MASSACHUSETTS WATER RESOURCES AUTHORITY

Board of Directors Report

on

Key Indicators of MWRA Performance

for

Fourth Quarter FY2014

Q1	Q2	Q3	Q4

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

Board of Directors Report on Key Indicators of MWRA Performance
Fourth Quarter FY2014

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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

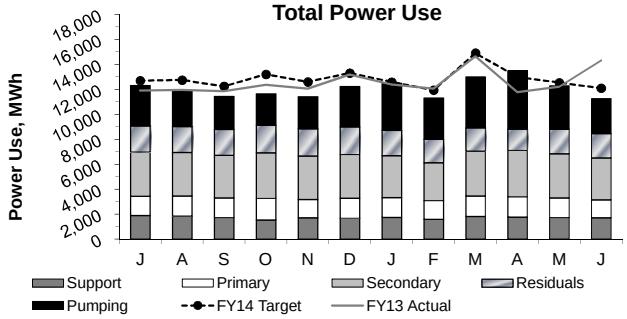
September 17, 2014

OPERATIONS AND MAINTENANCE

Deer Island Operations

4th Quarter - FY14

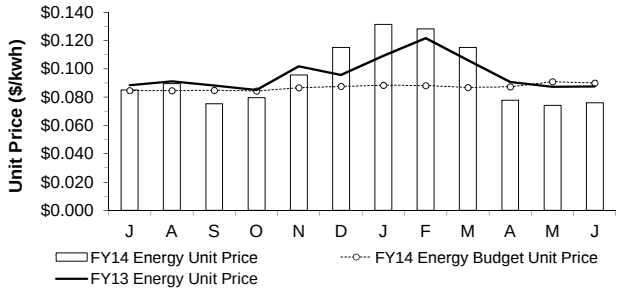
Total Power Use



Total Power Use in the 4th Quarter was 1.5% lower than the FY14 projections for the same period as plant flow was 1.0% lower-than-expected. Total Power Use was 5.9% lower-than-expected for FY14. Total Power Use is lower than expected as a result of lower-than-expected power used for pumping and for secondary wastewater treatment (as a result of energy optimization measures in the secondary reactor process area). Power used for pumping was 13.8% low for FY14 as plant flow was 13.2% lower than expected.

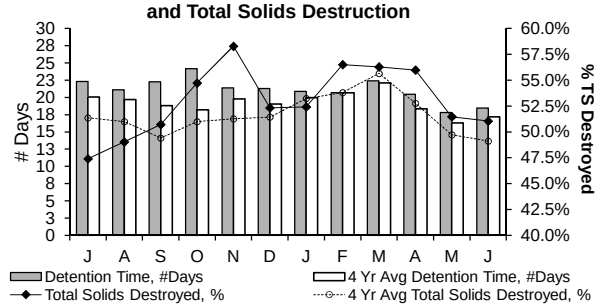
Total Energy Pricing

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



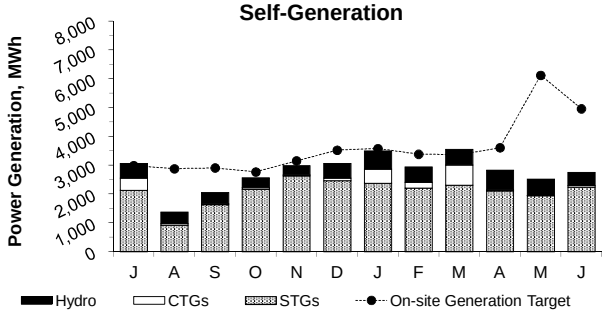
Under the current energy supply contract, a block portion of DI's energy is a fixed rate and the variable load above the block is purchased in real time. The actual Total Energy Unit Price for the quarter was 15.0% lower than the FY14 budget estimate. However, Total Power Purchased for the quarter was 22.8% higher than budgeted. Overall, year end costs were $706,244 (7.4%) higher than budgeted as the Total Energy Unit Price for FY14 was 9.4% higher than budgeted while the Total Power Purchased was 1.5% lower than budgeted. The Total Energy Unit Price for FY14 was higher than budgeted in six (6) of the 12 months and from May through November ranged from 10% to 49% higher than budgeted. The Total Energy Unit Price includes a fixed block price, spot energy price, transmission & distribution charges, and ancillary charges.

Sludge Detention Time in Digesters and Total Solids Destruction



Total solids (TS) destruction following anaerobic sludge digestion averaged 52.8% during the 4th Quarter, 4.5% higher than the 4 year average with an average sludge detention time in the digesters of 18.9 days, 9.5% higher than the 4 year average. TS destruction averaged 53.0% for FY14, 2.7% higher than the 4 year average with an average sludge detention time of 21.1 days, 10% higher than the 4 year average.

Self-Generation

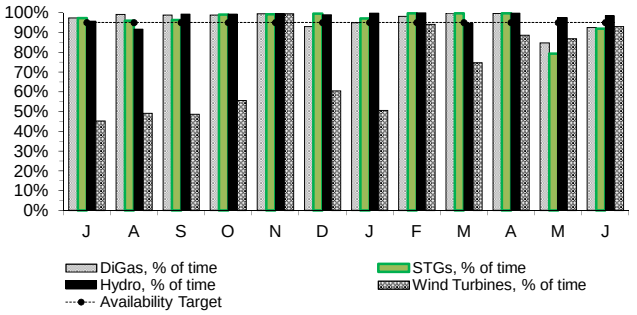


Power generated on-site during the 4th Quarter was 40% lower than target as the generation by the CTGs, STGs, and Wind Turbines all fell below target by 97%, 26%, and 5%. The Hydro Turbines and Solar Panels both generated more than target by 7% and 13%. The main reason for the lower-than-expected generation was less-than-expected operation of the CTGs for storm events. The target assumed the CTGs would be operated on five (5) - 24 hour days during the quarter for wet weather events but were not needed for this purpose. Additionally, repairs and maintenance on the STGs and the DiGas system reduced the availability of the STG and BP-STG for operation, resulting in a reduction in power generation. In FY14, power generation was 17.8% lower than target due, in large part, to below target generation by the CTGs and the STGs by 52% and 16%.

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 290 MWh was generated by the Solar Panels and 416 MWh was generated by the Wind Turbines in the 4th Quarter (860 MWh and 1,477 MWh, respectively for FY14).

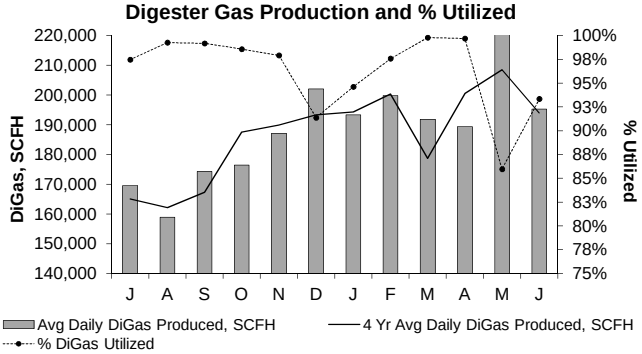
Self-Generation Equipment On-Line

(% of Time in Operation)



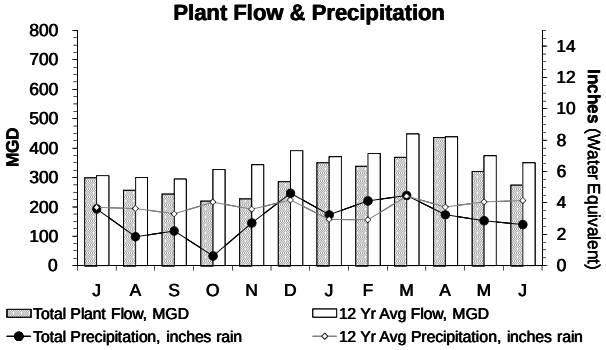
The Hydro Turbine system exceeded the 95% availability target for the 4th Quarter. The STGs, DiGas, and Wind Turbine systems all fell slightly below their 95% availability target by 4.7%, 2.6%, and 5.5%, respectively. For FY14, the Hydro Turbines, STGs, and the DiGas system all exceeded the 95% availability target while the Wind Turbines fell below target by 29.4% due to various mechanical issues resulting in significant downtime for Wind Turbine #2.

Digester Gas Production and % Utilized



The Avg Daily DiGas Production in the 4thd Quarter was on target (+0.6%) with the 4 Year Avg Daily DiGas Production for the same period and was also on target (+0.8%) for FY14. 93.0% of all the DiGas produced in the quarter was utilized at the Thermal Power Plant and overall, 96.2% of all the DiGas produced in FY14 was utilized at the Thermal Power Plant. Monthly DiGas utilization dropped below 90% in May due to the annual Thermal Power Plant shutdown when only 86.0% was able to be utilized.

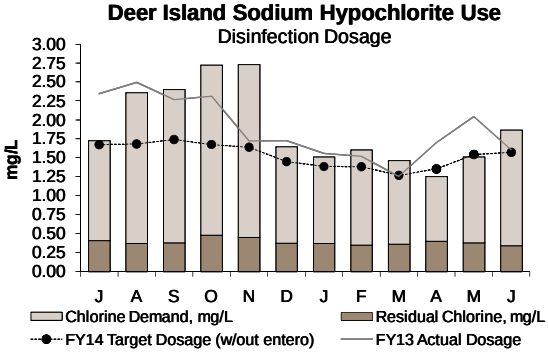
Plant Flow & Precipitation



The total plant flow for the quarter was 11.2% lower than the target total plant flow (343.6 MGD actual vs. 387.1 MGD expected) as precipitation for the 4th Quarter was 27% below target (8.72 inches actual vs.11.95 inches expected).

In FY14, the total plant flow was 16.3% lower than target (301.7 MGD actual vs. 360.2 MGD expected) as precipitation was 19% below target (36.18 inches actual vs.44.75 inches expected). Several low flow records were set during FY14, most notably, a recordsetting monthly low total plant flow of 219.7 MGD for October 2013 which was 22.32 MGD lower than the previous low flow record of 241.9 MGD from August 2007. Also, a new record low for the Total North System flows was set the same month with a flow of 149.34 MGD which was 14.75 MGD lower than the previous record low of 164.09 MGD set one month earlier.

Deer Island Sodium Hypochlorite Use



The disinfection dosing rate in the 4th Quarter was 4% higher than the target. DITP maintained an average disinfection chlorine residual of 0.37 mg/L this quarter with an average dosing rate of 1.54 mg/L (as chlorine demand was 1.17 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. For FY14, chlorine dosing was 24% higher than expected due to the record low plant flows. The actual hypochlorite usage in pounds of chlorine, however, was within 2% of the FY14 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	99.7%	6.63
A	1	1	0	99.6%	6.25
S	1	1	0	99.97%	0.96
O	0	0	0	100.0%	0.00
N	1	1	0	99.8%	3.73
D	1	1	0	99.5%	6.07
J	1	1	0	99.9%	3.56
F	2	2	0	99.96%	2.97
M	1	1	0	96.5%	52.05
A	4	4	0	99.9%	15.53
M	1	1	0	99.9%	3.35
J	0	0	0	100.0%	0.00
Total	15	15	0	99.5%	101.10

99.9% of all flows were treated at full secondary for the 4th Quarter and 99.5% for all of FY14. There were a total of five (5) separate secondary blending events in the quarter and 15 separate events in FY14; all due to high plant flows resulting from heavy rain. All five (5) blending events in the quarter combined to total 18.88 hours of blending and 29.96 Mgal of flow blended with secondary effluent.

The Maximum Secondary Capacity for the quarter and for FY14 was 700 MGD, except for 19.5 hours on May 6 during the the RSL pump isolation valve replacement work that required Secondary Battery C to be taken offline thus reducing the Maximum Secondary Capacity to 540 MGD temporarily during this essential maintenance work. The work was done during dry weather and no blending occurred.

Deer Island Operations & Maintenance Report

Environmental/Pumping:
In the 4th Quarter, the plant achieved a maximum average hourly flow rate of 848.0 MGD during the late morning of April 8 as a result of a two (2) day rain event that produced 0.71 inches of rain. During FY14, the plant achieved a maximum average hourly flow rate of 1,175.4 MGD on March 30 near the height of a three (3) day storm event that produced a total of 3.64 inches of rain in the Boston area. Pumping and treatment operations at DITP continued without incident through this storm, as well as throughout the entire fiscal year.

The Winthrop Terminal Headworks was taken offline for 5.5 hours on June 12 to allow staff to repair six (6) bars on screen #1 in the the headworks facility. As a safety precaution and to ease staff entry into the channel to affect repairs, the flow from the Caruso Pump Station to the Winthrop Terminal Headworks was held back temporarily to lower overall flows to the facility. Pumping was restored after the repairs were completed and there were no impacts to operation.

Secondary Treatment:
Annual turnaround maintenance was performed on Train #2 in the Cryogenic Oxygen Facility in mid-April. This turnaround maintenance is performed on roughly half of the components and systems in the Cryo Facility and allows the remaining half of the facility to continue to operate and produce oxygen uninterrupted. During this two (2) week turnaround maintenance, the contractor calibrated all the instrumentation on Cold Box unit #2 as well as, several other components of the oxygen plant. The same turnaround maintenance will be completed on Train #1 in the fall.

Deer Island Operations & Maintenance Report (continued)

Secondary Treatment (cont.):
On May 6, Secondary Battery C was shut down for approximately 19.5 hours to allow staff to replace three (3) large Return Sludge "RSL" pump isolation valves. This project was scheduled to occur only during dry weather flow conditions and staff pre-staged all the equipment and supplies necessary to minimize the duration of the shutdown. During the maintenance, the maximum secondary capacity was temporarily reduced from 700 MGD to 540 MGD as a result of taking Secondary Battery C offline. The plant flow remained well below 540 MGD and all effluent received secondary treatment. The maintenance was successfully completed and the battery placed back into service at 7:30 pm on the same day. The regulators (EPA and DEP) were notified in advance of this maintenance.

Primary and Secondary Treatment:
Contractors started work during the week of June 2 on a major essential Primary and Secondary Clarifier Scum Tip Tube Replacement Project. This work is scheduled to take approximately 28 months to complete. 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 few scum tip tubes that are not being replaced are ones that were installed in 2009 as trial units that became the basis of the design for the units that will be installed during this project. DITP has sequenced the work so as to minimize impact on DITP's overall capacity and the risk for secondary bypasses. 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). The regulators (EPA and DEP) were notified in advance of this maintenance.

As of the end of June, the contractor was working in two (2) primary clarifiers and three (3) secondary clarifiers with the work in all five (5) clarifiers expected to be completed by the end of July.

Odor Control Treatment:
Activated carbon media was changed out in carbon adsorber (CAD) units #4, #5, and #8 in the East Odor Control (EOC) Facility and in #1, #3, and #6 in the West Odor Control (WOC) Facility in the 4th Quarter as part of routine practice to replace spent carbon. Additionally, the scrubber media in wet chemical scrubber units #1 and #2 in the EOC Facility, and scrubbers #3 and #4 in the WOC Facility was replaced as part of routine practice to replace older, worn media.

The airflow fans in the Residuals Odor Control (ROC) Facility were shut down for a total of 33.5 hours from June 2 to June 4 to allow contractors to safely perform repairs to the fiberglass ductwork in the ROC Facility. Process air was contained within the the facility during all of these odor control shutdowns and no odor complaints were received as a result of any of these shutdowns.

Energy and Thermal Power Plant:
Solar power generation accounted for 3.3% (290.4 MWh) of the total power generated on-site in the 4th Quarter while Wind Turbine generation accounted for 4.7% (416.2 MWh) of the total power generated on-site in the 4th Quarter. Overall in FY14, solar power generation accounted for 2.42% (860.4 MWh) of the total power generated while Wind Turbine generation accounted for 4.16% (1,477.0 MWh) of the total power generated on-site.

Overall, total power generated on-site accounted for 23.8% of Deer Island's total power use in the 4th Quarter (24.6% in FY14). Renewable power generated on-site (by Solar, Wind, STGs, and Hydro Turbines) accounted for 23.5% of Deer Island's total electrical power use in the quarter (23.1% in FY14).

The annual maintenance and boilers testing at the Thermal Power Plant took place starting May 11 and continued into the first week of June. Part of this annual maintenance and testing includes a state mandated boiler inspection, as well as combustion testing and boiler tuning of both Zurn boilers. During this test each boiler was operated on digester gas, oil, and a combination of both. The main STG, the BP-STG, and the boilers were offline intermittently during the majority of the three (3) week maintenance period, except for approximately two (2) days when maintenance was performed on the common system and required a full Thermal Power Plant shutdown. Steam turbine power generation was achieved during much of this maintenance period by operating the BP-STG at maximum load.

Annual overhaul maintenance on CTG-2B took place in early April and required the generator to be locked out during the work period. This weather-dependent work was completed and the unit tested in advance of the rain event on April 8. CTG-1A was available on stand-by for operation had it been necessary. A verbal notification to the regulators (EPA/DEP) was provided, as required, in advance of this scheduled maintenance.

Both CTGs successfully completed a required 5-year inspection of their start air tanks in mid-May while the state's inspector was already on-site to oversee the boiler inspections. This inspection required each CTG unit to be taken out of service for approximately one (1) day to perform this test. A rotor ground fault detector was replaced on CTG-1A prior to this testing and required a two (2) day shutdown of the CTG to perform this work. The CTG was operated successfully for a brief period following this repair and the start air tank testing for this unit was completed later in the same day.

Clinton AWWTP:

Plant continues to meet its running average flow limit. June 2014 marks the 21st consecutive month the running average has been met.

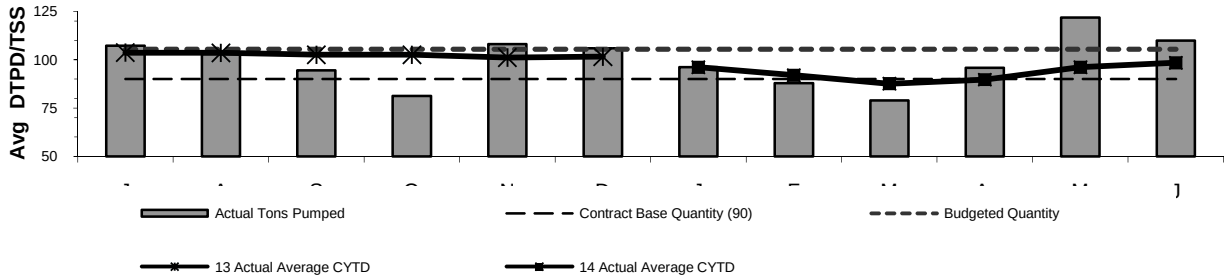
Primary settling tanks #1 and 2 have undergone extensive maintenance including the replacement of wear shoes and several broken flights. These tanks were put back on line and will run during the reconstruction of tanks 3 and 4, which will be turned over to the contractor July 1st .

Deer Island Residuals

4th Quarter - FY14

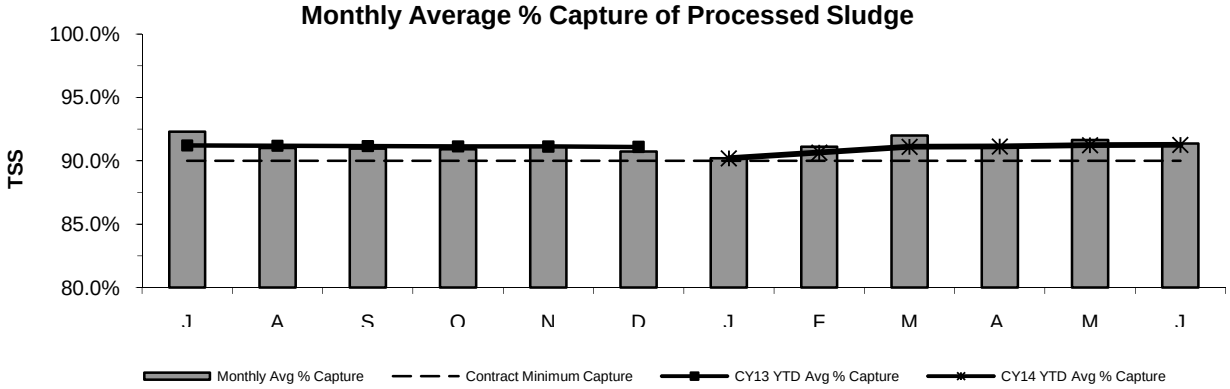
MWRA pays a fixed monthly amount for the calendar year to process up to 90 DTPD/TSS as an annual average. The monthly invoice is based on 90 DTPD/TSS (Dry Tons Per Day/Total Suspended Solids) times 365 days divided by 12 months. At the end of the year, the actual totals are calculated and additional 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 (FY14's budget is 105.4 DTPD/TSS).

Sludge Pumped From Deer Island



The average total quantity of sludge pumped in the 4th Quarter was 109.2 DTPD - higher than FY14's budget of 105.4 DTPD. The higher amount is due to higher sludge production due to warmer weather. The FY14 average quantity was 99.2 DTPD, well under the budget quantity, due in part to improved digester performance.

Monthly Average % Capture of Processed Sludge



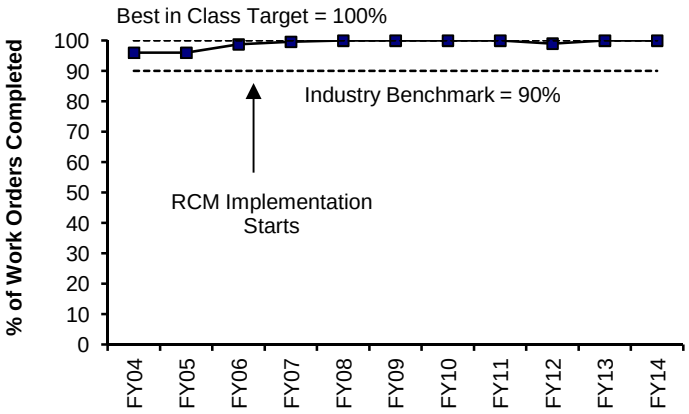
The contract requires NEFCo to capture at least 90% of the solids delivered to the Biosolids Processing Facility in Quincy. The CY14 to date average capture is 90.93%

Deer Island Yearly Maintenance Metrics

4th Quarter - FY14

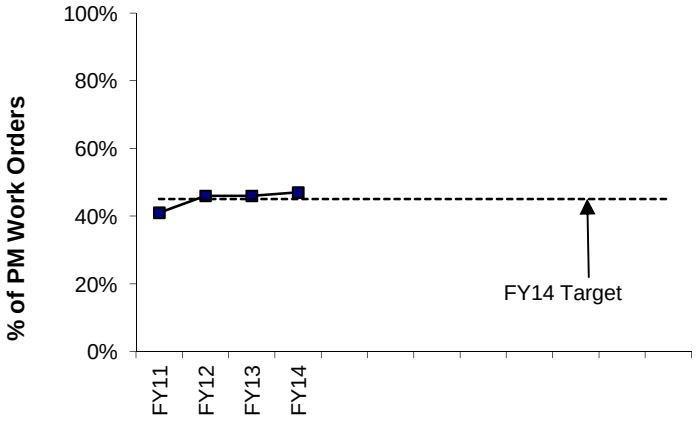
Proactive and Productivity Measures

Preventive Maintenance



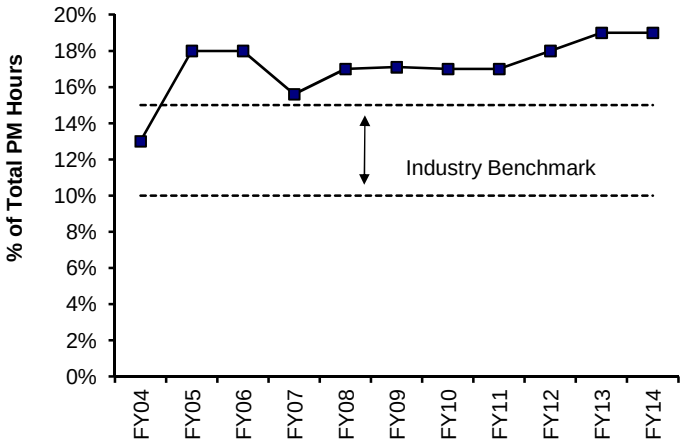
The industry benchmark is 90% for Preventive Maintenance (PM) completion. Upon reaching the 90% goal in FY04, the target goal was increased to the "best in class" standard of 100% PM completion. Since then, the percentage of PM work order completion has been at 99% or higher. Reliability-Centered Maintenance (RCM) and PM optimization efforts have continued since FY01. PM completion rate was 99.8% in FY14.

Preventive Maintenance Kitting



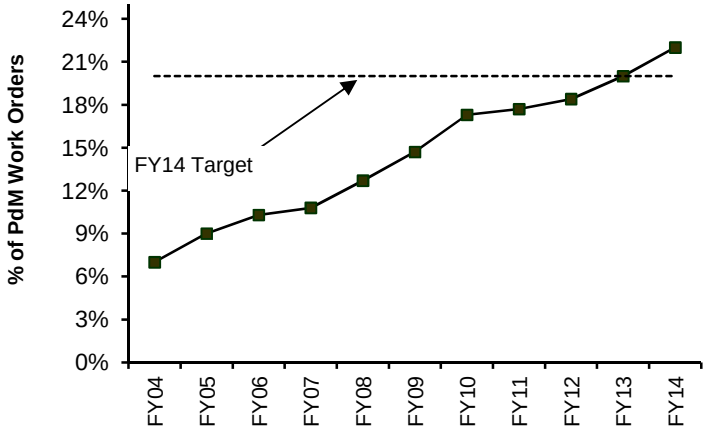
PM inventory items were loaded into Maximo so that parts for equipment could be assigned to PM work orders on a monthly basis. DITP reached the PM kitting goal in FY10. A new graph above was developed in FY11 to track kitting of all maintenance work orders. In an effort to increase wrench time, staff have been fine -tuning a process to "kit" all maintenance work orders. Kitting is considered a best practice by maintenance and reliability professionals and entails staging parts necessary to complete maintenance work. Kitting allows maintenance staff to spend more time "turning the wrench" and less time waiting for parts at the stockroom window. Kitting for FY14 was 47%.

Operations Light Maintenance PMs



The percentage of preventive maintenance work order hours completed by Operations staff (not maintenance staff) has increased from less than 1% in January 2002 to the current level for FY14 of 19%. DI reached the industry benchmark range of 10-15% in April 2003 and has exceeded the goal through FY14. Operations completes approximately 630 PM work orders per month.

Predictive Maintenance

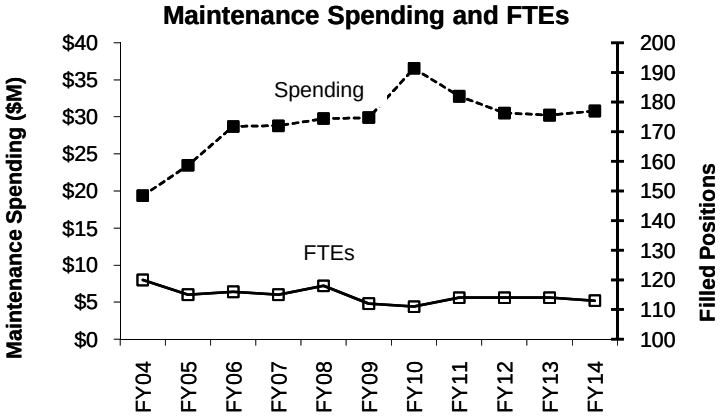


Predictive maintenance has steadily increased from 7% in FY04 to 22% in FY14, surpassing our goal of 20%. The increase in predictive maintenance was achieved through the expanded use of lubrication, vibration, thermography, and acoustic ultrasonic testing techniques. The Condition Monitoring Group continually reviews and investigates new opportunities and initiatives to expand condition monitoring testing and analysis.

Deer Island Yearly Maintenance Metrics

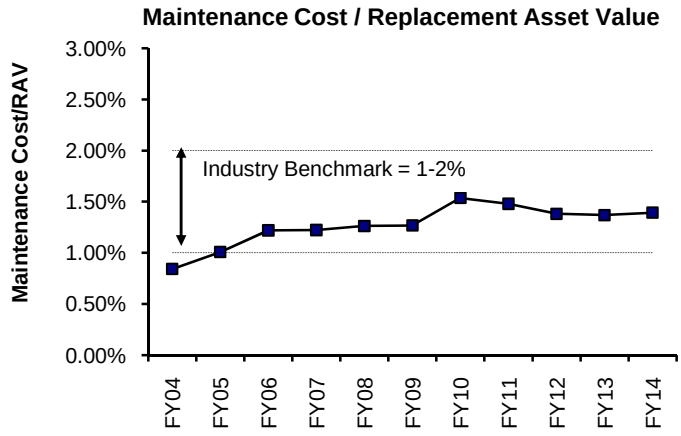
4th Quarter - FY14

Overall Maintenance Program Measures

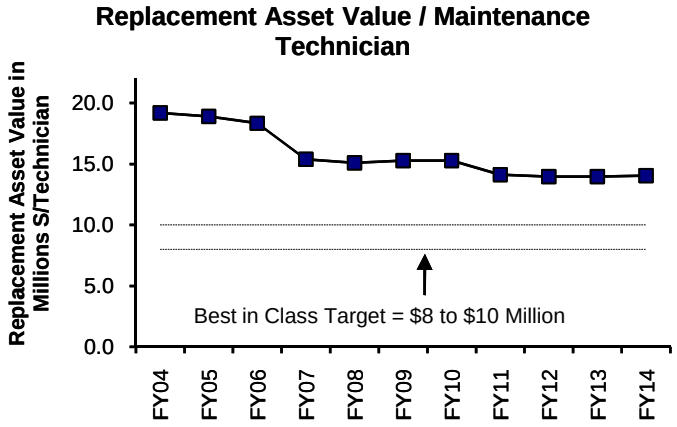


Maintenance staff is currently at 113 FTE's. Maintenance has been successful in meeting its goals through implementation of numerous maintenance efficiencies including Operations staff performing light maintenance, cross-functional training and flexibility, and Reliability Centered Maintenance.

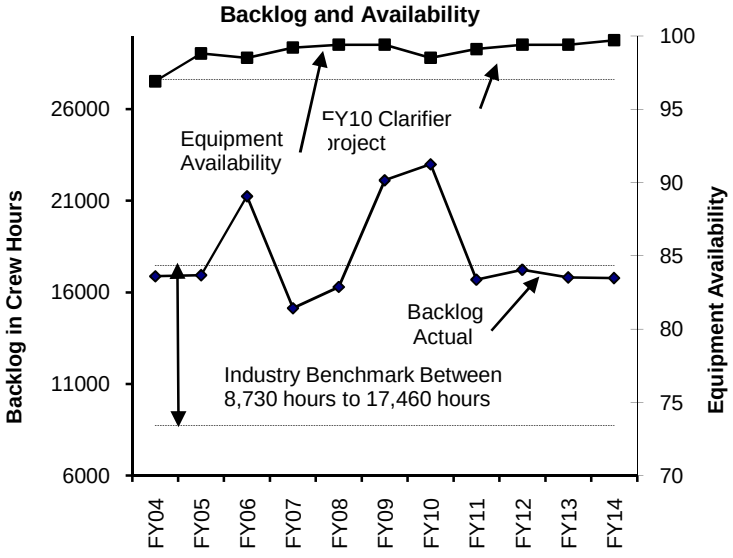
The maintenance spending graph shows actual annual maintenance spending and large asset replacements (equipment costs only). Maintenance budgeting will continue to evaluate proper preventive maintenance of plant assets and requirements for replacement of obsolete equipment to insure plant operates at maximum efficiency. In FY14, overall spending decreased slighttly from FY13. CIP projects during FY14 included the Expansion joint repairs, NMPS VFD Replacement, Digester MOD 1 and 2 Piping Replacement and Electrical Equipment upgrades. The large spike in FY10 and FY11 was attributed to the Clarifier rehabilitation project ($58M) which was on-going during that period.



The industry benchmark for annual maintenance spending is between 1% to 2% of replacement asset value. The plant's replacement asset value was calculated to be approximately $2.3 billion dollars. DITP's current maintenance spending is within the target range. Additional spending is expected to be required as the plant ages and additional equipment replacements are required. The maintenance spending includes $12.3 million in CEB together with CIP spending which included projects such as the Expansion joint repairs, NMPS VFD Replacement, Digester MOD 1 and 2 Piping Replacement Contract and Electrical Equipment upgrades.



DITP has adopted a "best in class" target of $8-$10 Million/Technician for its maintenance staffing. DITP exceeds the target at this time although the trend continues downward. As the plant ages and additional projects and replacements are required, additional staffing needs will be assessed.



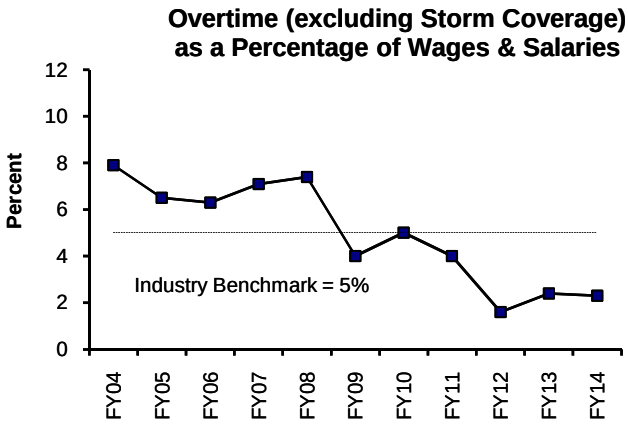
The industry benchmarks for equipment availability is 97% and the maintenance backlog based on current staffing levels is between 8,730 to 17,460 hours, respectively. The equipment availability exceeded the goal for the last nine years is 99.7% for FY14. The FY14 availability of 99.7% is the highest ever attained.

The total average backlog for FY14 was 16, 782 hours and is within the industry benchmark. The slight decrease in backlog is attributed to less maintenance work on clarifiers after completing of the clarifier rehabilitation project and the return of some staff from IA, absences, and filling critical trade vacancies. Management continues to prioritize work and closely monitor our backlog.

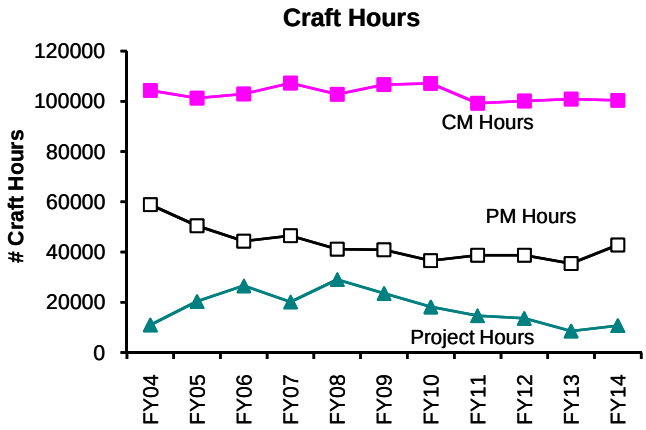
Deer Island Yearly Maintenance Metrics

4th Quarter - FY14

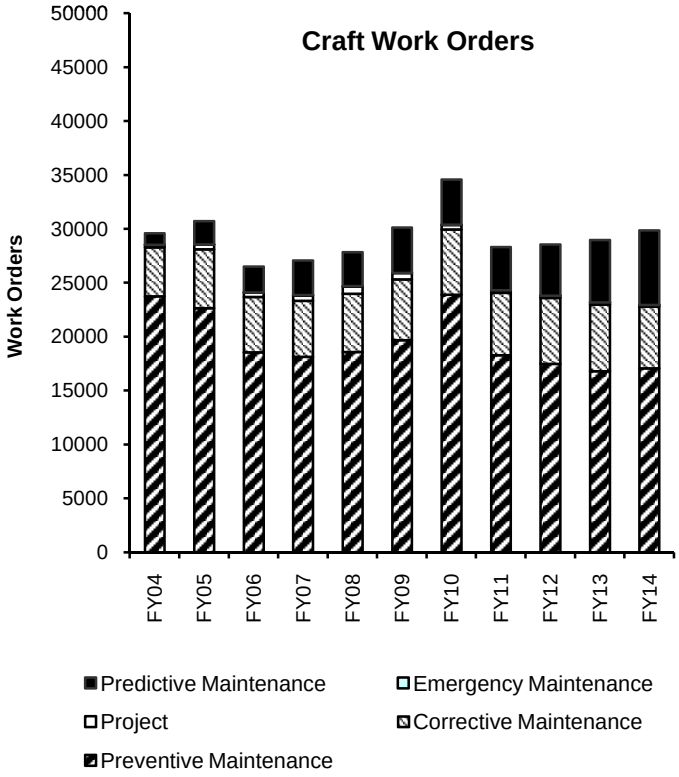
Overall Maintenance Program Measures (cont.)



Management continues its effort to keep overtime within the industry benchmark. DITP maintenance overtime was 2.3 % for FY14. Management has taken steps to reduce overtime spending by limiting overtime to repair critical equipment and systems only. DITP has been on or under budget from FY09 through FY14.



Optimization of the PM program through the transfer of some light maintenance tasks, from maintenance to Operations staff (20% of PM hours at the end of FY14), elimination of duplicate work orders, decreasing PM frequency due to equipment history and performance, completion of a PM Optimization efforts, and RCM recommendations has resulted in a significant decrease of 7,693 hours in maintenance staff PM craft hours from FY04 to FY14. Corrective Maintenance (CM) hours reduced slightly from last year. Project Maintenance hours showed an increase due to the replacement of AHU units throughout Deer Island.



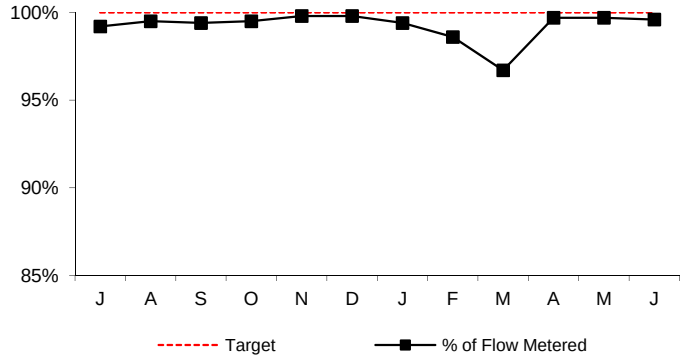
During FY14, the number of work orders increased by 854 from the previous year due to an increase in Predictive Maintenance work orders. Predictive Maintenance techniques allow maintenance to monitor and test equipment while remaining in service, therefore allowing convenient scheduling of corrective tasks to maximize plant equipment avalability and minimize random failures.

Operations Division Metering

4th Quarter - FY14

WATER METERS

Percent of Total Revenue Water Deliveries Calculated Using Meters

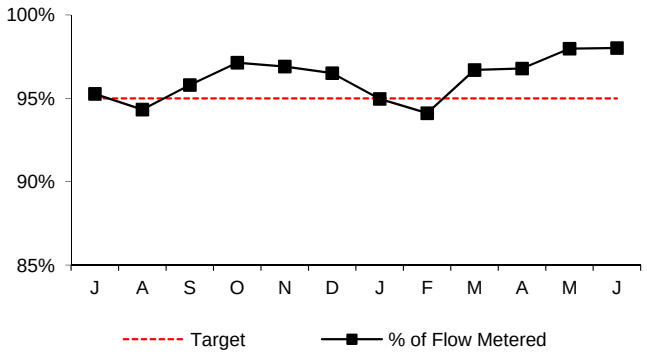


The target for revenue water deliveries calculated using meters is 100%. Estimates are generated for meters that are out of service due to instrumentation problems or in-house and capital construction projects. During the 4th Quarter of FY14, meter actuals accounted for 99.67% of flow; only 0.33% of total revenue water deliveries were estimated.
The following is the breakdown of estimations:

In-house and Capital Construction Projects - 0.07%
Instrumentation Failure - 0.26%

WASTEWATER METERS

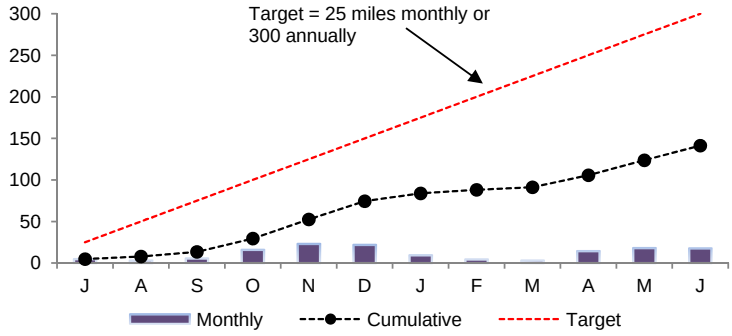
Percent of Total Wastewater Transport Calculated Using Meters



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 4th Quarter of FY14, meter actuals accounted for 97.6% of flow; 2.4% of wastewater transport was estimated.

WATER DISTRIBUTION SYSTEM PIPELINES

Miles Surveyed for Leaks

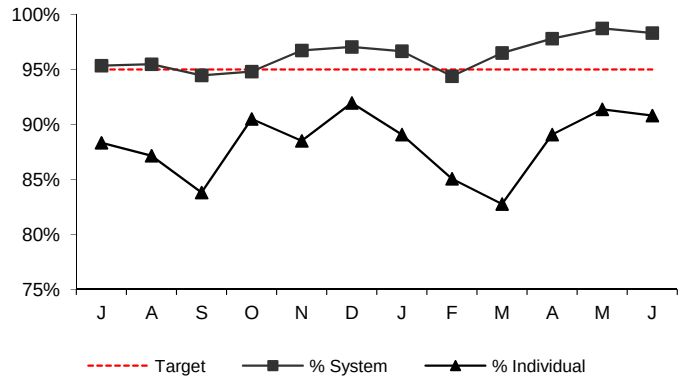


During the 4th Quarter of FY14, 50.12 miles of water mains were inspected. The total mileage inspected for the fiscal year is 141.33. Miles inspected are less than the annual 300 mile target due in part to the following conditions which occurred during various times of the fiscal year: staffing changes; winter weather conditions and some emergency community assistance.

Water Distribution System

Month	J	A	S	O	N	D	J	F	M	A	M	J
Leaks Detected	2	1	0	8	5	6	3	1	3	5	4	4
Leaks Repaired	0	1	2	5	4	5	4	4	2	5	3	1
Backlog	2	2	0	3	4	5	4	1	2	2	3	6
Avg. Lag Time	1.0	20.0	27.3	13.7	15.3	16.4	20.0	22.0	21.9	21.0	21.1	21.8

% Wastewater Meter Uptime



During the 4th Quarter of FY14,out of a possible 1,520,064 data points, only 25,867 points were missed resulting in a system-wide up time of 98.3%. Of the 174 revenue meters installed, on average 17 experienced down time greater than the 5% target resulting in a 90.4% individual meter uptime. Annual target not met due to a parts issue in February as well as the loss of three maintenance days in March for software system upgrade and staff training. For the 4th Quarter of FY14, down time for an individual meter is defined by any individual meter having less than 2,766.3 data points out of a potential 2,880 data points.

During the 4th Quarter of FY14, thirteen (13) leaks were detected. Five leaks were detected in April, four in May and four in June. Of the thirteen (13) leaks detected during the 4th Quarter, 8 were repaired by the end of the fiscal year. Additionally, Walnut Street, Saugus originally detected on October 23,2013 remains unrepaired.

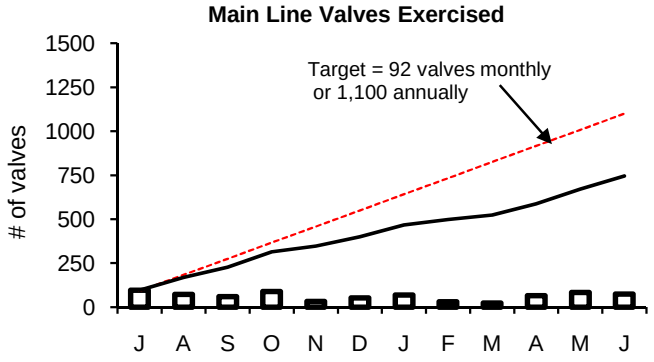
Water Distribution System Valves

4th Quarter - FY14

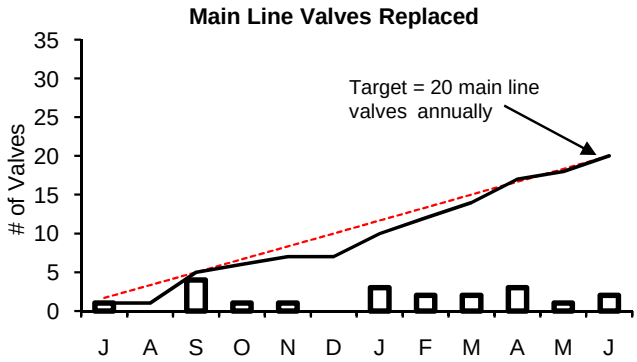
Background

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.

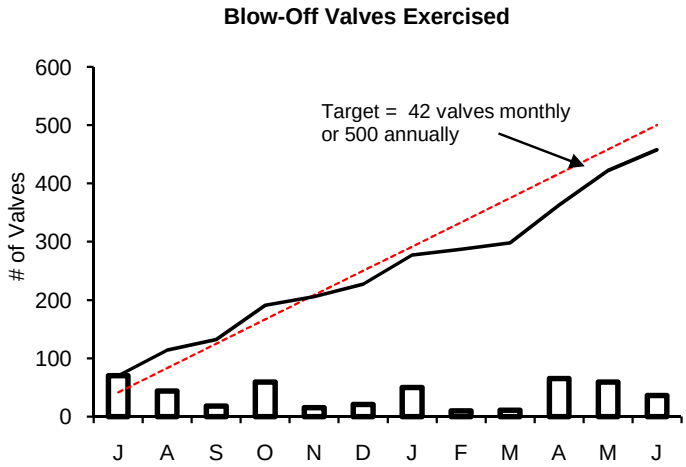
Type of Valve	Inventory #	Operable Percentage	
		FY14 to Date	FY14 Targets
Main Line Valves	2,092	97.7%	95%
Blow-Off Valves	1,206	95.1%	95%
Air Release Valves	1,335	93.1%	95%
Control Valves	48	100.0%	95%



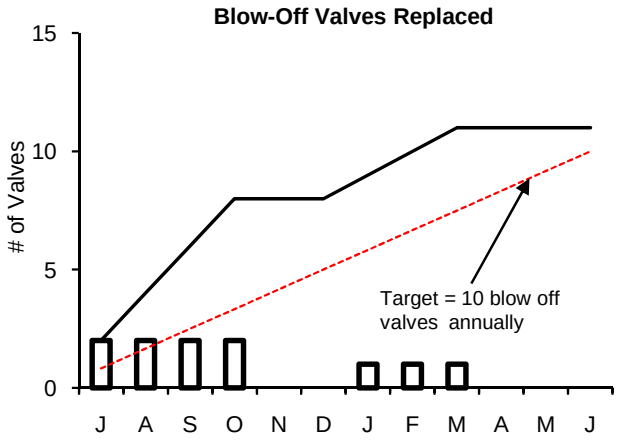
During the 4th Q of FY14 staff exercised 222 main line valves.The total exercised for the fiscal year is 745.



During the 4th Q of FY14 staff replaced six main line valves. The total replaced for the fiscal year is twenty.



During the 4thQ of FY14 staff exercised 160 blow-off valves. The total exercised for the fiscal year is 458.



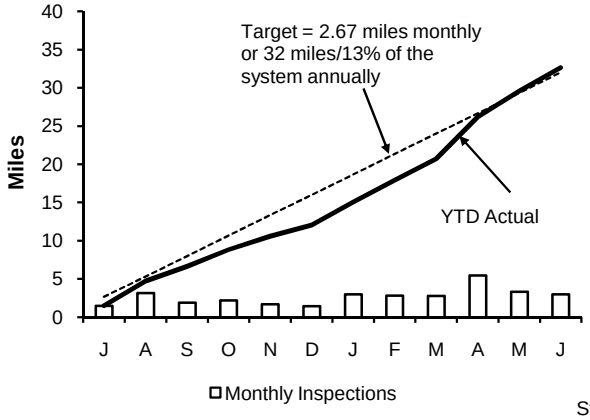
During the 4thQ of FY14, no blow-off valves were replaced The total replaced for the fiscal year is eleven.

Wastewater Pipeline and Structure Inspections and Maintenance

Fourth Quarter. FY-14

Inspections

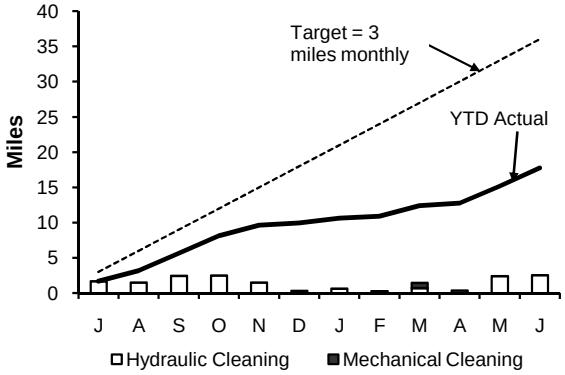
Pipeline Inspections



Staff internally inspected 3.04 miles of MWRA sewer pipeline during the month of June. The year to date total is 32.62 miles. No Community Assistance was provided to this month.

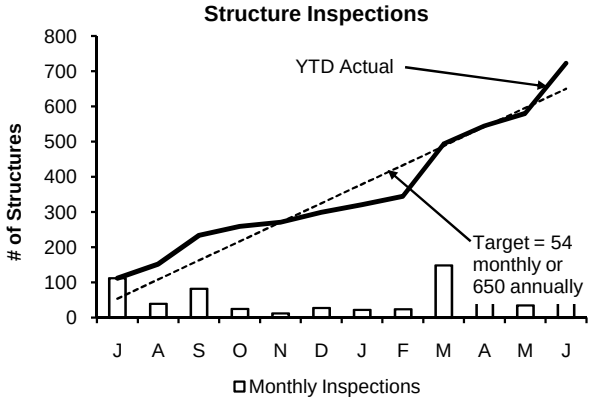
Maintenance

Pipeline Cleaning



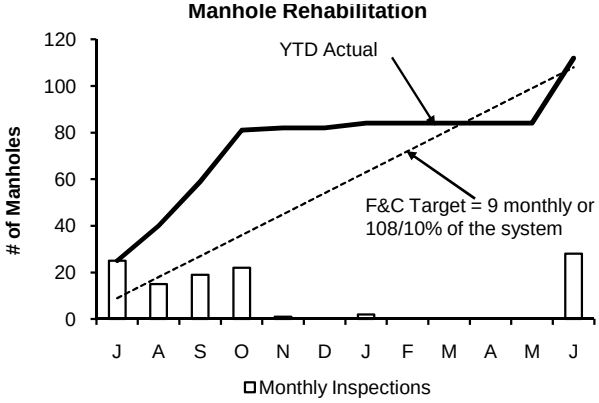
Staff cleaned 2.55 miles of MWRA's sewer system and removed 15 yards of grit and debris during the month of June. The year to date total is 17.75 miles. Pipeline maintenance staff focused on siphon cleaning given dry weather and low flow conditions, as well as, providing assistance to other units reducing time available for pipeline cleaning.
No Community Assistance was provided this month.

Structure Inspections



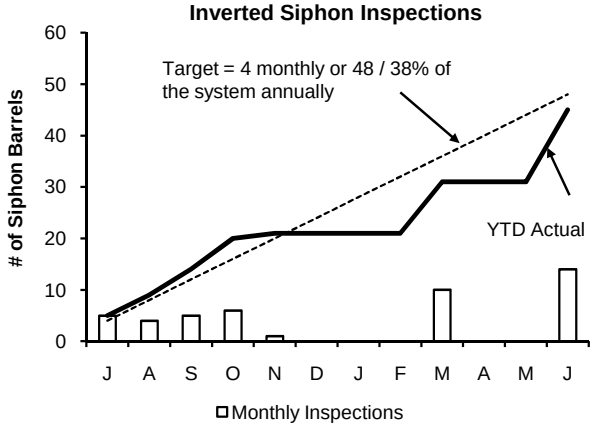
Staff inspected the 12 CSO structures and performed 131 additional manhole/structure inspections during the month of June. The year to date total is 723 inspections.

Manhole Rehabilitation



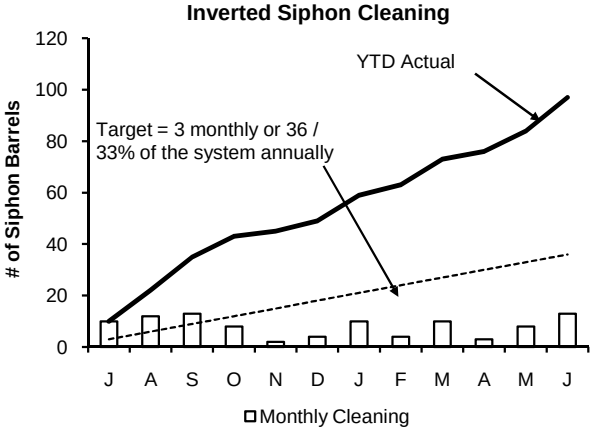
Staff replaced 28 frames & covers during the month of June.The yea to date total is 112.

Inverted Siphon Inspections



Staff inspected 14 siphon barrels during the month of June.Year to date total is 45 inspections.

Inverted Siphon Cleaning

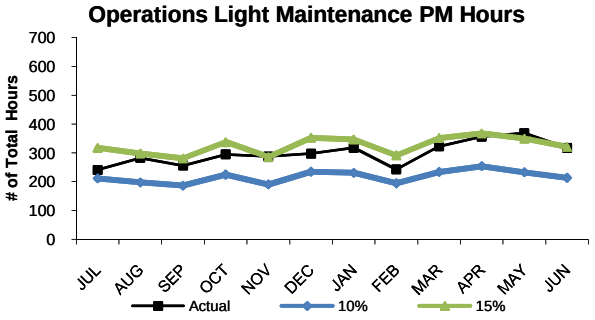


Staff cleaned 13 siphon barrels during the month of June.The year to date total is 97 barrels.

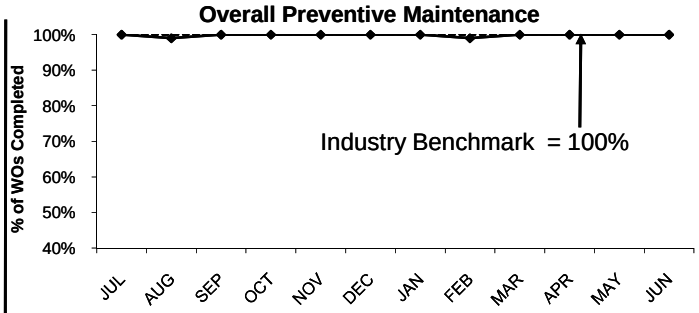
Field Operations' Metropolitan Equipment & Facility Maintenance

4th Quarter, FY14

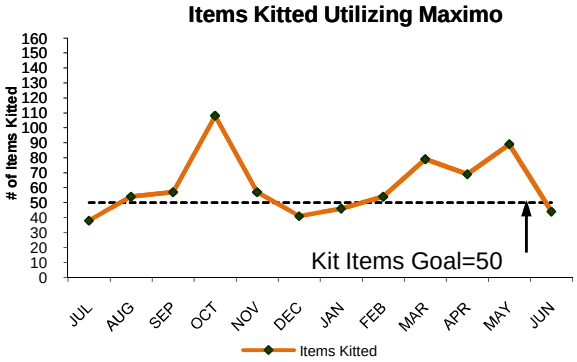
Several maintenance and productivity initiatives are in progress. The goal for the Overall PM completion and the Operator PM completion was raised to 100% for Fiscal Year 2010. The Operator PM and kitting initiatives frees up maintenance staff to perform corrective maintenance and project work, thus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



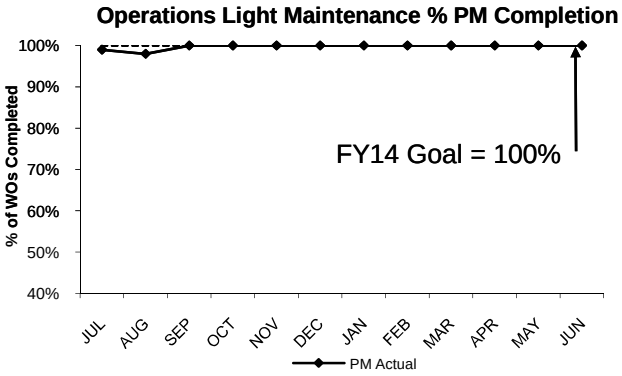
Operations staff averaged 348 hours of preventive maintenance during the 4th Quarter, an average of 15% of the total PM *hours* for the 4th Quarter, which is within the industry benchmark of 10% to 15%.



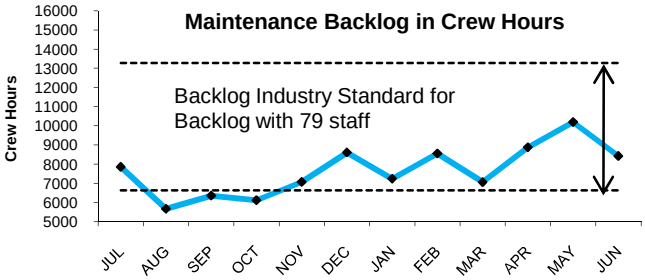
The Field Operations Department (FOD) preventive maintenance goal for FY14 is 100% of all PM work orders. Staff completed an average of 100% of all PM work orders in the 4th Quarter.



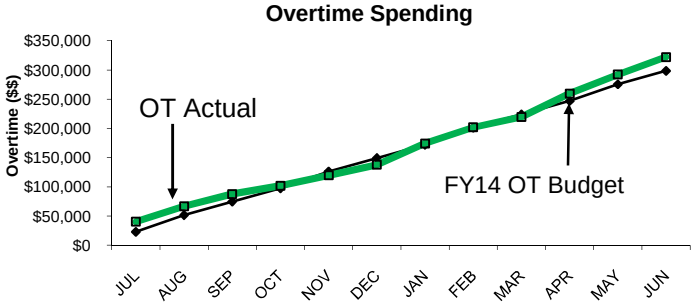
In an effort to more efficiently complete work, maintenance staff and work coordination staff have utilized the Lawson/Maximo interface to better kit stock and non stock material. The goal for FY14 is to "kit" 50 stock and non stock items total per month. An average of 67 items were kitted during the 4th Quarter.



Wastewater Operators complete light maintenance PM's which frees up maintenance staff to perform corrective maintenance. Operations' FY14 PM goal is completion of 100% of all PM work orders assigned. Operations completed an average of 100% of PM work orders in the 4th Quarter.



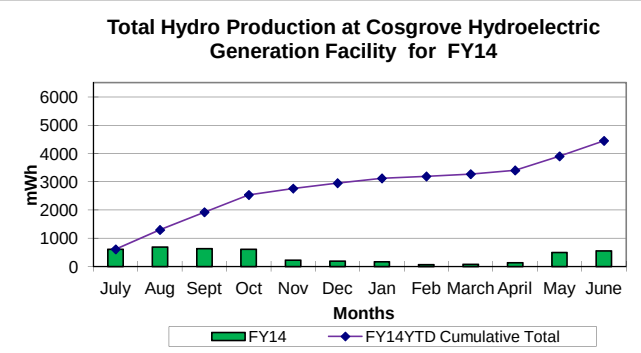
The 4th Quarter backlog average is 9162 hours. Management's goal is to continue to control overtime and still stay within the industry benchmark of 6450 to 12,940 hours. There are currently three vacant positions Facility Specialist, and two OMC laborers.

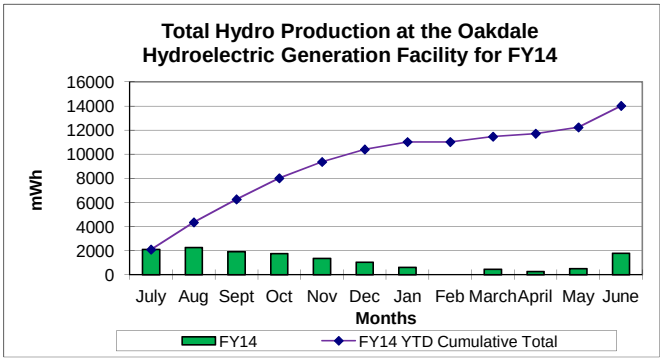


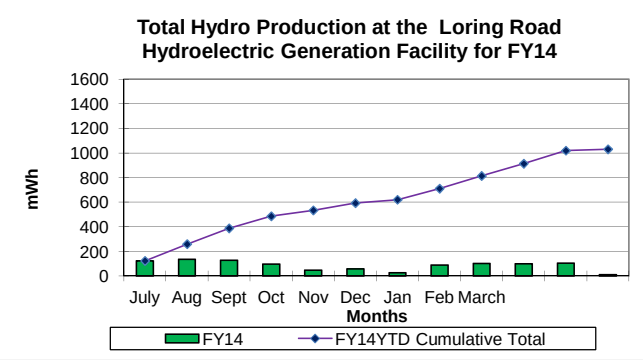
Maintenance overtime was $24k over budget for the 4th Quarter. Overtime was used for emergency repairs, storm coverage and upgrades to the Chelsea Administration Building.

Field Operations Hydroelectric Generation Quarterly Report

4th Quarter - FY14







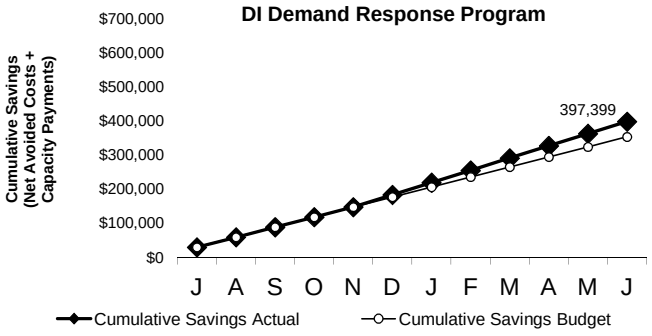
In the 4th Quarter, the **Cosgrove Hydroelectric Station** generated a net of 1,177 MWh; approximately 21% less power than was generated during the same quarter in FY13. The revenue generated at Cosgrove in the fourth quarter was $45,656.

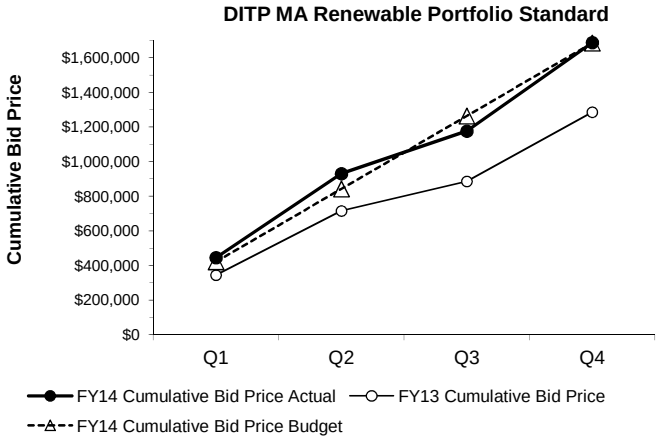
In the 4th Quarter, the **Oakdale HydroelectricStation** generated a net of 2,555 MWh; 96% more power than was generated during the same quarter in FY13. The net revenue generated in the fourth quarter was $109,784. (Power is generated when water is transferred from Quabbin to Wachusett.)

In the 4th Quarter, the **Loring Road** hydroelectric 200 kW station generated 216 MWh; approximately 31% less power than was generated during the same quarter in FY13. The net revenue generated in the fourth quarter was $10,181 (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 new turbine. The facility operates continuously. Some power is consumed on site, with the bulk exported to the grid.

Energy Audits and Implementation of Audit Recommendations at FOD Facilities: Technical energy audits of 24 facilities were performed in FY13. The focus of these energy audits were to identify specific lighting, HVAC, pumps, and motors, and insulation, among other measures that could be implemented at these facilities to save energy. Implementation of these audit recommendations began in the second quarter of FY14, and continued into the 4th quarter. The installation of VFDs and an Energy Management System on the HVAC system at the Navy Yard was completed in the 4th quarter. In addition, contracts were signed for the installation of energy efficient heaters for generators at five water and wastewater pump stations, and for the installation of VFDs on the exhaust and supply fans at two waterwater pump stations to reduce ventilation needs during unoccupied hours, during the 4th quarter.

Demand Response Payments: The John Carroll Water Treatment Plant, Loring Road Hydro, and Chelsea Creek, Columbus Park, Nut Island, and Ward Street Headworks are all enrolled in the ISO's Demand Response Program. The total net capacity payments for the third quarter of FY14 was $10,456.





Deer Island participates in the ISO-New England Demand Response Programs. By agreeing to have its Combustion Turbine Generators available to run and thus relieve the New England energy grid of Deer Island's load during times of high energy demand, MWRA receives monthly Capacity Payments from ISO-NE. When MWRA operates the CTGs 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 CTGs and the energy payments from ISO-NE.

Cumulative savings are the sum of Net Avoided Costs and monthly Capacity Payments - totaling $ 397,399 through June.

CTG-2B was operated on June 10 for a ISO-NE declared Demand Response audit event

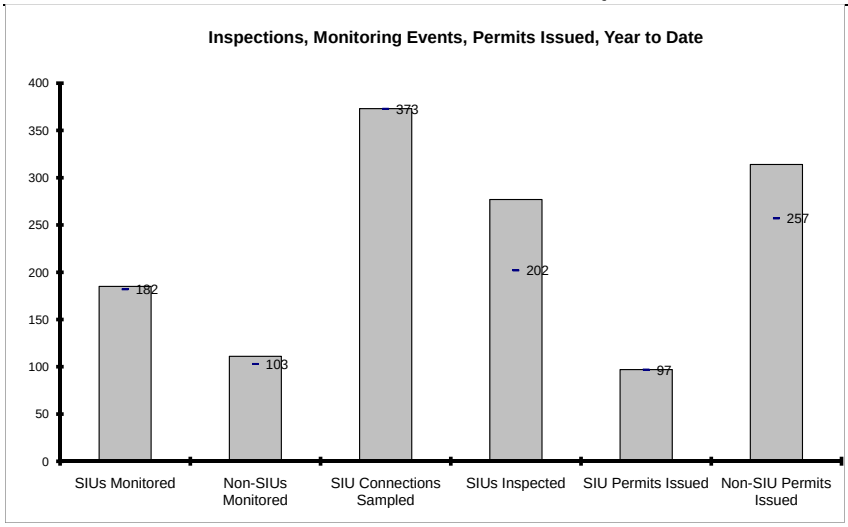
Note: Only the actual payments received are now being reported.

Bids were awarded during the 4th Quarter from Deer Island's renewable energy assets for the sale of 16,698 Class I Renewable Energy Certificates (RECs) for a total value of $499,688 and 48 Solar Renewable Energy Certificates (S-RECs) for a total value of $12,087. The value of the S-RECs is currently more than 8.4 times higher than the current value of Class I RECs (for STG, hydro and wind).

REC prices reflect the bid prices on the date that bids are accepted. Cumulative bid price reflects the total value of bids received to date. The FY14 budgeted cumulative bid estimate through the end the fiscal year is $1,685,611 while the actual bid total is $1,688,039.

Toxic Reduction and Control

4th Quarter 2014



EPA Required SIU Monitoring Events
for FY14: 182
YTD : **185**

Required Non-SIU Monitoring Events
for FY14: 103
YTD : **111**

SIU Connections to be Sampled
For FY14: 373
YTD: **373**

EPA Required SIU Inspections
for FY14: 202
YTD: **277**

SIU Permits due to Expire
In FY14: 97
YTD: **97**

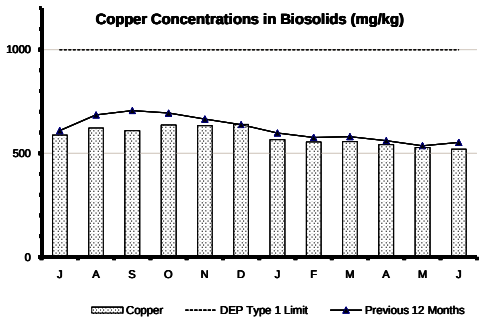
Non-SIU Permits due to Expire
for FY14: 257
YTD: **314**

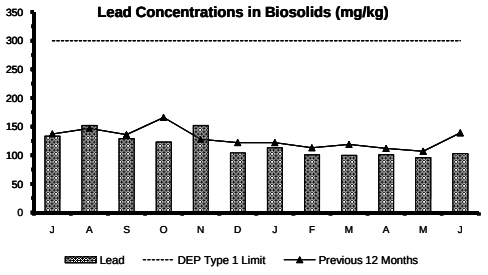
Significant Industrial Users (SIUs) are MWRA's highest priority industries due to their flow, type of industry, and/or their potential to violate limits. SIUs are defined by EPA and require a greater amount of oversight. EPA requires that all SIUs *with flow* be monitored at least once during the fiscal 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.

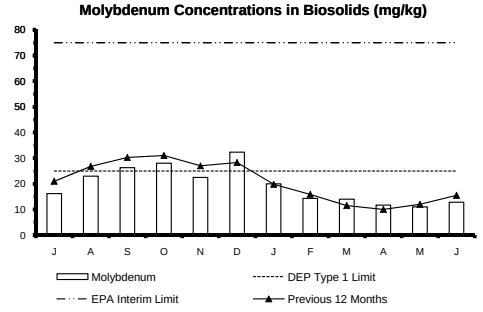
Number of Days to Issue a Permit								
	0 to 120		121 to 180		181 or more		Total Permits Issued	
	SIU	Non-SIU	SIU	Non-SIU	SIU	Non-SIU	SIU	Non-SIU
Jul	7	13	0	0	0	1	7	14
Aug	1	94	1	1	0	1	2	96
Sep	12	13	1	3	0	0	13	16
Oct	5	9	0	4	0	2	5	15
Nov	12	10	0	0	1	0	13	10
Dec	7	26	5	3	0	1	12	30
Jan	3	45	1	1	0	1	4	47
Feb	2	9	1	2	0	1	3	12
Mar	4	21	1	5	1	2	6	28
Apr	10	13	0	3	0	2	10	18
May	12	12	0	1	0	1	12	14
Jun	10	13	0	1	0	0	10	14
% YTD	88%	89%	10%	8%	2%	4%	97	314

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 and the remaining 10% of SIU permits be issued within 180 days.. Over the fiscal year 88% of SIU permits were issued within 120 days , missing the 90% target and 2% were issued after 180 days. In the 4th quarter, seventy-eight permits were issued. Thirty-two SIU permits and thirty-eight non-SIU permits were issued within 120 days after receipt of their applications. Five non-SIU permit were issued more than 120 days but before 180 days after receipt of their applications, but three non-SIU permits were issued after the 180-day period.
Delays in permit issuance were due to :
i) payment of the permit fee was late, ii) there were unique permitting considerations, or iii) because new staff were being trained.





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 . Overall. during this fiscal year, seventy-five percent of the time, the molybdenum levels were below the DEP limit. In the 4th quarter, the level of molybdenum remained below the DEP type 1 Limit, making it six months in succession.
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
4th Quarter – FY14

Western Water Operations and Maintenance

Ware Disinfection Facility: As part of the UV construction project, staff installed an interconnection to allow dilution water to be fed from the sample water line while the contractor's temporary bypass line was in service. Staff also installed an alternate sodium hypochlorite injection location for use while on the bypass line. The line stop and bypass line allowed the contractor to tie in the new UV piping to the existing piping and allow the replacement of the failed 48-inch butterfly valve. Staff also supported the contractor during the first phase of Demonstration Testing. During Demonstration Testing, two U.V. Reactor Trains are outfitted with lamps. The third train does not have lamps and all flow goes through this train during the second and third shifts.

Chicopee Valley Aqueduct: Staff continued to provide support for the contractor at the Shea Avenue leak site, including a night time shut down of the aqueduct. The Shea Avenue leak repair was completed by the end of the quarter.

Aqueducts: Staff completed the yearly inspection of all culverts on the Wachusett, Hultman, and Sudbury Aqueducts. Over one hundred culverts were inspected. Staff also fabricated and installed a new pipe gate on the Sudbury Aqueduct at the Memorial School in Natick to support the Aqueduct Trails Program.

Metro Water Operations & Maintenance

Water Pipeline Program: Seven valves were replaced during the fourth quarter, bringing the annual total replaced to 21, exceeding the annual goal of 20. The replaced valves were located in Belmont, Chelsea, Clinton, Malden and Revere. The annual goal (10) for blow off retrofits had been exceeded (11 completed) by March. There is a minor leak on the valve at detail record (70-76) (it is not surfacing), which requires the valve to be replaced after the summer demand season when Section 70 can be isolated without any potential service impacts. Leak repairs were completed on WASM 11 at 425 Pleasant Street in Belmont on Section 56 in the substructure of the General Edwards Bridge on the Revere/Lynn line and on Section 69 in Revere. The WASM 11 leak repair was completed without taking the main out of service and Section 56 continues to be an issue with badly deteriorating pipe conditions.

Valve Program: Main Line Valve Exercising (MLVE), Pressure Reducing Valve (PRV) preventative maintenance, and fire blow bypass valve maintenance were all performed per their normal routine maintenance schedules. Main Line Valve Exercising was approximately 70% of its annual goal due to staffing changes (one vacancy, and second due to IA for several months). The goal is expected to be met during FY15. Valve Operations were performed to support the in-house valve replacements noted above. Valve Operations for a variety of CIP and 8M permit contracts were performed including Section 20 for Mass DOT, Sections 16 and 69 for Revere sewer repair, Gillis Pump Station for CIP work and the Watertown Section CIP contractor. Section 80 was flushed in anticipation of Needham and Wellesley beginning to take water during the warmer weather season. The refilling of the Chestnut Hill Reservoir started early in April to return it to its normal operating range after the winter draw down. Section 69 was disinfected, flushed, and returned to service in the next phase of the Winthrop Avenue Revere sewer repair in April, and Section 16 was returned to service in early May. The portable water fountain was deployed at several locations, including the AWWA Annual Conference in Boston.

Cambridge Water Supply Transition: Transition back to Cambridge completely supplying themselves with water was first attempted on May 21. The CSO work had reached the point where the city's 40" water transmission main could be partially returned to service, per the city's hydraulic model. Meter 145, the temporarily active connection between the MWRA and Cambridge water systems was slowly closed. There was a resulting immediate pressure drop in the area of the city in the immediately adjacent to Meter 145. The decision was made in conjunction with the city, for the meter to remain in service. It was determined that there was a leak on the city's 40" water transmission main that required repair. The operation to isolate Meter 145 and return to all Cambridge water supply then scheduled for early June. On June 11, the city fully reactivated their 40" transmission main within their water distribution system on. Pressure within the Cambridge water system remained normal. After 24 hours of independent system operation, Meter 145 to Cambridge was completely isolated on June 12. There is additional work in Cambridge that is currently scheduled for the fall, which will require the activation of Meter 145 to augment the city's water supply.

Chicopee Valley Aqueduct Emergency Connection Test: On Tuesday, April 8, a test was conducted at the recently upgraded emergency connection between the Chicopee Valley Aqueduct (CVA) and the Springfield water system on West Street in Ludlow. One of the 10" Mobile Pump Units (MPU) was deployed to the site and operated by Water Pipeline Staff. Operations Engineering and Western Operations staff coordinated the activities with Springfield Water staff prior to and during the test. Western Valve staff operated the required valves to align the flow configuration. The MPU ultimately pumped at a 6 mgd flow rate during the successful test.

Wastewater Operations & Maintenance

Nut Island Headworks Odor Control In-house Maintenance Staff continue to install and test the odor control chemical piping system rebuild and were assisted by Operations Staff during system startup and testing. This will allow the wet scrubber side of the odor control system to be utilized during the summer months (peak H2S).

Hurricane Drill: Staff participated in the June 18 hurricane drill at the Chelsea Facility. The drill activity included staff travelling to a remote OCC location at the John Carroll Water Treatment Plant for remote operations exercise. From the remote OCC, site staff operated equipment at the Hayes Pump Station. All operation testing was successful.

Remote Headworks Upgrades: Wastewater Operations Staff continue to work with Engineering & Construction and for work necessary prior to the major renovation project of the Chelsea Creek Headworks and will be coordinated to minimize impact on the facility's normal operation. In April, staff attended a modeling workshop regarding the issue of possible high velocities in the screening channels while the headworks are choking and the impacts on equipment positioning.

Braintree/Weymouth and Houghs Neck Carbon Replacement: Staff determined that the carbon in the carbon absorbers at these facilities was beginning to fail and should be replaced by early summer. A contract for the replacement of the carbon at these two facilities and bids were solicited by Purchasing. A purchase order was issued to Carbon Activated, who has installed carbon at these two facilities in the past. Carbon has been delivered and installed. The collected carbon samples were tested by an independent lab in June and found to pass requirements.

Metro Equipment and Facility Maintenance

Nut Island Chemical System Replacement: The Odor Control Scrubber System had with multiple leaks and was difficult to repair and operate so MWRA staff decided to remove existing equipment and piping. They installed four new peristaltic hydroxide pumps and four new peristaltic sodium hypochlorite pumps. All CPVC piping was replaced with 20 isolation valves, and new pressure switches, back pressure valves and pressure relief valves. The new system will operate more efficiently with additional isolation valves to provide flexibility and system redundancy to use any of the four chemical feed pumps in alignment with any scrubber.

TRAC

Enforcement-Settlement Agreement between Aero Brazing Corporation and MWRA: TRAC and Aero Brazing Corporation entered into a Settlement Agreement to resolve all issues related to the June 4, 2013 Penalty Assessment Notice. Aero Brazing's Facility, located in Woburn, generates industrial wastewater from an aluminum brazing process. Aero Brazing had operated without a licensed pretreatment operator, falsified information on its permit application and failed to submit a pretreatment report on time as required by its permit. The orginal penalty was $62,500.00. The Settlement Agreement requires Aero Brazing to pay a $45,000.00 administrative penalty and pay stipulated penalties for a period of two years for reporting and discharge violations.

Inspections and Monitoring: During FY14, TRAC staff completed 743 industrial inspections, 1079 gasoline/oil separator inspections and 249 septage site and hauler inspections. The industrial inspections includes 214 Significant Industrial User (SIU) inspections meeting EPA's requirement that all SIUs be inspected annually. Staff also issued 287 Sewer Use Discharge Permits, 97 of which were issued to SIUs. Staff met the goal for SIU Permits and exceeded the goal for Non-SIU Permits. TRAC Staff sampled 185 SIUs as required by EPA's Pretreatment Regulations The EPA requires that each SIU be sampled at least once per fiscal year, and TRAC's Monitoring Plan requires sampling of 40% of the SIUs at least one additional time per year and 10% at least two additional times per year. All SIUs with discharges were sampled except for a few locations that stopped discharging early in 2013.

Metering and Monitoring

Staff completed evaluating possible discrepancies with field dataloggers. Eight meter dataloggers, system wide, required flow adjustments and were included with the final 2013 community flow.

Environmental Quality

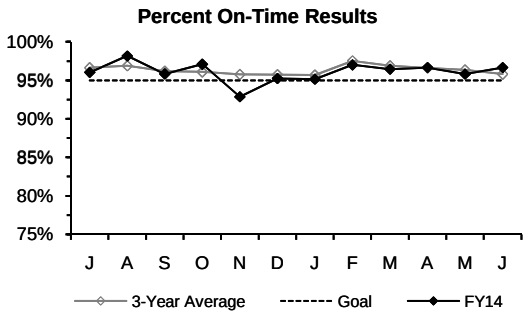
Algae: Algae monitoring began as usual in May. Nuisance algae levels were elevated for much of the early spring, and on June 24 a copper sulfate treatment at Wachusett Reservoir was deemed necessary to control levels of *Synura*. There have been no taste and odor complaints during the quarter related to algae.

Harbor and Outfall Monitoring: Three surveys were conducted during the quarter. *Alexandrium* (algae responsible for red tide) levels were low in Massachusetts Bay this season.

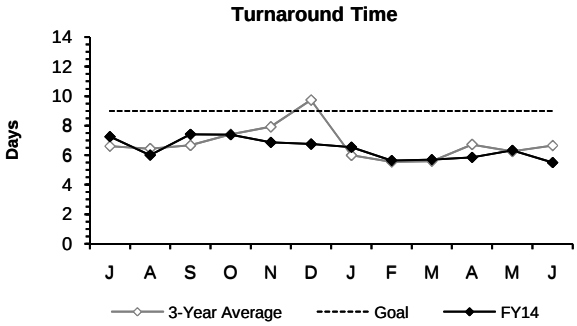
OMSAP Meeting: A meeting of the Outfall Monitoring Science Advisory Panel has been scheduled for September 23rd and will be held in Nahant.

Laboratory Services

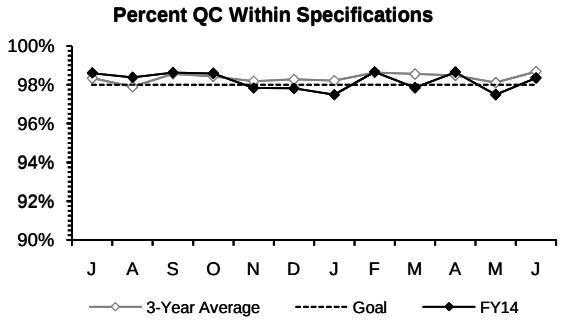
4th Quarter - FY14



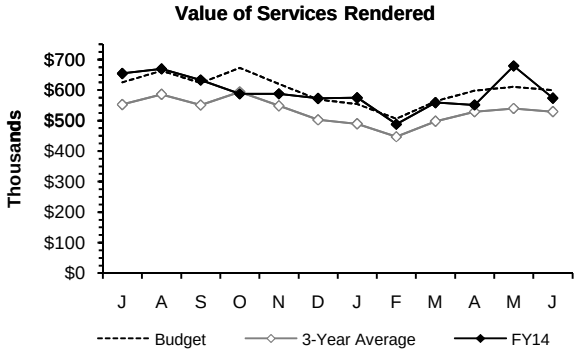
The Percent On-Time measurement was above the 95% goal.



Turnaround Time was faster than the 9-day goal.



Percent of QC tests meeting specifications was above the 98% in-house goal.



Value of Services Rendered was slightly below.the seasonally adjusted budget projection.

Highlights:
Lab Services has completed most of the annual Proficiency Test (PT) samples for 2014 at its five locations. Passing an annual PT is required to maintain DEP certification. This included 36 of 36 microbiology parameters and 381 of 382 chemistry parameters. Received passing scores for 97% of the paramaters for "oceanographic" PT samples. These voluntary PT samples are similar to the Harbor and Outfall Monitoring samples we test from Boston Harbor and Mass. Bay.

Quality Assurance: Completed work with Internal Audit on a management advisory on Lab QA/QC. DEP conducted the every other year certification audit at the Central Lab and only a small number of minor findings were noted, which have been addressed. DEP certied us for the new, more automated cyanide test that will be phased in for all wastewater testing in July.

LIMS: Issues since March Go Live of the new version of LIMS have been minor and most have been addressed quickly by MIS. Working MIS on LIMS enhancements and implementing Electronic Laboratory Notebook software to replace paper logbooks.

Mobile Lab: Two successful drills by the mobile lab were completed with the ESU.

DITP: Assisted with the delivery of fuel oil by collecting QC samples from random trucks.

TRAC: Continuing to work with an MWRA group examining wastewater sources of molybdenum.

Wastewater Operations: Tested CSO wet-weather samples from a treatment evaluation special study.

ENQUAL Clean Water and Drinking Water:
Regulatory testing for drinking water, waste water and Mass. Bay has been going smoothly.

Outside Customers: Began receiving nitrification samples from Peabody.

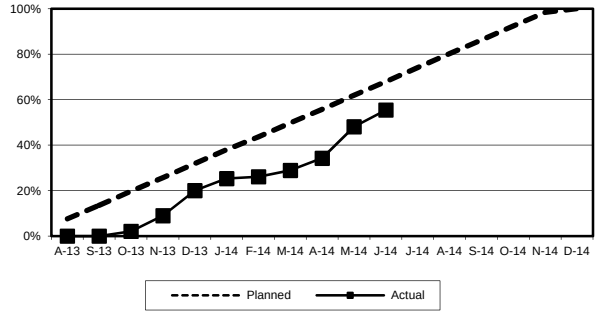
CONSTRUCTION PROGRAMS

Projects In Construction

Q4 - FY14

(Progress Percentages based on Construction Expenditures)

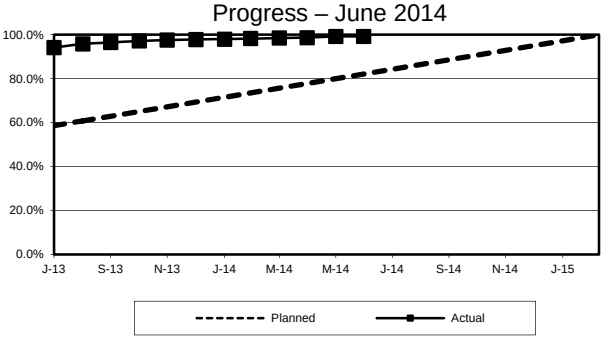
Nut Island Headworks Electrical and Conveyor Improvements Progress – June 2014



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 June the Contractor, J.F. White, completed the installation of cable tray on the ground, lower and bottom levels of the facility. They installed junction boxes in the boiler room for Ductbank A-2 and began installing conduit for the existing equipment on the bottom level.

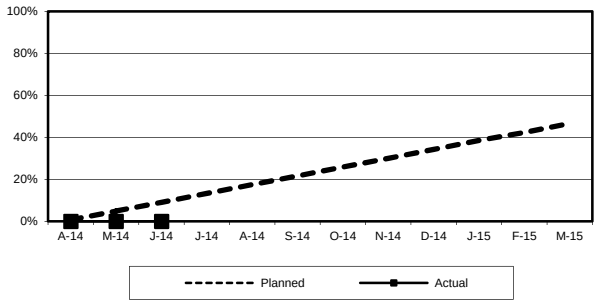
UV Disinfection Facilities CWTP Progress – June 2014



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: As of June the Contractor continued with punchlist work. The cooling water pipes for the air handling units in the Mechanical room were chlorinated and flushed. The roofing contractor furnished and installed 5" down-spouts and drain piping connection into all buildings. In addition, final paving and site restoration was completed.

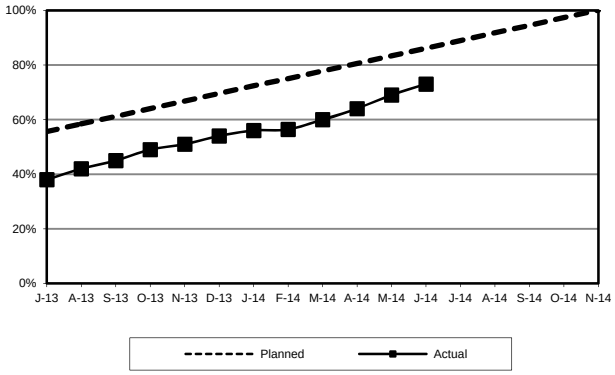
Clinton Digester and Primary Clarifier Rehab Progress - June 2014



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 June, the contractor, R.H. White Construction, began removing the railings, flights and chains, so that demolition of Primary Clarifiers 3 & 4 can begin. In addition, they began excavating around the perimeter of the tank walls and commenced ground penetrating radar on the concrete walls as required prior to demolition.

Spot Pond Water Storage Facility Progress – June 2014



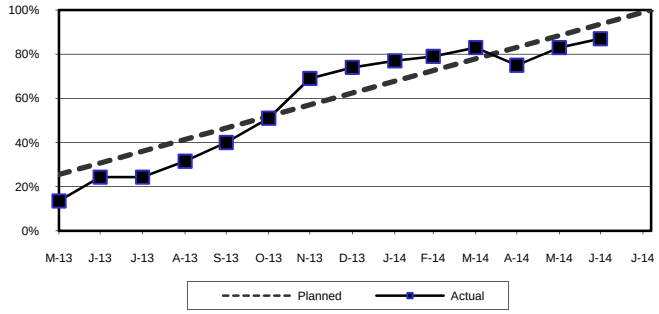
Project Summary: This is a design/build project for the construction of two, 10 million-gallon covered concrete storage tanks and a buried pump station, which will provide back-up redundancy for the Northern High and Northern Intermediate High distribution service areas.

Status and Issues: As of June, the concrete wall sections and base slab cells for Tank #1 are 100% complete and the roof decks are approximately 89% complete. The concrete roof decks in Tank #2 are approximately 98% complete. They completed sealing visible leaks on Tank #2 external walls and continued backfilling the tank. The South and West walls of Tank #2 are partially completed to elevation 201. Electrical and mechanical work inside the pump station continues. As of June 30th, 2014 the project is 45 days behind schedule.

Projects In Construction

(Progress Percentages based on Construction Expenditures)

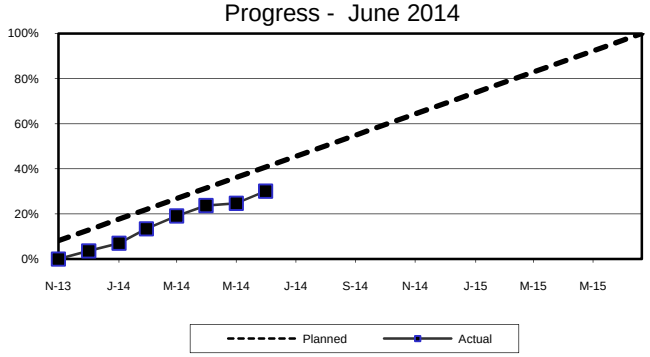
Quabbin UV Disinfection
Progress – June 2014



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 June, the Contractor replaced the 48" butterfly valve and piping in Vault 1. They conducted the start-up and functional testing of the UV units; moved the chlorine feed from Vault 1 to the UV Building; and calibrated the flow meters in the UV pipes.

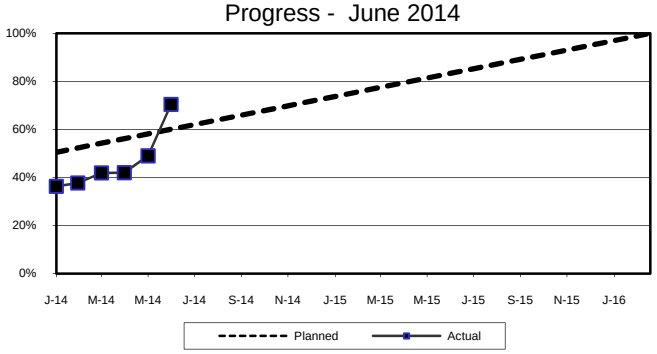
Pump, Gear Box and Diesel Engine Upgrade
Prison Point and Cottage Farm CSO Facilities
Progress - June 2014



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: As of June, the sub-contractor, Waukesha, completed the rehabilitation of Engine #1 and continued troubleshooting low oil pressure issue on Engine #2 at Cottage Farm. At Prison Point, the subcontractor erected staging at the pump level in order to remove the existing engine silencer on Engine #4.

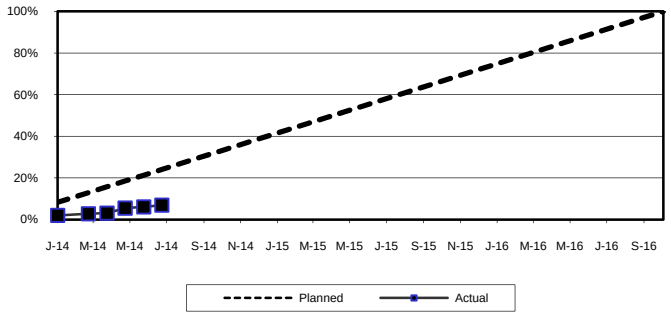
North Main Pump Station VFDs & Motors
Progress - June 2014



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: The Contractor, J.F. White, has completed the installation of VFD/motor No. 7 and VFD No. 6. The 90 day test period continues until mid-September.

Primary and Secondary Clarifier Scum Tip Tubes
Progress - June 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 removal of the existing tip tubes in SC-C5, SC-C6 and SC-A18, after which they began the installation of the new tip tubes. They began the installation of the new terminal blocks and disconnects for the scum skimmer control panels on Secondary Clarifier Batteries A & C.

CSO CONTROL PROGRAM

4th Quarter - FY14

MWRA and the CSO communities have completed 32 of the 35 projects in the Long-Term CSO Control Plan, including the Interceptor Connection Relief and Floatables Control at Outfall SOM01A project, which MWRA completed in December 2013 ahead of the June 2014 milestone in Schedule Seven. Two CSO projects are in construction: Reserved Channel Sewer Separation by BWSC, and CAM004 Sewer Separation by the City of Cambridge. MWRA recently bid the construction contract for the Automated Gate and Floatables Control at Outfall MWR003 and Rindge Avenue Siphon Relief, the last CSO project to move into construction, and plans to issue notice to proceed with construction in August 2014, in compliance with Schedule Seven. 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.

<table>
<tr><th colspan="2" rowspan="2">Project</th><th colspan="3">Court Milestones in Schedule Seven
(Shaded milestones are complete.)</th><th rowspan="2">Status as of June 30, 2014</th></tr>
<tr><th>Commence Design</th><th>Commence Construction</th><th>Complete Construction</th></tr>
<tr><td colspan="2">Reserved Channel Sewer Separation</td><td>Jul 06</td><td>May 09</td><td>Dec 15</td><td>BWSC continues to make progress with the nine planned contracts for the Reserved Channel Sewer Separation project.
<table><tr><td>Contract 1</td><td>CSO outfall rehab</td><td>$ 4.2 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>$11.2 M</td><td>Complete</td></tr><tr><td>Contract 3B</td><td>Sewer separation</td><td>$ 9.6 M</td><td>90% complete</td></tr><tr><td>Contract 4</td><td>Sewer separation</td><td>$ 7.4 M</td><td>75% 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>$ 0.9M</td><td>Awarded</td></tr><tr><td>Contract 7</td><td>Pavement restoration</td><td>$ 1.1 M</td><td>Complete</td></tr><tr><td>Contract 8</td><td>Pavement restoration</td><td>$ 5.4 M</td><td>35% complete</td></tr></table>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 plans to complete all work for the Reserved Channel sewer separation project by December 2015, in compliance with Schedule Seven.</td></tr>
<tr><td rowspan="2">Cambridge/ Alewife Brook Sewer Separation</td><td>CAM004 Sewer Separation</td><td rowspan="2">Jan 97</td><td>Jul 98

Sep 12</td><td rowspan="2">Dec 15</td><td>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 issue work on Concord Lane as a fourth contract.
<table><tr><td>Contract 8A</td><td>Sewer separation</td><td>$10.1M</td><td>Subst. complete</td></tr><tr><td>Contract 8B</td><td>Sewer separation</td><td>$16.3M</td><td>23% complete</td></tr><tr><td>Contract 9</td><td>Sewer separation</td><td>$ 5.7M</td><td>18% complete</td></tr></table>Cambridge has reached agreement with the property owner for the second right of entry permit for geotechnical and hazmat investigations in Concord Lane (private way). ROE#2 commits the owner to enter into a third right of entry permit 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.</td></tr>
<tr><td>MWR003 Gate and Rindge Ave. Siphon Relief</td><td>Apr 12</td><td>Aug 14</td><td>Oct 15</td><td>The construction contract was advertised on May 27 and three bids were received on June 26. Staff will seek Board approval to award on July 16. Staff plan to issue the notice to proceed with construction by August 2014 and complete this contract by October 2015, in compliance with Schedule Seven.</td></tr>
</table>

Other CSO Related Work				
Project	**Court Milestones in Schedule Seven (Shaded milestones are complete.)**			**Status as of June 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. The final draft report with recommendations will be available in August 2014. A meeting between BWSC, its consultant and MWRA has been scheduled for August 6 to discuss the findings and next steps. 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 FY14 CIP includes $5.6 million for the inflow removal effort, of which approximately $2.6 million is allocated to awarded design and construction contracts.

CIP Expenditures
4th Quarter - FY14

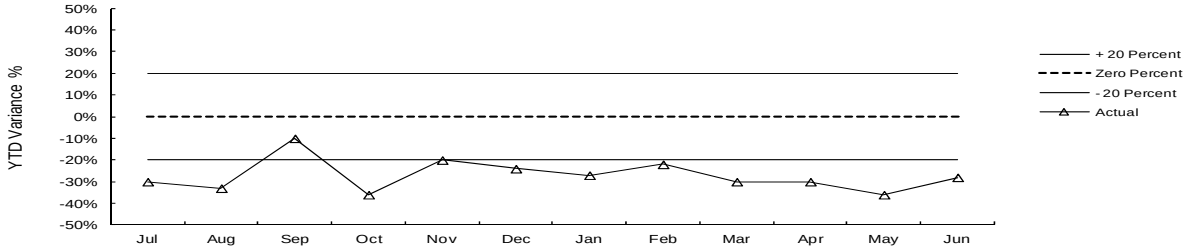
The Year-To-Date variances are highlighted below:

FY14 Capital Improvement Program Expenditure Variances through June by Program ($000)				
Program	FY14 Budget Through June	FY14 Actual Through June	Variance Amount	Variance Percent
Wastewater	84,251	55,690	(28,562)	-34%
Waterworks	49,839	40,966	(8,872)	-18%
Business and Operations Support	7,972	5,507	(2,465)	-31%
Total	$142,062	$102,163	($39,899)	-28%

Underspending within Wastewater is primarily due to: timing of anticipated expenditures for contracts 8B and 9 for the Cambridge Sewer Separation project; delays of equipment delivery for the North Main Pump Station Variable Frequency Drives Construction; timing for Prison Point/Cottage Farm Engine Pump & Gearbox Rebuilds; timing of expenditures and contract adjustments for the South Dorchester Sewer Separation contracts; award less than budget for the Nut Island Electrical Grit & Screening Conveyance Construction; and schedule changes for North Main Pump Station Butterfly Valve Replacement, Clinton Digester Rehabilitation, Miscellaneous VFD Replacements, and Sodium Hypochlorite Pipe Replacement Design contracts. This was partially offset by greater than anticipated community requests for grants and loans for the Infiltration/Inflow (I/I) Program, progress on the Scum Skimmer Replacement contract, and timing of equipment delivery for the Electrical Equipment Upgrade contract. Underspending in Waterworks is primarily due to lower than budgeted award for WASM 3 Design Construction Administration/Resident Inspection, schedule change for Carroll Treatment Plant Existing Facility Modifications CP-7, site issues and delay in equipment delivery for the Spot Pond Storage Facility Design/Build contract, and timing of Watershed Land purchases. This was partially offset by community requests for loans were greater than anticipated and unanticipated work for the Chicopee Valley Aqueduct Shea Ave Leak Repair contract.

CIP Expenditure Variance

Total FY14 CIP Budget of $142,461,000.



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 6/30/2014	$80 million
Unused capacity under the debt cap:	$723 million
Estimated date for exhausting construction fund without new borrowing:	Oct-14
Estimated date for debt cap increase to support new borrowing:	Not anticipated at this time
Commercial paper outstanding: Commercial paper capacity:	$170 million $350 million
Budgeted FY14 capital spending*:	$125 million

* Cash based spending is discounted for construction retainage.

DRINKING WATER QUALITY AND SUPPLY

Source Water – Microbial Results and UV Absorbance

4th Quarter – FY14

Source Water – Microbial Results

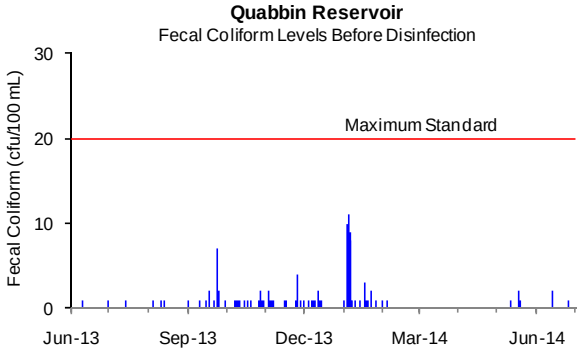
Total coliform bacteria are monitored in both source and treated water to provide an indication of overall bacteriological activity. Most coliforms are harmless. However, fecal coliform, a subclass of the coliform group, are identified by their growth at temperatures comparable to those in the intestinal 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 Ware Disinfection Facility (WDF) raw water tap before being treated and entering the CVA system.

From May 30 until June 7, grab samples for the Quabbin Reservoir were taken at the Winsor Power Station due to the raw water sample tap being temporarily unavailable at WDF.

All samples collected during the 4th 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.**

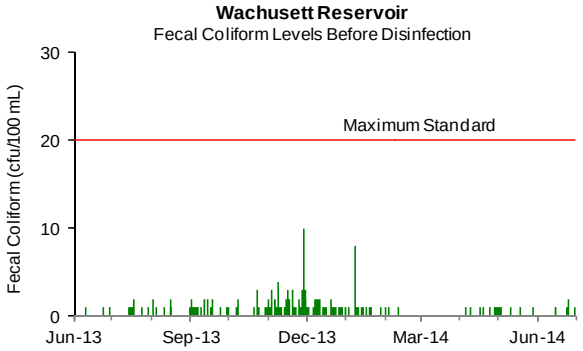


Sample Site: Wachusett Reservoir

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 4th Quarter were below 20 cfu/100mL. **For the current six-month period, 0% of the samples exceeded a count of 20 cfu/100mL.**

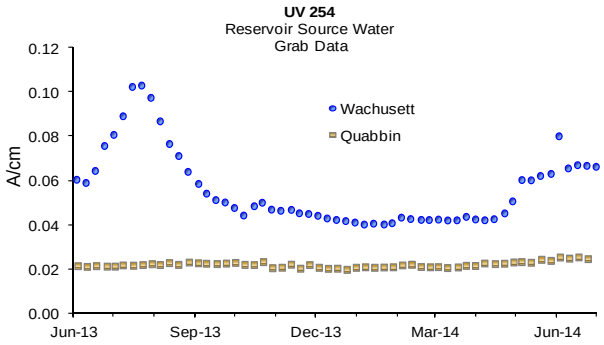


Source Water – UV Absorbance

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 0.024 A/cm.

Wachusett Reservoir UV-254 levels are currently around 0.067 A/cm.



Source Water – Turbidity

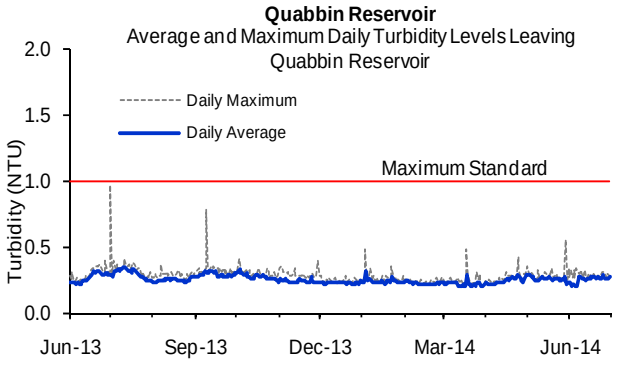
4th Quarter – FY14

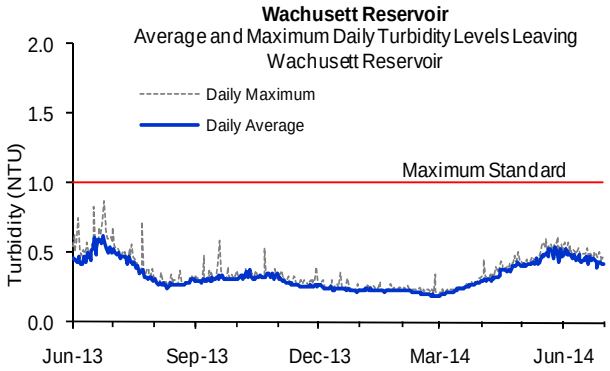
Turbidity is a measure of suspended and colloidal particles including clay, silt, organic and inorganic matter, algae and microorganisms. The effects of turbidity depend on the nature of the matter that causes the turbidity. High levels of particulate matter may have a higher disinfectant demand or may 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 Ware Disinfection Facility (WDF) before chlorination. Turbidity of Wachusett Reservoir is monitored continuously at the Carroll Water Treatment Plant before ozonation.

From May 30 until June 7, the turbidity analyzer was relocated to Winsor Power Station due to the sample tap being unavailable at WDF. Maximum turbidity results at Quabbin and Wachusett were within DEP standards for the quarter

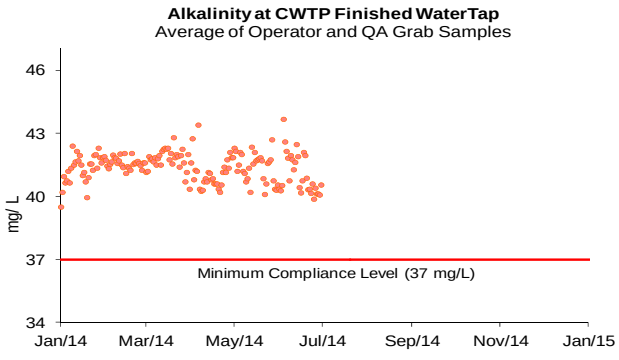


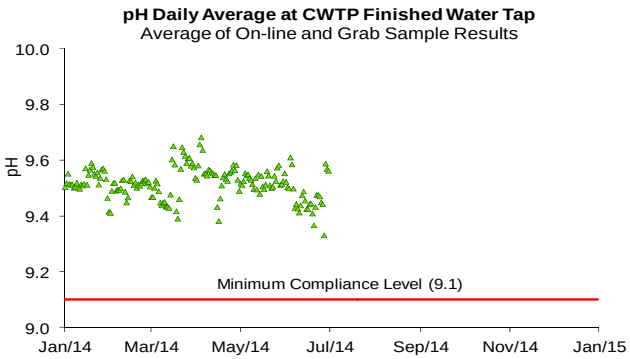


Treated Water – pH and Alkalinity Compliance

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 June 18 and 19, 2014. Distribution system sample pH ranged from 9.3 to 9.5 and alkalinity ranged from 41 to 43 mg/L. No sample results were below DEP limits for this quarter.





Treated Water – Disinfection Effectiveness

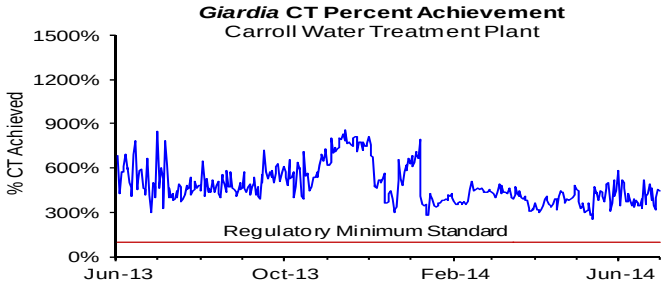
4th Quarter – FY14

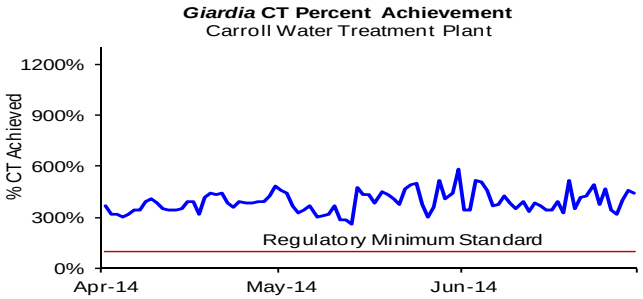
At the Carroll Water Treatment Plant (CWTP), MWRA reports on 99.9% (3-log) inactivation for *Giardia* (reported as "CT"), and 99% (2-log) inactivation for *Cryptosporidium* (reported as "Log_i"). MWRA calculates inactivation rates hourly and reports inactivation at maximum flow for *Giardia*, and minimum Log_i for *Cryptosporidium*. CT achievement for *Giardia* assures CT achievement for viruses, which have a lower CT requirement.

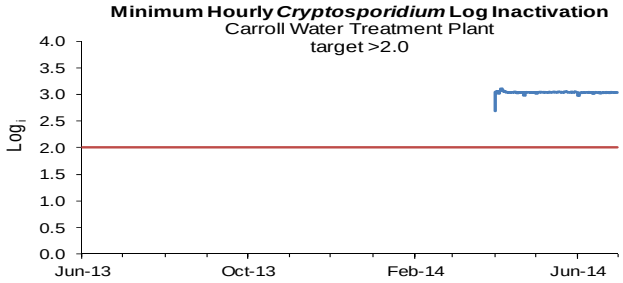
Compliance with the *Giardia* standard is expressed as percent of required CT achieved; 100% is the minimum allowed. Compliance with the *Cryptosporidium* standard is based on meeting the Log_i requirement of 2-log and meeting the "off-spec" requirement. Off-Spec water is water that has not received the required UV dose or if the UV reactor was operated outside the validated testing ranges. No more than 5% off-spec water is allowed in a month.

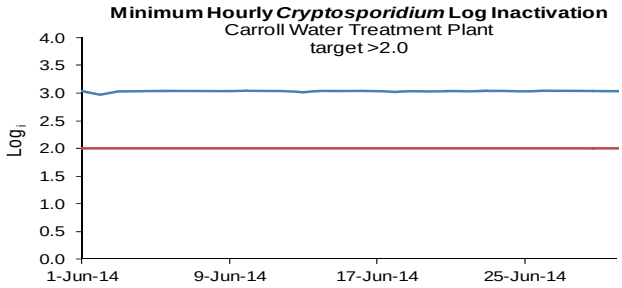
Wachusett Reservoir – MetroWest/Metro Boston Supply:

- Ozone dose at the CWTP varied between 1.4 to 2.5 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* Log_i was maintained above 2 log during the month. Off-spec water was less than 5%.
- The CWTP UV treatment process officially went on-line for regulatory compliance on April 1.



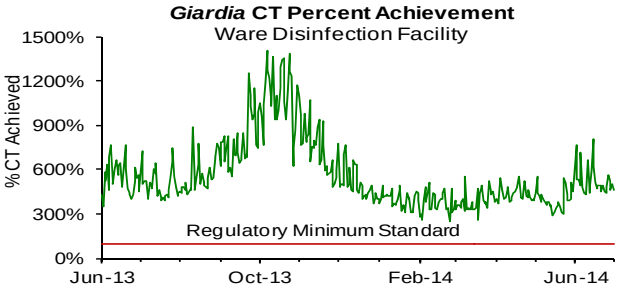


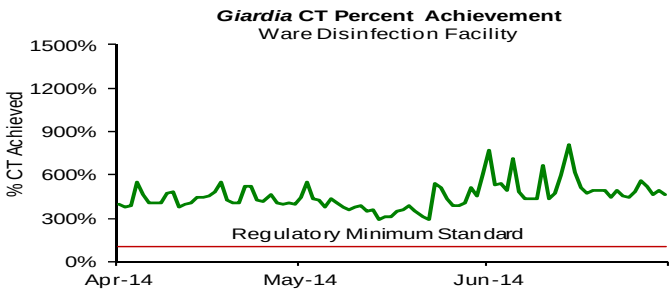




Quabbin Reservoir at Ware Disinfection Facility (CVA Supply):

CT was maintained above 100% at all times the plant was providing water into the distribution system for the quarter, as well as every day for the last fiscal year. The chlorine dose at Ware Disinfection Facility (WDF) is adjusted in order to achieve MWRA's seasonal target of $\geq$0.75 mg/L (November 01 – May 31) and $\geq$1.0 mg/L (June 1– October 31) at Ludlow Monitoring Station. The chlorine dose at WDF varied between 1.4 to 1.9 mg/L for the quarter.





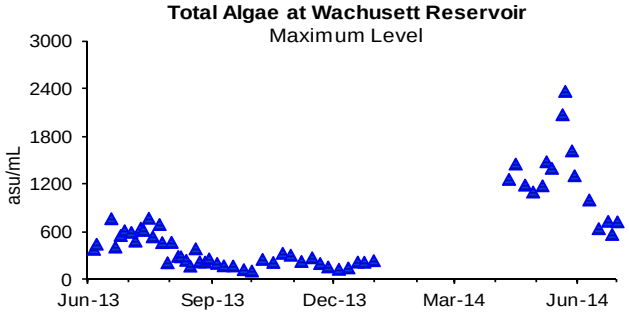
Source Water - Algae

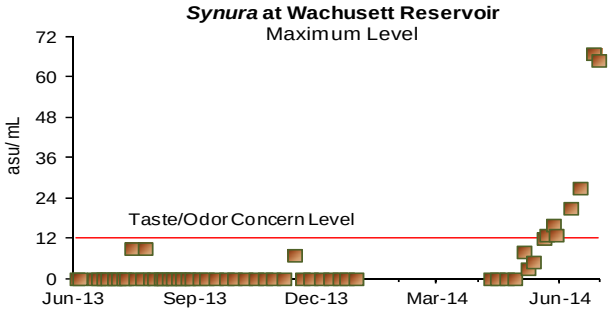
4th Quarter – FY14

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 algaecide. 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 4th Quarter, there were two complaints which may be related to algae reported from local water departments. Wachusett Reservoir was treated with copper sulfate on June 24 to control the growth of *Synura*, a taste and odor causing algae species.



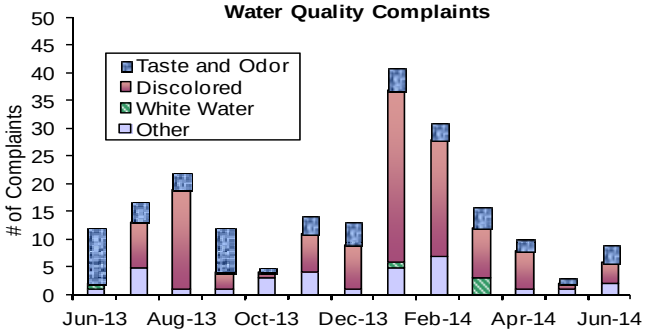


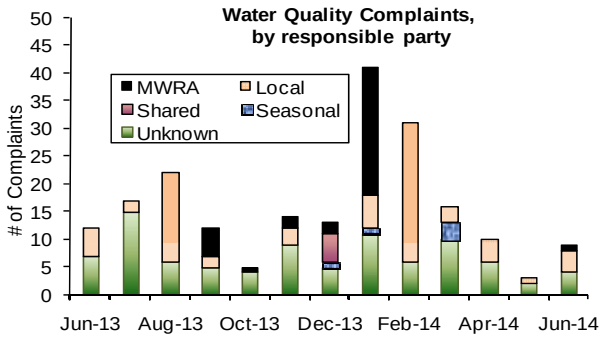
Drinking Water Quality Customer Complaints: Taste, Odor, or Appearance

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 22 complaints during the quarter compared to 45 complaints for 4th Quarter of FY13. Of these complaints, 12 were for “discolored water”, 6 were for “taste and odor”, and 4 were for “other”. Of these complaints, 9 were local community issues, 1 was an MWRA issue, and 12 were unknown in origin.





Bacteria & Chlorine Residual Results for Communities in MWRA Testing Program

4th Quarter – FY14

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 139 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 4th Quarter, 11 of the 5,980 community samples (0.18% system-wide) submitted to MWRA labs for analysis tested positive for coliform (Bedford - April; Swampscott - May; Boston, Framingham, Lexington, Newton, Revere, Somerville, and Waltham - June). Three of the 1,946 MWRA samples (0.15%) tested positive for total coliform in June. No sample tested positive for *E.coli*. Only 1.7% 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)
MWRA	d	MWRA Locations	374	0 (0%)	0		1.20	2.33
	d	Communities in Program	1572	3 (0.19%)	0	No	0.02	1.89
		Total: MWRA	1946	3 (0.15%)	0	No	0.02	1.98
Fully Served		ARLINGTON	156	0 (0%)	0		0.00	1.50
		BELMONT	104	0 (0%)	0		0.71	1.99
		BOSTON	783	1 (0.10%)	0	No	1.04	1.91
		BROOKLINE	221	0 (0%)	0		0.16	2.00
		CHELSEA	169	0 (0%)	0		1.20	1.82
		DEER ISLAND	52	0 (0%)	0		1.18	1.98
		EVERETT	170	0 (0%)	0		0.89	1.15
		FRAMINGHAM	219	1 (0.34%)	0	No	0.84	2.14
		LEXINGTON	120	1 (0.64%)	0	No	1.62	2.15
		LYNNFIELD	18	0 (0%)	0		0.53	1.39
		MALDEN	234	0 (0%)	0		0.95	1.75
		MARBLEHEAD	72	0 (0%)	0		0.36	1.95
		MEDFORD	204	0 (0%)	0		0.93	1.82
		MELROSE	120	1 (0.61%)	0	No	0.02	1.18
		MILTON	96	0 (0%)	0		1.39	1.83
		NAHANT	30	0 (0%)	0		0.12	1.55
		NEWTON	279	1 (0.27%)	0	No	0.58	2.04
		NORWOOD	99	0 (0%)	0		0.17	1.90
		QUINCY	299	0 (0%)	0		0.20	1.84
		READING	130	0 (0%)	0		0.45	1.74
		REVERE	198	1 (0.39%)	0	No	0.35	2.09
		SAUGUS	104	0 (0%)	0		1.41	1.89
		SOMERVILLE	276	1 (0.26%)	0	No	1.08	1.92
		SOUTHBOROUGH	30	0 (0%)	0		0.14	2.12
		STONEHAM	92	0 (0%)	0		0.92	2.02
		SWAMPSCOTT	57	1 (1.33%)	0	No	0.02	1.77
		WALTHAM	225	3 (1.01%)	0	No	0.31	2.15
		WATERTOWN	130	0 (0%)	0		1.45	2.09
		WESTBORO HOSPITAL	15	0 (0%)	0		0.08	0.46
		WESTON	48	0 (0%)	0		1.39	2.35
		WINTHROP	73	0 (0%)	0		0.12	1.81
		Total: Fully Served	*4823*	*11 (0.17%)*				
CVA & Partially Served	b	BEDFORD	60	0 (0%)	0		0.65	1.34
	b	CANTON	87	0 (0%)	0		0.04	1.03
	b	HANSCOM AFB	27	0 (0%)	0		0.86	1.81
	b	MARLBORO	126	0 (0%)	0		0.17	1.81
	b	NEEDHAM	123	0 (0%)	0		0.02	0.60
	b	NORTHBORO	50	0 (0%)	0		1.17	2.01
	b	WAKEFIELD	143	0 (0%)	0		0.42	1.24
	b	WELLESLEY	113	0 (0%)	0		0.02	0.82
	b	WILMINGTON	87	0 (0%)	0		1.25	1.98
	b	WINCHESTER	98	0 (0%)	0		0.16	1.33
	b	WOBURN	195	0 (0%)	0		0.06	0.93
	c	SOUTH HADLEY FD1	48	0 (0%)	0		0.09	0.57
		Total: CVA & Partially Served	*1157*	*0 (0%)*				
		Total: Community Samples	*5980*	*11 (0.18%)*				

(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.

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

4th Quarter – FY14

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).

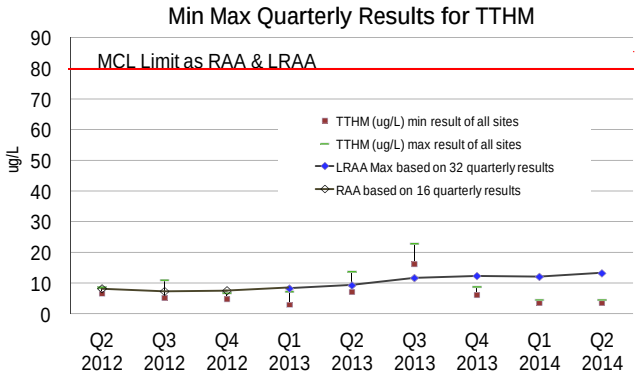
For the CVA communities, effective Q3 2013, under the Stage 2 DBP Rule, compliance is based on a LRAA for each community. Sampling locations have increased from 12 to 14 each quarter. Prior to Q3 2013, the running annual average is reported, and since Q3 2013, the maximum LRAA is reported (in addition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

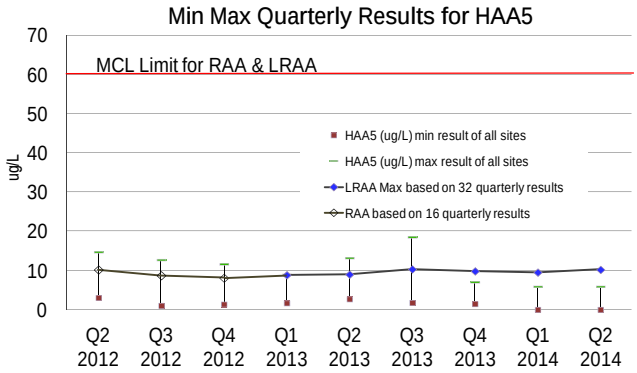
Partially served and CVA communities are responsible for their own compliance monitoring and reporting, and must be contacted directly for their individual results.

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 ug/L.

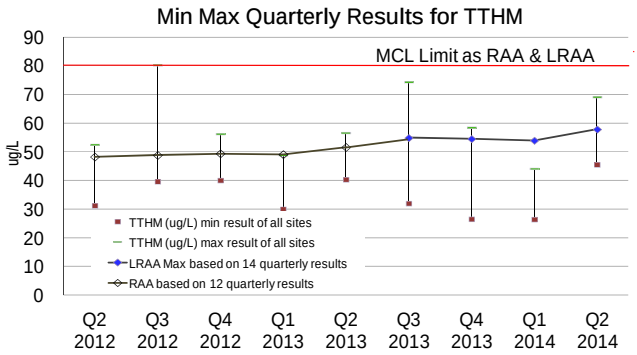
The RAA for TTHMs and HAA5s for MWRA's Compliance Program (represented as the line in the top two graphs below) remain below current standards. The LRAA for TTHMs = 13.3 ug/L; HAA5s = 10.2 ug/L. The current RAA for Bromate = 0.0 ug/L. CVA's DBP levels continue to be below current standards.

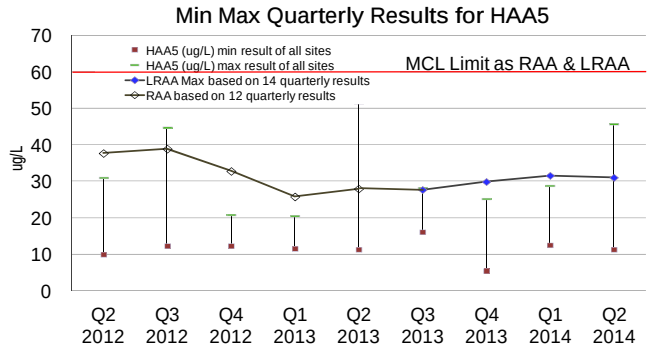
MetroBoston Disinfection By-Products





CVA Disinfection By-Products





Water Supply and Source Water Management

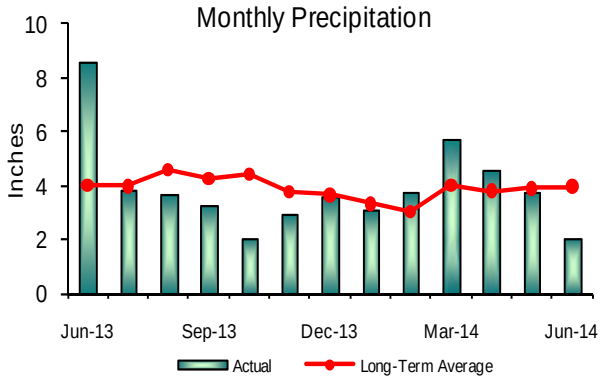
4th Quarter – FY14

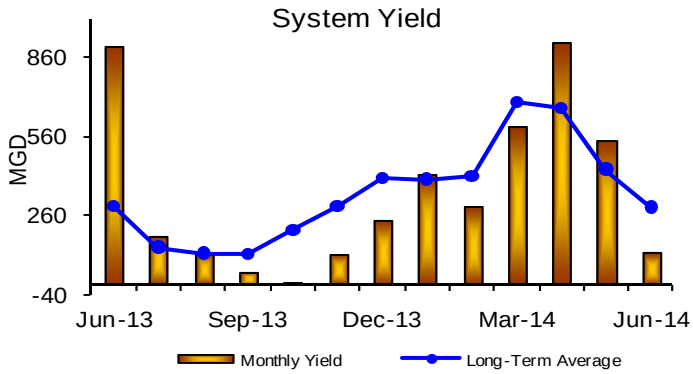
Background

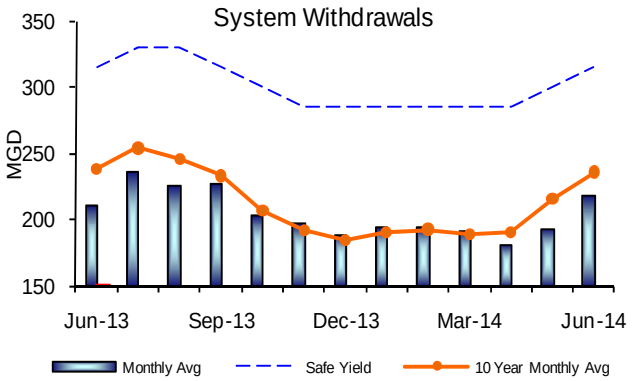
A reliable supply of water in MWRA's reservoirs depends on adequate precipitation during the year and seasonal hydrologic inputs from watersheds that surround the reservoirs. Demand for water typically increases with higher summer temperatures and then decreases as temperatures decline. Quabbin Reservoir 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.

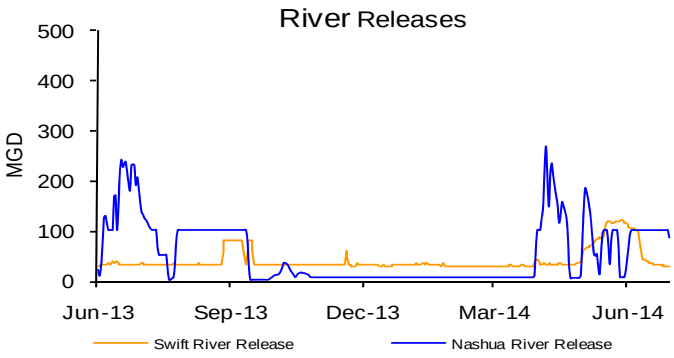
Outcome

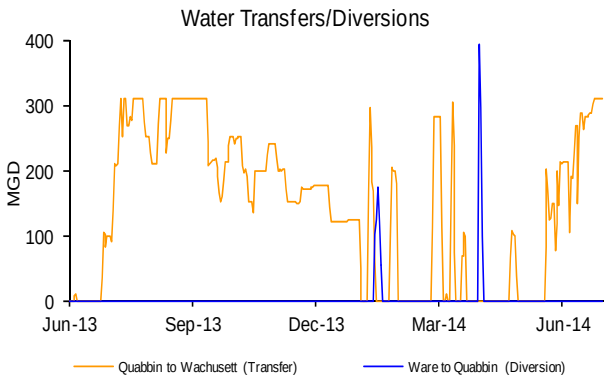
Quabbin Reservoir level remains within the normal operating range for this period of the year. The volume of the Quabbin Reservoir was at 96.8% as of June 30, 2014; a 3.8% increase for the quarter, which represents an increase of 15.7 billion gallons of storage. Yield for the quarter was above its quarterly long term average while precipitation was slightly below its long term average. Monthly withdrawals continue to be below its long-term average.

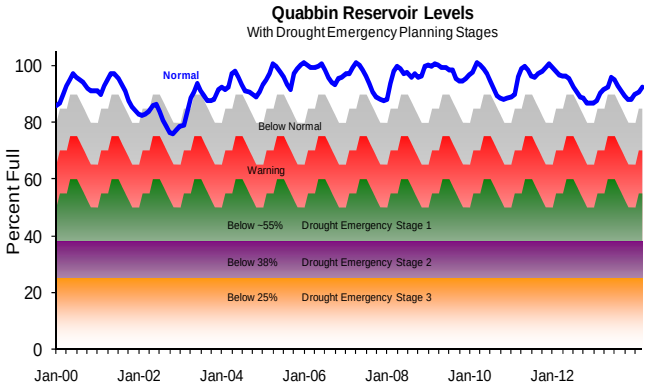












WASTEWATER QUALITY

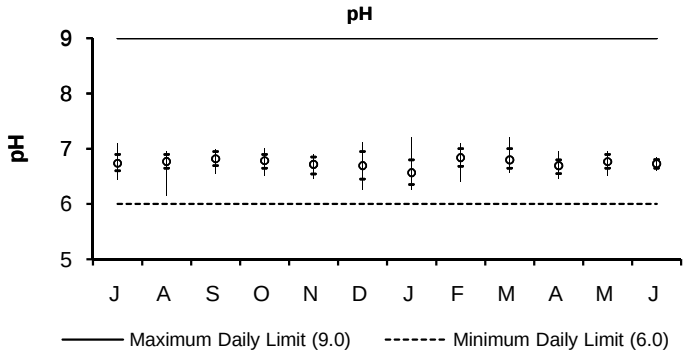
NPDES Permit Compliance: Deer Island Treatment Plant

4th Quarter - FY14

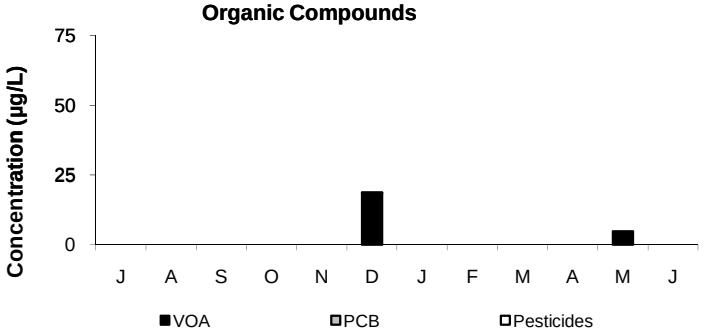
NPDES Permit Limits

Effluent Characteristics		*Units*	*Limits*	*April*	*May*	*June*	*4th Quarter Violations*	*FY14 YTD Violations*
Dry Day Flow:		mgd	436	269.1	272.5	267.8	0	0
cBOD:	Monthly Average	mg/L	25	6.3	4.4	6.4	0	0
	Weekly Average	mg/L	40	10.6	5.3	7.4	0	0
TSS:	Monthly Average	mg/L	30	18.4	6.7	9.2	0	0
	Weekly Average	mg/L	45	36.3	7.3	10.9	0	0
TCR:	Monthly Average	ug/L	456	<40	<40	<40	0	0
	Daily Maximum	ug/L	631	<40	<40	<40	0	0
Fecal Coliform:	Daily Geometric Mean	col/100mL	14000	74	20	20	0	0
	Weekly Geometric Mean	col/100mL	14000	24	8	8	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	6.5-7.0	6.5-7.0	6.5-6.9	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	100	50	50	0	0
	Inland Silverside	%	≥1.5	100	100	50	0	0

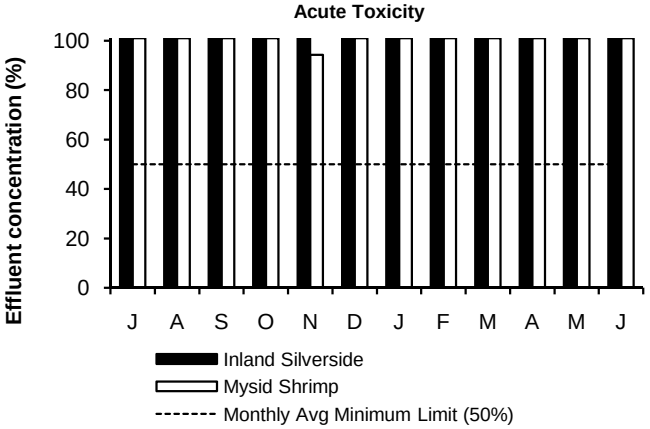
There have been no permit violations in FY14 at the Deer Island Treatment Plant.



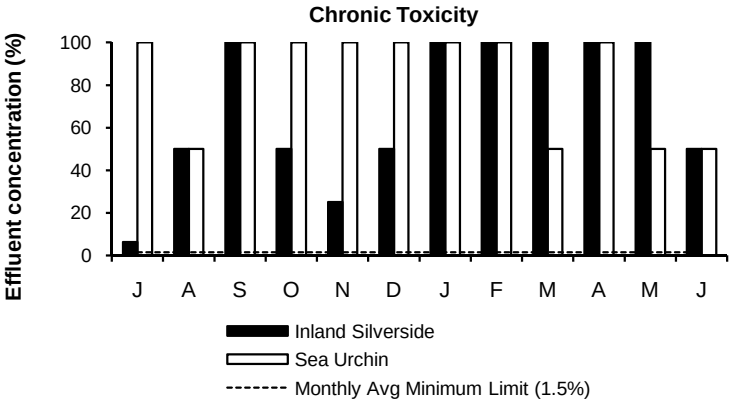
pH is a measure of the alkalinity or acidity of the effluent. Fluctuations in pH do not have an adverse effect on marine environments. Because of the pure oxygen used in the activated sludge reactor, the effluent pH tends to be at the lower pH range. pH measurements for the 4th Quarter were within the 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 4th Quarter, all organic compounds were below the detection limit.



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 4th 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% dillution water must show no observed effect on the growth and reproduction of the test species. Chronic toxicity permit limits were met for the 4th Quarter for both the inland silverside and sea urchin.

NPDES Permit Compliance: Clinton Wastewater Treatment Plant

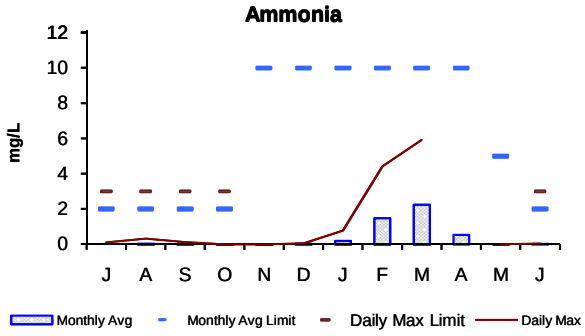
4th Quarter - FY14

NPDES Permit Limits

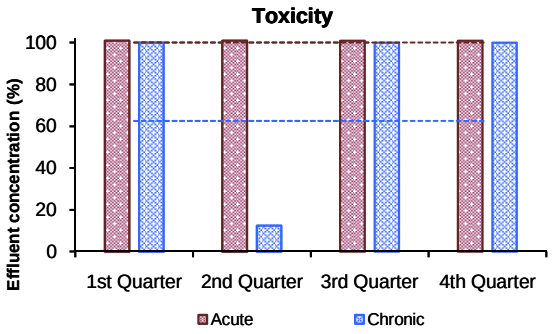
Effluent Characteristics		*Units*	*Limits*	*April*	*May*	*June*	*4th Quarter Violations*	*FY14 YTD Violations*
Flow:	Running Average:	mgd	3.01	2.50	2.56	2.40	0	0
BOD:	Monthly Average:	mg/L	20	3.1	2.9	3.1	0	0
	Weekly Average:	mg/L	20	4.4	3.2	3.8	0	0
TSS:	Monthly Average:	mg/L	20	3.6	3.6	3.1	0	0
	Weekly Average:	mg/L	20	5.5	4.6	3.4	0	0
pH:		SU	6.5-8.3	6.9-7.6	7.1-7.3	7.2-7.6	0	0
Dissolved Oxygen:	Daily Minimum:	mg/L	6	6.9	6.3	6.8	0	0
Fecal Coliform:	Daily Geometric Mean:	col/100mL	400	4	5	6	0	0
	Monthly Geometric Mean:	col/100mL	200	3	3	3	0	0
TCR:	Monthly Average:	ug/L	50	0	0	0	0	0
	Daily Maximum:	ug/L	50	0	7	0	0	0
Total Ammonia Nitrogen: June 1 - October 31								
	Monthly Average:	mg/L	10.0	0.54	0.00	0.02	0	0
	Daily Maximum:	mg/L	35.2	2.69	0.00	0.05	0	0
Copper:	Monthly Average:	ug/L	20	2.7	1.9	3.5	0	0
Phosphorus:								
	Monthly Average:	mg/L	N/A	--	--	--	0	0
Acute Toxicity:	Daily Minimum:	%	100	*N/A	*N/A	>100	0	0
Chronic Toxicity:	Daily Minimum:	%	> 62.5	*N/A	*N/A	100.0	0	1

There has been one permit violation in FY14 at the Clinton Treatment Plant.

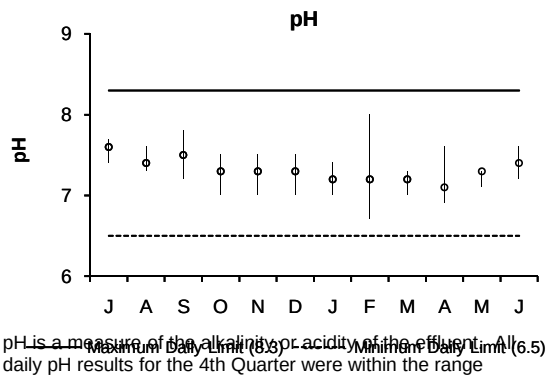
1st Quarter: There were no permit violations in the 1st Quarter of FY14.
2nd Quarter: There was one permit violation in the 2nd Quarter of FY14. In December 2013, the chronic toxicity was 12.5%, which is below the permit minimum of 62.5%.
3rd Quarter: There were no permit violations in the 3rd Quarter of FY14.
4th Quarter: There were no permit violations in the 4th Quarter of FY14.



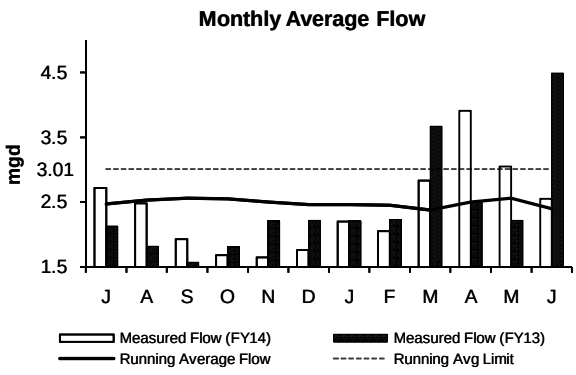
The 4th Quarter's monthly average and daily maximum concentrations were below the permit limits. The monthly average and daily maximum limits for the 4th Quarter are variable, getting more stringent towards June. The permit limits are most stringent from June to October when warm weather conditions are most conducive to potential eutrophication.



Acute and chronic toxicity testing simulates the short- and long-term toxic effects of chemicals in wastewater effluent on aquatic animals. For permit compliance, the effluent concentration that causes mortality to the daphnid in acute and chronic testing must be at least >100% and 62.5%, respectively. Toxicity limits were met during the 4th Quarter.



pH is a measure of the alkalinity or acidity of the effluent. All daily pH results for the 4th Quarter were within the range allowed 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 4th Quarter met the NPDES permit limit.

COMMUNITY FLOWS AND PROGRAMS

Total Water Use: MWRA Core Customers

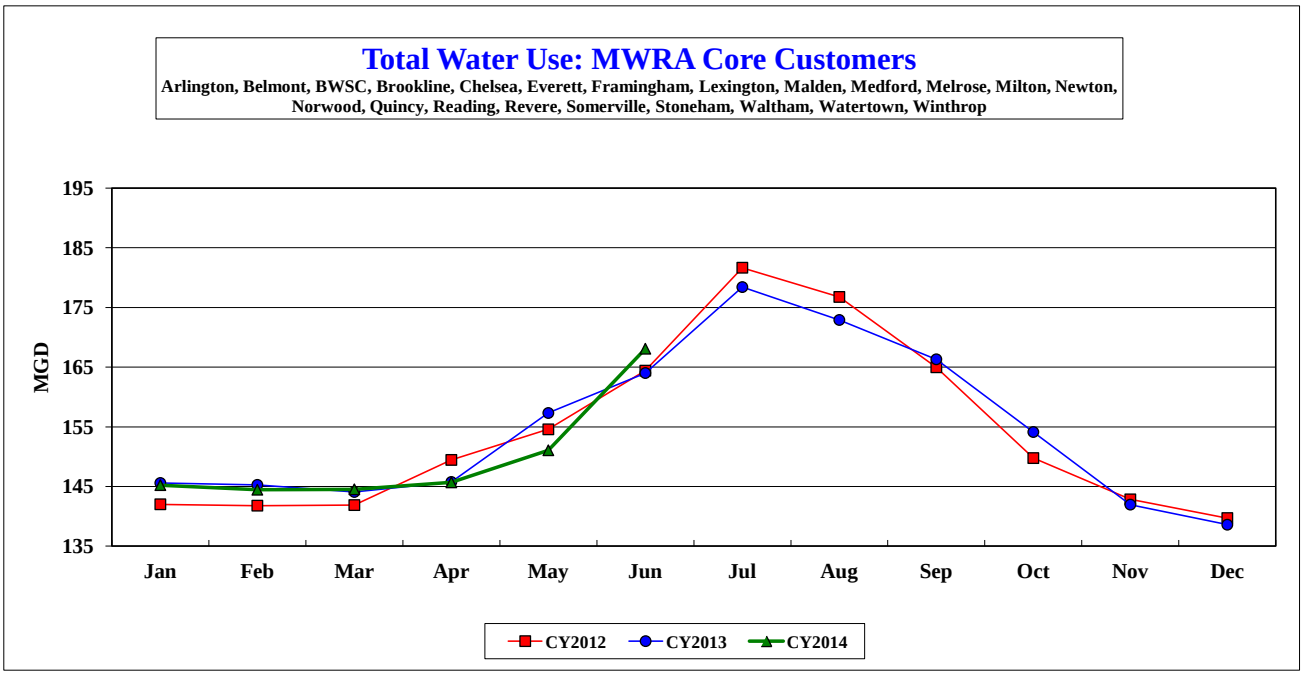
4th Quarter - FY14

Massachusetts Water Resources Authority

Water Supplied: MWRA Core Communities

MGD	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
CY2012	142.017	141.788	141.883	149.452	154.576	164.414	181.663	176.766	164.979	149.759	142.842	139.708	154.208
CY2013	145.587	145.271	144.080	145.758	157.315	164.013	178.420	172.908	166.315	154.128	141.960	138.594	154.605
CY2014	145.227	144.459	144.530	145.687	151.070	168.088	0.000	0.000	0.000	0.000	0.000	0.000	149.855

MG	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
CY2012	4,402.513	4,111.860	4,398.384	4,483.569	4,791.865	4,932.424	5,631.565	5,479.746	4,949.362	4,642.530	4,285.248	4,330.949	56,440.017
CY2013	4,513.200	4,067.590	4,466.466	4,372.748	4,876.772	4,920.403	5,531.005	5,360.137	4,989.458	4,777.974	4,258.813	4,296.408	56,430.974
CY2014	4,502.028	4,044.839	4,480.442	4,370.607	4,683.163	5,042.649	0.000	0.000	0.000	0.000	0.000	0.000	27,123.728



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.

June 2014 water supplied of 214.3 mgd (for revenue generating users) is up 9.9 mgd or 4.9% compared to June 2013. This includes 1.4 mgd supplied to the City of Cambridge and 0.597 mgd supplied to the Town of Hudson. Including the water supplied to Cambridge and Hudson, annual system-wide consumption for CY14 remains higher than CY13 with 185.4 mgd being supplied to MWRA customers through June. This is 4.3 mgd higher than CY13, and is an increase of 2.4%.

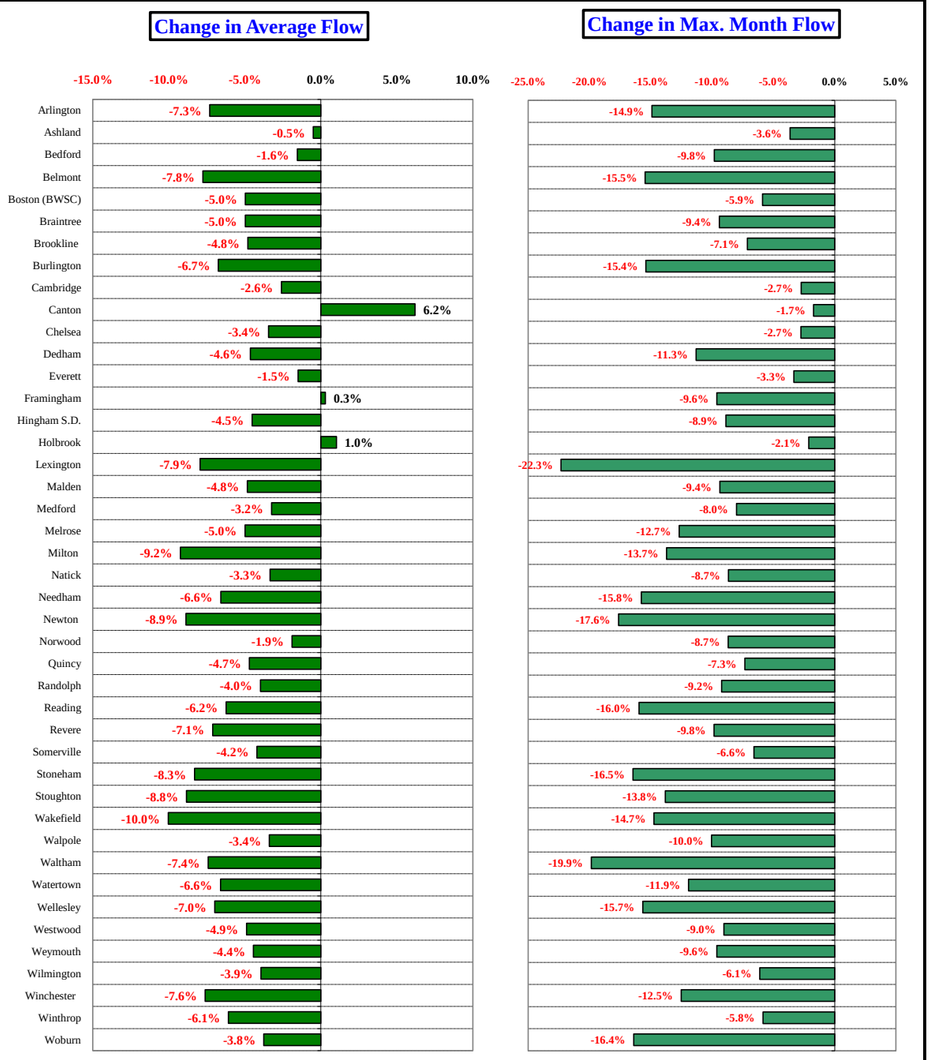
Excluding water provided to Cambridge and Hudson, CY14 year to date consumption through June is 1.6 mgd or 0.9% lower than CY13.

Community Wastewater Flows

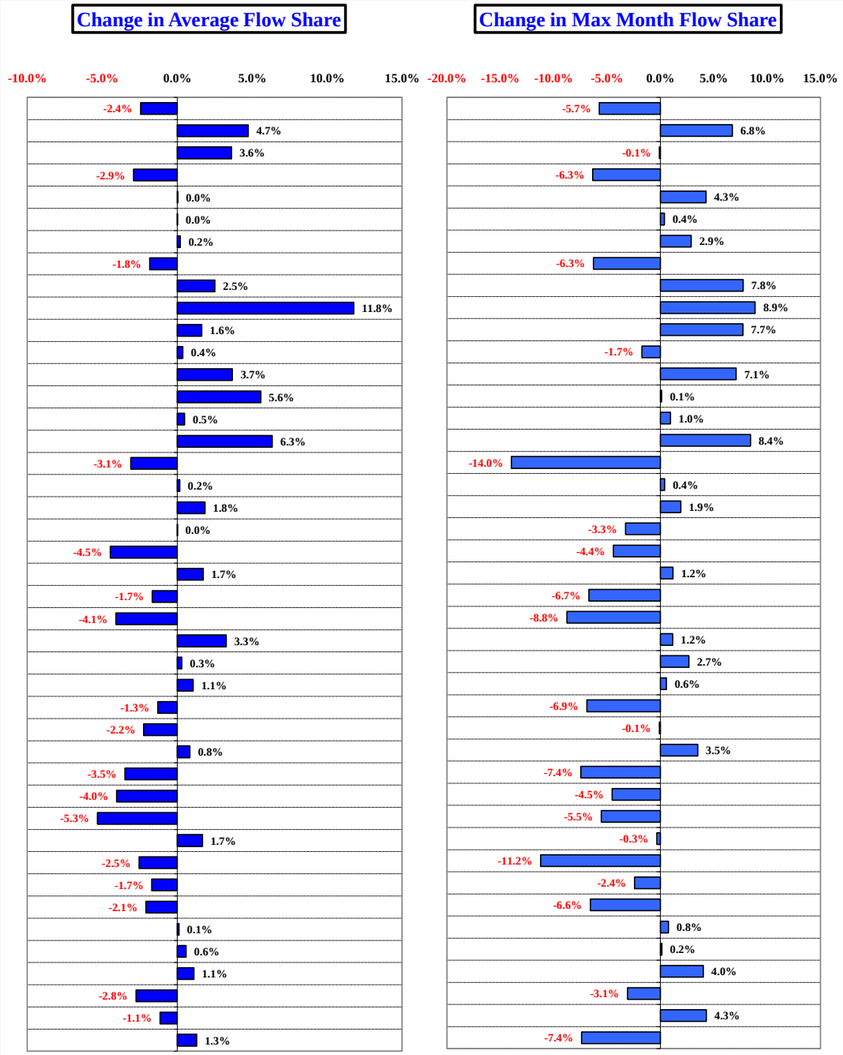
4th Quarter - FY14

How Projected CY2014 Community Wastewater Flows Could Effect FY2016 Sewer Assessments [1,2,3]

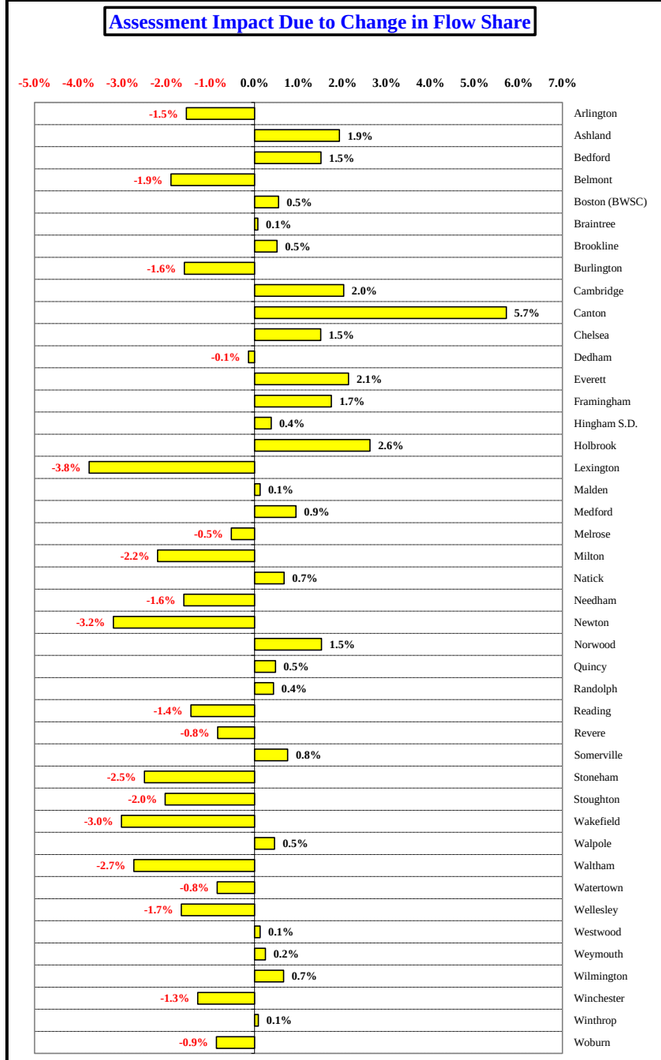
The flow components of FY2016 sewer assessments will be calculated using a 3-year average of CY2012 to CY2014 wastewater flows compared to FY2015 assessments that used a 3-year average of CY2011 to CY2013 wastewater flows.



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



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



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 08/07/14. Flow data is preliminary and subject to change pending additional MWRA and community review.

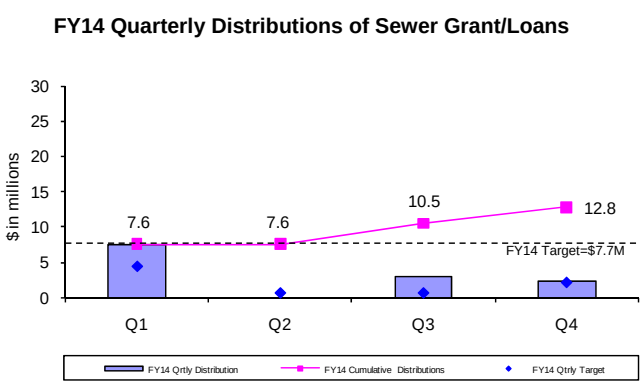
[3] CY2011 to CY2013 wastewater flows based on actual meter data. CY2014 flows based on actual meter data for January to June and projected flows for July to December.

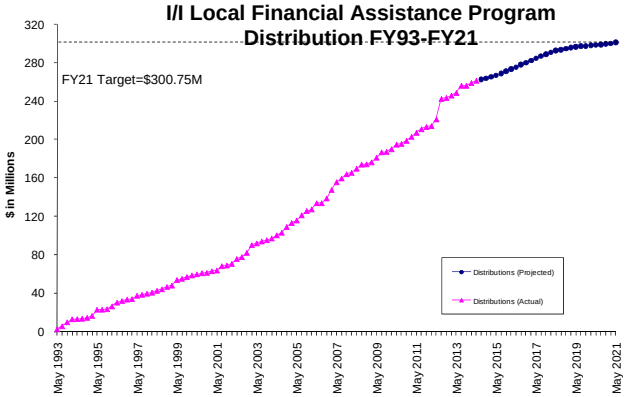
[4] Represents <u>ONLY</u> the impact on the total BASE assessment resulting from the changes in average and maximum wastewater <u>FLOW SHARES</u>.

Community Support Programs
4th Quarter – FY14

Infiltration/Inflow Local Financial Assistance Program

MWRA's Infiltration/Inflow (I/I) Local Financial Assistance Program provides $300.75 million in grants and interest-free loans (average of about $10 million per year from FY93 through FY21) to member sewer communities to perform I/I reduction and sewer system rehabilitation projects within their locally-owned collection systems. Eligible project costs include: sewer rehabilitation construction, pipeline replacement, removal of public and private inflow sources, I/I reduction planning, engineering design, engineering services during construction, etc. I/I Local Financial Assistance Program funds are allocated to member sewer communities based on their percent share of MWRA's wholesale sewer charge. Interest-free loans are repaid to MWRA over a five-year period beginning one year after distribution of the funds.

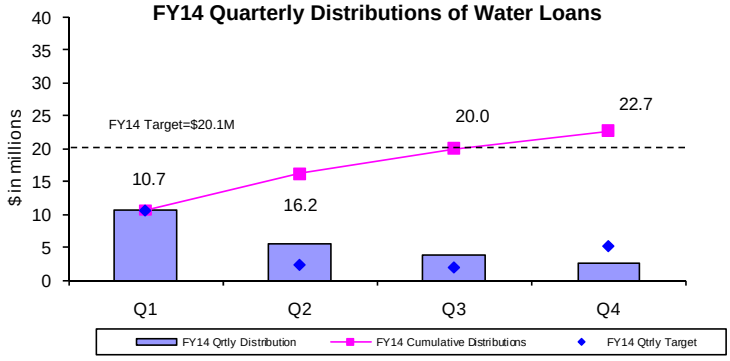


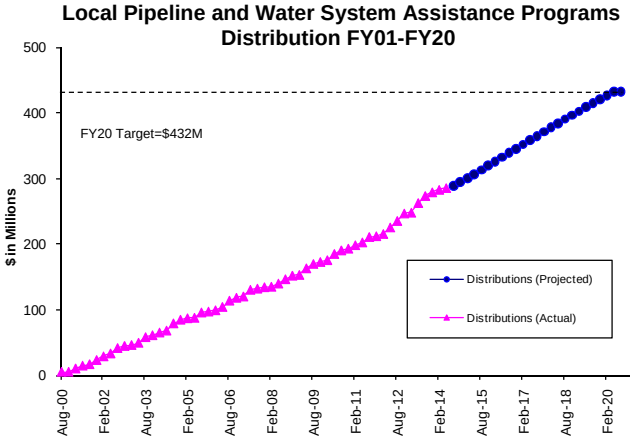


During the 4th Quarter of FY14, $2.27 million in financial assistance (45% grants and 55% interest-free loans) was distributed to fund local sewer rehabilitation projects in Ashland, Hingham, Melrose, Reading and Weymouth. Total grant/loan distribution for FY14 is $12.75 million. From FY93 through the 4th Quarter of FY14, all 43 member sewer communities have participated in the program and more than $261 million has been distributed to fund 459 local I/I reduction and sewer system rehabilitation projects. Distribution of the remaining funds has been approved through FY21 and community loan repayments will be made through FY26. All scheduled community loan repayments have been made. (Changes to the program approved as part of the FY15 budget will be reported next quarter).

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.



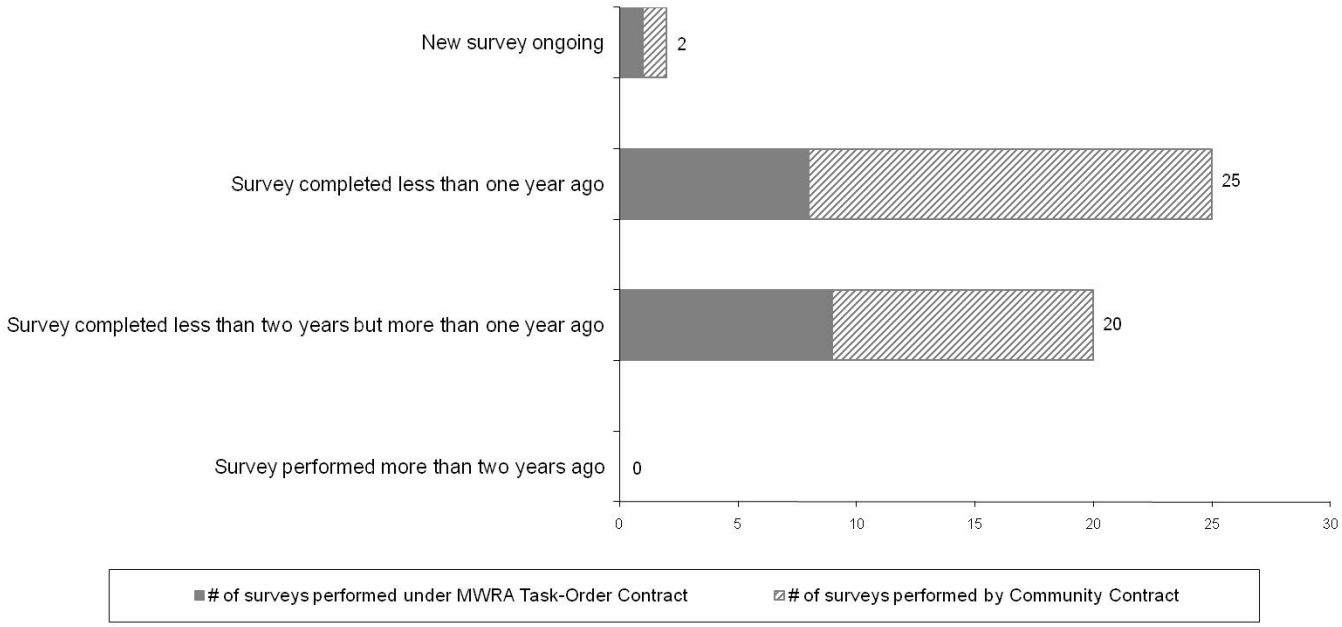


During the 4th Quarter of FY14, $2.69 million in interest-free loans was distributed to fund local water projects in Peabody and Swampscott. Total loan distribution for FY14 is $22.72 million. From FY01 through the 4th Quarter of FY14, more than $285 million has been distributed to fund 330 local water 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.

Community Support Programs
4th Quarter – FY14

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 4th Quarter of FY14, 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.

FY14 DISTRIBUTION	Annual Target	Q1	Q2	Q3	Q4	Annual Total
Educational Brochures	100,000	55,816	24,172	89,623	52,618	222,229
Low-Flow Fixtures (showerheads and faucet aerators)	10,000	2,323	3,624	6,041	3,294	15,282
Toilet Leak Detection Dye Tablets	------	827	954	1,983	1,214	4,978

BUSINESS SERVICES

Procurement: Purchasing and Contracts

4th Quarter, FY14

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

Outcome: Processed 79% of purchase orders within target; Average Processing Time was 7.07 days vs. 12.63 days in Qtr 4 of FY13. Processed 76 % (22 of 29) contracts within target timeframes; Average Processing Time was 105 days vs. 78 days in Qtr 4 of FY13.

Purchasing

	No.	TARGET	PERCENT IN TARGET
$0 - $500	1122	3 DAYS	74.1%
$500 - $2K	1053	7 DAYS	87.2%
$2K - $5K	171	10 DAYS	59.0%
$5K - $10K	99	25 DAYS	78.7%
$10K - $25K	76	30 DAYS	82.8%
$25K - $50K	19	60 DAYS	84.2%
Over $50K	45	90 DAYS	86.6%

The Purchasing Unit processed 2585 purchase orders, 33 more than the 2552 processed in Qtr 4 of FY13 for a total value of $14,260,418 versus a dollar value of $11,313,866 in Qtr 4 of FY13.

The purchase order processing target was not met for the $0 - $500 category due to vendor price confirmations; the $2k - $5k due to end user confirmations; the $5k - $10k due to end user evaluations and sole source requirements; the $10k-$25k due to end user evaluations and sole source requirements and the $25k - $50k due to end user evaluations and staff summary requirements.

Contracts, Change Orders and Amendments

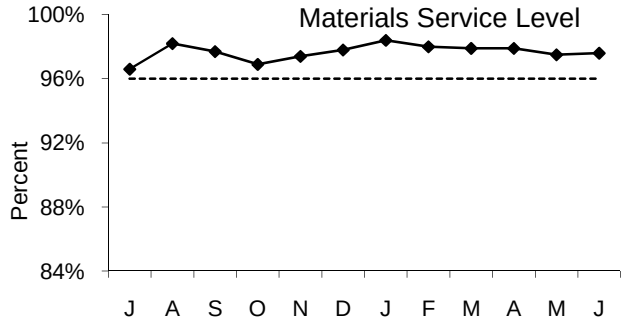
Seven contracts were not processed within target timeframes for the following reasons: delayed submission of contract documentation from the consultant; rebidding; multiple design revisions; longer than anticipated bid review and contractor qualifications process; and holding execution to meet the originating department's need for the service.

Procurement processed twenty seven contracts with a value of $12,692,077 and eleven amendments with a value of $653,968.

Twenty nine change orders were executed during the period. The dollar value of all non-credit change orders during Q4 FY14 was $1,298,419 and the value of credit change orders was ($468,061).

Materials Management

4th Quarter, FY14



The service level is the percentage of stock requests filled. The goal is to maintain a service level of 96%. Staff issued 8,273 (97.7%) of the 8,470 items requested in Q4 from the inventory locations for a total dollar value of $1,161,867.

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 FY14 goal is to reduce consumable inventory from the July '13 base level ($6.9 million) by 4.0% (approximately $276,182), to $6.6 million by June 30, 2014 (see chart below).

Items added to inventory this quarter include:

- Deer Island – adhesive caulk and labeling tape for Maintenance; fuses, relays, VFD mounting kit, and thermostat for Core; bearings, ring seal and bearing housing for Residuals; clamps, elbows, insulation, copper tubing, ball valves and filters for HVAC.
- Chelsea – battery inverter, clevis hook, grease gun holder, battery charger, battery cable, brake adapter, wheel bearing and oxygen sensor for VMM; grit screws, rotork actuator, coil, probes, pressure switch, submersible pump and cordless flashlight for Work Order Coordination Group.
- Southboro – crimp anchors, wire wheels, degreaser, abrasive discs and cleaner for Maintenance: calibration gas, rebuild kit and valves for Carroll Water Treatment Plant.

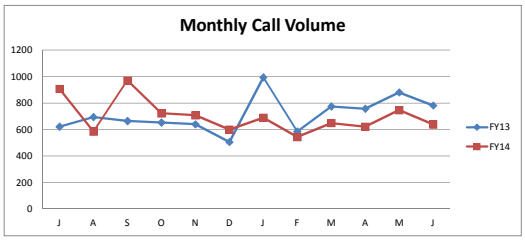
Property Pass Program:

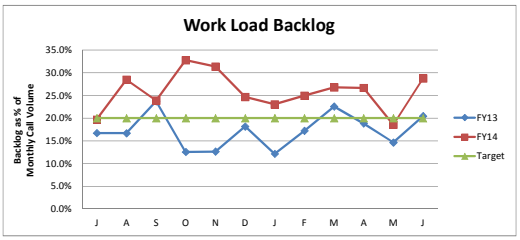
- Audits were conducted at Barre Shaft 8, Chelsea Creek, Ward Street, Columbus Park and Nut Island Head works and plumber's tool boxes during Q4.
- Numerous obsolete network switches, monitors, computers, printers, scanners, storage controls, power supplies, laptops and cell phones have been received into property pass as surplus. Disposition is being handled as part of our ongoing recycling efforts.
- Scrap revenue received for Q4 amounted to $24,260. Year to date revenue received amounts to $94,768.
- Revenue received from online vehicle auction held during Q4 amounted to $97,136. Year to date revenue received amounts to $183,531.

Items	Base Value July-13	Current Value w/o Cumulative New Adds	Reduction / Increase To Base
Consumable Inventory Value	6,954,017	7,622,448	668,431
Spare Parts Inventory Value	7,358,692	7,428,034	69,342
Total Inventory Value	14,312,709	15,050,482	737,773

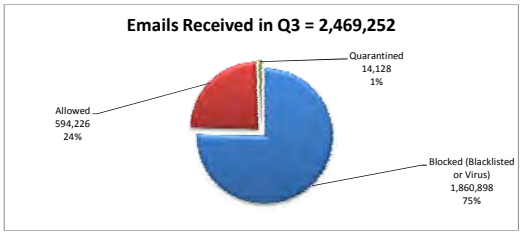
Note: New adds are items added at an inventory location for the first time for the purpose of servicing a group/department to meet their business needs/objectives.

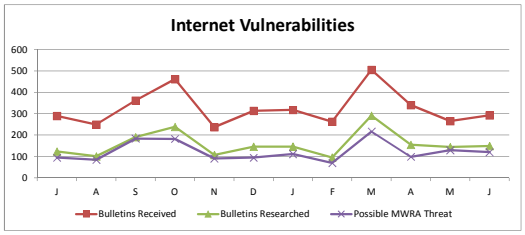
MIS Program
4th Quarter FY14





Performance:
Call Volume: Peaked in May. FY14-Q4 decreased by 17% from FY13-Q4. Call Backlog: Peaked in June and was 8.8% above the targeted benchmark of 20%.





Information Security:

During Q4, staff pushed security fixes and updates to desktops and servers throughout the quarter in order to protect against 95 vulnerabilities.

LANDesk Antivirus quarantined 60 distinct viruses from 42 MWRA computers. MWRA's systems are current with anti-virus providers' signatures for all known malware.

Infrastructure:

Data Network Circuit Upgrades: Completed circuit upgrades at several sites. The network group working with Verizon completed upgrades of the circuits connecting Southborough, and CWTP facility to Chelsea data center, from 3 MB to 10MB service. Internet service was also increased from 12MB to 50MB.

Data Storage Upgrade Project: As part of the Data Storage Project, MIS is in the process of consolidating all of its direct attached and SAN storage into one single unified platform. This will allow for MIS data growth, and reduces power consumption to support MIS "green" initiatives. In the month of May completed the installation of 3-PAR SAN storage with HP, and began connecting the VM hosts to the 3-PAR storage.

Windows 7 Upgrade: Rolling out new Windows 7 PCs replacing the older PCs and upgrading the remaining PC's XP Operating System (OS) with the Windows 7 OS. On 6/23/2014 a kickoff meeting occurred with the arrival of two onsite contractors from LANDesk who will use the LANDesk tool to pull information about the existing PCs on the network and push out the upgrades across the network. Images for PCs have been developed at the end of June, one for the new PCs and one for existing PCs being upgraded to the new OS. Image testing will occur in July.

Citrix Mobile Application Design and Development: Issued iPads to a pilot group of MWRA staff earlier this year so that they could evaluate application use opportunities for their functional areas. Created and distributed a survey this quarter to the iPad pilot group to collect feedback on the usefulness of the iPads and a wish list for mobile applications. Results have been compiled and reviewed in follow-up Brown Bag meeting with the pilot group in May. The next phase of the project is the Citrix Infrastructure Design and Build and is currently underway. Consultants incorporated feedback from the survey and several weeks of meeting with users and IT staff to develop a list of applications that will be mobilized and design the appropriate infrastructure to support the MWRA's initial mobilized application needs. In addition, Disaster Recovery (DR) and business continuity failover requirements designs are underway. The design document will be delivered in July and the consultants have started to build a pilot environment.

Applications/Training/Records Center:

Strategic Sourcing and Contract Management: Strategic Sourcing is the Infor/Lawson application used for electronic bidding. Information about the awarded bid will be passed into the new Infor/Lawson Contract Management module. IT Systems and application support staff worked with the vendor to upgrade the development system's Application Environment from 10.0.4.5 to 10.1.0.23 and the Landmark Application from version 9.0.1.10 to 9.1.1.1. Following testing of the upgraded development system, the production system will be upgraded in July. The upgrades allow us to stay current with the vendor's release and take advantage of recently added functionality. Staff and users continued working on new contract language, developing contract template types, new business processes, data migration from legacy systems, and reports.

BottonLine: BottomLine is a specialized application used for printing checks, AP invoices, as well as for reformatting ACH (Automated Clearing House) files used by banks for transactions such as direct deposit, child support, AP EFT vendors. The MWRA installed BottomLine version was on extended support which is due to expire in September of 2014. The application was successfully upgraded on both production system and the Disaster Recovery system after staff and users conducted numerous tests and parallel processes.

Cumulus: Cumulus is the application used by the MWRA to manage and publish the MWRA's photo collection. The application needed to be upgraded to maintain vendor support. Staff created two new virtual servers (internal and external) for the Cumulus application and data storage, created shares with appropriate permissions, set up the public facing environment so that Cumulus catalogs can be made available on mwra.com. All data (approximately 2TB) was copied over to the internal server. Existing catalogs were converted to the new version. Staff was trained on Administration functions and end users attended a demo regarding the new features.

GIS: The GIS system has been upgraded to version 10.2 and the GIS database was migrated to the Oracle Database Appliance (ODA). The ODA provides for manual failover to another node should the primary one go down.

LIMS: The Electronic Laboratory Notebook module of LabWare's Laboratory Information Management System has been installed in the development environment. Workshops to gather user requirements for a pilot have started with the Chelsea Laboratory.

Waste Water Quality (WWQ): The batch jobs for the WWQ data warehouse used by the central laboratory and their clients have been modified to run in a LINUX environment. These changes were made to enable user testing of WWQ on the development Oracle Database Appliance. User testing is expected to begin in July.

Library & Records Center: The Library completed 45 research requests (150 YTD) , cataloged 179 books and reports (763 YTD), and provided 107 articles and standards as needed (381 YTD). New services are being evaluated for automatically generating and emailing staff topic based articles (3,793 YTD). The Records Center added 192 boxes (731 YTD), conducted 1 training session, and attended 2 Records Conservation Board Meetings. The Records Center staff also participated in the Chelsea Hurricane drill to support the protection of records stored in Chelsea. Some notable library research topics included engineering subjects like Variable Frequency Drive (VFD) testing standards, health and safety topics like neurotoxicity of fluoride, and scientific topics such as enterococcus bacteria and molybdenum minerals.

IT Training: For the quarter, 81 staff attended 18 classes and 4 workshops. 28% of the workforce has attended at least one class year-to-date. The Q4 MIS course offerings included, Cumulus training for managing the MWRA Photo and pictures catalogs, . LIMS Electronic Lab Notebook training, Infor/Lawson Self-Service training and selected Chelsea and Southboro staff received GIS training and several SMART Board demos were conducted. In addition, 703 staff completed the Information Security 2014 Computer Based Training (CBT) through June 30th.

Legal Matters
4th Quarter FY 2014

PROJECT ASSISTANCE

COURT AND ADMINISTRATIVE ORDER

- **Boston Harbor Litigation and CSO**: Reviewed and filed quarterly compliance and progress report.

- **NPDES**: Reviewed comment letter on department of public health's proposed amendments to minimum standards for beach closings.

- **Administrative Consent Order (DITP power outages)**: Reviewed and submitted updated semi-annual *Consultant's Deer Island Energy Recommendations Tracking Sheet* to DEP and EPA.

REAL ESTATE, CONTRACT AND OTHER SUPPORT

- **Section 36/W11C/Shaft 9-A11 Site, Arlington and Medford: Section 36/W11C/Shaft 9-A11 Site, Arlington and Medford:** Recorded fifty-three (53) voluntary grants of easements and prepared and recorded 3 Orders of Taking for 13 private properties and 6 public ways necessary for construction of the project.

- **Spot Pond:** Negotiated, drafted and recorded an Amended and Restated Grant of Easements with Fellsway Development LLC, whereby MWRA obtained permanent utility easements on two parcels, one 32,507 sq. ft, and the second at 45,699 sq. ft., for MWRA's Spot Pond Covered Storage project at no additional cost to MWRA; finalized a telecommunications license with Verizon, and an electric service agreement with NSTAR.

- **Fore River Railroad/Fore River:** Finalized MWRA/FRRC License with Railpod for use of the FRRC track. Finalized letter agreement between MWRA/FRRC and Quincy Shipyard for easement swap in Fore River Shipyard. Finalized access agreement between FRRC and Quincy Shipyard for Fore River Shipyard.

- **Cross Harbor Cable:** Met with representatives of NSTAR **to** discuss NSTAR's counter proposal to MWRA's proposal**.**

- **Charlestown Wind Turbine:** Finalized a new net metering contract with NSTAR for net metering for the Charlestown Wind Turbine.

- **Public Access Permits:** Finalized Weston's public access permit.

- **DCR/City of Cambridge:** Reviewed and approved of an MOA between DCR and the City of Cambridge, and legislation, Chapter 270 of the Acts of 2010, allowing DCAMM, in consultation with MWRA, to grant an easement to the City of Cambridge on DCR land in Cambridge, in order to allow the City to proceed with the City's Alewife Stormwater Wetland Project .

- **Construction Contractor Claim:** Reviewed and made a recommendation on four (4) construction contractor claims.

- Worked with City of Cambridge and representatives of the Fresh Pond Mall to bring closure to the City's needs to access the Mall property for geotechnical and environmental investigations.

- **TRAC:** Drafted guidance and briefed staff on regulation promulgation/amendment process, as well as the applicable enabling act provisions.

- **Regulations:** Reviewed DEP proposed amendments to c.21E and UST regulations, and the comments submitted.

- **Chapter 21E/Waste Cleanup**: Reviewed two draft Activities and Use Limitations (AULs) that were going to be placed on properties on which the MWRA has a sewer and/or water easement and determined that AULs would not interfere with the MWRA's current use and potential uses of the property.

REAL ESTATE, CONTRACT AND OTHER SUPPORT (cont.)

MISCELLANEOUS

- Reviewed and approved thirty-seven (37) Section 8(m) Permits; drafted one day permit for an outdoors community dinner featuring local businesses, and all activities reasonably related thereto, to be held on that portion of Sudbury Aqueduct situated in DCR's Hemlock Gorge Reservation in Newton.

- **Co-Digestion:** Explored 50-Day Private Use exception to private activity limits.

LABOR, EMPLOYMENT AND ADMINISTRATIVE

New Matters

Eight demands for arbitration were filed.

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

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

LITIGATION/TRAC

New Matters During the Fourth Quarter of FY 2014, no new lawsuits were received.

Significant Developments Estate of Marie Stewart v. MWRA: The parties exchanged discovery identifying their experts and the opinions and testimony expected from them.

Matters Concluded Three cases closed during the Fourth Quarter FY 2014.

Portfolio Recovery Associates, LLC vs. (Alfred B. Robinson- current employee): Summons to Trustee (MWRA) was served on February 7, 2014 in an action brought against (current employee) in the amount of $3, 963.10. A Discharge of Trustee was filed with the court on May 20, 2014.

MWRA v. J.F. Shea: MWRA received all settlement funds and all parties to the case executed the settlement agreement, ending the litigation.

Gilchrist Metal Fabricating Co., Inc. v. City Lights Electrical Co., Inc. v. MWRA, et al: This case arose out of MWRA Contract #6855, Deer Island Treatment Plant Electrical Equipment Upgrade Construction 3. City Lights, the general contractor, entered into a subcontract with Gilchrist, a shop metals fabricator, to supply the supports for a ramp and bridge to elevate certain electrical conduits. Gilchrist provided supports fabricated out of carbon steel; however, the Contract required stainless steel supports. Gilchrist sued City Lights for the additional costs it allegedly incurred to replace the carbon steel supports with the stainless steel supports specified in the Contract, and claimed an ambiguity in the Contract documents. City Lights brought third-party claims against MWRA for contribution and indemnification. MWRA successfully tendered its defense to the design contractor, AECOM, which provided MWRA with defense counsel at no cost to MWRA. Counsel for MWRA filed a motion for summary judgment as to City Lights' claims, on the grounds that the action against MWRA was contractually barred, in light of the failure of City Lights to file a claim for the additional costs allegedly incurred by Gilchrist. The motion was allowed on April 3, 2014, and the action against MWRA is now dismissed.

Subpoenas During the Fourth Quarter of FY 2014, no new subpoenas were received and no subpoenas were pending at the end of the Fourth Quarter FY 2014.

Public Records During the Fourth Quarter of FY 2014 seven public records request were received, one withdrawn and two public records requests were closed.

SUMMARY OF PENDING LITIGATION MATTERS

TYPE OF CASE/MATTER	As of June 2014	As of Mar 2014	As of Dec 2013
Construction/Contract/Bid Protest (other than BHP)	4	5	5
Tort/Labor/Employment	5	5	6
Environmental/Regulatory/Other	1	1	1
Eminent Domain/Real Estate	0	0	0
total – all defensive cases	**10**	**11**	**12**
Affirmative cases not in suit:	0	1	1
Other Litigation matters (restraining orders, etc.) MWRA v. Thomas Mercer	1	1	1
Total – all pending lawsuits	**11**	**13**	**14**
Significant claims not in suit:	0	0	0
Bankruptcy	0	1	1
Wage Garnishment	16	17	15
TRAC/Adjudicatory Appeals	1	4	4
Subpoenas	0	0	1
OTAL – ALL LITIGATION MATTERS	28	35	35

TRAC/MISC.

New Appeals There were no new TRAC appeals received in the 4th Quarter FY 2014.

Settlement by Agreement of Parties Three cases were settled by Agreement of Parties in the 4th Quarter FY 2014.

Brigham & Women's Hospital; MWRA Docket Nos. 13-01 and 13-19 (Consolidated)

Northeastern University; MWRA Docket No. 13-18

Aero Brazing Co., MWRA Docket No. 13-16

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

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

Tentative Decisions No Tentative Decisions were issued in the 4th Quarter FY 2014.

Final Decisions No Final Decisions were issued during the 4th Quarter FY 2014.

INTERNAL & CONTRACT AUDIT PROGRAM
4th Quarter FY14

Highlights

Department of Laboratory Services Quality Assurance Program A draft report was issued on the DLS QA Program. This review found the program to be well documented, including the elements recommended by the Environmental Protection Agency (EPA). The QA Plan, Standard Operating Procedures and other procedural documents are available on-line. The following recommendations were made.

- Update the Ethics Statement in the QA Plan to include EPA suggested language and to post the statement in conspicuous places.
- Develop a report that would assist the DLS managers in the re-certification of staff by identifying the number of tests each analyst performed in the last 12 months.
- Increase the frequency of rolling audits
- Have supervisors perform biannual "methods and procedures" audits of each of their analysts.

Status of Open Audit Recommendations (12 recommendations closed in the 4th 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)	19	17
Bay State Fertilizer (9/3/13)	5	0
Follow-up Report on Fleet Services Activities (12/31/13)	4	13
MBE/WBE Program Contracting Goals (3/14/14)	5	5
Total Recommendations	**41**	**111**

Audit Savings

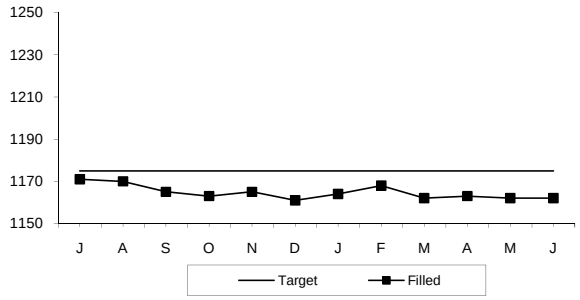
The Internal Audit Department's target is to achieve at least $1 million in cost savings each year. Cost savings vary each year based upon many factors. In some cases, cost savings for one year may be the result of work in prior years.

Savings	FY10	FY11	FY12	FY13	FY14	TOTAL
Consultants	$194,238	$520,176	$259,245	$587,314	$294,225	$1,855,198
Contractors & Vendors	$599,835	$3,129,538	$435,760	$2,153,688	$415,931	$6,734,752
Internal Audits	$206,282	$152,478	$407,350	$391,083	$923,370	$2,080,563
Total	**$1,000,355**	**$3,802,192**	**$1,102,355**	**$3,132,085**	**$1,633,526**	**$10,670,513**

OTHER MANAGEMENT

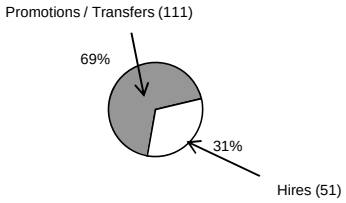
Workforce Management
4th Quarter FY14

Filled Position Tracking



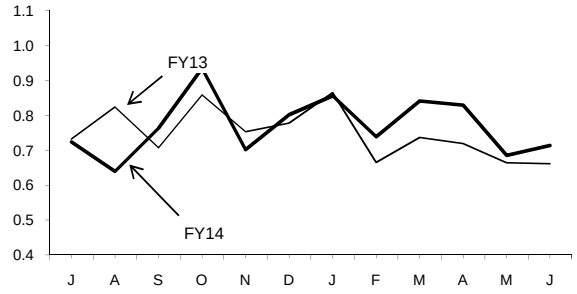
FY14 Target for Filled Positions = 1175
Filled Positions as of June 2014 = 1162

Positions Filled by Hires/Promotions
FY14-YTD



	Pr/Trns	Hires	Total
FY11	48 (62%)	30 (38%)	78
FY12	42 (61%)	27 (39%)	69
FY13	82 (64%)	47 (36%)	129
FY14	111 (69%)	51 (31%)	162

Average Monthly Sick Leave Usage
Per Employee



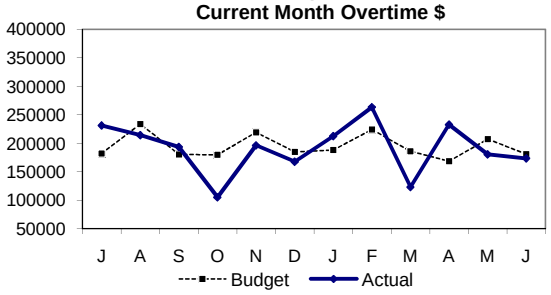
Average monthly sick leave for the 4th Quarter of FY14 decreased as compared to the 3rd Quarter (9.33 to 9.23 days).

In Q4 of FY14, the average quarterly sick leave usage has increased 3.1% from the same time last year.

	Number of Employees	YTD	Annualized Total	Annual FMLA %	FY13
A&F	182	10.18	10.18	38.1%	8.48
Aff. Action	6	11.78	11.78	31.2%	12.25
Executive	5	4.37	4.37	0.0%	3.08
Int. Audit	8	7.46	7.46	0.0%	7.36
Law	16	10.35	10.35	14.2%	11.80
OEP	6	16.14	16.14	59.0%	5.89
Operations	939	8.98	8.98	21.6%	9.02
Pub. Affs.	12	12.21	12.21	35.0%	9.08
MWRA Avg	**1174**	**9.23**	**9.23**	**24.6%**	**8.95**

Percent of sick leave usage attributable to Family and Medical Leave Act (FMLA) leave is 24.6% for the 4th Quarter of FY14.

Field Operations
Current Month Overtime $



Deer Island Treatment Plant
Current Month Overtime $

Total Overtime for **Field Operations** for June was $173,605 which is ($7k) under budget. Emergency overtime was $59k, which was ($28k) under budget. Spending included $36k for rain events, $11k for emergency maintenance, $5k for emergency operations, and $4k for CSO activation. Coverage overtime was $60k, which was $9k over budget, mainly for vacation coverage. Planned overtime was $56k or $12k over budget, mainly for maintenance off-hours work at $25k, work completion at $6k, and planned operations at $5k.

Year-to-date June FY14, FOD's overtime was $2.295m, which was ($41k), or ($1.7%) under budget, mainly due to lower than anticipated wet weather response.

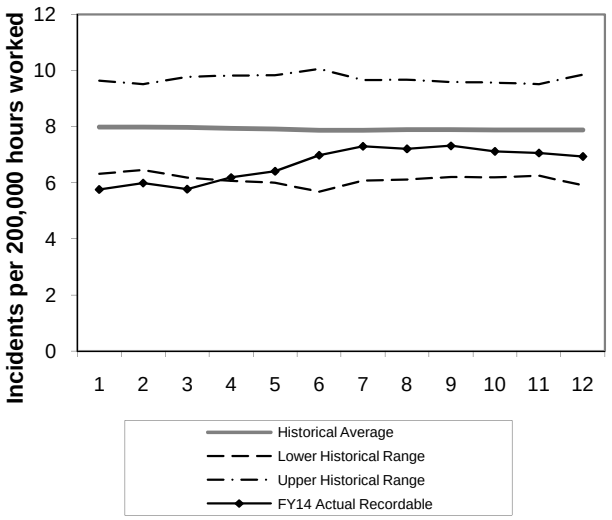
Deer Island's total overtime expenditure in June 2014 was $70K, which was ($13K) or (16.2%) under budget. The variance reflects lower than anticipated storm coverage requirements, ($25K), along with Management's continued efforts to control overtime spending by allowing overtime for maintenance or repair of critical systems and equipment only, ($4K). These items are partially offset by higher than anticipated shift coverage overtime, $16K.

Year-to-date June 2014, Deer Island's overtime was $878K, which was ($134K) or (13.2%) under budget, mainly due to less than anticipated storm coverage requirements, ($184K), along with Management's continued efforts to control overtime spending by allowing overtime for maintenance or repair of critical systems and equipment only, ($87K). These items are partially offset by higher than anticipated shift coverage overtime in Thermal due a vacancy, IA and FMLA, of a 2nd class engineer, $57K, and and higher Operations shift coverage requirements, $80K.

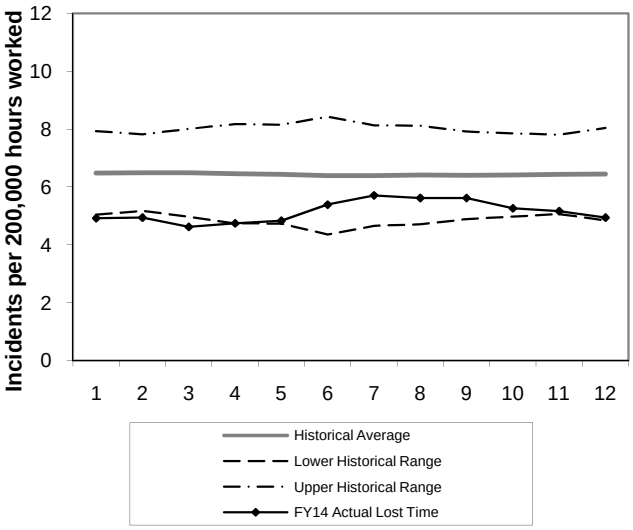
Workplace Safety

4th Quarter FY 14

Recordable Injury & Illness Rates



Lost Time Injury & Illness Rates



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 FY13. The “Upper” and “Lower Historical Ranges” are computed using these same data – adding and subtracting two standard deviations respectively. FY14 actual incident rates can be expected to fall within this historical range.

Workers Compensation Claims Highlights - Fourth Quarter FY14

	New	Closed	Open Claims
Lost Time	10	20	67
Medical Only	19	36	14
Report Only	26	26	
	New		**YTD Light Duty Returns**
Light Duty Returns	4		13

Highlights/Comments:

Light Duty Returns

Apr 3 employees returned to work light duty from IA
1 employee worked light duty, has several days on full comp, then returned full duty

May 1 employee returned to light duty assignment after a few days on IA (not counted as a new light duty return)

June 1 employee returned to light duty assignment after a few days on IA (not counted as a new light duty return)
1 employee returned to light duty assignement after IA

Regular Duty Returns

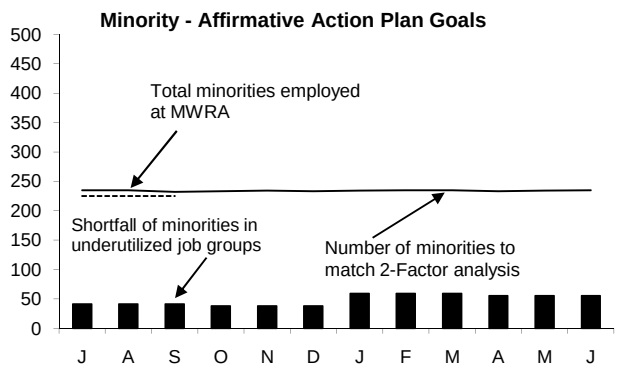
Apr 1 employee returned to work full duty from IA
1 employee returned to work full duty from a light duty assignment

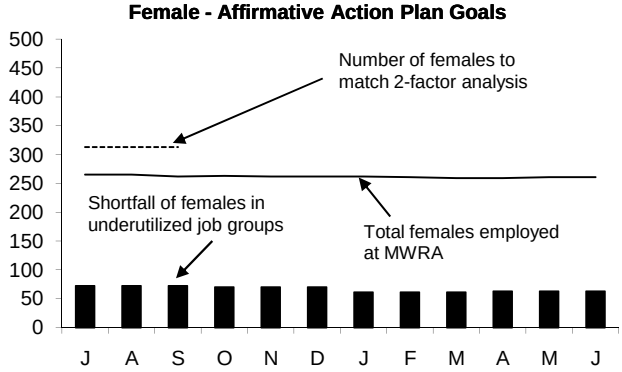
May 1 employee returned to work full duty from a light duty assignment

June 1 employee returned to work full duty from a light duty assignment
6 employees returned to work full duty from IA

MWRA Job Group Representation

4th Quarter - FY14





Highlights:

At the end of Q4 FY14, 10 job groups or a total of 55 positions are underutilized by minorities as compared to 10 job groups or a total of 40 positions at the end of Q4 FY13; for females 13 job groups or a total of 63 positions are underutilized by females as compared to 14 job groups or a total of 77 positions at the end of Q4 FY13. During Q4, 4 minorities and 3 females were hired. During this same period, 3 minorities and 1 females terminated.

Underutilized Job Groups - Workforce Representation

Job Group	Employees as of 6/30/2014	Minorities as of 6/30/2014	Achievement Level	Minority Over or Under Under utilized	Females As of 6/30/2014	Achievement Level	Female Over or Under Under utilized
Administrator A	20	2	2	0	5	6	-1
Administrator B	21	0	3	-3	3	6	-3
Clerical A	43	18	11	7	37	17	20
Clerical B	33	7	11	-4	12	2	10
Engineer A	78	16	20	-4	12	16	-4
Engineer B	50	13	11	2	6	12	-6
Craft A	115	13	22	-9	0	3	-3
Craft B	152	31	28	3	3	5	-2
Laborer	68	25	16	9	3	4	-1
Management A	104	13	24	-11	32	47	-15
Management B	48	10	12	-2	13	20	-7
Operator A	66	4	7	-3	1	4	-3
Operator B	66	7	17	-10	4	3	1
Para Professional	54	12	16	-4	24	38	-14
Professional A	35	3	8	-5	23	14	9
Professional B	166	46	43	3	78	75	3
Technical A	49	14	8	6	5	7	-2
Technical B	6	1	1	0	0	2	-2
Total	**1174**	**235**	**260**	**30/-55**	**261**	**281**	**43/-63**

AACU Candidate Referrals for Underutilized Positions

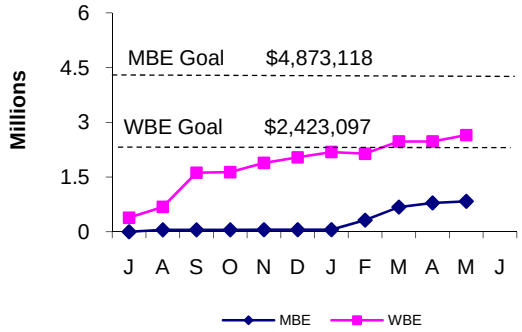
Job Group	Title	# of Vac	Requisition Int. / Ext.	Promotions/ Transfers	AACU Ref. External	Position Status
Craft A	Plumber/Pipefitter	2	Int/ Ext	1	1	NH=BM; T=WM
Craft A	Instrumentation Specialist	1	Int	1	0	Promo = WM
Craft A	M&O Specialist	1	Int/Ext	1	0	Promo = WM
Craft A	Unit Supervisor	1	Int/Ext	1	0	Promo = WM
Craft A	Valve Maintenance Forman	1	Int	0	0	In Progress
Clerical A	Secretary I	2	Int/Ext	0	2	In Progress
Clerical A	Administrative Coordinator I	1	Int	0	0	In Progress
Clerical B	Messenger/Courier	1	Int/Ext	0	0	New Hire = WM
Clerical B	Inventory Control Specialist	1	Int	0	0	In Progress
Engineer A	Project Engineer	1	Int	1	0	Promo = HM
Engineer A	Sr. Staff Engineer, Electrical	1	Int/Ext	0	0	In Progress
Engineer A	Sr. Program Manager, SCADA	1	Int	1	0	Promo = WM
Engineer A	Sr. Staff Engineer, Structural	1	Int/Ext	0	0	NH = AM
Engineer A	Project Manager	2	Int/Ext	0	0	Rehire = AM
Engineer A	Project Manager Environmental Data	1	Int	0	0	In Progress
Engineer B	Staff Engineer	2	Int	1	0	Transfer = HM
Engineer B	Project Manager, Process Control	1	Ext	0	0	In Progress
Laborers	OMC Laborer	2	Int/Ext	0	1	In Progress
Management A	Assistant Director of Construction	1	Int	1	0	Promo = WF
Management A	Construction Coordinator	2	Int	1	0	(2)Promo = WM
Management A	Manager, It Security	1	Ext	0	0	In Progress
Management B	Shifts Operations Manager	1	Int	1	0	Promo = WM
Management B	Facilities Manager	1	Int	1	0	Promo = BM
Management B	Operations Supervisor	1	Int	1	0	Promo = WM
Operator A	Area Supervisor	1	Int	1	0	(2)Promo = WM
Operator B	Operator	2	Ext	0	0	In Progress
Professional B	Senior Laboratory Technician	3	Int/ Ext	0	1	Rehire=WF & BF
Professional B	Chemist III	4	Int/Ext	0	1	NH = AF
Professional B	Financial Planner	1	Int/Ext	0	0	In Progress
Professional B	Sr. Sampling Associate	1	Int	1	0	Promo = WM
Professional B	Chemist I	1	Int	1	0	Promo = WF
Professional B	Source Coordinator	1	Int	0	0	In Progress
ParaProfessional	Planning & Scheduling Coordinator	2	Int	1	0	(2)Promo = WM

MBE/WBE Expenditures
Fourth Quarter FY 2014

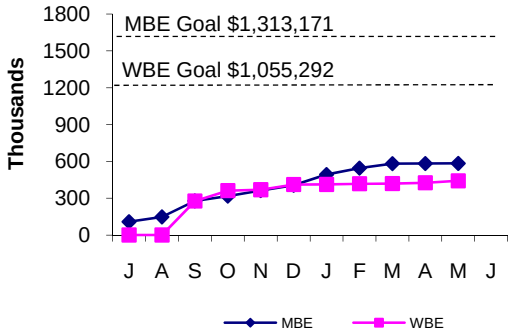
Background:

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

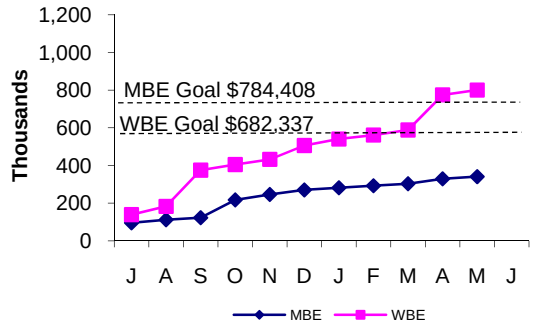
Construction



Professional



Goods/Services



FY14 spending and percentage of goals achieved, as well as FY13 performance are as follows:

	MBE				WBE			
	FY14 Year-to-Date		FY13		FY14 Year-to-Date		FY13	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Construction	834,566	20.2%	5,364,613	121.7%	2,647,980	129.0%	4,522,050	206.4%
Professional Svc.	584,242	44.5%	1,477,040	134.3%	442,350	41.9%	557,922	63.1%
Goods & Svcs.	340,683	43.4%	1,128,359	378.4%	800,328	117.3%	578,379	223.0%
Total	1,759,491	28.3%	$7,970,012	137.3%	3,890,658	102.6%	$5,658,351	169.7%

MBE/WBE dollar totals include MBE and WBE payments to prime contractors, consultants and vendors.

*Note: The MBE shortfall is the result of changes in contract schedules and therefore projected MBE work for FY14 did not ensue.

FY14 CEB Expenses through
4th Quarter – FY14

	June 2014 Year-to-Date ($000)					
	Budget	Actual	Variance	%	FY14 Budget	%
EXPENSES						
WAGES AND SALARIES	$ 94,874	$ 91,751	$ (3,123)	-3.3%	$ 94,874	96.7%
OVERTIME	3,580	3,400	(180)	-5.0%	3,580	95.0%
FRINGE BENEFITS	18,064	18,074	11	0.1%	18,064	100.1%
WORKERS' COMPENSATION	2,000	2,311	311	15.6%	2,000	115.6%
CHEMICALS	10,671	10,226	(445)	-4.2%	10,671	95.8%
ENERGY AND UTILITIES	22,761	23,397	636	2.8%	22,761	102.8%
MAINTENANCE	27,762	29,453	1,692	6.1%	27,762	106.1%
TRAINING AND MEETINGS	331	329	(2)	-0.6%	331	99.4%
PROFESSIONAL SERVICES	6,083	4,900	(1,183)	-19.4%	6,083	80.6%
OTHER MATERIALS	5,969	5,986	17	0.3%	5,969	100.3%
OTHER SERVICES	22,279	21,736	(543)	-2.4%	22,279	97.6%
TOTAL DIRECT EXPENSES	**$ 214,374**	**$ 211,565**	**$ (2,809)**	**-1.3%**	**$ 214,374**	**98.7%**
INSURANCE	$ 2,094	$ 2,051	$ (43)	-2.1%	$ 2,094	97.9%
WATERSHED/PILOT	27,215	26,641	(574)	-2.1%	27,215	97.9%
BECo PAYMENT	3,347	3,526	179	5.3%	3,347	105.3%
MITIGATION	1,567	1,495	(72)	-4.6%	1,567	95.4%
ADDITIONS TO RESERVES	169	169	-	0.0%	169	100.0%
RETIREMENT FUND	12,432	12,447	16	0.1%	12,432	100.1%
TOTAL INDIRECT EXPENSES	**$ 46,823**	**$ 46,329**	**$ (494)**	**-1.1%**	**$ 46,823**	**98.9%**
STATE REVOLVING FUND	$ 75,961	$ 72,685	$ (3,276)	-4.3%	$ 75,961	95.7%
SENIOR DEBT	204,471	229,506	25,035	12.2%	204,471	112.2%
CORD FUND	132	132	-	0.0%	132	100.0%
DEBT SERVICE ASSISTANCE	-	(854)	(854)	---	-	0.0%
CURRENT REVENUE/CAPITAL	9,200	9,200	-	0.0%	9,200	100.0%
SUBORDINATE MWRA DEBT	100,117	100,117	-	0.0%	100,117	100.0%
LOCAL WATER PIPELINE CP	4,128	316	(3,811)	-92.3%	4,128	7.7%
CAPITAL LEASE	3,217	3,217	-	0.0%	3,217	100.0%
VARIABLE DEBT	-	(12,770)	(12,770)	---	-	0.0%
DEFEASANCE ACCOUNT	-	-	-	---	-	---
TOTAL DEBT SERVICE	**$ 397,226**	**$ 401,550**	**$ 4,323**	**1.1%**	**$ 397,226**	**101.1%**
TOTAL EXPENSES	**$ 658,423**	**$ 659,444**	**$ 1,020**	**0.2%**	**$ 658,423**	**100.2%**
REVENUE & INCOME						
RATE REVENUE	$ 628,721	$ 628,721	$ -	0.0%	$ 628,721	100.0%
OTHER USER CHARGES	8,127	8,030	(97)	-1.2%	8,127	98.8%
OTHER REVENUE	6,444	11,266	4,822	74.8%	6,444	174.8%
RATE STABILIZATION	3,500	3,500	-	0.0%	3,500	100.0%
INVESTMENT INCOME	11,631	12,130	499	4.3%	11,631	104.3%
TOTAL REVENUE & INCOME	**$ 658,423**	**$ 663,647**	**$ 5,224**	**0.8%**	**$ 658,423**	**100.8%**

As of June 2014, total revenue was $663.6 million, $5.2 million or 0.8% higher than budget and total expenses were $659.4 million, $1.0 million or 0.2% more than budget for a net variance of $4.2 million, after recognition of $26.2 million defeasance.

Expenses –

- **Direct Expenses** are $211.6 million, $2.8 million or 1.3% less than budget.
- **Wages and Salaries** are underspent by $3.1 million or 3.3% due to lower headcount, mix of salaries for people retiring and new hires, and higher than budget leave time use.
- **Professional Services** are underspent by $1.2 million or 19.4% mainly for lower engineering of $555,000 for as-needed support and Dam Emergency Action Plan Updating services, lower Other of $253,000, and lower Lab & Testing of $252,000.
- **Maintenance** is overspent by $1.7 million or 6.1% year-to-date. Material purchases are greater than budget by $1.8 million and services are underspent by $153,000.
- **Utilities** are over budget by $636,000 or 2.8% due to higher Electricity of $1.2 million mainly for winter congestion pricing offset by lower Diesel Fuel of $355,000, Water use of $119,000, and Natural Gas use of $82,000.
- **Other Services** are underspent by $543,000 or 2.4% due to lower sludge quantities of $485,000, lower Other Services of $206,000, and lower Grit & Screenings Removal of $96,000 offset by higher space/lease rentals of $152,000, police details of $79,000, Telephones of $78,000, and Membership/Dues of $56,000.
- **Chemicals** are underspent by $445,000 or 4.2% due to lower Nitrazyme of $204,000 for Framingham modifications, Liquid Oxygen of $193,000 for lower pricing and volume, Sodium Hypochlorite of $178,000, and Sodium Bisulfite of $150,000. Offset by higher Hydrogen Peroxide of $135,000 for pretreatment of hydrogen sulfide gas, Soda Ash of $129,000 due to better mixing, Activated Carbon of $71,000, and Ferric Chloride of $63,000.
- **Workers Compensation** expenses are higher than budget by $311,000 or 15.6%. The majority of the variance is due to higher than budget Administrative and Legal Costs of $140,000 and Medical Expenses of $113,000.
- **Overtime** is underspent by $180,000 or 5.0% mainly due to lower than projected emergency wet weather events.
- **Indirect Expenses** are $46.3 million, $494,000 or 1.1% under budget mainly for Watershed Reimbursement expenses of $574,000 mainly for lower Payment in Lieu of Taxes (PILOT) expense and lower operating expenses. Also, lower insurance expenses of $43,000, mostly related to premiums.
- **Debt Service Expenses** totaled $401.5 million, $4.3 million or 1.1% over budget. The higher Debt Service variance is the result of debt service related surplus of $21.8 million offset by $26.2 million defeasance executed in June.

Revenue and Income –

- **Total Revenue / Income** for June is $663.6 million, $5.2 million or 0.8% higher than budget due to Non-Rate Revenue of $4.7 million and Investment Income of $499,000. The higher Non-Rate Revenue is due to $3.1 million in proceeds in exchange for the dismissal of all disputed claims of all parties to the 2010 water main break cost recovery lawsuit, $538,000 for the sale of emergency water for the Town of Hudson, $320,000 for higher energy revenue, $291,000 for the sale of surplus equipment and other items totaling $573,000, and higher investment income of $499,000.

Cost of Debt
4th Quarter - FY14

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

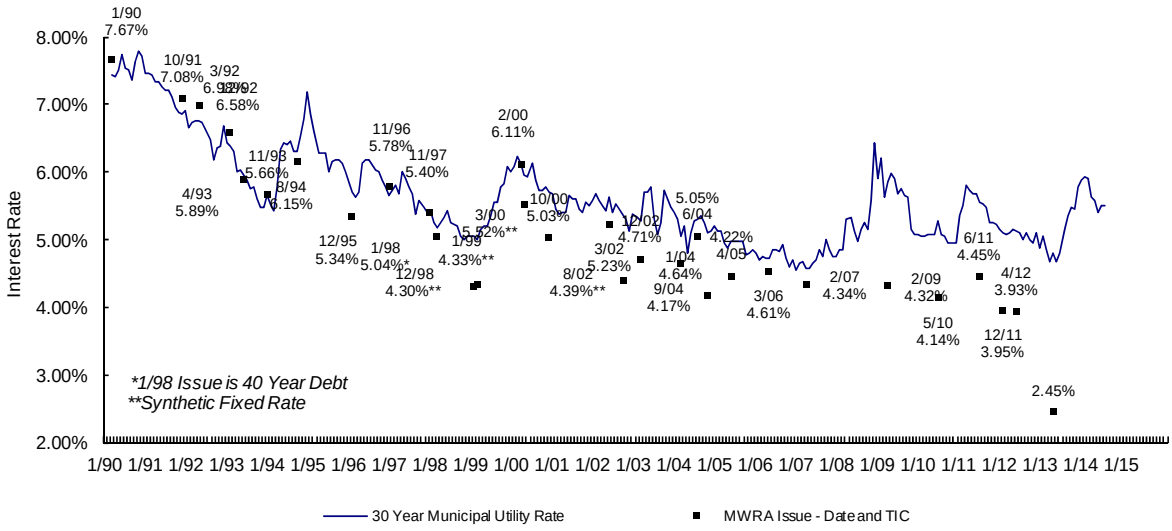
Average Cost of MWRA Debt

Fixed Debt ($4,013)	4.34%
Variable Debt ($484.3)	0.61%
SRF Debt ($1,023)	1.22%
Weighted Average Debt Cost ($5,520)	3.43%

Most Recent Senior Fixed Debt Issue
March 2013

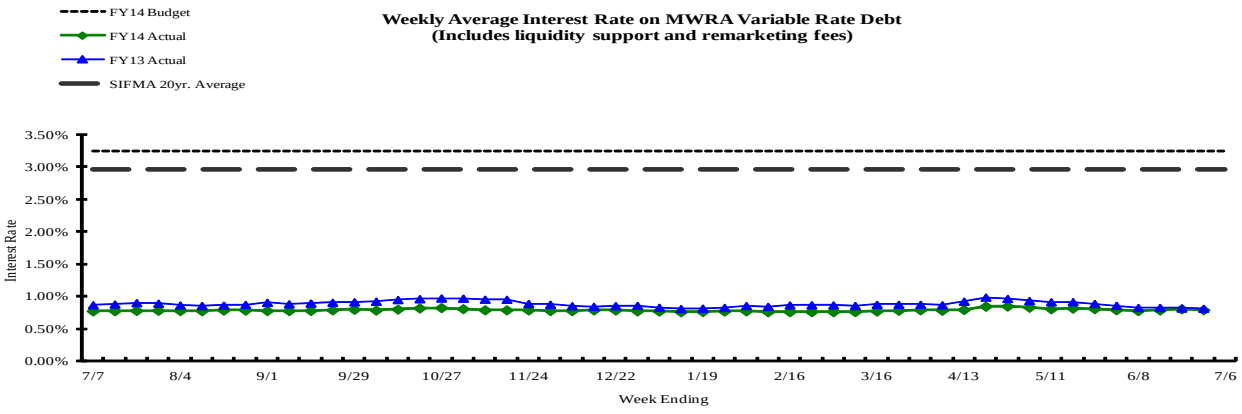
2013 Series A ($170.6)	2.45%

MWRA Fixed Rate Debt vs. 30 Year Municipal Utility Interest Rate



Weekly Average variable Interest Rates vs. Budget

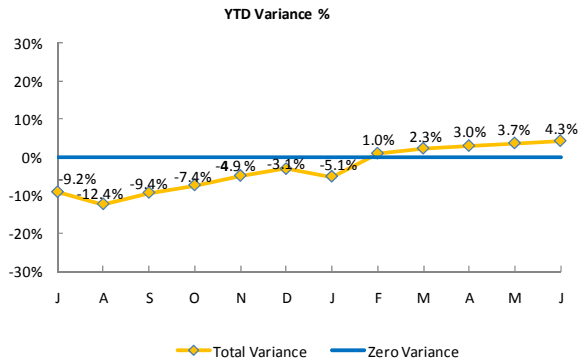
MWRA currently has ten variable rate debt issues with $1.0 billion outstanding, excluding commercial paper. Of the ten outstanding series, five have portions which have been swapped to fixed rate. Variable rate debt has been less expensive than fixed rate debt in recent years as short-term rates have remained lower than long-term rates on MWRA debt issues. In June, SIFMA rates fluctuated with a high of 0.07% 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.



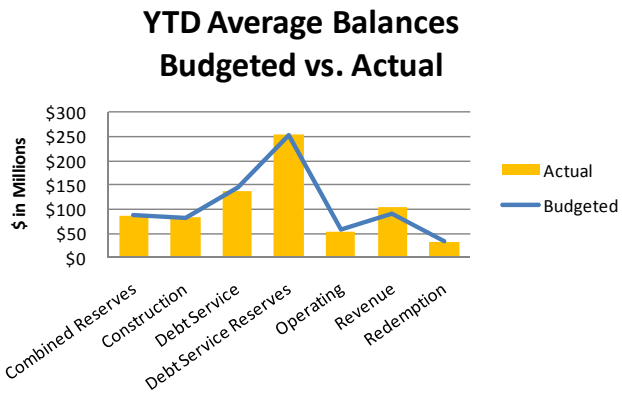
Investment Income

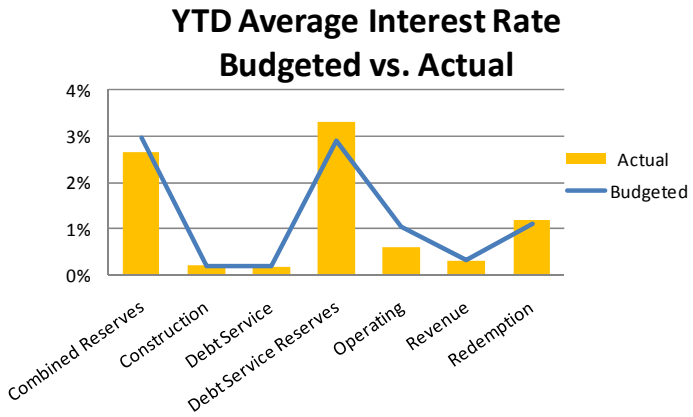
4th Quarter - FY14

Year To Date



	YTD BUDGET VARIANCE ($000)			
	BALANCES IMPACT	RATES IMPACT	TOTAL	%
Combined Reserves	$52	($283)	(231)	-9.0%
Construction	$4	($6)	(2)	-1.3%
Debt Service	($12)	($16)	(28)	-9.7%
Debt Service Reserves	$0	$996	997	13.5%
Operating	($24)	($241)	(266)	-45.1%
Revenue	$37	($31)	6	1.9%
Redemption	$0	$23	23	6.3%
Total Variance	$57	$442	$499	4.3%





Monthly