MASSACHUSETTS WATER RESOURCES AUTHORITY

Board of Directors Report

on

Key Indicators of MWRA Performance

for

First Quarter FY2011

Q1	Q2	Q3	Q4
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Frederick A. Laskey, Executive Director
Michael J. Hornbrook, Chief Operating Officer
December 22, 2010

Board of Directors Report on Key Indicators of MWRA Performance for First Quarter FY2011

Table of Contents

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

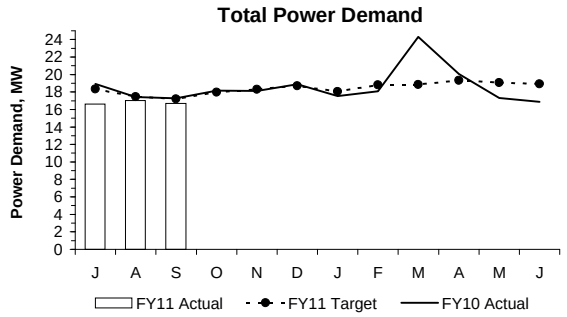
Frederick A. Laskey, Executive Director
Michael J. Hornbrook, Chief Operating Officer

December 22, 2010

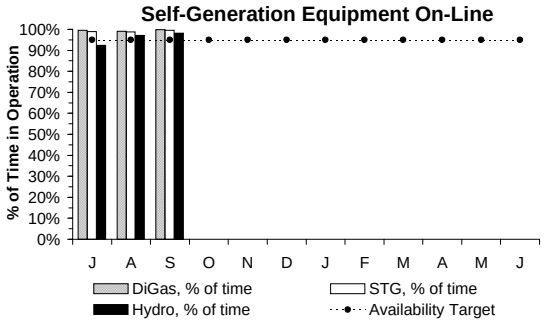
OPERATIONS AND MAINTENANCE

Deer Island Operations

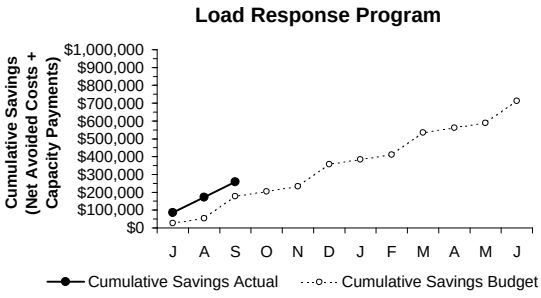
1st Quarter - FY11



Total Power Demand in the 1st Quarter was 5% lower than target as Total Plant Flow for the quarter was also lower than expected. Power Demand in each month of the quarter was 3% to 9% lower than target. During the 1st Quarter, Power Demand for pumping alone was 8.4% lower than expected as Total Plant Flow was 13% lower than expected. Power Demand from most of the other treatment processes was also lower than expected for the quarter.

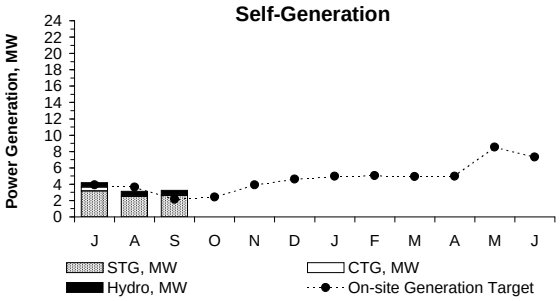


The DiGas, STG, and Hydro systems all exceeded their 95% Availability Target for the 1st Quarter. The Hydro Turbine system did drop 3% below target for July due to a failure of a wicket gate position transducer, which sidelined Turbine 2 for approximately two days.

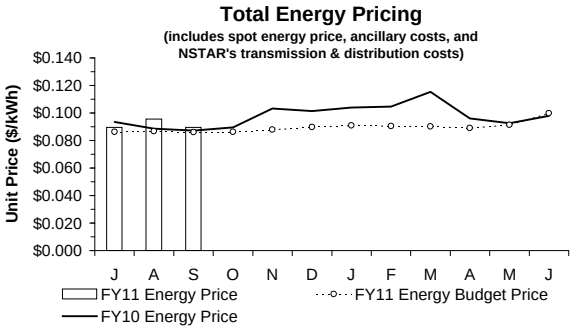


DI did not participate in any demand response events in the 1st Quarter as none were called.

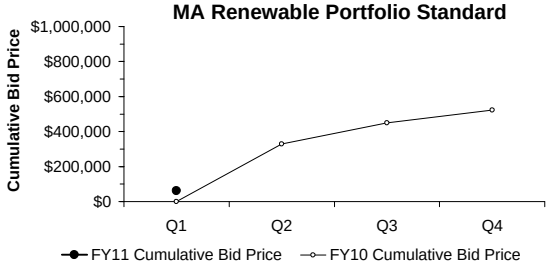
Deer Island participates in the ISO-New England Load Response Programs. By agreeing to have its Combustion Turbine Generators available to run and thus relieve the New England energy grid of Deer Island's load during times of high energy demand or high pricing, MWRA receives monthly Capacity Payments from ISO-NE. When it runs the CTGs at ISO-NE's request, MWRA receives energy payments from ISO-NE and also avoids NSTAR transmission and distribution charges. "Net Avoided Cost" is the avoided NSTAR payments offset by the cost of running the CTGs, and the energy payments from ISO-NE. Cumulative savings are the sum of Net Avoided Costs and monthly Capacity Payments - estimated to be $258,000 through the 1st Quarter compared to the budgeted savings of $178,350.



Power generated on-site was 15% higher than target for the 1st Quarter. The STG, CTGs, Solar Panels, and Hydro Turbines all exceeded their generation targets for the quarter by 20%, 66%, 153%, and 6%, respectively, while generation by the Wind Turbines was 38% lower than target. Solar Power generation was 1.21% and Wind Turbine generation was 4.29% of the total power generated on-site for the 1st Quarter. The CTGs were operated for a total of 27.4 hours in the quarter, of which 24.3 hours were in July during an NSTAR alarm condition, then for NSTAR maintenance, and on two days during a period of high ISO-NE grid demand to avoid peak pricing and potentially avoid the peak hourly demand, which may reduce MWRA capacity charges for next year. DI did not participate in any actual demand response events as none were called.



Under the new energy supply contract, a block portion of DI's energy is a fixed rate and the variable load above the block is purchased in real time. Overall, the total energy price in the 1st Quarter was 6% higher than the budgeted spot energy price. The total energy price includes a fixed block price, spot energy price, transmission & distribution charges, and ancillary charges. Please note the August and September total energy prices are estimates as the invoices have not been received. Year-to-date costs as a result of the higher energy pricing are estimated at approximately $150,295 more than budgeted through the 1st Quarter of FY11.



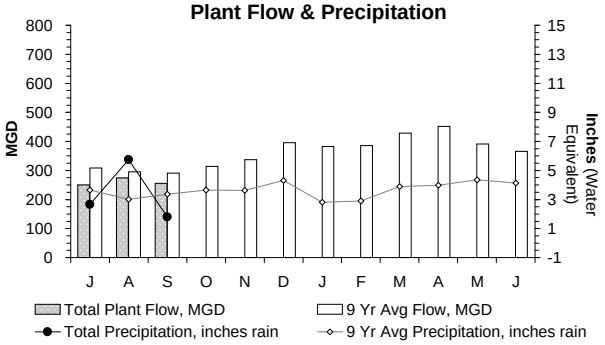
Bids were awarded in September for the sale of 5,902 Renewable Energy Certificates (RECs) for a total value of $61,288. No bids were awarded in July or August.

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 FY11 budgeted cumulative bid estimate through September is $154,866.

Deer Island Operations

1st Quarter - FY11

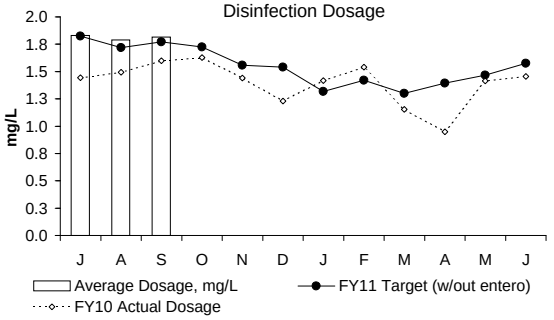
Plant Flow & Precipitation



The Total Plant Flow for the 1st Quarter was 13% lower than the 9-year average flow estimate (259.9 mgd actual vs. 298.6 mgd expected) even though precipitation was on target with the 9-year average for the quarter (10.21 inches actual vs. 10.03 inches expected). Plant flow remained low because of lower-than-expected rainfall during *most* of the quarter, resulting in very dry ground conditions, which absorbed much of the rain. Daily plant flow exceeded 300 mgd on only 11 of the 92 days in the quarter during periods of heavy rain; five of these 11 days resulted from a storm in August, which produced 4.48 inches of rain over a period of four days.

Deer Island Sodium Hypochlorite Use

Disinfection Dosage



The disinfection dosing rate was on the target for the 1st Quarter. The average dosing rate for the quarter of 1.81 mg/L was 2% higher than the 1.77 mg/L expected even though plant flow was lower than expected. A higher dosage is needed due to a higher chlorine demand with the more concentrated wastewater (a result of lower plant flow).

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

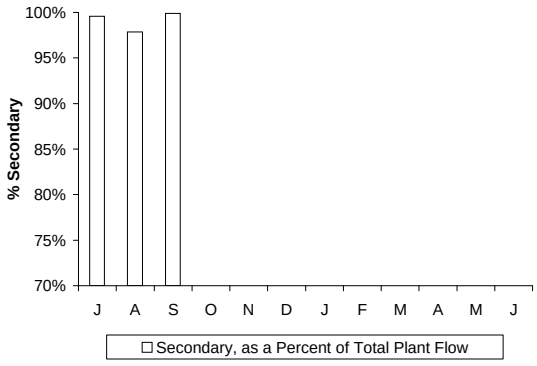
Secondary Blending Events

Month	Count of Blending Events	Count of Blending Events Due to Rain	Count of Blending Events Due to Non-Rain-Related Events	Secondary, as a Percent of Total Plant Flow	Total Hours Blended During Month
J	1	1	0	99.6%	4.5
A	3	3	0	97.9%	19.51
S	1	1	0	99.9%	2.24
O					
N					
D					
J					
F					
M					
A					
M					
J					
Total	**5**	**5**	**0**	**99.1%**	**26.3**

There were five separate blending events during the 1st Quarter. There were single blending events in both July and September and three separate events in August resulting in a total of 26.3 hours of blending and 222 million gallons of primary-only treated flow blended with secondary effluent.

All secondary blending events that occurred during the quarter were due to heavy rainfall resulting in high plant flows. **Secondary permit limits were met at all times.**

Deer Island Secondary Treatment as a Percent of Total Plant Flow



Overall, 99.1% of the total plant flow to DITP was treated through Secondary during the 1st Quarter. The Maximum Secondary Capacity for the entire quarter was 700 mgd.

Deer Island Operations & Maintenance Report

Environmental/Pumping:

The plant achieved a maximum average hourly flow rate of 1,272 mgd on August 25 during a storm event from August 22 through August 25. Pumping and treatment operations continued without incident throughout the entire quarter.

Primary and Secondary Treatment:

Maintenance staff and a contractor inspected and performed repairs to the influent gates in Primary Battery C during the week of September 7. At the same time, DITP staff began to perform repairs to the channel aeration lines within this battery, which will continue into October.

Progress on the major Primary and Secondary Clarifier Rehabilitation Project, MWRA Contract 6899, continued through the 1st Quarter. Rehabilitation work on a total of nine Primary clarifiers and seven Secondary clarifiers was completed during the quarter.

Odor Control:

Scrubber media in Wet Chemical Scrubber 5 in the East Odor Control Facility and in Scrubber 3 in the Residuals Odor Control Facility was changed out this quarter and both units were placed back into service.

Deer Island Operations & Maintenance Report (continued)

Secondary Treatment:
Essential maintenance on DITP's two flow control gates, which control secondary blending, began during the last week of August and was completed on September 1. The maintenance project included replacement of the programmable logic controller (PLC) and its power supply. The PLC controls the operation of the flow control gates. A new PLC is needed because the present one is more than 10 years old and at the end of its useful life. The battery charger/battery unit, which provides uninterrupted power to the PLC and the associated instrumentation for the flow control gates, is also more than 10 years old, and needed to be replaced. A full scale test was performed at the end to confirm that all systems were in full working order.

Residuals Treatment:
Staff replaced broken mixers in Module 2, Digesters 1 and 2. Also, a faulty gas PRV (Pressure Reducing Valve) in Module 3, Digester 2 was replaced.

Repairs to the support screen for Carbon Adsorber (CAD) 5 in the Residuals Odor Control Facility was completed and new activated carbon media was added to the unit in July. In August, the spent activated carbon material was changed out on CAD Units 3 and 4 in the North Pumping Odor Control Facility. Also, CAD 2 in the Residuals Odor Control Facility was repaired by a contractor and the unit was refilled with carbon material.

Regulatory/Compliance:
Emissions compliance testing on the North Pumping Odor Control system was conducted by consultants beginning the week of August 30. The Massachusetts Department of Environmental Protection requires that MWRA conduct emissions compliance testing for the various emission units once every 5 years. This testing requires the continuous emissions monitoring of the inlet and outlet of the odor control system over a 24-hour period for total reduced sulfur at the outlet stack of the odor control system and for non-methane hydrocarbons at the inlet. Non-methane hydrocarbons were also tested at the stack and the inlet was sampled for target volatile organic compounds or VOCs. The draft report summarizing the test results is currently being prepared by the consultants.

Clinton Wastewater Treatment Plant Operations & Maintenance Report

Auxiliary Pumps:
MWRA's consultant is designing permanent mounted auxiliary pumps in the influent and intermediate wet wells. These pumps will provide redundancy and back-up for the plant's aging screw pumps in the event of high flow conditions. This will avoid the need to rent pumps during anticipated high-flow storm events.

Digester Cleaning Project:
The first portion of the project has been completed. The floating-cover digester has been cleaned and inspected for structural integrity, interior component wear, and roof integrity. Staff are awaiting the final report from the inspection. This project will rehabilitate both digesters and their components over the next two years.

New Draft NPDES Permit: A draft of the new NPDES permit was issued this quarter. It contains a much more stringent phosphorous limit (0.15 mg/l versus existing 1.0 mg/l). This will require an additional capital expense for new treatment systems with an anticipated cost of $3.5 million. It must be completed within 48 months of the final permit.

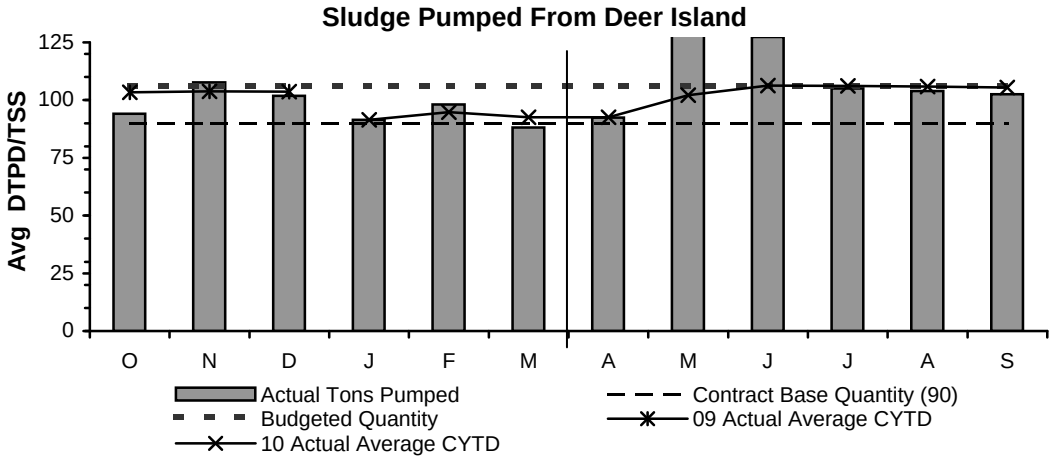
New Influent Gates: MWRA's Technical Assistance consultant is designing two influent gates - one for the Clinton influent and one for the Lancaster Sewer District. These gates protect the plant assets from extreme wet weather flows by throttling the influent to the plant. Staff are pursuing flood mitigation funding through FEMA.

Operations and Maintenance: During the 1st Quarter, staff completed a number of operations and maintenance tasks including: Changing air filters on all low pressure air blowers; installing a new motor on the vacuum compressor for the lab; changing the oil in the plunger pump and air compressor; clearing a blockage from the scum chute on Gravity Thickener 2 in the Dewatering Building, and also checking the bleed-off valve on the high-pressure air compressor, and replacing a piston stroke counter on Plunger Pump 3; replacing a low-pressure air blower for the contact chamber in the Chemical Building; replacing the gas pipe on the Primary Digester Tank in the . Digester Building, and also servicing the rotary gas valve on the Primary Digester; installing a new upper bearing assembly on Lift Pump 2 in the Intermediate Lift Station, as well as cleaning, inspecting and purging the grease on the lower bearings of the lift pump, and replacing broken grease lines and purge plugs.

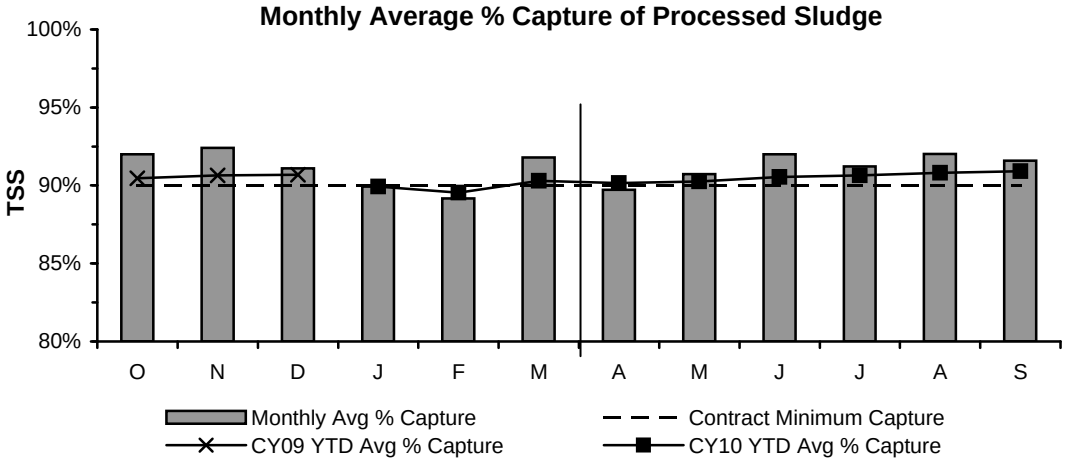
Deer Island Residuals

1st Quarter - FY11

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 (FY11's budget is 106 DTPD/TSS).



The average total quantity of sludge pumped from DITP to FRSA in the 1st Quarter was 103.8 DTPD, which is less than FY11's budget of 106 DTPD. The lower quantity is a result of less secondary sludge going to digestion, as well as sludge inventory re-balancing after digester transfers. Changes in sludge inventory, the performance of primary and secondary treatment, and upset conditions can all impact sludge quantities.



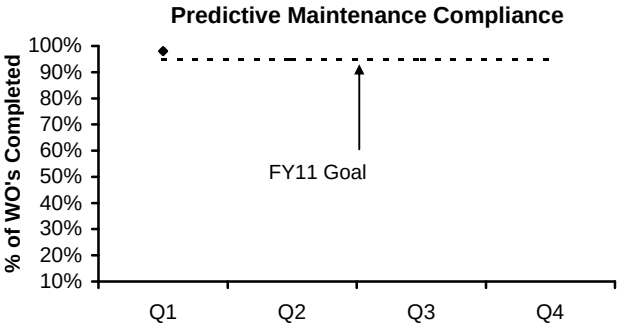
The contract requires NEFCo to capture at least 90% of the solids delivered to the Pelletizing Plant at FRSA; The solids capture rate for the 1st Quarter was 91.6%.

Deer Island Maintenance

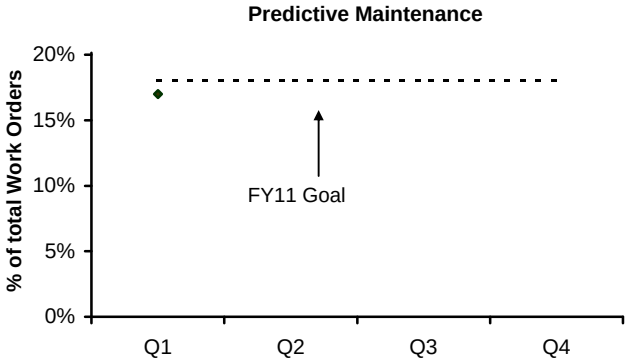
1st Quarter - FY11

Productivity Initiatives

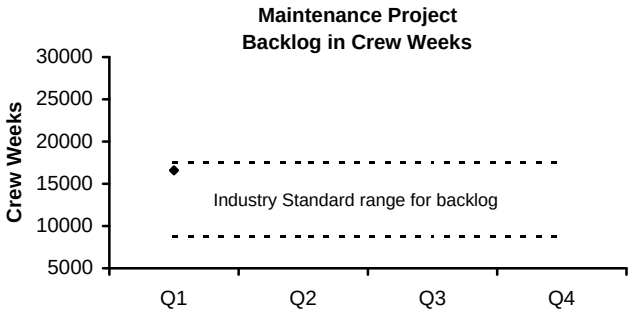
Productivity initiatives include increasing predictive maintenance tasks. Accomplishing this initiative should result in a decrease in the overall maintenance backlog.



Deer Island is moving forward with an aggressive predictive maintenance program. Deer Island's FY11 predictive maintenance goal is completion of 95% of all PdM work orders; Deer Island met that goal as it completed 98% if its PdM work orders in the 1st Quarter.



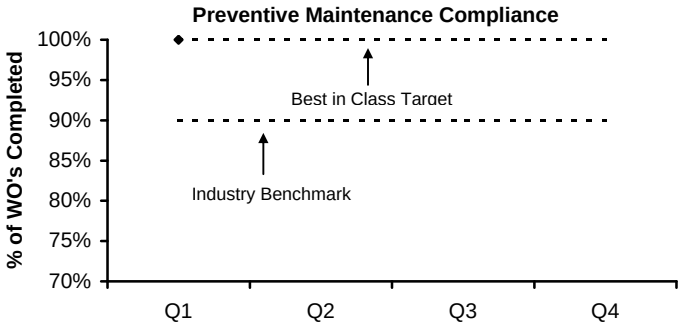
Deer Island's FY11 goal is to increase PdM work orders to 18% of total work orders. The industry is moving toward increasing predictive maintenance work to reduce down time and to better predict when repairs are needed. DITP completed 17% this quarter.



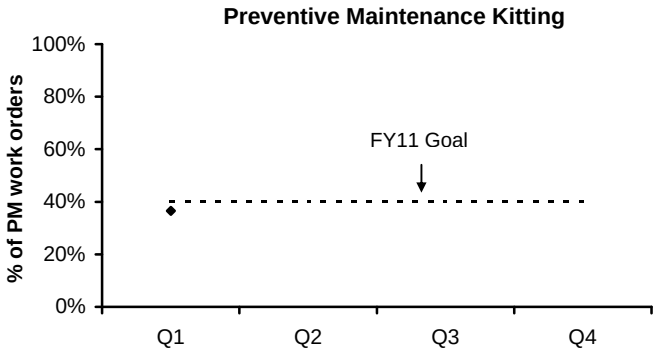
DITP's average backlog this quarter was 16,606 hours. The industry standard for maintenance backlog with 97 staff (currently planned staffing levels) is between 8,730 hours 17,460 hours. Maintenance is currently within the industry benchmark. Management continues to monitor backlog to ensure that all critical equipment and systems are available.

Proactive Initiatives

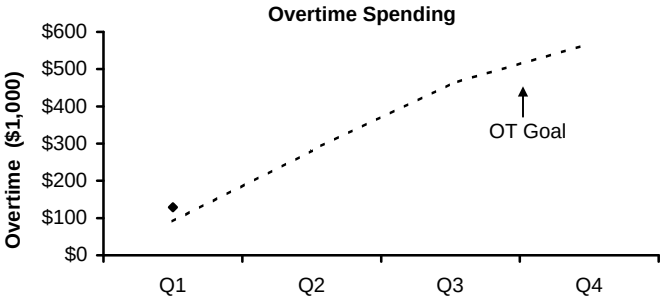
Proactive initiatives include completing 100% of all preventive maintenance tasks and increasing preventive maintenance kitting. These tasks should result in lower maintenance costs.



Deer Island's FY11 preventive maintenance goal is completion of 100% of all PM work orders from Operations and Maintenance. DITP met its goal as it completed 100% of all PMs this quarter.



Deer Island's FY11 preventive maintenance kitting goal is 40%; Deer Island completed 37% of maintenance kitting this quarter. Kitting is staging of parts/materials necessary to complete maintenance work. This will result in more wrench time and increased productivity.

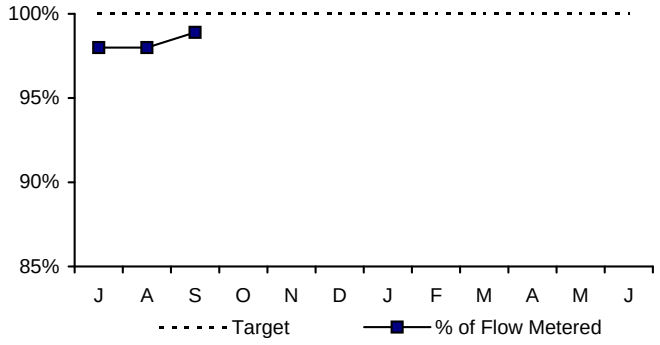


Overtime spending was $38K over budget for the 1st Quarter; of which, $27K was for storm coverage. In addition, overtime was used to work on the disinfection tip tube project, digester mixer replacement, flow control gate project, and Primary and Secondary Clarifier work. Management continues to limit overtime spending to critical maintenance activities.

Operations Division Metering
1st Quarter - FY11

WATER METERS

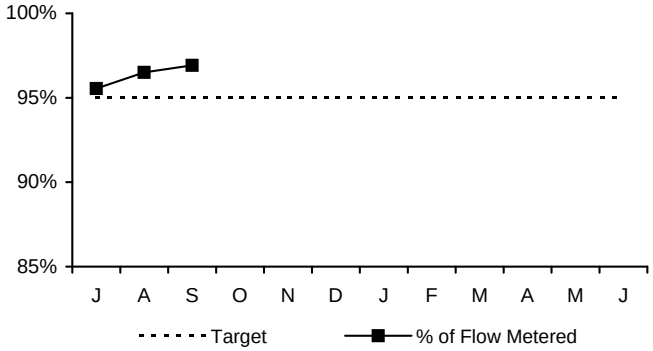
Percent of Total Revenue Water Deliveries Calculated Using Meters



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/or capital construction projects. During the 1st Quarter, meter actuals accounted for 98.3% of flow; only 1.7% of total revenue water deliveries were estimated. The following is the breakdown of estimations:
In-house and Capital Construction Projects - 0.8%
Instrumentation Failure - 0.9%

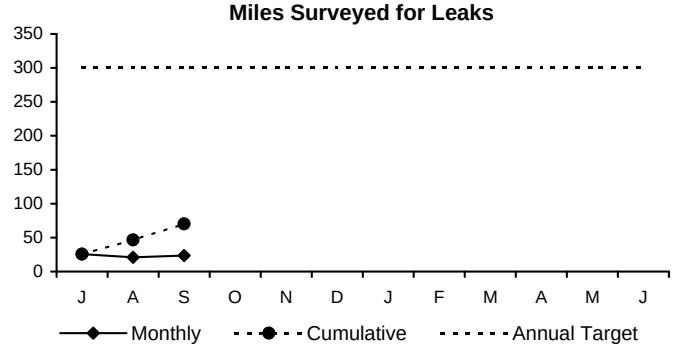
WASTEWATER METERS

Percent of Total Wastewater Transport Calculated Using Meters



The target for revenue wastewater transport calculated using meters is 95%. Estimates are generated for meters missing data due to instrument failure and/or erratic meter behavior. Estimates are produced using data from previous time periods under similar flow conditions. During the 1st Quarter, meter actuals accounted for 96.34% of flow; 3.66% of wastewater transport was estimated.

Miles Surveyed for Leaks



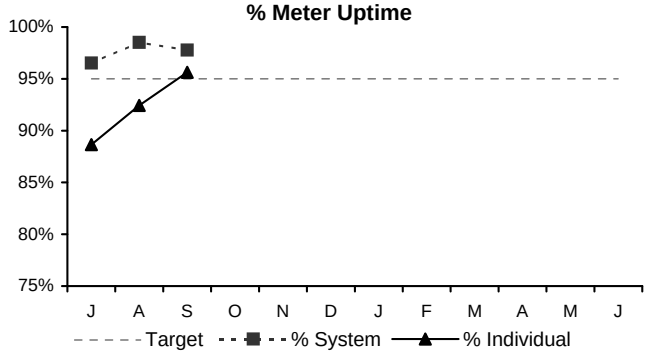
During the 1st quarter, staff inspected 70.21 miles of MWRA water mains.

Water Distribution System

Month	J	A	S	O	N	D	J	F	M	A	M	J
Leaks Detected	0	0	1									
Leaks Repaired	0	0	1									
Backlog	0	0	0									
Avg. Lag Time	**0.0**	**0.0**	**0.0**									

Only one leak was found during the 1st Quarter; staff repaired it successfully so the leak backlog for FY11 remains at zero. The Pipeline Program's goal is to repair all leaks found during the fiscal year. However, if the goal cannot be reached due to restrictions, isolations, communities, or degree of difficulty, then the goal is to have not more than two leaks outstanding at year's end.

% Meter Uptime



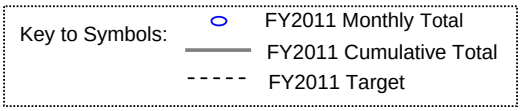
For the 1st first Quarter, out of a possible 1,628,160 data points, only 35,139 points were missed resulting in an average system-wide up time of 97.6%. Of the 184 revenue meters installed, on average, 14 experienced down time greater than the 5% target resulting in a 92.2% individual meter uptime. For the 1st Quarter, down time for an individual meter is defined by any individual meter, on average, having less than 2,797 data points.

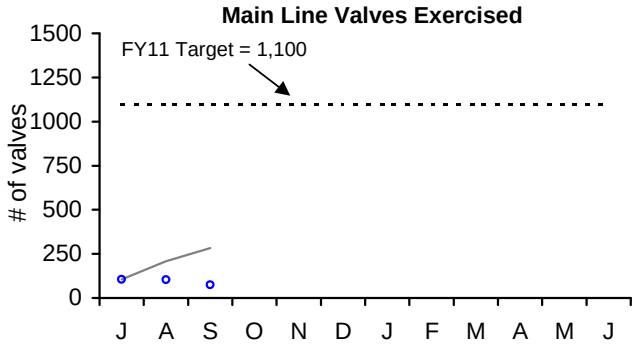
Water Distribution System Valves
1st Quarter - FY11

Background

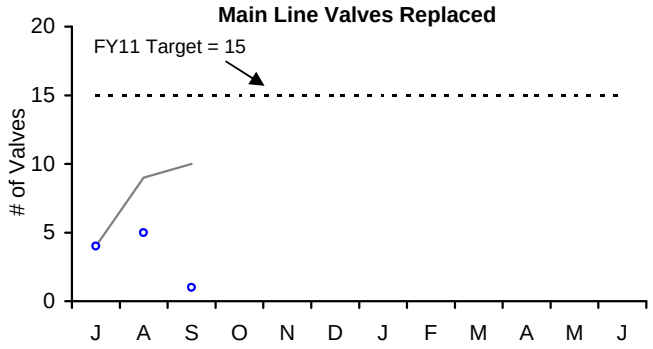
Valves are exercised, rehabilitated, or replaced in order to improve their operating condition. This work occurs year round. Valve replacements occur in roadway locations during the normal construction season, and in off-road locations during the winter season. Valve exercising can occur year round but 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	
		FY11 to Date	FY11 Targets
Main Line Valves	2,083	85.0%	87%
Blow-Off Valves	1,193	90.9%	94%
Air Release Valves	1,335	90.7%	92%
Control Valves	48	94.0%	92%

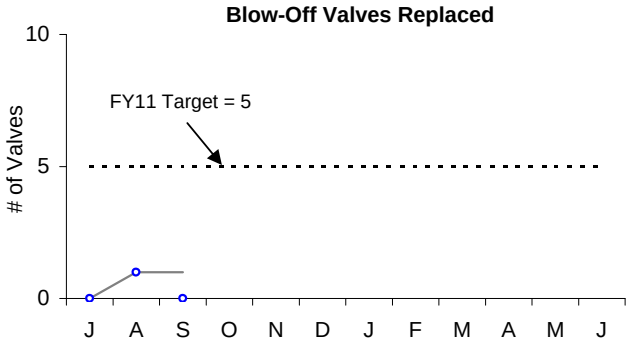




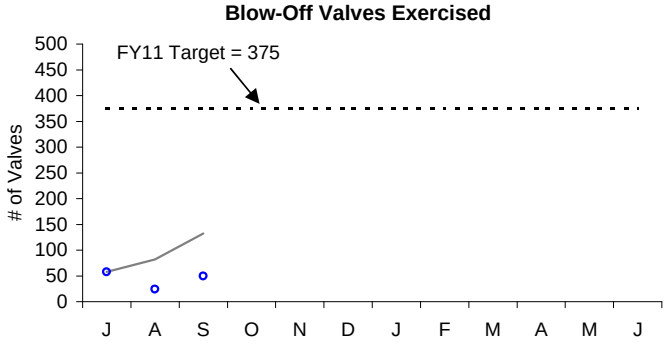
Staff exercised 283 main line valves in the 1st Quarter.



In the 1st Quarter, staff replaced 10 main line valves, well on pace to meet the FY11 goal of 15.



Staff replaced one blow-off valve this quarter.



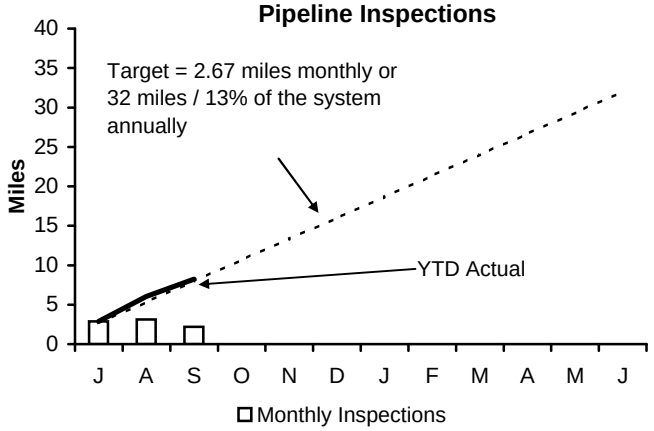
Staff exercised 132 blow-off valves in the 1st Quarter.

Wastewater Pipeline and Structure Inspections and Maintenance

1st Quarter - FY11

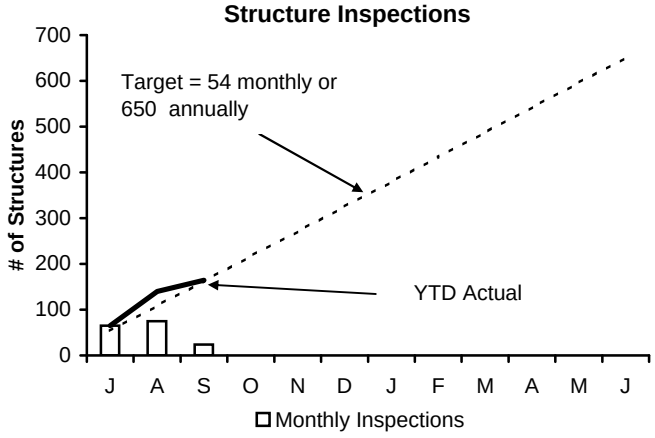
Inspections

Pipeline Inspections



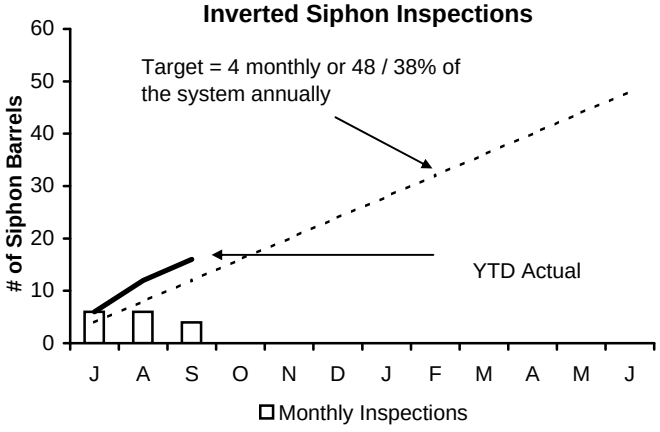
Staff internally inspected 8.22 miles of MWRA sewer pipeline in the 1st Quarter and also provided Community Assistance to the City of Somerville by inspecting 2,228 linear feet was sewer line for the city.

Structure Inspections



Staff conducted 164 manhole/structure inspections in the 1st Quarter, including all 12 CSO structures each month.

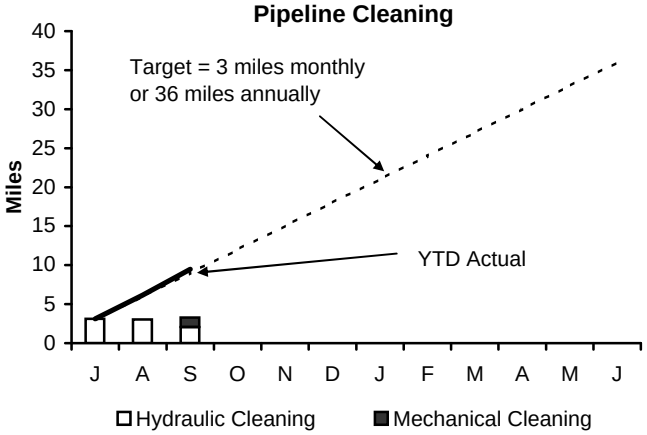
Inverted Siphon Inspections



In the 1st Quarter, staff inspected 16 siphon barrels.

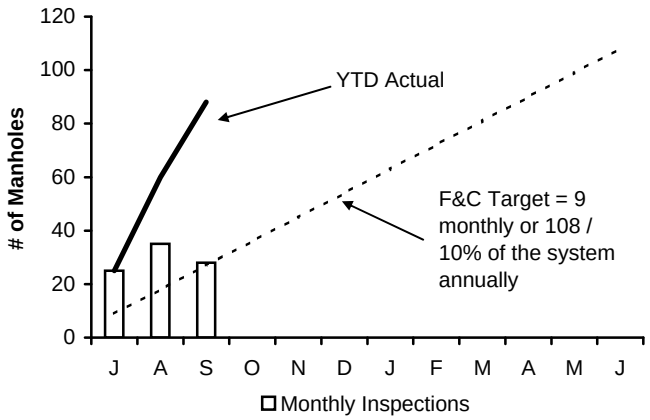
Maintenance

Pipeline Cleaning



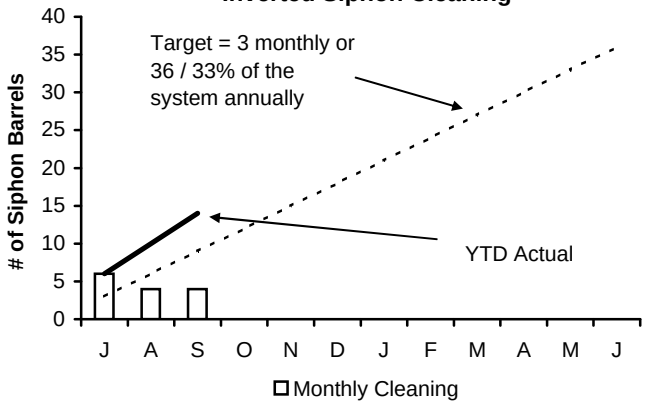
Staff cleaned 9.47 miles of MWRA's sewer system and removed 22 cubic yards of grit and debris. No Community Assistance cleaning was provided this quarter.

Manhole Rehabilitation



Staff replaced 88 frames and covers this quarter.

Inverted Siphon Cleaning

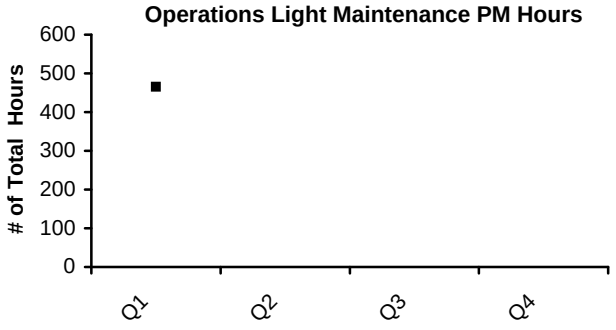


Staff cleaned 14 siphon barrels this quarter.

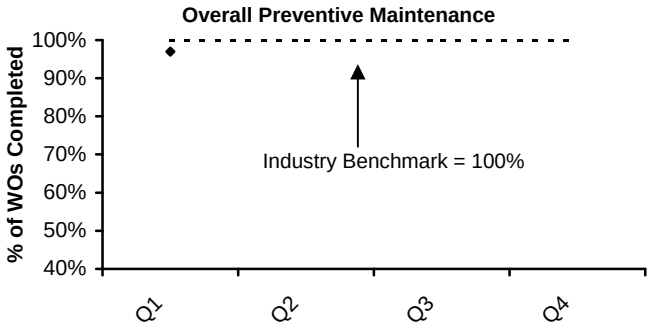
Field Operations' Metropolitan Equipment & Facility Maintenance

1st Quarter - FY11

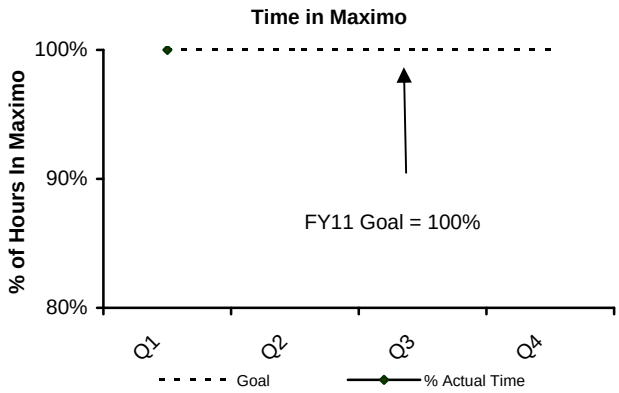
Several maintenance and productivity initiatives are in progress; Operators now performing light maintenance tasks is one of those productivity initiatives. This frees up maintenance staff to perform corrective maintenance and project work, thus reducing maintenance spending. Backlog and overtime metrics monitor the success of these maintenance initiatives.



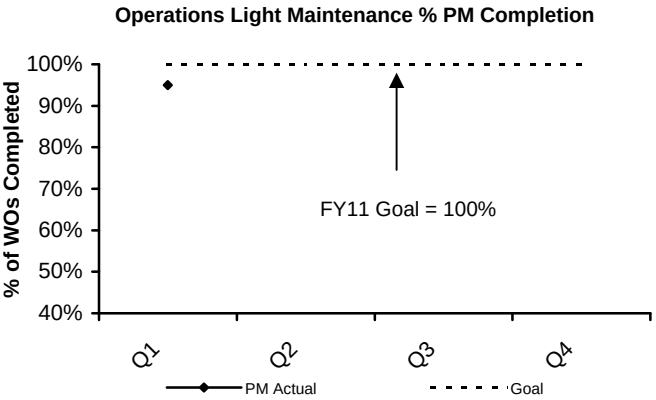
Operations staff averaged 465 hours of preventive maintenance during the 1st Quarter, an average of 23% of the total PM *hours* for the 1st Quarter, which is above the industry benchmark of 10% to 15%.



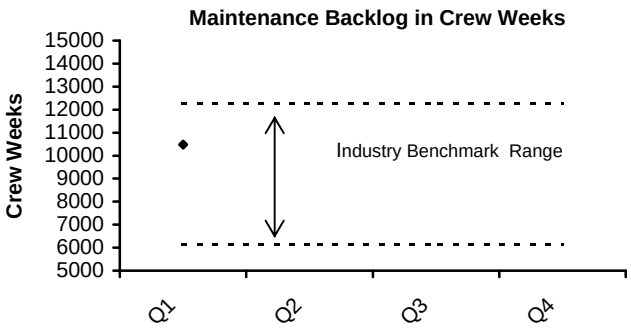
FOD's preventive maintenance goal for FY11 is 100% of all PM work orders. Staff completed an average of 97% of all PM work orders in the 1st Quarter.



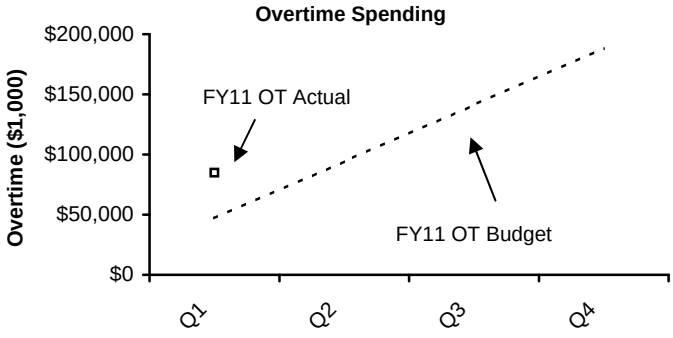
To ensure accurate data in the Maximo database, 8 hours of staff time each day must be entered into Maximo. The FY11 goal is 100%; 100% of time was entered in the 1st Quarter.



Operations' FY11 PM goal is completion of 100% of all PM work orders assigned. Operations completed an average of 95% of PM work orders in the 1st Quarter. Staff spent more time than expected on wet weather response and training.

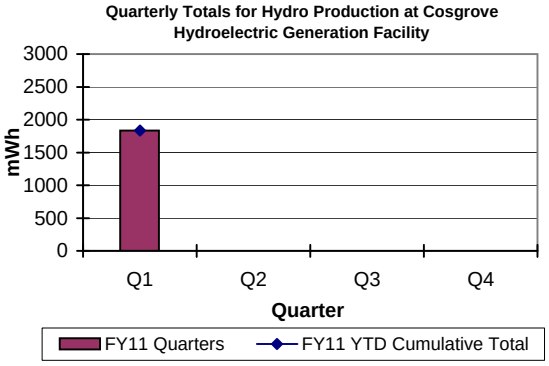


The 1st Quarter's backlog average was at 10,477 hours. Management's goal is to stay within the industry benchmark of 6,160 to 12,260 hours and control overtime. Mechanics' backlog has increased due to the addition of critical project work.

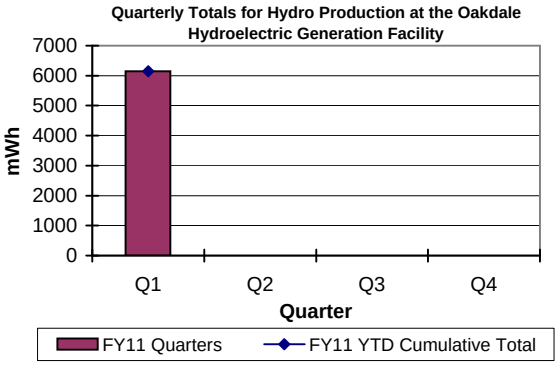


Maintenance overtime was $37K over budget for the 1st Quarter. Overtime was used to provide wet weather coverage, complete emergency repairs due to a variety of critical operational needs, and provide 24/7 coverage for the August Shaft 5A leak response.

Field Operations Hydroelectric Generation Quarterly Report
1st Quarter - FY11



In the 1st Quarter, the Cosgrove Hydroelectric Station generated a net of 1,833 MWh; 6% less power than was generated during the same quarter in FY10. The revenue generated at Cosgrove in the first quarter was $105,928.



In the 1st Quarter, the Oakdale Station's hydroelectric plant generated a net of 6,144 MWh; 19% more power than was generated during the same period in FY10. The revenue generated at Oakdale in the first quarter was $458,456. (Oakdale's operating protocol dictates that power is generated when water is transferred from Quabbin to Wachusett unless conditions result in flows that are in excess of generating capability.)

Loring Road Hydroelectric Project: Under the American Recovery and Reinvestment Act for Green Infrastructure projects, MWRA received$1.5 million in stimulus funding from SRF for this project. Construction continued during the 1st Quarter and is almost complete; the turbine generator is scheduled for delivery in November 2010.

Wachusett Dam Hydroelectric Generation Study: MWRA completed a feasibility study of hydroelectric power at the Wachusett Dam. A generator would be installed at the existing gatehouse through which water will be discharged to the South Branch of the Nashua River. MWRA was awarded a $375,000 grant for design and construction under the Massachusetts Technology Council's Small Hydropower Initiatives Program. Permitting and design has been delayed until agreement on stream releases and system expansion moves forward.

Carroll Water Treatment Plant (CWTP) Photovoltaic: Work on this project has been ongoing with substantial progress made during the 1st Quarter. MWRA will receive $1.5 million in stimulus funding from SRF for this project. Staff expect work to be completed by the end of calendar year 2010.

Southborough Photovoltaic: A feasibility study has been completed for the Trade Shop roof; staff are still reviewing the data and no final determination has been made regarding a recommendation to move forward with this project.

Wind Power: Staff continue to work with the City of Quincy to resolve some siting issues for wind turbines at Nut Island. MWRA had previously received a $500,000 design and construction grant from the Massachusetts Technology Council for this project.

Under the American Recovery and Reinvestment Act for Green Infrastructure projects, MWRA received $4.75 million in stimulus funding from SRF for the Charlestown wind turbine at the DeLauri Pump Station. MWRA issued a Notice to Proceed for the design/build of a 370-foot turbine in March 2010. Work continued during the 1st Quarter.

CWTP Energy Audit: Installation of variable frequency drives (VFDs) on hot water pumps, which were recommended in an energy audit, continued in the 1st Quarter; staff anticipate project completion in October. The work is being coordinated with NGRID so that MWRA will receive all allowed incentives.

Chelsea Facility Energy Audit: A detailed audit of the Chelsea facility recommended installing an Energy Management System (EMS) for the Administration Building, along with some equipment updates. Staff are proceeding with this recommendation and are working with NSTAR and its contractor to put together a specifications package system to be completed by December 31, 2010. NSTAR has agreed to provide a $168,000 incentive to MWRA for the installation of the EMS. In addition, energy-efficient lighting will be installed in the parking areas at the Chelsea Facility next quarter. NSTAR has committed to providing a $26,700 incentive toward the cost of that project.

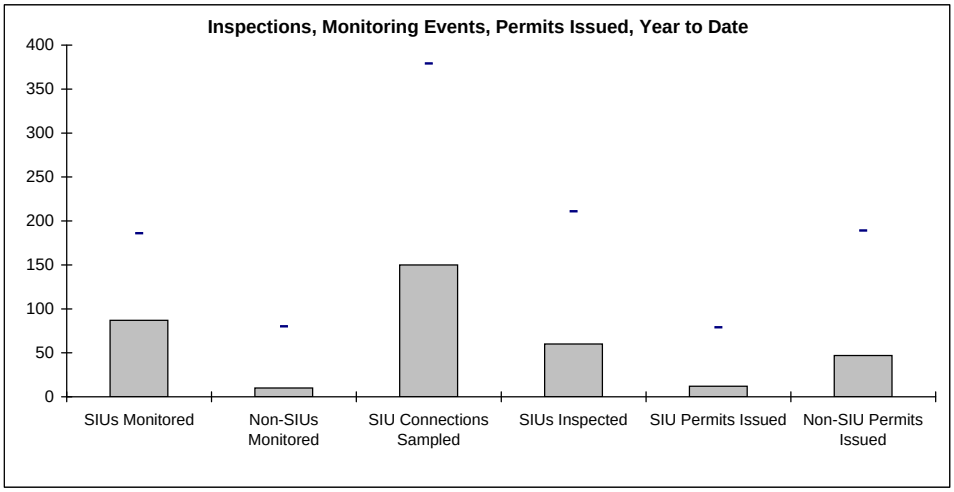
Energy Audit of Eight Field Operations Department (FOD) Facilities: MWRA staff identified multiple facilities that would benefit from a comprehensive energy audit. Phase 1 was conducted in the 4th Quarter of FY09 and included: Chelsea Creek, Columbus Park, and Ward Street Headworks, and Gillis, Newton Street, Commonwealth Avenue, and Prison Point Pump Stations, and the Chelsea Screen House. The focus of this energy audit was lighting, HVAC, pumps, and motors. Implementation of the audit recommendations began at the end of the 1st Quarter.

Energy Audit of 14 FOD Facilities: Audits of 14 additional FOD facilities began in the 1st Quarter.

Six Water Pump Station VFD Installations: VFDs are being installed at six water pump stations, Brattle Court, Belmont, Hyde Park, Newton Street., Reservoir Road, and Spring Street for better process control and energy efficiency. MWRA received a rebate check from NSTAR at the end of September in the amount of $86,043 for the VFDs at Reservoir Rd. and Spring Street.

Toxic Reduction and Control

1st Quarter - FY11



EPA Required SIU Monitoring Events
for FY11: 186
YTD : **87**

Required Non-SIU Monitoring Events
for FY11: 80
YTD : **10**

SIU Connections to be Sampled
For FY11: 379
YTD: **150**

EPA Required SIU Inspections
for FY11: 211
YTD: **60**

SIU Permits due to Expire
In FY11: 79
YTD: **12**

Non-SIU Permits due to Expire
for FY11: 189
YTD: **47**

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

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

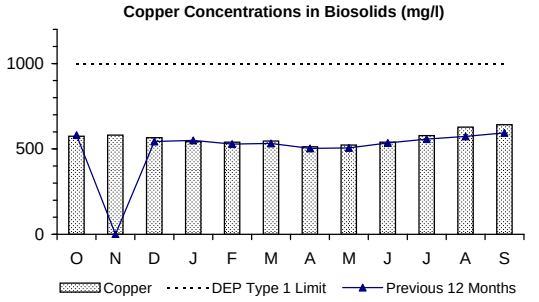
As reported last quarter, TRAC met or exceeded all of its monitoring and inspections goals for FY10.

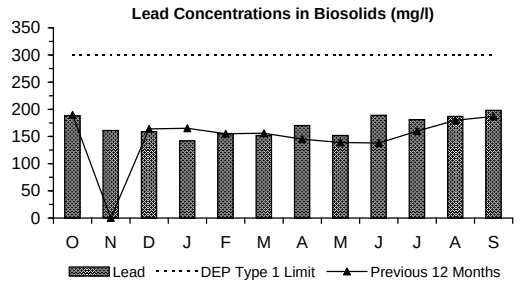
SIU and Non-SIU permits are issued with durations of two to five years, depending on the category of industry, varying the number of permits that expire in a given year.

Number of Days to Issue a Permit

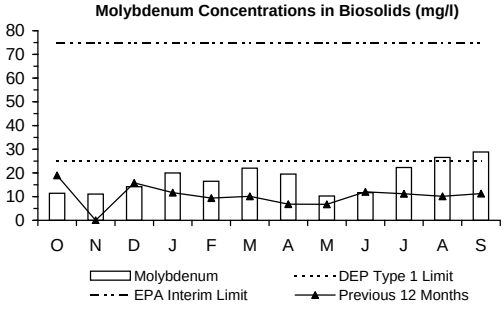
	0 to 120		121 to 180		181 or more		Total Permits Issued	
	SIU	Non-SIU	SIU	Non-SIU	SIU*	Non-SIU	SIU	Non-SIU
Jul	2	5	0	0	0	0	2	5
Aug	0	13	1	1	3	6	4	20
Sep	4	19	0	1	2	2	6	22
Oct							0	0
Nov							0	0
Dec							0	0
Jan							0	0
Feb							0	0
Mar							0	0
Apr							0	0
May							0	0
Jun							0	0
% YTD	**50%**	**79%**	**8%**	**4%**	**42%**	**17%**	**12**	**47**

EPA requires MWRA to issue or renew 90% of SIU permits within 120 days of receipt of the application or the permit expiration date - whichever is later. EPA also requires the remaining 10% of SIU permits to be issued within 180 days. * Five SIU permits were issued beyond 180 days: three were delayed pending the development of compliance schedules; one was delayed while issues regarding a sample location were resolved; the final was delayed pending resolution of a software (PIMS) issue. Facilities remain covered by their existing permits while their renewal permits are pending.





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



MWRA met DEP's Type 1 Molybdenum limit for each month during Fiscal Years 09 and 10. However, summer 2010 was reported to be the hottest on record in the Northeast; a corresponding increase in molybdenum levels in the 1st Quarter appears to support this. In August and September, the average concentrations exceeded the state standard for unrestricted use as a fertilizer within Massachusetts. Staff will review the current voluntary program, along with a review of local limits, which will coincide with the NPDES permit renewal, and evaluate whether a regulatory program is needed to control molybdenum use.

Field Operations & Maintenance Highlights

First Quarter FY11

Western Water Operations & Maintenance

- Carroll Water Treatment Plant (CWTP): Staff purged and placed Ozone Generator 1 back into service after Fuji Electric Corp. completed the overhaul. Staff isolated Generator 2 to allow the overhaul project to continue. While the generators have been off-line, staff have removed and cleaned the cooling water inlet manifolds. Staff also placed the plant on the emergency generators in anticipation of the peak electrical demand day and for a 'demand response' program request from ISO New England.

- MetroWest Tunnel: Staff installed a new electrical feed to support the operation of a Mobile Disinfection Unit at the E-1 Valve Chamber if needed.

- Cosgrove Intake and Power Station: Staff diagnosed and repaired a problem with the circuit breaker for Hydro Turbine 1 when it did not open during a power outage.

Metro Water Operations & Maintenance

- Water Pipeline Program: Work was completed on the Northern Intermediate High (NIH) emergency connection between Lexington and Winchester; 400 feet of 12-inch pipe and several valves were installed. The line was filled; pressure-tested, disinfected, and is now ready for use if needed. Pipeline staff also replaced a broken fire hydrant on the Deer Island access road.

- Pipeline Activations and Isolations: Valve staff isolated Meter 31 to Somerville on July 26 to allow new piping by the Contractor for the Sections 18/50/51 construction contract. During this time, Meter 32 supplied all of the water to the high service area of Somerville. Meter 31 was returned to service on July 30; no service impacts occurred.

- WASM 10 Leak in Waltham: On September 9, water was reported surfacing on a traffic island on Waverly Oaks Road in Waltham. It was determined to be a leak on WASM 10, a 60-inch steel main. Staff excavated and was able to successfully plug the leak live with the main in service.

Wastewater Operations & Maintenance

- Framingham Pump Station Chemical Containment and Monitoring: Maintenance staff are in the process of installing a containment berm that will direct spills to the sewer drain. Process Control and SCADA are reviewing options for leak detectors. The berm is installed. New leak sensors are ordered and will be installed by Electricians in October. SCADA will configure the PLC for new inputs and alarms.

- Cottage Farm Weir Adjustment: Staff evaluated and submitted recommendations for the adjustment of the Cottage Farm Detention Basin overflow weirs. The weirs on five of six tanks have been adjusted and Tank 6's adjustment will require specialized equipment; project completion is anticipated in October.

- New Neponset Odor Control Project: The odor control vessels and ductwork have been furnished and delivered; so has the carbon. Staff expect SCADA work to be completed in October.

TRAC

- Enforcement: TRAC issued Notices of Proposed Permit Suspension to nine facilities that had failed to pay their annual permit charges as required; five of the nine paid in full - two have made partial payments and have committed to pay the balance. One facility requested consideration that it operated for less than a full year and the remaining facility provided no response. Staff will be following up with those still owing and operating. FY11's Annual Charges will be issued in November.

- Monitoring - Oakdale Power Station Facility: TRAC's Monitoring staff sampled this facility for the first time in July under its new NPDES Hydroelectric Facility General Permit issued by EPA. The new permit requires quarterly sampling at this facility.

- Clinton Plant: In September, TRAC staff began monitoring Lancaster and Clinton influent for total phosphorus and orthophosphate in anticipation of the new Clinton NPDES Permit.

Metro Equipment and Facility Maintenance

Equipment Maintenance Program

- Meter 130 in Winchester: The electrical components in the vault were beginning to corrode from the harsh environment. Electrical Staff replaced all boxes, breakers, receptacles, switches and conduit with components best suitable for this environment.

- Caruso Pump Station: Staff scheduled an electrical shutdown with NSTAR, which allowed MWRA Engineering and Electrical staff to inspect the station's main switch gear. This also allowed for a controlled transfer of power from NSTAR to station emergency power; the emergency generator and associated switchgear operated properly.

- Nut Island Grit Screw 2: Mechanics removed an incline grit screw and replaced it with a new longer screw with an exposed lower bearing and mechanical seal.

Grounds/Custodial Maintenance

- Fells Detention Basin: The Fells Detention Basin has not been cleared in over 10 years and was overgrown with trees and shrubs. Grounds Staff completed removing the trees from the basin with the assistance of the Wastewater Pipeline Staff.

- Dam Maintenance: Staff cleared Fells Dam 6 and 7, the upstream side of the dam, portions of the Spot Pond Spillway, and the Chestnut Hill Reservoir, as well as other MWRA easements.

Facility Maintenance

- Hayes Pump Station: Carpenters refurbished the slate roof and gutters, and molding on the Back Odor Control Building, which is a historic structure.

- Painting and Door Repairs: Staff completed painting and door repair projects at a number of facilities, including the Intermediate Pump Station, Hayes Odor Control Building, the Gillis Pump Station, the Chelsea Facility, Nut Island, Caruso, Cottage Farm, Framingham, Hough's Neck and Ward Street. Graffiti was also removed from the Echo Street Bridge.

Operations Support

- Development of ERP Training Programs: In the 1st Quarter, staff continued developing a comprehensive annual emergency plan training program to comply with DEP requirements. This training will be provided for MWRA staff and a version of the training will also be provided to staff from MWRA's water communities.

- Headworks SCADA Project: Flume testing of the headworks' new flow measurement systems was completed and a final report submitted in August. Staff are reviewing alternative means to alleviate flume submergence issues without impacting operational hydraulics.

- Cyber Assessment: During the 1st Quarter, staff continued participating in an internal cyber security audit covering the SCADA system and MIS administrative networks. Staff were still working on some of the detailed audit reviews in September.

Water Quality Assurance

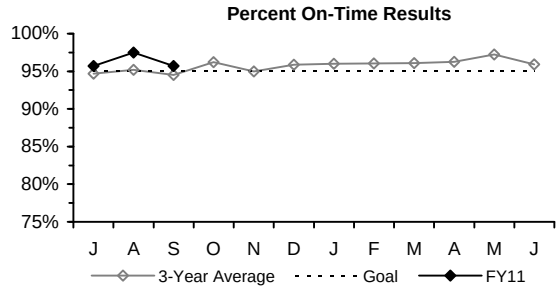
- On-line Water Quality Monitoring: Staff continued working on updating the water quality monitoring analyzer system. A staff summary for award was approved by the Board at the July Board Meeting and the contract was started in August. A kick-off meeting with the vendor was held in September and required submittals are expected in October. Staff have begun planning the associated data collection network with Verizon.

- Seasonal Work: Staff continued monitoring summer issues, including supporting the seasonal algae and coliform monitoring issues. A draft staff summary on algae issues was presented at the September Board Meeting.

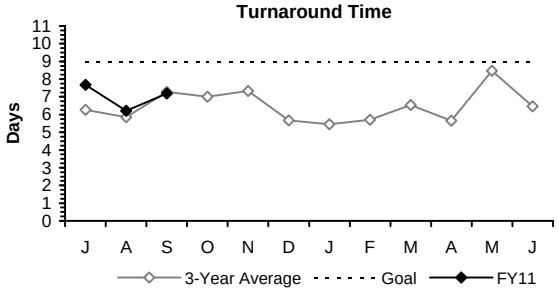
- Updated Coliform and Algae Response Plans: In July, staff updated the plans and circulated them for review by in-house staff. In September, staff continued updating the plans to incorporate review comments of other in-house staff.

Laboratory Services

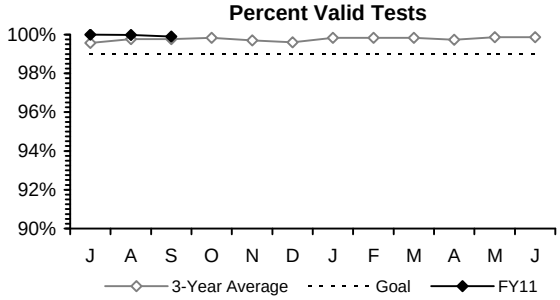
1st Quarter - FY11



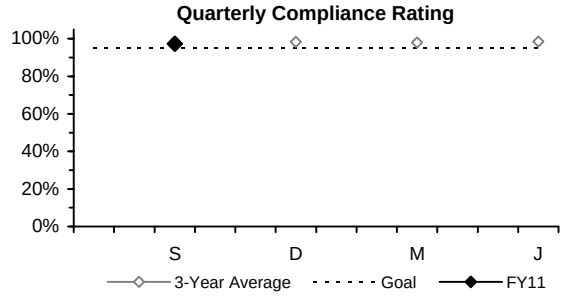
The Percent On-Time measurement was above the 95% goal for each month during the 1st Quarter.



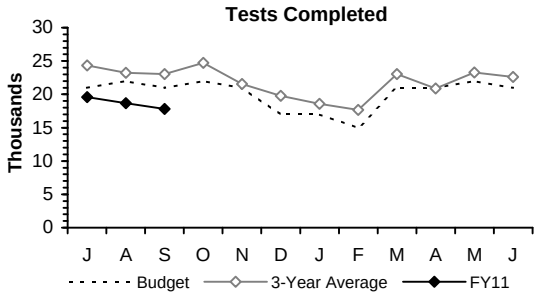
During the 1st Quarter, Turnaround Time remained faster than the established 9-day goal.



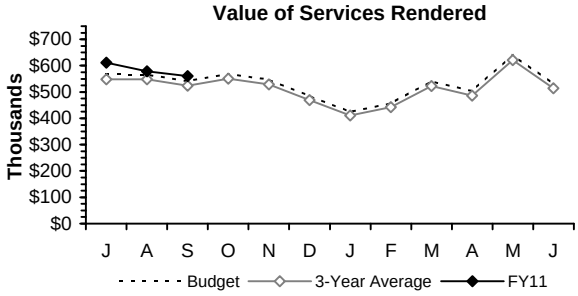
The Percent Valid Tests measurement stayed above the 99% goal this quarter.



A compliance audit of instrument record keeping at all five lab locations found good compliance with requirements. Compliance audits are performed in September, December, March and June.



The Tests Completed measurement was below the seasonally- adjusted budget goal this quarter; budget and FY11 actuals are now based on the new LIMS test-counting



The Value of Services Rendered measurement was above the seasonally-adjusted budget projection in the 1st Quarter.

Highlights:

LIMS: DLS worked with DEP to identify bugs in DEP's eDEP program for uploading regulatory drinking water results. DEP has agreed to work on a faster way for uploading and signing electronic drinking water results.
DITP: DLS is preparing for the re-start of the BIOCAST nutrient removal pilot study. Staff tested extra sodium hypochlorite samples collected during truck deliveries.
ENQUAD: Subsequent to two DITP blending events, DLS collected and tested permit-required Mass Bay samples to show that water quality was not advserly impacted; also tested practice sample of Mass Bay "fat particles" from a net tow for mercury and organic contaminants.
FOD/TRAC: Temporarily increased frequency of testing sodium hypochlorite samples from CSO facilities to weekly. Met with TRAC and MIS to work on PIMS/LIMS interface issues to ensure that all lab results are received by PIMS.
FOD/Water Quality Assurance: Met with Waltham and FOD on Waltham's Total Coliform Rule program. Waltham has a new city engineer who requested the meeting to better understand the TCR requirements. Tested rush samples from emergency distribution reservoirs in support of the Shaft 5 leak contingency planning. Wilmington started bringing its Total Coliform Rule samples to the Chelsea Lab. Tested follow-up lead samples from a Brookline school and a complaint investigation sample from the Weston Police Station. Generated the first required Enterococcus report under the new ground water rule. Implemented a new TCR sampling plan for Chelsea.
Outside Customers: Tested samples from partial lead service line replacements for Woburn. Provided DCR with supplemental calcium results for the past two years from several Wachusett locations. Coordinated herbicide monitoring between DCR and a contract lab in an area where trees were removed for Asian Longhorn Beetle control.

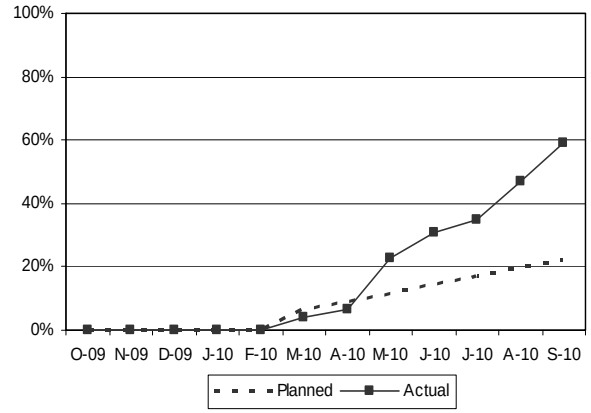
CONSTRUCTION PROGRAMS

Projects In Construction - 1

September 2010

(Progress Percentages based on Construction Expenditures)

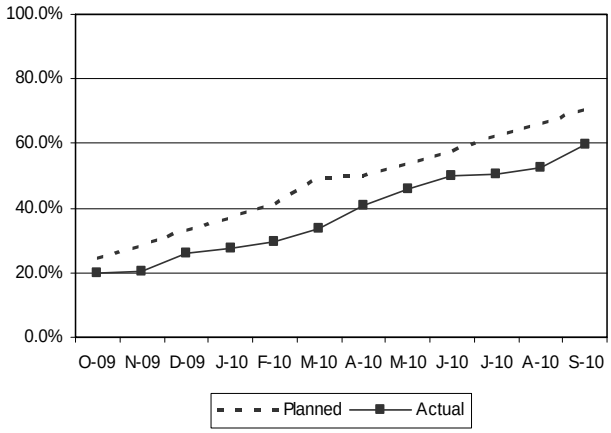
Southern Spine Water Mains Rehabilitation - Section 107
Progress - September 2010



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

Status and Issues: In Milton, the contractor installed 720 linear feet of 48" Ductile Iron Pipe (DIP) along Adams St in Milton and 1,706 linear feet of Town of Milton Water Main 12" DIP from Brook St to East Milton Square. The contractor completed reclamation and preparation for paving from Station 19+00 to 69+00. Manual air valves were installed at Stations 73+50 and 31+00. The contractor has assigned four construction crews to this work, more than originally scheduled. More crews along with favorable spring weather has put the contract ahead of schedule.

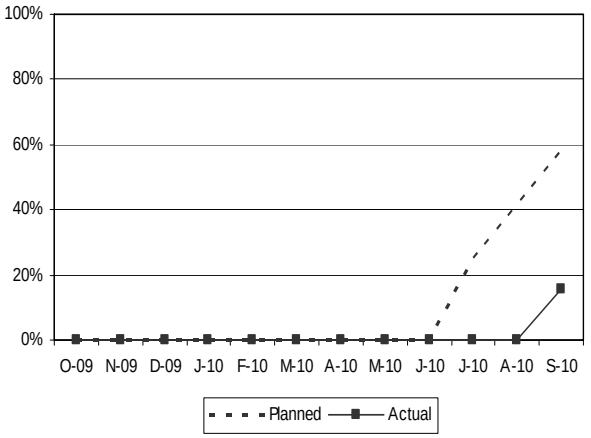
North Dorchester Bay Pump Station and Sewers
Progress - September 2010



Project Summary: Construction of 15-MGD CSO pump station, approximately 3,200 linear feet of 24-inch force main and 640 linear feet of 30-inch gravity sewers and appurtenant work.

Status and Issues: During September, the contractor completed waterproofing and backfilling of the annular space on the north face, where the forcemain exits the structure. Placement of wall block that make-up the exterior and interior walls reached 85% completion. The contractor continued transport and disposal of excess excavated materials off-site. The contractor restarted the installation of the 10-inch water service piping along Shore Road. Gravity sewer installation reached 100% in September with the tie-in to the BWSC sewer line. Force main installation reached 100% completion in August. The contractor is reporting that construction completion will be in accordance with the court ordered milestones.

Braintree/Weymouth Section 624 Rehabilitation
Progress - September 2010



Project Summary: Installation of cured-in-place pipe (CIPP) in approximately 2,050 linear feet of 60-inch x 57-inch sewer in North Weymouth.

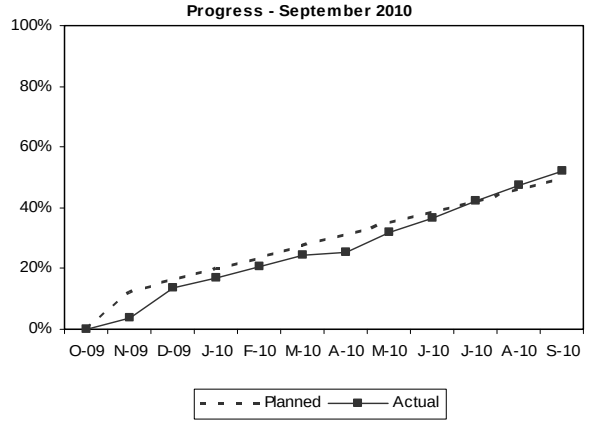
Status and Issues: During September, the contractor completed the tie-in of the temporary force main to the Hingham force main on Rosalind Road. Work progress has been very slow and construction may require additional work crews for multiple work areas to meet the current schedule. The contractor provided an updated schedule on September 28th, which appears to be aggressive. The schedule shows that all CIPP work will be completed by the end of October.

Projects In Construction – 2

September 2010

(Progress Percentages based on Construction Expenditures)

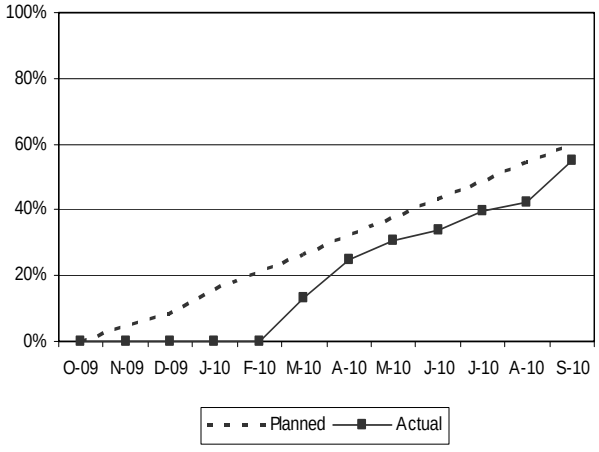
Section 18, 50 & 51 Rehabilitation in Medford/Somerville
Progress - September 2010



Project Summary: This project is one of the Shaft 7 to WASM 3 phases (CP-5) and provides for the rehabilitation of valves and 15,000 linear feet of 48, 20 and 16-inch pipe in Medford and Somerville including replacement of revenue Meter 32 in Somerville.

Status and Issues: On Section 18, the contractor installed, backfilled and temporary paved all access pits on Boston Ave and Winchester Street. Contaminated soil was discovered when replacing the existing blow-off valve on Harvard St, which delayed the schedule. Final paving was completed on Walnut St, Summer St and College Ave from curb to curb. On Section 50, all work has been completed.

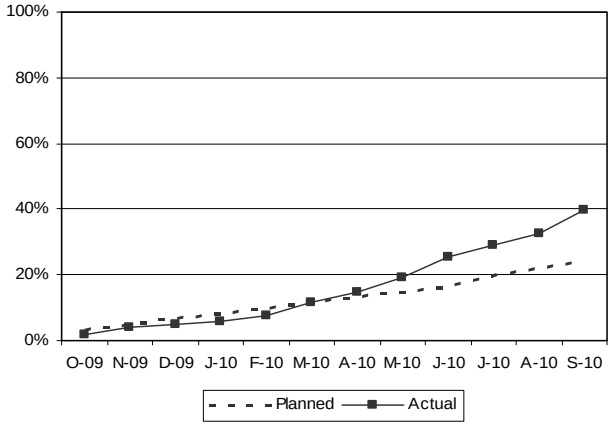
North Dorchester Bay Ventilation Building
Progress - September 2010



Project Summary: Construction of a ventilation building, interconnection to the NDB storage tunnel maintenance access structure at BOS-087 and final restoration of the -087 work area.

Status and Issues: At the ventilation building the contractor completed concrete placement for building roof beams and roof slab. Work continued on the placement of the water proof membrane to the exterior building walls. At the Yard Work location, no work was performed this period.

Hultman Aqueduct Interconnections Project
Progress - September 2010



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

Status and Issues: The contractor completed pipe repairs in Segment B between Brook St and Grove St. Segments B through E are now complete. Installation, disinfection and testing was completed on the Pressure Reducing Valves (PRVs) on Bacon St and Trapelo Rd in Waltham. Three 120" Butterfly Valves (BVs) for VC-N2 were installed. Installation began on the cathodic protection system and interior piping at N2.

CSO CONTROL PROGRAM

1st Quarter - FY11

Of the 35 projects in MWRA's Long-Term CSO Control Plan, 26 are complete, including two projects completed in the past quarter: East Boston Branch Sewer Relief (by MWRA) and Bulfinch Triangle Sewer Separation (by BWSC); six projects are in construction and two additional projects are in design. MWRA plans to commence design of the one project not yet started (MWR003 Gate and Floatables Control, Rindge Ave. Siphon Relief and SOM01A Interconnection Relief and Floatables Control) by July 2012. Progress on the nine CSO projects not yet complete is presented in the following table.

Project	Court Milestones in Schedule Seven (Shaded milestones are complete)			Status
	Commence Design	Commence Construction	Complete Construction	
North Dorchester Bay Storage Tunnel and Related Facilities	Aug 97	Aug 06	May 11	Tunnel Construction: Contractor reached Substantial Completion of this $147 million tunnel contract in November 2009 and continues to address punchlist items. Dewatering Pump Station and Sewer Construction: The contractor for the $26.0 million tunnel dewatering pumping station at MassPort's Conley Terminal and associated force main has completed the installation of the 3,200-foot-long, 24-inch-diameter force main, including the connection to the pumping station. The contractor also completed installation of the 640-foot-long, 30-inch-diameter PVC pipe to up-size a BWSC gravity sewer on N Street to accept the force main flows. At the pumping station, the contractor completed the placement of concrete for the exterior and interior below-grade walls, the floor beams, and the concrete slab on grade, backfilled most of the annular space between the facility substructure and the slurry wall, and recently commenced masonry work on the above-grade station walls. Ventilation Building Construction: The contractor for the $5.2 million construction contract for the below-ground tunnel ventilation building that is being constructed at the upstream end of the tunnel completed placement of the concrete exterior and interior walls and commenced installation of the roof beams and placement of the roof slab. Once the roof slab is complete, the contractor will waterproof the exterior walls, backfill the below-ground structure, and install the vent shafts. Installation of equipment within the building will follow. MWRA remains on schedule to complete all work and bring the North Dorchester Bay CSO storage conduit and related facilities into service by May 2011, in compliance with Schedule Seven.
Charles River Interceptor Gate Controls and Additional Interconnections	Jan 08	Jan 10	Jan 11	On June 15, 2010, MWRA submitted additional technical information to the U.S. Environmental Protection Agency, Region 1 (EPA), and the Massachusetts Department of Environmental Protection (DEP) regarding MWRA's engineering study of the Charles River Valley/South Charles Relief Sewer Gate Controls and Additional Interceptor Connections in response to EPA's comments. MWRA continues to conclude that no interceptor optimization alternative can appreciably reduce CSO discharges at the Cottage Farm CSO Facility or at other hydraulically-related CSO outfalls to the Charles River beyond the levels of control in MWRA's approved long-term control plan without raising the hydraulic grade lines in the sewer system to unacceptable levels. EPA staff disagree and believe benefits can be achieved without a significant increase in risk.

Project		Court Milestones in Schedule Seven (Shaded milestones are complete)			Status
		Commence Design	Commence Construction	Complete Construction	
South Dorchester Bay Sewer Separation (Project is complete per Court Order)		Jun 96	Apr 99	Nov 08	BWSC continues to pursue additional stormwater inflow removal (i.e., downspout disconnections) from the sanitary sewer system, in order to mitigate the remaining risks of sewer system flooding in large storms. BWSC advertised a Request for Proposals for associated design services in April 2010 and received proposals in May. BWSC has completed negotiations with the selected firm and expects to submit the contract to MWRA for review and approval soon, prior to issuing a NTP.
Reserved Channel Sewer Separation		Jul 06	May 09	Dec 15	BWSC continues to make progress with the first of nine planned construction contracts for the $73.7 million Reserved Channel Sewer Separation project. BWSC received bids on three additional construction contracts for which BWSC is awaiting DEP SRF authorization to award. BWSC also recently advertised a fifth contract and continues to make progress with final design of the remaining four contracts.
Brookline Sewer Separation		Nov 06	Nov 08	Jul 13	The first of two Brookline construction contracts for this project is complete. The second contract involves micro-tunneling along Beacon Street to install new sewers at significant depths, as well as the construction of several special structures that will connect the new sewers to existing laterals and to MWRA's interceptors. Main trunk combined sewers will be converted to storm drains. Brookline advertised the construction bid in July 2010 and received bids on September 23. The apparent low bid is $16.35 million, 32% lower than the Engineer's Estimate of $23.95 million. Brookline is reviewing the bids and expects to award the contract soon. As reported last quarter, MWRA has completed internal inspections of CSO Outfall MWR010, which will convey the separated Brookline stormwater to the Charles River. MWRA plans to clean and rehabilitate the outfall by the time Brookline completes the sewer separation work. Funds for the outfall work are included in the FY11CIP.
Cambridge/ Alewife Brook Sewer Separation	CAM004 Outfall and Wetland Basin (Contract 12)		Oct 10*	Oct 12*	On July 1, 2010, Cambridge received construction bids for the CAM004 Stormwater Outfall and Wetland Basin (Contract 12), and it has since issued a Letter of Intent to Award Contract 12 in the low bid amount of $14.8 million (approximately $2.3 million to be funded by MWRA). In addition, on August 9, 2010, the Governor signed legislation pursuant to Article 97 of the Massachusetts Constitution allowing the transfer of easements to Cambridge on state land within the Alewife Brook Reservation managed by DCR. Negotiations for certain private property easements have become more complicated with pending foreclosure of the properties. Cambridge and MWRA hope to secure the remaining easements through negotiations or takings soon. Commencement of construction is delayed at least three months from the July 31, 2010 date reported last quarter.
	CAM004 Sewer Separation	Jan 97	Jul 98 Jul 12*	Dec 15*	Cambridge completed a few initial construction contracts several years ago and plans to award three additional contracts to complete this project. Contrary to what was reported last quarter, Cambridge has not yet resumed design activities, but plans to do so soon. Cambridge continues to plan to award the next construction contract by July 2012.
	CAM400 Manhole Separation	Jul 06*	Jan 10*	Mar 11*	In January 2010, Cambridge awarded the construction contract that includes both of these projects. Work is progressing on schedule and is expected to be complete by the proposed milestone dates (October 2010 and March 2011).
	Interceptor Connection Relief/ Floatables	Jul 06*	Jan 10*	Oct 10*	

Project		Court Milestones in Schedule Seven (Shaded milestones are complete)			Status
		Commence Design	Commence Construction	Complete Construction	
Cambridge /Alewife Brook Sewer Separation	MWR003 Gate and Rindge Ave. Siphon	Jul 12*	Feb 14*	Apr 15*	Proposed milestones have been shifted out three months more due to a recent delay in commencing construction of Cambridge's Contract 12.

* Alewife Brook project schedules were delayed at least 27 months due to past wetlands permit appeals. Additional time is included for certain Alewife projects due to permits, land, easements and Article 97 legislation requirements for the CAM004 Outfall and Wetland Basin project. MWRA will seek revisions to the milestones in Schedule Seven based on new project schedules proposed by the City of Cambridge once Cambridge secures the final easements necessary for the commencement of construction of Contract 12.

CIP Expenditures
First Quarter FY11

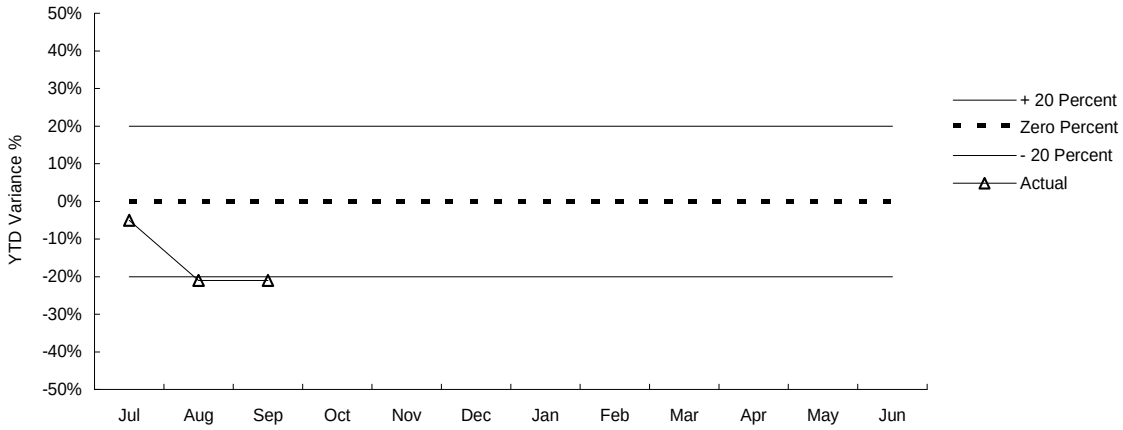
The Year-To-Date variances are highlighted below:

FY11 Capital Improvement Program Expenditure Variances through September by Program ($000)				
Program	FY11 Budget Through September	FY11 Actual Through September	Variance Amount	Variance Percent
Wastewater	34,918	26,237	(8,681)	-25%
Waterworks	12,247	11,694	(553)	-5%
Business and Operations Support	3,863	2,535	(1,328)	-34%
Total	$51,028	$40,466	($10,562)	-21%

Underspending within Wastewater is primarily attributable to projected tasks on the North Dorchester Pump Station & Sewers contract being less than originally anticipated, delay in award of the second Brookline Sewer Separation contract, and lower community requests for grants and loans. This was partially offset by accelerated progress on the DI Primary & Secondary Clarifier Rehabilitation contract. Underspending within Waterworks is primarily due to lower community requests for loans offset by accelerated progress on the Lower Hultman Aqueduct Rehabilitation (CP6A) contract.

CIP Expenditure Variance

Total FY11 CIP Budget of $208,000,000.



Construction Fund Management

All payments to support the capital program are made from the Construction Fund. Sources of fund revenues 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 10/23/10	$122 million
Unused capacity under the debt cap:	$617 million
Estimated date for exhausting construction fund without new borrowing:	May-11
Estimated date for debt cap increase to support new borrowing:	FY2013
Commercial paper outstanding:	$194 million
Commercial paper capacity:	$350 million
Budgeted FY11 capital spending*:	$199 million
Projected FY10 grant and SRF receipt:	$13 million

* Cash based spending is discounted for construction retainage.

DRINKING WATER QUALITY AND SUPPLY

Source Water – Microbial Results

1st Quarter – FY11

Background

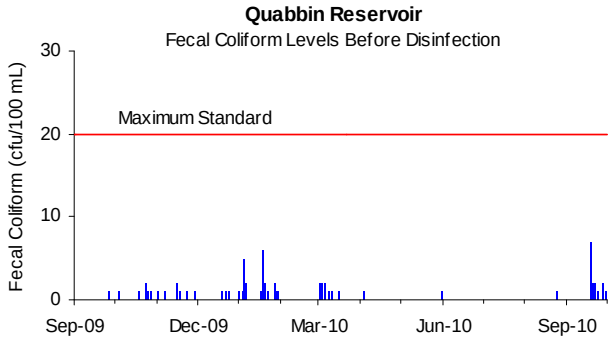
Total coliform bacteria are monitored in both source and treated water to provide an indication of overall bacteriological activity. Most coliforms are harmless. However, fecal coliform, a subclass of the coliform group, are identified by their growth at temperatures comparable to those in the intestinal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

Sample Site: Quabbin Reservoir

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

All samples collected during the 1st Quarter were below 20 cfu/100ml.

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



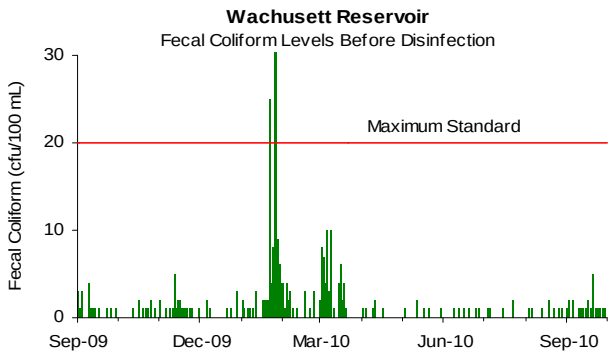
Sample Site: Wachusett Reservoir

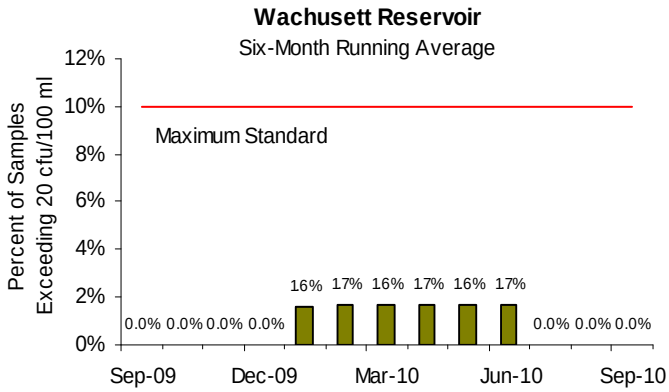
Wachusett Reservoir water is sampled at the CWTP raw water tap in Marlborough before it receives treatment at CWTP.

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

All samples collected during the 1st Quarter were below 20 cfu/100ml.

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





Source Water – Turbidity

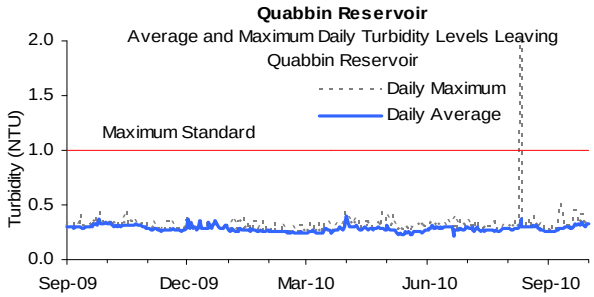
1st Quarter – FY11

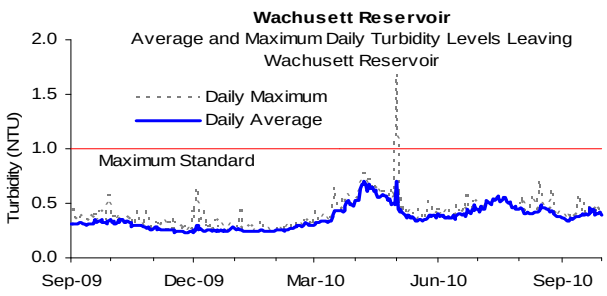
Background

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

Samples for turbidity from Quabbin Reservoir are collected at the Ware Disinfection Facility before chlorination. Samples from Wachusett Reservoir are taken at the CWTP's inlet (raw water line) before ozonation. The Massachusetts Department of Environmental Protection standard for source water turbidity for unfiltered water supply systems is a maximum of 1.0 NTU; the EPA standard is a maximum of 5.0 NTU. Maximum turbidity results at Quabbin were within DEP standards in July and September. Wachusett maximum turbidity results were within DEP standards for the quarter.

On August 10, a valve operation at the Winsor Power Station stirred up pipe sediment and caused Quabbin Reservoir water being delivered to the WDF to exceed the DEP standard. The maximum turbidity reached 2.87 NTU. Turbidity levels were over 1 NTU for a duration of 20 minutes. Required disinfection levels as measured by CT were met at all times. Daily total coliform results downstream were coliform free, and required disinfection residuals were maintained, therefore as there was no disruption of treatment effectiveness, this turbidity excursion is not a violation of the Surface Water Treatment Rule.



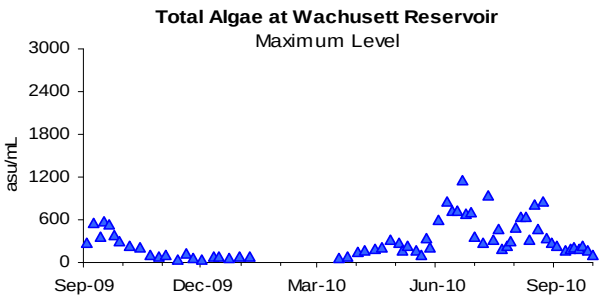


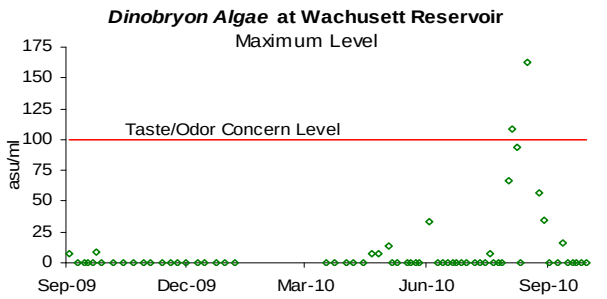
Source Water – Algae

Algal 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 using filters may notice more frequent changing of the filters is needed. Diatom levels are currently low.

Of the 5 complaints received for the quarter from local water departments, none concerned taste and odor that may be due to algae. The Wachusett Reservoir was treated with copper sulfate on August 15 to control the growth of Dinobryon, a taste and odor causing algae species.





Treated Water – Disinfection Effectiveness

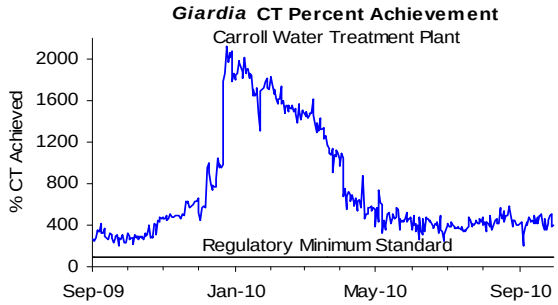
1st Quarter – FY11

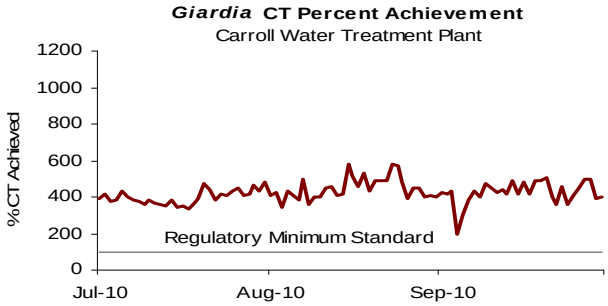
Background

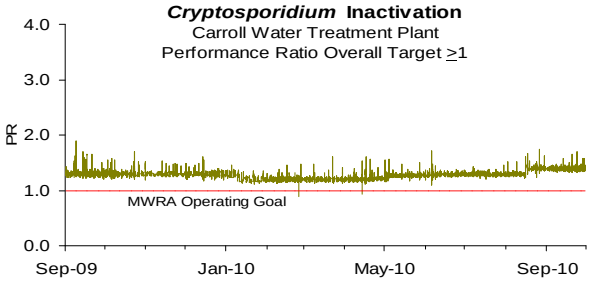
With the activation of the Carroll Water Treatment Plant (CWTP), MWRA now reports on both regulatory required 99.9% inactivation for *Giardia* (reported as "CT"), and its voluntary operating goal of 99% inactivation for *Cryptosporidium*. MWRA calculates hourly CT inactivation rates and reports daily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

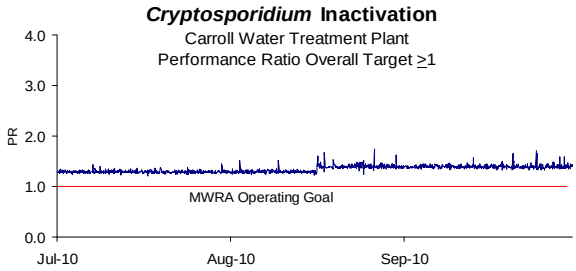
Wachusett Reservoir – MetroWest/Metro Boston Supply:

- CT was maintained above 100% at all times the plant was providing water into the distribution system this quarter.
- MWRA's operating goal to meet a PR of 1 was met for every hour of the quarter.
- Ozone dose at the CWTP varied between 1.4 to 2.4 mg/L for the quarter.
- During months when the water is cold, a higher level of disinfection is required to achieve MWRA's PR target for *Cryptosporidium*; this results in a much higher CT achievement for *Giardia*.



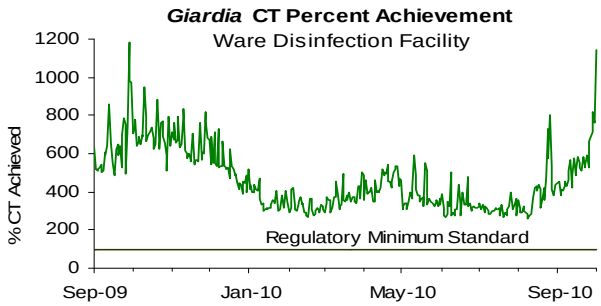


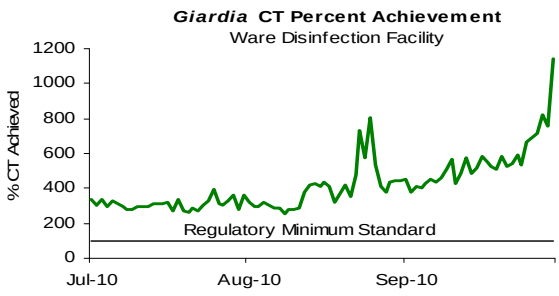




Quabbin Reservoir at Ware Disinfection Facility (CVA Supply):

CT was maintained above 100% at all times the plant was providing water into the distribution system in the 1st Quarter, as well as every day for the last fiscal year. The chlorine dose was raised from 1.3 mg/L to 1.4 mg/L on August 12, and raised again on August 18 to where it remains at 1.5 mg/L. This was to address community concerns of low residuals.



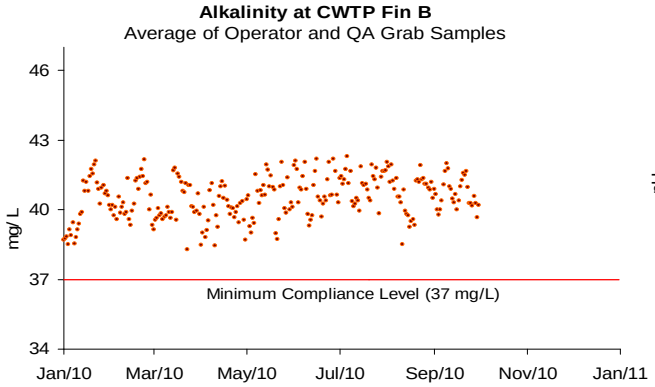


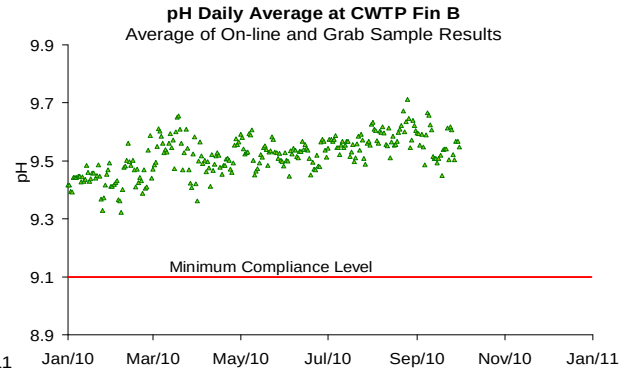
Treated Water – pH and Alkalinity Compliance

1st Quarter – FY11

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's target for distribution system pH is 9.3; the target for alkalinity is 40 mg/l. Per DEP requirements, samples from the CWTP Fin B tap 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 this level for more than 9 days in a six-month period. MWRA tests finished water pH and alkalinity daily at the CWTP Fin B sampling tap. Distribution system samples are collected in March, June, September, and December.

Distribution system samples were collected on September 20, 2010; sample pH ranged from 9.0 to 9.5 and alkalinity ranged from 38 to 43 mg/L. No sample results were below DEP limits in the 1st Quarter.





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

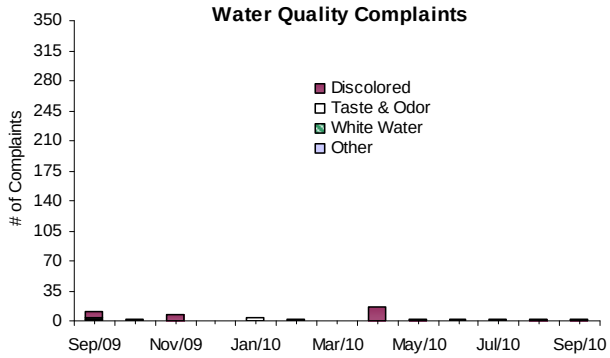
Background

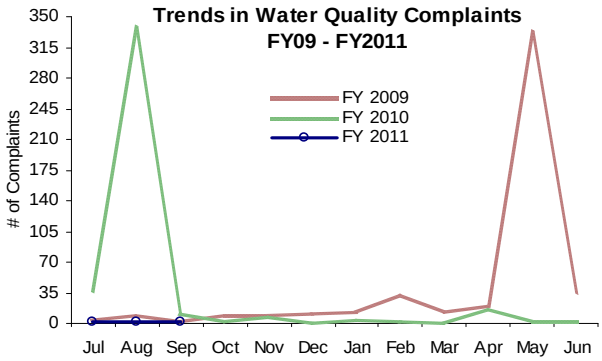
MWRA collects information on water quality complaints that typically fall into four categories: 1.) discoloration due to MWRA or local pipeline work; 2.) taste and odor due to algae blooms in reservoirs or chlorine in the water; 3.) white water caused by changes in pressure or temperature that traps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

MWRA routinely contacts communities to classify and tabulate water complaints from customers. This count, reflecting only telephone calls to towns, likely does not capture the total number of customer complaints. Field Operations staff have improved data collection and reporting by keeping track of more kinds of complaints, tracking complaints to street addresses and circulating results internally on a daily basis.

Outcome

Communities reported five complaints during the 1st Quarter compared to 384 complaints for 1st Quarter of FY10. Of these complaints, four were for "discolored water", and one was for "other."





Bacteria & Chlorine Residual Results for Communities in MWRA Testing Program

1st Quarter – FY11

While all communities collect bacteria samples for the Total Coliform Rule (TCR), 41 systems (including Deer Island and Westborough State Hospital) use MWRA's Laboratory for TCR compliance testing. These systems collect samples for bacteriological analysis and measure water temperature and chlorine residual at the time of collection. The other 10 MWRA customer communities (including Lynn's GE plant) have their samples tested elsewhere and these towns should be contacted directly for their monthly results.

There are 140 sampling locations for which MWRA is required to report TCR results. These locations include a subset of the community TCR locations, as well as sites along MWRA's transmission system, water storage tanks and pumping stations.

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

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

Highlights

In the 1st Quarter no communities violated the TCR. Nine of the 5,713 community samples (0.16% system-wide) submitted to MWRA labs for analysis tested positive for coliform (Belmont, Brookline, Deer Island, Needham, Somerville, Wakefield – August; Framingham – September); nine of the 2,209 (0.41%) MWRA samples tested positive for total coliform. No sample tested positive for *E.coli*. All 41 systems that submitted chlorine residual data maintained an average disinfectant residual of at least 0.2 mg/L. Only 2.9% of samples had any results with a disinfectant residual lower than 0.2 mg/L for the quarter.

TCR results by Community

Town	Samples Tested for Coliform (a)	Total Coliform # (%) Positive	E.coli % Positive	Public Notification Required?	Minimum Chlorine Residual (mg/L)	Average Chlorine Residual (mg/L)
ARLINGTON	182	0 (0%)	0.0%		0.10	1.61
BELMONT	111	2 (1.80%)	0.0%	No	0.05	1.75
BOSTON	743	0 (0%)	0.0%		0.62	2.01
BROOKLINE	224	1 (0.45%)	0.0%	No	0.01	1.95
CHELSEA	134	0 (0%)	0.0%		1.14	1.98
DEER ISLAND	55	1 (1.82%)	0.0%	No	1.01	1.83
EVERETT	130	0 (0%)	0.0%		0.05	0.94
FRAMINGHAM	221	1 (0.45%)	0.0%	No	0.25	1.79
HANSCOM AFB (Bedford) (b)	27	0 (0%)	0.0%		0.08	1.12
LEXINGTON	117	0 (0%)	0.0%		0.30	2.09
LYNNFIELD	18	0 (0%)	0.0%		0.29	1.14
MALDEN	195	0 (0%)	0.0%		1.24	1.37
MARBLEHEAD	72	0 (0%)	0.0%		0.22	1.83
MARLBOROUGH (b)	158	0 (0%)	0.0%		0.09	1.98
MEDFORD	204	0 (0%)	0.0%		0.17	1.60
MELROSE	117	0 (0%)	0.0%		0.02	1.10
MILTON	97	0 (0%)	0.0%		1.05	1.73
NAHANT	30	0 (0%)	0.0%		0.02	1.31
NEEDHAM (b)	129	2 (1.55%)	0.0%	No	0.04	0.95
NEWTON	277	0 (0%)	0.0%		0.02	1.74
NORTHBOROUGH	48	0 (0%)	0.0%		0.03	0.76
NORWOOD	108	0 (0%)	0.0%		0.06	1.42
QUINCY	299	0 (0%)	0.0%		0.08	1.72
READING	130	0 (0%)	0.0%		0.03	1.66
REVERE	210	0 (0%)	0.0%		0.97	1.78
SAUGUS	104	0 (0%)	0.0%		1.61	1.97
SOMERVILLE	298	1 (0.34%)	0.0%	No	0.54	1.86
SOUTH HADLEY FD1 (c)	48	0 (0%)	0.0%		0.02	0.42
SOUTHBOROUGH	31	0 (0%)	0.0%		0.39	1.83
STONEHAM	97	0 (0%)	0.0%		1.38	2.10
SWAMPSCOTT	54	0 (0%)	0.0%		0.15	1.14
WAKEFIELD (b)	157	1 (0.64%)	0.0%	No	0.17	1.33
WALTHAM	216	0 (0%)	0.0%		0.36	2.18
WATERTOWN	140	0 (0%)	0.0%		0.19	1.78
WELLESLEY (b)	108	0 (0%)	0.0%		0.03	0.72
WESTBORO HOSPITAL	15	0 (0%)	0.0%		0.02	0.57
WESTON	48	0 (0%)	0.0%		0.91	2.17
WILMINGTON (b)	29	0 (0%)	0.0%		0.77	1.81
WINCHESTER (b)	65	0 (0%)	0.0%		0.23	1.46
WINTHROP	73	0 (0%)	0.0%		0.21	0.86
WOBURN (b)	194	0 (0%)	0.0%		0.06	1.19
Total:	5713	9 (0.16%)				
MASS. WATER RESOURCES AUTHORITY (d)	2209	9 (0.41%)	0.0%	No	0.01	1.86

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

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

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

(d) MWRA sampling program includes a subset of community TCR sites as well as sites along the transmission system, tanks and pumping stations. Some MWRA TCR sites which are entry points to the community had low chlorine residuals due to various reasons.

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

1st Quarter – FY11

Background

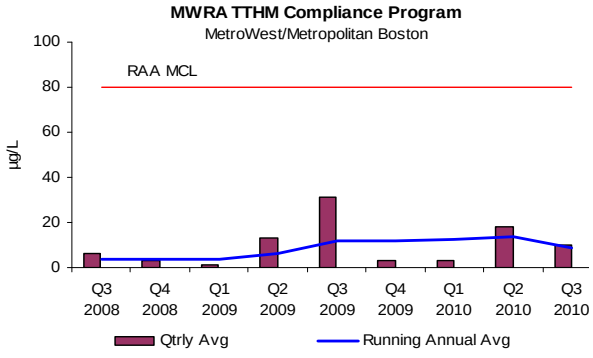
Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s) are by-products of disinfection treatment with chlorine. TTHMs and HAA5s are of concern due to their potential adverse health effects at high levels. EPA's running annual average (RAA) standard is 80 ug/L for TTHMs and 60 ug/L for HAA5s. The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

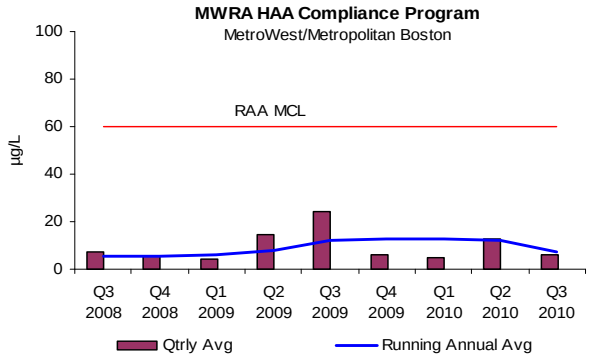
Absorbance, measured as UV-254, is a surrogate measure of reactive organic matter. Regulated DBPs have dropped to very low levels with the CWTP coming on-line. However, UV-254 levels remain useful for estimating ozone dosage and serving as a trigger for Quabbin transfer consideration.

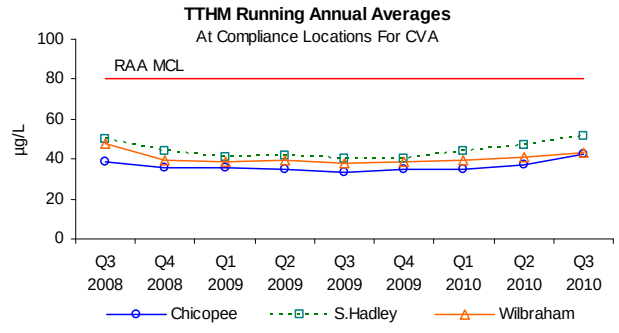
Bromate is tested monthly per DEP requirements for water systems that treat with ozone. Bromide in the raw water may be converted into bromate following ozonation. EPA's RAA MCL standard for bromate is 10 ug/L.

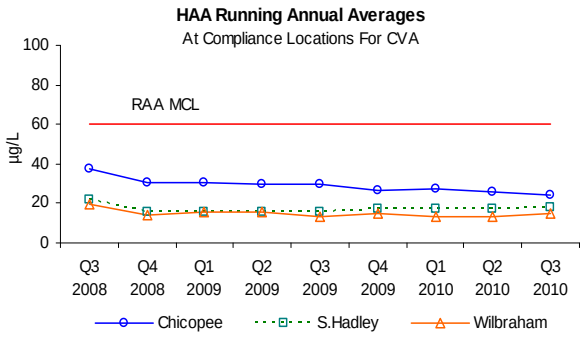
Outcome

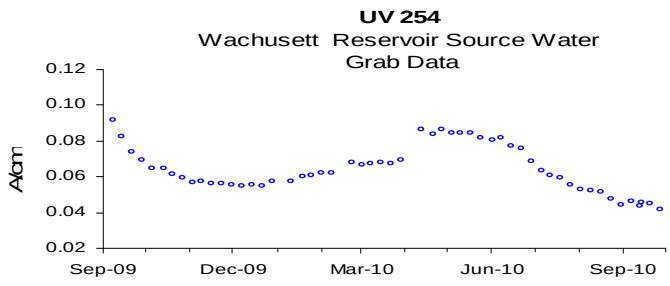
The RAA for TTHMs and HAA5s for MWRA's Compliance Program (represented as the line in the top two graphs below) remained below current standards. The RAA for TTHMs = 8.7 ug/L; HAA5s = 7.4 ug/L. CVA's DBP levels continue to be below current standards. UV-254 levels are currently around 0.04 A/cm. The current RAA for Bromate = 0.0 ug/L.











Water Supply and Source Water Management

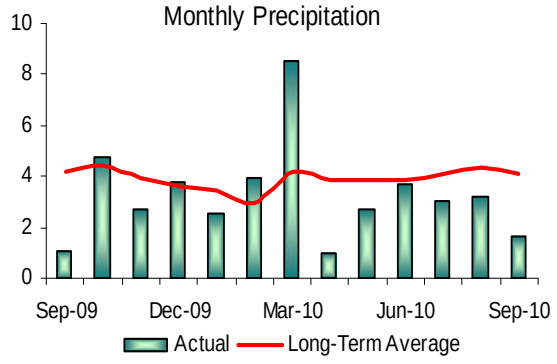
1st Quarter – FY11

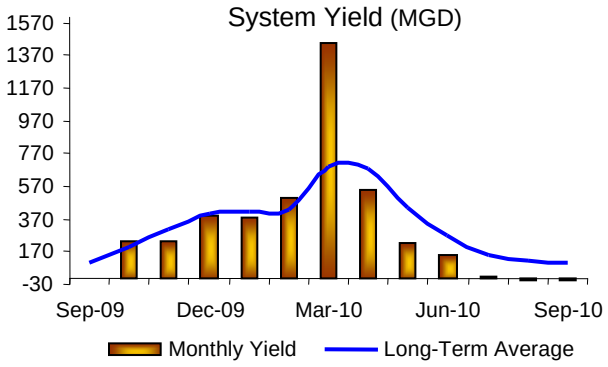
Background

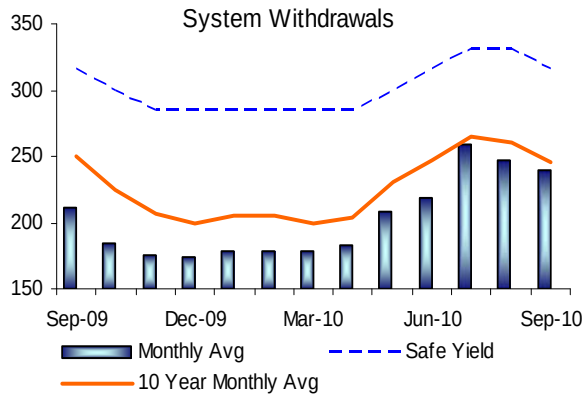
A reliable supply of water in MWRA's reservoirs depends on adequate precipitation during the year and seasonal hydrologic inputs from watersheds that surround the reservoirs. Demand for water typically increases with higher summer temperatures and then decreases as temperatures decline. Quabbin Reservoir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

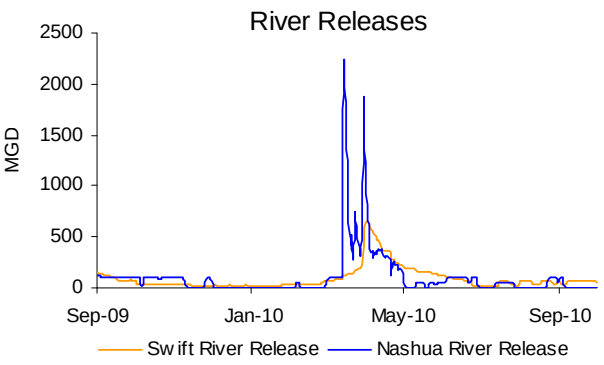
Outcome

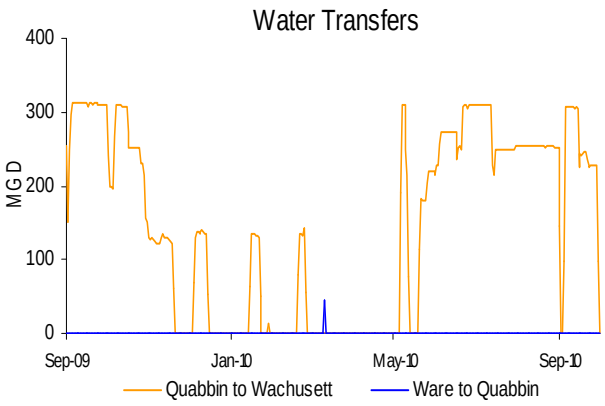
Quabbin Reservoir level remains within the normal operating range for this period of the year. Quabbin Reservoir was at 89.4% of capacity as of September 30, 2010; 6.2% lower than the same time last year. The reservoir level is down 4.06 feet from July 1, which represents a decrease of more than 30.6 billion gallons of storage for this quarter alone. System withdrawals, yield and precipitation were below average for the quarter.

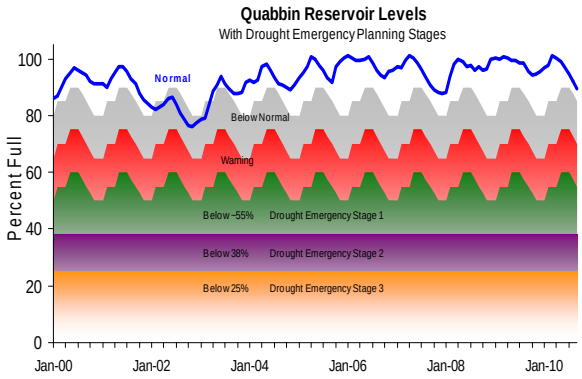












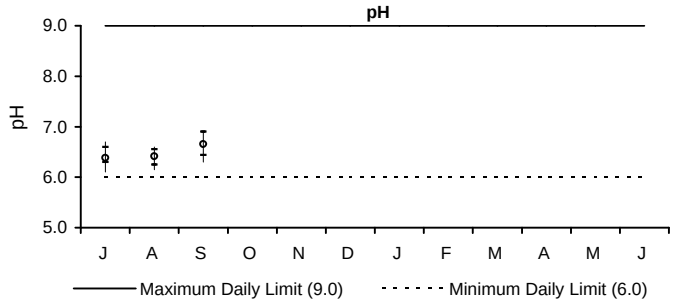
WASTEWATER QUALITY

NPDES Permit Compliance: Deer Island Treatment Plant
1st Quarter - FY11

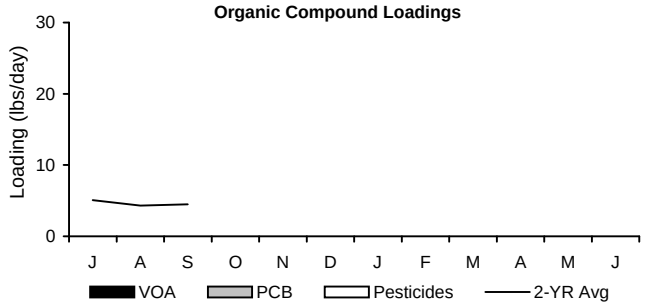
NPDES Permit Limits

Effluent Characteristics		*Units*	*Limits*	*July*	*August*	*September*	*1st Quarter Violations*	*FY11 YTD Violations*
Dry Day Flow:		mgd	436	329.7	322.9	320.7	0	0
cBOD:	Monthly Average	mg/L	25	4.6	3.7	3.6	0	0
	Weekly Average	mg/L	40	5.5	5.1	4.3	0	0
TSS:	Monthly Average	mg/L	30	6.1	5.9	4.4	0	0
	Weekly Average	mg/L	45	9.0	8.3	5.4	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	16.9	58.0	52.7	0	0
	Weekly Geometric Mean	col/100mL	14000	7.7	21.5	18.1	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	6.1-6.7	6.2-6.6	6.3-6.9	0	0
PCB, Aroclors:	Monthly Average	ug/L	0.000045	UNDETECTED			0	0
Acute Toxicity:	Mysid Shrimp	%	50	>100	89.1	>100	0	0
	Inland Silverside	%	50	>100	68.3	>100	0	0
Chronic Toxicity:	Sea Urchin	%	1.5	100	100	100	0	0
	Inland Silverside	%	1.5	50	50	50	0	0

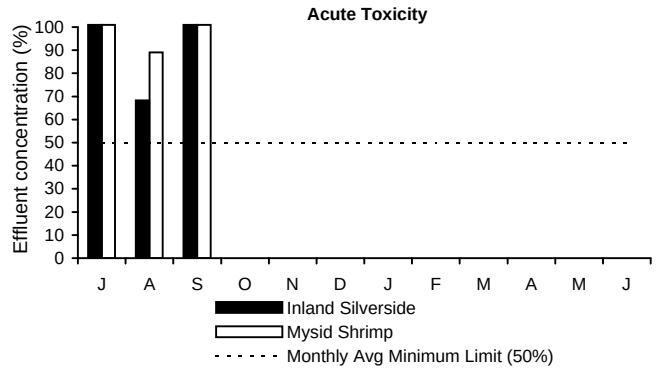
There have been no permit violations to date in FY11 at the Deer Island Treatment Plant.



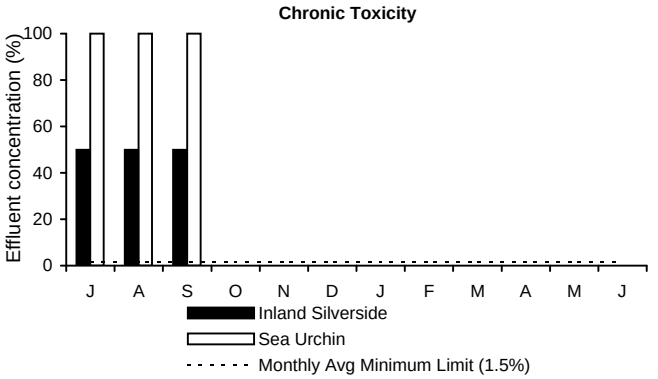
pH is a measure of the alkalinity or acidity of the effluent. Fluctuations in pH do not have an adverse effect on marine environments. Because of the pure oxygen used in the activated sludge reactor, the effluent pH tends to be at the lower range. pH measurements for the 1st Quarter were within the daily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



An important wastewater component to be monitored in the effluent is organic compounds, including volatile organic acids, pesticides, and polychlorinated biphenyls. The secondary treatment process has significantly reduced organic compound loadings in the effluent stream. There is no permit limit for organic compounds in the NPDES permit.



The acute toxicity test simulates the short-term toxic effects of chemicals in wastewater effluent on marine animals. The test measures the concentration (percent) of effluent that kills half the test organisms within four days. The higher the concentration of effluent required, the less toxic the effluent. For permit compliance, the effluent concentration that causes mortality to mysid shrimp and inland silverside must be at least 50%. Acute toxicity permit limits were met for the 1st Quarter.



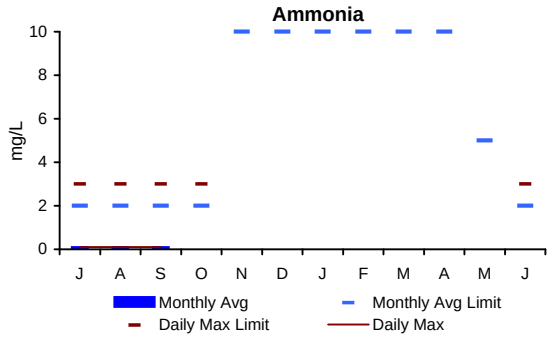
Typically, effects of chronic exposures differ from those of acute exposures. Because of this, chronic toxicity responses are not necessarily related to acute toxicity. The chronic toxicity test simulates the long-term toxic effects of chemicals in wastewater effluent on marine animals. To meet permit limits, 1.5% of the effluent must show no observed effect on the growth and reproduction of the test species. Chronic toxicity permit limits were met for the 1st Quarter.

NPDES Permit Compliance: Clinton Wastewater Treatment Plant
1st Quarter - FY11

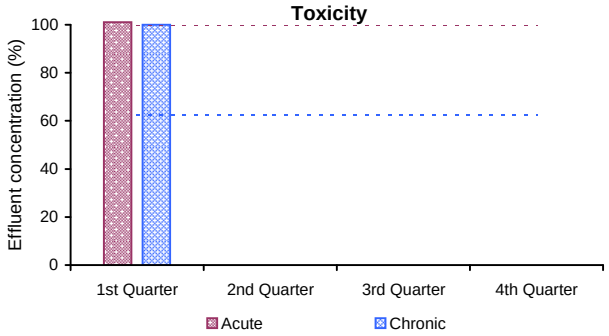
NPDES Permit Limits

Effluent Characteristics		*Units*	*Limits*	*July*	*August*	*September*	*1st Quarter Violations*	*FY11 YTD Violations*
Flow:		mgd	3.01	3.50	3.34	3.25	3	3
BOD:	Monthly Average:	mg/L	20	2.2	2.7	2.6	0	0
	Weekly Average:	mg/L	20	3.1	3.4	2.8	0	0
TSS:	Monthly Average:	mg/L	20	2.8	3.0	3.7	0	0
	Weekly Average:	mg/L	20	6.1	4.1	4.6	0	0
pH:		SU	6.5-8.3	6.9-7.4	6.9-7.9	7.0-7.7	0	0
Dissolved Oxygen:	Daily Minimum:	mg/L	6	6.6	6.4	7.3	0	0
Fecal Coliform:	Daily Geometric Mean:	col/100mL	400	15	18	14	0	0
	Monthly Geometric Mean:	col/100mL	200	2	4	4	0	0
TCR:	Monthly Average:	ug/L	50	0	0	0	0	0
	Daily Maximum:	ug/L	50	0	0	0	0	0
Total Ammonia Nitrogen:	6/1-10/31							
	Monthly Average:	mg/L	10.0	0.1	0.1	0.1	0	0
	Daily Maximum:	mg/L	35.2	0.1	0.1	0.1	0	0
Copper:	Monthly Average:	ug/L	20	8.8	5.5	8.1	0	0
Phosphorus:	May 1 - Oct 31							
	Monthly Average:	mg/L	1.0	N/A	N/A	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

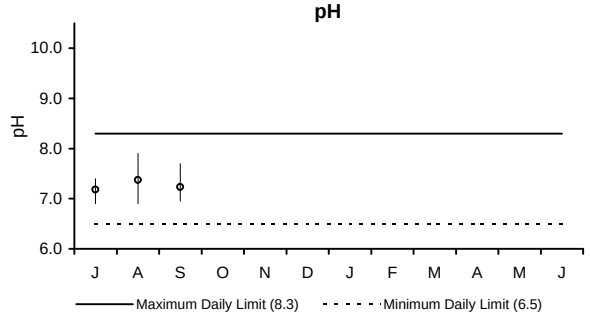
1st Quarter:
The Clinton Plant's monthly average flows in July (3.50 mgd), August (3.34 mgd), and September (3.25) exceeded the permit limit of 3.01 mgd.
Toxicity testing is conducted on a quarterly basis.



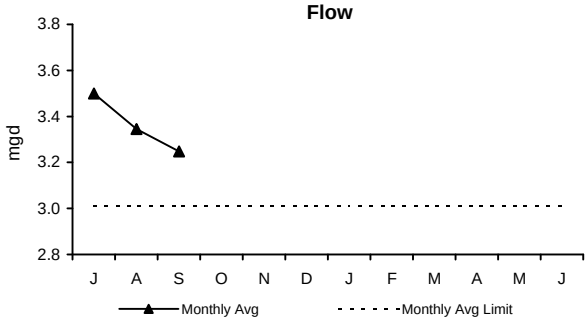
The 1st Quarter's monthly average and daily maximum concentrations were below permit limits. The monthly average and daily maximum limits for the period of November 1 - March 31 are 10 mg/L and 35.2 mg/L, respectively. The permit limits are most stringent from June to October with the monthly average and daily maximum limits of 2.0 mg/L and 3.0 mg/L, respectively. The permit limits are lower during warmer months bcause this is when warm weather conditions are most conducive to potential eutrophication.



Acute and chronic toxicity testing simulates the short- and long-term toxic effects of chemicals in wastewater effluent on aquatic animals. For permit compliance, the effluent concentration that causes mortality to the daphnid in acute and chronic testing must be at least >100% and 62.5%, respectively. Toxicity limits were met during the 1st Quarter.



pH is a measure of the alkalinity or acidity of the effluent. All daily pH results for the 1st Quarter were within the range set by the permit.



This graph depicts the average monthly flow, measured in million gallons per day, entering the plant. The average monthly flows during the 1st Quarter exceeded the permit limit.

COMMUNITY FLOWS AND PROGRAMS

Massachusetts Water Resources Authority

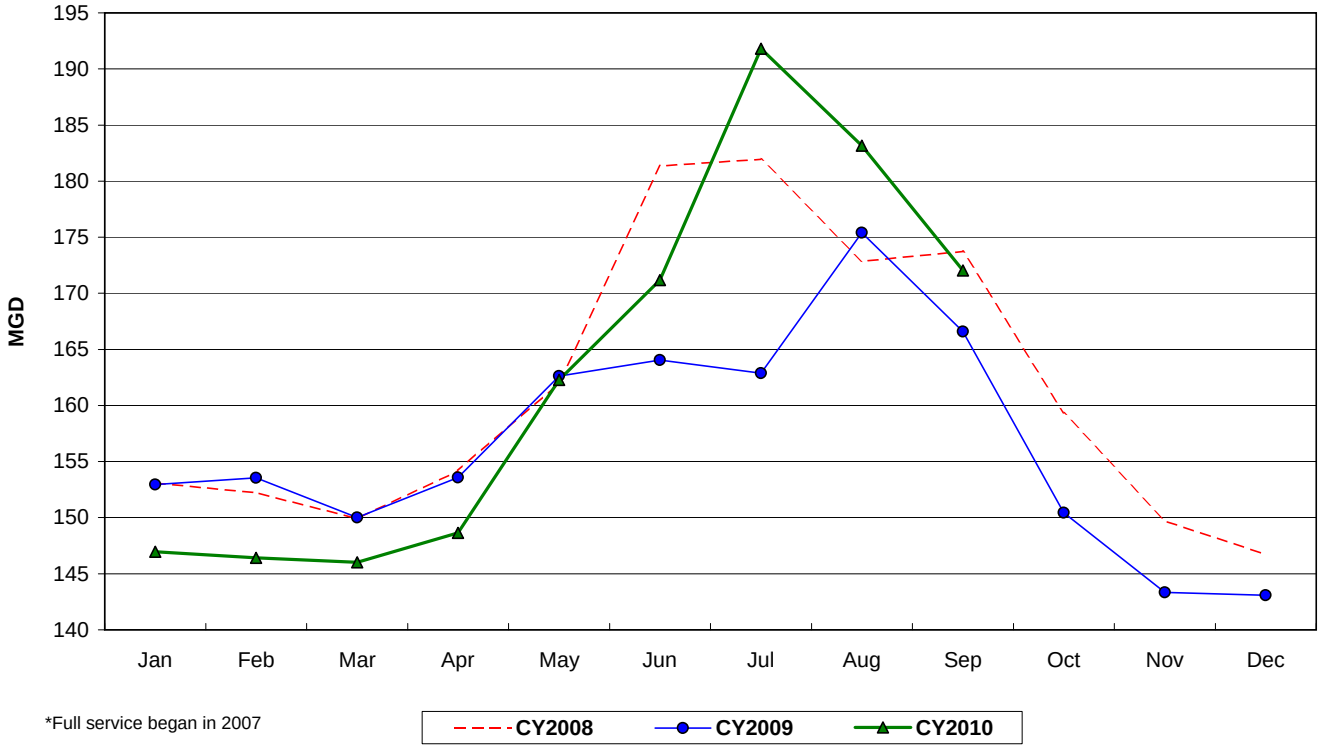
Water Supplied: MWRA Core Communities

MGD	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
CY2008	153.088	152.234	149.917	154.190	162.017	181.350	181.977	172.851	173.742	159.347	149.732	146.722	161.444
CY2009	152.955	153.548	150.008	153.576	162.628	164.037	162.866	175.400	166.583	150.449	143.351	143.074	156.560
CY2010	146.968	146.430	146.031	148.655	162.276	171.180	191.812	183.150	172.042	0.000	0.000	0.000	163.347

MG	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
CY2008	4,745.722	4,414.773	4,647.415	4,625.691	5,022.518	5,440.499	5,641.288	5,358.375	5,212.249	4,939.760	4,491.952	4,548.371	59,088.614
CY2009	4,741.614	4,299.349	4,650.244	4,607.285	5,041.476	4,921.104	5,048.836	5,437.393	4,997.482	4,663.925	4,300.540	4,435.290	57,144.538
CY2010	4,556.000	4,100.047	4,526.963	4,459.643	5,030.570	5,135.398	5,946.183	5,677.656	5,161.250	0.000	0.000	0.000	44,593.710

Total Water Use: MWRA Core Customers

Arlington, Belmont, BWSC, Brookline, Chelsea, Everett, Framingham, Lexington, Malden, Medford, Melrose, Milton, Newton, Norwood, Quincy, Reading*, Revere, Somerville, Stoneham, Waltham, Watertown, Winthrop



*Full service began in 2007

Community Wastewater Flows
First Quarter FY11

PLACE HOLDER

DATA IS NOT AVAILABLE AT THE TIME OF DISTRIBUTION

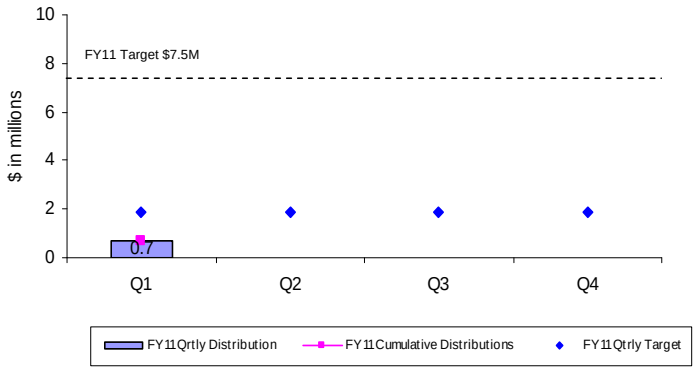
Community Support Programs

1ST Quarter – FY11

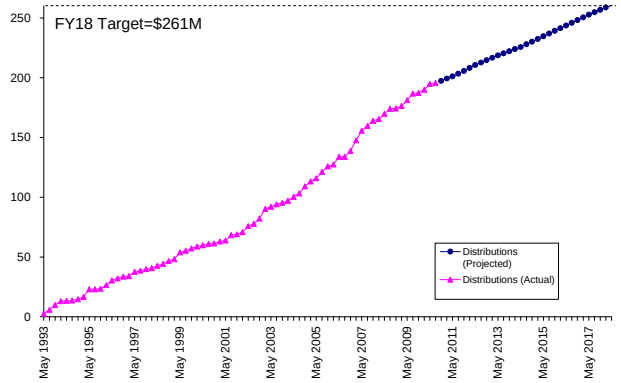
Infiltration/Inflow Local Financial Assistance Program

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

FY11 Quarterly Distributions of Sewer Grant/Loans



I/I Local Financial Assistance Program Distribution FY93-FY18

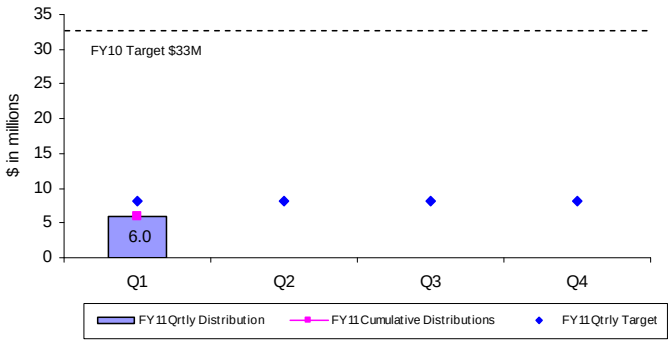


During the first quarter of FY11, $0.7 million in financial assistance (45% grants and 55% interest-free loans) was distributed to fund a local sewer rehabilitation project in Revere. Total grant/loan distribution for FY11 is $0.7 million. From FY93 through the first quarter of FY11, all 43 member sewer communities have participated in the program and more than $195 million has been distributed to fund 392 local I/I reduction and sewer system rehabilitation projects. Distribution of the remaining funds has been approved through FY18 and community loan repayments will be made through FY23. All scheduled community loan repayments have been made.

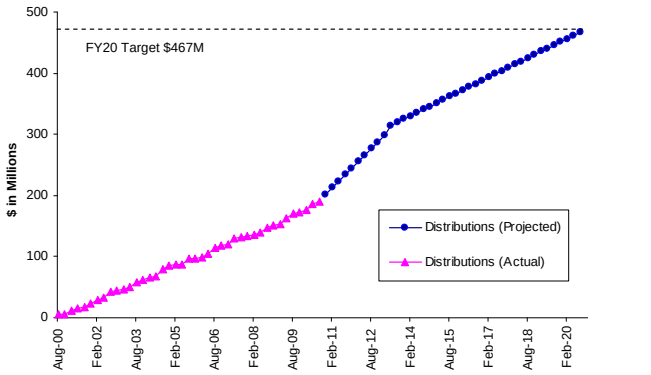
Water Local Pipeline and Water System Assistance Programs

The MWRA's Local Pipeline and Water System Assistance Programs (LPAP and LWSAP) provide $467 million in interest-free loans (an average of about $23 million per year from FY01 through FY20) to member water communities to perform water main rehabilitation projects within their locally-owned water distribution systems. Eligible project costs include: water main cleaning/lining, replacement of unlined water mains, lead service replacements, valve, hydrant and 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.

FY11 Quarterly Distributions of Water Loans



Local Pipeline and Water System Assistance Programs Distribution FY01-FY20



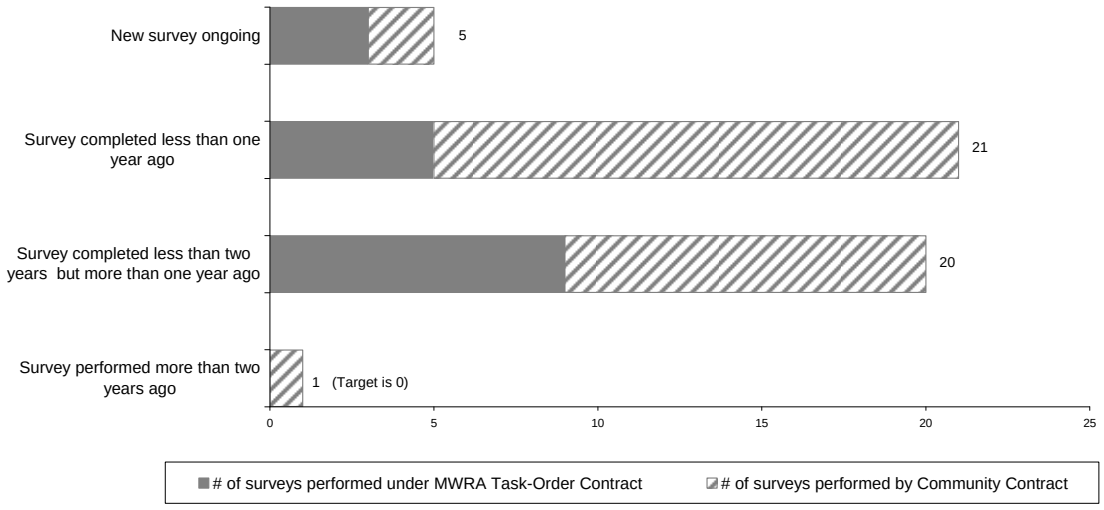
During the first quarter of FY11, $6.0 million in interest-free loans was distributed to fund local water projects in Boston, Melrose, Norwood, Quincy and Swampscott. Total loan distribution for FY11 is $6.0 million. From FY01 through the first quarter of FY11, $191 million has been distributed to fund 220 local water system rehabilitation projects in 31 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

1st Quarter – FY11

Community Water System Leak Detection

To ensure member water communities identify and repair leaks in local-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 contractor 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 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 by MWRA, and the costs are billed to the community the following year. During the first quarter of FY11, one member water community (Northborough) is out of compliance with MWRA Leak Detection Regulations. Northborough has applied for a water conservation grant from MassDEP to perform the leak detection work. A grant award determination has not yet been made by MassDEP.



Community Water Conservation Outreach

The 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 annual budget is $25,000 for printing and purchase of materials. Annual distribution targets and totals are provided in the table below. For FY11, the target for educational brochures has been lowered and the target for low-flow fixtures has been increased based on recent trends.

	Annual Target	Q1	Q2	Q3	Q4	Annual Total
Educational Brochures	150,000	8,152				8,152
Low-Flow Fixtures (showerheads and faucet aerators)	10,000	2,615				2,615
Toilet Leak Detection Dye Tablets	------	8,218				8,218

BUSINESS SERVICES

Procurement: Purchasing and Contracts

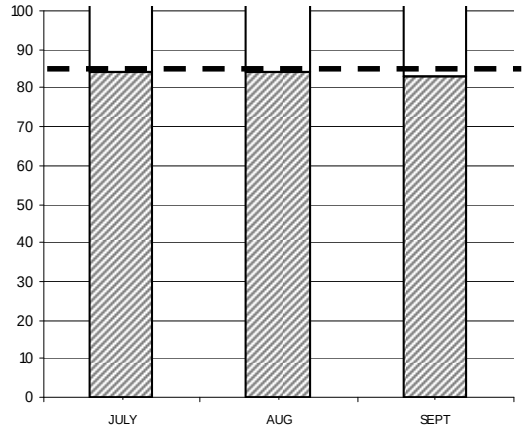
First Quarter FY11

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

Outcome: Processed 84% of purchase orders within target; Avg. Processing Time was 7.35 days vs. 4.62 days in Qtr 1 of FY10. Processed 84% (16 of 19) contracts within target timeframes; Avg. Processing Time was 80 days vs. 233 days in Qtr 1 of FY10.

Purchasing

Purchase Orders - Percent in Target



	NO.	TARGET	PERCENT IN TARGET
$0 - $500	1036	4 DAYS	87.7%
$500 - $2K	782	7 DAYS	84.9%
$2K - $5K	187	10 DAYS	64.7%
$5K - $10K	104	25 DAYS	80.85
$10K - $25K	52	30 DAYS	65.4%
$25K - $50K	10	60 DAYS	60.0%
OVER $50K	20	80 DAYS	75.0%

- Purchasing Unit processed 2191 purchase orders, 58 more than the 2133 processed in Qtr 1 of FY10, for a total value of $8,688,761 vs. a dollar value of $7,361,918 in Qtr 1 of FY10.

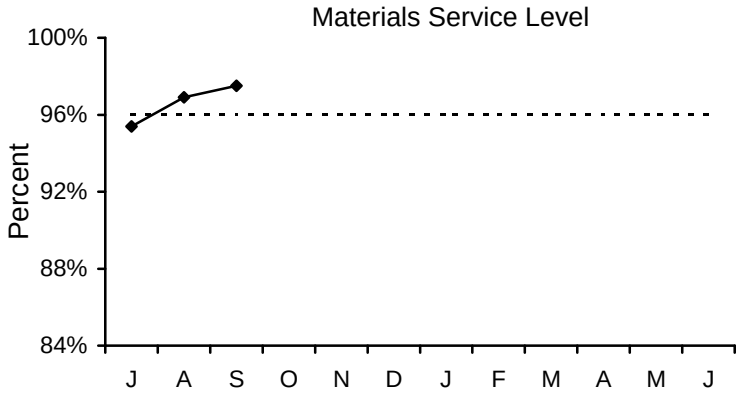
- The purchase order-processing target was not achieved for the $2k - $5k category due to delays in vendor response, sourcing vendors and obtaining pricing, the $10k - $25k category due to sourcing of alternate vendors and equivalent items and clarification of specifications, the $25k - $50k category because of a re-bid and the over $50k category because of a re-bid, changes to contract requirements and extended negotiations and bid reviews.

Contracts, Change Orders and Amendments

- Three contracts were not processed within target timeframes for the following reasons: two contractors delayed submission of required documents; another contract required extensive revisions to scope and numerous addenda.
- Procurement processed nineteen contracts with a value of $20,323,917 and sixteen amendments with a value of $11,553,985.
- Twenty-four change orders were executed during the period, but several were large balancing change orders at the end of jobs, and are recorded as credits or negative numbers. The dollar value of all non-credit change orders during the 1st quarter FY11 was $2,480,571 and the value of credit change orders was ($151,862). The net dollar value of all change orders was $2,328,709.
- In addition, staff reviewed 92 proposed change orders and 38 draft change orders.

Materials Management

First Quarter FY11



The service level is the percentage of stock requests filled. The goal is to maintain a service level of 96%. Staff issued 7,328 (96.7%) of the 7,575 items requested in Q1 from the inventory locations for a total dollar value of $860,698.

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 FY11 goal is to reduce consumable inventory from the July '10 base level ($7.35 million) by 2.0% (approximately $147,061), to $7.20 million by June 30, 2011 (see chart below).

Items added to inventory this quarter include:

- Deer Island – RTD and input modules for PLC equipment for centrifuges for Core; rubber plugs for Liquid Train; printer cartridges for Condition Monitoring.
- Chelsea – CSU modem card for TRAC.
- Southboro – Hazmat tape, sprayer, hand wipes, disposal bags, brooms, shovels and cutoff wheels were added for Safety and flouride electrode for the Carroll Water Treatment Plant.

Property Pass Program:

- Audits were conducted at Chelsea Valve Maintenance, Chelsea Mechanical Maintenance, Columbus Park and Emergency Services Unit during Q1.
- Numerous obsolete computers, printers, monitors, keyboards and docking stations have been received into property pass as surplus. Disposition is being handled as part of our ongoing recycling efforts.
- Scrap revenue received to date for the quarter amounted to $17,456.87.

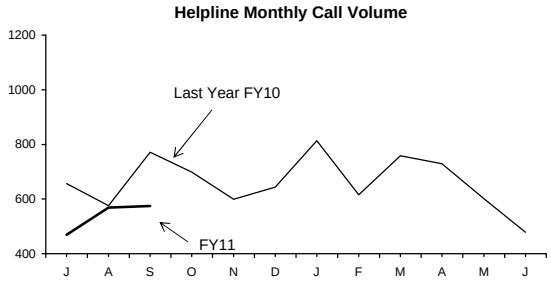
Items	Base Value July-10	Current Value w/o Cumulative New Adds	Reduction / Increase To Base
Consumable Inventory Value	7,353,045	7,335,048	-17,997
Spare Parts Inventory Value	6,888,860	6,791,537	-97,323
Total Inventory Value	14,241,905	14,126,585	-115,320

Note: Approximately $581,803 worth of MIS equipment remains under warehouse inventory awaiting issue in Q2 FY11 following new Windows 7 configuration and support related training. This equipment's value is reflected in the consumable inventory value.

MIS Program
1st Quarter FY11

Operations

Highlights:

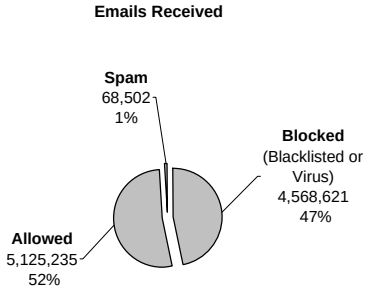


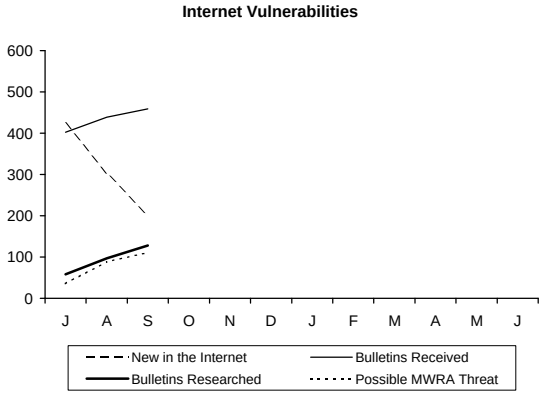
Performance

Call volume peaked in September and has decreased by 19.51% from Q1 last year. The backlog also peaked in September and is above the targeted benchmark range. The mix of calls for the quarter do not indicate any major problems.

Business System Plan

- Cyber Security: During Q1, staff pushed security fixes and updates to desktops and servers throughout the quarter in order to protect against the 927 newly revealed vulnerabilities.
- LANDesk Antivirus did not identify any infected files on MWRA computers that were not immediately quarantined. MWRA's systems are current with anti-virus providers' signatures for all known malware.
- Windows 7 Testing: The Windows 7 test results were compiled for the Application Groups and PC Desktop support. For the Application Groups, 97 applications were tested, 7 were revised for Windows 7 compatibility, 1 is awaiting word from vendor, and 7 require upgrades. The 7 application upgrades will be ready for the start of the PC rollouts in Q2. For PC Desktop support, testing for 109 PC desktop applications for Windows 7 compatibility is underway.





Applications/Training/Records Center

Area	Significant Accomplishments
Community Contacts Application	Configured and installed a synchronized backup machine on Deer Island for the community contacts database.
Granite XP	Completed the configuration and installation of the Granite XP software that allows the Pipeline Inspection group to upload observation data and video to a central location. The Observation data is accessible via an Oracle database while the video is stored on a file server on the MWRA network.
Emergency Documents	Developed and updated numerous SOPs and documentation to support preparation for Hurricane Earl. Activities included, establishing MEMA Web EOC accounts, developing a login and navigation job-aid, and conducting a corresponding demonstration to emergency support personnel. Also created new job aids for using GETS (Government Emergency Telephone Service) and WPS (Wireless Priority Service) phone calls. Updated Reverse 911 (NXT Communicator) instructions to include procedures for using the backup sites (TN and AZ).
Reverse 911	Created three Scenarios (all water communities, all sewer communities, all communities) for initiating Reverse 911 calls; the scenarios include placeholders for message text that will be changed to event-specific information. Additionally, users were trained and streamlined instructional job-aids for staff and the EOCs were developed.
Lawson	Performed changes to reflect MWRA's new Divisional structure that impact Financial and HR system rollup; reports were implemented for new fiscal year. As part of planned quarterly readiness test of the Deer Island backup hardware, the Treasury Department produced live payroll checks from the Deer Island disaster recovery location. Successfully performed the semi-annual failover tests for the Lawson Production System Cluster for both Lawson and Oracle software.
ArcServer	MIS provided training to 30 users on the Water and Sewer web-based mapping applications. These web-based mapping applications run on the .net platform and are provided free of charge from the vendor, ESRI. Staff use these web-based mapping applications to find asset locations and associated information.
Training	For the quarter, 102 staff attended 15 classes and 14 workshops. 6% of the workforce have attended at least one class year-to-date.
Library & Records Center	Supported Hurricane Preparation activities and issued a reminder of responsibilities email to Department Records Managers and Officers (DRMs/DROs) and continued managing the Shaft 5 evidence room. Coordinated several vendor demos for records management software to support physical records management, electronic record legal searches and holds, and email archiving. Added 13 geology sample boxes for contract 7045 (Northern High Service).

Legal Matters
First Quarter FY11

PROJECT ASSISTANCE

COURT AND ADMINISTRATIVE ORDERS

- **Boston Harbor Litigation and CSO:** Finalized and filed Compliance and Progress Report and CSO Quarterly Progress Report with Federal District Court on September 15, 2010. Drafted Motion to Amend Schedule Seven relating to the revised construction milestones for sewer separation at CAM002 and CAM004.

- **NPDES:** Reviewed and filed 60-day submittal to MADEP related to Administrative Consent Order with Penalty for diesel fuel spill at Cottage Farm CSO facility.

REAL ESTATE AND CONTRACT AND OTHER SUPPORT

- **Hultman Aqueduct Interconnector Project:** Drafted an agreement with NSTAR for the installation and maintenance of electrical facilities in Weston; finalized License for Entry Agreement between MWRA and the City of Waltham.

- **Lynnfield/Saugus Pipelines Project:** Finalized the License for Entry Agreement with the City of Lynn for property owned by the City of Lynn and located in Saugus, Massachusetts.

- **Trustees of Heather Realty Trust v. MWRA:** Drafted an Order of Taking, and Notice Letter for the acquisition of an additional temporary easement on the property located at 1625 VFW Parkway in West Roxbury to extend the period of time on the easement acquired in March 2010.

- **Southern Spine Distribution Mains - Rehabilitation of Section 107 Project:** Finalized the License for Entry Agreement with The Atlantic Financial Trust for the temporary use of property located at 480 Adams Street in Milton; drafted an Order of Taking for the acquisition of a temporary easement located at 362 Adams Street in Milton. Obtained the agreement of four (4) landowners for the temporary acquisition of parts of their property.

- **Charlestown/Cosgrove:** Assisted with filing of petition to DPU to allow for variations in tariff provisions otherwise applicable to the Charlestown wind turbine project; resolved net-metering agreement issues with NGRID re: Cosgrove facility.

- **Weston Water Main:** Continued review and analysis of potential litigation claims arising out of the water main break on May 1, 2010 and other litigation strategy issues for consideration and deliberation by Board members; responded to Public Records requests; conducted a Deposition of a major interested party; conducted interviews with parties that were on-site during installation of the water main; drafted protocols for observed to follow during testing of recovered components; attended first round of testing conducted over a span of 3 weeks.

- **Section 8(m) permits:** Reviewed and approved 37 Section 8(m) permits and 3 Direct Connect Permits.

ENVIRONMENTAL

- **NPDES/General Permits:** Reviewed EPA's proposed General Permit for "point source discharges from the application of pesticides to waters of the United States."

- **Sanitary Sewer Overflows (SSO):** Reviewed EPA's draft policy on SSOs, and provided guidance to staff.

- **Maritime Transportation Security Act (MTSA):** Provided guidance to staff and arguments to be presented regarding Deer Island from the provisions of 33 CFR 105 of the MTSA regulations which requires certain waterfront facilities to conduct security assessments and develop and implement security plans and measures.

- **Spill Prevention, Control and Countermeasures (SPCC) Rule:** Reviewed SPCC amendments that require certain changes to facilities' SPCC plans to provide guidance regarding amending MWRA facilities' plans.

LABOR, EMPLOYMENT AND ADMINISTRATIVE

New Matters

Eight demands for arbitration were filed.

Matters Concluded

Received an arbitrator's decision in favor of the Union on the grounds that the MWRA had changed the duties of an employee.

Settled an arbitration regarding the demotion of an employee for poor performance.

Received a decision from the Massachusetts Division of Labor Relations in favor of the MWRA denying a union's petition to add certain positions to its collective bargaining unit.

LITIGATION/TRAC

New Lawsuits

During the First Quarter of FY 2011, three new lawsuits were reported.

(Former MWRA Employee) v. MWRA: The plaintiff is appealing the arbitration decision upholding his termination from the MWRA. He is seeking reinstatement.

Boston Generating, LLC, et al. Debtor: This is a Chapter 11 Bankruptcy proceeding in which MWRA received a Notice of Bidding Procedures Hearing and a related Motion on August 30, 2010.

PDA Financial Trust 2003-1 v. (Current Employee) & MWRA: A Trustee Summons was received on Friday, September 17, 2010 from PDA Financial Trust for (Current Employee) to garnish wages in the amount of $3935.67.

Significant Developments

(Former MWRA Employee) – Unemployment matter: The law division appeared and contested a former MWRA employee's unemployment hearing. MWRA successfully argued motions vacating multiple subpoenas served on MWRA employees. The matter is still under advisement.

Alice Nicholas v. MWRA and P. Caliacco, Corp.**:** Plaintiff seeks money damages for (i) alleged inadequate compensation for a temporary easement taken by the MWRA on plaintiff's property for a construction project; and (ii) alleged damage to plaintiff's home and the surrounding land, allegedly caused by the construction work by MWRA's contractor, P. Caliacco Corp. By Order of Taking dated June 6, 2007, MWRA took a temporary easement over plaintiff's property, in connection with work on the Southern Spine Distribution Mains Control Valve No. 2. On September 1, 2009, Peerless Insurance Co., the insurer for the co-defendant P. Caliacco Corp agreed to defend and indemnify the MWRA for all claims constituting property damage or personal injury, but has reserved the right to deny coverage or a defense on any land taking claim. A pre-trial conference was held on August 10, 2010 and the court scheduled the case for trial on November 29, 2010.

William Davison, et al. v. MWRA**:** This is an action for damages resulting from the taking by the MWRA of easements in Suffolk County by eminent domain. The property is located at 1625 VFW Parkway, West Roxbury, MA. On or about April 13, 2005, the MWRA made a taking of temporary and permanent easements to construct, inspect, repair, renew, replace, operate and maintain a sewer line in and under certain parcels of land owned by Plaintiffs. On August 4, 2010 MWRA received a deposition subpoena noticing a deposition a day before the close of discovery. MWRA has filed a motion seeking a protective order to prevent this deposition.

MWRA v. Chutehall Construction Co., Ltd., and La Perle, Vincent Club, Hickox William Architects, Inc., Campanella, Williams, Hickox: MWRA is seeking recovery of a $10,000 TRAC penalty, plus interest and the costs of bringing the lawsuit due to Chutehall's refusal to pay the penalty prior to entry of a final judgment.

Closed Cases

Four cases were reported closed.

AFSCME Council 93 v. MWRA: This action is a Complaint to Vacate an Arbitration Award pursuant to General Laws Chapter 150C filed by AFSCME Council 93. The Complaint seeks an order vacating the Arbitrator's award dismissing the Union's grievance asserting that the MWRA violated the Collective Bargaining Agreement when it assigned work to certain employees. The Arbitrator found that the MWRA's Enabling Act did not permit arbitration of this dispute and that as a result he did not have the authority to address the dispute. The Superior Court issued a judgment for the MWRA.

National Cargo, Inc. v. MWRA: Plaintiff is a trucking firm based in New Jersey that alleged that it was contracted to pick up a shipment at Conley Terminal in South Boston and transport it to the Deer Island Treatment Plant. Plaintiff alleged that the machine was over-dimensional and that the equipment needed to transport this machine was more expensive. Plaintiff also alleged that its driver had to sit and wait for 2 hours to have the equipment unloaded, at $125 per hour. Plaintiff filed suit in New Jersey, seeking $1,800 in damages as reimbursement to costs to transport over-dimensional shipment equipment, plus the detention charges. Negotiations ensued among MWRA, National Cargo, Inc., and Shihlin Electric USA, MWRA's equipment vendor, which was responsible for delivery costs pursuant to its contract with MWRA. On May 25, 2010, Shihlin Electric paid $1,000 to National Cargo in full settlement of National Cargo's claims and its collection action. Plaintiff's collection action has been dismissed by the New Jersey court.

Safety Insurance Company v. Fore River Railroad Corp., et al. This was a subrogation claim brought by Safety Insurance Company. The plaintiff, as subrogee of Robert Sullivan, alleged that on August 9, 2009, the defendants negligently maintained the railroad tracks and/or roadway located at 641 Commercial Street, Braintree, Massachusetts, so as to cause a spike and/or bolt to puncture a tire on the motor vehicle belonging to plaintiff's subrogor, resulting in property damage in the sum of $7,691.44. On March 25, 2010, the Law Division, on behalf of Fore River Railroad Corporation ("FRRC") and MWRA, served a Notice of Lawsuit and Tender of Defense on Fore River Transportation Corporation ("FRTC"), Twin Rivers Manufacturing Corporation (Guarantor), and Zurich American Insurance Group ("FRTC Insurer"). Pursuant to the License under which FRTC operates the railroad, the Law Division tendered the defense and demanded full indemnification for any liability which might be found against FRRC and MWRA. On July 6, 2010, counsel for FRTC and Twin Rivers Manufacturing Corporation delivered to plaintiff's counsel a check in the sum of $7,691.44, in exchange for a Subrogation Release running to the benefit of FRRC, FRTC, and MWRA, acknowledging satisfaction and release of the property damage claims asserted in this action. Plaintiff also delivered an executed Stipulation of Dismissal, with prejudice, which has been filed with the Court.

Chutehall Construction Co., Ltd. v. Commonwealth of Massachusetts:
Appeal from MWRA Docket No. 04-08
Suffolk Superior Court C.A. No. 2006-01556
Appeals Court Docket No. 2007-P-1415

This is an appeal from MWRA's Final Decision in an administrative appeal of a $10,000 TRAC Penalty Assessment Notice (PAN). The MWRA's administrative decision upholding the penalty was affirmed by the Superior Court and Appeals Court. Both the MA SJC and US Supreme Court declined to review the case.

Subpoenas

During the First Quarter of FY 2011 three new subpoenas were received and two subpoenas were pending at the end of the First Quarter FY 2011.

Public Records

During the First Quarter of FY 2011 eleven new public records requests were received and six requests were closed at the end of First Quarter FY 2011.

SUMMARY OF PENDING LITIGATION MATTERS

TYPE OF CASE/MATTER	As of Sept 2010	As of June 2010	As of Mar 2010
Construction/Contract/Bid Protest (other than BHP)	3	4	3
BHP Claims/Contract Cases	0	0	0
Tort/Labor/Employment	5	7	7
Environmental/Regulatory/Other	1	2	2
Eminent Domain/Real Estate	2	2	2
total – all defensive cases	**11**	**15**	**14**
Affirmative Cases: MWRA v. (current employee) MWRA v. Chutehall Construction Co., Ltd, et al.	2	2	2
Other Litigation matters (restraining orders, etc.)	0	0	2
total – all pending lawsuits	**13**	**17**	**18**
Significant claims not in suit: Geico/Travelers Insurance Claims	2	2	0
Bankruptcy	3	8	9
Wage Garnishment	7	5	8
TRAC/Adjudicatory Appeals	3	2	3
Subpoenas	3	2	1
TOTAL – ALL LITIGATION MATTERS	31	36	39

TRAC/MISC.

New Appeals: No new appeals were received in the 2nd Quarter FY 2011.

Settlement by Agreement of Parties One case was settled by Agreement of Parties in 2nd Quarter FY 2011.

Notice of Dismissal Fine paid in full No cases were dismissed by Notice of Dismissal, fine paid in full.

Tentative Decisions No Tentative Decisions were issued in 2nd Quarter FY 2011.

Final Decisions No Final Decisions were issued during the 2nd Quarter FY 2011.

Internal & Contract Audit Program
1st Quarter FY11

Highlights

HULTMAN TASK ORDERS (Completed: August 24, 2010)

The objective of this assignment was to determine the costs incurred by the contractor performing joint repairs on the Hultman Aqueduct. Internal Audit staff reviewed the contractor's certified payrolls and documentation maintained by the consultant resident engineer on the project. Internal Audit subsequently provided alternative pricing calculations to management for use during the renegotiation of the unit prices for joint repair resulting in $1,705,213 in savings.

WAREHOUSE PRACTICES (Completed: September 30, 2010)

The objectives of this audit were to evaluate the effectiveness of practices followed at the warehouses to issue consumable stock, count and control inventory, and identify excess and obsolete items. As of March 2010 there were 21,207 consumable items valued at $6.8 million in the three MWRA warehouse locations. There were 37,879 consumable line item issues in FY09. Recommendations were made to introduce an electronic stock issue system, institute a replacement-in-kind policy for certain durable items, complete an accelerated cycle count at the Deer Island warehouse, undertake a comprehensive review of stock to identify excess and obsolete items, and strengthen controls over adding items to inventory.

Status of Open Audit Recommendations (8 recommendations closed in the 1st quarter)

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

Report Title (date)	Recommendations Pending Implementation	Closed Recommendations
Financial & Management Controls of the Fore River Railroad (3/1/07)	1	6
Audit of Buying Practices (9/15/08)	1	10
Boston Water & Sewer Commission CSO Financial Assistance Agreement (9/18/09)	1	2
Review of Fixed Assets (9/21/09)	5	5
Construction Change Order Pricing (12/31/09)	5	0
Chelsea Data Center Physical Controls (5/5/10)	5	6
Review of Emergency Action Plans (6/30/10)	3	4
Bay State Fertilizer (6/30/10)	1	2
Warehouse Practices (9/30/10)	4	6
Total Recommendations	**26**	**41**

Audit Savings

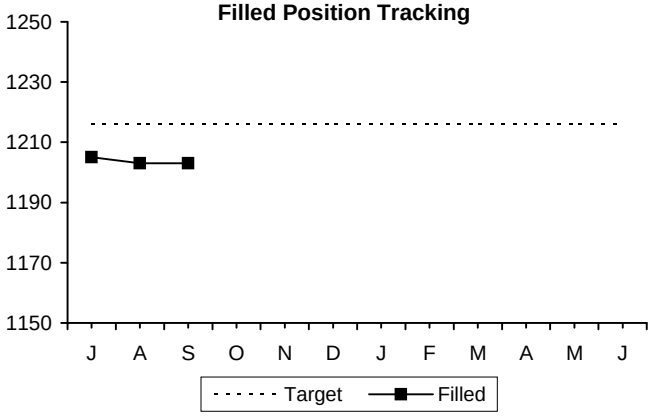
The Internal Audit Department's target is to achieve at least $1 million in cost savings each year. Cost savings vary each year based upon many factors. In some cases, cost savings for one year may be the result of work in prior years.

Savings	FY07	FY08	FY09	FY10	FY11	TOTAL
Consultants	$358,341	$55,901	$316,633	$194,238	$213,332	$1,138,445
Contractors & Vendors	$637,378	$2,147,311	$1,262,088	$599,835	$2,184,108	$6,830,720
Internal Audits	$183,840	$0	$438,027	$206,282	$6,750	$834,899
Total	**$1,179,559**	**$2,203,212**	**$2,016,748**	**$1,000,355**	**$2,404,190**	**$8,804,064**

OTHER MANAGEMENT

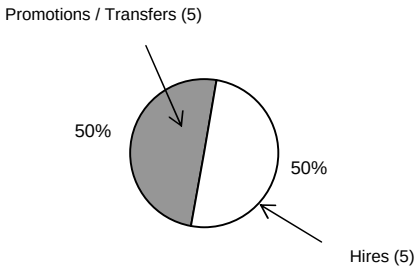
Workforce Management
1st Quarter - FY11

Filled Position Tracking



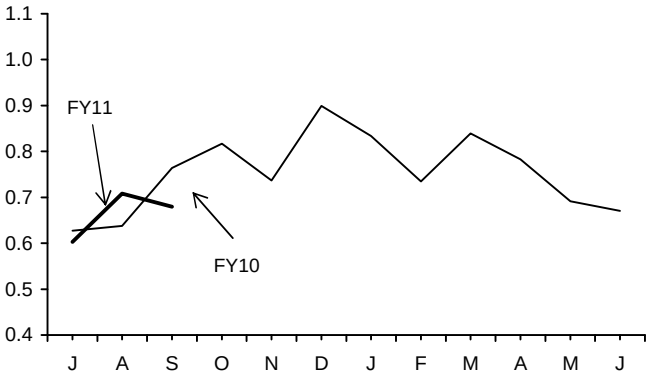
FY11 Target for Filled Positions = 1216
Filled Positions as of September 2010 = 1203

Positions Filled by Hires/Promotions
FY11



	Pr/Trns	Hires	Total
FY08	63 (62%)	39(38%)	102
FY09	63 (73%)	23(27%)	86
FY10	66 (76%)	21(24%)	87

Average Monthly Sick Leave Usage
Per Employee

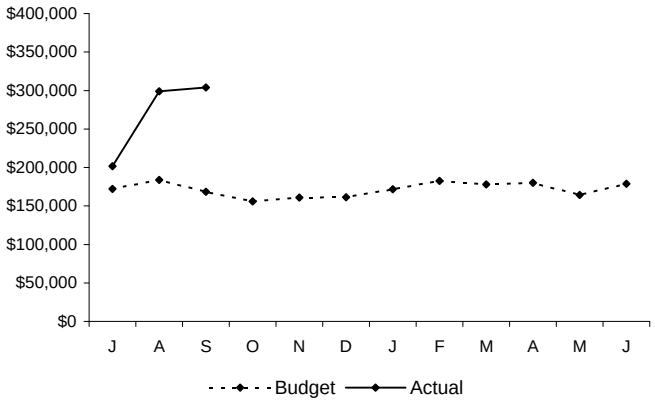


In FY10, the average monthly sick leave usage has decreased 1.85% from the same time last year.

	Number of Employees	YTD	Annualized Total	Annual FMLA %	FY10
A&F	194	1.89	7.56	28.2%	N/A
Aff. Action	8	1.09	4.36	37.4%	N/A
Executive	4	0.40	1.60	0.0%	3.96
Int. Audit	8	0.73	2.92	0.0%	N/A
Law	18	1.81	7.24	9.0%	10.03
Emerg Prep	5	1.49	5.95	0.0%	N/A
Operations	934	2.07	8.28	19.6%	9.26
Planning	22	0.89	3.57	5.4%	6.08
Pub. Affairs	13	1.92	7.69	27.0%	N/A
MWRA Avg	**1206**	**2.02**	**8.06**	**20.6%**	**9.03**

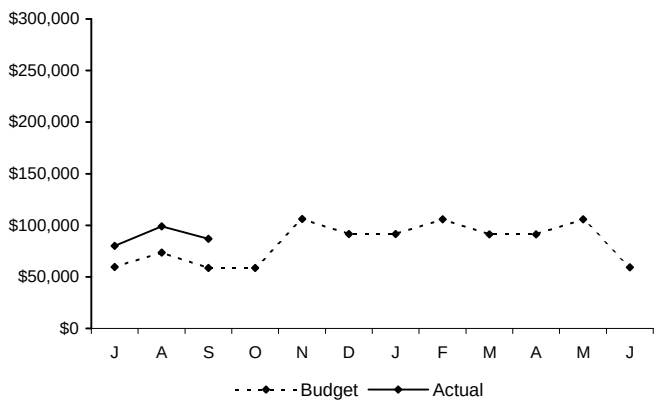
Percent of sick leave usage attributable to Family and Medical Leave Act (FMLA) leave is 20.6% ending September 30, 2010.

Field Operations
Overtime Expenditure Variance



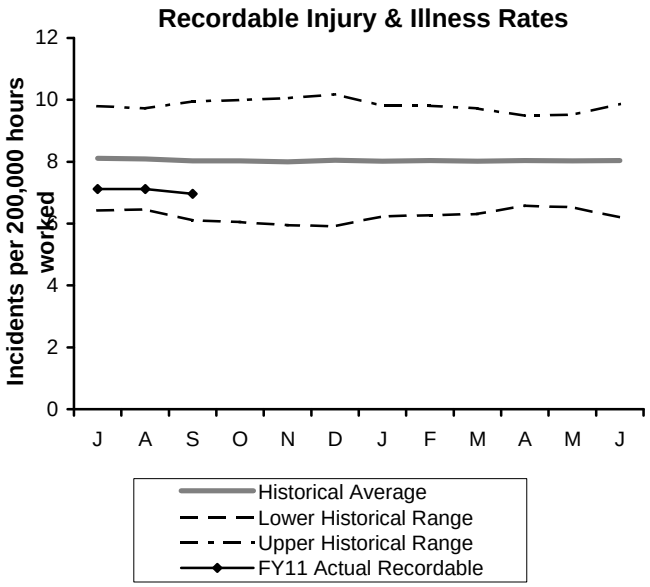
Overtime spending in the 1st Quarter was $804,787 or 53.4% over budget, mainly due to the emergency response and coverage needs resulting from the August leak at Shaft 5a in Weston and wet weather mobilization and response activities during the quarter.

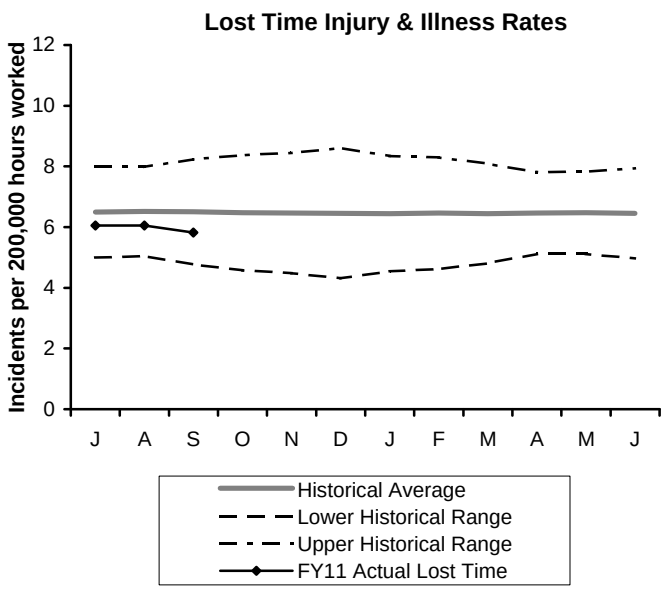
Deer Island Treatment Plant
Overtime Expenditure Variance



Overtime spending in the 1st Quarter totaled $265,702, which was $73,969 or 38.6% over budget. Overtime spending was required primarily for storm coverage and support of the disinfection tip tube and clarifier projects.

Workplace Safety
First Quarter FY11





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 FY10. The “Upper” and “Lower Historical Ranges” are computed using these same data – adding and subtracting two standard deviations respectively. FY11 actual incident rates can be expected to fall within this historical range.

Workers Compensation Claims Highlights - First Quarter FY11

	New	Closed	Open Claims
Lost Time	9	18	57
Medical Only	52	58	47
	New		**YTD Returns**
Light Duty Returns	1		1

Highlights / Comments

Light Duty Returns

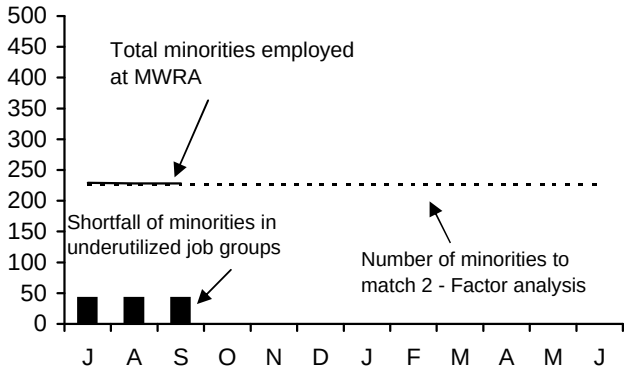
1 employee returned from IA to light duty.

Regular Duty Returns

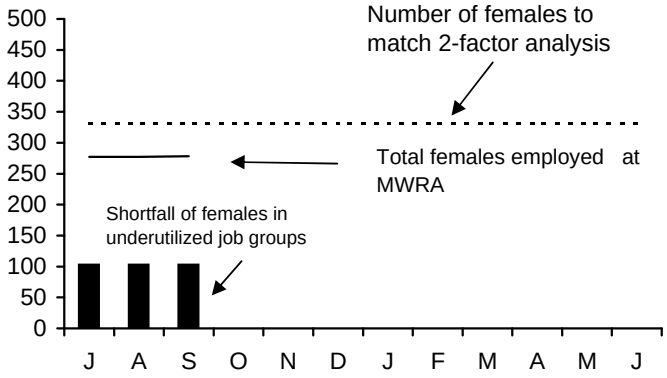
9 employees returned to regular duty from IA.

MWRA Job Group Representation
First Quarter FY11

Minority - Affirmative Action Plan Goals



Female - Affirmative Action Plan Goals



Highlights:

At the end of Q1 FY11, 8 job groups or a total of 42 positions are underutilized by minorities as compared to 7 job groups or a total of 38 at the end of Q1 FY10; for females 13 job groups or a total of 103 positions are underutilized by females as compared to 13 job groups or a total of 89 at the end of Q1 FY10. During Q1, 1 minoritiy and 2 females were hired. During this same period, 2 minorities and 2 females terminated.

Underutilized Job Groups - Workforce Representation

Job Group	Employees as of 9/30/2010	Minorities as of 9/30/2010	Achievement Level	Minority Over or Under Under utilized	Females As of 9/30/2010	Achievement Level	Female Over or Under Under utilized
Administrator A	17	3	2	1	2	5	-3
Administrator B	24	0	4	-4	6	6	0
Clerical A	47	21	11	10	41	12	29
Clerical B	39	9	9	0	18	3	15
Engineer A	84	16	14	2	11	15	-4
Engineer B	47	9	3	6	6	24	-18
Craft A	121	16	21	-5	0	6	-6
Craft B	142	26	19	7	3	8	-5
Laborer	63	14	11	3	5	10	-5
Management A	108	18	20	-2	33	42	-9
Management B	56	10	12	-2	14	28	-14
Operator A	66	5	7	-2	2	4	-2
Operator B	67	8	13	-5	4	4	0
Para Professional	60	11	26	-15	28	53	-25
Professional A	37	2	9	-7	23	15	8
Professional B	166	41	30	11	75	78	-3
Technical A	52	16	11	5	4	12	-8
Technical B	11	3	2	1	3	4	-1
Total	**1207**	**228**	**224**	**46/-42**	**278**	**329**	**52/-103**

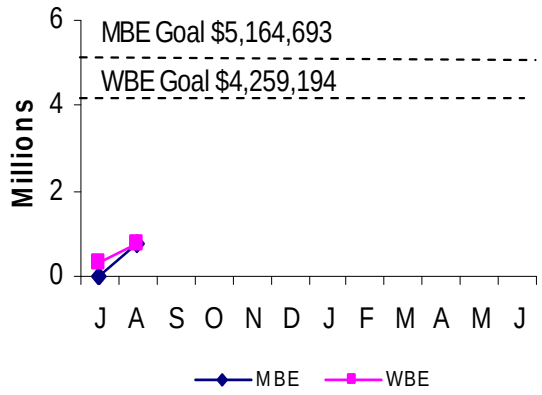
AACU Candidate Referrals for Underutilized Positions

Job Group	Title	# of Vac	Requisition Int. / Ext.	Promotions/ Transfers	AACU Ref. External	Position Status
Craft A	M&O Specialist	1	Int	0	0	Pending
Craft B	Second Class Engineer	1	Ext	1	0	Promo-W/M
Craft B	Heavy Equipment Operator	1	Ext	0	0	New Hire-B/M
Craft B	Third Class Engineer	1	Ext	0	0	Pending
Laborer	OMC Laborer	2	Ext	0	0	Vol Dem-W/M New Hire-W/F
Professional B	Sr. Analyst, CSO	1	Ext	0	0	Pending
Operator B	Operator	1	Ext	0	0	Pending

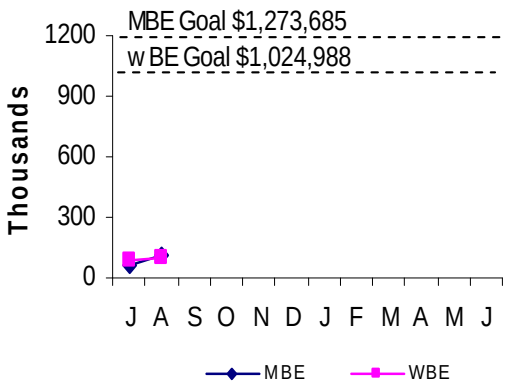
MBE/WBE Expenditures
First Quarter FY11

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

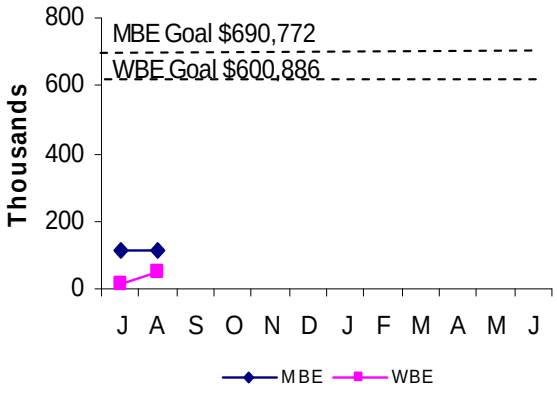
Construction



Professional



Goods/Services



FY11 spending and percentage of goals achieved, as well as FY10 performance are as follows:

	MBE				WBE			
	FY11 Year-to-Date		FY10		FY11 Year-to-Date		FY10	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Construction	751,556	14.6%	5,267,811	69.1%	738,930	17.3%	9,419,315	148.9%
Professional Svc.	107,274	8.4%	1,516,786	134.7%	103,722	10.1%	921,543	101.8%
Goods & Svcs.	114,411	16.6%	514,900	72.5%	48,573	8.1%	386,870	62.6%
Total	**$973,241**	**13.7%**	**$7,299,497**	**77.2%**	**$891,225**	**15.1%**	**$10,727,728**	**136.7%**

MWRA FY11 CEB Expenses through
First Quarter FY11

	September 2010 Year-to-Date					
	Period 3 YTD Budget	Period 3 YTD Actual	Period 3 YTD Variance	%	FY11 Approved	% Expended
EXPENSES						
WAGES AND SALARIES	$ 20,330,062	$ 20,091,760	$ (238,302)	-1.2%	$ 91,151,296	22.0%
OVERTIME	788,542	1,156,996	368,454	46.7%	3,310,659	34.9%
FRINGE BENEFITS	4,478,668	4,299,567	(179,101)	-4.0%	17,995,660	23.9%
WORKERS' COMPENSATION	467,503	637,774	170,271	36.4%	1,870,000	34.1%
CHEMICALS	2,809,983	2,568,405	(241,578)	-8.6%	9,797,118	26.2%
ENERGY AND UTILITIES	5,220,210	5,151,667	(68,543)	-1.3%	23,314,734	22.1%
MAINTENANCE	6,042,590	4,937,527	(1,105,063)	-18.3%	28,759,673	17.2%
TRAINING AND MEETINGS	44,554	19,628	(24,926)	-55.9%	231,783	8.5%
PROFESSIONAL SERVICES	1,461,274	1,425,315	(35,959)	-2.5%	5,961,508	23.9%
OTHER MATERIALS	764,520	713,366	(51,154)	-6.7%	4,612,316	15.5%
OTHER SERVICES	5,934,178	5,628,095	(306,083)	-5.2%	22,607,937	24.9%
TOTAL DIRECT EXPENSES	**$ 48,342,084**	**$ 46,630,100**	**$ (1,711,984)**	**-3.5%**	**$ 209,612,684**	**22.2%**
INSURANCE	$ 646,497	$ 322,053	$ (324,444)	-50.2%	$ 2,586,000	12.5%
WATERSHED/PILOT	6,186,230	5,974,882	(211,348)	-3.4%	24,744,920	24.1%
BECo PAYMENT	960,879	961,050	171	0.0%	4,174,256	23.0%
MITIGATION	379,595	368,099	(11,496)	-3.0%	1,518,401	24.2%
ADDITIONS TO RESERVES	(101,893)	(101,893)	-	0.0%	(407,581)	25.0%
RETIREMENT FUND	5,342,856	5,342,856	-	0.0%	5,342,856	100.0%
POST EMPLOYEE BENEFITS	-	-	-	---	-	---
TOTAL INDIRECT EXPENSES	**$ 13,414,164**	**$ 12,867,047**	**$ (547,117)**	**-4.1%**	**$ 37,958,852**	**33.9%**
DEBT SERVICE	$ 86,715,409	$ 81,761,732	$ (4,953,677)	-5.7%	$ 354,326,676	23.1%
DEBT SERVICE ASSISTANCE	-	-	-	---	-	---
TOTAL DEBT SERVICE	**$ 86,715,409**	**$ 81,761,732**	**$ (4,953,677)**	**-5.7%**	**$ 354,326,676**	**23.1%**
TOTAL EXPENSES	**$ 148,471,657**	**$ 141,258,879**	**$ (7,212,778)**	**-4.9%**	**$ 601,898,212**	**23.5%**
REVENUE & INCOME						
RATE REVENUE	$ 142,450,001	$ 142,450,001	$ -	0.0%	$ 569,800,000	25.0%
OTHER USER CHARGES	1,882,958	1,961,026	78,068	4.1%	7,065,350	27.8%
OTHER REVENUE	627,451	556,937	(70,514)	-11.2%	4,693,216	11.9%
RATE STABILIZATION	1,257,435	1,257,435	-	0.0%	5,029,744	25.0%
INVESTMENT INCOME	3,877,984	3,493,876	(384,108)	-9.9%	15,309,902	22.8%
TOTAL REVENUE & INCOME	**$ 150,095,829**	**$ 149,719,274**	**$ (376,554)**	**-0.3%**	**$ 601,898,212**	**24.9%**

As of September 2010, total revenue was $149.7 million, $377,000 less than budget. Total expenses were $141.3 million, $7.2 million or 4.9% less than budget.

Expenses –

- **Direct Expenses** are $46.6 million, $1.7 million or 3.5% less than budget.
- **Maintenance** is $1.1 million or 18.3% underspent year-to-date of which $661,000 is for material purchases and $444,000 is for services.
- **Overtime** is $368,000 or 46.7% over budget due to emergencies such as the Shaft 5A leak and hurricane preparations.
- **Other Services** are $306,000 or 5.2% under budget mostly due to sludge pelletization of $121,000, Other Services of $98,000, Telephones of $40,000, Permit Fees of $17,000 and Health/Safety of $16,000.
- **Chemicals** are $242,000 or 8.6% less than budget mostly due to lower Sodium Hypochlorite of $296,000 for timing of deliveries at DITP, lower Liquid Oxygen of $38,000 and Sodium Bisulfite of $31,000 offset by higher Nitrazyme of $135,000 due to odor control at the Framingham Extension Relief Sewer.
- **Wages and Salaries** are $244,000 or 1.2% less than budget due to less filled positions than budgeted and lower leave balance accruals for higher vacation and accrued holiday use.
- **Fringe Benefits** are $179,000 or 4.0% under budget for lower Health Insurance of $102,000, Dental Insurance of $44,000 and Unemployment Insurance of $30,000.
- **Workers' Compensation** is $170,000 higher than budget due to the high number of claimants who have applied for and received accidental disability retirements.
- **Utilities** are $69,000 or 1.3% under budget due to lower Electricity of $35,000 mainly due to lower than projected usage at DITP offset by higher pricing in Field Operations.
- **Other Materials** are $51,000 or 6.7% under budget mostly due to Vehicle Expense of $48,000, Work Clothes of $26,000 and Other Materials of $20,000, offset by Vehicle Purchases of $42,000.
- **Professional Services** are $36,000 or 2.5% under budget due to lower than budgeted Engineering of $148,000, Other of $91,000, and Security of $18,000 offset by higher Lab & Testing of $237,000 due to delay in harbor and monitoring scope revisions related to the NPDES permit.
- **Indirect Expenses** are $12.9 million, $0.5 million or 4.1% under budget due to lower Insurance payment/claims and premiums of $324,000 and lower Watershed Reimbursements of $211,000 as a result of an FY10 overaccrual.
- **Debt Service Expenses** total $81.8 million, $5.0 million or 5.7% less than budget due to favorable variable interest rates.

Revenue and Income –

- **Total Revenue / Income** for September was $149.7 million, $377,000 less than budget. This decrease is due to lower Investment Income of $384,000 driven by lower rates and Other Revenue of $71,000 offset by higher Other User Charges of $78,000 due to fourth quarter FY10 water usage by the Town of Wilmington of $93,000 offset by lower Deer Island water usage of $23,000.

Cost of Debt
First Quarter FY11

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

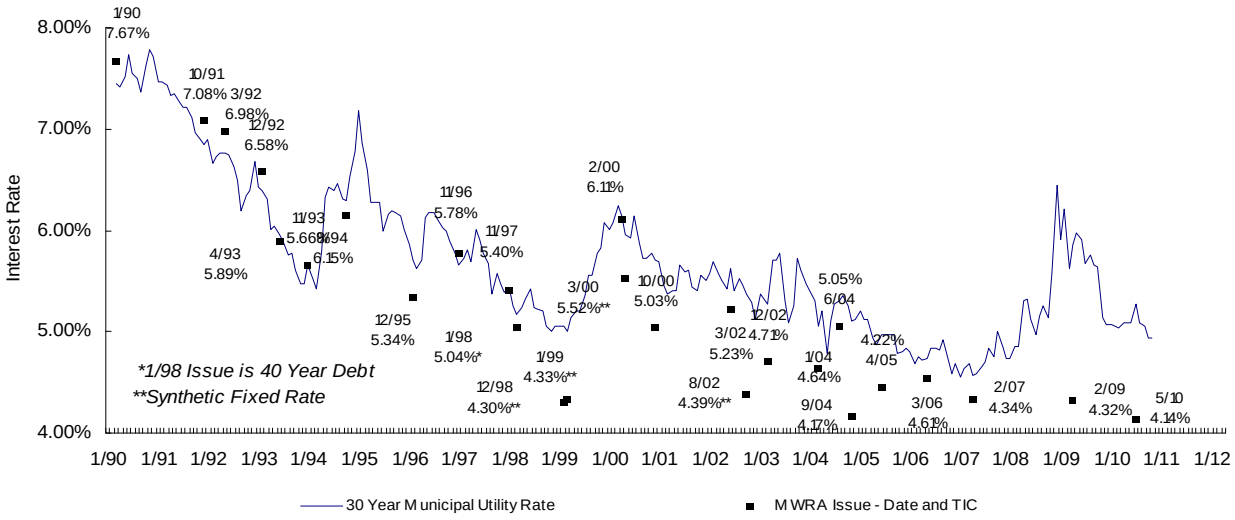
Average Cost of MWRA Debt

Fixed Debt ($3,979)	4.54%
Variable Debt ($566)	0.86%
SRF Debt ($1,060)	1.05%
Weighted Average Debt Cost ($5,606)	3.54%

Most Recent Senior Fixed Debt Issue
May 2010

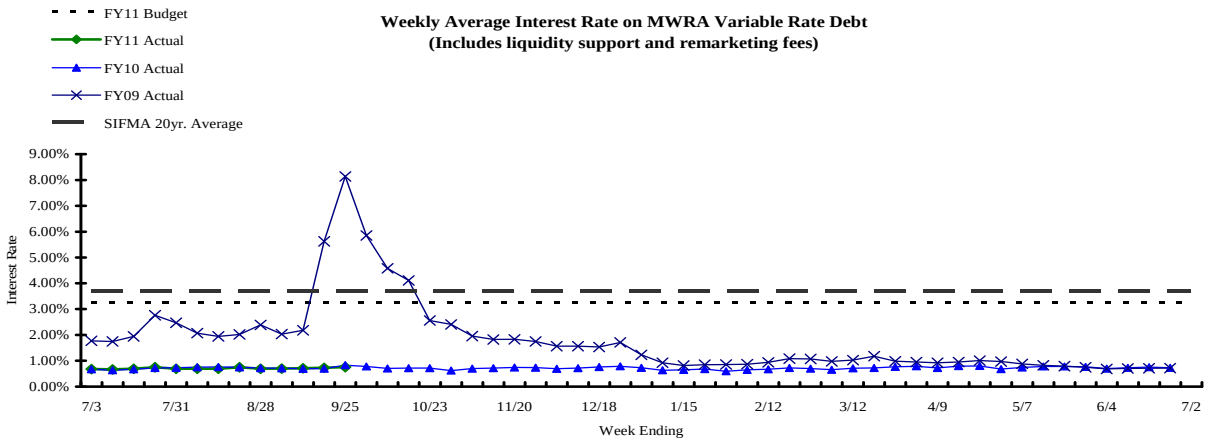
2010 Series A & B ($284)	4.14%

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



Weekly Average variable Interest Rates vs. Budget

MWRA currently has nine variable rate debt issues with $1.3 billion outstanding, excluding commercial paper. Of the nine outstanding series, five have portions which have been swapped to fixed rate. Variable rate debt has been less expensive than fixed rate debt in recent years as short-term rates have remained lower than long-term rates on MWRA debt issues. In September, SIFMA rates fluctuated with a high of 0.30% and a low of 0.25%. MWRA's issuance of variable rate debt, although consistently less expensive in recent years, results in exposure to additional interest rate risk as compared to fixed rate debt.



Investment Income
First Quarter FY11

Actual interest income varies from budgeted amounts because either fund balances or interest rates are greater or lower than budgeted.

YTD Investment Income vs. Budget
($000)

	Impact on Investment Income due to Variance in Fund Balances				Impact on Investment Income due to Variance in Interest Rates			Combined Impact on Investment Income	
Fund	Average Budgeted Balance	Average Actual Balance	Variance	Impact	Budget	Actual	Impact	Impact	%
Combined Reserves	$92,179	$91,552	($626)	($7)	4.65%	4.33%	($69)	(76)	-7.4%
Construction	$97,447	$139,892	$42,444	$45	0.50%	0.36%	($42)	3	2.4%
Debt Service	$92,249	$87,276	($4,973)	($4)	0.50%	0.35%	($32)	(37)	-33.3%
Debt Service Reserves	$255,902	$255,168	($735)	($6)	3.73%	3.33%	($247)	(253)	-11.1%
Operating	$56,032	$48,524	($7,508)	($3)	1.27%	1.55%	$13	10	6.1%
Revenue	$72,170	$72,822	$652	$5	0.65%	0.52%	($25)	(20)	-18.4%
Redemption	$32,851	$32,849	($2)	($0)	0.94%	0.80%	($11)	(11)	-14.8%
Total	$698,830	$728,082	$29,253	$29	2.33%	2.01%	($413)	(384)	-9.9%

YTD Investment Income Variance