



MASSACHUSETTS WATER RESOURCES AUTHORITY

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

Frederick A. Laskey
Executive Director

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ADMINISTRATION, FINANCE & AUDIT COMMITTEE MEETING

Chair: (vacant)
Vice-Chair: H. Vitale
Committee Members:
J. Carroll
K. Cotter
J. Foti
A. Pappastergion
J. Walsh

to be held on

Wednesday, April 15, 2015

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

Time: 10:00 a.m.

AGENDA

A. Information

1. Delegated Authority Report – March 2015
2. 2014 Annual Update on New Connections to the MWRA System
3. FY15 Financial Update and Summary as of March 2015

B. Approvals

1. Establishment of an OPEB Trust
2. Amendments to General Bond Resolution

C. Contract Awards

1. Integrated Financial, Procurement and Human Resources/Payroll Management System Maintenance and Support: Infor Global Solutions
2. Technical Assistance Consulting Services, Hazardous Materials Assessment: Geosphere Environmental Management, Inc., Contract 600TA; and Green Seal Environmental, Inc., Contract 601TA

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the
Administration, Finance and Audit Committee

March 11, 2015

A meeting of the Administration, Finance and Audit Committee was held on March 11, 2015 at the Authority headquarters in Charlestown. Vice-Chairman Vitale presided. Present from the Board were Messrs. Carroll, Flanagan, Foti and Walsh; Mr. Pappastergion joined the meeting in progress. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Michele Gillen, Carolyn Fiore, Denise Breiteneicher, Mike Hornbrook, Steve Estes-Smargiassi, John Vetere, Tom Durkin, Kathy Soni, Matt Horan, and Bonnie Hale. The meeting was called to order at 10:15.

Information

Delegated Authority Report – January and February 2015

There was general discussion and question and answer on some of the items contained in the report. Mr. Laskey noted that he would be bringing forward some fine-tuning and possible increases of the delegated authority levels, which would be the same as those used by the Commonwealth.

(Mr. Pappastergion joined the meeting.)

Review of MWRA's Draft Five-Year Strategic Business Plan 2016-2020

Staff provided an overview of the business plan.

Second Quarter FY15 Orange Notebook

Staff gave a presentation highlighting certain portions of the report, and there was general discussion and question and answer.

January/February 2015 Snow Storms Report

Staff gave a presentation detailing MWRA's response to the record-breaking period of snow and below average temperatures between January 26 and the end of February. Mr. Laskey made note of all the MWRA staff members who rose to the occasion, stepped up and worked long hours getting the snow cleared at and around its facilities and in member communities. Several Board members attested to the assistance provided to their communities by the Authority and expressed their gratitude.

* Approved as recommended at March 11, 2015 Board of Directors meeting.

Staff summarized the remaining four information items:

- Fiscal Year 2015 Mid-Year Capital Project Spending Report
- FY15 Financial Update and Summary as of February 2015
- FY15 Sewer Assessment Adjustment
- Preliminary FY16 Water and Sewer Assessments.

Approvals

***Transmittal of Proposed FY16 Current Expense Budget**

Staff gave a presentation on the proposed CEB, and there was general discussion and question and answer. The Committee recommended approval of transmittal of the Proposed FY16 CEB to the Advisory Board for its 60 day review and comment period (ref. agenda item B.1).

***Amendments to Investment Policy**

The Committee recommended approval of amendments to the Investment Policy (ref. agenda item B.2).

Contract Awards

***Adams Street Grade Crossing and Cattlepass Bridge: Contract FRR29, LM Heavy Civil Construction, LLC**

Staff noted that because there was grant funding for this contract, it required approval by the MWRA Board of Directors rather than the Fore River Railroad Board of Directors. The Committee recommended approval of the contract award (ref. agenda item C.1).

The meeting adjourned at 11:40 a.m.

* Approved as recommended at March 11, 2015 Board of Directors meeting.

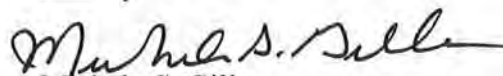
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: April 15, 2015
SUBJECT: Delegated Authority Report – March 2015

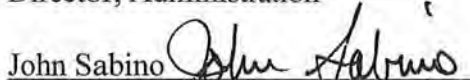


COMMITTEE: Administration, Finance & Audit

INFORMATION
 VOTE


Michele S. Gillen
Director, Administration

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


John Sabino
Director of Procurement

RECOMMENDATION:

For information only. Attached is a listing of actions taken by the Executive Director under delegated authority for the period March 1 through March 31, 2015.

This report is broken down into three sections:

- Awards of Construction, non-professional and professional services contracts and change orders and amendments in excess of \$25,000, including credit change orders and amendments in excess of \$25,000;
- Awards of purchase orders in excess of \$25,000; and
- Amendments to the Position Control Register, if applicable.

BACKGROUND:

The Board of Directors' Management Policies and Procedures, as amended by the Board's vote on October 14, 2009, delegate authority to the Executive Director to approve the following:

Construction Contract Awards:

Up to \$1 million if the award is to the lowest bidder; or up to \$500,000 if the award is to other than the lowest bidder.

Change Orders:

Up to 25% of the original contract amount or \$250,000, whichever is less, where the change increases the contract amount, and for a term not exceeding an aggregate of six months; and for any amount and for any term, where the change decreases the contract amount. The delegations for cost increases and time can be restored by Board vote.

Professional Service Contract Awards:

Up to \$100,000 and one year with a firm; or up to \$50,000 and one year with an individual.

Non-Professional Service Contract Awards:

Up to \$250,000 if a competitive procurement process has been conducted, or up to \$100,000 if a procurement process other than a competitive process has been conducted.

Purchase or Lease of Equipment, Materials or Supplies:

Up to \$1 million if the award is to the lowest bidder; or up to \$500,000 if the award is to other than the lowest bidder.

Amendments:

Up to 25% of the original contract amount or \$250,000, whichever is less, and for a term not exceeding an aggregate of six months.

Amendments to the Position Control Register:

Amendments which result only in a change in cost center.

BUDGET/FISCAL IMPACT:

Recommendations for delegated authority approval include information on the budget/fiscal impact related to the action. For items funded through the capital budget, dollars are measured against the approved capital budget. If the dollars are in excess of the amount authorized in the budget, the amount will be covered within the five-year CIP spending cap. For items funded through the Current Expense Budget, variances are reported monthly and year-end projections are prepared at least twice per year. Staff review all variances and projections so that appropriate measures may be taken to ensure that overall spending is within the MWRA budget.

CONSTRUCTION/PROFESSIONAL SERVICES DELEGATED AUTHORITY ITEMS MARCH 1 - 30, 2015


NO.	DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT	AMEND/CO	COMPANY	FINANCIAL IMP.
C-1.	03/02/15	GRIT AND SCREENINGS HAULING AND DISPOSAL INCREASE THE FOLLOWING ESTIMATED BID ITEM QUANTITIES: HAULING AND DISPOSAL OF GRIT AND SCREENINGS FROM THE NUT ISLAND HEADWORKS DUE TO AN INCREASINGLY HIGHER MONTHLY VOLUME BEING COLLECTED.	OP-209	1	W.L. FRENCH EXCAVATING CORP.	\$34,355.20
C-2.	03/09/15	REPLACEMENT OF SCUM SKIMMERS DEER ISLAND TREATMENT PLANT REMOVE AND REPLACE ONE GEAR DRIVE UNIT IN GRAVITY THICKENER NO. 1, REPLACEMENT GEAR HAD BEEN PRE-PURCHASED AND KEPT IN MWRA INVENTORY.	7396	1	WALSH CONSTRUCTION COMPANY	\$61,070.49
C-3.	03/18/15	NUT ISLAND HEADWORKS ELECTRICAL AND CONVEYORS IMPROVEMENTS REMOVE AND REPLACE THREE PREVIOUSLY INSTALLED PRIMARY SCRAPERS DUE TO AN UNFORSEEN CONDITION WITH THE SCRAPER BLADES; EXTEND CONTRACT TERM BY 102 CALENDAR DAYS FROM FEBRUARY 6, 2015 TO MAY 19, 2015.	7313	6	J.F. WHITE CONTRACTING CO.	\$80,000.00
C-4.	03/26/15	SECURITY EQUIPMENT MAINTENANCE AND REPAIR SERVICES DECREASE THE FOLLOWING BID ITEMS AND ALLOWANCES TO REFLECT ACTUAL QUANTITIES USED: PREVENTIVE, NON-EMERGENCY AND EMERGENCY REPAIR SERVICES, INTEGRATION PROGRAMMING SERVICES, SPARE PARTS, REPLACEMENTS PARTS AND MARK-UP.	EXE-031	6	VISCOM SYSTEMS, INC.	(\$49,998.56)

NO.	DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT #	AMENDMENT	COMPANY	FINANCIAL IMPACT
P-1.	3/2/15	ONE SPLIT MECHANICAL SEAL REPAIR KIT FOR THE NORTH MAIN PUMP STATION DEER ISLAND TREATMENT PLANT AWARD OF SOLE SOURCE PURCHASE ORDER FOR THE PURCHASE OF ONE SPLIT MECHANICAL SEAL REPAIR KIT FOR A NORTH MAIN PUMP STATION AT DEER ISLAND TREATMENT PLANT TO HAVE IN MWRA INVENTORY TO FACILITATE IMMEDIATE REPAIR IF NEEDED. MWRA STAFF WILL PERFORM ALL TASKS RELATED TO INSTALLING SEAL REPAIR KIT.			A.W. CHESTERTON COMPANY	\$42,815.00
P-2.	3/2/15	REPLACEMENT PARTS FOR THE CRYOGENICS FACILITY'S COOLING TOWERS AT THE DEER ISLAND TREATMENT PLANT AWARD OF PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR THE PURCHASE OF REPLACEMENT DRIFT ELIMINATORS, FILL MEDIA AND A DRIVE SHAFT FOR THE CRYOGENICS FACILITY'S COOLING TOWERS AT THE DEER ISLAND TREATMENT PLANT TO BE INSTALLED BY MWRA STAFF.	WRA-3972		R.T. FÖRBES COMPANY, INC.	\$43,137.00
P-3	3/2/15	MINE SAFETY APPLIANCE GAS MONITORING EQUIPMENT AT THE DEER ISLAND TREATMENT PLANT AWARD OF SOLE SOURCE PURCHASE ORDER FOR THE PURCHASE OF 10 MSA ULTIMA H2S GAS SENSORS, 10 MSA ULTIMA COMBO METHANE GAS SENSORS AND 20 MSA ULTIMA OXYGEN SENSORS. REPLACEMENT OF EXISTING TRANSMITTERS AND SENSORS HAS BECOME NECESSARY SINCE THE EXISTING GAS SYSTEMS ARE OBSOLETE AND SPARE PARTS ARE NO LONGER READILY AVAILABLE. MWRA STAFF WILL PERFORM ALL TASKS RELATED TO REPLACEMENT WORK.			NEPONSET CONTROLS, INC.	\$61,730.00
P-4.	3/2/15	ONE SEMI-AUTOMATIC, HEAVY-DUTY, HYDRAULIC, METAL-CUTTING, HIGH-SPEED BAND SAW AWARD OF PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR THE PURCHASE OF ONE SEMI-AUTOMATIC, HEAVY-DUTY, HYDRAULIC, METAL-CUTTING, HIGH-SPEED BAND SAW TO REPLACE A 30 YEAR OLD VERTICAL BAND SAW FOR THE MACHINE SHOP AT THE CHELSEA MAINTENANCE FACILITY.	WRA-3970		MONTGOMERY-PETERSON	\$64,705.00
P-5.	3/2/15	TWO ELECTRIC STERILIZERS FOR THE DEPARTMENT OF LABORATORY SERVICES AWARD OF PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR THE PURCHASE OF TWO ELECTRIC STERILIZERS FOR THE DEPARTMENT OF LABORATORY SERVICES TO REPLACE TWO SMALLER UNITS THAT ARE NOT LARGE ENOUGH TO MAINTAIN OPTIMUM EFFICIENCY OR PRODUCTION DURING THE BUSIEST TIMES IN THE LABORATORY. STAFF RECOMMEND THIS REPLACEMENT.	WRA-3965		CONSOLIDATED MACHINE CORP.	\$74,399.68
P-6.	3/2/15	SIX HP BLADE SERVERS AND SUPPORT AWARD OF PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR THE PURCHASE OF SIX HP BLADE SERVERS AND SUPPORT FOR THE CHELSEA FACILITY. THE MIS FIVE-YEAR STRATEGIC PLAN, UNDER THE IT INFRASTRUCTURE PROGRAM, CONTAINS FUNDS TO IMPLEMENT THE MOBILE DEVICE MANAGEMENT & APPLICATION DELIVERY ENVIRONMENT TO FACILITATE THE SECURE MOBILIZATION OF THE WORKFORCE, THROUGH THE USE OF SMART PHONE AND TABLET TECHNOLOGIES.	WRA-3936 ITC47		HUB TECHNICAL SERVICES, LLC	\$142,878.45
P-7.	3/16/15	SIX WATSON-MARLOW HOSE PUMP ASSEMBLIES FOR THE DEER ISLAND TREATMENT PLANT AWARD OF SOLE SOURCE PURCHASE ORDER FOR THE PURCHASE OF SIX WATSON-MARLOW REPLACEMENT HOSE PUMP ASSEMBLIES FOR THE RESIDUALS ODDOR CONTROL FACILITY SCRUBBER CAUSTIC FEED SYSTEM AT THE DEER ISLAND TREATMENT PLANT. THE SIX PUMPS IN QUESTION ARE ORIGINAL EQUIPMENT INSTALLED UNDER THE BOSTON HARBOR PROJECT APPROXIMATELY 20 YEARS AGO AND HAVE EXCEEDED THEIR USEFUL SERVICE LIFE. STAFF RECOMMEND THEY BE REPLACED AND WILL PERFORM ALL INSTALLATION TASKS RELATED TO THIS PURCHASE.			THE MAHER CORP.	\$42,440.00
P-8.	3/18/15	SUPPLY AND DELIVERY OF SODIUM HYPOCHLORITE TO THE COMBINED SEWER OVERFLOW FACILITIES, CLINTON TREATMENT PLANT AND HEADWORKS FACILITIES APPROVAL OF AMENDMENT NO. 1 TO INCREASE THE NUMBER OF GALLONS OF SODIUM HYPOCHLORITE RESULTING FROM MORE WET WEATHER AND RAIN THAN ANTICIPATED RESULTING IN THE CSO FACILITIES ACTIVATING MORE FREQUENTLY. MWRA WILL ONLY PAY FOR PRODUCT DELIVERED AND RECEIVED.	WRA-3877	1	UNIVAR, INC.	\$29,698.08
P-9.	3/18/15	120 BATTERIES FOR UNINTERRUPTIBLE POWER SUPPLIES AT THE DEER ISLAND TREATMENT PLANT AWARD OF PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR THE PURCHASE OF 120 BATTERIES FOR UNINTERRUPTIBLE POWER SUPPLIES IN THE THERMAL/POWER PLANT AT DEER ISLAND TREATMENT PLANT. DEER ISLAND'S CURRENT BATTERY MAINTENANCE PROTOCOL DICTATES THAT UPS BATTERY BANKS BE REPLACED EVERY FOUR YEARS. THE AGE OF THE BATTERIES TO BE REPLACED UNDER THIS PURCHASE IS APPROACHING THE FOUR-YEAR MARK. MWRA STAFF WILL PERFORM ALL TASKS RELATED TO REMOVING THE EXISTING BATTERY UNITS AND INSTALLING THE NEW SYSTEMS.	WRA-3968		BRAND COMPANY, INC.	\$31,180.80
P-10.	3/20/15	TEN BACK-PRESSURE REGULATORS FOR THE WASTE GAS SYSTEM AT THE DEER ISLAND TREATMENT PLANT AWARD OF PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR THE PURCHASE OF TEN BACK-PRESSURE REGULATORS FOR THE WASTE GAS SYSTEM AT THE DEER ISLAND TREATMENT PLANT. SIX OF THE NINE BACK-PRESSURE REGULATORS ARE ORIGINAL BOSTON HARBOR PROJECT EQUIPMENT AND STAFF REPLACED THE OTHER THREE IN 2004. ALL REGULATORS CURRENTLY OPERATE BUT THE RUBBER COMPONENTS OF THE VALVES DRY OUT OVER TIME AND DO NOT PROVIDE A COMPLETE POSITIVE SEAL AS DESIGNED. STAFF RECOMMEND THAT ALL BACK-PRESSURE REGULATORS BE REPLACED AND PURCHASE AN ADDITIONAL REGULATOR TO HAVE IN MWRA INVENTORY TO FACILITATE IMMEDIATE REPAIR IF NEEDED. MWRA STAFF WILL PERFORM ALL TASKS RELATED TO REMOVING AND SWAPPING OUT THE BACK-PRESSURE REGULATORS.	WRA-3976		TECHNOLOGY SALES ASSOCIATES, INC.	\$82,000.00
P-11.	3/24/15	SUPPLY AND DELIVERY OF SODIUM HYDROXIDE TO VARIOUS WASTEWATER LOCATIONS AWARD OF PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR THE PURCHASE AND DELIVERY OF SODIUM HYDROXIDE TO COLUMBUS PARK HEADWORKS, WARD STREET HEADWORKS, CHELSEA CREEK HEADWORKS AND NUT ISLAND HEADWORKS ON AN AS-NEEDED BASIS FOR THE TERM OF ONE YEAR.	WRA-3999Q		UNIVAR, INC.	\$36,950.29
P-12.	3/24/15	MINE SAFETY APPLIANCE GAS MONITORING EQUIPMENT AT THE NUT ISLAND HEADWORKS AWARD OF SOLE SOURCE PURCHASE ORDER FOR THE PURCHASE OF 72 MSA ULTIMA X TRANSMITTERS; 18 OXYGEN, 18 HYDROGEN SULFIDE AND 36 LEL. ALSO INCLUDED ARE 36 MSA MODEL 9020 DUAL CHANNEL CONTROLLERS. REPLACEMENT OF THESE TRANSMITTERS AND CONTROLLERS HAS BECOME NECESSARY SINCE THE EXISTING GAS SYSTEMS ARE OBSOLETE AND SPARE PARTS ARE NO LONGER READILY AVAILABLE. UPON RECEIPT OF THE EQUIPMENT, IT WILL BE INSTALLED UNDER MWRA'S INSTRUMENTATION SERVICE CONTRACT (OP-256) WITH KIT ZELLER, INC. THE SCOPE OF SERVICES FOR THIS WORK WAS INCLUDED IN THE CONTRACT, DETAILING THE WORK, AS WELL AS THE ESTIMATED BUDGETED HOURS.			NEPONSET CONTROLS, INC.	\$207,715.80

PURCHASING DELEGATED AUTHORITY ITEMS - MARCH 1 - 31, 2015

NO.	DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT #	AMENDMENT	COMPANY	FINANCIAL IMPACT
p-13.	3/24/15	SUPPLY AND DELIVERY OF ULTRA-LOW-SULFUR, #2 DIESEL FUEL FOR THE DEER ISLAND TREATMENT PLANT AWARD OF PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR THE SUPPLY AND DELIVERY OF 378,000 GALLONS OF ULTRA-LOW-SULFUR, #2 DIESEL FUEL TO THE THERMAL/POWER PLANT AT THE DEER ISLAND TREATMENT PLANT AS NEEDED TO MEET OPERATIONAL NEEDS .	ENE32		GLOBAL MONTELLO GROUP	\$809,031.60
p-14.	3/26/15	SUPPLY AND DELIVERY OF CARBON DIOXIDE TO THE JOHN J. CARROLL WATER TREATMENT PLANT AWARD OF PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR THE SUPPLY AND DELIVERY OF CARBON DIOXIDE TO THE JOHN J. CARROLL WATER TREATMENT PLANT ON AN AS-NEEDED BASIS FOR A TERM OF ONE YEAR. MWRA WILL ONLY PAY FOR PRODUCT THAT IS DELIVERED AND RECEIVED.	WRA-3978		PRAXAIR, INC.	\$319,074.00


STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: April 15, 2015
SUBJECT: 2014 Annual Update on New Connections to the MWRA System

COMMITTEE: Administration, Finance & Audit

INFORMATION
 VOTE

Carolyn M. Fiore, Deputy Chief Operating Officer
Pamela Heidell, Policy & Planning Manager
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

For Information Only. This *2014 Annual Update on New Connections to the MWRA System* has been prepared pursuant to the "Annual Update" requirements of MWRA's system expansion policies.

DISCUSSION:

The *2014 Annual Update on New Connections to the MWRA System* addresses new connections to the MWRA water and sewer systems from outside the service area, and focuses primarily on each connection's compliance with requirements stipulated in its water supply or sewer use agreements with MWRA. For water connections, requirements include, but are not limited to, compliance with water withdrawal limits and the status of entrance payments due MWRA. For wastewater connections, requirements address inflow removal and any ongoing stipulations regarding management of wet weather flows, compliance with discharge limits, and the status of payments due to MWRA.

The requirements of water and sewer agreements derive from the following MWRA policies:

- OP.04, Sewer Connections Serving Property Partially Located in a Non-MWRA Community (the "Sewer Straddle" policy);
- OP.05, Emergency Water Supply Withdrawals;
- OP.09, Water Connections Serving Property Partially Located in a Non-MWRA community (the "Water Straddle" policy);
- OP.10, Admission of New Community to MWRA Water System; and
- OP.11, Admission of New Community to MWRA Sewer System and Other Requests for Sewer Service to Locations outside MWRA Sewer Service Area.

Pursuant to OP.10, new connections are defined as connections approved within the preceding five years. However, since 2002, when MWRA policies first prescribed an Annual Update, staff have tracked each entrant's compliance with water withdrawal/wastewater discharge requirements. Accordingly, this report concentrates on new connections or modified connections within the last five years, but also includes abbreviated information on water withdrawals and wastewater discharges by all entities (from outside the service area) admitted since 2002. The annual report to the Board also includes an update on inquiries from potential applicants for admission and other system expansion considerations.

Approved Connections to the MWRA Water System and Inquiries Regarding Future Connections

Approved Connections to the Water System

Since 2002, Stoughton, Reading, the Dedham-Westwood Water District (DWWD), and Wilmington have become MWRA water-supplied communities. (Bedford was admitted into the MWRA system prior to 2002 before firm water withdrawal limits were established for new communities.) There have also been two "straddle connections" since 2002 – Avalon in Peabody/Danvers (now called 14 North), and the YMCA in Marblehead/Salem. Information pertaining to these connections is provided in Table 1 on the following page; Figure 1 (following the table) shows the new water connections.

The highlights of Table 1 include:

- With the exception of DWWD, addressed further below, all water supply withdrawals are below their contract limits; and
- All entrance fees have been paid pursuant to agreed-upon schedules of payments included in the communities' Water Supply Agreements.

Within the last five years, approvals for emergency water under OP. 5 have been limited to Ashland and Hudson and approvals of new communities under OP.10 have been limited to DWWD, which requested an increase in its water withdrawal limit (DWWD was first admitted into the MWRA system in 2005, with a lesser approved withdrawal). Within the last five years, there have been no requests under OP.9, the Water Straddle policy. More information on Hudson, Ashland, and DWWD follows.

Hudson

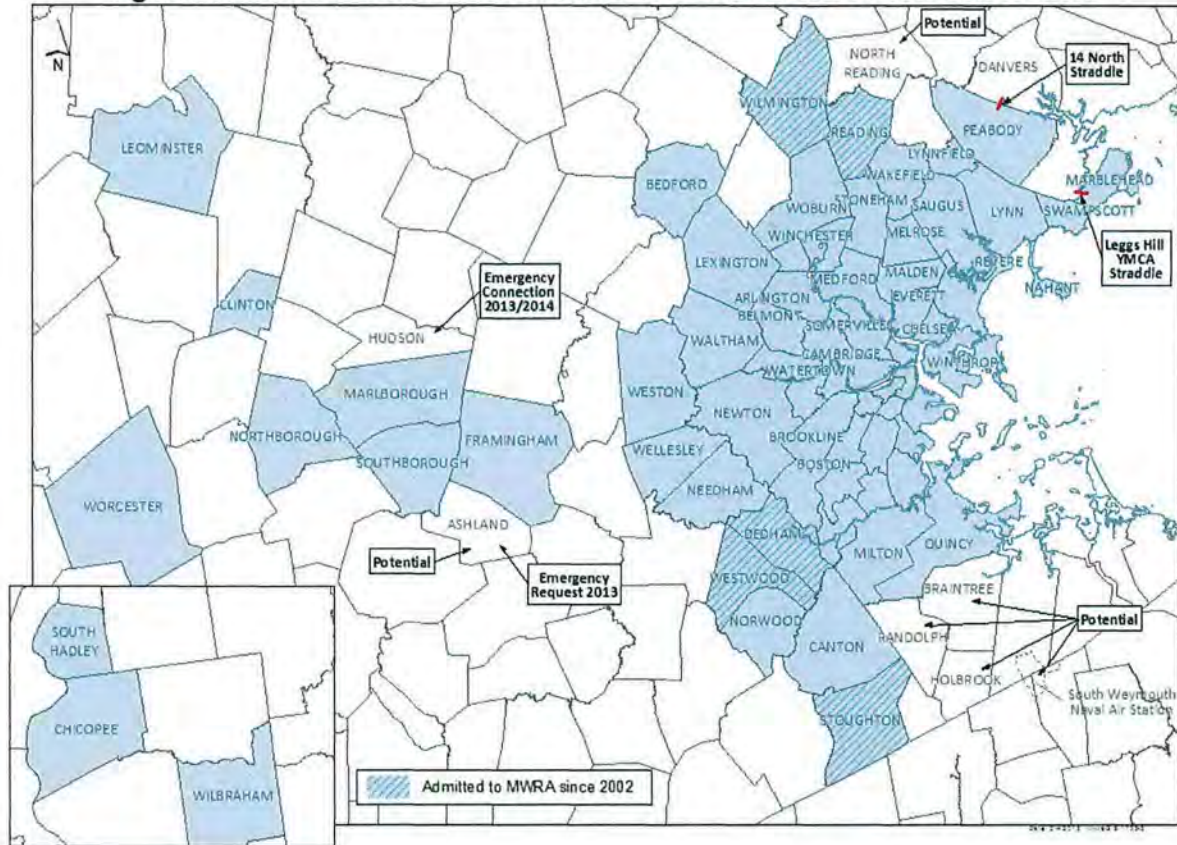
Hudson withdrew MWRA water from July 2013 through December 2014 under three consecutive six-month emergency withdrawal approvals and via an emergency eight-inch metered interconnection with Marlborough. A shortfall in local sources resulted when Hudson was required to take its Cranberry Bog Well and Kane Well off-line due to water quality issues, and remaining sources (Chestnut Street Wells and Gates Pond) were not sufficient to meet the Town's demand. A long-term corrective plan for Cranberry Bog and Kane wells consisting of the construction of transmission mains from the wells to Hudson's Chestnut Street Filtration Plant, along with instrumentation and process modifications at the treatment plant, was

Table 1
Approved Connections to MWRA Water System Since 2002

Applicant (location)/	Applicable MWRA Policy	Approval Date	Status of Entrance Fee or Payment of Charges Under the Emergency Policy	MWRA Approved withdrawal (mgd annualized)	Withdrawal from MWRA in 2014(mgd)
Hudson	OP.05, Emergency Withdrawal	6//13 (6 month term) 12/13(6 month term) 6/14 (6 month term)	For the three six-month emergency withdrawal periods, MWRA received a total of \$1,033,787.	0.5 mgd	.431
Ashland	OP.05, Emergency Withdrawal	12/2013	None- water was never withdrawn	.75 mgd	0
Dedham/Westwood W.D	OP.10, New Community	12/05 (partially supplied) 12/14 (partially supplied)	Entrance fee (\$548,748) for first 0.1 mgd paid in full. Entrance fee of \$566,727 for additional 0.1 mgd to be paid in five annual installments, 1st one received.	0.1 mgd 0.2 mgd	.24 mgd
Wilmington	OP.10, New Community	5/09 (partially supplied)	Net Entrance Fee of \$2,809,320 w/20 year payment schedule. 2014 contract reflects revised payment schedule w/ interest rate of 4.34% (versus 4.67% for years 1-5) ¹ .	0.6 mgd	.278. mgd
Reading	OP.10, New Community	11/05 (partially supplied) 10/07 (fully supplied)	\$3,285,242 (first 0.6 mgd) \$7,799,606 (for additional 1.5 mgd) Paid in full	2.1 mgd	1.59 mgd
YMCA (Salem/Marblehead)	OP.09, "Straddle Policy"	11/06	\$70,823 paid in full	0.0127 mgd	.0093 mgd
14 North (Avalon) Danvers/Peabody	OP.09, "Straddle Policy"	05/03	\$64,063 paid in full	0.012 mgd	.008 mgd
Stoughton	OP.10, New Community	6/02 (partially supplied)	Net Entrance Fee of \$5,657,117, w/20 year payment schedule. 2014 contract reflects revised payment schedule w/ interest rate of 4.34% (versus 4.43 for years 1-11) ² .	1.15 mgd	.869 mgd

¹, ² revised entrance fee payment schedule was requested by Wilmington and approved by the MWRA Board and the MWRA Advisory Board in 2014. Stoughton revised entrance fee payment scheduled approved by MWRA and Advisory Board in 2014.

Figure 1: New Water Connections Since 2002 and Potential New Connections



undertaken under a DEP Administrative Consent Order (ACO). Pursuant to that ACO, Hudson completed its corrective plan by December 31, 2014, and thereafter ceased MWRA withdrawals.

In 2014, Hudson's withdrawals averaged approximately 431,000 gallons per day, below the approved average withdrawal of 0.5 mgd. In 2014, water sold to Hudson, which assessed at the prevailing rate plus a 10% surcharge as prescribed by OP.5, resulted in approximately \$550,929 in water revenue. An additional \$104,260 was assessed for Hudson's asset value payments, as also prescribed by OP.5.^[1] Considering both 2013 and 2014 emergency withdrawals from MWRA, MWRA received a total of \$1,033,787.

Ashland

Ashland requested an emergency water supply withdrawal from MWRA for the period December 18, 2013 through June 17, 2014, after low water levels caused concern that the Town's wells would not be able to operate. Ultimately, Ashland did not withdraw any water in 2013 or 2014, as water levels were replenished soon after MWRA approved the emergency

^[1] Per OP.5, charges for emergency withdrawals increase with each six-month emergency withdrawal period. The first period, the charge is 110% of the prevailing rate, and emergency supply periods two and three, an asset value contribution is assessed (period 2 is 110% of 1/3 of annual payment associated with value contribution amortized with interest over fifteen years, and period three is 110% of 2/3 the annual payment. For successive years, the premium and asset value contribution further increase.

water withdrawal. In addition to emergency requests, Ashland is also considering MWRA as a long-term option to supplement its local sources (addressed below under potential connections to the water system).

Dedham-Westwood Water District

DWWD was admitted into the MWRA Water System in 2005. DWWD's local sources include three groundwater supplies, which are able to meet the District's demand the majority of the time. MWRA water is used as a supplemental source, particularly when use of one of DWWD's sources, the Fowl Meadow Well, is restricted during low-flow periods on the Neponset River. DWWD was approved in 2005 to withdraw up to 36.5 million gallons on an annual volume basis (0.1 mgd) from MWRA and paid an entrance fee for that amount. In December 2014, the Board approved DWWD's request to increase its withdrawal limit by 36.5 million gallons per year for a total authorized annualized average-day withdrawal of 0.2 mgd or 73 million gallons a year. Anticipated growth in DWWD's service area, increasing groundwater withdrawal concerns highlighted by the Sustainable Water Management Initiative, and a desire to increase the reliability of its water system in the event of groundwater pump failure prompted DWWD's request.

An additional entrance fee payment of \$556,727 to be paid in five annual installments is associated with the revised contract limit annual, and the first annual installment of \$111,345.37 was received in January 2015. DWWD's water use in 2014 was .24 mgd, higher than the revised contract limit, due to an emergency situation that arose when DWWD encountered delays on work of one of its wells. Under typical situations, DWWD's future water withdrawals from MWRA should be under 0.2 mgd on an annual average basis, barring changes in local sources (which would require DWWD and MWRA to revisit the Water Supply Agreement once more).

Potential Future Connections to the Water System and Other Considerations

MWRA continued discussions, some of which began years ago, with North Reading, Ashland, Southfield, and Tri-Town regarding admission into the MWRA water system.

North Reading

North Reading has filed an Environmental Notification Form (ENF), stating the Town's intent to pursue becoming a fully-served MWRA water community and to discontinue use of its local wells in the Ipswich River Basin, as well as reduce its reliance on water supplied from Andover. In 2014, a cooperative study effort by North Reading, Reading, and MWRA included a hydraulic analysis to evaluate wheeling water from MWRA through the Town of Reading water system to North Reading, and also determine infrastructure improvements required to assure a reliable supply and adequate pressure to both communities. The results of the technical study were promising, but to implement the plan, some pipelines in Reading will need to be upsized and a new interconnection between Reading and North Reading constructed. MWRA understands that North Reading and Reading Selectmen are to meet to discuss the project further. North Reading is also in the process of preparing a Draft Environmental Impact Report and is seeking input from stakeholders prior to filing it. Even with progress made to the date, the timeline for North Reading to receive MWRA water is several years out, given that local agreements and approvals

will need to be in place, regulatory approvals will need to be obtained, and pipelines will need to be designed and constructed.

In the meantime, MWRA is advancing its Northern Intermediate High (NIH) Redundancy project, which will increase hydraulic capacity at NIH communities' take-offs and also enhance reliability.

Ashland

Ashland relies on three wells in a well field adjacent to the Hopkinton State Reservoir. The reservoir elevation impacts the elevation of the groundwater in the well field. In the past, lower-than-normal precipitation raised concerns about water levels, for when reservoir levels drop, Ashland's wells may be affected to the point that two of the three wells may "lock-out" as the groundwater drops below the pumps. In addition, the Town's groundwater sources can impact nearby water resources and may result in withdrawal constraints that limit groundwater pumping. Therefore, Ashland is developing a plan to diversify its water sources.

For some time, MWRA staff have worked with the Ashland Department of Public Works to address various aspects of obtaining supplemental water from MWRA. Unfortunately, at a Special Town Meeting in November 2014, a warrant article to see if the Town would seek admission to MWRA and appropriate funds for the connection cost and entrance fee received approval of a simple majority but did not receive the two-thirds vote necessary. Opponents of the warrant article cited loss of local control and the concern that more water would "open the floodgate to developers." The Town will revisit MWRA admission at its May 2015 Town Meeting. Should Ashland join MWRA, MWRA water would be conveyed to Ashland via an Ashland/Southborough interconnection. Ashland previously received a grant from the Department of Housing and Community Development MassWorks Infrastructure Program for partial funding for the construction of the interconnection. Since Ashland operates a treatment plant that also supplies water to Hopkinton, there may also be future consideration of Hopkinton also pursuing admission to MWRA as a partial-use community.

Tri-Town

Braintree, Randolph and Holbrook comprise Tri-Town, a regional drinking water supply shared by the three communities. Braintree operates its own treatment plant and a second treatment plant serves the Randolph-Holbrook Joint Water Board. Both treatment plants are aging and a single regional treatment facility has been proposed. To increase reservoir storage capacity and safe yield, a reservoir dredging project is also proposed. In the past, Tri-Town's demand has exceeded reservoir yields. As an alternative to a capital program involving both a new regional treatment plant and a dredging program, Tri-Town is considering a connection to MWRA for either full membership or partial membership to supplement local supplies. In 2014, MWRA met with the Tri-Town communities numerous times, both individually and collectively in formal meetings of the Tri-Town Board, and MWRA also attended a meeting in late 2014 with EOEEA and the communities. To MWRA, it appears that the communities are still considering a local option and are seeking regulatory input regarding local source capacity and availability of state assistance.

Southfield

The Weymouth Naval Air Station Redevelopment (Southfield) remains a prospective connection to MWRA. Many, including MWRA staff, believe MWRA remains the best solution to comprehensively address the long-term needs of the Redevelopment, and moreover, the regional needs of Southfield and Tri-Town communities combined. In 2014, MWRA met with Starwood, Southfield's new Master Developer, on more than one occasion, and also completed some pipeline routing investigations. Technically, MWRA believes there are many ways to serve Southfield, either wheeling MWRA water or through construction of a direct pipeline from MWRA's Section 22 in Quincy to Southfield. The latter alternative entails many miles of new pipeline.

Other Initiatives to Advance System Expansion

In 2014, the Board revised the entrance fee provisions of OP.10 to codify the Advisory Board's recommendation for a 25-year, interest-free payment plan for the entrance fee, with a grace period for the first three years. Prior to the policy being revised, it required that the entrance fee be paid up-front unless otherwise approved by the Board, and if approved by the Board, the alternative entrance fee payment schedule would include an interest rate equivalent to the average cost of MWRA's fixed-rate debt, plus an additional 25 basis points. An interest-free payment plan can reduce communities' capital and debt service costs associated with entrance fee payments by approximately 40%. As a result of MWRA's and the MWRA Advisory Board's efforts, the Water Infrastructure Bill enacted in 2014 contains provisions to make connection costs eligible for SRF principal forgiveness loans, and to provide grants for 50% of the entrance fee, subject to appropriation by the legislature. These initiatives are intended to encourage MWRA water system expansion, particularly where cost of MWRA versus local supply options is the major consideration.

Summary of Approved Connections to the MWRA Sewer System and Inquiries Regarding Future Connections

Approved Connections to the Sewer System

Table 2 on the following page summarizes all permanent connections to the MWRA sewer system since 2002 and Figure 2 (following the table) shows their approximate locations. Each entity entered into sewer connection agreements with MWRA stipulating terms, and since 2007, all sewer connection agreements have included annual reporting requirements on the estimated volume of wastewater volume discharged. As indicated in Table 2, all entities reported that wastewater discharges in 2014 were below their approved agreement limits. The annual reporting requirements contained in the sewer connection agreements also address continuing obligations for the connecting entity that relate to sewer system operations. These range from inflow removal reports to ongoing inspection of the inflow dishes installed in sewer manholes to reduce inflow in Walpole (a condition of the Herb Chambers and D&N Realty inflow removal requirements), to maintaining the ability to cease discharges to MWRA during severe wet weather (Avalon and D&N Realty). As also indicated in Table 2, all entities have been compliant with their MWRA agreement conditions.

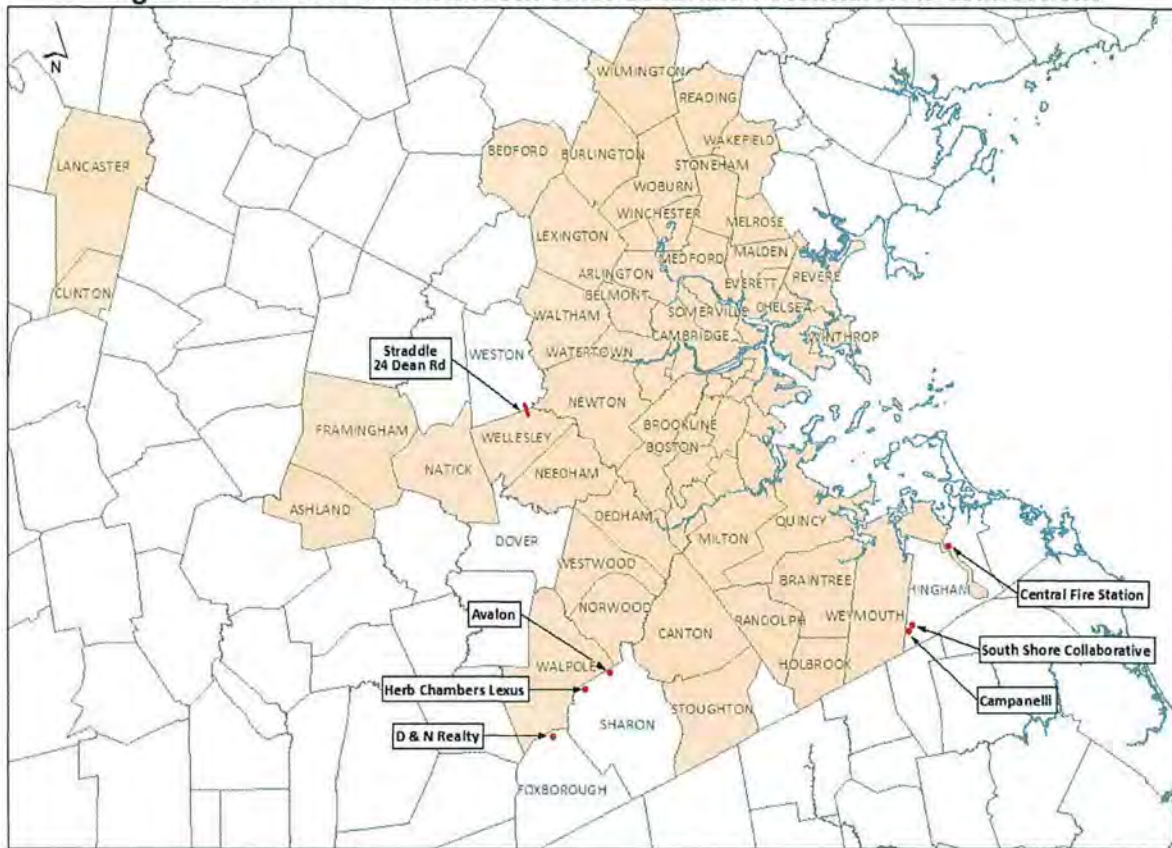
Table 2
Approved Connections to MWRA Sewer System Since 2002

Applicant (location)/	Applicable MWRA Policy	Approval Date	Entrance Fee Payment	Status of Inflow Removal/Other Contract Requirements	MWRA Approved discharge (gpd))	Estimated Discharge to MWRA in 2014* (gpd)
FoxRock Realty (at 105 Research Rd, Hingham)	OP.11	4/12	\$9,133 + \$ 12,750 paid in full	-Inflow removal completed	5,536 gpd	2,317
24 Dean Road, (Weston/Wellesley)	OP.04	3/11	\$18,033 paid in full	-Inflow removal completed	575 gpd	324
D&N Realty, (Foxborough)	OP.11	6/07	\$168,391 paid in full	-Inflow removal completed - Inflow dishes are periodically inspected to ensure proper operation - Owner maintains a tight tank and has up-to-date emergency pumping contracts for holding tank pump-out: can cease discharges if directed by MWRA during wet weather events.	13,000 gpd	3,090
Avalon Bay, (Sharon)	OP.11	6/07	\$105,586 paid in full	-Storage tank per agreement with Norwood -Inflow removal completed	16,120 gpd	14,752**
Herb Chambers Lexus, Sharon)	OP.11	5/07	\$40,750 paid in full	-Inflow removal completed -Inflow dishes are periodically inspected to ensure proper operation	6,400 gpd	6,297**
Hingham Fire Station, (Hingham)	OP.11	4/07	\$8,429 paid in full	-Inflow removal completed	782 gpd	216.79

* Wastewater discharges are estimated based on water meter readings.

**Water consumption figures are adjusted downward by 5% to account for a certain percentage of water that is used by the facility and not returned as wastewater (such as landscaping, water consumed).

Figure 2: New Sewer Connections Since 2002 and Potential New Connections



In 2014, there were no applications for sewer connections under OP.11, *Admission of New Community to MWRA Sewer System and Other Requests for Sewer Service to Locations Outside MWRA Sewer Service Area*, or OP.4, *Sewer Connections Serving Property Partially located in a Non-MWRA Community*. The most recent approved sewer connection was in 2012, and this was for FoxRock Realty's expansion and renovation of a property at 105 Research Road in Hingham for use by the South Shore Collaborative. Within the last five years, the only other new sewer connection from outside the service area was for a residence at 24 Dean Road straddling the Weston/Wellesley municipal boundary. More information on 105 Research Road and 24 Dean Road follows.

105 Research Road, Hingham

In April 2012, MWRA approved an increase in wastewater discharge from 105 Research Road in Hingham from 2,025 gallons per day, as previously approved in 2004, to up to 5,336 gallons per day, subject to an additional entrance fee payment of \$12,750, removal of at least 14,400 gallons of inflow, and contingent upon legislative approval. The Research Road property is located in southwestern Hingham and conveys flow to MWRA via the Weymouth sewer system. In 2004, when MWRA and Research Road LLC entered into a Sewer Connection Agreement for an approved discharge from 105 Research Road of 2,025 gallons per day, the site was used for office and warehouse use. A renovation, reuse, and expansion of the site for use by the South Shore Educational Collaborative required an increased wastewater discharge. Legislation was

enacted in July 2012 allowing a higher discharge, and in November 2012, MWRA received the \$12,750 entrance payment in full. In 2013, FoxRock fulfilled its Inflow Removal obligations with the submittal of an Inflow Removal report documenting eight sump pumps were redirected and eleven sewer manholes replacements were completed. It was estimated that 10,080 gpd of inflow reduction was achieved by sump pump reduction and 20,072 gpd of inflow reduction was achieved by manhole replacement. In 2014, the school's wastewater discharges were 2,317 gallons per day.

24 Dean Road, Weston

In March, 2011, MWRA approved a connection to the MWRA sewer system via the Wellesley sewer system for a residence at 24 Dean Road that is partially located in Weston and partially located in Wellesley, in accordance with the Sewer Straddle policy. Total estimated wastewater generation from the residence was estimated to be 575 gallons per day; wastewater generation attributable to development from outside the MWRA sewer service area (four of the five bedrooms in the house) was estimated to be 460 gallons per day. Wastewater flow from the 24 Dean Road residence is transported to the Wellesley system via a short sewer line connecting to a sewer manhole at 20 Dean Road, where the Wellesley sewer system ends. MWRA required removal of at least 1,840 gpd of peak inflow. Accordingly, the applicant provided funds to the Town of Wellesley to install a fiberglass manhole cover inflow removal dish. Wellesley DPW reported that this dish was installed. The Applicant was required to pay an entrance fee of \$18,033, which was received by MWRA in April 2011. In 2014, the estimated wastewater discharge was approximately 324 gallons per day.

Potential Future Connections to the Wastewater System

North Hingham Sewer District Expansion

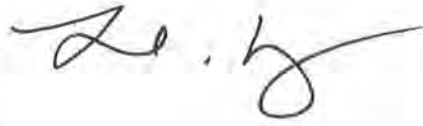
The North Hingham Sewer District is a member of MWRA's Sewer System, and the boundaries of the District have previously been defined by legislation. Hingham's Department of Public Works has indicated that it wishes to explore with MWRA expanding the limits of the District to include properties that connected to the District under the MDC (without documented approvals), as well as additional properties.

Other

MWRA staff did receive other sewer system expansion inquiries, but after discussion with interested parties on requirements of admission, including inflow removal and the need to consider feasible alternatives to MWRA, formal applications were not submitted.

STAFF SUMMARY

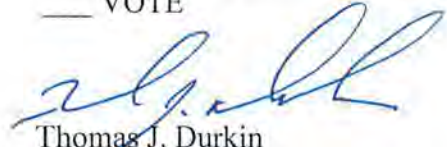
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: April 15, 2015
SUBJECT: FY15 Financial Update and Summary



COMMITTEE: Administration, Finance & Audit

INFORMATION
 VOTE

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


Thomas J. Durkin
Director, Finance

RECOMMENDATION:

For information only. This staff summary provides the financial update and variance highlights through March 2015, comparing actual spending to the FY15 Budget, and a year-end projection for the Current Expense Budget.

DISCUSSION:

Total year-to-date expenses are lower than budget by \$3.5 million or 0.7% mainly due to lower direct expenses of \$3.3 million and indirect expenses of \$282,000, and higher total revenues of \$1.8 million or 0.4% for a net variance of \$5.3 million.

In March, \$1.6 million was transferred to the Defeasance Account mostly as a result of the continued low variable rate environment which brought the year-to-date defeasance account balance to \$12.3 million. In addition to the \$9.6 million variable rate related favorable variance, the defeasance account also includes \$2.7 million as a result of the November 2014 debt financing and lower than budgeted State Revolving Fund (SRF) borrowings. Should these favorable trends continue, the balance is projected at \$25.0 million by year-end. It is important to note that while these funds are allocated for defeasance, they are available for other budgetary purposes until the defeasance is executed.

Without the transfer of the \$12.3 million in debt service savings to the Defeasance Account, the total year-to-date variance through March would have been \$17.6 million.

Beyond debt service savings, staff projects a surplus of approximately \$5.8 million at year-end of which \$3.5 million would be for lower direct expenses mainly due to conservative budgeting for wages and utilities both of which are lower than anticipated, \$663,000 for lower indirect expenses, and \$1.6 million for greater than budgeted revenues. Staff will continue to refine the year-end projections each month as more actual spending information becomes available and update the Board accordingly.

Please refer to Attachment 4 for a more detailed comparison by line item.

Total Expenses were lower than budget by \$3.5 million or 0.7% and total Revenues were higher than budgeted by \$1.8 million or 0.4%.

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

	FY15 Budget (March)	FY15 Actual (March)	\$ Variance	% Variance
Direct Expenses	\$155.9	\$152.6	-\$3.3	-2.1%
Indirect Expenses	\$38.6	\$38.3	-\$0.3	-0.7%
Debt Service	\$304.6	\$304.6	\$0.0	0.0%
Total	\$499.1	\$495.6	-\$3.5	-0.7%

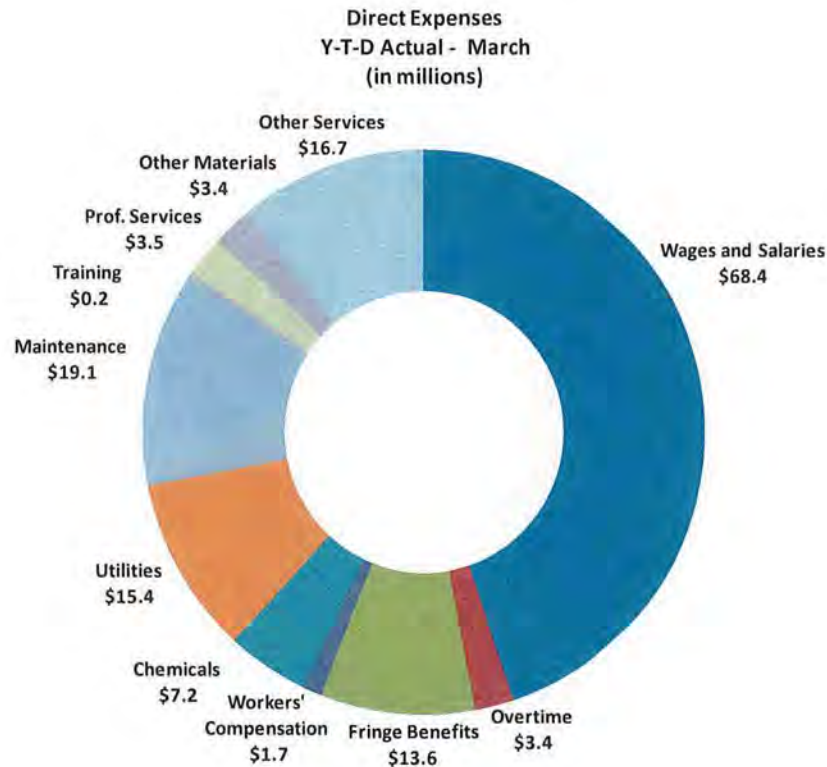
Besides debt service, the largest variances year-to-date are driven by:

- Direct Expenses are lower than budget by \$3.3 million for utilities, wages and salaries, professional services, chemicals, and fringe benefits;
- Indirect Expenses are lower than budget by \$282,000 for lower Watershed expenses due to FY14 overaccrual, lower Mitigation payments, and lower Harbor Electric Energy Company (HEEC) payments; and
- Revenues exceeding budget by \$1.8 million due to \$995,000 for a prior period adjustment for Watershed related expenses, \$425,000 for the sale of unbudgeted emergency water for the Town of Hudson, \$372,000 payment received for the sale of the Fox Point CSO Facility, \$142,000 for higher permit, monitoring, and penalty fees, \$75,000 reimbursement for Briarwood Rehabilitation Easement project, \$55,000 for the timing of Rutland/Holden payments, \$52,000 for the timing of antenna license revenue, and a variety of smaller items totaling approximately \$137,000. The favorable variances were offset by lower Energy revenue of \$448,000 mainly due to the timing of Renewable Portfolio Standard (RPS) sales.

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

Direct Expenses

Direct expenses total \$152.6 million, \$3.3 million or 2.1% lower than budgeted.



The underspending on direct expenses is related to Utilities, Wages and Salaries, Professional Services, Chemicals, and Fringe Benefits offset by overspending for Overtime, Other Materials, Maintenance, Other Services, and Workers' Compensation.

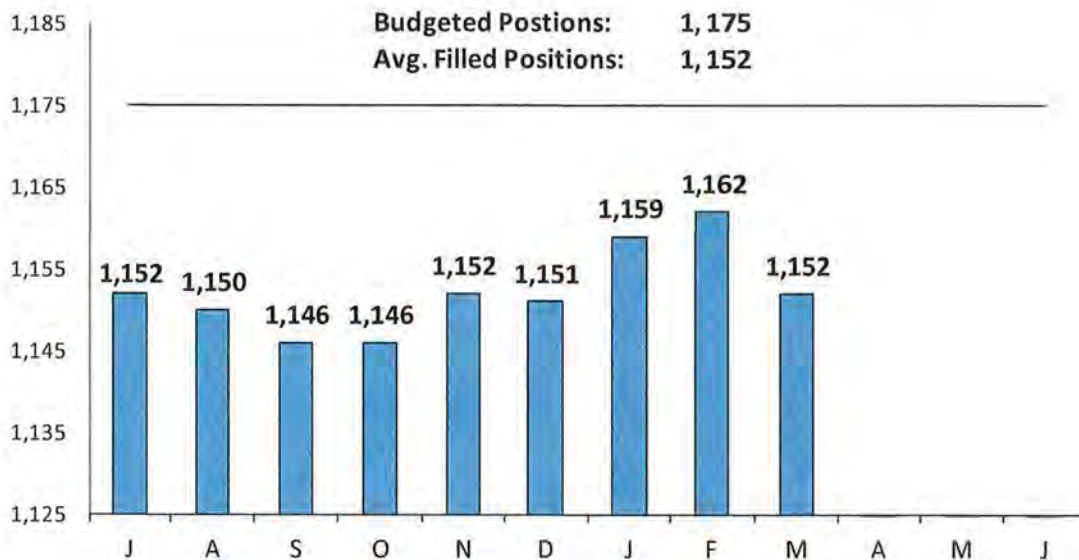
Utilities

Utilities are underspent \$2.3 million or 13.2% year-to-date primarily for lower Electricity of \$1.4 million mainly due to lower commodity and transmission and distribution costs and lower flows which resulted in less pumping demand at Deer Island, lower Diesel Fuel of \$796,000 mainly in Field Operations and Deer Island due to favorable pricing, and Water use of \$119,000.

Wages and Salaries

Wages and Salaries were underspent by \$1.9 million or 2.6% mainly as a result of lower than budgeted positions and the salary mix differential between staff retiring at higher rates and new hires coming on board at lower rates. The average filled positions were 1,152 which is 23 positions lower than the 1,175 budgeted positions. Additionally, MWRA had 4 temporary employees.

FY15 MWRA Positions Trend



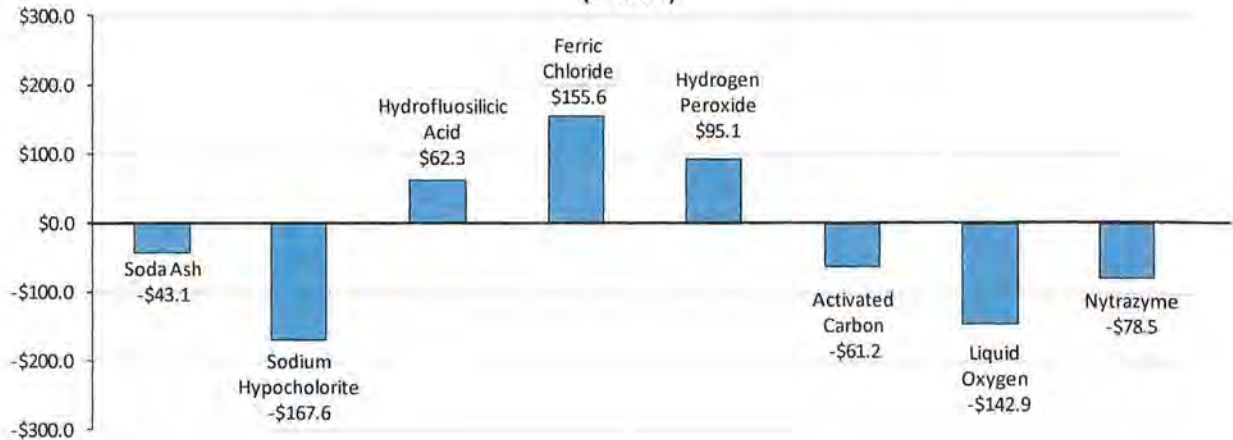
Professional Services

Professional Services are lower than budget by \$590,000 or 14.6% mainly due to the timing of initiatives such as the Mystic River Modeling project, dam safety work, and as-needed engineering for maintenance projects.

Chemicals

Chemicals are underspent by \$221,000 or 3.0% year-to-date mainly due to lower than budgeted Sodium Hypochlorite of \$168,000 due to lower pricing and timing of deliveries, Liquid Oxygen of \$143,000 due to better water quality, and Nitrazyme of \$79,000 due to Town of Framingham system modifications. Underspending is offset by overspending for Ferric Chloride of \$156,000 due to struvite control and Hydrogen Peroxide of \$95,000 due to increased need for pretreatment of hydrogen sulfide gas due to lower than budgeted plant flows.

FY15 Chemical Expense Variances (Year-To-Date March)
(in 000's)



Fringe Benefits

Fringe Benefits are lower than budget by \$169,000 or 1.2% mainly due to lower than budgeted health and unemployment insurance due to the fewer than budgeted positions.

Overtime

Overtime expenses are higher than budgeted by \$692,000 or 25.2% for higher than projected wet weather events, specifically for snow removal in February & March, and coverage requirements.

Other Materials

Other Materials are higher than budget by \$623,000 or 22.0% mainly due to timing of vehicle, computer hardware, work clothes, and Clinton gravel purchases. The overspending is offset by lower vehicle expenses mostly related to lower gasoline pricing.

Maintenance

Maintenance is overspent by \$466,000 or 2.5% year-to-date. Materials are overspent by \$1.3 million and services are underspent by \$872,000. The variance is due to several reasons: projects scheduled for FY14 that were completed in FY15; critical unbudgeted projects such as purchase of data diodes to improve the security of the SCADA system's data networks; and the Back Pressure Steam Turbine Generator condenser unit services at Deer Island. Staff projects approximately \$800,000 in overspending by year-end.

Other Services

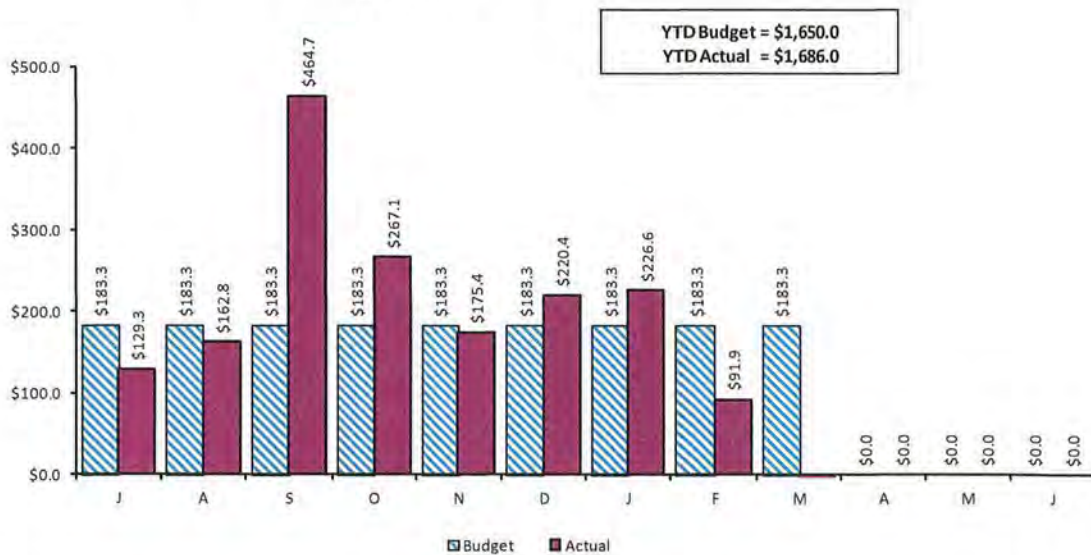
Other Services are higher than budget by \$85,000 or 0.5% mainly due to higher than budgeted telecommunications expenses of \$158,000 due to security data line upgrades in support of the enhanced security system and Charlestown Navy Yard headquarters carpet and painting

upgrades of \$81,000. Overspending is offset by lower spending on Permits of \$67,000 mainly due to timing.

Workers' Compensation

Workers' Compensation expenses are higher than budget by \$36,000 or 2.2% based on higher compensation payments of \$124,000 and administrative costs of \$52,000 offset by lower medical expenses of \$140,000. March's expenses were lower than budget by \$235,000 due to three large settlements which lowered reserves.

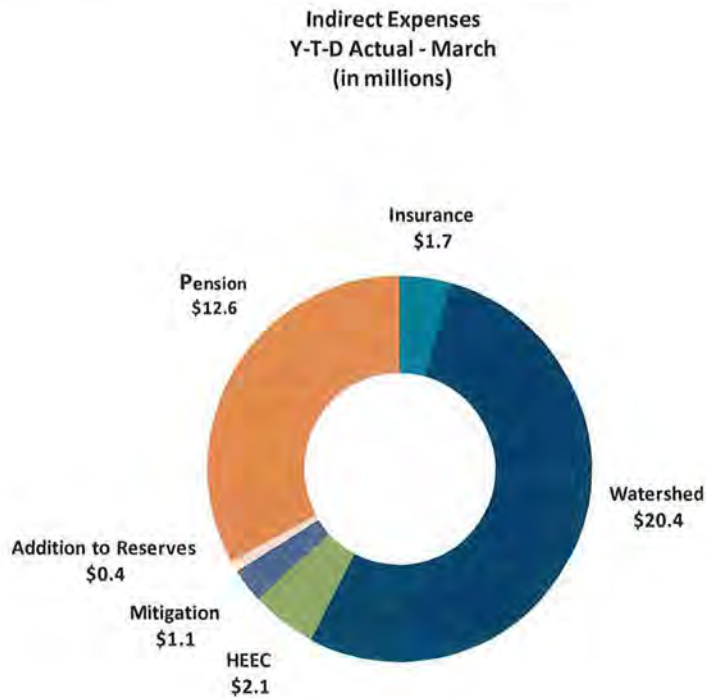
FY15 Workers' Compensation Spending (Year-To-Date March)
(in thousands)



# of Open Claims-Lost Time	69	72	70	66	66	62	64	66	64	0	0	0
# of Open Claims-Medical On	16	24	24	21	14	15	16	24	25	0	0	0

Indirect Expenses

Indirect expenses total \$38.3 million, \$282,000 or 0.7% lower than budget.

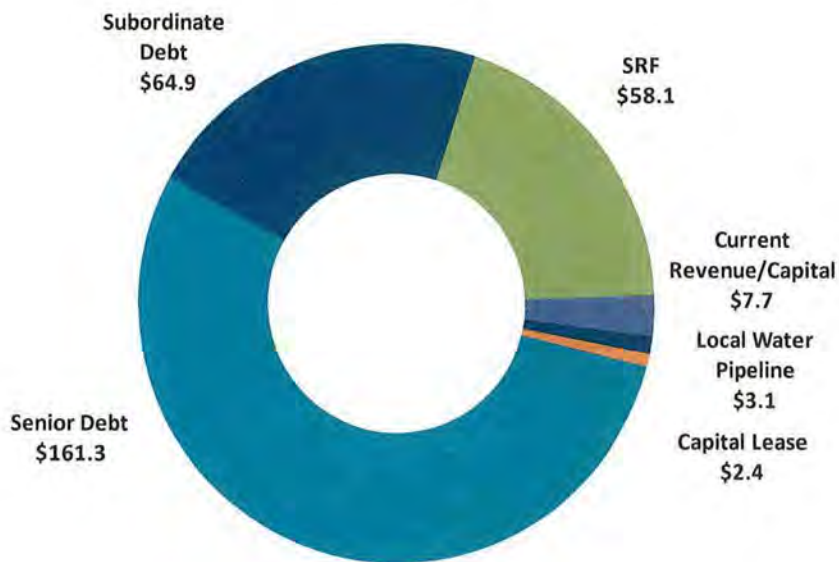


The majority of the year-to-date underspending on Indirect Expenses is for lower Watershed Reimbursement of \$151,000 due to FY14 overaccrual and lower Payment in Lieu of Taxes (PILOT) payments, lower Mitigation payments, and lower Harbor Electric Energy Company (HEEC) of \$104,000 due to lower reimbursement.

Debt Service Expenses

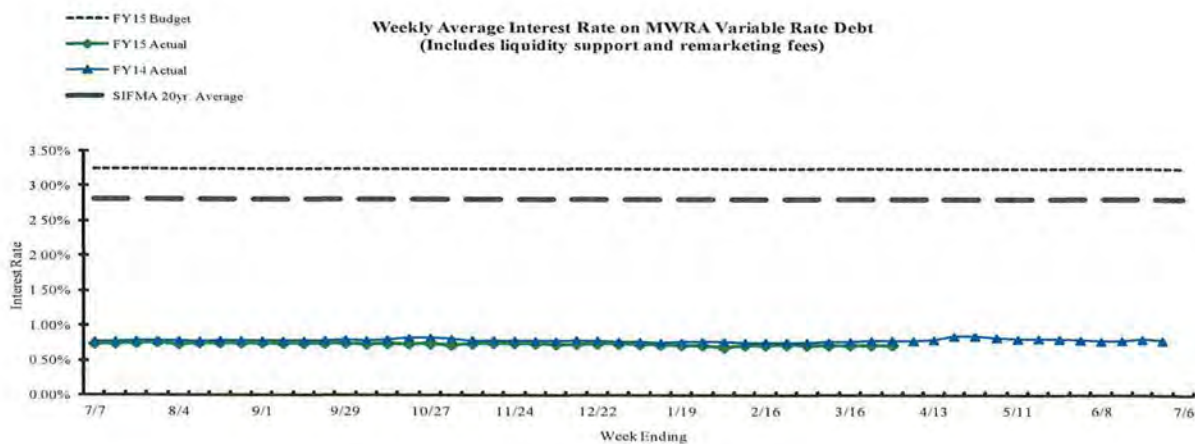
Debt Service expenses include the principal and interest payment for fixed debt, the variable subordinate debt, and the State Revolving Fund (SRF) obligation, the commercial paper program for the local water pipeline projects, current revenue for capital, and the Chelsea facility lease payment.

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



Debt Service expenses through March totaled \$304.6 million which is at budgeted level after the transfer of \$12.3 million of a favorable year-to-date debt variance to the Defeasance Account. \$9.6 million of the \$12.3 million favorable year-to-date debt variance is pertaining to the low short-term variable rate. The balance is attributable to the November 2014 debt financing, and State Revolving Fund (SRF) borrowings.

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



Revenue

Year-to-date revenue for FY15 totals \$507.7 million which is \$1.8 million or 0.4% higher than budget.

The higher non-rate Revenue is due to \$995,000 for a prior period adjustment for Watershed related expenses, \$425,000 for the sale of unbudgeted emergency water for the Town of Hudson, \$372,000 payment received for the sale of the Fox Point CSO Facility, \$142,000 for higher permit, monitoring, and penalty fees, \$75,000 reimbursement for Briarwood Rehabilitation Easement project, \$55,000 for the timing of Rutland/Holden payments, \$52,000 for the timing of antenna license revenue, and a variety of smaller items totaling approximately \$137,000. The higher favorable variances were offset by lower Energy revenue of \$448,000 mainly due to the timing of Renewable Portfolio Standard (RPS) sales.

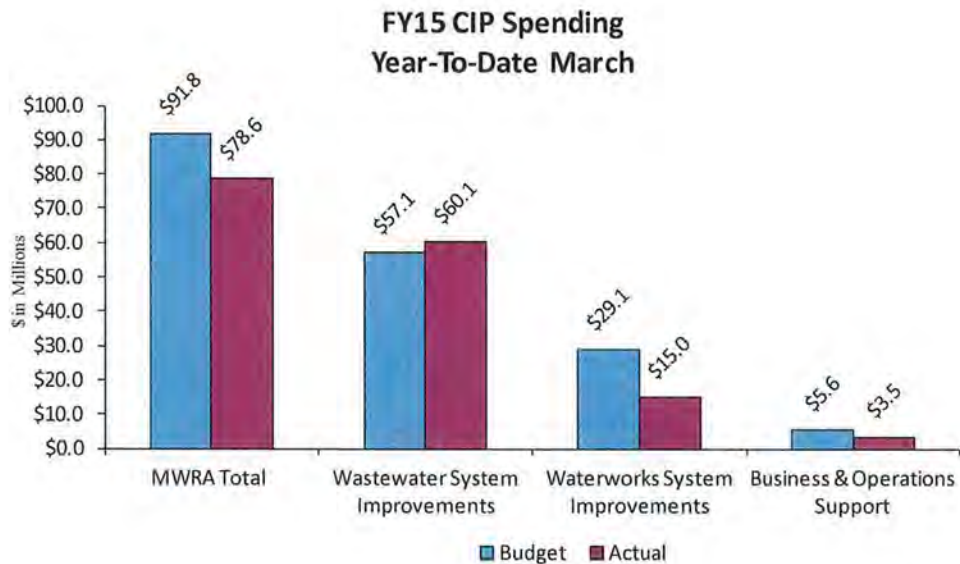
Please refer to Attachment 2 for a more detailed comparison by line item.

FY15 Capital Improvement Program

Spending year-to-date in FY15 totals \$78.6 million, \$13.1 million or 14.3% lower than budget. After accounting for programs which are not directly under MWRA's control, most notably the Inflow and Infiltration (I/I) program, the Local Water Pipeline program, and the community managed Combined Sewer Overflow (CSOs) projects, the underspending is \$21.2 million or 32.4%.

Underspending was reported in Waterworks of \$14.1 million and Business and Operations Support of \$2.1 million offset by overspending in Wastewater of \$3.0 million.

Spending By Program:



\$ in Millions	Budget	Actuals	\$ Var.	% Var.
Wastewater System Improvements				
Interception & Pumping	8.2	7.1	-1.0	-12.7%
Treatment	21.7	15.2	-6.5	-29.9%
Residuals	0.0	0.0	0.0	N/A
CSO	17.9	22.8	4.9	27.3%
Other	9.3	14.9	5.7	61.3%
Total Wastewater System Improvements	\$57.1	\$60.1	\$3.0	5.3%
Waterworks System Improvements				
Drinking Water Quality Improvements	18.3	11.1	-7.3	-39.6%
Transmission	3.7	1.6	-2.1	-56.2%
Distribution & Pumping	6.6	3.5	-3.0	-46.0%
Other	0.5	-1.2	-1.7	-338.0%
Total Waterworks System Improvements	\$29.1	\$15.0	-\$14.1	-48.5%
Business & Operations Support	\$5.6	\$3.5	-\$2.1	-37.0%
Total MWRA	\$91.8	\$78.6	-\$13.1	-14.3%

The main reasons for the underspending were:

1. **Wastewater Treatment** of \$9.1 million – mainly for Electrical Equipment Upgrade Construction of \$2.8 million, Butterfly Valve Replacement Construction of \$2.3 million, North Main Pump Station VFD Replacement of \$678,000, Miscellaneous VFD Replacements of \$475,000, and HVAC Equipment Replacement Design/Engineering Services During Construction of \$427,000, mainly due to timing, and other smaller projects totaling approximately \$2.8 million.
2. **Drinking Water Quality Improvements** of \$7.3 million – mainly for Spot Pond Covered Storage of \$6.5 million due to timing of work and weather delays and Carroll Water Treatment Plant of \$1.4 million for updated schedule of CP7 Existing Facilities work and less than anticipated UV Disinfection Engineering Services During Construction.
3. **Water Distribution and Pumping** of \$3.0 million – mainly for Weston Aqueduct Supply Mains Section 36/W11 C/S 9 – All Valve of \$1.1 million, Design/Construction Administration/Resident Inspection for WASM3 of \$631,000, and Section 36 of \$231,000; Southern Extra High Redundancy of \$672,000 mainly for Storage Final Design and Construction Administration; and Valve Replacement of \$488,000 due to timing.
4. **Water Transmission** of \$2.1 million – mainly for timing of Watershed Land purchases of \$850,000, Sudbury Aqueduct – MEPA Review alternatives analysis of \$756,000, Hultman Interconnections Final Design/Construction Administration/and Resident Inspection of \$331,000, and Dam Safety Modifications and Repairs of \$250,000.
5. **Business and Operations Support** of \$2.5 million – mainly for lower than budgeted spending for MIS initiatives of \$1.4 million, As-Needed Design Services of \$725,000 due to timing, and Alternative Energy Initiatives of \$378,000 mainly due to the elimination of the Shaft E Hydro In-Conduit initiative.
6. **Waterworks Other** of \$1.7 million – primarily due to lower than projected Local Water Pipeline Assistance Program community requests for loans and greater than budgeted repayments.
7. **Wastewater Interception and Pumping** of \$1.7 million – for lower spending mainly on Nut Island Electric Grit & Screening Conveyance Construction of \$730,000, Chelsea Creek Headworks Design of \$688,000, and Alewife Brook Pump Station Rehabilitation of \$103,000 mainly due to timing.

The underspending was offset by overspending on the following programs:

1. **Wastewater Other** of \$5.7 million – primarily due to Inflow and Infiltration (I/I) Financial Assistance Program community requests for higher loans and grants.

2. **Combined Sewer Overflow (CSO)** of \$4.9 million – due to the higher than anticipated estimates due to increased scope from the City of Boston for work on the Reserved Channel Sewer Separation project of \$2.9 million, Cambridge Sewer Separation of \$984,000 due to higher than anticipated cost estimates, and MWRA003 Gates and Siphon of \$888,000 due to actual award being greater than budgeted.
3. **Wastewater Treatment** of \$2.6 million – for Scum Skimmer Replacement project due to greater than budgeted contractor progress.
4. **Wastewater Interception and Pumping** of \$651,000 – due to greater than budgeted progress on Prison Point/Cottage Farm Engine, Pumps, and Gearboxes of \$521,000 and Nut Island Headworks Electric, Grit & Screenings Conveyance Design of \$130,000.
5. **Business and Operations Support** of \$382,000 – FY14-18 Vehicle Purchases of \$382,000 mainly due to timing.

Construction Fund Balance

The construction fund balance was at \$74 million as of March. Commercial Paper availability was at \$220 million to fund construction projects.

Attachment 1 – Variance Summary March 2015

Attachment 2 – Current Expense Variance Explanations

Attachment 3 – Capital Improvement Program Variance Explanations

Attachment 4 – FY15 Budget vs. FY15 Projection

ATTACHMENT 1

	March 2015 Year-to-Date					
	Period 9 YTD Budget	Period 9 YTD Actual	Period 9 YTD Variance	%	FY15 Approved	% Expended
EXPENSES						
WAGES AND SALARIES	\$ 70,251,743	\$ 68,400,866	\$ (1,850,877)	-2.6%	\$ 96,554,749	70.8%
OVERTIME	2,741,775	3,434,007	692,232	25.2%	3,620,600	94.8%
FRINGE BENEFITS	13,796,952	13,627,766	(169,186)	-1.2%	18,299,405	74.5%
WORKERS' COMPENSATION	1,650,000	1,685,978	35,978	2.2%	2,200,000	76.6%
CHEMICALS	7,436,335	7,215,716	(220,619)	-3.0%	10,219,580	70.6%
ENERGY AND UTILITIES	17,700,634	15,372,784	(2,327,850)	-13.2%	23,472,354	65.5%
MAINTENANCE	18,585,520	19,051,983	466,463	2.5%	27,972,607	68.1%
TRAINING AND MEETINGS	246,049	243,546	(2,503)	-1.0%	361,019	67.5%
PROFESSIONAL SERVICES	4,047,814	3,457,850	(589,964)	-14.6%	5,957,201	58.0%
OTHER MATERIALS	2,824,500	3,447,052	622,552	22.0%	5,952,729	57.9%
OTHER SERVICES	16,602,329	16,686,920	84,591	0.5%	22,538,498	74.0%
TOTAL DIRECT EXPENSES	\$ 155,883,651	\$ 152,624,468	\$ (3,259,183)	-2.1%	\$ 217,148,742	70.3%
INSURANCE	\$ 1,596,116	\$ 1,661,768	\$ 65,652	4.1%	\$ 2,128,155	78.1%
WATERSHED/PILOT	20,600,092	20,449,570	(150,522)	-0.7%	27,466,790	74.5%
BECo PAYMENT	2,233,932	2,130,214	(103,718)	-4.6%	3,198,174	66.6%
MITIGATION	1,204,475	1,094,927	(109,548)	-9.1%	1,605,967	68.2%
ADDITIONS TO RESERVES	362,215	362,215	-	0.0%	482,953	75.0%
RETIREMENT FUND	12,629,475	12,645,475	16,000	0.1%	12,629,475	100.1%
TOTAL INDIRECT EXPENSES	\$ 38,626,305	\$ 38,344,169	\$ (282,136)	-0.7%	\$ 47,511,514	80.7%
STATE REVOLVING FUND	\$ 58,502,309	\$ 58,113,673	\$ (388,636)	-0.7%	\$ 78,460,635	74.1%
SENIOR DEBT	163,642,175	161,295,031	(2,347,144)	-1.4%	220,835,626	73.0%
CORD FUND	657,380	657,380	-	0.0%	876,506	75.0%
DEBT SERVICE ASSISTANCE	(853,660)	(853,660)	-	0.0%	(853,660)	100.0%
CURRENT REVENUE/CAPITAL	7,650,000	7,650,000	-	0.0%	10,200,000	75.0%
SUBORDINATE M/WRA DEBT	74,524,056	74,524,056	-	0.0%	99,686,106	74.8%
LOCAL WATER PIPELINE CP	3,111,340	3,111,340	-	0.0%	4,148,453	75.0%
CAPITAL LEASE	2,412,795	2,412,795	-	0.0%	3,217,060	75.0%
VARIABLE DEBT	-	(9,609,121)	(9,609,121)	---	-	0.0%
BOND REDEMPTION SAVINGS	(5,059,198)	(5,059,198)	-	0.0%	(6,745,598)	75.0%
DEFEASANCE ACCOUNT	-	12,344,902	12,344,902	---	-	0.0%
TOTAL DEBT SERVICE	\$ 304,587,197	\$ 304,587,197	\$ -	0.0%	\$ 409,825,128	74.3%
TOTAL EXPENSES	\$ 499,097,153	\$ 495,555,834	\$ (3,541,322)	-0.7%	\$ 674,485,384	73.5%
REVENUE & INCOME						
RATE REVENUE	\$ 487,736,838	\$ 487,736,838	\$ -	0.0%	\$ 650,315,784	75.0%
OTHER USER CHARGES	6,000,210	6,032,236	32,026	0.5%	8,259,693	73.0%
OTHER REVENUE	4,975,363	6,777,116	1,801,753	36.2%	6,180,450	109.7%
RATE STABILIZATION	-	-	-	---	-	---
INVESTMENT INCOME	7,215,194	7,186,918	(28,276)	-0.4%	9,729,457	73.9%
TOTAL REVENUE & INCOME	\$ 505,927,605	\$ 507,733,108	\$ 1,805,503	0.4%	\$ 674,485,384	75.3%

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY15 Budget YTD March	FY15 Actuals YTD March	FY15 YTD Actual vs. FY15 Budget		Explanations
			\$	%	
Direct Expenses					
Wages & Salaries	70,251,743	68,400,866	(1,850,877)	-2.6%	Underspending is due to lower filled positions and salary mix differential between staff retiring at higher rates and new hires coming on board at lower rates. At the end of March the average filled positions of 1,152, 23 positions less than the 1,175 budgeted positions.
Overtime	2,741,775	3,434,007	692,232	25.2%	Overspending due to higher than projected wet weather events, especially snow removal in the month of February, and coverage requirements.
Fringe Benefits	13,796,952	13,627,766	(169,186)	-1.2%	Lower than budget mainly due to Health of \$165k and Unemployment Insurance of \$31k due to lower filled positions.
Worker's Compensation	1,650,000	1,685,978	35,978	2.2%	Overspending due to higher Compensation Payments of \$124k and Administrative and Legal costs of \$52k, partially offset by lower medical payments of \$140k.
Chemicals	7,436,335	7,215,716	(220,619)	-3.0%	Lower than budgeted Sodium Hypochlorite of \$168k due to timing of deliveries and pricing, Liquid Oxygen of \$143k due to better water quality, and Nitrazyme of \$79k due to Town of Framingham system modifications. Underspending is offset by overspending for Ferric Chloride of \$156k due to struvite control and Hydrogen Peroxide of \$95k due to increased need for pretreatment of hydrogen sulfide gas due to lower plant flows.
Utilities	17,700,634	15,372,784	(2,327,850)	-13.2%	Underspending due to lower Electricity of \$1.4 million mainly due to lower commodity and transmission and distribution costs and lower flows which resulted in less pumping demand at Deer Island, Diesel Fuel of \$796k, and Water use of \$119k.

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY15 Budget YTD March	FY15 Actuals YTD March	FY15 YTD Actual vs. FY15 Budget		Explanations
			\$	%	
Maintenance	18,585,520	19,051,983	466,463	2.5%	Materials are overspent by \$1.3 million and services are underspent by \$872k. Overspending reflects projects scheduled for FY14 that were completed in FY15; critical unbudgeted project; and the Back Pressure Steam Turbine Generator condenser unit services at Deer Island.
Training & Meetings	246,049	243,546	(2,503)	-1.0%	
Professional Services	4,047,814	3,457,850	(589,964)	-14.6%	Lower than budget mainly due to the timing of initiatives such as the Mystic River Modeling project, dam safety work, and as-needed engineering for maintenance projects.
Other Materials	2,824,500	3,447,052	622,552	22.0%	Higher than budget mainly due to timing of Vehicle of \$303k, Computer Hardware of \$285k, Work Clothes of \$68k, Other Materials of \$61k offset by lower Vehicle Expenses of \$138k mostly due to gas prices.
Other Services	16,602,329	16,686,920	84,591	0.5%	Higher than budget mainly due to Telecommunications expenses of \$158k due to increased security data lines and Space Lease/Rentals of \$81k for Charlestown Navy Yard headquarters carpet and painting upgrades offset by lower Permit Fees \$67k due to timing.
Total Direct Expenses	155,883,651	152,624,468	(3,259,183)	-2.1%	
Indirect Expenses					
Insurance	1,596,116	1,661,768	65,652	4.1%	Higher Payments/Claims of \$172k partially offset by lower Premiums of \$106k.
Watershed/PILOT	20,600,092	20,449,570	(150,522)	-0.7%	Lower Reimbursement expenses of \$119k due to FY14 overaccrual and lower Payment in Lieu of Taxes of \$31k.
HEEC Payment	2,233,932	2,130,214	(103,718)	-4.6%	Lower Capacity Charges of \$95k.
Mitigation	1,204,475	1,094,927	(109,548)	-9.1%	
Addition to Reserves	362,215	362,215	-	0.0%	
Pension Expense	12,629,475	12,645,475	16,000	0.1%	
Post Employee Benefits	-	-	-		
Total Indirect Expenses	38,626,305	38,344,169	(282,136)	-0.7%	
Debt Service					

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY15 Budget YTD March	FY15 Actuals YTD March	FY15 YTD Actual vs. FY15 Budget		Explanations
			\$	%	
Debt Service	305,440,857	305,440,857	-	0.0%	Debt Service expenses through March are at budgeted level after the transfer of \$12.3 million of a favorable year-to-date variance to the Defeasance Account.
Debt Service Assistance	(853,660)	(853,660)	-	0.0%	
Total Debt Service Expenses	304,587,197	304,587,197	-	0.0%	
Total Expenses					
	499,097,153	495,555,834	(3,541,322)	-0.7%	
Revenue & Income					
Rate Revenue	487,736,838	487,736,838	-	0.0%	
Other User Charges	6,000,210	6,032,236	32,026	0.5%	
Other Revenue	4,975,363	6,777,116	1,801,753	36.2%	Higher non-rate Revenue is mainly due to \$995k for a prior period adjustment for Watershed related expenses, \$425k for the sale of unbudgeted emergency water for the Town of Hudson, \$372k payment received for the sale of the Fox Point CSO Facility and other non-essential assets, \$142k for higher permit, monitoring, and penalty fees. The higher favorable variances were offset by lower Energy revenue of \$448k mainly due to the timing of Renewable Portfolio Standard (RPS) sales.
Rate Stabilization	-	-	-		
Investment Income	7,215,194	7,186,918	(28,276)	-0.4%	Lower Investment Income due to lower than budgeted short-term rates.
Total Revenue	505,927,605	507,733,108	1,805,503	0.4%	
Net Revenue in Excess of Expenses	6,830,452	12,177,274	5,346,825		

ATTACHMENT 3
Capital Improvement Program Variance Explanations
(000's)

	FY15 Budget YTD March	FY15 Actuals YTD March	YTD Actuals vs. Budget		Explanations
			\$	%	
Interception & Pumping (I&P)	\$8,182	\$7,144	(\$1,038)	-12.7%	Underspending mainly due to Nut Island Electrical and Grit and Screenings Conveyance of \$730,000 and Alewife Brook Pump Station Rehabilitation of \$103,000 due to timing and Chelsea Creek Upgrades Design/Construction Administration of \$688,000 due to design delays. Offset by Prison Point/Cottage Farm Engine Pump & Gearbox Rebuilds of \$521,000 due to contractor progress and Nut Island Headworks Electric, Grit & Screenings Conveyance Design of \$130,000 due to timing.
Treatment	\$21,730	\$15,235	(\$6,495)	-29.9%	Underspending on Electrical Equipment Upgrade Construction 4 of \$2.8M, Butterfly Valve Replacement of \$2.3M, North Main Pump Station VFD Replacement of \$678,000, Miscellaneous VFD Replacements of \$475,000, HVAC Equipment Replacement Design/Engineering Services During Construction of \$427,000 due to timing, and other smaller projects of \$2.8 million. Offset by overspending on Scum Skimmer Replacement of \$2.6M due to contractor progress.
Residuals	\$0	\$0	\$0	-	
CSO	\$17,923	\$22,821	\$4,899	27.3%	Overspending on Reserved Channel Sewer Separation of \$2.9M due to updated cost estimate as a result of increased scope of work, Cambridge Sewer Separation of \$984,000 due to higher than anticipated cost estimates, and MWR003 Gate & Siphon of \$888,000 due to actual contract award greater than budget.
Other Wastewater	\$9,263	\$14,936	\$5,674	61.3%	Overspending on Infiltration and Inflow (I/I) due to community requests for grants and loans being more than budgeted.
Total Wastewater	\$57,098	\$60,137	\$3,040	5.3%	
Drinking Water Quality Improvements	\$18,342	\$11,072	(\$7,270)	-39.6%	Underspending for Spot Pond Storage Facility of \$6.5M mainly for timing of work and weather delays and Carroll Water Treatment Plant of \$1.4M mainly for Existing Facilities CP-7 due to schedule change and Ultraviolet Disinfection - Design/Engineering Services During Construction/Resident Engineer Inspection due to timing. Offset by overspending on Quabbin Water Treatment Plant of \$715,000 primarily due to contractor progress.

ATTACHMENT 3
Capital Improvement Program Variance Explanations
(000's)

	FY15 Budget YTD March	FY15 Actuals YTD March	YTD Actuals vs. Budget		Explanations
			\$	%	
Transmission	\$3,672	\$1,608	(\$2,064)	-56.2%	Underspending for Watershed Land of \$850,000 due to the timing of land acquisitions, Sudbury Aqueduct - MEPA of \$756,000 due to alternatives analysis, Hultman Interconnect - Final Design/CA/RI of \$331,000 due to less than anticipated construction administration resident inspection services, and Dam Projects of \$250,000 due to less than anticipated design and engineering services.
Distribution & Pumping	\$6,569	\$3,549	(\$3,020)	-46.0%	Underspending on Weston Aqueduct Supply Mains of \$2.0M mainly due to timing for Section 36/W11 C/S 9 - All Valve, WASM 3 and Section 36 Design/Construction Administration/Resident Inspection, Southern Extra High (SEH) Redundancy & Storage of \$672,000 due to Redundancy/Storage Phase 1 - Final Design/Construction Administration/Resident Inspection delays pending additional time to meet with local communities, and Valve Replacement of \$488,000 due to timing of equipment purchases. Offset by overspending on Northern Intermediate High of \$218,000 mainly for greater than budgeted progress on West Street Pipe Construction in Reading.
Other Waterworks	\$517	(\$1,231)	(\$1,749)	-	Underspending on Local Water System Assistance Program of \$1.5M due to less than budgeted community requests for loans and greater repayments than planned and Central Monitoring System of \$142,000 due to schedule shift for SCADA implementation.
Total Waterworks	\$29,100	\$14,997	(\$14,103)	-48.5%	
Business & Operations Support	\$5,556	\$3,500	(\$2,055)	-37.0%	Underspending on MIS-related projects of \$1.4 million due to timing of IT Strategic Plan implementation, Capital Maintenance Planning & Development of \$725,000 due to lower than projected use of as-needed technical assistance, and Alternative Energy of \$378,000 mainly due to Shaft E Hydro project being removed from CIP. Offset by timing of FY14-18 Vehicle Purchases of \$382,000.
Total MWRA	\$91,753	\$78,635	(\$13,118)	-14.3%	


ATTACHMENT 4

FY15 Budget vs FY15 Projection

TOTAL MWRA	FY15 Budget	FY15 Projection	Change FY15 Budget vs FY15 Budget vs Projection	
			\$	%
EXPENSES				
WAGES AND SALARIES	\$ 96,554,749	\$ 94,094,681	\$ (2,460,068)	-2.5%
OVERTIME	3,620,600	4,296,570	675,970	18.7%
FRINGE BENEFITS	18,299,405	17,993,119	(306,286)	-1.7%
WORKERS' COMPENSATION	2,200,000	2,400,000	200,000	9.1%
CHEMICALS	10,219,580	9,902,400	(317,180)	-3.1%
ENERGY AND UTILITIES	23,472,354	21,152,929	(2,319,425)	-9.9%
MAINTENANCE	27,972,607	28,776,376	803,769	2.9%
TRAINING AND MEETINGS	361,019	379,552	18,533	5.1%
PROFESSIONAL SERVICES	5,957,201	5,531,108	(426,093)	-7.2%
OTHER MATERIALS	5,952,729	6,314,420	361,691	6.1%
OTHER SERVICES	22,538,498	22,804,030	265,532	1.2%
TOTAL DIRECT EXPENSES	\$ 217,148,742	\$ 213,645,185	\$ (3,503,556)	-1.6%
INSURANCE	\$ 2,128,155	\$ 2,193,807	\$ 65,652	3.1%
WATERSHED/PILOT	27,466,790	27,197,961	(268,829)	-1.0%
HEEC PAYMENT	3,198,174	2,831,518	(366,656)	-11.5%
MITIGATION	1,605,967	1,496,419	(109,548)	-6.8%
ADDITIONS TO RESERVES	482,953	482,953	-	0.0%
RETIREMENT FUND	7,808,155	7,824,155	16,000	0.2%
POSTEMPLOYMENT BENEFITS/ ADDITIONAL PENSION DEPOSIT	4,821,320	4,821,320	-	0.0%
TOTAL INDIRECT EXPENSES	\$ 47,511,514	\$ 46,848,134	\$ (663,380)	-1.4%
STATE REVOLVING FUND	\$ 78,460,635	\$ 75,619,341	\$ (2,841,294)	-3.6%
SENIOR DEBT	220,835,626	214,861,284	(5,974,342)	-2.7%
DEBT SERVICE ASSISTANCE	(853,660)	(853,660)	-	
CURRENT REVENUE/CAPITAL	10,200,000	10,200,000	-	0.0%
SUBORDINATE MWRA DEBT	99,686,105	99,686,105	-	0.0%
LOCAL WATER PIPELINE CP	4,148,453	341,921	(3,806,532)	-91.8%
CAPITAL LEASE	3,217,060	3,217,060	-	0.0%
VARIABLE DEBT	-	(12,416,923)	(12,416,923)	
CORE FUND DEPOSIT	876,507	876,507	-	0.0%
DEFEASANCE ACCOUNT	-	25,039,091	25,039,091	
BOND REDEMPTION	(6,745,598)	(6,745,598)	-	
TOTAL DEBT SERVICE	\$ 409,825,128	\$ 409,825,128	\$ -	0.0%
TOTAL EXPENSES	\$ 674,485,386	\$ 670,318,447	\$ (4,166,936)	-0.6%
REVENUE & INCOME				
RATE REVENUE	\$ 650,315,782	\$ 650,315,782	\$ -	0.0%
OTHER USER CHARGES	8,259,693	8,259,693	-	0.0%
OTHER REVENUE	6,180,451	7,978,838	1,798,387	29.1%
RATE STABILIZATION	-	-	-	#DIV/0!
INVESTMENT INCOME	9,729,458	9,579,458	(150,000)	-1.5%
TOTAL REVENUE & INCOME	\$ 674,485,384	\$ 676,133,769	\$ 1,648,387	0.2%


VARIANCE \$ (5,815,322) \$ 5,815,322

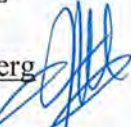

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: April 15, 2015
SUBJECT: Establishment of Other Post Employment Benefits (OPEB) Trust

COMMITTEE: Administration, Finance & Audit

 INFORMATION
 X VOTE

Robert Belkin, Controller 
Kathy Soni, Budget Director
Preparer/Title

Steven A. Remsberg 
General Counsel
Thomas J. Durkin 
Director, Finance

Since 2008, staff has been working with the Board of Directors and the MWRA Advisory Board to determine the best strategy to address the Authority's Other Post Employment Benefits (OPEB) liability issue.

At the July 16, 2008 Board of Directors meeting, the Board voted to accept staff's recommendation to redirect Fiscal Year 2008 and 2009 funds appropriated for OPEB to shorten the amortization of the unfunded pension liability at that time, and to generally adopt a plan of addressing the pension liability and OPEB liability holistically as one post employment benefit.

At the January 14, 2015 Board of Directors meeting, staff updated the Board that the pension liability was approaching full funding and proposed a comprehensive plan be developed to address the OPEB liability, including the establishment of an OPEB irrevocable trust.

RECOMMENDATION:

Staff recommend that an irrevocable trust be established for the sole purpose of accounting for funding of the Net OPEB Obligation. The proposed trust document is attached. Annual funding will be reflected in the Current Expense Budget (CEB) and determined at the discretion of the Board of Directors.

Further, staff recommend that that Authority adopt the declaration of trust in substantially the form attached hereto and filed with the records of this meeting creating and establishing the Massachusetts Water Resources Authority Irrevocable OPEB Trust, that the Board appoint a five-member Board of Trustees to administer the Trust including the Executive Director, the Director of Finance, the Treasurer, the Budget Director and the Director of Human Resources.

DISCUSSION:

In June, 2004 the Governmental Accounting Standards Board (GASB) issued Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. Other Postemployment Benefits (OPEB) is defined as retiree benefits such as health, dental and life insurance. This Statement, effective for the Authority's fiscal year 2008, required government entities to record the Net OPEB Obligation (NOO), based on the Annual Required Contribution (ARC), on their balance sheet, as well as disclose the Unfunded Actuarial Accrued Liability (UAAL) in the notes to financial statements.

At June 30, 2014 the Authority's balance sheet reflected a \$102 million NOO, which is the aggregation of each fiscal year's NOO since the 2008 implementation, at approximately \$14 million per year. The UAAL, which is actuarially derived, is \$197 million, based on the latest OPEB valuation at January 1, 2012.

Unlike pension accounting rules, OPEB obligations are not required to be funded. However, Statement No. 45 does require that any funding that does take place be made to an irrevocable trust, ensuring that these funds are used exclusively for the OPEB obligation. The Statement further states that these funds can be used to pay current year retiree health, dental and life insurance premiums, which could effectively draw down the trust funds, if so desired. Funding to the irrevocable trust allows the government entity to reduce both its NOO and UAAL. No credit is given if funding is not made to the irrevocable trust.

Under Chapter 32A of the General Laws, MWRA's retirees are eligible to receive OPEB benefits. Similar to the pension system, MWRA has an accrued liability for the cost of providing those benefits to its retirees. The projected liability of \$197.2 million is comprised of approximately \$51 million for individuals and their spouses who have already retired and \$146.2 million for current employees. Over the last several years, MWRA has taken a holistic view of its pension and OPEB liabilities and has directed additional funding towards paying down the pension liability, until fully funded, with the plan to then address its OPEB liability. This strategy has been driven primarily by the more robust investment options available to the pension system, which could not be achieved with the OPEB funds until an irrevocable trust has been established. Once the pension is fully funded, the budgeted funds would be reallocated to OPEB. Currently, the pension fund is technically scheduled to be fully funded by 2024. However, staff estimate these additional optional payments have shortened that amortization schedule to 2017.

Since 2008, MWRA has budgeted certain levels of OPEB related funding as optional payments to the pension fund and most recently that funding level has been based on approximately 50% of the Annual Required Contribution (ARC) from the January 2010 report. The ARC is the sum of the Normal Cost which is the value of the future benefits earned in the current year and the Amortization payment for the unfunded liability, which relates to the value of future benefits earned during prior years that were not funded. Separate from the Normal Cost and Amortization payment, MWRA also has an annual "Pay-As-You-Go" portion to cover the current year's benefits of existing retirees and their spouses, which is reflected separately in the fringe benefits line item of the budget.

The establishment of the irrevocable trust is the first step to funding OPEB and reducing the Net OPEB Obligation and Unfunded Actuarial Accrued Liability.

Staff have reviewed a number of OPEB trust instruments as guidance and have drafted the trust using the model employed by Boston Water and Sewer Commission with supplemental materials employed by Massport and other entities. The attached draft has been reviewed by tax counsel Thomas Collins of the firm McCarter English. McCarter English serves as MWRA's bond counsel. Also, credit rating agencies have expressed their desire to see a plan in place to address the mounting OPEB liability.

BUDGET/FISCAL IMPACT:

The establishment of the irrevocable trust has no budget/fiscal impact. The budget/fiscal impact will be from funding of the irrevocable trust. The budgetary impact for future years will depend on the level of funding approved by the Board of Directors annually and will be supported by the Current Expense Budget.

MASSACHUSETTS WATER RESOURCES AUTHORITY

OTHER POST-EMPLOYMENT BENEFITS ("OPEB")

IRREVOCABLE TRUST AGREEMENT

THIS IRREVOCABLE TRUST AGREEMENT is entered into this day of , 2015, by and between the Massachusetts Water Resources Authority (hereinafter "MWRA," the "Authority," or the "Employer") a body politic and corporate and a public instrumentality of the Commonwealth of Massachusetts charged with providing essential governmental functions of drinking water supply and wastewater treatment under the provisions of c. 372 of the Acts of 1984 and each of the initial trustees of the Trust named herein (hereinafter the "Trustees").

RECITALS

WHEREAS, the Authority has adopted certain post-employment medical and life insurance post-employment benefit programs for which the Authority pays the Employer's share of the costs of such benefits pursuant to powers granted to the Authority under its enabling act; and

WHEREAS, the provision of such post-employment benefit programs constitutes the exercise of an essential governmental function within the meaning of section 115(1) of the Internal Revenue Code; and

WHEREAS, eligible employees of the Authority are entitled to qualify for and enroll in retiree health and life insurance benefits provided by the Authority through benefit programs whether procured through the Group Insurance Commission ("GIC") of the Commonwealth of Massachusetts or through other sources; and

WHEREAS, the Authority presently collects and pays over to GIC the Employer's statutory share of premiums for such retiree health benefit coverages and forwards to GIC the employees' shares of said premiums received from the MWRA Retirement System; and

WHEREAS, the Authority is subject to and required to comply with standards established by the Governmental Accounting Standards Board ("GASB") with respect to such benefit programs; and

WHEREAS, the Authority wishes to establish an irrevocable trust (the "Trust") for the purpose of providing a means of funding its current and projected OPEB obligations in accordance with and under the guidance of GASB Statement Nos. 43 and 45; and

WHEREAS, this Trust is established by the Authority with the intention that it qualify as a tax exempt trust performing an essential governmental function within the meaning of Internal Revenue Code section 115(1); and

WHEREAS, the form of this Trust Agreement was approved by MWRA's Board on April 15, 2015.

AGREEMENT

NOW THEREFORE, the Authority and the Trustees agree as follows:

ARTICLE 1 DEFINITIONS

As used in this Agreement, the following terms shall have the following meanings:

1.1. "Code" means the Internal Revenue Code of 1986, as from time to time amended. References herein to the Code shall include corresponding provisions of any subsequent recodification of the United States internal revenue laws.

1.2. "GASB 43 and 45" means Governmental Accounting Standards Board, Statement No. 43 (Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans) and Statement No. 45 (Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions).

1.3. "Other post-employment benefits" or "OPEB," means post-employment benefits, other than pension benefits as that term is defined in GASB 43 and 45 including post-employment healthcare benefits, regardless of the type of plan that provides them, and all post-employment benefits provided separately from a pension plan, excluding benefits defined as termination offers and benefits. OPEB benefits offered by the Authority for which the Authority pays the "Employer's share" of premium costs as of the date of the creation of the Trust includes: (i) health care insurance coverage, not including dental insurance, and (ii) basic life insurance.

1.4. "Retired Employee" means an individual who has retired from employment with the Authority, from the Authority's Retirement System, or from the Authority's Advisory Board and who is qualified to receive retirement benefits from the Massachusetts Water Resources Retirement System pursuant to the applicable provisions of section 7 of MWRA's enabling act under M.G.L. c. 92 Appendix and M.G.L. c. 32, as amended, or as otherwise provided by law.

1.5. "Trust" means the Massachusetts Water Resources Authority Irrevocable OPEB Trust as established by this Agreement, and as from time-to-time amended.

1.6. "Trustee" means each duly serving member of the Board of Trustees, and any successor Trustee appointed as provided pursuant to Article 5.

1.7. "Trust Fund" means all the money and property, of every kind and character, including principal and income, held by the Trustees under the Trust.

ARTICLE 2 PURPOSE

2.1. The Trust is created as an irrevocable trust for the sole purpose of providing for the advance accumulation of funding projected to be necessary to meet the costs of post-employment health care and other benefits offered by the Authority to its Retired Employees and eligible dependents, which is an essential governmental function of the Authority. Presently, the Authority is responsible for funding the MWRA's share of the costs for these post-employment benefits. Funds to be contributed to the Trust from time to time are intended for the exclusive benefit of the Authority's Retired Employees and their eligible dependents and may be distributed from the Trust Fund in such periods as distributions from the Trust are determined to be necessary or convenient for paying said Authority's share of such post-employment benefits. The Trust Fund assets held in the Trust shall not be used for or diverted to any other purposes. A portion of the annual earnings and income of the Trust may be used for payment of reasonable and necessary professional and administrative services, costs and expenses related to assisting the Trustees in administering this Trust.

2.2. It is intended that the Trust shall constitute a so called "Qualified OPEB Trust" according to the standards set forth in GASB 43 and 45 and shall constitute an irrevocable tax-exempt governmental trust exercising an essential governmental function under section 115(1) of the Code. The provisions of this Trust Agreement shall not be interpreted as authorizing any action of the Trustees inconsistent with the requirements for exclusion from gross income under section 115(1) of the Code of any income earned or derived by the Trust.

ARTICLE 3 ESTABLISHMENT OF TRUST; IRREVOCABILITY

3.1. The Authority hereby establishes this irrevocable Trust which shall be known as the "Massachusetts Water Resources Authority Irrevocable OPEB Trust" for the sole and exclusive purpose of providing a means of accumulating funding for (i) the payment of MWRA's share of the costs of providing post-employment health care and other benefits now or hereafter offered to and for the Authority's Retired Employees and their eligible dependents, and (ii) the payment of all reasonable and necessary expenses of administering this Trust.

3.2. The Code section 115(1) governmental trust established hereby shall be irrevocable and shall conform to all applicable sections of the Code and all statutes, ordinances, rules, regulations and judicial decisions interpreting Code section 115(1). No funds or property paid over or contributed to the Trust shall ever revert to the Authority while MWRA continues to provide OPEB benefits to its Retired Employees.

3.3. The principal location of the Trust shall be 100 1st Avenue, Charlestown Navy Yard, Boston, Massachusetts 02109.

3.4. The Trustees hereby expressly accept the trusts imposed upon them by this Trust Agreement and agree to perform their obligations under this Agreement as fiduciaries in accordance with the terms and conditions of this Trust Agreement.

3.5. The Trustees shall hold legal title to all property of the Trust. Neither the Authority, nor any officer, employee, official, appointee or agent of the Authority, nor any other individual, shall have any right, title or interest in or claim to the Trust Fund or to any portion thereof. Funds paid over and contributed to the Trust shall cease to be the funds of the Authority and shall be used solely and exclusively for the purpose for which the Trust was established. The Retired Employees beneficial interest in the Trust is the health care coverage and other OPEB benefits selected by the Authority for the benefit of said Retired Employees and their eligible dependents.

3.6. The Trust Fund shall consist of such sums of money as shall from time to time be contributed, paid and delivered to the Trustees by the Authority together with any other property received and held under this Trust, all investments made or held under this Trust which, together with all income, earnings, profits, increments and accruals thereon, without distinction between principal and income, shall constitute the corpus of the Trust hereby created and established. The Authority shall be the sole arbiter regarding the timing and amounts of contributions to be made to the Trust.

ARTICLE 4 TRUST FUNDING

4.1. The Trust Fund shall be credited with all amounts paid over and contributed by the Authority to the Trust for the purposes of meeting the Authority's obligations to fund the Employer's share of the current and future OPEB costs payable by the Authority, or any other funds or property donated or granted specifically to the Authority for the Trust, or turned over to the Trust directly pursuant to the provisions of sections 3.6, 4.1, or 6.1.13 hereof, or any other provision of the Trust Agreement authorizing the receipt of monies, funds or other property by the Trust.

4.2. The Trustees shall be accountable for all delivered contributions to the Trust but shall have no duty to determine that the amounts received are adequate to provide for the Employer's share of the costs necessary to maintain the OPEB benefits, as arranged and purchased by the Authority. The Authority, through its Board of Directors, shall determine the amounts and frequency of any all contributions of monies or other property to the Trust.

4.3. The Trustees shall have no duty, expressed or implied, to compel any contribution to be made by the Authority, but shall be responsible only for property and funds received by the Trustees under this Trust Agreement.

4.4. Distributions of assets by and from the Trust for the purchase of health care coverages and benefits are not and will not create any indebtedness of the Authority to the Trust within the meaning of any constitutional, statutory or contractual limitation or restriction.

4.5. Interest and all other earnings accruing from investment of all or any part of the Trust Fund shall be credited to the Trust. Amounts in the Trust Fund, including earnings or interest, shall be held for the exclusive purpose of and shall be expended only to satisfy the obligations of the Authority to provide funding to pay the expenses of OPEB benefits for Retired Employees and their dependents, and for defraying the reasonable expenses of administering this Trust.

4.6. The Trust Fund shall in no event be subject to the claims of the Authority's general creditors. Consistent with the provisions of the Authority's enabling act at section 6(f), neither the Authority nor the Trust shall in any way be liable to attachment, garnishment, assignment or other process or remedy, nor may any portion of the Trust Fund be seized, taken, appropriated or applied by any legal, statutory or equitable process, to pay any debt or liability of the Trust, of the Authority or of any Retired Employees or of their dependents.

4.7 This Trust Agreement creates no vesting of rights of any kind or description in any person who is or may become an MWRA Retired Employee or who may be an eligible dependent thereof and creates no individual allocation, account, share, or entitlement to any portion of the Trust Fund in favor of any MWRA Retired Employee or eligible dependent thereof. No MWRA Retired Employee, nor any current or future active MWRA employee, nor any persons claiming through any of them, shall have any right, title or interest, in or through the Trust Agreement, to any part or portion of the Trust Fund and no portion of the Trust Fund can either be assigned or otherwise alienated by action of any retired Employee or eligible dependent, or be attached by trustee process, be the subject of any injunctive relief, or be taken upon execution of a judgment by any creditor of any Retired Employee or of any eligible dependent.

ARTICLE 5 TRUSTEES

5.1. The Trust shall be administered by a Board of Trustees consisting of five (5) members, who shall include the below-designated Authority Board member and MWRA managers or employees holding the positions identified below:

- (i) MWRA Executive Director;
- (ii) MWRA Director of Finance;
- (iii) MWRA Treasurer
- (iv) MWRA Budget Director, and
- (v) MWRA Director of Human Resources

5.2. Each Trustee's term of service shall continue for so long as he or she is willing to perform the duties and obligations of the position. A vacancy shall be deemed to have occurred

requiring an appointment of a successor Trustee when any existing Trustee shall have resigned or been removed for cause. Whenever a vacancy occurs in the membership of the Board of Trustees of the Trust, the legal title to property held by this Trust shall continue in the remaining Trustees. Upon the appointment of a successor Board member and/or the hiring of any new or successor employee who will next fill and occupy any one of the five above-listed positions, whether or not in a temporary or acting capacity, title to the Trust Fund shall automatically vest in all the then duly appointed Trustees, including each duly appointed successor Trustee.

5.3. Each initial and future Trustee shall execute an acceptance of the appointment to the office of Trustee and shall agree to observe and be bound by the terms and conditions of this Trust Agreement. Each resigning Trustee shall sign a written form of resignation as a Trustee.

5.4 Upon leaving office, a Trustee, having executed a form of resignation, shall promptly and without unreasonable delay, deliver to the Trust's principal office any and all records, documents, or other materials in his or her possession or under his or her control belonging to the Trust.

5.5. In performing his or her duties under this Agreement, any Trustee who is not a state or municipal employee, as applicable, shall be deemed to be a special state or municipal employee, as applicable, within the meaning of M.G.L. c. 268A and be subject to the restrictions and prohibitions set forth therein.

5.6 Unless the Trustees shall decide otherwise, the Authority's Executive Director shall serve as the Chair of the Board of Trustees. The Trustees may elect or appoint a Vice-Chair.

5.7 Removal of a Trustee shall be for cause and shall be implemented by a vote of the MWRA Board of Directors and by delivery of a copy of that vote to the affected Trustee.

5.8 The Trustees shall not be compensated by the Authority or by the Trust for their services as Trustees. The Trustees shall be entitled to reimbursement for reasonable and necessary personal expenses incurred in the course of their services to the Trust.

ARTICLE 6 POWERS OF THE TRUSTEES

6.1. The Trustees shall have the power to control and manage the Trust and the Trust Fund and to perform such acts, enter into such contracts, engage in such proceedings, and generally to exercise any and all rights and privileges, although not specifically mentioned herein, as the Trustees may deem necessary or advisable to administer the Trust and the Trust Fund or to carry out the purposes of this Trust. In addition to the powers set forth elsewhere in this Trust Agreement, the powers of the Trustees, in connection with their management and control of the Trust, shall include, but shall not be limited to, the following:

6.1.1. To receive, hold, manage, invest and reinvest all monies which at any time form part of the Trust, whether principal or income, provided however that there shall be no

investment directly in mortgages or in collateralized loans and further provided that the Trustees shall comply with the provisions of Article 7 of this Trust Agreement, applicable law, and any investment policy adopted by the Trustees concerning the investment and management of Trust assets.

6.1.2 To borrow or raise money for the purposes of the Trust, in such amount, and upon such reasonable terms and conditions as the Trustees shall deem advisable, subject to applicable law and statutes; and for any sum so borrowed to issue the promissory note of the Trust, and to secure the repayment thereof in such manner as will not result in a use of the Trust Fund contrary to the limited purposes and uses to which said Trust Fund has been dedicated.

6.1.3. To hold cash, uninvested, for such length of time as the Trustees may determine without liability for interest thereon.

6.1.4. To hire, engage or retain suitable agents, legal, financial and/or actuarial advisors and investment consultants as the Trustees may deem necessary and advisable for the efficient operation and administration of the Trust, to delegate duties and powers hereunder to such agents, advisors and consultants, and to charge the expenses thereof to the Trust. The Trustees are entitled to rely upon and may act upon the opinion or advice of any such agents, advisors or consultants approved by the Trustees in the exercise of reasonable care. The Trustees shall not be responsible for any loss or damage resulting from any action or non-action made in good faith reliance upon such opinion or advice. All delegated authority shall be specifically defined in any by-laws adopted by the Trustees or the written minutes of the Trustees' meetings.

6.1.5. To hire such consultants or independent contractors as the Trustees may deem necessary or advisable to render the services required and permitted for the proper operation of the Trust, and to charge the reasonable expenses thereof to the Trust.

6.1.6. To continue to have and to exercise, after any termination of the Trust and until final distribution of all Trust assets, all of the title, powers, discretions, rights and duties conferred or imposed upon the Trustees hereunder, by any by-laws adopted by the Trustees or by any applicable law.

6.1.7. To construe and interpret this Trust Agreement and other documents related to the purposes of the Trust.

6.1.8. To maintain bank and/or investment accounts for the administration of the Trust and the Trust Fund and to authorize the Trustees, or any one or more of them as designated by the Trustees to make payments from any appropriate account for purposes of the Trust, including payments and distributions to cover the costs of purchasing and administering OPEB benefits for MWRA Retired Employees.

6.1.9. To receive and review reports of the financial condition and of the receipts and disbursements of the Trust and the Trust Fund.

6.1.10. To adopt by-laws, rules, regulations, formulas, actuarial tables, forms, and procedures by resolution or vote from time to time as the Trustees may deem advisable and appropriate for the proper administration of the Trust, provided the same are consistent with the terms of this Trust Agreement.

6.1.11. To purchase as a general administrative expense of the Trust so-called director's liability insurance, fidelity bonds, and other insurance for the benefit of the Trust and/or the protection of the Trustees against any losses by reason of errors or omissions or breach of fiduciary duty or negligence.

6.1.12. To enter into any and all contracts and agreements reasonable and necessary for carrying out the terms of this Trust Agreement and for the administration and operation of the Trust and to do all acts as they, in their discretion, may deem necessary or advisable. Except as otherwise directed, designated or delegated by the Trustees in writing, all such contracts and agreements, or other legal documents herein authorized, shall be executed by all of the Trustees, by a majority of them, or by any single Trustee so designated by a vote of the Trustees, or by such other individual(s) as the Trustees may designate.

6.1.13. To receive contributions or payments of money, funds or property from any source whatsoever but such contributions or payments may be utilized only for the purposes designated in paragraph 3.1 hereof.

6.1.14. To incur and pay all reasonable and necessary expenses incurred in the collection, care, administration, and protection of the Trust and the Trust Fund.

6.1.15. To do all acts, whether or not expressly authorized herein, which the Trustees may deem necessary or proper in connection with the administration of the Trust, although the power to do such acts is not specifically set forth herein.

6.1.16. To compromise, settle or arbitrate any claim, debt, or obligation of or against the Trust or Trust Fund; to enforce or abstain from enforcing any right, claim, debt or obligation owed to the Trust, and to abandon any shares of stock, bonds, or other securities, or interests determined by it to be worthless; to prosecute, compromise and defend lawsuits, but without the obligation to do so, all at the risk and expense of the Trust;

6.1.17. To hire, in conformance with any applicable procurement process, one or more consultants, actuaries, accountants, advisors, attorneys or other professionals to assist with the administration of the Trust Fund and to pay such amounts that the Trustee deems to be reasonable, including, without limiting the generality of the foregoing, third party firms to provide legal, tax, financial, actuarial, investment, accounting and audit advice and/or services to the Trust.

6.1.18. To comply with all requirements imposed by applicable provisions of law.

6.1.19. To serve as custodian with respect to Trust assets.

ARTICLE 7

LIMITATION OF TRUSTEES' POWERS, DUTIES AND RESPONSIBILITIES

7.1. Nothing contained in the Trust Agreement, either expressly or by implication, shall be deemed to impose any powers, duties or responsibilities on the Trustees other than those set forth in the Trust Agreement. The duties, powers and responsibilities of the Trustees shall be limited as specifically provided herein. No person serving as a Trustee hereunder shall be liable or responsible to anyone for any matter, claim, or dispute whatsoever, provided only that the Trustee has acted in good faith in connection therewith.

7.2. The Trustees shall not be liable for the making, retention or sale of any investment or reinvestment made by the Trustees as herein provided or for any loss to or diminution of the Trust Fund or for anything done or omitted to be done by the Trustees with respect to the Trust Agreement or the Trust Fund except as and only to the extent that such action constitutes a knowing violation of the law or other intentional act of misfeasance, malfeasance or nonfeasance, fraud or gross negligence.

7.3. The Trustees, in their discretion, may purchase as an expense of the Trust Fund such liability insurance for themselves as may be reasonable. The Authority, in its discretion, may also purchase such liability insurance for the Trustees, as the Authority may select.

7.4. The Authority shall not assume any obligation or responsibility to any person for any act or failure to act of the Trustees, any insurance company, or any beneficiary of the Trust Fund. The Trustees shall have no obligation or responsibility with respect to any action required by this Trust Agreement to be taken by the Authority, any insurance company, or any other person, or for the result or the failure of any of the above to act or make any payment or contribution, or to otherwise provide for any benefit contemplated by this Trust Agreement.

7.5. Neither the Trustees nor the Authority shall be obliged to inquire into or be responsible for any action or failure to act on the part of the other. No insurance company shall be a party to this Trust Agreement for any purpose or be responsible for the validity of this Trust Agreement, it being intended that such insurance company shall be liable only for the obligations set forth in the policy or contract issued by it.

7.6. Except as otherwise provided below, the Trustees shall hold, manage and control the assets of the Trust in accordance with such Investment Guidelines as are adopted and/or approved from time to time by the Trustees and shall invest, re-invest and manage Trust assets as a prudent investor would, using judgment and care under the circumstances then prevailing that persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not in regard to speculation but in regard to the permanent disposition of their funds, considering the probable income as well as the probable safety of their capital, and consistent with provisions of any statute governing the investment of the funds of the Trust.

7.7 Consistent with adopted Investment Guidelines, the Trustees shall have full power, without any court order, to purchase, lease, improve, rent, exchange, hold, control, invest and re-invest in any real estate in such manner and upon such terms as the Trustees deem best. The Trustees shall likewise have the power, consistent with adopted Investment Guidelines, to purchase shares in investment trusts and stock in investment corporations, irrespective of any statutes, rules or practices now or hereafter in force limiting the investments of trust companies or trusts generally, with full power to convert realty into personalty and personalty into realty, so long as the Trustees shall deem such investments reasonably sound.

7.8 The Trustees may assign, delegate and entrust all duties for the investment decisions and investment management of the Trust Fund, or any portion thereof, to an experienced financial and/or investment advisor or consultant reasonably skilled and experienced in the management of investments of the type appropriate to the purposes and objectives of the Trust. To the extent that the Trustees determine that they will delegate and entrust investment decisions and judgments to any qualified and experienced investment or financial advisors the Trustees shall adopt and establish Investment Guideline(s) for the Trust Fund, or any portion thereof, and any and all firms shall hold and invest the funds and property of the Trust in a manner consistent with those Investment Guideline(s).

7.9 The Trustees may delegate and entrust any and all custodial duties and functions with respect to the Trust Fund to an experienced company, bank or firm reasonably skilled and experienced with such custodial and fiduciary duties of managing, handling, investing and segregating of funds held in trust for the benefit of third parties. All funds in the Trust Fund shall be accounted for separately from all other funds maintained by any appointed custodian.

7.8 The Trustees are empowered to and shall take all necessary actions under any applicable state or federal law, regulation or other authority to retain the status of the Trust as a tax-exempt governmental trust under section 115 of the Code.

ARTICLE 8 ACTIONS BY THE TRUSTEES

8.1 A majority of Trustees may exercise any or all of the powers of the Trustees hereunder and may execute on behalf of the Trustees any and all instruments with the same effect as though executed by all the Trustees.

8.2 The Trustees may, by instrument executed by all of the Trustees, delegate to any one of or group of the Trustees, or to any agent, advisor or consultant such other powers and duties as they deem advisable, including the power to execute, acknowledge or deliver instruments as fully as all the Trustees might do themselves.

8.3 No Trustee shall be required to give any bond or other security for the performance of any duties assumed and accepted by the Trustees.

ARTICLE 9
LIABILITY OF THE TRUSTEES

9.1 A Trustee shall not be liable for any mistake of judgment or other action made, taken or omitted by the Trustee in good faith, nor for any action taken or omitted by any other Trustee or any agent, advisor or consultant selected with reasonable care, and the duties and obligations of the Trustees hereunder shall be expressly limited to those imposed upon them by this Trust Agreement.

9.2 No successor Trustee shall be held responsible for an act or failure of a predecessor Trustee.

9.3 The Trustees shall be indemnified by the Authority in the same manner and to the same extent as the Authority may indemnify its own employees under the provisions of section 7(b) of the Authority's enabling act, against any civil claim, action, award, compromise, settlement or judgment.

9.4 A Trustee shall not be indemnified if he has acted in a grossly negligent, willful or malicious manner, or in connection with any matter where it is shown to be an intentional or knowing breach of fiduciary duty, an act of willful dishonesty or an intentional violation of law by the Trustee.

ARTICLE 10
MEETING OF THE TRUSTEES

10.1 The Trust may meet at such times and at such places as the Trustees shall determine.

10.2 A quorum at any meeting shall be a majority of the Trustees then in office.

ARTICLE 11
TAXES, EXPENSES, AND COMPENSATION

11.1 It is intended that the Trust will be a Code section 115(1) governmental tax-exempt trust. As such, it is expected that there will be no income taxes owed by the Trust. To the extent that any taxes are imposed upon the Trust, the Trustee shall use the assets of the Trust Fund to pay for any taxes owed.

11.2 All reasonable and necessary costs and expenses of managing and administering the Trust and the Trust Fund, including such compensation for advisors, consultants or custodians as may be approved by the Authority from time to time, and reimbursement for reasonable and necessary fees, costs and expenses incurred through the use of such third party advisors, consultants or custodians, shall be paid from the Trust unless the Authority chooses to pay the expenses directly.

ARTICLE 12
ACCOUNTS

12.1 The Trustees shall keep complete and accurate accounts of all the Trust's receipts, investments, disbursements and expenses under this Trust Agreement. The person or persons designated by the Authority shall be entitled to inspect and audit such records upon request at any reasonable time.

12.2 The books and records of the Trust shall be audited annually by an independent auditor in accordance with generally accepted accounting practices. The results of the audit shall be provided to the Authority at the same time as it is presented to the Trustees.

ARTICLE 13
ANNUAL REPORTS

13.1 The Trustees shall furnish to the Authority annually, or more frequently if the Authority so requests, a statement of account showing the condition of the Trust Funds and all investments, sales, income, disbursements and expenses of the Trust and the Trust Fund.

ARTICLE 14
CUSTODY OF THE TRUST FUNDS

14.1 The Authority's Director of Finance and/or Treasurer, with the authorization of and acting on behalf of the Trust, may establish one or more checking accounts in the name of the Trust, which may be interest bearing or non-interest bearing accounts. Such checking account or accounts shall be funded solely from the Trust Fund, and the Trustees may authorize the Authority's Director of Finance and/or Treasurer, or other authorized Authority employee, to draw on such checking accounts solely for the payment of OPEB benefits and for the administrative expenses of the Trust.

ARTICLE 15
TERMINATION OF CONTRIBUTIONS; TRUST TERMINATION

15.1 The Authority has established this Trust with the *bona fide* intention and expectation that from year to year it will be able to and will deem it advisable to make its contributions to the Trust as herein provided. However, the Authority reserves the right to fund OPEB benefits on a "pay-as-you-go" basis and realizes that circumstances not now existing and not now foreseen or circumstances beyond its control may make it either impossible or inadvisable to continue to make contributions as herein provided. In the event that the Authority decides that it is either impossible or inadvisable for it to continue to make its contributions as herein provided, the Authority shall have the right to terminate its contributions to the Trust.

15.2 In the event that (i) the Authority's contributions to the Trust have been terminated completely in accordance with the provisions of paragraph 15.1, and (ii) all assets of the Trust have been distributed in accordance with the purposes of this Trust Agreement, the Board shall

have the power to terminate the Trust completely by appropriate votes specifying the date of such termination, and certifying to the exhaustion and expenditure of 100% of the Trust Fund upon OPEB benefits and upon payment of all reasonable costs of the past administration of the Trust.

15.3 So long as the Trust holds any property or funds and so long as the Authority continues to periodically contribute funds to the Trust to fund OPEB benefits to its Retired Employees, the Trust shall continue unless and until terminated pursuant to law, provided, however, the continuance of the Trust shall not be deemed to be a contractual obligation of the Authority.

15.4 The powers of the Trustees shall continue until the affairs of the Trust are concluded.

15.5 Upon the termination or dissolution of the Trust as provided for in this Article, no Trust assets shall be distributed to or revert to any entity other than MWRA or to any successor of MWRA which is also an entity whose income is likewise excludable from gross income under section 115(1) of the Code.

ARTICLE 16 AMENDMENTS

16.1 The Trust may be amended as set forth herein. The Authority, through its Board of Directors, may amend the Trust for any reason with the exceptions that the original purpose of the Trust may not be amended, no amendment shall be permitted which changes in any manner or degree that the objective of the Trust is to provide funding for the sole and exclusive purpose of providing OPEB benefits to MWRA Retired Employees and their eligible dependents and no amendment may be made if such amendment would jeopardize the exclusion from gross income under Code section 115(1) of any income earned or derived by the Trust. This Trust shall be amended at any time as may be necessary to comply with the requirements for tax exempt status under Code § 115(1), to conform the Trust to the laws of the Commonwealth of Massachusetts, or to meet the standards set forth in GASB 43 and GASB 45 to be treated as funded through a qualifying trust or equivalent arrangement.

16.2 This Trust Agreement may be amended, but not revoked, from time to time by the Authority, subject to the following limitations:

16.2.1. The assets of the Trust may not be used for or diverted to any other purposes prior to satisfaction of the Authority's OPEB obligations, and of the reasonable expenses of administering the Trust.

16.2.2. The duties and liabilities of the Trustees cannot be substantially changed without their written consent.

16.3 Any amendment to this Trust shall be reduced to writing and shall be executed by the Authority and by each of the Trustees.

ARTICLE 17
SEVERABILITY OF INVALID PROVISIONS

17.1 If any provision of this Trust Agreement is determined to be invalid, illegal, or unenforceable for any reason, then the provision shall be severed from the remaining provisions of the Trust Agreement for any reason, and the remaining parts of the Agreement shall be construed to give the maximum practical effect to the purposes stated herein, as if the invalid, illegal, or unenforceable provision was never a part hereof.

ARTICLE 18
MISCELLANEOUS

18.1 This Trust Agreement shall be interpreted, construed and enforced, and the Trust hereby created shall be administered in accordance with, and governed by the applicable laws of the United States and of the Commonwealth of Massachusetts.

18.2 The titles to Articles of this Trust Agreement are placed herein for convenience of reference only, and the trust Agreement is not to be construed by reference thereto.

18.3 No person shall be obliged to see to the application of any money paid or property delivered to the Trustees, or as to whether or not the Trustees have acted pursuant to any authorization herein required, or as to the terms of this Trust Agreement. In general, each person dealing with the Trustees may act and rely upon any advice, request or representation in writing by the Trustees, or by the Trustees' duly authorized agent, and shall not be liable to any person in so doing. The certification of the Trustees that they are acting in accordance with this Trust Agreement or are authorized to bind the Trust shall be conclusive in favor of any person relying thereon.

18.4 This Trust Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original but all of which together shall constitute one instrument which may be sufficiently evidenced by any counterpart.

18.5 Until advised to the contrary, the Trustees may assume this Trust is entitled to exemption from taxation under Section 115(1) of the Code.

IN WITNESS WHEREOF, the parties hereto have caused this Trust Agreement to be executed in their respective names by their duly authorized officers and Trustees as of the day and year first above written.

Witnessed By:

Massachusetts Water Resources Authority as Settlor

By: _____
Frederick A. Laskey, Executive Director and not
Individually

TRUSTEES:

MWRA Executive Director

By: _____
Frederick A. Laskey, as Trustee and not Individually

MWRA Director of Finance

By: _____
Thomas Durkin, As Trustee and not Individually

MWRA Treasurer

By: _____
Matthew Horan, as Trustee and not Individually

MWRA Budget Director

By: _____
Kathy Soni, as Trustee and not Individually

MWRA Director of Human Resources

By: _____
Karen Gay-Valente, as Trustee and not Individually

STAFF SUMMARY

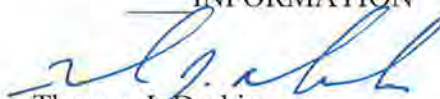
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: April 15, 2015
SUBJECT: General Bond Resolution Amendments



COMMITTEE: Administration, Finance & Audit

X VOTE
INFORMATION

Matthew R. Horan, Treasurer *MH*
Sean R. Cordy, Financial Planner *SR*
Preparer/Title



Thomas J. Durkin
Director, Finance

This staff summary discusses the amendments to MWRA's General Bond Resolution and seeks approval for the utilization of the reserve funds to be released. Implementation of these amendments began in 2007 as an integral part of a long-term rates management strategy first recommended by the Advisory Board and then approved by the Board of Directors. MWRA has finally received the necessary 67% bondholder consent on the senior and subordinate lien to allow them to take effect. As a result of the amendments, MWRA will be able to release approximately \$113.4 million in reserve funds.

The \$113.4 million is comprised of \$67.1 million from the Debt Service Reserve Fund, \$21.3 million from the Community Obligation and Revenue Enhancement Fund, and \$25 million from the Renewal and Replacement Reserve. Based on the recommendation of the Long-Term Rates Management Committee, staff are recommending that \$103.4 million or 91% of the funds be utilized to defease outstanding debt service (\$92.1 million in principal and \$11.3 million in interest) between FY17 and FY27, and the remaining \$10 million or 9% be devoted to the establishment of an irrevocable Other Post Employment Benefits Trust.

RECOMMENDATION:

To authorize the Executive Director or his designee, on behalf of the Authority, to enter into, execute and deliver all necessary agreements and other instruments and to take such other actions necessary to effectuate the redemption and defeasance of an aggregate principal amount of approximately \$92,105,000 of outstanding MWRA senior bonds including to cause the escrow of cash and/or securities in an amount necessary to fund such redemption and defeasance and to deposit \$10 million into an irrevocable OPEB Trust utilizing reserve funds made available as a result of the amendments to the General Bond Resolution.

DISCUSSION:

In January 1990, the Board of Directors approved MWRA's General Bond Resolution (Resolution) which governs the issuance of its debt obligations. Among other things, the Resolution creates various reserve funds and outlines all the security provisions that bondholders

receive to help ensure timely payment of debt service. When the Resolution was approved in 1990, MWRA was a new agency facing a large mandated capital program and a limited track record as a debt issuer. Given the uncertainty as to MWRA's ability to pay debt service over the long-term, the resolution was drafted to require the establishment of a variety of reserve funds that provided a "belt and suspenders" approach to security for bondholders. This approach included a variety of reserve accounts including a large Debt Service Reserve Fund, the Community Obligation and Revenue Enhancement Fund (CORE) to be utilized in the event of a local body default, and the Renewal and Replacement Reserve to provide funding for emergency construction projects necessary to maintain operations when other funds are not available. In addition to these three reserve accounts, which are included in the amendments, MWRA also has an Operating Reserve Fund, Insurance Reserve Fund, Rate Stabilization Fund and a Bond Redemption account. MWRA's reserve funds currently have a balance of approximately \$390.3 million.

Since that time MWRA has completed the majority of its mandated capital program, obtained strong credit ratings, and has a proven history of conservative financial and budgetary management, as well as timely collection of revenue and payment of debt service. In cooperation with the Advisory Board, staff worked with bond counsel, financial advisors, underwriters and the rating agencies to develop modifications to the resolution that reflected MWRA's maturity as an issuer. Based on the review, a variety of amendments to the Resolution were proposed that ranged from administrative corrections to reductions in reserve requirements. A summary of the amendments to the Resolution is attached to this staff summary.

In order to amend the Resolution, 67% of bondholders on the senior and the subordinate liens had to consent to the changes. In February 2007, MWRA issued its first bonds that incorporated these amendments which started the process of receiving the necessary consents. MWRA has received the necessary consents on all bonds it has issued since that time and after MWRA issued the 2014 Series D-F bonds in November, it achieved 72.7% consents on the senior lien. Once the necessary consents were received on the senior lien, staff met with the Massachusetts Clean Water Trust and received its consent on the bonds issued to them prior to 2008, which pushed the subordinate lien to 89.7%. MWRA is undertaking the other necessary steps, including providing notice to bondholders, to implement the amendments and intends to have that process completed by April 23, 2015.

As part of the amendments, changes were made that will allow for the release of \$113.4 million from three of MWRA's reserve accounts. The largest release will be approximately \$67.1 million from the Debt Service Reserve Fund. The money in the Debt Service Reserve Fund was generated from the proceeds of tax-exempt bond transactions and as a result must be used to defease debt from the series they are attributed to. The impact of this defeasance has been built into the assessment projections since fiscal year 2014. The following table provides an overview of the utilization of the Debt Service Reserve Fund releases, which were targeted at peak debt service years as much as possible based on the characteristic of the bond series.

Series	Budget Impact of the Debt Service Reserve Release										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
2002J	\$ (8,262,125)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2005A-B	\$ (8,472,625)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2006A-B	\$ (132,500)	\$ (132,500)	\$ (2,782,500)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2007A-B	\$ (492,500)	\$ (492,500)	\$ (492,500)	\$ (492,500)	\$ (492,500)	\$ (492,500)	\$ (2,492,500)	\$ (2,392,500)	\$ (2,292,500)	\$ (2,192,500)	\$ (1,942,500)
2009A-B	\$ (5,128,406)	\$ (140,906)	\$ (4,315,906)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2010A-B	\$ (170,000)	\$ (170,000)	\$ (3,570,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2011B	\$ (25,500)	\$ (25,500)	\$ (875,500)				\$ -	\$ -	\$ -	\$ -	\$ -
2011C	\$ (211,200)	\$ (211,200)	\$ (211,200)	\$ (211,200)	\$ (1,991,200)	\$ (3,640,000)	\$ -	\$ -	\$ -	\$ -	\$ -
2012A-B	\$ (226,500)	\$ (226,500)	\$ (3,306,500)	\$ (72,500)	\$ (1,522,500)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2013A	\$ (167,400)	\$ (167,400)	\$ (967,400)	\$ (715,400)	\$ (1,992,200)	\$ (962,000)	\$ -	\$ -	\$ -	\$ -	\$ -
2014D-F	\$ (213,250)	\$ (213,250)	\$ (3,494,917)	\$ (1,032,500)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ (23,502,006)	\$ (1,779,756)	\$ (20,016,423)	\$ (2,524,100)	\$ (5,998,400)	\$ (5,094,500)	\$ (2,492,500)	\$ (2,392,500)	\$ (2,292,500)	\$ (2,192,500)	\$ (1,942,500)

The remaining \$46.3 million in released funds is comprised of \$21.3 million from the CORE Fund and \$25 million from the Renewal and Replacement Reserve Fund. The money in both of these reserves was generated through MWRA's revenues and as a result do not have the same restrictions as the tax-exempt bond proceeds.

Based on a recommendation from the Advisory Board, a Long-Term Rates Management Committee was convened to discuss the application of the \$46.3 million of CORE and Renewal and Replacement funds. The Committee was comprised of members of the MWRA Board of Directors, Advisory Board Executive Committee members, Executive Directors of both MWRA and the Advisory Board. The Committee was presented with a variety of options for the application of the funds ranging from all being deposited to an Other Post Employment Benefits (OPEB) Trust to all being used to defease outstanding bonds. After review of staff's presentation and a detailed discussion of the options, it was the consensus of the Committee that \$10 million of the funds be allocated as the initial deposit into an OPEB Trust and the remaining \$36.3 million be utilized to defease outstanding debt. A recommendation to establish an irrevocable OPEB Trust is being presented in a separate staff summary at this meeting. The table below details the impact of the defeasance on the increases to the rate revenue requirement based on the FY16 Proposed CEB.

PFY16: Proposed FY16 Budget with CORE and Renewal & Replacement Release Allocated \$10 Million to OPEB Trust and \$36.3 Million to Defeasance

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Total Rate Revenue (\$ in Mil)	\$ 650,316	\$ 676,995	\$ 703,656	\$ 731,351	\$ 760,190	\$ 790,121	\$ 821,283	\$ 872,945	\$ 841,267	\$ 826,807	\$ 805,821
Rate Revenue Change (\$ in Mil)	\$ 21,595	\$ 26,679	\$ 26,661	\$ 27,695	\$ 28,839	\$ 29,931	\$ 31,162	\$ 51,662	\$ (31,678)	\$ (14,460)	\$ (20,986)
Rate Revenue Change	3.43%	4.1%	3.9%	3.9%	3.9%	3.9%	3.9%	6.3%	-3.6%	-1.7%	-2.5%
CORE and Renewal & Replacement Application	\$ -	\$ -	\$ 8,284	\$ 11,191	\$ 10,397	\$ 6,452	\$ -	\$ -	\$ -	\$ -	\$ -
Use of Rate Stabilization & Bond Redemption	\$ 6,746	\$ 3,547	\$ -	\$ -	\$ -	\$ 30,276	\$ 19,757	\$ 9,041	\$ -	\$ -	\$ -
Rate Stabilization & Bond Redemption Balance	\$ 62,620	\$ 59,073	\$ 59,073	\$ 59,073	\$ 59,073	\$ 28,797	\$ 9,041	\$ (0)	\$ (0)	\$ (0)	\$ (0)

With the application of the \$36.3 million in released reserves, strategic utilization of available Rate Stabilization and Bond Redemption funds, MWRA is able to achieve projected rate increases of 3.9% through fiscal year 2021, based on the FY16 Proposed CEB. The application of the \$36.3 million also allows MWRA to maintain its Rate Stabilization and Bond Redemption reserves longer providing some flexibility in the event of unforeseen events. It is important to note that the projections currently show Rate Stabilization and Bond Redemption funds being utilized at elevated levels in FY20 and FY21. Staff believe that those amounts could be reduced based on the application of potential surplus funds to conduct defeasances targeting those years.

The application of the \$113.4 million in released funds will allow MWRA to begin to address its OPEB liability, while still applying over 91% or \$103 million to provide rate relief to its member

communities. Staff anticipate executing the defeasance for \$36.3 million at the end of April and the \$67.1 million in Debt Service Reserve Funds after they are released on June 30, 2015.

BUDGET/FISCAL IMPACT:

The application of these funds will lower MWRA's outstanding debt, provide sustainable and predictable rate increases and begin the process of addressing the OPEB liability.

**Massachusetts Water Resources Authority
Amendments to General Bond Resolution**

Reserve Requirements and Reserve Funds

- The Debt Service Reserve Fund Requirement for Bonds would be changed from a per-Series basis to an aggregate basis, and one of the standards of the test would be changed from 100% of Average Annual Adjusted Debt Service to 50% of Maximum Annual Adjusted Debt Service.
- Investments permitted in the Debt Service Fund, Subordinated Debt Service Fund, Debt Service Reserve Fund and Subordinated Debt Service Reserve Fund would be expanded to include more permitted investments, including securities repurchase agreements (“repos”), and investments in the Debt Service Reserve Fund and the Subordinated Debt Service Reserve Fund would no longer be limited to 15 years. Amounts released from the Debt Service Reserve Fund or the Subordinated Debt Service Reserve Fund on account of the reduction in a debt service reserve requirement or the use of a financial guaranty in place of funding would be used to redeem Bonds or Subordinated Bonds, as applicable.
- The purpose of the Renewal and Replacement Reserve Fund would be redefined more narrowly as a fund for emergency needs, and other expenditures for repairs and replacements not provided for in the Operating Budget and the Capital Budget. In addition, any portion of the new Renewal and Replacement Reserve Fund Requirement in excess of \$10 million may be covered by a line of credit (such as the Authority’s current commercial paper programs) rather than having to be funded with cash and investments.
- The Supplemental Coverage Ratio Requirement and the Community Obligation and Revenue Enhancement Fund would be eliminated.

Rate Covenants and Additional Debt Tests

- The requirement that Rates and Charges cover deposits to the Community Obligation and Revenue Enhancement Fund would be eliminated.
- The calculation of debt service requirements for Bonds would take into account certain interest rate swap arrangements (as already provided in the General Resolution with respect to Subordinated Bonds).

Amendments


- The general Bondholder consent requirement would be reduced from the holders of two-thirds of the outstanding principal amount of each Series of Secured Bonds affected by a proposed amendment to the holders of 51% of the outstanding principal amount of such Series of Secured Bonds.

- Bond insurers and other providers of credit enhancement would be authorized to vote on amendments in place of the holders of the Secured Bonds that they insure or secure (excluding amendments that would require a unanimous consent or the consent of every holder of affected Secured Bonds).

Other

- The provision permitting removal of the Trustee at the option of the Authority would operate at two-year intervals instead of five-year intervals.
- Refunding and defeasance escrows would be permitted to be funded not only with obligations issued or guaranteed by the United States and pre-refunded municipal bonds, but also with obligations of the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation and other agencies established by the federal government.

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: April 15, 2015
SUBJECT: Integrated Financial, Procurement and Human Resources/Payroll Management System Maintenance and Support
Infor Global Solutions (formerly Lawson Associates, Inc.)

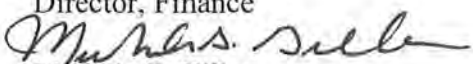
COMMITTEE: Administration, Finance & Audit

Janice B. Watts, Buyer
Russell J. Murray, MIS Director
Joseph S. Barrett, Custom Support Manager
Preparer/Title

 INFORMATION

VOTE


Thomas Durkin
Director, Finance


Michele S. Gillen
Director, Administration

RECOMMENDATION:

To approve the award of a sole source purchase order contract for the annual maintenance and support of the integrated financial, procurement and human resources/payroll management system to Infor Global Solutions (formerly Lawson Associates, Inc.), and to authorize the Executive Director to execute said purchase order contract in an amount not to exceed \$358,654.12 for a period of one year, from June 1, 2015 through May 31, 2016.

DISCUSSION:

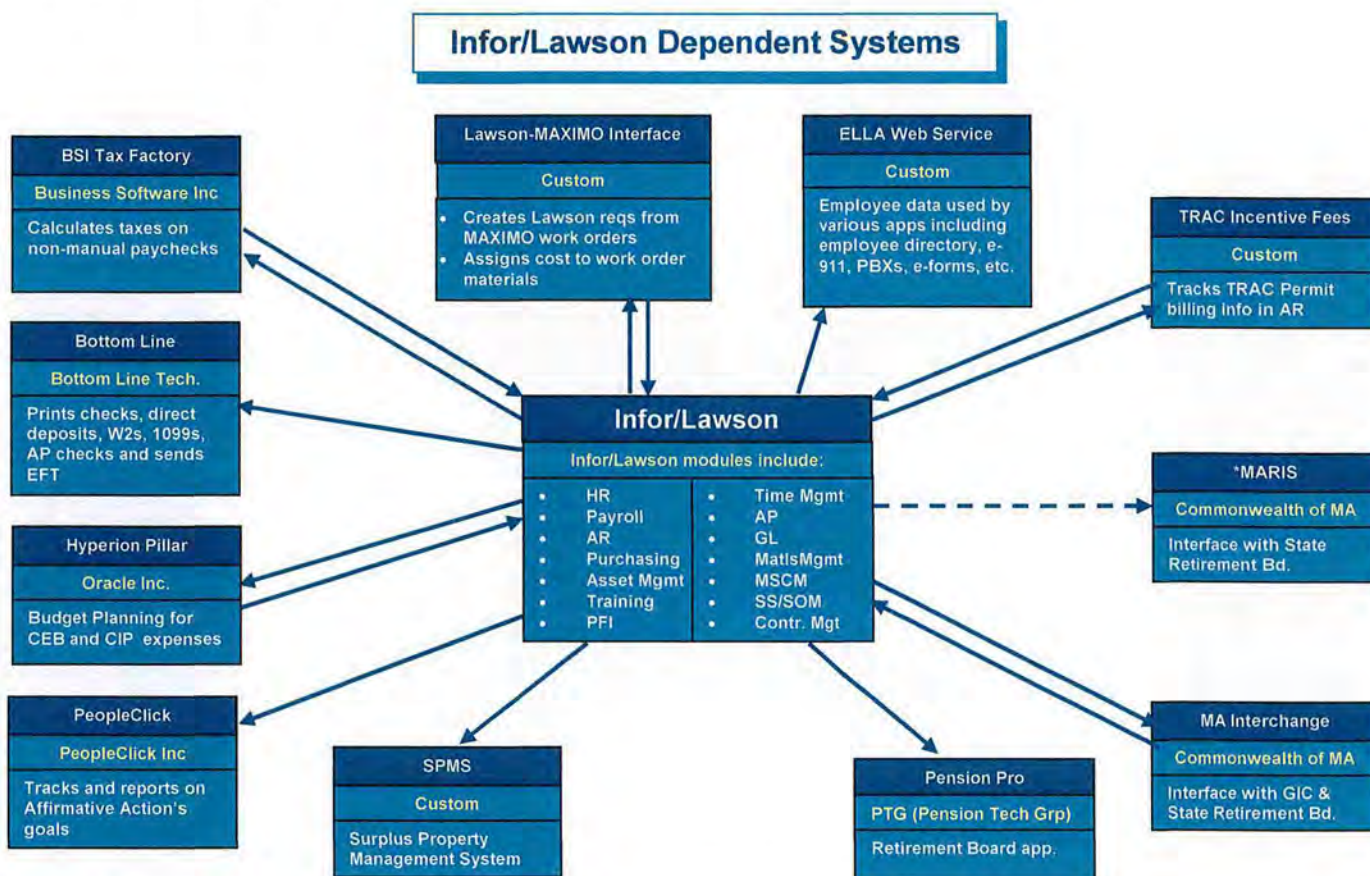
On March 24, 1999, the Board of Directors approved Contract 6362 with Lawson Associates (now Infor Global Solutions) to implement an integrated financial and procurement management system. In May 2000, the implementation of a Human Resources/Payroll module was included as part of the Lawson System. Today this set of application modules represents the core administrative and financial management functionality for the MWRA (Human Resources, Payroll, Finance, Procurement, and Materials Management). In addition, the Commonwealth of Massachusetts Records Conservation Board has approved this system as the "system-of-record" for the associated electronic information thus reducing the need for paper records.

Prior to the Lawson implementations, the equivalent system functionality came from multiple vendor systems. In 1999 the combined maintenance costs for these systems was \$221,750. At an estimated increase of 4% per year, these maintenance agreements would total over \$415,000 in 2015. There are also numerous advantages with having a single application vendor including, single support channels, standardized interfaces, reporting, system compatibilities and upgrade requirements.

In October 2012, as part of an effort to reduce the use of customized applications, use more off-the-shelf products, and respond to the MIS 5-Year Strategic Plan recommendations (including enhancing e-Procurement functionality and reducing paper), the Board of Directors approved the implementation of the Strategic Sourcing, Supplier Order Management and Contracts Management modules.

The illustration below shows the significant Infor/Lawson modules in use and interfaces with other applications.

This maintenance and support agreement is an essential tool to protect the MWRA's Lawson software investment. The Lawson support agreement ensures that the MWRA receives vendor support including:



*New Massachusetts Retirement Information System (MARIS) interface scheduled for production in Q1 FY16.

- Access to product patches, version releases, software upgrades and documentation; “How To” assistance, remote diagnosis, priority case queuing, e-mail notifications, Lawson Global Support, hot topics web discussion groups and electronic self-service case logging, tracking and management.
- Access to support engineers twelve hours a day, five days a week and twenty-four hour, seven day a week support for critical issues.

Staff have thoroughly reviewed the sole source nature of this procurement. Infor Global Solutions is the manufacturer of this software and while there are third party vendors who provide support for various applications, they do not have the ability to change standard code or provide upgrades or fixes to the application. This ability is important to the MWRA to ensure that it is able to maximize its use of Lawson.

Non-renewal of the maintenance and support agreement would place the MWRA at risk since no further support will be provided on the existing applications. Therefore, staff recommend that the MWRA renew the annual maintenance agreement to provide ongoing support for the Lawson System.

BUDGET/FISCAL IMPACT:

This year's request of \$358,654.12 represents a 6% increase over last year's not-to-exceed amount of \$338,352.94. There are sufficient funds available in the FY15 CEB for this renewal.

MBE/WBE PARTICIPATION:

Infor Global Solutions is not a certified Minority or Woman Owned business.

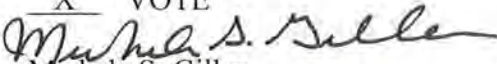
STAFF SUMMARY

TO: Board of Directors
FROM: Fredrick A. Laskey, Executive Director 
DATE: April 15, 2015
SUBJECT: Technical Assistance Consulting Services – Hazardous Materials
Geosphere Environmental Management, Inc., Contract 600TA
Green Seal Environmental, Inc., Contract 601TA

COMMITTEE: Administration, Finance & Audit

 INFORMATION

 X VOTE


Michele S. Gillen

Director of Administration

John R. Nelson, Environmental Manager
Marcel R. Brady, Mgr., Contract Administration
Preparer/Title


Michael J. Hornbrook

Chief operating Officer

RECOMMENDATION:

To approve the recommendation of the Consultant Selection Committee to select Geosphere Environmental Management, Inc., and Green Seal Environmental, Inc., to provide Technical Assistance Consulting Services in the category of Hazardous Materials, and to authorize the Executive Director, on behalf of the Authority, to execute Contract 600TA with Geosphere Environmental Management, Inc., and Contract 601TA with Green Seal Environmental, Inc., each for an amount not to exceed \$450,000, with a contract term of three years, and to authorize a Notice to Proceed for the first year of each contract for an amount not to exceed \$150,000.

Further, to authorize the Executive Director to approve separate Notices to Proceed, if recommended by staff, to commence the second- and third-year terms of each contract, for the same yearly not to exceed amounts.

DISCUSSION:

The purpose of these technical assistance contracts is to make available, on an as-needed basis, hazardous materials assessment services for small, unanticipated, or emergency projects.

Over the years, because of the significant demand for task order work involving hazardous materials, MWRA typically awards separate contracts to two firms. Staff are of the opinion that this two-contract approach has been successful in ensuring the availability of qualified expertise in this important and environmentally sensitive discipline at all times.

Some typical examples of the task order work that is likely to be issued under this contract include:

- preparation and implementation of spill prevention plans at MWRA facilities required under the Clean Water Act;
- training staff in oil-handling spill prevention and response procedures;
- management of hazardous materials clean-up work by a Licensed Site Professional;
- support of MWRA staff as they plan, design, and construct new and rehabilitated infrastructure;
- hazardous materials response actions in accordance with the Massachusetts Contingency Plan; and
- ground water remediation and monitoring.

Procurement Process

Staff used a one-step, two-envelope Request for Qualifications/Proposals (RFQ/P) process for this procurement. Because these hazardous materials contracts often involve ensuring regulatory compliance and remediation of complex site conditions, proposers were required to meet minimum qualifications requirements in specific areas of experience and expertise. In their proposals, respondents were required to provide examples of completed projects demonstrating that the experience requirements have been met. Each firm also had to show that it employs at least one Licensed Site Professional and one Massachusetts-Licensed Professional Engineer.

The RFQ/P did not include a detailed scope of work on which proposers could submit a cost proposal because tasks will vary depending on the nature and circumstances of the requested work. Instead, firms were required to provide Single Hourly Rates for each person, within each labor classification, for the current year and each of the two successive years of the contract, if extended, along with unit prices for laboratory and drilling costs. Each Single Hourly Rate is the billable rate of each specific employee for each hour spent on a task order and is inclusive of all direct labor costs, indirect costs, and profit. Staff developed a sample cost exercise, which was based on the typical level of effort for task orders completed under hazardous materials contracts in the recent past. This sample cost exercise was the basis for determining the lowest cost proposals.

The RFQ/P was advertised and issued in February 2015; eleven proposals were received by the March 6, 2015 deadline. On March 19, 2015, the Selection Committee met and carefully examined all eleven proposals. Four firms, Capaccio Environmental Engineering, Inc., CleanHarbors Environmental Services, Inc., End Point LLC, and SAK Environmental, LLC, were deemed not qualified because the firms' proposals did not demonstrate experience for one or more of the requirements established by the RFQ/P.

The Selection Committee then opened the second envelope containing the sample cost exercise of the remaining seven qualified firms and ranked them based upon cost. The results are presented on the following page.

<u>Firms</u>	<u>Sample Cost Exercise</u>	<u>Rank</u>
Geosphere Environmental Management, Inc.	\$18,463.00	1
Green Seal Environmental, Inc.	\$20,451.08	2
Fay, Spofford & Thorndike	\$20,980.84	3
Cardno ATC	\$21,036.00	4
ENSAFE	\$21,765.30	5
Stone Environmental, Inc.	\$23,959.19	6
AMEC Massachusetts, Inc.	\$24,750.68	7

Geosphere Environmental Management, Inc., with the lowest sample cost exercise was first-ranked. This firm is one of the current incumbent Consultants for Hazardous Materials. Staff report that Geosphere has provided outstanding past performance on MWRA work, and has successfully completed task orders on schedule and within budget. The firm proposed a highly qualified project team with excellent experience performing complex Massachusetts Contingency Plan and hazardous building materials work, and the firm possesses the requisite knowledge of environmental regulations. Geosphere's proposal included an excellent decision-making flow chart that supported a detailed technical and management approach to anticipated task order work.

Green Seal Environmental, Inc. was the second-ranked firm. This Massachusetts-Certified DBE/MBE/WBE firm has no prior experience working for MWRA. However, it has experience working for the Massachusetts Department of Conservation and Recreation, and several Federal agencies, including the Environmental Protection Agency and the Federal Emergency Management Agency. Green Seal's proposal included a well-qualified project team with excellent experience in environmental regulations, and knowledge and expertise in the Massachusetts Contingency Plan, NPDES permitting, spill prevention, control and countermeasure plans, hazardous building materials assessments, including asbestos, lead paint and PCBs, and hazardous waste management. The firm's proposal demonstrated significant experience on previous related projects and a thoughtful technical and management approach to anticipated task order work.

The Selection Committee was in agreement that all of the remaining firms were certainly well qualified and met the threshold requirements for consideration. However, the firms submitted proposals that were not as competitively priced as the two recommended firms.

Therefore, staff recommend that the Board approve the award of these two contracts to Geosphere Environmental Management, Inc. and Green Seal Environmental, Inc.

BUDGET/FISCAL IMPACT:

The FY15 Capital Improvement Program contains \$900,000 for Hazardous Materials Services.

MBE/WBE PARTICIPATION:

There were no MBE or WBE participation requirements established for this contract due to limited opportunities for subcontracting. However, Green Seal Environmental, Inc. is a Massachusetts Supplier Diversity Office-certified, Disadvantaged, Minority- and Women-owned business.



MASSACHUSETTS WATER RESOURCES AUTHORITY

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

Frederick A. Laskey
Executive Director

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WASTEWATER POLICY & OVERSIGHT COMMITTEE MEETING

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

to be held on

Wednesday, April 15, 2015

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

Time: Immediately following AF&A Comm.

AGENDA

A. Information

1. Infiltration/Inflow Local Financial Assistance Program Annual Update

B. Approvals

1. Approval of Memorandum of Understanding with the Massachusetts Department of Fish and Game for a Public Access Fishing Pier at Deer Island

C. Contract Awards

1. Mystic River Streamgages - Joint Funding Agreement: U.S. Geologic Survey, Contract OP-281

D. Contract Amendments/Change Orders

1. Nut Island Headworks Electrical and Conveyors Improvements: Malcolm Pirnie, Inc., Contract 7312, Amendment 4

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Wastewater Policy and Oversight Committee

March 11, 2015

A meeting of the Wastewater Policy and Oversight Committee was held on March 11, 2015 at the Authority headquarters in Charlestown. Chairman Walsh presided. Present from the Board were Messrs. Carroll, Flanagan, Foti, Pappastergion and Vitale. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Mike Hornbrook, Dave Kubiak, John Vetere, Steve Cullen, Jerry Sheehan, Dave Duest and Bonnie Hale. The meeting was called to order at 11:40 a.m.

Information

Progress of Cambridge-Implemented CSO Projects and Projected Financial Assistance through September 2015

Staff provided a brief update.

Approvals

*Final CSO Annual Progress Report for 2014

Staff gave a presentation, and the Committee recommended approval of submittal of the report to the Federal District Court (ref. agenda item B.1).

Contract Awards

*Modeling Massachusetts Bay Water Quality 2014-2016: University of Massachusetts/Dartmouth, Contract OP-272

The Committee recommended approval of the contract award (ref. agenda item C.1).

*Purchase Order for Three Jet/Sewer Cleaning Machines: Boston Freightliner, Inc., Bid WRA-3971

There was general discussion and question and answer. The Committee recommended approval of the contract award (ref. agenda item C.2).

* Approved as recommended at March 11, 2015 Board of Directors meeting.

Contract Amendments/Change Orders

***Pump, Gear Box, and Diesel Engine Upgrade, Prison Point and Cottage Farm CSO Facilities: IPC Lydon, LLC, Contract 7452, Change Order 7**

There was some question and answer. The Committee recommended approval of Change Order 7 (ref. agenda item D.1).

***Operation and Maintenance of Sludge Processing Facility - Fore River Pelletizing Plant: New England Fertilizer Co., Contract S345, Amendment 1**

Staff gave a presentation and there was general discussion and question and answer. The Committee recommended approval of Amendment 1 (ref. agenda item D.2).

The meeting adjourned at 12:15 p.m.

* Approved as recommended at March 11, 2015 Board of Directors meeting.

STAFF SUMMARY

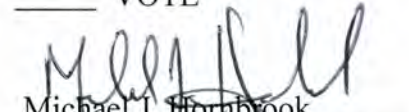
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: April 15, 2015
SUBJECT: Infiltration/Inflow Local Financial Assistance Program Annual Update



COMMITTEE: Wastewater Policy & Oversight

X INFORMATION
VOTE

Carolyn M. Fiore, Deputy Chief Operating Officer
Jon F. Szarek, Project Manager
Carl H. Leone, Senior Program Manager
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

As recommended by MWRA's Advisory Board, the Board approved the addition of \$160 million for two additional Phases of the Infiltration/Inflow Local Financial Assistance Program beginning with the current FY15 budget. In addition to the increase in funding, the Program's grant/loan split was reconfigured to 75% grant and 25% loan (previously 45% grant and 55% loan) and the loan repayment period was extended to 10 years (previously 5 years). The expansion of funding availability combined with more favorable grant component and loan repayment terms are major positive developments for MWRA's member communities. Under the first three quarterly financial assistance distributions for FY15, \$10.7 million in new Phase 9 funds have already been distributed to fund local projects in nine communities. Staff are processing additional financial assistance applications for the FY15 fourth quarterly funding distribution (May) and anticipate the distribution of an addition \$4.5 million in new Phase 9 funds.

RECOMMENDATION:

For information only. MWRA's Infiltration/Inflow (I/I) Local Financial Assistance Program was initiated in May 1993 to provide funding to member sewer communities to perform I/I reduction and sewer system rehabilitation projects within their locally-owned collection systems. The program's goal is to assist member communities in improving local sewer system conditions to reduce I/I and ensure ongoing repair/replacement of the collection system.

BACKGROUND:

All 43 member sewer communities have participated in the I/I Local Financial Assistance Program. A total of \$460.75 million in grant and loan funds have been allocated to member sewer communities based on their respective share of sewer charges. Through February 2015, a total of \$283.1 million has been distributed to member communities to fund 475 local sewer rehabilitation projects over 23 years. The remaining \$177.6 million is approved for distribution through FY25. Attachment 1 provides a summary of funds allocated, distributed, and remaining for each member community. Attachment 2 provides more detail on community distributions by program phase including the most recent addition of Phases 9 and 10 funds at \$80 million each. All scheduled community loan repayments have been made, a total of \$134.9 million to date.

Wastewater discharged by member sewer communities to MWRA is influenced by seasonal and wet-weather conditions related to I/I. I/I is extraneous water that enters all wastewater collection systems through a variety of sources.

Infiltration is groundwater that enters the collection system through physical defects such as cracked pipes/manholes or deteriorated joints. Typically, many sewer pipes are below the surrounding groundwater table. Therefore, leakage into the sewer (infiltration) is a broad problem that is difficult and expensive to identify and reduce.

Inflow is extraneous flow entering the collection system through point sources and may be directly related to storm water run-off from sources such as roof leaders, yard and area drains, basement sump pumps, manhole covers, cross connections from storm drains or catch basins, drains from springs and swampy areas, leaking tide gates, etc. Inflow causes a rapid increase in wastewater flow that occurs during and after storms. The volume of inflow entering a collection system typically depends on the magnitude and duration of a storm event, as well as related impacts such as snowmelt and storm tides.

MWRA's I/I Local Financial Assistance Program is a critical component of MWRA's Regional I/I Reduction Plan.¹ Specifically, local sewer system rehabilitation projects are intended to at least offset ongoing collection system deterioration to prevent a net increase in regional I/I. In the long-term, system rehabilitation should result in lower I/I, which will allow for future increases in sanitary flows (residential, commercial, industrial, and institutional) without a net increase in total wastewater flow. The program fosters efficient operation and maintenance of local sewer systems.

DISCUSSION:

The addition of Phases 9 and 10 funds (total of \$160 million for combined grants and loans) increases the total program budget to \$460.75 million and extends the distribution of grants and loans through FY25. The grant/loan split was reconfigured for Phases 9 and 10 to 75% grant and 25% interest-free loan (previously 45% grant and 55% loan) and the loan repayment period was extended to 10 years (previously 5 years). Program funds are allocated among the 43 MWRA



Infiltration in a Sanitary Sewer



Inflow into a Manhole



Private Inflow from a Sump Pump

¹ As required by the National Pollutant Discharge Elimination System (NPDES) Permit for the Deer Island Plant, MWRA's Regional Infiltration/Inflow Reduction Plan was approved by MassDEP in November 2002. MWRA is required to report annually on the I/I Reduction Plan and present estimates of I/I. The Regional I/I Reduction Plan and Annual I/I Reduction Report are online at: <http://www.mwra.com/comsupport/communitysupportmain.html>.

sewer communities based on respective share of wholesale sewer charges. Phase 9 funds began to be distributed in FY15. Phase 10 funds will be available to each community in the fiscal year following distribution of 50% or more of that community’s Phase 9 funds.

As recommended by the Advisory Board, the I/I Local Financial Assistance Program was modified by the addition of sunset provisions for the grant portion of funding for Phases 1 through 7. The sunset provisions have proven successful in motivating communities to continue to invest in local sewer rehabilitation projects. All funds budgeted by MWRA for community I/I reduction grants and loans for Phases 1 through 5 were distributed to fund local projects. The grant portion of Phase 6 and 7 funds will sunset at the end of FY18 and FY21, respectively. A status update on community funding is provided in the table below.

Funding Phases	Year Initiated	Total Funding (\$ millions)	Funds Distributed (\$ millions)	Funds Remaining (\$ millions)	Number of Communities with Funds Remaining
1-5	FY93-FY05	\$ 180.75	\$ 180.75	\$ 0.00	0 of 43
6	FY07	\$ 40.00	\$ 35.04	\$ 4.96	8 of 43
7	FY10	\$ 40.00	\$ 31.88	\$ 8.12	11 of 43
8	FY13	\$ 40.00	\$ 24.76	\$ 15.24	24 of 43
9	FY15	\$ 80.00	\$ 10.71	\$ 69.29	37 of 43
10	FY15	\$ 80.00	\$ 0.00	\$ 80.00	43 of 43
TOTAL		\$ 460.75	\$ 283.13	\$177.62	

Grant and loan funding is provided to local communities for eligible I/I reduction projects including planning, design, construction, and engineering services during construction. These projects generally take one to three years to complete. Seventy-seven percent of the funds distributed to date have financed local construction projects. The table below details funds distributed by project phase for both completed and ongoing projects.

PROJECT PHASE	COMPLETED PROJECTS (\$ millions)	ONGOING PROJECTS (\$ millions)	TOTAL (\$ millions)
Planning/Study:	\$ 35.6	\$ 3.7	\$ 39.3 (14%)
Design:	11.6	1.1	12.7 (4%)
Construction:	153.5	63.1	216.6 (77%)
Eng. Services During Const.:	11.1	3.4	14.5 (5%)
TOTAL	\$ 211.8 (75%)	\$ 71.3 (25%)	\$ 283.1 (100%)

Program Results

Through February 2015, a total of 475 local I/I reduction and sewer system rehabilitation projects have been funded through the MWRA’s grant/loan program. Cumulative results for the program are summarized below.

- Results for planning/inspection projects:
- 1,555 miles of sewer TV inspected
 - 1,051 miles of sewer flow isolated
 - 1,118 miles of sewer smoke tested
 - 41,430 sewer manholes inspected
 - 60,980 buildings inspected



Smoke Testing of Sewer Confirms Catch Basin and Open Service Connection Clean-Out are Inflow Sources



Sewer TV Inspection



Infiltration Source Identified by Sewer TV Inspection

Results for projects targeting infiltration reduction:

- 52 miles sewer replaced
- 113 miles cured-in-place pipe (CIPP) liner
- 143 miles sewer tested/chemically sealed
- 2,480 sewer spot repairs
- 10,300 service connection repairs
- 4.7 miles underdrains sealed



CIPP Pipe Liner



Installation of CIPP Pipe Liner

Results for projects targeting inflow reduction:

- 953 catch basins disconnected
- 39 miles of new or replaced storm drains
- 12,780 manholes rehabilitated/sealed
- 2,270 manhole covers replaced or inflow seals installed
- 430 sump pumps redirected
- 5,200 downspouts/area drains disconnected



Sewer Manhole in Wetland - Raised and Sealed

Stormwater and I/I Impacts to the Collection System

The system annual average daily flow to the Deer Island Treatment Plant is approximately 360 mgd; minimum dry-weather flows drop to 230 mgd; peak wet-weather flow during significant rainfall exceeds the 1,270 mgd plant capacity (more than 3.5 times the average flow), and significant additional system capacity is available at combined sewer overflow (CSO) outfalls and storage facilities. Few problems exist within local and regional sewer systems during dry weather or as a result of small and medium storm events. However, high levels of I/I (as well as stormwater from combined sewers) reduce pipeline capacity in the collection system that would otherwise be available to transport sanitary flow. The result, during extreme storm events, may be sewer system surcharging and sanitary sewer overflows (SSOs). I/I also results in the transport of groundwater and surface water out of the natural watershed.

Estimated Flow Reduction

Over the last five years (2010-2014), MWRA's average daily flow of 325 mgd is 35 mgd (10%) below average; while the five-year rainfall has been at the average. Over the last three years (2012-2014), MWRA's average daily flow of 305 mgd has been well below the long-term average (55 mgd or 15% below average); while the three-year rainfall has been somewhat below average at 40 inches. Individually, 2012, 2013, and 2014 average daily flow data are: 290 mgd, 310 mgd, and 320 mgd and average annual rainfall of 37 inches, 39 inches, and 45 inches, respectively. Attachment 3 provides a graph of long-term regional flow data for the Deer Island Treatment Plant collection system and annual rainfall. The long-term average daily flow for the total system is 360 mgd and the average annual rainfall is 44 inches (local NOAA site at Boston Logan Airport).

Attachment 4 displays the five-year running averages (flow and rainfall) as a means of smoothing the annual variability in the long-term data displayed in Attachment 3. The regional wastewater flow trend has declined while the annual rainfall trend is modestly increasing. The five-year running average daily flow has declined from approximately 390 mgd to approximately 325 mgd, a reduction of 65 mgd or more than 15% of wastewater flow tributary to the Deer Island Treatment Plant.

The estimated average daily flow reduction associated with completed local I/I reduction projects that have received MWRA financial assistance is about 85 million gallons per day (mgd). This flow reduction "ballpark" figure is based on the communities' (or their consultants') peak I/I reduction estimates, which have been prorated by MWRA staff to estimate an annual average I/I reduction. The estimated I/I reduction represents groundwater and stormwater that no longer enter the collection system at the point of repair. Regional wastewater flow reductions resulting from specific local I/I reduction projects are difficult to substantiate through end-of-the-collection-system meter data, due to factors noted below:

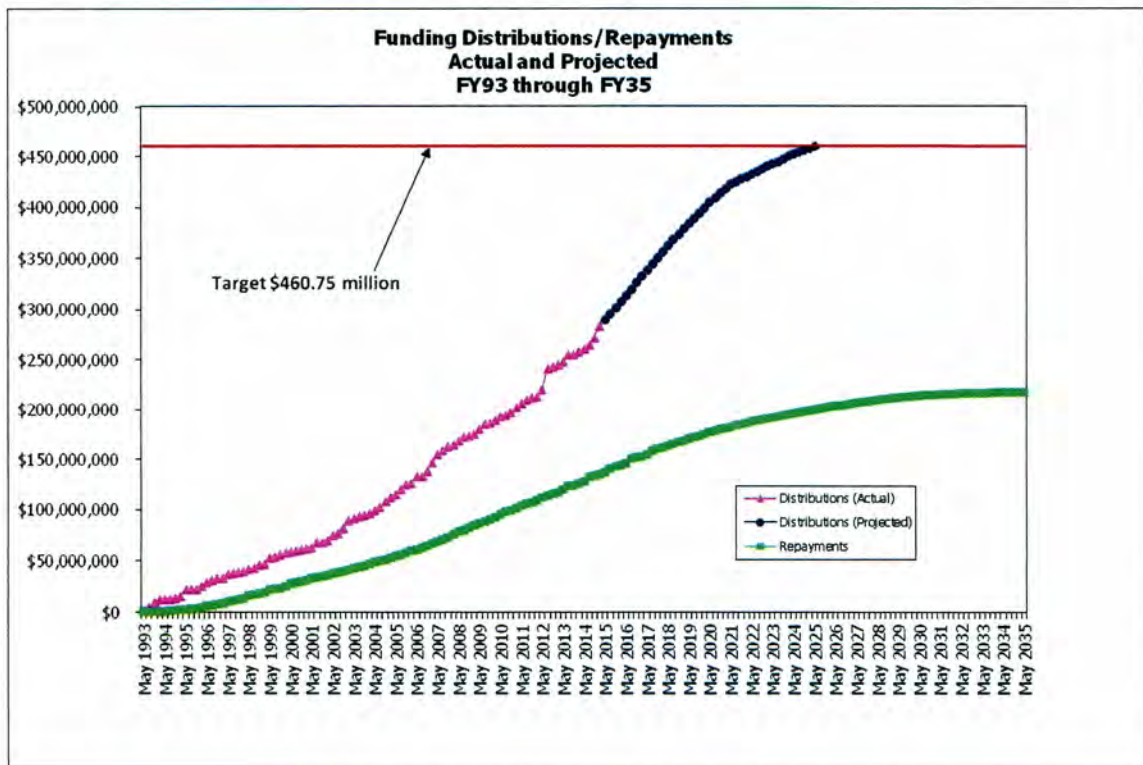
- Wastewater flows within the collection system vary dramatically due to changes in precipitation. For example, annual average daily flow for MWRA's system varies up to 100 mgd from year to year (from a low of less than 300 mgd to a high of more than 400 mgd). Small flow reductions for individual projects (typically less than one mgd) are dwarfed by regional flow fluctuations;

- Sewer capacity gained by elimination of I/I in one subsystem may, in some cases, allow for other I/I to enter the collection system at a different location, resulting in less net flow reduction at the end of the collection system;
- MWRA's numerous pumping and interceptor upgrades, as well as combined sewer overflow and system optimization projects result in an increase in the capture and treatment of wastewater flow and the reduction of raw sewage discharges. When reviewing end-of-the-collection system meter data, these increased flows to the Deer Island Treatment Plant offset upstream I/I reductions; and,
- Over the last 20 years sewer population in the service area has increased by about 150,000 leading to an increase in sanitary sewage. Conversely, during the same 20 year period, per capita water use returned to the sewer system has decreased due to installation of low-flow plumbing fixtures and appliances leading to a decrease in sanitary sewage.

Taking these factors into account, long-term metering records will continue to be analyzed to monitor regional wastewater flow trends.

BUDGET/FISCAL IMPACT:

The FY15 CIP includes an overall budget of \$242.6 million for the grant portion of the I/I Local Financial Assistance Program. An additional \$218.2 million is budgeted for the loan portion of the program. However, this amount is offset by an equal amount of loan repayments over time. Depending on the timing and level of community loan requests, annual loan distributions can fluctuate, sometimes causing over-spending or under-spending (versus budget) for any particular quarter or year. The graph below presents grant and loan distributions and loan repayments (actual and projected) for all ten phases of the program – FY93 through FY35.



For the total program, the budget target is \$460.75 million for grant and loan distributions. To date, \$283.1 million in grants and loans have been distributed and the program has a remaining balance of \$177.6 million in future community grants and loans through FY25. Community loan repayments to date are \$134.9 million, leaving a remaining balance of \$83.3 million in future repayments through FY35. As community loans are repaid, the funds are deposited into MWRA's construction fund. Community grants and loans are financed through MWRA 30-year bonds.

MBE/WBE PARTICIPATION:

MBE/WBE participation goals are included in the Financial Assistance Program agreements.

ATTACHMENTS:

- Attachment 1 – Community Funding Summary
- Attachment 2 – Community Funding Summary by Program Phase
- Attachment 3 – Long-Term Regional Flow Data
- Attachment 4 – Long-Term Regional Flow Data – 5-Year Running Average

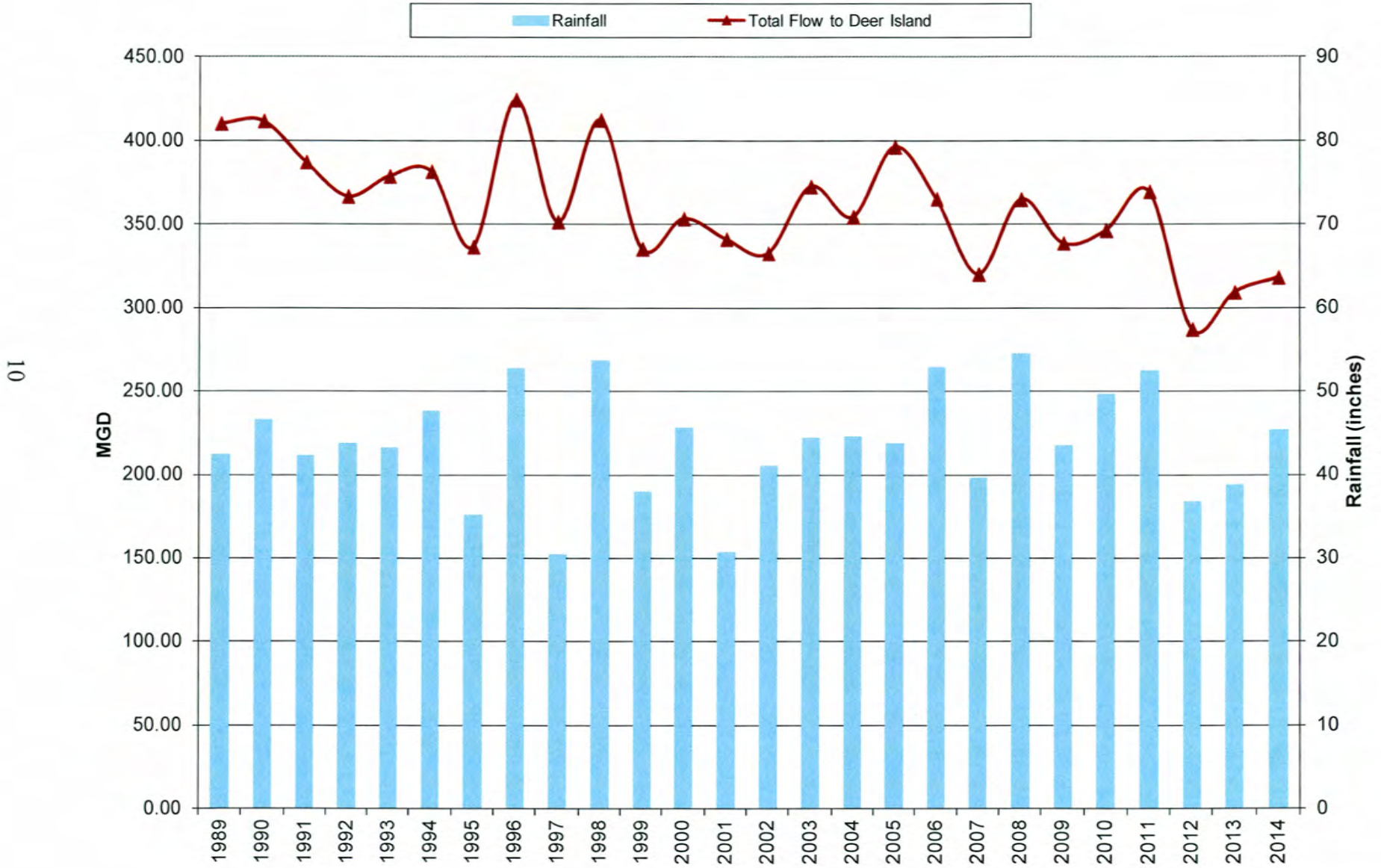
ATTACHMENT 1
MWRA I/I LOCAL FINANCIAL ASSISTANCE PROGRAM
FUNDING SUMMARY AS OF FEBRUARY 2015

Community	Total Allocations (Phases 1 - 10)	Total Distributions (Phases 1 - 10)	Percent Distributed	Funds Remaining
Arlington	\$8,423,000	\$5,613,000	67%	\$2,810,000
Ashland	\$2,168,500	\$1,328,500	61%	\$840,000
Bedford	\$3,404,600	\$1,691,600	50%	\$1,713,000
Belmont	\$5,135,100	\$2,992,100	58%	\$2,143,000
Boston	\$132,171,200	\$83,711,976	63%	\$48,459,224
Braintree	\$8,359,000	\$5,175,800	62%	\$3,183,200
Brookline	\$13,165,200	\$7,666,200	58%	\$5,499,000
Burlington	\$5,102,800	\$3,285,800	64%	\$1,817,000
Cambridge	\$23,620,100	\$11,077,055	47%	\$12,543,045
Canton	\$3,965,900	\$2,675,900	67%	\$1,290,000
Chelsea	\$6,870,100	\$4,232,100	62%	\$2,638,000
Dedham	\$5,740,000	\$4,827,000	84%	\$913,000
Everett	\$8,071,500	\$3,141,500	39%	\$4,930,000
Framingham	\$12,125,000	\$5,003,000	41%	\$7,122,000
Hingham	\$1,632,500	\$1,332,500	82%	\$300,000
Holbrook	\$1,639,600	\$896,562	55%	\$743,038
Lexington	\$7,445,300	\$4,835,300	65%	\$2,610,000
Malden	\$12,283,900	\$4,593,900	37%	\$7,690,000
Medford	\$11,987,600	\$4,794,600	40%	\$7,193,000
Melrose	\$6,076,300	\$3,914,300	64%	\$2,162,000
Milton	\$5,564,500	\$3,251,500	58%	\$2,313,000
Natick	\$5,582,600	\$4,452,800	80%	\$1,129,800
Needham	\$6,257,600	\$2,892,150	46%	\$3,365,450
Newton	\$21,197,400	\$17,529,400	83%	\$3,668,000
Norwood	\$6,879,400	\$4,103,499	60%	\$2,775,901
Quincy	\$19,790,000	\$12,882,000	65%	\$6,908,000
Randolph	\$6,050,800	\$3,894,800	64%	\$2,156,000
Reading	\$4,629,100	\$2,870,100	62%	\$1,759,000
Revere	\$10,130,900	\$5,502,900	54%	\$4,628,000
Somerville	\$15,515,800	\$10,117,800	65%	\$5,398,000
Stoneham	\$4,919,900	\$4,105,900	83%	\$814,000
Stoughton	\$4,722,900	\$3,671,200	78%	\$1,051,700
Wakefield	\$5,966,900	\$3,578,700	60%	\$2,388,200
Walpole	\$3,680,000	\$3,042,000	83%	\$638,000
Waltham	\$13,732,400	\$11,377,400	83%	\$2,355,000
Watertown	\$6,285,800	\$2,581,800	41%	\$3,704,000
Wellesley	\$5,709,700	\$2,748,808	48%	\$2,960,892
Westwood	\$2,532,300	\$1,425,300	56%	\$1,107,000
Weymouth	\$11,480,900	\$6,321,300	55%	\$5,159,600
Wilmington	\$2,462,000	\$1,388,000	56%	\$1,074,000
Winchester	\$4,183,000	\$3,448,000	82%	\$735,000
Winthrop	\$3,393,400	\$1,926,400	57%	\$1,467,000
Woburn	\$10,695,500	\$7,229,500	68%	\$3,466,000
Totals	\$460,750,000	\$283,129,950	61%	\$177,620,050

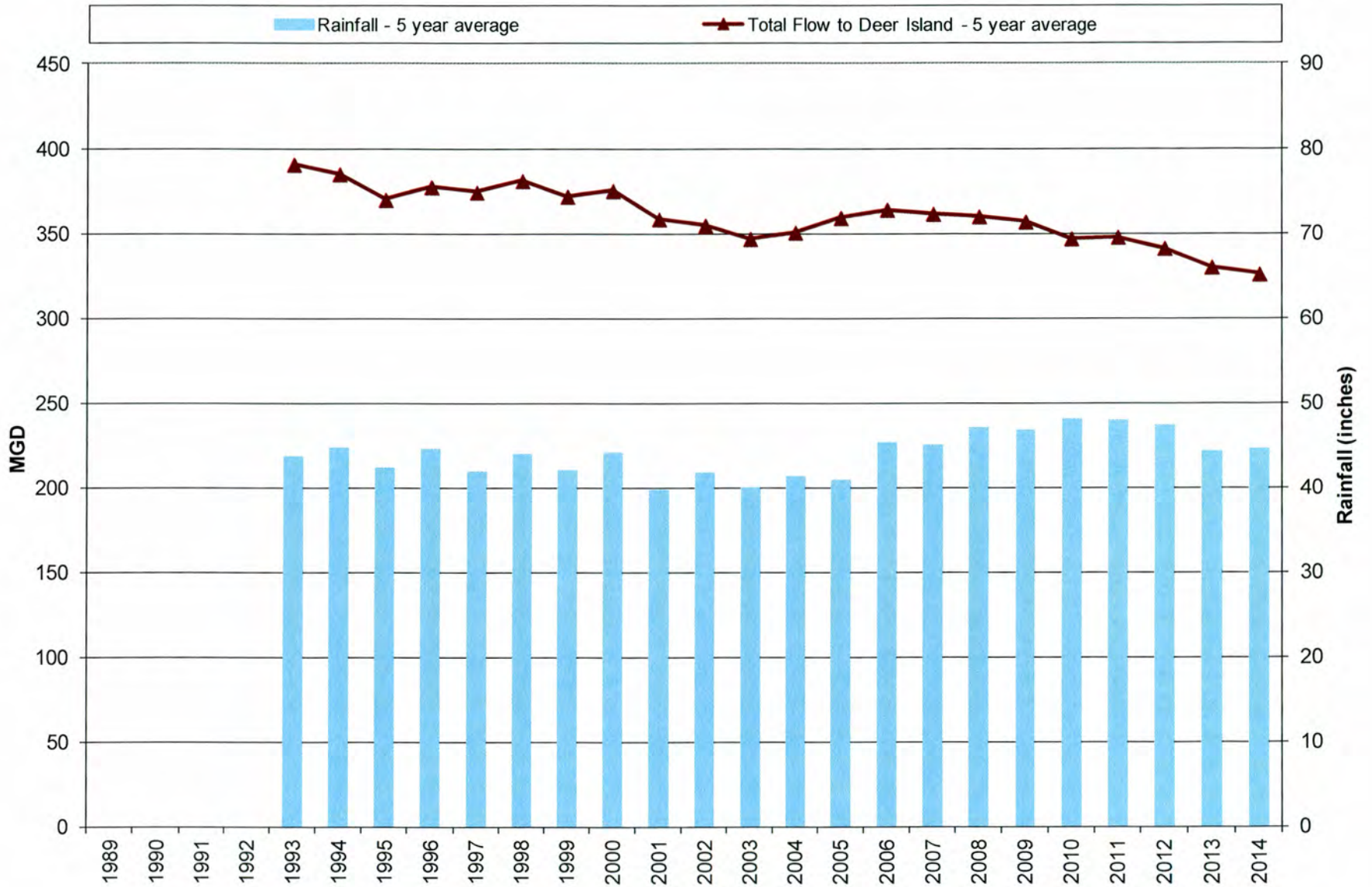
ATTACHMENT 2
MWRA // LOCAL FINANCIAL ASSISTANCE PROGRAM
FUNDING SUMMARY BY PROGRAM PHASE (AS OF FEBRUARY 2015)

Community	Phase 10 Funds Distributed	Phase 10 Funds Remaining	Phase 9 Funds Distributed	Phase 9 Funds Remaining	Phases 6 - 8 Funds Distributed	Phases 6 - 8 Funds Remaining
Arlington	\$0	\$1,405,000	\$0	\$1,405,000	\$2,164,000	\$0
Ashland	\$0	\$420,000	\$0	\$420,000	\$594,000	\$0
Bedford	\$0	\$561,000	\$0	\$561,000	\$308,000	\$591,000
Belmont	\$0	\$848,000	\$0	\$848,000	\$884,000	\$447,000
Boston	\$0	\$23,293,000	\$0	\$23,293,000	\$32,093,776	\$1,873,224
Braintree	\$0	\$1,520,000	\$0	\$1,520,000	\$2,066,800	\$143,200
Brookline	\$0	\$2,280,000	\$0	\$2,280,000	\$2,554,000	\$939,000
Burlington	\$0	\$899,000	\$0	\$899,000	\$1,336,000	\$19,000
Cambridge	\$0	\$4,027,000	\$0	\$4,027,000	\$1,753,955	\$4,489,045
Canton	\$0	\$645,000	\$0	\$645,000	\$1,030,000	\$0
Chelsea	\$0	\$1,319,000	\$0	\$1,319,000	\$1,763,000	\$0
Dedham	\$0	\$913,000	\$913,000	\$0	\$1,533,000	\$0
Everett	\$0	\$1,421,000	\$0	\$1,421,000	\$0	\$2,088,000
Framingham	\$0	\$2,050,000	\$0	\$2,050,000	\$0	\$3,022,000
Hingham	\$0	\$300,000	\$300,000	\$0	\$443,000	\$0
Holbrook	\$0	\$290,000	\$0	\$290,000	\$255,962	\$163,038
Lexington	\$0	\$1,305,000	\$0	\$1,305,000	\$2,008,000	\$0
Malden	\$0	\$2,229,000	\$0	\$2,229,000	\$0	\$3,232,000
Medford	\$0	\$2,013,000	\$0	\$2,013,000	\$0	\$3,167,000
Melrose	\$0	\$1,081,000	\$0	\$1,081,000	\$1,613,000	\$0
Milton	\$0	\$914,000	\$0	\$914,000	\$972,000	\$485,000
Natick	\$0	\$969,000	\$808,200	\$160,800	\$1,374,000	\$0
Needham	\$0	\$994,000	\$0	\$994,000	\$261,550	\$1,377,450
Newton	\$0	\$3,668,000	\$3,668,000	\$0	\$5,596,000	\$0
Norwood	\$0	\$1,180,000	\$0	\$1,180,000	\$1,388,100	\$415,900
Quincy	\$0	\$3,454,000	\$0	\$3,454,000	\$5,217,000	\$0
Randolph	\$0	\$1,078,000	\$0	\$1,078,000	\$1,540,000	\$0
Reading	\$0	\$844,000	\$0	\$844,000	\$1,134,000	\$71,000
Revere	\$0	\$1,853,000	\$0	\$1,853,000	\$1,752,000	\$922,000
Somerville	\$0	\$2,699,000	\$0	\$2,699,000	\$3,962,000	\$0
Stoneham	\$0	\$814,000	\$814,000	\$0	\$1,248,000	\$0
Stoughton	\$0	\$798,000	\$544,300	\$253,700	\$1,274,000	\$0
Wakefield	\$0	\$1,017,000	\$0	\$1,017,000	\$1,221,800	\$354,200
Walpole	\$0	\$638,000	\$638,000	\$0	\$957,000	\$0
Waltham	\$0	\$2,355,000	\$2,355,000	\$0	\$3,630,000	\$0
Watertown	\$0	\$1,050,000	\$0	\$1,050,000	\$0	\$1,604,000
Wellesley	\$0	\$970,000	\$0	\$970,000	\$493,108	\$1,020,892
Westwood	\$0	\$441,000	\$0	\$441,000	\$452,000	\$225,000
Weymouth	\$0	\$1,995,000	\$0	\$1,995,000	\$1,791,400	\$1,169,600
Wilmington	\$0	\$428,000	\$0	\$428,000	\$420,000	\$218,000
Winchester	\$0	\$703,000	\$671,000	\$32,000	\$1,073,000	\$0
Winthrop	\$0	\$586,000	\$0	\$586,000	\$584,000	\$295,000
Woburn	\$0	\$1,733,000	\$0	\$1,733,000	\$2,927,000	\$0
Totals	\$0	\$80,000,000	\$10,711,500	\$69,288,500	\$91,668,451	\$28,331,549

**ATTACHMENT 3
 MWRA Long-Term Regional Flow Data
 NOAA Annual Rainfall at Logan Airport**

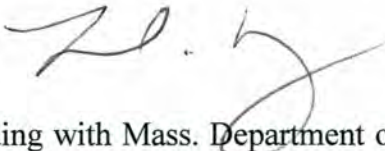


ATTACHMENT 4
MWRA Long-Term Regional Flow Data
5-year Running Averages
5 year running NOAA Rainfall Average at Logan Airport



STAFF SUMMARY

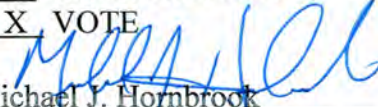
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: April 15, 2015
SUBJECT: Approval of Memorandum of Understanding with Mass. Department of Fish and Game for Public Access Fishing Pier at Deer Island



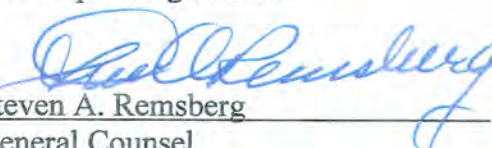
COMMITTEE: Wastewater Policy & Oversight

 INFORMATION

 X VOTE


Michael J. Hornbrook
Chief Operating Officer

John Vetere, Deputy Chief Operating Officer
David F. Duest, Director, DITP
Preparer/Title


Steven A. Remsberg
General Counsel

RECOMMENDATION:

That the Board authorize the Executive Director, on behalf of the Authority, to execute and enter into a Memorandum of Understanding with the Massachusetts Department of Fish and Game, and other fisheries offices, in substantially in the form attached to this staff summary authorizing the Department to undertake and fund the permitting, design and construction of a fishing pier and associated 20 pier parking spaces within the public access portion of Deer Island and to further authorize the Authority to fund 20 additional parking spaces to supplement existing parking spots for general public access use, and to authorize MWRA to provide general oversight and monitoring of the use of the fishing pier and parking areas.

BACKGROUND:

In 1986, the Massachusetts Legislature set aside lands around the perimeter of Deer Island, which were not otherwise needed for new wastewater treatment plant improvements, to be dedicated to open space uses for public access as mitigation for the expansion of the treatment facilities that were to be built on the island. The island perimeter walking trail has served as a unique opportunity for the public to enjoy the aesthetic and recreational activities which were intended by the Legislature.

The Legislature has additionally charged the Department of Fish & Game (“Department”) under a variety of statutory provisions to promote and improve programs and opportunities for saltwater fishing with the intent that those programs will increase public access to marine recreational facilities. In particular, the Department is authorized to utilize public lands, with the consent of the public agency having care, custody and control of such lands, and to build docks, piers and parking areas that will accommodate the public’s use and access to saltwater fishing venues. The Department is likewise authorized to transfer operation of such facilities to the public body already in control of the public lands.

DISCUSSION:

The proposed Memorandum of Understanding (MOU), which has been developed as a result of on-going discussions between the agency and MWRA, places full and sole responsibility for the costs of permitting, design and construction of a pier and 20-spot parking lot upon the Department. MWRA is to be afforded an opportunity to review the plans and contract documents before the design is finalized and will receive as-built plans once the facility has been completed. The pier facility improvements will at all times be the property of the Department and all maintenance costs will also be the sole responsibility of Department.

MWRA sees an opportunity to use the pier project to improve upon the limited parking available to public access users at the entrance to the island by incorporating an additional 20 parking spaces which can be interchangeably used for fishing and/or for general access to the perimeter pathway. The costs associated with adding another 20 parking spaces is estimated at \$75,000 and would be contributed by the Authority. The Department is willing to couple the parking area for its pier with additional parking for existing public access users.



Similar Pier Installed In Oak Bluffs

MWRA’s obligations as operator of the pier are minimal and do not involve the addition of or funding for personnel, equipment or supplies. MWRA’s principal responsibilities are to monitor and periodically report to the Department the condition of the pier and the need for repairs or maintenance. In addition, MWRA is responsible for on-site monitoring of uses of the pier to allow MWRA to advise the Department of uses or users who are not complying with the Department’s rules and regulations, all of which will be clearly posted on signage to be provided by the Department. It is MWRA’s expectation that its current practice of policing the existing public access parking lot will include trash removal from the pier and new parking area. MWRA maintains a similar fishing pier as part of the public access area at the Nut Island Headworks in Quincy and has found it to be well used and appreciated by the community.



Nut Island Fishing Pier

The MOA also provides that neither MWRA nor the Department shall charge any fees to the public. Payment of a fee by a member of the public for access would allow lawsuits for injuries to be maintained against the Authority. Likewise, MWRA would not be involved in any way with monitoring whether users of the pier have obtained the appropriate fishing licenses or are complying with the Department's rules and regulations. The MOU requires no active or daily monitoring of persons using the pier or associated parking as the pier is designed and intended to be "self-operating." MWRA retains the right to temporarily close the pier should weather conditions or other factors cause MWRA to believe that public safety may be jeopardized.

BUDGET/FISCAL IMPACT:

There are sufficient funds available in the CEB and/or CIP to construct the 20 additional public access parking spaces.

ATTACHMENTS

Proposed MOU with Department of Fish & Game
Plan View of Pier Location

Memorandum of Understanding (MOU)

THIS MOU is entered into pursuant to the authority of G.L. c. 10 § 35NN, c. 130 § 17C and c. 21A, §§2(8) and 11B, and G.L. c. 10 § 35NN, c. 130 § 17C and c. 21A, §§2(8) and 11B on this _____ day of _____, 2015, by and among the Division of Marine Fisheries (“DMF”) and Office of Fishing and Boating (“OFBA”) within the Massachusetts Department of Fish and Game (“DFG”) collectively referred to herein as “DFG”, and the Massachusetts Water Resources Authority (“MWRA”), all parties collectively referred to as the “Parties”).

WHEREAS, the Parties desire to memorialize the obligations of each relative to the siting, funding, permitting, design, construction, maintenance, monitoring and operation of a proposed public access salt water fishing pier and associated parking facilities upon lands situated on Deer Island in the City of Boston currently owned by the Commonwealth of Massachusetts, and presently under the care, custody and control of MWRA; and

WHEREAS, MA Fisheries has proposed that a portion of the Deer Island site, as identified on the attached plan and which MWRA dedicates to open space and public access uses pursuant to the provisions of Chapter 658 of the Acts of 1986, be dedicated for public access and use as a fishing pier facility and for public access parking associated with the pier (the “Premises”); and

WHEREAS, MWRA believes that the proposed uses of the Premises are consistent with and are a continuation of its existing open space and public access uses of the Deer Island site, do not represent any disposition of said open space/public access uses by MWRA, do not represent a change in use of the open space/public access portions of the Deer Island site, and therefore that no action or approval of the Massachusetts Legislature under Article 97 is required.

NOW THEREFORE, in consideration of the allocation of responsibilities, as provided herein, among the Parties for the costs of design, permitting, construction, improvement, repair, maintenance and daily operation of a fishing pier and associated area of forty (40) parking spaces to be located at the Premises and in consideration of the mutual covenants contained herein, and for other good and valuable consideration the receipt and sufficiency of which are acknowledged by the Parties, each of the DFG, OFBA, DMF, and MWRA covenant and agree as follows:

1. Consent to Use of Public Access Property. Pursuant to the provisions of G.L. c. 21A, section 11B, MWRA hereby consents to the use of the Premises by DFG for a fishing pier and associated parking and both MWRA and DFG agree to the transfer to MWRA, the public entity having care, custody and control of the public access portions of Deer Island, of the limited monitoring and operational functions described in paragraph 5 hereof. It is understood and agreed that title to and ownership of the fishing pier structure shall be and remain in DFG and that the DFG Parties shall undertake the obligations allocated to them hereunder.

2. Project Funding. DMF shall, subject to available funding, provide funds from the Marine Recreational Fisheries Development Fund (“MRFDF”) to pay all costs necessary for the permitting, design, and construction of the fishing pier and shall pay 50% of the costs to permit, design and construct a total of forty (40) parking spaces, of which twenty (20) spaces are to be associated with and to be dedicated to and marked for the public’s use of the fishing pier. In the event that there is insufficient funding from the MRFDF, OFBA shall, subject to available funding, provide funds to make up for any such shortfall. MWRA shall pay the costs for the remaining twenty (20) parking spaces which may be devoted either to general public access uses or for fishing pier parking. DMF shall from time to time, subject to available funding, pay for and undertake any repairs, replacement or reconstruction of the fishing pier reasonably necessary to maintain those facilities in a constant condition of good repair, free of all known and obvious defects and conditions which would present an unreasonable risk of injury, loss

or death to members of the visiting public. DMF, subject to available funding, and MWRA shall share equally in the costs of undertaking any repairs, replacement or reconstruction of the parking area reasonably necessary to maintain the parking facilities in a constant condition of good repair, free of all known and obvious defects and conditions which would present an unreasonable risk of injury, loss or death to members of the visiting public. In the event that there is insufficient funding from the MRFDF, OFBA shall, subject to available funding, provide funds to make up for any such shortfall.

3. Signage. OFBA shall provide MWRA with a sign or signs which contain the provisions of OFBA regulations (hereafter “Regulations”) governing the use of public access facilities (320 CMR 2.00), and a statement that the facilities were constructed by OFBA and DMF using funds from the MRFDF. MWRA shall install and maintain any sign or signs provided by DFG in a prominent and visible location at the facilities. MWRA reserves the right to coordinate the placement of said signage with other signage presently in use at or around the public access entrance areas of Deer Island in a manner that will best direct the public’s attention to the Regulations associated with the fishing pier and associated parking spaces.

4. Periodic Maintenance, Repair and Inspection of Parking Facilities. DMF, OFBA and MWRA shall devote sufficient funds from their respective legislative appropriations and budgets, respectively, to provide for the sharing, on a 50/50 basis, of the costs of maintenance, repairs and inspections which will be necessary to keep the entirety of the parking area in a constant condition of good repair, free of all known and obvious defects and conditions which would present an unreasonable risk of injury, loss or death to members of the visiting public.

5. Operation and Monitoring of the Parking and Fish Pier Facilities. MWRA shall be responsible for funding and staffing which, in its sole discretion, it believes to be necessary for the operation and monitoring of the facilities which will be substantially self-operating in nature and will require no day-to-day active assistance from MWRA. As used herein, the term “operation and monitoring” shall include: (i) general oversight of the facilities and monitoring whether uses by the general public are in accordance with the Regulations, (ii) periodic trash and litter removal, and (iii) reasonable efforts to detect unsafe conditions, damage to, and/or the need for maintenance or repairs to the fishing pier structure or parking area. MWRA agrees that it

shall notify OFBA in the event that such conditions are observed in order to enable OFBA and DMF to effect repairs pursuant to paragraphs 2 and 7 hereof. While MWRA shall have no obligation to enforce compliance with any provision of the Regulations, MWRA shall use reasonable efforts to bring serious, repeated or chronic violations of the Regulations to the attention of DFG and/or appropriate law or code enforcement officials and to cooperate with said officials.

As used herein, the term “operation and monitoring” shall not require MWRA to: (i) charge or collect any license or admission fees from any user of the fishing pier, (ii) to issue or check for valid licenses for fishing from the pier, (iii) to provide any assistance to members of the public in their use of the facilities, nor (iv) to provide any public safety/security services to users. Neither shall that term require MWRA to post any employee or assign any personnel at the facilities during any specific period(s) of time when the facilities are open to the public. MWRA reserves the right, after prior consultation with OFBA, to temporarily close access to the fishing pier and associated parking area in the event that any condition, including adverse winter weather advisories or warnings, or any other activity or needed repair at the pier or parking area presents a risk of injury or harm to the public. In the event of an emergency, OFBA acknowledges that it may not be possible for MWRA to consult with OFBA prior to a temporary closure of the facilities; in such cases, MWRA shall provide timely notice to OFBA of its actions.

6. Design, Construction and Installation of the Fishing Pier and Parking Area.

OFBA and DMF shall be responsible for the permitting, design, installation, and construction on the Premises of the fishing pier and 40 space parking lot. OFBA shall provide MWRA, at least 30 days in advance of the start of any construction of the parking facility or of the fish pier facility, with a full set of all plans, specifications, drawings and contract documents, which will be used in connection with the construction of those facilities. The design and construction of the facilities shall be in compliance with all applicable federal, state and local building codes and regulatory requirements, including ensuring the necessary number of handicapped accessible parking spaces based on the shared use by DFG and MWRA of the parking area. OFBA shall provide MWRA, following the completion of any construction of the parking facility or of the fish pier facility, with a full set of as built plans and drawings for those finished facilities.

7. Maintenance, Repair and Inspection of the Fishing Pier. DMF and OFBA shall devote sufficient funds from their respective legislative appropriations to provide for the costs of maintenance, repairs and inspections which will be necessary to keep the fishing pier in a constant condition of good repair, free of all known and obvious defects and conditions which would present an unreasonable risk of injury, loss or death to members of the visiting public.

8. No Fees to be Charged. Neither DFG nor MWRA, either directly or through their agents or contractors, shall assess or collect from members of the public any fees, charges, assessments or other payment of any consideration in exchange for or as a condition of entry upon, admission to or use of any part or portions of the parking facility or fish pier facility. DFG and MWRA desire to avoid exposure, responsibility and/or liability for claims of injuries or damage to or loss of property or any other damages, inclusive of claims for wrongful death, and wish to be protected from such claims by the provisions of G.L. c. 21, § 17C. It is the express intent of MWRA and of DFG that no signage or other written or verbal statements shall be made by DFG or by their respective employees, agents or contractors that any fee, charge, assessment or other payment or consideration will be charged for admission to or use of the facilities by the public.

9. Management Measures. Subject to the prior written approval of DFG,, MWRA may adopt reasonable management measures governing the use of the facilities that are not inconsistent with either the provisions of the Regulations or with other applicable management measures adopted by DFG.

10. Third Party Claims and Lawsuits. It is the express intention of DFG, as the owner of the facilities, and MWRA, as the entity having care, custody and control of the public access property owned by the Commonwealth, that each reserves all rights, claims and defenses, including any claims against one another, which each may have in connection with any claims or lawsuits that may be brought against any of the Parties arising out of the public's use of the fishing pier and associated parking facilities, including the applicability of the provisions of G.L. c. 21, §17C.

11. Compliance With All Laws and Authorities; No Interference. DFG shall not interfere with any MWRA activities, operations, shipments or deliveries to or from Deer Island, nor will it, by any of its activities, cause MWRA to be unable to comply with those laws or the provisions of any of its permits with which it is required to remain

in compliance. DFG shall observe and obey all reasonable MWRA safety and security directives applicable to any of MWRA's operations and activities at Deer Island.

12. Insurance. Prior to the entry upon the Premises by any contractor chosen to perform any work including design, construction, installation, repairs, maintenance, inspections and/or operation of the parking and fish pier facilities, said contractor shall provide DFG and MWRA with certificates of insurance coverage in such amounts and types as will protect both MWRA and DFG from the types of claims and risks of loss which could arise out of or result from said contractors operations, activities and facilities at Deer Island.

13. Term; Termination. This MOU shall be in effect for the useful life of the fishing pier facility or until mutually dissolved or modified in writing by the DFG, DMF, OFBA, and the MWRA.

14. Designated Representatives of the Parties. For the purposes of communications under this MOU, the designated representatives of the Parties and their contact information are as follows:

MWRA

David F. Duest
Director, Deer Island Wastewater Treatment Plant
190 Tafts Avenue
Winthrop, MA 02152
Telephone 617-660-7870

DFG

Richard Lehan, General Counsel
MA Department of Fish & Game
251 Causeway Street, Suite 400
Boston, MA 02114
Telephone 617-626-1500

DMF

Ross Kessler
Public Access Coordinator
DMF New Bedford Field Facility
Quest Center 1213 Purchase St, New Bedford, MA 21740
Telephone 508-990-0449

OFBA

Doug H. Cameron
Deputy Director
Office of Fishing and Boating Access
1 Rabbit Hill Rd., Westborough, MA 01581
Telephone 508-389-7812

IN WITNESSES WHEREOF, the parties hereto have executed this Agreement on this
___ day of _____, 2015.

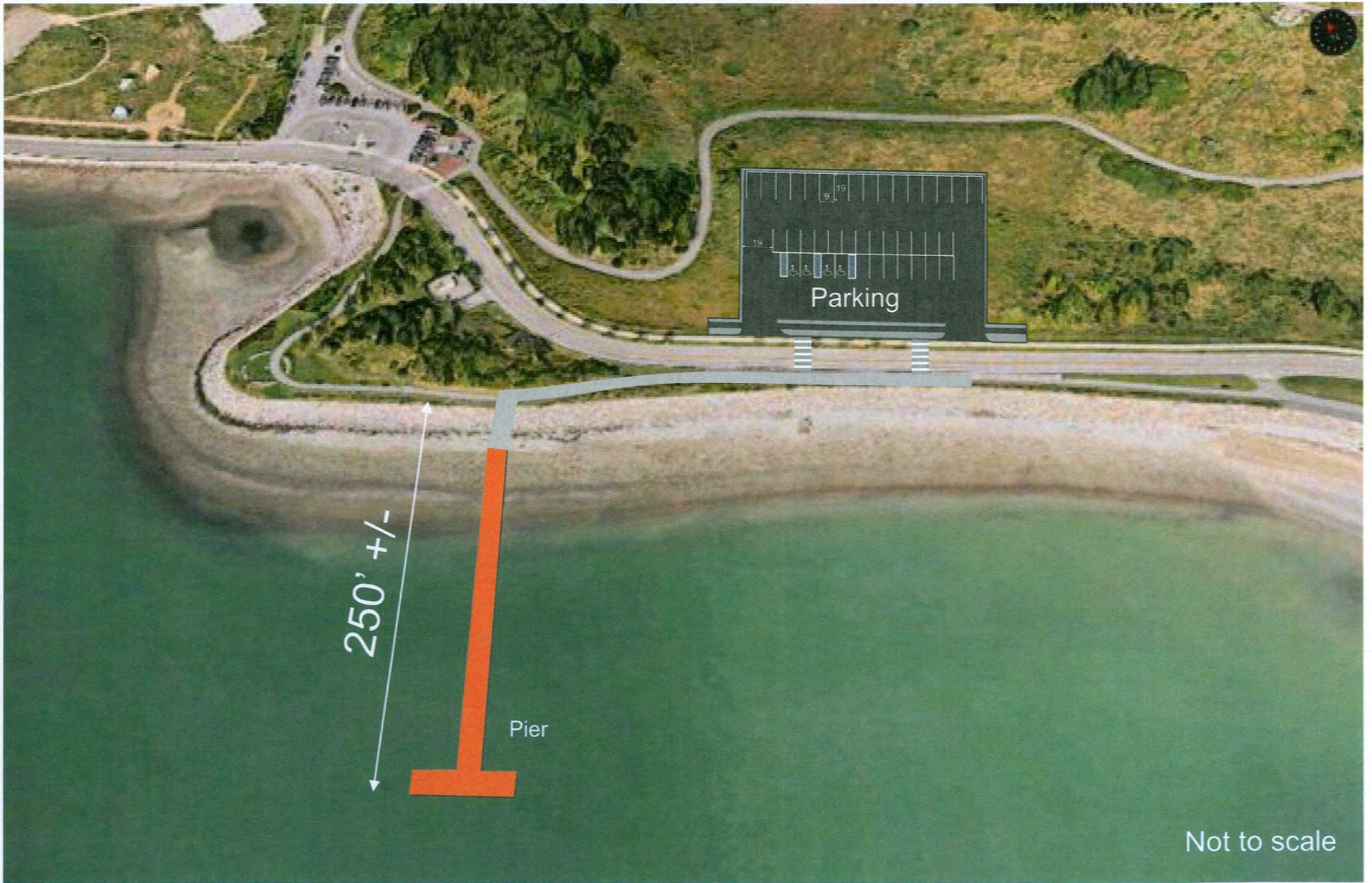
BY THE DEPARTMENT OF FISH AND GAME

George N. Peterson Jr.,
Commissioner

Paul J. Diodati
Director of the Division of Marine Fisheries

John P. Sheppard
Director of the Office of Fishing and Boating

Frederick A. Laskey
Executive Director, Massachusetts Water Resources
Authority



250' +/-

Pier

Parking

Not to scale

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: April 15, 2015
SUBJECT: Mystic River Streamgages Joint Funding Agreement
United States Geological Survey
Contract OP-281



COMMITTEE: Wastewater Policy & Oversight

INFORMATION
 VOTE

Carolyn M. Fiore, Deputy Chief Operating Officer
Lise Marx, Sr. Program Manager
Preparer/Title



Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director to enter into a multi-year, Joint Funding Agreement (Contract OP-281) with the United States Geological Survey for the installation, maintenance, and ongoing operation of three streamgages in the Mystic River Watershed at a cost of \$144,900, from the date of the Notice to Proceed to September 30, 2017.

BACKGROUND:

The overall proposal to undertake a comprehensive, broad-based, multi-party collaborative study of water quality in the Mystic River watershed is very similar to efforts undertaken in the Charles River Watershed during the 1990's and early 2000's. MWRA participated in funding and technical review of both the Integrated Monitoring, Modeling and Management Study conducted by the Charles River Watershed Association and the subsequent collaborative USGS study of Charles River contaminant sources. These planning and technical studies allowed the broader community to understand the role that stormwater played in non-attainment of water quality standards in the Charles River and supported MWRA's contention that combined sewer overflows (CSOs) were not the main source of water quality impairment. Staff believe that further studying the Mystic River flows and nutrient loadings will support the appropriateness of MWRA's Long-Term CSO Control Plan and demonstrate that CSO discharges and very infrequent sanitary sewer overflows are not the cause of significant nutrient loading and the subsequent heavy growth of invasive aquatic vegetation in the Lower Mystic River.

DISCUSSION:

Contract OP-281 is a sole source Joint Funding Agreement with the United States Geological Survey (USGS) for the purpose of the installation, maintenance, and ongoing operation of three

streamgaging stations on the Mystic River. Streamgages are installed and maintained by USGS across the United States. However, currently there are no streamgages operated in the Mystic River mainstem. USGS does operate streamgages on two Mystic River tributaries, the Aberjona River at Winchester, and Alewife Brook, near Arlington and there are stage sensors at the Amelia Earhart Dam.

Under this Agreement, USGS will install two streamgages on the Mystic mainstem (See Figure 1 below) at the Route 16 Bridge crossing (Site A), and upstream at High Street (Site B); a third streamgage will be installed at the Malden River (Either at Site C or Site D). These gages will allow estimation of flows from the entire Mystic River watershed. Flow data generated from these streamgages will be useful to MWRA in understanding the broader impact of combined sewer overflows and sanitary sewer overflows within the Mystic River Watershed.

Figure 1
Proposed Mystic Streamgaging Stations



** Only one streamgage will be installed on the Malden River, either at Site C or Site D, depending on accessibility and suitability of the site*

MWRA has coordinated extensively with the Mystic River Watershed Association over the years on water quality sampling, data sharing, laboratory analyses, as well as MWRA's participation in annual events to remove invasive aquatic species and MWRA's participation in the EPA-facilitated Mystic River Steering Committee. The streamgaging of the Mystic River Watershed is being recommended as part of a broad-based collaborative study (the Mystic River Flow Monitoring and Water Quality Improvement Project) of nutrients in the Mystic River. In addition to this Agreement, the collaborative study is expected to receive funding, equipment, and in-kind services from EPA, DEP, USGS (matching funds), the Mystic River Watershed Association, and

other entities. MWRA's possible participation in this broader collaborative study will be the subject of a future staff summary.

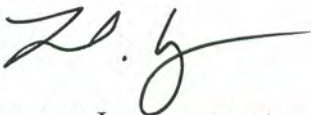
This staff summary specifically addresses the Joint Funding Agreement between MWRA and USGS, which is a component of the larger Mystic River Flow Monitoring and Water Quality Improvement Project. Contracting with MWRA will allow USGS to provide \$16,700 annually in matching funds that it would not otherwise be able to provide if contracting with a non-governmental agency such as the Mystic River Watershed Association. Under this Agreement, USGS will install, maintain, and operate the three streamgages, which are comprised of data loggers, satellite transmitters, water level (stage) indicators, and acoustic Doppler velocity meters. USGS hydrographers will visit the sites six to eight times per year to make manual discharge measurements for development of stage-discharge relations and stage-area or index-velocity relations. Data will be collected at 15-minute intervals and transmitted via GOES (Geostationary Operational Environmental Satellite) every hour to the USGS National Water Information System website. Streamflow records for each monitoring year will be computed after development of the relations and will be published as part of the USGS online annual data report series.

The purpose of the larger Mystic River Flow and Water Quality Improvement Study is to understand the inputs of phosphorus into the Mystic River and, long-term, to develop a Phosphorous Total Maximum Daily Load analyses for the Mystic River. However, the first three years of the study, which are the focus of this agreement, are primarily geared toward data collection, both in terms of flow and obtaining nutrient data (nutrient sampling and data analysis currently being performed by Mystic River Watershed Association and other parties). MWRA is particularly interested in understanding flow in the river in order to put combined sewer overflows or the very infrequent sanitary sewer overflows (during large wet-weather events), into a broader context of overall river flows during wet-weather events. These gages will allow estimation of flows from the entire Mystic River watershed which is essential for accurate estimation of contaminant loads, and for the calibration of predictive streamflow and water quality hydrologic models.

BUDGET/FISCAL IMPACT:

MWRA's total cost for this multi-year Joint Funding Agreement will be \$144,900. Funding under this Agreement will be \$34,300 in FY15 and \$55,300 in both FY16 and FY17. This agreement with MWRA allows USGS to contribute \$16,700 per year or a total of \$50,100 in matching funds to the project. Funding for this Agreement is included in the FY15 and Proposed FY16 Current Expense Budgets. Appropriate funding for the remaining term of the USGS Agreement will be included in subsequent CEB requests.

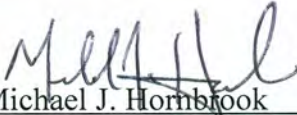
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: April 15, 2015
SUBJECT: Nut Island Headworks Electrical and Conveyors Improvements
Malcolm Pirnie, Inc.
Contract 7312, Amendment 4

COMMITTEE: Wastewater Policy & Oversight

INFORMATION
 VOTE

John P. Vetere, Deputy Chief Operating Officer
A. Navanandan, P.E, Chief Engineer
David K. Pottle, P.E., Program Manager
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 4 to Contract 7312, Nut Island Headworks Electrical and Conveyors Improvements, with Malcolm Pirnie, Inc.,¹ in the amount of \$68,100, increasing the contract amount from \$1,181,377 to \$1,249,477, and extending the contract term by 376 days, from May 6, 2015 to May 19, 2016.

DISCUSSION:

The Nut Island Headworks, located in the Hough's Neck section of Quincy (pictured on the right), was placed into operation in 1998 (Prior to the completion of the cross-harbor tunnel, the site housed the Nut Island Treatment Plant.) The facility provides screening and grit removal, flow metering, and flow control for Deer Island's Lydia Goodhue (South System) Pump Station. The



¹ Malcolm Pirnie, Inc. has changed its name to Arcadis U.S., Inc. but continues to perform under its original name those contracts executed prior to the name change.

facility receives flow from almost the entire MWRA south collection system. The Nut Island Headworks serves 22 communities and has a peak hydraulic capacity of 360 million gallons per day.

Tidally-influenced groundwater had infiltrated floor-slab-embedded electrical conduits in the bottom level of the headworks, and, over time, this infiltration caused corrosion of the electrical wiring and conduits that could have impacted the operational reliability of critical pieces of equipment, including pumps, blowers, and the odor control system.

The Nut Island Headworks removes grit and screenings with the operation of a network of three screenings conveyors and six grit conveyors. These conveyors were experiencing significant operational and maintenance problems, including difficulty maintaining belt alignment, premature belt and roller wear, and screenings and grit not being fully contained. To improve the operation of the grit and screenings conveyors, staff recommended the inclined screenings conveyor be replaced, belt scrapers be replaced, vertical belts be enclosed with covers, and wider drip pans be installed.

On February 16, 2011, the Board approved the award of Contract 7312 to Malcolm Pirnie, Inc. for a term of 1,338 calendar days in an amount not to exceed \$1,024,877 to provide preliminary design, final design, and construction administration and resident engineering services for the necessary electrical and conveyors improvements required at Nut Island. On June 26, 2013, the Board approved the subsequent award of Contract 7313 to J.F. White Contracting Co. for the construction of those improvements.

The Notice to Proceed (NTP) for construction was issued on July 24, 2013. To date, construction work is approximately 93% complete.



New Conduits in Electric Room



New Cable Trays in First Floor Hallway

Work remaining includes completion of improvements to the conveyors including modifications to vertical covers and drip pans, replacement of Screenings Conveyor 3, completion of connections of newly-installed wiring between panels in the electrical room and panels and equipment in the odor control, pump and blower, and grit rooms, demolition of replaced pull boxes, conduit and cable, and abandonment of slab-embedded conduits in the pump and blower and odor control rooms.

This Amendment

The current contract end date for this contract is May 6, 2015. The Substantial Completion date for construction Contract 7313 is May 19, 2015. Staff recommend that Contract 7312 with Malcolm Pirnie be extended from May 6, 2015 to May 19, 2016, which includes the one-year warranty period following construction. Proposed Amendment 4 increases the contract time, and provides increased funding to account for hourly rate escalation and for additional Contract Administration and Resident Engineering services, as further described below.

Extended Contract Duration \$33,600

Contract 7312 provides Construction Administration (CA) services during construction Contract 7313. This contract includes services and funding during the post-construction, one-year warranty period for: ensuring operational improvements are constructed in accordance with the project design and construction warranty provisions; providing one-year certification that all improvements meet expected performance standards; and assisting MWRA in resolving any problems, if they were to occur, during the one-year warranty period. The time period to perform these services has shifted out due to an extended design period (seven months) to address detailed design technical issues, and the extended construction period (five months). The proposed amendment extends the end date of Contract 7312 by 376 days, through May 19, 2016, which is the end of the construction Contract 7313’s one-year warranty period.

The level of effort for the technical portion of these CA services is not being increased by Amendment 4. However, these services will be performed later than originally estimated and the hourly rates are slightly higher than those that were included in the original contract.

In addition, the extension of the contract duration will require the Consultant to perform other required non-technical CA services, such as monthly invoicing, MBE/WBE participation reports, accrual reports, progress reports, etc.) for approximately 12 months longer than originally anticipated.

Additional Resident Engineering Services \$34,500

Through Amendment 3, RE services were funded through May 6, 2015, which is the current end date of Contract 7312. Amendment 4 will provide additional funding for full-time RE services through June 19, 2015, which is one month beyond the current Substantial Completion date of Contract 7313. Providing RE services for one month beyond Substantial Completion is required to develop and resolve punch list items, perform final inspections, and to provide assistance with closeout of Department of Public Safety permits.

CONTRACT SUMMARY:

	<u>AMOUNT</u>	<u>TIME</u>	<u>DATED</u>
Contract Amount:	\$1,024,877	1,338 Days	03/18/11
Amendment 1:*	\$0.00	182 Days	03/26/12
Amendment 2:*	\$0.00	0 Days	12/26/14
Amendment 3:*	\$156,500	0 Days	Pending
Amendment 4:	<u>\$68,100</u>	<u>376 Days</u>	Pending
Adjusted Contract:	\$1,249,477	1,896 Days	

*Approved under delegated authority

BUDGET/FISCAL IMPACT:

The FY15 CIP includes a budget of \$1,024,877 for Contract 7312. Including this amendment for \$68,100 the adjusted contract total will be \$1,249,477 or \$224,600 over budget. This amount will be covered within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

MBE/WBE participation requirements under Contract 7312 were established at 2.42% MBE and 0% WBE, and will remain unchanged by Amendment 4.



MASSACHUSETTS WATER RESOURCES AUTHORITY

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

Frederick A. Laskey
Executive Director

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

WATER POLICY AND OVERSIGHT COMMITTEE MEETING

Chair: A. Pappastergion

Vice-Chair: (vacant)

Committee Members:

J. Carroll

J. Foti

H. Vitale

J. Walsh

J. Wolowicz

to be held on

Wednesday, April 15, 2015

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

Time: Immediately following Wastewater Comm.

AGENDA

A. Information

1. Local Pipeline and Water System Assistance Program Annual Update

B. Approvals

1. Memorandum of Agreement between Massachusetts Water Resources Authority and the City of Somerville - Contract 7335, Section 4 Webster Avenue Pipe and Utility Bridge Replacement

C. Contract Awards

1. Section 4 Webster Avenue Pipe and Utility Bridge Replacement: NEL Corporation, Contract 7335
2. Diver Assisted Suction Harvesting of Invasive Plants at Stillwater Basin, Wachusett Reservoir: AE Commercial Diving Services, WRA-1559

D. Contract Amendments/Change Orders

1. Spot Pond Water Storage Facility Design/Build Project: Walsh Construction Co., Contract 6457, Change Order 14
2. Preliminary Design and Owner's Representative Services for Spot Pond Storage Facility: Camp Dresser & McKee, Inc., Contract 7233, Amendment 2
3. Northern Intermediate High, West Street Transmission Main – Reading: P. Caliacco Corp., Contract 7066, Change Order 4

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the
Water Policy and Oversight Committee

March 11, 2015

A meeting of the Water Policy and Oversight Committee was held on March 11, 2015 at the Authority headquarters in Charlestown. Chairman Pappastergion presided. Present from the Board were Messrs. Carroll, Flanagan, Foti, Vitale and Walsh. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Mike Hornbrook and Bonnie Hale. The meeting was called to order at 12:15 p.m.

Contract Awards


*Community Leak Detection Task Order Services: Liston Utility Services, Contract W298; and Wachs Water Services, Contract W298A

The Committee recommended approval of the contract awards (ref. agenda item A.1).

The meeting adjourned at 12:20 p.m.

* Approved as recommended at March 11, 2015 Board of Directors meeting.

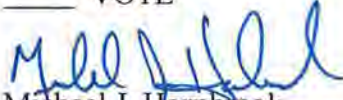
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: April 15, 2015
SUBJECT: Local Pipeline and Water System Assistance Program Annual Update

COMMITTEE: Water Policy & Oversight

X INFORMATION
 VOTE

Carolyn M. Fiore, Deputy Chief Operating Officer
Elaine M. Donahue, Project Manager
Carl H. Leone, Senior Program Manager
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

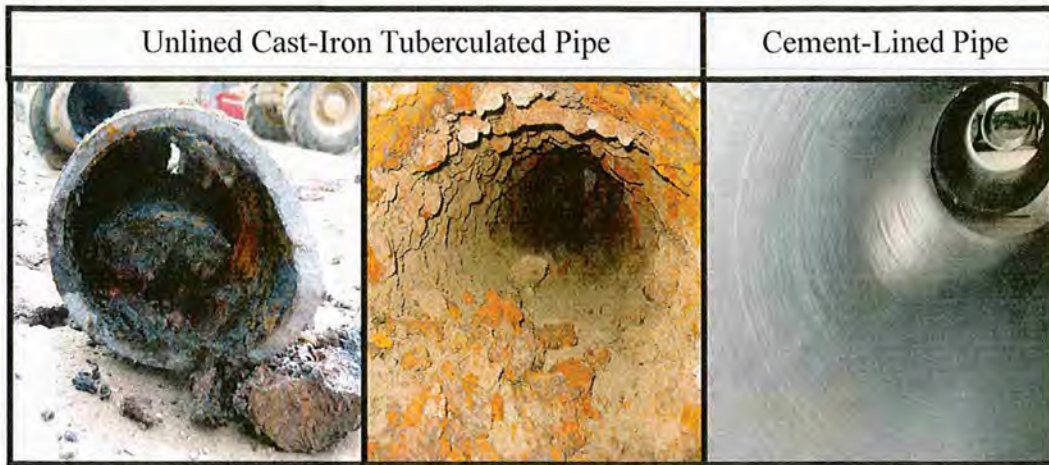
For information only. Thirty-eight of the 45 eligible member water communities¹ have participated in MWRA's \$432 million Local Pipeline and Water System Assistance Program. Through February 2015, \$299 million in interest-free loans has been distributed to member communities to finance 345 projects that will help maintain high water quality in local distribution systems. Community loans are repaid to MWRA over a ten-year period. All scheduled community loan repayments have been made, more than \$172 million to date.

BACKGROUND:

MWRA's goal in providing financial assistance to member communities is to improve local water systems to help maintain high water quality as it passes from MWRA's facilities through local pipelines to customers' taps. Continued improvement of local water systems was a critical element of MWRA's Integrated Water Supply Improvement Program, which focused on cost-effective investment in water quality upgrades. Older water mains, particularly those constructed of unlined cast-iron pipe, need to be replaced or cleaned and lined to prevent tuberculation (rust build-up), loss of disinfectant residual, and potential bacteria growth.

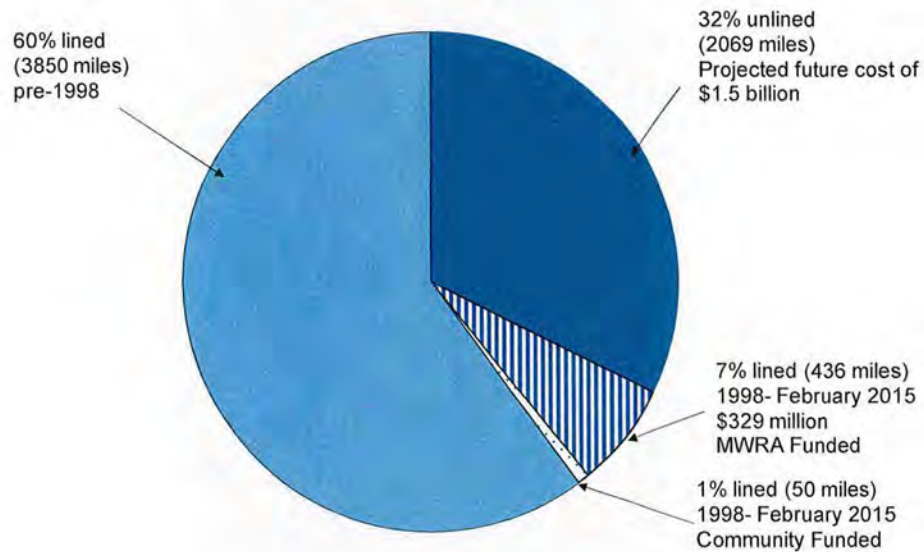
The Phase 1 - Local Pipeline Assistance Program (LPAP) began in FY01 and was completed at the end of FY13. It provided \$222 million in interest-free loans to water system communities for water main replacement or cleaning and lining projects. The Phase 2 - Local Water System Assistance Program (LWSAP) commenced in FY11 and is approved through FY20. The Phase 2 expansion of the water loan program added \$210 million in interest-free loans for member water communities (including a \$10 million allocation specifically for the three Chicopee Valley Aqueduct communities – Chicopee, South Hadley FD #1, and Wilbraham).

¹ MWRA has a total of 50 water communities (with Dedham/Westwood Water District counted as one), of which 45 are allocated loan funds under the Local Water System Assistance Program. The five ineligible water communities have special case considerations; these include: Clinton, Leominster, and Worcester (emergency only), that receive untreated water from the Wachusett Reservoir; Cambridge, that receives water on an emergency-only basis; and Lynn, that receives water for the GE plant only. The three Chicopee Valley Aqueduct (CVA) communities (Chicopee, South Hadley FD#1, and Wilbraham) are allocated funds under the Phase 2 loan Program, but were not allocated loan funds under the Phase 1 – Local Pipeline Assistance Program, as that program was initiated as part of the treatment decision for the John J. Carroll Water Treatment Plant.



Prior to 1998, 60% (3,850) of the 6,400-mile regional water system was lined pipe. Since 1998, MWRA's community financial assistance programs (including the \$30 million pilot program in 1998/99) have led to the investment of \$329 million in local water distribution systems and resulted in the replacement or cleaning and lining of 436 miles of water mains. Approximately 32% (2,069 miles) of locally-owned distribution systems remain unlined, representing a regional need of about \$1.5 billion for future water main rehabilitation.

**Regional Water System Lined and Unlined Pipe
About 6,400 Miles of Community Water Mains
Updated February 2015**



DISCUSSION:

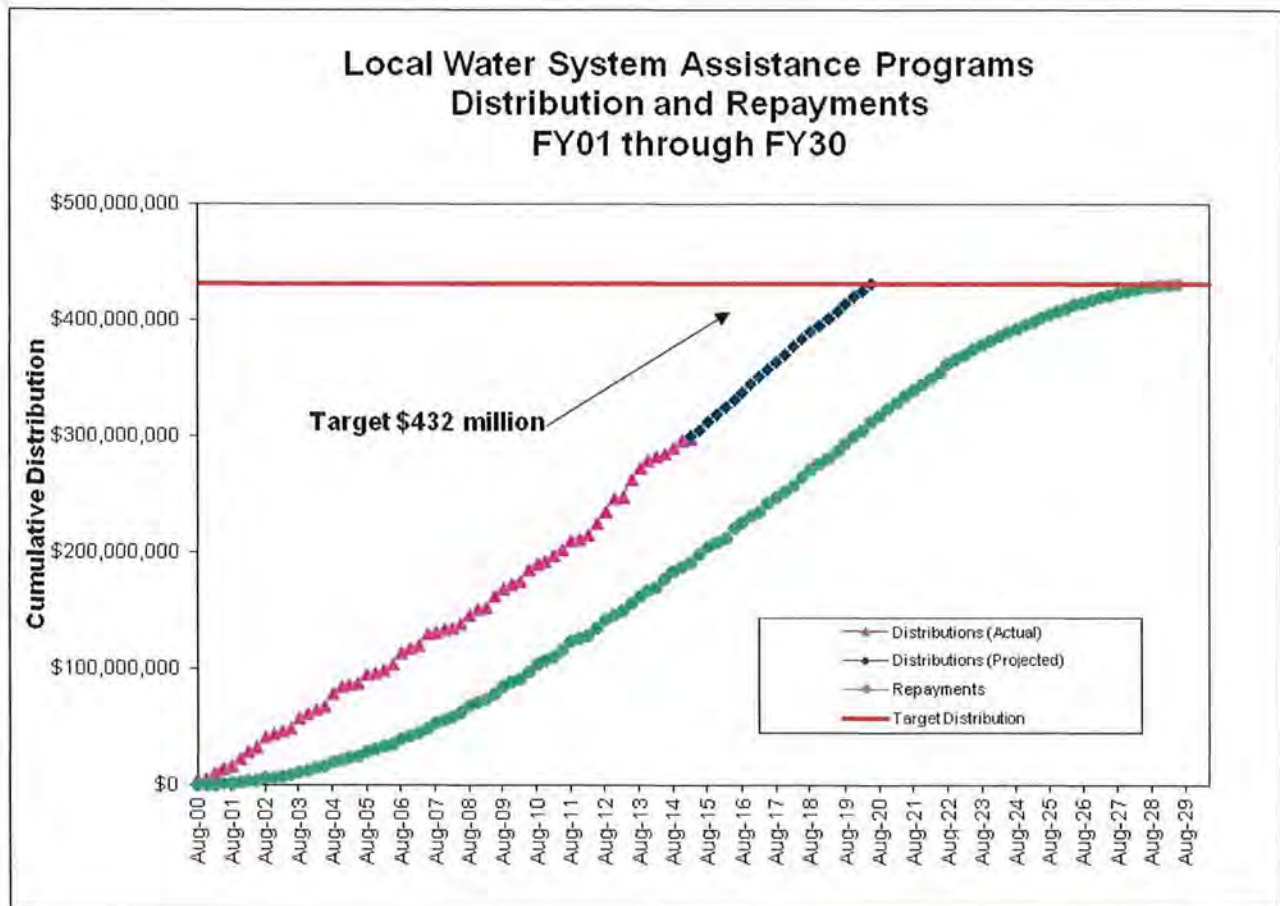
Local Pipeline and Water System Assistance Program loan funds are allocated to member water communities based on a combination of their percent share of unlined pipe and wholesale water charge (see Attachments 1 and 2). MWRA's partially supplied communities received pro-rated shares based on their percentage use of MWRA water. Attachment 3 provides individual statistics for the total miles of lined and unlined water main in each member water community.

The Phase 1 - LPAP was completed at the end of FY13 (June 2013). Thirty-five of the forty-two eligible communities participated in the Phase 1 loan program, with a total of 87% of total allocated funds (\$222 million) utilized for local water projects.

Under Phase 2 - LWSAP (FY11-FY20), \$77 million has been distributed to 33 member communities to fund local water system projects. As water loan distributions under the Phase 1 program came to a conclusion, loan distributions under Phase 2 have ramped-up. The majority of financial assistance loans (93 percent) under Phase 2 LWSAP have continued to fund replacement/rehabilitation of unlined water mains. In addition, some communities are initiating system efficiency projects (Tier Two Projects) including, meter replacement, meter reading, and booster pump station upgrades or replacements.

BUDGET/FISCAL IMPACT:

The FY15 CIP includes an overall net budget of zero dollars for water system financial assistance because community loans are offset by repayments over time. However, depending on the timing and level of community loan requests, annual loan distributions can fluctuate, sometimes causing over-spending or under-spending (versus budget) for any particular year. The graph below presents loan funding distributions (actual and projected) and corresponding repayments for the program - FY01 through FY30.



The program budget target is \$432 million for both loan distributions and repayments. To date, \$299 million in loans have been distributed and the program has a remaining balance of \$133 million in future community loans (through FY20). Community loan repayments to date are \$172 million, leaving a remaining balance of \$260 million in future repayments (through FY30). As community loans are repaid, the funds are deposited into MWRA's construction fund. The FY15 CEB budget includes \$4.1 million for the cost of the interest as a separate line item under Debt Service.

MBE/WBE PARTICIPATION:

MBE/WBE goals for community projects are established in the Program Guidelines.

ATTACHMENTS:

- Attachment 1 – Phase 1 - LPAP Allocation and Fund Utilization by Community
- Attachment 2 – Phase 2 - LWSAP Allocation and Fund Utilization by Community
- Attachment 3 – Lined and Unlined Pipe by Community

ATTACHMENT 1
MWRA PHASE 1 LOCAL PIPELINE ASSISTANCE PROGRAM
ALLOCATION AND FUND UTILIZATION BY COMMUNITY
THROUGH JUNE 2013

THE PHASE 1 PROGRAM IS COMPLETE

Community	Community Total Allocation	Funds Distributed Thru Jun 13	Percent Distributed	Unutilized Funds
Arlington	\$9,723,620	\$6,099,000	63%	\$3,624,620
Bedford*	\$1,018,610	\$1,018,610	100%	\$0
Belmont	\$4,213,570	\$4,213,570	100%	\$0
Boston	\$61,571,330	\$61,571,330	100%	\$0
Brookline	\$625,090	\$0	0%	\$625,090
Canton*	\$2,080,380	\$0	0%	\$2,080,380
Chelsea	\$5,023,870	\$4,825,468	96%	\$198,403
Dedham/Westwood* ##	\$7,500	\$7,500	100%	\$0
Everett	\$5,429,020	\$5,429,020	100%	\$0
Framingham	\$8,681,800	\$8,681,800	100%	\$0
Lexington	\$1,539,570	\$1,539,570	100%	\$0
Lynnfield WD	\$320,000	\$320,000	100%	\$0
Malden	\$10,244,520	\$10,244,520	100%	\$0
Marblehead	\$6,320,350	\$0	0%	\$6,320,350
Marlborough*	\$1,166,200	\$1,166,200	100%	\$0
Medford	\$9,723,620	\$7,212,923	74%	\$2,510,697
Melrose	\$6,586,590	\$6,586,590	100%	\$0
Milton	\$6,771,800	\$6,771,800	100%	\$0
Nahant	\$1,331,210	\$1,111,242	83%	\$219,968
Needham*	\$1,286,520	\$257,304	20%	\$1,029,216
Newton	\$25,860,190	\$25,860,190	100%	\$0
Northborough*	\$97,180	\$0	0%	\$97,180
Norwood	\$5,139,630	\$5,139,630	100%	\$0
Peabody*	\$838,030	\$838,030	100%	\$0
Quincy	\$15,835,600	\$15,835,600	100%	\$0
Reading ###	\$1,916,000	\$1,916,000	100%	\$0
Revere	\$5,371,140	\$3,500,000	65%	\$1,871,140
Saugus	\$9,029,070	\$9,029,070	100%	\$0
Somerville	\$9,480,530	\$9,480,530	100%	\$0
Southborough	\$81,030	\$0	0%	\$81,030
Stonham	\$1,736,360	\$1,736,360	100%	\$0
Stoughton* #	\$4,480,000	\$4,480,000	100%	\$0
Swampscott	\$5,602,660	\$5,602,660	100%	\$0
Wakefield*	\$2,524,950	\$0	0%	\$2,524,950
Waltham	\$13,636,210	\$2,552,968	19%	\$11,083,242
Watertown	\$1,736,360	\$1,736,360	100%	\$0
Wellesley*	\$1,279,280	\$1,279,280	100%	\$0
Weston	\$127,330	\$127,330	100%	\$0
Wilmington* ####	\$73,000	\$0	0%	\$73,000
Winchester*	\$665,190	\$665,190	100%	\$0
Winthrop	\$4,167,260	\$2,027,600	49%	\$2,139,660
Woburn*	\$3,454,330	\$3,454,330	100%	\$0
TOTAL	\$256,796,500	\$222,317,575	87%	\$34,478,926

* Partially Served Communities

Stoughton's total allocation is for eight years; the Town was not an MWRA member water community for the first two years of the Program.

Dedham/Westwood's total allocation is for five years; the Town was not an MWRA member water community for the first five years of the Program.

Reading's total allocation is for five years; FY06 and FY07 as a partially supplied MWRA water community at \$142,000/year and FY08, FY09, and FY10 as a fully supplied MWRA water community at \$544,000/year.

Wilmington's total allocation is for one year - FY10.

ATTACHMENT 2
MWRA PHASE 2 LOCAL WATER SYSTEM ASSISTANCE PROGRAM
ALLOCATION AND FUND UTILIZATION BY COMMUNITY
THROUGH FEBRUARY 2015

Community	Community Total Allocation	Community Annual Allocation	Allocation To Date (Year 4)	Funds Distributed Thru Feb 14	Percent Distributed (Year 4)	Total Remaining Funds	Funds Currently Available
Arlington	\$6,225,000	\$622,500	\$3,112,500	\$1,300,000	42%	\$4,925,000	\$1,812,500
Bedford *	\$2,418,000	\$500,000	\$2,418,000	\$1,975,000	82%	\$443,000	\$443,000
Belmont	\$3,477,000	\$500,000	\$2,500,000	\$2,000,000	80%	\$1,477,000	\$500,000
Boston	\$38,754,000	\$3,875,400	\$19,377,000	\$19,377,000	100%	\$19,377,000	\$0
Brookline	\$3,426,000	\$500,000	\$2,500,000		0%	\$3,426,000	\$2,500,000
Canton *	\$3,216,000	\$500,000	\$2,500,000	\$2,000,000	80%	\$1,216,000	\$500,000
Chelsea	\$3,814,000	\$500,000	\$2,500,000	\$741,200	30%	\$3,072,800	\$1,758,800
Dedham/Westwood *	\$503,000	\$503,000	\$503,000	\$503,000	100%	\$0	\$0
Everett	\$4,672,000	\$500,000	\$2,500,000	\$2,500,000	100%	\$2,172,000	\$0
Framingham	\$7,357,000	\$735,700	\$3,678,500	\$2,207,100	60%	\$5,149,900	\$1,471,400
Lexington	\$3,024,000	\$500,000	\$2,500,000	\$1,145,015	46%	\$1,878,985	\$1,354,985
Lynnfield Water Dist.	\$1,396,000	\$500,000	\$1,396,000	\$250,000	18%	\$1,146,000	\$1,146,000
Malden	\$7,272,000	\$727,200	\$3,636,000	\$1,774,000	49%	\$5,498,000	\$1,862,000
Marblehead	\$4,237,000	\$500,000	\$2,500,000		0%	\$4,237,000	\$2,500,000
Marlborough *	\$1,917,000	\$500,000	\$1,917,000	\$1,283,800	67%	\$633,200	\$633,200
Medford	\$6,959,000	\$695,900	\$3,479,500		0%	\$6,959,000	\$3,479,500
Melrose	\$3,988,000	\$500,000	\$2,500,000	\$2,000,000	80%	\$1,988,000	\$500,000
Milton	\$4,123,000	\$500,000	\$2,500,000	\$850,000	34%	\$3,273,000	\$1,650,000
Nahant	\$1,490,000	\$500,000	\$1,490,000	\$884,000	59%	\$606,000	\$606,000
Needham *	\$794,000	\$500,000	\$794,000		0%	\$794,000	\$794,000
Newton	\$13,602,000	\$1,360,200	\$6,801,000	\$5,440,800	80%	\$8,161,200	\$1,360,200
Northborough *	\$1,048,000	\$500,000	\$1,048,000		0%	\$1,048,000	\$1,048,000
Norwood	\$4,395,000	\$500,000	\$2,500,000	\$2,500,000	100%	\$1,895,000	\$0
Peabody *	\$1,089,000	\$500,000	\$1,089,000	\$1,089,000	100%	\$0	\$0
Quincy	\$10,505,000	\$1,050,500	\$5,252,500	\$4,202,000	80%	\$6,303,000	\$1,050,500
Reading	\$4,146,000	N/A **	\$4,146,000	\$4,146,000	100%	\$0	\$0
Revere	\$5,034,000	\$503,400	\$2,517,000		0%	\$5,034,000	\$2,517,000
Saugus	\$6,621,000	\$662,100	\$3,310,500	\$3,310,500	100%	\$3,310,500	\$0
Somerville	\$7,419,000	\$741,900	\$3,709,500	\$1,557,234	42%	\$5,861,766	\$2,152,266
Southborough	\$1,512,000	\$500,000	\$1,512,000		0%	\$1,512,000	\$1,512,000
Stoneham	\$2,339,000	\$500,000	\$2,339,000	\$1,000,000	43%	\$1,339,000	\$1,339,000
Stoughton*	\$2,506,000	\$500,000	\$2,506,000		0%	\$2,506,000	\$2,506,000
Swampscott	\$3,755,000	\$500,000	\$2,500,000	\$1,849,468	74%	\$1,905,532	\$650,532
Wakefield *	\$2,325,000	\$500,000	\$2,325,000	\$1,400,000	60%	\$925,000	\$925,000
Waltham	\$10,293,000	\$1,029,300	\$5,146,500	\$1,798,370	35%	\$8,494,630	\$3,348,130
Watertown	\$2,978,000	\$500,000	\$2,500,000	\$1,500,000	60%	\$1,478,000	\$1,000,000
Wellesley *	\$2,350,000	\$500,000	\$2,350,000	\$241,569	10%	\$2,108,431	\$2,108,431
Weston	\$1,625,000	\$500,000	\$1,625,000	\$900,000	55%	\$725,000	\$725,000
Wilmington *	\$611,000	\$500,000	\$611,000		0%	\$611,000	\$611,000
Winchester *	\$882,000	\$500,000	\$882,000	\$500,000	57%	\$382,000	\$382,000
Winthrop	\$3,312,000	N/A **	\$3,312,000	\$1,025,000	31%	\$2,287,000	\$2,287,000
Woburn *	\$2,591,000	\$500,000	\$2,591,000	\$1,000,000	39%	\$1,591,000	\$1,591,000
SUBTOTAL	\$200,000,000			\$74,250,056		\$125,749,944	\$50,624,444

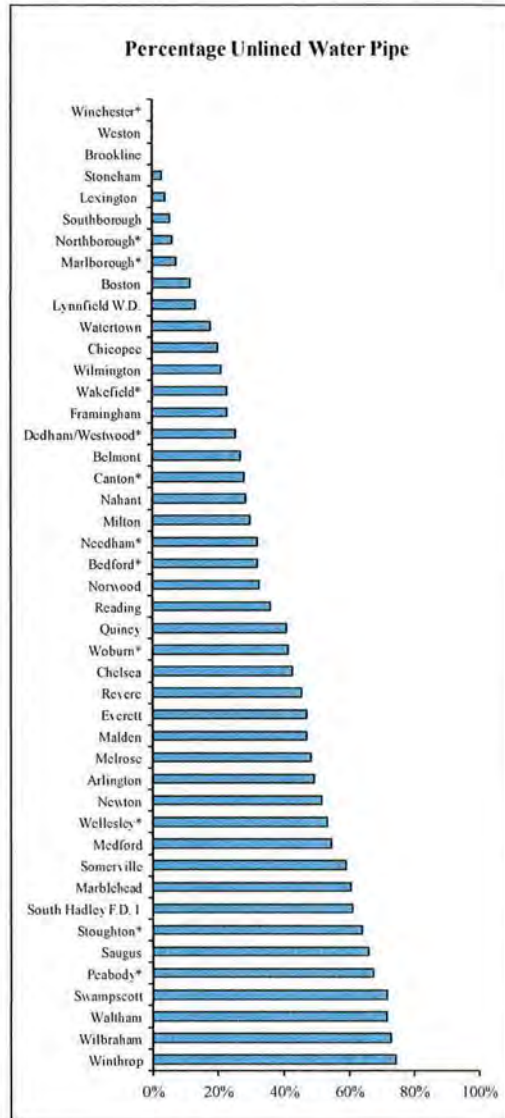
Chicopee	\$7,153,000	\$715,300	\$3,576,500	\$2,085,000	58%	\$5,068,000	\$1,491,500
South Hadley F.D. I	\$1,538,000	\$500,000	\$1,538,000		0%	\$1,538,000	\$1,538,000
Wilbraham	\$1,309,000	\$500,000	\$1,309,000		0%	\$1,309,000	\$1,309,000
SUBTOTAL	\$10,000,000			\$2,085,000		\$7,915,000	\$4,338,500

TOTAL	\$210,000,000			\$76,335,056		\$133,664,944	\$54,962,944
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* Partially Served Communities


ATTACHMENT 3
MWRA LOCAL PIPELINE AND WATER SYSTEM ASSISTANCE PROGRAMS
LINED AND UNLINED PIPE BY COMMUNITY
THROUGH FEBRUARY 2015

Community	Total Miles of Pipe	Miles of Lined Pipe	Miles of Unlined Pipe	Percent Unlined
Arlington	132	67	65	49%
Bedford*	85	57	27	32%
Belmont	88	64	24	27%
Boston	1009	890	119	12%
Brookline	140	140	0	0%
Canton*	121	87	34	28%
Chelsea	59	34	25	43%
Chicopee	262	209	54	21%
Dedham/Westwood*	190	141	49	26%
Everett	68	36	32	47%
Framingham	274	211	63	23%
Lexington	157	151	6	4%
Lynnfield W.D.	29	25	4	14%
Malden	118	62	56	47%
Marblehead	80	31	48	61%
Marlborough*	168	156	12	7%
Medford	121	55	66	54%
Melrose	80	42	39	48%
Milton	138	97	41	30%
Nahant	23	16	7	29%
Needham*	133	90	43	32%
Newton	319	155	164	52%
Northborough*	65	61	4	6%
Norwood	118	80	38	32%
Peabody*	170	56	114	67%
Quincy	238	141	97	41%
Reading	110	70	40	36%
Revere	91	50	41	46%
Saugus	125	43	82	66%
Somerville	120	49	71	59%
South Hadley F.D. 1	82	32	50	61%
Southborough	87	82	5	5%
Stoneham	78	76	2	3%
Stoughton*	148	53	94	64%
Swampscott	55	16	40	72%
Wakefield*	114	88	26	23%
Waltham	157	44	113	72%
Watertown	80	66	14	18%
Wellesley*	136	64	72	53%
Weston	105	105	0	0%
Wilbraham	74	20	54	73%
Wilmington	126	99	27	21%
Winchester*	105	105	0	0%
Winthrop	45	12	33	74%
Woburn*	182	106	76	42%
TOTAL	6,405	4,336	2,069	32%



* Partially Served Communities

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: April 15, 2015
SUBJECT: Memorandum of Agreement between Massachusetts Water Resources Authority and the City of Somerville - Contract 7335, Section 4 Webster Avenue Pipe and Utility Bridge Replacement

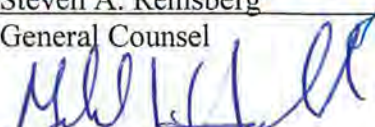
COMMITTEE: Water Policy & Oversight

John P. Vetere, Deputy Chief Operating Officer
A. Navanandan, PE, Chief Engineer
Michael G. Rivard, PE, Program Manager, E&C
Preparer/Title

 INFORMATION

 X VOTE


Steven A. Remsberg
General Counsel


Michael J. Hornbrook
Chief Operating Officer

Under a separate staff summary being presented at this meeting, staff are recommending the award of Contract 7335, Section 4 Webster Avenue Pipe and Utility Bridge Replacement, which will replace MWRA's 48-inch pipeline, the City of Somerville's 20-inch pipeline, and the utility bridge that supports both. The City of Somerville has agreed to pay MWRA \$100,000 for including the replacement of its 20-inch pipeline into its contract to replace Section 4 and the utility bridge. This staff summary recommends that the Board authorize the Executive Director to execute a Memorandum of Agreement with Somerville detailing the terms of this arrangement.

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to execute a Memorandum of Agreement with the City of Somerville, substantially in the form attached hereto, related to reimbursement to the Authority for construction costs associated with the replacement of Somerville's 20-inch-diameter water main.

DISCUSSION:

A portion of MWRA's Section 4, 48-inch-diameter pipe, crosses over the Fitchburg Commuter Rail Line, adjacent to the Mass DOT Webster Avenue vehicle bridge in Somerville (See Figure 1 attached). The pipe was taken off line in 2009 due to joint leaks and it needs to be replaced. The pipe is currently supported by a steel truss utility bridge that is approximately 75 years old. The City of Somerville also has a 20-inch-diameter water main that is supported by the same utility bridge adjacent to MWRA's water main.

Since the replacement of MWRA's pipe and the utility bridge will impact the City of Somerville's water main, and, given the age and condition of its water main, the City of Somerville has requested that its water main be replaced at the same time as the Section 4 work, and has agreed to pay MWRA for the added construction cost to do so. Staff have estimated that the construction cost to replace the City's 20-inch water main is approximately \$100,000.



To ensure close coordination of all aspects of this project as it moves forward, staff recommend that MWRA enter into a Memorandum of Agreement with the City of Somerville. Staff are recommending the MOA for the following reasons:

- In order to replace MWRA's 48-inch pipe and the supporting utility bridge, the City of Somerville's water main will be disrupted and must be removed;
- Replacing both MWRA's pipe and Somerville's pipe at the same time, by the same contractor, will limit disruption to traffic and residents in the vicinity of the work; and
- MWRA's construction contractor will be less restricted in getting the utility bridge replaced if the Somerville's pipeline is taken out of service and removed entirely.

The attached draft MOA contains provisions for both MWRA and Somerville relating to coordination of the work, permitting, changes to the work, and payment terms. Somerville has been involved in the review of the design documents and has provided approval for traffic plans and extended work hours, where possible, to expedite the project. MWRA will receive payment from the City of Somerville upon Substantial Completion of the work.

BUDGET/FISCAL IMPACT:

The FY15 CIP includes a budget of \$1,500,000 for the Section 4 Webster Avenue Pipe and Utility Bridge Replacement. This MOA will offset the construction costs associated with replacement of the City of Somerville's water main by \$100,000.

ATTACHMENT:

Figure 1 Webster Avenue Pipe & Utility Bridge Replacement - Project Location
Draft Somerville Memorandum of Agreement

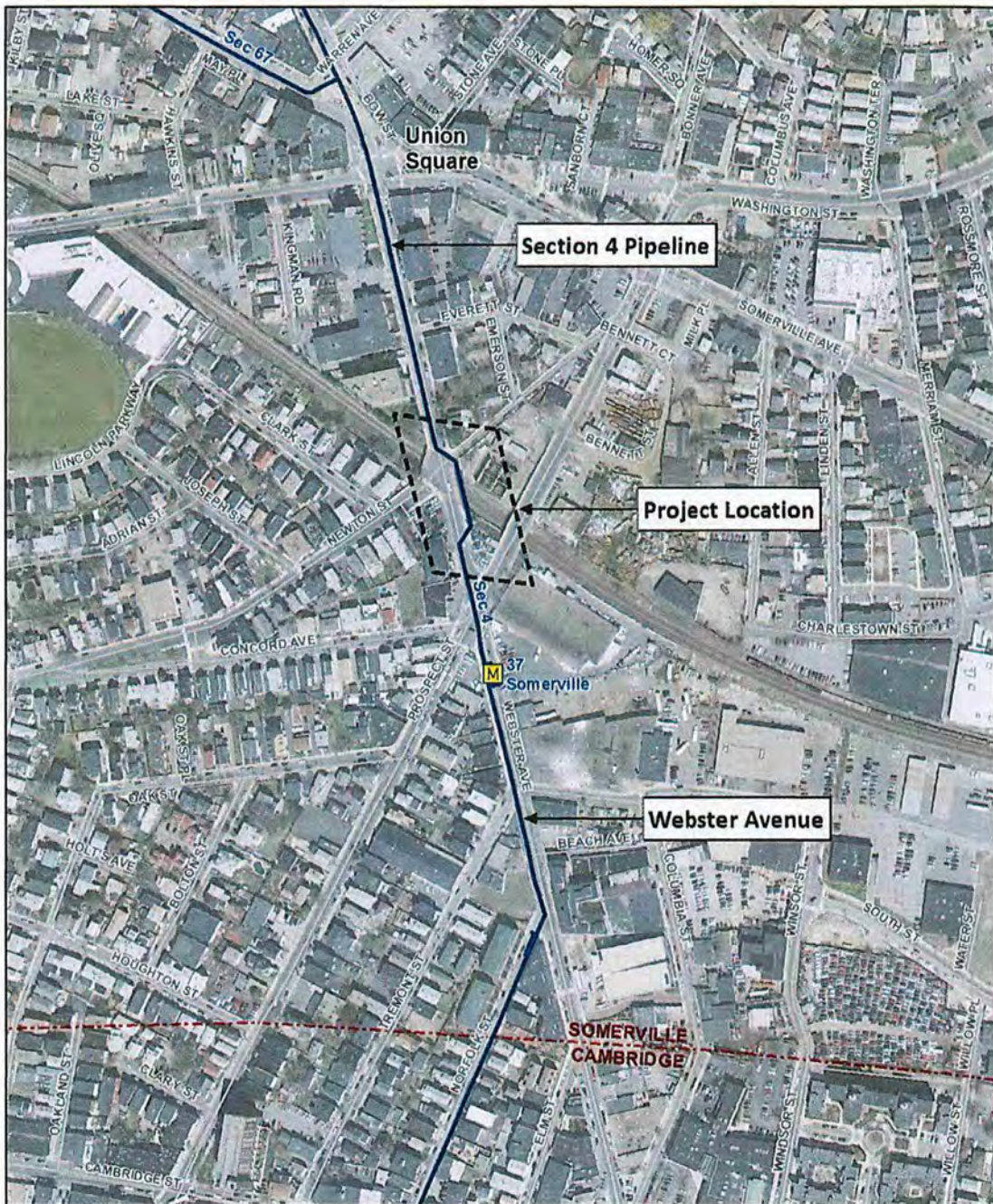
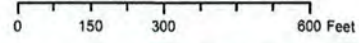


Figure 1
Webster Avenue Pipe and
Utility Bridge Replacement
Project Location

1 inch = 300 feet



DATE: 3/31/2015 MWR&GIS/7/81

MEMORANDUM OF AGREEMENT
BETWEEN
MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
CITY OF SOMERVILLE

This MEMORANDUM OF AGREEMENT ("MOA") is made this _____ day of _____, 2015, by and between the MASSACHUSETTS WATER RESOURCES AUTHORITY a body corporate and politic and an independent authority pursuant to St. 1984, c.372 of the laws of the Commonwealth of Massachusetts ("MWRA"), and the City of Somerville, duly incorporated as a City under the laws of the Commonwealth of Massachusetts ("Somerville"). MWRA and Somerville may hereafter be referred to as "Party" or "Parties."

RECITALS

WHEREAS, the MWRA has a 48-inch water main, part of the MWRA's Northern Low Pressure Zone, (the "MWRA Water Main") that crosses over the Fitchburg Commuter Rail line in and adjacent to Webster Avenue, Somerville on a steel truss bridge, both of which are in need of replacement; and

WHEREAS, the City of Somerville has a 20-inch water main adjacent to the MWRA Water Main that also crosses over the Commuter Rail in and adjacent to Webster Avenue on the steel truss bridge ("the "Somerville Water Main"); and

WHEREAS, the MWRA is planning to replace the MWRA Water Main and the utility bridge truss structure supporting it in a project entitled Section 4, Webster Ave. Pipe and Utility Bridge Replacement, MWRA Contract No. 7335 (the "Project"); and

WHEREAS, the Somerville Water Main is currently in need of replacement; and

WHEREAS, the Parties have determined that it is in both of their best interests to combine the replacement of the Somerville Water Main with the replacement of the MWRA Water Main into one project so as to be performed at the same time; and

WHEREAS, MWRA is amenable to including replacement of the Somerville Water Main into the Project; and

WHEREAS, Somerville has agreed to provide payment to the MWRA for the portion of the work associated with the Somerville Water Main replacement consistent with its estimated cost; and

WHEREAS, the MWRA and the City of Somerville wish to enter into this Memorandum of Agreement ("MOA") regarding payment for the City of Somerville water main that will be included in the Project.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. AWARD OF CONTRACT

1.1 MWRA shall award a contract for the Project, including the replacement of the Somerville Water Main, to the lowest eligible and responsible bidder. The MWRA will enter into a contract with the successful bidder and be responsible for construction of the Project.

2. MWRA PROJECT RESPONSIBILITIES

2.1 MWRA will complete the design of the replacement of the Somerville Water Main and include it in the scope of the work for the Project. Somerville will have the opportunity to review the scope of work and provide its comments to MWRA.

2.2 MWRA will administer the contract for the Project and provide resident inspection and engineering services during construction. The MWRA agrees that it shall confer with Somerville's representative on all questions, Requests for Information ("RFI"), request for any changes, modifications and/or deletions by the MWRA or its Contractor with respect to any work associated with the Somerville Water Main replacement. MWRA agrees that it shall abide by any decision of Somerville's representative with respect to any work associated with the Somerville Water Main replacement.

2.3 MWRA shall require its contractor for the Project to: i) name Somerville as an additional insured on all insurance policies required to be provided by such contractor for the Project, except for Workers Comp; ii) name Somerville as an Obligee on all Performance and Labor and Materials Payment Bonds provided by the contractor under the construction contract.

2.4 MWRA shall cause its contractor to warrant for the benefit of Somerville, all work related to the Somerville Water Main against defects in materials and workmanship for a period of one (1) year from substantial completion of the Project. Provision shall be made for the contractor to repair or replace all defective work within said one year period. Somerville agrees that it shall look only to the Project's contractor, and not the MWRA, in the event of a breach of warranty that requires remedial work

2.5 MWRA shall cause its contractor to indemnify and hold harmless Somerville to the same extent that MWRA requires its contractor to indemnify and hold harmless the MWRA.

3. SOMERVILLE PROJECT RESPONSIBILITIES

3.1 The City of Somerville agrees that it shall pay the MWRA the sum of \$100,000 as follows: Upon reaching substantial completion of the construction contract MWRA shall invoice the City for \$100,000. Somerville agrees to pay MWRA within thirty (30) days of its receipt of such invoice.

3.2 Somerville shall assist the MWRA and Project's contractor with obtaining permits and approvals which are under Somerville's jurisdiction, and that are necessary to complete the work.

3.3 Somerville will allow, except during declared snow emergencies, the Project contractor at its discretion to prosecute the project work during the winter moratorium period from November 15 through April 15 throughout the contract term.

3.4 Somerville reserves the right to provide its own resident inspection solely for that portion of the Project concerning the Somerville Water Main Replacement. MWRA agrees that it shall provide access to Somerville's inspector at the work site and shall cooperate with Somerville's inspector with regard to any reasonable requests for assistance in inspecting the work

4. CHANGE ORDERS

4.1 In the event that Somerville requests a change to the scope of work after the contract for the Project has been awarded, MWRA shall process a change order for such work, which shall be paid for by Somerville. Payments for such change order shall be separately invoiced to MWRA by its contractor, which will then invoice Somerville for such change order cost. Somerville agrees to pay MWRA within thirty (30) days of its receipt of such invoice.

5. TERM

5.1 The term of this Agreement shall, unless otherwise agreed to by the parties, commence on the date written above and continue until final completion of the Project and any Warranty period.

6. AMENDMENTS

6.1 The parties to this MOA may amend this MOA only by a writing duly executed by both parties.

7. SEVERABILITY

7.1 If any part of this MOA is determined to be invalid, illegal or unenforceable, such determination shall not affect the validity, legality or enforceability of any other part of the Agreement and the remaining parts of this Agreement shall be enforced as if such invalid, illegal or unenforceable part were not contained herein.

8. NOTICE

8.1 Whenever, by the terms of this instrument, notices may or are to be given either to Somerville or the MWRA, such notice shall be deemed to have been given, if in writing and either delivered by hand or by US mail to the following addresses:

To Somerville: Stan Koty, Commissioner DPW
City of Somerville DPW
1 Franey Road
Somerville, MA 02145

To MWRA: Michael Rivard, Program Manager
Massachusetts Water Resources Authority
2 Griffin Way
Chelsea, MA 02150

9. ENTIRE AGREEMENT

9.1 This agreement, constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements, understandings, expectations, negotiations, and discussions of the parties, whether oral or written. There are no representations by either party which are not specifically set forth in this agreement.

10. GOVERNING LAW

10.1 This agreement shall be executed and delivered in the Commonwealth of Massachusetts and shall be construed and enforced in accordance with, and shall be governed by, the laws of the Commonwealth of Massachusetts.

11. DISPUTES/COOPERATION

11.1 Somerville and the MWRA shall each use their best efforts to cooperate in the performance of the Project by appointing appropriate representatives who, respectively, shall be responsible for expediting and responding to any and all inquiries, problems and matters requiring coordination among the parties concerning the scheduling, performance, progress or completion of the Project. Any and all disputes which arise and which cannot be amicably resolved by the parties during the course of the performance of the work shall, if at all possible, be resolved after the completion of that work.

12. COUNTERPARTS

12.1 This agreement shall be executed in duplicate counterparts, each of which shall be deemed an original and both of which shall constitute one and the same instrument.

13. AUTHORITY

13.1 Each person signing below in an official or representative capacity warrants that he or she is duly authorized to act for his or her principal as indicated below and that he

or she is so acting when signing this Agreement.

IN WITNESS WHEREOF, the Parties hereto have set their hands and seals on the day and year first written above.

MASSACHUSETTS WATER RESOURCES
AUTHORITY

CITY OF SOMERVILLE


By: _____
Frederick A. Laskey
Executive Director

By: _____
Joseph A. Curtatone
Mayor, City of Somerville

Approved as to form:

Francis X. Wright, Jr., City Solicitor

STAFF SUMMARY

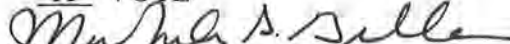
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: April 15, 2015
SUBJECT: Section 4 Webster Avenue Pipe and Utility Bridge Replacement
NEL Corporation
Contract 7335

COMMITTEE: Water Policy & Oversight

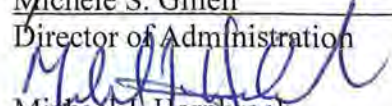
John P. Vetere, Deputy Chief Operating Officer
A. Navanandan, P.E., Chief Engineer
Michael G. Rivard, P.E., Program Manager
Preparer/Title

 INFORMATION

 X VOTE



Michele S. Gillen
Director of Administration


Michael J. Hornbrook
Chief Operating Officer

Contract 7335 will replace MWRA's Section 4 water main, a 48-inch-diameter pipe that crosses over the Fitchburg Commuter Rail Line adjacent to the Mass DOT Webster Avenue vehicle bridge in Somerville. The City of Somerville's 20-inch water main runs parallel to MWRA's line and also will be replaced under this contract. A separate staff summary presented at this meeting will recommend that MWRA enter into a Memorandum of Agreement for coordination with Somerville on this project and for Somerville's reimbursement to MWRA for the estimated cost to replace its 20-inch main.

RECOMMENDATION:

To approve the award of Contract 7335, Section 4 Webster Avenue Pipe and Utility Bridge Replacement, to the lowest responsible and eligible bidder, NEL Corporation, and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the bid amount of \$1,759,000, for a contract term of 214 calendar days from the Notice to Proceed.

DISCUSSION:

MWRA's Section 4 water main, a 48-inch-diameter, cast-iron, lead-joint pipe, crosses over the Fitchburg Commuter Rail Line adjacent to the Mass DOT Webster Avenue vehicle bridge in Somerville (See attached Figure 1). Section 4 supplies MWRA's Northern Low Service area, which includes Somerville, Malden, Medford, Everett, Chelsea, and Charlestown. MWRA's pipe was originally installed in 1898 as a grade crossing, but was elevated as a bridge crossing in 1911. The City of Somerville's 20-inch water main was also installed on the common bridge structure at that time.

Section 4 was taken off line in 2009 due to joint leaks and failure of the thrust restraint system on the pipe. After extensive engineering review, repair of the existing pipe was determined to be unfeasible due to its age, antiquated joints, and damage to the thrust restraints. Therefore, in order to restore service in this line, the pipe needs to be replaced.

The pipe is currently supported by a steel truss utility bridge that is approximately 75 years old and is reaching the end of its useful life. Also, the City of Somerville operates a 20-inch-diameter water main that occupies the same utility bridge adjacent to MWRA's pipe (see pictures below).



Pipe Bridge over Fitchburg Rail Line



Somerville's 20-Inch and MWRA's 48-Inch Pipeline on Utility Bridge



MWRA Pipe and Somerville Pipe Rising from Underground and Across Bridge



Traffic and Foot Bridge will not be Replaced



Only Utility Support Bridge to be Replaced

Contract 7335 involves replacement of MWRA's 48-inch pipe, the City of Somerville's 20-inch pipe, as well as, the steel utility bridge that supports both. Due to the need to replace the utility bridge and the close proximity of MWRA's work to the adjacent City of Somerville's 20-inch water main, and, given the age and poor condition of the Somerville's water main, the City of Somerville has requested that its water main be replaced during MWRA's work and has agreed to pay MWRA \$100,000 to fund the cost of its water main replacement. A proposed Memorandum of Agreement between MWRA and the City of Somerville is the subject of a separate staff summary being presented at this meeting.

The MBTA will be working on the Fitchburg Commuter Rail line during the 2015 construction season as part of its Green Line Extension Project. Therefore, staff have coordinated MWRA's work with the MBTA's schedule, and with the City of Somerville, by adding a milestone of September 2, 2015 to the contract to complete the pipe and bridge work to reduce traffic disruption during the start of the next school year.

Procurement Process and Results

Contract 7335 was advertised and competitively bid in accordance with Massachusetts General Laws, Chapter 30. Bids were received and opened on April 2, 2015 with the following results:

Bidders	Bid Price
NEL Corporation	\$1,759,000
<i>Engineer's Estimate (Dated 3/11/2015)</i>	<i>\$1,961,000</i>
MIG Corp, Inc.	\$2,027,357
P. Gioioso & Sons, Inc.	\$2,054,376
Northern Construction Service, LLC	\$2,667,950

NEL Corporation's bid is 10.3% below the Engineer's Estimate, and the three lowest bids are within 17% of each other, an indication of the reasonableness of the low bid. The Design Engineer, Dewberry Engineers Inc, analyzed the difference between the low bid and its Engineer's Estimate and determined that NEL Corporation's bid included lower costs for the pre-fabricated bridge, the ductile-iron pipe, and the special fittings.

The contract required a number of qualifications and allowed for subcontracting as long as the subcontractors met the qualifications. NEL's team includes The Dow Company, Inc. for pipe installation, and The Composite Company, Inc. for steel erection. NEL will perform the remainder of the work. Staff reviewed the qualifications of NEL and its subcontractors and determined that they met the requirements of the contract. Dewberry contacted references for NEL Corporation and found the firm's experience and performance to be acceptable. The references report that the Contractor's performance on these projects was very good and the projects were completed on schedule. NEL Corporation also has demonstrated its ability to successfully complete large complex projects for the MassDOT and the MBTA.

MWRA staff and Dewberry have concluded that NEL Corporation possesses the skill, ability, and integrity necessary to perform the work under this contract, and is qualified to do so. Staff have further determined that the bid price is reasonable, complete, and includes the payment of

prevailing wage rates, as required. Therefore, staff recommend the award of this contract to NEL Corporation as the lowest responsible and eligible bidder.

BUDGET/FISCAL IMPACT:

The FY15 CIP includes a budget of \$1,500,000 for Contract 7335. The bid price of \$1,759,000 is \$259,000 over budget. This amount will be covered within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

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

ATTACHMENT:

Figure 1 - Webster Avenue Pipe and Utility Bridge Replacement Project Location

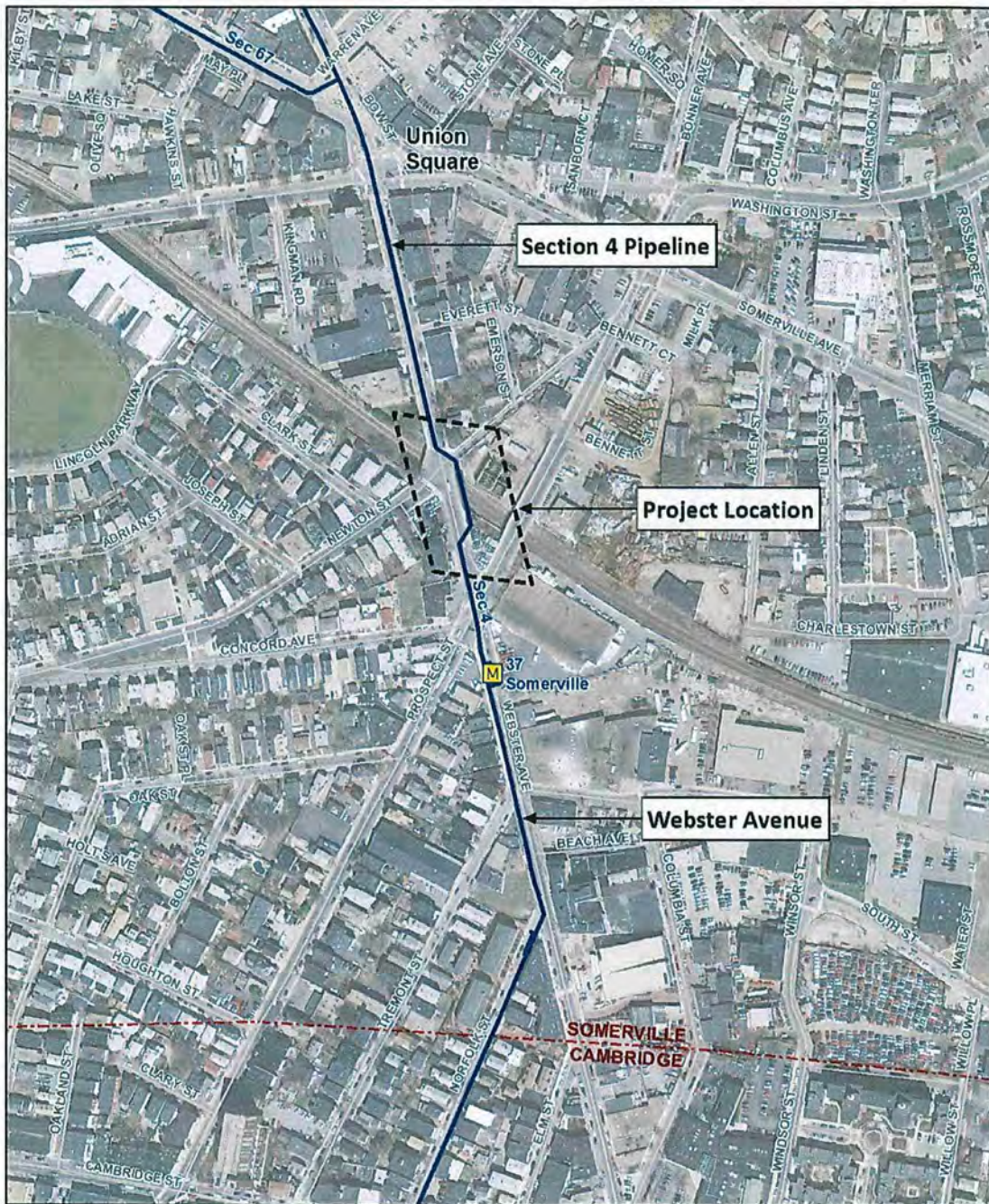
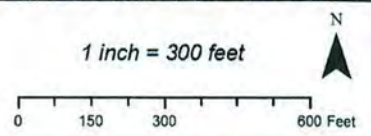
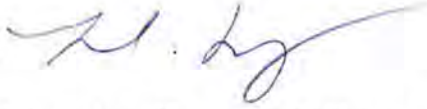


Figure 1
Webster Avenue Pipe and
Utility Bridge Replacement
Project Location




DATE: 3/31/2015 MWRA0151761

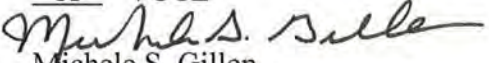
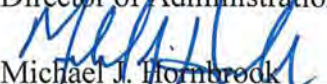
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: April 15, 2015
SUBJECT: Diver Assisted Suction Harvesting of Invasive Plants at Stillwater Basin,
Wachusett Reservoir
AE Commercial Diving Services
WRA-1559

COMMITTEE: Water Policy & Oversight

John Sabino, Director of Procurement 
David Coppes, P.E., Director, Waterworks
John Gregoire, Program Manager, Reservoir Operations
Preparer/Title

 INFORMATION
 X VOTE


Michele S. Gillen
Director of Administration

Michael J. Hornbreck
Chief Operating Officer

RECOMMENDATION:

To approve the award of a purchase order contract for the control of invasive plants at Stillwater Basin in the Wachusett Reservoir to the lowest responsive bidder under Bid WRA-1559, AE Commercial Diving Services, and to authorize the Executive Director, on behalf of the Authority, to execute said purchase order contract in the bid amount of \$350,000.

BACKGROUND:

The Wachusett Reservoir is a major component of MWRA's drinking water supply system for greater Boston and the MetroWest communities. In August 2001, a pioneering colony of Eurasian watermilfoil (*Myriophyllum spicatum*) was observed for the first time in the basin system at the upper reaches of the reservoir. Eurasian watermilfoil is an exotic, invasive species of macrophyte known to aggressively displace native vegetation and grow to nuisance densities with associated impairments to water quality. It propagates in three ways: maturation and seeding, by rhizomes (roots), and by late-season *auto-fragmentation* where plant fragments, shown in the picture on the right, drift downstream, sink, and then take root to become new plants.



Eurasian watermilfoil fragment

The picture below shows the most dense Eurasian watermilfoil area of Stillwater Basin before control efforts. Seasonal re-growth continues and requires attention.



Additionally, in recent years another plant, Fanwort (*Cabomba caroliniana* – shown in the picture below right) has been observed to be increasing in the basin system.

Both of these invasive species, previously restricted to the uppermost component of the reservoir system, Stillwater Basin (Figure 1 on the following page) have migrated to the lower basins where control efforts had been in place.

MWRA had previously initiated a consultant study to evaluate a number of alternatives, including dredging, to address the invasives problem. Dredging was not considered a viable option, at least in the short term, because in addition to cost (estimated at \$2.6 to \$4.2 million), MWRA would face a multi-year permitting process, extreme challenges associated with coffer-damming a moving river, and the high risks of significant increases in turbidity.



Fanwort (*Cabomba caroliniana*)

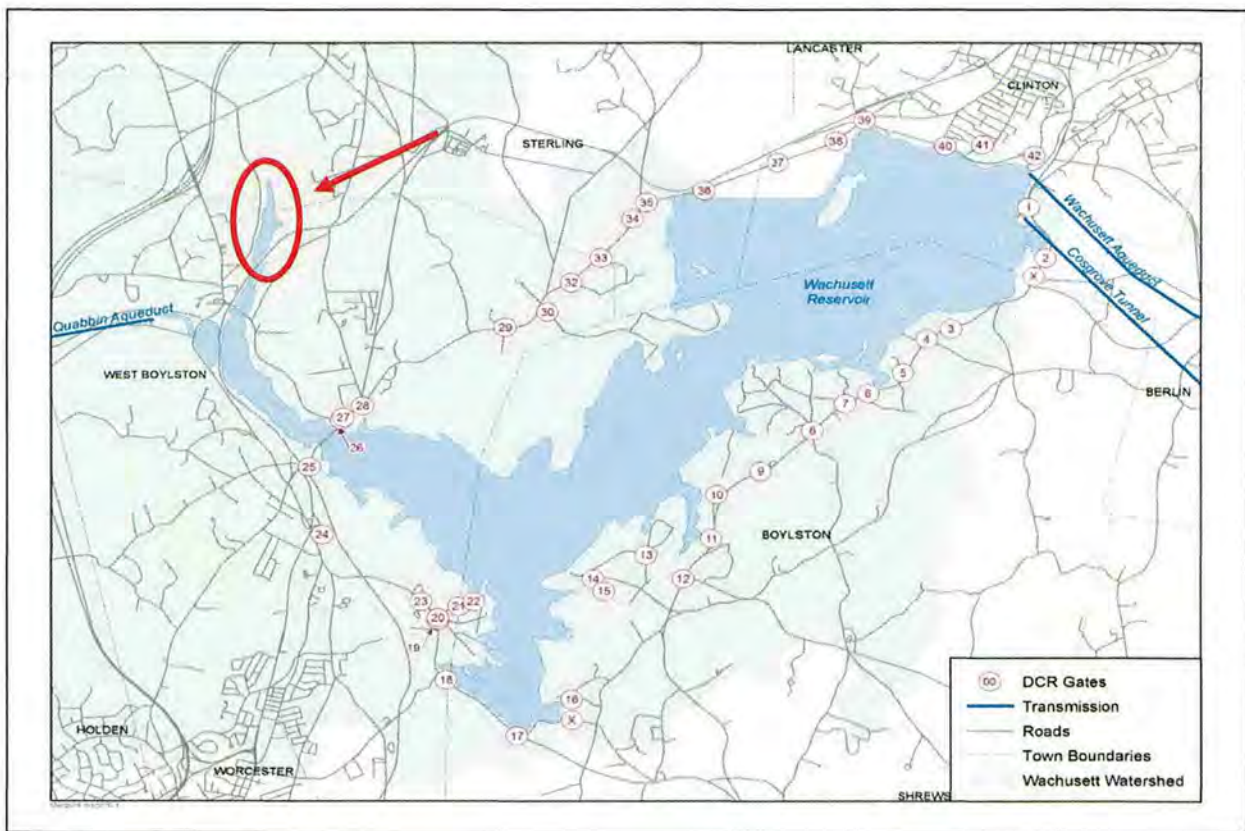


Figure 1. Stillwater Basin circled

A subsequent decision was made to maintain a “fire-break” to prohibit the plants’ migration from the basins into the main body of the reservoir where large shallow areas in the north basin near the intake are highly susceptible to invasive plant infestation.

Control efforts for these invasive aquatic plants under the “firebreak” approach have been underway since 2002. These efforts have included installation of two acres of benthic barriers to smother infestation zones in upper reaches of the basin system, seasonal diver hand-pulling of plants, and seasonal installation of fragment barriers at strategic locations in the basin system.

Success of the program was measured in several ways: by volume of plant matter removed annually, by pre- and post-season surveys, and by the fact that, with the exception of an occasional plant, no infestations were found in the main body of the reservoir. However, in 2012, hundreds of invasive Eurasian watermilfoil plants were found to have taken root just outside of the Rt. 12 Causeway “firebreak” zone in the southern end of Wachusett Reservoir. While these plants were removed more aggressive control measures were deemed necessary and greater resources were directed to the upstream source of the plant matter, at Stillwater Basin.

DISCUSSION:

In March 2013, the Board approved the award of the first large-scale, basin-wide effort to remove the dense accumulation of aquatic invasive plants from Stillwater Basin using Diver Assisted Suction Harvesting or “DASH.” With DASH, the divers identify and pull the invasive plants and roots out and guide them into the suction hoses, which then deposit them on filter

screens mounted on boats. The pictures below show MWRA's contracted DASH boats in operation at Stillwater Basin in summer 2013.



DASH divers working the basin

Suctioned plants deposited on screens

In 2013 the contract scope called for two full passes of the basin by the DASH method. The first DASH contract was awarded to Aqualogics, Inc. (WRA-3590) in the bid amount of \$397,560. The first contract was considered successful in that a large amount of invasive plant matter was removed utilizing the DASH method. While Aqualogics completed the majority of the work, they left \$35,966 unspent.

For 2014, AE Commercial Diving Services was awarded the DASH contract (WRA-3800) in the bid amount of \$259,600. AE Commercial Diving Services completed all contract work with a single pass of the entire basin and a second pass of the deeper middle part of the basin.

After each of the two previous contracts, staff have incorporated lessons learned into the next year's contract. For example, whereas the second phase last year focused on the central area of densest growth, the scope of work in 2015 will increase to include two *full* passes of DASH

harvesting across the entire basin, similar to the first year. This increase in scope is necessary because staff have learned that more light penetrates the basin after the first harvest removes the initial dense plant cover, which can then spark a robust re-growth of the invasives.

As in all previous years, the ultimate goal of removing the invasives is so that native plants will not only remain undisturbed, but will thrive and slowly fill in where the invasives are removed.

In addition to containing the immediate DASH boat work zones, floating fragment booms (as shown on the right) will be placed in a northern and southern location for the entire harvesting season.



Floating Fragment Barrier

Harvested invasive plants are deposited daily into a dumpster (rented by the Department of Conservation and Recreation, Watershed Division) stationed at the Basin shore. Once filled, DCR empties the dumpster into a dump truck and transports the harvested plants to its compost facility.



Harvested Plants in Smaller Containers on the Boat



Plants transferred into dumpsters for disposal

These annual DASH efforts are intended to keep the growth of aquatic invasives species in check in Stillwater basin and will require some level of continued effort going forward. At the end of the season staff will assess the reduction of re-growth and the in-fill of native plants. The level of effort for future contracts will be considered based on each season's results.

As has been the past practice, to monitor the work and ensure that the DASH contract work is proceeding in accordance with the contract requirements, MWRA will again competitively bid and award a separate quality assurance (QA) diving contractor to inspect the DASH work zones weekly after MWRA's contractor has completed work in these areas. These areas will be videotaped for documentary purposes, to support pay requisitions by the contractor, and to ensure that specific target areas are easily identified if contractor re-work is necessary. The before and after photos below, taken by a previous QA diver, clearly demonstrate the value of this separate inspection/videotaping contract.



Before DASH



After DASH

Procurement Process

Bid WRA-1559 was advertised in the following publications: Boston Herald, Goods and Services Bulletin, El Mundo, and Bay State Publications. Bids were also made available for public downloading on MWRA's e-procurement system. In addition, staff notified vendors identified as having provided these services of the opportunity to bid.

On February 27, 2015, three bids were received with the following results (for comparison purposes, staff also have included all three years' of DASH bids):

<u>BIDDER</u>	<u>2013 BID</u>	<u>2014 BID</u>	<u>2015 BID</u>
Aqualogics, Inc.	\$397,000	\$373,200	\$206,500
EnviroScience, Inc.	Did Not Bid	Did Not Bid	\$258,950
<i>Staff's Estimate</i>	<i>\$463,000</i>	<i>\$300,000</i>	<i>\$300,000</i>
AE Commercial Diving Services	\$549,000	\$259,600	\$350,000
Lycott Environmental, Inc.	\$315,000*	Did Not Bid	Did Not Bid

*In 2013, Lycott Environmental's proposed cost included the use of only one DASH boat, which staff felt was not sufficient to successfully perform the work so the bid was determined to be non-responsive.

Staff reviewed Aqualogics' bid and contacted the company to evaluate its assumptions for costs and proposed resources. In its response, Aqualogics stated that it assumed that during Phase 2, only sporadic re-growth would be encountered and this re-growth would be addressed by utilizing a non-DASH process of "bag harvesting," with DASH being utilized only on an "as-needed" basis. The specifications clearly state that two full DASH passes would be required. Furthermore, "bag harvesting" runs contrary to the intended use of DASH exclusively because if the entire plant, including any of its fragments, is not completely sucked up into the DASH hose, the risk of further re-growth remains as the diver cannot safely ensure that the entirety of the invasive plant and roots will end up in the diver's side bag without leaving fragments behind. Aqualogics could not completely finish the work in 2013 with nearly twice the budget compared to this current bid, and required constant oversight and direction to rework areas as the QA diver identified incomplete work. For these reasons, Aqualogics' bid was deemed non-responsive.

Staff then reviewed EnviroScience, Inc.'s bid and conducted a follow-up interview with the firm. The EnviroScience project manager informed staff that this would be its first DASH project and that the firm proposes to utilize only one DASH boat with two divers and a surface tender for the duration of the project. Based upon experiences from 2013 and 2014, MWRA staff have determined that this level of effort and equipment is wholly inadequate to properly perform DASH harvesting of a 38-acre basin for two complete phases. Past efforts on the basin have required up to three DASH boats, fully staffed and running continuously. Similar to the 2013 bid, when Lycott Environmental's bid (referenced above) was determined to be non-responsive because the firm proposed using only one DASH boat, and because of the firm's lack of DASH experience, staff determined that EnviroScience's bid was also non-responsive.

Staff have reviewed AE Commercial Diving Services, Inc.'s bid, which was \$350,000. Staff conducted a follow-up interview with the firm and asked the same questions that were asked of Aqualogics to assess the firm's bid. AE Commercial Diving provided a realistic application of resources and costs through detailed unit costs for payroll, equipment, fuel, insurance, etc. The firm's bid for Phase 2 includes a full DASH application as specified. The firm proposes to utilize three DASH boats, each with two divers and one tender. Staff believe that the proposed personnel and equipment better represents what is required to successfully perform the increased level of effort and scope of services for this year's contract.

After reviewing AE Commercial Diving Services' bid, and after conducting the follow-up interview, staff have determined that they underestimated the cost for the new contract and its increased scope of work (second complete DASH pass of the basin) and level of effort. Estimating aquatic invasive plant removal has been a challenge as staff have not had a substantial historical base on which to rely for reference in developing their estimates, and previous bids, as shown above, have produced large variances in bid pricing. DASH work involves dealing with living biomass whose growth is subject to many variables, such as nutrients, light penetration, and water temperatures.

Staff are of the opinion that AE Commercial Diving Services' bid is reasonable and complete. References were checked and found to be favorable. In addition to AE Commercial Divers' successful 2014 effort for MWRA in Stillwater Basin, AE Commercial Services has successfully completed similar DASH work in Lake Willoughby, in Westmore, Vermont, and in Woodridge Lake, in Litchfield Connecticut. MWRA staff are also familiar with AE Commercial Diving Services from its past work in 2012 and 2013 as a subcontractor to Aquatic Control Technologies, Inc. during invasives control work at another location in Wachusett Reservoir.

Staff are confident that AE Commercial Diving Services can perform the work under this contract for the bid price. Therefore, staff recommend the award of this contract to AE Commercial Diving Services as the lowest responsive bidder.


BUDGET/FISCAL IMPACT:

There are sufficient funds for the first portion of this contract in the Operations Division's FY15 Current Expense Budget. Appropriate funding also is included in the Proposed FY16 CEB for the remaining term of the contract.

MBE/WBE PARTICIPATION:

AE Commercial Diving Services is not a Certified Minority- or Women-owned business.

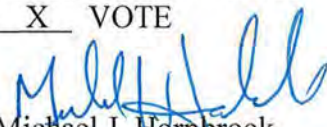
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: April 15, 2015
SUBJECT: Spot Pond Water Storage Facility Design/Build Project
Walsh Construction Company
Contract 6457, Change Order 14

COMMITTEE: Water Policy & Oversight

John P. Vetere, Deputy Chief Operating Officer
Martin E. McGowan, Construction Coordinator
Corinne M. Barrett, Director, Construction

Preparer/Title

INFORMATION
 VOTE


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Change Order 14 to Contract 6457, Spot Pond Water Storage Facility Design/Build Project, with Walsh Construction Company, extending the contract term by 115 calendar days from April 22, 2015 to August 15, 2015, at no additional cost to the Authority.

Further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 6457 in amounts not to exceed the aggregate of \$250,000, and 180 days in accordance with the Management Policies and Procedures of the Board of Directors.

DISCUSSION:

Under this contract, MWRA is constructing an underground 20-million-gallon concrete drinking water storage facility and pump station at the former Boston Regional Medical Center site near Spot Pond in Stoneham. An artist's rendering of what the completed pump station will look like is shown on the right. The project is intended to provide additional system storage for the Northern Low Service area and stabilize pressures in the Northern Low Service area supplying Somerville, Malden, Medford, Everett,



Chelsea, and Charlestown. The storage tank will also reduce flows in the City Tunnel System by lessening the use of pressure-reducing valves to feed the Northern Low Service area from the City Tunnel System during normal operations. The pump station will be partially underground with only the north face exposed and will supplement the Gillis Pump Station by providing pumping redundancy to the 21 communities served by the Northern High and Northern Intermediate High Service areas.

The project also includes a fiber optic communication system between Gillis Pump Station, the new facility, and the Fells Covered Storage facility.

On October 12, 2011, the Board approved the award of Contract 6457 to Walsh Construction Company to design and construct the Spot Pond Water Storage Facility, in the bid amount of \$49,361,000, with a contract term of 1,095 calendar days from the Notice to Proceed. Construction is approximately 90% complete. The following pictures depict recent construction progress:



Yard Piping (Section 13 Tie-In), early January 2015



Yard Piping (Section 64 Tie-In), March 2015



Pump Station Interior



Concrete Finishing Work Inside the Tank

This Change Order

Change Order 14 consists of the following one item:

Extend the Contract Term by 115 Calendar Days

\$0.00

The Contractor is required to install a waterproofing system consisting of a sheet membrane applied to the concrete roof deck of the water storage tanks. The waterproofing system will prevent infiltration of surface water into the drinking water supply.

In accordance with the manufacturer's specifications, the waterproofing sheet membrane must be applied only to completely dry surfaces when the ambient temperature is above 25 degrees Fahrenheit. Due to wet weather in December 2014 and January 2015, and the historic snowfall that began on January 24th and continued through much of the rest of the winter, the Contractor was unable to apply the membrane according to its intended schedule. The waterproofing cannot be installed until the accumulated snow is completely melted and the roof deck is dry enough to meet the manufacturer's application requirements. The Contractor could not perform snow removal to accelerate the process because portions of the waterproofing material have already been installed and could possibly be damaged by snow removal equipment.



Substantial Snow Depth on the Roof of the Storage Tank in February 2015

Staff anticipate that all snow will be gone and the roof deck should be sufficiently dry by May 1, 2015. Waterproofing must be installed prior to tank backfilling and installation of the tank level instruments, intrusion alarms, and security fencing at each tank access hatch. Massachusetts



February 2015 View Across Roof Decking Where Waterproofing Membrane will be Installed

Department of Environmental Protection requires all of these tasks be completed prior to disinfecting and activating each storage tank. Pump station testing and final site grading cannot be completed until the storage tank is activated.

The cumulative impacts of the extreme winter weather conditions entitle the Contractor to a time extension of 115 calendar days.

The approved PCO for this item of work has been identified by MWRA staff as an unforeseen condition.

The Owner's Representative (Camp Dresser & McKee, Inc.¹), MWRA staff, and the Contractor have agreed to an extension of 115 calendar days in contract term, from April 22, 2015 to August 15, 2015 at no additional cost to the Authority.

CONTRACT SUMMARY:

	AMOUNT	TIME	DATED
Original Contract:	\$49,361,000.00	1,095 Days	11/10/11
Change Orders:			
Change Order 1*	\$0.00	0 Days	06/05/12
Change Order 2*	\$240,712.51	0 Days	12/26/12
Change Order 3	(\$44,075.34)	0 Days	11/06/13
Change Order 4*	(\$14,169.24)	0 Days	12/04/13
Change Order 5*	\$91,181.84	0 Days	02/19/14
Change Order 6*	\$105,659.90	0 Days	08/27/14
Change Order 7	\$587,630.07	0 Days	10/15/14
Change Order 8*	\$14,471.20	0 Days	11/03/14
Change Order 9	\$737,370.56	144 Days	11/28/14
Change Order 10*	\$14,907.88	0 Days	03/13/15
Change Order 11*	\$0.00	0 Days	04/09/15
Change Order 12*	\$15,596.96	0 Days	04/09/15
Change Order 13*	\$201,066.86	0 Days	04/09/15
Change Order 14	<u>\$0.00</u>	<u>115 Days</u>	Pending
Total Change Orders	\$1,950,353.20	259 Days	
Adjusted Contract:	\$51,311,353.20	1,354 Days	

*Approved under delegated authority

If Change Order 14 is approved, the cumulative total value of all change orders to this contract will be \$1,950,353.20 or 3.95% of the original contract amount. Work on this contract is approximately 90% complete.

BUDGET/FISCAL IMPACT:


Change Order 14 is for a time extension only and will have no budgetary impact.

MBE/WBE PARTICIPATION:

The MBE and WBE participation requirements for this contract were established at 5.3% and 4.4%, respectively. The Contractor will be notified that these requirements are still expected to be met.

¹ A separate staff summary is being presented at this meeting for an amendment to a related contract, Contract 7233, Preliminary Design and Owner's Representative Services for the Spot Pond Storage Facility, with Camp Dresser & McKee, Inc. Camp Dresser & McKee, Inc. has changed its name to CDM Smith Inc. but continues to perform under its original name those contracts executed prior to the name change.


STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: April 15, 2015
SUBJECT: Preliminary Design and Owner's Representative Services for the Spot Pond Storage Facility
Camp Dresser & McKee, Inc.
Contract 7233, Amendment 2

COMMITTEE: Water Policy & Oversight

 INFORMATION
 X VOTE

John P. Vetere, Deputy Chief Operating Officer
A. Navanandan, P.E., Chief Engineer
Michael G. Rivard, P.E., Program Manager
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 2 to Contract 7233, Preliminary Design and Owner's Representative Services for the Spot Pond Storage Facility, with Camp Dresser & McKee, Inc., extending the contract term by nine months from November 22, 2016 to August 15, 2017, and increasing the contract amount by \$142,000, from \$2,892,096 to \$3,034,096.

DISCUSSION:

On March 10, 2010, the Board approved the award of Contract 7233 to Camp Dresser & McKee, Inc.¹ (CDM) to provide Preliminary Design and Owner's Representative Services for the Spot Pond Storage Facility Design/Build Project (see Attachment A). On June 4, 2014, the Board approved Amendment 1, which extended the contract end date from July 22, 2014 to November 22, 2016, to include the construction completion date plus the two-year warranty period, with no overall increase in contract amount.

The Spot Pond Storage Facility Design/Build project is being constructed by Walsh Construction Co. under Contract 6457 at the former Boston Regional Medical Center site near Spot Pond in Stoneham and is approximately 90% complete.

The Spot Pond Storage Facility, consisting of two 10-million-gallon, buried, concrete water storage tanks will provide distribution system storage for MWRA's Northern Low distribution

¹ Camp Dresser & McKee, Inc. has changed its name to CDM Smith Inc. but continues to perform under its original name those contracts executed prior to the name change.

system. The tanks will provide stabilized pressures in the Northern Low Service system supporting Somerville, Malden, Medford, Everett, Chelsea, and Charlestown, while providing emergency potable water storage to these communities and the Boston Low Service system. The project also includes an underground pump station that will supplement the Gillis Pump Station providing pumping redundancy to the 21 communities served by the Northern High and Northern Intermediate High pressure zones, thus eliminating a potential single source of failure if the Gillis Pump Station could not operate.

This Amendment

A separate staff summary is being presented at this meeting, which is recommending approval of a no-cost change order to Construction Contract 6457, Spot Pond Water Storage Facility Design/Build Project, with Walsh Construction Company, which will extend the construction contract completion date from April 22, 2015 to August 15, 2015. This time extension is related to the unprecedented snow storms of this past winter.

While the remaining funds to provide Owner’s Representative construction administration and resident engineering/inspection services would have been sufficient for the current construction completion date of April 15, 2015, the need to extend the construction end date through August 15, 2015 will require an increase in contract amount for the Consultant to continue to provide submittal review, start-up support, and field oversight. Staff estimate that the additional level of effort will require an increase of \$142,000.

Although the current end date of the Owner’s Representative contract is November 22, 2016, which includes the Consultant’s review of facility performance near the end of the two-year warranty period, the extension of the construction contract will necessitate an extension to the Owner’s Representative contract by nine months from November 22, 2016 to August 15, 2017 to provide Owner’s Representative services through the entire two-year warranty period (commencing on August 15, 2015).

BUDGET/FISCAL IMPACT:

The FY15 CIP includes a budget of \$2,892,096 for Contract 7233. Amendment 2 includes \$142,000 of additional budget, increasing the contract amount to \$3,034,096, or \$142,000 over budget. This amount will be covered within the five-year CIP spending cap.

CONTRACT SUMMARY

	<u>Amount</u>	<u>Time</u>	<u>Dated</u>
Contract Award:	\$2,892,096	52 Months	03/10/10
Amendment 1:	\$0.00	28 Months	06/04/14
Proposed Amendment 2:	<u>\$142,000</u>	<u>9 Months</u>	Pending
Adjusted Contract:	\$3,034,096	89 months	

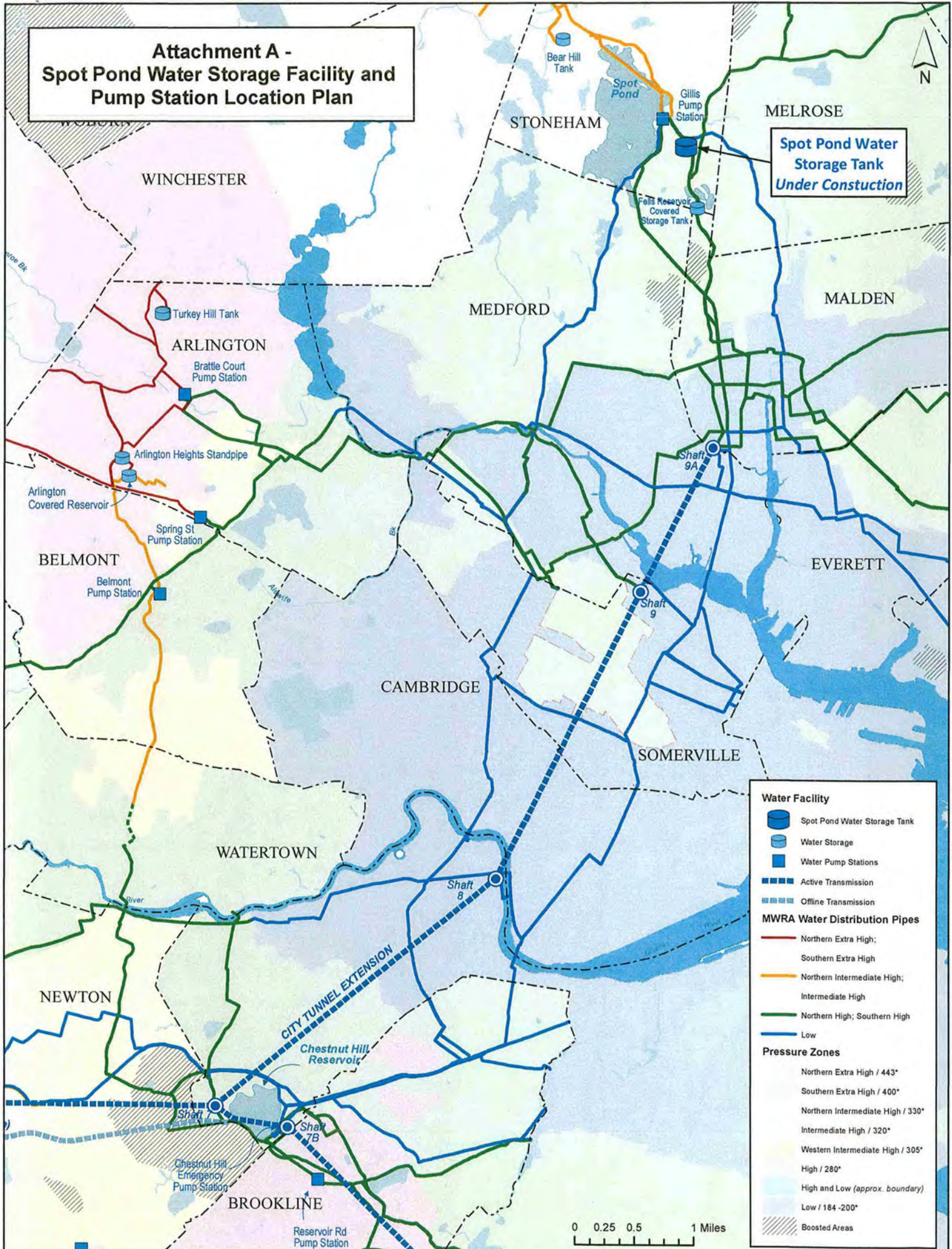
MBE/WBE PARTICIPATION:

The MBE and WBE participation requirements for this contract were established at 7.18% and 5.77%, respectively. CDM proposed 10.26% MBE and 7.09% WBE participation. These contract requirements will remain unchanged by this amendment.

ATTACHMENT:

Attachment A - Spot Pond Water Storage Facility and Pump Station Location Plan

Attachment A - Spot Pond Water Storage Facility and Pump Station Location Plan



Water Facility

- Spot Pond Water Storage Tank
- Water Storage
- Water Pump Stations
- Active Transmission
- Offline Transmission

MWRA Water Distribution Pipes

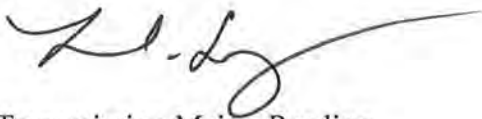
- Northern Extra High;
- Southern Extra High
- Northern Intermediate High;
- Intermediate High
- Western Intermediate High / 305'
- High / 280'
- High and Low (approx. boundary)
- Low / 184'-200'

Pressure Zones

- Northern Extra High / 443'
- Southern Extra High / 400'
- Northern Intermediate High / 330'
- Intermediate High / 320'
- Western Intermediate High / 305'
- High / 280'
- High and Low (approx. boundary)
- Low / 184'-200'

Boosted Areas


STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: April 15, 2015
SUBJECT: Northern Intermediate High, West Street Transmission Main - Reading
P. Caliacco Corp.
Contract 7066, Change Order 4

COMMITTEE: Water Policy & Oversight

 INFORMATION
 X VOTE

John P. Vetere, Deputy Chief Operating Officer
Jeremiah Sheehan, Construction Coordinator
Corinne M. Barrett, Director, Construction
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Change Order 4 to Contract 7066, Northern Intermediate High, West Street Transmission Main - Reading, with P. Caliacco Corp., for an amount not to exceed \$200,000, increasing the contract amount from \$1,726,369.46 to \$1,926,369.46, with no increase in contract term.

Further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 7066, in amounts not to exceed the aggregate of \$250,000 and 180 days, in accordance with the Management Policies and Procedures of the Board of Directors.

DISCUSSION:

MWRA's Northern Intermediate High (NIH) service area provides water to the communities of Reading, Stoneham, Wakefield, Wilmington, Winchester, and Woburn through a single 48-inch pipeline, which is fed by the Gillis Pump Station at Spot Pond in Stoneham. Although some of these communities are partially served by MWRA, the loss of this single transmission main would result in a rapid loss of service in Reading, Stoneham, and Woburn, and potential water restrictions in Wakefield, Wilmington and Winchester.

The main pipeline that serves this area (Section 89) is a three-mile-long, four-foot-diameter, pre-stressed concrete cylinder pipe (PCCP) transmission main with no redundancy other than the low-capacity, century-old Section 29 that parallels its route for a short distance. The 10,500-foot length of Section 89 northwest of Spot Pond is constructed of PCCP with Class IV reinforcing wire, which was used by the now defunct Interpace Corporation for a short period of time in the 1970s. It has been well documented, based upon catastrophic pipe failures elsewhere in the country, that Class IV reinforcing wire is susceptible to hydrogen embrittlement, which can lead

to premature pipe failure. In addition, records indicate that this portion of the Section 89 pipe was manufactured at Interpace's Hudson, New York Plant during a window of time when the concrete coating over the Class IV reinforcing wires was defective, leading to cracking and spalling that can accelerate the corrosion of the reinforcing wires. Due to the lack of redundancy, Section 89 cannot be taken out of service for inspection or repairs.

MWRA's goal is to design and construct a new pipeline that will provide redundancy to the community meters so that Section 89 can be removed from service for inspection and rehabilitation. Contract 7066, which consists of the construction of 2,400 linear feet of 36-inch water transmission main on West Street in the Town of Reading, is the first component of this overall project.

The Town of Reading has a roadway reconstruction project, West Street Reconstruction, which the Town is proceeding with in conjunction with the Massachusetts Highway Department (MassDOT). Reading's project was situated in MWRA's proposed pipeline alignment on West Street from the Woburn/Reading city limits to the intersection of West Street and Oak Street. In order to minimize impacts with MassDOT's roadway reconstruction project, and to eliminate the need to disturb a newly reconstructed roadway, MWRA advanced the design and construction of this contract. On May 14, 2014, the Board approved the award of Contract 7066, Northern Intermediate High, West Street Transmission Main - Reading, to P. Caliacco Corp. in the bid amount of \$1,565,357, for a contract term of 180 calendar days from the Notice to Proceed.

Work on this contract is currently approximately 72.5% complete.

This Change Order

Change Order 4 consists of the following item:

Analyze, Handle, Remove, and Dispose of Contaminated Soil

Not to Exceed \$200,000

On West Street in Reading, there are two gas stations that Mass DEP has identified as previously having underground storage tank releases (see photo on the right; Mutual in foreground, Mobil adjacent and beyond). These sites are situated adjacent to MWRA's excavation for the water main.

Prior to bid, the Design Engineer, Fay, Spofford and Thorndike (FS&T) collected groundwater samples from a nearby monitoring well and a soil sample at a location between the gas stations. Although the groundwater samples contained some petroleum constituents that were below the limits necessary for requiring a Remediation General Permit, this contract specified a the need for a Remediation General Permit and the requirement for a frac tank treatment system due to the transient nature of groundwater. An evaluation of the



soil boring sample indicated a non-detectable level of petroleum contaminants at the above location. However, in November 2014, one of the gas station's property owners filed a report with DEP indicating contaminated soil and groundwater were present on its site and performed subsequent removal of soil from the property.

Due to this response action by the gas station, MWRA directed the Contractor to perform additional test pits at several locations in this area to determine the groundwater and soil conditions that would be encountered. Based on several factors, including a review of the gas station's environmental records, along with both visual and olfactory observations while conducting the test pits (see photo on the right), MWRA notification to regulatory agencies is required.



It will be necessary to develop site plans, prepare and submit a Utility Related Abatement Measure (URAM) notification report to Massachusetts DEP, conduct geoprobe extraction of soil for laboratory analysis and pre-characterization of the soil, implement a subsequent Health and Safety Plan on site, and transport and dispose of contaminated soil at an approved landfill. Replacement of the material transported off site with gravel backfill also will be required, as well as a higher level of treatment for petroleum-based groundwater encountered during excavation using granulated activated carbon.

The approved PCO for this item of work has been identified by MWRA staff as an unforeseen condition. This work has not begun. Due to several unknown factors, such as the level of contaminants, the distance to the accepted landfill, the quantity of soil, and the amount of treated groundwater, FS&T, MWRA staff, and the Contractor have agreed to a not-to-exceed amount of \$200,000 for this additional work with no increase in contract term.

CONTRACT SUMMARY:

	AMOUNT	TIME	DATED
Original Contract:	\$1,565,357.00	180 Days	06/12/14
Change Orders:			
Change Order 1*:	\$161,012.46	14 Days	12/19/14
Change Order 2*:	\$0.00	29 Days	01/05/15
Change Order 3*:	\$0.00	87 Days	04/02/15
Change Order 4:	<u>\$200,000.00</u>	<u>0 Days</u>	Pending
Total Change Orders:	\$361,012.46	130 Days	
Adjusted Contract:	\$1,926,369.46	310 Days	

*Approved under delegated authority

If Change Order 4 is approved, the cumulative total value of all change orders to this contract will be \$361,012.46 or 23.07% of the original contract amount. Work on this contract is currently approximately 72.5% complete.

BUDGET/FISCAL IMPACT:

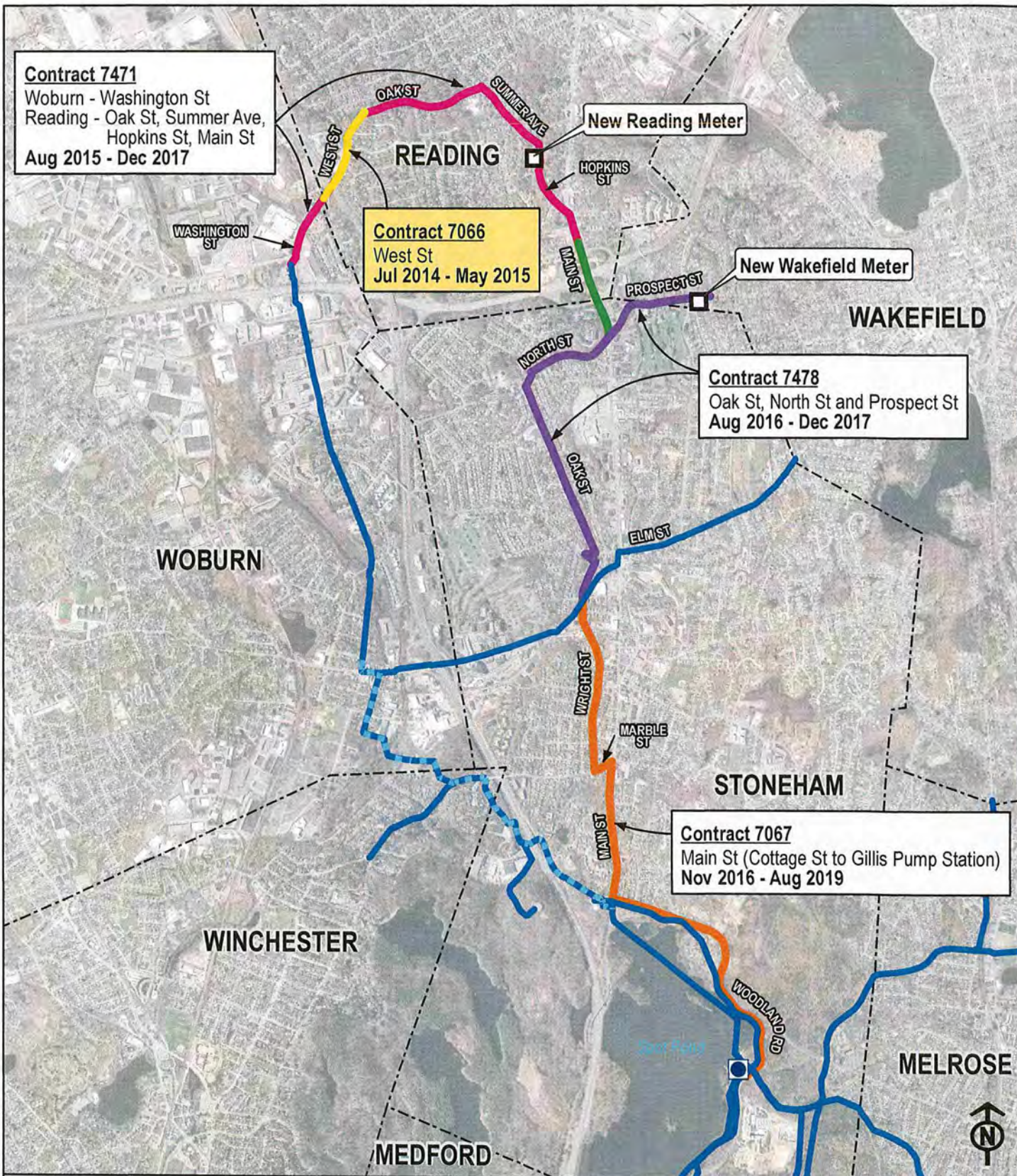
The FY15 Capital Improvement Program budget includes \$2,100,000 for Contract 7066. Including this change order for an amount not to exceed \$200,000, the adjusted subphase total will be \$1,926,369.46.

MBE/WBE PARTICIPATION:

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

ATTACHMENT:

Locus Map of Contract 7066



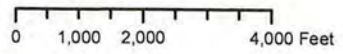
Contract 7471
 Woburn - Washington St
 Reading - Oak St, Summer Ave,
 Hopkins St, Main St
 Aug 2015 - Dec 2017

Contract 7066
 West St
 Jul 2014 - May 2015

Contract 7478
 Oak St, North St and Prospect St
 Aug 2016 - Dec 2017

Contract 7067
 Main St (Cottage St to Gillis Pump Station)
 Nov 2016 - Aug 2019

MASSACHUSETTS WATER RESOURCES AUTHORITY
Northern Intermediate High Redundant Pipeline Project
Route Overview with MWRA Facilities
Attachment A



- Contract 7471
- Contract 7478
- Contract 7067
- Contract 7066
- Short-Term Improvements
- MWRA Mains
- - - Class IV PCCP
- New Meter Locations



MASSACHUSETTS WATER RESOURCES AUTHORITY

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

Frederick A. Laskey
Executive Director

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

PERSONNEL & COMPENSATION COMMITTEE MEETING

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

to be held on

Wednesday, April 15, 2015

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

Time: Immediately following Water Comm.

A. Approvals

1. Appointment of Project Manager, Quality Assurance
2. Appointment of Project Manager, Engineering & Construction Department
3. PCR Amendments – April 2015

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the
Personnel and Compensation Committee

March 11, 2015

A meeting of the Personnel and Compensation Committee was held on March 11, 2015 at the Authority headquarters in Charlestown. Member Foti presided. Present from the Board were Messrs. Carroll, Flanagan, Pappastergion, Vitale and Walsh. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Patterson Riley, Michele Gillen, Karen Gay-Valente and Bonnie Hale. The meeting was called to order at 12:20 p.m.

Information

Compliance with New Federal Regulations on Veterans and Individuals with Disabilities

Staff provided a brief overview on the Authority's compliance with the new regulations.

Approvals

*2015 Affirmative Action Plan

The Committee recommended approval of the 2015 Affirmative Action Plan (ref. agenda item B.1).

*PCR Amendments – March 2015

The Committee recommended approval of amendments to the Position Control Register (ref. agenda item B.2).

*Appointment of Director, Internal Audit

The Committee recommended approval of the appointment of Mr. Brian Rozowsky (ref. agenda item B.3).

*Appointment of Manager, Benefits and HRIS

The Committee recommended approval of the appointment of Mr. Raymond Wagner (ref. agenda item B.4).

* Approved as recommended at March 11, 2015 Board of Directors meeting.

*Appointment of Senior Program Manager, Valves, Operations Division

The Committee recommended approval of the appointment of Mr. Steven Considine (ref. agenda item B.5).


*Appointment of Manager, Maintenance, Metro East, Operations Division

The Committee recommended approval of the appointment of Mr. Daniel Keogh (ref. agenda item B.6).

The meeting adjourned at 12:25 p.m.

* Approved as recommended at March 11, 2015 Board of Directors meeting.

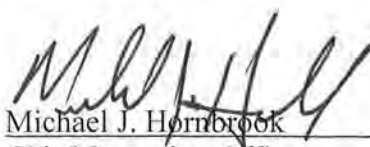
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: April 15, 2015
SUBJECT: Appointment of Project Manager, Quality Assurance

COMMITTEE: Personnel & Compensation

INFORMATION
 VOTE

Carolyn M. Fiore, Deputy Chief Operating Officer
Betsy Reilley, Ph.D., Director, Environmental Quality
Karen Gay-Valente, Director, Human Resources
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the appointment of Mr. Don Martel (Unit 6/Grade 10) to the position of Project Manager, Quality Assurance (Unit 9, Grade 25), at the recommended salary of \$95,364.21, to be effective April 18, 2015.

DISCUSSION:

The position of Project Manager, Quality Assurance, became vacant upon the promotion of the previous incumbent. Organizationally, this position reports to the Senior Program Manager, Quality Assurance.

The Water Quality Unit (within the Environmental Quality Department), located in Southborough, is responsible for overseeing all of MWRA's chemical management practices at Western Operations' water facilities, and also provides support for chemical treatment at MWRA's CSO facilities. This position oversees compliance with various environmental programs and coordinates with the Real Property/Environmental Management Department. Programs include above-ground chemical tanks, underground storage tanks, treatment chemical tracking, required Spill Prevention Countermeasures and Control (SPCC) inspections, Best Management Practice inspections, underground storage tank/vapor recovery inspections, hazardous waste and universal waste storage and pick-ups, and related programs.

Selection Process

This position was posted internally and a total of 12 candidates applied; five applicants were referred by Human Resources as having met the minimum qualifications for the position. The Senior Program Manager of Quality Assurance, a Program Manager from Water Quality, and a representative from the Human Resources Department interviewed all five referred candidates.

Upon completion of the interviews, Mr. Don Martel was selected as the best candidate to fill the position. Mr. Martel possesses extensive knowledge of compliance regulations, petroleum products, and other hazardous chemicals, along with broad experience in emergency response procedures. He has more than 13 years experience working in various positions in water and wastewater operations, and a lengthy military background with the United States Air Force. His latest military position, as Aerial Port Operations Chief (highest enlisted rank in the unit), involved oversight of training, and compliance with Chemical Warfare and Emergency Preparedness Requirements, among other duties.

Mr. Martel began his career with MWRA in 2004 as Instrument Technician in Western Operations. Since that time, Mr. Martel has held other positions of increasing responsibility, which have included: Transmission and Treatment Operator at the Carroll Treatment Plant; Planner Scheduler, developing and tracking Maximo work orders; and most recently, as Security Systems Administrator.

Mr. Martel has significant relevant training and certifications including: Underground Storage Tank A/B certification, Massachusetts Drinking Water Operator Licenses 4T and T3 (both full), Massachusetts Wastewater Operator License, Grade 6, OSHA 40-hour HAZWOPER certification, OPA 90, and numerous others.

Mr. Martel is a highly motivated and self-directed individual with strong organizational skills that allow him to easily and successfully work either independently or as a team member to complete all tasks assigned. He is highly regarded and well respected by his supervisors and peers.

Mr. Martel earned an Associate's Degree in Business Administration from the Community College of the Air Force and an Associate's Degree in Environmental Technology from Springfield Technical Community College.

BUDGET/FISCAL IMPACT:

There are sufficient funds for this position in the FY15 Current Expense Budget. The recommended salary is in accordance with Unit 9's current collective bargaining agreement.

ATTACHMENTS:

- Resume of Don Martel
- Position Description
- Organization Chart

Donald Martel

CIVILIAN EXPERIENCE:

Massachusetts Water Resources Authority; Charlestown, Massachusetts

Security Services Administrator; Chelsea, Massachusetts, 2012-Present

Manage all security issues for the Authority.

- Supervise 47 contract security personnel and their daily duties;
- Manage surveillance and access systems for the Authority;
- Manage all vendor contracts related to security for the Authority;
- Assist and support senior management with security-related confidential issues;
- Prepare reports to management, as required.

Planner / Scheduler; Southborough, Massachusetts, 2007-2012.

Coordinates and schedules resources for timely fabrication, installation, and/or repair of drinking water-related sub systems and facilities.

- Developed and scheduled work orders for both corrective and preventative maintenance;
- Coordinated and scheduled fifteen (15) union work crews to meet operations and engineering priorities.

Instrumentation and Controls Technician / Operator; Marlborough, Massachusetts, 2004-2007.

Operate and monitor disinfection and transmission of numerous drinking water facilities.

- Operated and documented safe and efficient disinfection operation;
- Performed required calibrations and laboratory analysis;
- Performed periodic maintenance, as required.

Town of Hardwick; Hardwick, Massachusetts

Waste Water Plant Superintendent; Hardwick, Massachusetts, 2002-2004.

Manage the operation of two waste water facilities.

- Supervised all facets of plant operations;
- Maintained facilities for efficient operation and regulatory compliance;
- Managed all vendor support contracts;
- Prepare reports to management, regulators, and consumers, as required.

Northeast Utilities; West Springfield, Massachusetts

Laboratory Technician, 1992-2002.

Perform regulated analysis of coal and oil.

- Performed diesel testing for generator usage;
- Prepared analysis reports;

- Followed Good Laboratory Practices and Standard Operating Procedures.

MILITARY EXPERIENCE:

CMSGT (E9) Donald Martel

42d Aerial Port Squadron, Westover ARB, Chicopee, MA

Aerial Port Operations Chief, June 2011 – September 2013 (Retirement)

- Supervised the operation of a unit of 210 personnel;
- Responsible for the safe and efficient loading of military aircraft;
- Responsible for the complete operation of a 16 hour/7 day per week operation;
- Responsible for the management of all medical, training and career development of all unit personnel;
- Oversaw the compliance of all Chemical Warfare and Emergency Preparedness requirements.

Aerial Port Air Freight Superintendent, January 2006 – June 2011

- Responsible to the Operations Chief for the training, discipline and career development of the Ramp, Cargo, Special Handling and Fleet sections comprising 100 members.

Air Cargo Superintendent, January 2004 – January 2006

- Responsible to the Air Freight Superintendent for the training, discipline and career development of the Air cargo section comprising 50 members.

Self Evaluation/Quality Control (SEQC), October 1998 – January 2004

- Directly responsible to the Squadron Commander for the Quality Control of the entire unit;
- Performed audits/inspections to assure the Unit was in compliance to Squadron, Wing and Headquarters standards.

Ramp Supervisor, October 1996 – October 1998

- Responsible to the Ramp Superintendent for the training of a five member Ramp Team;
- Responsible for member evaluations and their career development.

Air Cargo Supervisor, September 1994 – October 1996

- Responsible to the Air Cargo Superintendent for the training of a six member Cargo Team;
- Responsible for member evaluations and their career development.

Air Cargo Team, September 1992 – September 1994

- Member of a six member Air Cargo Team responsible for the cargo documentation for all cargo to be flown on military aircraft;
- Maintained the Mobility Kit for all military deployments.

C141 Combat Aircrew Loadmaster (Active Duty): September 1980 – September 1984

- C141 Combat Loadmaster with 1500 flying hours;
- Responsible for the safe and efficient loading/unloading of military aircraft;
- Responsible for all emergency procedures for passengers;

- Performed airdrop of troops and cargo in combat conditions.

Deployments:

1. **Balad Air Base, Iraq:** Aerial Port Superintendent (E9) September 2009 – January 2010
 - Responsible for 110 deployed members;
 - Ran the Port under rocket and mortar fire with a 99% reliability rate;
 - All members returned safely.
2. **Q-West Air Base, Northern Iraq:** Port Superintendent (E9) January 2007 – May 2007
 - Responsible for 50 deployed members;
 - Ran the Port under rocket and mortar fire with a 100% reliability rate;
 - Served as the Senior Enlisted Advisor for all Air Force personnel while embedded with 5,000 Army personnel;
 - All members returned safely.
3. **Bagram Air Base, Afghanistan:** Port Superintendent (E9) September 2006 – January 2007
 - Responsible for 150 deployed members;
 - Ran the Port under rocket and mortar fire with a 99% reliability rate;
 - All members returned safely.
4. **Qatar Air Base, Qatar:** Port Superintendent (E7-E8) September 2002 – January 2003
 - Responsible for 30 deployed members with a reliability rate of 100%;
 - All members returned safely;
 - Promoted to E8 in the desert.

EDUCATION:

A.A. in Business Administration (2000); Community College of the Air Force; Maxwell AFB, Gunter Annex, Alabama

A.S. in Environmental Technology (1999); Springfield Technical Community College; Springfield, MA

LICENSES/CERTIFICATIONS/BOARDS:

Massachusetts Drinking Water Operators Licenses: D4 (Full) and T3 (Full)

Massachusetts Waste Water Operators License: Grade 6 (OIT)

Massachusetts UST Class A/B Operator Certification

OSHA 40 Hour HAZWOPPER Certification

OSHA 10 Hour Construction Safety Certification

OPA 90 QI Standing

FCC Communication License

Collection System License: Grade II

Commercial Drivers License: Class B

First Aid/CPR Certification

Chairman, Town of Hardwick, Sewer Commission (2011-2013)

REFERENCES ARE AVAILABLE UPON REQUEST.

MWRA
POSITION DESCRIPTION

POSITION: Project Manager, Quality Assurance

PCR#: 5821006

DIVISION: Water Quality Operations

DEPARTMENT: Assurance

BASIC PURPOSE:

Oversees the chemical management practices at MWRA water and CSO treatment facilities and ensures compliance with applicable regulations. Coordinates efforts to minimize risk of water supply contamination, accidental release and worker exposure associated with water treatment chemicals. Oversees environmental permitting and coordinates with Real Property/Environmental Management department for new and current facilities. Oversees and assists in the development of Facility Handbooks, Operations and Maintenance manuals, and training programs for new facilities.

SUPERVISION RECEIVED:

Works under the general supervision of the Senior Program Manager, QA.

SUPERVISION EXERCISED:

Exercises close supervision of consultants, project engineers, and contract employees as needed for assigned projects.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Monitors procurement, vendor selection, delivery procedures, testing, quality assurance, and inventory control of all chemicals used to treat drinking water and wastewater (CSO facilities).
- Researches industry standards, regulatory requirements, and alternative methods for chemical management. Make recommendations and coordinates with vendors to make facility or procedural improvements.
- Develops and updates Standard Operating Procedures for procurement, delivery, testing, quality assurance, and inventory control of all chemicals used to treat drinking water.
- Develops curriculum and training materials to use in training operators on SOPs for chemical management program. Implement ongoing training program and monitor training effectiveness.

- Working with treatment and OSHU staff, coordinates development of facility specific local safety plans. Develops and implements routine performance monitoring and update plans as necessary.
- Participates in startup of new treatment facilities to ensure that environmental, health, and safety procedures are developed to MWRA standards.
- Participates in the development of Standard Operating Procedures and other information for Facility Handbooks.
- Coordinates training programs for new facilities.
- Coordinates permitting with local and state entities (fire dept, DEP) for chemical storage tanks and environmental compliance issues.
- Coordinate environmental compliance actions with Western Operations department including hazardous material storage, SPCC Plans and inspections, UST and Stage II compliance, and hazardous and universal waste removal. Arrange to have vendors perform inspections or other tasks as necessary.
- Assists with other emergency response planning activities as needed.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year undergraduate degree in environmental field required. Graduate degree with focus on risk management preferred; and
- (B) Four (4) to six (6) years experience in the operations and environmental compliance of a large water or wastewater facility, or similar utility ; and
- (C) Knowledge of chemicals, hazardous chemical safety/quality assurance practices, and accidental release prevention planning as attained through four (4) to six (6) years of experience; or
- (D) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of emergency response planning as acquired through Incident Command System training.
- (B) Demonstrated ability in determining compliance of applicable regulations and in working with field operations for treatment facility improvements.

- (C) Ability to develop risk management assessments, emergency response plans, response simulations, and training programs.
- (D) Excellent computer skills; Word, Excel, Access, Power point. Proficiency in accidental release dispersion modeling, preferred.
- (E) Strong organizational, written, and verbal communication skills are required.

SPECIAL REQUIREMENTS:

Grade I Drinking Water treatment operator license or ability to obtain within six (6) months of appointment.

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

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

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

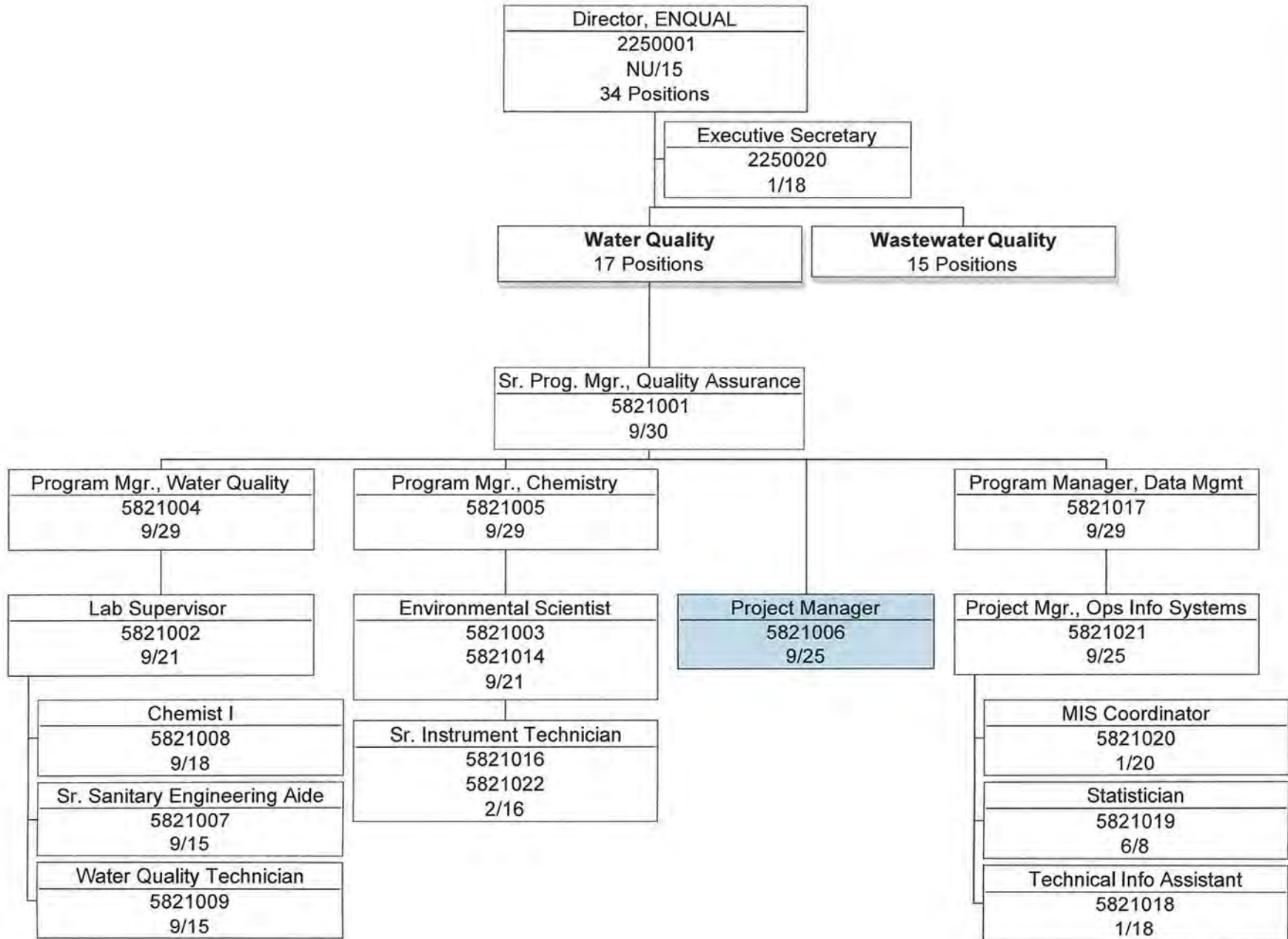
There are no requirements that weight be lifted or force be exerted in the performance of this job. Specific vision abilities required by this job include close vision, and the ability to adjust focus.

WORK ENVIRONMENT:


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

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

Programs, Policy & Planning
Environmental Quality
 April 2015




STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: April 15, 2015
SUBJECT: Appointment of Project Manager
Engineering and Construction Department

COMMITTEE: Personnel & Compensation

 INFORMATION
 X VOTE

Karen Gay-Valente, Director, Human Resources
John P. Vetere, Deputy Chief Operating Officer
A. Navanandan, P.E., Chief Engineer
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the appointment of Mr. Carmine DeMaria, Sr. Engineer (Unit 9/23) to the position of Project Manager in the Engineering and Construction Department (Unit 9/25), at the recommended salary of \$95,364.88, to be effective April 18, 2015.

DISCUSSION:

This Project Manager position in the Engineering and Construction Department became vacant upon the promotion of the previous incumbent. The Project Manger position oversees and coordinates project development from conceptual design through construction contract award for various engineering projects, including modifications, upgrades, or repairs to MWRA water and wastewater facilities, pipeline rehabilitation and replacement, and other water and wastewater engineering projects as assigned. In addition, the position is responsible for project scheduling and prioritization, CIP budget preparation and projections, supervision of staff engineers, and close coordination with MWRA's Metropolitan and Western Operations communities and other external agencies.

Selection Process

This Project Manager position was posted internally and externally. A total of nine candidates applied, three external and six internal. Of the nine who applied, six candidates, including one external candidate, were determined to have met the minimum qualifications for the position. All six qualified candidates were interviewed by a committee that included the Assistant Director of Engineering, a Senior Program Manager from Engineering, a Program Manager from Engineering, and a representative from MWRA's Affirmative Action and Compliance Unit. Upon completion of the interviews, Mr. Carmine DeMaria was selected as the best candidate to fill this position.

Mr. DeMaria has 20 years of professional engineering experience at MWRA working on water and wastewater engineering and security-related projects. He has a thorough knowledge of engineering design and project management principles as demonstrated by his experience working on in-house pipeline designs, such as Section 53 Revere Water Main, Section 27 Water Main, Section 93A Force Main Replacement, Section 95/100 Water Main, and Warren Cottage Water Main, and management of several security improvements contracts, including upgrading the main entrances at the Deer Island Treatment Plant, MWRA's Chelsea Facility, and the John J. Carroll Water Treatment Plant, as well as work on the Quabbin Power and Security contract.

Mr. DeMaria has accumulated a thorough knowledge of engineering, planning, and design practices and has successfully supervised and provided technical support to staff. He is well respected by his managers and peers.

Mr. DeMaria earned an Associate Degree in Civil Engineering at the Wentworth Institute of Technology and a Bachelor of Science Degree in Civil Engineering from Merrimack College.

BUDGET/FISCAL IMPACT:

There are sufficient funds for this position in the FY15 CEB. The recommended salary is in accordance with the Unit 9's current collective bargaining agreement.

ATTACHMENTS:

Resume of Carmine DeMaria
Position Description
Organization Chart

CARMINE DE MARIA

PROFESSIONAL EXPERIENCE:

2008 (August) - Present *Project Engineer-Security*, MASSACHUSETTS WATER RESOURCES AUTHORITY

- Manages all phases of planning, permitting, design, and construction administration of Security Improvement Projects.
- Supervises Professional Engineering work required for the preparation of reports and contract plans and specifications for Security Improvement Projects.
- Manages all phases of consultant selection for professional engineering consultant Security Contracts.
- Performs Security Vulnerability Assessments for MWRA Water and Sewer Facilities, resulting in Security Improvement Projects.
- Performs Security related planning and design leading into the development of reports and contract documents for Security up-grades at water and wastewater facilities.
- Manages and Supervises the consultant security contract work, relating to the development of scope of services, plans and specifications, cost estimates, work schedules, technical review of consultant work, negotiations and preparation of contract award recommendations.
- Coordinates and reviews the design scopes and construction plan and specifications of all future water and sewer improvement contracts ensuring that all MWRA Security needs and standards are met prior to bidding.
- Provides construction administration services during construction, such as shop drawing submittals review, change order reviews, contract document clarification and interpretations, monthly meeting participation, receiving and reviewing redline drawings, record drawings and detail records and any other supportive service for the Construction Department.
- Prepares Capital and Current Expense Budgets for Security Improvement Projects.
- Directs and supervises both the contractor as well as MWRA staff during the construction of Security Improvements Project.
- Provides technical information and assistance during the design and construction of Security Improvements Contracts
- Coordinates with and addresses communities, external public interest groups, government agencies, and other MWRA departments regarding Security Improvement Projects.
- Drafted documents securing grant money.
- Working on the Security Future Needs Study.

1997- 2008 (July) *Project Engineer*, MASSACHUSETTS WATER RESOURCES AUTHORITY

- Worked on design and engineering services during construction for large water and sewer rehabilitation projects, including project development, scheduling, plan and specification preparation, community meetings, cost estimates, bid review, and management of consultants on a Task Order Basis.
- Assisted in the development of final record plans and contract closeouts.
- Provided manhole and pipeline evaluations.
- Conducted hydraulic modeling and analysis for planned shutdowns.
- Assisted in the preparation of Operation Plans for CIP Construction and FOD activities, both on the water and sewer side.
- Worked with GIS, DISC, and Surveying staff to develop mapping information used for the preparation of Record Contract Documents.
- Provided engineering support for in-house and CIP construction projects, including permitting and engineering calculations, such as pipeline line restraint.

- Coordinated procurement of contractors and assists in the managing implementation of the related work.
- Involved in the coordination and implementation of necessary FOD support actions (valve maintenance and operation, meter rehabilitation, pipeline shut downs, dewatering and disinfection), coordination of start-up activities and record submittals.
- Acted as a liaison to MWRA communities during design investigation activities that affect water and sewer services during local activities.
- Assisted in providing pertinent field information used in updating and maintaining FOD and GIS databases.

1996-1997 ***Staff Engineer, MASSACHUSETTS WATER RESOURCES AUTHORITY***

- Assisted in the design and the management of various pipeline projects from conceptual planning through construction contract award.
- Monitored, with supervision, the work of engineering consultants including the preparation of engineering scope of services required.
- Provided oversight of the quality of engineering work and compliance with schedules, budgets and MWRA design standards.
- Prepared detailed design sketches, project plans, specifications, engineering reports, cost estimates and schedules.
- Provided construction shop drawing review and inspected project sites to assure compliance with established quality control criteria and safety.

1995-1996 ***Contract Engineer, MASSACHUSETTS WATER RESOURCES AUTHORITY***

- Conducted utility investigations.
- Coordinated project planning and design with Federal, State, municipal agencies and with various MWRA departments.
- Performed civil / hydraulic designs and calculations including hydraulic modeling.

1994-1995 ***Intern/Co-op, MASSACHUSETTS WATER RESOURCES AUTHORITY***

- Prepared and scheduled valve replacements.
- Revised existing piping schematics.
- Developed and maintained the Authority's valve database.
- Prepared pipe system profiles, dewatering plans, including valve shutdowns and meter impacts.

1993-1994 ***Survey Transit Operator, MERIDIAN ENGINEERING, Peabody, MA***

- Performed topographic and mortgage inspection surveys.
- Certified foundations and septic systems.
- Staked out property lines, building corners, and parking facilities.
- Produced topographic maps using data collectors.

1990-1993 ***Contract Const. Inspector, BOSTON WATER & SEWER COMMISSION, Boston, MA***

- Supervised the installation of hydrants, water mains and valves.
- Created final water and sewer as-built drawings.
- Developed project cost estimates and investigated change order claims.
- Prepared federal, state and local permits for construction purposes.
- Conducted preliminary and final inspections of job sites.

EDUCATION:

MERRIMACK COLLEGE, North Andover, MA
Bachelor of Science in Civil Engineering - May, 1994.

WENTWORTH INSTITUTE OF TECHNOLOGY, Boston, MA
Associate in Civil Engineering Technology - May, 1990.

WATER PROJECTS:

- NHS Revere Pipeline Improvements Section 53, Contract 5177
- Warren Cottage Line Rehabilitation Project, Contract 6285
- Water Transmission Mains Section 95 and 100, Contract 6108
- NHS-Section 27 Improvements, Contract 6333
- Section 26 Route 107 Lynn-Leak Repair

SEWER PROJECTS:

- Section 160 Rehabilitation Mystic Valley Sewer, Contract 6843
- Somerville Sewer Project, Contract S389
- On-Site Treatment at Shaft 4/Lonergan Intake/Nash Hill, Contract A418
- South System Relief Project, Contract 6801
- Section 156 Rehabilitation Metropolitan Sewer, Contract 7393
- East Boston Branch Sewer Relief Project Pipe Bursting, Contract 6841

SECURITY PROJECTS:

- Miscellaneous Fencing, Contract 6760 V
- Security Improvements at Various Facilities, Contract 6760 W
- Deer Island Plant Main Entrance Security Improvements, 6760 P
- Quabbin, Power, Communication and Security, Contract 7461
- Chelsea Facility Main Entrance Security Improvements
- Carroll Water Treatment Plant Entrance Security Improvements

SECURITY TRAINING:

- Homeland Security Detection Training for Critical Infrastructure
- 40- Hour Hazardous Waste Site Worker Basic Health and Safety Training

**MANAGEMENT
SKILLS TRAINING:**

- Presentation Skills
- Problem Solving
- Public Speaking
- Project Management Training

COMPUTER SKILLS:

- Excel, Word, Power Point, ArcMap

**MWRA
POSITION DESCRIPTION**

POSITION: Project Manager
DIVISION: Operations
DEPARTMENT: Engineering and Construction

BASIC PURPOSE:

Manages professional engineering and design projects related to the rehabilitation and capital improvement of waterworks and wastewater facilities and infrastructure.

SUPERVISION RECEIVED:

Works under the general supervision of a Program Manager or Sr. Program Manager / Engineering and Construction.

SUPERVISION EXERCISED:

Exercises close supervision over a small staff of professional employees.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Manages the planning and design phases of assigned rehabilitation and capital engineering projects including detailed plans, work schedules, technical assistance, progress and evaluation.
- Supervises and performs professional engineering work of substantial difficulty and importance, including the preparation of reports and contract plans and specifications, requiring the exercising of independent engineering judgment.
- Manages all phases of consultant selection and supervision of professional engineering consultant contracts including the development of scope of services, plans and specifications, costs estimates, work schedules, negotiations and preparation of contracts award recommendations. Ensures compliance with contract budgets, schedules, and terms.
- Supervises and manages junior professional staff, including assignment of tasks and evaluation of performance. Provides technical assistance to staff in the development and performance of projects including designs for waterworks and wastewater projects.
- Initiates new projects and prepares capital or current expense budget requests as required.

- Coordinates projects with communities, external public interest groups, government agencies, and other MWRA departments. Provides technical information and assistance. May address professional and community groups and initiate outreach projects.
- Drafts documents to secure grants and permits from various federal, state and local agencies.
- Provides construction administration services during construction, including review of shop drawings, review of proposed change orders, provide interpretations and clarifications on contract documents, attend monthly progress meetings, receive and review draft redlined drawings, record drawings, and detail records and all other services necessary to support the Construction Department.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Completion of a four (4) year college program in civil engineering or related field; and
- (B) Five (5) to seven (7) years experience in facilities planning, design, construction, maintenance and operations of waterworks and wastewater systems and facilities of which two (2) years must be in a supervisory capacity; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated ability to work effectively as part of an engineering team and also to function independently, with minimal supervision.
- (B) Knowledge of local, state and federal regulations as applicable to the planning, design and construction of pump stations, interceptors, and water lines.
- (C) Knowledge of Massachusetts bidding laws including M.G.L. Chapter 30 and Chapter 149 construction bidding regulations.
- (D) Familiarity with computer software packages such as Word and Excel
- (E) Excellent interpersonal, managerial, oral and written communication skills are required.

SPECIAL REQUIREMENTS:

Registered Professional Engineer in Massachusetts is preferred.

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

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

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

The employee must occasionally lift and/or move up to 10 pounds. No specific visual abilities are required by this job.

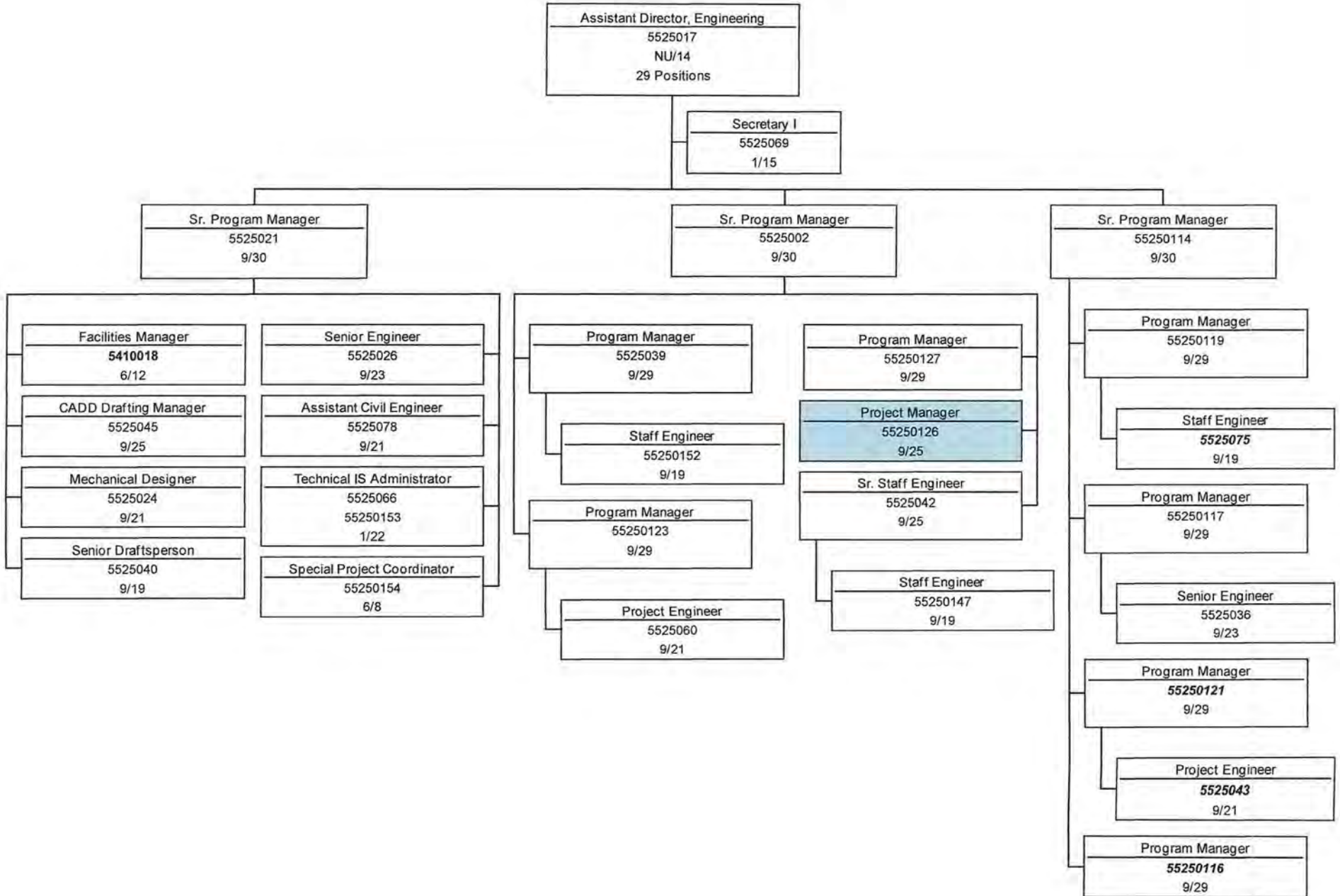
WORK ENVIRONMENT:

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

While performing the duties of this job, the employee is not exposed to any unusual environmental conditions.

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

Engineering & Construction
Engineering
 April 2015



STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: April 15, 2015
SUBJECT: April PCR Amendments



COMMITTEE: Personnel and Compensation

 INFORMATION
 X VOTE


Karen Gay-Valente, Director of Human Resources
Joan C. Carroll, Manager Compensation
Preparer/Title


Michele S. Gillen
Director, Administration

RECOMMENDATION:

To approve an amendment to the Position Control Register (PCR) listed on the attached chart.

DISCUSSION:

The Position Control Register lists all positions of the Authority, filled and vacant. It is updated as changes occur and it is published at the end of each month. Any changes to positions during the year are proposed as amendments to the PCR. All amendments to the PCR must be approved by the Personnel Committee of the Board of Directors. All amendments resulting in an upgrade of a position by more than one grade level, and/or an amendment which creates a position increasing annual cost by \$10,000 or more, must be approved by the Board of Directors after review by the Personnel Committee.

April PCR Amendment

There is one PCR amendment related to changes with instrumentation at the Carroll Water Treatment Plant (CWTP). Due to the complex componentry at the JCWTP, more advanced trouble shooting to maintain and repair intricate equipment is required. Additionally as the instruments at the plant need replacement they are being upgraded with advanced controls which require a higher level of skill to operate and maintain.

The amendment is:

1. Title and grade change to a vacant position in the Treatment and Transmission Department, Instrument Technician to a Senior Instrument Technician.

This amendment requires approval by the Personnel and Compensation Committee.

BUDGET/FISCAL IMPACT:

The annualized budget impact of this PCR amendment is \$3,566. Staff will ensure that any cost increase associated with this PCR amendment will not result in spending over the approved FY15 Wages and Salaries budget.

ATTACHMENTS:
New/Old Job Descriptions

MASSACHUSETTS WATER RESOURCES AUTHORITY
 POSITION CONTROL REGISTER AMENDMENTS
 FISCAL YEAR 2015

PCR AMENDMENTS REQUIRING PERSONNEL & COMPENSATION COMMITTEE APPROVAL - April 15, 2015

Number	Current PCR #	V/F	Type	Current Title	UN	GR	Amended Title	UN	GR	Current/Budget Salary	Estimated New Salary	Estimated Annual \$ Impact	Reason For Amendment
P20	Operations Treatment & Transmissions 3392057	V	T,G	Instrument Tech	2	15	Sr Instrument Tech	2	16	\$63,355	\$66,921 - \$66,921	\$3,566 - \$3,566	To address the need for a higher operations and maintenance diagnostic skill level at CWTP
PERSONNEL & COMP COMMITTEE TOTAL=					1		TOTAL:					\$3,566 - \$3,566	

PCR AMENDMENTS REQUIRING BOARD APPROVAL- April 2015

BOARD TOTAL =	0	SUBTOTAL:	\$0 - \$0
GRAND TOTAL =	1	TOTAL ESTIMATED COSTS:	\$3,566 - \$3,566



MASSACHUSETTS WATER RESOURCES AUTHORITY

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

Frederick A. Laskey
Executive Director

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

Chair: M. Beaton
Vice-Chair: J. Carroll
Secretary: J. Foti
Board Members:
A. Blackmon
K. Cotter
P. Flanagan
A. Pappastergion
H. Vitale
J. Walsh
J. Wolowicz

BOARD OF DIRECTORS' MEETING

to be held on

Wednesday, April 15, 2015

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

Time: 1:00 p.m.

AGENDA

- I. **APPROVAL OF MINUTES**
- II. **REPORT OF THE CHAIR**
- III. **REPORT OF THE EXECUTIVE DIRECTOR**
- IV. **BOARD ACTIONS**
 - A. **Approvals**
 1. Establishment of an OPEB Trust (ref. AF&A B.1)
 2. Amendments to General Bond Resolution (ref. AF&A B.2)
 3. Approval of Memorandum of Understanding between the Massachusetts Department of Fish and Game and the Massachusetts Water Resources Authority for a Public Access Fishing Pier at Deer Island (ref. WW B.1)
 4. Memorandum of Agreement between Massachusetts Water Resources Authority and the City of Somerville - Contract 7335, Section 4 Webster Avenue Pipe and Utility Bridge Replacement (ref. W B.1)
 5. Appointment of Project Manager, Quality Assurance (ref. P&C A.1)
 6. Appointment of Project Manager, Engineering & Construction Department (ref. P&C A.2)
 7. PCR Amendments – April 2015 (ref. P&C A.3)

B. Contract Awards

1. Integrated Financial, Procurement and Human Resources/Payroll Management System Maintenance and Support: Infor Global Solutions (ref. AF&A C.1)
2. Technical Assistance Consulting Services, Hazardous Materials Assessment: Geosphere Environmental Management, Inc., Contract 600TA; and Green Seal Environmental, Inc., Contract 601TA (ref. AF&A C.2)
3. Mystic River Streamgages - Joint Funding Agreement: U.S. Geologic Survey, Contract OP-281 (ref. WW C.1)
4. Section 4 Webster Avenue Pipe and Utility Bridge Replacement: NEL Corporation, Contract 7335 (ref. W C.1)
5. Diver Assisted Suction Harvesting of Invasive Plants at Stillwater Basin, Wachusett Reservoir: AE Commercial Diving Services, WRA-1559 (ref. W C.2)

C. Contract Amendments/Change Orders

1. Nut Island Headworks Electrical and Conveyors Improvements: Malcolm Pirnie, Inc., Contract 7312, Amendment 4 (ref. WW C.1)
2. Spot Pond Water Storage Facility Design/Build Project: Walsh Construction Co., Contract 6457, Change Order 14 (ref. W D.1)
3. Preliminary Design and Owner's Representative Services for Spot Pond Storage Facility: Camp Dresser & McKee, Inc., Contract 7233, Amendment 2 (ref. W D.2)
4. Northern Intermediate High, West Street Transmission Main – Reading: P. Caliacco Corp., Contract 7066, Change Order 4 (ref. W D.3)

V. CORRESPONDENCE TO THE BOARD

VI. OTHER BUSINESS

VII. EXECUTIVE SESSION

A. Real Estate:

1. MWRA Contract 7335 – Section 4 Webster Ave Pipe and Utility Bridge Replacement, Somerville: Approval of Order of Taking

B. Litigation

1. Court Settlement - Worker's Compensation Lien Recovery

VIII. ADJOURNMENT

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Board of Directors

March 11, 2015

A meeting of the Board of Directors of the Massachusetts Water Resources Authority was held on March 11, 2015 at the Authority headquarters in Charlestown. Chairman Beaton presided. Present from the Board were Messrs. Blackmon, Carroll, Flanagan, Foti, Pappastergion, Vitale and Walsh. Ms. Wolowicz and Mr. Cotter were absent. Among those present from the Authority staff were Frederick Laskey, Executive Director, Steven Remsberg, General Counsel, Michael Hornbrook, Chief Operating Officer, Thomas Durkin, Director of Finance, Michele Gillen, Director of Administration, John Gregoire, Program Manager, Reservoir Operations, and Bonnie Hale, Assistant Secretary. The meeting was called to order at 1:15 p.m.

APPROVAL OF MINUTES

Upon a motion duly made and seconded, it was

Voted to approve the minutes of the Board of Directors' meeting of January 14, 2015, as presented and filed with the records of the meeting.

REPORT OF THE CHAIR

Chairman Beaton congratulated Board member Paul Flanagan from Winthrop on his reappointment for a four-year term and welcomed new Board member Austin Blackmon from Boston.

REPORT OF THE EXECUTIVE DIRECTOR

Mr. Laskey reported on various matters, including: thanks to the many MWRA staff members who worked tirelessly to remove snow during the record-breaking winter; noted that Gov. Baker had stated that it was not his intent to extend the state early retirement program beyond the Executive branch; and recognized, thanked and wished good luck to retiring Internal Audit Director John Mahoney, who had performed his job very effectively and retrieved millions of dollars for the MWRA over his 27 years of service.

BOARD ACTIONS

APPROVALS

Transmittal of Proposed FY16 Current Expense Budget

Upon a motion duly made and seconded, it was

Voted to approve transmittal of the FY16 Proposed Current Expense Budget to the MWRA Advisory Board for its 60 day review and comment period.

Approval of Investment Policy

Upon a motion duly made and seconded, it was

Voted to adopt the amendments to the Investment Policy in compliance with the State Finance and Governance Board's regulations (976 CMR 2.03), substantially in the form presented and filed with the records of the meeting.

Final CSO Annual Progress Report for 2014

Upon a motion duly made and seconded, it was

Voted to authorize staff to submit the Combined Sewer Overflow Annual Progress Report 2014, in the form presented and filed with the records of the meeting, to the Federal District Court by March 15, 2015, in compliance with Schedule Seven of the Boston Harbor Case.

2015 Affirmative Action Plan

Upon a motion duly made and seconded, it was

Voted to approve the Massachusetts Water Resources Authority's Affirmative Action Plan effective for a one-year period from January 1, 2015 through December 31, 2015.

PCR Amendments – March 2015

Upon a motion duly made and seconded, it was

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

Appointment of Director, Internal Audit

Upon a motion duly made and seconded, it was

Voted to approve the Executive Director's recommendation to appoint Mr. Brian Rozowsky to the position of Director, Internal Audit, (Non-Union Grade 16), at an annual salary of \$122,000, to be effective on the date designated by the Executive Director.

Appointment of Manager, Benefits and HRIS

Upon a motion duly made and seconded, it was

Voted to approve the Executive Director's recommendation to appoint Mr. Raymond Wagner to the position of Manager, Benefits & HRIS, Human Resources (Non-Union Grade 14), at an annual salary of \$107,633.00, to be effective on the date designated by the Executive Director.

Appointment of Senior Program Manager, Valves, Operations Division

Upon a motion duly made and seconded, it was

Voted to approve the Executive Director's recommendation to appoint Mr. Steven Considine (Unit 2, Grade 21) to the position of Senior Program Manager, Valves (Unit 9, Grade 30) at an annual salary of \$89,999.72, effective March 14, 2015.

Appointment of Manager, Maintenance, Metro East, Operations Division

Upon a motion duly made and seconded, it was

Voted to approve the Executive Director's recommendation to appoint Mr. Daniel P. Keough (Unit 9 Grade 29) to the position of Manager, Maintenance, (Non-Union, Grade 14), at an annual salary of \$118,000, effective on March 14, 2015.

CONTRACT AWARDS

Adams Street Grade Crossing and Cattlepass Bridge: Contract FRR29, LM Heavy Civil Construction, LLC

Upon a motion duly made and seconded, it was

Voted to approve the award of Contract FRR29, Fore River Railroad Adams Street Grade Crossing and Cattlepass Bridge Replacement, to the lowest responsible and eligible bidder, LM Heavy Civil Construction, LLC, and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in the bid amount of \$1,467,000, with a contract term of 555 calendar days from the Notice to Proceed.

Modeling Massachusetts Bay Water Quality 2014-2016: University of Massachusetts/Dartmouth, Contract OP-272

Upon a motion duly made and seconded, it was

Voted to approve the award of Contract OP-272, a cooperative research contract with the University of Massachusetts/Dartmouth, to conduct computer

modeling of water quality in Massachusetts Bay, and authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in the amount of \$217,115 (to be matched by \$140,000 from the University of Massachusetts at Dartmouth), for a contract term of three years from the Notice to Proceed.

Purchase Order for Three Jet/Sewer Cleaning Machines: Boston Freightliner, Inc., Bid WRA-3971

Upon a motion duly made and seconded, it was

Voted to approve the award of a purchase order for three vector jet/sewer cleaning machines to the lowest eligible and responsive bidder under bid WRA-3971, Boston Freightliner, Inc., and authorize the Executive Director to execute and deliver said purchase order in the bid amount of \$1,050,832.

Community Leak Detection Task Order Services: Liston Utility Services, Contract W298; and Wachs Water Services, Contract W298A

Upon a motion duly made and seconded, it was

Voted to approve the recommendation of the Consultant Selection Committee to select Liston Utility Services and Wachs Valve and Hydrant Services, LLC, doing business as Wachs Water Services, to provide leak detection task order services for MWRA's member communities, and to authorize the Executive Director, on behalf of the Authority, to execute and deliver Contract W298 with Liston Utility Services and Contract W298A with Wachs Valve and Hydrant Services, LLC, doing business as Wachs Water Services, each for an amount not to exceed \$500,000 and a term of three years, from April 1, 2015 through March 31, 2018.

CONTRACT AMENDMENTS/CHANGE ORDERS

Pump, Gear Box, and Diesel Engine Upgrade, Prison Point and Cottage Farm CSO Facilities: IPC Lydon, LLC, Contract 7452, Change Order 7

Upon a motion duly made and seconded, it was

Voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order 7 to increase the amount of Contract 7452 with IPC Lydon, LLC, Pump, Gear Box, and Diesel Upgrade, Prison Point and Cottage Farm CSO Facilities, in an amount not to exceed \$115,000, with no increase in contract term; and, further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 7452 in an amount not to exceed the aggregate of \$250,000 in accordance with the Management Policies and Procedures of the Board of Directors.

Operation and Maintenance of Sludge Processing Facility - Fore River Pelletizing Plant: New England Fertilizer Co., Contract S345, Amendment 1

Upon a motion duly made and seconded, it was

Voted to authorize the Executive Director to approve Amendment 1 to extend the term of Contract S345 with New England Fertilizer Company, Operation and Maintenance of the Fore River Pelletizing Plant, for an additional five years, from January 1, 2016 through December 31, 2020 and authorize expenditures for that additional term in the amount of \$63,260,721 plus escalation, excess quantity charges, and a 15% design and administration payment for capital improvement projects entered into by MWRA.

REPORT OF THE EXECUTIVE DIRECTOR (cont'd.)

Presentation: MWRA's Dam Safety Program

Staff provided a detailed presentation on MWRA's Dam Safety Program, 2005 – 2015 (materials on file with the records of the meeting).

EXECUTIVE SESSION

It was moved to enter executive session to discuss litigation.

Upon a motion duly made and seconded, it was, upon a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Blackmon		
Carroll		
Flanagan		
Foti		
Pappastergion		
Vitale		
Walsh		
Beaton		

Voted to enter executive session for the purpose of discussing strategy with respect to litigation, in that such discussion in open session may have a detrimental effect on the litigating position of the Authority.

It was stated that the meeting would return to open session solely for the consideration of adjournment.

* * * *

EXECUTIVE SESSION

* * * *

The meeting returned to open session at 2:00 p.m. and adjourned.