

MASSACHUSETTS WATER RESOURCES AUTHORITY

Board of Directors Report

on

Key Indicators of MWRA Performance

For

First Quarter FY2008

Q1	Q2	Q3	Q4



Frederick A. Laskey, Executive Director
Michael J. Hornbrook, Chief Operating Officer
November 14, 2007

Board of Directors Report on Key Indicators of MWRA Performance for First Quarter FY2008

Table of Contents

Operations and Maintenance

DITP Operations-Energy	1
DITP Operations	2
Residuals Processing	4
DITP Maintenance	5
Operations Division–Metering & Leak Detection	6
Water Distribution System–Valves	7
Wastewater Pipeline/Structures	8
Field Operations Energy Program	9
Toxic Reduction and Control	10
Field Operations – Narrative Topics	11
Laboratory Services	17
CSO Update	18

Construction Programs

Projects in Construction	21
CIP Expenditures	23

Drinking Water Quality and Supply

Source Water – Microbial Results	24
Source Water – Turbidity and Algae	25
Treated Water – Disinfection Effectiveness	26
Treated Water – pH and Alkalinity, Complaints	27
Bacteria and Chlorine Residual Results	28
Disinfection By-Products, UV 254	29
Water Supply/Source Water Management	30

Wastewater Quality

NPDES Permit Compliance – Deer Island	31
NPDES Permit Compliance – Clinton	32

Community Flows

Total Water Use – Core Communities	33
Community Wastewater Flows	34

Business Services

Procurement	35
Materials Management	36
MIS Program	37
Law Dept.-Activities	38
Internal and Contract Audits	42

Other Management

Workforce Management	43
MWRA Workplace Safety Program	44
Job Group Representation	45
MBE/WBE Expenditures	46
CEB Expenses	47
Cost of Debt	48
Investment Income	49
Rates Management	50

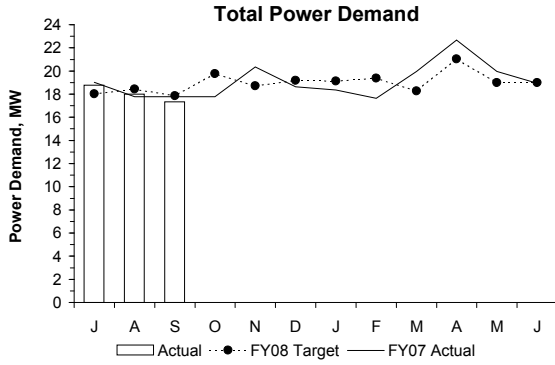
This quarterly report is prepared by MWRA staff to track a variety of MWRA performance measures for routine review by MWRA's board of directors. The content and format of this report is expected to develop as time passes. Information is reported on a preliminary basis as appropriate and available for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

Frederick A. Laskey, Executive Director
Michael J. Hornbrook, Chief Operating Officer
November 14, 2007

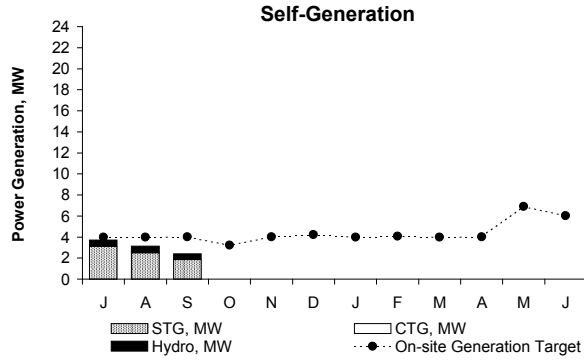
OPERATIONS AND MAINTENANCE

Deer Island Operations - Energy

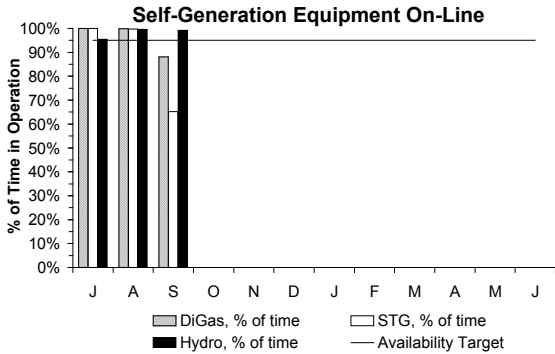
1st Quarter - FY08



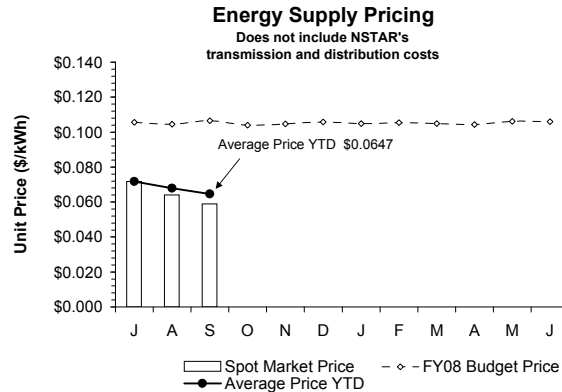
Total Actual Power Demand for the 1st quarter of FY08 was close to the FY08 target level (within +/- 5% of target each month). Actual Demand this quarter was similar to last year's quarterly demand, even though the plant's flow in FY08 is 16% lower than it was last year, because of the high power demand requirements of a second cold box in the cryogenic plant needed to support the secondary treatment process in the summer months.



Power generated on-site was 23% below the FY08 target for the 1st Quarter as both the STG and the hydro turbine units operated below their targets (23% and 17% lower, respectively). The STG operated below target, primarily due to low gas production, a result of low sludge production. The lower-than-expected output from the hydro turbine units was due to lower-than-expected plant flow. The CTGs ran on seven days in the 1st Quarter, five days for maintenance/checkout purposes, one day for a demand response event, and one day due to high electricity spot market pricing.

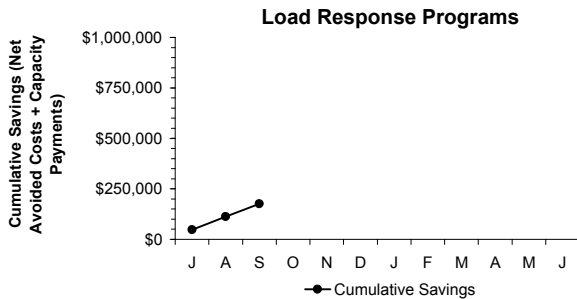


During July and August, the DiGas, STG, and hydro turbine systems all exceeded their availability targets. In September, only the hydro turbine system exceeded its target while the DiGas and STG systems fell below their availability target (12% and 35% below, respectively). In September, the STG was not available for more than nine days due to annual maintenance. The reduced availability of the DiGas system is due to annual boiler maintenance on the boilers' common systems and due to several minor boiler trips associated with boiler/STG restarts after the maintenance activity.



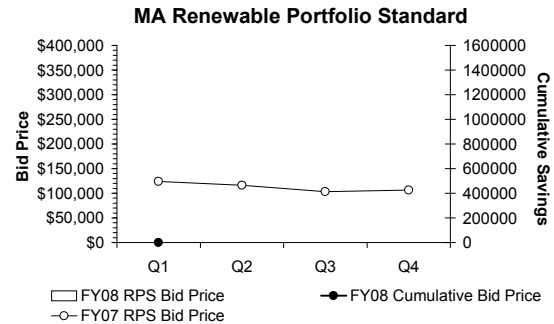
Under the current energy supply contract, all of DI's energy is purchased in real time. Spot market pricing in the 1st Quarter was 38% below the FY08 target. The Average YTD Price through the 1st Quarter was \$0.0647 per kWh, approximately 10% higher than the \$0.0589 per kWh Average YTD Price during the same period in FY07.

Please note that August and September pricing are estimates as the invoices have not been received.



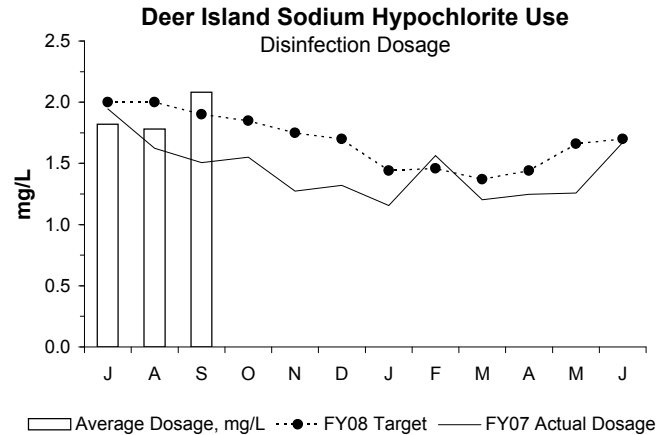
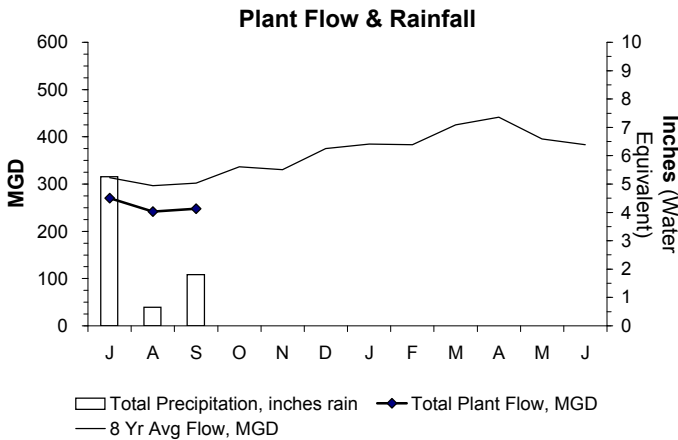
DI participated in one demand response event during the 1st Quarter (in August), the only event called.

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, Deer Island receives energy payments from ISO-NE and also avoids NSAT 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



No bids were received during the 1st Quarter of FY08. RPS prices reflect the bid prices on the date that bids are accepted. Cumulative savings reflect the total value of bids received to date.

Deer Island Operations 1st Quarter - FY08



Total Plant Flow for the 1st Quarter was 17% lower than the 8-year average flow because rainfall was 23% lower than the 8-yr average for the quarter (7.73 inches actual vs. 10.09 inches expected). Rainfall was 75% higher than expected in July (due mainly to two significant rainstorms) but 77% lower than expected in August; overall plant flow was 14% and 18% lower, respectively, than expected for these months. Total Plant Flow for the 1st Quarter was 16% lower than FY07's actual plant flow for the same period.

The disinfection dosing rate was similar to the FY08 target for the 1st Quarter but was 12% higher than the FY07 actual for the quarter. The higher dosing rate was likely due to lower plant flow in FY08 (253.3 mgd) than in FY07 (304.1 mgd) during the same period. Lower plant flow requires higher dosing as the wastewater is more concentrated.

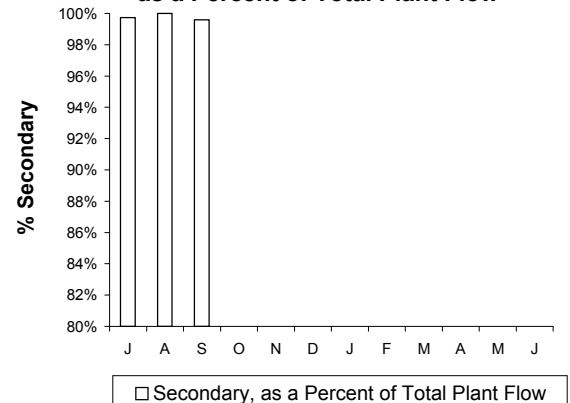
The overall disinfection dosing rate (target and actual) is dependent on plant flow, target effluent total chlorine residual levels, effluent quality and NPDES permit levels for fecal coliform.

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	99.7%	3.20
A	0	0	0	100.0%	0.00
S	1	1	0	99.6%	4.91
O					
N					
D					
J					
F					
M					
A					
M					
J					
Total	2	2	0	99.8%	8.1

There were two separate blending events during the 1st Quarter; both due to rain. The rain event on July 28 produced 2.32 inches of precipitation and resulted in a single blending event lasting 3.2 hours with 22.6 million gallons of flow bypassing secondary treatment. The blending event in September lasted 4.91 hours and resulted in 29.7 million gallons of flow bypassing secondary treatment as 1.28 inches of rain fell. There were no blending events in August. All blended flow met numerical permit limits for secondary treatment and water quality standards.

Deer Island Secondary Treatment as a Percent of Total Plant Flow



Overall, 99.8% of the total plant flow to DITP was treated through secondary treatment during the 1st Quarter of FY08. The Maximum Secondary Capacity for the quarter was 700 mgd (set on April 4, 2007) except on five partial days in August when Secondary Battery C was shut down for a major RSL isolation valve maintenance project; the Maximum Secondary Capacity was 540 mgd during those periods.

Deer Island Operations & Maintenance Report

Environmental/Pumping:

During the 1st Quarter, the plant achieved a maximum average hourly flow rate of 1002.4 mgd on July 28 as a result of the largest rain event in the quarter that produced 2.32 inches of precipitation. Pumping and treatment operations continued without incident throughout this storm.

Deer Island Operations
1st Quarter - FY08

Deer Island Operations & Maintenance Report (continued)

Disinfection:

The contract work to replace the internal lining in Sodium Hypochlorite Storage Tank 1 (which began in June) was completed in September. The new liner for Tank 1 underwent several dye leak tests in September to check the integrity of the new liner. Preparation work to replace the liner in Tank 3 began in August and continued into September. The contractor is hopeful that the new liner replacement for Tank 3 will be completed by the end of this calendar year.

Energy:

Deer Island is currently enrolled in the Demand Response Program. The Demand Response Program (administered by the not-for-profit Independent System Operators of New England or ISO-NE) compensates energy users for reducing their electrical consumption during a called event to help alleviate fuel supply constraints and elevated pricing in the region. DITP participated in one demand response event during the 1st Quarter. On August 15, there was an unannounced test called by ISO-NE to confirm facility and equipment availability in the event a normal demand response event is called. CTG 1 was operated for approximately two hours, as required, during this test.

A recent evaluation of the operating efficiency of the hydro turbines resulted in staff adjusting their current operating procedure to running only a single hydro turbine unit when plant flow is less than 300 mgd. The operation of a single hydro turbine unit was found to provide better efficiency in comparison to the operation of both units at the same time when plant flow is less than 300 mgd. Only one hydro turbine unit was operated at a given time during most of the 1st Quarter as plant flow for the majority of the month was below 300 mgd.

Regulatory:

Emissions compliance testing on the Residuals Odor Control (ROC) system was conducted by consultants in early August. MA DEP requires that DITP conduct emissions compliance testing once every five years. The two ROC emission units were tested for Total Reduced Sulfur at the outlet (stack) of the odor control system and for non-methane hydrocarbons at the inlet to each emission unit. Even though it is not required by the operating permit, non-methane hydrocarbons were also tested at the stack. The final report summarizing the test results is currently being prepared by the consultants.

Several DEP officials were on-site at DITP on August 14 for an unannounced site visit of the treatment plant. The officials were given a comprehensive plant tour covering the entire wastewater and residuals treatment facilities and process areas, along with a walkthrough of the Central Laboratory.

Clinton Wastewater Treatment Plant

Emergency Generator Project: This project will provide emergency back-up power to the secondary treatment process to ensure complete compliance in the event of a prolonged power interruption. The contractor has made substantial progress to date. The concrete pad and all associated conduit is in place. Corings into the building and through the floors have been completed. The contractor is now awaiting delivery of the automatic transfer switches and the generator itself.

Soda Ash System Replacement Project: The project has been bid and the lowest bidder was Methuen Construction at \$252,000; staff anticipate that the Notice to Proceed will be issued shortly.

Digester Project: Staff issued a task order to that will involve inspection of the digester to begin the design for an FY09 CIP project that will involve cleaning and re-valving and re-piping.

Headworks Building: Staff replaced the flights, chains and wear shoes on one bay of Primary Tanks 2 and 4, including the cross collector on Tank 2. Staff also removed the lower roller bearing covers from the influent lift pumps, inspected the bearings for wear and purged the grease lines. Staff replaced the pulleys and drive belt on Lift Pump 1.

Digester Building: Staff cleaned the polymer makeup system; adjusted the packing on Piston Pump 2; and installed a new power frame assembly on Recirculation Pump 2.

Chemical Building: Staff rebuilt and re-installed Sump Pump 1 and the soda ash slurry pump; adjusted the soda ash feed belt; repaired an air leak on the soda ash filter system on top of the chemical silo; flushed the alum feed line running to the aeration tanks; and reinstalled a rebuilt motor on the low air compressor for the chlorine contact chamber.

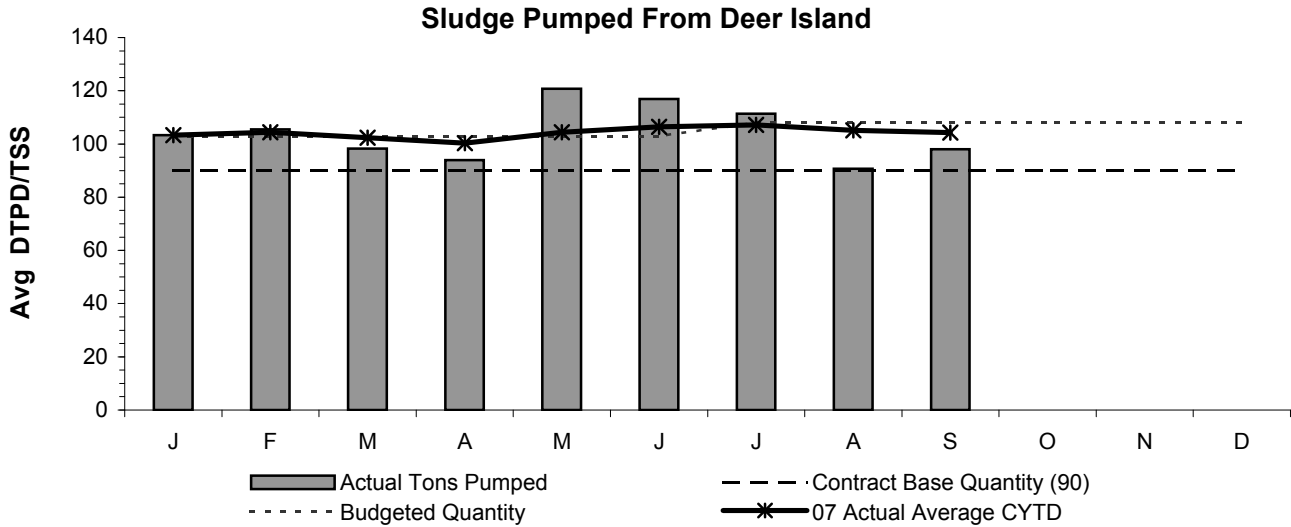
Trickling Filter: Staff cleaned the spray nozzles and lubricated the center column of the trickling filter.

Final Clarifiers: Staff set up staging to inspect the collection trough on Final Clarifier 3. A crack was found in the PVS piping so the old piping was removed and replaced.

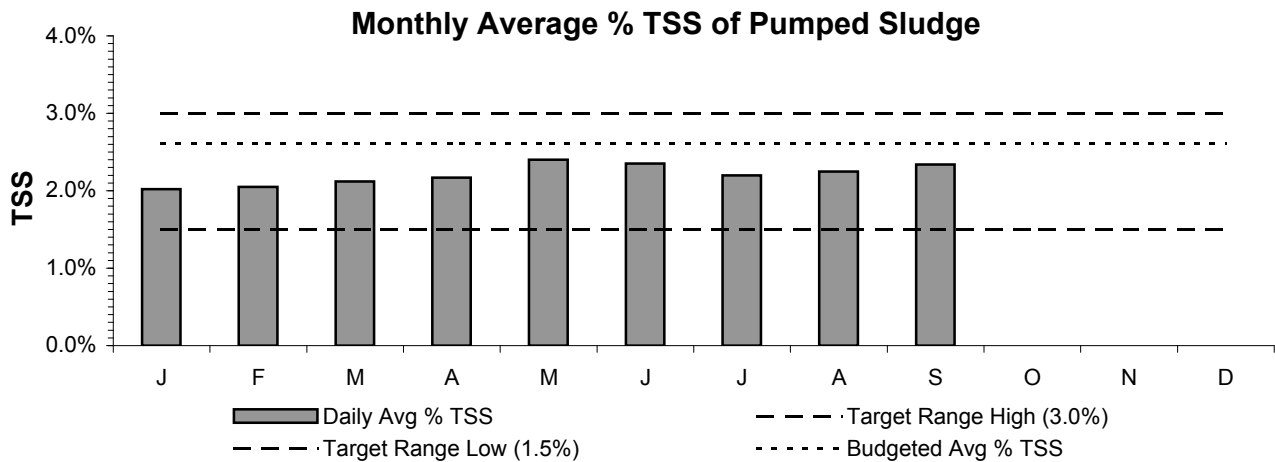
Deer Island Residuals

1st Quarter - FY08

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 (FY08's budget is 108 DTPD/TSS).



The average total quantity of pumped sludge for the 1st Quarter was 100 DTPD, which was lower than the FY08 budget of 108 DTPD. Quantities of pumped sludge were low due to lower-than-expected flows during the quarter, in addition to maintenance work on Secondary Battery C. Sludge quantities can vary based on flow and changes in sludge inventory, as well as the performance of primary and secondary treatment. Upset conditions can also affect sludge quantities.



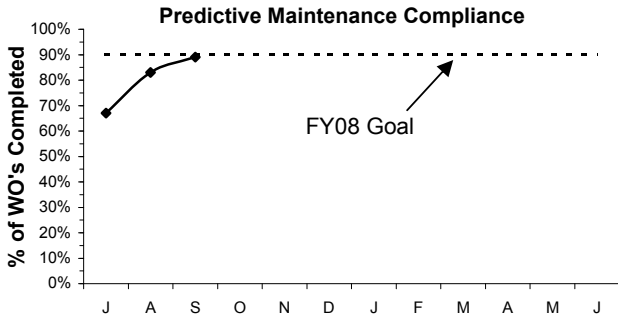
The daily average percentage of total suspended solids continued to be steady during the quarter and well within the contract range of 1.5% to 3%, which is an absolute range and not an annual average.

Deer Island Maintenance

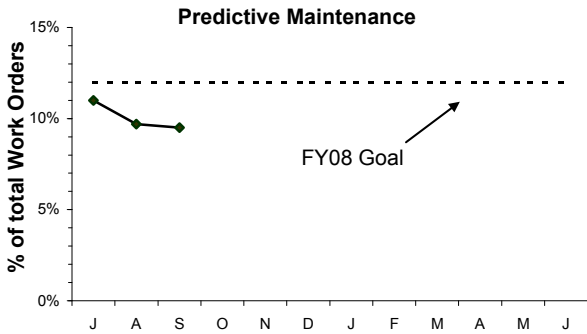
1st Quarter - FY08

Productivity Initiatives

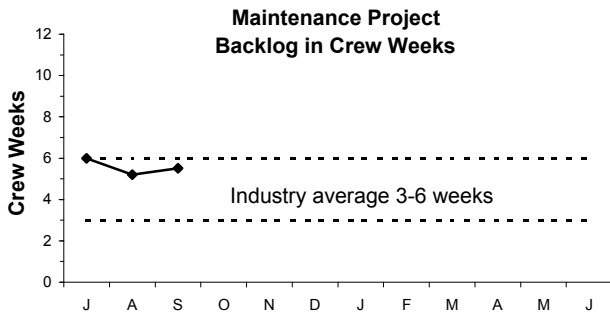
Productivity initiatives include increasing predictive maintenance tasks. Accomplishing this initiative should result in a decrease in the overall maintenance backlog.



The FY08 goal for predictive maintenance is the completion of 90% of all PdM work orders. Deer Island is moving forward with an aggressive predictive maintenance program. "Growing pains" are expected in the early stages as staff move up the learning curve on new predictive techniques. Work orders that are not completed one month are first priority in the following month. Remaining PMs are prioritized by frequency.



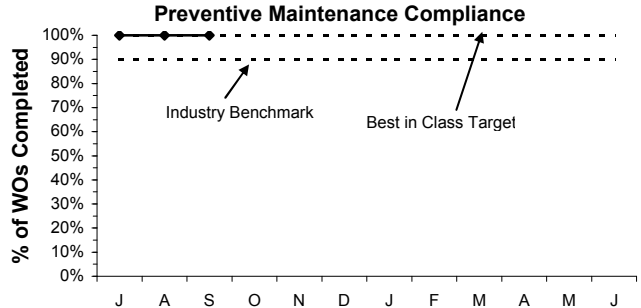
The FY08 goal is to increase PdM work orders to 12% of total work orders. The industry is moving toward increasing predictive maintenance work to reduce downtime and better predict when repairs are needed. The type of maintenance change orders can vary from month to month, so it may not be possible to achieve this goal every month.



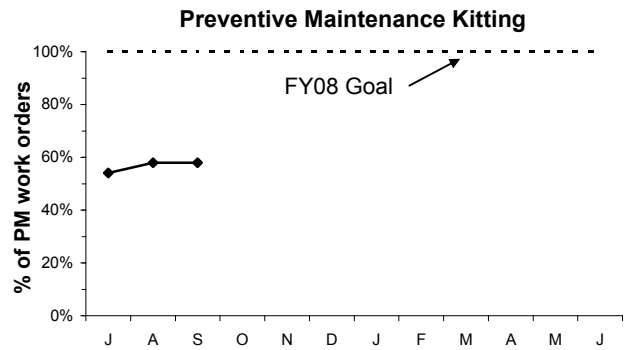
The industry average for maintenance backlog is 3-6 weeks. Deer Island's FY08 goal is to stay within industry average. The backlog is currently being controlled with the use of overtime. There is currently one instrumentation technician vacancy and one medium-voltage electrician vacancy.

Proactive Initiatives

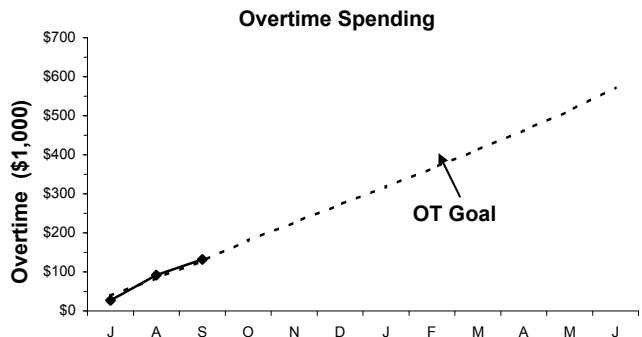
Proactive initiatives include completing 100% of all preventive maintenance tasks and increasing preventive maintenance kitting. These tasks should result in lower maintenance costs for maintenance.



The FY08 goal for preventive maintenance is completion of 100% of all PM work orders from Operations and Maintenance. Deer Island achieved this goal in the 1st Quarter.



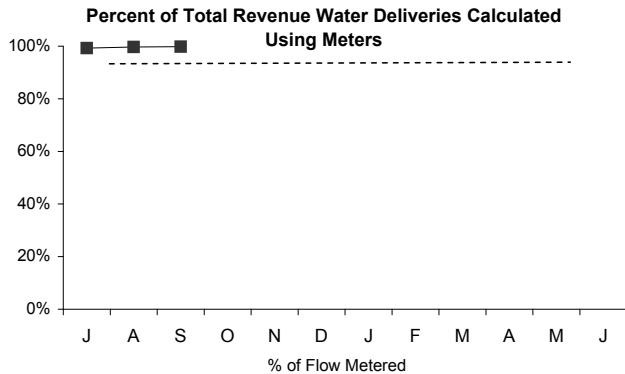
Deer Island's FY08 goal is to kit 100% of all preventive maintenance work orders. Planning is now focused on plumbing PMs and identifying all PM schedules that do not include materials and will not require kitting.



Overtime was over budget by \$12K for the first quarter. Overtime was spent on the RSL plug valve replacement project, preparing Residuals Digester Mod 2 to be put back on line, primary tanks repairs and controlling the maintenance backlog created by some staff vacancies.

Operations Division Metering 1st Quarter - FY08

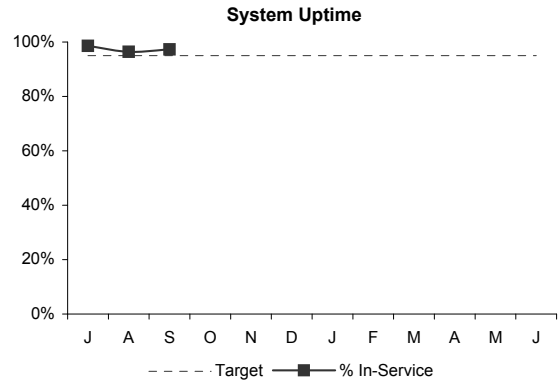
WATER METERS



The target for revenue water deliveries calculated using meters is 100%. During the 1st Quarter, meter actuals accounted for 99.6% of flow; only 0.4% of total revenue water deliveries were estimated. Estimates are generated for meters that are out of service due to instrumentation problems or in-house and/or capital construction projects. The following is the breakdown of estimations:

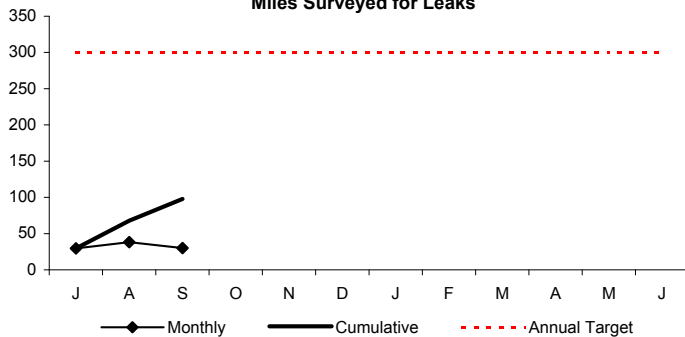
- In-house/Capital Construction Projects - 0.0%
- Instrumentation Failure - 0.4%

WASTEWATER METERS



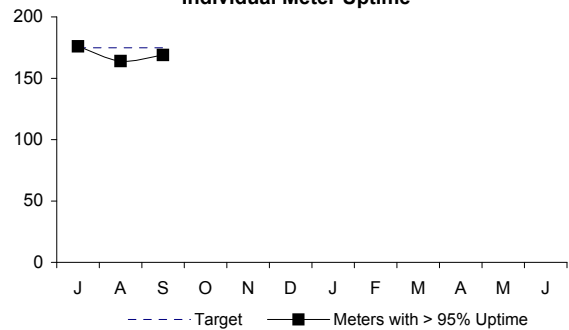
During the 1st Quarter, out of a possible 1,625,088 data points, only 41,900 points were missed resulting in a system-wide up time of 97.42%. Staff continue to work with meter system vendors to improve performance, resolve velocity issues and reduce estimates. In early September, the data host server experienced some hardware problems and was replaced without any loss of data.

Miles Surveyed for Leaks



During the 1st Quarter, staff inspected 97.87 miles of MWRA water mains.

Individual Meter Uptime



Of the 184 revenue meters installed, an average of 14 meters experienced down time in excess of the 95% target. For the 1st Quarter, down time is defined by any individual meter having less than 2,846 data points. Target numbers may vary depending upon the number of meters in service. As construction activities increase (April - November), meters are removed and estimates are generated based on surrounding meters and past performance.

Water Distribution System

Month	J	A	S	O	N	D	J	F	M	A	M	J
Leaks Detected	0	1	0									
Leaks Repaired	0	0	1									
Backlog	0	1	0									
Avg. Lag Time (days)	0.0	8.0	34.0									

The leak backlog for FY08 is currently at zero; one leak was found (on the American Legion Highway in Dorchester) and repaired in the 1st Quarter. Although the leak was isolated on the same day it was found, the 34-day repair lag time reflects other ongoing crew work and the need to obtain a Boston DPW permit and schedule the work around an ongoing road construction project; once started, the repair itself took one week. The Pipeline Program's goal is to repair all leaks found during the fiscal year. However, if the goal

Water Distribution System Valves

1st Quarter - FY08

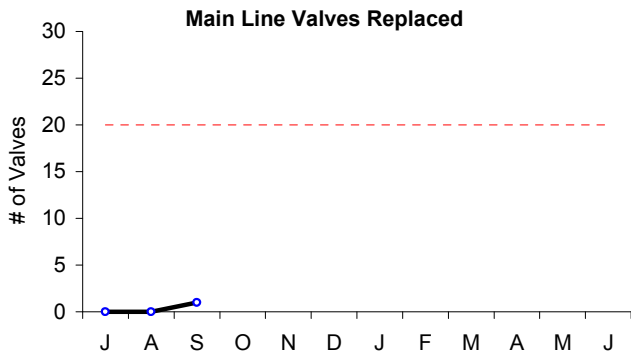
Background

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 is often displaced during the construction season because a large number of construction contracts involving rehabilitation, replacement, or new installation of water lines require valve staff to operate valves and to 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.

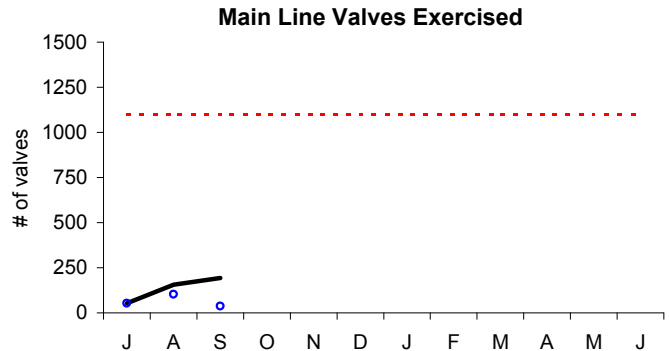
The prior goal for tracking "air release valves replaced" has been replaced with a new goal for tracking "blow-off valves exercised." Blow-off valves are exercised at the same time as main line valves but were not reported in the past. The remaining number of air release valves needing replacement is small and no longer needs to be reported.

Type of Valve	Inventory #	Operable Percentage	
		FY08 to Date	FY08 Targets
Main Line Valves	1,265	86.0.%	84%
Blow-Off Valves	1,132	91.3%	94%
Air Release Valves	1,324	90.4%	86%
Control Valves	51	94.0%	92%

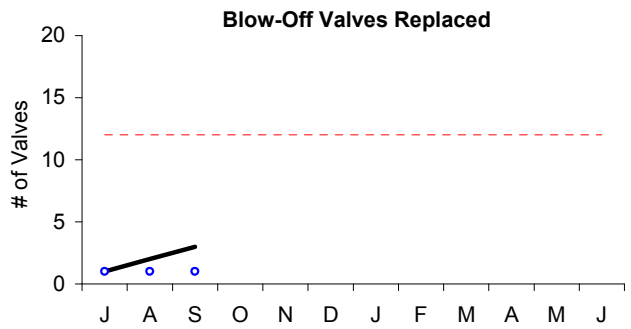
Key to Symbols: ○ FY2008 Monthly Total
 — FY2008 Cumulative Total



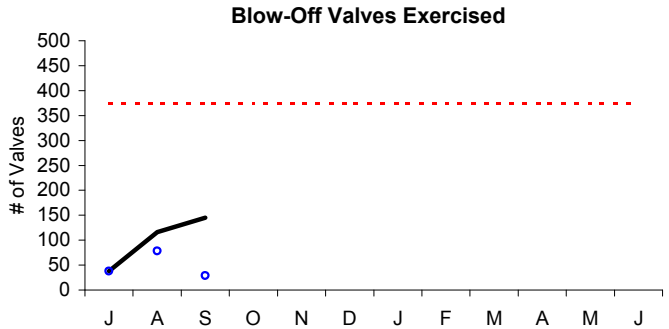
Staff replaced one main line valve in the 1st Quarter. The low production rate reflects diversion of the pipeline crew to work on other MWRA water and wastewater projects, as well as to support local work in Medford. Staff expect to meet the goal by year-end.



During the 1st Quarter, staff exercised 193 main line valves.



During the first quarter, staff replaced three blow-off valves.

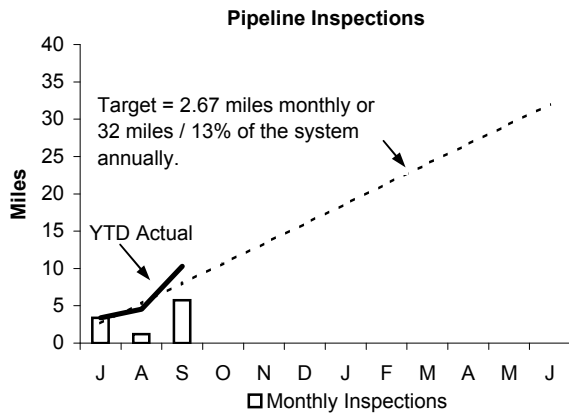


Staff exercised 145 blow-off valves during the 1st Quarter.

Wastewater Pipeline and Structure Inspections and Maintenance

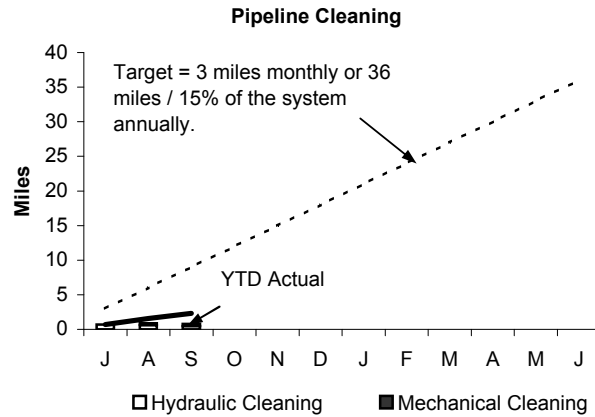
1st Quarter - FY08

Inspections



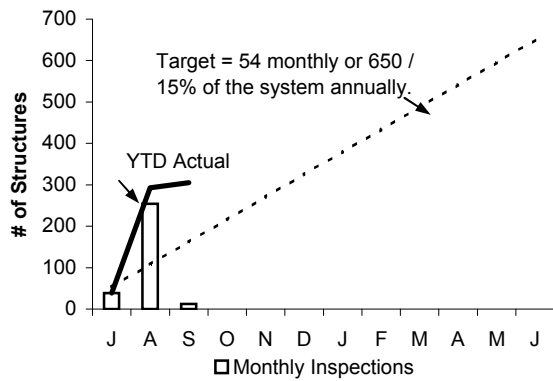
Staff conducted 10.29 miles of internal pipeline inspections this quarter. Staff also inspected 0.94 miles of pipeline in Weymouth, Melrose, Wakefield, Winchester, Canton, Norwood, Lexington and Lawrence/DEP as part of MWRA's Community Assistance Program.

Maintenance



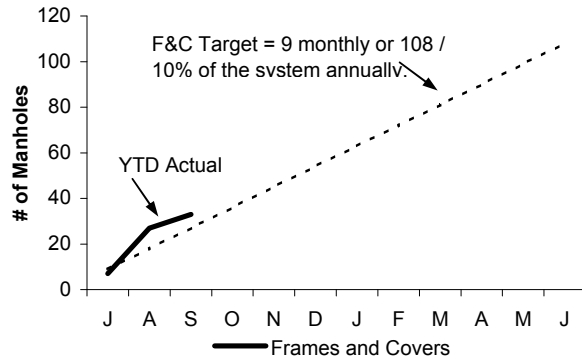
Staff cleaned 2.33 miles of MWRA sewer system and removed 31 cubic yards of grit and debris. As part of the Community Assistance Program, staff also cleaned .24 miles of community sewers and removed 3 cubic yards of debris for Everett and Weymouth.

Structure Inspections



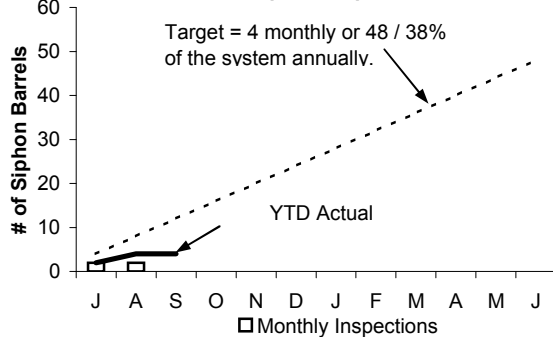
Staff completed 305 structure inspections during the 1st Quarter, including the 12 CSO structures each month.

Manhole Rehabilitation



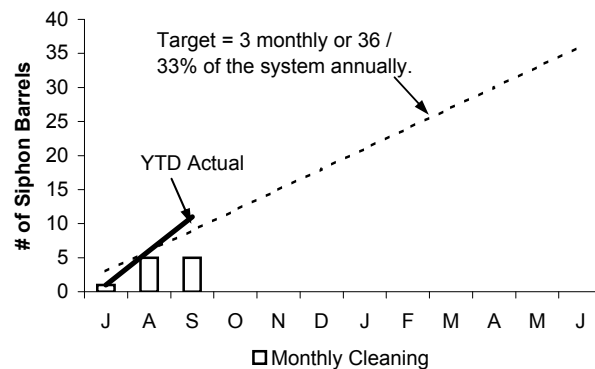
Staff replaced 33 manhole frame and covers during the 1st Quarter; three manhole barrels and one head-house structure were also rehabilitated (the goal is two per month).

Inverted Siphon Inspections



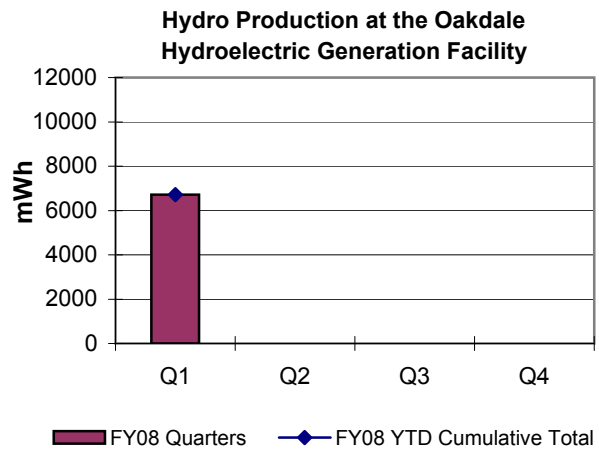
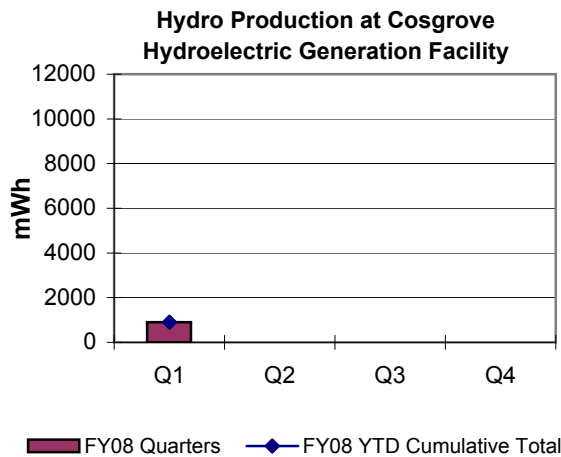
Staff inspected four siphon barrels during the 1st Quarter.

Inverted Siphon Cleaning



Staff cleaned 11 siphon barrels this quarter.

Field Operations Energy Program 1st Quarter- FY08



In the 1st Quarter of FY08, the Cosgrove Hydroelectric Station generated a net of 897 mWh, resulting in revenue of \$50,606. Generation was down from the same quarter last year because of a planned repair of a crest gate, which began in July (and is scheduled to continue through December), that requires a lower elevation in the Wachusett Reservoir. In addition, staff continue to resolve issues with an emergency generator so flows have been kept running through Cosgrove slightly lower than usual, thereby reducing generation capacity.

Energy Program Highlights

MWRA Wind Power Consultant: In the 4th Quarter of 2007, Black & Veatch began work on the wind power consulting services contract. The scope of services requires the Consultant to short-list four MWRA facilities with the highest potential for wind power generation and to perform an in-depth wind power site assessment for each of those locations. Thus far, Black & Veatch has determined that the Nut Island Headworks, the Braintree-Weymouth Intermediate Pump Station (IPS), the Carroll Water Treatment Plant, and the Southborough Facility are the most viable facilities for wind power development. During the 1st Quarter, MWRA submitted design and construction grant applications totaling \$500,000 for Nut Island and the IPS to the Massachusetts Technology Council (MTC) for a single turbine at each location. A grant application for \$40,000 was also submitted for a feasibility study at Norumbega.

John J. Carroll Water Treatment Plant (CWTP) Photovoltaic Feasibility Study: A feasibility study was completed for a project to install photovoltaic (solar) panels at the CWTP to generate electricity. Staff submitted a grant application to MTC to obtain \$250,000 for construction. MTC has not issued any decisions on grant awards but is expected to do so before the end of December 2007.

Loring Road Hydroelectric Generation Feasibility Study: A grant application was submitted to MTC for \$50,000 to conduct a feasibility study for installing a hydroelectric turbine in the Loring Road facility to harness the energy generated when the hydraulic grade line drops approximately 80 feet between Norumbega and Loring Road. MTC's decision is expected by December 31, 2007.

CWTP Energy Audit: An energy audit of the CWTP, in conjunction with NGRID, is being conducted in the 1st and 2nd Quarters of FY08. NGRID is funding 50% of the audit cost. In the preliminary phase, NGRID's Contractor, DMI, Inc., visited the treatment plant, investigated energy usage, and made preliminary recommendations for 10 energy conservation measures. These recommendations were reviewed by Operations staff and the Contractor. DMI is performing a more detailed technical and economic analysis of each measure. MWRA will be under no obligation to accept any of the audit recommendations but any equipment recommended, if implemented, will automatically qualify for the utility rebate program.

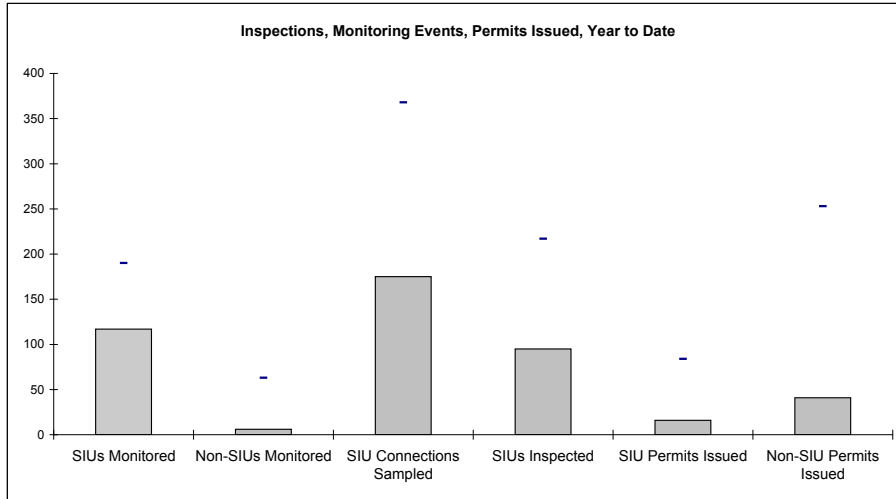
CWTP Lighting Audit: This audit was conducted during the 1st Quarter and staff will proceed to implement the audit recommendations.

DITP Lighting Audit: A multi-phase lighting audit of the Deer Island Treatment Plant commenced in September. DITP staff is working with NSTAR and its contractors to conduct the audit at no cost to MWRA.

Chelsea Facility Energy Audit: An energy audit is being developed for the Chelsea Facility, in conjunction with NSTAR, the Facility's energy provider. NSTAR will fund 50% of the audit cost and will also provide automatic rebates for up to 50% of any energy-saving measure implemented as a result of the audit.

Toxic Reduction and Control

First Quarter - Fiscal Year 2008



EPA Required Monitoring Events

for FY08: 190
YTD: 117

Required Non-SIU Monitoring Events

for FY08: 63
YTD: 6

SIU Connections to be Sampled

For FY08: 368
YTD: 175

EPA Required SIU Inspections

for FY08: 217
YTD: 95

SIU Permits due to Expire

In FY08: 84
YTD: 16

Non-SIU Permits due to Expire

for FY08: 253
YTD: 41

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.

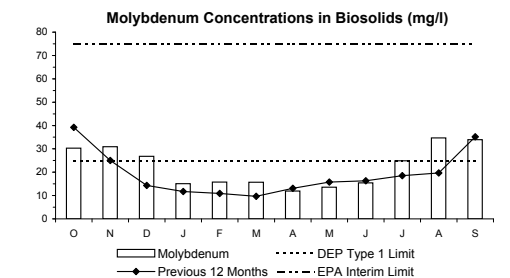
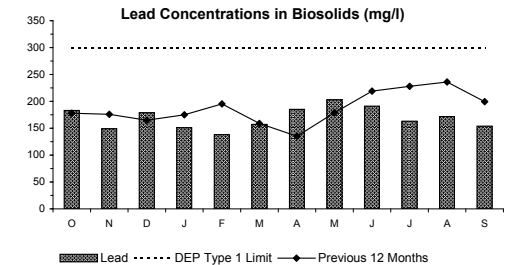
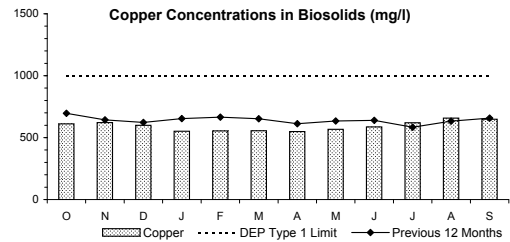
The annual goal is set at the beginning of the fiscal year but it can fluctuate due to the actual number of SIUs at any given time. During the course of the year, some SIUs do not discharge and cannot be monitored. TRAC's monitoring plan requires one additional sampling event for 40% of the SIUs and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

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

	Number of Days to Issue a Permit						Total Permits Issued	
	0 to 120		121 to 180		181 or more		SIU	Non-SIU
	SIU	Non-SIU	SIU	Non-SIU	SIU	Non-SIU		
Jul	0	6	0	1	0	2	0	9
Aug	3	8 *	1	2	0	1	4	11
Sep	6	9	0	2	0	1	6	12
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	90%	72%	10%	16%	0%	13%	10	32

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.

* TRAC also issued 318 Group Permits to printers and photoprocessors in August.



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. TRAC is reassessing its voluntary molybdenum reduction program, which has decreased influent loads significantly since 1995.

Field Operations Highlights

1st Quarter – FY08

Western Water Operations & Maintenance

- Carroll Water Treatment Plant (CWTP): Fuji Electric Corporation of America completed repairs to Ozone Generator 1 last quarter. Work on Ozone Generator 2 began in September. Staff installed a new actuator on Butterfly Valve 4, the main flow control valve into the plant. The new actuator has an optical position feedback device that improved the control loop. The new actuator reduced the total number of movements of the 120-inch valve, which allowed tighter control. The control band was reduced from +/- 4 mgd to +/- 1 mgd. General Electric was on site to work on the PLC for the 13.8-kV switchgear. GE staff re-scaled the oil pressure transmitters, investigated logic discrepancies and replaced the batteries. MWAR staff assisted with the testing of a robotic underwater camera that is being considered for purchase and assisted Quality Assurance staff with sampling both storage tanks at the treatment plant. Staff also assisted with the Department of Environmental Protection's annual sanitary survey at the water treatment plant.
- Cosgrove Intake and Power Station: Staff assisted MWRA's 13.8-kV electrical maintenance contractor with diagnosing an amperage imbalance between phases; a mechanical failure of the tap changer linkage was identified and repaired.
- Wind Turbine Study: Staff assisted the contractor installing two temporary towers, one at the Southborough Facility and one at the Carroll Water Treatment Plant. The towers have monitoring devices that will collect data over the next year to determine the feasibility of installing wind-driven electrical generators at these locations. MWRA staff installed electrical service to both temporary towers.
- Winsor Power Station: Staff completed work on modifying the former UV Pilot Pipe Loop and installing a fixed-orifice sleeve valve in the lower level of the power station. This project provides redundant capability of releasing water to the Swift River. Staff also assisted the designer with flow testing the new sleeve valve.
- Oakdale Power Station: Staff took the hydro turbine off-line at the request of National Grid in September. The utility needed to complete the tie-in for a new service to the Town of Rutland. During this time, MWRA's 69-kV electrical maintenance contractor did an outstanding job completing corrective maintenance at the substation. Staff also began installing equipment to monitor the line/generator power remotely over a SCADA signal.
- Chicopee Valley Aqueduct (CVA): Staff assisted the CVA redundancy contractor with pressure testing and disinfecting the 16-inch line to South Hadley and pressure testing the 30-inch line to Chicopee.
- Quabbin Aqueduct: Staff completed annual dam maintenance at the Shaft 8 facility. The river elevation was lowered to facilitate screen cleaning, Venturi (meter) maintenance and inspection of motor joints on the dam proper.
- Sudbury Aqueduct: Staff from Chelsea's TV Inspection Unit started an inspection and cleaning project at the Rosemary Brook Siphon. Staff also started a graffiti removal project at Waban Arches in Wellesley.
- Clinton Wastewater Treatment Plant: Staff completed Slopemaster and tractor cutting at the treatment plant's landfill site. Staff cut the interior and banks of the cells and cleared the access path to the groundwater monitoring wells.
- Local Assistance: The Town of Needham isolated a storage tank due to water quality concerns; staff assisted the Town with pumping the tank and chlorination.

Metro Water Operations & Maintenance

- Blow-Off Retrofits: Staff completed three blow-off retrofits: Lynn Fells Parkway at Falmouth Street in Saugus, Wigglesworth at Main Street in Malden, and at Belle Isle in Revere. During the work in Revere, an unmarked gas main service was uncovered. The Revere Fire Department responded to handle the situation. The service to a former house that had been torn down and replaced with an apartment building was never removed. The blow-off piping work was then completed as planned.
- Main Line Valve Replacement at Wigglesworth at Main Street in Malden: Water Pipeline staff replaced an existing main line valve at this location in September.

**Metro Water
Operations &
Maintenance
(Continued)**

- Test Pits for PCB Remediation: Water Pipeline staff transported equipment to Wachusett Dam to dig six test pits so that MWRA's Consultant, GZA, could take some soil samples for PCB analysis. The crew received a 40-hour OSHA training course for conducting excavations at contaminated sites.
- Nonantum Road/WASM 14 Sleeve Valve Testing: The 30-day operational test of the sleeve valves ended in August. The valves performed reasonably well and currently remain in service. There remain a few issues to be worked out such as operation during a power failure. A recommendation as to whether or not they remain in service is being developed.
- Needham's Bird Hill Water Tank: Staff assisted the Town of Needham with its response to an open hatch on the Town's Bird's Hill Water Tank.
- Leak Repairs: Work began on the leak repairs on Section 94 on the American Legion Highway in Dorchester and on Section 4 on Walnut Street in Somerville. The Section 94 leak was on the eight-inch blow-off branch valve; the valve was repaired and the road was returned to pre-excavation condition. Travel was restricted to one eastbound lane during the week that this work was performed. The Section 4 leak turned out to be a leak on an abandoned Somerville water service.
- Fore River Staging Area Sludge Line Excavation: Water Pipeline staff continued excavation to investigate a blockage in one of the sludge lines between the Pellet Plant and Deer Island. The work requires extensive jack hammering and concrete removal to expose the buried piping.
- Sewer Repair: In August, Water Pipeline staff repaired a damaged 12-inch sewer main on West Wyoming Street in Melrose in response to a request from Wastewater Operations.
- Manhole Inspections: A combination of Pipeline and Valve staff inspected more than 500 manholes in the Metropolitan water system in response to issues that arose on high speed roadways. No immediate issues were detected and approximately 12 frames and covers were replaced.
- Brattle Court Pump Station Isolation: The Brattle Court Pump Station was completely isolated for one week in September so that the contractor could make necessary piping connections. The Spring Street Pump Station provided all service to the Northern Extra High service area during this week.
- Singletree Water Storage Tank: The Town of Brookline isolated and drained its Singletree Water Storage Tank. MWRA's Reservoir Road Pump Station normally supplies the tank. Meter 157 at the Newton Street Pump Station provides service to this part of Brookline when the Singletree and Reservoir Road are out of service; both have since been returned to service.

**Wastewater
Operations &
Maintenance**

- CSO: The Prison Point Optimization Plan has been ongoing. SCADA upgrades at the facility are in progress and are near completion. For the first time, the diesel engines were operated from the computer terminal during an activation in September. SCADA upgrades at Somerville Marginal and Cottage Farm are ongoing. These upgrades will ensure proficient operation of the facilities and provide real-time data with logging capability.
- Pumping: SCADA upgrades at Alewife, Hayes and DeLauri were completed. SCADA upgrades at the Chelsea Screen House have commenced. These upgrades will allow the capability of monitoring the operation of the facilities and log data from the Operations Control Center (OCC) in Chelsea. A total of 36,000 pounds of activated carbon have been replaced at the Chelsea Screen House, which should reduce odors emanating from the facility.

Technical Inspection

- Staff internally inspected 5.74 miles (30,401 linear feet) of MWRA Sewer Interceptors, 305 structures, and four siphon barrels. The structure inspections, which exceeded the monthly target, were a direct result of an incident involving loose covers on major roadways. While this incident did not involve MWRA structures, an integrity check was performed on all MWRA structures located on roadways to ensure a similar event is avoided.

**Wastewater
Operations &
Maintenance
(Continued)**

- Community Assistance was provided during this quarter to the Towns of Weymouth, Melrose, Wakefield, Canton, Norwood, Winchester, Lexington and the City of Lawrence. Staff inspected a total of .94 miles (4,991 feet) of community lines.
- Maintenance and Inspection staff have focused a considerable amount of time and resources to the Roosevelt School area of Melrose in an effort to prevent or reduce the flooding in this area.

Wastewater Pipeline

- Staff maintained 2.31 miles (12,223 linear feet) of various diameter sewer lines and removed 31 yards of debris. Staff also replaced 33 frames and covers, and rehabilitated three manholes and one headhouse. Staff cleaned 11 siphon barrels in the 1st Quarter.
- Community Assistance was provided to the City of Everett and the Town of Weymouth; staff cleaned .24 miles (1,300 feet) of community pipeline and removed four yards of debris.
- Maintenance staff also assisted in removing, repairing or replacing pumps at Caruso and Alewife Pumping Stations.

TRAC

Emergency Response

- Fuel Oil Spills: TRAC staff responded to two reports of fuel oil spills, one at the Department of Conservation and Recreation Horse Barn in Milton in July, and the other at Gulf Oil Terminal on 281 Eastern Avenue in Chelsea in September. Remediation activities prevented both from releasing oil into MWRA's sanitary sewer system.
- Blue Water: On July 27, TRAC staff received a report from MWRA's OCC that blue water was flowing into the Columbus Park Headworks. Sampling staff responded to collect wastewater samples of the deep-blue-colored water from the headworks channel and submitted them to MWRA's Lab for analysis. Inspection staff surveyed industries whose discharges flows through Columbus Park but were unable to identify the source of the colored water. While the color was seen in a Deer Island grit chamber, it was apparently removed harmlessly through the treatment process.
- Pretreatment Information Management System (PIMS) Contract: TRAC staff met with IPS, the vendor, in July and September. IPS completed a data migration of TRAC IS data to the development system and completed system interface and configuration specifications. Testing of custom modules is planned for October.

Monitoring

- Speen Street Framingham Project: Monitoring staff resumed sampling in August for additional Speen Street wastewater data. This sampling was also conducted last year and the results will be used to evaluate the effectiveness of part of the FES program implementation.
- Spectacle Island: In September, Monitoring staff sampled wastewater from Spectacle Island for the first time at the new sampling site located on Long Island in Boston Harbor. The sampling site was designed in collaboration with MWRA, the Central Artery/Tunnel Project and the City of Boston. The wastewater from Spectacle Island consists of landfill collection leachate and a small amount of sanitary wastewater.
- Permitting-G1 Permit Renewal: In August, TRAC issued 318 Group Permits to companies that perform photo processing and/or printing operations. The new permits are in effect from August 16, 2007 through August 15, 2012.

Compliance/Enforcement:

- Settlement Agreement between TEI Biosciences, Inc. and MWRA: TRAC and TEI Biosciences entered into a Settlement Agreement, effective August 30, 2007, to resolve all issues related to a March 15, 2007 Penalty Assessment Notice (PAN) for violations of MWRA's chloroform limit. The Settlement Agreement requires TEI to pay a \$15,000 administrative penalty and pay stipulated penalties for a period of two years.
- Penalty Assessment Notices: TRAC issued eight PANs totaling \$6,000 to companies that failed to submit the G1 Annual Compliance Report as required by the Group Permit for Photo Processing and Printing Operations (Group Permit). The due date for filing the Compliance Report was April 2, 2007; the penalties ranged from \$500 to \$1,000.

**Metro Equipment
and Facility
Maintenance**

Equipment Maintenance Program

- Nut Island Headworks: One of the tank fill lines for the Fire Pump Building was temporarily repaired to allow half the tank structure to be emptied. The problem began with building settlement breaking both fill and suction lines in opposite sides of the tank. Plumbing staff are now installing both by-pass fill and suction lines, designed by MWRA staff. Installation of a 'temporary' fill line was especially difficult because it was up high above the floor. It included retrofitting a flexible hose through the existing pipe sleeve connecting to the valves and fittings. With half the tank drained, further study and evaluation of the settlement can be conducted.

Predictive Maintenance was performed on all major electrical components by a specialty contractor with oversight by MWRA electrical staff. This initiative falls within the scope of high-voltage maintenance that is conducted every three to five years. This project involved a facility shutdown that was carefully coordinated with Wastewater Operations and Deer Island Primary Ops. Areas of the High Level Sewer were monitored throughout the five-hour shutdown. The equipment check-out identified a potential failure with the main breaker and a follow-up corrective maintenance task was completed to replace the breaker.

- Electrical Projects: Electricians installed new energy-efficient lighting in the boiler room at the Ward Street Headworks. This energy initiative began in the Chelsea Headworks boiler room and continues to be one of several ongoing projects. Many of the lighting fixtures have become obsolete and no longer provide sufficient lighting. Defective lighting is replaced with energy-efficient units. Replacements have been primarily at the three remote headworks facilities and some older stations. All new components for the intercom system at Prison Point were installed with factory replacement parts to restore the system back to original working condition. The electrical control system for the paint booth in the Maintenance Building's Paint Shop was completed and was fully integrated with HVAC controls.
- Service Contract Development Updates: **Instrumentation Maintenance Service, Contract OP-57** – Union Park CSO instrumentation equipment added to the contract under Change Order 2. **Crane Maintenance Service, Contract OP-51** – First load testing of DITP cranes completed; load testing of wastewater transport facilities in progress. PCO approved for the addition of crane equipment located at Union Park CSO, BOS019 and IPS. **New Elevator Service Contract, Contract OP- 85** – Staff finalizing specs. to bid replacement for existing Contract OP-46. **Fuel Storage Tank Maintenance Service, Contract OP-48** – Testing of tank monitoring systems at various facilities is nearing completion. **Air Compressor System Service, Contract OP- 49** – Second quarterly inspections and preventive maintenance of the compressed air systems in progress at various facilities. Renewal of certificates of air vessels being coordinated with FM Global and the contractor. **Fire Alarm and Fire Sprinkler Systems Service, Contract OP-50** – Installation of digital communicators for system monitoring completed at various facilities. Activation of the monitoring service pending availability of the required phone lines. Second quarterly inspections of fire alarm systems in progress. Inspections of sprinkler alarm systems at various facilities are nearing completion. Installation of temporary cable for rewiring of the fire alarm systems components on the lowest level of Nut Island Headworks in progress and expected to be completed by mid-October. **Hydraulic Equipment Maintenance Service, Contract OP-45** – Union Park CSO and BOS019 equipment added to the contract under Change Order 1. Contractor to inspect and evaluate hydraulic cylinders at Chelsea Screen House and repair as necessary. HPU2 at NI being investigated for leaks. Hydraulic cylinders at all four headworks to be removed, sandblasted, recoated and reinstalled. **New Hydraulic Service Contract, Contract OP-79** – Staff finalizing specs. for replacement contract for the existing Contract OP-45 that expires on 1/24/08. New contract will include DITP hydraulic equipment. **Boiler and Water Heater Service, Contract OP-63** – Based on an evaluation of the overall condition of the Prison Point heating boiler, contractor was authorized to proceed with the boiler replacement. Annual boiler and water heater cleanings at wastewater and water facilities are in progress and expected to be completed by the end of October. Change order in place for inclusion of heating boilers located at Union Park CSO.
- Project Developments: **Chelsea Creek Ductwork Repair and Cleaning** – Contract OP-77 to address deficiencies in the existing ductwork to maximize airflow and balancing. In-house design is completed; contract advertised and pre-bid site visit held. **Electrical Testing Service Contract** – Work was completed at both Gillis Pump Station and the Nut Island Headworks. Corrective measures were taken at Nut Island for the main breaker. A future contract is under development to include five additional facilities in FY08.

**Metro Equipment
and Facility
Maintenance
(Continued)**

Grounds/Custodial Maintenance

- Fence Work/Security: Crews cleared and chipped brush and logs for the fence contractor at Shaft 9. Repairs were made on the rolling rear gate at Nut Island; the crew welded brackets so it would operate smoothly without slipping out of alignment. The gate is used for security and is frequently opened and closed manually by staff. Additional steps were taken to increase security at the Fells; bushes were installed to block travel from the assisted living parking lot onto the Fells Reservoir area. Jersey barriers and more fencing will be installed to further prevent entrance to the Fells access road. This project involves MWRA, DCR, State Police, and officials at the local hospital and the long-term care facility.
- Grounds Work: Grounds crews performed additional work at the Fells Reservoir as part of the program for dam clearing beyond the limits of the contractor's tree clearing work in the spring. Crews removed vegetation and cleared overgrown areas along three of the dams and by the gatehouse. The work required a combination of equipment/machinery and a significant amount of handwork. This work is now included under the Building & Grounds Program (to be cleared twice a year). Crews also removed stumps and brush at the Chelsea Headworks. Two dead trees were removed and one was relocated to the Chelsea facility. Clearing work was performed at the Somerville CSO outfall area. Growth along the interior bowl of the Chestnut Hill Reservoir was cut down using the Slopemaster as part of the annual maintenance. Grounds staff trimmed back trees and raised the canopy along the Craddock Bridge and mowed the immediate area around the bridge. Grounds staff cleaned inside the fenced enclosure and perimeter of the Long Island shaft. Crews also performed general clean-up and removed downed tree limbs that fell onto MWRA's fence at the Framingham Pump Station. The trees were on the property of the CSX rail line (commuter rail) while the poles and lines are on the Pump Station side.
- Water Pipeline Support: Staff supported the Pipeline crews by pouring and forming thrust blocks for a project in Malden. Shoring was also installed for pipeline work on the American Legion Highway and in Revere. Section 70 easement clearing was performed by the Grounds Shop.

Facility Maintenance

- Facility Improvements: A trench drain was installed at the bottom of the hopper apron at Ward Street with the assistance of Water Pipeline staff. The rehab. project of the back area is now approximately 70% complete. After additional survey and determining the final location of outside emergency showers, the layout and grading plan can be completed for the rear of the facility, adjacent to both Wentworth and Mass College of Art. New safety hatches were installed at the three headworks, replacing the old aluminum units that became inoperable over the past few years. Masonry staff replaced/restored almost 150 feet of curbing along the pier at Nut Island. The work required temporary fencing, concrete demolition, form work, and pouring of high-strength grout. Embedded in the curb is a large conduit that feeds the pier lighting. Several sections were poured to restore the curbing and seal it from the weather.
- Wastewater Operations & Maintenance Support: Concrete berms were poured around conduits in the truck bay areas at Nut Island that are deteriorating. Temporary decking was installed at the Rosemary Brook Siphon to provide a safe place for Wastewater crews to work
- Fells Reservoir Graffiti Removal: The Fells Reservoir graffiti removal was completed. This project involved the use of a floating platform with graffiti removal equipment, maneuvered around the reservoir with a motorized boat. Graffiti was removed from the face of the rock around the perimeter of the reservoir. MWRA's efforts were acknowledged by the Friends of the Fells. Final touch-ups on handrails were completed at the Craddock Bridge. A deck coating for the handicap ramp will be applied at a later date as a final step in the renovation of the bridge.

**Operations
Support**

Emergency Planning

- Staff continue to participate in an EPA-led initiative to develop Mutual Aid Agreements to expedite emergency response to Hurricane Katrina-type disasters. A draft model agreement for Massachusetts water suppliers was completed in August with input from MWRA staff. Broad circulation of this draft to other Massachusetts utilities is expected in the coming months. Staff plan to brief the Advisory Board on the topic in the next quarter as the model agreement becomes finalized.
- Hurricane response plans have been re-circulated for review and planning continues for a fall emergency exercise.

**Operations
Support
(Continued)**

- Staff submitted a proposal for new DHS grant funding, consisting primarily of additional water quality monitoring equipment and rapid contamination detection analysis equipment. Results of this submission are expected in October.

Operations Engineering

- Staff continued providing support on major capital and in-house projects with significant 1st Quarter activity on the Improvements at Five Water Pump Stations contract, follow-up to dam inspections, Phase 6 Valve Rehabilitation, CVA Redundancy Improvements, Section 22 Redundancy and SCADA Implementation at Wastewater Facilities.
- Field testing of the Nonantum Road Sleeve Valves began in July and was successfully completed in September.
- Staff were able to identify and correct a problem with a valve operator during internal inspection of Nash Hill Tank piping, eliminating a hydraulic restriction.
- Staff supported camera inspection of Walnut Hill Tanks and continued planning for internal inspection of Nash Hill Tank piping.

SCADA

- Staff have been participating in the ongoing construction of SCADA Improvements at Wastewater Facilities and CSOs as part of the first wastewater SCADA construction contract. Through September, controls have been successfully upgraded at many field sites to the point that most site functions are now controllable from the OCC. The second construction contract (SCADA Improvements at Headworks) is advertised and bids are scheduled in October.

Wastewater Metering

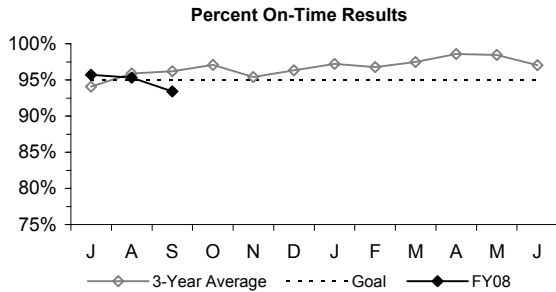
- A field re-visit of problem sites by Hach, the meter manufacturer, concluded in July with a site-by-site list of recommendations being generated, mainly physical improvements in the meter manholes. Staff began implementing the site-specific solutions in August and have been seeing improved data quality in many sites.

Water Quality Assurance

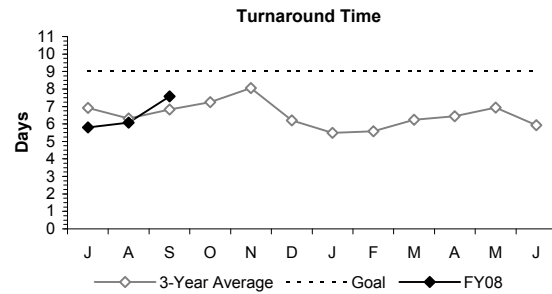
- Staff continued to monitor coliform issues downstream of the CWTP during the summer warm water months. Monitoring in the 1st Quarter focused on tracking coliform re-growth in various plant locations so as to allow treatment process adjustments. Staff expanded sampling to monitor additional locations within CWTP and to monitor effects during treatment process changes.
- Staff prepared data reports and analyses of coliform issues to support review by an Expert Panel that is scheduled to meet in October.
- Staff also helped support a water quality incident at a tank in Needham.

Laboratory Services

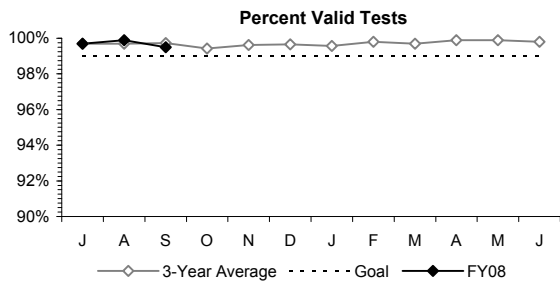
1st Quarter - FY08



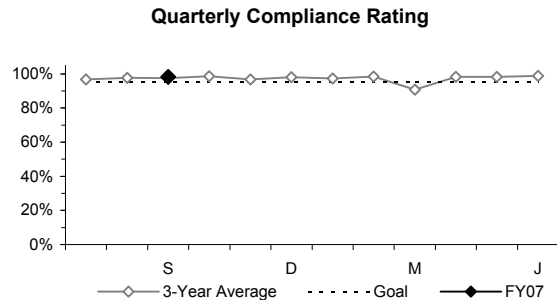
The Percent On-Time measurement was above the 95% goal for two months of the quarter; the Lab fell behind in September, reflecting a busy summer workload.



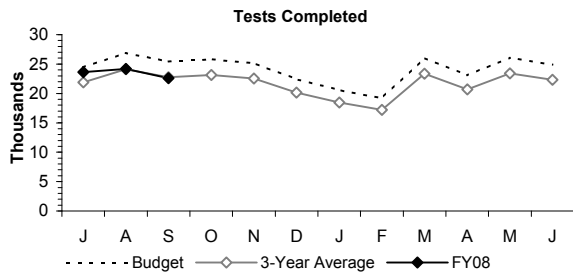
Turnaround Time was faster than the 9-day goal for all three months of the quarter.



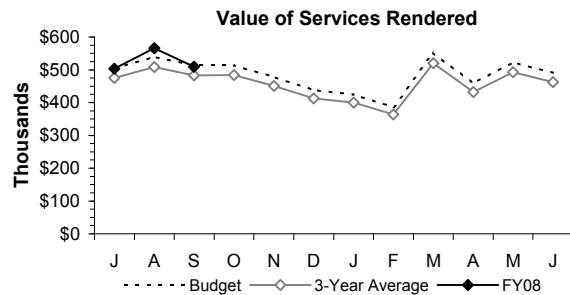
The Percent Valid Tests measurement stayed above the 99% goal for all three months of the quarter.



A September audit on readiness for a DEP certification audit found good compliance with requirements. Quarterly compliance audits are performed in September.



The Tests Completed measurement was below the seasonally-adjusted budget goal each month during the 1st Quarter; the projected workload may have been overly ambitious.



Value of Services Rendered was above or near the seasonally-adjusted budget projection for each

Highlights: A Needham representative expressed gratitude for the assistance provided by the Southborough Lab staff in dealing with a presumptive positive coliform sample. Our paper, "False Cyanide Formation During Drinking Water Sample Preservation and Storage" was accepted for publication in "Environmental Science and Technology".

LIMS: Bids for the new LIMS were received and staff expect to present the award of a contract at the October Board meeting. DLS continues to work with MIS to change to the Total Coliform Rule DEP reporting forms for the November data.

Security: Staff are participating in the decontamination workgroup convened by the Critical Infrastructure Partnership Advisory Council.

Quality Assurance: Achieved acceptable results for all submitted annual proficiency test samples needed for DEP certification.

ENQUAD/DITP/Planning: DITP wastewater samples were submitted to a contract lab for pharmaceuticals and personal care products testing. Testing annual benthic sediment samples from Mass. Bay.

DITP: Replacement of the Admin/Lab roof was completed at the end of August. Some samples were subcontracted to keep up with client testing.

FOD/TRAC: Tested rush samples from Columbus Park and DITP to aid an investigation of "blue water". Testing included rapid screening tests to determine whether the water was a threat to the secondary process, and follow-up testing to help TRAC identify a possible source. Provided rush testing for samples from a discharger that appeared to be in violation of a DEP cease and desist order.

FOD/Water Quality Assurance: Tested numerous TCR "profiling" samples weekly from various locations within CWTP. Tested rush haloacetic acid samples to help understand the effect of pH on disinfection by-product formation. Received DEP certification for the new cyanide method that should allow us to avoid false cyanide hits in our treated drinking water. The quarterly cyanide sample at CWTP was a non-detect. Tested special samples from the CVA intake to investigate increased chlorine demand. Tested rush samples from schools in Reading and Somerville. Tested complaint samples from residences in Belmont, Everett, Marblehead, Nahant, Reading, Somerville, and Stoneham.

Outside Customers: Conducted several special studies on bacteria samples from Fort Point Channel. Performed two days of Charles River monitoring at the request of the Charles River Swim Club in support of its scheduled swim. Tested Lead and Copper Rule and nutrient samples from Reading.

CSO Update

1st Quarter - FY08

North Dorchester Bay Tunnel and Related Facilities: MWRA continued to make considerable progress with construction of the \$151.2 million North Dorchester Bay CSO Storage Tunnel and with design of the related CSO facilities, including the dewatering pump station, force main and remote odor control facility. The construction contractor received the tunnel boring machine (TBM) on September 5, 2007. On-site assembly and testing of the TBM is ongoing to prepare for mining operations. The mining shaft and equipment removal shaft are complete. In addition, the contractor is constructing the CSO and stormwater diversion structures and tunnel drop shafts at existing outfalls and is completing restoration of surfaces at Moakley Park following the installation of storm drains. On the related design contract, MWRA has authorized the consultant to commence final design activities. The 60% design plans are due in October 2007.

East Boston Branch Sewer Relief: In June 2007, after reviewing the Draft Project Design Report for the East Boston Branch Sewer Relief Project, MWRA authorized its design consultant to proceed with final design. Substantial progress has been made since then. MWRA is coordinating its work with ongoing or planned construction projects in East Boston by BWSC, the City of Boston, the Massachusetts Highway Department and Keyspan. MWRA continues to address and assess any effects these other projects may have on the CSO project's construction schedule.

Charlestown BOS019 CSO Storage Conduit: The facility has been on-line since Substantial Completion on March 30, 2007, and is operating as intended. The new facility includes two, 280-foot-long, 10-foot by 17-foot underground concrete storage conduits that provide 670,000 gallons of overflow storage capacity, a pump out facility and an influent gate house. Data from a depth sensor recently installed in an influent chamber to the storage conduit is being used to activate or suspend "dry weather pump" operations at the Prison Point CSO treatment facility. This allows crews to maximize "dry weather pumping" (even during wet weather) and minimize treated discharges to the inner harbor (as part of the Prison Point optimization project) without increasing CSO discharges to the BOS019 storage facility.

Union Park Detention/Treatment Facility: Since MWRA declared the construction contract to be substantially complete on April 27, 2007, the contractor has focused on punch list work items and the contract operator has run the treatment facility and the related BWSC pumping station as intended to meet discharge goals. Two systems are currently being re-evaluated and refined - the chlorine analyzers in automatic mode and the odor control system. Neither of these systems is compromising the performance of the new facility for storage and treatment of CSO flows.

Brookline Connection and Cottage Farm Overflow Chamber Interconnection and Gate Controls: On September 14, 2007, MWRA received the Final Hydraulic Modeling Technical Report and the Final Preliminary Design Report for this project. On August 6, 2007, MWRA authorized its design consultant to proceed with final design. With the 100% design documents scheduled to be completed by October 2007, MWRA plans to initiate discussions with key permitting agencies (Department of Conservation and Recreation, Boston and Cambridge Conservation Commissions, etc.) over the next few months.

Optimization Study of Prison Point CSO Facility: Since submitting the report on the optimization study of the Prison Point CSO facility to EPA and DEP on March 30, 2007, MWRA has implemented the recommendations related to operation of the influent gates to maximize storage and conveyance to Deer Island and minimize discharge of treated CSO flow to the inner harbor. With new depth sensors recently installed in the Charlestown Branch Sewer, MWRA has also begun to implement the recommended procedures for operating the small dry weather pumping station at Prison Point during wet weather. Optimizing the dry weather pump operation is intended to maximize flows to Deer Island while avoiding any increase in overflows to the BOS019 CSO storage conduit located upstream of the dry weather discharge connection to the Charlestown Branch Sewer.

Over the next several months, MWRA will continue to improve operations at Prison Point in accordance with the recommended plan and monitor the effects of the new operations on treated discharge volume, dry weather pump discharge volume, and the avoidance of any increase in untreated CSO discharges in hydraulically related systems.

South Dorchester Bay Sewer Separation: South Dorchester Bay sewer separation is intended to eliminate CSO flows to the Commercial Point and Fox Point CSO treatment facilities by the Schedule Seven milestone of November 2008, allowing MWRA to decommission the facilities. All nine BWSC separation contracts have been completed, resulting in the installation of a total of 135,351 linear feet of new storm drain. BWSC continues to perform downspout disconnection work to increase the amount of stormwater inflow removed from

the sewer system. An ongoing downspout contract is approximately 89% complete and a final downspout contract is scheduled to commence soon. Overall, BWSC has completed the removal of approximately 67% of the downspouts slated to be disconnected. BWSC also continues to perform final paving to restore disturbed areas. The third and final paving contract commenced in October 2005 and will continue through November 2007.

As reported last quarter, BWSC has closed all regulators tributary to MWRA's Fox Point and Commercial Point CSO treatment facilities, effectively eliminating CSO overflows to South Dorchester Bay. BWSC has continued to evaluate system hydraulic conditions during wet weather to determine whether the performance of the Dorchester system, including control of system flooding, is consistent with predicted levels. The results of the flow monitoring and hydraulic analysis program were expected to be available this past quarter but are now expected to be available sometime this fall. Assuming the results confirm that the regulators can remain closed permanently, MWRA plans to request permission from DEP and EPA to cease treatment operations at Commercial Point and Fox Point.

Stony Brook Sewer Separation: Stony Brook sewer separation is intended to minimize CSO discharges into BWSC's Stony Brook Conduit, which drains to the Charles River Basin. BWSC has completed construction of all four separation contracts, resulting in the installation of a total of 73,313 linear feet of new storm drains to complete this project. As reported earlier, downspout disconnection work in the Stony Brook project area is complete. A final paving contract to restore disturbed areas is still underway and will continue through November 2007.

BWSC has conducted flow monitoring of the Stony Brook sewer system and anticipated soon issuing a report that would summarize its evaluation of the data and its conclusions on CSO control performance. However, a second round of flow monitoring is needed due to inconclusive results in one tributary area and the discovery of a previously unknown regulator, which will be metered to determine CSO activation frequency and volume or inactive status.

Fort Point Channel Sewer Separation and System Optimization: Since attaining Substantial Completion of the project on March 30, 2007, BWSC has been conducting flow monitoring to measure the CSO control performance of the separated system. The project was intended to reduce CSO discharges to Fort Point Channel at Outfalls BOS072 and BOS073 from nine activations totaling three million gallons of untreated CSO in a typical year to zero discharges in a typical year. BWSC installed 4,550 linear feet of new storm drain and completed weir raising and floatables controls at the related CSO regulators.

Morrissey Boulevard Storm Drain: A component of the North Dorchester Bay CSO control plan, the Morrissey Boulevard Storm Drain project is intended to direct some of the North Dorchester Bay stormwater away from MWRA's recommended CSO Storage Tunnel in storms greater than the 1-year design storm (in smaller storms, the stormwater will be diverted to the North Dorchester Bay CSO Storage Tunnel). As previously reported, BWSC issued a Notice to Proceed for the first of two planned construction contracts for the project in December 2006, in compliance with Schedule Seven. The first contract is substantially complete; it involved construction of the diversion chamber that will allow stormwater flows now discharging to the South Boston beaches at Outfall BOS087 to be diverted to Savin Hill Cove once the CSO Storage Tunnel and remaining Morrissey Boulevard drain are complete. BWSC recently awarded a second, much larger, construction contract and held a pre-construction meeting for this contract on September 5, 2007.

Reserved Channel Sewer Separation: This project is intended to minimize CSO discharges to the Reserved Channel by separating combined sewer systems in adjacent areas of South Boston. Implementation of the recommended sewer separation plan will reduce the number of overflows to the Reserved Channel from as many as 37 to 3, in a typical year. BWSC is continuing with the data collection phase, including field investigations, internal pipeline inspections, building inspections, geotechnical investigations and flow metering. The project schedule calls for submission of the preliminary design report by January 2008. Final design will commence immediately thereafter, with start of construction by May 2009.

Bulfinch Triangle Sewer Separation: The goal of the Bulfinch Triangle Sewer Separation Project is to minimize CSO discharges to the Charles River by separating combined sewer systems in the area of Boston roughly bounded by North Station, Haymarket Station, North Washington Street, Cambridge Street and immediate environs. The recommended sewer separation plan is intended to reduce the number of overflows to the Charles River, reduce overflows to the Prison Point CSO facility and close Outfall BOS049. BWSC is currently performing field investigations, building inspections, survey work and public outreach. Additional inspection work was necessary prior to finalizing the Preliminary Design Report, which BWSC had issued in draft form last April. The final Preliminary Design Report is due soon and it will include a detailed cost estimate.

Brookline Sewer Separation: This project will separate sewers in several areas of Brookline, totaling 72 acres, where there are remaining combined sewers tributary to MWRA's Charles River Valley Sewer. The project is intended to reduce discharges to the Charles River from the Cottage Farm facility. The Project was originally split into two sections, Beacon Street area and Boylston Street area, to coordinate with MassHighway's reconstruction of Beacon Street. Preliminary and final design of the Beacon Street area was to be conducted first. However, MassHighway accelerated its construction schedule. Therefore, the start of construction of sewer separation in the Beacon Street area could not meet MassHighway's schedule (this does not compromise court schedule compliance). Brookline is now planning one construction contract and expects to issue a revised project schedule soon. Field investigations and flow monitoring are ongoing. Brookline has completed the survey work, utility research and preliminary storm drain layout in the Beacon Street area. Verification of sewer and storm drain service connections, hazardous materials assessments and geotechnical investigations are ongoing.

Cambridge/Alewife Brook Sewer Separation: The City of Cambridge was unable to meet the recent milestones for commencement of construction of the CAM400 manhole separation project and the CAM004 stormwater outfall and detention basin project, due to the ongoing wetlands permit appeal. Other design and construction phases are also delayed as much as 15 months beyond court milestones for this reason.

A portion of the Cambridge/Alewife Brook Sewer Separation Project will be implemented by MWRA. The work involves installation of an overflow control gate and floatables control at Outfall MWR003 and hydraulic relief of an MWRA siphon near Rindge Avenue. Due to delays associated with Cambridge's Contract 12, MWRA has revised its schedule for the MWR003 improvements and Rindge Avenue Siphon. MWRA now plans to commence design by July 2010.

Region-wide Floatables Control: Several years ago, MWRA and BWSC completed work to control floatables in CSO discharges from the outfalls they own and operate, with the exception of floatables control at MWRA Outfall MWR003, discussed above under "Cambridge/Alewife Brook Sewer Separation."

Cambridge Floatables Control: Floatables control will be installed by Cambridge at four Cambridge outfalls, as well as one Somerville outfall, along Alewife Brook as part of the Cambridge/Alewife Brook Sewer Separation Project. These controls were included in the various regulatory filings on the Alewife Brook project and the Alewife Brook/Upper Mystic River Variance. As previously reported, Cambridge has completed floatables control at one of these locations, Outfall CAM401A. Design work for the other outfalls along Alewife Brook is on hold pending resolution of the Contract 12 wetlands appeal. With respect to Charles River floatables control, for the two CSO outfalls it owns and operates (CAM007 and CAM017), Cambridge has awarded the construction contract and plans to commence construction later this month. Construction is scheduled to be completed by December 2007, in compliance with Schedule Seven. In fall 2006, Cambridge temporarily closed two other CSO outfalls (CAM009 and CAM011) on the Charles River that were previously slated for floatables control. Cambridge intends to monitor system conditions near them over the next two years to determine whether they can be permanently closed without adverse hydraulic effect.

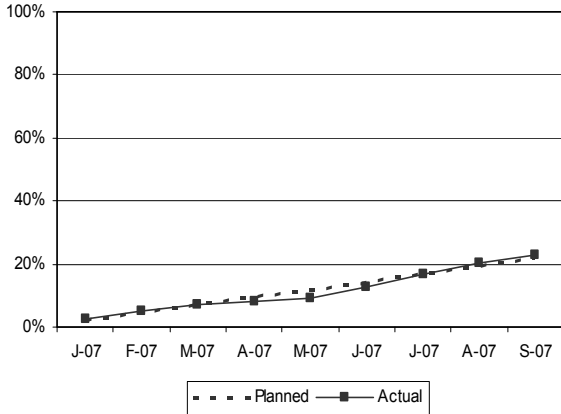
CONSTRUCTION PROGRAMS

Projects In Construction - 1

September 2007

(Progress Percentages based on Construction Expenditures)

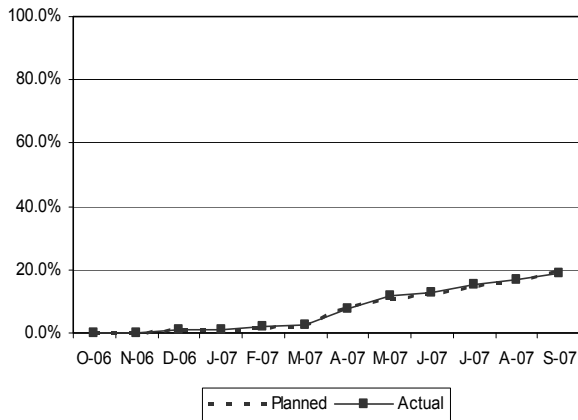
Blue Hills Covered Storage Design Build Project
Progress - September 2007



Project Summary: This project includes of a 20 million gallon covered storage facility at the Blue Hills Reservation, providing sufficient distribution storage to the communities of MWRA's Southern High Storage Area.

Status and Issues: During September, the contractor continued operating the rock crusher to produce structural fill from on and off site materials. The contractor installed a layer of filter fabric over the top of the finished drainage aggregate layer on both tanks, then completed placing structural fill for the tank base slabs and valve vault. On the outside perimeter ring for Tank 2, the contractor began the installation of the concrete forms, rebar and concrete. The contractor also completed planting the 10,000 square feet area of Vegetated Wetland.

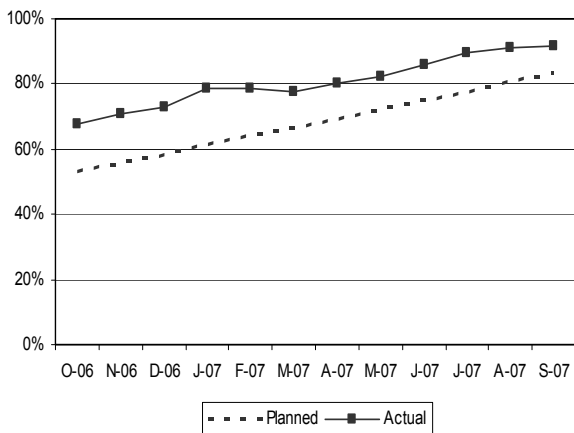
North Dorchester Bay CSO Tunnel/Shafts
Spending - September 2007



Project Summary: Construction of 10,872 LF of 17-ft diameter segment lined storage tunnel with 7 diversion structure/drop shafts and associated sewer and drainage separation pipework.

Status and Issues: During September, the contractor received and began assembly of the TBM. The contractor mined three feet of the tunnel to prepare for TBM alignment and placement. The TBM drill head, screw auger and three shields were dropped in the shaft and assembled. The trailing gear frames and utility interconnections were energized to the gear transformers. The contractor continued assembly of the Grout Plant and NStar completed their work on the TBM power supply. At both the CSO-085 and -086 shafts, the contractor continued diversion structure fitout and inter-connections and installed the drop shaft. At -086 the contractor finished reconstruction of the athletic fields. At COS-087 the contractor installed the receiving shaft construction slab.

Upper Neponset Valley Sewer
Progress - September 2007



Project Summary: This contract will provide 16,500 LF of gravity sewer, installed by cut/cover and pipe jacking along the VFW Parkway.

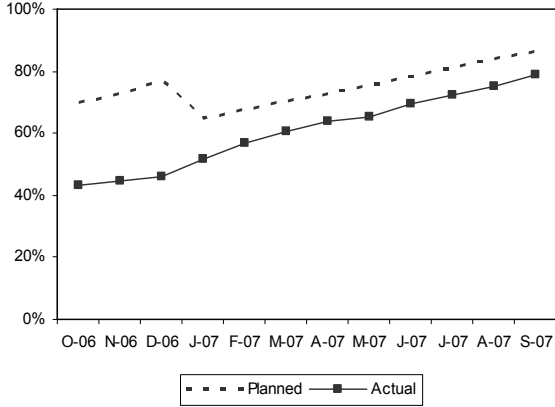
Status and Issues: With the flow through the old interceptor being diverted under contract 6629, the contractor completed the Dedham connections. The Gardner Street and Charles Park Road local sewers were also completed. Resetting of curbing along VFW parkway continued. Expected billings for month will be approximately \$150,000.

Projects In Construction - 2

September 2007

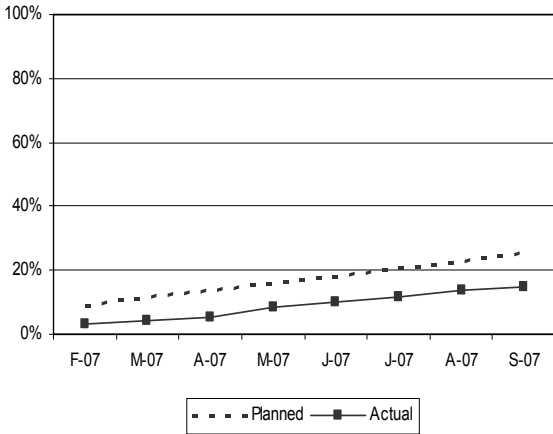
(Progress Percentages based on Construction Expenditures)

BW Replacement Pump Station
Progress - September 2007



In September, the contractor placed concrete fill in the wet wells and grinder areas, installed structural steel at the attic level, and received delivery of the boiler and air handling units. The installation of the steel deck and HVAC ductwork reached 50% completion, while installation of the 24" Raw Waste Water piping and supports in the basement continued. The September invoice is expected to be approximately \$625,000 or 3.6% of the adjusted contract price. The National Grid has indicated changes to the primary feeders are required and will not perform any new work on MWRA property without an easement. The new service will be routed down Jewett Street. National Grid has started the utility work required for the primary service using Jewett St. The contractor has received the design for service on MWRA property. The new services needs to be activated by the end of the year.

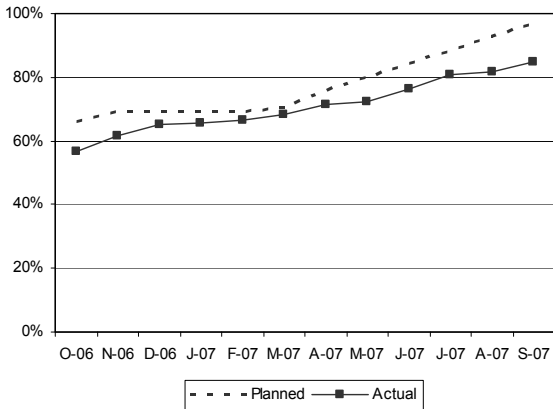
Rehabilitation of Water Pumping Stations
Progress - September 2007



Project Summary: This work provides rehabilitation of a series of water pump stations. At the present time, Brattle Court and Hyde Park are the focus of work.

Status and Issues: At Brattle Court, the contractor began installation of the interior water piping and continued installation of the mechanical piping. At Hyde Park, the contractor continued installation of new exterior water lines and associated materials related to Section 94. Demolition of the old equipment pads was completed. At Reservoir Road the contractor began working on the copper roof.

Chicopee Valley Aqueduct Pipeline Redundancy Project
Progress - September 2007



Project Summary: This project includes construction of redundant pipeline improvements in the Chicopee Valley, providing alternate water supply to the communities of Chicopee, South Hadley Fire District #1 and Wilbraham.

Status and Issues: At the Rte. 21 valve chamber, work continued on the valve chamber piping, waterproofing and cast-in-place concrete. Hydraulic testing and disinfection of the new 30" Chicopee pipeline was completed. The contractor continued flushing, testing and disinfection of the new 20" Wilbraham pipe. The radio telemetry equipment for the Mt. Minechoag location was delivered. Modifications and re-roofing of the Bondsville facility were completed. Expected billings for month will be approximately \$196,000.

CIP Expenditures September 2007

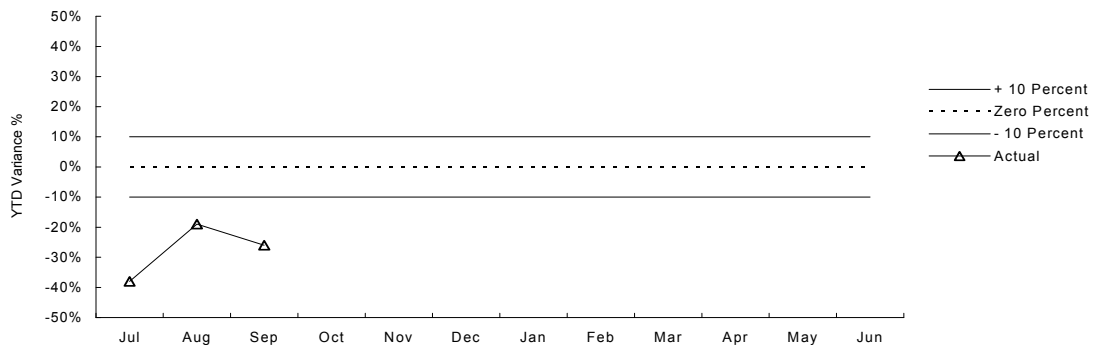
Accurate projections of CIP spending are one measure of effective project management and are important to ensuring that funds are available to support MWRA's capital program.

FY08 Capital Improvement Program Expenditure Variances through September by Program (\$000)				
Program	FY08 Budget Through September	FY08 Actual Through September	Variance Amount	Variance Percent
Wastewater	34,341	28,789	(5,552)	-16%
Waterworks	14,836	7,873	(6,963)	-46%
Business and Operations Support	1,530	415	(1,115)	-72%
Total	\$50,707	\$37,077	(\$13,630)	-26%

Underspending through September within Wastewater is primarily attributable to the North Dorchester Bay Project delay with an installment payment on the Tunnel Boring Machine. Underspending within Waterworks is primarily attributable to the community repayments as part of the Local Water Pipeline Improvement Loan Program.

CIP Expenditure Variance

Total FY08 CIP Budget of \$227,943,000.

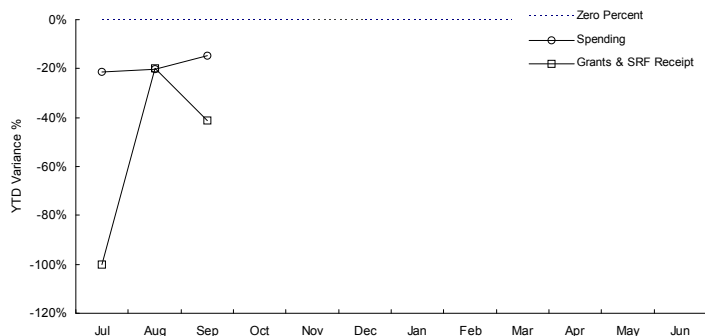


Construction Fund Management

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 9/29/07	\$100 million
Unused capacity under the debt cap:	\$529 million
Estimated date for exhausting construction fund without new borrowing:	Mar-08
Estimated date for debt cap increase to support new borrowing:	FY2009
Commercial paper outstanding:	\$89 million
Commercial paper capacity:	\$350 million
Budgeted FY08 capital spending*:	\$206 million
Projected FY08 grant and SRF receipt:	\$83 million

YTD Construction Fund Variances



* Cash based spending is discounted for construction retainage.

DRINKING WATER QUALITY AND SUPPLY

Source Water – Microbial Results

1st Quarter - FY08

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 requires that no more than 10% of source water samples prior to disinfection over any six-month period 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. MWRA met the six-month running average standard for fecal coliform continuously at this location during the past year.

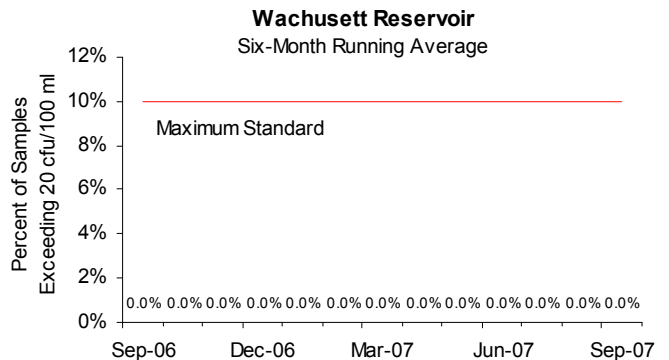
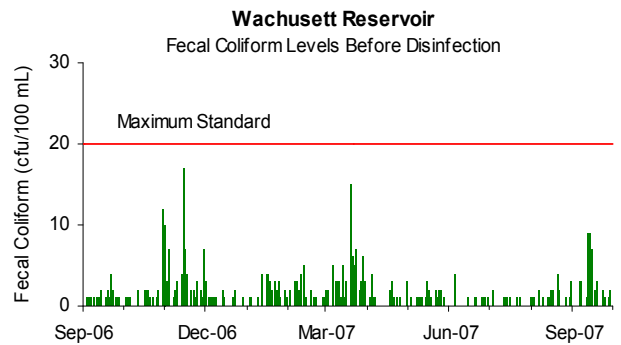
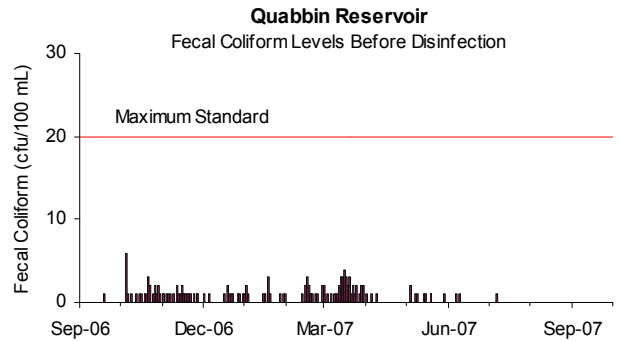
All samples collected during the 1st Quarter were below 20 cfu/100ml. For the current six-month period, 0.0% of the samples exceeded a count of 20 cfu/100ml.

Sample Site: Wachusett Reservoir

Wachusett Reservoir water is sampled before it enters the MetroWest/Metropolitan Boston systems at the CWTP's raw water tap in Marlborough.

Fecal coliform levels tend to increase during the winter because, when water bodies near Wachusett ice over, waterfowl seek open water. Many roost at Wachusett, which tends to freeze later in the year than smaller ponds nearby. DCR has an active bird harassment program to move the birds away from the intake area. Sporadic bird observations were performed in July and August. The program was fully implemented with constant bird monitoring (Monday through Friday) on August 27 due to increased fecal counts.

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.



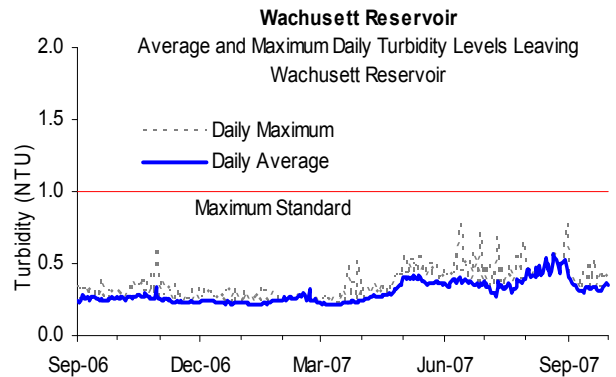
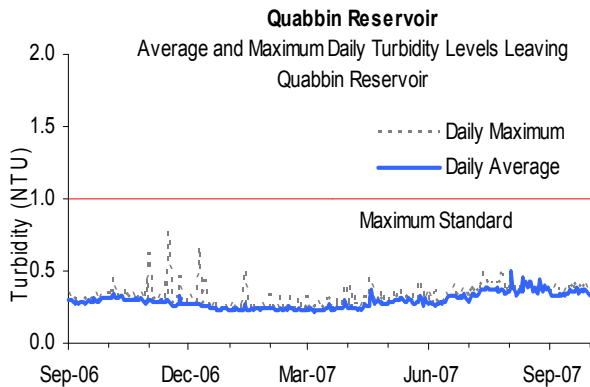
Source Water – Turbidity

1st Quarter - FY08

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 treatment. 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 and Wachusett were within DEP standards for the quarter.

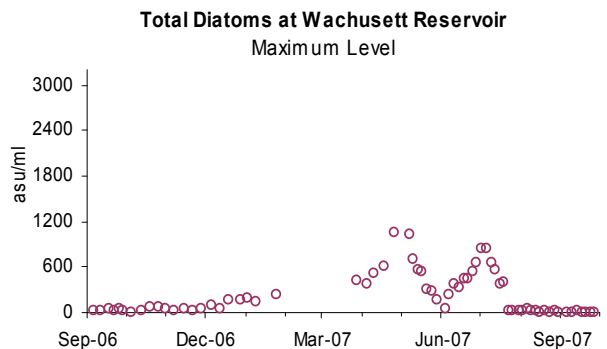
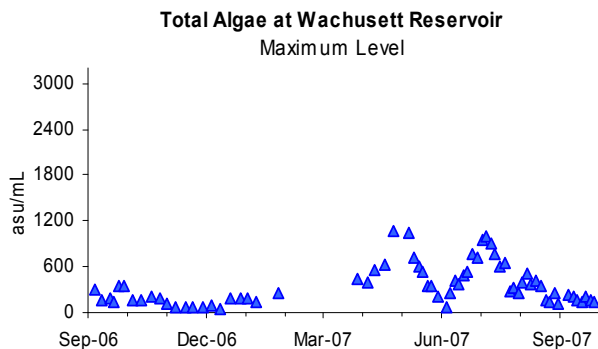


Source Water – Algae

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 that more frequent changing of the filters is needed. Diatom levels are currently low.

Algal levels were low for the quarter.



Treated Water – Disinfection Effectiveness

1st Quarter - FY08

Background

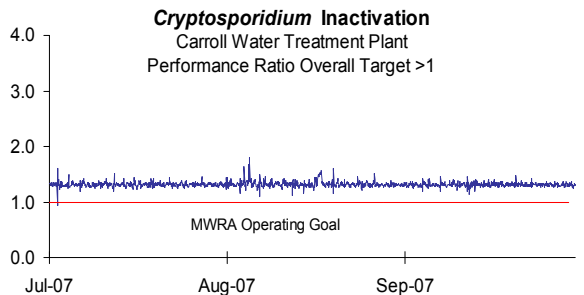
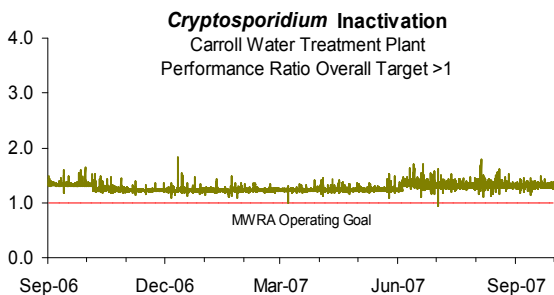
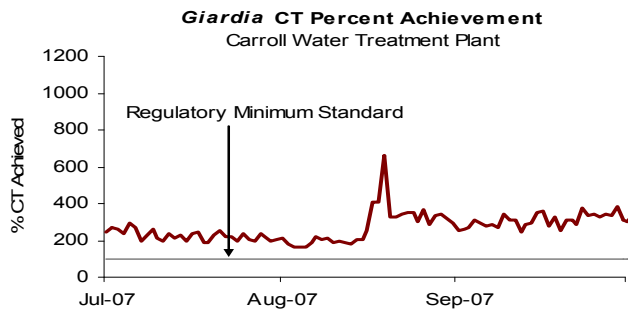
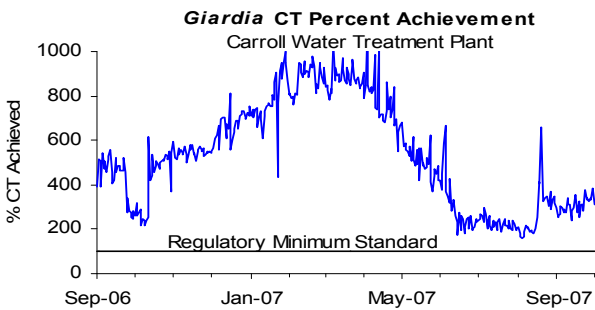
With the activation of the Carroll Water Treatment Plant (CWTP), MWRA now reports on both regulatory required 99.9% inactivation for *Giardia*, and its voluntary operating goal of 99% inactivation for *Cryptosporidium*. MWRA calculates hourly CT inactivation rates and reports daily CT inactivation rates at maximum flow, as specified by EPA regulations. The concentration (C) of the disinfectant over time (T) yields a measure of the effectiveness of disinfection. CT achievement for *Giardia* assures CT achievement for viruses, which have a lower CT requirement. The required CT for ozonated water varies with water temperature.

Wachusett Reservoir – MetroWest/Metro Boston Supply:

To avoid confusion with the 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. PR was maintained above 1 at all times the plant was providing water into the distribution system. CT calculation for *Giardia* is conservative; subsequently, more inactivation occurs than is being reported. Compliance with the *Giardia* standard is expressed as percent of required CT achieved; 100% is the minimum allowed.

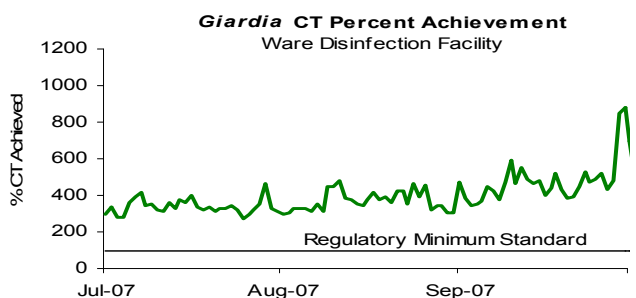
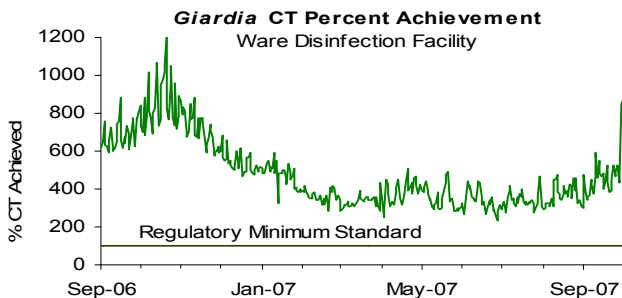
- Ozone Generator 1 (out of 4) had been offline since 5/30 for maintenance and was placed back into service on 7/2. The ozone concentration came up very slowly in this generator resulting in the PR dropping below 1.0 for about one half hour. PR for cryptosporidium activation is a “voluntary” target and it is MWRA’s operational goal to meet this during each hour of the day. The lowest hourly average was 0.9 (not during max flow). *Giardia* CT was 194% at this time, well above the regulatory requirement. Ozone was added to all contactors at all times during this event.

- Giardia* CT was met each day this quarter. Ozone dose at the CWTP varied between 1.8 to 3.4 mg/L for the quarter.



Quabbin Reservoir at Ware Disinfection Facility (CVA Supply):

Chlorine dose remained at 1.3 mg/L. CT was met each day this quarter, as well as every day for the last fiscal year.



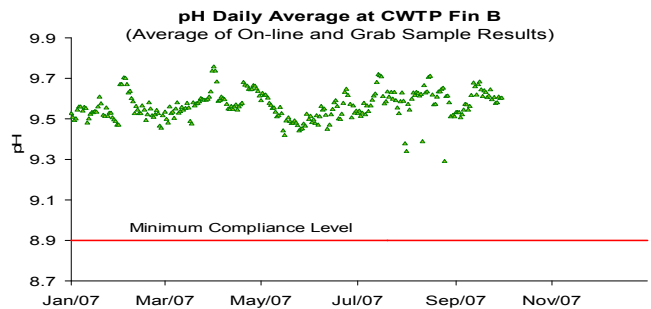
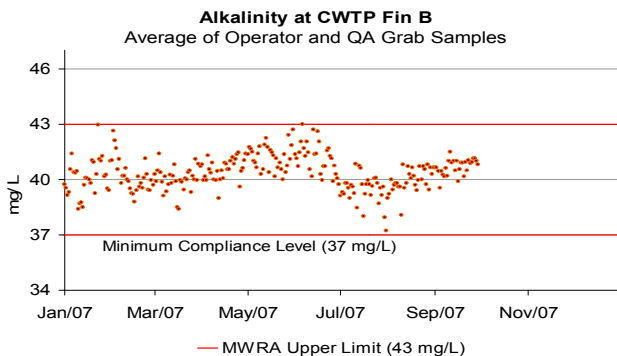
Treated Water – pH and Alkalinity Compliance

1st Quarter - FY08

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's Fin B site have a minimum compliance level of 8.9 for pH and 37 mg/L for alkalinity. Samples from 27 distribution system taps have a minimum compliance level of 8.8 for pH and 37 mg/L for alkalinity. For no more than nine days in a six-month period may results be below these levels. Quality Assurance staff and Operators test pH and alkalinity daily at the CWTP's Fin B site. Distribution system samples are collected in March, June, September, and December.

On August 1 and 11, soda ash was temporarily shut down to test lower pH levels on disinfection effectiveness. This resulted in low alkalinity values. During these temporary shut downs, CWTP's Fin B and Fin A data were averaged (represents what is actually entering local systems) and alkalinity met DEP limits.

Distribution system samples were collected on September 23, 2007; sample pH ranged from 9.2 to 9.7 and alkalinity ranged from 41 to 44 mg/L. No sample results were below DEP limits for the 1st Quarter.



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

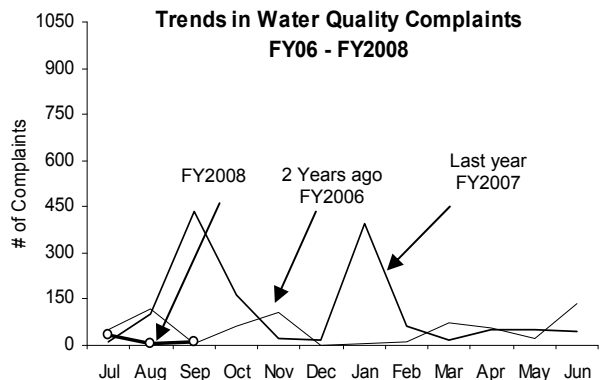
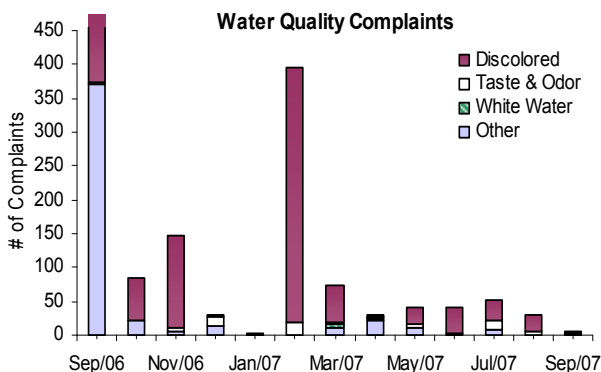
Background

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. When nuisance algae bloom, such as *Synura* or *Anabaena*, MWRA treats the reservoirs with copper sulfate, an algacide.

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

Outcome

Communities reported 53 complaints during the quarter compared to 547 complaints for 1st Quarter of FY07. Of these, 32 were "discolored water" complaints, including 20 in Marlboro due to a local water main break; 12 were "taste and odor"; and 9 were "other" complaints.



Bacteria & Chlorine Residual Results for Communities in MWRA Testing Program

1st Quarter - FY08

While all communities collect bacteria samples for the Total Coliform Rule (TCR), 38 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 likely bacterial 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. MWRA considers a disinfectant residual of 0.2 mg/L a minimum target level at all points in the distribution system.

Highlights

In the 1st Quarter, one of the 5,513 samples (0.02% system-wide) submitted to MWRA labs for analysis tested positive for coliforms. Twenty of 2,200 (0.73%) MWRA samples tested positive for confirmed total coliform. No sample tested positive for *E. coli*. *In July, Weston did not violate the TCR as only one sample was positive in its system. However, due to an MWRA error, Weston did not collect the required repeat samples resulting in a monitoring violation. All other samples collected during the month of July were free of coliform. All 39 systems that submitted chlorine residual data maintained an average disinfectant residual of at least 0.2 mg/L. Only 2.3% of the system samples had 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	166	0 (0%)	0.0%		0.03	1.56
BELMONT	104	0 (0%)	0.0%		0.13	1.63
BOSTON	728	0 (0%)	0.0%		0.66	2.16
BROOKLINE	221	0 (0%)	0.0%		0.49	2.18
CHELSEA	130	0 (0%)	0.0%		0.96	1.92
DEER ISLAND	52	0 (0%)	0.0%		0.88	1.67
EVERETT	130	0 (0%)	0.0%		0.40	0.87
FRAMINGHAM	216	0 (0%)	0.0%		0.29	2.11
LEXINGTON	115	0 (0%)	0.0%		0.65	2.32
LYNNFIELD	18	0 (0%)	0.0%		0.34	0.97
MALDEN	195	0 (0%)	0.0%		1.14	1.26
MARBLEHEAD	72	0 (0%)	0.0%		0.29	1.90
MARLBOROUGH (b)	158	0 (0%)	0.0%		0.59	2.15
MEDFORD	221	0 (0%)	0.0%		0.48	1.79
MELROSE	117	0 (0%)	0.0%		0.03	0.82
MILTON	96	0 (0%)	0.0%		0.91	1.75
NAHANT	30	0 (0%)	0.0%		0.00	1.33
NEEDHAM (b)	137	0 (0%)	0.0%		0.03	0.93
NEWTON	276	0 (0%)	0.0%		0.25	1.95
NORTHBOROUGH	48	0 (0%)	0.0%		0.10	1.03
NORWOOD	108	0 (0%)	0.0%		0.01	1.40
QUINCY	299	0 (0%)	0.0%		0.06	1.74
READING	130	0 (0%)	0.0%		0.19	1.68
REVERE	169	0 (0%)	0.0%		1.01	1.72
SAUGUS	104	0 (0%)	0.0%		1.21	2.04
SOMERVILLE	262	0 (0%)	0.0%		0.04	1.84
SOUTH HADLEY FD1 (c)	40	0 (0%)	0.0%		0.06	0.31
SOUTHBOROUGH	30	0 (0%)	0.0%		0.20	1.75
STONEHAM	91	0 (0%)	0.0%		0.95	2.18
SWAMPSCOTT	54	0 (0%)	0.0%		0.25	1.25
WAKEFIELD (b)	143	0 (0%)	0.0%		0.29	1.47
WALTHAM	216	0 (0%)	0.0%		0.11	1.83
WATERTOWN	130	0 (0%)	0.0%		0.25	1.72
WELLESLEY (b)	106	0 (0%)	0.0%		0.11	0.89
WESTBORO HOSPITAL	20	0 (0%)	0.0%		0.13	1.67
WESTON	48	1 (2.08%)	0.0%	Yes*	0.14	2.03
WINCHESTER (b)	65	0 (0%)	0.0%		0.30	1.31
WINTHROP	74	0 (0%)	0.0%		0.28	1.43
WOBURN (b)	194	0 (0%)	0.0%		0.20	0.95
Total:	5513	1(0.02)%				
MASS. WATER RESOURCES AUTHORITY (d)	2200	20 (0.91%)	0.00%		0.05	2.05

(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.

* See text above table. Weston had a monitoring violation because MWRA failed to notify the water department to collect repeat samples.

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

1st Quarter - FY08

Background

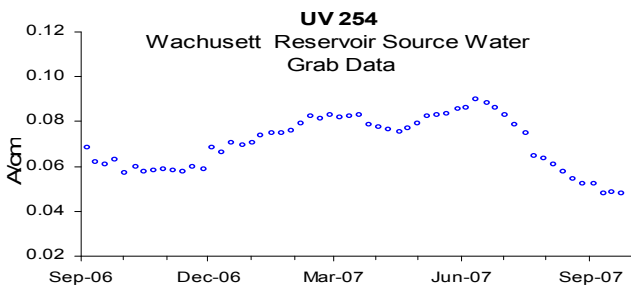
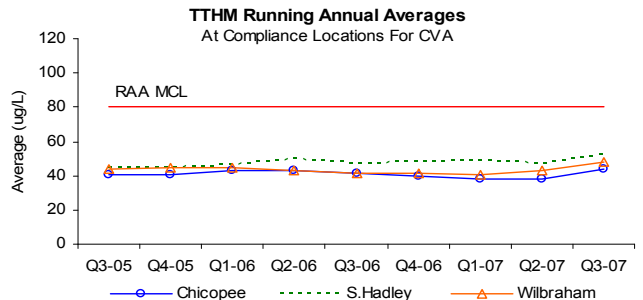
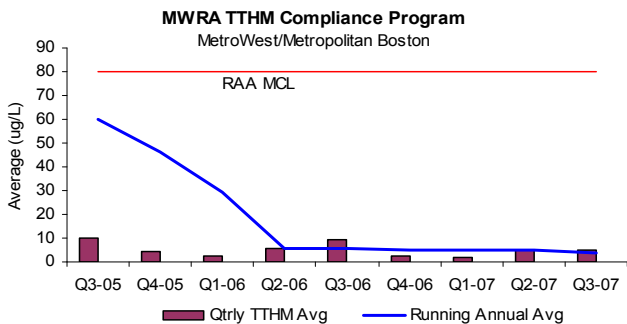
Total Trihalomethanes (TTHMs) are by-products of disinfection treatment with chlorine. Chlorination levels, the presence of organic precursors (measured by UV absorbance), pH levels, the contact time of water with chemicals used for disinfection, and temperature, all affect TTHM levels. TTHMs are of concern due to their potential adverse health effects at high levels. EPA's running annual average (RAA) standard is 80 ug/L. Haloacetic Acids (HAAs) are also regulated (RAA is 60 ug/L) but compliance is not of significant concern for MWRA's system (data not shown). The switch from chlorine to ozone for primary disinfection and the consolidation of treatment has lowered DBP formation and made results more uniform. DEP has approved consolidating MetroWest/Metropolitan Boston programs since MWRA now provides fully treated water to both. This change was implemented in July 2005. DEP requires that compliance samples be collected quarterly. MWRA samples more frequently at some locations. 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 the water 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. There were only two occasions when bromate was detected, and staff now believe this was due to a shipment of sodium hypochlorite that contained high bromate. We do not expect bromate to be an issue for MWRA and have therefore dropped the chart from this page.

Outcome

The running annual average for TTHMs and HAA5s at compliance locations (represented as the line in the top two graphs below) remained below current standards. HAA5 and TTHM levels at all sampling locations for the MetroWest/Metropolitan Boston communities have declined dramatically since August 2005 following activation of the CWTP, which uses ozone rather than chlorine for primary disinfection. The RAA for TTHMs = 3.7 ug/L. CVA's DBP levels continue to be below current standards. UV-254 levels are currently around 0.05 A/cm. The quarterly results for bromate did not exceed the standard and the RAA for Bromate = 0.0 ug/L.



Water Supply and Source Water Management

1st Quarter - FY08

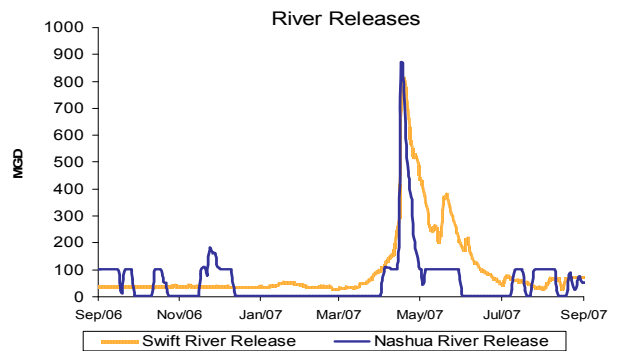
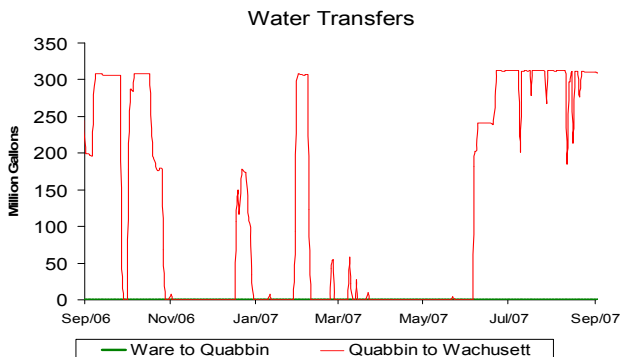
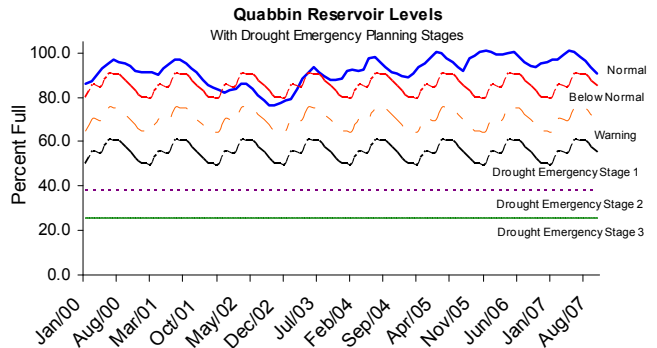
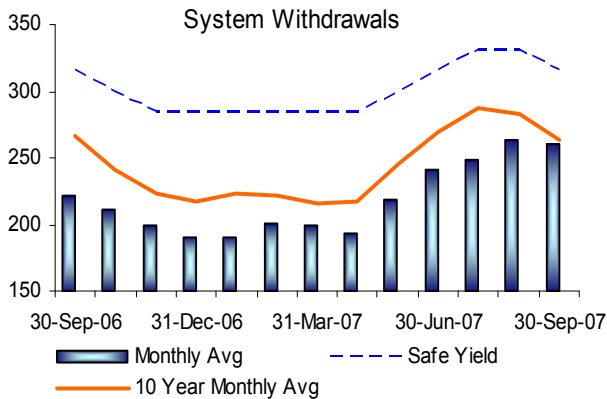
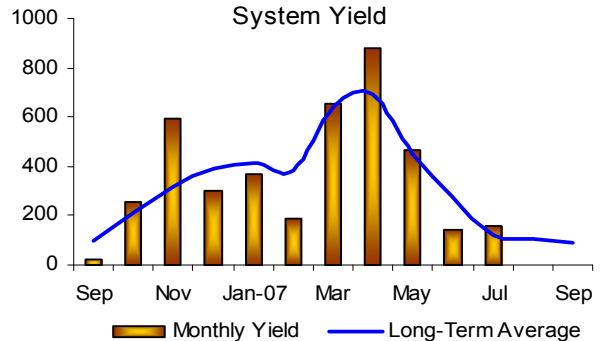
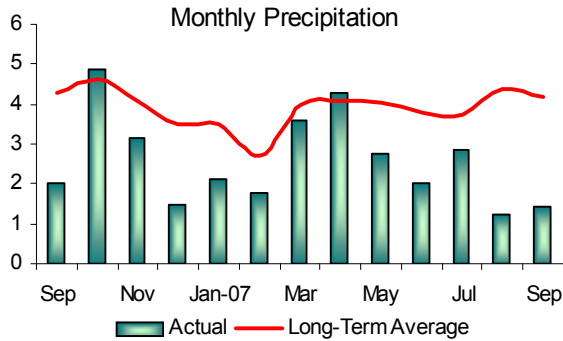
Background

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 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 on implementation of DCR's DEP-approved Watershed Protection Plans.

Outcome

Quabbin Reservoir was at 90.9% of capacity as of September 30, 2007, 3.1% lower than the same time last year but within the normal operating range for this period of the year. Precipitation continues to be below its long-term monthly averages for this quarter.

The Wachusett Reservoir elevation was lowered to 388 ft (± 0.5 ft) for the period ~May 25 through October 15 to allow for the new spillway crest gates installation. Upon successful completion of this installation, the Reservoir elevation will be returned to the normal operating band of 390-391.5 ft.

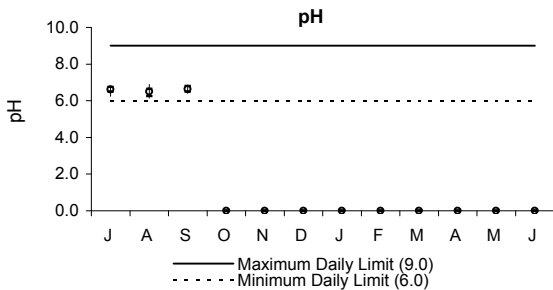


WASTEWATER QUALITY

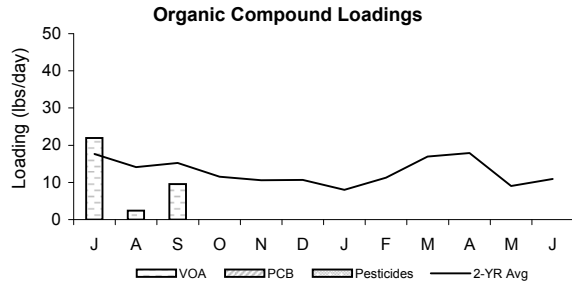
NPDES Permit Compliance: Deer Island Treatment Plant
1st Quarter - FY08
NPDES Permit Limits

Effluent Characteristics		Units	Limits	July	August	September	1st Quarter Violations	FY08 YTD Violations
Dry Day Flow:		mgd	436	325.5	319.1	315.4	0	0
cBOD:	Monthly Average	mg/L	25	4.9	4.1	4.4	0	0
	Weekly Average	mg/L	40	5.5	5.9	5.8	0	0
TSS:	Monthly Average	mg/L	30	7.8	5.3	6.9	0	0
	Weekly Average	mg/L	45	9.9	6.3	10.1	0	0
TCR:	Monthly Average	ug/L	456	40	40	40	0	0
	Daily Maximum	ug/L	631	40	47	40	0	0
Fecal Coliform:	Daily Geometric Mean	col/100mL	14000	15.9	33.2	48.2	0	0
	Weekly Geometric Mean	col/100mL	14000	6.4	9.8	31.6	0	0
	% of Samples >14000	%	10	0	0	0	0	0
	Consecutive Samples >14000	#	3	0	0	0	0	0
pH:		SU	6.0-9.0	6.3-6.8	6.2-6.9	6.4-6.9	0	0
PCB, Aroclors:	Monthly Average	ug/L	0.000045	UNDETECTED			0	0
Acute Toxicity:	Mysid Shrimp	%	50	>100	>100	>100	0	0
	Inland Silverside	%	50	>100	>100	>100	0	0
Chronic Toxicity:	Sea Urchin	%	1.5	100	100	100	0	0
	Inland Silverside	%	1.5	1.5	50	50	0	0

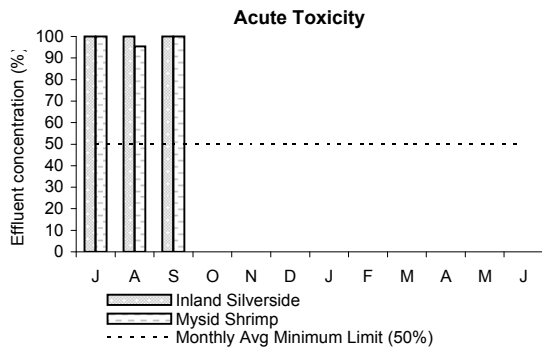
To date, there have been no permit violations at the Deer Island Treatment Plant in Fiscal Year 2008.



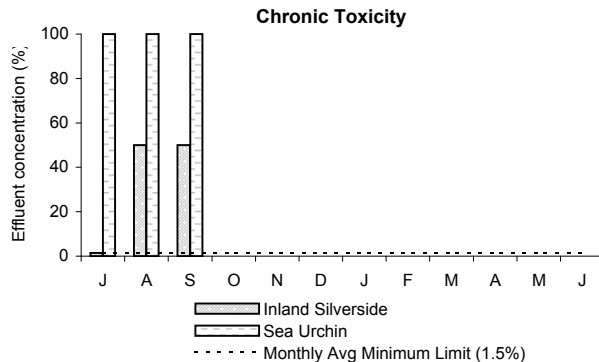
pH is a measure of the alkalinity or acidity of the effluent. Fluctuations in pH do not have an adverse effect on marine environments. Because of the pure oxygen used in the activated sludge reactor, effluent pH tends to be at the lower pH range. pH measurements for the 1st Quarter were within the daily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



An important wastewater component to be monitored in the effluent is organic compounds, including volatile organic acids, pesticides, and polychlorinated biphenyls.



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



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

NPDES Permit Compliance: Clinton Wastewater Treatment Plant

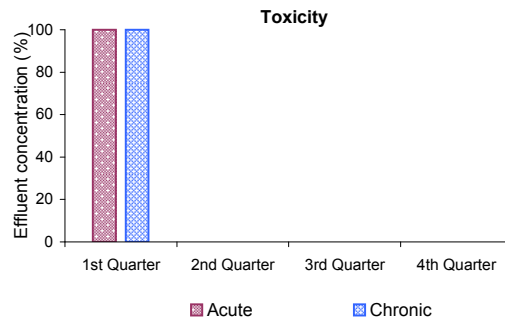
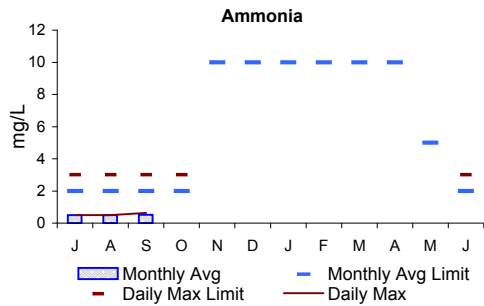
1st Quarter - FY08

NPDES Permit Limits

Effluent Characteristics		Units	Limits	July	August	September	1st Quarter Violations	FY08 YTD Violations
Flow:		mgd	3.01	3.24	3.23	3.18	3	3
BOD:	Monthly Average:	mg/L	20	2.6	2.3	2.4	0	0
	Weekly Average:	mg/L	20	3.3	2.6	2.8	0	0
TSS:	Monthly Average:	mg/L	20	3.2	2.8	3.1	0	0
	Weekly Average:	mg/L	20	3.8	3.0	3.8	0	0
pH:		SU	6.5-8.3	7.0-7.8	7.1-7.4	7.0-7.4	0	0
Dissolved Oxygen:	Daily Minimum:	mg/L	6	6.7	6.7	6.4	0	0
Fecal Coliform:	Daily Geometric Mean:	col/100mL	400	26	187	39	0	0
	Monthly Geometric Mean:	col/100mL	200	3	10	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	0.5	0.5	0.5	0	0
	Daily Maximum:	mg/L	35.2	0.5	0.5	0.6	0	0
Copper:	Monthly Average:	ug/L	20	7.9	7.1	10.2	0	0
Phosphorus: May 1 - Oct 31								
	Monthly Average:	mg/L	1.0	0.19	0.20	0.27	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

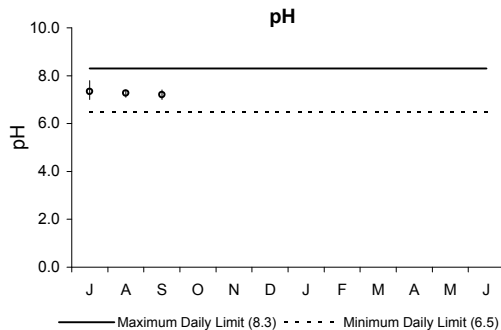
To date in FY08, there have been three permit violations at the Clinton Wastewater Treatment Plant, all related to flow. The monthly average flows during the 1st Quarter, 3.24 mgd in July, 3.23 in August, and 3.18 in September, exceeded the permit limit of 3.01 mgd. Significant wet weather conditions during that the past two years have resulted in elevated monthly flows at the plant, which have directly impacted the 12-month running average used to calculate the monthly average flow.

Because of low flow in the receiving water, the permit mandates stringent limits on nutrient discharges. These limits act to prevent eutrophication, or undesirable nutrient enrichment and excessive plant growth, in the receiving water. To meet these limits, nitrification occurs year-round and phosphorus removal is implemented from May 1 - October 31.

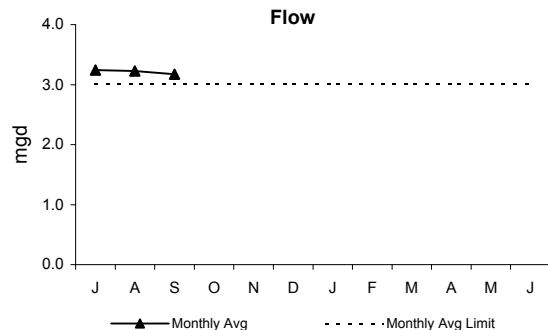


The 1st Quarter monthly average and daily maximum concentrations were below the permit limits. The monthly average and daily maximum limits for the period of November 1 - March 31 are 10 mg/L and 35.2 mg/L, respectively. The permit limits are most stringent from June - October, when warm weather conditions are most

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 100%, respectively. Permit limits were met during the 1st



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



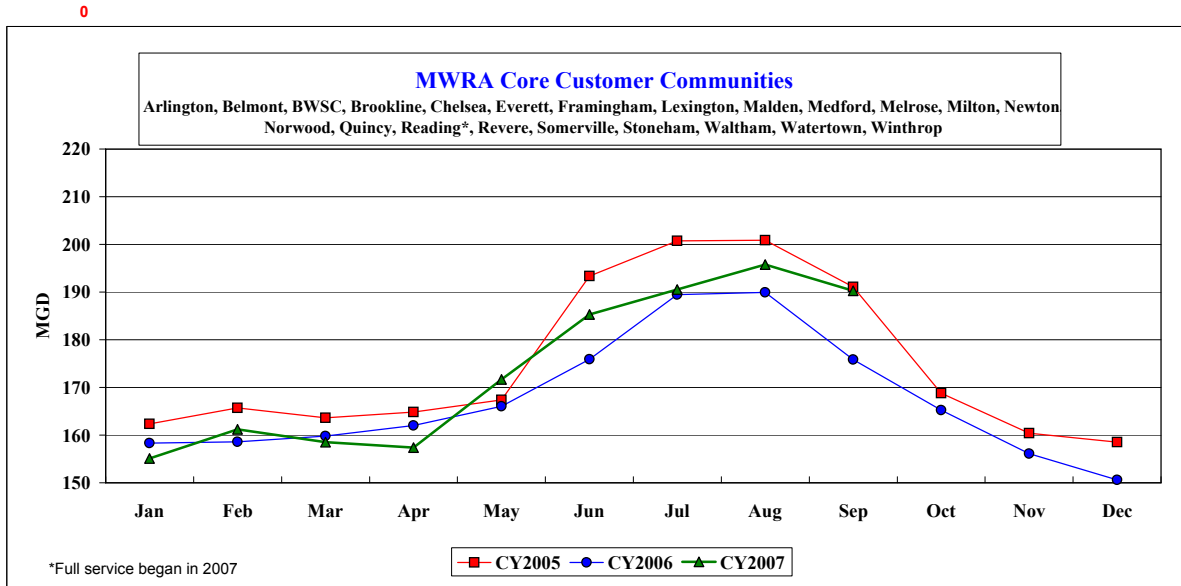
The graph depicts the average monthly flow, measured in million gallons per day, entering the plant. The average monthly flows for the 1st Quarter exceeded the permit limit.

COMMUNITY FLOWS

Total Water Use: MWRA Core Customer Communities

MGD	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
CY2005	162.326	165.732	163.645	164.812	167.389	193.360	200.720	200.842	191.068	168.816	160.378	158.511	174.846
CY2006	158.305	158.563	159.814	161.991	166.013	175.903	189.446	189.942	175.866	165.227	156.078	150.623	167.385
CY2007	155.073	161.239	158.556	157.413	171.674	185.329	190.556	195.779	190.297	0.000	0.000	0.000	174.090

MG	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
CY2005	5,032.111	4,640.485	5,073.006	4,944.356	5,189.056	5,800.787	6,222.313	6,226.107	5,732.030	5,233.310	4,811.348	4,913.831	63,818.740
CY2006	4,907.441	4,439.761	4,954.227	4,859.730	5,146.393	5,277.092	5,872.840	5,888.199	5,275.991	5,122.038	4,682.351	4,669.320	61,095.384
CY2007	4,807.265	4,514.701	4,915.231	4,722.383	5,321.883	5,559.880	5,907.236	6,069.154	5,708.923	0.000	0.000	0.000	47,526.655

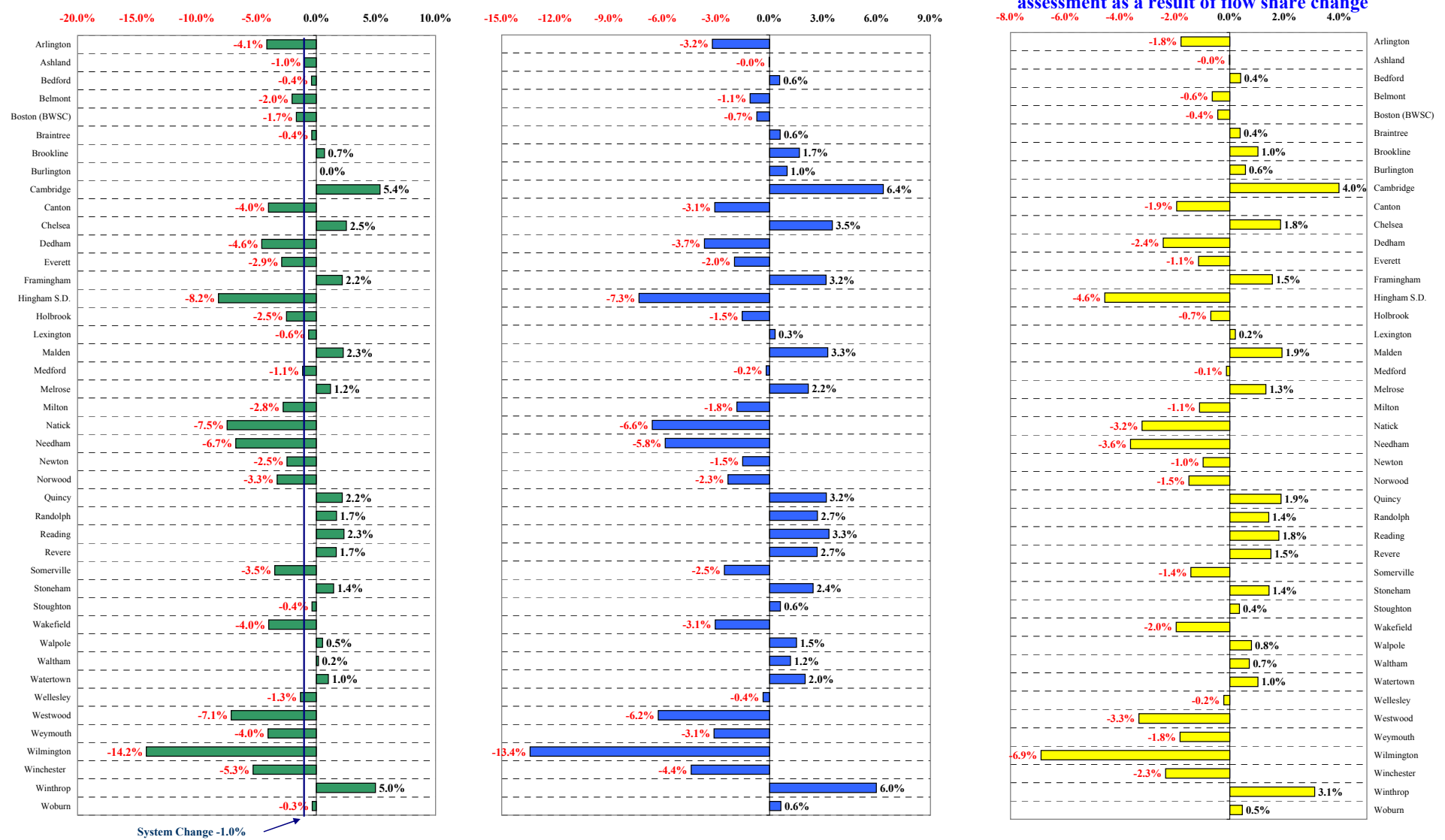


FY2009 sewer assessments will use a 3-year average of CY2005 to CY07 wastewater flows compared to FY2008 assessments that used a 3-year average of CY2004 to CY2006 wastewater flows. But as MWRA's sewer assessments are a ZERO-SUM calculation, a community's assessment is strongly influenced by the RELATIVE change in CY2005 to CY2007 flow share compared to CY2004 to CY2006 flow share, compared to all other communities in the system. Changes in flow shares are only a part of the assessment calculation as illustrated by the estimated impact of flow share changes on FY2009 sewer assessments.

Change in community absolute flow

Change in community flow share

Estimated variance from average system assessment as a result of flow share change³



¹ MWRA uses a 3-year moving flow average to calculate sewer assessments. Three-year averaging smoothes the impact of year-to-year changes in community flow share, but does not eliminate the long-term impact of changes in each community's relative contribution to the total flow.
² MWRA's wastewater metering system replacement began in March 2004 and was completed in March 2005. Therefore, wastewater flows for each month during this period are an average of the three prior years. Flow data is preliminary and subject to change pending additional MWRA and community review.
³ Add this figure to the projected FY2009 system-wide average sewer rate increase of 4.5% (September 2007) to estimate each community's FY2009 sewer assessment change from FY2008.
⁴ Based on CY2005 to CY2007 average wastewater flows as of 11/02/07.

BUSINESS SERVICES

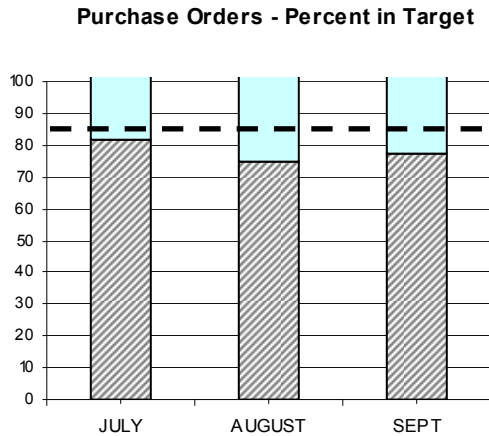
Procurement: Purchasing and Contracts

First Quarter FY08

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

Outcome: Processed 78% of purchase orders within target; Avg. Processing Time was 6.27 days vs. 5.56 days in Qtr 1 of FY07. Processed 61% (14 of 23) contracts within target timeframes; Avg. Processing Time was 172 days vs. 178 days in Qtr 1 of FY07.

Purchasing



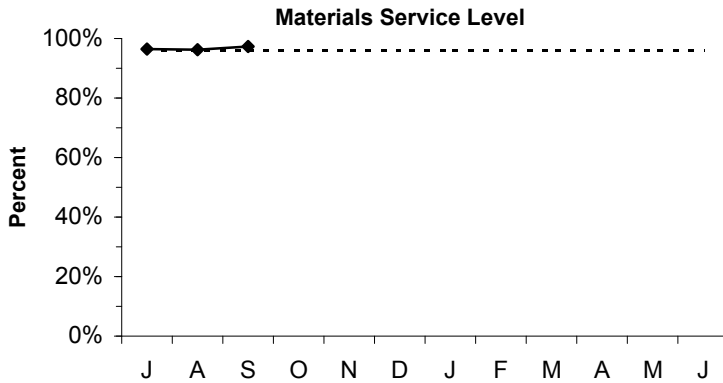
	NO.	TARGET	PERCENT IN TARGET
\$0 - \$500	1016	4 DAYS	76.6%
\$500 - \$2K	642	7 DAYS	80.8%
\$2K - \$5K	239	10 DAYS	74.5%
\$5K - \$10K	91	25 DAYS	83.5%
\$10K - \$25K	44	30 DAYS	75.0%
\$25K - \$50K	14	60 DAYS	85.7%
OVER \$50K	10	80 DAYS	90.0%

- Purchasing Unit processed 2056 purchase orders, 438 less than the 2494 processed in Qtr 1 of FY07, for a total value of \$8,784,197 vs. a dollar value of \$5,778,422 in Qtr 1 of FY07.
- The purchase order-processing target was not achieved for the \$0 - \$500 category, due to confirmation of pricing and specifications; the \$2k - \$5k category, because of sourcing of additional vendors and clarification of user needs; and the \$10k - \$25k category, due to clarification of end user requirements.

Contracts, Change Orders and Amendments

- Procurement processed twenty-three contracts with a value of \$17,981,637 and seventeen amendments with a value of \$18,300,446.
- Nine contracts were not processed within target timeframes, for the following reasons: extended price negotiations; extended review of bid for responsiveness; changes in specifications; rebid of two contracts using alternative procurement methodology; and three contracts were part of FY08 insurance program and could not be executed until entire program was approved.
- Twenty-nine 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 FY08 was \$914,663 and the value of credit change orders was (\$390,646). The net dollar value of all change orders was \$524,017.
- In addition, staff reviewed 87 proposed change orders and 24 draft change orders.

Materials Management First Qtr FY08



The service level is the percentage of stock requests filled. The goal is to maintain a service level of 96%. Staff issued 9,891 (96.6%) of the 10,234 items requested in Q1 from the inventory locations for a total dollar value of \$956,617.

Inventory Value - All Sites

The FY08 goal is to reduce consumable inventory from the July '07 base level (\$6.67 million) by 2.0% (approximately \$133,411), to \$6.53 million by June 30, 2008. During the first quarter, the total value of all inventory (excluding new adds) was decreased by \$27,521 against the July 07 base value. Consumable inventory value (excluding new adds) decreased by \$112,869.

Newly added items this quarter include explosion proof selector switches, exit sign batteries, ballasts, connectors, unions, couplings, and solenoid valves for Deer Island Maintenance, Plumbing, Electrical and I&C. Sensors, lithium battery packs, digester sleeves and biosystems pumps were added for the Carroll Water Treatment Plant. Items added to stock at the Chelsea warehouse included copier toners for new copy machines, bleach wipes for TRAC and hazmat brooms for Safety.

Spare parts with a current value of \$6,319,004 (excluding new adds) continue to be reviewed for obsolescence. Surplus efforts are ongoing with the Chelsea, Deer Island and Southboro warehouses for both spare parts and consumables. Also, a new initiative of the Property Pass Program has resulted in the establishment of PCs and monitors as inventory items allowing for the safeguarding of these assets. Established controls are in place which includes tracking serial numbers. In addition, several tool/equipment audits have been completed in Field Operations and the process of consolidating and surplus equipment as necessary is ongoing.

Items	Base Value July-07	Current Value w/o Cumulative New Adds	Reduction / Increase To Base
Total Current Inventory Value	13,151,938	13,124,417	-27,521
Consumable Inventory Value	6,670,582	6,557,713	-112,869
Spare Parts Inventory Value	6,481,356	6,319,004	-162,352

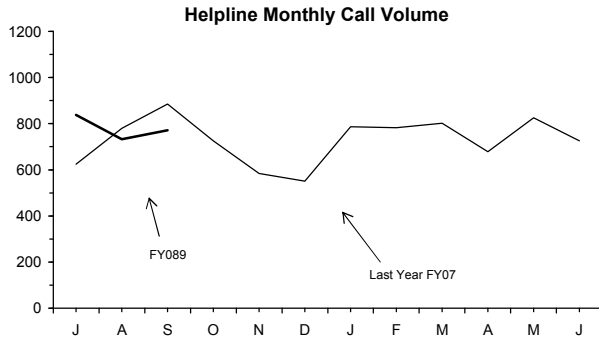
Note:

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

MIS Program 1st Quarter FY08

Operations

Highlights:



Performance

Call volume peaked in July and has increased by 2.36% from Q1 last year. The backlog peaked in August and is slightly 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, the AlertCon status from ISS primarily remained at Level 1 with several brief jumps to Level 2 due to highly critical vulnerabilities in Windows and Internet Explorer. Staff continued to push security fixes to desktops and servers monthly in order to protect against the 1048 newly revealed vulnerabilities during the quarter. At least 20 infected files were quarantined and either repaired or removed from MWRA computers this quarter. Phishing scams reached a new high, with just under 29,000 unique messages identified in June (last month for which data is available) and linked to over 31,000 scam web sites. MWRA's email gateway received 5,015,511 email messages of which it blocked 4,298,050. Additionally, 343,174 spam messages were quarantined in Q1, of which, less than 1% were incorrectly categorized as spam (and sent on to their recipients). Updates to MWRA spam filters continue to catch a significant number of spam email (accounting for just under 7% of all incoming email messages for the quarter), including "phishing" scams.

Items	FY03-07	FY08 (YTD)	FY08(Q1)	Grand Total
Bulletins	11206	601	601	11807
Open Items (backlog)	N/A	N/A	199	N/A
Needing Action	2044	146	146	2190
Completed	1018	17	17	1035
Suspended	N/A	16	16	N/A

- **Business Continuity/EOC:** Completed upgrade of Chelsea EOC including training of Operations staff and management of room functionality/operation. Build out of CWTP EOC is scheduled for Q2. Upgraded existing Slingbox Pro firmware to continue optimum performance and maintainability. The Slingbox equipment provides access to live news and weather information for the DITP EOC.
- **Infrastructure:** Work continued on DNS server upgrades; configured ILo (Integrated Lights Out -- console) for CNYDNS1 and CHLDNS0 replacement, enabling more capabilities for remote system management. Optimized backup jobs on three backup servers resulting in a reduction of 2 tapes per day, saving approximately \$2000. Completed upgrade of spam management surf control E-mail filtering software which provides continuous multilayered protection against increasingly complex blended email threats such as spam, phishing, viruses and malicious code. Product enhancements include the new Surf Control Reputation Service, a fully integrated anti-virus scanning engine and faster virus protection.

Applications/Training

Area	Significant Accomplishments
A&F	Upgraded BSI Tax Factory to version 8.0 on Lawsby and Lawdev and ran a complete parallel payroll on these servers using the Lawson Portal interface. These parallel tests proved the new version of the BSI Tax Factory and Portal are functioning properly. The Portal implementation is a preliminary step to a successful Lawson Environment upgrade later this fiscal year. Additionally, upgraded the Munease (tracks Bonds Issued by MWRA) application to version 12.95.
DEP Reporting	Completed coding for 6 new Bacteriological and Chlorine/Chloramine Reports to comply with the new DEP forms. These reports are needed because of new DEP reporting requirements communicated to the MWRA's Department of Laboratory Services.
Data Collection BUOY	Configured new software and network PC to support Operations' deployment of a data collection buoy in the Wachusett reservoir and developed a reporting repository to store collected data and a console program to input buoy data into Oracle databases. This buoy will be collecting water quality parameters such as temperature and pH as well as meteorological data.
LIMS	Lowest priced, qualified, LIMS vendor, Labware, Inc was selected for the new LIMS replacement implementation. MIS, DLS, and Procurement will be bringing this recommendation to the Board of Director's for approval in Q2.
LAWSON	Selection and procurement of the next generation of Lawson hardware and software has begun. The goal is to replace our existing hardware and upgrade the Lawson environment to Lawson System Foundation (LSF) 9.0 in FY08 to maintain vendor support.
Training	For the quarter, 35 staff attended 13 classes and 6 workshops. 2% of the workforce have attended at least 1 class year-to-date.

Legal Matters

1st Quarter FY2008

PROJECT ASSISTANCE

COURT AND ADMINISTRATIVE ORDERS

- Boston Harbor Litigation and CSO: Filed the quarterly CSO Progress Report and the CSO Annual Report with the Court.
- NPDES: Reviewed MWRA's comments on DEP's draft determination and fact sheets for variance extensions for the Charles River and Upper Mystic River/Alewife Brook.
- Braintree Weymouth Consent Order: Requested and received relief from the Administrative Consent Order requirements related to the rehabilitation of existing sewers project from DEP
- Upper Neponset Valley Relief Sewer: Submitted monthly progress summaries for the Upper Neponset Valley Relief Sewer project to DEP

REAL ESTATE AND CONTRACT

- North Dorchester Bay CSO: Finalized, obtained, and recorded Grant of Permanent Easement documents with DCAM. Prepared additional PIC license for installation of geotechnical equipment at various locations. Resubmitted PIC license for location of tunnel appurtenances in Columbia Road.
- Hultman Aqueduct Interconnections: Attended various meetings with Turnpike Authority and its tenant, Liberty Mutual Insurance Co., concerning temporary construction work and installation of electric and telecommunications lines. Prepared draft license with Liberty Mutual. Reviewed and revised draft easement drawings for Weston construction sites and for Shaft L staging area in Framingham.
- Telecommunications: Reviewed terms of proposed, revised permits with RP&EM for use of Turkey Hill and Walnut Hill by Cingular/A&T.
- Fore River Railroad Corporation: Attended various meetings with MBTA concerning license for installation of pedestrian crossing over railroad right of way located on MBTA property.
- Wind Turbines: Advised staff on property issues concerning possible installation of wind turbines at various locations in Southborough, Nut Island, and Braintree-Weymouth IPS.
- Section 97A, East Boston: Prepared application and license with PIC for installation of monitoring wells. Various conferences with staff concerning environmental conditions of planned easement alignment.
- Responded to various public records requests; provided support in the defense of two lawsuits filed by construction contractors; advised on warranty and other contract matters for Operations Division and Procurement staff; reviewed and approved 17 Section 8(m)permits. Recorded various Orders of Conditions, Orders of Taking, Certificates of Compliance, Extension permits at various Registries of Deeds for MWRA engineers and staff; reviewed title examinations for easement acquisitions; finalized and had executed a Turnkey Relocation Agreement with T-Mobile; had discussions with town counsel regarding an amendment to the settlement agreement with the Town of Winchester; favorably resolved a Notice of Probable Violation with DPU regarding excavation in Eastern Avenue, Malden; had discussions with various state agency staff, and provided comments on proposed legislation for trench excavation; provided comments on the cost sharing agreement with the Town of Saugus.

ENVIRONMENTAL

- Clean Water Act: Reviewed and assessed proposed federal legislation which would change the jurisdiction of the CWA to excluded "navigable" from the definition of "waters of the United States" and discussed with staff possible impact of proposed change on MWRA activities.

- MA. Wetlands Protection Act: Reviewed and assessed proposed changes to the WPA regulations which would streamline the appeals process to assess possible impact on MWRA activities.
- Beede Superfund Case: Reviewed motion to intervene and objection to Consent Order filed in the federal court which is to rule on the Consent Order by one of the non-participating potentially responsible parties (PRPs) in the Beede Superfund Site cleanup, and corresponded with attorneys representing the other participating PRPs (MWRA is a participating PRP.)
- TRAC: Held hearing on motion for summary decision and issued memorandum and order on parties' motions for summary decision, decision denying petitioner's motion for reconsideration of decision on parties' motions for summary decision, pre-hearing conference notice, and revised scheduling order for MWRA Docket Nos. 06-02, 06-03, 07-01, and 07-06 consolidated. Held hearing and issued order for MWRA Docket No. 06-08.

LABOR, EMPLOYMENT AND ADMINISTRATIVE

New Matters:

Three demands for arbitration were filed.

Matters Concluded:

Received one arbitrator's decision in favor of the MWRA.

Settled one arbitration.

Received a dismissal from the Labor Relations Commission.

LITIGATION/TRAC

New Matters:

One new case was reported in the First Quarter of FY 2008.

- UniFirst Corporation v. MWRA: Plaintiff alleges that UniFirst and MWRA entered into a written contract on or about November 1, 1996 for uniform services; that MWRA terminated the contract on or about December 1, 2006; and that MWRA breached the contract by failing to return all uniforms and other materials and/or by failing to pay plaintiff for lost/ruined uniforms.

Significant Developments:

- Verizon New England v. MWRA & another: MWRA prevailed on a complex group of motions involving discovery against an entity which claimed that it is not a party to this suit.

Concluded Cases:

Two cases were reported closed during the First Quarter of FY 2008.

- Dumbaugh v. MDC, et al.: In this lawsuit, a property owner in the lower Beacon Hill area of Boston alleges that his property was damaged through the drawdown of groundwater levels caused by the negligent "maintenance, repair and operation" of the defendants' sewer and storm water collection systems. This drawdown allegedly caused the deterioration of the wood piles under the property. Plaintiff sought approximately \$350,000.00 in damages from MDC, BWSC, City of Boston and MWRA. Trial was scheduled for May 7, 2007. On the eve of trial, plaintiff agreed to settle all claims against MWRA in this matter for the sum of \$40,000.00. The Board of Directors approved payment of this sum. The agreed sum has been paid to the plaintiff, and the plaintiff has provided a Release to MWRA and a Stipulation of Dismissal has been filed with the Court.

- Joseph Gill, et al. v. MWRA, et al.: This is a personal injury action in which plaintiff, Joseph Gill, and his wife, Mary Ellen Gill, seek recovery for damages allegedly arising out of an accident which occurred on May 11, 2000 during construction of the Metro West Supply Tunnel Project in Framingham, Massachusetts. Joseph Gill, an employee of Shea-Traylor-Healy, the General Contractor, was operating a passenger train traveling east bound in the tunnel when his train ran head-on into a concrete train traveling in the opposite direction on the same track. MWRA's primary insurer under the Metro West OCIP Program, Liberty Mutual, has defended the case for MWRA (as well as the Stone & Webster entities and K.C. Electric Company). On October 12, 2005, this case was settled in mediation for \$750,000.00, together with a waiver of the worker's compensation lien. The Mary Gill claim, for loss of consortium, which was severed from the Joseph Gill claim, was settled for \$50,000.00. All settlement proceeds have been paid by MWRA's insurer.

Subpoenas:

During the First Quarter of FY 2008, three subpoenas were received and one subpoena was pending at the end of First Quarter FY 2008.

Public Records:

During the first quarter of FY 2008, eighteen new public records requests were received and seven requests were closed at the end of First Quarter FY 2008.

SUMMARY OF PENDING LITIGATION MATTERS

TYPE OF CASE/MATTER	As of Sept 2007	As of June 2007	As of Mar 2007
Construction/Contract/Bid Protest (other than BHP)	5	4	5
BHP Claims/Contract Cases	1	1	1
Tort/Labor/Employment	11	13	19
Environmental/Regulatory/Other	2	2	2
Eminent Domain/Real Estate	1	1	3
total – all defensive cases	20	21	30
Affirmative Cases:	1	1	3
<u>MWRA v. (current employee)</u>			
Other Litigation matters (restraining orders, etc.)	2	2	3
<u>MWRA v. (former employee)</u>			
<u>MWRA v. (former employee)</u>			
total – all pending lawsuits	23	24	36
Significant claims not in suit:	1	1	1
CDM Walnut Hill			
Bankruptcy	1	1	2
Wage Garnishment	5	4	3
TRAC Appeals	8	8	9
Subpoenas	3	1	1
Public Records Requests	18	12	16
TOTAL - ALL LITIGATION MATTERS	59	51	68

TRAC

New Appeals

One new appeal was received in the 1st Quarter FY 2008.

- Conopco, Inc. d/b/a Unilever 07-06

Pre-Hearings Held

No pre-hearings were held in the 1st Quarter FY 2008.

Status Conference Held

One status conference was held in 1st Quarter FY 2008.

- New England Confectionary Company 05-12

Joint Motion to Dismiss

No cases were dismissed by Joint Motion to Dismiss in the 1st Quarter 2008.

Joint Stipulations of Dismissals

No cases were dismissed by Joint Stipulation after fine was paid at the pre-hearing conference in the 1st Quarter FY 2008.

Joint Stipulations of Dismissals – Claims Dismissed

No cases were dismissed by Joint Stipulations of Dismissal, claims dismissed in the 1st Quarter FY 2008.

Hearings Held

Two hearings were held in the 1st Quarter FY 2008.

- Conopco, Inc. d/b/a Unilever Consolidated 06-02, 06-03, 07-01 & 07-06
- Orient Heights Chiropractic 06-08

Settlement By Agreement of Parties

No cases were settled by Agreement of Parties in 1st Quarter FY 2008.

Tentative Decisions Issued

One Tentative Decision was issued in 1st Quarter 2008.

- Ashmont Chiropractic 06-07

Final Decisions Issued

One Final Decision was issued during the 1st Quarter FY 2008.

- Ashmont Chiropractic Center, Inc. 06-07

Internal & Contract Audit Program

1st Quarter FY08

INTERNAL AUDIT PROGRAM

Status of Internal Audit Recommendations

Audit Recommendations Remaining Open from 3 to 48 Months*

Report Title (date)	Open Recommendations
(8m) Permit Process (12/15/03)	1
Delegated Authority (3/25/04)	2
Chemical Delivery Procedures (5/5/04)	5
Evaluating Consultant Performance (6/22/04)	2
Field Operations Maintenance Management Practices (9/16/05)	5
Accounts Payable Activities (10/11/05)	10
Controls Over Gasoline & Diesel Fuel (5/3/06)	11
Field Crew Practices (11/14/06)	4
Total Open Recommendations	40

*Audit recommendations less than 3 months old are not reported on this page.

The Internal Audit Department follows up on open recommendations on a quarterly basis. When a recommendation has not been acted on in 48 months the appropriateness of the recommendation is re-evaluated during a subsequent audit. National surveys of government organizations indicate that on average 82% of audit recommendations are completed. On closed assignments 79% of Internal Audit's recommendations have been implemented.

CONTRACT AUDIT PROGRAM

Number of Reviews Completed and Cost Savings - FY03 to FY07

Description	FY04	FY05	FY06	FY07	FY08 1Q	TOTAL
Consultant Reviews						
Cost Disclosure Statement Reviews	78	32	63	43	9	225
Preliminary Field Reviews	1	4	6	2	0	13
Incurring Cost Audits	9	9	12	10	2	42
Contractor Reviews						
Construction Labor Burden Reviews	13	10	8	8	4	43
Change Order/Claim Audits	4	0	0	0	1	5
Contractor Financial Reviews	3	4	0	2	3	12
Cost Savings						
Consultant Cost Savings	\$779,945	\$483,968	\$768,394	\$358,341	\$15,833	\$2,406,481
Contractor/Vendor Cost Savings	\$900,721	\$1,551,139	\$456,968	\$637,378	\$1,414,603	\$4,960,809
Internal Audits				\$183,840		\$183,840
Total Cost Savings	\$1,680,666	\$2,035,107	\$1,225,362	\$1,179,559	\$1,430,436	\$7,551,130

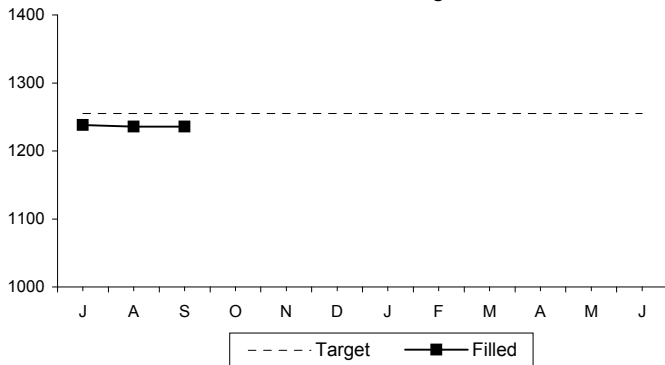
The Internal Audit Department's target is to achieve at least \$1,000,000 in cost savings each year. Cost savings vary each year based upon many factors. In some cases, cost savings for one year may be the result of work in prior years. Commencing in FY07 cost savings will include the dollar impact, if measurable, of internal assignments.

OTHER MANAGEMENT

Workforce Management

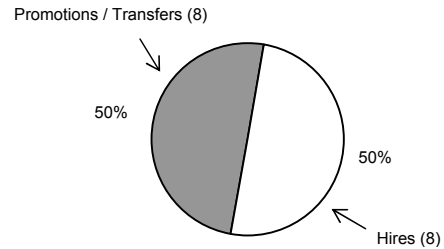
1st Quarter FY08

Filled Position Tracking



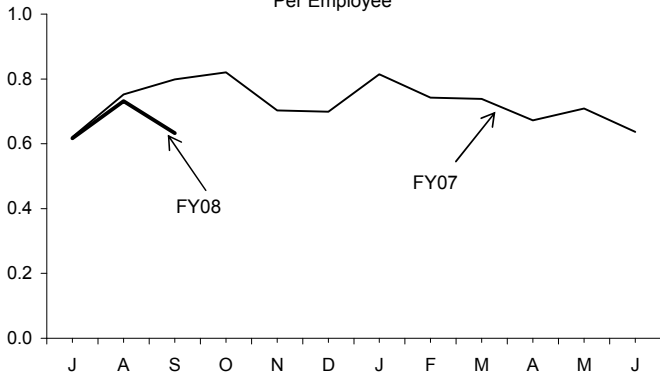
FY08 Target for Filled Positions = 1255
 Filled Positions as of September 2007 = 1236

**Positions Filled by Hires/Promotions
FY08**



	Pr/Trns	Hires	Total
FY05	97 (66%)	49 (34%)	146
FY06	41 (65%)	22 (35%)	63
FY07	52 (56%)	41 (44%)	93

**Average Monthly Sick Leave Usage
Per Employee**

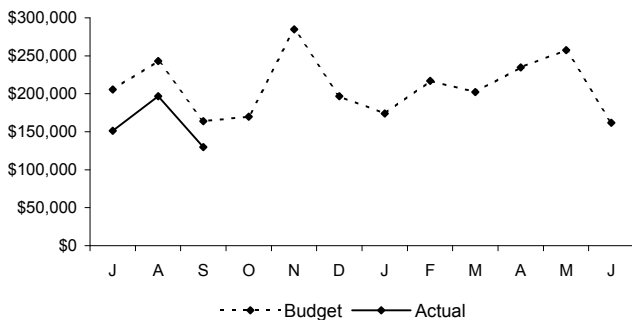


In FY08, the average monthly sick leave usage has decreased 8.78% from the same time last year.

	Number of Employees	YTD	Annualized Total	Annual FMLA %	FY07
Law	20	1.44	5.75	0.0%	11.17
Planning	24	1.20	4.82	1.0%	5.84
Operations	961	2.01	8.02	20.3%	8.95
Support	194	2.00	8.01	35.9%	7.62
Finance	41	2.21	8.84	13.0%	9.58
Executive	7	0.73	2.93	0.0%	3.72
MWRA Avg	1247	1.98	7.92	21.9%	8.71

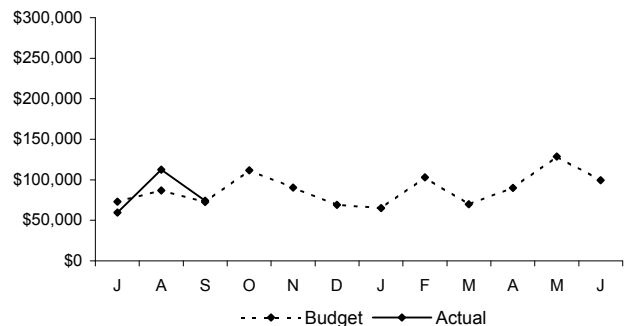
Percent of sick leave usage attributable to Family and Medical Leave Act (FMLA) leave is 21.9% ending September 30, 2007.

**Field Operations
Overtime Expenditure Variance**



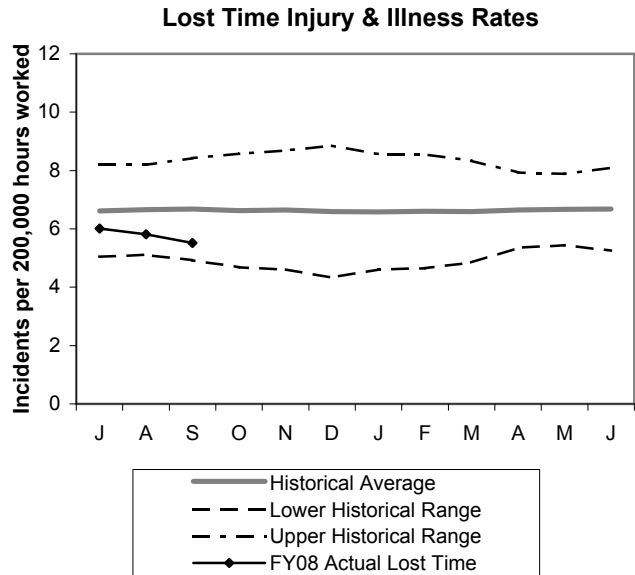
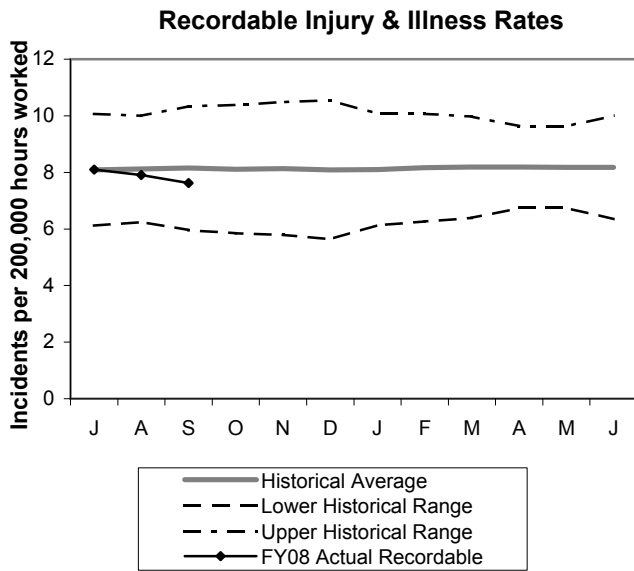
Field Operations overtime spending for the first quarter of FY08 was \$135,000 (22%) less than budgeted, primarily because there were fewer wet weather events than projected.

**Deer Island Treatment Plant
Overtime Expenditure Variance**



Deer Island overtime spending in the first quarter of FY08 was \$14,000 or 6% greater than budgeted, primarily in August as a result of a return sludge line valve replacement project, cleaning of the Winthrop Terminal facility, and continuing efforts to reduce the maintenance backlog on I&C and Electrical work due to staff vacancies in these areas.

Workplace Safety 1st Quarter FY08



- 1 "Recordable" incidents are all work-related deaths and illnesses, and those work-related injuries which result in 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 FY07. The "Upper" and "Lower Historical Ranges" are computed using these same data – adding and subtracting two standard deviations respectively. FY08 actual incident rates can be expected to fall within this historical range.

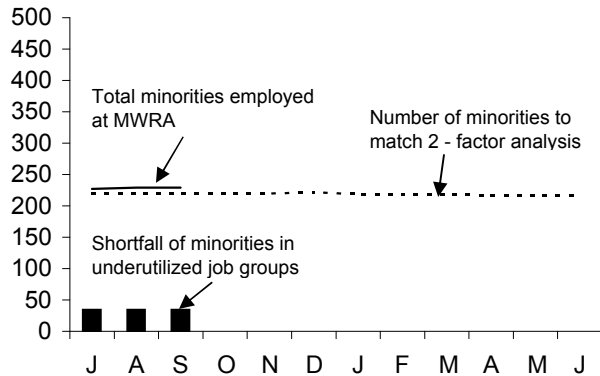
Workers Compensation Claims Highlights

	New	Closed	Open Claims
Lost Time	8	16	19
Medical Only	38	45	40
	New		YTD Returns
Light Duty Returns	4		3

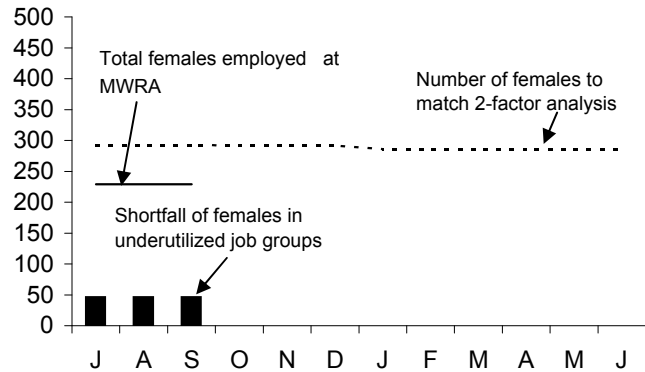
- **Light Duty Returns:**
 - There were 3 returns to light duty.
 - 2 DTIP EEs to own positions.
 - 1 VMM EE to own position.

MWRA Job Group Representation Quarter 1, FY 2008

Minority - Affirmative Action Plan Goals



Female - Affirmative Action Plan Goals



Highlights:

At the end of Q1 FY08, 9 job groups or a total of 37 positions are underutilized by minorities as compared to 6 job groups or a total of 34 at the end of Q1 FY07; for females 9 job groups or a total of 49 positions are underutilized as compared to 9 job groups or a total of 46 at the end of Q1 FY07. During Q1, 2 minorities were hired and 1 minority was terminated. During this same period, 0 females was hired and 1 female terminated.

Underutilized Job Groups - Workforce Representation

Job Group	Total Employees as of 9/30/2007	Actual Minorities as of 9/30/2007	Achievement Level	Minority Over or Under utilized	Actual Females As of 9/30/2007	Achievement Level	Female Over or Under utilized
Administrator A	18	2	1	1	3	5	-2
Administrator B	25	1	4	-3	7	7	0
Clerical A	53	24	9	15	45	24	21
Clerical B	39	7	11	-4	16	8	8
Engineer A	85	16	15	1	13	12	1
Engineer B	57	9	11	-2	8	16	-8
Craft A	115	14	22	-8	0	6	-6
Craft B	150	28	18	10	5	7	-2
Laborer	59	13	10	3	4	3	1
Management A	98	17	15	2	29	34	-5
Management B	58	9	12	-3	14	28	-14
Operator A	71	6	7	-1	3	1	2
Operator B	77	10	16	-6	3	5	-2
Para Professional	61	10	13	-3	27	16	11
Professional A	39	2	9	-7	24	17	7
Professional B	180	44	32	12	81	76	5
Technical A	47	13	9	4	3	14	-11
Technical B	14	4	3	1	4	6	-2
Total	1246	229	217.0	45/-36	289	285	55/-49

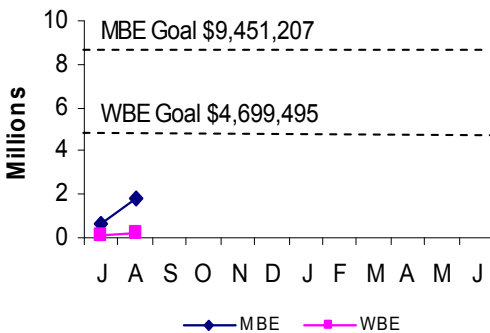
AACU Candidate Referrals For Underutilized Positions

Job Group	Title	# of Vac.	Promotions/ Transfers	AACU Ref. Internal	AACU Ref. External	External Hires
Operator B	Operator	2	0	0	0	0
Clerical B	Inventory Specialist	1	0	0	0	0

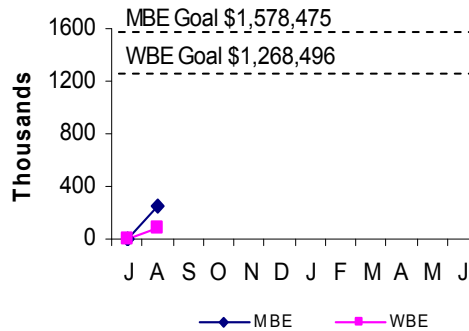
MBE/WBE Expenditures First Quarter 2008

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.

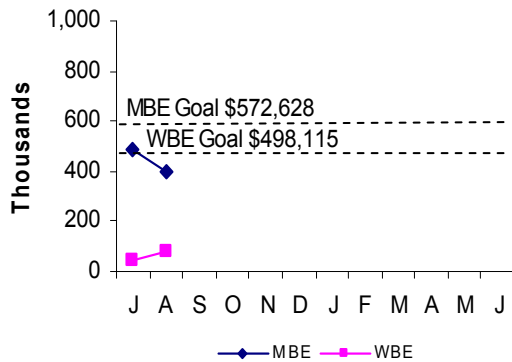
Construction



Professional



Goods/Services



FY06 spending and percentage of goals achieved, as well as FY05 performance are as follows:

	MBE		FY07		WBE		FY07	
	FY08 Year-to-Date		FY07		FY08 Year-to-Date		FY07	
	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>
Construction	1,855,415	19.6%	4,303,492	55.1%	192,489	4.1%	3,789,881	97.6%
Professional Svc.	251,191	15.9%	1,602,317	117.6%	88,455	7.0%	773,737	70.7%
Goods & Svcs.	394,704	68.9%	1,188,886	164.2%	80,197	16.1%	312,234	49.6%
Total	\$2,501,310	21.6%	\$7,094,695	71.7%	\$361,141	3.8%	\$4,875,852	86.9%

MWRA FY08 CEB Expenses through September 2007

	September 2007 Year-to-Date					
	Period 3 YTD Budget	Period 3 YTD Actual	Period 3 YTD Variance	%	FY08 Approved	% Expended
EXPENSES						
WAGES AND SALARIES	\$ 21,667,584	\$ 21,130,360	\$ (537,224)	-2.5%	\$ 88,091,461	24.0%
OVERTIME	916,001	800,007	(115,994)	-12.7%	3,864,290	20.7%
FRINGE BENEFITS	4,056,509	3,852,927	(203,582)	-5.0%	16,271,444	23.7%
WORKERS' COMPENSATION	347,400	297,328	(50,072)	-14.4%	1,400,000	21.2%
CHEMICALS	2,277,577	2,408,603	131,026	5.8%	8,702,932	27.7%
ENERGY AND UTILITIES	5,652,441	5,723,621	71,180	1.3%	26,532,695	21.6%
MAINTENANCE	5,832,393	6,326,760	494,367	8.5%	25,768,810	24.6%
TRAINING AND MEETINGS	61,406	55,359	(6,047)	-9.8%	222,252	24.9%
PROFESSIONAL SERVICES	1,993,383	1,562,869	(430,514)	-21.6%	7,869,287	19.9%
OTHER MATERIALS	888,696	746,593	(142,103)	-16.0%	5,022,858	14.9%
OTHER SERVICES	6,241,523	5,777,103	(464,420)	-7.4%	22,893,395	25.2%
TOTAL DIRECT EXPENSES	\$ 49,934,913	\$ 48,681,530	\$ (1,253,383)	-2.5%	\$ 206,639,424	23.6%
INSURANCE	\$ 625,001	\$ 795,610	\$ 170,609	27.3%	\$ 2,500,000	31.8%
WATERSHED/PILOT	5,801,787	5,886,974	85,187	1.5%	23,207,147	25.4%
BEC _o PAYMENT	1,055,100	1,055,100	-	0.0%	4,347,200	24.3%
MITIGATION	354,806	353,141	(1,665)	-0.5%	1,419,223	24.9%
ADDITIONS TO RESERVES	413,664	413,664	-	0.0%	1,654,655	25.0%
RETIREMENT FUND	1,058,332	1,058,334	2	0.0%	4,233,329	25.0%
POST EMPLOYEE BENEFITS	1,774,724	1,774,725	1	0.0%	7,098,896	25.0%
TOTAL INDIRECT EXPENSES	\$ 11,083,414	\$ 11,337,548	\$ 254,134	2.3%	\$ 44,460,450	25.5%
DEBT SERVICE	\$ 81,233,863	\$ 80,085,824	\$ (1,148,039)	-1.4%	\$ 296,127,700	27.0%
DEBT SERVICE ASSISTANCE	(4,312,500)	(4,312,500)	-	0.0%	17,250,000	-25.0%
TOTAL DEBT SERVICE	\$ 76,921,363	\$ 75,773,324	\$ (1,148,039)	-1.5%	\$ 313,377,700	24.2%
TOTAL EXPENSES	\$ 137,939,690	\$ 135,792,402	\$ (2,147,288)	-1.6%	\$ 564,477,574	24.1%
REVENUE & INCOME						
RATE REVENUE	\$ 129,449,458	\$ 129,449,458	\$ -	0.0%	\$ 517,797,832	25.0%
OTHER USER CHARGES	2,166,415	2,081,084	(85,331)	-3.9%	7,565,475	27.5%
OTHER REVENUE	540,349	735,385	195,036	36.1%	5,241,223	14.0%
INVESTMENT INCOME	8,675,158	8,834,081	158,923	1.8%	33,873,044	26.1%
TOTAL REVENUE & INCOME	\$ 140,831,380	\$ 141,100,008	\$ 268,628	0.2%	\$ 564,477,574	25.0%

Through September 2007, total revenue was \$141.1 million, \$269,000 or .2% more than budgeted. Total expenses were \$135.7 million, \$2.1 million or 1.6% less than budgeted.

Expenses –

- **Direct Expenses** through September totaled \$48.7 million, \$1.2 million or 2.5% less than budgeted.
- **Wages and Salaries** are \$537,000 or 2.5% less than budgeted as a result of lower regular pay due to fewer than budgeted filled positions.
- Overspending for **Chemicals** of \$131,000 is mostly due to higher hydrogen peroxide and ferric chloride at Deer Island.
- **Energy and Utility** expenses are \$71,000 or 1.3% greater than budgeted.
- **Maintenance** spending overall is \$494,000 or 8.5% more than budgeted. Spending in Operations is \$527,000 more than budgeted while spending in Support Services is \$37,000 more than budgeted and \$69,000 less than budgeted in Emergency Preparedness. Most of the overspending in Operations is due to timing.
- **Professional Services** expense through September is \$431,000 or 21.6% less than budgeted mainly due to underspending for lab and testing analysis in ENQUAD and security in Emergency Preparedness Department.
- **Indirect Expenses** are \$254,000 more than budgeted due to increased accrual for an anticipated insurance claim.
- **Debt Service** through September totaled \$75.8 million, \$1.1 million or 1.5% less than budgeted as a result of variable rate savings.

Revenue and Income –

- **Other User Charges** and **Other Revenue** through September totaled \$2.8 million combined; \$110,000 or 4.1% more than budgeted as result of higher than budgeted receipt for the Renewable Portfolio Standard (RPS) credits related to the Deer Island energy program.
- **Investment Income** through September totaled \$8.8 million, \$159,000 or 1.8% more than budgeted mostly due to the effect of higher than budgeted variable interest rate.

Cost of Debt September 2007

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.

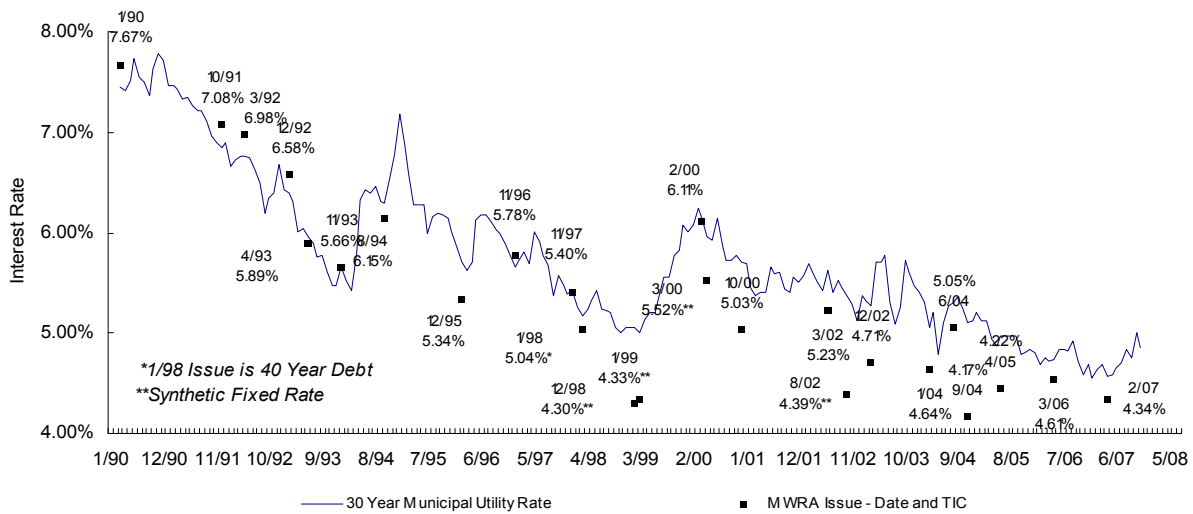
Average Cost of MWRA Debt

Fixed Debt (\$3,898)	4.67%
Variable Debt (\$699)	3.93%
SRF Debt (\$885)	0.92%
 Weighted Average Debt Cost (\$5,482)	 3.97%

Most Recent Senior Fixed Debt Issue February 2007

2007 Series A & B (\$848)	4.34%
---------------------------	-------

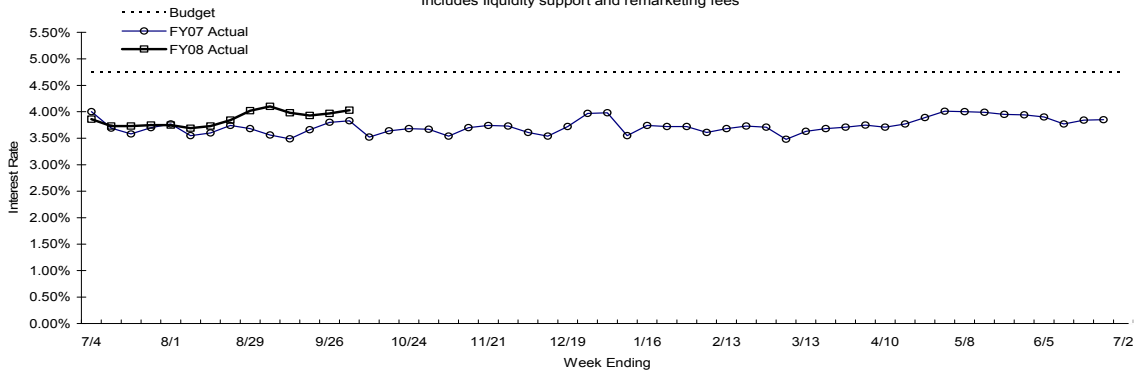
MWRA Fixed Rate Debt vs. 30 Year Municipal Utility Interest Rate



Weekly Average Interest Rates vs. Budget

MWRA currently has seven variable rate debt issues with \$699 million outstanding, excluding commercial paper and the seven floating rate issues 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. Short term rates have been relatively constant during fiscal year 2008. MWRA's issuance of variable rate debt, although consistently less expensive in recent years, results in exposure to additional interest rate risk as compared to fixed rate debt.

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



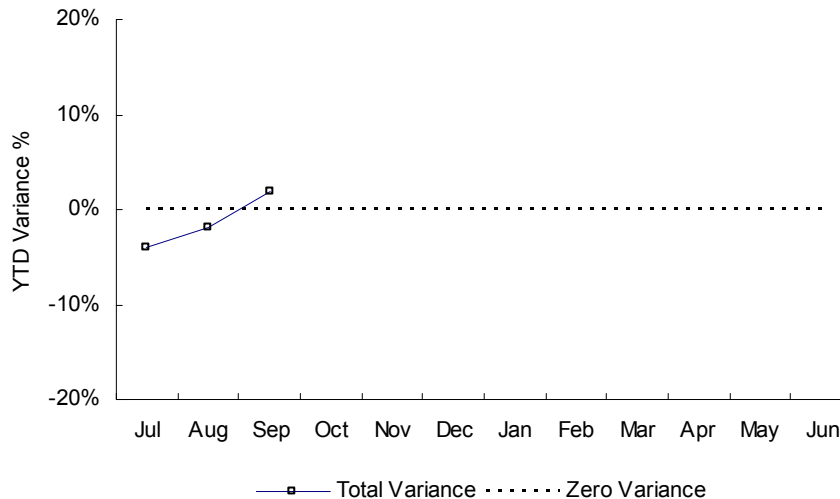
Investment Income September 2007

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)

Fund	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	
	Average Budgeted Balance	Average Actual Balance	Variance	Impact	Budget	Actual	Impact	Impact	%
Combined Reserves	\$89,297	\$89,440	\$144	\$6	4.99%	4.81%	(\$46)	(\$40)	-3.5%
Construction	\$105,837	\$69,933	(\$35,905)	(\$416)	4.50%	5.42%	\$166	(\$251)	-20.4%
Debt Service	\$88,894	\$89,077	\$183	\$2	4.50%	5.29%	\$180	\$182	17.7%
Debt Service Reserves	\$272,290	\$274,778	\$2,488	\$33	5.19%	5.16%	(\$22)	\$11	0.3%
Operating	\$55,650	\$49,009	(\$6,641)	(\$87)	4.44%	4.80%	\$56	(\$31)	-4.9%
Revenue	\$49,462	\$59,214	\$9,752	\$113	4.54%	5.33%	\$121	\$234	40.4%
Redemption	\$35,410	\$35,410	\$0	\$0	4.54%	5.13%	\$53	\$53	12.9%
Total	\$696,839	\$666,860	(\$29,978)	(\$349)	4.83%	5.14%	\$508	\$159	1.8%

YTD Investment Income Variance



Rates Management September 2007

Baseline estimates of future rate revenue requirements and household charges are established twice each year in conjunction with preparation of proposed and final budgets.

MWRA Rate Projections as of September 30, 2007

	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	Average FY08-FY17
Rate Revenue Increase ¹	4.5%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	4.6%	2.7%	8.6%	5.5%
Average Household Charge Based on 90,000 gal/year ²	\$1,025	\$1,082	\$1,140	\$1,200	\$1,270	\$1,341	\$1,417	\$1,484	\$1,535	\$1,651	
Average Household Charge Based on 61,000 gal/year	\$695	\$734	\$773	\$814	\$861	\$909	\$961	\$1,006	\$1,040	\$1,119	

¹ The Commonwealth has included \$23 million for debt service assistance in its budget for FY08. These projections assume MWRA will receive \$17.25 million of the total Commonwealth appropriation in FY08, and similar amounts in FY09 to FY17.

² Weighted average for the MWRA Core 21 communities based on the November 2005 MWRA Advisory Board's annual retail rates survey. Core 21 communities receive 100% MWRA water and sewer service.

Significant Changes since August 2007: None

	Ten-Year Impact (FY08-FY17)
FY08-FY17 RATE REVEUE REQUIREMENT (August 2007)	\$6,698.4M
FY07 Operating Surplus added to Rate Stabilization	(\$2.2M)
Additional Interest Income resulting from FY07 Operating Surplus	(\$0.1M)
FY08-FY17 RATE REVEUE REQUIREMENT (September 2007)	\$6,696.1M

Prior year budget surpluses are set aside to offset future rate increases. These funds are held either in the rate stabilization fund or in the bond redemption account.

	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	Total
Rate Stabilization Withdrawal	\$0.0	\$5.4	\$16.8	\$7.2	\$5.7	\$7.2	\$1.4	\$0.0	\$0.0	\$0.0	\$43.7
Future Debt Escrow	\$0.0	\$0.0	\$1.5	\$26.5	\$0.0	\$7.4	\$0.0	\$0.0	\$0.0	\$0.0	\$35.4
Total	\$0.0	\$5.4	\$18.3	\$33.7	\$5.7	\$14.6	\$1.4	\$0.0	\$0.0	\$0.0	\$79.1