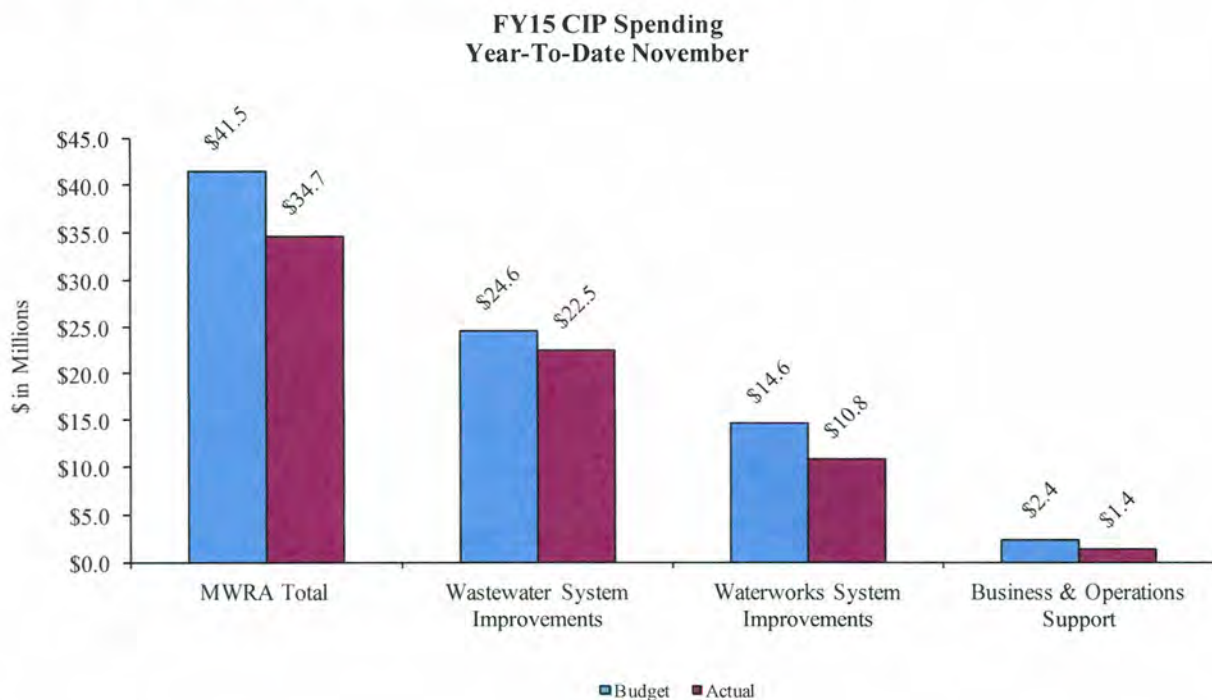
Year-to-date revenue for FY15 totals \$287.0 million which is \$761,000 or 0.3% higher than budget due to higher non-rate revenue of \$875,000 offset by lower Investment Income of \$114,000 due to lower than budgeted short-term rates.

The higher non-rate Revenue of \$875,000 is mainly due to the \$372,000 payment received for the sale of the Fox Point CSO Facility, \$333,000 for the sale of unbudgeted emergency water for the Town of Hudson, \$153,000 for higher permit, monitoring, and penalty fees, \$75,000 reimbursement for Briarwood Rehabilitation Easement project, \$61,000 due to the timing of the Fore River Railroad Corporation payments, and other miscellaneous revenue items totaling \$53,000. The higher favorable variances were offset by lower Energy revenue of \$173,000 mainly due to the timing of Renewable Portfolio Standard (RPS) sales.

FY15 Capital Improvement Program

Spending year-to-date in FY15 totals \$34.7 million, \$6.8 million or 16.4% lower than budget. After accounting for programs which are not directly under MWRA's control, most notably the Inflow and Infiltration (I/I) program, the Local Water Pipeline program, and the community managed Combined Sewer Overflow (CSOs) projects, the underspending is \$7.4 million or 23.6%.

Underspending was reported in all programs: Wastewater of \$2.0 million, Waterworks of \$3.8 million, and Business and Operations Support of \$1.0 million.



Spending By Program:

\$ in Millions	Budget	Actuals	\$ Var.	% Var.
Wastewater System Improvements				
Interception & Pumping	5,056,995	3,501,640	-1,555,355	-30.8%
Treatment	7,491,186	7,778,621	287,435	3.8%
Residuals	0	8,515	8,515	N/A
CSO	6,307,696	10,016,706	3,709,011	58.8%
Other	5,697,090	1,229,194	-4,467,895	-78.4%
Total Wastewater System Improvements	24,552,967	22,534,678	-2,018,287	-8.2%
Waterworks System Improvements				
Drinking Water Quality Improvements	10,862,701	8,168,682	-2,694,018	-24.8%
Transmission	2,094,342	977,701	-1,116,641	-53.3%
Distribution & Pumping	3,037,975	1,926,700	-1,111,274	-36.6%
Other	-1,439,810	-287,752	1,152,059	-80.0%
Total Waterworks System Improvements	14,555,208	10,785,332	-3,769,875	-25.9%
Business & Operations Support	2,353,831	1,351,668	-1,002,162	-42.6%
Total MWRA	41,462,006	34,671,678	-6,790,327	-16.4%

The main reasons for the underspending were:

1. **Wastewater Other** of \$4.5 million – primarily due to Inflow and Infiltration (I/I) community requests for grants and loans being lower than budget.
2. **Drinking Water Quality Improvements** of \$2.7 million – mainly for Spot Pond Covered Storage of \$3.0 million mainly for timing of work and Carroll Water Treatment Plant of \$424,000 for less than anticipated Carroll UV Disinfection Engineering Services During Construction.
3. **Wastewater Interception and Pumping** of \$1.6 million – for lower spending on Prison Point/Cottage Farm Engine, Pumps, and Gearboxes of \$1.0 million and Nut Island Headworks Electrical and Grit and Screenings Conveyance Construction of \$142,000 due to timing of work, Chelsea Creek Headworks Design of \$253,000 due to design delays, and Alewife Brook Pump Station Screen Design/Construction Administration and Resident Engineer Inspection of \$74,000 due to additional time for review of contract specifications.
4. **Water Transmission** of \$1.1 million – mainly for lower than budgeted spending for Long-Term Redundancy of \$466,000 for Sudbury Aqueduct MEPA Review, Dam Projects of \$250,000 due to less than anticipated Design and Engineering Services During Construction, and Watershed Land of \$110,000 due to timing.
5. **Water Distribution and Pumping** of \$1.1 million – for lower spending on Weston Aqueduct Supply Mains of \$573,000 for lower WASM 3 Design, Construction Administration, and Resident Inspection work, Southern Extra High Redundancy and Storage of \$442,000 mainly for delays for Southern Extra High Redundancy and Storage Final Design, and Valve Replacement of \$271,000 due to timing of equipment purchases.
6. **Business and Operations Support** of \$1.0 million – mainly for lower than budgeted spending for MIS initiatives of \$361,000, Vehicle Purchases of \$300,000 due to timing, and lower than projected spending for As-Needed Design Services of \$300,000.

The underspending was offset by overspending on the following programs:

1. **Combined Sewer Overflow (CSO)** overspending of \$3.7 million – due to the timing of payments to the City of Boston for work on the Reserved Channel Sewer Separation project.
2. **Waterworks Other** overspending of \$1.2 million – primarily due to Local Water Pipeline Assistance Program community requests for loans, and higher repayments.
3. **Drinking Water Quality Improvements** overspending of \$720,000 – primarily for Quabbin Water Treatment Plant Ultraviolet Construction project due to contractor progress.

4. **Water Distribution and Pumping** overspending of \$199,000 – due to contractor progress on West Street Pipe Reading Construction.

Construction Fund Balance

The construction fund balance was at \$67 million as of November 2014. Commercial Paper availability was at \$180 million to fund construction projects.

Attachment 1 – Variance Summary November 2014

Attachment 2 – Current Expense Variance Explanations

Attachment 3 – Capital Improvement Program Variance Explanations

ATTACHMENT 1

	November 2014					
	Year-to-Date					
	Period 5 YTD Budget	Period 5 YTD Actual	Period 5 YTD Variance	%	FY15 Approved	% Expended
EXPENSES						
WAGES AND SALARIES	\$ 38,709,465	\$ 37,155,709	\$ (1,553,756)	-4.0%	\$ 96,554,749	38.5%
OVERTIME	1,540,831	1,616,625	75,794	4.9%	3,620,600	44.7%
FRINGE BENEFITS	7,675,673	7,540,884	(134,789)	-1.8%	18,299,405	41.2%
WORKERS' COMPENSATION	916,667	1,199,262	282,595	30.8%	2,200,000	54.5%
CHEMICALS	4,529,582	4,546,686	17,104	0.4%	10,219,580	44.5%
ENERGY AND UTILITIES	8,579,488	7,898,445	(681,043)	-7.9%	23,472,354	33.6%
MAINTENANCE	10,185,956	12,425,745	2,239,789	22.0%	27,972,607	44.4%
TRAINING AND MEETINGS	81,844	167,434	85,590	104.6%	361,019	46.4%
PROFESSIONAL SERVICES	2,153,563	2,190,218	36,655	1.7%	5,957,201	36.8%
OTHER MATERIALS	1,507,758	1,913,410	405,652	26.9%	5,952,729	32.1%
OTHER SERVICES	9,666,625	9,750,012	83,387	0.9%	22,538,498	43.3%
TOTAL DIRECT EXPENSES	\$ 85,547,452	\$ 86,404,430	\$ 856,977	1.0%	\$ 217,148,742	39.8%
INSURANCE	\$ 900,373	\$ 727,064	\$ (173,309)	-19.2%	\$ 2,128,155	34.2%
WATERSHED/PILOT	11,620,565	11,501,521	(119,044)	-1.0%	27,466,790	41.9%
BEC ₀ PAYMENT	1,391,410	1,383,800	(7,610)	-0.5%	3,198,174	43.3%
MITIGATION	679,448	617,651	(61,797)	-9.1%	1,605,967	38.5%
ADDITIONS TO RESERVES	204,326	204,326	-	0.0%	482,953	42.3%
RETIREMENT FUND	10,218,815	10,218,815	-	0.0%	12,629,475	80.9%
TOTAL INDIRECT EXPENSES	\$ 25,014,937	\$ 24,653,177	\$ (361,760)	-1.4%	\$ 47,511,514	51.9%
STATE REVOLVING FUND	\$ 32,402,961	\$ 32,402,961	\$ -	0.0%	\$ 78,460,635	41.3%
SENIOR DEBT	91,204,586	90,804,305	(400,281)	-0.4%	220,835,626	41.1%
CORD FUND	365,211	365,211	-	0.0%	876,506	41.7%
DEBT SERVICE ASSISTANCE	(853,660)	(853,660)	-	0.0%	(853,660)	100.0%
CURRENT REVENUE/CAPITAL	4,315,384	4,315,384	-	0.0%	10,200,000	42.3%
SUBORDINATE MWRA DEBT	41,637,047	41,637,047	-	0.0%	99,686,106	41.8%
LOCAL WATER PIPELINE CP	1,755,115	1,755,115	-	0.0%	4,148,453	42.3%
CAPITAL LEASE	1,361,064	1,361,064	-	0.0%	3,217,060	42.3%
VARIABLE DEBT	-	(5,278,725)	(5,278,725)	---	-	0.0%
BOND REDEMPTION SAVINGS	(2,853,907)	(2,853,907)	-	0.0%	(6,745,598)	42.3%
DEFESANCE ACCOUNT	-	-	-	---	-	---
TOTAL DEBT SERVICE	\$ 169,333,800	\$ 163,654,794	\$ (5,679,006)	-3.4%	\$ 409,825,128	39.9%
TOTAL EXPENSES	\$ 279,896,189	\$ 274,712,401	\$ (5,183,789)	-1.9%	\$ 674,485,384	40.7%
REVENUE & INCOME						
RATE REVENUE	\$ 275,133,601	\$ 275,133,601	\$ -	0.0%	\$ 650,315,784	42.3%
OTHER USER CHARGES	3,766,122	3,708,935	(57,187)	-1.5%	8,259,693	44.9%
OTHER REVENUE	3,278,144	4,209,926	931,782	28.4%	6,180,450	68.1%
RATE STABILIZATION	-	-	-	---	-	---
INVESTMENT INCOME	4,080,330	3,966,806	(113,524)	-2.8%	9,729,457	40.8%
TOTAL REVENUE & INCOME	\$ 286,258,197	\$ 287,019,267	\$ 761,069	0.3%	\$ 674,485,384	42.6%

**ATTACHMENT 2
Current Expense Variance Explanations**

Total MWRA	FY15 Budget YTD November	FY15 Actuals YTD November	FY15 YTD Actual vs. FY15 Budget		Explanations
			\$	%	
Direct Expenses					
Wages & Salaries	38,709,465	37,155,709	(1,553,756)	-4.0%	Underspending is due to lower headcount, salary mix differential between staff retiring at higher rates and new hires coming on board at lower rates, and timing of projected cost of living increases for unsettled union contracts. At the end of November the average filled positions of 1,149, are 26 positions less than the 1,175 funded positions.
Overtime	1,540,831	1,616,625	75,794	4.9%	Overspending due to higher than projected wet weather events and coverage requirements.
Fringe Benefits	7,675,673	7,540,884	(134,789)	-1.8%	Lower than budget mainly for lower than budgeted Health of \$98k and Unemployment Insurance of \$24k due to lower headcount.
Worker's Compensation	916,667	1,199,262	282,595	30.8%	Overspending due to higher Compensation Payments of \$261k and Administrative and Legal costs of \$48k.
Chemicals	4,529,582	4,546,686	17,104	0.4%	Lower than budgeted Liquid Oxygen of \$105k due to better water quality resulting in lower dosing, Nitrazyme of \$79k due to system modifications by the Town of Framingham, Activated Carbon of \$61k due to timing, and Soda Ash of \$48k due to lower flows. Underspending is offset by higher spending for Hydrogen Peroxide of \$97k due to lower flows requiring increased pretreatment for hydrogen sulfide gas, Ferric Chloride of \$97k for struvite control, and Hydrofluosilicic Acid of \$54k due to delay in anticipated regulatory dosing change reduction.
Utilities	8,579,488	7,898,445	(681,043)	-7.9%	Underspending due to lower Electricity of \$1.1 million mainly due to lower than budgeted pricing and flows at Deer Island, as well as lower Water use of \$99k offset by higher Diesel Fuel of \$566k due to timing of the Deer Island fuel purchase originally planned for the Spring but moved to November to take advantage of favorable pricing of \$2.70 per gallon.
Maintenance	10,185,956	12,425,745	2,239,789	22.0%	Material purchases are greater than budget by \$1.8 million and services are overspent by \$627k mainly due to timing.

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY15 Budget YTD November	FY15 Actuals YTD November	FY15 YTD Actual vs. FY15 Budget		Explanations
			\$	%	
Training & Meetings	81,844	167,434	85,590	104.6%	
Professional Services	2,153,563	2,190,218	36,655	1.7%	Higher Lab & Testing of \$48k and Security of \$37k offset by lower Engineering of \$57k.
Other Materials	1,507,758	1,913,410	405,652	26.9%	Higher than budget mainly due to timing of Computer Hardware purchases of \$240k, Other Materials of \$67k mainly for Clinton gravel purchases, Health and Safety Materials of \$58k, Work Clothes of \$49k, and Equipment/Furniture offset by lower Vehicle Expenses of \$49k due to lower fuel prices and Postage of \$40k due to timing.
Other Services	9,666,625	9,750,012	83,387	0.9%	Higher than budget mainly due to Telecommunications expenses of \$78k due to security data lines and Space Lease/Rentals of \$66k for Charlestown Navy Yard headquarters carpet and painting upgrades.
Total Direct Expenses	85,547,452	86,404,430	856,978	1.0%	
Indirect Expenses					
Insurance	900,373	727,064	(173,309)	-19.2%	Lower Premiums of \$92k and Payments/Claims of \$82k.
Watershed/PILOT	11,620,565	11,501,521	(119,044)	-1.0%	Lower Reimbursement expenses of \$119k due to FY14 overaccrual.
HEEC Payment	1,391,410	1,383,800	(7,610)	-0.5%	
Mitigation	679,448	617,651	(61,797)	-9.1%	
Addition to Reserves	204,326	204,326	-	0.0%	
Pension Expense	10,218,815	10,218,815	-	0.0%	
Post Employee Benefits	-	-	-	-	
Total Indirect Expenses	25,014,937	24,653,177	(361,760)	-1.4%	

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY15 Budget YTD November	FY15 Actuals YTD November	FY15 YTD Actual vs. FY15 Budget		Explanations
			\$	%	
Debt Service					
Debt Service	170,187,461	164,508,455	(5,679,006)	-3.3%	Underspending from favorable short-term interest rates of \$5.3 million. In November the Authority also reflected the favorable impact of \$400k as a result of the recent debt refinancing.
Debt Service Assistance	(853,660)	(853,660)	-	0.0%	
Total Debt Service Expenses	169,333,801	163,654,795	(5,679,006)	-3.4%	
Total Expenses					
Total Expenses	279,896,190	274,712,402	(5,183,788)	-1.9%	
Revenue & Income					
Rate Revenue	275,133,601	275,133,600	(1)	0.0%	
Other User Charges	3,766,122	3,708,935	(57,187)	-1.5%	
Other Revenue	3,278,144	4,209,926	931,782	28.4%	Higher non-rate Revenue of \$875k is mainly due to \$372k payment received for the sale of the Fox Point CSO Facility, \$333k for the sale of unbudgeted emergency water for the Town of Hudson, \$153k for higher permit fees, monitoring, and penalty fees, \$75k for reimbursement of sewer expenses connected with Briarwood Rehabilitation, \$61k due to the timing of the Fore River Railroad Corporation payments, and other miscellaneous revenue items totaling \$53k offset by lower Energy revenue of \$173k mainly due to the timing of Renewable Portfolio Standard (RPS) sales.
Rate Stabilization	-	-	-		
Investment Income	4,080,330	3,966,806	(113,524)	-2.8%	Lower Investment Income due to lower than budgeted short-term rates.
Total Revenue	286,258,197	287,019,267	761,070	0.3%	
Net Revenue in Excess of Expenses	6,362,007	12,306,865	5,944,858		

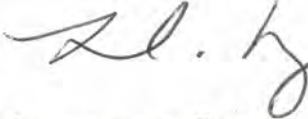
ATTACHMENT 3
Capital Improvement Program Variance Explanations

	FY15 Budget YTD November	FY15 Actuals YTD November	YTD Actuals vs. Budget		Explanations
			\$	%	
Interception & Pumping (I&P)	\$5,057	\$3,502	(\$1,555)	-30.8%	Underspending mainly due to timing of work for Prison Point/Cottage Farm Engine Pump & Gearbox Rebuilds of \$1.0M, Chelsea Creek Upgrades Design/Construction Administration of \$253,000 due to design delays, and Nut Island Electrical and Grit and Screenings Conveyance of \$142,000 due to timing.
Treatment	\$7,491	\$7,779	\$287	3.8%	Overspending on Scum Skimmer Replacement of \$2.4M, Clinton Digester Rehabilitation of \$1.0M, and North Main Pump Station (NMPS) VFD Replacement Construction of \$375,000 due to contractor progress. Offset by underspending on Electrical Equipment Upgrade Construction 4 of \$1.4M, Centrifuge Backdrive Replacement of \$1.1M, Butterfly Valve Replacement of \$600,000, and other smaller projects of \$388,000 mainly due to timing.
Residuals	\$0	\$9	\$9	-	
CSO	\$6,308	\$10,017	\$3,709	58.8%	Overspending on Reserved Channel Sewer Separation of \$3.7M due to timing of payment versus budget.
Other Wastewater	\$5,697	\$1,229	(\$4,468)	-78.4%	Underspending on Infiltration and Inflow (I/I) due to community requests for grants and loans being less than budgeted.
Total Wastewater	\$24,553	\$22,535	(\$2,018)	-8.2%	
Drinking Water Quality Improvements	\$10,863	\$8,169	(\$2,694)	-24.8%	Underspending for Spot Pond Storage Facility of \$3.0M mainly for timing of work and Carroll Water Treatment Plant of \$341,000 for Ultraviolet Disinfection - Design/Engineering Services During Construction/Resident Engineer Inspection due to less than projected need. Offset by overspending on Quabbin Water Treatment Plant of \$720,000 due to contractor progress.
Transmission	\$2,094	\$978	(\$1,117)	-53.3%	Underspending for Long Term Redundancy of \$466,000 mainly due to ongoing alternatives analysis of Sudbury Aqueduct - MEPA Review, Dam Projects of \$250,000 due to less than anticipated design and engineering services, and Watershed Land of \$110,000 due to the timing of land acquisitions.

ATTACHMENT 3
Capital Improvement Program Variance Explanations

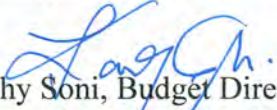
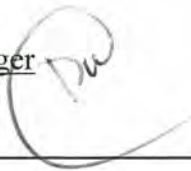
	FY15 Budget YTD November	FY15 Actuals YTD November	YTD Actuals vs. Budget		Explanations
			\$	%	
Distribution & Pumping	\$3,038	\$1,927	(\$1,111)	-36.6%	Underspending on Weston Aqueduct Supply Mains of \$573,000 mainly due to less than anticipated spending for WASM 3 Design/Construction Administration/Resident Inspection, Southern Extra High (SEH) Redundancy & Storage of \$442,000 due to Redundancy/Storage Phase 1 - Final Design/Construction Administration/Resident Inspection delays pending additional time to meet with local communities, and Valve Replacement of \$271,000 due to timing of equipment purchases. Offset by overspending on Northern Intermediate High of \$199,000 mainly due to contractor progress on West Street Pipe Reading Construction.
Other Waterworks	-\$1,440	(\$288)	\$1,152	-	Overspending on Local Water System Assistance Program of \$1.4M due to community requests for loans, and higher repayments. Offset by Central Monitoring System of \$220,000 due to schedule shift for SCADA implementation.
Total Waterworks	\$14,555	\$10,785	(\$3,770)	-25.9%	
Business & Operations Support	\$2,354	\$1,352	(\$1,002)	-42.6%	Underspending on MIS-related projects of \$361,000 due to timing of IT Strategic Plan implementation, Capital Maintenance Planning & Development of \$300,000 due to lower than projected use of as-needed technical assistance, and Centralized Equipment Purchase of \$285,000 due to timing of vehicle purchases.
Total MWRA	\$41,462	\$34,672	(\$6,790)	-16.4%	

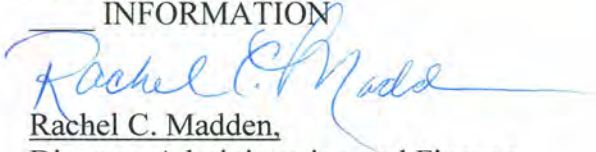
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: December 17, 2014
SUBJECT: Transmittal of the FY16 Proposed Capital Improvement Program

COMMITTEE: Administration, Finance & Audit

X VOTE
INFORMATION


Kathy Soni, Budget Director

David Whelan, Budget Manager
Preparer/Title


Rachel C. Madden,
Director, Administration and Finance

RECOMMENDATION:

To approve the transmittal of the FY16 Proposed Capital Improvement Program (CIP) to the Advisory Board for its 60-day review and comment period.

DISCUSSION:

The Fiscal Year 2016 Proposed Capital Improvement Program (CIP) represents an update to the program approved by the Board in June 2014 for Fiscal Year 2015. The Proposed CIP includes the latest cost estimates, revised schedules, and new projects based on the recently updated Master Plan.

The FY16 Proposed Capital Improvement Program projects \$147.1 million spending for FY16, of which \$96.7 million supports Wastewater System Improvements, \$41.6 million supports Waterworks System Improvements, and \$8.8 million is for Business and Operations Support.

FY16 is the third year of the FY14-18 Base-Line Cap which was set at \$791.7 million. Based on the FY16 Proposed Budget, spending for FY14-18 stands at \$707.5 million, which is \$84.2 million or 10.6% lower than the Base-Line Cap. This lower spending is the result of the exclusion of the community assistance programs from the Cap calculation and lower spending in FY14 and FY15.

In FY16, the Authority will reach a significant milestone as the court mandated Combined Sewer Overflow (CSO) program is nearing completion. Going forward, asset protection and long-term water redundancy initiatives will be the main focus.

Some of the major projects with significant spending in the FY16 include projects already in construction such as Cambridge Sewer Separation, a number of asset protection projects at Deer Island such as the Scum Skimmer replacement, the North Main Pump Station Variable Frequency Drive replacement, and Electrical Equipment Upgrade Construction 4, as well as planned projects such as the Wachusett Aqueduct Pump Station construction, Chelsea Creek

Headworks Rehabilitation, and the Northern Intermediate High and Southern Extra High redundancy initiatives. Staff projects 45 project awards for FY16, the most significant ones being the Chelsea Creek Headworks Rehabilitation, the Wachusett Aqueduct Pump Station Construction, HVAC Equipment Replacement at Deer Island, and Northern Intermediate High (NIH) Section 89/29 Construction.

The Five-Year Spending Cap

MWRA established its first five-year Cap in FY03 covering the FY04-08 period. The intent of the Cap was to create a ceiling or not-to-exceed amount for spending over a five-year period. The goal of the Cap is to control spending while still ensuring an adequate level of investment to support the core operational needs of the Authority.

Each year, actual spending is compared to the Base-Line Cap. The Cap allows annual spending to vary by +/- 20% from the Base-Line Cap as long as the total five-year spending does not exceed the Base-Line Cap.

FY14-18 Base-Line Cap

The FY14 Final CIP established the FY14-18 Base-Line Cap at \$791.7 million with the following breakdown.

FY14-18 Base-Line Cap		FY14	FY15	FY16	FY17	FY18	Total FY14-18
	Projected Expenditures	\$142.5	\$147.6	\$149.3	\$141.8	\$136.8	\$718.0
Contingency	7.6	9.5	10.1	9.8	9.3	46.1	
Inflation on Unawarded Construction	0.8	4.2	8.4	11.1	13.5	37.9	
Less: Chicopee Valley Aqueduct Projects	(5.0)	(2.2)	(1.4)	(1.3)	(0.4)	(10.3)	
FY14-18 Base-Line Cap	\$145.8	\$159.1	\$166.4	\$161.3	\$159.1	\$791.7	

In FY15, at the recommendation of the Advisory Board, the Base-Line Cap was modified to exclude Community Assistance Programs from the Cap calculation which resulted in a net change of \$4.7 million (restated Cap would be ~\$787.0 million).

Based on the FY16 Proposed CIP, the five-year spending is now at \$707.5 million, with some cash flow changes between the years based on the latest cost estimates and updated schedules. The exclusion of the Community Assistance Programs from the Cap calculation account for a reduction of \$59.0 million.

The FY14-18 Cap based on the FY16 Proposed CIP complies with both the overall and annual Cap requirements.

FY16 Proposed Cap FY14-18 Comparison

FY16 Proposed		FY14	FY15	FY16	FY17	FY18	Total FY14-18
	Projected Expenditures		\$102.2	\$108.1	\$147.1	\$177.6	\$186.8
Contingency		0.0	5.3	8.2	10.4	12.0	35.9
Inflation on Unawarded Construction		0.0	0.0	1.4	5.5	9.2	16.1
Less: I/I Program		0.0	(11.2)	(16.9)	(18.9)	(18.1)	(65.1)
Less: Water Loan Program		0.0	1.6	2.2	2.5	-0.1	6.1
Less: Chicopee Valley Aqueduct Projects		(5.6)	(1.5)	(0.0)	(0.1)	(0.2)	(7.3)
FY16 Proposed FY14-18 Spending		\$96.6	\$102.3	\$141.9	\$177.0	\$189.6	\$707.5

FY16 Proposed vs FY14-18 Base-Line Cap		FY14	FY15	FY16	FY17	FY18	Total FY14-18
	Projected Expenditures		(\$40.3)	(\$39.4)	(\$2.2)	\$35.8	\$50.0
Contingency		(7.6)	(4.2)	(1.9)	0.7	2.7	(10.2)
Inflation on Unawarded Construction		(0.8)	(4.2)	(7.0)	(5.6)	(4.2)	(21.8)
Less: I/I Program		0.0	(11.2)	(16.9)	(18.9)	(18.1)	(65.1)
Less: Water Loan Program		0.0	1.6	2.2	2.5	(0.1)	6.1
Less: Chicopee Valley Aqueduct Projects		(0.6)	0.7	1.4	1.3	0.2	3.0
FY14-18 Cap (\$ Change)		(\$49.2)	(\$56.7)	(\$24.5)	\$15.7	\$30.5	(\$84.2)
FY14-18 Cap (% Change)		-33.8%	-35.7%	-14.7%	9.7%	19.2%	-10.6%

FY16 Proposed CIP Compared to the FY15 Final CIP by Program

The FY16 Proposed CIP increased by \$157.0 million versus the FY15 Final CIP approved by the Board of Directors in June 2014, with most of the additional spending in years outside of the current Cap period.

	FY16 Proposed	FY15 Final	\$ Change	% Change	FY14-18 \$ Change	FY14-18 % Change
Wastewater Systems Improvements	\$ 2,975.5	\$ 2,885.8	\$ 89.7	3.0%	\$ 8.6	2.0%
Waterworks System Improvements	2,906.7	2,843.7	63.0	2.2%	(46.4)	-15.7%
Business and Operations Support	127.0	122.7	4.3	3.4%	3.3	8.6%
Total MWRA without contingency	\$ 6,009.2	\$ 5,852.2	\$ 157.0	2.7%	\$ (34.5)	-4.6%

The majority of the increase from the FY15 Final CIP is attributable to scope changes, updated cost estimates, and updated inflation assumptions totaling approximately \$129.8 million and the inclusion of five new project requests totaling \$27.2 million.

The table on the following page details some of the major changes between the FY15 Final CIP and the FY16 Proposed CIP.

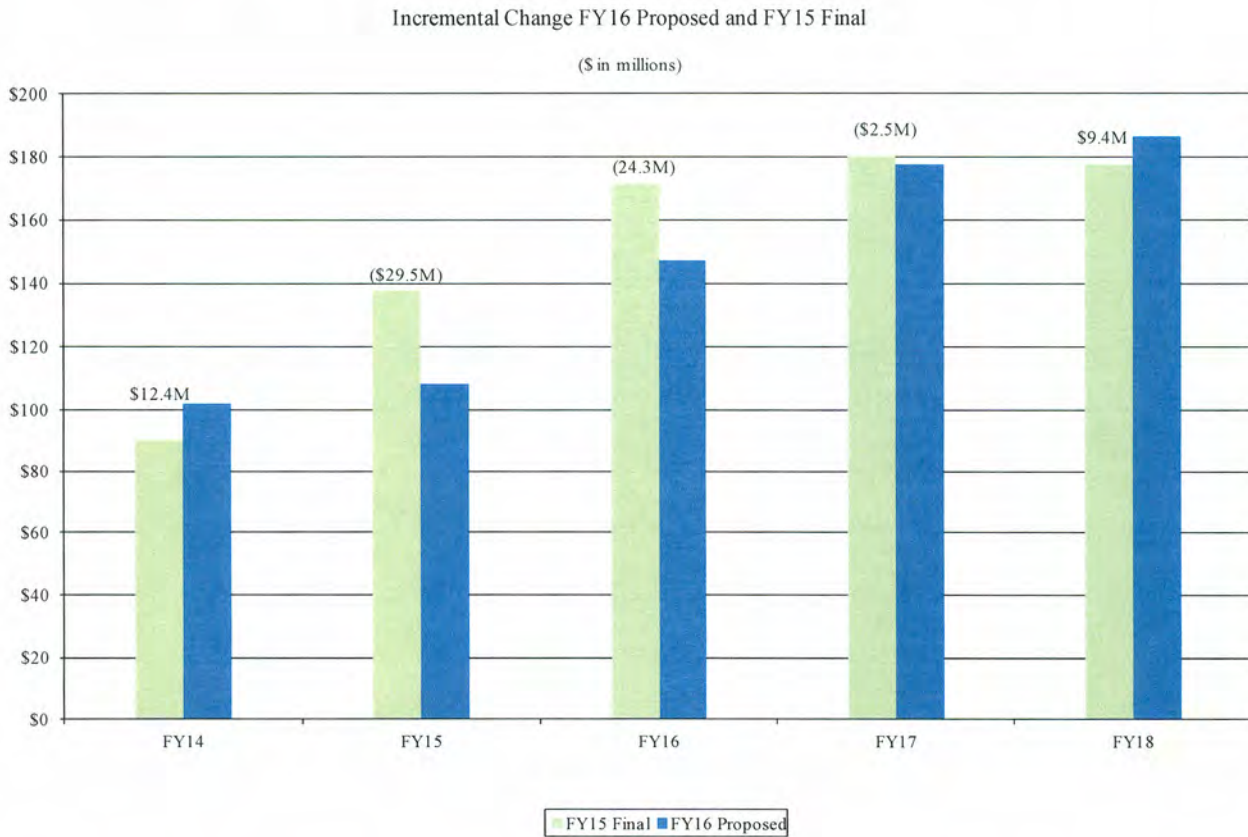
Comparison of Major Changes FY16 Proposed and FY15 Final CIP (in millions)

Project	FY15 Final	FY16 Proposed	Total Project Level Overall Impact	FY14-18 Impact	Beyond Cap	Notes
Wastewater SCADA/PLC Upgrades	\$0.0	\$7.0	\$7.0	\$0.6	\$6.4	New FY16 project
Replacement of the Weston Aqueduct Flow Control Valve	\$0.0	\$0.9	\$0.9	\$0.9	\$0.0	New FY16 project
Oakdale High Line Replacement	\$0.0	\$0.5	\$0.5	\$0.5	\$0.0	New FY16 project
Flat Roof Replacement at Cosgrove	\$0.0	\$0.3	\$0.3	\$0.3	\$0.0	New FY16 project
Waterworks SCADA/PLC Upgrade	\$0.0	\$18.5	\$18.5	\$1.6	\$16.9	New FY16 project
DITP Combined Heat and Power Construction (Design and Construction)	\$25.0	\$89.0	\$64.0	\$1.0	\$63.0	Increased scope
DITP Gas Line Design & Construction	\$10.0	\$0.0	-\$10.0	-\$1.8	-\$8.2	Included in DITP Combined Heat & Power
DITP Locat Scrubber Replacement	\$5.3	\$0.0	-\$5.3	-\$0.3	-\$5.0	Included in DITP Combined Heat & Power
DITP Clarifier Rehabilitation 2	\$27.0	\$35.0	\$8.0	\$8.6	-\$0.6	Updated cost estimate based on expanded scope
CSO - Reserved Channel Construction	\$53.6	\$57.2	\$3.5	\$3.5	\$0.0	Updated cost estimates
Nut Island System Wide Odor Control Construction	\$0.0	\$3.1	\$3.1	\$0.3	\$2.8	Added construction phase
Wachusett Pump Station Construction	\$50.6	\$60.5	\$9.9	-\$1.1	\$11.0	Increased scope, updated cost estimates, and longer duration
Schedule Shifts			\$0.0	-\$56.6	\$56.6	Schedule Changes
Sub-total	\$171.5	\$272.0	\$100.5	-\$42.4	\$142.9	

The highlighted items represent new projects added in the FY16 Proposed cycle.

Please refer to Attachment B for more detail on FY16 new projects.

The chart below shows the incremental change between the FY16 Proposed CIP and the FY15 Final CIP by fiscal year.



Please refer to Attachment D for detailed changes at the project level for the FY14-18 Cap and potential spending beyond FY18.

Major Planned Contract Awards for Fiscal Year 2016:

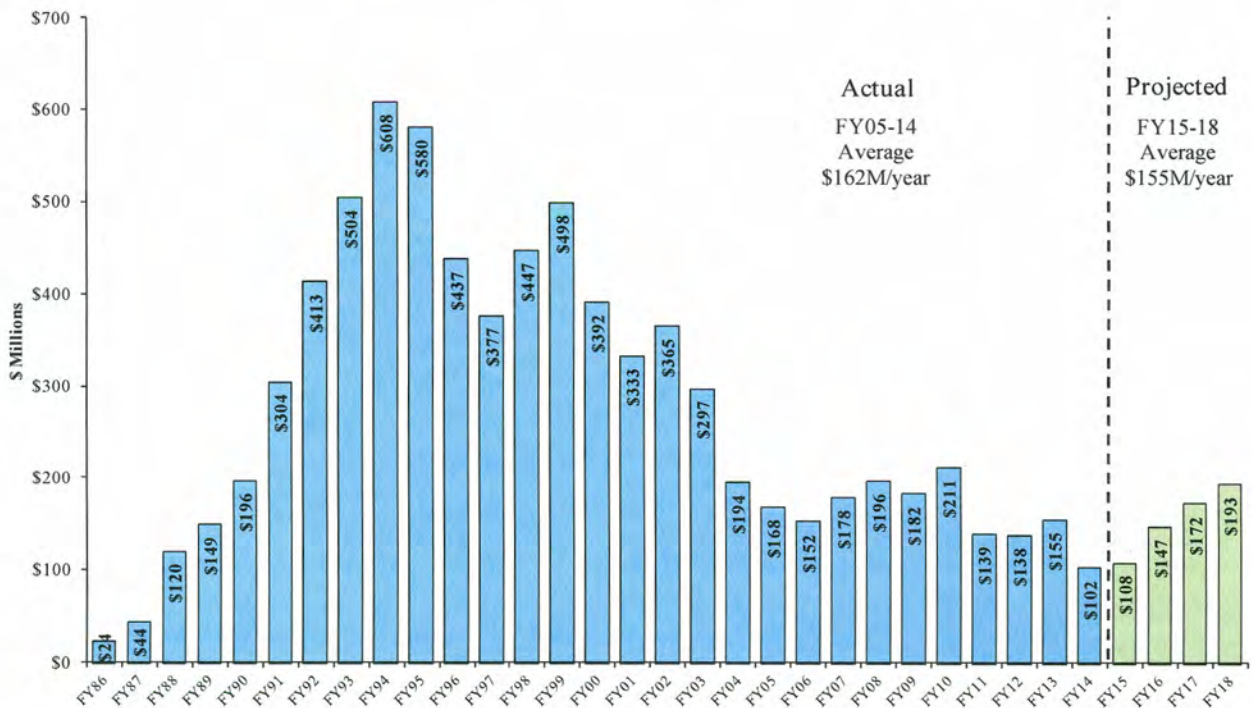
In FY16, 45 contracts totaling \$166.5 million are projected to be awarded. The largest ten projected contract awards total \$128.4 million and are listed below, accounting for just over 77% of expected awards:

Project	Subphase	NTP	FY16 Proposed
Facility Asset Protection	Chelsea Creek Upgrade Construction	Dec-15	\$54.8
NIH Redundancy & Storage	Sec 89/29 Redundancy Construction Phase 1B	Aug-15	20.2
DI Treatment Plant Asset Protection	HVAC Equipment Replacement - Construction	Mar-16	17.1
Clinton Wastewater Treatment Plant	Phosphorus Reduction Construction	Feb-16	7.1
DI Treatment Plant Asset Protection	Sodium Bisulf & Hypochlorite Tank Rehabilitation	Mar-16	6.6
DI Treatment Plant Asset Protection	Combined Heat & Power Design	Jan-16	6.0
Carroll Water Treatment Plant	Existing Facilities Modifications - CP7	Jul-15	5.5
DI Treatment Plant Asset Protection	Ancillary Modifications - Final Design 4	Jan-16	4.3
Applications Improvements Program	Enterprise Content Management	Sep-15	4.0
Central Monitoring System	Quabbin Power Communications & Security	Oct-15	2.8
Top 10 Awards for FY16			\$128.4
45 Contract Awards Planned for FY16			\$166.5

Historical Spending

The chart below captures the historical CIP spending through FY14 and projects spending to FY18 based on the FY16 Proposed CIP.

CIP Historical and Projected Spending



Changing Nature of the Capital Program - Shift from Mandated Projects

Since 1985, nearly 80% of the Authority's spending has been on court mandated projects. Going forward, the majority of spending will support Asset Protection, Water System Redundancy, Pipeline Replacement and Rehabilitation, and continued support for Community Assistance programs. Asset Protection and Water System Redundancy spending is projected to rise from past levels and currently accounts for 57.1% and 25.3% of FY14-18 capital expenditures respectively, a total of nearly \$594.8 million of the \$721.8 million projected to be spent over the 5-year period.

	FY09-13	FY14-18	FY19-23
Asset Protection	\$ 252.0	\$ 411.9	\$ 788.7
Carroll WTP	\$ 39.4	\$ 14.8	\$ 11.8
Water Redundancy	\$ 138.4	\$ 182.9	\$ 495.2
CSO	\$ 316.5	\$ 58.6	\$ 2.0
Other	\$ 80.1	\$ 53.7	\$ (22.6)
Total	\$ 826.4	\$ 721.8	\$1,275.0
Asset Protection	30.5%	57.1%	61.9%
Carroll WTP	4.8%	2.0%	0.9%
Water Redundancy	16.7%	25.3%	38.8%
CSO	38.3%	8.1%	0.2%
Other	9.7%	7.4%	-1.8%
Total	100.0%	100.0%	100.0%

The FY16 Proposed projects total CIP spending of \$2.2 billion starting in FY15.

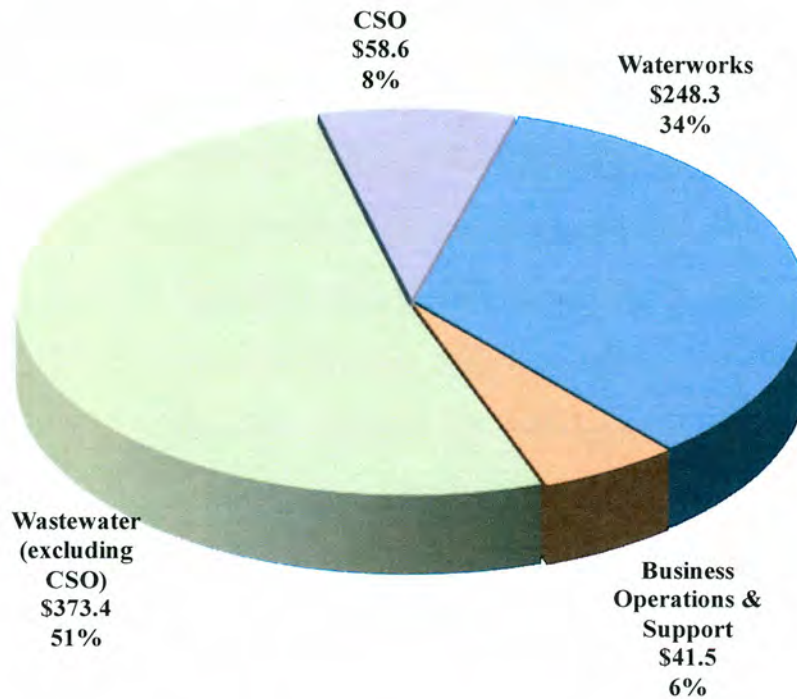
	Total Contract Amount	Payments Thru FY14	Projected Spending	Total FY14-18	Total FY19-23	Beyond 23
Wastewater System Improvements	\$2,975.6	\$1,791.7	\$1,183.8	\$432.0	\$688.0	\$119.6
Interception & Pumping	890.8	527.4	363.4	103.1	225.5	41.6
Treatment	776.0	213.8	562.1	195.6	344.4	51.2
Residuals	167.6	64.6	103.0	5.5	63.5	34.1
CSO	898.3	853.3	45.0	58.6	2.0	-
Other Wastewater	242.9	132.5	110.4	69.2	52.5	(7.3)
Waterworks System Improvements	\$2,906.7	\$1,915.6	\$991.0	\$248.3	\$579.1	\$204.7
Drinking Water Quality Improvements	665.5	625.4	40.1	58.1	12.2	0.0
Transmission	1,223.5	759.5	464.0	86.1	267.8	114.4
Distribution & Pumping	948.6	377.5	571.1	97.2	333.1	145.7
Other Waterworks	69.0	153.2	(84.2)	6.8	(34.0)	(55.5)
Business & Operations Support	127.0	82.9	44.0	41.5	8.0	-
Total MWRA	\$6,009.2	\$3,790.3	\$2,218.9	\$721.8	\$1,275.0	\$324.3

FY14-18 Proposed CIP Expenditures

Spending during the FY14-18 timeframe is projected to be \$721.8 million. Yearly cash-flows for the proposed Cap period are shown below:

	Total Contract Amount	Payments Thru FY14	Projected Spending	FY14	FY15	FY16	FY17	FY18	Total FY14-18
Wastewater System Improvements	\$2,975.6	\$1,791.7	\$1,183.8	\$55.7	\$72.0	\$96.7	\$110.5	\$97.1	\$432.0
Interception & Pumping	890.8	527.4	363.4	6.9	9.1	17.6	38.4	31.1	103.1
Treatment	776.0	213.8	562.1	29.1	28.0	47.8	47.9	42.8	195.6
Residuals	167.6	64.6	103.0	0.1	-	0.7	1.2	3.6	5.5
CSO	898.3	853.3	45.0	15.6	23.7	13.7	4.1	1.5	58.6
Other Wastewater	242.9	132.5	110.4	4.0	11.2	16.9	18.9	18.1	69.2
Waterworks System Improvements	\$2,906.7	\$1,915.6	\$991.0	\$41.0	\$28.4	\$41.6	\$56.2	\$81.1	\$248.3
Drinking Water Quality Improvements	665.5	625.4	40.1	30.2	17.0	3.9	4.7	2.2	58.1
Transmission	1,223.5	759.5	464.0	4.5	3.9	21.2	24.1	32.5	86.1
Distribution & Pumping	948.6	377.5	571.1	4.8	8.5	15.6	27.2	41.2	97.2
Other Waterworks	69.0	153.2	(84.2)	1.5	(1.0)	0.9	0.2	5.2	6.8
Business & Operations Support	127.0	82.9	44.0	5.5	7.8	8.8	10.9	8.5	41.5
Total MWRA	\$6,009.2	\$3,790.3	\$2,218.9	\$102.2	\$108.1	\$147.1	\$177.6	\$186.8	\$721.8

The graph below illustrates a breakdown of the major program spending for the FY14-18 timeframe.



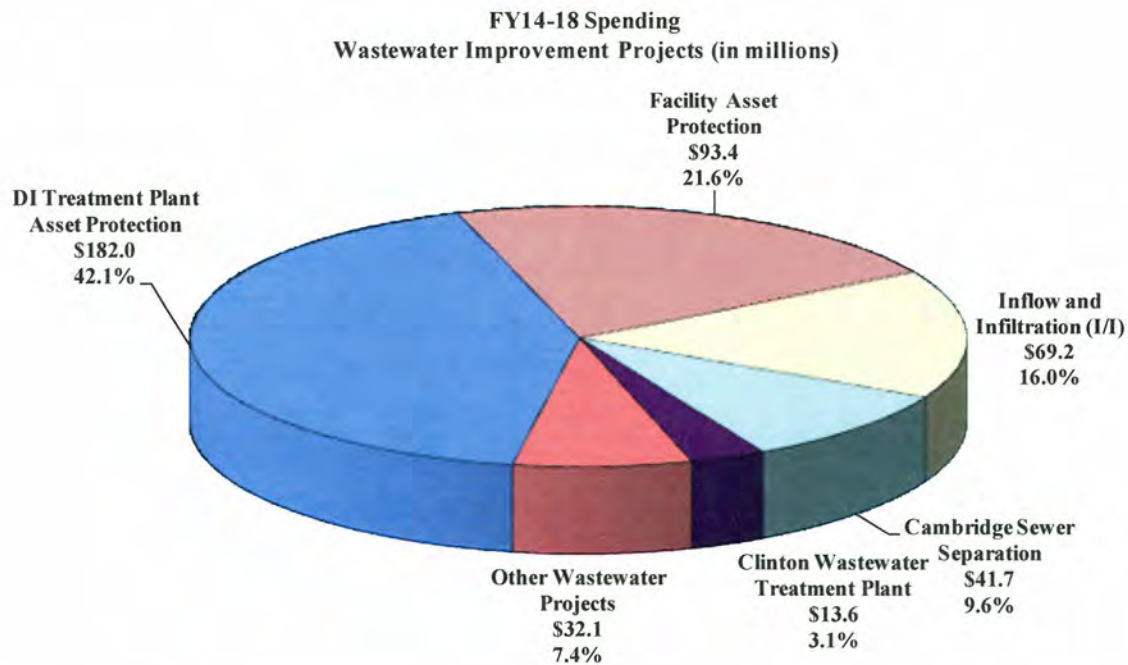
Please refer to Attachment C for a more detailed project listing and projected cash flows.

Top 10 Projects in the FY14-FY18 Cap Period

It is important to emphasize that the majority of spending within the Wastewater and Waterworks programs is concentrated in several larger projects with significant spending in the FY14-18 timeframe. These projects are either currently under construction or soon to be awarded. The top 5 projects for the Wastewater program total \$399.8 million for FY14-18 period and represent 92.5% of the \$432.0 million total program.

Wastewater Program

The breakdown of the \$432.0 million Wastewater program by major project is illustrated on the graph below:



The FY14-18 sub-phases of projects with spending greater than \$20 million along with a brief description of the scope of work are included below:

Infiltration/Inflow (I/I) Local Financial Assistance - \$69.2 million – This program provides funding assistance for communities to rehabilitate their collection systems with the goal of structurally reducing I/I flow.

Chelsea Headworks Construction - \$35.7 million (\$54.8 million total construction cost). This major rehabilitation project includes replacement/upgrade to the screens, grit collection system, grit and handling systems, odor control systems, HVAC, mechanical, plumbing and instrumentation. Solids handling systems will be automated and the building's egress and fire suppressions systems will also be upgraded.

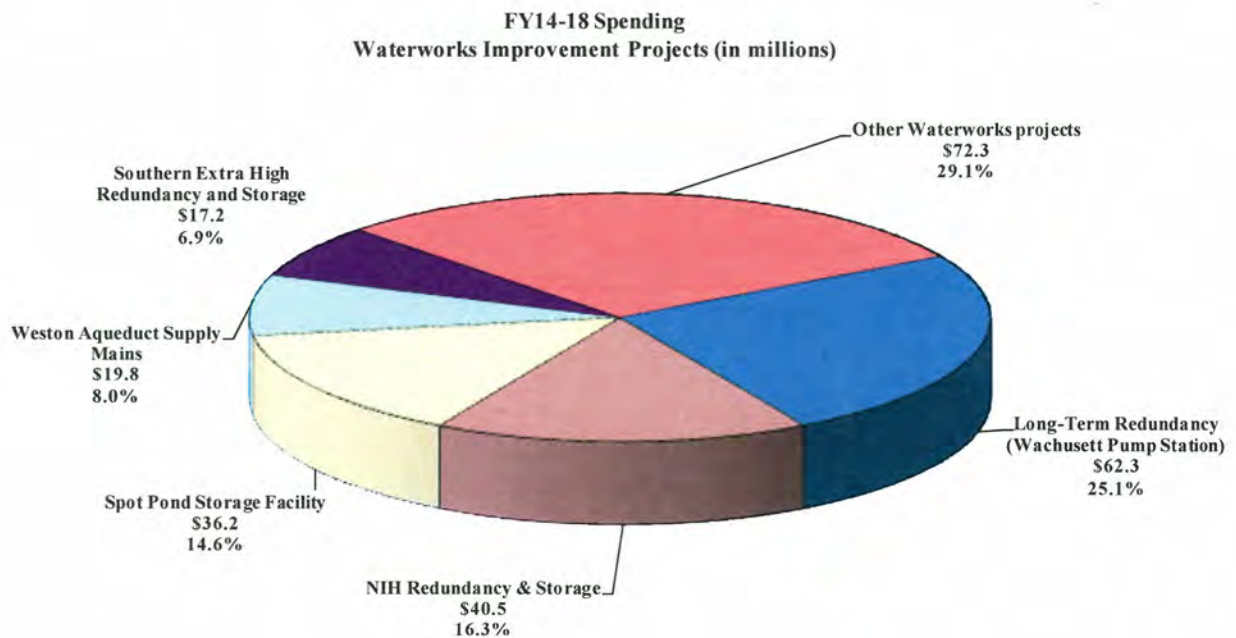
Cambridge Sewer Separation CSO Control Program Design and Construction- \$41.7 million (\$92.1 million total costs, \$63.5 million already spent). This project encompasses the wastewater system improvements implemented by the City of Cambridge to control CSO discharges to the Alewife Brook. Completed work includes the CAM004 Stormwater Outfall and Wetland Basin, Interceptor Connection Relief and Floatables Controls, and Sewer Separation at Outfall CAM400 and contract 8A (Huron Ave West). Remaining work involves three construction contracts to separate combined sewers in a 211-acre area upstream of Outfall CAM004 in the Huron Avenue and Concord Avenue neighborhoods, east of Fresh Pond Parkway. Cambridge’s contracts 8B and 9 are well underway. The contracts will redirect stormwater removed from the system to the wetland basin and will culminate in the closing of Outfall CAM004. All work is scheduled to be complete by December 2015 in compliance with Schedule Seven of the Federal District Court Order.

Deer Island Scum Skimmer Replacement - \$20.2 million - This is an asset protection replacement project which proposes to replace degraded carbon steel tip tubes and drive mechanisms for 40 Primary Clarifier tanks and 54 Secondary Clarifier tanks with stainless steel components to improve the system reliability and overall maintenance.

Water program

Similarly, the top 5 projects for the Waterworks program total \$176.0 million for FY14-18 and represent 70.9% of the \$248.3 million total program.

The breakdown of the \$248.3 million program by major project is illustrated on the graph below:



The FY14-18 sub-phases of projects with spending greater than \$20 million along with a brief description of the scope of work are included below:

Wachusett Aqueduct Pump Station Design and Construction - \$53.9 million (\$66.6 million in total cost) - This is a redundancy project for construction of a 240 mgd emergency pump station which will provide redundancy for the Cosgrove Tunnel by pumping raw water from the Wachusett Aqueduct to the Carroll Water Treatment Plant. This project, along with the completion of the on-going Hultman Aqueduct rehabilitation and interconnections project, will provide fully treated water transmission redundancy from the Wachusett Reservoir to the beginning of the metropolitan distribution system in Weston.

Spot Pond Storage Facilities - \$36.2 million (\$60.8 million in total cost) - This project is for the construction of a 20 million-gallon drinking water storage facility and redundant pump station in Stoneham. The underground, concrete tanks will provide drinking water storage for MWRA's Low Service area. Additionally, this project will provide system redundancy for 21 communities in the Northern Intermediate High and Northern High service areas currently served by the Gillis Pump Station.

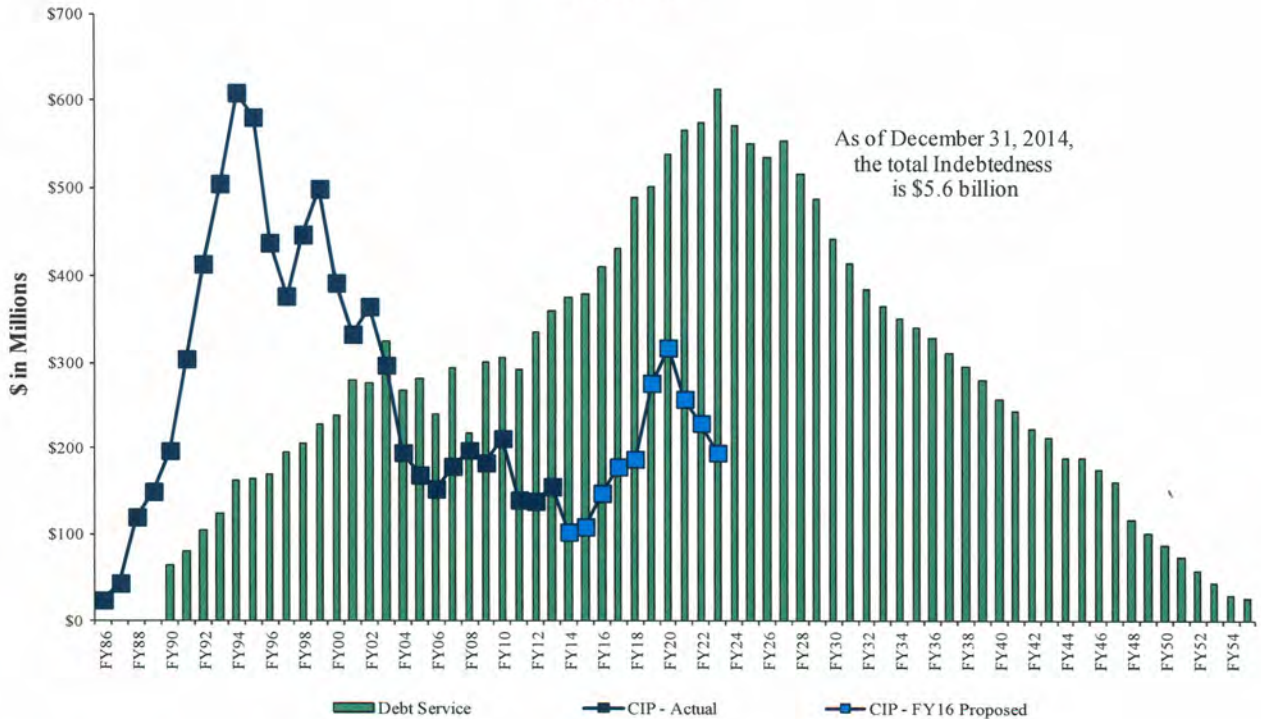
Northern Intermediate High (NIH) Section 89 & 29 Redundancy Construction Phases 1A-C & 2 - \$22.5 million and \$8.9 million respectively (total construction cost \$32.9 million and \$17.8 million) - This is a redundancy project for the MWRA's Northern Intermediate High service area. Currently, this area is primarily supplied by a single 48-inch diameter pipeline, the Gillis Pump Station, and water distribution storage from the Bear Hill Tank. This project proposes a new seven mile redundant pipeline under four construction phases and will provide uninterrupted water supply to the service area in the event of a failure of the existing single supply pipe and to allow the existing pipe to be removed from service for inspection, maintenance, and repair.

MWRA Capital Improvement Spending versus Debt Service -

The following graph was updated with the FY16 Proposed CIP spending and debt service projections to illustrate the relationship between the MWRA's CIP and debt service.

As of December 31, 2014, MWRA's total debt will be \$5.6 billion which results in significant increases in debt service obligations in the upcoming years. The Authority's debt service obligation as a percent of total expenses has increased from 36% in 1990 to 61% in the FY15 Final Current Expense Budget.

MWRA Capital Improvement Spending & Debt Service



Contingency

Contingency for each fiscal year is incorporated into the CIP to fund the uncertainties inherent to construction. The contingency budget is calculated as a percentage of budgeted expenditure outlays. Specifically, contingency is 7% for non-tunnel projects and 15% for tunnel projects. The total contingency budget in the FY16 Proposed CIP is \$153.8 million, with \$35.9 million during FY14-18.

Future Risks

Below is a list of projects which may change the budget put forth for FY16 as the preferred option is not decided at this time:

- Sudbury Aqueduct – tunnel vs. surface pipeline;
- Residual Processing/Asset management; and
- New regulatory mandates

CIP Review and Adoption Process

The Advisory Board will have 60 days from the transmittal of the FY16 Proposed CIP to review the budget and prepare comments and recommendations. During the review period, Advisory Board and MWRA staff will continue to meet and discuss the changes to the capital budget. The Advisory Board will transmit its comments and recommendations to MWRA in the spring after their review. Staff will prepare draft responses to the Advisory Board's recommendations for discussion at the budget hearing. During the Spring, MWRA will update the CIP to incorporate the latest information into the Final budget. In June, staff will present the FY16 Final CIP to the Board for adoption.

ATTACHMENTS:

- A. FY16 Proposed Five-Year CIP by Major Program Category
- B. New Capital Projects Added to the FY16 Proposed CIP
- C. FY16 Proposed Project Level Expenditure Forecast
- D. Comparison of the FY16 Proposed CIP and Changes from the FY15 Final CIP

ATTACHMENT A
FY16 PROPOSED FIVE-YEAR CIP BY MAJOR PROGRAM CATEGORY

CAPITAL IMPROVEMENT PROGRAM													
EXPENDITURE FORECAST FY2014-2018													
(\$000)													
	Total Contract Amount	Project Payments Thru FY14	Balance as of 6/30/14	FY14	FY15	QI FY16	QII FY16	QIII FY16	QIV FY16	FY16	FY17	FY18	5-Year Total FY14-18
Wastewater System Improvements	2,975,524	1,791,690	1,183,833	55,690	72,000	25,549	21,860	25,023	24,271	96,702	110,461	97,118	431,971
Waterworks System Improvements	2,906,650	1,915,649	991,002	40,966	28,373	7,204	10,639	12,575	11,173	41,591	56,215	81,116	248,261
Business & Operations Support	126,982	82,949	44,033	5,507	7,767	1,441	1,803	2,186	3,381	8,810	10,920	8,539	41,543
Contingency	35,875	-	35,875	-	5,292	1,868	1,882	1,964	2,451	8,164	10,845	11,574	35,875
Total MWRA w/ Contingency	6,045,031	3,790,288	2,254,743	102,163	113,432	36,062	36,184	41,748	41,276	155,267	188,441	198,347	(1) 757,650

⁽¹⁾ Please note the five-year total (FY14-18) of \$757.7 million includes \$35.9 million in contingency funds. The spending without contingency is \$721.8 million.

⁽²⁾ To reconcile to the FY14-18 Cap, the effect of the overall Cap inflation of \$16.1 million needs to be added to the \$757.7 million and then offset with the Infiltration/Inflow (I/I) of (\$65.1 million), Water Loan Program of \$6.1 million, and Chicopee Valley Aqueduct expenses of (\$7.3 million) for a FY14-18 Cap total of \$707.5 million for the Metropolitan System.

ATTACHMENT B
New Capital Projects Added to the FY16 Proposed CIP

Program	Project	Subphase	Total Contract Amount	FY15	FY16	FY17	FY18	FY14-18	FY19-23	Beyond FY23	Total Expenditures
Interception & Pumping	Wastewater Central Monitoring	Wastewater SCADA/PLC Upgrade	\$7,000,000			150,000	470,000	\$620,000	\$2,350,000	\$4,030,000	\$7,000,000
Transmission	Sudbury/Weston Aqueduct Repairs	Replacement of Weston Aqueduct Flow Control Valve (Southborough)	\$900,000		\$491,000	409,000		\$900,000	\$0		\$900,000
	Quabbin Transmission System	Oakdale High Line Replacement	\$500,000			500,000		\$500,000	\$0		\$500,000
Other Waterworks	Waterworks Facility Asset Protection	Flat Roof Replacement at Cosgrove	\$300,000			300,000		\$300,000	\$0		\$300,000
	Central Monitoring	Waterworks SCADA/PLC Upgrade	\$18,500,000			350,000	1,244,000	\$1,594,000	\$6,220,000	\$10,686,000	\$18,500,000
SUMMARY:											
Total Wastewater Projects			\$7,000,000	\$0	\$0	\$150,000	\$470,000	\$620,000	\$2,350,000	\$4,030,000	\$7,000,000
Total Waterworks Projects			\$20,200,000	\$0	\$491,000	\$1,559,000	\$1,244,000	\$3,294,000	\$6,220,000	\$10,686,000	\$20,200,000
Total Projects			\$27,200,000	\$0	\$491,000	\$1,709,000	\$1,714,000	\$3,914,000	\$8,570,000	\$14,716,000	\$27,200,000

**ATTACHMENT C
FY16 PROPOSED PROJECT LEVEL EXPENDITURE FORECAST**

Program / Project	Total Contract Amount	Payments through FY14	Remaining Balance	FY14 - FY18	FY19 - FY23	Beyond FY23
Total MWRA	6,009,156,069	3,790,288,064	2,218,868,004	721,775,653	1,275,019,272	324,236,267
Wastewater	2,975,523,703	1,791,690,217	1,183,833,486	431,971,099	687,967,784	119,584,170
Interception & Pumping	890,761,873	527,413,833	363,348,040	103,077,040	225,546,776	41,597,991
102 Quincy Pump Facilities	25,907,202	25,907,203	-			
104 Braintree-Weymouth Relief Facilities	232,454,622	227,703,644	4,750,978	309,836	4,440,854	
105 New Neponset Valley Relief Sewer	30,300,303	30,300,303	-			
106 Wellesley Extension Replacement	64,358,543	64,358,543	-			
107 Framingham Extension Relief	47,855,986	47,855,986	-			
127 Cummingsville Replacement Sewer	8,998,768	8,998,767	-			
130 Siphon Structure Rehabilitation	6,634,725	939,770	5,694,955		5,694,954	
131 Upper Neponset Valley Sewer System	54,174,078	54,174,078	-			
132 Corrosion & Odor Control	19,604,901	3,001,406	16,603,495	774,171	15,829,324	
136 West Roxbury Tunnel	11,313,573	10,313,573	1,000,000		1,000,000	
137 Wastewater Central Monitoring	27,482,036	19,782,036	7,700,000	759,835	2,910,000	4,030,000
139 South System Relief Project	4,939,244	3,439,244	1,500,000		1,500,000	
141 Wastewater Process Optimization	10,382,688	1,216,655	9,166,033	1,391,021	5,816,539	1,969,948

**ATTACHMENT C
FY16 PROPOSED PROJECT LEVEL EXPENDITURE FORECAST**

Program / Project	Total Contract Amount	Payments through FY14	Remaining Balance	FY14 - FY18	FY19 - FY23	Beyond FY23
142 Wastewater Meter System -Equip. Replacement	27,737,912	5,137,912	22,600,000	6,435,898	6,564,102	9,600,000
143 Regional I/I Management Planning	168,987	168,987	-			
145 Facility Asset Protection	312,698,306	24,115,727	288,582,579	93,406,280	176,041,004	25,998,043
146 Deer Island Cross Harbor Tunnel	5,000,000	-	5,000,000		5,000,000	
147 Randolph Trunk Sewer Relief	750,000	-	750,000		750,000	
Treatment	775,955,405	213,805,783	562,149,621	195,591,569	344,413,219	51,227,846
182 DI Primary and Secondary Treatment	(957,878)	(957,878)	-			
200 DI Plant Optimization	33,426,679	33,426,679	-			
206 DI Treatment Plant Asset Protection	720,856,548	176,308,421	544,548,126	182,011,247	340,474,407	50,870,318
210 Clinton Wastewater Treatment Plant	20,402,382	2,800,886	17,601,496	13,580,321	3,938,812	357,528
211 Laboratory Services	2,227,674	2,227,674	-			
Residuals	167,642,622	64,642,623	103,000,000	5,537,361	63,486,113	34,083,333
261 Residuals	63,810,848	63,810,848	-			
271 Residuals Asset Protection	103,831,775	831,775	103,000,000	5,537,361	63,486,113	34,083,333

**ATTACHMENT C
FY16 PROPOSED PROJECT LEVEL EXPENDITURE FORECAST**

Program / Project	Total Contract Amount	Payments through FY14	Remaining Balance	FY14 - FY18	FY19 - FY23	Beyond FY23
CSO	898,297,941	853,284,951	45,012,991	58,582,903	2,008,722	
CSO MWRA Managed	433,697,378	430,576,324	3,121,053	3,818,911		
339 North Dorchester Bay	221,599,821	221,601,931	(2,110)	(20,774)		
347 East Boston Branch Sewer Relief	85,637,164	85,637,164	-	(8,831)		
348 BOS019 Storage Conduit	14,287,581	14,287,581	-			
349 Chelsea Trunk Sewer	29,779,319	29,779,319	-			
350 Union Park Detention Treatment Facility	49,583,406	49,583,406	-			
353 Upgrade Existing CSO Facilities	22,385,200	22,385,200	-			
354 Hydraulic Relief Projects	2,294,549	2,294,549	-			
355 MWR003 Gate & Siphon	4,497,261	1,374,097	3,123,164	3,848,516		
357 Charles River CSO Controls	3,633,077	3,633,077	-			
CSO Community Managed	414,349,518	374,520,110	39,829,409	55,139,023	747,057	
340 Dorchester Bay Sewer Separation (Fox Point)	54,625,590	54,625,590	-	473,295		
341 Dorchester Bay Sewer Separation (Commercial Pt.)	64,173,625	60,322,568	3,851,057	2,279,418	747,057	
342 Neponset River Sewer Separation	2,549,086	2,549,086	-	104,692		
343 Constitution Beach Sewer Separation	3,731,315	3,731,315	-	(37,573)		

**ATTACHMENT C
FY16 PROPOSED PROJECT LEVEL EXPENDITURE FORECAST**

Program / Project	Total Contract Amount	Payments through FY14	Remaining Balance	FY14 - FY18	FY19 - FY23	Beyond FY23
344 Stony Brook Sewer Separation	44,246,462	44,246,463	-	48,079		
346 Cambridge Sewer Separation	92,138,873	63,493,803	28,645,071	41,654,669		
351 BWSC Floatables Controls	945,936	945,935	-	12,957		
352 Cambridge Floatables Control	1,126,708	1,086,925	39,783	39,783		
356 Fort Point Channel Sewer Separation	11,917,090	11,917,089	-	(89,619)		
358 Morrissey Boulevard Drain	32,339,111	32,188,262	150,849	(7,676)		
359 Reserved Channel Sewer Separation	72,612,611	64,361,307	8,251,305	12,572,710		
360 Brookline Sewer Separation	24,888,705	25,997,364	(1,108,659)	(1,108,659)		
361 Bulfinch Triangle Sewer Separation	9,054,405	9,054,404	-	(803,052)		
CSO Planning & Support	50,251,045	48,188,517	2,062,528	(375,032)	1,261,665	
Other Wastewater	242,865,861	132,543,027	110,322,835	69,182,227	52,512,954	(7,325,000)
128 I/I Local Financial Assistance	242,584,985	132,262,151	110,322,835	69,182,227	52,512,954	(7,325,000)
138 Sewerage System Mapping Upgrade	280,876	280,876	-			

**ATTACHMENT C
FY16 PROPOSED PROJECT LEVEL EXPENDITURE FORECAST**

Program / Project	Total Contract Amount	Payments through FY14	Remaining Balance	FY14 - FY18	FY19 - FY23	Beyond FY23
Waterworks	2,906,650,496	1,915,648,552	991,001,945	248,261,283	579,054,733	204,652,097
Drinking Water Quality Improvements	665,507,846	625,440,011	40,067,835	58,119,474	12,160,835	20,009
542 Carroll Water Treatment Plant	437,783,078	415,484,707	22,298,371	14,757,552	11,797,000	20,009
543 Quabbin Water Treatment Plant	19,713,993	18,358,535	1,355,458	6,945,752		
544 Norumbega Covered Storage	106,674,146	106,674,146	-			
545 Blue Hills Covered Storage	40,554,905	40,082,823	472,082	228,247	363,835	
550 Spot Pond Storage Facility	60,781,723	44,839,800	15,941,923	36,187,923		
Transmission	1,223,457,115	759,501,011	463,956,104	86,139,859	267,844,269	114,434,833
597 Winsor Station Pipeline	27,935,559	1,734,958	26,200,601	9,340,289	17,199,679	
601 Sluice Gate Rehabilitation	9,158,411	9,158,411	-			
604 MetroWest Tunnel	708,618,553	696,776,534	11,842,019	3,214,143	9,888,122	117,781
615 Chicopee Valley Aqueduct Redundancy	8,666,292	8,666,292	-			
616 Quabbin Transmission System	15,456,914	7,456,913	8,000,000	773,199	7,481,250	
617 Sudbury/Weston Aqueduct Repairs	6,914,690	659,948	6,254,741	2,912,139	3,342,603	
620 Wachusett Reservoir Spillway Improvements	9,287,460	9,287,461	-			
621 Watershed Land	24,000,000	17,882,400	6,117,600	6,657,600		
623 Dam Projects	4,538,205	3,094,856	1,443,349	978,024	474,999	

**ATTACHMENT C
FY16 PROPOSED PROJECT LEVEL EXPENDITURE FORECAST**

Program / Project	Total Contract Amount	Payments through FY14	Remaining Balance	FY14 - FY18	FY19 - FY23	Beyond FY23
625 Long Term Redundancy	408,881,031	4,783,239	404,097,792	62,264,465	229,457,616	114,317,052
Distribution And Pumping	948,649,229	377,520,183	571,129,046	97,214,065	333,080,475	145,651,108
618 Northern High NW Transmission Section 70	1,000,000	-	1,000,000	474,000	526,000	
677 Valve Replacement	22,702,289	12,016,378	10,685,911	2,743,001	3,592,578	4,350,327
678 Boston Low Service - Pipe & Valve Rehab	23,690,864	23,690,863	-			
683 Heath Hill Road Pipe Replacement	19,358,036	19,358,036	-			
689 James L. Gillis Pump Station	33,419,006	33,419,007	-			
692 Northern High Service - Section 27 Improvement	1,091,568	123,646	967,922	177,506	790,416	
693 NHS - Revere & Malden Pipeline Improvements	55,160,861	26,832,740	28,328,121	11,197,000	16,429,767	701,355
702 New Connecting Mains - Shaft 7 to WASM 3	34,295,531	10,960,807	23,334,725	403,000	17,110,668	5,821,056
704 Rehab of Other Pump Stations	55,057,852	30,057,852	25,000,000		18,750,000	6,250,000
706 NHS - Connecting Mains from Section 91	2,360,194	2,360,194	-			
708 Northern Extra High Service - New Pipelines	7,863,498	3,632,119	4,231,379	61,113	3,495,000	675,266
712 Cathodic Protection Of Distribution Mains	1,667,849	140,913	1,526,935	508,980	763,470	254,490
713 Spot Pond Supply Mains Rehab	66,479,587	61,168,728	5,310,859	2,385,536	3,112,051	

**ATTACHMENT C
FY16 PROPOSED PROJECT LEVEL EXPENDITURE FORECAST**

Program / Project	Total Contract Amount	Payments through FY14	Remaining Balance	FY14 - FY18	FY19 - FY23	Beyond FY23
714 Southern Extra High - Sections 41 & 42	3,657,243	3,657,243	-			
719 Chestnut Hill Connecting Mains	32,035,145	17,486,675	14,548,470	316,000	10,156,494	4,075,977
720 Warren Cottage Line Rehab	1,204,822	1,204,821	-			
721 Southern Spine Distribution Mains	74,773,200	36,681,373	38,091,827	368,533	4,036,837	33,676,182
722 NIH Redundancy & Storage	90,055,253	8,145,032	81,910,220	40,528,674	43,552,216	
723 Northern Low Service Rehab - Section 8	23,333,783	2,320,986	21,012,797	553,421	20,459,375	
725 Hydraulic Model Update	598,358	598,358	-			
727 SEH Redundancy & Storage	99,543,770	6,830,942	92,712,829	17,205,812	21,291,808	54,289,180
730 Weston Aqueduct Supply Mains	281,121,768	68,490,501	212,631,267	19,785,182	159,736,016	35,557,275
731 Lynnfield Pipeline	5,625,832	5,625,828	-	(51,693)		
732 Walnut St. & Fisher Hill Pipeline Rehab	2,717,140	2,717,141	-			
735 Section 80 Rehabilitation	9,835,779	-	9,835,779	558,000	9,277,779	
Other Waterworks	69,036,306	153,187,346	(84,151,040)	6,787,886	(34,030,847)	(55,453,852)
753 Central Monitoring System	38,206,328	15,803,729	22,402,599	5,496,599	6,220,000	10,686,000
763 Distribution Systems Facilities Mapping	2,298,919	1,036,368	1,262,551	914,095	348,456	
764 Local Water Infrastructure Rehab	7,487,762	7,487,762	-			

**ATTACHMENT C
FY16 PROPOSED PROJECT LEVEL EXPENDITURE FORECAST**

Program / Project	Total Contract Amount	Payments through FY14	Remaining Balance	FY14 - FY18	FY19 - FY23	Beyond FY23
765 Local Water Pipeline Assistance Program	-	128,313,468	(128,313,468)	(4,680,433)	(53,317,957)	(68,860,852)
766 Waterworks Facility Asset Protection	21,043,297	546,018	20,497,278	5,057,624	12,718,655	2,721,000
Business & Operations Support	126,981,869	82,949,295	44,032,574	41,543,271	7,996,755	
881 Equipment Purchase	21,618,832	13,348,295	8,270,537	8,664,504	847,000	
925 Technical Assistance	1,125,000	-	1,125,000	1,125,000		
930 MWRA Facility - Chelsea	9,813,633	9,813,633	-			
931 Business Systems Plan	24,539,759	24,515,683	24,076	88,529		
932 Environmental Remediation	1,478,602	1,478,602	-	(200)		
933 Capital Maintenance Planning & Development	16,720,749	11,057,829	5,662,920	6,596,524		
934 MWRA Facilities Management and Planning	2,150,535	370,533	1,780,002		1,780,002	
935 Alternative Energy Initiatives	25,905,708	17,387,564	8,518,143	4,992,848	3,716,055	
940 Application Improvement Program	10,050,000	366,135	9,683,866	9,065,406	911,469	
942 Information Security Program	2,385,411	819,825	1,565,586	1,595,221	255,000	
944 Information Technology Management Program	922,640	-	922,640	863,306	59,334	
946 IT Infrastructure Program	10,271,000	3,791,196	6,479,804	8,552,134	427,895	

ATTACHMENT D
Comparison of the FY16 Proposed CIP and Changes from the FY15
Final CIP

Program and Project	FY15 Final				FY16 Proposed				Change from FY15 Final			
	Total Budget Amount	FY14-18	FY19-23	Beyond 23	Total Budget Amount	FY14-18	FY19-23	Beyond 23	Total Budget Amount	FY14-18	FY19-23	Beyond 23
Total MWRA	5,852,185	756,279	1,131,090	276,690	6,009,156	721,776	1,275,019	324,236	156,971	(34,504)	143,929	47,546
Wastewater	2,885,828	423,390	620,567	105,869	2,975,524	431,971	687,968	119,584	89,696	8,581	67,401	13,715
Interception & Pumping	873,172	108,970	213,926	29,735	890,762	103,077	225,547	41,598	17,590	(5,893)	11,620	11,863
102 Quincy Pump Facilities	25,907	-	-	-	25,907	-	-	-	-	-	-	-
104 Braintree-Weymouth Relief Facilities	232,453	309	4,441	-	232,455	310	4,441	-	2	1	-	-
105 New Neponset Valley Relief Sewer	30,300	-	-	-	30,300	-	-	-	-	-	-	-
106 Wellesley Extension Replacement Sewer	64,359	-	-	-	64,359	-	-	-	-	-	-	-
107 Framingham Extension Relief Sewer	47,856	-	-	-	47,856	-	-	-	-	-	-	-
127 Cummingsville Replacement Sewer	8,999	-	-	-	8,999	-	-	-	-	-	-	-
130 Siphon Structure Rehabilitation	6,520	-	5,580	-	6,635	-	5,695	-	115	-	115	-
131 Upper Neponset Valley Sewer	54,174	-	-	-	54,174	-	-	-	-	-	-	-
132 Corrosion & Odor Control	16,346	1,000	12,344	-	19,605	774	15,829	-	3,259	(226)	3,485	-
136 West Roxbury Tunnel	11,314	-	1,000	-	11,314	-	1,000	-	-	-	-	-
137 Wastewater Central Monitoring	20,482	327	373	-	27,482	760	2,910	4,030	7,000	433	2,537	4,030
139 South System Relief Project	4,939	-	1,500	-	4,939	-	1,500	-	-	-	-	-
141 Wastewater Process Optimization	10,360	1,391	5,794	1,970	10,383	1,391	5,817	1,970	23	-	23	-
142 Wastewater Meter System-Equipment	26,438	7,300	3,000	11,000	27,738	6,436	6,564	9,600	1,300	(864)	3,564	(1,400)
143 Regional I/I Management Planning	169	-	-	-	169	-	-	-	-	-	-	-
145 Facility Asset Protection	306,806	98,644	174,144	16,766	312,698	93,406	176,041	25,999	5,892	(5,238)	1,897	9,233
146 D.I. Cross Harbor Tunnel Inspection	5,000	-	5,000	-	5,000	-	5,000	-	-	-	-	-
147 Randolph Trunk Sewer Relief	750	-	750	-	750	-	750	-	-	-	-	-
Treatment	709,420	191,535	282,292	50,871	775,955	195,592	344,413	51,228	66,535	4,056	62,121	358
182 DI Primary and Secondary	(958)	-	-	-	(958)	-	-	-	-	-	-	-
200 DI Plant Optimization	33,427	-	-	-	33,427	-	-	-	-	-	-	-
206 DI Treatment Plant Asset Protection	655,558	178,663	278,524	50,871	720,857	182,011	340,474	50,871	65,299	3,348	61,950	-
210 Clinton Wastewater Treat Plant	19,166	12,872	3,768	-	20,402	13,580	3,939	358	1,236	708	171	358
211 Laboratory Services	2,228	-	-	-	2,228	-	-	-	-	-	-	-
Residuals	167,920	10,384	58,917	34,083	167,643	5,537	63,486	34,083	(278)	(4,847)	4,569	-
261 Residuals	63,811	-	-	-	63,811	-	-	-	-	-	-	-
271 Residuals Asset Protection	104,109	10,384	58,917	34,083	103,832	5,537	63,486	34,083	(277)	(4,847)	4,569	-

ATTACHMENT D
Comparison of the FY16 Proposed CIP and Changes from the FY15
Final CIP

Program and Project	FY15 Final				FY16 Proposed				Change from FY15 Final			
	Total Budget Amount	FY14-18	FY19-23	Beyond 23	Total Budget Amount	FY14-18	FY19-23	Beyond 23	Total Budget Amount	FY14-18	FY19-23	Beyond 23
CSO	892,449	53,481	1,262	-	898,298	58,583	2,009	-	5,849	5,102	747	-
340 Dorchester Bay Sewer Separation (Fox Point)	54,626	474	-	-	54,626	473	-	-	-	(1)	-	-
341 Dorchester Bay Sewer Separation (Commercial Point)	64,174	3,026	-	-	64,174	2,279	747	-	-	(747)	747	-
342 Neponset River Sewer Separation	2,549	105	-	-	2,549	105	-	-	-	-	-	-
343 Constitution Beach Sewer Separation	3,731	(38)	-	-	3,731	(38)	-	-	-	-	-	-
344 Stony Brook Sewer Separation	44,247	48	-	-	44,246	48	-	-	(1)	-	-	-
346 Cambridge Sewer Separation	90,847	40,363	-	-	92,139	41,655	-	-	1,292	1,292	-	-
351 BWSC Floatables Controls	946	13	-	-	946	13	-	-	-	-	-	-
352 Cambridge Floatables Control	1,127	40	-	-	1,127	40	-	-	-	-	-	-
356 Fort Point Channel Sewer Separation	11,917	(90)	-	-	11,917	(90)	-	-	-	-	-	-
358 Morrissey Boulevard Drain	32,339	(8)	-	-	32,339	(8)	-	-	-	-	-	-
359 Reserved Channel Sewer Separation	68,902	8,862	-	-	72,613	12,573	-	-	3,711	3,711	-	-
360 Brookline Sewer Separation	24,802	(1,195)	-	-	24,889	(1,109)	-	-	87	86	-	-
361 Bulfinch Triangle Sewer Separation	9,054	(803)	-	-	9,054	(803)	-	-	-	-	-	-
339 North Dorchester Bay	221,606	(14)	-	-	221,600	(21)	-	-	(6)	(7)	-	-
347 East Boston Branch Sewer Relief	85,638	(8)	-	-	85,637	(9)	-	-	(1)	(1)	-	-
348 BOS019 Storage Conduit	14,288	-	-	-	14,288	-	-	-	-	-	-	-
349 Chelsea Trunk Sewer	29,779	-	-	-	29,779	-	-	-	-	-	-	-
350 Union Park Detention Treatment Facility	49,583	-	-	-	49,583	-	-	-	-	-	-	-
353 Upgrade Existing CSO Facilities	22,385	-	-	-	22,385	-	-	-	-	-	-	-
354 Hydraulic Relief Projects	2,295	-	-	-	2,295	-	-	-	-	-	-	-
355 MWR003 Gate & Siphon	3,716	3,067	-	-	4,497	3,849	-	-	781	782	-	-
357 Charles River CSO Controls	3,633	-	-	-	3,633	-	-	-	-	-	-	-
324 CSO Support	50,264	(362)	1,262	-	50,251	(375)	1,262	-	(13)	(13)	-	-
Other Wastewater	242,866	59,020	64,171	(8,820)	242,866	69,182	52,513	(7,325)	-	10,163	(11,658)	1,495
128 I/I Local Financial Assistance	242,585	59,020	64,171	(8,820)	242,585	69,182	52,513	(7,325)	-	10,162	(11,658)	1,495
138 Sewerage System Mapping Upgrade	281	-	-	-	281	-	-	-	-	-	-	-
Total Waterworks	2,843,684	294,623	503,558	170,821	2,906,650	248,261	579,055	204,653	62,966	(46,362)	75,497	33,831
Drinking Water Quality	659,861	62,761	1,892	-	665,508	58,119	12,161	20	5,647	(4,642)	10,269	20
542 Carroll Water Treatment Plant	433,712	20,611	1,892	-	437,783	14,758	11,797	20	4,071	(5,853)	9,905	20
543 Quabbin Water Treatment Plant	19,305	6,536	-	-	19,714	6,946	-	-	409	410	-	-
544 Norumbega Covered Storage	106,674	-	-	-	106,674	-	-	-	-	-	-	-
545 Blue Hills Covered Storage	40,547	584	-	-	40,555	228	364	-	8	(356)	364	-
550 Spot Pond Storage Facility	59,624	35,030	-	-	60,782	36,188	-	-	1,158	1,158	-	-

ATTACHMENT D
Comparison of the FY16 Proposed CIP and Changes from the FY15
Final CIP

Program and Project	FY15 Final				FY16 Proposed				Change from FY15 Final			
	Total Budget Amount	FY14-18	FY19-23	Beyond 23	Total Budget Amount	FY14-18	FY19-23	Beyond 23	Total Budget Amount	FY14-18	FY19-23	Beyond 23
Transmission	1,201,724	98,047	236,780	111,859	1,223,457	86,140	267,844	114,434	21,733	(11,907)	31,064	2,575
597 Winsor Station Pipeline	27,434	17,182	8,856	-	27,936	9,340	17,200	-	502	(7,842)	8,344	-
601 Sluice Gate Rehabilitation	9,158	-	-	-	9,158	-	-	-	-	-	-	-
604 MetroWest Tunnel	708,490	4,981	8,110	-	708,619	3,214	9,888	118	129	(1,767)	1,778	118
615 Chicopee Valley Aqueduct Redundancy	8,666	-	-	-	8,666	-	-	-	-	-	-	-
616 Quabbin Transmission System	13,592	2,240	4,150	-	15,457	773	7,481	-	1,865	(1,467)	3,331	-
617 Sudbury/Weston Aqueduct Repairs	5,968	3,211	2,098	-	6,915	2,912	3,343	-	947	(299)	1,245	-
620 Wachusett Reservoir Spillway Improvement	9,287	-	-	-	9,287	-	-	-	-	-	-	-
621 Watershed Land	24,000	6,658	-	-	24,000	6,658	-	-	-	-	-	-
622 Cosgrove/Wachusett Redundancy	-	-	-	-	-	-	-	-	-	-	-	-
623 Dam Projects	4,540	1,412	43	-	4,538	978	475	-	(2)	(434)	432	-
625 Long Term Redundancy	390,588	62,363	213,524	111,859	408,881	62,264	229,458	114,317	18,293	(99)	15,934	2,458
Distribution & Pumping	932,592	121,064	306,096	132,729	948,649	97,214	333,080	145,651	16,057	(23,850)	26,984	12,922
618 Northern High NW Tran Sections 70 & 71	1,000	1,000	-	-	1,000	474	526	-	-	(526)	526	-
677 Valve Replacement	22,540	3,411	7,113	-	22,702	2,743	3,593	4,351	162	(668)	(3,520)	4,351
678 Boston Low Service-Pipe & Valve Rehabilitation	23,691	-	-	-	23,691	-	-	-	-	-	-	-
683 Heath Hill Road Pipe Replacement	19,358	-	-	-	19,358	-	-	-	-	-	-	-
689 James L. Gillis Pump Station Rehabilitation	33,419	-	-	-	33,419	-	-	-	-	-	-	-
692 NHS - Section 27 Improvements	1,071	178	770	-	1,092	178	790	-	21	-	20	-
693 NHS - Revere & Malden Pipeline Improvement	48,988	12,814	9,342	-	55,161	11,197	16,430	702	6,173	(1,617)	7,088	702
702 New Connect Mains-Shaft 7 to WASM 3	33,902	6,105	16,836	-	34,296	403	17,111	5,821	394	(5,702)	275	5,821
704 Rehabilitation of Other Pump Stations	55,058	-	18,750	6,250	55,058	-	18,750	6,250	-	-	-	-
706 NHS-Connecting Mains from Section 91	2,360	-	-	-	2,360	-	-	-	-	-	-	-
708 Northern Extra High Service New Pipelines	7,776	1,206	2,938	-	7,863	61	3,495	675	87	(1,145)	557	675
712 Cathodic Protection Of Distrubution Mains	1,636	498	748	249	1,668	509	763	254	32	11	15	5
713 Spot Pond Supply Mains Rehabilitation	66,470	3,261	2,227	-	66,480	2,386	3,112	-	10	(875)	885	-
714 Southern Extra High Sections 41 & 42	3,657	-	-	-	3,657	-	-	-	-	-	-	-
719 Chestnut Hill Connecting Mains	31,731	805	8,031	5,408	32,035	316	10,156	4,076	304	(489)	2,125	(1,332)
720 Warren Cottage Line Rehabilitation	1,205	-	-	-	1,205	-	-	-	-	-	-	-
721 South Spine Distribution Mains	74,073	390	4,000	32,992	74,773	369	4,037	33,676	700	(21)	37	684
722 NIH Redundancy & Storage	88,723	39,821	42,928	-	90,055	40,529	43,552	-	1,332	708	624	-
723 Northern Low Service Rehabilitation Section 8	22,964	754	19,889	-	23,334	553	20,459	-	370	(201)	570	-
724 Northern High Service - Pipeline Rehabilitation	-	-	-	-	-	-	-	-	-	-	-	-
725 Hydraulic Model Update	598	-	-	-	598	-	-	-	-	-	-	-
727 Southern Extra High Redundancy & Storage	97,774	18,130	19,731	53,156	99,544	17,206	21,292	54,289	1,770	(924)	1,561	1,133
730 Weston Aqueduct Supply Mains	276,475	31,939	143,819	34,675	281,122	19,785	159,736	35,557	4,647	(12,154)	15,917	882
731 Lynnfield Pipeline	5,774	97	-	-	5,626	(52)	-	-	(148)	(149)	-	-
732 Walnut St. & Fisher Hill Pipeline Rehabilitation	2,717	-	-	-	2,717	-	-	-	-	-	-	-
733 NHS Pipeline Rehabilitation 13-18 & 48	-	-	-	-	-	-	-	-	-	-	-	-
734 Southern Extra High Pipelines-Sections 30, 39,40, & 44	-	-	-	-	-	-	-	-	-	-	-	-
735 Section 80 Rehabilitation	9,630	656	8,974	-	9,836	558	9,278	-	206	(98)	304	-

ATTACHMENT D
Comparison of the FY16 Proposed CIP and Changes from the FY15
Final CIP

Program and Project	FY15 Final				FY16 Proposed				Change from FY15 Final			
	Total Budget Amount	FY14-18	FY19-23	Beyond 23	Total Budget Amount	FY14-18	FY19-23	Beyond 23	Total Budget Amount	FY14-18	FY19-23	Beyond 23
Other	49,507	12,752	(41,211)	(73,767)	69,036	6,788	(34,031)	(55,454)	19,529	(5,964)	7,180	18,313
753 Central Monitoring System	19,592	3,789	-	-	38,206	5,497	6,220	10,686	18,614	1,708	6,220	10,686
763 Distribution Systems Facilities Mapping	1,799	763	-	-	2,299	914	348	-	500	151	348	-
764 Local Water Infrastructure Rehabilitation Assistance	7,488	-	-	-	7,488	-	-	-	-	-	-	-
765 Local Water Pipeline Improvement Loan Program	-	(2,581)	(49,647)	(74,632)	-	(4,680)	(53,318)	(68,861)	-	(2,099)	(3,671)	5,771
766 Waterworks Facility Asset Protection	20,628	10,781	8,436	865	21,043	5,058	12,719	2,721	415	(5,723)	4,283	1,856
Business & Operations Support	122,673	38,266	6,965	-	126,982	41,543	7,997	-	4,309	3,277	1,032	-
881 Equipment Purchase	20,491	7,460	924	-	21,619	8,665	847	-	1,128	1,205	(77)	-
925 Technical Assistance	1,125	1,125	-	-	1,125	1,125	-	-	-	-	-	-
930 MWRA Facility - Chelsea	9,814	-	-	-	9,814	-	-	-	-	-	-	-
931 Business Systems Plan	24,535	84	-	-	24,540	89	-	-	5	5	-	-
932 Environmental Remediation	1,479	-	-	-	1,479	-	-	-	-	-	-	-
933 Capital Maintenance Planning	13,971	3,847	-	-	16,721	6,597	-	-	2,750	2,750	-	-
934 MWRA Facilities Management	2,151	-	1,780	-	2,151	-	1,780	-	-	-	-	-
935 Alternative Energy Initiatives	26,522	5,707	3,618	-	25,906	4,993	3,716	-	(616)	(714)	98	-
940 Applicat Improv Program	10,050	9,795	182	-	10,050	9,065	911	-	-	(730)	729	-
942 Info Security Program ISP	1,343	808	-	-	2,385	1,595	255	-	1,042	787	255	-
944 Info Tech Mgmt Program	923	923	-	-	923	863	59	-	-	(60)	59	-
946 IT Infrastructure Program	10,271	8,519	461	-	10,271	8,552	428	-	-	33	(33)	-



MASSACHUSETTS WATER RESOURCES AUTHORITY

Charlestown Navy Yard
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Frederick A. Laskey
Executive Director

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REVISED

WASTEWATER POLICY & OVERSIGHT COMMITTEE MEETING

Chair: J. Walsh
Vice-Chair: P. Flanagan
Committee Members:
J. Carroll
J. Foti
A. Pappastergion
B. Swett
H. Vitale

to be held on

Wednesday, December 17, 2014

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

Time: Immediately following AF&A Comm.

AGENDA

A. Information

1. Report on December 9-10 Storm Impacts (presentation)

B. Contract Award

1. VFD Additions, Secondary Oxygen Reactor Batteries A, B and C, Deer Island Treatment Plant: Dagle Electrical Construction Corporation, Contract 6877


C. Contract Amendments/Change Orders

1. Management, Operation and Maintenance of the Union Park Pump Station/CSO Facility and the Unmanned Stations: Woodard & Curran, Inc., Contract S506, Amendment 1

D. Approvals

1. Deer Island Co-Digestion Update (postponed from 10/15/14 meeting)
2. Charles River Pollution Control District Petition on NPDES Co-Permittees (postponed from 10/15/14 meeting)

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: December 17, 2014
SUBJECT: VFD Additions, Secondary Oxygen Reactor Batteries A, B, and C
Deer Island Treatment Plant
Dagle Electrical Construction Corporation
Contract 6877

COMMITTEE: Wastewater Policy & Oversight

David F. Duest, Director, Deer Island WWTP
Richard J. Adams, Manager, Engineering Services
Preparer/Title

____ INFORMATION

X VOTE


Rachel C. Madden, Director
Administration and Finance


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the award of Contract 6877, VFD Additions, Secondary Oxygen Reactor Batteries A, B, and C, Deer Island Treatment Plant, to the lowest responsible and eligible bidder, Dagle Electrical Construction Corporation, and authorize the Executive Director, on behalf of the Authority, to execute said contract in the bid amount of \$2,243,243, for a contract term of 540 calendar days from the Notice to Proceed.

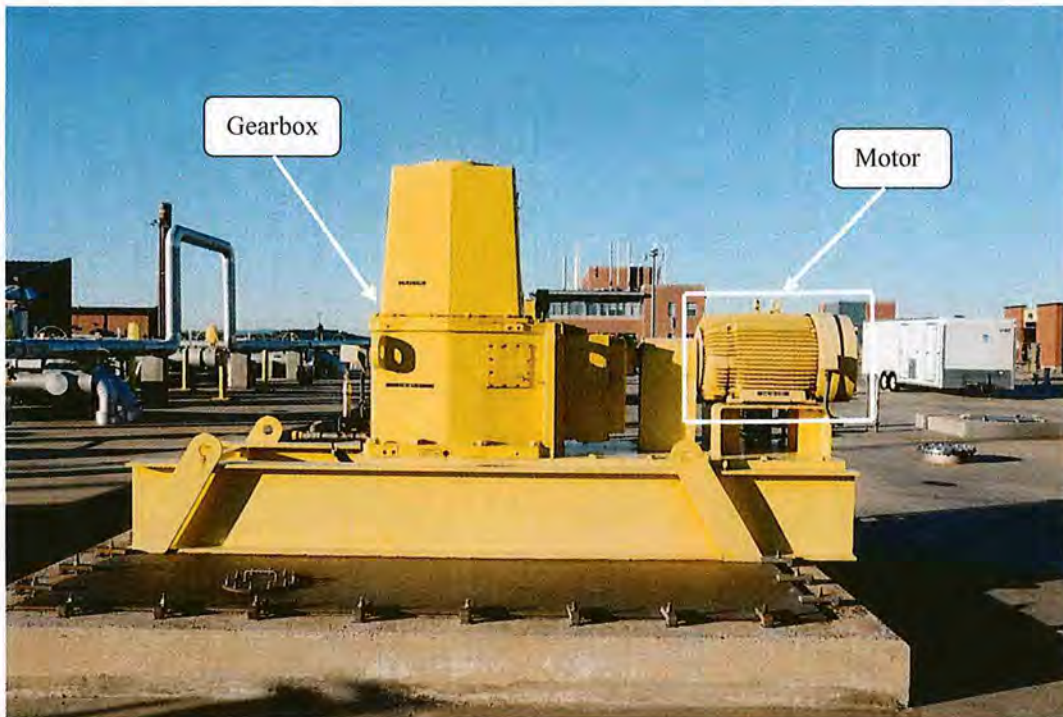
DISCUSSION:

The Cryogenic Facility at the Deer Island Treatment Plant provides pure oxygen to the secondary reactors' headspace to promote biological treatment of primary effluent. Secondary Reactor Batteries A, B, and C contain a total of nine aerator trains (each aerator train has four aerators and four mixers). Each aerator and each mixer has a triple reduction gearbox and mixing blade. In total, there are 72 gearboxes that drive 36 aerators and 36 mixers. The gearboxes transmit power from the aerator/mixer motors to the aerator/mixer blades. Although all of the gearboxes look very similar, the gearboxes for the mixers and the aerators have differing horsepower (HP) motors, 50-HP, 100-HP, and 150-HP.

The secondary reactor batteries were brought on line in phases, beginning with Battery A in 1997, followed by Battery B in 1998, and Battery C in 2001. They operate 24/7, every day of the year. Current plant protocol has six out of nine aerator trains operating at any one time. Depending on the service conditions, or "partial loading," the useful life of the motors for these aerators and mixers should be approximately 25 years.

On November 12, 2014, the Board approved the award of Contract WRA-3907, a four-year contract to refurbish the secondary reactor aerator and mixer gearboxes, which bear the heaviest workload of this treatment process.

Under Contract 6877, 18 of the constant speed 100-HP motors will be replaced and 18 new variable frequency drives (VFDs) also will be installed (see outlined motor in the picture below).



As a component of MWRA's multi-year effort to improve Deer Island's energy efficiency, MWRA has been examining opportunities to optimize the operation of the existing pure oxygen system and selector/reactor process to increase the overall efficiency of the system and reduce power consumption. Staff have previously reported to the Board (October 2013) of the installation of new oxygen sensors in the reactors that allow for the adjustment of the reactor mixing operation resulting in a 6% reduction in overall plant electricity use (annual average savings of \$830,000).

In addition to the optimization of the reactor mixing, a detailed study, along with extensive testing of various combinations, showed that if MWRA replaced just 18 of the 100-HP mixer motors in Reactors 5 and 6 of each train in Batteries A, B, and C, along with the addition of VFDs for each of these 18 motors, additional substantial energy savings could be achieved. The VFDs will allow staff to more precisely control the dilution of pure oxygen into the wastewater stream to maintain the biological process, while at the same time, use less oxygen (and thus, less energy). The study showed that it would not be cost effective to install VFDs on the other motors for Reactors 1 through 3 (which are controlled by two-speed motors), Reactor 4 (which already has a VFD installed on the motor), and Reactor 7 (which is used the most infrequently).

Staff estimate that this energy-efficiency measure will reduce overall energy consumption to Trains 5 and 6 by approximately 40%, which staff estimate will translate into more than \$300,000 per year in energy savings. In addition, this project is included in the MOU with NStar and staff anticipate that MWRA will receive a rebate of more than \$800,000 to offset a portion of the construction costs.

In addition to the new VFDs and motors, this project includes the construction of a new dedicated air-conditioned room to be located in the Secondary Clarifier Gallery to provide a stable, conditioned environment so that the VFDs will not overheat or be exposed to chemicals, water, etc.

Staff have determined that the payback period for this project, factoring in the dedicated air conditioning costs, is approximately 7.2 years.

Procurement Process

Contract 6877 was advertised and competitively bid in accordance with M.G.L. Chapter 149. Three general bids were opened on October 23, 2014 with the following results:

BIDDERS	BID PRICE
Annese Electrical Services, Inc.	\$2,075,000*
Dagle Electrical Construction Corporation	\$2,243,243
<i>Engineer's Estimate</i>	<i>\$2,248,000</i>
J.F. White Contracting, Co.	\$2,674,210
Fischbach & Moore Electric Group, LLC.	\$3,029,000

*MWRA staff and MWRA's Design Consultant, Brown & Caldwell, reviewed Annese Electrical Services Inc.'s bid, which was 9.2% lower than the Engineer's Estimate. MWRA staff also interviewed Annese Electrical Services to verify that the Contractor understood the entire scope of work and included all elements of the work in its bid. After meeting with Annese Electrical Services it was determined that the Contractor had not included all elements of the work in its bid. Specifically, the Contractor failed to include a full-time Quality Control Manager, as required, and in addition, did not include the specified type of copper conductors. Based on the foregoing, the Contractor would not be able to complete the work for the bid price. For this reason, Annese Electrical Services' bid was rejected.

MWRA staff and Brown and Caldwell then reviewed Dagle Electrical Construction Corporation's bid, which is only 0.3% lower than the Engineer's Estimate. MWRA staff interviewed Dagle Electrical Construction Corporation and confirmed that its bid meets all of the requirements of the specifications and includes all elements of the work. Based on those discussions, staff have determined that the bid price is reasonable, complete, and includes the payment of prevailing wage rates.

References were checked and found to be favorable. Dagle Electric Construction Corporation is in the process of completing some preliminary work (conduit routing, wiring, etc.) on the new lighting control system at the Deer Island Treatment Plant under a separate MWRA contract, Contract 6901, Electrical Equipment Upgrade Construction 4, (\$10,861,700).

Upon completion of the bid review, staff have determined that Dagle Electrical Construction Corporation possesses the skill, ability, and integrity necessary to complete the work under this contract and is qualified to do so. Therefore, staff recommend the award of this contract to Dagle Electrical Construction Corporation as the lowest responsible and eligible bidder.


BUDGET/FISCAL IMPACT:

The approved FY15 CIP contains \$2,248,000 for Contract 6877. Staff estimate that this project will result in energy savings of approximately \$300,000 per year. In addition, staff anticipate that MWRA will receive an energy-savings incentive rebate of approximately \$800,000 from NStar, resulting in a payback period of 7.2 years.

MBE/WBE PARTICIPATION:

The MBE and WBE participation requirements for this contract were established at 7.24% and 3.60%, respectively. The Contractor's bid meets these requirements.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: December 17, 2014
SUBJECT: Two-Year Contract Extension for the Management, Operation and Maintenance of the Union Park Pump Station/CSO Facility and the Unmanned Stations
Woodard & Curran, Inc.
Contract S506, Amendment 1

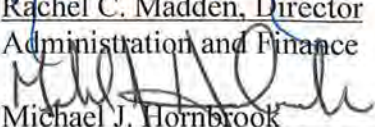
COMMITTEE: Wastewater Policy & Oversight

Stephen D. Cullen, Director, Wastewater O & M
John P. Vetere, Deputy Chief Operating Officer
Preparer/Title

INFORMATION

VOTE


Rachel C. Madden, Director
Administration and Finance


Michael J. Hornbrook
Chief Operating Officer

Contract S506 was approved by the Board on January 18, 2012 and was jointly executed by MWRA and Boston Water and Sewer Commission with the lowest responsible bidder, Woodard & Curran, Inc., for a period of three years. The original vote allowed for two one-year extensions of the contract term upon approval by the Board. The Contractor has performed satisfactorily. Negotiations resulted in an agreement between all parties that for the first one-year extension, the annual service fee portion of the contract will be funded with a 2.942% increase over the last year of the original three-year contract. Because all parties were able to agree to level-fund the second one-year option, MWRA staff and BWSC jointly recommend that the two one-year extension options included in the original contract be approved at this time.

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 1 to Contract S506, Management, Operation and Maintenance of the Union Park Pump Station/CSO Facility and the Unmanned Stations, with Woodard & Curran, Inc., and to jointly execute said amendment, along with the Boston Water and Sewer Commission (BWSC), for a contract service fee amount of \$2,760,160, of which MWRA will pay \$745,243.20 (27%) and BWSC will pay \$2,014,916.80 (73%), plus a funding allowance amount of \$480,000 (which includes \$120,000 for MWRA and \$360,000 for BWSC) for corrective maintenance and minor repairs to process equipment, increasing the total not-to-exceed amount of the contract from \$4,598,074 to \$7,838,234, and increasing the contract term by 730 calendar days, from March 1, 2015 to February 28, 2017.

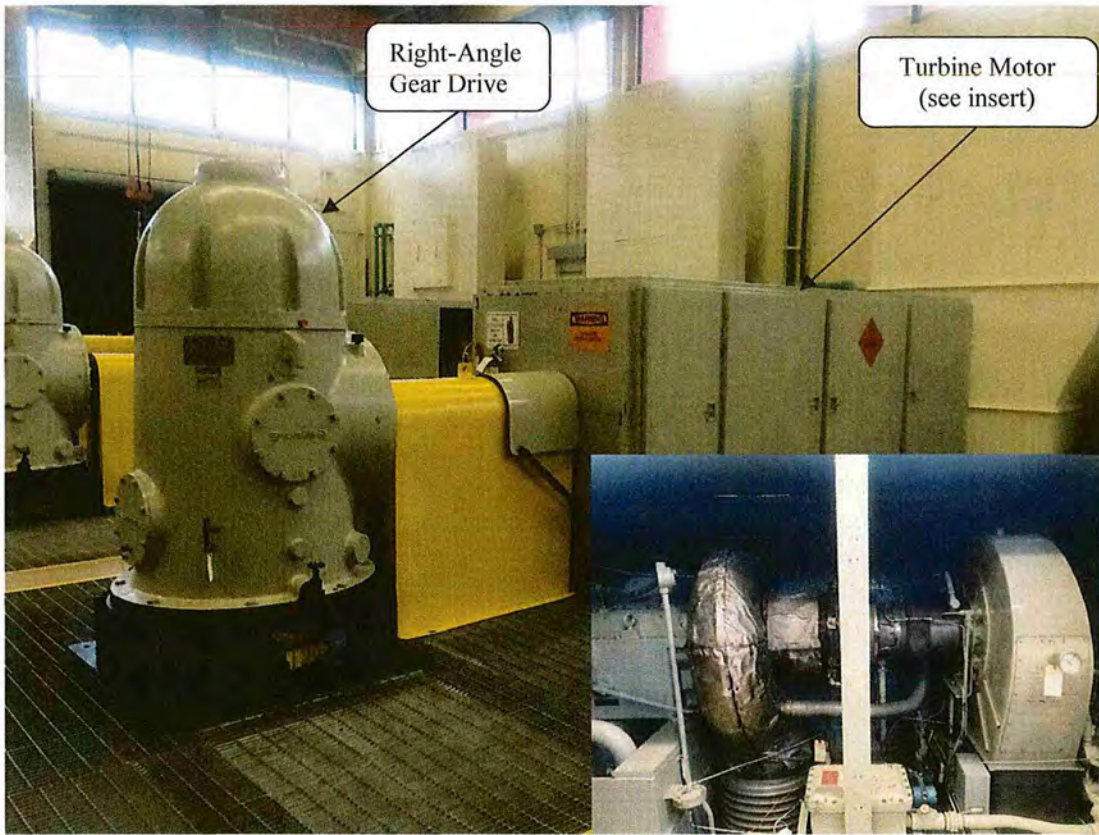
BACKGROUND:

BWSC and MWRA currently own and operate, the Union Park Pumping Station/CSO Facility, which is a wet-weather facility that handles combined sewage in the South End of Boston (see exterior facility photograph below and attached aerial map). BWSC owns and is responsible for all pumping functions, and MWRA owns and is responsible for combined sewer overflow (CSO) treatment functions at the facility. This facility is staffed 24 hours per day, 7 days per week.



The Union Park CSO Facility has activated 71 times in the last three years. CSO storage capacity at the facility has resulted in the elimination of the discharge of combined sewage to the Fort Point Channel during 55 of those events. A total volume of 102.67 million gallons of combined sewage was captured at the facility and eventually returned to the wastewater system in lieu of discharge to the Fort Point Channel. During the 16 events when the facility's storage volume was exceeded due to heavy rain, the remaining volume received treatment (screening, disinfection and dechlorination) prior to discharge to the Fort Point Channel. Since start-up in 2007, the Union Park CSO Facility has performed better (in terms of reduction of CSO discharge frequency and volume) than the CSO Program's court-mandated requirements.

The pictures on the following pages depict some of MWRA's CSO components of the Union Park Facility.



Top Level: One of Three Right Angle Drives and Turbine Motors for the Three Pumps Below



Lower Level: Three Pumps, Shafts, and Discharge Piping



One of Six Channels at the Facility

BWSC and MWRA entered into a Memorandum of Agreement (MOA) in 2001 that outlined the operational and financial responsibilities of both agencies at this facility. Because the pump station and CSO equipment essentially operate as one facility, the MOA included a condition requiring a joint contract for services to manage, operate, and maintain the Union Park facilities, as well as the nine other smaller, unstaffed pump stations owned exclusively by BWSC. The current Contractor under Contract S506, Woodard & Curran, operated the facility under the first joint contract, which began in 2007 and ended in 2012, and has operated the facility continuously under Contract S506 since that time.

The MOA proportionally allocated 73% of the costs associated with the contract to BWSC and 27% to MWRA, based on BWSC's and MWRA's estimated staffing needs at the Union Park facility and the nine other unstaffed BWSC pump stations. Other cost shares (e.g., utilities, repairs, and replacements) are based on the percentage of Union Park ownership (determined as part of the MOA) and/or the ability to clearly assign cost responsibility.

DISCUSSION:

The contract, as approved by the Board, allows for two one-year extensions. With the approaching expiration date of the contract next March, MWRA and BWSC entered into negotiations with Woodard & Curran on the feasibility of exercising the first one-year extension

option. Those negotiations resulted in a mutual agreement between all parties that the first one-year extension option would be for an increase of 2.942% more than what was paid during the final year of the original three-year contract term. This 2.942% is reflective of the expected increase in the costs associated with operating and maintaining the facility, as well as salary increases for Woodard & Curran employees staffing the facility. Negotiations resulted in further agreement that the second one-year option would include no additional annual increase (level-funded through the final year). BWSC and MWRA staff are satisfied with the Contractor's performance and agree that the annual service fee increase of 2.942% for the first one-year extension (which is the same percentage increase as in year three of the original contract), with no increase for the second one-year extension is reasonable, and recommend that the Board approve both one-year extensions at this time.

Preventive maintenance is included in the annual service fee. However, the contract also includes a funding allowance for corrective maintenance and minor repairs of facility process equipment and building systems. Use of the funding allowance requires various levels of reporting and/or task order pre-approvals, depending on the nature and estimated cost of the work. To date, approximately \$118,000 of the original \$150,000 contract allowance has been expended for MWRA's corrective maintenance. Staff recommend that an additional \$60,000 per year, or \$120,000 in total, be included for the two additional years. The recommended \$60,000 per year is the same amount as the third year of the current contract.

Contract Staffing Review

MWRA and BWSC staff have reviewed the Contractor's current and continuing contract staffing levels and qualifications of key staff and have determined that they are sufficient and appropriate to adequately meet facility's operational and maintenance needs for the next two years. Staff also have reviewed Woodard & Curran's operation and maintenance efforts at the Union Park CSO facility (and the nine unstaffed BWSC-owned pump stations) and have determined that the Contractor has performed satisfactorily and has met all contractual requirements.

BUDGET/FISCAL IMPACT:

The FY15 CEB currently includes adequate funds for contract services, utilities, maintenance and chemicals for Union Park. The Proposed FY16 and FY17 CEBs will include adequate funds to continue the facility's contract and operation.

MBE/WBE PARTICIPATION:

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

ATTACHMENT:

Aerial Map of Union Park Pump Station/CSO Facility



MASSACHUSETTS WATER RESOURCES AUTHORITY

Charlestown Navy Yard
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Executive Director

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WATER POLICY AND OVERSIGHT COMMITTEE MEETING

Chair: A. Pappastergion

Vice-Chair: B. Swett

Committee Members:

J. Barrera

J. Carroll

J. Foti

H. Vitale

J. Walsh

J. Wolowicz

to be held on

Wednesday, December 17, 2014

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


Time: Immediately following Wastewater Comm.

AGENDA

A. Approvals

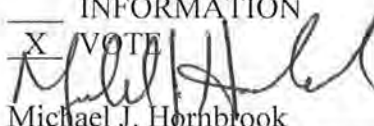
1. Renewal of Water Supply Continuation Agreements
2. Revision to Dedham-Westwood Water District's MWRA Withdrawal Limits

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: December 17, 2014
SUBJECT: Renewal of Water Supply Continuation Agreements for Cambridge, Canton, Framingham, Lynn Water and Sewer Commission, Needham, Northborough, Peabody, Weston, and Winchester

COMMITTEE: Water Policy & Oversight

Pamela Heidell, Policy and Planning Manager
Preparer/Title

INFORMATION
 VOTE

Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to (i) execute renewed ten-year Water Supply Continuation Agreements with Cambridge, Canton, Framingham, Lynn Water and Sewer Commission, Needham, Northborough, Peabody, Weston, and Winchester, substantially in the form filed as Attachments 1-9 to this staff summary; and (ii) to continue in effect the Wakefield Water Continuation Agreement until it is renewed in 2015.

DISCUSSION:

Introduction

Twenty-five of the MWRA's fifty water-served communities are "contract communities" that receive MWRA water pursuant to Water Supply Continuation Agreements. The differentiation between contract and non-contract communities dates back to prior to the Enabling Act. Seven of these contract communities are fully served (including Framingham and Weston), fifteen partially supplied by MWRA and regularly use local sources to meet some portion of demand (including Canton, Lynn Water and Sewer Commission, Needham, Northborough, Peabody, and Winchester), and three (including Cambridge) rely on MWRA only in unusual or emergency situations.

Ten community agreements expire on December 31, 2014. The development of new Agreements is predicated upon the satisfaction of certain criteria set forth in the MWRA Enabling Act and the completion of a process outlined in MWRA regulation (360 C.M.R. 11.00) entitled "Regulations for the Continuation of Contract Water Supply." The Regulation requires the preparation of a Supplementary Report for each community that includes supply and demand

analyses, documentation of conservation and demand management efforts, and a description of various facets of the community's water supply system. The Regulation also prescribes the execution of a written agreement between MWRA and each community for up to a ten-year period. In the past months, MWRA staff have worked with the communities to complete the prescribed contract renewal processes and Supplementary Reports, and to identify obligations to be fulfilled by both MWRA and the communities for the next contract term.

The contract renewal process prescribed in the Regulation has been completed for nine of the ten communities with contracts expiring in December: Cambridge, Canton, Framingham, Lynn Water and Sewer Commission, Needham, Northborough, Peabody, Weston, and Winchester. For the tenth community, Wakefield, Board approval will be sought in early 2015; the Town's consultant is in the process of completing evaluations that are part of the Supplementary Report.

The Proposed Agreements

Proposed Water Supply Continuation Agreements have been prepared for the above-noted nine communities, which are now recommended for Board approval. The Water Supply Continuation Agreements serve the following purposes. First, they specify how water supply needs of the communities will be met in a manner consistent with the capabilities of MWRA's water supply system. Second, they compel demand management and planning efforts. Third, they constitute a record of compliance with the factors and requirements specified in Section 8 (d) of the Enabling Act and MWRA regulations (360 C.M.R 11.00, Continuation of Contract Water Supply).

Each of the proposed Agreements recites the facts establishing that the applicable criteria set forth in Section 8(d) of the Enabling Act as necessary conditions for the continuation of water supply have been satisfied; these criteria relate to safe yield, non-abandonment of local sources, implementation of effective demand management measures, and the conduct of water use surveys.

Each Agreement also states the maximum annual water volumes and maximum daily water volumes that MWRA agrees to provide the community over the next ten years. The table on the following page presents the highest annual demand for the subject contract communities within the last five years, the existing contract annual maximum withdrawals, and the proposed contract maximum withdrawals over the contracts' period.

Community	Demand			
	Highest Annual Demand 2009-2013 (mg)	Existing Contract Annual Maximum Withdrawal (mg)	Proposed Contract Annual Maximum Withdrawal (mg)	
			2015	2024
Cambridge	1,125*	0 in typical year	0 in typical year	0 in typical year
Canton	824	700	355	460
Framingham-Scenario 1	2,433	3,172	2,416	2,836
Framingham- Scenario 2			2,416	1,679
LWSC	85.5	330	300	285
Needham	393**	165	400	420
Northborough	326	353***	325	342
Peabody	377	445	439	524
Weston	634	718	718	718
Winchester	385	610	610	610

Table Notes:

*In 2013, Cambridge constructed modifications to its treatment plant, necessitating Cambridge to rely on MWRA water. From 2009-2012, Cambridge did not withdraw MWRA water.

**Needham's withdrawals were elevated due to a well collapse, funding delays and requirements associated with a replacement well, and equipment malfunction when the new well was placed on line. Per the contract, MWRA was notified of these conditions and need for more water.

*** Northborough's annual maximum was 353 million gallons a year in the initial years of the contract, but decreased to 127 million gallons a year in later years of the contract, reflecting an assumption that local wells and new treatment facilities would be brought on line during the contract term. While Northborough did bring a replacement well on line, it was subsequently taken off line due to bacterial contamination.

Canton's proposed Agreement reflects the Town's assumption that demand from MWRA will be dampened by use of local sources to meet the majority of demand. Within the last five years, Canton has cleaned, rehabilitated, replaced and/or activated seven local wells, as well as brought a new well and local treatment facility on-line. Whereas Canton's withdrawals from MWRA were as high as 824 million gallons in 2010 while improvements to the local water supply system were underway, with the new local source capacity and availability, Canton's demand from MWRA was only 322 million gallons in 2013. Canton's local source withdrawals are allowed pursuant to a Water Management Act permit.

For Framingham, the Town's Agreement provides for two very different scenarios: one assumes the status quo, and the other assumes that it will bring its dormant Birch Road wellfield back on line in 2018. If the local source is brought on line, Framingham's demand from MWRA in 2019 would be 3.94 mgd versus 7.11 mgd if Framingham continued to be fully served by MWRA. In either scenario, Framingham's water demand is less than what was projected ten years ago.

In contrast, Peabody has projected increased withdrawals from MWRA. Peabody projects that its current use of local sources will remain constant, and water demand associated with projected population increases will be met by increased withdrawals from MWRA. Due to concerns of source water capacity and finished water quality, Peabody's use of local sources is less today than it was when the prior ten-year contract was executed. Peabody's Water Management registration limits withdrawals to 3.89 mgd in the Ipswich River Basin and 1.89 mgd in the North Coastal Basin. Peabody was previously authorized to withdraw an additional 0.82 mgd from the Ipswich River Basin pursuant to a Water Management Act permit, but in 2011 Peabody surrendered its Water Management Act permit.

Needham has also projected increased withdrawals from MWRA. Needham is currently operating its wellfield to not exceed its Water Management Act Registration volume of 959.95 million gallons per year, and supplementing this with MWRA to meet additional demand (Needham also has a Water Management Act permitting an additional 0.31 mgd to be withdrawn, but this is not a certainty in the future). Like Peabody, Needham anticipates that projected growth will be met by increased withdrawals from MWRA.

Northborough has traditionally been considered a “partial” community. Prior to construction of the John J. Carroll Water Treatment Plant, Northborough used local wells to meet the majority of its demand, and withdrew water from the Wachusett Aqueduct to supplement local sources. With MWRA’s treatment and transmission modifications, the intent was for Northborough to temporarily become fully supplied by MWRA while it undertook studies and made provisions for new treatment facilities to address both groundwater treatment and compatibility concerns with blending groundwater and MWRA treated water. Some local improvements were made, and a replacement well returned to service, only to be removed again in 2012. Northborough is again fully supplied by MWRA as it undertakes studies to determine the future mix of MWRA versus local sources. The Agreement reflects the current fully supplied status with projected withdrawals reflecting the current status and some provision for growth, but also acknowledges that this may change if local sources are brought back on line.

Weston and Winchester’s existing contract limits remain as is for the next ten years. For both communities, demand is currently well below contract limits. Both communities did not want to give up their historical contract limits, established when the communities’ demands were higher and growth was projected. (In fact, the communities originally requested that prior contract limits be further increased, a request that was not granted by MWRA.)

Lynn Water and Sewer Commission’s new contract limit is slightly less than the historical contract limit, yet higher than historical demand. Typically, the only Lynn customer served by MWRA is General Electric; approximately 97% of City demand is met by surface withdrawals in the North Coastal and Ipswich River Basins. The proposed contract limit is based on data that Lynn Water and Sewer Commission received from General Electric.

There is no annual withdrawal limit for Cambridge, as it was felt somewhat impractical to arrive at a number. Cambridge relies on MWRA only in unusual or emergency situations, and the safe yield of its local sources is sufficient to meet projected population and employment growth. By the terms of its contract with MWRA, Cambridge will be required to provide written notification to MWRA of any unusual water demand or supply conditions that require withdrawals from MWRA, prior to withdrawing water.

The contract renewal process provided an opportunity to not only consider future community demands from MWRA, but to assess the progress the communities have made to implement demand management programs and to protect local sources, pursuant to the requirements for Continuation of Water Supply and Enabling Act mandates. The accomplishments and future obligations are summarized below.

All nine communities have ongoing leak detection and repair programs, and all report that 100% of their systems are metered. Needham, Northborough, Weston and Winchester are now consistently below the 10% Unaccounted-for-Water (UAW) standard of the Massachusetts Water Conservation Standards. Framingham's UAW averages around 13%, and the town is currently undertaking a detailed water system audit. Canton has actively worked to reach the 10% target. While Peabody's UAW is higher, it is taking several measures to reduce UAW, including replacing old leaky distribution pipes, better tracking of municipal uses (e.g., flushing), and gradual replacement of residential meters.

The contract communities are required to have a conservation public information and evaluation program that includes distribution of Authority provided materials and all are compliant. Some go beyond this. Cambridge, Canton, Framingham, LWSC, Northborough, and Peabody are typically below the 65 residential gallons per day (RGPCD) state Water Conservation Standard. Winchester's RGPCD has varied from 63-73 over the last five years, averaging 68. Needham's residential gallons per capita per day has fluctuated between 66 and 67 in recent years. The Town is actively seeking the cooperation of all residents to achieve 65 RGPCD by water use restrictions on non-essential water use, and promotion of water conservation. Despite distributing MWRA materials, providing water conservation tips on its website and in bill stuffers, and distributing water conservation materials at the DPW, Weston averaged 106 RGPCD over the last five years. All of the communities have inclining block rates to promote water conservation and all of the communities except Framingham have also adopted a local drought restriction enforcement ordinance. Framingham has drafted water use regulations (that include drought restrictions) that are in the final review stages and it is anticipated that they will be adopted in early 2015.

The recommendations of the DEP Source Water Assessment Program (SWAP) provide a framework for the partially supplied communities' local source protection efforts. All communities but Winchester have ordinances for the protection of local sources lying within the community boundaries. In Winchester's instance, local sources are primarily protected through land ownership by the Town for water supply purposes and, in part, by ownership through the Commonwealth and by rules and regulations of the Commonwealth, which meet the intent of MWRA's requirements for enactment of local ordinances for the protection of local water supplies.

In short, the proposed Agreements reflect continued commitment to implementation of current and proposed local demand management programs and local source protection.

BUDGET/FISCAL IMPACTS:

The communities' water withdrawals are assessed in accordance with MWRA's Community Charge Determination Policy. MWRA's Community Charge Determination Policy computes charges for water services on the basis of each community's metered water flows.

ATTACHMENTS:

Attachments 1 through 9, Water Supply Continuation Agreements

WATER SUPPLY CONTINUATION AGREEMENT

BETWEEN

THE MASSACHUSETTS WATER RESOURCES AUTHORITY

AND

THE CITY OF CAMBRIDGE

This Water Supply Continuation Agreement ("Agreement") by and between the Massachusetts Water Resources Authority (the "MWRA") and the City of Cambridge (the "City"), (hereinafter jointly referred to as the "Parties"), memorializes the agreement and understanding of the Parties regarding the arrangement whereby the MWRA will continue to supply water to the City and the City will purchase its water supply or a portion of its water supply from the MWRA water supply system.

RECITALS

- R.1. The MWRA was created by the Massachusetts legislature in December, 1984 to operate, regulate, finance, and modernize the waterworks and sewerage systems serving the greater metropolitan Boston area. Operating pursuant to the terms of its Enabling Act, chapter 372 of the Acts of 1984 (the "Act"), the MWRA currently provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns and special service districts (the "Communities") within its service area.
- R.2. The MWRA desires to continue to provide safe and sufficient water supplies to the City and to provide system-wide assistance to help protect and conserve water supplies.
- R.3. Section 8(d) of the Act permits the MWRA to enter into an arrangement to provide the continued delivery of water to a Community if specified requirements are met.
- R.4. A regulation entitled "Continuation of Contract Water Supply," promulgated by the MWRA at 310 C.M.R. 11.00 and most recently revised on November 18, 1994, (the "Regulation") defines more specifically the requirements of section 8(d) of the Act and governs the continued delivery of water by the MWRA to the Communities which purchase water in accordance with contracts.

- R.5. The City executed a contract dated May 27, 1954 for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985 and by operation of the Act, was terminated as of January 1, 1990, and was thereafter replaced by contracts which were subject to the terms of the Act.
- R.6 The City subsequently executed new contracts for the purchase of water from the MWRA in 1990, 1995, and 2005, the latter contract which, by its term, expires on December 31, 2014.
- R.7 The City, pursuant to the Regulation, has requested from the MWRA that its water supply be continued and has submitted a continuation request, a Supply Analysis Report, a Demand Analysis Report and a plan for water conservation and demand management pursuant to 310 C.M.R. 11.08.
- R.8. The City has adopted an ordinance for the protection of local sources.
- R.9. The City has submitted a detailed description of local user charge systems and accounting systems which meet the Regulation's requirement for conservation based rates.
- R.10 Based on its review of the submittals described in the recitals numbered R.7., R.8. and R.9., MWRA finds that the requirements of section 8(d) of the Act have been met as follows:
- (1) the safe yield of the watershed system as of the date of this contract and as projected for the term hereof, is sufficient to meet the projected demand of the City;
 - (2) no existing or potential water supply source for the City has been abandoned;
 - (3) effective demand management measures have been developed by the City;
 - (4) a local water supply source feasible for development has not been identified by either the City or the Department of Environmental Protection (the "DEP");
 - (5) a water use survey has been completed which identifies all users within the City that consume in excess of twenty million gallons a year; and
- R.11. MWRA and the City wish to formalize their rights and obligations regarding the supply of water to the City and therefore enter into this Agreement.

NOW, THEREFORE, in consideration of the foregoing recitals of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the Town agree to the following:

1. The term ("Term") of this Agreement shall be ten (10) years beginning on January 1, 2015 and ending at midnight on December 31, 2024.
2. The City agrees that during the Term it will operate its local water supply system in such a manner so as to make maximum use of local water supply sources.
3. The City and MWRA agree that the City does not anticipate using water from MWRA's supplies on a regular basis, based on projected demand and projected supply from local sources. The MWRA shall during the Term provide the City with water on an as-needed basis, subject to all other terms and provisions of this Agreement.

In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining those conditions, MWRA agrees that it will use its best efforts to supply the City with those quantities of water as are necessary to meet its legitimate needs. In that event, the City anticipates that it would require up to 24 million gallons per day on a maximum daily water volume basis.

4. Prior to the City taking any water from the MWRA system, the City must request and receive approval from the MWRA's Chief Operating Officer or his designee. Such approval may be obtained verbally and shall not be unreasonably withheld. If verbal approval is given, the MWRA will confirm its approval in writing to the City within five working days.
5. In the event that revised circumstances regarding local demand and/or supply should occur and the City determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the City's newly projected demand, the City may petition the MWRA to amend this Agreement pursuant to 360 C.M.R. 11.11.
6. The MWRA shall bill the City and the City shall pay to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate(s). All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's standard policies and procedures.
7. The City agrees to continue in effect during the Term a user charge system and an accounting system that meets the Regulation's requirement for conservation based rates.

8. The City shall develop and implement a full cost pricing system within twelve (12) months from the date that all communities listed in section 8(d) of the Act, other than those subject to 360 CMR 11.00, have implemented a full cost pricing system.
9. The City agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including participation in MWRA conservation programs, and distribution of MWRA-provided materials to all water users.
10. The City agrees that during the Term it shall not abandon any local source and substitute for it water from DCR/MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.
11. The City agrees to continue in full force and effect during the Term its local Ordinance for the protection of local water sources and to attempt through cooperative steps to have ordinances for the protection of the City's water sources enacted in the communities where sources are located.
12. Any dispute arising between the MWRA and the Town under the terms of this Agreement shall be resolved exclusively in accordance with the dispute resolution process set forth at 360 CMR 11.14 and the administrative procedures set forth at 360 CMR 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this day of December, 2014 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:

Frederick A. Laskey
Executive Director

CITY OF CAMBRIDGE

By:

Richard C. Rossi,
City Manager

WATER SUPPLY CONTINUATION AGREEMENT

BETWEEN

THE MASSACHUSETTS WATER RESOURCES AUTHORITY

AND

THE TOWN OF CANTON

This Water Supply Continuation Agreement ("Agreement") by and between the Massachusetts Water Resources Authority (the "MWRA") and the Town of Canton (the "Town") (hereinafter jointly referred to as the "Parties"), memorializes the agreement and understanding of the Parties regarding the arrangement whereby the MWRA will continue to supply water to the Town and the Town will purchase its water supply or a portion of its water supply from the MWRA water supply system.

RECITALS

- R.1. The MWRA was created by the Massachusetts legislature in December, 1984 to operate, regulate, finance, and modernize the waterworks and sewerage systems serving the greater metropolitan Boston area. Operating pursuant to the terms of its Enabling Act, chapter 372 of the Acts of 1984 (the "Act"), the MWRA currently provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns and special service districts (the "Communities") within its service area.
- R.2. The MWRA desires to continue to provide safe and sufficient water supplies to the Town and to provide system-wide assistance to help protect and conserve water supplies.
- R.3. Section 8(d) of the Act permits the MWRA to enter into an arrangement to provide the continued delivery of water to a Community if specified requirements are met.
- R.4. A regulation entitled "Continuation of Contract Water Supply", promulgated by the MWRA at 310 C.M.R. 11.00 and most recently revised on November 18, 1994,

(the "Regulation") defines more specifically the requirements of section 8(d) of the Act and governs the continued delivery of water by the MWRA to the Communities which purchase water in accordance with contracts.

- R.5. The Town executed a contract dated November 2, 1967 for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985 and by operation of the Act, was terminated as of January 1, 1990, and was thereafter replaced by contracts which were subject to the terms of the Act.
- R.6 The Town and the MWRA subsequently executed new contracts for the purchase of water from the MWRA in 1989, 1996, and 2005, the latter contract, which by its terms, expires on December 31, 2014;
- R.7 The Town, pursuant to the Regulation, has requested that the MWRA continue to supply water to it and has submitted a continuation request, a Supply Analysis Report, a Demand Analysis Report and a plan for water conservation and demand management pursuant to Regulation section 11.08 (3).
- R.8. The Town has adopted a local ordinance for the protection of local sources.
- R.9. The Town has submitted a detailed description of local user charge systems and accounting systems which meet the Regulation's requirement for conservation based rates.
- R.10 Based on its review of the submittals described in the recitals numbered R.7, R.8., and R.9., MWRA finds that the applicable requirements of section 8(d) of the Act have been met as follows:
 - (1) the safe yield of the watershed system as of the date of this contract and as projected for the term hereof, is sufficient to meet the projected demand of the town.
 - (2) no existing or potential water supply source for the Town has been abandoned;
 - (3) effective demand management measures have been developed by the Town;
 - (4) a local water supply source feasible for development has not been identified by either the Town or the Department of Environmental Protection (the "DEP");
 - (5) a water use survey has been completed which identifies all users within the Town that consume in excess of twenty million gallons a year; and

R.12. The MWRA and the Town wish to formalize their rights and obligations regarding the supply of water to the Town and therefore enter into this Agreement.

NOW, THEREFORE, in consideration of the foregoing recitals and of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the Town agree to the following:

1. The term ("Term") of this Agreement shall be ten (10) years beginning on January 1, 2015 and ending at midnight on December 31, 2024.
2. The MWRA shall during the Term provide the Town with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
355	355	375	380	405
<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
410	440	445	450	450

Consistent with the hydraulic capabilities of MWRA's distribution system, MWRA will supply the Town with up to 3.7 million gallons per day ("mgd") on a maximum daily water volume basis. In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply the Town with those quantities of water to meet its legitimate needs in excess of the maximum annual water volumes stated above so as to make up for unexpected shortfalls in the available yield of available local sources.

3. In the event that revised circumstances regarding local demand and/or supply should occur and the Town determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the Town's new demand, the Town may petition the MWRA to amend this Agreement pursuant to 360 C.M.R. 11.11.
4. The MWRA shall bill the Town and the Town shall pay to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate(s). All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's standard policies and procedures.
5. The Town agrees to continue in effect during the Term a user charge system and an accounting system which meets the Regulation's requirement for conservation based rates.

6. The Town shall develop and implement a full cost pricing system within twelve (12) months from the date that all communities listed in section 8(d) of the Act, other than those subject to 360 CMR 11.00, have implemented a full cost pricing system.
7. The Town agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including participation in MWRA conservation programs, and distribution of MWRA-provided materials to all water users.
8. The Town agrees that during the Term it shall not abandon any local source and substitute for it water from DCR/MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.
9. The Town agrees to continue in full force and effect during the Term its local Ordinance for the protection of local water sources.
10. Any dispute arising between the MWRA and the Town under the terms of this Agreement shall be resolved exclusively in accordance with the dispute resolution process set forth at 360 CMR 11.14 and the administrative procedures set forth at 360 CMR 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this day of December, 2014 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:

Frederick A. Laskey
Executive Director

TOWN OF CANTON

By:

William T. Friel,
Town Administrator

WATER SUPPLY CONTINUATION AGREEMENT
BETWEEN
THE MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE TOWN OF FRAMINGHAM

This Water Supply Continuation Agreement ("Agreement") by and between the Massachusetts Water Resources Authority (the "MWRA") and the Town of Framingham (the "Town") (hereinafter jointly referred to as the "Parties"), memorializes the agreement and understanding of the Parties regarding the arrangement whereby the MWRA will continue to supply water to the Town and the Town will purchase its water supply or a portion of its water supply from the MWRA water supply system.

RECITALS

- R.1. The MWRA was created by the Massachusetts legislature in December, 1984 to operate, regulate, finance, and modernize the waterworks and sewerage systems serving the greater metropolitan Boston area. Operating pursuant to the terms of its Enabling Act, chapter 372 of the Acts of 1984 (the "Act"), the MWRA currently provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns and special service districts (the "Communities") within its service areas.
- R.2. The MWRA desires to continue to provide safe and sufficient water supplies to the Town and to provide system-wide assistance to help protect and conserve water supplies.
- R.3. Section 8(d) of the Act permits the MWRA to enter into an arrangement to provide the continued delivery of water to a Community if specified requirements are met.
- R.4. A Regulation entitled "Continuation of Contract Water Supply", promulgated by the MWRA at 360 C.M.R. 11.00 and most recently revised on November 18, 1994,

(the "Regulation") defines more specifically the requirements of section 8(d) of the Act and governs the continued delivery of water by the MWRA to the Communities which purchase water in accordance with contracts in effect on January 1, 1985.

- R.5. The Town executed a contract dated February 17, 1966 for the purchase of water from the MDC which contract, which because it had no stated termination date remained in effect on January 1, 1985 and by operation of the Act was terminated as of January 1, 1990, and was thereafter replaced by a contract(s) which were subject to the terms of the Act.
- R.6 The Town and MWRA subsequently executed new contracts for the purchase of water from the MWRA in 1989, 2002, and 2005, the latter contract, which by its terms, expires on December 31, 2014.
- R.7 The Town, pursuant to the Regulation, has requested from the MWRA that its water supply be continued and has submitted a continuation request, a supply analysis, a demand analysis, a plan for water conservation and demand management pursuant to Regulation section 360 C.M.R. 11.08. The Town has drafted water use regulations that addresses water conservation and emergency restrictions and that include a local drought restriction, and anticipates adoption of the regulations in 2015.
- R.8 The Town has adopted a local ordinance for the protection of local sources.
- R.9 The Town has submitted a detailed description of local user charge systems and accounting systems which meet the Regulations' requirement for conservation based rates.
- R.10 Based on its review of the submittals described in the recitals numbered R.7., R.8. and R.9., the MWRA finds that the applicable requirements of section 8(d) of the Act have been met as follows:
 - (1) the safe yield of the watershed system as of the date of this contract and as projected for the term hereof, is sufficient to meet the projected demand of the Town;
 - (2) no existing or potential water supply source for the Town has been abandoned;
 - (3) effective demand management measures have been developed by the Town;
 - (4) a local water supply source feasible for development has not been identified by either the Town or the Department of Environmental Protection (the "DEP");

- (5) a water use survey has been completed which identifies all users within the Town that consume in excess of twenty million gallons a year; and

- R.11 The Town is considering reactivation of the Birch Road wellfield so that its use can be resumed in 2019, if cost-effective and permits can be acquired. For purposes of this Agreement, the term "cost-effective" shall mean the economic feasibility for development, defined in 360 CMR 11.08 96) (b), based on a development cost per million gallons no greater than two and one-half times MWRA's prevailing rate. The Town's demand analysis included two scenarios: on scenario assumed Framingham's continuation as a fully supplied MWRA community and a second scenario assumed redevelopment of the Birch Road wellfield.
- R.12. The MWRA and the Town wish to formalize their rights and obligations regarding the supply of water to the Town and therefore enter into this Agreement.

NOW, THEREFORE, in consideration of the foregoing recitals and of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the Town agree to the following:

- 1. The term ("Term") of this Agreement shall be ten (10) years beginning on January 1, 2015 and ending at midnight on December 31, 2024.
- 2. The MWRA shall during the Term provide the Town with water on a maximum annual water volume basis, stated in millions of gallons, as follows, assuming the Town does not reactivate its Birch Road wellfield:

<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
2416	2460	2504	2548	2596
<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
2642	2690	2737	2785	2836

Consistent with the hydraulic capabilities of MWRA's distribution system, MWRA will supply the Town with up to 11.66 million gallons a day ("mgd") on a maximum daily water volume basis. In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply the Town with those quantities of water to meet its legitimate needs in excess of the maximum annual water volumes stated above.

3. The Parties recognize that the Town may or may not reactivate its Birch Road wellfield and that if the Birch Road wellfield is reactivated, the MWRA shall during the Term provide the Town with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
2416	2460	2504	2548	1439
<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
1485	1533	1580	1628	1679

4. In the event that revised circumstances regarding local demand and/or supply should occur and the Town determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the Town's newly projected demand, the Town may petition the MWRA to amend this Agreement pursuant to 360 C.M.R. 11.11.
5. The MWRA shall bill the Town and the Town shall pay to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate (s). All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's standard policies and procedures.
7. The Town agrees to continue in effect during the Term a user charge system and an accounting system which meets the Regulation's requirement for conservation based rates.
8. The Town shall develop and implement a full cost pricing system within twelve (12) months from the date that all communities listed in section 8(d) of the Act, other than those subject to 360 CMR 11.00, have implemented a full cost pricing system.
9. The Town agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including participation in MWRA conservation programs, and distribution of MWRA-provided materials to all water users.
10. The Town agrees that during the Term it shall not abandon any local source and substitute for it water from DCR/MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.

11. The Town agrees to use its best efforts to continue in full force and effect during the Term its local Ordinance for the protection of local water sources, or, at the Town's discretion, to adopt any more stringent measures.
12. The Town agrees to use its best efforts to adopt water use regulations that address water conservation and emergency restrictions that include a local drought restriction by 2015.
13. Any dispute arising between the MWRA and the Town under the terms of this Agreement shall be resolved exclusively in accordance with the dispute resolution process set forth at 360 CMR 11.14 and the administrative procedures set forth at 360 CMR 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this day of December, 2014 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:

Frederick A. Laskey
Executive Director

TOWN OF FRAMINGHAM

By:

Robert J. Halpin
Town Manager

WATER SUPPLY CONTINUATION AGREEMENT

BETWEEN

THE MASSACHUSETTS WATER RESOURCES AUTHORITY

AND

LYNN WATER AND SEWER COMMISSION

This Water Supply Continuation Agreement ("Agreement") by and between the Massachusetts Water Resources Authority (the "MWRA") and the Lynn Water and Sewer Commission ("LWSC"), (hereinafter jointly referred to as the "Parties"), memorializes the agreement and understanding of the Parties regarding the arrangement whereby the MWRA will continue to supply water to LWSC and the LWSC will purchase its water supply or a portion of its water supply from the MWRA water supply system.

RECITALS

- R.1. The MWRA was created by the Massachusetts legislature in December, 1984 to operate, regulate, finance, and modernize the waterworks and sewerage systems serving the greater metropolitan Boston area. Operating pursuant to the terms of its Enabling Act, chapter 372 of the Acts of 1984 (the "Act"), the MWRA currently provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns and special service districts (the "Communities") within its service area.
- R.2. The MWRA desires to continue to provide safe and sufficient water supplies to the Town and to provide system-wide assistance to help protect and conserve water supplies.

- R.3. Section 8(d) of the Act permits the MWRA to enter into an arrangement to provide the continued delivery of water to a Community if specified requirements are met.
- R.4. A Regulation entitled "Continuation of Contract Water Supply", promulgated by the MWRA at 310 C.M.R. 11.00 and most recently revised on November 18, 1994, (the "Regulation") defines more specifically the requirements of section 8(d) of the Act and governs the continued delivery of water by the MWRA to the Communities which purchase water in accordance with contracts.
- R.5. The LWSC executed a contract dated December 30, 1982 for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985 and by operation of the Act, was terminated as of January 1, 1990, and was thereafter replaced by a contract (s) which were subject to the terms of the Act.
- R.6. The LWSC and MWRA subsequently executed a new contract for the purchase of water from the MWRA in 1990, 1995, and 2005, the latter contract, which by its terms, expires on December 31, 2014.
- R.7. The LWSC, pursuant to the Regulations, has requested that the MWRA continue to supply water to it and has submitted a continuation request, a Supply analysis, a demand analysis, and a plan for water conservation and demand management pursuant to the Regulation section 11.08 (3).
- R.8. LWSC has a Water Supply Protection Plan approved by DEP, addressing protection of four LWSC sources in multiple communities.
- R.9. The LWSC has submitted a detailed description of local user charge systems and accounting systems which meet the Regulations' requirement for conservation based rates.
- R.10. Based on its review of the submittals described in recitals numbered R.7., R.8. and R.9, the MWRA finds that the applicable requirements of section 8(d) of the Act have been met as follows:
- (1) the safe yield of the watershed system as of the date of this contract and as projected for the term hereof, is sufficient to meet the projected demand of LWSC;

- (2) no existing or potential water supply source for the LWSC has been abandoned;
- (3) effective demand management measures have been developed by the LWSC
- (4) a local water supply source feasible for development has not been identified by either the LWSC or the Department of Environmental Protection (the "DEP");
- (5) a water use survey has been completed which identifies all users within the LWSC that consume in excess of twenty million gallons a year; and

R.10. The MWRA and LWSC wish to formalize their rights and obligations regarding the supply of water to the Town and therefore enter into this Agreement.

NOW, THEREFORE, in consideration of the foregoing recitals and of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the LWSC agree to the following:

- 1. The term ("Term") of this Agreement shall be ten (10) years beginning on January 1, 2015 and ending at midnight on December 31, 2024.
- 2. LWSC agrees that during the Term it will operate its local water supply system in such a manner so as to make maximum use of local water supply sources.
- 3. The MWRA shall during the Term provide the LWSC with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
300	300	300	295	295
<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2123</u>	<u>2024</u>
290	290	290	285	285

Consistent with the hydraulic capabilities of MWRA's distribution system, MWRA shall supply LWSC up to 2.5 million gallons per day ("mgd") on a maximum daily water volume basis. In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply LWSC with those quantities of water to meet its legitimate needs in

excess of the maximum annual water volumes stated above so as to make up for the unexpected shortfalls in the available yield of local sources.

4. In the event that revised circumstances regarding local demand and/or supply should occur and LWSC determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet LWSC's newly projected demand, LWSC may petition the MWRA to amend this Agreement pursuant to 360 C.M.R. 11.11.
5. The MWRA shall bill the LWSC and the LWSC shall pay to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate. All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's standard policies and procedures.
6. LWSC agrees to continue in effect during the Term a user charge system and an accounting system which meets the Regulation's requirement for conservation based rates.
7. The LWSC shall develop and implement a full cost pricing system within twelve (12) months from the date that all communities listed in section 8(d) of the Act other than those subject to 360 CMR 11.00 have implemented a full cost pricing system.
8. The LWSC agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including participation in MWRA conservation programs, and distribution of MWRA-provided materials to all water users.
9. The LWSC agrees that during the Term it shall not abandon any local source and substitute for it water from DCR/MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.
10. The LWSC agrees that it will work cooperatively with appropriate City of Lynn officials to continue in full force and effect its local Ordinance for the protection of local water sources.
11. Any dispute arising between the MWRA and the LWSC under the terms of this Agreement shall be resolved exclusively in accordance with the dispute

resolution process set forth at 360 CMR 11.14 and the administrative procedures set forth at 360 CMR 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this day of December, 2014 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:

Frederick A. Laskey
Executive Director

LYNN Water and Sewer Commission

By:

Daniel F. O'Neil
Executive Director, Lynn Water and Sewer Commission

WATER SUPPLY CONTINUATION AGREEMENT

BETWEEN

THE MASSACHUSETTS WATER RESOURCES AUTHORITY

AND

THE TOWN OF NEEDHAM

This Water Supply Continuation Agreement ("Agreement") by and between the Massachusetts Water Resources Authority (the "MWRA") and the Town of Needham (the "Town") (hereinafter jointly referred to as the "Parties"), memorializes the agreement and understanding of the Parties regarding the arrangement whereby the MWRA will continue to supply water to the Town and the Town will purchase its water supply or a portion of its water supply from the MWRA water supply system.

RECITALS

- R.1. The MWRA was created by the Massachusetts legislature in December, 1984 to operate, regulate, finance, and modernize the waterworks and sewerage systems serving the greater metropolitan Boston area. Operating pursuant to the terms of its Enabling Act, chapter 372 of the Acts of 1984 (the "Act"), the MWRA currently provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns and special service districts (the "Communities") within its service area.
- R.2. The MWRA desires to continue to provide safe and sufficient water supplies to the Town and to provide system-wide assistance to help protect and conserve water supplies.
- R.3. Section 8(d) of the Act permits the MWRA to enter into an arrangement to provide the continued delivery of water to a Community if specified requirements are met.
- R.4. A Regulation entitled "Continuation of Contract Water Supply", promulgated by the MWRA at 360 C.M.R. 11.00 and most recently revised on November 18, 1994, (the "Regulation") defines more specifically the requirements of section 8(d) of

the Act and governs the continued delivery of water by the MWRA to the Communities which purchase water in accordance with contracts, a copy of which is attached hereto.

- R.5. The Town executed a contract dated November 7, 1957 for the purchase of water from the MDC which contract, which because it had no stated termination date remained in effect on January 1, 1985 and by operation of the Act was terminated as of January 1, 1990, and was thereafter replaced by a contract (s) which were subject to the terms of the Act.
- R.6 The Town and MWRA subsequently executed new contracts for the purchase of water from the MWRA in 1990, 1996, and 2006; the latter contract, which by its terms, expires on December 31, 2014.
- R.7 The Town, pursuant to the Regulation, has requested from the MWRA that its water supply be continued and has submitted a continuation request, a supply analysis, a demand analysis, a plan for water conservation and demand management pursuant to Regulation section 360 C.M.R. 11.08.
- R.8 The Town has adopted a local bylaw for the protection of local sources.
- R.9 The Town has submitted a detailed description of local user charge systems and accounting systems which meet the Regulations' requirement for conservation based rates.
- R.10 The Town is scheduled to begin the review process for its Water Management Act permit with MassDEP in 2015. The Sustainable Water Management Initiative (SWMI) changes to the Water Management Act regulations are unclear regarding the impact they will have on the Town's current permitted withdrawals of 0.31 MGD. If Needham's Water Management Act permitted volume is reduced or forfeited, the Town requests the right to re-evaluate the allotted volumes to this agreement.
- R.11 Based on its review of the submittals described in the recitals numbered R.7., R.8. and R.9., the MWRA finds that the applicable requirements of section 8(d) of the Act have been met as follows:
- (1) the safe yield of the watershed system as of the date of this contract and as projected for the term hereof, is sufficient to meet the projected demand of the Town;
 - (2) no existing or potential water supply source for the Town has been abandoned;

- (3) effective demand management measures have been developed by the Town;
- (4) a local water supply source feasible for development has not been identified by either the Town or the Department of Environmental Protection (the "DEP");
- (5) a water use survey has been completed which identifies all users within the Town that consume in excess of twenty million gallons a year; and

R.12. The MWRA and the Town wish to formalize their rights and obligations regarding the supply of water to the Town and therefore enter into this Agreement.

NOW, THEREFORE, in consideration of the foregoing recitals and of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the Town agree to the following:

- 1. The term ("Term") of this Agreement shall be ten (10) years beginning on January 1, 2015 and ending at midnight on December 31, 2024.
- 2. The MWRA shall during the Term provide the Town with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
400	400	410	410	410
<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
415	415	415	415	420

Consistent with the hydraulic capabilities of MWRA's distribution system, MWRA will supply the Town with up to 6.5 million gallons a day ("mgd") on a maximum daily water volume basis. In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply the Town with those quantities of water to meet its legitimate needs in excess of the maximum annual water volumes stated above so as to make up for the unexpected shortfalls in the available yield of local sources.

- 3. The Parties recognize that the Town's future Water Management Act Permit requirements are uncertain, and that the Town's current permit may possibly be modified by DEP, or forfeited by the Town. If Needham's Water Management Act permitted volume is reduced or forfeited, the Parties agree to re-evaluate the

appropriateness of the volumes to be supplied from the MWRA system under this Agreement and to amend this Agreement, if necessary.

4. In the event that revised circumstances regarding local demand and/or supply should occur and the Town determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the Town's newly projected demand, the Town may petition the MWRA to amend this Agreement pursuant to 360 C.M.R. 11.11.
5. The MWRA shall bill the Town and the Town shall pay to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate (s). All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's standard policies and procedures.
6. The Town agrees to continue in effect during the Term a user charge system and an accounting system which meets the Regulation's requirement for conservation based rates.
7. The Town shall develop and implement a full cost pricing system within twelve (12) months from the date that all communities listed in section 8(d) of the Act, other than those subject to 360 CMR 11.00, have implemented a full cost pricing system.
8. The Town agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including participation in MWRA conservation programs, and distribution of MWRA-provided materials to all water users.
9. The Town agrees that during the Term it shall not abandon any local source and substitute for it water from DCR/MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.
10. The Town agrees to use its best efforts to continue in full force and effect during the Term its local bylaw for the protection of local water sources, or, at the Town's discretion, to adopt any more stringent measures. The Town also agrees to continue dialogue with officials in the Towns of Dover, Natick, and Wellesley regarding their cooperation to protect wellhead areas that extend into those towns.

11. Any dispute arising between the MWRA and the Town under the terms of this Agreement shall be resolved exclusively in accordance with the dispute resolution process set forth at 360 CMR 11.14 and the administrative procedures set forth at 360 CMR 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this day of December, 2014 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:

Frederick A. Laskey
Executive Director

TOWN OF NEEDHAM

By:

Kate Fitzpatrick
Town Manager

WATER SUPPLY CONTINUATION AGREEMENT

BETWEEN

THE MASSACHUSETTS WATER RESOURCES AUTHORITY

AND

THE TOWN OF NORTHBOROUGH

This Water Supply Continuation Agreement ("Agreement") by and between the Massachusetts Water Resources Authority (the "MWRA") and the Town of Northborough (the "Town")(hereinafter jointly referred to as the "Parties"), memorializes the agreement and understanding of the Parties regarding the arrangement whereby the MWRA will continue to supply water to the Town and the Town will purchase its water supply or a portion of its water supply from the MWRA water supply system.

RECITALS

- R.1. The MWRA was created by the Massachusetts legislature in December, 1984 to operate, regulate, finance, and modernize the waterworks and sewerage systems serving the greater metropolitan Boston area. Operating pursuant to the terms of its Enabling Act, chapter 372 of the Acts of 1984 (the "Act"), the MWRA currently provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns and special service districts (the "Communities") within its service area.
- R.2. The MWRA desires to continue to provide safe and sufficient water supplies to the Town and to provide system-wide assistance to help protect and conserve water supplies.
- R.3. Section 8(d) of the Act permits the MWRA to enter into an arrangement to provide the continued delivery of water to a Community if specified requirements are met.
- R.4. A regulation entitled "Continuation of Contract Water Supply", promulgated by the MWRA at 360 C.M.R. 11.00 and most recently revised on November 18, 1994, (the "Regulation") defines more specifically the requirements of section 8(d) of the Act and governs the continued delivery of water by the MWRA to the Communities which purchase water in accordance with contracts.

- R.5. The Town executed a contract dated May 27, 1954 for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985 and by operation of the Act, was terminated as of January 1, 1990, and was thereafter replaced by a contract (s) which were subject to the terms of the Act.
- R.6 The Town and the MWRA subsequently executed new contracts for the purchase of water from the MWRA in 1990, 1995, and 2005, the latter contract, which by its terms, expires on December 31, 2014.
- R.7 The Town and the MWRA executed Amendment 1 to the 1995 contract in 2001. The Amendment recognized that MWRA treated water to be supplied from new MWRA facilities has different characteristics than water previously supplied to Northborough from the Wachusett Aqueduct and from that supplied by Northborough's ground water wells, and that blending MWRA treated water with Northborough's groundwater supplies presented compatibility concerns. The Amendment recognized Northborough's intent to undertake studies and make provisions for new treatment facilities. It also suspended terms of MWRA's and the Town's agreement regarding use of local sources, and MWRA's agreement to fully supply the Town with water for a limited period of time.
- R.8 The Town brought its Lyman Street replacement well online in 2009 and took it off-line in 2012 due to bacteria detection, which required the Town to use MWRA water to meet all of the Town's water needs. The Town is in the process of preparing a Water Master Plan. The Plan includes a review of water supply options including: use of existing wells with added treatment and possibly additional subsurface supplies; use of the Town's existing wells along with MWRA water to meet summer peak demands; and use of MWRA water for all of the Town's water needs. In 2014, all options are under review. For the purpose of the Regulation and this Agreement, the Town's projection of MWRA water use reflects use of MWRA water for all of the Town's water needs.
- R.9 The Town, pursuant to the Regulation, has requested that the MWRA continue to supply water to it and has submitted a continuation request, a Supply Analysis Report, a Demand Analysis Report and a plan for water conservation and demand management pursuant to 11.08 (3).
- R.10. The Town has adopted a local ordinance for the protection of local sources.

R.11. The Town has submitted a detailed description of local user charge systems and accounting systems which meet the Regulation's requirement for conservation based rates.

R.12 Based on its review of the submittals described in the recitals numbered R.9., R.10. and R.11., MWRA finds that the applicable requirements of section 8(d) of the Act have been met as follows:

- (1) the safe yield of the watershed system as of the date of this contract and as projected for the term hereof, is sufficient to meet the projected demand of the town.
- (2) no existing or potential water supply source for the Town has been abandoned;
- (3) effective demand management measures have been developed by the Town;
- (4) a local water supply source feasible for development has not been identified by either the Town or the Department of Environmental Protection (the "DEP");
- (5) a water use survey has been completed which identifies all users within the Town that consume in excess of twenty million gallons a year; and

R.12. The MWRA and the Town wish to formalize their rights and obligations regarding the supply of water to the Town and therefore enter into this Agreement.

NOW, THEREFORE, in consideration of the foregoing recitals and of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the Town agree to the following:

1. The term ("Term") of this Agreement shall be ten (10) years beginning on January 1, 2015 and ending at midnight on December 31, 2024.
2. The MWRA shall during the Term provide the Town with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
325	327	329	331	333
<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
334	336	338	340	342

Consistent with the hydraulic capabilities of MWRA's distribution system, MWRA will supply the Town with up to 1.84 million gallons per day ("mgd") on

a maximum daily water volume basis. In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply the Town with those quantities of water to meet its legitimate needs in excess of the maximum annual water volumes stated above so as to make up for unexpected shortfalls in the available yield of available local sources.

3. The Parties shall reassess the amount of water to be provided by MWRA and by the Town from its local water supply sources when the Master Plan analysis is complete, and will amend this Agreement accordingly if a local water supply option is reactivated.
4. In the event that revised circumstances regarding local demand and/or supply should occur and the Town determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the Town's newly projected demand, the Town may petition the MWRA to amend this Agreement pursuant to 360 C.M.R. 11.11.
5. The MWRA shall bill the Town and the Town shall pay to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate(s). All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's standard policies and procedures.
6. The Town agrees to continue in effect during the Term a user charge system and an accounting system which meets the Regulation's requirement for conservation based rates.
7. The Town shall develop and implement a full cost pricing system within twelve (12) months from the date that all communities listed in section 8(d) of the Act, other than those subject to 360 CMR 11.00, have implemented a full cost pricing system.
8. The Town agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including participation in MWRA conservation programs, and distribution of MWRA-provided materials to all water users.
9. The Town agrees that during the Term it shall not abandon any local source and substitute for it water from DCR/MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.

10. Unless abandonment of the Town's local source is permitted by DEP, the Town agrees to continue in full force and effect during the Term its local Ordinance for the protection of local water sources.
11. Any dispute arising between the MWRA and the Town under the terms of this Agreement shall be resolved exclusively in accordance with the dispute resolution process set forth at 360 CMR 11.14 and the administrative procedures set forth at 360 CMR 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this day of December, 2014 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:

Frederick A. Laskey
Executive Director

TOWN OF NORTHBOROUGH

By:

John W. Coderre
Town Administrator
Northborough Water and Sewer Commission

WATER SUPPLY CONTINUATION AGREEMENT

BETWEEN

THE MASSACHUSETTS WATER RESOURCES AUTHORITY

AND

THE CITY OF PEABODY

This Water Supply Continuation Agreement ("Agreement") by and between the Massachusetts Water Resources Authority (the "MWRA") and the City of Peabody (the "City"), (hereinafter jointly referred to as the "Parties"), memorializes the agreement and understanding of the Parties regarding the arrangement whereby the MWRA will continue to supply water to the City and the City will purchase its water supply or a portion of its water supply from the MWRA water supply system.

RECITALS

- R.1. The MWRA was created by the Massachusetts legislature in December, 1984 to operate, regulate, finance, and modernize the waterworks and sewerage systems serving the greater metropolitan Boston area. Operating pursuant to the terms of its Enabling Act, chapter 372 of the Acts of 1984 (the "Act"), the MWRA currently provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns and special service districts (the "Communities") within its service area.
- R.2. The MWRA desires to continue to provide safe and sufficient water supplies to the City and to provide system-wide assistance to help protect and conserve water supplies.

- R.3. Section 8(d) of the Act permits the MWRA to enter into an arrangement to provide the continued delivery of water to a Community if specified requirements are met.
- R.4. A regulation entitled "Continuation of Contract Water Supply", promulgated by the MWRA at 310 C.M.R. 11.00 and most recently revised on November 18, 1994, (the "Regulation") defines more specifically the requirements of section 8(d) of the Act and governs the continued delivery of water by the MWRA to the Communities which purchase water in accordance with contracts.
- R.5. The City executed a contract dated December 9, 1965 for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985 and by operation of the Act, was terminated as of January 1, 1990, and was thereafter replaced by contracts which were subject to the terms of the Act.
- R.6. The City subsequently executed new contracts for the purchase of water from the MWRA in 1989, 1996, and 2005, the latter contract, which by its term expires on December 31, 2014.
- R.7. The City, pursuant to the Regulation, has requested from the MWRA that its water supply be continued and has submitted a continuation request, a Supply Analysis Report, a Demand Analysis Report and a plan for water conservation and demand management pursuant to 310 C.M.R. 11.08.
- R.8. The City has adopted an ordinance for the protection of local sources.
- R.9. The City has submitted a detailed description of local user charge systems and accounting systems which meet the Regulation's requirement for conservation based rates.
- R.10. Based on its review of the submittals described in the recitals numbered R.7., R.8. and R.9., MWRA finds that the requirements of section 8(d) of the Act have been met as follows:
- (1) the safe yield of the watershed system as of the date of this contract and as projected for the term hereof, is sufficient to meet the projected demand of the City;
 - (2) no existing or potential water supply source for the City has been abandoned;

- (3) effective demand management measures have been developed by the City;
- (4) a local water supply source feasible for development has not been identified by either the City or the Department of Environmental Protection (the "DEP");
- (5) a water use survey has been completed which identifies all users within the City that consume in excess of twenty million gallons a year; and

R.11. MWRA and the City wish to formalize their rights and obligations regarding the supply of water to the City and therefore enter into this Agreement.

NOW, THEREFORE, in consideration of the foregoing recitals of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the Town agree to the following:

- 1. The term ("Term") of this Agreement shall be ten (10) years beginning on January 1, 2015 and ending at midnight on December 31, 2024.
- 2. The City agrees that during the Term it will operate its local water supply system in such a manner so as to provide approximately 256 million gallons per year towards meeting its local needs.
- 3. The MWRA shall during the Term provide the City with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
439	450	460	471	481
<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
492	502	513	523	534

and on a maximum daily water volume basis stated in millions of gallons as follows:

<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
4.04	4.09	4.19	4.24	4.29
<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
4.34	4.39	4.44	4.49	4.54

In the event of unusual water demand or supply conditions and upon written

notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply the City with those quantities of water to meet its legitimate needs in excess of the maximum annual volumes stated above so as to make up for unexpected shortfalls in the available yield of available local sources.

4. In the event that revised circumstances regarding local demand and/or supply should occur and the City determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the City's newly projected demand, the City may petition the MWRA to amend this Agreement pursuant to 360 C.M.R. 11.11.
5. The MWRA shall bill the City and the City shall pay to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate(s). All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's standard policies and procedures.
6. The City agrees to continue in effect during the Term a user charge system and an accounting system that meets the Regulation's requirement for conservation based rates.
7. The City shall develop and implement a full cost pricing system within twelve (12) months from the date that all communities listed in section 8(d) of the Act other than those subject to 360 CMR 11.00 have implemented a full cost pricing system.
8. The City agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including participation in MWRA conservation programs, and distribution of MWRA-provided materials to all water users.
9. The City agrees that during the Term it shall not abandon any local source and substitute for it water from DCR/MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.
10. The City agrees to continue in full force and effect during the Term its local Ordinance for the protection of local water sources.

11. Any dispute arising between the MWRA and the Town under the terms of this Agreement shall be resolved exclusively in accordance with the dispute resolution process set forth at 360 CMR 11.14 and the administrative procedures set forth at 360 CMR 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this day of December, 2014 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:

Frederick A. Laskey
Executive Director

CITY OF PEABODY

By:

Edward A. Bettencourt, Jr.
Mayor

WATER SUPPLY CONTINUATION AGREEMENT
BETWEEN
THE MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE TOWN OF WESTON

This Water Supply Continuation Agreement ("Agreement") by and between the Massachusetts Water Resources Authority (the "MWRA") and the Town of Weston (the "Town"), (hereinafter jointly referred to as the "Parties"), memorializes the agreement and understanding of the Parties regarding the arrangement whereby the MWRA will continue to supply water to the Town and the Town will purchase its water supply from the MWRA water supply system.

RECITALS

- R.1. The MWRA was created by the Massachusetts legislature in December, 1984 to operate, regulate, finance, and modernize the waterworks and sewerage systems serving the greater metropolitan Boston area. Operating pursuant to the terms of its Enabling Act, chapter 372 of the Acts of 1984 (the "Act"), the MWRA currently provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns and special service districts (the "Communities") within its service area.
- R.2. The MWRA desires to continue to provide safe and sufficient water supplies to the Town and to provide system-wide assistance to help protect and conserve water supplies.

- R.3. Section 8(d) of the Act permits the MWRA to enter into an arrangement to provide the continued delivery of water to a Community if specified requirements are met.
- R.4. A regulation entitled "Continuation of Contract Water Supply", promulgated by the MWRA at 310 C.M.R. 11.00 and most recently revised on November 18, 1994, (the "Regulation") defines more specifically the requirements of section 8(d) of the Act and governs the continued delivery of water by the MWRA to the Communities which purchase water in accordance with contracts.
- R.5. The Town executed a contract dated November 14, 1963 for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985 and by operation of the Act, was terminated as of January 1, 1990, and was thereafter replaced by a contract (s) which were subject to the terms of the Act.
- R.6. The Town and the MWRA subsequently executed new contracts for the purchase of water from the MWRA in 1990, in 1998, and in 2005, the latter contract, which by its terms expires on December 31, 2014;
- R.7. The Town, pursuant to the Regulation, has requested that the MWRA continue to supply water to it and has submitted a continuation request, a Supply Analysis Report, a Demand Analysis Report and a plan for water conservation and demand management pursuant to Regulation section 11.08 (3).
- R.8. The Town has adopted a local ordinance for the protection of local sources.
- R.9. The Town has submitted a detailed description of local user charge systems and accounting systems which meet the Regulation's requirement for conservation based rates.
- R.10. Based on its review of the submittals described in the recitals numbered R.7, R.8., R.9. and R.10., the MWRA finds that the applicable requirements of section 8(d) of the Act have been met as follows:
- (1) the safe yield of the watershed system as of the date of this contact and as projected for the term hereof, is sufficient to meet the projected demand of the town.
 - (2) no existing or potential water supply source for the Town has been abandoned;
 - (3) effective demand management measures have been developed by the Town;

- (4) a local water supply source feasible for development has not been identified by either the Town or the Department of Environmental Protection (the "DEP");
- (5) a water use survey has been completed which identifies all users within the Town that consume in excess of twenty million gallons a year; and

R.11. The MWRA and the Town wish to formalize their rights and obligations regarding the supply of water to the Town and therefore enter into this Agreement.

NOW, THEREFORE, in consideration of the foregoing recitals of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the Town agree to the following:

- 1. The term ("Term") of this Agreement shall be ten (10) years beginning on January 1, 2015 and ending at midnight on December 31, 2024.
- 2. The MWRA shall during the Term provide the Town with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
718	718	718	718	718
<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
718	718	718	718	718

and 5.2 million gallons per day ("mgd") on a maximum daily water volume basis. In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply the Town with those quantities of water to meet its legitimate needs in excess of the maximum annual water volumes stated above so as to make up for unexpected shortfalls in the available yield of available local sources.

- 3. In the event that revised circumstances regarding local demand and/or supply should occur and the Town determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the Town's new demand, the Town may petition the MWRA to amend this Agreement pursuant to 360 C.M.R. 11.11.
- 4. The MWRA shall bill the Town and the Town shall pay to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing

rate(s). All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's standard policies and procedures.

5. The Town agrees to cooperate with the Cambridge Water Board to protect the Cambridge reservoir system, a portion of which is located within the Town. The Town understands that the Town's obligations hereunder are limited to the following:
 - a) participating, through a Town representative, in any ad hoc working group composed of communities whose lands are partially within the Cambridge reservoir system watershed, which said group may attempt to develop coordinated land use policies to assure the continued quality of the water in the Cambridge reservoir system;
 - b) informing relevant local entities, including but not limited to Town meeting and the Board of Selectmen, of any conclusions reached by the said ad hoc group, and of any recommended changes in local land use controls.
6. The Town agrees to continue in effect during the Term a user charge system and an accounting system which meets the Regulation's requirement for conservation based rates.
7. The Town shall develop and implement a full cost pricing system within twelve (12) months from the date that all communities listed in section 8(d) of the Act, other than those subject to 360 CMR 11.00, have implemented a full cost pricing system.
8. The Town agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including participation in MWRA conservation programs, and distribution of MWRA-provided materials to all water users.
9. The Town agrees that during the Term it shall not abandon any local source and substitute for it water from DCR/MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.
10. The Town agrees to continue in full force and effect during the Term its local Ordinance for the protection of local water sources.
11. Any dispute arising between the MWRA and the Town under the terms of this Agreement shall be resolved exclusively in accordance with the dispute

resolution process set forth at 360 CMR 11.14 and the administrative procedures set forth at 360 CMR 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this day of December, 2014 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:

Frederick A. Laskey
Executive Director

TOWN OF WESTON

By:

Donna S. VanderClock
Weston Town Manager

WATER SUPPLY CONTINUATION AGREEMENT
BETWEEN
THE MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE TOWN OF WINCHESTER

This Water Supply Continuation Agreement (“Agreement”) by and between the Massachusetts Water Resources Authority (the “MWRA”) and the Town of Winchester (the “Town”), (hereinafter jointly referred to as the “Parties”), memorializes the agreement and understanding of the Parties regarding the arrangement whereby the MWRA will continue to supply water to the Town and the Town will purchase its water supply or a portion of its water supply from the MWRA water supply system.

RECITALS

- R.1. The MWRA was created by the Massachusetts legislature in December, 1984 to operate, regulate, finance, and modernize the waterworks and sewerage systems serving the greater metropolitan Boston area. Operating pursuant to the terms of its Enabling Act, chapter 372 of the Acts of 1984 (the “Act”), the MWRA currently provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns and special service districts (the “Communities”) within its service area.
- R.2. The MWRA desires to continue to provide safe and sufficient water supplies to the Town and to provide system-wide assistance to help protect and conserve water supplies.

- R.3. Section 8(d) of the Act permits the MWRA to enter into an arrangement to provide the continued delivery of water to a Community if specified requirements are met.
- R.4. A regulation entitled "Continuation of Contract Water Supply", promulgated by the MWRA at 310 C.M.R. 11.00 and most recently revised on November 18, 1994, (the "Regulation") define more specifically the requirements of section 8(d) of the Act and govern the continued delivery of water by the MWRA to the Communities which purchase water in accordance with contracts.
- R.5. The Town executed a contract dated July 2, 1957 for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985 and by operation of the Act, was terminated as of January 1, 1990, and was thereafter replaced by contracts which were subject to the terms of the Act.
- R.6. The Town subsequently executed new contracts for the purchase of water from the MWRA in 1990, 1998, and 2005, the latter contract, which by its term expires on December 31, 2014.
- R.7. The Town, pursuant to the Regulation, has requested from the MWRA that its water supply be continued and has submitted a continuation request, a Supply Analysis Report, a Demand Analysis Report and a plan for water conservation and demand management pursuant to 310 C.M.R. 11.08.
- R.8. The Town's Middle Reservoir and South Reservoir and Zone A of their watersheds are owned and controlled by the Town for water supply purposes. North Reservoir is also owned and controlled by the Town, with portions of Zone A of the watershed not owned by the Town and the Commonwealth, and also extending into Stoneham and Medford. Local sources are primarily protected through land ownership by the Town for water supply purposes and in part by ownership through the Commonwealth and by rules and regulations of the Commonwealth, which meet the intent of MWRA's requirements for enactment of local ordinances for the protection of local water supplies. The Source Water Assessment and Protection Report prepared for the Winchester Water and Sewer Division provided recommendations to further improve local source protection.
- R.9. The Town has submitted a detailed description of local user charge systems and accounting systems which meet the Regulation's requirement for conservation based rates.

R.10 Based on its review of the submittals described in the recitals numbered R.7., R.8. and R.9., the MWRA finds that the requirements of section 8(d) of the Act have been met as follows:

- (1) the safe yield of the watershed system as of the date of this contract and as projected for the term hereof, is sufficient to meet the projected demand of the town;
- (2) no existing or potential water supply source for the Town has been abandoned;
- (3) effective demand management measures have been developed by the Town;
- (4) a local water supply source feasible for development has not been identified by either the Town or the Department of Environmental Protection (the "DEP");
- (5) a water use survey has been completed which identifies all users within the Town that consume in excess of twenty million gallons a year;

R.11 MWRA and the Town executed the Spot Pond Elevation Management Agreement in 2002, which permits Winchester, under certain conditions and upon written request, to withdraw untreated water from Spot Pond for local treatment and distribution, and

R.12. MWRA and the Town wish to formalize their rights and obligations regarding the supply of water to the Town and therefore enter into this Agreement.

NOW, THEREFORE, in consideration of the foregoing recitals of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the Town agree to the following:

1. The term ("Term") of this Agreement shall be ten (10) years beginning on January 1, 2015 and ending at midnight on December 31, 2024.
2. The Town agrees that during the Term it will operate its local water supply system in such a manner so as to provide approximately 256 million gallons per year towards meeting its local needs.
3. The MWRA shall during the Term provide the Town with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
610	610	610	610	610

<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
610	610	610	610	610

and on a maximum daily water volume basis stated in millions of gallons as follows:

<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
6.7	6.7	6.7	6.7	6.7
<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
6.7	6.7	6.7	6.7	6.7

In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply the Town with those quantities of water to meet its legitimate needs in excess of the maximum annual volumes stated above so as to make up for unexpected shortfalls in the available yield of available local sources.

4. The Town may withdraw untreated water from Spot Pond pursuant to the terms of the Spot Pond Elevation Management Agreement between Town of Winchester and Massachusetts Water Resources Authority. Withdrawals are subject to the terms and conditions of that Agreement, and are not included in the withdrawals in (3) above.
5. In the event that revised circumstances regarding local demand and/or supply should occur and the Town determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the Town's newly projected demand, the Town may petition the MWRA to amend this Agreement pursuant to 360 C.M.R. 11.11.
6. The MWRA shall bill the Town and the Town shall pay to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate. All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's standard policies and procedures.
7. The Town agrees to continue in effect during the Term a user charge system and an accounting system that meets the Regulation's requirement for conservation based rates.
8. The Town shall develop and implement a full cost pricing system within twelve (12) months from the date that all communities listed in section 8(d) of the Act

other than those subject to 360 CMR 11.00 have implemented a full cost pricing system.

9. The Town agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including participation in MWRA conservation programs, and distribution of MWRA-provided materials to all water users.
10. The Town agrees that during the Term it shall not abandon any local source and substitute for it water from DCR/MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes. MWRA covenants that under no circumstances will it attempt to take possession of the Town's local reservoirs during the Term.
11. The Town agrees to continue in full force and effect during the Term its control and protection of the reservoirs and its portion of its watersheds owned by the Town, and to continue to work with DCR to protect portions of the watershed owned by the Commonwealth. The Town further agrees to work towards implementation of the recommendations of Table 3 of the Source Water Assessment and Protection (SWAP) Report prepared for the Winchester Water and Sewer Division.
12. Any dispute arising between the MWRA and the Town under the terms of this Agreement shall be resolved exclusively in accordance with the dispute resolution process set forth at 360 CMR 11.14 and the administrative procedures set forth at 360 CMR 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this day of December , 2014 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:


Frederick A. Laskey
Executive Director

TOWN OF WINCHESTER

By:

Richard Howard
Town Manager

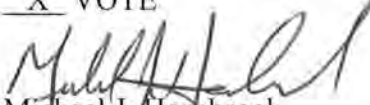
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: December 17, 2014
SUBJECT: Revision to Dedham-Westwood Water District's MWRA Withdrawal Limits

COMMITTEE: Water Policy & Oversight

INFORMATION
 VOTE

Pamela Heidell, Policy & Planning Manager
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

On October 15, 2014, staff provided the Board with an update on Dedham-Westwood Water District's desire to increase its withdrawal limit from MWRA. Since that time, DWWD has submitted a formal request to MWRA and to MWRA's Advisory Board to increase its withdrawal. At the November 12, 2014 meeting, the Board approved a revision to MWRA's policy for entrance fee payments. This staff summary recommends that the Board approve DWWD's request to increase its withdrawal limit, which includes the approved revisions to the entrance fee payments.

RECOMMENDATION:

To approve the Dedham-Westwood Water District's request to increase its contract withdrawal limits from 36.5 million gallons a year to 73 million gallons a year, subject to payment of an additional entrance fee of \$556,727, and to authorize the Executive Director, on behalf of the Authority, to execute an amended water supply agreement with the Dedham-Westwood Water District, stipulating the terms and conditions of service, substantially in the form shown in Attachment A.

DISCUSSION:

Overview

On October 22, 2014, DWWD submitted a written request to MWRA and the MWRA Advisory Board asking that its MWRA withdrawal limits be increased by 36.5 million gallons a year (Attachment B).

DWWD was admitted into the MWRA Waterworks System in 2005. Although its supply sources were able to meet the District's demand of approximately 4 million gallons a day (mgd) the majority of the time, during dry conditions, the District encountered difficulties meeting its peak demand. DWWD's local water supply system is served by three groundwater supplies, two

of which are in the Charles River Basin and one, the Fowl Meadow Well, is in the Neponset River Basin.

Use of the Fowl Meadow Well is governed by both the Water Management Act and the Interbasin Transfer Act, and the latter requires DWWD to cease operation of the Fowl Meadow Well when flow in the Neponset River falls below a designated amount. Hydrologic and water demand modeling was conducted to identify the water deficit created by restricted use of the Fowl Meadow Well, and this deficit was projected in 2005 to be 0.1 mgd, which served as the basis of DWWD's original request to MWRA. Accordingly, under the terms of DWWD's admission to MWRA, DWWD was authorized to withdraw 36.5 million gallons annually or 0.1 mgd on an annual average day basis, with a typical maximum-day withdrawal of 2 million gallons.

DWWD's existing agreement with MWRA provides that any increase beyond 2 million gallons on a daily basis, and 36.5 million gallons on an average annual basis, will require a written contract revision and a revision to the entrance fee. Anticipated growth in DWWD's service area, increasing groundwater withdrawal concerns highlighted by the Sustainable Water Management Initiative, and a desire to increase the reliability of its water system in the event of groundwater pump failure, are factors that now prompt DWWD's request to increase its withdrawal limit from MWRA. DWWD is seeking approval for an additional 36.5 million gallons per year for a total authorized annualized average-day withdrawal of 0.2 mgd or 37 million gallons a year. DWWD's maximum daily withdrawal from MWRA of 2 million gallons would not change. Even with revised MWRA withdrawal limits, DWWD's demand of approximately 4 mgd on an annualized basis will be primarily met from local sources.

Looking at DWWD's past patterns of water withdrawals from MWRA, its withdrawals are typically higher in the May-October time period. Since the provisions of MWRA's current entrance fee policy require consideration of both average and peak six-month use in determining the entrance fee, DWWD's past withdrawal patterns were used to project future withdrawals from MWRA. Water use in 2014 was not used to determine the entrance fee because DWWD's withdrawals this year were influenced by an emergency situation that arose when DWWD encountered delays on work of one of its wells.

Regulatory and Advisory Board Reviews

On October 10, 2014, the Executive Office of Environmental Affairs determined that the requested increase in withdrawal is not subject to review under MEPA and the submission of a new ENF was not required. The WRC previously determined it would not take jurisdiction under the Interbasin Transfer Act. These determinations fulfill MWRA's requirement to complete reviews associated with MWRA's supply of water to DWWD.

On November 20, the Advisory Board voted to allow the request from DWWD to revise its contract to increase the allowed annual purchase from MWRA by an additional 36.5 million gallons a year. The Advisory Board's vote reflects an agreement that DWWD will pay an additional entrance fee of \$566,727 (Attachment C).

New Water Supply Agreement and Entrance Fee Provisions

An amended and restated Water Supply Agreement is included in Attachment A. It reflects a new water withdrawal limit of 73 million gallons annually and requires an additional entrance fee payment of \$566,727 by DWWD. The entrance fee covers the DWWD's additional share of the value of MWRA's system currently in place and reflects calculation of the entrance fee based on 75% annual average use, 25% peak six-month average.

On November 12, the Board approved a modification to MWRA's Policy #OP.10, *Admission of New Community to MWRA Water System*, to incorporate up to a 25-year, interest-free payment plan for the entrance fee, consistent with a policy recommendation approved by MWRA's Advisory Board. The revised policy became effective on the date of Board approval (November 12, 2014). DWWD's amended and restated Water Supply Agreement reflects DWWD's preference to pay the entrance fee in a five-year, interest-free payment plan, with the first payment due January 20, 2015.

The amended and restated Water Supply Agreement will reflect a term of 2014 to 2020. In 2011, DWWD executed a ten-year Water Supply Agreement with MWRA, effective January 1, 2011 and ending on December 31, 2020. The amended new contract will end on the same date as the prior contract.

Pursuant to #OP.10 and 360 C.M.R. 11.00, Continuation of Water Supply, certain requirements must be met for Contract Water Supply. DWWD has satisfied requirements of these regulations, and in 2010 submitted a Supplementary Report to MWRA that reflected continued implementation of demand management programs, no abandonment of local sources, water use surveys, and Zoning By-laws to preserve and protect drinking water supplies.

Level of Funding to DWWD Under the Local Water System Assistance Program (LWSAP)

Staff propose no change to DWWD's loan allocation due to the increase in water withdrawal limits, because withdrawal limits are not one of the parameters used in the approved allocation methodology of the LWSAP FY11-FY20. The LWSAP allocates funds based on 1) fully supplied or partially supplied status; 2) estimated share of MWRA water assessment for FY11; 3) estimated share of unlined water pipe pro-rated based on percent use of MWRA water; and 4) pro-rating the allocation to the number of years remaining in the program. For DWWD, the allocation was \$503,000 for the 10-year period FY11-20 and DWWD has used all these funds.

There are two instances when a change to the existing LWSAP allocations should be reviewed and neither apply in this instance since DWWD is neither a new community nor proposing to become a fully served MWRA community:

- 1) The June 30, 2010 staff summary approving loan allocation guidelines includes a policy for allocating funds to new MWRA communities as part of the admission process; and
- 2) If an existing partial-use community becomes a fully supplied community, that part of the allocation formula would be revised.

BUDGET/FISCAL IMPACT:

DWWD's entrance fee will be paid in interest-free installments over a period of five years beginning in January 2015. Proceeds from the entrance fee will be utilized to defer and offset expenses associated with the ongoing waterworks capital improvement program. DWWD will continue to be assessed for water in accordance with MWRA's Community Charge Determination Policy. MWRA's Community Charge Determination Policy computes charges for water services on the basis of each community's metered water flows. If DWWD withdraws an additional 100,000 gallons per day, this would equal \$118,247 at FY15 prevailing rates.

ATTACHMENTS:

Attachment A: Amended and Restated Water Supply Agreement

Attachment B: DWWD's request to MWRA to Increase Withdrawal Limits

Attachment C: Advisory Board Approval of DWWD's Request to Increase Withdrawal Limits

AMENDED AND RESTATED
WATER SUPPLY CONTINUATION AGREEMENT
BETWEEN
THE MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE DEDHAM-WESTWOOD WATER DISTRICT

This Amended and Restated Water Supply Continuation Agreement (“Agreement”) by and between the Massachusetts Water Resources Authority (the “MWRA”) and the Dedham-Westwood Water District (“DWWD”) (hereinafter jointly referred to as the “Parties”), documents the amended agreement and understanding of the Parties regarding the arrangement whereby the MWRA will continue to supply water to DWWD and DWWD will purchase a portion of its water supply from the MWRA water supply system and supersedes the Agreement between the parties dated April, 2011.

RECITALS

1. Whereas, MWRA was created in 1984 by chapter 372 of the Acts of 1984 (the “Act”) to operate, regulate, finance, and modernize the waterworks and sewerage systems serving the greater metropolitan Boston area;
2. Whereas, MWRA currently provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns and special service districts (the “Communities”) within its service area;
3. Whereas, MWRA desires to continue to provide safe and sufficient water supplies to DWWD and to provide system-wide assistance to help protect and conserve water supplies;
4. Whereas, Section 8 (d) of the Act permits the MWRA to extend its waterworks system to a community and to provide the continued delivery of water to the new community under reasonable terms as determined by MWRA provided that specific requirements are met;
5. Whereas, the MWRA finds that the applicable requirements of section 8(d) of the Act have been met as follows:
 - (1) the safe yield of the watershed system as of the date of this contract and as

- projected for the term hereof, is sufficient to meet the projected demand of the Town;
- (2) No existing or potential water supply source for DWWD has been abandoned;
 - (3) Effective demand management measures have been developed by DWWD;
 - (4) A local water supply source feasible for development has not been identified by either DWWD or the Department of Environmental Protection (the "DEP");
 - (5) A water use survey has been completed which identifies all users within DWWD that consume in excess of twenty million gallons a years.
6. Whereas, DWWD, having met the conditions of Section 8 (d) and the conditions of O.P. #10, Admission of a New Community to the Waterworks System, was duly admitted to the MWRA Waterworks system on October 25, 2005, thereby acquiring certain rights and obligations conferred by that admission;
 7. Whereas, a regulation entitled "Continuation of Contract Water Supply," promulgated by the MWRA at 360 C.M.R. 11.00 and most recently revised on November 18, 1994, (the "Regulation") defines more specifically the requirements of section 8(d) of the Act and governs the continued delivery of water by the MWRA to the communities purchasing water from the MWRA;
 8. Whereas, DWWD first executed a contract dated January 1, 2006 for the purchase of 36.5 million gallons of water a year from the MWRA;
 9. Whereas, DWWD agreed to pay MWRA an entrance fee of Five Hundred Forty-eight Thousand Seven Hundred Forty-eight Dollars (\$548,748) for its share of the present asset value of the waterworks system in place at the time of its entrance to MWRA, in accordance with a schedule of payments established at the time of its entrance, and with the final scheduled payment having been made in February 2010. It is the express understanding of the parties, in consideration of DWWD's payment of the entrance fee, that DWWD shall be eligible to continue its purchase of water supply from MWRA in accordance with Section 8 (d) of the Act and with the Regulation.
 10. Whereas, DWWD, pursuant to the Regulation, requested from the MWRA that its water supply be continued and submitted a continuation request and a Supplementary Report including a supply analysis, a demand analysis, a water management plan, an ordinance for the protection of local sources, and a description of the local user charges system and accounting system which meet the Regulation's requirement for conservation based rates; and
 11. Whereas, on October 22, 2014, DWWD requested that its annual withdrawal limit from MWRA be increased from 36.5 million gallons a year to 73 million gallons per year;
 12. Whereas, on December 17, 2014 the MWRA approved DWWD's request to increase its MWRA withdrawal limit from 36.5 million gallons a year to 73 million gallons a year, subject to payment of an additional entrance fee of \$566,727; and

13. Whereas, the MWRA and DWWD wish to formalize their rights and obligations regarding the supply of water to the DWWD and therefore enter into this Agreement.

NOW, THEREFORE, in consideration of mutual promises contained herein and for other good and valuable consideration, the MWRA and DWWD agree to the following:

1. The term ("Term") of this Amended Agreement shall end at midnight on December 31, 2020.
2. The MWRA shall during the Term provide DWWD with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
73	73	73	73	73	73	73

and up to two million gallons per day (mgd) on a maximum day (non-emergency) basis.

3. Any increase beyond 73 million gallons on an average annual basis will require a written contract revision and revision to the entrance fee. A water supply emergency may be an appropriate reason for DWWD to temporarily increase its maximum water volume in excess of the above referenced volume without requiring a revision to this Agreement.
4. DWWD agrees that during the Term it will operate its local water supply system in such manner so as to make maximum feasible use of any available local water supply sources.
5. DWWD agrees that the MWRA shall not be liable to DWWD for any disruption of water service delivery to DWWD attributable to the water distribution systems of the DWWD.
6. DWWD agrees to pay an additional entrance fee of \$556,727 and to pay the entrance fee in pursuant to a five-year, interest-free payment plan. A schedule of payments is shown on the schedule attached to this Agreement as Exhibit A and incorporated herein. It is the express understanding of the Parties, in consideration of DWWD's payment of the entrance fee in accordance with the provisions of this and past Agreements, that DWWD shall have the right to continuation of its purchase of water supply from MWRA in accordance with Section 8(d) of the Act and with the Regulation. The process for continuation of water supply shall be as set forth in the Regulation.
7. The MWRA shall bill DWWD and DWWD shall pay to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate. All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's standard policies and procedures.
8. The DWWD agrees to continue a user charge system and an accounting system which meets the Regulation's requirement to a) incorporate a uniform rate or an alternative structure which provides incentives for water conservation and/or is designed to ensure

the affordability of water services to low and/or fixed income persons; and b) prohibit rate structures that incorporate descending or declining block rates.

9. DWWD agrees to continue in effect a full cost pricing system for water received from the MWRA water supply system.
10. DWWD agrees that during the Term it shall maintain all reasonable conservation measures and continue the implementation of its Water Conservation Plan submitted to DEP in 2005 as a condition of its MEPA Certificate for admission to MWRA. Measures include but are not limited to participation in MWRA conservation programs, distribution of MWRA-provided materials to all water users, compliance with MWRA's regulations for town-wide leak detection and repair (360 C.M.R. 12.00), maintain metering in 100% of DWWD's distribution system, including all municipal facilities, and maintenance of efficient water fixtures in all public buildings, together with promotion of their use in industrial, commercial and residential areas.
11. DWWD agrees that during the Term it shall not abandon any local source and substitute for it water from MWRA sources unless DEP has declared that the local source will be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.
12. DWWD agrees that it will work cooperatively with the Towns of Dedham and Westwood to continue in full force and effect their local bylaws (Dedham's Aquifer Protection District Zoning By-law for the Bridge Street well field and Fowl Meadow Aquifer and Westwood's Water Resource Protection District zoning bylaw for the White Lodge Well Field and Rock Meadow Well) to preserve and protect existing and potential sources of drinking water supplies, to promote the health, safety, and general welfare of the community, to conserve Dedham and Westwood's natural resources, and to prevent temporary and permanent contamination to the environment. DWWD further agrees to work toward implementation of the recommendations of the Source Water Assessment and Protection Report prepared for DWWD, including cooperation with the Towns of Canton, Milton, and Norwood to encourage them to adopt local controls that include DWWD's wellhead protection area.
13. The Parties agree that the interconnection between DWWD's distribution and the MWRA system constructed in 1999-2000 to provide a source of emergency supply shall remain available for emergency use, with valving set to allow water to enter the DWWD automatically in the event of a low-pressure event such as a major fire.
14. Any dispute arising between the MWRA and DWWD concerning the calculation of DWWD's annual assessment shall be resolved in accordance with MWRA's Rate Basis Data Review and Dispute Resolution process. Any other dispute between MWRA and DWWD under terms of this Agreement shall be resolved in accordance with the dispute resolution process set forth at 360 CMR 11.14 and the administrative procedures set forth at 360 CMR 1.00.

ATTACHMENT A

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this ____ day of December, 2014 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:

Frederick A. Laskey
Executive Director

DEDHAM WESTWOOD WATER DISTRICT

By:

Eileen M. Commane
Executive Director

Attachment #1

Dedham-Westwood Water District customers using over 20 million gallons annually

Only one customer, the Norfolk County Jail 200 West Street Dedham

Dedham-Westwood Water District

MWRA Entrance Fee Repayment Schedule

PmtNo.	Payment Date	Scheduled Payment
1	1/20/2015	\$ 111,345.37
2	1/20/2016	111,345.37
3	1/20/2017	111,345.37
4	1/20/2018	111,345.37
5	1/20/2019	111,345.37
TOTAL:		\$ 556,726.86



DEDHAM-WESTWOOD WATER DISTRICT

50 Elm Street, P. O. Box 9137 • Dedham, MA 02027-9137
(781) 329-7090 • Fax (781) 329-8737
www.dwwd.org

October 22, 2014

Mr. Frederick A. Laskey, Executive Director
Massachusetts Water Resources Authority
100 First Avenue, Charlestown Navy Yard
Boston, MA 02129

Mr. Joseph Favaloro, Executive Director
Massachusetts Water Resources Authority Advisory Board
100 First Avenue, Charlestown Navy Yard
Boston, MA 02129

Subject: Request to Increase MWRA Withdrawal by 36.5 million gallons a year (0.1 mgd)

Dear Mr. Laskey and Mr. Favaloro:

The Dedham Westwood Water District (DWWD) was admitted into the MWRA Waterworks System in 2005. At that time, the volume of water required from MWRA was projected to be up to 36.5 million gallons per year or 100,000 gallons per day (0.1 mgd) on an average annual basis. 36.5 million gallons a year is no longer sufficient to meet DWWD's needs, and the DWWD is now seeking approval to purchase up to an additional 36.5 million gallons of water a year from the Authority, for a total of 73 million gallons of water per year (200,000 gallons per day on an annualized average basis).

DWWD's water system is served by three groundwater supplies, two of which are in the Charles River Basin and one of which is in the Neponset River Basins. Hydrologic and water demand modeling conducted for DWWD in 2005 formed the basis of DWWD's original requested volume of withdrawal: the modeling projected the amount and frequency of water supply shortfalls associated with restrictions on use of DWWD's Fowl Meadow Well in the Neponset River Basin. Most of the time, DWWD's groundwater supplies are able to meet the DWWD demand. However, experience since 2005 has shown that the shortfall in local sources may exceed 36.5 million gallons a year: dry conditions encountered in summer/early fall this year, coupled with growth in DWWD's service area and increasing groundwater withdrawal concerns highlighted by the Massachusetts Sustainable Water Management Initiative, now prompts DWWD's request and need for more MWRA water. Moreover, the reliability of the DWWD water system in the event of any groundwater pump failure as experienced twice in the last three years would also be improved with an increase in the contractual volume available from the MWRA.

Pursuant to the existing Water Supply Continuation Agreement between MWRA and DWWD as well as the original terms of DWWD's admission to MWRA, any increase beyond 2 million gallons on a daily basis, and 36.5 million gallons on an average annual basis will require a written contract revision and revision to the entrance fee. Accordingly, DWWD is requesting a

written contract revision. DWWD understands payment of a revised entrance fee amount will be required for the additional 36.5 million gallons a year requested.

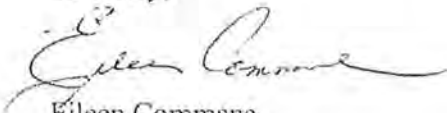
In support of DWWD's request, please note that DWWD has satisfied requirements of the MWRA's regulations for Continuation of Contract Water Supply, MWRA # OP.10 Admission to MWRA Waterworks System, and MWRA's Enabling Act. In 2010, DWWD submitted a Supplementary Report to MWRA that reflected the following:

- 1) DWWD has maintained all reasonable conservation measures and has continued the implementation of its Water Conservation Plan submitted to DEP in 2005 as a condition of its MEPA Certificate for admission to MWRA.
- 2) DWWD has not abandoned any local source and substituted it for water from MWRA sources;
- 3) A local water supply source feasible for development has not been identified by either DWWD or DEP.
- 4) A water use survey has been completed that identified all large water users.

The above noted plans and statements remain true. In addition, all required regulatory reviews associated with DWWD's requested increased withdrawal have been completed, since DWWD has obtained a determination from the Executive Office of Energy and Environmental Affairs that the requested expansion in withdrawal is not subject to review under MEPA and the submission of a new ENF is not required. The WRC previously determined it would not take jurisdiction under the Interbasin Transfer Act. Please see Attachment 1.

DWWD looks forward to a continuing and cooperative relationship with the MWRA and the Advisory Board. Should you have any questions or desire further information, please do not hesitate to contact me at 781-461-2779 or ecommane@dwwd.org.

Sincerely,



Eileen Commene,
Executive Director

cc:

Pam Heidell, MWRA



December 2, 2014

Mr. Fred Laskey, Executive Director
Massachusetts Water Resources Authority
100 1st Avenue, Building 39-3
Boston, MA 02129

Dear Mr. Laskey:

At the regular MWRA Advisory Board meeting on November 20, 2014, with a quorum in attendance, the members unanimously voted for the following motion:

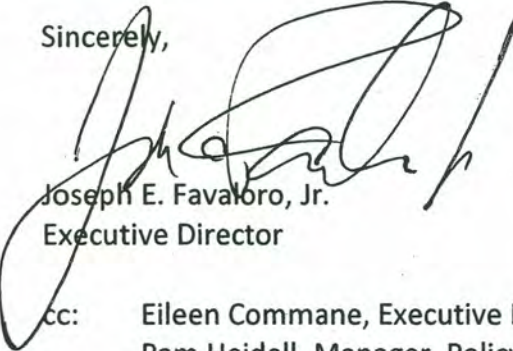
To allow the request from the Dedham-Westwood Water District (DWWD) to revise its contract to increase the allowed annual purchase by an additional 36.5 million gallons per year. Pursuant to the existing Water Supply Continuation Agreement between MWRA and DWWD, as well as the original terms of DWWD's admission to MWRA, any increase beyond two million gallons on a daily basis, and 36.5 million gallons on an average annual basis, will require a written contract revision and revision to the entrance fee. DWWD understands payment of a revised entrance fee amount will be required for the additional 36.5 million gallons a year requested. DWWD has satisfied requirements of the MWRA's regulations for Continuation of Contract Water Supply, MWRA #OP.10 Admission to MWRA Waterworks System, and MWRA's Enabling Act. In 2010, DWWD submitted a Supplementary Report to MWRA that reflected the following:

- 1. DWWD has maintained all reasonable conservation measures and has continued the implementation of its Water Conservation Plan submitted to DEP in 2005 as a condition of its MEPA Certificate for admission to MWRA.**
- 2. DWWD has not abandoned any local source and substituted it for water from MWRA sources.**
- 3. A local water supply source feasible for development has not been identified by either DWWD or DEP.**
- 4. A water use survey has been completed that identified all large water users.**

The above noted plans and statements remain true. In addition, all required regulatory reviews associated with DWWD's requested increase withdrawal have been completed, since DWWD has obtained a determination from the Executive Office of Energy and Environmental Affairs that the requested expansion in withdrawal is not subject to review under MEPA and the submission of a new ENF is not required. The WRC previously determined it would not take jurisdiction under the Inter-Basin Transfer Act.

Dedham-Westwood Water District, in accordance with these terms, will pay an additional entrance fee of \$556,727 to be divided into interest-free installments over 25 years, with a three-year grace period (as is approved Advisory Board policy).

Sincerely,



Joseph E. Favaloro, Jr.
Executive Director

cc: Eileen Commane, Executive Director, DWWD
Pam Heidell, Manager, Policy & Planning



MASSACHUSETTS WATER RESOURCES AUTHORITY

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

Frederick A. Laskey
Executive Director

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

PERSONNEL & COMPENSATION COMMITTEE MEETING

Chair: K. Cotter
Vice-Chair: J. Wolowicz
Committee Members:
J. Barrera
J. Carroll
P. Flanagan
J. Foti
A. Pappastergion
H. Vitale
J. Walsh

to be held on

Wednesday, December 17, 2014

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

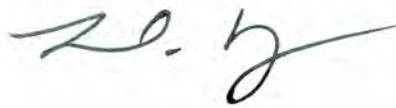
Time: Immediately following Water Comm.

A. Approvals

1. PCR Amendments – December 2014
2. Appointment of Director, Human Resources
3. Appointment of Manager, Operations Support
4. Appointment of Manager, Employment, Human Resources
5. Appointment of Assistant Manager, Labor Relations, Human Resources
6. Appointment of Environmental Manager, Real Property and Environmental Management
7. Appointment of Director, Intergovernmental Affairs
8. Appointment of Deputy Director, Maintenance, Deer Island
9. Appointment of Sr. Program Manager, Engineering Services, Deer Island
10. Appointment of Construction Coordinator, Engineering and Construction
11. Appointment of Program Manager, Wastewater Operations
12. Appointment of Regional Manager of Monitoring, TRAC

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 17, 2014
SUBJECT: PCR Amendments – December 2014



COMMITTEE: Personnel and Compensation

 INFORMATION
 X VOTE

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 chart.

DISCUSSION:

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.

December PCR Amendments

There are two PCR amendments included in this package that are related to the Human Resources Department. First, a new position, Manager of Operations Support, is being requested to handle human resources issues for the Operations, Engineering and Construction groups which have experienced significant turnover over the last several months. The recommended candidate for this position is currently the Director of Human Resources and the recommended candidate to backfill that position is the current Deputy Director of Human Resources. Both appointments are being recommended under separate staff summaries at this Board meeting. The second amendment is for the elimination of the Deputy Director position, which will result in a savings of \$118,234 for the Department.

Also included are three changes which are related to collective bargaining negotiations. Two positions have been excluded from the bargaining unit and are now designated as confidential positions. These changes reflect the significant confidential duties the employees perform for senior level managers. These two positions along with a third similarly-situated confidential position require an upgrade in grade level to ensure appropriate classification based on job responsibilities. As part of the collective bargaining review of position designations, three other positions will have their confidential designations removed and will return to their union designation. In addition, one job title that had previously been designated as confidential will be

changed to a management designation to better reflect the nature of the incumbents' duties and role within the organization. These changes do not require Board approval.

The remaining PCR amendments reflect organizational changes aimed at improving the cost-effectiveness, structural soundness and staffing patterns around the organization.

These amendments include:

1. Title and location change to a vacant position (Construction Coordinator to Sr. Program Manager) in the Operations Division to meet the staffing needs at the Deer Island Treatment Plant.
2. Title change for a filled position in Public Affairs (Director, Public Affairs to Director, Intergovernmental Affairs) to better align title with responsibilities.
3. Title change to a vacant position (Project Manager, Senior Designer to Project Manager, Mechanical) in Operations to meet the staffing needs at Deer Island Capital Engineering.
4. Elimination of a position (Deputy Director, Human Resources) in the Administration and Finance Division due to the recommended appointment of incumbent to Director, Human Resources.
5. Title and grade change to a vacant position (B&G Worker to HVAC Specialist) in the Operations Division to address HVAC staffing needs at DITP.
6. Title, grade and location change to a vacant position (Secretary I to O&M Systems Specialist) in the Operations Division to address staffing needs at DITP.
7. Creation of a new position (Manager, Operations Support) in Operations to fill an organizational need.
8. Title and grade change to a filled position (Executive Secretary to Administrative Systems Coordinator) in the Operations Division to align title and grade with current responsibilities.
9. Title and grade change to a filled position (Executive Secretary to Administrative Systems Coordinator) in the Administrative and Finance Division to align title and grade with current responsibilities.
10. Title and grade change to a filled position (Executive Secretary to Administrative Systems Coordinator) in the Law Division to align title and grade with current responsibilities.

The first four amendments require Personnel and Compensation Committee review and approval. The remaining amendments require Board approval after review by the Personnel and Compensation Committee.

BUDGET/FISCAL IMPACT:

The annualized budget impact of these PCR amendments will range in costs from \$17,922 to \$33,838. Actual costs will depend on the hiring rates for the future hires in the positions of HVAC Specialist and O&M Systems Specialist. Staff will ensure that any cost increase associated with these PCR amendments will not result in spending over the approved FY2015 Wages and Salaries budget.

ATTACHMENTS:

New/Old Job Descriptions

**MASSACHUSETTS WATER RESOURCES AUTHORITY
POSITION CONTROL REGISTER AMENDMENTS
FISCAL YEAR 2015**

PCR AMENDMENTS REQUIRING PERSONNEL & COMPENSATION COMMITTEE APPROVAL - December 17, 2014

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	
P8	Operations Engineering 55250110	V	T,L	Construction Coordinator	9	30	Sr Program Manager	9	30	N/A	N/A - N/A	\$0 - \$0	To meet staffing needs for the Deer Island Capital Engineering Department	
P9	Executive Public Affairs 8250020	F	T	Director, Public Affairs	NU	15	Director, Intergovernmental Affairs	NU	15	N/A	N/A - N/A	N/A - N/A	To better align title with responsibilities	
P10	Operations Capital Engineering 2971019	V	T	Project Manager, Senior Designer	9	25	Project Manager, Mechanical	9	25	N/A	N/A - N/A	\$0 - \$0	To meet staffing needs in Capital Engineering at DITP	
P11	Administration & Finance Human Resources 8520001	V	E	Deputy Director, Human Resources	NU	15	Position Elimination			\$118,234	\$0 - \$0	-\$118,234 - -\$118,234	Position to be eliminated upon appointment of Director, Human Resources Staff Summary recommendation presented at December 17, 2014 meeting	
PERSONNEL & COMP COMMITTEE TOTAL =										4		TOTAL:		-\$118,234 - -\$118,234

PCR AMENDMENTS REQUIRING BOARD APPROVAL-December 2014

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
B3	Operations Trade Labor Maint 2988015	T,G	V	B&G Worker	2	13	HVAC Specialist	2	16	\$55,913	\$65,932 - \$65,932	\$10,019 - \$10,019	To address HVAC staffing needs at DITP
B4	Operations Safety 2941004	T,G,L	V	Secretary I	1	15	O&M Systems Specialist	1	20	\$52,055	\$52,037 - \$67,953	-\$18 - \$15,898	To meet Technical Information Center needs at Deer Island
B5	Position to be added	N/A	N/A	N/A	N/A	N/A	Manager, Operations Support	NU	14		\$115,230 - \$115,230	\$115,230 - \$115,230	Staff Summary recommendation presented at December 17, 2014 meeting
B6	Operations Engineering & Construction 55250131	T,G	F	Executive Secretary	1	18	Administrative Systems Coordinator	C1	20	\$61,460	\$65,299 - \$65,299	\$3,839 - \$3,839	To align title and grade with current responsibilities
B7	Administration & Finance Directors Office 4110006	T,G	F	Executive Secretary	C1	18	Administrative Systems Coordinator	C1	20	\$59,043	\$62,647 - \$62,647	\$3,604 - \$3,604	To align title and grade with current responsibilities
B8	Law Law Expenses 7110035	T,G	F	Executive Secretary	1	18	Administrative Systems Coordinator	C1	20	\$55,744	\$59,226 - \$59,226	\$3,482 - \$3,482	To align title and grade with current responsibilities
BOARD TOTAL =					6		SUBTOTAL:					\$136,156 - \$152,072	
GRAND TOTAL =					10		TOTAL ESTIMATED COSTS:					\$17,922 - \$33,838	

OLD

**MWRA
POSITION DESCRIPTION**

POSITION: Construction Coordinator
PCR#:
DIVISION: Operations
DEPARTMENT: Engineering and Construction

BASIC PURPOSE:

Supervises office and field engineers to oversee and manage construction contracts and professional engineering contracts in the construction, rehabilitation, improvements, and start-up of Waterworks and Wastewater facilities and infrastructure.

SUPERVISION RECEIVED:

Works under the general supervision of the Assistant Director, Construction.

SUPERVISION EXERCISED:

Exercises close supervision of office and field employees including professional and technical staff, resident engineers, and inspectors.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Oversees and manages a program of construction projects, including the rehabilitation and improvement of waterworks and wastewater facilities and pipelines.
- Supervises and manages office and field engineers, including assignment of projects, evaluation of performance, and staff development planning. Provides technical and administrative assistance to staff during the construction, startup, and warranty of projects.
- Oversees and directs consultant engineering services and contracts during construction, including all work for quality of work, budget, schedule, and compliance with contractual terms and MWRA objectives and policies. Negotiates and reviews construction services in consultant contracts.

- Acts as liaison with engineering, operations, and maintenance staff to ensure the smooth construction and start-up of new or rehabilitated facilities.
- Ensures contractor compliance with construction documents, MWRA procedures and policies, regulatory requirements, and applicable engineering standards.
- Supervises the development and maintenance of construction tracking and reporting procedures. Prepares and updates construction budget and schedule projections.
- Performs constructability reviews of construction plans and specifications.
- Reviews, negotiates and processes change orders and claims in accordance with MWRA policies and procedures.
- Reviews and processes pay estimates and final payment and construction closeout documents in a timely manner. Oversees preparation and submittal of accurate record drawings upon construction completion.
- Oversees office and field project files, ensuring that all project documentation is complete, up-to-date, and in accordance with MWRA policies and procedures.
- Prepares staff summaries for the Executive Director and Board for construction contract and engineering agreement changes, and project status.

SECONDARY DUTIES:

- Participates in preparing for collective bargaining and hears Step-One grievances.
- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Completion of a four (4) year college program in civil engineering or a related field; and
- (B) Eight (8) to (10) ten years experience in the construction of water and wastewater facilities and infrastructure, of which four (4) years should be in a supervisory capacity and four (4) years should include a project management experience; or

- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated ability to work effectively as part of a project team and also to function independently with minimal supervision.
- (B) Knowledge of Massachusetts laws, including MGL Chapter 30 and Chapter 149 construction regulations.
- (C) Familiarity with computer software, such as Word and Excel.
- (D) Excellent interpersonal, managerial, oral and written communication skills are required.

SPECIAL REQUIREMENTS:

Registration as a Professional Engineer in Massachusetts is preferred.

TOOLS AND EQUIPMENT USED:

Office equipment 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 use hands to finger, handle, feel or operate objects, tools or controls and frequently required to reach with hands and arms. The employee regularly is required to talk or hear. The employee is occasionally required to walk; stand; climb or balance; stoop, kneel, crouch, or crawl; or sit.

The employee must frequently lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception 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 employees frequently works in outside weather conditions. The employee occasionally works near moving mechanical parts, and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in high precarious places and is occasionally exposed to fumes or airborne particles, extreme heat or extreme cold, and the risk of electrical shock.

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

June 1, 2011

MWRA
POSITION DESCRIPTION

NEW

POSITION: Senior Program Manager (DI)

PCR#:

DIVISION: Operations

DEPARTMENT: Engineering Services

BASIC PURPOSE:

Manages all projects assigned for the Engineering Services Department from conceptual design through the construction phase.

SUPERVISION RECEIVED:

Works under the general supervision of the Manager, Engineering Services.

SUPERVISION EXERCISED:

Exercises close supervision of Program Managers, Senior Staff, and Staff Engineers, and Design Engineers.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Develops and manages plant engineering projects that support the operations staff for engineering resolution. Recommends solutions to the problems, which arise during normal plant operations.
- Provides plant engineering support to the maintenance staff with complex work orders and contract maintenance projects, and provides appropriate design services. Provides support services for the economical operation of plant wide compressed air, water, HVAC, and electrical systems.
- Supervises design, engineering, drafting, and finalization of in-house projects involving repair/replace/modification activities, renovation and layout changes for offices, laboratories, shops and warehouses.
- Oversees project management of concept designs, detailed designs and the preparation of plans and specifications for proposed plant engineering modifications. Identifies,

prioritizes, and establishes milestones for the completion of projects within the department.

- Manages blanket maintenance/construction contracts.
- Oversees the preparation of plans and specifications for vendor contracts for proposed plant engineering modifications.
- Oversees reviews of, and modifications to all operations and maintenance documentation. Ensures that all operations and maintenance documentation conforms to MWRA standards.
- Oversees and manages construction projects generated by the Engineering Services department, and outside consultants. Performs project management on construction projects.
- Oversees and directs consulting engineering services and contracts during construction including all work for quality of work, budgets, schedule, and compliance with contractual terms and MWRA objectives and policies.
- Oversees the updating of engineering drawings and records and the subsequent forwarding (in accordance with established procedures) to the Technical Services Center.
- Provides oral and written reports to the Manager, Engineering Services detailing results of problem investigations, proposed resolution, and economic justification for the proposed changes.
- Evaluates assigned employees performance according to MWRA procedures.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A Bachelor's degree in mechanical, electrical or controls engineering; and
- (B) Understanding of facilities design and plant engineering, and construction project management techniques to include the preparation of plans, specifications, and biddable project documents as normally acquired through eight (8) to ten (10) years of related experience, of which three (3) years at least must be in a supervisory or managerial capacity; and
- (C) Experience in wastewater treatment operations, utilities and large facility start-up procedures desirable; and

- (D) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Ability to plan, organize, direct, train and assign duties to subordinates as obtained through the successful completion of an MWRA supervisory training program or an approved substitute.
- (B) Extensive experience in the development and oversight of MGL chapter 30 and 149 contracts.
- (C) Personal computer skills including spreadsheet, database, word processing, project management and Auto CADD desired.
- (D) Demonstrated verbal and written communication skills.

SPECIAL REQUIREMENTS:

Massachusetts Registered Professional Engineer preferred.

TOOLS AND EQUIPMENT USED:

Office equipment 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 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 stand, walk, climb or balance, stoop, kneel, crouch, or crawl, taste or smell.

The employee must frequently lift and/or move up to 10 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception, peripheral 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 occasionally works in outside weather conditions. The employee occasionally works near moving mechanical parts, and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in high precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals and risk of electrical shock.

The noise level in the work environment is usually loud in field settings and moderately quiet in other work facilities.

August 2014

MWRA

OLD

POSITION DESCRIPTION

POSITION: Director, Public Affairs

PCR#:

DIVISION: OED

DEPARTMENT:

BASIC PURPOSE:

Manages intergovernmental, community and media relations to ensure effective and accurate understanding of the goals, programs and activities of the Authority and to build support for such among its various constituencies.

SUPERVISION RECEIVED:

Works under the general supervision of the Executive Director.

SUPERVISION EXERCISED:

Exercises supervision of Community Relations Coordinators, Senior Program Manager, Environmental Review and Compliance and administrative support staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Develops strategy and supervises staff regarding public participation programs, liaison with municipalities within the Authority's district and liaison with state and federal legislative bodies.
- Develops, prepares and administers a media program for the Authority.
- Establishes effective contact with government agencies, legislative leader and public officials in order to provide the Authority with accurate and timely information

concerning activities which may affect the Authority's operations.

- Counsels the Executive Director with regard to the intergovernmental implications of the Authority's policies, practices and actions.
- Devises strategies for clarifying and dealing with issues of interest to the Authority's various constituencies.
- Answers inquiries from elected/appointed officials and the general public.
- Represents the Authority in all aspects of public, community and governmental relations.
- Recommends action to be taken by Authority management to develop and maintain good intergovernmental relations.

SECONDARY DUTIES:

- Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Analytical and communication skills as normally attained through a four (4) year college program in public policy, public administration, communications or a related field; and
- (B) Understanding of public policy, public administration and legislative issues as acquired by ten (8) to ten (10) years of related experience of which five (5) years must be in a managerial capacity; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Excellent writing, communication, interpersonal and public speaking skills are required.

SPECIAL REQUIREMENTS:

None

TOOLS AND EQUIPMENT USED:

Office machines 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 the job. Reasonable accommodation may be made to enable individuals with disabilities to perform the essential functions.

While performing the essential functions 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 regularly is required to stand or talk or hear. The employee is occasionally required to walk, sit, climb or balance, stoop, kneel, crouch, or crawl.

The employee must frequently lift and/or move up to 10 pounds, occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, depth perception, 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 occasionally works in outside weather conditions. The employee works near moving mechanical parts is occasionally exposed to wet and/or humid conditions. The employee is occasionally exposed to fumes and airborne particles, toxic or caustic chemicals, and risk of electric shock.

The noise level in the work environment is moderately quiet.

February 2012

MWRA

NEW

POSITION DESCRIPTION

POSITION: Director, Intergovernmental Affairs

PCR#:

DIVISION: OED

DEPARTMENT:

BASIC PURPOSE:

Manages intergovernmental, community and media relations to ensure effective and accurate understanding of the goals, programs and activities of the Authority and to build support for such among its various constituencies.

SUPERVISION RECEIVED:

Works under the general supervision of the Executive Director.

SUPERVISION EXERCISED:

Exercises supervision of Community Relations Coordinators, Senior Program Manager, Environmental Review and Compliance and administrative support staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Develops strategy and supervises staff regarding public participation programs, liaison with municipalities within the Authority's district and liaison with state and federal legislative bodies.
- Develops, prepares and administers a media program for the Authority.
- Establishes effective contact with government agencies, legislative leader and public officials in order to provide the Authority with accurate and timely information

concerning activities which may affect the Authority's operations.

- Counsels the Executive Director with regard to the intergovernmental implications of the Authority's policies, practices and actions.
- Devises strategies for clarifying and dealing with issues of interest to the Authority's various constituencies.
- Answers inquiries from elected/appointed officials and the general public.
- Represents the Authority in all aspects of public, community and governmental relations.
- Recommends action to be taken by Authority management to develop and maintain good intergovernmental relations.

SECONDARY DUTIES:

- Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Analytical and communication skills as normally attained through a four (4) year college program in public policy, public administration, communications or a related field; and
- (B) Understanding of public policy, public administration and legislative issues as acquired by ten (8) to ten (10) years of related experience of which five (5) years must be in a managerial capacity; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Excellent writing, communication, interpersonal and public speaking skills are required.

SPECIAL REQUIREMENTS:

None

TOOLS AND EQUIPMENT USED:

Office machines 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 the job. Reasonable accommodation may be made to enable individuals with disabilities to perform the essential functions.

While performing the essential functions 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 regularly is required to stand or talk or hear. The employee is occasionally required to walk, sit, climb or balance, stoop, kneel, crouch, or crawl.

The employee must frequently lift and/or move up to 10 pounds, occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, depth perception, 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 occasionally works in outside weather conditions. The employee works near moving mechanical parts is occasionally exposed to wet and/or humid conditions. The employee is occasionally exposed to fumes and airborne particles, toxic or caustic chemicals, and risk of electric shock.

The noise level in the work environment is moderately quiet.

February 2012

MWRA
POSITION DESCRIPTION



POSITION: Project Manager, Senior Designer

PCR#:

DIVISION: Operations

DEPARTMENT: Plant Engineering/Deer Island

BASIC PURPOSE:

Performs a variety of engineering design and drafting tasks to support various in-house engineering, maintenance and construction projects at the Deer Island Treatment Plant.

SUPERVISION RECEIVED:

Works under the general supervision of the Senior Program Manager.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Performs design development involving mechanical, electrical, civil and structural additions and improvements, including layout changes for shops, offices, laboratories, warehouses, power and process plants, and related buildings and grounds.
- Develops design drawings from conceptual engineering sketches, field measurements and manufacturers product data. Compiles designs and drawings, provides first draft layouts and detail options for review by mechanical, electrical, civil and structural engineers. Incorporates review comments into a final version with minimal technical guidance, supervision and direction.

- Resolves equipment arrangement problems by evaluating equipment anchoring, piping/conduit layout schemes, ductwork, manual operators, drive components, etc. Confers with Operations and Maintenance personnel to obtain information pertinent to design changes in existing systems or equipment.
- Selects pipe supports appropriate for pipe diameter, working pressures, method of anchoring, expansion/contraction factors. Calculate pipe cut lengths, fillers or spool piece sizing/type based upon clearance requirements and system hydraulic capacities. Analyze clearance and interference envelopes of moving equipment.
- Lays out piping, ductwork, equipment and conduit with reference to maintenance, housekeeping, personnel safety and compliance with relevant codes and standards.
- Prepares material and equipment quantity take offs for cost estimates and material orders.
- Participates in field investigations, records and organizes field data, assists engineer in computation and prepares drawings of existing facilities on CADD system.
- Supervises CADD drafting personnel in the development of engineering drawings and supporting documents, ensuring drawing quality.
- Reviews analyzes, compares and reports on compliance of contractor submittals with contract documents.

SECONDARY DUTIES:

- Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year college program in Engineering Technology or related field; and
- (B) Six (6) to eight (8) years in of design/drafting experience at an architectural-engineering firm(s) with at least three (3) years employment in the capacity of designer; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated proficiency in AutoCAD 2000, related soft desk products, and other software applications related to engineering design.
- (B) Knowledge of engineering and construction practices and design/drafting methods.
- (C) Understanding of commercial and industrial design and construction practices as proven by work samples demonstrating previous design and as built work of moderate to high complexity.
- (D) Excellent interpersonal, written and oral communications skills are required.

SPECIAL REQUIREMENTS:

AutoCAD certification preferred

TOOLS AND EQUIPMENT USED:

Office equipment 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 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 stand, walk, climb or balance, stoop, kneel, crouch, or crawl, or smell.

The employee must occasionally lift and/or move up to 20 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception, peripheral 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 occasionally works in outside weather conditions. The employee occasionally works near moving mechanical parts, and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in high precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals and risk of electrical shock.

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

February, 2001

NEW

**MWRA
POSITION DESCRIPTION**

POSITION: Project Manager, Mechanical
PCR#:
DIVISION: Operations
DEPARTMENT: Deer Island/ Engineering Services

BASIC PURPOSE:

This position will assist the Program Manager, Mechanical in providing mechanical construction and field inspection services and technical assistance for various Deer Island mechanical construction and maintenance design projects.

SUPERVISION RECEIVED:

Works under the general supervision of the Program Manager – Mechanical, Engineering Services Department on Deer Island.

SUPERVISION EXERCISED:

None

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Assists in the design development involving mechanical additions and improvements, including layout changes for plant equipment.
- Develops conceptual sketches, field measurements and reviews manufacturer product data. Compiles designs and drawings, provides first draft layouts and detailed design options for review by the Program Manager, Mechanical. Incorporates review comments into a final version with minimal technical guidance, supervision and direction.
- Acts as the resident field inspector on mechanical construction and maintenance projects on Deer Island.
- Maintains organized and detailed files of design projects and construction projects including daily construction logs.
- Provides Engineering design calculations (i.e. pipe flow pressure drop).

- Maintains documentation of work performed by construction contractors, designers and in-house tradesmen, recommends approval variations made necessary by contingencies arising during construction and installation.
- Oversees modifications to operation and maintenance documentation with respect to mechanical design modifications and upgrades.
- Assists the plant operations staff with technical resolution and recommendations to mechanical problems, which arise during normal operation of the plant.
- Develops and maintains files and familiarity with all codes, code addenda, code cases, and industry standards applicable to the mechanical field, and ensure that facility specifications comply.
- Assists with the coordination of plant project activities with engineering consultants, contractors and manufacturers as required.
- Provides oral and written reports detailing results of problem investigations and economic justification for proposed changes.
- Participates in engineering reviews during construction.
- Performs related duties, as required.

DESIRED MINIMUM QUALIFICATIONS

Education and Experience

- (A) Completion of a four- (4) year college program in engineering; and
- (B) Seven (7) to nine (9) years of experience with the installation, field inspection, and maintenance of a wide variety of mechanical equipment.
- (C) Experience within a complex processing facility, and wastewater treatment operation is desirable.
- (D) Experience in determining if field installations are compliant with applicable National and Local codes.
- (E) Experience in defining and clarifying code-related issues.
- (F) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated knowledge of process plant equipment, system operation, building construction; wastewater plant experience preferred.
- (B) Demonstrated abilities to work as part of a project team and to develop and maintain productive working relationships with external parties.
- (C) Proficiency with personal computers and knowledge of word processing, spreadsheets, and engineering applications software required.
- (D) Excellent interpersonal, verbal and written communications skills are required.

SPECIAL REQUIREMENTS:

A Valid Massachusetts Class D Motor Vehicle Operator's License
EIT Preferred.

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

The physical demands 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 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 sit and talk and hear. The employee is required to stand and walk; climb ladders, stoop, kneel, crouch or crawl; and smell.

The employee shall be capable of lifting 20 pounds. Specific vision abilities required by this job include close vision, distance vision, depth perception and the ability to adjust focus.

October 2011



MWRA
POSITION DESCRIPTION

POSITION: Building and Grounds Worker

PCR#:

DIVISION: Operations

DEPARTMENT: Maintenance/Deer Island

BASIC PURPOSE:

Performs a variety of maintenance and repair tasks to roads, grounds, buildings, structures and associated appurtenances together with other light maintenance tasks as assigned.

SUPERVISION RECEIVED:

Works under the general supervision of the Building & Grounds Supervisor.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Cleans process tanks (including unbolting and securing of access covers), galleries, drains, culverts, and structures as required.
- Cleans process spills and upsets as required.
- Maintains roadways, walkways, fencing and gates as necessary.
- Performs clean-up and housekeeping tasks for work area to maintain a clean environment within designated area.
- Removes snow and ice from roadways, walkways, buildings and structures as necessary.
- Maintains the appearance of the plant grounds by cutting, trimming or weeding grass, shrubs, trees or ornamental beds.
- Digs and/or refills ditches and holes. Breaks, removes and repairs concrete as required.

- Collects and disposes of trash and other waste materials.
- Operates machinery, vehicles, material handling equipment, snow removal equipment, and tools as necessary to perform assigned work such as (but not limited to) tractors, mowers, cement mixers, cleaning machinery, etc.
- Operates motor vehicles such as vans and pick up trucks to transport materials and equipment to work sites, pick up and deliver materials, etc.
- Washes and cleans vehicles, tools and equipment.
- Moves material and supplies.
- Loads and unloads vehicles, carts, trailers, etc., as required.
- Performs work in a safe and professional manner.
- Reports and documents work being performed.
- Follows established safety, operating and emergency response procedures and policies as established by the MWRA.
- Trained in Confined Space Entry, CPR and First Aid, and be capable of entering, setting up, installing, disassembling confined space equipment and ability to work in a confined space.
- Perform work in compliance with Authority Integrated Contingency Plan.
- Ability to attain knowledge and work processes required to perform maintenance tasks required by Reliability Centered Maintenance or similar Maintenance Management Program.
- Performs light maintenance independently or as part of a team. Light maintenance shall include but not limited to:
 - Operates forklift or other light equipment not requiring a specific license.
 - Inspects and troubleshoots various systems and equipment.
 - With proper training sets up ladders, staging and rigging and utilizes hoists, jacks, dollies, lifts, etc. for proper access to job and to remove and install equipment.
 - Performs, documents and reports inspections and work performed.
 - Operates portable pumping, ventilation and other equipment necessary to support and accomplish assigned tasks.

- Assists other trades in the performance of their work, as required, or as assigned.
- Lockout/Tagout of equipment to facilitate maintenance.
- Installs safety rails, changes light bulbs and replaces HVAC filters.

SECONDARY DUTIES:

- Performs related duties as required.
- Promotes and participates in the cross-functional work practices.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Basic reading, writing, mathematical, scientific and oral communication skills as normally attained through a high school education or the equivalent; and
- (B) Requires from six (6) to twelve (12) months of related buildings and grounds experience.
- (C) Satisfactory completion of training in accordance with cross-functional training program established at the MWRA.
- (D) Any equivalent combination of education/training and experience.

Necessary Knowledge, Skills and Abilities:

- (A) A working knowledge of the methods and tools required to perform building and grounds maintenance functions, to include the operation of a wide variety of machinery, vehicles, material handling equipment, hand and power tools and specialized machinery for roads, grounds, galleries, structures and facilities care.
- (B) Ability to follow written and oral instructions.
- (C) Skill in the operation of the listed tools and equipment.

SPECIAL REQUIREMENTS:

- A valid Massachusetts Class D Motor Vehicle Operators License.

- Complete competency based training program related to **ESSENTIAL DUTIES AND RESPONSIBILITIES** as outlined above and successfully demonstrates required competencies.

TOOLS AND EQUIPMENT USED:

Motor vehicle, power and hand tools, mobile radio, telephone, beeper.

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 use hands to handle, finger, feel or operate objects, tools, or controls and reach with hands and arms. The employee frequently is required to stoop, kneel, crouch or crawl. The employee occasionally is required to stand, walk, talk or hear, sit, climb, or balance.

The employee must frequently lift and/or move up to 25 pounds and occasionally lift and/or move more than 100 pounds. Specific vision abilities required by this job include close vision, distance and peripheral vision, depth perception, 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 outside weather conditions. The employee regularly works near moving mechanical parts and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals, and risk of electrical shock.

The noise level in the work environment is very loud in field settings and moderately loud at other work locations.

December, 2001

MWRA
POSITION DESCRIPTION

NEW

POSITION: HVAC Specialist

PCR#:

DIVISION: Operations

DEPARTMENT: Deer Island Maintenance, Metropolitan Maintenance

BASIC PURPOSE:

Inspects, maintains, repairs and installs heating, ventilation, air conditioning and odor control equipment and other light maintenance tasks.

SUPERVISION RECEIVED:

Works under the general supervision of a Unit Supervisor.

SUPERVISION EXERCISED:

Exercises supervision of entry level staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Installs, modifies, troubleshoots, repairs and tests new and existing heating, ventilation, air conditioning and odor control systems, equipment, and fixtures.
- Performs HVAC related activities specified by work order.
- Inspects and troubleshoots heating, ventilating, air conditioning and odor control equipment using tools and instrumentation and techniques of the trade.
- Performs preventative, predictive and corrective maintenance on heating, ventilation, air conditioning and odor control equipment according to vendor specifications.
- Installs duct work, hoods, ventilation devices and assemblies using manual and powered tools.
- Obtains necessary parts through established procedures.

- Follows established safety, operating, and emergency response procedures and policies established by MWRA.
- Operates motor vehicles, such as vans and pick-up trucks to pick-up and deliver supplies and equipment to work sites .
- Performs work in a safe and professional manner.
- Trains peers and subordinates as requested.
- Performs, documents and reports results of inspections and work performed.
- Perform work in compliance with Authority Integrated Contingency Plan.
- Operates equipment manually and through instrument panels and programmable logic control units as required in performance of maintenance tasks. Equipment may include, but will not be limited to pumps, valves, gates, meters, gauges, controllers, motor control centers and level control devices.
- Troubleshoots & corrects equipment/systems through the use of condition monitoring methods & equipment.
- Works from manufacturer's manuals and specifications, blueprints, schematics and verbal instructions to install, repair, troubleshoot, inspect, check & maintain mechanical, electrical-mechanical & hydraulic systems.
- Assists other trades in the performance of their work, as required, or as assigned.
- Performs light maintenance independently or as part of a team. Light maintenance shall include but not limited to:
 - Operates forklift or other light equipment not requiring a special license.
 - Inspects and troubleshoots various systems and equipment.
 - Installs and retrofits/new equipment related to plant systems.
 - Modifies and/or aligns existing equipment to specifications.
 - With proper training sets up ladders, staging and rigging and utilizes hoists, jacks, dollies, lifts, etc. for proper access to job and to remove and install equipment.
 - Operates portable pumping, ventilation & other equipment necessary to support assigned task.

- Greases and lubricates, replaces oil reserves, minor packing adjustments and opens hatches.
- Installs safety rails.
- Removes snow from immediate work area in order to perform tasks.
- Routine testing, lockout/tagout, operation (startup/shutdown) and adjustment of process equipment.
- Performs necessary cleanup and housekeeping for work areas and other light maintenance tasks.
- Performs related duties as required.

SECONDARY DUTIES:

- Promotes and participates in productivity improvement plan.
- Trains peers and subordinates as requested.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Basic reading, writing, mathematical and oral communication skills as normally attained through a high school education or equivalent; and
- (B) Three (3) to five (5) years experience in the operation, repair and maintenance of industrial HVAC & related equipment; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Thorough knowledge of the standard practices, materials, tools, occupational hazards and safety practices common to the trade.
- (B) Skills in the operation of tools, instruments and equipment of the trades.
- (C) Thorough knowledge of the standard practices, material, tools, occupational hazards and safety practices common in the trade.
- (D) Trained in Confined Space Entry, CPR and First Aid, and be capable of entering, setting-up, installing, disassembling confined space equipment and ability to work in a

confined space.

- (E) Ability to attain knowledge & work processes required to perform maintenance task required by Reliability Centered Maintenance or similar Maintenance Management Program.

SPECIAL REQUIREMENTS:

- Possession of a Valid Massachusetts Class D Operator's License.
- Possession of a Mass. Refrigeration License
- Complete competency based training program related to **ESSENTIAL DUTIES AND RESPONSIBILITIES** as outlined above and successfully demonstrates required competencies.

TOOLS AND EQUIPMENT USED:

Motor vehicle, power and hand tools, hoist, mobile truck radio, beeper.

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 essential functions 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 is frequently required to stoop, kneel, crouch or crawl. The employee is occasionally required to stand, walk, talk, hear, sit, climb or balance.

WORK ENVIRONMENT:

The work environment 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 outside weather conditions. The employee regularly works near moving mechanical parts, and is occasionally exposed to fumes and airborne particles, toxic or caustic chemicals and risk of electric shock. This job is hearing protection required and the noise level in the work environment is very loud in field settings and moderately loud at pumping stations.

August 2001

MWRA
POSITION DESCRIPTION

OLD

POSITION: Secretary I

PCR#:

DIVISION: Executive, Administration & Finance, Operations, Law, Support Services

DEPARTMENT: Deer Island, Engineering & Construction, Operations Administration, FOD Administration, Finance Director's Office, Treasury, Operations Planning, Laboratory Services, Law, Public Affairs, Human Resources, MIS, Procurement

BASIC PURPOSE:

Provides secretarial and administrative support within their department. This description provides a range of possible duties but the incumbent will not necessarily perform all the duties listed below.

SUPERVISION RECEIVED:

Works under the general supervision of the departmental Director, Manager, Supervisor, or Administrative Assistant.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Composes and edits correspondence, reports and other materials on word processor; assists the management in the preparation of reports, logbooks, agendas and special projects.
- Attends department meetings, including meetings covering grievance resolution and collective bargaining strategy, takes notes and transcribes materials as needed.
- Maintains log of invoices and prepares requisitions for various equipment and supplies; maintains files including invoices, attendance records and performance appraisals.

- Greets and welcomes visitors/job applicants. Answers telephone, processes information requests, records messages and routes calls, opens and distributes mail.
- Enters Request for Material, Invoice Vouchers and Receiving entries in the accounting system. Researches and logs vendor inquiries to ensure prompt replies to vendor.
- Schedules appointments, meetings, conferences, and workshops and makes travel arrangements; prepares travel and expense reports.
- Records, updates, and tracks files using databases management system or spreadsheets as required.
- Coordinates mass mailings.
- Maintains a log of all personnel paperwork and tracks its progress through final approval. Processes timesheets, personnel actions, and performance reviews as necessary. Supports timesheet collection and entry of information into the time system. May distribute checks.
- Serves as a backup for the Executive Secretary as needed.

SECONDARY DUTIES:

- Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Knowledge of administrative and secretarial procedures as normally attained through a two (2) year secretarial or business school program; and
- (B) Understanding of administrative and office procedures as acquired through a three (3) to five (5) years secretarial/administrative experience; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated proficiency in Microsoft Office products including Outlook, Word and Excel. Some knowledge of PowerPoint is preferred.
- (B) Ability to successfully type at 50 WPM.

(C) Excellent communication and interpersonal skills.

SPECIAL REQUIREMENTS:

Must have successfully completed the MIS and professional development-related ACP requirements for this position. If no qualified ACP certified applicant applies for the position, the selected candidate will have 6 months to complete the ACP program.

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 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 sit and talk or hear. The employee is occasionally required to stand and walk.

The employee must frequently lift and/or move up to 10 pounds and occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, and the ability to adjust.

WORK ENVIRONMENT:

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

July 2002

NEW

**MWRA
POSITION DESCRIPTION**

POSITION: O & M Systems Specialist
PCR#:
DIVISION: Operations
DEPARTMENT: TIC/Capital Programs/Deer Island

BASIC PURPOSE:

Assists in the development and implementation of various information systems within the Technical Information Center. Oversees the daily operations of Technical Document Control System (InfoStar), Technical Document Imaging System and interfaces with MWRA Computer Aided Design System (GDS and AutoCAD).

SUPERVISION RECEIVED:

Works under the general supervision of the Program Manager, Technical Information Center.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Administers application development projects involving Electronic Document Controls, Computer Aided Design and Image Management Software, including feasibility studies, conceptual/detailed designs, programming, testing, implementation and audit.
- Oversees and controls production operations including document preparation, scanning, indexing, image verification and image committal to electronic storage.
- Monitors end-user feedback for problems/opportunities relating to system performance and takes appropriate actions to address same.
- Maintains technical reference library at TIC, including installs software, identifies the plant needs, makes recommendations for new publications and for improvement, updates the user

group, contacts vendors, and maintains an updated product/vendor inventory.

- Plans and develops logical file structures on computer servers to store TIC's electronic document, including manuals, specifications, images, drawings, etc.; assists in administering the server usage; develops effective and efficient methods for retrieval purposes.
- Oversees the activities of reconciliation of TIC's document among different media, including develops methods, performs comparisons, updates records, and documents all changes.
- Performs Quality Assurance/Quality Control (QA/QC) on consultant supplied electronic document, including reports, manuals, drawings; documents the result; files the document into appropriate TIC storage area; reports problems if there are any discrepancies.
- Reproduces electronic copies of TIC provided document for plant staff, consultants or other MWRA department, via CD, zip disks, floppy disks, e-mail, or other up-to-date electronic media.
- Oversees the engineering document conversion activities, including scanning, OCR, index, publishing, hardware and software upgrades.
- Acts as liaison with MIS/FIS for ongoing support including computer software, hardware, network performance, updates, problem reporting and correction, and improvement.
- Receives and processes verbal, written, electronic, and telephone requests for plant and library records. Makes the requested record available to the requester
- Provides training on all related hardware and software.
- Verifies scanned images on automated high-resolution workstations checking for contrast, byte density, overall legibility and skewed documents.
- Assesses production/quality control statistic and adjusts operational plans and schedules based on feedback.
- Develops tactical plans required to achieve specified goals and schedules.
- Operates a variety of equipment including CADD workstations, plotters, scanners, digitizers, laminators, engineering copiers, CDROM servers and file servers.

SECONDARY DUTIES:

- Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A two (2) year college program, with courses in related areas; and
- (B) Three (3) years of experience in engineering documentation and automated management systems; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Experience with automated information systems, data processing, relational databases, and data communication as well as Jukebox and File Services Systems.
- (B) Ability to perceive and analyze problems, develop alternatives, and effect solutions with sound judgement.
- (C) Ability to interface system designs with technical requirements of operating and database management systems.
- (D) Excellent oral and written communication skills.

SPECIAL REQUIREMENTS:

None.

TOOLS AND EQUIPMENT USED:

Office equipment 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 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; stand; climb or balance; stoop, kneel, crouch, or crawl; taste or smell.

The employee must frequently lift and/or move up to 10 pounds and occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, depth perception, peripheral 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 moderately quiet.

January, 2001

OLD

**MWRA
POSITION DESCRIPTION**

POSITION: Executive Secretary

PCR#:

DIVISION: Executive, Finance, Operations, Law, Support Services

DEPARTMENT: Central Support, Environmental Quality, Executive Office, Treasury, Operations Administration, Operations Planning, FOD Administration, Human Resources, Law, Procurement, Program Management, Affirmative Action

BASIC PURPOSE:

Provides complete administrative and secretarial support. This description provides a range of possible duties but the incumbent will not necessarily perform all the duties listed below.

SUPERVISION RECEIVED:

Works under the general supervision of the departmental Director or Manager.

SUPERVISION EXERCISED:

May exercise supervision of secretaries or other entry-level staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Takes dictation, prepares meeting minutes; coordinates preparation of and/or composes and edits correspondence, reports, agendas, special projects and other materials on word processor.
- Attends division, department and unit meetings that includes meetings covering grievance resolution and collective bargaining strategy; takes notes and transcribes materials as needed.
- Answers phones, processes internal and external official information requests tactfully, records messages and routes calls. Greets and welcomes visitors/job applicants. Processes mail.

- Schedules appointments, meetings, and conferences, and makes travel arrangements; prepares expense reports.
- Develops and maintains a number of types of filing systems, including departmental and personal. Records, updates and tracks files using database management system or spreadsheets as required.
- Orders and distributes office supplies, coordinate purchasing and invoicing, prepare personnel actions, monitor the budget, and records payroll and attendance information.

SECONDARY DUTIES:

- Performs related duties as assigned.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Knowledge of administrative and secretarial procedures as normally attained through a two (2) year college, secretarial or business school program; and
- (B) Understanding of administrative and office procedures as acquired through five (5) to seven (7) years executive secretarial/administrative experience; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated proficiency in Microsoft Office products including Outlook, Word, Excel, Access and PowerPoint.
- (B) Ability to successfully type at a rate of 60-70 WPM.
- (C) Excellent organizational, communication and interpersonal skills, including ability to handle confidential information.

SPECIAL REQUIREMENTS:

Must have successfully completed the MIS and professional development-related ACP requirements for this position. If no qualified ACP certified applicant applies for the position, the selected candidate will have 6 months to complete the ACP program.

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.

There are no requirements that weight be lifted or force be exerted in the performance of this job. 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.

July 2002

MWRA
POSITION DESCRIPTION

NEW

POSITION: Administrative Systems Coordinator

PCR#:

DIVISION: Operations, Law, Administration & Finance

DEPARTMENT: Deer Island, Operations Administration, Administration, Lab Services, Public Affairs, Real Property and Management, Law

BASIC PURPOSE:

Assists in labor relations matters, administrative tasks, inventory control, recordkeeping, development and implementation of various computer software programs. Provides a range of possible duties, but will not necessarily perform all the duties listed below.

SUPERVISION RECEIVED:

Works under the general supervision of the location Director, Deputy Director, or Manager.

SUPERVISION EXERCISED:

Exercises supervision over assigned entry-level and clerical employees.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Manages all administrative activities such as payroll, accounting, inventory control and purchasing of items including equipment, supplies, and materials.
- Assists in the dissemination, direction and implementation of administration policies and procedures.
- Assists in yearly budget requests and manages databases for current expense budget for accounts and to-date reporting or expenditures. Answers quarterly variance questions and all other related budgetary questions.
- Coordinates the implementation of and manages the efficient use of the computerized programs in accordance with Authority policies and procedures.

- Under the supervision of the supervisor, reviews professional services invoices to verify the accuracy of data submitted and cross references data against contract documents. Assists in setting up detailed spreadsheets used to track contract data such as overhead rates, contract hourly rates, fees and salaries. Enters and updates spreadsheet data as necessary to maintain the accuracy of contract invoice details.
- Reviews assigned employee performance in accordance with Authority Policies and Procedures.
- Coordinates the preparation of documents, reports, etc. for all administrative, human resources, payroll, and inventory functions.
- Performs all secretarial duties such as correspondence, telephones, files, calendar, conferences etc.
- Develops and implements computer generated work order systems and coordinates some with material requirements.

SECONDARY DUTIES:

- Coordinates special projects as needed.
- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A two (2) year undergraduate degree, bachelor of arts or bachelor of science or related field; and
- (B) Organizational and administrative skills as attained through four (4) to seven (7) years experience; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated proficiency in Microsoft Office products including Outlook, Word, Excel, Access and PowerPoint.
- (B) Familiarity of database and HRIS software
- (C) Demonstrated experience in planning, organizing, and supervising projects.
- (D) Excellent analytical, interpersonal, oral and written communication skills.

SPECIAL REQUIREMENTS:

Must have successfully completed the MIS and professional development-related ACP requirements for this position. . If no qualified ACP certified applicant applies for the position, the selected candidate will have 6 months to complete the ACP program.

TOOLS AND EQUIPMENT USED:

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

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 duties.

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, color 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 settings.

December 2014


STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 17, 2014
SUBJECT: Appointment, Human Resources Director



COMMITTEE: Personnel & Compensation

 INFORMATION
 X VOTE



Rachel Madden, Director of Administration and Finance
Preparer/Title

RECOMMENDATION:

To approve the appointment of Karen Gay-Valente to the position of Director, Human Resources, (Non-Union Grade 16), at an annual salary of \$129,466, commencing on a date to be determined by the Executive Director.

DISCUSSION:

The Director of Human Resources position will become vacant upon the appointment of Robert Donnelly to the position of Manager, Operations Support, Operations Division.

The Director of Human Resources is responsible for all human resource policies and programs, directing all personnel and labor relations functions and implementing human resource activities that support MWRA's organizational goals and objectives. The Director manages the employment, compensation and benefits programs, collective bargaining and union contract administration, human resource information systems, training and development and worker's compensation programs. This position reports to the Director of Administration and Finance and supervises a staff of 16 people.

Karen Gay-Valente has more than thirty years of progressively responsible human resources experience in the public sector. Ms. Gay-Valente joined MWRA in 1995 as the Assistant Manager of Labor Relations and was promoted to the Manager, Labor Relations position in 2003. In 2006, Ms. Gay-Valente was promoted to the Deputy Director of Human Resources. Ms. Gay-Valente assists in the management of all Human Resource functions and directly manages the Employment, Labor Relations and Workers Compensation functions. Ms. Gay-Valente serves as the MWRA chief liaison with the five collective bargaining units and is responsible for negotiations, recently settling all five union agreements. She also manages the employee relations, grievance administration and employee performance and disciplinary action processes.

Ms. Gay-Valente has a proven track record of managing human resource matters efficiently and effectively. She is highly respected by staff at all levels of the agency, as well as the labor leaders she regularly interacts with.

Prior to her employment at the MWRA, Ms. Gay-Valente worked for the Commonwealth of Massachusetts, including senior level positions at the Department of Mental Retardation and the Department of Mental Health where she directed personnel, labor relations, staff development, compensation and employment.

Ms. Gay-Valente possesses a Bachelor of Science Degree in Business Administration from Salem State University. Ms. Gay-Valente also recently earned the Senior Professional in Human Resources Certification from the Human Resources Certification Institute.

BUDGET/FISCAL IMPACT:

There are sufficient funds for this position in the FY2015 Current Expense Budget. Additionally, Ms. Gay-Valente's former position, Deputy Director of Human Resources, will be eliminated resulting in an annual reduction in the Human Resource department's salary expenses of \$118,233.

ATTACHMENTS:

Resume of Karen Gay-Valente
Position Description
Organization Chart

KAREN GAY-VALENTE, SPHR

PROFESSIONAL EXPERIENCE

12/95 to Present – MASSACHUSETTS WATER RESOURCES AUTHORITY, CHARLESTOWN, MA

Deputy Director of Human Resources

- Assist in the management of Human Resource Department.
- Provide strategic advice and guidance to Senior Managers for policy, practice and organizational changes and negotiates impact with bargaining unions.
- Direct Employment Unit responsible for recruitment and selection.
- Manage Labor Relations Unit and provide direction and resolution for employee relations, and disciplinary action matters, grievance administration and employee complaint investigations.
- Oversee Workers Compensation and Occupational Health and Safety functions and provide direction for aggressive claims management and return to work strategies.
- Negotiate successor collective bargaining agreements for five bargaining units including bargaining strategy and development of economic and benefit parameters.
- Collaborate with Legal Division to strategize and provide testimony at external forums including arbitration hearings, MCAD and unemployment hearings.

Manager of Labor Relations

- Managed Labor Relations, Workers Compensation and Occupational Health and Safety functions.
- Negotiated successor collective bargaining agreements for five bargaining units including bargaining strategy, contract proposal development and recommendations for economic and benefit parameters. Negotiated first Reasonable Suspicion and Post Accident Drug and Alcohol testing policy.
- Managed employee relations, disciplinary action and grievance administration functions and directed employee complaint investigations including harassment and workplace violence complaints.
- Provided advice and guidance to managers on organizational and policy changes requiring discussions and/or negotiation with collective bargaining units.
- Developed and implemented training programs including Drug and Alcohol testing policy procedures.

Assistant Manager, Labor Relations

- Assisted with successor collective bargaining negotiations for five bargaining units.
- Served as chief spokesperson in mid-term impact negotiations involving organizational and work rule changes.
- Advised managers and supervisors in resolving employee relations, performance and disciplinary matters and conducted complaint investigations.
- Developed and conducted management and supervisory training programs including Sexual Harassment and Violence-Free Workplace conduct, contract administration, disciplinary procedures and grievance administration.

10/79 to 9/91 – COMMONWEALTH OF MASSACHUSETTS, BOSTON, MA

DEPARTMENT OF MENTAL RETARDATION, BOSTON, MA

Assistant Commissioner for Human Resources

- Directed Human Resource Division for newly created agency with 11, 000+ employees represented by eight bargaining units.
- Developed Agency human resource policy and guidelines.
- Directed and managed 1000+ agency-wide reduction in force.
- Managed and directed all human resource and labor relations activities required for closure of residential state school with 3000+ employees.

DEPARTMENT OF MENTAL HEALTH, BOSTON, MA

Deputy Assistant Commissioner for Human Resources

- Assisted in management of human resources for agency with 23, 000+ employees represented by eight bargaining units.
- Human Resources representative on statewide task force responsible for splitting the Agency and creating the Department of Mental Retardation.

EXECUTIVE OFFICE OF HEALTH AND HUMAN SERVICES, BOSTON, MA

Deputy Director of Personnel and Labor Relations

- Liaison to the Departments of Personnel Administration and the Office of Employees Relations for human resource matters impacting the fourteen Human Service agencies.
- Coordinated the implementation of new and/or revised human resources policies with the Human Service agencies.
- Advised and provided guidance to Agency Senior Managers for human resource matters.

DEPARTMENT OF YOUTH SERVICES, BOSTON, MA

Assistant Director of Personnel and Labor Relations

- Assisted in management of Personnel and Labor Relations Units.
- Managed Payroll and HRIS system implementation.

DEPARTMENT OF SOCIAL SERVICES, BOSTON, MA

Supervisor of Personnel and Payroll

- Supervised Personnel and Payroll Units for newly created agency including training Central and Regional staff.
- Participated in the design and implementation of new HRIS system.

EDUCATION: Salem State University, Salem, MA
B.S. Business Administration

CERTIFICATION: Senior Professional in Human Resources (SPHR)

AFFILIATIONS: Society for Human Resource Management (SHRM)
Northeast Human Resource Association (NEHRA)
National Public Employer Relations Association (NPELRA)

**MWRA
POSITION DESCRIPTION**

POSITION: Director, Human Resources

PCR#: 8510001

DIVISION: Administration & Finance

DEPARTMENT: Human Resources

BASIC PURPOSE:

Directs activities and programs for all personnel and labor relations functions including the development and promulgation of personnel policies and procedures.

SUPERVISION RECEIVED:

Works under the general supervision of the Director, Administration & Finance

SUPERVISION EXERCISED:

Exercises general supervision over the Employment Manager, Manager, Labor Relations, Manager, Compensation, Manager, Benefits & HRIS, Manager, Training & Development and an Administrative Systems Coordinator.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Formulates and recommends personnel policies and human resource programs for the Authority. Directs the interpretation and application of personnel and labor relations policies throughout the Authority.
- Manages the operations and administration of the department and its various units including supervision of staff, preparation and administration of department budgets, establishment of goals and objectives, and related activities.
- Ensures the design and implementation of human resource programs that are internally equitable, externally competitive and in compliance with appropriate governmental laws and regulations.
- Directs the wage and salary programs, classification and job evaluation process, performance appraisal and salary increase programs, and employee benefits programs.

- Oversees the Authority's recruitment and employment programs ensuring compliance with Equal Employment Opportunity regulations and the Authority's Affirmative Action program.
- Oversees the representation of the Authority in collective bargaining, contract administration and grievance proceedings as well as the Authority's workers compensation and health and safety programs.
- Directs organizational and employee development activities including staffing assessment-planning programs which meet Authority-wide training and development needs. Oversees managerial, supervisory, technical and non-technical training programs.
- Assists department heads and other managers in the selection and placement of executives within the Authority. Participates in the interview and appraisal of candidates for top management positions.
- Conducts research relating to new, progressive or innovative techniques responding to personnel issues and problems and evaluates their application to the Authority.
- Counsels with department management on the application of personnel policies and procedures to their areas of responsibility, identifies their special needs and requirements, and develops specialized programs to respond to the issues and needs of all departments of the Authority.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Analytical and writing skills as normally attained through a four (4) year college program in public administration, business or related field. An advanced degree preferred; and
- (B) Thorough understanding of personnel administration and management as acquired through ten (10) to twelve (12) years experience of which at least five (5) years are in a supervisory and/or managerial capacity and at least three (3) years are in the public sector; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

(A) Excellent verbal and written communication skills and interpersonal skills.

SPECIAL REQUIREMENTS:

None.

TOOLS AND EQUIPMENT USED:

Office machines as normally associated with the use of multiple-line 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 use hands to feel, finger, handle or operate objects, including office equipment or controls and reach with hands and arms. The employee is occasionally required to stand and walk. The employee is regularly required to sit, and talk or hear.

The employee must frequently 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.

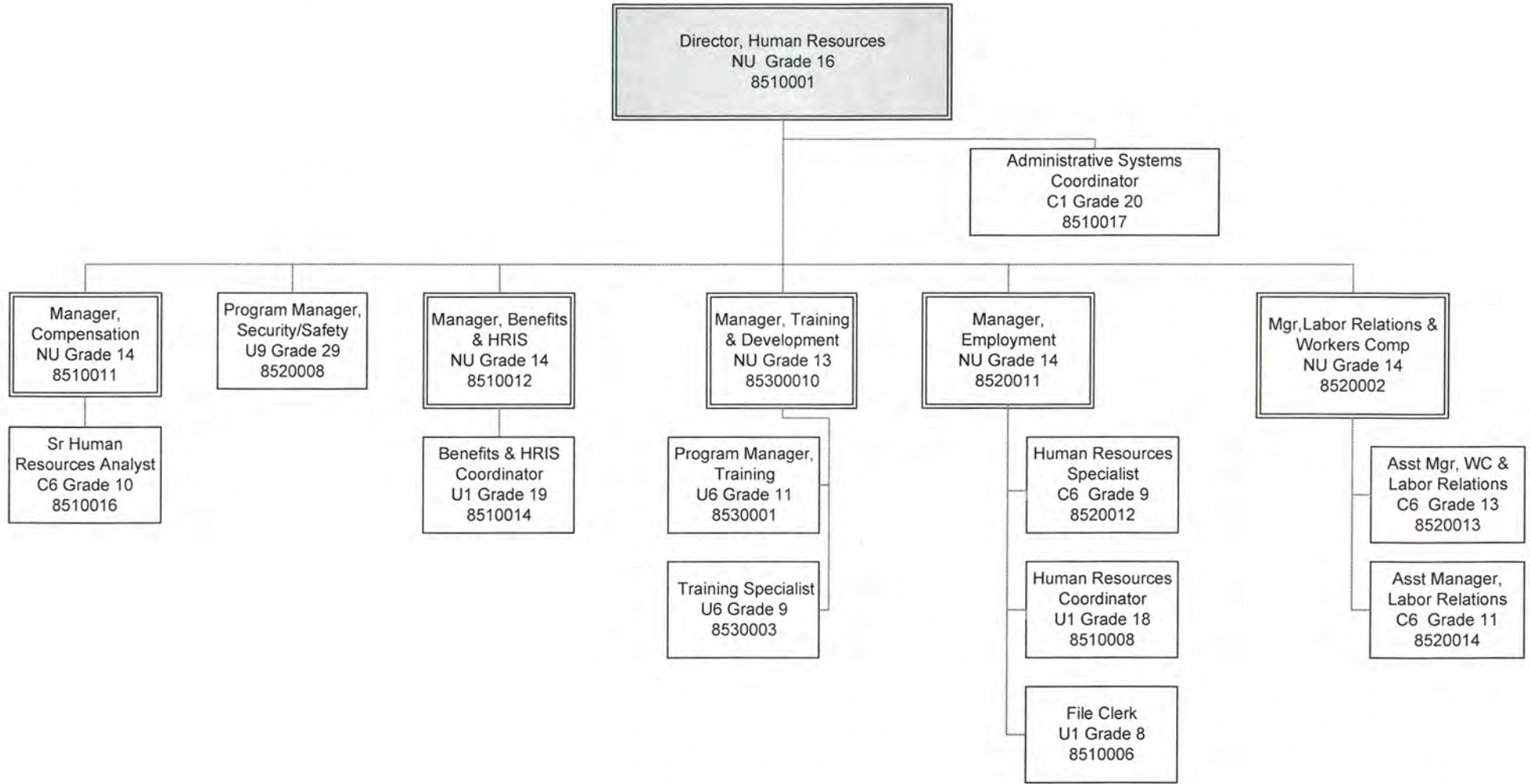
While performing the duties of this job, the employee regularly works in an office environment.

The noise level in the normal work environment is quiet.

December 2014

Human Resources Organization

December 2014



STAFF SUMMARY

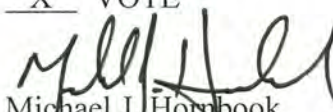
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 17, 2014
SUBJECT: Appointment of Manager, Operations Support
Operations Division



COMMITTEE: Personnel & Compensation

INFORMATION
 VOTE

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



Michael J. Hornbook
Chief Operating Officer

RECOMMENDATION:

To approve the appointment of Robert G. Donnelly to the position of Manager, Operations Support, Operations Division (Non-Union, Grade 14) at the recommended salary of \$115,230, to be effective on a date to be determined by the Executive Director.

DISCUSSION:

The position of Manager, Operations Support, in the Operations Division, is included in the December PCR Amendments Staff Summary. This newly created position is being established to handle human resources issues for the Operations, Engineering and Construction groups. The need for this position became apparent in recent months as these groups have experienced significant turnover. The position will provide on-site access to an experienced Human Resources manager.

The position's focus will be on human resource program activity such as employee and labor relations, leave management, training and development, and employment practices and procedures. The position will work in close coordination with the Human Resources Department and will enhance the delivery and administration of programs and initiatives at the operational field level by providing a dedicated manager to such activities.

The Operations Support Manager will be located at the Chelsea facility and report directly to the Deputy Chief Operating Officer for Operations, Engineering and Construction. The position will be responsible for planning and implementation of major human resources initiatives related to organizational restructuring, staffing levels, career development, and efficiency improvements within the Operations, Engineering, and Construction groups.

Mr. Robert Donnelly is recommended for the position of Manager, Operations Support. He has served as the Director of Human Resources since September 2004. In this capacity, Mr. Donnelly has overseen human resource functions, including compensation and benefits, labor relations, training and development, and employment issues. Prior to joining MWRA, Mr. Donnelly held human resource management positions in the health care and consumer product industries including the positions of Human Resource Manager and Compensation and Benefits Manager. While this appointment represents a downgrade in position title and grade, the recommendation is consistent with Mr. Donnelly's career desire to return to performing human resources management at the field level.

Mr. Donnelly holds a Bachelor of Science Degree and a Master's of Public Administration from Northeastern University.

BUDGET/FISCAL IMPACT:

There are sufficient funds for this position in the FY2015 Current Expense Budget.

ATTACHMENTS:

Resume of Robert G. Donnelly
Position Description
Organization Chart

RESUME

Robert G. Donnelly

Human Resources professional with experience, knowledge and skills in all facets of Human Resources management. Proven ability in the design and implementation of initiatives to support key business goals. Excellent skills in program development and project management.

EXPERIENCE

MASSACHUSETTS WATER RESOURCES AUTHORITY, Boston, MA

Director, Human Resources

2004- Present

Lead Human Resources management position for 1,200-employee public water and wastewater utility. Direct all human resources activities including compensation, employment, benefits, labor and employee relations, training, workers' compensation, safety and human resources information systems. Oversee an annual \$16.0 MM budget and a twenty person staff.

Selected accomplishments

- Member of the senior management team leading the organization's human resources function
- Coordinate employee and labor relations functions including collective bargaining, grievance processes, employee training, labor negotiations and incident investigations
- Led an agency-wide project to develop and implement a drug and alcohol testing policy
- Developed and implemented background check system for new hires
- Enhanced leave management procedures and systems
- Restructured Human Resources to effectively deliver HR services and programs with reduced headcount
- Served as Project Manager for agency-wide study benchmarking agency staffing with peer utilities

THE FIRST YEARS INC., Canton, MA (now a TOMY Brand Company)

2003 – 2004

Manager, Compensation and Benefits

Management responsibilities for all domestic and international compensation, benefits and performance management and employee relations programs for this 200-employee juvenile products company specializing in infant and toddler products. Perform additional responsibilities as a human resources generalist including employee relations, employee and management coaching and managing performance issues.

Selected Accomplishments

- Researched, developed and implemented new parental and work-life balance benefits to enhance recruitment and retention
- Implemented changes to benefits programs leading to significant savings to the company.
- Led focus groups with employees to collect important employee insights regarding health benefits
- Partnered with senior business and HR leaders to redesign and reorganize the marketing, sales and product development functions

OCEAN SPRAY CRANBERRIES, INC., Lakeville, MA**1994 - 2003*****Manager, Human Resources (9/99 to 6/03)***

Provided a full range of HR services to business teams and the Research and Development Center. Served as HR Manager and Business Partner for R&D, the International Business Team, Food Services Business Team and Food Technology Team. Managed all expatriate and in-country assignments. Provided corporate-wide compensation expertise and services in collaboration with the Compensation and Benefits Manager including management of international assignments.

Selected Accomplishments

- Developed, implemented, presented and communicated HR programs such as performance review and feedback, individual development planning, competency development and assessment, training, salary administration, recruitment and selection, team building, and employee relations
- Led the compensation structure redesign project to design, implement, present and communicate changes in the company's compensation program for the exempt and non-exempt workforce
- Led the development and implementation of a training program on reward and recognition
- Facilitated teambuilding activities for the New Products team leading to clarity of mission and roles

Senior Compensation Administrator/Human Resources Consultant (8/94 to 8/99)

Provided HR generalist services to the Research & Development Center. Developed and managed total compensation programs covering positions in sales, marketing, research and development and manufacturing. Administered the position evaluation, market analysis and pay programs.

Selected Accomplishments

- Developed and communicated salary broadbands for key functions and business teams
- Successfully recruited highly specialized research and development staff
- Led the development of a "premium skills" program for the information technology department
- Developed a total cash compensation structure for the Canadian business team

UNIVERSITY HOSPITAL (Boston Medical Center), Boston, MA**1987 - 1994*****Manager, Compensation and Benefits (9/93-9/94)***

Human Resources management team member for this Boston teaching hospital responsible for planning, implementing and managing a full range of compensation and benefits policies, programs and practices.

Selected Accomplishments

- Introduced a team-based incentive compensation pilot program
- Managed the benefits programs such as flexible benefits and a defined contribution retirement plans
- Implemented compensation plans to recruit and retain staff

Manager, Compensation (10/89-8/93)

Held responsibilities for compensation program design, communication and administration. Designed compensation budget models leading to improvements in budget forecasting.

Compensation Analyst (10/87-10/89)

Performed market and job analysis, position evaluation, pay structure development, equity studies, developing solutions to compensation issues, survey development and analysis. Administered and communicated the pay plans. Worked closely with Labor Relations on collective bargaining issues.

EDUCATION

Master of Public Administration - Northeastern University, Boston, MA

Bachelor of Science, Criminal Justice - Northeastern University, Boston, MA

PROFESSIONAL AFFILIATIONS

WorldatWork, Certified Compensation Professional

Northeast Human Resources Association

Society for Professional Human Resources Management

Town of Norwood Personnel Board

**MWRA
POSITION DESCRIPTION**

POSITION: Manager, Operations Support

PCR#:

Division/Section: Operations/Chelsea

DEPARTMENT:

BASIC PURPOSE:

Manages planning and implementation of major initiatives, projects and programs related to organizational restructuring, staffing, development and efficiency improvements in Operations.

SUPERVISION RECEIVED:

Works under the supervision of the Deputy Chief Operating Officer.

SUPERVISION EXERCISED:

May supervise assigned resources as required by project or initiative.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Develops and communicates department procedures for human resources and operations support issues. Meets regularly with Operations directors and managers to solicit input and communicate procedures.
- Conducts training with managers and supervisors as needed.
- Prepares Department staffing analyses and advises the Deputy Chief Operating Officer on human resources issues, projects and programs to address issues.
- Coordinates Labor Relations matters for the Department. Advises the Deputy Chief Operating Officer on pending labor relation's matters.
- Assists Human Resource Department by either conducting investigations or through the coordination of investigations working closely with Labor Relations staff. Assists with disciplinary matters as needed.
- Works with operations managers in providing accurate responses to Step I grievances.
- Represents the Department in contract negotiations.

- Serves as liaison between Human Resources and Operations in regards to sick leave management. Prepares and distributes sick leave management reports to Operations Managers. Meets regularly with managers to review sick leave usage and develop appropriate steps to address specific issues or situations.
- Works in close coordination with Human Resources to monitor the use of sick time by employees on documentation requirements. Prepares reports and other detail needed to review usage patterns and other pertinent data. Recommends appropriate next steps to Deputy Chief Operating Officer.
- Audits written time sheet submissions from all staff including all off hour shifts in order to ensure that staff are applying time appropriate to use such as leave time, meal breaks, compensatory time, overtime and stand-by.
- Works with managers to regularly review work schedules and ensure schedules are consistent with department policy and procedures.
- Provides job descriptions, posting analysis and examinations to include reports, suggestions and recommendations to improve processes and effectiveness.
- Working with Human Resources, assists Operations managers in employment-related activities such as participating on interviewing panels and working with hiring managers to construct interview questionnaires.
- Works with the Human Resources Training Unit to assess training needs and coordinate training activities and sessions.
- Assists with the development and writing of Staff Summaries as needed.
- Assists Law with preparation for arbitration cases and unemployment hearings as needed.

SECONDARY DUTIES:

Performs other duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year college program in public/business administration or a related field.
- (B) Understanding of labor relations, personnel administration and grievance administration as acquired through seven (7) to nine (9) years of related experience; or

- (C) Any equivalent combination of education or experience.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D Motor Vehicle Operators License

NECESSARY KNOWLEDGE, SKILLS AND ABILITIES:

- (A) Demonstrated ability to work effectively as part of a project team and also to function independently with minimal supervision.
- (B) Knowledge of Massachusetts laws including MGL Chapter 150E and Federal laws including FMLA and ADA.
- (C) Familiarity with computer software, such as Word, Excel and PowerPoint.
- (D) Excellent interpersonal, managerial, oral and written communication skills are required.

TOOLS AND EQUIPMENT USED:

Office equipment 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 use hands to finger, handle, feel or operate objects, tools or controls and frequently required to reach with hands and arms. The employee regularly is required to talk or hear. The employee is occasionally required to walk; stand; climb or balance; stoop, kneel, crouch, or crawl; or sit.

Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and the ability to adjust focus.

WORK ENVIRONMENT:

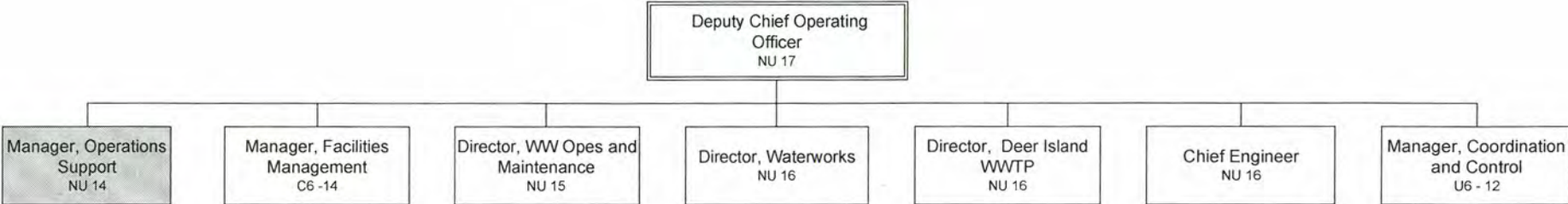
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. While performing the duties of this job, the employee regularly works in an office environment.

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

November 2014

Operations, Engineering and Construction

December 2014



STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 17, 2014
SUBJECT: Appointment of Manager, Employment
Human Resources Department



COMMITTEE: Personnel & Compensation

INFORMATION
 VOTE

Karen Gay-Valente, Deputy Director, Human Resources
Robert Donnelly, Director of Human Resources
Preparer/Title



Rachel C. Madden
Director, Administration and Finance

RECOMMENDATION:

To approve the appointment of Andrea Murphy to the position of Manager, Employment, Human Resources (Non-Union Grade 14), at an annual salary of \$113,569.00 commencing on a date to be determined by the Executive Director.

DISCUSSION:

The position of Manager, Employment, will become vacant upon the retirement of Vivienne Wright, who provided the MWRA with over thirty years of exceptional and dedicated service.

The Manager of Employment fulfills a critical human resource function overseeing all facets of the employment process including hiring qualified candidates for vacated positions. Over the past few years, there has been a significant increase in attrition and hiring given the large number of retirements. This has led to a heightened demand on the Employment Unit to recruit and select successors to critical positions as expeditiously as possible and to proactively determine future staffing needs. Additionally, the Employment Manager is intricately involved in all other Human Resources functions and works closely with Compensation, Labor Relations and the Affirmative Action staff. The position reports directly to the Director of Human Resources.

SELECTION PROCESS:

The position was posted internally. Two qualified candidates were referred for interviews. Each candidate was interviewed by a panel consisting of the Deputy Director, Human Resources, Director, Administration and Finance, and Chief Operating Officer. At the conclusion of interviews, Ms. Murphy was recommended for selection as the best candidate for the position.

Andrea Murphy began her career in Human Resources at MWRA in 1985 as the Authority's Employee Benefits Coordinator. In 1991, Ms. Murphy was promoted to Benefits Manager

handling all benefit program activities of the Authority. In 2000, Ms. Murphy was promoted to Manager of Benefits and Human Resources Information Systems (HRIS). In this capacity, Ms. Murphy assumed responsibility for HR information Systems where she was largely involved in the development and implementation of the Lawson system's human resources module. Ms. Murphy has also served as Acting Manager for Compensation in the past. In that capacity, she worked closely with Employment staff on filling critical positions.

In her various capacities in Human Resources, Ms. Murphy has been an instrumental team member in a wide variety of HR activities including contract negotiations, payroll processing, human resources information systems, compensation, employment and recruitment, employee communications and employee relation resolution. Her background in information systems and process improvement will be an asset to the Employment function as MWRA looks to enhance the use of technology to update its employment systems to better support succession planning, recruitment and replacement needs. In summary, Ms. Murphy's extensive managerial experience in MWRA human resources makes her an excellent selection for this challenging role.

Ms. Murphy possesses a Bachelor of Arts degree in Business Administration from St. Michael's College and a certificate in Pension and Employee Benefits from Bentley College.

BUDGET/FISCAL IMPACT:

There are sufficient funds for this position in the FY15 Current Expense Budget.

ATTACHMENTS:

Resume of Andrea Murphy
Position Description
Organization Chart

Andrea Murphy

MASSACHUSETTS WATER RESOURCES AUTHORITY 1985- Present

The MWRA is an independent Authority that provides water and sewer services to 60 communities in Massachusetts with an active employee population of 1200+ (1150 union and 50 managerial employees).

Positions held: **Manager of Benefits & HRIS** May 2000 - present
 Benefits Manager October 1991 – April 2000
 Employee Benefits Coordinator April 1985 – September 1991

Benefits Responsibilities:

- Manage MWRA benefit programs (health, life, dental, disability, and benefit time)
- Manage MWRA FMLA program
- Conduct competitive selection process and negotiate with benefit vendors
- Research, review and recommend new benefit programs
- Develop and deliver employee benefit seminars
- Design and implement new benefits
- Manage MWRA unemployment compensation program
- Manage the workers' compensation program
- Manage MWRA employee assistance program
- Communicate benefits and policies
- Design comparison studies, participate in surveys for benefits and compensation

Data & HRIS Responsibilities:

- Manage MWRA HRIS function
- HR project leader for the Lawson System development and implementation and implemented three subsequent upgrades
- HR project leader for the design and implementation of two additional Lawson modules
- Manage MWRA records retention function

HR Administration Responsibilities:

- Develop and implement policies and procedures
- Provide expert guidance for department directors and supervisors
- Manage department budget
- Supervise staff of five

Labor Relations Responsibilities:

- Negotiate new programs and policies with 5 unions
- Participate in collective bargaining negotiations, grievance and disciplinary hearings
- Investigate incidents for potential discipline
- Interpret union contracts and advise and assist management and unions
- Develop and manage the CDL program
- Manage MWRA Employee Health issues including fitness for duty and ADA issues

Employee Relations Responsibilities:

- Manage MWRA employee recognition program
- Manage Employee Discount Program

Compensation Responsibilities:

- Acted as Compensation Manager
- Recommended staffing and compensation levels
- Review internal and external equity and recommend salaries
- Managed salary administration program
- Develop job descriptions

Training Responsibilities:

- Deliver training for CDL drivers and supervisors
- Develop and deliver training for employees and retirees
- Design the new employee orientation program
- Develop and implement new MWRA drug and alcohol policy
- Develop orientation materials

Employment Responsibilities:

- Manage the temporary employee program
- Served as recruiter at job fairs
- Analyze the hiring process and recommend improvements

EDUCATION

St. Michael's College, Winooski Vermont
B.A., Business Administration

Bentley College, Waltham Massachusetts
Certificate in Pension and Employee Benefits

University of Massachusetts, Lowell, Massachusetts
Post Graduate Business courses

SKILLS and SKILL DEVELOPMENT

Computer Skills: Proficient in Microsoft Office Suite, Lawson HR/PR System
Skill Development: Seminars on ADA, HIPPA, FMLA, COBRA, Section 125

PROFESSIONAL ASSOCIATIONS

Trustee for the NAGE Health & Welfare Fund
Trustee for the MOSES Health & Welfare Fund
World at Work
New England Employee Benefits Council
The Survey Group

REFERENCES

Furnished upon request

**MWRA
POSITION DESCRIPTION**

POSITION: Employment Manager
PCR#: 8520010
DIVISION: Administration & Finance
DEPARTMENT: Human Resources

BASIC PURPOSE:

Manages all recruitment and employment programs and activities. Establishes and administers adequate employment, placement and transfer policies and procedures to meet Authority personnel requirements.

SUPERVISION RECEIVED:

Works under the general supervision of the Deputy Director of Human Resources.

SUPERVISION EXERCISED:

Exercises close supervision of assigned professional and clerical staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Manages and implements the Authority's procedures for recruitment and hiring and ensures compliance with Affirmative Action goals.
- Assess impact of attrition on staffing and provide guidance to MWRA senior managers on succession and replacement planning.
- Conducts applicant screening to determine qualifications for MWRA positions. Refers qualified applicants to hiring managers.
- Develops and implements employment automated systems including applicant tracking systems. Works closely with other Human Resources Managers to improve processes.
- Develops and implements new recruitment sources including social media sites and supervises preparation of brochures, pamphlets, and other marketing materials describing Authority employment opportunities.

- Coordinates all employment issues with Authority divisions and outside recruitment agencies.
- Establishes active relationship with employment sources such as schools and colleges.
- Manages all required pre-employment background check procedures to include obtaining applicant consent/authorization forms and pre-employment physicals; ensuring the confidentiality of information and reports.
- Develops and implements programs designed to increase applicant pools.
- Trains managers in the employment process (forms, procedures, selections criteria, interviewing).
- Ensures accuracy of Authority job postings.
- Develops and maintains relationships with community, school and professional organizations and other referral sources.
- Drafts regular and special reports on employment matters including costs, numbers hired, attrition and promotions.
- Responds to requests and inquiries relative to employment from internal candidates, managers and applicants.
- Serves as a member of management's negotiating team for collective bargaining negotiations.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year college program in human resources, industrial relations, public administration or a related field; and
- (B) General understanding of human resources and hiring practices and state and federal laws and regulations governing employment as acquired through seven (7) to nine (9) years experience in employment and human resource administration of which a minimum of three (3) years must be in a supervisory capacity; or

(C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

(A) Ability to plan, organize, direct, train and assign duties to subordinates.

(B) Understanding and knowledge of federal and state employment laws, practices and policies.

(C) Excellent oral and written 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 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.

There are no requirements that weight be lifted or force be exerted in the performance of this job. Specific vision abilities required by this job include close vision, and the ability to adjust focus.

WORK ENVIRONMENT:

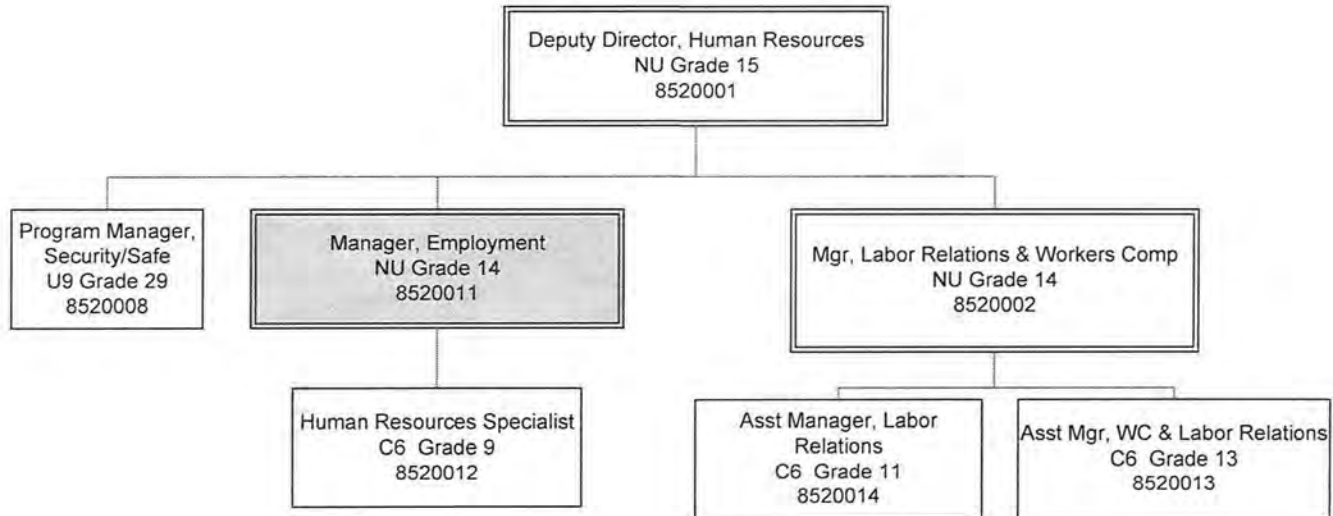
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. While performing the duties of this job, the employee regularly works in an office environment.

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

November 2014

Labor Relations and Employment Organization

December 2014




STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 17, 2014
SUBJECT: Appointment of Assistant Manager, Labor Relations
Human Resources Department



COMMITTEE: Personnel & Compensation

 INFORMATION
 X VOTE


Steven G. Perry, Mgr., Labor Relations & Workers' Comp
Robert Donnelly, Director of Human Resources
Preparer/Title


Rachel C. Madden
Director, Administration and Finance

RECOMMENDATION:

To approve the appointment of Tomeka Cribb-Jones to the position of Assistant Manager, Labor Relations (Confidential 6, Grade 11), at an annual salary of \$89,691.89 commencing on a date to be determined by the Executive Director.

DISCUSSION:

The Assistant Manager, Labor Relations reports directly to the Manager, Labor Relations and Workers' Compensation. The position provides professional level assistance in all Labor Relations activities including serving as a hearing officer for grievance and disciplinary hearings, participating in collective bargaining negotiations and arbitration hearings as well as external hearings. The position recently became vacant when the previous incumbent transferred to a position in the Law Division.

Selection Process:

The position was posted internally and externally. Four qualified candidates were referred for interviews. Each candidate was interviewed by a panel consisting of the Deputy Director, Human Resources, the Manager of Labor Relations and Workers' Compensation and a representative of the Affirmative Action and Compliance Unit. At the conclusion of interviews, Ms. Cribb-Jones was recommended for selection as the best candidate for the position.

Ms. Cribb-Jones has over 15 years of professional human resources experience both in the public and private sectors. Currently, Ms. Cribb-Jones is the Senior Human Capital Business Partner for the Boston Public School System. In this capacity, she has had significant labor relations responsibilities including participating in grievance hearings, conducting investigations, working with unions on issue resolution and dealing with employee relations issues. She also supervises a human resources staff. Prior to this role, Ms. Cribb-Jones held human resources roles with

the New England Organ Bank and Adventures in Advertising. Ms. Cribb-Jones' work experiences expand beyond labor relations as she has also served as a trainer, diversity recruiter and human resources manager.

Ms. Cribb-Jones possesses a Bachelor of Arts degree in Business Communications from Emmanuel College and is working on attaining a Professional Human Resources Certificate from the Society of Human Resources Management.

Given her diverse experience in human resources and labor relations, her training and educational background, Ms. Tomeka Cribb-Jones is highly recommended for the position of Assistant Manager, Labor Relations.

BUDGET/FISCAL IMPACT:

There are sufficient funds for this position in the FY15 Current Expense Budget.

ATTACHMENTS:

Resume of Tomeka Cribb-Jones
Position Description
Organization Chart

TOMEKA CRIBB-JONES

HUMAN RESOURCES DIRECTOR / MANAGER

Excels in Providing New Solutions to Longstanding Challenges

Accomplished and broadly experienced human resources professional with a solid track record of success in leading and driving the transformation needed to achieve goals. Provides forward-thinking leadership that continually strives to improve processes and organizational effectiveness, taking initiative to address longstanding challenges; achieved by driving consensus across diverse stakeholders and galvanizing efforts across HR organizations to a unified goal and mission. Core competencies and strengths:

A Trusted Strategic Business Partner
Creates Cultures of Accountability & Ownership
Performance Management / Management Coaching
Business Transformation / Change Management
Advocate for Data-Driven Decision Making

Talent Acquisition, Development & Management
Employee & Labor Relations / Investigations
State & Federal Employment Law / Compliance
Benefits Administration / Project Management
New Hire Training, Orientation & On-Boarding

PROFESSIONAL EXPERIENCE

BOSTON PUBLIC SCHOOLS | Boston, MA

2004 – Present

The oldest public school district comprised of 128 schools serving (K-12)

SR. HUMAN CAPITAL Business Partner

Managed all aspects of the HR function, supporting 128 schools and BPS central office departments including but not limited to SPED, Transportation, Academics, Office of English Language Learners comprised of a 4,930-employee population. Provide supervision to 8 HR School Support Partners in a cross-functional team and 2 HR Coordinators.

Achievement Highlights:

- **Heavily involved in labor and employee relations (about 75 – 80% of today's role).** Worked closely with the union to understand issues and concerns and ensure full compliance. Conducted investigations; involved in collective bargaining.
 - Provided consultation to principals related to position management and the promotion, retention and dismissal of staff.
 - Approved the appointment of employees to fill budgeted vacancies according to court orders, collective bargaining contracts and state and city qualifications. Worked with Principals and Headmasters on licensure and certifications requirements for teacher, teacher assistant and administrator openings
- **Proactively identified and addressed opportunities for continuous process improvement across the HR function.** Continually designed, developed and executed solutions that enabled the school to do more with less. Assisted Principals with analysis of teacher turnover, performance, absenteeism and leave of absences.
- **Provided a solution that fully automated many of the HR functions.** Led the transformation from a paper-based HR organization to a more automated organization, initiating a technology solution that could address this.
 - Successfully drove consensus across all senior-level stakeholders, including the Director of Payroll and Head of IT.
 - Wrote up business case to be presented to the Assistant Superintendent of HR, securing approval move forward.
 - Project managed all aspects, including user requirements gathering, collaborating with IT, testing and user training.
 - Introduced a solution that dramatically improved productivity, held teams accountable and delivered results.
- **Instilled a culture of accountability and ownership.** Developed a Tracking System spreadsheet to address growing problems with delayed and lost HR paperwork. Improved new hire experience and reduced level of frustration for employees as a result of this effort by improving paperwork turnaround exponentially.
- **Collaborated with principals to ensure schools were meeting diversity commitments.** Researched and dug deeper to understand the core root of the problem. Introduced and enforced new practices to ensure commitments met.

NEW ENGLAND ORGAN BANK | Newton, MA

2002 – 2004

The oldest independent nonprofit organ procurement organization in the country *federally designated for all or part of the six New England states.*

HUMAN RESOURCES MANAGER & TRAINING MANAGER

Managed all aspects of the HR function, managing 1 HR Coordinator and Front Desk Associate

Achievement Highlights:

- **Immediately focused on talent acquisition for this non-profit organization**, playing an instrumental role in nearly doubling the workforce from 30 to 70 employees within 2 years.
- **Created training materials and launched NEOB University.** Built out an internal training program, serving as the organizations injury prevention and compliance program.
 - Quickly ramped up and built out a comprehensive program, putting infrastructure, policies and processes in place to train a high performance OPO team. Familiarized with employment law, licensing, certifications and OSHA standards
 - Drove the talent acquisition strategy, successfully meeting aggressive 1.5-month goal to recruit, hire, onboard, train and assimilate a team of 15+ case managers supporting donor families.
 - Worked 24 x 7 to recruit, train and prepare the team for success. Developed and delivered training materials; trained 2 trainers to help assimilate the team. Mentored new hires to ensure they fully understood the material.
- **Played an integral role in building a solid HR foundation to support the success of the organization.** Built out necessary infrastructure, systems, processes and SOPs to support the organization for anticipated growth.
 - Authored the first Employee Handbook, creating policy, SOPs and processes, mitigating substantial risk.
 - Created the company's first formalized applicant tracking system, launching a solution on RecruitMax.
 - Helped shaped a better culture focused on investing in employees. Coached managers in developing their teams.
 - Launched sexual harassment training and employee-centric social events to galvanize and build team spirit.
- **Served on a team charged with improving employee benefits and compensation practices.**
 - Worked closely with team to reduce the number of medical providers and push for core providers to offer more.
 - Shifted to new strategies to attract volunteers to NEOB, leading rebranding strategy garner employee buy-in.
 - Overhauled existing compensation and bonus structure to support growth.
- **Partnered closely with managers on performance management issues.** Helped to identify and eliminate low performers. Coached on providing feedback and disciplinary action where needed. Ensured proper documentation.

ADVENTURES IN ADVERTISING | Quincy, MA

1999 – 2002

A promotional product distributor with \$26.6M in annual revenues; comprised of 3000 suppliers.

HUMAN RESOURCES MANAGER / DIVERSITY RECRUITER

Managed all aspects of the HR function for a high volume distributor, managed summer interns and 4 call center representatives.

Achievement Highlights:

- **Heavily involved in employee relations and investigations.** Conducted diligence and handled investigations with fairness regarding unemployment hearings 10+ per month on average.
- **Provided highly professional leadership that was approachable, fair and unbiased.** Ensured that employee's voice heard while continually balancing these needs with the company's business objectives and enforcing utmost compliance.
- **Providing ongoing coaching and guidance to 15+ Field Managers** regarding performance management, documentation, employment law, compliance and appropriate communications. Held management team accountable.
- **Challenged with a growing high turnover of high-level, minority managers.** Initiated and facilitated monthly discussions to create open honest, candid dialogue. Mandated Diversity Training across the field for all managers.
 - Effectively reduced minority management attrition by 25+% within the first year as a result of this effort.
 - Received Outstanding Achievement award in 2001 for this effort and high impact leadership contribution to the company.
- **Assumed the role of the Diversity Recruiting Manager for the Boston area in 2001.** Strengthened relationships with campus affinity groups and career centers. Incepted new strategy that positioned AIA as a long-term career choice.
 - Increased pipeline, targeting colleges with business programs, including UMass and Northeastern University.
- **Worked with operations to improve processes**, providing a solution that dramatically improved accuracy of the AIA's call center, Helped with the re-design of the call center system to address this ongoing problem.
- **Completed AIA's rigorous 6-week management training program**, learning in-depth about HR best practices, data driven-decision making, performance management and coaching and Six Sigma methodology.

Earlier Engagements: Chief of Staff and Special Projects, Boston Public Schools, 2004-2006/ Intern, Office of Communications, Boston Celtics (NBA) | Boston, MA, 1995 – 1996

Technical Proficiencies: Microsoft Office, Excel, Oracle, PeopleSoft, TalentEd, and Kenexa

TOMEKA CRIBB JONES|

EDUCATION

- **Bachelor of Arts in Business Communication**, Emmanuel College, Boston, MA, 1996
Minor in Economics
- **PHR Human Resources Certificate**, Curry College, Milton, MA- Present
- **Urban School Human Capital Academy**, Houston, Texas, 2014
- **Executive Team Leadership Management Program**, Boston Public Schools, Boston, MA, 2012

COMMUNITY INVOLVEMENT & LEADERSHIP

Emmanuel College | Boston, MA, **Black Student Alumni Mentor**

2007 – 2009

Drove brand recognition for BSO Alumni. Assisted in the undergraduate admission process.

**MWRA
POSITION DESCRIPTION**

POSITION: Assistant Manager, Labor Relations

PCR#: 8520014

DIVISION: Administration & Finance

DEPARTMENT: Human Resources

BASIC PURPOSE:

Assists in all Labor Relations activities including serving as hearing officer for grievance and disciplinary hearings, participates and assists in collective bargaining negotiations, arbitration hearings and external hearings. Handles various employee relations and disciplinary matters.

SUPERVISION RECEIVED:

Works under the general supervision of the Manager, Labor Relations and Workers' Compensation.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Serves as hearing officer for grievance and disciplinary hearings.
- Participates and assists in collective bargaining matters including proposal development, responses to requests for information, maintaining bargaining records and meeting organization.
- Provides advice and support to managers and supervisors on employee performance issues such as attendance, work performance and other disciplinary issues.
- Provides support to managers and supervisors on employee relation matters including conducting internal reviews and workplace investigations and preparing necessary reports and recommendations.

- Assists the Manager of Labor Relations and Workers' Compensation prepare and conduct supervisory training sessions covering, among other subjects, managing performance issues, disciplinary procedures and contract administration and interpretation.
- Represents the Labor Relations Unit at internal and external Labor/Management committee meetings as designated by the Manager of Labor Relations and Workers' Compensation.
- Provides support to legal counsel in arbitration cases and other external matters.
- Acts as backup to Assistant Manager, Labor Relations and Workers' Compensation when necessary.
- Assists with completion and implementation of special projects such as leave management reporting and analysis.

SECONDARY DUTIES:

- Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Completion of a four (4) year college program in labor relations, human resources, public administration or related field; and
- (B) A general understanding of labor relations and personnel administration, grievance administration and resolution and disciplinary procedures as acquired through four (4) to six (6) years experience preferably in the public sector; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated analytical and negotiation skills.
- (B) Excellent interpersonal, written and oral communication skills.

SPECIAL REQUIREMENTS:

Page 2 of 3

C6 Gr 11

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A valid Massachusetts Class D Motor Vehicle Operators License.

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 use hands to feel, finger, handle or operate objects, including office equipment or controls and reach with hands and arms. The employee is occasionally required to stand and walk. The employee is regularly required to sit, and talk or hear.

The employee must frequently 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.

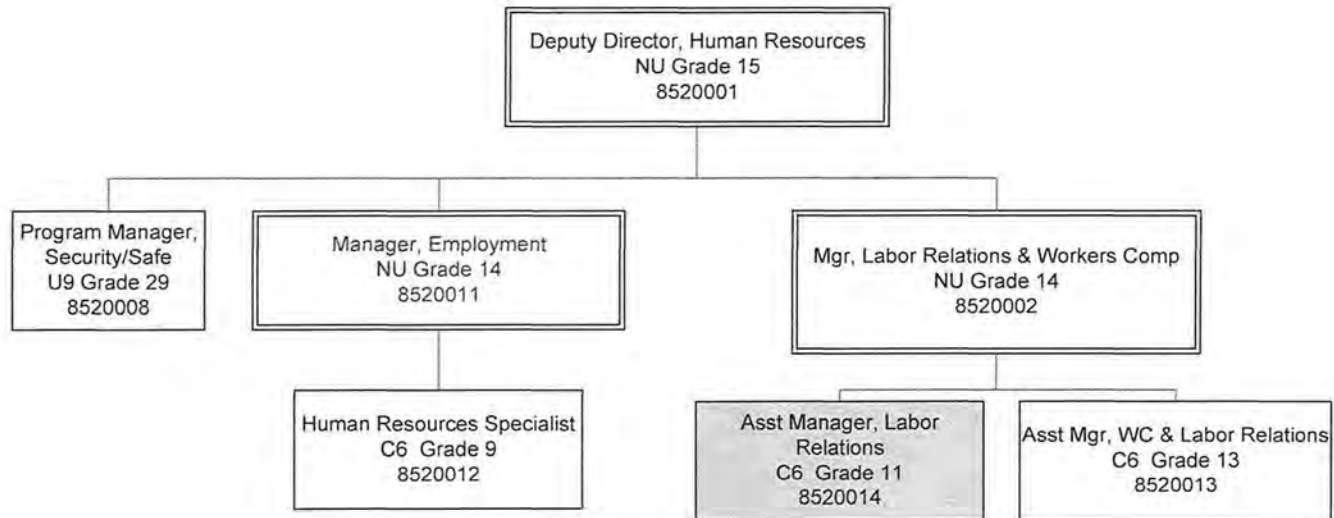
While performing the duties of this job, the employee regularly works in an office environment.

The noise level in the normal work environment is quiet.

September 2014

Labor Relations and Employment Organization

December 2014



STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 17, 2014
SUBJECT: Appointment of Environmental Manager,
Administration and Finance Division



COMMITTEE: Personnel & Compensation

MSG
Michele S. Gillen, Deputy Director, A & F
Robert G. Donnelly, Director of Human Resources
Preparer/Title *R. Donnelly*

 INFORMATION

VOTE

Rachel C. Madden
Rachel C. Madden
Director, Administration & Finance

RECOMMENDATION:

To approve the appointment of John Nelson to the position of Environmental Manager (Unit 9, Grade 30) in the Administration and Finance Division at the recommended salary of \$114,229.01, effective on a date to be determined by the Executive Director.

DISCUSSION:

The position of Environmental Manager became vacant upon the retirement of the incumbent, Leon Lataille. The Environment Manager is primarily responsible for managing environmental issues including environmental project planning, contracts and regulatory compliance. The Environmental Manager oversees a small team of program managers engaged in project-specific planning and facility environmental regulatory compliance activities. The position reports directly to the Deputy Director, Administration and Finance and has considerable cross-divisional interactions with Operations Division senior managers including the Chief Operating Officer on environmental regulatory issues impacting authority operations.

Selection Process

The position was posted internally and 11 individuals applied. Seven candidates were interviewed for the position. An interview panel consisting of the Deputy Director, Administration and Finance, the Deputy Chief Operating Officer, Programs, Policies and Planning and the Special Assistant for Affirmative Action and Compliance interviewed each candidate. At the completion of the interviews, the panel determined that John Nelson was the best qualified candidate to fill this important position.

John Nelson has worked at MWRA since 1995. Currently, Mr. Nelson serves as Acting Environmental Manager. Prior to this acting assignment, Mr. Nelson held the position of Program Manager, Real Property and Environmental Management reporting directly to the Environmental Manager. As Program Manager, Mr. Nelson was responsible for managing regulatory compliance for MWRA facility operations including oversight of clean-ups of

contaminated properties; managing compliance with underground fuel storage regulations; managing assessment and abatement design and oversight activities for contaminated building materials; and management of oil spill prevention control and countermeasure plan activities at several MWRA facilities. Prior to joining MWRA, Mr. Nelson held positions in private industry including environmental engineer and hydrologist.

Mr. Nelson possesses a Master of Arts in Geological Sciences and a Bachelor of Science in Geology.

BUDGET/FISCAL IMPACT:

There are sufficient funds in the FY15 CEB for this position. The recommended salary is in accordance with guidelines established in Unit 9's current collective bargaining agreement for promotional increases.

ATTACHMENTS:

Resume of John R. Nelson
Position Description
Organization Chart

John R. Nelson

PROFESSIONAL EXPERIENCE

MASSACHUSETTS WATER RESOURCES AUTHORITY
Program Manager, Real Property & Environmental Management

Chelsea, MA
1995 – present

- Manages federal, state, and local environmental regulatory compliance for MWRA facility operations and for infrastructure improvement projects. Major regulatory program responsibilities include:
 - Oversight of the assessment and cleanup of MWRA-owned and managed contaminated properties under the Massachusetts Contingency Plan;
 - Oversight of contaminated soil and groundwater management under the Massachusetts Contingency Plan, hazardous waste regulations, and Clean Water Act on MWRA construction projects;
 - Compliance with the Massachusetts underground fuel storage tank regulations for 30+ facilities;
 - Clean Water Act NPDES permit compliance for four waterworks facilities and for numerous construction projects;
 - Massachusetts and EPA hazardous waste regulation compliance for MWRA facilities that generate hazardous waste;
 - Oil Spill Prevention, Control, and Countermeasure Plan (SPCC) management at 11 MWRA facilities under the Clean Water Act; and
 - Assessment, and abatement design and oversight for contaminated building materials including PCBs, lead paint and asbestos at MWRA facilities under the EPA Toxic Substances Control Act, and the Massachusetts and EPA hazardous waste regulations.
- Reviews environmental compliance issues and integrates environmental management requirements into ongoing MWRA infrastructure improvement design and construction contracts.
- Routinely interacts with Massachusetts DEP and EPA staff regarding permitting and environmental regulatory compliance at MWRA facilities and on infrastructure upgrade and improvement projects.
- Manages MWRA environmental compliance consulting contracts and underground fuel tank maintenance contracts including oversight of consultant and contractor staff, review of deliverables, and budgetary and schedule compliance.

ENPRO SERVICES, INC.
Environmental Engineer

Newburyport, MA
1994-1995

- Responsible for the engineering and scientific oversight of emergency response actions at hazardous material spills.
- Supervised and directed cleanup staff, interfaced with state regulatory personnel and clients, prepared required submittals to state environmental agencies, and prepared monthly invoicing.

TRC ENVIRONMENTAL, INC.

Hydrogeologist

Lowell, MA

1990-1994

- Provided geological and hydrogeological support for the hazardous material assessments and remedial cleanup design and implementation at EPA-listed CERCLA and NPL Superfund sites, RCRA Corrective Action sites, federal military facilities, and for large industrial clients.

ATEC ASSOCIATES, INC.

Engineering Technician

Laboratory Manager/Engineering Geologist

Hydrogeologist/Project Manager

Alexandria, VA & Columbia, MD

1984-1985

1985-1988

1988-1990

- Conducted onsite construction materials testing and inspection, and managed a geotechnical and construction materials testing laboratory.
- As a member of a geotechnical engineering design group carried out geological and geotechnical investigations and designed soil mechanics laboratory testing programs.
- Conducted hazardous materials property transfer site assessments, subsurface investigations for the delineation of soil and groundwater contamination, and design and implementation of contaminated site remediation projects.
- As part of these responsibilities, supervised junior staff, prepared monthly invoicing, and interfaced with engineering staff, construction managers, and clients.

STATE UNIVERSITY OF NEW YORK AT BINGHAMTON

Teaching Assistant/Curator

Binghamton, NY

1982-1984

- Teaching assistant for undergraduate courses in invertebrate paleontology and sedimentology.
- Curator of the Geoscience Department paleontological collections.

EDUCATION**STATE UNIVERSITY OF NEW YORK AT BINGHAMTON**

M.A. in Geological Sciences

Binghamton, NY

1984

Thesis: "Sedimentology and Stratigraphy of the Paleozoic Rocks of the Mountain Pine Ridge, Belize, Central America"

UNIVERSITY OF MASSACHUSETTS

B.S. in Geology, Cum Laude

Amherst, MA

1982

Award for top geology graduate in class of 1982.

PUBLICATIONS AND PRESENTATIONS

- Zirbel, M.L., Nelson, J.R., Radville, M.E., and Levy, W. (2002) "An Evaluation of Soil Background Concentrations in South Boston". *Annual International Conference in Soils, Sediments and Water 2001*.

- **Nelson, J.R.**, Batchelder, G.L., Radville, M.E., Albert, S.A. (2007). "Using Multiple Lines of Evidence to Demonstrate that Elevated Arsenic Groundwater Concentrations are Naturally Occurring". *Proceedings of the Annual International Conference on Soils, Sediments, Water and Energy*, Vol. 12 (2007), Article 7.
- Sultanian, D., Lagueux, R., **Nelson, J.R.** (2012). "Wachusett Dam PCB Assessment and Remediation". *Annual International Conference in Soils, Sediments, Water, and Energy 2012*.

MEMBERSHIPS, CERTIFICATIONS AND TRAINING

- Licensed Professional Geologist, New Hampshire and Virginia
- Certified Massachusetts DEP Underground Storage Tank Class A/B Operator
- Certified Maine DEP Oil Storage Tank Operator
- OSHA/EPA HAZWOPPER 40-Hour Hazardous Waste Site Worker Certification
- OSHA/EPA 24-Hour Hazardous Material Worker Protection and Incident Command Certification
- US Coast Guard Maritime Response OPA 90 Qualified Individual Certification
- EPA Water Sector Advanced ICS-400 Incident Command System and FEMA National Incident Management System Certification
- EPA Region 1 NetDMR Training for Permittees
- Training in technical writing, Microsoft Access, PI-ProcessBook and PI-DataLink, and GIS/ArcMap
- Member, Geological Society of America.

**MWRA
POSITION DESCRIPTION**

POSITION: Environmental Manager
PCR#: 8850003
DIVISION: Administration & Finance
DEPARTMENT: Real Property & Env Mgmt

BASIC PURPOSE:

Manages environmental issues for the division including environmental project planning, contracts and regulatory compliance.

SUPERVISION RECEIVED:

Works under the general supervision of the Deputy Director, Administration & Finance

SUPERVISION EXERCISED:

None

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Coordinates with other divisions within the Authority the development and implementation of policies, protocols and guidance for handling and resolving environmental issues, including those which affect interdivisional projects and sites.
- Represents the Authority in developing programs and procedures for compliance with environmental requirements and negotiating appropriate procedures for compliance and expeditious review with regulatory agencies.
- Oversees all sewerage division projects for environmental regulatory compliance.
- Develops and implements recommendations for environmental planning to assure regulatory compliance based on a review of sewerage division projects.

- Oversees development of environmental workplans, health and safety plans, and remediation plans for division construction projects.
- Oversees the work of environmental consultants under contract to the MWRA for quality of deliverables, budget and schedule compliance and conformance to contract terms.
- Oversees division construction activities for compliance with environmental workplans and state, local and federal environmental laws.
- Acts as division contact with regulatory agencies and provides environmental reports and notifications required by the regulatory agencies.
- Provides guidance in formulating agency, or division policy by analyzing environmental impacts of proposed policy on division projects.
- Prepares budgets and schedules and ensures their compliance.
- Participates in consultant selection procedures and contract negotiations.
- Performs related duties as performed.

SECONDARY DUTIES:

Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Knowledge of principles and practices of engineering and environmental science as normally acquired through four (4) years in a related degree. A Master's degree is preferred and;
- (B) Experience negotiating with regulatory and environmental agencies or environmental and wastewater issues and in the review and development of compliance monitoring plans as attained through eight (8) to ten (10) years experience in environmental issues and;
- (C) Demonstrated experience with Clean Water Act regulations, Superfund and MCP or;

- (D) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Excellent interpersonal, oral and written communications skills required.
- (B) Ability to manage critical projects under demanding schedule and performance requirements.

SPECIAL REQUIREMENTS:

None.

TOOLS AND EQUIPMENT USED:

Office equipment 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 use hands to finger, handle, feel or operate objects, tools, or controls and reach with hands and arms. The employee occasionally is required to sit, stand and walk. The employee is frequently required to climb or balance; stoop, kneel, crouch, or crawl; taste or smell.

The employee must frequently lift and/or move up to 10 pounds and occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance, color vision, peripheral vision, depth perception, 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.

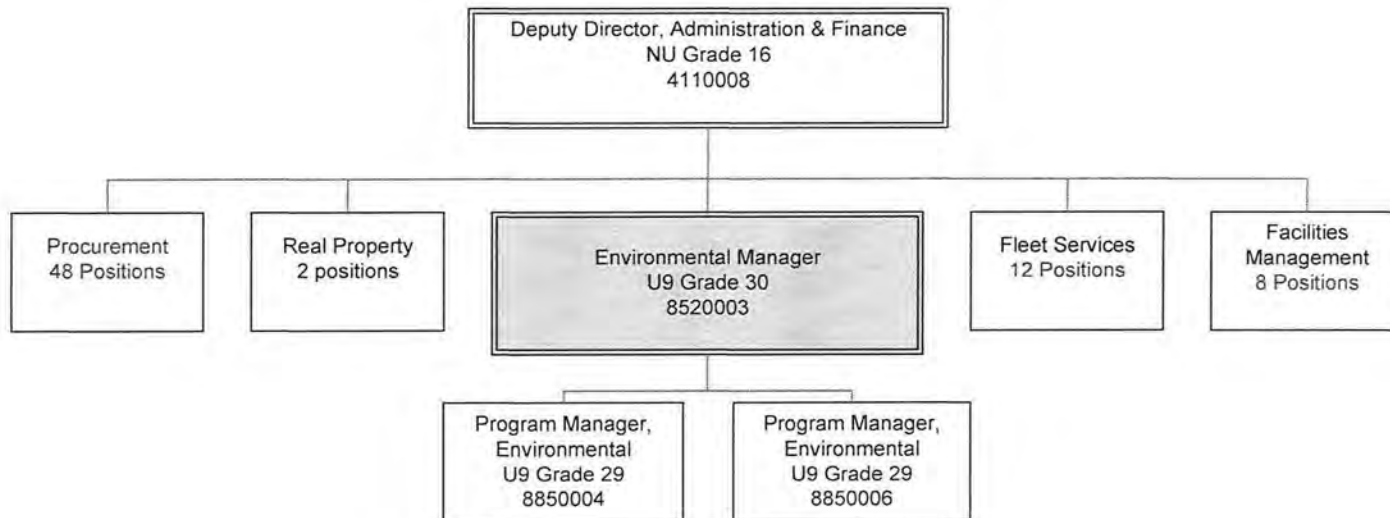
While performing the duties of this job, the employee regularly works in an office environment. The employee occasionally works in outside weather conditions. The employee occasionally works near moving mechanical parts and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in high, precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals, and risk of electrical shock.

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

July, 2001

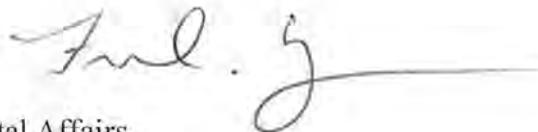
Environmental Management Organization

December 2014



STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 17, 2014
SUBJECT: Appointment of Director, Intergovernmental Affairs



COMMITTEE: Personnel and Compensation

X VOTE
 INFORMATION

RECOMMENDATION:

That the Board approve the appointment of Sean A. Navin to the position of Director of Intergovernmental Affairs (Non-Union, Grade 15) at an annual salary of \$118,500, commencing on a date to be determined by the Executive Director.

DISCUSSION:

The Director of Intergovernmental Affairs reports to the Executive Director and is responsible for the management of intergovernmental and community relations. It is the role of this position to build support for MWRA's programs and activities with its diverse constituencies. Key responsibilities include serving as liaison between MWRA and its customer communities; establishing effective contacts with government agencies, the Congressional delegation, legislative leaders and local public officials. Additionally, the Director of Intergovernmental Affairs provides counsel to the Executive Director and senior management with regard to the public relations implications from the agency's projects and practices. The position became vacant with the recent departure of the incumbent. A PCR amendment, also presented at this meeting, changed the title of this position to better align it with its responsibilities.

Mr. Navin is well qualified to fill this important role. Since 2011, Mr. Navin has served as the Assistant Secretary of Legislative Affairs for the Executive Office of Energy and Environmental Affairs (EOEEA), developing the legislative strategy to advance clean energy and environmental goals for the Commonwealth. In addition, his role was recently expanded to Senior Advisor focusing on policy implementation, and international business development where he managed the development and integration of Governor Patrick's Climate Preparedness Initiative and organized a number of international trade missions.

Prior to joining EOEEA, Mr. Navin served as the Deputy Policy Director to Governor Patrick on policy matters related to Energy and Environmental Affairs, Transportation, Education, Public Safety, and Workforce Development. He was also the Legislative Liaison at the Department of Conservation and Recreation overseeing Legislative Affairs and Constituent Services and, prior to that, managed the district office for Congressman McGovern.

Mr. Navin holds a Bachelor of Arts in Political Science from Stonehill College and a Master's Degree in Public Affairs from the University of Massachusetts, Boston.

Based on his experience in legislative and public affairs, Mr. Navin is recommended for the position of Director of Intergovernmental Affairs.

BUDGET/FISCAL IMPACT:

There are sufficient funds in the FY2015 CEB for this position.

ATTACHMENTS:

Resume of Sean A. Navin
Position Description
Public Affairs Organizational Chart

SEAN A. NAVIN

Dedicated and effective, highly-motivated Public Affairs Professional with 10 years of experience. A proven leader and manager with a strong background in government affairs, communications, strategic planning and implementation.

Professional Experience

Massachusetts Executive Office of Energy and Environmental Affairs – Boston, MA 2011 - Present
The Nation's first Energy and Environmental Cabinet office, overseeing a \$200M budget, six agencies, and two quasi-public agencies

Senior Adviser (2014 – Present)

Senior member of leadership team, focusing on policy implementation, and international business development.

- Counsel Secretary on all matters and issues, including policy, legislation, programming, personnel, and administration.
- Oversee International Trade-Missions for the Secretariat. Successfully planned 5 trade missions to 11 countries with dozens of State leaders that directly led to international expansion for multiple Massachusetts businesses.
- Serve as point person between Secretariat and International agencies. Worked with foreign governmental agencies to share best practices and advise on the expansion of renewable energy programs abroad.
- Spearhead Governor Patrick's Energy and Environmental transition team. Lead the EEA transition team to produce a transition website and materials and administer in-person briefings.
- Manage the development and integration of Governor Patrick's Climate Preparedness Initiative. Oversaw \$52M plan that addressed priority areas, including transportation, energy, built environment, and public health.

Assistant Secretary of Legislative Affairs (2011 – Present)

Lead federal, state, and local Government Affairs for Secretariat including six state agencies and two quasi-government agencies.

- Direct a staff of nine Government Affairs and policy professionals.
- Devise Legislative strategy to advance the clean energy and environmental goals of the Patrick Administration.
- Work with Legislative Leaders to address complex statewide issues. Collaborated with House and Senate members to secure the Commonwealth's energy future, grow the Massachusetts clean energy sector, and protect the environment.
- Act as spokesperson for the Secretary. Communicate frequently with federal, state, and local elected officials, community leaders, and staff to foster and strengthen partnerships.
- Utilize structural relationships to advance agenda. Enlisted support from internal and external stakeholders to garner public support of budget priorities and policy initiatives.
- Operate as liaison between government officials and programmatic staff. Increased communications between the Massachusetts Legislature and staff to build support for agency initiatives and strengthen constituent services.
- Advance important pieces of legislation pertaining to Secretariat. Successfully advocated for the passage of four consecutive General Appropriation Acts (FY2012–FY2015).

Office of Governor Deval L. Patrick – Boston, MA 2010 – 2011
Office of the 71st Governor of the Commonwealth of Massachusetts

Deputy Policy Director

Adviser to Governor Patrick on policy matters related to Energy and Environmental Affairs, Transportation, Education, Public Safety, and Workforce Development.

- Reviewed policies, regulations, reports, grants, and budget priorities of five Secretariats to ensure that all agencies worked collaboratively to advance the Patrick Administration agenda.
- Planned development of MassWorks campaign that highlighted Massachusetts' nation-leading economic recovery.
- Communicated with Secretaries and staffs to ensure effective policy implementation of the Governor's directives.
- Conceptualized and implemented solutions to complicated political and policy problems.

Massachusetts Department of Conservation and Recreation – Boston, MA 2009 – 2010

The steward of 450,000 acres of parks and forests, beaches, bike trails, watersheds, dams, and parkways

Legislative Liaison

Oversaw Legislative Affairs and Constituent Services for the Divisions of State and Urban parks, Watershed Protection, and Bureau of Forest Fire Control and Forestry, and the Bureau of Ranger Services.

- Advocated for \$85M budget and prioritized spending for crucial earmarks that benefitted user experience.

- Built relationships with 200 Legislators and municipal officials across Massachusetts by executing successful outreach strategy through constituent services management, public events, and communication.
- Developed a public outreach effort in partnership with the agency and Legislators to acknowledge and reconcile the concerns of constituents and advocacy groups.
- Advised Commissioner on pending legislation and impact on the secretariat and the department.

SAN Ventures, LLC – Holden, MA

2007 – 2013

*Parent company of two successful cafes in Central Massachusetts***Co-Owner**

Created company, oversaw café acquisition, and opening of second café location. Active partner 2007-2009; Silent partner 2009-2013.

- Formed Limited Liability Company to purchase existing business and open a second location simultaneously.
- Headed design, construction, and set up of secondary café location.
- Supervised combined staff of 30 employees to ensure that both businesses ran efficiently.
- Worked with web designer to produce a user-friendly Ecommerce website to generate online sales and direct customers to brick and mortar locations.
- Created marketing campaign to increase in-store and online sales through promotional sales, corporate events, social media, and printed materials.
- Cultivated and maintained integral relationships to build community presence, including coordination of charitable donations to non-profit and need-based organizations.

Office of Congressman James P. McGovern – Marlborough, MA 2005 – 2008*Congressional Office representing the 2nd Congressional District of Massachusetts, serving more than 710,000 constituents***District Representative**

Managed Congressional district office that served nine municipalities and 200,000 constituents.

- Increased presence of Congressional office in local municipalities, oversaw constituent services focused on Social Security, Immigration, and Health Care, and Housing.
- Briefed Congressman on district issues and served as contact between Congressional office and local and state governments.
- Represented Congressman on local boards and at meetings, events, and conferences.
- Identified new partnerships and built relationships with key stakeholders throughout the district.

Re-Elect McGovern Committee – Worcester, MA

2004 – 2005

*Campaign Committee for the Re-Election of Congressman James P. McGovern***Field Coordinator**

Directed all field operations for nine communities in the 2nd Massachusetts Congressional District for the McGovern Campaign.

- Organized volunteers throughout the district, ensuring that resources were maximized appropriately.
- Planned hundreds of successful events including phone banks, standouts, house parties, and fundraisers to capitalize on supporter participation.
- Executed a Get-Out-the-Vote plan that resulted in candidate winning every precinct in every community.

Education**Master in Public Affairs**

2013

University of Massachusetts, Boston, MA

Bachelor of Arts

2004

Major: Political Science Minor: Italian Studies
Stonehill College, Easton, MA

Volunteer Experience*Greater Boston Food Bank, Boston, MA**Cradles to Crayons, Boston, MA**Marlborough Annual Evening of Giving, Marlborough, MA**Friends of Marlborough Public Library, Marlborough, MA**Marlborough Historical Society, Marlborough, MA**Italian American Veterans Club, Marlborough, MA*

**MWRA
POSITION DESCRIPTION**

POSITION: Director, Intergovernmental Affairs

PCR#:

DIVISION: OED

DEPARTMENT:

BASIC PURPOSE:

Manages intergovernmental, community and media relations to ensure effective and accurate understanding of the goals, programs and activities of the Authority and to build support for such among its various constituencies.

SUPERVISION RECEIVED:

Works under the general supervision of the Executive Director.

SUPERVISION EXERCISED:

Exercises supervision of Community Relations Coordinators, Senior Program Manager, Environmental Review and Compliance and administrative support staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Develops strategy and supervises staff regarding public participation programs, liaison with municipalities within the Authority's district and liaison with state and federal legislative bodies.
- Develops, prepares and administers a media program for the Authority.
- Establishes effective contact with government agencies, legislative leader and public officials in order to provide the Authority with accurate and timely information concerning activities which may affect the Authority's operations.
- Counsels the Executive Director with regard to the intergovernmental implications of the

Authority's policies, practices and actions.

- Devises strategies for clarifying and dealing with issues of interest to the Authority's various constituencies.
- Answers inquiries from elected/appointed officials and the general public.
- Represents the Authority in all aspects of public, community and governmental relations.
- Recommends action to be taken by Authority management to develop and maintain good intergovernmental relations.

SECONDARY DUTIES:

- Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Analytical and communication skills as normally attained through a four (4) year college program in public policy, public administration, communications or a related field; and
- (B) Understanding of public policy, public administration and legislative issues as acquired by ten (8) to ten (10) years of related experience of which five (5) years must be in a managerial capacity; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Excellent writing, communication, interpersonal and public speaking skills are required.

SPECIAL REQUIREMENTS:

None

TOOLS AND EQUIPMENT USED:

Office machines 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 the job. Reasonable accommodation may be made to enable individuals with disabilities to perform the essential functions.

While performing the essential functions 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 regularly is required to stand or talk or hear. The employee is occasionally required to walk, sit, climb or balance, stoop, kneel, crouch, or crawl.

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

WORK ENVIRONMENT:

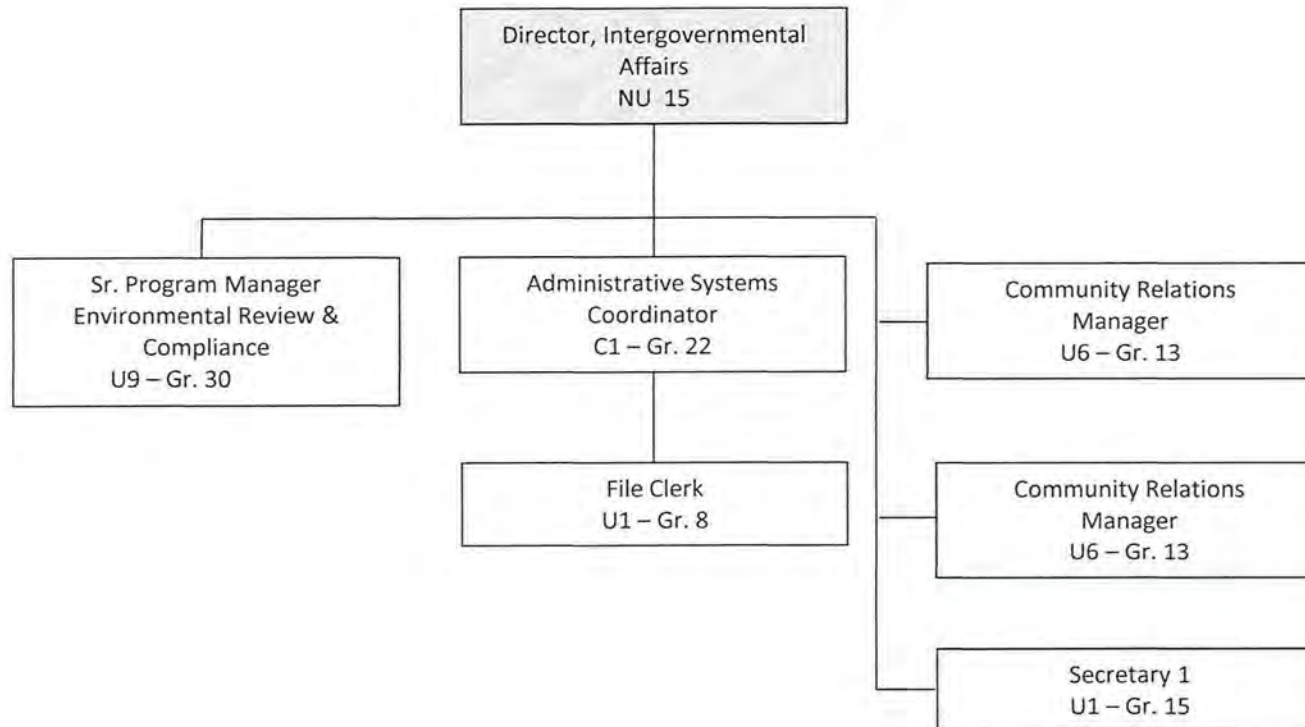
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee works near moving mechanical parts is occasionally exposed to wet and/or humid conditions. The employee is occasionally exposed to fumes and airborne particles, toxic or caustic chemicals, and risk of electric shock.


The noise level in the work environment is moderately quiet.

February 2012

Public Affairs Organization
December 2014



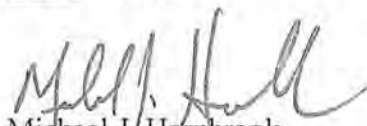
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: December 17, 2014
SUBJECT: Appointment of Deputy Director, Maintenance, Deer Island Treatment Plant Operations Division

COMMITTEE: Personnel & Compensation

 INFORMATION
 X VOTE

Robert G. Donnelly, Director, Human Resources
John P. Vetere, Deputy Chief Operating Officer
David F. Duest, Director, Deer Island WWTP
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the appointment of Mr. Edward J. Regan to the position of Deputy Director, Maintenance, Deer Island Treatment Plant (Non-Union, Grade 15), at an annual salary of \$125,717.51, commencing on a date to be determined by the Executive Director.

DISCUSSION:

The position of Deputy Director, Maintenance became vacant upon the retirement of the previous incumbent this past July. The Deputy Director, Maintenance position reports to the Director, Deer Island Wastewater Treatment Plant, and is responsible for all of the asset management and maintenance programs for the Deer Island Treatment Plant's facilities and substantial inventory of equipment. The position directs the work of 137 staff, including all of the trades groups, condition monitoring staff, and the Planners/Schedulers.

The treatment facilities at Deer Island constructed under the Boston Harbor Project are now almost 20 years old. As such, the Deputy Director, Maintenance position's role has become increasingly more important in directing and overseeing all of the maintenance initiatives implemented on Deer Island (condition monitoring, reliability-centered maintenance, and preventive and corrective maintenance). The Deputy Director must ensure that appropriate equipment replacements are completed either by in-house staff or contractors, in the quickest possible timeframe, to ensure that the plant is always capable of treating maximum flows.

This position also requires developing the current expense and capital maintenance budgets, ensuring that staff work safely, and must strive to maintain harmonious relations with union personnel.

Selection Process

The position was posted internally and three qualified candidates were referred for interviews. The three candidates were interviewed by the Director, Deer Island WWTP, the Deputy Director, Deer Island WWTP, and the Special Assistant for Affirmative Action. Upon completion of the interviews, Mr. Edward J. Regan was unanimously selected as the best candidate for the position based upon his education, experience, knowledge of the industry, and his understanding of the position goals, requirements, and priorities as demonstrated during the interview.

Mr. Regan currently holds the position of Manager, Maintenance for Metro East, which he has held since March 2014. Mr. Regan was placed in his current position during the extensive reorganization that occurred when a number of senior level managers retired earlier this calendar year, and the incumbent was promoted to Assistant Director, Deer Island WWTP.

In his current position as Manager, Maintenance for Metro East, Mr. Regan is responsible for the maintenance of all of MWRA's water and wastewater facilities (except the treatment plants) in eastern Massachusetts, including the remote headworks, pumping stations, and combined sewer overflow facilities. He currently directs the work of 117 trades staff. Mr. Regan has more than 28 years of experience in maintenance and has worked at MWRA since 1986.

In his previous position as Asset Manager at Deer Island, Mr. Regan managed MWRA's asset management program, including the condition monitoring program, computerized maintenance management system (MAXIMO) upgrades, reliability-centered maintenance program implementation, maintenance staff training, budget development and tracking, and operations light maintenance implementation. Mr. Regan directed 13 staff that included the Work Coordination Group and the Condition Monitoring Group. Prior to that, Mr. Regan held several positions of increasing responsibility at Deer Island, including the Work Coordination Center Manager, where he was responsible for planning, scheduling, and obtaining materials for the daily work activities of 130 maintenance staff that handled approximately 30,000 work orders per year.

Mr. Regan is recognized as a leader in the asset management community. He is a team member of the Water Environmental Research Foundation developing industry-wide asset management reports for use in water and wastewater utilities around the world. He has authored numerous papers and reports on asset management and maintenance initiatives.

Mr. Regan has developed and implemented numerous maintenance improvements and initiatives that have resulted in cost savings and improved equipment performance. His broad asset management and maintenance knowledge and extensive maintenance experience working on the complex and varied equipment at Deer Island uniquely qualifies him as the ideal candidate to immediately fill this important position.

Mr. Regan earned a Bachelor of Science degree in Business Management from Emmanuel College. He is a Certified Reliability-Centered Maintenance Facilitator, a Certified Vibration Analyst Level 1, and he holds a Grade 7 Combined Wastewater Operator's license.

Mr. Regan's current salary as Manager, Maintenance (Unit 6, Grade 14) is \$123,252.45; the recommended salary of \$125,717.51 is commensurate with the increased responsibilities of this position.

BUDGET/FISCAL IMPACT:

There are sufficient funds for this position in the FY15 Current Expense Budget.

ATTACHMENTS:

Resume of Edward J. Regan
Position Description
Organization Chart

EDWARD J. REGAN

SUMMARY OF QUALIFICATIONS

- Implemented multiple asset management improvements to protect and maintain MWRA assets in both Water and Wastewater facilities.
- Demonstrated skills in problem assessment, root cause analysis, problem mitigation, and productive solutions for critical equipment.
- Strong leadership and organization skills.
- Wide range of experience in developing, writing, and implementing maintenance programs for a large wastewater facility.
- Ability to articulate the value of an asset management program to operations staff as well as others outside the organization.
- Motivated worker who works well with others and independently.

ACCOMPLISHMENTS

- Over 28 years proven maintenance experience in multiple levels of the organization.
 - Established MWRA's asset management program as a leader in the industry.
 - Implemented and established work procedures for the new computerized maintenance management system Maximo on Deer Island and supported Maximo implementation in Field Operations.
 - Key member of the startup team of the Deer Island Treatment Plant.
 - NEWEA award for Asset Management 2008.
-

PROFESSIONAL EXPERIENCE

Massachusetts Water Resource Authority, Charlestown MA

MWRA Manager, Maintenance Metro East, March 2014 to present

- Supervisor of 115 trade staff including planners, electricians, mechanics, HVAC technicians, painters, carpenters, masons, building and grounds, and metering instrumentation technicians.
- Responsible for the maintenance of all water and wastewater facilities including headwork's, pumping stations and combined sewer overflow facilities in eastern Massachusetts.
- Responsible for a maintenance budget of approximately \$16 million in salaries, material and services

MWRA Asset Manager, September 2008 to March 2014

- Supervisor of Work Coordination and Condition Monitoring Groups consisting of 13 staff at Deer Island.
- Developed, monitored and tracked maintenance budget of approximately \$13 million dollars.
- Responsible for the implementation of the overall asset management program. Developed and implemented asset management programs including metric development, condition monitoring program, computerized maintenance management system, and reliability centered maintenance program.

EDWARD J. REGAN

- Developed and implemented best practices including operations light maintenance, productivity improvement plan, and meter based preventive maintenance.
- Implementation of the industry leading Reliability Centered Maintenance Program for over 80 systems.
- Formed and developed of the new Condition Monitoring Maintenance task team.
- Developed and implemented new procedures for maintenance and process changes.
- Water Environmental Research Foundation (WERF) issue area team member responsible for reviewing and commenting on asset management reports which are shared with MWRA and Water and Wastewater utilities around the world.

Work Coordination Center Manager, December 1999 to September 2008

- Supervisor of the Work Coordination Center Group of 12 staff at Deer Island.
- Planned, scheduled, and obtained materials for the daily work activities of 130 maintenance staff and approximately 30,000 work orders per year.
- Supported major multidiscipline plant projects including materials purchases and staff summary preparation.
- Responsible for daily use, upgrades, and initial implementation of the computerized maintenance management system, Maximo.
- Facilitated and designed Maximo training courses for different trades groups and different supervisory levels. Training was completed for over 200 staff
- Developed maintenance performance indicators and reports to support asset management goals.

Planner and Scheduler Coordinator, Deer Island January 1995 to December 1999

- Assigned and prepared work orders for maintenance staff that include all tasks to be completed, work sequence, staff resources required and materials required.
- Developed work schedules for Area Managers and supervisors that included special instructions or considerations.
- Coordinated with Operations, Maintenance, Engineering, Process Control and Warehouse, departments to develop work plans. Ensured work priorities were followed and equipment outages were planned and scheduled.
- Monitor and make changes to equipment database to ensure data consistency and integrity.

Mechanical Maintenance, Deer Island January 1986 to January 1995

- Performed mechanical repairs, overhauls and rebuilds of equipment, components, valves or diesel engines.
- Performed preventive maintenance tasks including changing oil, lubricating equipment, and replacement of worn parts.
- Operate and maintain a large inventory of specialized tools required for daily maintenance.

EDUCATION

- 1995: Emmanuel College, Bachelor of Science Business Management
- 1997: Maximo Administrator
- 2000: Certified Reliability Centered Maintenance Facilitator
- 2011: Certified Vibration Analyst Level 1

EDWARD J. REGAN

LICENSES AND MEMBERSHIPS

- 1997: Member of Maximo User Group
- 2006: Member of New England Water Environment Association (NEWEA)
- 2006: Member of Water Environment Federation (WEF)
- 2008: Member of Water Environment Research Foundation (WERF)
- 2014: Grade 7 Combined Wastewater Operating License

PAPERS AND REPORTS

- 2002 "*RCM Pilot Results at the Deer Island Treatment Plant*", presented at the Society of Maintenance and Reliability Professionals conference and the New England Water Environment Association conference, Key contributor.
- 2002 "*A CMMS - One Tool in the Asset Management Toolbox*", presented at Water Environment Federation conference, Key contributor
- 2002 "*Outside Resources Contribute to Culture Change*", published in Maintenance Technology Magazine, Author.
- 2003 "*Pioneering Asset Management in the Water Quality Industry - MWRA's Model for Change*", presented at Water Environment Federation conference, Key contributor.
- 2003 "*MWRA Leverages MAXIMO to Manage \$7 Billion Worth of Production, Facility and Fleet Assets*" selected to be used as a case study on MRO software web site, Key contributor
- 2004 "*Driving Changes In Maintenance - Maintenance Metrics*", selected to be presented at the New England Water Environment Federation, Key contributor.
- 2004 "*Tools, Techniques and Approaches to Asset Replacement*", selected to be presented at the New England Water Environment Federation, Key contributor.
- 2009 "*Remaining Asset Life*", Water Environment Research Foundation, Strategic Asset Management Project, final report, Key contributor.
- 2011 "*Asset Management Tools Development Research Digest*", Water Environment Research Foundation, Strategic Asset Management Project, final report, Key contributor.
- 2014 "*Leading Practices and Key Performance indicators for Asset Management*" Water Environment Research Foundation, Strategic Asset Management Project, final report, Key contributor.

**MWRA
POSITION DESCRIPTION**

POSITION: Deputy Director, Maintenance

PCR#: 2915013

DIVISION: Operations

DEPARTMENT: Deer Island Directors Office

BASIC PURPOSE:

Directs and manages the efficient, cost-effective maintenance programs that service the Deer Island Wastewater Treatment Facility. Manages and provides the maintenance employees with necessary resources and support while contributing to the mission of the Authority.

SUPERVISION RECEIVED:

Works under the direct supervision of the Director of Deer Island.

SUPERVISION EXERCISED:

- Manages all aspects of the Maintenance program for Deer Island relative to preventive, corrective and emergency maintenance activities with special emphasis on predictive maintenance, equipment availability goals, including the development of staffing requirements and oversight of staff performance.
- Coordinates with the Operations group to assure that maintenance work is properly prioritized. Works with all Deer Island Department Managers to ensure the success of the plant mission.
- Directs the continual upgrading and improvement of the computerized maintenance management program and maintenance service contracts.
- Directs and continuously improves upon the Reliability Centered Maintenance (RCM) program. Develops long range maintenance strategies for capital expenses and special projects.
- Directs the maintenance department safety program, maximizes employee involvement, supports the plant-wide safety program and makes safety inspections.

- Directs and implements all work rules to assure consistency and uniformity in accordance with established Authority policies and procedures.
- Responsible for ensuring all equipment, facilities, and staff are prepared/functional so as to meet all regulatory requirements. Including but not limited to the NPDES, Air and Hazardous Material Handling Permits issued by EPA, DEP, Coast Guard or other Regulatory agencies.
- Directs Safety, Security, and/or Emergency situations that require investigation and/or Senior Management attention including all drills, inspection and/or introduction of new processes.
- Develops Current and Capital expense budgeting requirements including Material, Contract Services, Training, Staffing and Rehabilitation/Replacement Contracts.
- Reviews and approves staff recommendations regarding modifications to plant and facilities.
- Works with Division and Authority-wide managers to, obtain and provide service as required.
- Provides opportunities for technical, supervisory and managerial training and education for all maintenance employees.
- Reviews and approves reports and budgets prepared by staff.
- Oversees successful administration of collective bargaining 'agreement provisions and serves as Step I Grievance Hearing Officer. Hears disciplinary actions.
- Reviews employee performance according to Authority procedures.

SECONDARY DUTIES:

- Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- A. A four (4) year college program in business, plant management, environmental, chemical, and civil or mechanical engineering or a related field.

- B. Ten (10) to twelve (12) years of wastewater/water treatment maintenance experience, of which five to seven (5-7) years must be in the management of a large maintenance work force with multiple supervisory levels.
- C. Proven knowledge of maintenance strategies including but not limited to Reliability Centered Maintenance, Condition Monitoring (Oil, Vibration and Acoustic Ultra Sonic Analysis and Laser Alignment). Total Productive Maintenance and/or Original Equipment Manufacturer processes.

Necessary Knowledge, Skills and Abilities:

- (A) Excellent working knowledge of the systems and equipment associated with a large wastewater treatment facility.
- (B) Working knowledge of maintenance management systems and procedures and computerized maintenance management and inventory control systems.
- (C) Familiarity with personal computers and associated software programs desirable.
- (D) Experience in union environment required.

SPECIAL REQUIREMENTS:

- (A) A Grade 7 Massachusetts Department of Environmental Protection Wastewater Treatment Plant Operator's license or ability to obtain within one year.
- (B) A valid Massachusetts Class D motor vehicle Operator's license.
- (C) Professional Engineer's license preferred.

TOOLS AND EQUIPMENT USED:

Office machines 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 the job. Reasonable accommodation may be made to enable individuals with disabilities to perform the essential functions.

While performing the essential functions 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 regularly is required to stand or talk or hear. The employee is occasionally required to walk, sit, climb or balance, stoop, kneel, crouch, or crawl. The employee must frequently lift and/or move up to 10 pounds, occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, depth perception, and the ability to adjust focus.

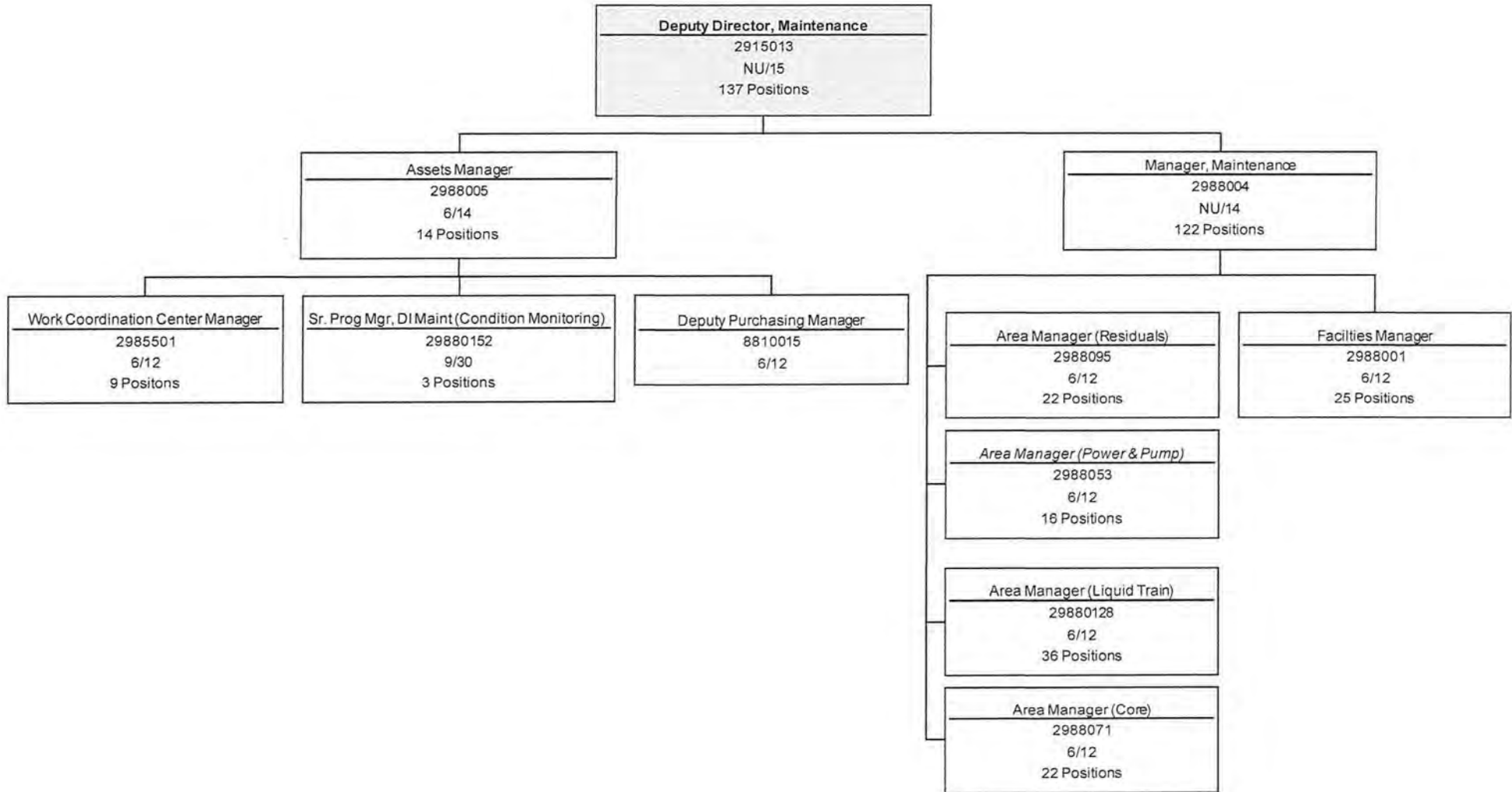
WORK ENVIRONMENT:

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

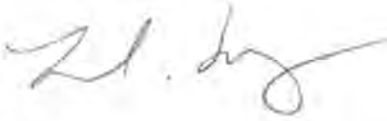
While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee works near moving mechanical parts is occasionally exposed to wet and/or humid conditions. The employee is occasionally exposed to fumes and airborne particles, toxic or caustic chemicals, and risk of electric shock.

The noise level in the work environment is moderately quiet.

Operations - Wastewater Treatment
Deer Island - Maintenance
December 2014



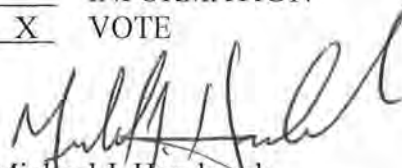
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: December 17, 2014
SUBJECT: Appointment of Senior Program Manager,
Engineering Services Department, Deer Island

COMMITTEE: Personnel & Compensation

 INFORMATION
 X VOTE

Robert G. Donnelly, Director, Human Resources
John P. Vetere, Deputy Chief Operating Officer
David F. Duest, Director, Deer Island WWTP
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the appointment of Mr. Phillip D. Szotfried to the position of Senior Program Manager in the Engineering Services Department, Deer Island (Unit 9, Grade 30), at the recommended salary of \$114,229.01, to be effective December 20, 2014.

DISCUSSION:

The position of Senior Program Manager became vacant upon the recent retirement of the previous incumbent. This position manages all aspects of various construction and design projects on Deer Island. The Senior Program Manager takes the lead role in all communication relative to the development of in-house designs, dealing with consultants and contractors, in negotiating change order costs, and determining the reasons and necessity for the changes, and in general, ensures that MWRA's best interests are served during the design and construction of a project. The Senior Program Manager also performs constructability reviews of construction plans and specifications prior to bid. Additional responsibilities include, but are not limited to, supervision of field engineers and assignment of projects, evaluation of performance and staff development, and provision of technical and administrative assistance as required to staff assigned to design and construction projects.

Organizationally, the Senior Program Manager reports to the Manager, Engineering Services (see attached Organization Chart).

Selection Process

This position was posted internally and externally. A total of four candidates applied, all internal. It was determined that all four internal candidates met the minimum qualifications for

the position and senior staff from the Engineering Services and a representative from MWRA's Affirmative Action & Compliance Unit interviewed all four candidates. Upon completion of the interviews, Mr. Phillip D. Szottfried was selected as the most qualified candidate based on his combination of education, experience, ability, and knowledge.

Mr. Szottfried came to MWRA in 2011 and was appointed to the position of Program Manager, Instrumentation & Control at Deer Island. He has more than 27 years of experience in the operation, design and construction of water and wastewater systems and power plants. In his current position as Program Manager, Mr. Szottfried assists the Manager of Engineering Services in overseeing and coordinating a number of design and construction projects with other departments on Deer Island, including Process Control and the Operations groups, during facility upgrades and modifications.

Before coming to MWRA, Mr. Szottfried held various positions at a number of different engineering firms, including Metcalf and Eddy, and gained extensive experience in the design and construction oversight of a number of large wastewater treatment plants in North America and in the Middle East. He was charged with working closely with designers and contractors in all phases of engineering maintenance services and equipment repair contracts from inception to award. He was also involved in the design of control systems for a number of power generation stations.

In his time at MWRA, Mr. Szottfried has successfully demonstrated the ability to manage multiple projects. He has good leadership skills and has earned the respect of his supervisors and colleagues.

Mr. Szottfried holds a Bachelor of Science Degree in Electrical Engineering from Northeastern University. He has a Engineer-In-Training Certificate and is working toward his Professional Engineering License.

BUDGET/FISCAL IMPACT:

There are sufficient funds for this position in the Operations Division's FY15 Current Expense Budget. The recommended salary is in accordance with guidelines established in Unit 9's current collective bargaining agreement.

ATTACHMENTS:

- Resume of Phillip Szottfried
- Position Description
- Organizational Chart

Phillip D. Szottfried

Overview As an Instrument and Control Systems Engineer with a broad range of application experience I have been involved in project and construction management, engineering, operation and design, and start-up of central station (fossil) power plants, combined cycle and simple cycle power plants, water/ wastewater, pharmaceutical, environmental, and industrial projects.

Education BS, Electrical Engineering, Northeastern University, Boston MA

Registration EIT, Massachusetts

Professional Experience **MWRA, Boston, MA** **February 2011-Present**
Program Manager- Instrumentation and Controls

- Responsible for control related projects for improvement/replacements for Deer Island Wastewater Treatment Plant and satellite pumping stations. Evaluate and specify instrumentation and oversee staff and sub-contractors.
- Responsible for maintaining and modernizing control systems consisting of over 200 PLC's throughout the plant. Specify purchase and start-up instrumentation related equipment throughout the plant.
- In charge of construction and maintenance contracts for plant maintenance and upgrades. Contracts range from \$500,000 to \$4,000,000.

Waldron Engineering, Exeter, NH **September 2011-February 2011**

- Temporary Instrumentation and Controls engineer assignment providing design, specification and start-up services. Projects included industrial boilers and a combustion turbine and a steam metering project.

CSID (Control Systems Implementation and Design), LLC, Marblehead, MA **June 2009-September 2010**

- Public Service Enterprise Group (PSEG), Bridgeport, CT- Responsible for the engineering documentation, trouble-shooting and control system modifications at the 400 MW Bridgeport Harbor Station. Perform DCS graphic and control modifications, wiring diagrams updates, field modifications, and loop drawing updates. Plant utilizes an ABB DCS with Harmony, Process Portal A and S800 modules.
- Tucson Electric Power Company, Springerville Arizona - Responsible for the engineering documentation, installation and startup for the

controls of a new drag chain conveyor as part of the bottom ash upgrade.

EPPIC Systems, LLC, Salem, NH

June 2002-May 2009

- Public Service Enterprise Group (PSEG), Bridgeport, CT- Responsible for the engineering documentation, installation and startup for a new mercury reduction system for the 400 MW unit 3. Responsible for the development of logic diagrams, DCS graphics, wiring diagrams, and loop drawings. Performed commissioning and start-up of carbon injection, baghouse and ash storage/removal systems, new booster fans, modifications to plant's existing combustion controls. Also responsible for DCS programming and graphics modifications and connection of new processors into existing plant DCS. Project utilized an ABB DCS with Harmony, Process Portal A and S800 modules.

Remained on site after project completion to work on plant DCS for graphics and DCS logic. Also responsible for field troubleshooting and working with operators for improving controls and graphical interfaces.

- Tucson Electric Power Company, Sundt Generating Station, Tucson Arizona - Responsible for the engineering documentation, installation and startup of the controls modernization program for the 165MW Sundt Generating Station Unit 4. Project consisted of replacing a Bailey Network 90 Boiler Control system, a Forney Burner Management System, Beta Annunciator/SOE, AAF Baghouse, and Modicon PLC's for various Balance of Plant systems including Ash and Coal Handling. Systems. Project utilized an Emerson Ovation DCS and upgraded Modicon Concept PLC's.
- Tucson Electric Power Company, Springerville Arizona - Responsible for the engineering documentation, installation and startup of the controls modernization program for the 2x380MW Springerville Generating Station Units 1&2. Project consisted of replacing all early 1980's vintage electronic analog controls with a plant wide DCS. Project included replacing all control systems including CCS, FSSS, DAS, ILS, turbine controls, ash handling, scrubber and baghouse, and coal handling systems. Project utilized a Foxboro IA DCS.
- AES MATEP Cogeneration project –consisting of 2 Alstom 12 MW gas turbines with 50,000 #/hr HRSG's. Responsible for engineering and design of the cogeneration plant remote control and monitoring system. The system consists of several PLC's integrated on a common Data Network connected to two HMI/Workstations located in the central control room. The system allows starting and monitoring of the two CTG's, two HRSG's with duct burners, fuel gas compressors, emission reduction system, and balance of plant equipment.

Vanderweil Engineers, Boston, MA

Sept. 2001-May 2002

- GEMMA Power Systems – Designed instrumentation systems for five 50MW peaking power plants in San Diego and Palm Springs California. Specified all process analytical and process control equipment, and wrote programmable logic controller specifications for

construction bidding documents. Performed start-up commissioning for the two sites using GE PLC's.

- Tucson Electric Power Company, Springerville Arizona - Responsible for the engineering documentation, installation and startup of the controls modernization program for the 2x380MW Springerville Generating Station Units 1&2. Project consisted of replacing bottom ash control systems. Project utilized a Foxboro IA DCS.

Parsons, Canton, MA

May 1998-Aug. 2001

- Merck Pharmaceuticals – Responsible for the instrument design supervision for three thermal oxidizers for Merck at various sites. Supervised engineers and designers from conceptual design to final design.
- Tucson Electric Power Company, Springerville Arizona - Responsible for the engineering documentation, installation and startup of the controls modernization program for the 2x380MW Springerville Generating Station Units 1&2. Project consisted of replacing baghouse and fly ash control systems. Project utilized a Foxboro IA DCS.

Metcalf & Eddy, Wakefield, MA

April 1996-May 1998

- Ministry Of Electricity and Water – Kuwait – Senior Site Control systems Engineer in charge of overseeing the installation of process monitoring equipment and a Johnson Controls DCS for a 60 MGD wastewater treatment plant in Kuwait. Duration of assignment was two years.

Parsons, Canton, MA

May 1995-April 1996

- Brooklyn Navy Yard Cogeneration Project, Brooklyn NY – Responsible for the development of logic diagrams, DCS graphics, wiring diagrams. Performed commissioning and start-up Responsible for the configuration, installation, and start-up of field instrumentation and a Bailey DCS for a 286 MW cogeneration plant.

Metcalf & Eddy, Wakefield, MA

June 1987-May 1995

- Various Water/Waster Treatment Plants throughout the USA- Designed instrumentation systems for numerous water and wastewater systems, hazardous waste cleanup sites, specified all process analytical and process control equipment. Developed loop diagrams for piping and instrumentation drawings and specified process control equipment and wrote DCS and PLC specifications for construction bid documents. Provided technical support to contractors and clients and acted as liaison with vendors. Performed Startup activities including installation supervision, loop checkout, troubleshooting, and controls coordination.

**MWRA
POSITION DESCRIPTION**

POSITION: Senior Program Manager (DI)

PCR#:

DIVISION: Operations

DEPARTMENT: Engineering Services

BASIC PURPOSE:

Manages all projects assigned for the Engineering Services Department from conceptual design through the construction phase.

SUPERVISION RECEIVED:

Works under the general supervision of the Manager, Engineering Services.

SUPERVISION EXERCISED:

Exercises close supervision of Program Managers, Senior Staff, and Staff Engineers, and Design Engineers.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Develops and manages plant engineering projects that support the operations staff for engineering resolution. Recommends solutions to the problems, which arise during normal plant operations.
- Provides plant engineering support to the maintenance staff with complex work orders and contract maintenance projects, and provides appropriate design services. Provides support services for the economical operation of plant wide compressed air, water, HVAC, and electrical systems.
- Supervises design, engineering, drafting, and finalization of in-house projects involving repair/replace/modification activities, renovation and layout changes for offices, laboratories, shops and warehouses.
- Oversees project management of concept designs, detailed designs and the preparation of plans and specifications for proposed plant engineering modifications. Identifies, prioritizes, and establishes milestones for the completion of projects within the department.
- Manages blanket maintenance/construction contracts.

- Oversees the preparation of plans and specifications for vendor contracts for proposed plant engineering modifications.
- Oversees reviews of, and modifications to all operations and maintenance documentation. Ensures that all operations and maintenance documentation conforms to MWRA standards.
- Oversees and manages construction projects generated by the Engineering Services department, and outside consultants. Performs project management on construction projects.
- Oversees and directs consulting engineering services and contracts during construction including all work for quality of work, budgets, schedule, and compliance with contractual terms and MWRA objectives and policies.
- Oversees the updating of engineering drawings and records and the subsequent forwarding (in accordance with established procedures) to the Technical Services Center.
- Provides oral and written reports to the Manager, Engineering Services detailing results of problem investigations, proposed resolution, and economic justification for the proposed changes.
- Evaluates assigned employees performance according to MWRA procedures.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A Bachelor's degree in mechanical, electrical or controls engineering; and
- (B) Understanding of facilities design and plant engineering, and construction project management techniques to include the preparation of plans, specifications, and biddable project documents as normally acquired through eight (8) to ten (10) years of related experience, of which three (3) years at least must be in a supervisory or managerial capacity; and
- (C) Experience in wastewater treatment operations, utilities and large facility start-up procedures desirable; and
- (D) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Ability to plan, organize, direct, train and assign duties to subordinates as obtained through the successful completion of an MWRA supervisory training program or an approved substitute.
- (B) Extensive experience in the development and oversight of MGL chapter 30 and 149 contracts.
- (C) Personal computer skills including spreadsheet, database, word processing, project management and Auto CADD desired.
- (D) Demonstrated verbal and written communication skills.

SPECIAL REQUIREMENTS:

Massachusetts Registered Professional Engineer preferred.

TOOLS AND EQUIPMENT USED:

Office equipment 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 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 stand, walk, climb or balance, stoop, kneel, crouch, or crawl, taste or smell.

The employee must frequently lift and/or move up to 10 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception, peripheral vision and the ability to adjust focus.

WORK ENVIRONMENT:

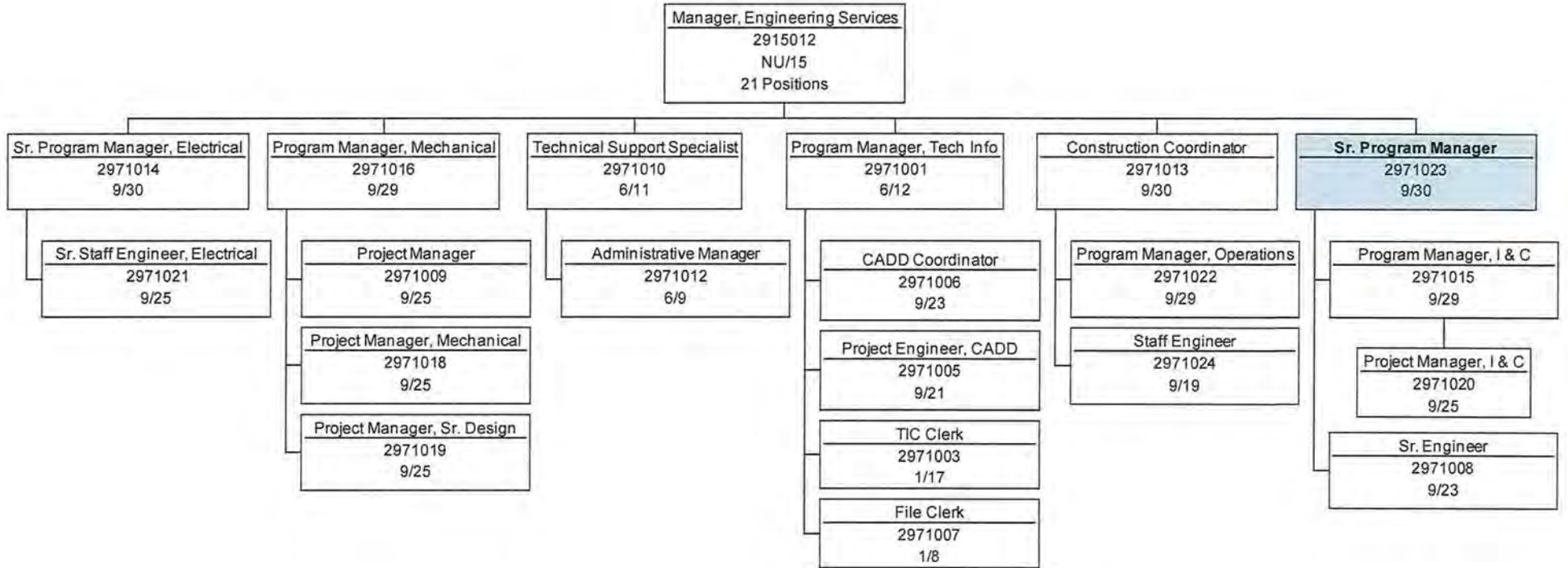
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee occasionally works in outside weather

conditions. The employee occasionally works near moving mechanical parts, and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in high precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals and risk of electrical shock.

The noise level in the work environment is usually loud in field settings and moderately quiet in other work facilities.

Operations-Wastewater Treatment
Deer Island - Capital Engineering
 December 2014



STAFF SUMMARY

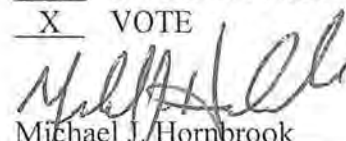
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 17, 2014
SUBJECT: Appointment of Construction Coordinator,
Engineering & Construction Department



COMMITTEE: Personnel & Compensation

Robert G. Donnelly, Director, Human Resources
John P. Vetere, Deputy Chief Operating Officer
Corinne M. Barrett, Director of Construction
Preparer/Title

 INFORMATION
 X VOTE


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the appointment of Ms. Lisa Bina to the position of Construction Coordinator in the Engineering & Construction Department (Unit 9, Grade 30) at the recommended salary of \$100,953.99 to be effective on December 20, 2014.

DISCUSSION:

Due to a number of retirements and promotions, there have been several recent appointments of Construction Coordinators. This is final recommended appointment of currently vacant Construction Coordinator positions.

The position of Construction Coordinator is MWRA's key point person on every construction project, and is responsible for managing all aspects of the project. Construction Coordinators take the lead role in: all communication with contractors and design engineers; negotiating change order costs and determining the necessity and reasons for the changes; and, in general, ensuring that MWRA's best interests are served during the construction of any project. Depending on the size of the project, a Construction Coordinator may be assigned to a single project or multiple projects that could include new buildings/facilities or the rehabilitation and improvement of existing MWRA water and wastewater facilities and pipelines. Construction Coordinators also perform constructability reviews of contract plans and specifications prior to bidding. Additional responsibilities include, but are not limited to, supervision of field engineers and inspectors, assignment of projects, performance evaluations and staff development, and provision of technical and administrative assistance to staff assigned to the construction projects as required.

Organizationally, the Construction Coordinator position reports to the Assistant Director, Construction, in the Construction Unit and can supervise up to five field staff (see attached organization chart).

Selection Process

This position was posted internally. A total of four candidates applied and after a review of the applications, it was determined that all four candidates met the minimum qualifications for the position. Senior staff from Engineering & Construction and a representative from MWRA's Affirmative Action and Compliance Unit interviewed all four candidates and determined that Ms. Lisa Bina was the most qualified candidate to fill the position based upon her combination of experience, abilities, knowledge, and education.

Ms. Bina began her career with MWRA in 1999 as a Project Engineer and has more than 15 years of experience in the operation, design, and construction of MWRA water and wastewater systems. Her first primary area of responsibility as Project Engineer focused on Combined Sewer Overflow projects. Ms. Bina assisted in the management and supervision of consultant designs on various projects.

Since that time, Ms. Bina was promoted to Project Manager in Operations Engineering, where she coordinates between Operations staff and Construction staff on important issues relating to construction of the Spot Pond Coverage Storage Facility and the Gillis Pump Station Improvement projects. Additional responsibilities include managing the Metropolitan Operations Paving Construction Contract, developing Operations Plans for water system isolation and system reconfigurations, and providing on-call management and emergency response coverage for wet-weather storm events. She has worked closely with contractors in all phases of engineering maintenance services and equipment repair contracts from specification development, to award, to contract close-out. Ms. Bina has successfully demonstrated the ability to manage multiple projects, has good leadership skills, and has earned the respect of her supervisors and colleagues.

Ms. Bina earned a Bachelor of Science Degree in Civil and Environmental Engineering from Clarkson University. She is a Registered Professional Engineer in Massachusetts, and she holds a Water Distribution System Grade 4D Full License.

BUDGET/FISCAL IMPACT:

There are sufficient funds for this position in the Operations Division's FY15 Current Expense Budget. The recommended salary is in accordance with promotional guidelines established in Unit 9's current collective bargaining agreement.

ATTACHMENTS:

Resume of Lisa Bina
Position Description
Organizational Chart

PROFESSIONAL EXPERIENCE

Massachusetts Water Resources Authority

10/1999 - Present

Operations Engineering, Project Manager

- Acting as the coordinator on behalf of Field Operations during the construction of the Spot Pond Coverage Storage Facility and Gillis Pump Station Improvement Projects. Responsibilities include design and construction submittal review, SCADA coordination, O&M manual review, start-up activities, and developing all necessary pipeline reconfigurations and shutdowns to assist with construction activities.
- Currently managing the Metropolitan Operations Paving Construction Contract. Responsibilities include the review of invoices, scheduling of work, and the development of change orders.
- Developing Operations Plans for water system isolation and system reconfigurations which have included the use of mobile pumping units to supplement supply. Responsibilities include the development of the operation plan, conducting the necessary hydraulic modeling, scheduling and coordinating the work, and monitoring system conditions at the OCC during the operation.

Planning Department, Project Manager

- Provided all in-house hydraulic modeling services for the design and construction of major water system distribution projects. Projects have included NIH and SEH system redundancy, Gillis Short Term Improvements, Blue Hills and Spot Pond Covered Storage tanks, and the concept design of the Metropolitan System Redundancy Study.
- Provided as needed assistance to operational staff by utilizing the hydraulic model to determine service impacts for planned and emergency shutdowns.
- Provided on-going technical assistance on hydraulic related issues for planning and engineering staff such as system expansion, alternative energy, and water quality monitoring and meter design.
- Responsible for managing the Authority's water distribution hydraulic model that entailed maintaining master files, updating model network and system demands, and updating modeling software, as needed.

CSO Department, Project Engineer

- Assisted in the management of the consultant's design of the North Dorchester CSO Project and the Cottage Farm Upgrade Project which included the review of plans and specifications, project scheduling and permitting issues.
- Assisted in the supervision of the consultant's progress on projects involving MWRA's SWMM model. Responsibilities include overseeing budgets, and reviewing quality and progress of work.

Coler & Colantonio Inc., Project Engineer

8/1997 to 10/1999

- Project Engineer for the development and design of a new groundwater pumping station that included corrosion control equipment for pH adjustment using hydrated lime. Project included the design of the expansion of the existing distribution to the new supply. Assisted in construction activities with the review of construction submittals and periodic site inspections.
- Project/Field Engineer for the design and construction of gravity sewer ranging in size from 8 to 15 in. Construction responsibilities included full time inspection of construction materials and procedures, reviewing pay estimates and being the prime liaison between the Town and Contractor.
- Managed the development of several hydraulic models for clients which included the calibration and development along with the ability to utilize model to develop master plans.

Earth Tech/Whitman & Howard Inc., Project Engineer

10/1994 – 8/1997

- Project/Field Engineer for the design and construction phases of various water system expansion and rehabilitation projects. The projects included the installation of water mains ranging in size from 8 to 20 in. Field responsibilities, when applicable, included full time inspection of construction materials and procedures, reviewing invoices and acted as prime liaison between Town and Contractor.
- Project Engineer/Staff Engineer for several water distribution studies that included the development, calibration and analyses of water system utilizing various commercial water software programs.

US Peace Corps - Bangkok, Thailand

- Worked for the Ministry of Public Health in the implementation of the design and construction of wastewater collection and treatment systems in local hospitals throughout the country.

EDUCATION

Clarkson University, BS Civil and Environmental Engineering, 1992

LICENSES

Registered Professional Engineer, Civil, Massachusetts #40698
Massachusetts Water Distribution System Grade 4D Full #24014

**MWRA
POSITION DESCRIPTION**

POSITION: Construction Coordinator
PCR#: 5525090
DIVISION: Operations
DEPARTMENT: Engineering and Construction

BASIC PURPOSE:

Supervises office and field engineers to oversee and manage construction contracts and professional engineering contracts in the construction, rehabilitation, improvements, and start-up of Waterworks and Wastewater facilities and infrastructure.

SUPERVISION RECEIVED:

Works under the general supervision of the Assistant Director, Construction.

SUPERVISION EXERCISED:

Exercises close supervision of office and field employees including professional and technical staff, resident engineers, and inspectors.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Oversees and manages a program of construction projects, including the rehabilitation and improvement of waterworks and wastewater facilities and pipelines.
- Supervises and manages office and field engineers, including assignment of projects, evaluation of performance, and staff development planning. Provides technical and administrative assistance to staff during the construction, startup, and warranty of projects.
- Oversees and directs consultant engineering services and contracts during construction, including all work for quality of work, budget, schedule, and compliance with contractual terms and MWRA objectives and policies. Negotiates and reviews construction services in consultant contracts.
- Acts as liaison with engineering, operations, and maintenance staff to ensure the smooth construction and start-up of new or rehabilitated facilities.

- Ensures contractor compliance with construction documents, MWRA procedures and policies, regulatory requirements, and applicable engineering standards.
- Supervises the development and maintenance of construction tracking and reporting procedures. Prepares and updates construction budget and schedule projections.
- Performs constructability reviews of construction plans and specifications.
- Reviews, negotiates and processes change orders and claims in accordance with MWRA policies and procedures.
- Reviews and processes pay estimates and final payment and construction closeout documents in a timely manner. Oversees preparation and submittal of accurate record drawings upon construction completion.
- Oversees office and field project files, ensuring that all project documentation is complete, up-to-date, and in accordance with MWRA policies and procedures.
- Prepares reports for the Executive Director and Board for construction contract and engineering agreement changes, and project status.

SECONDARY DUTIES:

- Participates in preparing for collective bargaining and hears Step-One grievances.
- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Completion of a four (4) year college program in civil engineering or a related field; and
- (B) Eight (8) to (10) ten years experience in the construction of water and wastewater facilities and infrastructure, of which four (4) years should be in a supervisory capacity and four (4) years should include a project management experience; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated ability to work effectively as part of a project team and also to function independently with minimal supervision.

- (B) Knowledge of Massachusetts laws, including MGL Chapter 30 and Chapter 149 construction regulations.
- (C) Familiarity with computer software, such as Word and Excel.
- (D) Excellent interpersonal, managerial, oral and written communication skills are required.

SPECIAL REQUIREMENTS:

Registration as a Professional Engineer in Massachusetts is preferred.

TOOLS AND EQUIPMENT USED:

Office equipment 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 use hands to finger, handle, feel or operate objects, tools or controls and frequently required to reach with hands and arms. The employee regularly is required to talk or hear. The employee is occasionally required to walk; stand; climb or balance; stoop, kneel, crouch, or crawl; or sit.

The employee must frequently lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and the ability to adjust focus.

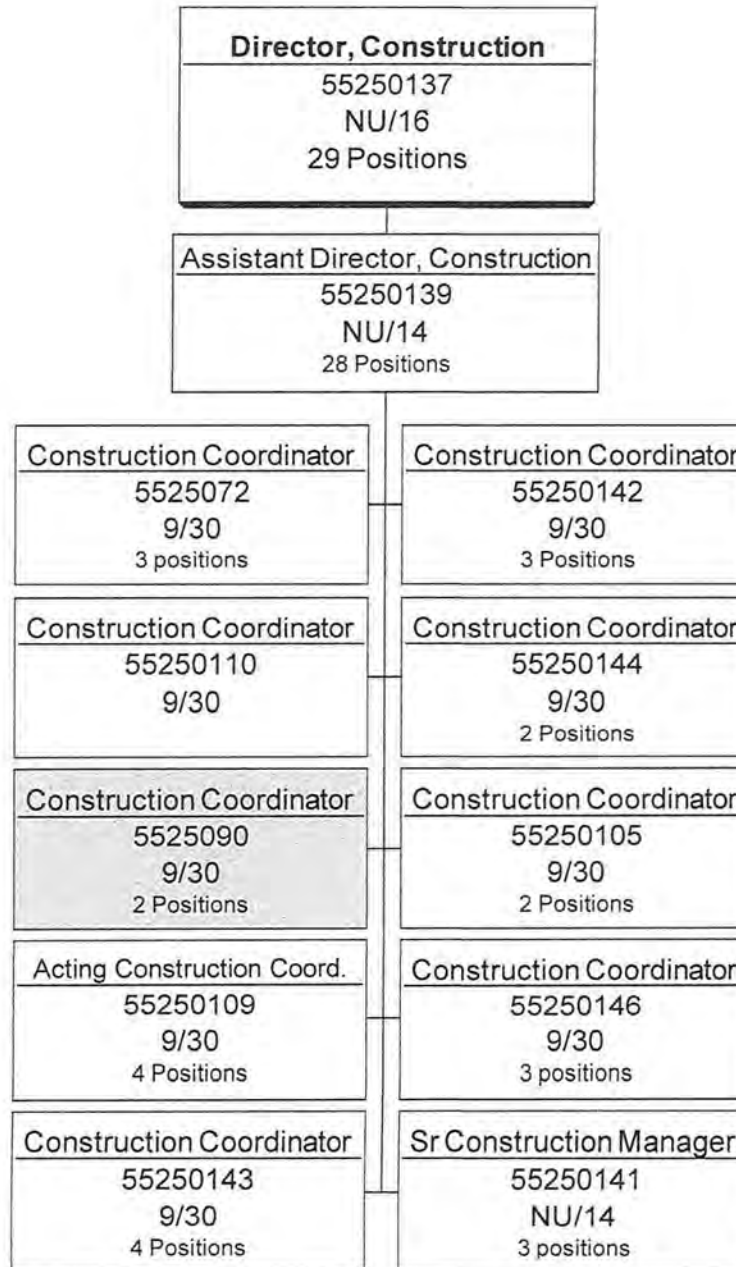
WORK ENVIRONMENT:

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 employees frequently works in outside weather conditions. The employee occasionally works near moving mechanical parts, and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in high precarious places and is occasionally exposed to fumes or airborne particles, extreme heat or extreme cold, and the risk of electrical shock.


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

Engineering & Construction
Construction
 December 2014



Note: A PCR Amendment to convert Construction Coordinator #55250110 to a Sr Program Manager for DI is also part of the Dec 2014 Board package.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
Date: December 17, 2014
SUBJECT: Appointment of Program Manager,
Wastewater Operations

COMMITTEE: Personnel & Compensation

INFORMATION
 VOTE

Robert G. Donnelly, Director, Human Resources
John P. Vetere, Deputy Chief Operating Officer
Stephen Cullen, Director, Wastewater Operations & Maint.
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the appointment of Mr. James MacPherson to the position of Program Manager, Wastewater Operations (Unit 9, Grade 29), at the recommended salary of \$96,883.71, to be effective on December 20, 2014.

DISCUSSION:

The position of became vacant upon the recent promotion of the previous incumbent. The Program Manager, Wastewater Operations assists with the management of all aspects of wastewater operations in the Chelsea Wastewater Operations Control Center, wastewater pumping stations, combined sewer overflow (CSO) facilities, and headworks facilities.

Organizationally, the Project Manager reports to the Manager of Operations, Wastewater Operations & Maintenance Department (see attached Organization Chart).

Selection Process

This position was posted internally. A total of nine candidates applied and it was determined that four candidates met the minimum qualifications for the position. Senior staff from Wastewater Operations and a representative of the Affirmative Action & Compliance Unit interviewed all four candidates. Upon completion of the interviews, it was determined that Mr. James MacPherson was the most qualified candidate for the position based on his combination of wastewater operations experience, relevant supervisory experience, ability, and knowledge.

Mr. MacPherson is recommended for this position because of his extensive wastewater operations and supervisory experience, and his knowledge of the operation of MWRA's wastewater facilities, especially during significant wet-weather events.

Mr. MacPherson began his career with the former Metropolitan District Commission 33 years ago and has continued to work MWRA since its creation. He has extensive experience with the operation of MWRA's wastewater pump stations, headworks facilities (including the Nut Island Headworks) and combined sewer overflow (CSO) facilities. Early in his career, Mr. MacPherson worked at the Nut Island Treatment Plant and the Braintree-Weymouth Pump Station. For the past 16 years, Mr. MacPherson has held the position of Operations Supervisor in Wastewater Operations. During that time, he has been responsible for supervising the day-to-day operations of the Wastewater Operations Control Center (OCC), and has been typically one of the front-line responders troubleshooting problems and taking appropriate measures to ensure continuous operation of all wastewater equipment and systems. He supervises as many as 25 employees during wet-weather response events and is responsible for ensuring proper staffing levels, wet-weather response training, and controlling flows at wastewater facilities.

Mr. MacPherson has a thorough understanding of MWRA's SCADA system and MWRA's automated work order system, Maximo. He has successfully demonstrated the ability to manage multiple projects, has good leadership skills, and has earned the respect of his supervisors, employees and colleagues.

Mr. MacPherson holds a Grade IV Wastewater Treatment License and a Grade IV Collections Certification.

BUDGET/FISCAL IMPACT:

There are sufficient funds for this position in the Operations Division's FY15 Current Expense Budget. The recommended salary is in accordance with guidelines established in Unit 9's current collective bargaining agreement.

ATTACHMENTS:

- Resume of James MacPherson
- Position Description
- Organizational Chart

James MacPherson

Experience:

1998-present MWRA, Chelsea, Ma

Operations Supervisor

In this position I am responsible to supervise day to day operations of the wastewater operation control center. I analyze problems and take appropriate action to ensure continuous and reliable operation of equipment and systems.

Specific duties include:

- *Extensive experience operating and supervising the operation of the Wastewater OCC, combined sewer overflow (CSO) facilities, pumping stations and head works facilities.

- *Extensive experience supervising wastewater staff and operating wastewater facilities during the wet weather events, including but not limited to, monitoring radar/weather forecasts, coordinating standby, ensuring proper staffing levels, wet weather training, controlling flows at the head works and process control at the CSO facilities.

- *Thorough understanding of SCADA in the Wastewater OCC and all of the Wastewater facilities including developing and testing set points for process control and wet well pumping parameters.

- *Assisted in the development of Standard Operating Procedures (SOPs) for the CSO facilities and pumping stations, including developing a checklist for placing the Chelsea Screen house and the Caruso PS on the loop and inspecting the underground vaults associated with the South Boston storage tunnel.

- *Experience working with Engineering and Construction staff in a cooperative manner by providing an operational perspective during the design review process and ensuring construction activities are accomplished without impacting operations.

- *Thorough understanding of Maximo including, overseeing the completion of monthly maintenance PMs, opening work orders, and tracking maintenance activities.

- *Thorough understanding of the Tiscor scanners including developing and modifying routes and reviewing scanners activities to ensure staff are properly scanning all facilities as intended.

- *Attends and contributes to weekly maintenance coordination meetings.

- *Uses PI Processbook to collect data on diesel engines for excel spreadsheet.

- *Perform SPCC inspections on CSO's and pump stations monthly.

1992-1998 MWRA, Nut Island Treatment Plant
Senior Sewage Treatment Plant Operator

- *Responsible for day to day operation of the Nut Island Treatment Plant.
- *collaborate with contractors and vendors to ensure proper transfer from the old treatment plant to new head works

1986-1992 MWRA, Braintree/Weymouth Pump Station
Assistant Chief Operator

- *Supervise diesel operations to ensure proper running of the plant.
- *Preventative maintenance and troubleshooting of pumps and screens.
- *Take daily readings and maintain logs of all flow.

1984-1986 Nut Island Treatment Plant
Sewage Treatment Plant Operator

- *Operation of anaerobic digester, detention tanks and grit room.
- *Worked all phases of plant including chlorine readings and monitor digesters.

1981-1984 Nut Island Treatment Plant
Diesel Power Plant Operator

- *Operate and maintain diesel engines and other mechanical equipment to ensure proper operation of entire plant.

Professional Certifications:

Grade IV Wastewater Treatment License # 5728

Grade IV Collections License # 2512

**MWRA
POSITION DESCRIPTION**

POSITION: Program Manager, Wastewater Operations

PCR#: 24700142

DIVISION: Field Operations

DEPARTMENT: Wastewater Operations

BASIC PURPOSE:

Assists the Manager of Operations in managing the operation of the Authority's Wastewater OCC, wastewater pumping stations, headworks and CSO facilities. Manages wet weather events, develops Standard Operating Procedures (SOPs), trains staff on SOPs, facility operations, process control procedures and emergency response plans. Coordinates maintenance programs, acts as a construction liaison as well as an Operational advisor.

SUPERVISION RECEIVED

Works under the general supervision of the Manager of Operations

SUPERVISION EXERCISED:

Will exercise close supervision over wastewater operations staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Develops, updates and ensures implementation of Standard Operating Procedures (SOPs) for all wastewater facilities. Develops operational and inspection protocols for operations staff as directed by the Manager of Operations.
- Manages predictive and preventive maintenance initiatives. Works closely with Operations Supervisors, Maintenance Managers and Work Coordination Managers to ensure all work orders are issued, completed and closed in a timely manner. Conducts periodic audits on Operations staff maintenance activities. Attends weekly maintenance coordination meetings. Utilizes Maximo to open and process work orders as required.
- Responsible for coordinating all aspects of communication/Tellog, PLC, system alarms with SCADA, Metering and Engineering groups.

- Responsible for operations involvement on construction projects, attend construction meetings and participates in the construction and start-up of new facilities.
- Performs facility audits, facility inspections, SPCC inspections and staff scheduling issues as directed by the Manager of Operations. Responsible for scanner system and updates of new technology associated with facility automation as needed.
- Manages departmental records relating to the Yellow/Orange Notebooks.
- Utilizes PI Processbook to monitor facility operation and to gather information to produce reports. Gathers data and formulates storm reports for Wastewater Operations.
- Acts as liaison to the safety coordinator and implements recommendations as needed. Responsible for the safe operation of all wastewater system components and ensures all staff are in compliance with all MWRA safety policies and procedures.
- Manages wet weather events for Wastewater Operations.
- Trains staff on proper Operational Techniques and Emergency Response.

SECONDARY DUTIES:

- Performs related duties as required

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) B.S. in Mechanical, Electrical, or Civil Engineering.
- (B) Demonstrated knowledge of wastewater operations and wastewater equipment maintenance and practices as acquired by seven (7) to nine (9) years experience in the field.
- (C) Any combination of education and experience

Necessary Knowledge, Skills, and Abilities:

- (A) Ability to read and interpret plans and drawings.
- (B) Proficient in the use of personal computers and associated Microsoft Office software programs, including Word, Excel, and Access.

(C) Experience with the CMMS software MAXIMO.

(D) Trained in Confined Space Entry and capable of entering, of setting up, installing, disassembling confined space equipment and ability to work in a confined space

SPECIAL REQUIREMENTS:

A valid Grade 5 Wastewater Operator's license, or the ability to obtain within 6 months

A valid Grade 4 Collections System Certification, or the ability to obtain within 6 months

A valid Massachusetts Class D Motor Vehicle Operators License.

TOOLS AND EQUIPMENT USED:

Office equipment as normally associated with the use of telephone and personal computer.

PHYSICAL DEMANDS:

The physical demands 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 use hands fingers, handle, feel or operate objects, including office equipment or controls and reaches with hands and arms. The employee must frequently lift and or move up to 10 pounds, occasionally lift/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, depth perception and the ability to focus.

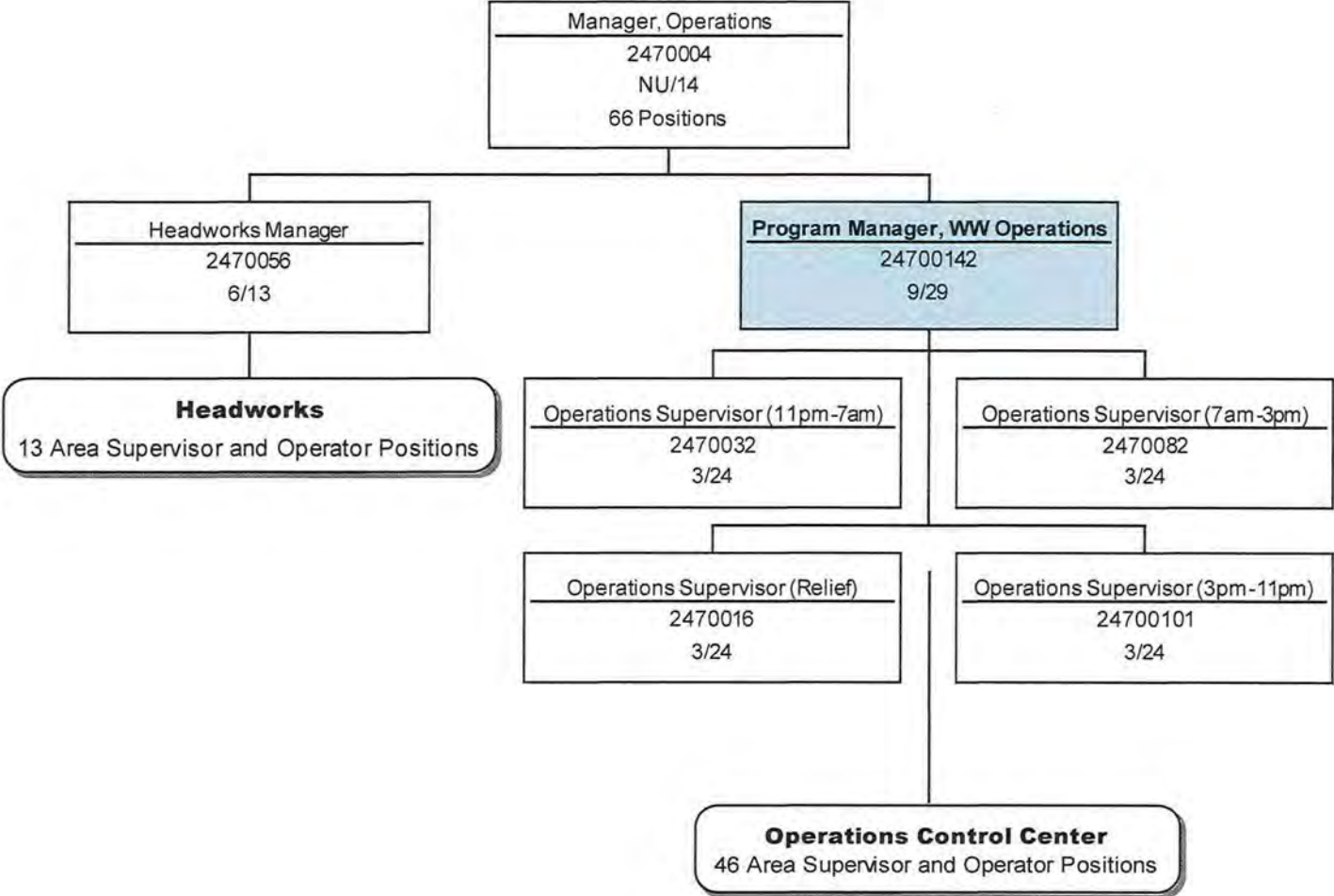
WORK ENVIRONMENT:

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

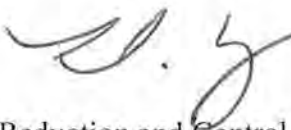
While performing the duties of this job, the employee regularly works in an office environment. The employee will also be exposed to outdoor weather conditions. The employee is occasionally exposed to fumes and airborne particles.

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

Operations - Wastewater O&M
Wastewater Operations
December 2014




STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: December 17, 2014
SUBJECT: Appointment of Regional Manager, Toxic Reduction and Control

COMMITTEE: Personnel & Compensation

 INFORMATION
 X VOTE

Robert G. Donnelly, Director, Human Resources
Carolyn M. Fiore, Deputy Chief Operating Officer
John Riccio, Director, Toxic Reduction and Control
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the appointment of Ms. Lori LaPointe to the position of Regional Manager, Toxic Reduction and Control (Unit 9, Grade 29) at the recommended salary of \$100,808.66, to be effective December 17, 2014.

DISCUSSION:

The position of Regional Manager, Toxic Reduction and Control (TRAC) became vacant in October 2014 when the previous incumbent left to take a position outside of the Authority.

The position of Regional Manager is responsible for the day-to-day management of TRAC's Monitoring Program, including overseeing Sampling staff who perform field sampling duties as required MWRA's EPA-approved Pretreatment Program, and perform other sampling in support of various MWRA programs.

The Regional Manager's duties include: supervising staff and managing all aspects of TRAC's Monitoring Program; ensuring consistency of sampling practices and procedures; developing and maintaining Standard Operating Procedures for sampling; managing all aspects of TRAC's sampling operations work space at the Chelsea Facility, including budget management for sampling equipment and supplies; reviewing and evaluating monitoring documentation for accuracy in support of TRAC enforcement and/or legal actions; and participating in TRAC's On-Call Manager rotation for response to spill events after hours.

Organizationally, the Regional Manager reports to the Director of TRAC (see attached Organization Chart).

Selection Process

This position was posted internally and seven candidates applied. The Director of TRAC and the Director of Human Resources interviewed all seven candidates. Of those seven, four candidates were recommended for a second interview with the Chief Operating Officer, the Deputy Chief Operating Officer, Programs, Policy and Planning, the Special Assistant for Affirmative Action & Compliance, and the Director of TRAC. Upon completion of the second interviews, it was determined that Ms. Lori A. LaPointe possessed the knowledge, skills and experience required for appointment to this position.

Ms. LaPointe has 21 years of experience at MWRA, several of those years in TRAC in directly related positions. Ms. LaPointe's experience in TRAC includes several years of supervisory experience as a Senior Sampling Associate, as well as, experience as a Sampling Associate and as an Industrial Coordinator. Currently, Ms. LaPointe holds the position of Project Manager, Quality Assurance where she oversees management practices at water facilities, and also oversees environmental permitting for new and current facilities. Her promotion to Regional Manager is a natural progression along her career path.

Ms. LaPointe has performed all of her previous TRAC responsibilities at a high level and she has demonstrated excellent communication skills, initiative, and leadership. She played an important role in the successful deployment of TRAC's Pretreatment Information Management System for scheduling and tracking the Monitoring Program's activities.

Ms. LaPointe earned a Bachelor of Science Degree in Zoology from the University of Massachusetts, Amherst.

BUDGET/FISCAL IMPACT:

There are sufficient funds for this position in the Operations Division's FY15 Current Expense Budget. The recommended salary is in accordance with guidelines established in Unit 9's current collective bargaining agreement.

ATTACHMENTS:

Resume of Lori LaPointe
Position Description
Organization Chart

Lori Ann LaPointe

Education

University of Massachusetts, Amherst
B.S. Zoology-1987

Northeastern University, Burlington, MA
Certificate in Occupational Health and Safety (2000)

Tufts University, Medford, MA
Graduate classes in Hazardous Materials Management
September 1988-December 1989.

Experience

Massachusetts Water Resources Authority

Project Manager, Environmental Quality-Water April 2014-Present

Oversees the chemical management practices at MWRA water treatment facilities and ensures compliance with applicable regulations. Oversees environmental permitting and coordinates with Real Properties/Environmental Management department for new and current facilities. Oversees and assists in the development of Facility Handbooks, Operation and Maintenance manuals, and training programs.

Operations/Toxic Reduction and Control (TRAC)

Senior Sampling Associate: June 2013-March 2014

Assist Regional Manager of Monitoring in overseeing field, facility and daily sampling activities of the Sampling Associates. Supervisor of 6 staff.

Ensured quality field operations by providing guidance to field sampling personnel on sampling methods, techniques, equipment and safety as required by MWRA SOPS and NPDES permits.

Member of TRAC safety committee.

Provide tool box talks to staff.

Responsible for providing daily schedules for sampling staff as well as keeping track of yearly goals.

Responsible for the ordering of materials, equipment and safety equipment for the performance of the Monitoring group.

Responsible for scheduling safety training for staff.

Oncall Manager for TRAC Dept.-may have to respond to spill in the Collection system or Industry.

Completed Supervisor Training program to help with new role as Supervisor.

Member of ESU unit.

Industrial Coordinator: May 2007-June 2013 (Acting Sampling Coordinator November 2012- March 2013)

Inspects and writes MWRA Sewer Use discharge permits as part of the pretreatment program.

Acts as On-call Manager for TRAC in rotation with other TRAC staff.

Worked independently to get goals completed.

Oncall Manager for TRAC Dept.

Member of Emergency Service Unit (ESU).

Senior Sampling Associate: August 2004-May 2007

Assisted Regional Manager of Monitoring in overseeing field facility and daily sampling activities of the Sampling Associates. Ensured quality field operations by providing guidance to field sampling personnel on sampling methods, techniques, equipment and safety. Responsible for providing daily schedules for sampling staff as well as keeping track of yearly goals.

Sampling Associate: April 1993-August 2004

Collected samples and flow data from industries, sewer lines, treatment plants and other sites as required by the TRAC monitoring program. Generated reports of sampling activities and maintained sampling equipment.

Clean Harbors, Inc., Braintree, MA

Field Chemist: October 1989-April 1993

Supervised the field sampling staff on daily work schedules. Performed various types of field sampling activities such as water, wastewater, soil and hazardous waste sampling at a variety of sites. Calibrated and maintained all field and health and safety equipment for the entire company. Responsible for writing, organizing and training fellow co-workers and commercial customers in environmental and industrial hygiene field sampling techniques.

Customer service/Receiving: September 1987-October 1989

Supervised the sample receiving and waste disposal groups. Greeted and assisted clients concerning analytical requirements with respect to environmental regulations. Developed a sample tracking system for enhancement of customer service. Developed and implemented sampling plans for clients.

Skills

- ▶ ESU member since its inception. Incident Commander Training.
 - ▶ Advisory Committee Member for Minuteman Technical High School (2010-present)
 - ▶ Massachusetts, Department of Environmental Protection-Wastewater Treatment Plant Operator's License-grade 4M WI
 - ▶ OSHA 40 hour and 10 hour trained, First Aid, CPR and AED, Roadway safety, MBTA and MBCR Right of Way Trained
 - ▶ MWRA Confine Space Instructor (20+years)-participated with writing of program and its updates.
 - ▶ Massachusetts Water Treatment 1-passed exam and application in for license.
 - ▶ Underground storage tank AB license
-

**MWRA
POSITION DESCRIPTION**

POSITION: Regional Manager

PCR#: 2210063

DIVISION: Operations

DEPARTMENT: TRAC

BASIC PURPOSE:

Manages the Toxic Reduction and Control (TRAC) Department's Inspection and Permitting Program or Monitoring Program. Directs all inspection and permitting or monitoring activities for the department and provides assistance to other sections within the department.

SUPERVISION RECEIVED:

Reports to the Director of TRAC.

SUPERVISION EXERCISED:

Supervises assigned inspection, permitting or monitoring staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Recommends agency, program or department policy by analyzing all pertinent issues and information regarding the impact of proposed policy and by determining the resources necessary to implement the policy. Reviews, recommends, and manages the implementation of policies and standard operating procedures within TRAC to maintain efficient, high quality programs that are in compliance with EPA and other regulatory requirements.
- Performs administrative duties such as interviewing and recommending staff for hiring and promotion, reviewing and evaluating staff, scheduling work, developing budgets, managing vehicles, equipment, and supply acquisitions and maintenance, approving time sheets, helping to develop and implement training for staff members, and maintaining discipline.
- Ensures that staff coordinate with other TRAC groups and sections and with other MWRA departments and divisions as needed.
- Performs administrative duties including, but not necessarily limited to, interviewing and recommending personnel for hiring or promotion, approving time sheets, scheduling work, developing budgets, performance evaluations, and maintaining discipline.

- Uses computer systems to schedule and coordinate work, to ensure that staff time and functions are appropriately tracked and reported, and to carry out other job responsibilities.
- Coordinates (as required) TRAC staff preparation and response to emergency spills/releases into sewer system and participates in development and implementation of emergency response policy.
- Participates in development and implementation of TRAC policies and procedures.
- Participates in the selection and hiring of project consultants and oversees the consultant's planning process.
- Participates in liaison, coordination, and educational activities within the MWRA and with other governmental agencies and the public.

Inspection Program

- Provides overall direction to inspection staff concerning the implementation of local limits, planning, and database preparation to meet regulatory requirements.
- Reviews and evaluates monitoring reports, engineering reports, pretreatment proposals and associated technical information, inspection reports, permit applications, and permits and recommends appropriate standards and follow-up actions.
- Develops and implements training programs for staff personnel in inspections and permitting procedures, state-of-the-art waste treatment applications and Federal, State and local regulations.
- Coordinates, as required, inspection staff preparation and response to emergency spills and releases into the sewer system.
- Reviews and evaluates inspection and permitting documents generated by the inspection staff and ensures that they will support enforcement and legal actions and stand up to scrutiny in actions brought by MWRA or others.

Monitoring Program

- Provides overall direction to sampling staff concerning technical requirements for sampling to ensure that there is consistency and coordination among and within the staff on sampling practice, procedure, and implementation.
- Oversees the maintenance of the Monitoring Manual and its SOPs and keeps the manual up-to-date.
- Serves as the primary liaison with the MWRA Central Laboratory on sampling and analysis issues.

- Manages TRAC's sampling operations at the Chelsea facility; ensures that sampling equipment and supplies are available and maintained; develops the TRAC sampling field equipment budget.
- Coordinates, as required, monitoring staff preparation and response to emergency spills and releases into the sewer system.
- Reviews and evaluates monitoring documents generated by the sampling staff and ensures that they will support enforcement and legal actions and stand up to scrutiny in actions brought by MWRA or others.

SECONDARY DUTIES:

- Acts as On-Call Manager for TRAC in rotation with other TRAC staff.
- Participates actively in TRAC multi-disciplinary work groups.
- Drafts reports, memoranda, and other documents.
- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Four year undergraduate degree in the chemistry, biology, environmental sciences, a related engineering or science discipline, computer science or information systems science, legal studies or other related field. Advanced degree preferred.
- (B) Knowledge and understanding of environmental regulatory issues, policies, and practices related to industrial wastewater treatment and discharge, as acquired through a minimum of 7 to 9 years of experience, of which at least 3 years should be in a supervisory capacity. This should include an understanding of industrial permits, and enforcing environmental requirements.
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of the use, development, maintenance and management of complex computer-based information systems as a tool for supporting pretreatment program.
- (B) Ability to negotiate and reach agreement in an enforcement setting and to work with attorneys.
- (C) Ability to plan and implement programs.

- (D) Demonstrated effectiveness working across organizational boundaries and with persons at all levels in an organization.
- (E) Strong written and oral communication skills.
- (F) Ability to manage staff, including to organize, direct, train, assign duties to, supervise, motivate, and evaluate staff.

SPECIAL REQUIREMENTS:

Massachusetts Class D Motor Vehicle Operators License.

TOOLS AND EQUIPMENT USED:

Office machines as normally associated, with the use of telephone, personal computer including word processing and other software, copy or 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 the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the essential functions 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 sit, and talk or hear. The employee is occasionally required to stand, and walk.

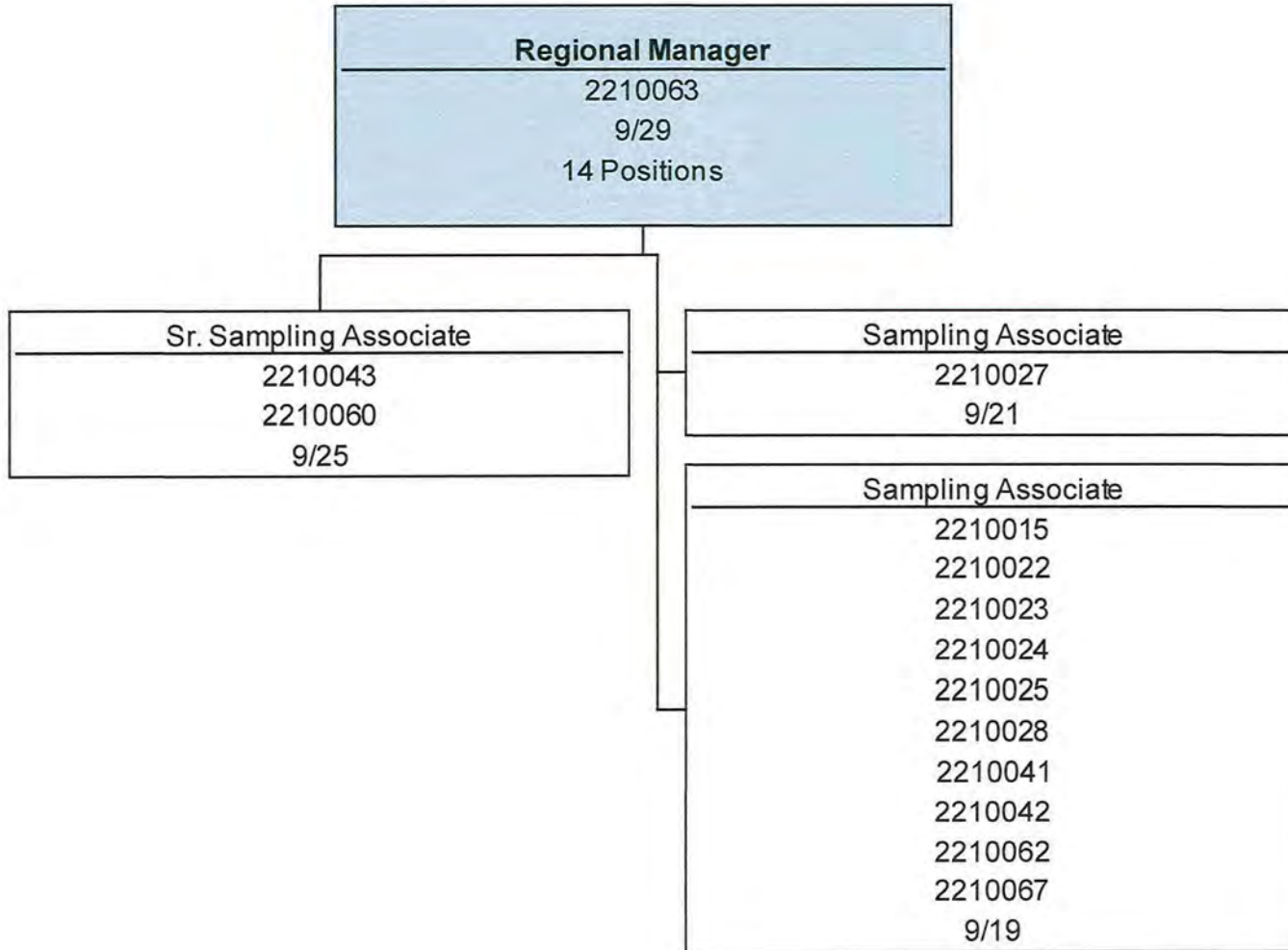
The employee must regularly lift and/or move up to 10 pounds, occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision and the ability to adjust focus.

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 a moderately quiet in office setting.

Programs, Policy & Planning
TRAC Sampling Unit
December 2014





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

REVISED

BOARD OF DIRECTORS' MEETING

to be held on

Wednesday, December 17, 2014

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

Time: 1:00 p.m.

Chair: M. Bartlett
Vice-Chair: J. Carroll
Secretary: J. Foti
Board Members:
J. Barrera
K. Cotter
P. Flanagan
A. Pappastergion
B. Swett
H. Vitale
J. Walsh
J. Wolowicz

AGENDA

I. APPROVAL OF MINUTES

II. REPORT OF THE CHAIR

III. REPORT OF THE EXECUTIVE DIRECTOR

IV. BOARD ACTIONS

A. Approvals

1. FY16 Proposed Capital Improvement Program (CIP) (ref. AF&A B.1)
2. Renewal of Water Supply Continuation Agreements (ref. W A.1)
3. Revision to Dedham-Westwood Water District's MWRA Withdrawal Limits (ref. W A.2)
4. PCR Amendments – December 2014 (ref. P&C A.1)
5. Appointment of Director, Human Resources (ref. P&C A.2)
6. Appointment of Manager, Operations Support (ref. P&C A.3)
7. Appointment of Manager, Employment, Human Resources (ref. P&C A.4)
8. Appointment of Assistant Manager, Labor Relations, Human Resources (ref. P&C A.5)

9. Appointment of Environmental Manager, Real Property and Environmental Management (ref. P&C A.6)
10. Appointment of Director, Intergovernmental Affairs (ref. P&C A.7)
11. Appointment of Deputy Director, Maintenance, Deer Island (ref. P&C A.8)
12. Appointment of Sr. Program Manager, Engineering Services, Deer Island (ref. P&C A.9)
13. Appointment of Construction Coordinator, Engineering and Construction (ref. P&C A.10)
14. Appointment of Program Manager, Wastewater Operations (ref. P&C A.11)
15. Appointment of Regional Manager of Monitoring, TRAC (ref. P&C A.12)
16. Deer Island Co-Digestion Update (postponed from 10/15/14 meeting) (ref. WW D.1)
17. Charles River Pollution Control District Petition on NPDES Co-Permittees (postponed from 10/15/14 meeting) (ref. WW D.2)

B. Contract Award

1. VFD Additions, Secondary Oxygen Reactor Batteries A, B and C, Deer Island Treatment Plant: Dagle Electrical Construction Corporation, Contract 6877 (ref. WW B.1)

C. Contract Amendments/Change Orders

1. Management, Operation and Maintenance of the Union Park Pump Station/CSO Facility and the Unmanned Stations: Woodard & Curran, Inc., Contract S506, Amendment 1 (ref. WW C.1)

V. CORRESPONDENCE TO THE BOARD

VI. OTHER BUSINESS

VII. EXECUTIVE SESSION

- A. Real Estate: Acceptance of Permanent Easements from the City of Marlborough
- B. Collective Bargaining: Ratification of Collective Bargaining Agreements with United Steelworkers Units 1 and 6 and NAGE Unit 3
- C. Litigation: Estate of Marie Stewart – Mediation

VIII. ADJOURNMENT

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Board of Directors

November 12, 2014

A meeting of the Board of Directors of the Massachusetts Water Resources Authority was held on November 12, 2014 at the Quabbin Visitors Center in Ware. Chair Bartlett presided. Present from the Board were Ms. Wolowicz and Messrs. Barrera, Cotter, Flanagan, Swett and Walsh; Messrs. Carroll, Pappastergion and Vitale joined the meeting in progress. Mr. Foti 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, Kathy Soni, Budget Director, Thomas Durkin, Treasurer, David Duest, Director of Deer Island Treatment Plant, Richard Adams, Manager, Engineering Services, Joshua Das, Project Manager, Public Health, Pamela Heidell, Manager, Policy and Planning, Corinne Barrett, Director of Construction, David Coppes, Director of Waterworks, Frederick Brandon, Assistant Director of Engineering, and Bonnie Hale, Assistant Secretary. The meeting was called to order at 10:40 a.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 October 15, 2014, as presented and filed with the records of the meeting.

REPORT OF THE CHAIR

Ms. Bartlett remarked that it was wonderful to be having the Board meeting at the beautiful Quabbin Reservoir, and reported that her staff at Energy and Environmental Affairs continued to talk to MWRA about funding proposals for the co-digestion plant.

REPORT OF THE EXECUTIVE DIRECTOR

Mr. Laskey reported on various matters, including a meeting held with the Winthrop Citizens Advisory Committee to brief them on the status of co-digestion and MWRA's intent to move forward with barging, not trucking; the submittal of the Harbor Monitoring Report, which the Board will be briefed on December; an advantageous bond deal completed the prior week; and anticipation of the dedication ceremony for the William A. Brutsch Water Treatment Facility scheduled at noon, as a tribute to the man who contributed so much to the waterworks system during his long career with the MDC and then MWRA.

ADMINISTRATION, FINANCE & AUDIT COMMITTEE

INFORMATION

Staff summarized the following two information items, and there was general discussion and question and answer:

- Delegated Authority Report – October 2014
- FY15 Financial Update and Summary as of October 2014.

APPROVALS

Assignment and Assumption of Contract 595TA, Technical Assistance Consulting Services, Hazardous Materials, from EnviroSense, Inc. to EnSafe, Inc.

Upon a motion duly made and seconded, it was

Voted to approve the assignment and assumption of Contract 595TA, Technical Assistance Consulting Services, Hazardous Materials, from EnviroSense, Inc. to EnSafe, Inc., with no increase in price or contract term.

CONTRACT AWARDS

Insurance Consultant Services: Kevin F. Donoghue Insurance Advisors, Inc., Contract F232

Upon a motion duly made and seconded, it was

Voted to approve the recommendation of the Consultant Selection Committee to select Kevin F. Donoghue Insurance Advisors, Inc. to provide Insurance Consultant Services and to authorize the Executive Director, on behalf of the Authority, to execute Contract F232 with Kevin F. Donoghue Insurance Advisors, Inc. in an amount not to exceed \$150,000 for a term of three years from the Notice to Proceed.

WASTEWATER POLICY & OVERSIGHT COMMITTEE

APPROVALS

Memorandum of Understanding and Financial Assistance Agreement with BWSC for Implementation of CSO Control Projects, Amendment 15, and Progress of BWSC Implemented CSO Projects and Projected Financial Assistance through June 2015

Upon a motion duly made and seconded, it was

Voted to authorize the Executive Director, on behalf of the Authority, to execute Amendment 15 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 \$3,710,388.72 from \$292,595,398.28 to \$296,305,787.00.

CONTRACT AWARDS

Supply and Delivery of Ferric Chloride to the Deer Island Treatment Plant and the Clinton Advanced Wastewater Treatment Plant: Kemira Water Solutions, Inc., WRA-3927

Upon a motion duly made and seconded, it was

Voted to approve the award of a contract for the Supply and Delivery of Ferric Chloride to the Deer Island Treatment Plant and the Clinton Advanced Wastewater

Treatment Plant to the lowest eligible and responsible bidder, Kemira Water Solutions, Inc., and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in the bid amount of \$1,166,625 for the period January 1, 2015 to December 31, 2015.

Valve and Piping Replacement at Various Facilities, Deer Island Treatment Plant, Engineering Services During Construction and Resident Engineering and Inspection Services: AECOM Technical Services, Inc., Contract 6598

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. to provide Engineering Services During Construction and Resident Engineering and Inspection Services for the Valve and Piping Replacement at Various Facilities at the Deer Island Treatment Plant project and to authorize the Executive Director, on behalf of the Authority, to execute Contract 6598 with AECOM Technical Services, Inc. in an amount not to exceed \$2,299,946 for a term of 46 months from the Notice to Proceed.

Refurbishment of Secondary Reactor Aerator and Mixer Gearboxes at the Deer Island Treatment Plant: SPX Process Equipment, Lightnin Operations, WRA-3907

Upon a motion duly made and seconded, it was

Voted to approve the award of a four-year contract for the Refurbishment of Secondary Reactor Aerator and Mixer Gearboxes at the Deer Island Treatment Plant, to the lowest eligible and responsible bidder, SPX Process Equipment, Lightnin Operations, and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in an amount not to exceed \$1,193,295.

CONTRACT AMENDMENTS/CHANGE ORDERS

North System Hydraulic System: AECOM, Contract 6930, Amendment 3

There was question and answer about the extensions to the contract.

Upon a motion duly made and seconded, it was

Voted to authorize the Executive Director, on behalf of the Authority, to approve Amendment No. 3 to extend the term of Contract No. 6930 with AECOM, North System Hydraulic System, by six months to June 5, 2015, with no overall increase in contract amount.

WATER POLICY & OVERSIGHT COMMITTEE

INFORMATION

Update on Lead and Copper Rule Compliance

Staff provided a brief update on calendar year 2014 sampling, which resulted in the second lowest lead levels to date.

(Messrs. Carroll and Pappastergion joined the meeting.)

APPROVALS

Revision to MWRA Policy #OP.10, "Admission of New Community to MWRA Waterworks System"

Staff summarized the history of new communities that had joined the MWRA since 2002 and potential new members, and there was general discussion and question and answer. (Mr. Vitale joined the meeting during the discussion.)

Upon a motion duly made and seconded, it was

Voted to approve a modification to the "Entrance Fees" section of MWRA's Policy #OP.10, Admission of New Community to MWRA Water System, to incorporate the specific wording provided on pages 2 and 3 of the staff summary presented and filed with the records of the meeting to reflect up to a 25-year, interest-free payment plan for the entrance fee, consistent with a policy recommendation approved the MWRA Advisory Board. The policy revision, if approved, will become effective as of the date of Board approval.

CONTRACT AMENDMENTS/CHANGE ORDERS

Spot Pond Water Storage Facility Design/Build Project: Walsh Construction Company, Contract 6457, Change Order 9

Staff described the major reasons for the change order, as well as the unique characteristics of design/build contracts, and there was detailed discussion and question and answer.

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. 9 to increase the amount of Contract No. 6457 with Walsh Construction Company, Spot Pond Water Storage Facility Design/Build Project, in an amount not to exceed \$757,370.56 and to extend the term by 144 calendar days to April 22, 2015; and to authorize the Executive Director to approve additional change orders as may be needed to Contract No. 6457 in amounts not to exceed the aggregate of \$250,000 and 180 days, in accordance with the Management Policies of the Board of Directors.

PERSONNEL & COMPENSATION COMMITTEE

APPROVALS

PCR Amendments – November 2014

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, Environmental Quality

Upon a motion duly made and seconded, it was

Voted to approve the Executive Director's recommendation to appoint Ms. Elizabeth Steele Homa, Ph.D. to the position of Program Manager, Data

Management in the Environmental Quality Department, (Unit 9, Grade 29) at an annual salary of \$92,959.45 to be effective on the date designated by the Executive Director.

Appointment of Program Manager, Engineering & Construction

Upon a motion duly made and seconded, it was

Voted to approve the Executive Director's recommendation to appoint Ms. Ester N. Lwebuga, P.E., Project Manager (Unit 9, Grade 25) to the position of Program Manager in the Engineering and Construction Department (Unit 9, Grade 29) at an annual salary of \$100,808.66 to be effective November 15, 2014.

Appointment of Program Manager, Engineering & Construction

Upon a motion duly made and seconded, it was

Voted to approve the Executive Director's recommendation to appoint Mr. Patrick Smith, P.E., Project Manager (Unit 9, Grade 25) to the position of Program Manager in the Engineering and Construction Department (Unit 9, Grade 29), at an annual salary of \$100,808.66 to be effective November 15, 2014.

The meeting adjourned at 11:45 a.m.