Frederick A. Laskey **Executive Director**

MASSACHUSETTS WATER RESOURCES AUTHORITY

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

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REVISED

ADMINISTRATION, FINANCE & AUDIT COMMITTEE MEETING

to be held on

Chair: J. Foti

J. Carroll

K. Cotter A. Pappastergion

B. Swett J. Walsh

Vice-Chair: J. Barrera Committee Members:

Location:

Wednesday, January 16, 2013

100 First Avenue, 2nd Floor Charlestown Navy Yard

Boston, MA 02129

Time:

10:00 a.m.

AGENDA

A. Information

- 1. Delegated Authority Report - December 2012
- 2. FY13 Financial Update and Summary as of December 2012
- 3. PowerPoint Presentation on MWRA's Planning Estimates Assumptions

B. **Approvals**

- 1. Approval of the Sixty-Fifth Supplemental Resolution
- 2. Authorization to Surplus Waban Hill Reservoir, Newton
- 3. Authorization to Acquire Land in Weston

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Administration, Finance and Audit Committee

December 12, 2012

A meeting of the Administration, Finance and Audit Committee was held on December 12, 2012 at the Authority headquarters in Charlestown. Chairman Foti presided. Present from the Board were Messrs. Barrera, Carroll, Flanagan, Mannering, Pappastergion and Walsh; Mr. Swett joined the meeting in progress. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Rachel Madden, Mike Hornbrook, Michele Gillen, Marianne Connolly, Pam Heidell, and Bonnie Hale. The meeting was called to order at 10:30 a.m.

<u>Information</u>

Delegated Authority Report - November 2012

There was question and answer on the vehicle purchases and the MWRA vehicle replacement policy.

State Ethics Commission On-Line Training Programs

Staff reviewed the online training that must be completed by 4/15/13 and requested that Board members forward a copy of their completion certificates to Bonnie Hale.

(Mr. Swett joined the meeting.)

FY13 Financial Update and Summary as of November 2012

Staff summarized the monthly financial update.

Approvals

*Transmittal of the Proposed Fiscal Year 2014 Capital Improvement Program to MWRA Advisory Board

Staff gave a presentation on the proposed FY14 CIP and there was general discussion and question and answer. The Committee recommended approval of transmitting the CIP to the Advisory Board for its 60-day review and comment period (ref. agenda item B.1).

^{*} Approved as recommended at December 12, 2012 Board of Directors meeting.

*2012 Legislative Summary and Upcoming Agenda for 2013-2014 Session

The information in the staff summary was reviewed and discussed. Mr. Mannering raised the long-standing issue of the Town of Clinton receiving free wastewater treatment and asked staff to continue to work on rectifying that. The Committee recommended approval of supporting the establishment of MWRA Rate Relief as the top legislative priority for the upcoming session and support the re-filed bills referenced in the staff summary (ref. agenda item B.2).

Information (cont'd.)

Draft Alternative Water Assessment Scenario and Estimated Cost of Water

Staff reported on this additional information item which came about in conjunction with the potential water system expansion opportunities, specifically regarding the Tri-Town communities. Budget staff developed an Alternative Scenario for water assessment projections for the next several years based on a series of assumptions mostly based on prior years' favorable spending and lower capital improvement projections. Two charts were handed out (and are on file with the records of the meeting.)

The meeting adjourned at 11:50 a.m.

^{*} Approved as recommended at December 12, 2012 Board of Directors meeting.

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

January 16, 2013

SUBJECT:

Delegated Authority Report – December 2012

COMMITTEE: Administration, Finance & Audit

X INFORMATION

VOT

Rachel C. Madden

Barbie Aylward, Administrator
Frank Renda, Data & Information Coordinator
Preparer/Title

Director, Administration & Finance

Michele Gillen
Deputy Director, Administration &

Finance

RECOMMENDATION:

For information only. Attached is a listing of actions taken by the Executive Director under delegated authority for the period December 1 through December 31, 2012.

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 DECEMBER 1 - 31, 2012

DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT	AMENDMENT/CO	COMPANY	FINANCIAL IMP/
12/07/12	NORTH MAIN PUMP STATION MOTOR CONTROL CENTER REPLACEMENT DEER ISLAND TREATMENT PLANT FURNISH AND INSTALL A 16-FOOT MOTOR CONTROL CENTER IN LIEU OF CONTRACT-SPECIFIED 22-FOOT MCC; EXTEND CONTRACT TERM BY 105 CALENDAR DAYS FROM JANUARY 3, 2013 TO APRIL 19, 2013	6972	1	J.F WHITE CONTRACTING COMPANY	(\$18,684.74)
12/07/12	DAM REPAIRS - SUDBURY, WACHUSETT OPEN CHANNEL LOWER, CHESTNUT HILL, WESTON AND FOSS RESERVOIR DAMS DECREASE ESTIMATED QUANTITIES TO REFLECT ACTUALS USED FOR CEMENT AND ASSOCIATED DRILL HOLES FOR MASONRY FACE PRESSURE GROUTING AT WACHUSETT OPEN CHANNEL LOWER DAM AND FOSS RESERVOIR DAM GATEHOUSE;	7194	9	T. FORD COMPANY, INC.	(\$66,410.00)
12/07/12	CLINTON AERATION EFFICIENCY IMPROVEMENT CLINTON WASTEWATER TREATMENT PLANT RELOCATE AND RESIZE TWO NEW DUCT BANKS AND ASSOCIATED WIRING; REMOVE AND REINSTALL AN EXISTING LIGHT POLE AT A REVISED LOCATION	7278	5	R.H. WHITE CONSTRUCTION CO., INC.	\$54,791.00
12/19/12	PRIMARY AND SECONDARY CLARIFIER W3H FLUSHING SYSTEM DEER ISLAND TREATMENT PLANT FURNISH AND INSTALL 34 THREE-INCH, FLANGED, UNION-BONNET, RISING STEAM, SOLID-WEDGE GATES VALVES WITH 316 STAINLESS STEEL STERNS IN LIEU OF CONTRACT-SPECIFIED THREE-INCH THREADED GATE VALVES	7374	1	DELTA CONTROL ENGINEERS, INC. d/b/a/ HARDING & SMITH	\$30,000.00

PURCHASING DELEGATED AUTHORITY ITEMS - DECEMBER 1 - 31, 2012

DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT #	AMENDMENT	COMPANY	FINANCIAL IMPACT
12/07/12	PREVENTIVE MAINTENANCE SERVICE AWARD OF A THREE-YEAR PURCHASE ORDER CONTRACT FOR PREVENTIVE MAINTENANCE OF THE PURGE AND TRAP INSTRUMENTS AT THE CENTRAL LABORATORY AT THE DEER ISLAND TREATMENT PLANT	WRA-3472		TELEDYNE TEKMAR, INC	\$35,264.24
12/07/12	INSTRUMENT MAINTENANCE AWARD OF A ONE-YEAR SOLE-SOURCE PURCHASE ORDER FOR MAINTENANCE OF FIVE METALS INSTRUMENTS AT THE CENTRAL LABORATORY AT THE DEER ISLAND TREATMENT PLANT			PERKIN ELMER, INC	\$43,403.56
12/07/12	REPLACEMENT ELECTRIC BURDEN CARRIERS AWARD OF A PURCHASE ORDER, TO THE LOWEST RESPONSIVE BIDDER, FOR TEN ELECTRIC BURDEN CARRIERS FOR THE DEER ISLAND TREATMENT PLANT, AS PART OF A MULTI-YEAR PROCESS SYSTEMATICALLY REPLACING THE ELECTRIC BURDEN CARRIERS IN THE WORST CONDITION AT A RATE OF 10 PER YEAR	WRA-3546		NORTHLAND INDUSTRIAL TRUCK COMPANY, INC	\$104,600.00
12/07/12	CRUSHED STONE AND SUB BASE (STATE MIX) AWARD OF TWO SEPARATE TWO-YEAR PURCHASE ORDER CONTRACTS, TO THE LOWEST RESPONSIVE BIDDERS, FOR THE SUPPLY AND DELIVERY OF 3/4-INCH CRUSHED STONE TO S.M. LORUSSO, AND THE SUPPLY AND DELIVERY OF SUB BASE (STATE MIX) TO NORTHGATE RECYCLING, BOTH PRODUCTS ARE DELIVERED ON AN AS-NEEDED BASIS	WRA-3547		NORTHGATE RECYCLING, INC S.M. LORUSSO	\$47,000.00 \$73,000.00
12/12/12	RENTAL OF FLOW METER INSTRUMENTS AWARD OF A PURCHASE ORDER, TO THE LOWEST RESPONSIVE BIDDER, FOR A TWO-MONTH RENTAL OF FLOW METER INSTRUMENTS TO BE USED TO CORRECTLY BALANCE THE HOT PROCESS WATER SYSTEM WHICH MAINTAINS SUFFICIENT SLUDGE TEMPERATURES IN THE DIGESTERS	WRA-3549Q		CARL LUEDERS & COMPANY, INC	\$31,500.00
12/19/12	TRASH REMOVAL SERVICES AWARD OF A THREE-YEAR PURCHASE ORDER CONTRACT, TO THE LOWEST RESPONSIVE BIDDER, FOR TRASH REMOVAL SERVICES AT THE DEER ISLAND TREATMENT PLANT	WRA-3542		JET-A-WAY, INC	\$121,778.24
12/19/12	ANALYTICAL TESTING AWARD OF A THREE-YEAR PURCHASE ORDER CONTRACT, TO THE LOWEST REPSONSIVE BIDDER, FOR EPA REQUIRED ANALYTICAL TESTING UNDER THE UNREGULATED CONTAMINANT MONITORING RULE 3	WRA-3529		ANALYTICAL LABORATORY SERVICES, INC	\$155,934.00

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

January 16, 2013

SUBJECT:

FY13 Financial Update and Summary

COMMITTEE: Administration, Finance & Audit

X INFORMATION

VOTE

Kathy Soni, Budget Director

David Whelan, Budget Manager

Preparer/Title

Director, Administration and Finance

RECOMMENDATION:

For information only. This staff summary provides the financial update and variance highlights through December 2012.

DISCUSSION:

As part of MWRA's multi-year rates management strategy, the Authority is continuing the practice of setting aside favorable Capital Finance variances into the Defeasance Account with the intention of using these funds to defease debt and provide rate relief in future years. As such, in December, \$837,000 was transferred to the Defeasance Account which brought the year-todate balance to \$6.2 million. This variance is the result of the continued low variable rate environment. As we move into the second half of FY13, staff have begun to identify candidates for a defeasance and evaluate options to optimize debt service savings in the most challenging upcoming fiscal years.

Without the transfer of the \$6.2 million in debt service savings to the Defeasance Account, the total year-to-date budgetary variance through December would have been \$9.7 million.

Total Expenses were lower than budget by \$3.1 million or 1.0% and total Revenues were higher than budgeted by \$325,000 or 0.1%.

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

- Direct Expenses being lower than budget by \$2.9 million for wages and salaries, other services, fringe benefits, utilities, workers' compensation, and professional services offset by overspending for maintenance, chemicals, and other materials:
- Indirect Expenses being lower than budget by \$390,000 for Watershed expenses due to a FY12 overaccrual and lower Insurance expenses;
- Staff having recognized the year-to-date loss of \$175,000 for Debt Service Assistance (DSA) as a result of the Governor's recent 9C budget cuts; and

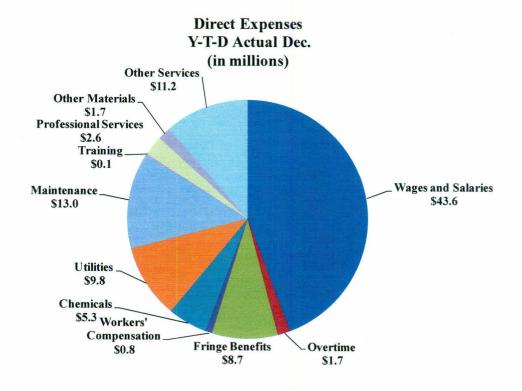
• Revenues exceeding budget by \$325,000 due to Non-Rate Revenue of \$774,000 for Federal Emergency Management Agency (FEMA) reimbursements for last year's storm costs of \$433,000 and Miscellaneous Revenue of \$373,000, offset by lower investment income of \$449,000 due to lower than budgeted short-term rates. The miscellaneous revenue favorable variance is due to a variety of smaller items with the largest being an energy rebate received for the Chelsea facility.

Total FY13 actual spending is lower than budget by \$3.1 million or 1.0% as indicated below:

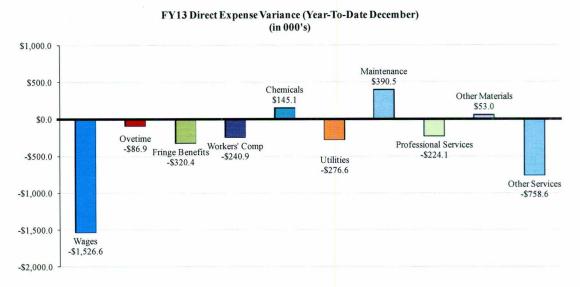
	FY13 Budget (Dec.)	FY13 Actual (Dec.)	\$ Variance	% Variance
Direct Expenses	\$101.6	\$98.7	-\$2.9	-2.9%
Indirect Expenses	\$28.0	\$27.6	-\$0.4	-1.4%
Debt Service	\$184.8	\$185.0	\$0.2	0.1%
Total	\$314.4	\$311.3	-\$3.1	-1.0%

Direct Expenses

Direct expenses total \$98.7 million, \$2.9 million or 2.9% less than budget.

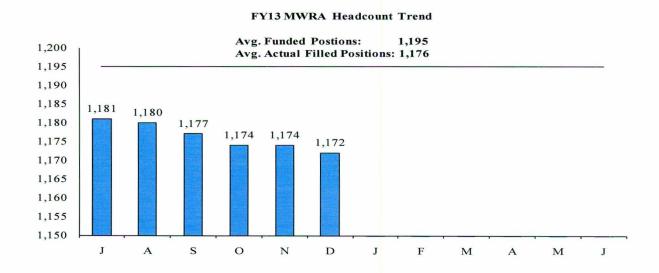


The primary reason for underspending on direct expenses is lower spending for: wages and salaries, other services, fringe benefits, utilities, workers' compensation, and professional services. The underspending was offset by higher than budgeted spending for maintenance, chemicals, and other materials.



Wages and Salaries

Wages and Salaries are underspent by \$1.5 million or 3.4% mainly as a result of lower than budgeted filled positions and employees on unpaid time off. The average actual filled positions were 1,176 which is 19 positions lower than the 1,195 positions funded. Additionally, MWRA currently has 9 temporary employees on staff.



Other Services

Other Services are lower than budget by \$759,000 or 6.4% mainly due to lower than budgeted sludge quantities. Sludge quantities in FY13 are approximately 6% lower, 99.3 tons per day versus 106.1 budgeted. The Other Services category is also underspent due to the timing of water quality projects, contaminant monitoring, and remediation activities.

Fringe Benefits

Fringe Benefits are underspent by \$320,000 or 3.5% year-to-date in FY13 due to lower than budgeted health insurance costs resulting from lower headcount and because new employees contribute at a higher percentage (25% versus 20%) than employees hired before July 2003.

Utilities

Utilities are underspent by \$277,000 or 2.7% due to lower electricity of \$163,000, diesel fuel of \$118,000, and natural gas of \$42,000. The underspending is mainly in Field Operations.

Workers' Compensation

Workers' Compensation expenses are lower than budget by \$241,000 or 22.9%. To date, actual reserves are trending below budget by \$510,000 while actual payments are higher than budget by \$270,000. It should be noted that more than \$100,000 of the underspending is due to two cases for which we expect reimbursements from the secondary insurer.

Professional Services

Professional Services are underspent by \$224,000 or 7.9% mainly due to timing of IT Strategic Plan and Lawson Module initiatives of \$215,000, lower than budgeted report preparation and asneeded services for the Harbor Monitoring program of \$44,000, and lower than budgeted need for outside legal services of \$36,000 offset by higher engineering services of \$41,000.

Overtime

Overtime is underspent by \$87,000 or 5.0% mostly at Deer Island.

Maintenance

Maintenance is overspent by \$391,000 or 3.1% year-to-date. Material purchases are greater than budgeted by \$577,000 mainly due to timing of purchases scheduled for FY12 received this year, offset by \$186,000 underspending in services.

Chemicals

Chemicals are overspent by \$145,000 or 2.8% year-to-date. The majority of the variance is attributable to higher spending on Soda Ash due to price increases and Sodium Hypochlorite offset by lower than budgeted spending for Nitrazyme for corrosion control.

FY13 Chemical Expense Variances (Year-To-Date December) (in 000's)

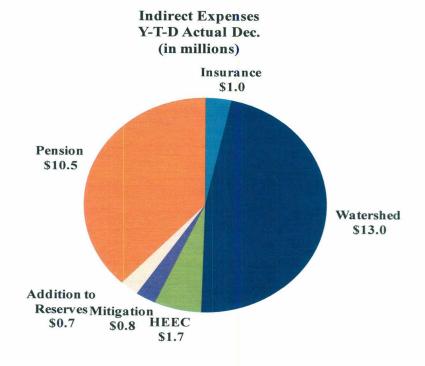


Other Materials

Other Materials are higher than budget by \$53,000 or 3.2% due to timing of vehicle replacements, computer hardware purchases, and lab and testing supplies offset by lower than projected spending on gravel purchases at Clinton.

Indirect Expenses

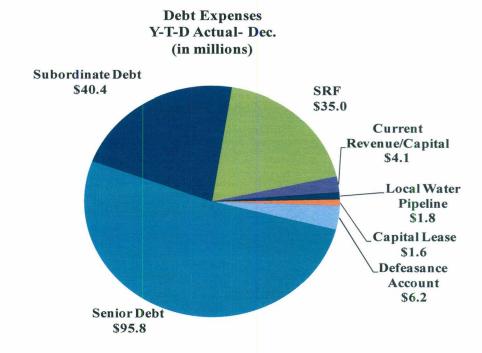
Indirect Expenses year-to-date total \$27.6 million, \$390,000 or 1.4% less than budget.



The majority of the year-to-date underspending on Indirect Expenses is for lower watershed expenses of \$233,000 due to a FY12 overaccrual and lower insurance expenses of \$95,000 mainly for lower claims.

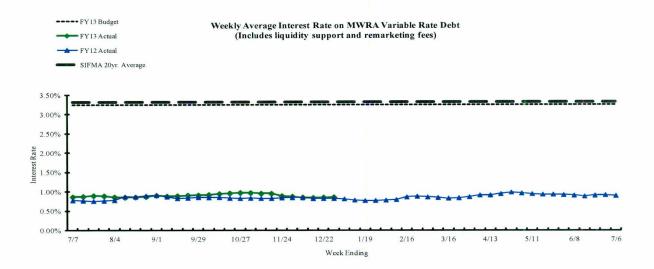
Debt Service Expenses

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 Service expenses through December totaled \$185.0 million which is higher than budget by \$175,000 after the transfer of \$6.2 million of a favorable year-to-date variance to the Defeasance Account and recognition of loss of Debt Service Assistance (DSA) per the Governor's recent 9C budget cuts.

The graph below reflects the variable rate trend by month over the past year in comparison with FY12 Actuals and the FY13 Budget for the same period.



Revenue

Non-Rate Revenue and Investment Income for FY13 year-to-date total \$319.0 million which is \$325,000 or 0.1% higher than budget due to higher non-rate revenue of \$774,000 mainly for the Federal Emergency Management Agency (FEMA) reimbursement for last year's storm costs of \$433,000 and higher Miscellaneous Revenue of \$373,000, offset by lower investment income of \$449,000 due to lower than budgeted short-term rates. The higher miscellaneous revenue mostly relates to energy rebates received for our Chelsea facility and a variety of smaller items such as Verizon and NSTAR credits for prior period adjustments and revenue from the auctioning off of surplus equipment.

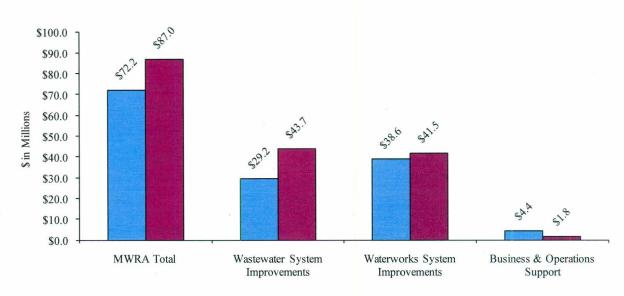
FY13 Capital Improvement Program

Spending year-to-date in FY13 totals \$87.0 million, \$14.8 million or 20.5% higher than budget. After accounting for programs which are not directly under MWRA's control, most notably the Local Water Pipeline program, the Inflow and Infiltration (I/I) program, and the community managed Combined Sewer Overflow (CSO's) projects, the underspending is \$8.0 million or 11.1%.

Overspending was reported in the Wastewater program of \$14.5 million and Waterworks of \$2.9 million offset by underspending in Business and Operations Support of \$2.6 million.

Spending By Program:

FY13 CIP Spending (Year-To-Date December)



Budget	A atual

\$ in Millions	Budget	Actuals	\$ Var.	% Var.
Wastewater System Improvements				
Interception & Pumping	1.5	1.3	-0.1	-8.9%
Treatment	8.9	7.5	-1.4	-15.8%
Residuals	0.2	0.1	-0.1	-40.2%
CSO	15.6	15.5	-0.1	-0.5%
Other	3.0	19.2	16.2	542.6%
Total Wastewater System Improvements	\$29.2	\$43.7	\$14.5	49.7%
Waterworks System Improvements				
Drinking Water Quality Improvements	21.0	18.8	-2.2	-10.4%
Transmission	9.6	9.2	-0.4	-4.0%
Distribution & Pumping	3.7	3.0	-0.8	-20.2%
Other	4.3	10.6	6.3	145.3%
Total Waterworks System Improvements	\$38.6	\$41.5	\$2.9	7.6%
Business & Operations Support	\$4.4	\$1.8	-\$2.6	-60.0%
Total MWRA	\$72.2	\$87.0	\$14.8	20.5%

The main reasons for FY13 year-to-date overspending are:

- 1. Wastewater Other of \$16.2 million primarily due to Inflow and Infiltration (I/I) community requests for grants and loans being greater than budgeted.
- 2. Water Other of \$6.3 million primarily due to community requests for Local Water Pipeline Improvement Loans being greater than budgeted.

The overspending was offset by underspending for:

- 1. Water Drinking Water Quality Improvements of \$2.2 million mainly for lower than budgeted spending for Spot Pond of \$2.8 million due to project delays offset by higher than budgeted spending at Carroll Water Treatment Plant mainly for contractor progress on Ultraviolet Disinfection Construction.
- 2. **Business and Operations Support** of \$2.6 million mainly for lower spending on MIS projects of \$2.1 million due to timing of IT Strategic Plan implementation, Alternative Energy of \$325,000 due to lower than projected need for technical assistance, and lower Centralized Equipment Purchase of \$170,000 due to timing of larger vehicle purchases.
- 3. Wastewater Treatment of \$1.4 million mainly for delays for North Main Pump Station VFD Construction of \$704,000, Clarifier W3H Flushing System of \$207,000, Gravity Thickener Rehabilitation of \$166,667, and the North Main Pump Station Motor Control Construction of \$162,000.
- 4. Water Distribution and Pumping of \$753,000 mainly for lower spending on Southern Spine Distribution Mains of \$426,000 due to the pending credit change order on Section 107 Phase 2 Construction and Section 21, 43, & 22 Design CA/RI work, Valve Replacement of \$268,000 due to timing, and Northern Intermediate High of \$193,000 due to design work being less than anticipated. Underspending offset by overspending of \$193,000 for Weston Aqueduct Supply Mains mainly due to Section 36 design work.
- 5. **Water Transmission** of \$383,000 due to timing of Watershed land purchases of \$872,000, Long Term Redundancy of \$282,000 due to delays in Sudbury Aqueduct work, and Winsor Dam Hydroelectric/Quabbin Sluice Gates of \$263,000 due to design delays. Underspending offset by overspending on Quabbin Transmission System of \$983,000 due to contractor progress on Oakdale Phase 1A Electrical work.

Construction Fund Balance

The construction fund balance was at \$154 million as of December 2012. Commercial Paper availability was at \$206 million to fund construction projects.

Attachment 1 – Variance Summary December 2012

ATTACHMENT 1

						December 2012 Year-to-Date				
	1	Period 6 YTD Budget		Period 6 YTD Actual		Period 6 YTD Variance	%		FY13 Approved	% Expended
EXPENSES										
WAGES AND SALARIES	\$	45,167,317	\$	43,640,765	\$	(1,526,552)	-3.4%	\$	94,059,400	46.4%
OVERTIME		1,743,861		1,656,938		(86,923)	-5.0%		3,573,495	46.4%
FRINGE BENEFITS		9,050,455		8,730,070		(320,385)	-3.5%		18,241,926	47.9%
WORKERS' COMPENSATION		1,050,000		809,061		(240,939)	-22.9%		2,100,000	38.5%
CHEMICALS		5,178,610		5,323,699		145,089	2.8%		9,963,496	53.4%
ENERGY AND UTILITIES		10,124,284		9,847,656		(276,628)	-2.7%		23,127,198	42.6%
MAINTENANCE		12,626,139		13,016,679		390,540	3.1%		28,229,070	46.1%
TRAINING AND MEETINGS		204,809		143,711		(61,098)	-29.8%		385,617	37.3%
PROFESSIONAL SERVICES		2,851,945		2,627,872		(224,073)	-7.9%		5,900,785	44.5%
OTHER MATERIALS		1,675,410		1,728,395		52,985	3.2%		5,591,291	30.9%
OTHER MATERIALS OTHER SERVICES		11,927,461		11,168,897		(758,564)	-6.4%		23,743,608	47.0%
TOTAL DIRECT EXPENSES	s	101,600,291	S	98,693,743	\$	(2,906,548)	-0.4%	\$	214,915,886	45.9%
TOTAL DIRECT EXPENSES	•	101,000,291	T)	98,093,743	Ф	(2,900,548)	-2.9 70	Э	214,915,000	43.9 70
INSURANCE	\$	1,048,937	\$	954,394	\$	(94,543)	-9.0%	\$	2,097,875	45.5%
WATERSHED/PILOT	Ф	13,206,588	Ф	12,973,095	Ф	. , ,	-1.8%	Ф	26,413,175	49.1%
BECO PAYMENT						(233,493)	-2.5%		3,741,915	46.5%
MITIGATION	1	1,783,649		1,739,090		(44,559)				
ADDITIONS TO RESERVES		783,462		750,275		(33,187)	-4.2%		1,566,923	47.9%
		699,165		699,165		-	0.0%		1,398,329	50.0%
RETIREMENT FUND	-	10,474,376	6	10,490,247	- m	15,871	0.2%	Ф.	10,474,376	100.2%
TOTAL INDIRECT EXPENSES	\$	27,996,177	\$	27,606,266	\$	(389,911)	-1.4%	\$	45,692,593	60.4%
STATE REVOLVING FUND	\$	35,044,358	\$	35,044,358	\$		0.0%	\$	73,804,552	47.5%
SENIOR DEBT	Ф	95,799,398	Ф	95,799,398	Ф	-	0.0%	Ф	193,432,134	49.5%
DEBT SERVICE ASSISTANCE		(175,000)		93,799,398		175,000	-100.0%		(350,000)	0.0%
CURRENT REVENUE/CAPITAL		4,100,000		4,100,000		173,000	0.0%		8,200,000	50.0%
SUBORDINATE MWRA DEBT		46,622,789		46,622,789		-	0.0%		93,303,807	50.0%
LOCAL WATER PIPELINE CP		1,820,259		And the second s		-	0.0%			50.0%
CAPITAL LEASE		1,608,530		1,820,259		-	0.0%		3,640,517 3,217,060	50.0%
VARIABLE DEBT		1,608,530		1,608,530		(6.226.572)	0.000.000		3,217,000	
DEFEASANCE ACCOUNT		-		(6,236,572)		(6,236,572)			-	0.0%
	6	104 020 224	6	6,236,572	4	6,236,572	0.10/	er.	277 249 070	0.0%
TOTAL DEBT SERVICE	\$	184,820,334	\$	184,995,334	5	175,000	0.1%	\$	375,248,070	49.3%
TOTAL EXPENSES	\$	314,416,802	\$	311,295,343	\$	(3,121,457)	-1.0%	\$	635,856,549	49.0%
DETERMINE A PAGE										
REVENUE & INCOME		202 555 255	•	202 774 257	•		0.00		COM 512 222	-0.00°
RATE REVENUE	\$	303,756,000	\$	303,756,000	\$	_	0.0%	\$	607,512,000	50.0%
OTHER USER CHARGES		3,612,945		3,598,211		(14,734)	-0.4%		7,766,692	46.3%
OTHER REVENUE		3,836,614		4,625,236		788,622	20.6%	•	6,116,845	75.6%
INVESTMENT INCOME		7,493,221		7,044,298		(448,923)	-6.0%		14,461,012	48.7%
TOTAL REVENUE & INCOME	\$	318,698,780	\$	319,023,745	\$	324,965	0.1%	\$	635,856,549	50.2%

ATTACHMENT 2 Current Expense Variance Explanations

Total MWRA	FY13 Budget YTD	FY13 Actuals YTD	FY13 YTD Actual vs	s. FY13 Budget	Explanations	
	December	December	\$	%		
Direct Expenses						
Wages & Salaries	45,167,317	43,640,765	(1,526,551)	-3.4%	Underspending is due to lower headcount and employees on unpaid leave status. As of December the average filled positions were 1,176, 19 positions less than the 1,195 funded positions.	
Overtime	1,743,861	1,656,938	(86,923)	-5.0%	Underspending mainly at Deer Island of \$80k.	
Fringe Benefits	9,050,455	8,730,070	(320,385)	-3.5%	Underspending for Health Insurance of \$248k and Medicare of \$44k mainly due to lower headcount.	
Worker's Compensation	1,050,000	809,061	(240,940)	-22.9%	Underspending due to lower reserves of \$510k offset by higher payments of \$270k.	
Chemicals	5,178,610	5,323,699	145,088	2.8%	Overspending for Soda Ash of \$176k due to pricing and Sodium Hypochlorite of \$79k offset by lower spending for Nitrazyme of \$103k due to timing.	
Utilities	10,124,284	9,847,656	(276,628)	-2.7%	Underspending for Electricity of \$163k, Diesel Fuel of \$118k, and Natural Gas of \$42k, offset by higher spending for Water of \$48k.	
Maintenance	12,626,139	13,016,679	390,541	3.1%	Maintenance Materials are overspent by \$577k due to timing of purchases offset by underspending for Services of \$186k.	
Training & Meetings	204,809	143,711	(61,098)	-29.8%	Underspending in all divisions related to timing.	
Professional Services	2,851,945	2,627,872	(224,073)	-7.9%	Underspending for Other of \$149k mainly due to timing of IT Strategic Plan implementation & Lawson Module initiatives of \$215,000, Lab and Testing due to lower than budget report preparation and as-needed services for the Harbor Monitoring program of \$44,000, and lower than budgeted need for outside legal services of \$36,000 offset by higher engineering services of \$41,000.	

ATTACHMENT 2 Current Expense Variance Explanations

Total MWRA	FY13 Budget YTD December	FY13 Actuals YTD	FY13 YTD Actual	vs. FY13 Budget	Explanations
	December	December	\$	%	
Other Materials	1,675,410	1,728,395	52,985	3.2%	Overspending for Vehicle Replacements of \$55k, Computer Hardware of \$51k, and Lab & Testing Supplies of \$21k offset by lower than projected spending on gravel purchases at Clinton.
Other Services	11,927,461	11,168,897	(758,564)	-6.4%	Underspending for Sludge Pelletization of \$382k due to lower quantities and Other Services of \$305k mainly due to the timing of water quality projects, contaminant monitoring, and remediation activities.
Total Direct Expenses	101,600,291	98,693,743	(2,906,548)	-2.9%	
Indirect Expenses		The state of the state of	- P		The state of the s
Insurance	1,048,937	954,394	(94,543)	-9.0%	Underspending due to lower payments for claims of \$122k offset by higher premiums of \$28k.
Watershed/PILOT	13,206,588	12,973,095	(233,492)	-1.8%	Underspending for lower Watershed Reimbursement due to a FY12 overaccrual.
HEEC Payment	1,783,649	1,739,090	(44,559)	-2.5%	Underspending due to lower O&M charges of \$48k offset by higher Capacity Charges of \$3k.
Mitigation	783,462	750,275	(33,186)	-4.2%	Underspending due to lower mitigation charges.
Addition to Reserves	699,165	699,165	-	0.0%	
Pension Expense	10,474,376	10,490,247	15,871	0.2%	
Post Employee Benefits	-	-	-		
Total Indirect Expenses	27,996,177	27,606,266	(389,911)	-1.4%	
Debt Service	er de pel lite				per and the same and are
Debt Service	184,995,334	184,995,334	-	0.0%	Debt Service expenses are at budgeted levels after the transfer of \$6.2 million favorable short-term rate year-to-date variance to the Defeasance Account.
Debt Service Assistance	(175,000)		175,000	-100.0%	Reflects the loss of Debt Service Assistance (DSA) per the Governor's 9C budget cuts.
Total Debt Service Expenses	184,820,334	184,995,334	175,000	0.1%	
FOR STREET, ST			THE STREET		

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY13 Budget YTD	FY13 Actuals YTD	FY13 YTD Actua	vs. FY13 Budget	Explanations		
	December	December	\$	%			
Total Expenses	314,416,802	311,295,343	(3,121,457)	-1.0%			
Revenue & Income							
Rate Revenue	303,756,000	303,756,000	-	0.0%			
Other User Charges	3,612,945	3,598,211	(14,734)	-0.4%			
Other Revenue	3,836,614	4,625,236	788,622	20.6%	Higher than budgeted Other Revenue of \$789k mainly for the Federal Emergency Management Agency (FEMA) reimbursement for last year's storm costs of \$433k and higher Miscellaneous Revenue of \$373k. The higher miscellaneous revenue mostly relates to energy rebates received for the Chelsea facility and a variety of smaller items such as Verizon and NSTAR credits for prior period adjustments and revenue from the auctioning off surplus equipment.		
Rate Stabilization			-				
Investment Income	7,493,221	7,044,298	(448,923)	-6.0%	Lower investment income mainly due to lower than budgeted short-term interest rates.		
Total Revenue	318,698,780	319,023,745	324,965	0.1%			
Net Revenue in Excess of Expenses	4,281,978	7,728,402	3,446,422				

ATTACHMENT 3
Capital Improvement Program Variance Explanations

	FY13 Budget YTD	FY13 Actuals YTD	YTD Actuals	s vs. Budget	Evaluations				
	December		\$	%	Explanations				
Interception & Pumping (I&P)	\$1,455	\$1,325	(\$130)	-8.9%	Underspending for Melrose Sewer reimbursement of \$654,000 for prior year's contractual obligations and North System Hydraulic Study of \$240,000 due to time extension. Offset by higher spending for Upper Neponset Valley Sewer System Land Acquisition of \$313,000 due to timing, Cottage Farm Fuel System Upgrade of \$196,000 and Chelsea Creek Upgrades - Design/Construction Administration of \$182,000 due to contractor progress.				
Treatment	\$8,886	\$7,487	(\$1,400)	-15.8%	Underspending due to longer than anticipated lead times for specialized equipment for the North Main Pump Station VFD Replacement Construction of \$704,000 and Motor Control Center - Construction of \$162,000, schedule shift for As-Needed Design 7-1 and 7-2 of \$289,000, Clarifier W3H Flushing System of \$207,000 and Fuel Pipe Abandonment project of \$186,000 due to lower award and schedule shift, Gravity Thickener Center Columns Replacement of \$167,000 and Expansion Joint Repair - Construction 2 of \$154,000 due to delayed notice-to-proceed. Offset by overspending for Clinton Aeration Efficiency work of \$878,000 and Metals Lab Fume Hood Replacement of \$148,000 due to greater contractor progress.				
Residuals	\$238	\$142	(\$96)	-40.2%					
CSO	\$15,622	\$15,547	(\$75)	-0.5%	Underspending on North Dorchester Bay of \$453,000 primarily due to less than anticipated Construction Management Services on the Tunnel & Facilities, South Dorchester Bay Sewer Separation (Commercial Point) of \$352,000, and Morrissey Boulevard Drain of \$308,000 for less than anticipated Design services. Offset by higher spending on Reserved Channel Sewer Separation of \$1.3M due to greater contractor progress.				
Other Wastewater	\$2,986	\$19,185	\$16,200	542.6%	Overspending on Inflow and Infiltration (I/I) due to community requests for grants and loans being greater than budgeted.				
Total Wastewater	\$29,187	\$43,686	\$14,499	49.7%					

ATTACHMENT 3
Capital Improvement Program Variance Explanations

	FY13	FY13	YTD Actuals	s vs. Budget	
	Budget YTD December	Actuals YTD December	\$	%	- Explanations
Drinking Water Quality Improvements	\$20,989	\$18,808	(\$2,180)	-10.4%	Underspending for Spot Pond Storage Facility of \$2.8M primarily due to delayed start of concrete work, Fitout Construction at Carroll Water Treatment Plant of \$212,000 due to schedule shift, and less than anticipated engineering services during construction for Ultraviolet Disinfection of \$205,000. Offset by overspending for Carroll Plant Ultraviolet Disinfection Construction of \$1.7M due to contractor progress.
Transmission	\$9,586	\$9,203	(\$383)	-4.0%	Underspending on Lower Hultman Rehabilitation project of \$1.1M and Watershed Land Acquisition of \$872,000 due to timing, Long Term Redundancy Sudbury Aqueduct - MEPA Review of \$392,000 and Quabbin Aqueduct & Winsor Pump Station Upgrades - Design of \$216,000 due to schedule shifts. Offset by overspending for the Upper Hultman Rehabilitation work of \$1.2M due to contractor progress and acceleration of the project. Also, Quabbin Transmission System of \$983,000 due to contractor progress on Oakdale Phase 1A Electrical Construction contract.
Distribution & Pumping	\$3,731	\$2,978	(\$753)	-20.2%	Underspending on Southern Spine Distribution Mains of \$426,000 mainly due to less than anticipated resident engineering and inspection services on Sections 21, 43 & 22 and a pending credit change order on Section 107 Phase 2 Construction, and Valve Replacement of \$268,000 mainly due to work scheduled for FY13 performed in FY12 on Construction 7.
Other Waterworks	\$4,304	\$10,560	\$6,256	145.3%	Overspending on Local Water Pipeline Assistance Program due to community requests for loans being greater than budgeted by \$7.7M offset by repayments being greater than anticipated by \$1.3M.
Total Waterworks	\$38,610	\$41,550	\$2,939	7.6%	
Business & Operations Support	\$4,385	\$1,756	(\$2,629)	-60.0%	Underspending due to MIS-related projects of \$2.1M due to timing of IT Strategic Plan implementation, and Alternative Energy Initiatives of \$325,000 mainly due to lower than projected as needed technical assistance.
Total MWRA	\$72,182	\$86,992	\$14,810	20.5%	

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

January 16, 2013

SUBJECT:

Approval of the Sixty-Fifth Supplemental Resolution

COMMITTEE: Administration, Finance & Audit

Thomas J. Durkin, Treasurer

Matthew R. Horan, Deputy Treasurer MA

Preparer/Title

X VOTE

INFORMATION

Director, Admin & Finance

RECOMMENDATION:

To adopt the Sixty-Fifth Supplemental Resolution authorizing the issuance of up to \$300,000,000 of Massachusetts Water Resources Authority General Refunding Bonds and the supporting Issuance Resolution.

DISCUSSION:

The bonds to be issued under this authorization will be used to refund outstanding bonds. Staff anticipate that the bonds to be issued under this authorization would be sold at the end of February, with a closing on the transaction in March. Currently the municipal bond market is experiencing very low interest rate levels for fixed rate debt. As a result of these low interest rates, there is an opportunity for MWRA to refund approximately \$219.3 million of outstanding fixed and variable rate bonds for savings.

The series of bonds that are being considered for refunding are the 2002 Series D (\$56.5 million), 2005 Series A (\$13.5 million), 2006 Series A (\$66.2 million), 2006 Series B (\$60.9 million), 2007 Series A (\$12 million) and the 2008 Series F (\$10.3 million). These series are the most advantageous for refunding primarily because the bonds can be called in a relative short period of time, thereby providing the most savings. Shorter periods of time between the issuance of the refunding and the retirement of the old bonds results in less interest expense. Typically, the cost of paying double interest for a discrete period of time would be offset by the escrow's earnings. However, given the historically low governmental securities interest rates which comprise the escrow, that is not currently possible. So although the interest rates on the new refunding bonds are at historical lows, the lack of escrow earnings to fund the extra interest precludes MWRA from being able to refund additional series of bonds at this moment in time and realize any savings.

Based on the current interest rates, staff anticipate that the refunding will yield \$7.4 million in budgetary savings, with a net present value savings of \$6.1 million or 5.95%. The following table details the changes in debt service as a result of the refunding by fiscal year.

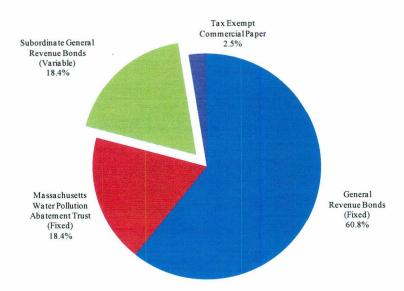
Fiscal	Prior Debt	Refunding			Fiscal	Prior Debt	Refunding				
Year	Service	Debt Service	Difference		Diffe rence		Year	Service	Debt Service	1	Difference
2013	\$ 4,534,866	\$ 4,493,845	\$ (41,020)		2025	\$ 10,799,863	\$ 10,535,750	\$	(264,113)		
2014	\$ 9,940,987	\$ 10,048,350	\$ 107,363		2026	\$ 5,492,713	\$ 5,227,750	\$	(264,963)		
2015	\$ 9,812,613	\$ 10,048,350	\$ 235,737		2027	\$ 10,872,250	\$ 10,607,000	\$	(265,250)		
2016	\$ 35,172,306	\$ 33,788,350	\$ (1,383,956)		2028	\$ 10,787,750	\$ 10,526,500	\$	(261,250)		
2017	\$ 51,270,167	\$ 49,373,750	\$ (1,896,417)		2029	\$ 8,577,500	\$ 8,315,500	\$	(262,000)		
2018	\$ 7,643,400	\$ 7,487,750	\$ (155,650)		2030	\$ 8,012,000	\$ 7,749,750	\$	(262,250)		
2019	\$ 8,328,400	\$ 8,067,750	\$ (260,650)		2031	\$ 8,023,500	\$ 7,761,500	\$	(262,000)		
2020	\$ 8,187,438	\$ 7,923,750	\$ (263,688)		2032	\$ 8,048,750	\$ 7,782,500	\$	(266,250)		
2021	\$ 9,471,988	\$ 9,205,500	\$ (266,488)		2033	\$ 8,076,250	\$ 7,811,500	\$	(264,750)		
2022	\$ 33,152,500	\$ 32,892,000	\$ (260,500)		2034	\$ 8,085,000	\$ 7,817,250	\$	(267,750)		
2023	\$ 39,588,750	\$ 39,324,750	\$ (264,000)		Total	\$331,177,988	\$323,821,145	\$	(7,356,842)		
2024	\$ 27,299,000	\$ 27,032,000	\$ (267,000)		2000 CO		200				

It is important to note, that this is purely a refunding for savings and does not propose to restructure any existing debt. As part of this refunding for interest rate savings, staff reviewed the outstanding variable rate bonds to see if any of those bonds could be refunded with fixed rate debt. After review of the available candidates, staff recommend refunding the 2002 Series D (\$56.5 million) and a portion of the 2008 Series F (\$10.3 million). These bonds were selected because of their relatively short maturity (2016 and 2017) should result in interest yields around 1.00%.

MWRA's long-term debt portfolio is comprised of both fixed rate and variable rate debt. MWRA's fixed rate, comprised of General Revenue Bonds (\$3.5 billion) and loans with the Massachusetts Water Pollution Abatement Trust (\$1.1 billion) account for approximately 78.1% of MWRA's outstanding debt. The Subordinate General Revenue Bonds which are variable rate (\$1.1 billion) currently comprise 19.5% of the debt portfolio. The remaining 2.5% of the debt portfolio is associated with Tax-exempt Commercial Paper which is used to fund construction in progress (\$144 million).

The rating agencies have indicated that a range of 15% to 25% is reasonable for an entity with a debt portfolio similar to MWRA. Given the conditions in the fixed rate municipal bond market, MWRA can take advantage of this low interest rate environment and fix out a portion of its variable rate debt with maturities in the next few years. The refunding of these bonds with fixed rate debt will reduce MWRA's variable rate exposure from approximately 19.5% to 18.4% of the total debt portfolio and at these historic low fixed rate levels achieve overall budgetary savings. This reduction will continue to move MWRA closer to the lower end of the recommended range and will help reduce the overall risk to variable interest rates. The following chart shows the break-down of MWRA's debt portfolio after the refunding.

After the Refunding



As always, market conditions drive the size of a refunding. Therefore, staff are requesting authorization to issue up to \$300 million to provide capacity to maximize the refunding for savings. While the \$300 million is a not-to-exceed amount, should market conditions change, the refunding could be smaller than the \$219.3 million identified here. For instance, an increase of 20 basis points in long-term fixed interest rates over the current levels would reduce the refunding from \$219.3 million to approximately \$137.2 million.

Staff will continue to work with MWRA's financial advisors to determine the most appropriate size and structure for the refunding. Under the terms of the last procurement approved by the Board in March 2010, Jefferies and Company will serve as the lead underwriter for this transaction.

BUDGET/FISCAL IMPACT:

There are sufficient funds available in the FY13 CEB to pay the debt service costs associated with these borrowings. Any potential refunding for savings would reduce future debt service. The amount of the potential reduction will be determined based upon market conditions and the ultimate size and pricing of the refunding transaction.

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

January 16, 2013

SUBJECT:

Authorization to Surplus Waban Hill Reservoir

COMMITTEE: Administration, Finance & Audit

INFORMATION

Michael J. Hornbrook
Chief Operating Officer

Michele S. Gillen, Deputy Director A&F

Preparer/Title

Rachel C. Madden

Director, Administration and Finance

RECOMMENDATION:

To declare as surplus to MWRA's water system construction, maintenance or operation needs and purposes an approximately 5.09 acre parcel known as the Waban Hill Reservoir located in the City of Newton and shown on the attached plan and to dispose of it by notifying the Commissioner of the Division of Capital Asset Management.

DISCUSSION:

Section 9(c) of MWRA's Enabling Act sets forth the procedure by which MWRA may relinquish its jurisdiction and control over Commonwealth-owned water and sewer real property that are under MWRA care, control and jurisdiction which are no longer needed for maintenance and operations of its water and sewer systems. MWRA's policy for Disposition of Real Property requires that, for property acquired through the enabling legislation, prior to declaring a site as surplus, the responsible division must first declare it surplus, confirm that it is surplus Authority-wide, obtain Board approval of this surplus designation, and finally, dispose of it by notifying the Commissioner of the Division of Capital Asset Management (DCAM).

The City of Newton constructed the Waban Hill Reservoir in the 1880s for use in the Newton water system (which at that time was an independent water system). Upon completion of City of Newton water system improvements, the Waban Hill Reservoir was no longer a necessary part of Newton's water system and in 1890 Newton



conveyed that land and reservoir to the Metropolitan Water Board. The reservoir was used by the Metropolitan District Commission until 1974 when construction of the Dorchester Tunnel was completed and the reservoir was no longer necessary to the active water supply system. Since 1974, the reservoir has been maintained as an emergency back-up supply of water; however, it has only been utilized once (in 1980) during planned repairs to the Dorchester Tunnel. MWRA's improvements to the Spot Pond Supply Mains now allow MWRA to satisfy this emergency need from the Northern Low Service System making the Waban Hill Reservoir no longer necessary for emergency use.

Michael J. Hornbrook, Chief Operating Officer, has declared this approximately 5-acre lot as surplus to the construction, maintenance or operation needs of the Authority.

BUDGET/FISCAL IMPACT:

There is no fiscal impact from this transaction.

Waban Reservoir, Newton





STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

January 16, 2013

SUBJECT:

Authorization to Acquire Land in Weston

COMMITTEE: Administration, Finance & Audit

INFORMATION

Michael J. Hornbrook
Chief Operating Officer

Cine Operating O

Director, Administration and Finance

Michele S. Gillen, Deputy Director A&F

Preparer/Title

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority to acquire for nominal consideration from the Massachusetts Department of Transportation an approximately 39,326 square foot parcel of land in Weston as shown on the attached plan.

DISCUSSION:

MWRA's Management Policies of the Board of Directors require the MWRA Board of Directors to approve all land purchases, leases or easements from a public entity (i.e. state authority, a state or federal agency, a city or town).

As shown on the attached map, MWRA owns in fee or maintains exclusive easement rights in Weston at the Shaft 5/5A site. However, MassDot owns in fee a large parcel that bisects MWRA controlled lands (shown in pink on the attached map). Staff believe that the critical water infrastructure at this location can be best secured if this parcel were acquired by MWRA. As such, MWRA requested that said parcel by conveyed from MassDot to MWRA.

Per its policies and procedures, MassDot conducted an internal review of MWRA's request and has approved the disposition of this parcel to MWRA. This conveyance also required the approved of the Federal Highway Administration which was granted in December 2012. Final approval from MassDot's Highway Administrator is anticipated this week after which a deed will be prepared to convey the parcel to MWRA.

BUDGET/FISCAL IMPACT

There is no budget impact.



MASSACHUSETTS WATER RESOURCES AUTHORITY



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

Telephone: (617) 242-6000

Fax: (617) 788-4899 TTY: (617) 788-4971

WATER POLICY AND OVERSIGHT COMMITTEE MEETING

Chair: A. Pappastergion Vice-Chair: B. Swett Committee Members: J. Carroll J. Foti

M. Gove

J. Walsh

to be held on

Wednesday, January 16, 2013

Location:

100 First Avenue, 2nd Floor

Charlestown Navy Yard Boston, MA 02129

DOSTOII, IVIA

Time:

Immediately following Wastewater Comm.

<u>AGENDA</u>

A. <u>Information</u>

- 1. Report on 2012 Water Use Trends
- Reading Update

B. Approvals

 Local Water System Assistance Program – Approval of Water Loan Program Guidelines Revision for the Town of Reading Due to Water Quality Concerns

C. Contract Amendments/Change Orders

- Miscellaneous Fencing and Guard Rail: STEELCO Chain Link Fence Co., Contract 6760T, Change Order 2
- 2. Hultman Aqueduct Interconnections: Barletta Heavy Division, Inc., Contract 6975, Change Order 26.
- 3. Southern Extra High Redundancy Plan: SEA Consultants, Inc., Contract 6452, Amendment 6

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Water Policy and Oversight Committee

December 12, 2012

A meeting of the Water Policy and Oversight Committee was held on December 12, 2012 at the Authority headquarters in Charlestown. Chairman Pappastergion presided. Present from the Board were Messrs. Barrera, Carroll, Flanagan, Foti, Mannering and Swett. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Mike Hornbrook, and Bonnie Hale. The meeting was called to order at 12:05 p.m.

<u>Information</u>

Aquatic Invasive Species Control in Wachusett Reservoir

A presentation on this item was referred to the full Board meeting.

Contract Awards

*Quabbin Ultraviolet Disinfection Facility: Daniel O'Connell's Sons, Inc., Contract 6776

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

Contract Amendments/Change Orders

*Phase 1A Electrical Upgrade Design – Oakdale Facility, ESDC and RE Services: Fay, Spofford & Thorndike, LLC, Contract 7229, Amendment 1

The Committee recommended approval of Amendment 1 (ref. agenda item C.1).

The meeting adjourned at 12:10 p.m.

^{*} Approved as recommended at December 12, 2012 Board of Directors meeting.

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

January 16, 2013

SUBJECT:

Report on 2012 Water Use Trends

COMMITTEE: Water Policy & Oversight

X INFORMATION VOTE

Daniel Nvule, Senior Program Manager Stephen Estes-Smargiassi, Director, Planning Preparer/Title

Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

For information only. Each January, staff provide the Board with a review of the previous year's water use data and discuss trends.

DISCUSSION:

Water Consumption by MWRA Communities

Calendar Year 2012 water sales to MWRA communities of 189.45 million gallons per day (mgd) were slightly higher (0.67%) than 2011, due primarily to higher summer water use as discussed below (see Figure 1 below). Overall, water consumption by MWRA's fully-supplied Metro System communities was flat and the small increase in overall consumption (approximately 1.3 mgd) is attributable to an increase in sales to partially-served communities, particularly during the summer period. Sales to 25 out of 43 Metro System communities and all three Chicopee Valley Aqueduct communities were higher in 2012 than in 2011, as shown in the attached monthly community water use report.





Demand from MWRA's largest customer, Boston Water and Sewer Commission (BWSC), was 64.4 mgd, about the same as last year and still at pre-1900 levels (See Figure 2 below).

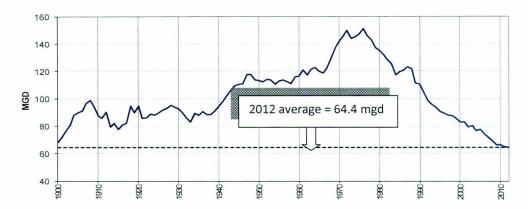
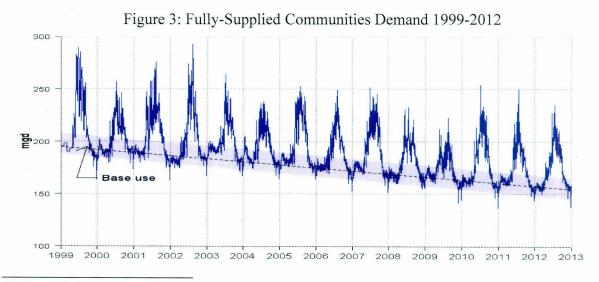


Figure 2: Boston Water Use 1900-2012

Over time, water use reductions have been in both base use, defined as water use from November to March, and outdoor use (or seasonal use), defined as the increase over the base demand during the irrigation season of May to September. As reported for the last three years, reductions in base use in fully-supplied communities continue to show a decrease of approximately 3 mgd per year as shown by the dotted sloping line in Figure 3¹ below. These reductions of approximately 1.8% annually are generally due to increases in the efficiency of water use in homes and businesses as water-saving technologies continued to increase market share and consumers reacted to price increases, as well as reduced pipeline leaks, and seem likely to continue for some time. This trend is seen in many other communities nationwide. A recent Water Research Foundation report analyzing residential water use trends indicated that, "Many water utilities in the United States and elsewhere are experiencing declining water sales among households."²



¹ Certain analyses can only be done on fully-supplied communities where MWRA has information on their daily use available from our revenue meters. MWRA receives data on monthly total use for partially-supplied communities but not until they provide that data to DEP in their Annual Statistical Reports in March. Fully-supplied communities represent almost 90% of the total annual demand.

² Water Research Foundation: <u>North America Residential Water Usage Trends Since 1992</u>, Denver, Colorado, 2010.

Seasonal water use is more variable and driven in large part by weather during the irrigation season. Factors influencing seasonal use include the total irrigation season precipitation, the number of dry days between rainfall events, temperature, and the total amount of sunshine. Over time, water price also influences seasonal use. 2012 had a relatively long dry spell in the summer, as well as being warmer than average, which contributed to a higher percentage of outdoor use for the year. This summer had a pattern of several larger rainstorms, rather than a series of more frequent moderate precipitation events, leading to more outdoor use even though monthly summer precipitation was close to average. Late summer and fall rainfall was below average, as has been noted in the Orange Notebook, and the yearly total was also substantially below average as discussed further below.

During the past 15 years, seasonal use in the fully-supplied communities has varied from a low of 11 mgd (6% of total use) in 2009 to 21 mgd (11%) in 2007, with an average of approximately 16.6 mgd (8.6%). Seasonal use in the fully-supplied communities for 2012 averaged 18 mgd (10.2%)³. Seasonal use as a percentage of total was the second highest, the record being held by the very dry year of 2007. 2012 had a maximum day demand of 276 mgd on July 16th. Once again, Christmas was the lowest day at 152.7 mgd.

Figure 4 below shows the seasonal water use variation over the years, and Figure 5 on the following page shows both the relatively small impact that seasonal demand has on total water use and the longer-term decline in both base and total use.

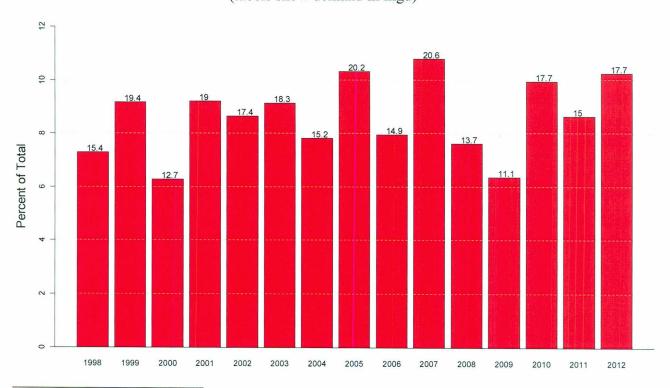


Figure 4: Fully-Supplied Communities' Annual Seasonal Demand (labels show demand in mgd)

³ Note that the <u>percentage</u> for a given summer use increases as the <u>total</u> demand decreases over time. This issue also affects other measures reported on a percentage basis, such as unaccounted for water use.

8 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012

Figure 5: Fully-Supplied Communities Annual Base and Seasonal Demand

Reservoir Withdrawals and Releases

Total MWRA water withdrawals increased slightly in 2012, from 195 mgd in 2011 to 200 mgd. However, the five-year running annual average continued to decline, extending the trend that began when MWRA adopted its demand management policies in 1986, reflecting the on-going increase in water use efficiency in homes and businesses, as well as the effects of the economic slowdown. Withdrawals include water sold to MWRA communities, as well as other uses in the watershed and MWRA system. They are the metric used to compare to the 300 mgd safe yield of the watershed/reservoir system⁴.

Figure 6 below shows 5-year averages of withdrawals from 1980 to present. The five-year averaging reduces the effects of year-to-year variability due to weather and provides a good indication of longer-term trends. By coincidence, the 2012 five-year average equaled the single-year withdrawal number.

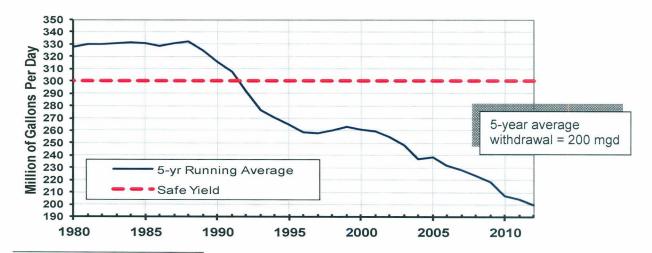
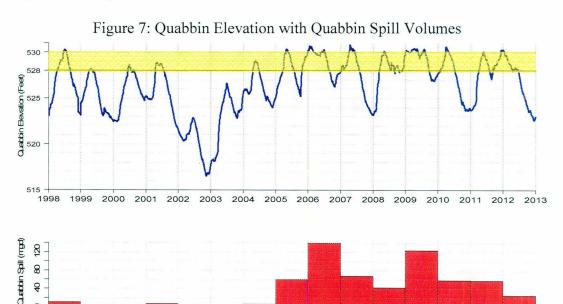


Figure 6: Total Reservoir Withdrawals – Five-Year Running Average 1980 to 2012

⁴ The 300-mgd safe yield is based on the drought of the 1960s. Use of a less conservative 20-year recurrence drought, as allowed by DEP, would result in a safe yield as high as 350 mgd. MWRA's Water Management Act registration is for 312 mgd.

The estimation of reservoir withdrawals relies on combination of measurements in MWRA's transmission system, as well as at MetroWest and central Massachusetts communities. During 2012, there was significant construction activity in the transmission system with the ongoing rehabilitation of the Hultman Aqueduct. Different combinations of the MetroWest Tunnel and segments of the Hultman were in service at different times, and some portions of the system were repeatedly placed on-line and taken off-line. Because of this, different combinations of meters were used for different months during 2012, and a new estimation method using the Venturi meter at the Carroll Water Treatment Plant (CWTP) was used during some months of 2012 and will be used regularly beginning in 2013. Staff believe that the new method will result in a slightly higher estimate of MWRA system use than has been recorded previously because the new meter is further upstream than the Shaft NE meter at Norumbega, used since the MetroWest Tunnel was placed into service, and due to slight differences in the readings of the CWTP and NE meters. System use is the difference between what MWRA estimates as reservoir withdrawals and what is accounted for as sold to communities, and has typically ranged from 2 to 2.5 percent in recent years. The change in transmission system metering does not affect metering used for rates calculation purposes or the total sales numbers shown earlier in Figure 1.

Figure 7 below shows Quabbin elevations and spill volumes for the past 15 years. Quabbin spilled small quantities of water in 1998, 2000, 2001, and 2004. Significant spills occurred with the reservoir more than full for extended periods each year between 2005 and 2010 with the largest spills in 2006. In 2012, Quabbin spilled for 160 days for a total of about 9.6 billion gallons (an average of 26.2 mgd). In 2012, Wachusett Reservoir spills totaled 6 billion gallons (an average of 16.5 mgd).



2005 2006

2007

2004

8

2000

Figure 8 below compares the amount of water withdrawn to supply customer demand to the total amount of water spilled and released, including the spills at Quabbin shown earlier in Figure 7, water spilled or released to the Nashua River from Wachusett Reservoir, water released from Wachusett Reservoir to the Sudbury River through the Wachusett Aqueduct, and Ware River water, which could have been transferred to Quabbin but was not due to lowered demands. MWRA's annual average releases and spills from the reservoir system have exceeded the amount of water withdrawn for water supply purposes five times in the last 15 years: 2006, 2008, 2009, 2010, and 2011. In 2012, with slightly higher demand, and significantly lower run-off from the watersheds into the reservoirs, demand was higher than reservoir spills and releases.

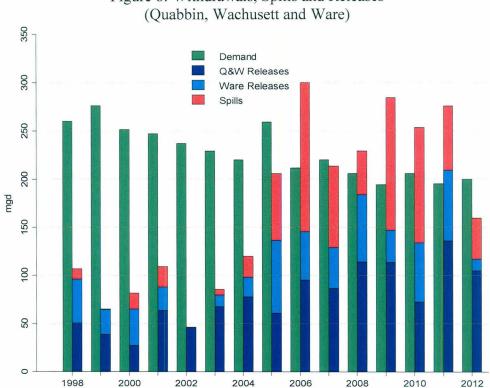


Figure 8: Withdrawals, Spills and Releases

ATTACHMENT:

Monthly and Year-To-Date Water Use Comparisons

Massachusetts Water Resources Authority

Monthly and Year-to-Date Water Use Comparisons

Reporting Period: December 2012 (as of 01/09/13)

ALL DATA SUBJECT TO CHANGE OR ADJUSTMENT PENDING ADDITIONAL MWRA AND COMMUNITY REVIEW

Prior Year-End	
Totals	

		M 41-1-			VTD			YTD		CY	tais
	Flow	Monthly	Flow	Flow	YTD	Flow	Flow Sha	,	Change in YTD Flow	Ave. Flow	Flow
Metro-System Customers	Dec-12	Dec-11	Change	CY12	CY11	Change	CY12	CY11	Share	mgd	Share 1
Arlington	3.530	3.627	-2.7%	3.976	4.252	-6.5%	2.2%	2.4%	-7.0%	4.252	2.4%
Belmont	1.916	1.898	1.0%	2.197	2.045	7.5%	1.2%	1.2%	6.9%	2.045	1.2%
Boston (BWSC)	59.175	58.831	0.6%	64.363	64.482	-0.2%	36.2%	36.4%	-0.7%	64.482	36.4%
Brookline	4.634	4.149	11.7%	5.157	5.110	0.9%	2.9%	2.9%	0.4%	5.110	2.9%
Canton (P)	1.165	1.331	-12.5%	1.234	1.932	-36.1%	0.7%	1.1%	-36.5%	1.932	1.1%
Chelsea	2.945	3.003	-2.0%	3.078	3.077	0.0%	1.73%	1.74%	-0.5%	3.077	1.74%
Dedham-Westwood W.D. (P)	0.0136	0.0018	651.8%	0.109	0.026	319.2%	0.06%	0.01%	317.0%	0.026	0.0147%
Exerett	3.534	3.499	1.0%	3.923	3.916	0.2%	2.2%	2.2%	-0.3%	3.916	2.2%
Framingham	5.779	5.814	-0.6%	6.676	6.645	0.5%	3.7%	3.8%	-0.0%	6.645	3.8%
Leominster (P)	0.000	0.000	0.0%	0.000	0.000	0.0%	0.0%	0.0%	0.0%	0.000	0.0%
Lexington ²	3.664	3.382	8.3%	4.851	4.649	4.3%	2.7%	2.6%	3.8%	4.649	2.6%
Lynn (LWSC) (P)	0.151	0.242	-37.5%	0.212	0.235	-9.7%	0.1%	0.1%	-10.1%	0.235	0.1%
Lynnfield W.D.	0.249	0.240	3.8%	0.408	0.362	12.7%	0.2%	0.2%	12.1%	0.362	0.2%
Malden	4.968	5.460	-9.0%	5.469	5.469	-0.0%	3.1%	3.1%	-0.5%	5.469	3.1%
Marblehead	1.277	1.275	0.2%	1.738	1.650	5.4%	1.0%	0.9%	4.8%	1.650	0.9%
Marlborough (P)	2.803	1.331	110.7%	2.781	2.488	11.8%	1.6%	1.4%	11.2%	2.488	1.4%
Medford	4.573	4.482	2.0%	4.820	5.001	-3.6%	2.7%	2.8%	-4.1%	5.001	2.8%
Melrose	2.011	1.899	5.9%	2.203	2.174	1.4%	1.2%	1.2%	0.8%	2.174	1.2%
Milton	2.010	2.364	-15.0%	2.475	2.456	0.8%	1.4%	1.4%	0.3%	2.456	1.4%
Nahant	0.234	0.224	4.3%	0.305	0.280	8.9%	0.2%	0.2%	8.3%	0.280	0.2%
Needham (P)	0.005	0.329	-98.6%	1.110	0.871	27.4%	0.6%	0.5%	26.8%	0.871	0.5%
Newton	7.573	7.726	-2.0%	9.022	8.760	3.0%	5.1%	4.9%	2.5%	8.760	4.9%
Northborough (P)	0.818	0.837	-2.2%	0.892	0.798	11.9%	0.5%	0.5%	11.3%	0.798	0.5%
Norwood	2.492	2.520	-1.1%	2.735	3.047	-10.2%	1.5%	1.7%	-10.7%	3.047	1.7%
Peabody (P)	0.166	0.103	60.4%	0.680	0.561	21.2%	0.4%	0.3%	20.6%	0.561	0.3%
Quincy	8.301	8.411	-1.3%	8.860	8.935	-0.8%	5.0%	5.0%	-1.3%	8.935	5.0%
Reading	1.529	1.403	9.0%	1.619	1.636	-1.1%	0.9%	0.9%	-1.6%	1.636	0.9%
Revere	3.590	3.642	-1.4%	3.801	3.941	-3.6%	2.1%	2.2%	-4.1%	3.941	2.2%
Saugus	2.297	2.327	-1.3%	2.587	2.847	-9.1%	1.5%	1.6%	-9.6%	2.847	1.6%
Somerville	5.306	5.184	2.4%	5.623	5.573	0.9%	3.2%	3.1%	0.4%	5.573	3.1%
Southborough	0.627	0.596	5.2%	0.907	0.838	8.2%	0.5%	0.5%	7.7%	0.838	0.5%
Stoneham	2.988	2.394	24.8%	2.860	2.805	2.0%	1.6%	1.6%	Control of the Contro	2.805	1.6%
Stoughton (P)	0.683	0.593	15.2%	0.662	0.633	4.7%	0.4%	0.4%	4.1%	0.633	0.4%
Swampscott	1.258	1.326	-5.1%	1.556	1.502	3.6%	0.9%	0.8%	3.1%	1.502	0.8%
Wakefield (P)	1.339	1.198	11.8%	1.401	1.462	-4.1%	0.8%	0.8%	-4.6%	1.462	0.8%
Waltham	5.960	5.823	2.3%	6.821	7.040	-3.1%	3.8%	4.0%	-3.6%	7.040	4.0%
Watertown	2.320	2.330	-0.4%	2.572	2.643	-2.7%	1.4%	1.5%	-3.2%	2.643	1.5%
Wellesley (P)	1.087	0.097	1016.8%	1.244	0.772	61.0%	0.7%	0.4%	SURFICION STREET, STRE	0.772	0.4%
Weston	0.885	0.865	2.3%	1.658	1.522	8.9%	0.9%	0.9%	8.4%	1.522	0.9%
Wilmington (P)	0.055	0.238	-77.0%	0.109	0.271	-59.7%	0.1%	0.2%	CONTRACTOR DESIGNATION OF	0.271	0.2%
Winchester (P)	0.655	0.420	56.1%	0.985	0.881	11.8%	0.6%	0.5%	11.3%	0.881	0.5%
Winthrop	1.182	1.161	1.9%	1.248	1.253	-0.4%	0.7%	0.7%	Annual Company of the	1.253	0.7%
Woburn (P)	2.129	1.083	96.5%	3.101	2.291	35.4%	1.7%	1.3%	34.7%	2.291	1.3%
Subtotal Metro-System		153.661	2.7%	178.029		0.5%	100%	100%		177.132	100%
Chicopee Valley Aqueduct	157.875		Maria Ma					A Maria Charles			
The state of the s	4.440	4.822	-7.9%	5.518	5.351	3.1%	70.0%	70.8%	-1.1%	5.351	70.8%
Chicopee South Hadley FD #1	0.881	0.930	Market Company of the	1.161	1.147	1.2%	14.7%	15.2%	NAME AND ADDRESS OF TAXABLE PARTY.	1.147	15.2%
Wilbraham	0.801	0.813	-1.5%	1.202	1.064	13.0%	15.3%	14.1%	The real Property lies and the least of the	1.064	14.1%
Subtotal CVA System	6.122	6.565		7.881	7.563	4.2%	100%	100%		7.563	100%
	7	0.000	-0.070	7.001	7.000	4.270	10070	100 /0		7.000	1007
Other Revenue Supply	0.00-	0.000	0.001	0.00-	0.000	0.001				0.000	
Cambridge (P)	0.000	0.000	0.0%	0.000	0.000	0.0%				0.000	and the same of the same of the same of
Clinton 3	1.908	1.710		2.033	1.942	4.7%		Con Section		1.942	
Worcester (P)	0.000	0.000	0.0%	0.002	0.000	100.0%		(E-10-74)		0.000	ACCUSATION OF THE PARTY OF THE
Other Revenue Customers 4	1.433	1.462	COMPANY OF THE PARTY OF	1.503	1.549	-3.0%				1.549	
Subtotal Other Revenue Supply	3.341	3.172	5.3%	3.539	3.492	1.3%			NAME OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER,	3.492	Pleasure L
Total Water Supplied											
Fully Supplied Metro Communities	146.807	145.858	0.7%	163.508	163.912	-0.2%				163.912	
CVA Communities	6.122	6.565	-6.8%	7.881	7.563	4.2%				7.563	
Partially Supplied Communities	11.068	7.803	41.8%	14.523	13.220	9.9%				13.220	
Other Revenue Customers	3.341	3.172	5.3%	3.537	3.492	1.3%				3.492	
Total Water Supplied 6		163.398									

¹⁾ Flow share for each rate revenue community is the community's share of total flow for all rate revenue communities. Flow share for each Chicopee Aqueduct Valley (CVA) community is each CVA community's share of total CVA flow. Water assessments for revenue communities are calculated by allocating the annual cVA community's share of CVA flow.

²⁾ Lexington supplies Bedford with partial MWRA water service.

³⁾ The Town of Clinton receives up to 800 million gallons of water per year free of charge and is charged a flat wholesale rate per million gallons for water in excess of 800 million gallons per year.

⁴⁾ Other Revenue Customers: Fernald School (State), D.C.R. (Parks & Pools), Stone Zoo, Deer Island WWTP and Department of Youth Services.

⁵⁾ Other Revenue Customers are charged a flat wholesale rate per million gallons of water supplied.

⁶⁾ This report includes only water supplied for which revenue is collected in accordance with existing user agreements. It does not include water utilized for system maintenance.

⁽P) Community is partially supplied by MWRA.

Question's regarding water supplied can be directed to David Liston @ (617) 305-5853 or Leo Norton @ (617) 788-2256.

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

January 16, 2013

SUBJECT:

Reading Water System Planning Update

COMMITTEE: Water Policy & Oversight

X INFORMATION

VOTE

Jae R. Kim, Chief Engineer

Frederick Brandon, Assistant Director, Engineering

Preparer/Title

Chief Operating Officer

This staff summary provides the Board with an update on preliminary discussions with the Town of Reading concerning MWRA's Northern Intermediate High redundancy capital project, expansion of water service to North Reading, and current Reading water quality concerns.

RECOMMENDATION:

For information only.

BACKGROUND:

The Town of Reading joined the MWRA water system as a partially supplied community in 2005 and became a full water member in 2007 with the deactivation of its local wells. Prior to joining the MWRA system Reading supplied water through Town wells and a water treatment plant that were located in the northwest area of the Town. The water treatment plant supplied water to the distribution system and two water storage tanks. One tank is located near the center of town off of Auburn Street with a capacity of 0.75 million gallons and the other is located in the southern area of town at Bear Hill with a capacity of 1.0 million gallons. The general flow of water from the Town system was from the water treatment plant in the northwest area of Reading through local mains to the center and southern section of Town.

After Reading became fully supplied by MWRA, the supply of water changed from the local water treatment plant in the northwest area of the Town to MWRA's water meter located in the southwest area of the Town. This change in supply, as well as the Town's storage tank operations and the presence of unlined, cast-iron water mains, has contributed to lower summertime total chlorine residual levels within portions of Reading's local system.

¹ In a separate staff summary presented at this meeting, staff are recommending that the Board approve a one-time exemption to the Program Guidelines for the Local Water System Assistance Program to waive the annual allocation restriction for the Town of Reading to allow the Town to borrow up to its entire \$4,012,000 remaining water loan allocation to fund construction of Reading's priority local water quality project(s).

DISCUSSION:

As part of MWRA's Northern Intermediate High Redundancy (NIH) project, MWRA is proposing to construct a 7-mile pipeline from the Gillis Pump Station to the north forming a loop with the existing single MWRA pipe (Section 89) that supplies Stoneham and Reading and portions of Wakefield, Woburn, Winchester and Wilmington (See Attachment 1).

In addition to the proposed redundant pipeline, MWRA has already implemented several intermediate measures to provide partial redundancy and improve service to the area including construction of an emergency connection between Stoneham and Reading, and elimination of a hydraulic restriction by replacing valves at the Washington Street pipe bridge over Route 128 in Woburn. Several other smaller emergency connections to NIH communities have also been constructed by MWRA Operations staff.

MWRA has also been searching for a suitable location in the northern portion of the service area to construct additional distribution storage. In addition to MWRA's redundant NIH pipeline, the need for additional storage for the NIH service area had been identified in the 1993 Rizzo Associates Distribution Storage System Study, the 1993 MWRA Water System Master Plan, the 2006 MWRA Water System Master Plan and the 2010 NIH Assessment and Concept Plan. This additional storage is included in the approved FY13 CIP. MWRA's experience on several projects in siting water tanks at appropriate elevations has been extremely difficult due to the number of limited sites that meet MWRA's hydraulic requirements and local opposition.

The Town has suggested that it is interested in transferring ownership of the land at the Town's Bear Hill tank site to MWRA for a future, larger regional water tank in exchange for MWRA demolishing the existing town tank, constructing a second redundant meter connection, and constructing local water pipeline improvements along the route of MWRA's proposed redundant pipeline. This site is at an appropriate elevation for MWRA's proposed regional tank. Although the site does not provide enough space for all of MWRA's storage needs, it would result in a significant improvement for the existing system and would support potential system expansion service to the north. No other sites have been identified as a viable option.

The change in water supply from the north to the south and the addition of a second meter connection on the south side of town will reduce the need for the Town's Bear Hill Tank and will provide an opportunity for the Town to abandon the tank and reduce water age within the distribution system, thereby improving water quality.

Staff are reviewing the Town's proposal and estimating the cost of the requested improvements as well as appraising the value of the land for proposed water tank. If an agreement can be reached with the Town for the tank site, with the Board's approval, then MWRA will be in a position to provide additional needed storage in the northern portion of the service area, along with the proposed redundant pipeline. All of these improvements will benefit existing MWRA communities and will also support expansion of the water service area to the north, including North Reading.

ATTACHMENT:

Map of Northern Intermediate High Service Area

Attachment 1: Northern Intermediate High Service Area NORTH READING **Former Water Treatment Plant** WILMINGTON READING Auburn St Tank WAKEFIELD Requested 12" Local Water Main Proposed Meter - Leech Park Meter 240 Reading Bear Hill Tank Site Reading 230 M **Short-Term** 339 Stoneham-Reading Connection 36" Washington St Bridge Valve Improvements 229 M WOBURN 228 M **Proposed Redundant Pipeline Route** 200 🔟 332 STONEHAM Water Meters 138 Storage Options MWRA Water Storage Bear Hill Reading Water Storage Tank 322 323 45 MELROSE Proposed Redundant Pipeline 231 247 M 141 Short-Term Stoneham-Reading Gillis / Connection - Contract 7261, 2200 feet - 36" pipe 180 **Existing Section 89 Pipes** 2,500 5,000 10,000 Feet Other MWRA Water Distribution Pipes

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

January 16, 2013

SUBJECT:

Local Water System Assistance Program – Approval of Water Loan Program

Guidelines Revision for Town of Reading Due to Water Quality Concerns

COMMITTEE Water Policy & Oversight

___ INFORMATION

X VOTE

Carl H. Leone, Senior Program Manager, Planning Stephen Estes-Smargiassi, Director of Planning

Preparer/Title

Chief Operating Officer

On June 30, 2010, the Board approved the Program Guidelines for the Local Water System Assistance Program to provide the second phase of interest-free loan funding to member water communities. This staff summary recommends a one-time exemption to the Program Guidelines to allow the Town of Reading to access its entire \$4,012,000 remaining loan allocation, thus waiving the annual allocation restriction. The Town of Reading has made this request to MWRA based on water quality concerns resulting from low chlorine residual in the local water distribution system.

RECOMMENDATION:

To approve a one-time exemption to the Program Guidelines for the Local Water System Assistance Program to waive the annual allocation restriction for the Town of Reading to allow the Town to borrow up to its entire \$4,012,000 remaining water loan allocation.

BACKGROUND:

The Phase 2 Local Water System Assistance Program (LWSAP) provides \$210 million in interest-free loans to 45¹ member water communities (approximately \$21 million per year over ten years, FY11-FY20) for local water system improvement projects. Community loans are repaid to MWRA over a 10-year period. The Phase 2 LWSAP loan funds are allocated to member water communities as listed on Attachment 1. The Phase 2 water loan program follows the \$257 million Phase 1 Local Pipeline Assistance Program, which will be concluding at the end of FY13.

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 consideration; these include: Clinton, Leominster (emergency only), 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.

MWRA's goal in providing financial assistance to member communities is to improve local water systems to help maintain high quality water as it passes from MWRA's facilities through local pipelines to customers' taps. Continued improvement of local water systems is a critical element of MWRA's Integrated Water Supply Improvement Program. 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) as depicted below, loss of disinfectant residual, and potential bacteria growth. Approximately 33% of local distribution systems remain unlined. Attachment 2 provides individual statistics for the total miles of lined and unlined water main in each member water community.







The water loan Program Guidelines include an annual allocation restriction, as follows:

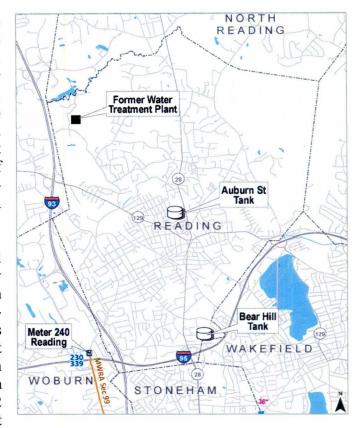
"Distribution of Program funds is spread over a 10-year period FY11 through FY20. Each community's annual allocation is restricted to the larger of (1) 10 percent of their total allocation or (2) \$500,000. If not utilized in a given year, annual allocations roll-over and accumulate up to the community's total allocation. The annual allocation restrictions are intended to limit MWRA loan distributions to about \$21 million per year."

DISCUSSION:

The Town of Reading was approved as a fully-served MWRA water community on October 7, 2007 (the previous two years Reading was a partial MWRA water user). The change in supply from Reading's water treatment plant located on the northern edge of the town to MWRA's supply from the southern edge of the town, as well as storage tank operations and the presence of unlined, cast-iron mains, has contributed to lower summertime total chlorine residual levels at some local coliform sampling sites. The changes in water quality and water system hydraulics were the impetus for the Town of Reading updating its Water System Master Plan, completed by Weston and Sampson in September 2012. Water quality modeling confirmed that tuberculated unlined pipe is contributing to degradation of total chlorine residual as water travels through Reading's distribution system from the new MWRA supply meter located in the southern portion of the local system to the northern portions.

The report recommends a program to rehabilitate or replace all unlined water pipe (a cost of up to \$25 million) over 20 years. The plan also recommends changes to how the Town operates its distribution storage, and recommends abandoning one of the two existing tanks to reduce water age. (A separate staff summary being presented at this meeting discusses the potential of MWRA acquiring one of the Readingowned tank sites for a regional MWRA water supply tank.)

Reading has been working to improve local water quality. The Town has recently completed a \$2.05 million construction project to replace 1.7 miles of unlined, castiron water main on Haverhill and Charles Streets. The project was funded in August 2011 through MWRA's water loan program and used all of Reading's Phase 1 allocation and a small portion of the Town's Phase 2 allocation. Reading's next priority project



to eliminate additional unlined pipe (water main phase A-1 improvements), including the main local transmission line feeding the northern portion of the Town, is estimated at \$4 to \$5 million and is detailed in Reading's letter to MWRA (see Attachment 3). Reading plans to begin this project in July 2013.

Under MWRA's Phase 2 LWSAP, Reading has a 10-year remaining allocation of \$4,012,000. However, the Program Guidelines restrict Reading's annual allocation to \$500,000. FY13 is the third year of the program; thus, Reading's current available allocation is \$1,366,000 (calculated as \$500,000 times 3 minus \$134,000 previously distributed). An additional \$500,000 becomes available each fiscal year up to the \$4,012,000 total. Staff recommend that the Board approve a one-time exemption to the Program Guideline's limits, which will allow MWRA staff to work with Reading representatives to rapidly provide a 10-year, interest-free water loan to fund construction of Reading's priority local water quality project(s).

BUDGET/FISCAL IMPACT:

The FY13 CIP includes an overall net budget of zero dollars for water loans 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 significantly, sometimes causing over-spending or under-spending (compared to budget) for any particular year. Through the first half of FY13, MWRA has distributed \$21.2 million in interest-free, 10-year water loans, which exceeds the annual budget by \$2 million. Including the proposed \$4 million loan to Reading, all community water loans for FY13 are projected to be between \$6 million and \$8 million over budget due to communities requesting more loans than anticipated. The accelerated distribution of water loans will result in accelerated repayments and a net offset over time. As

community loans are repaid, the funds are deposited into MWRA's construction fund. The funding for this program is secured through MWRA's tax-exempt commercial paper.

ATTACHMENTS:

Attachment 1 - LWSAP Allocation and Funding Utilization by Community

Attachment 2 - Community Water System Statistics

Attachment 3 – Letter Request from Town of Reading

ATTACHMENT 1

MWRA LOCAL WATER SYSTEM ASSISTANCE PROGRAM ALLOCATION AND FUND UTILIZATION BY COMMUNITY THROUGH DECEMBER 2012

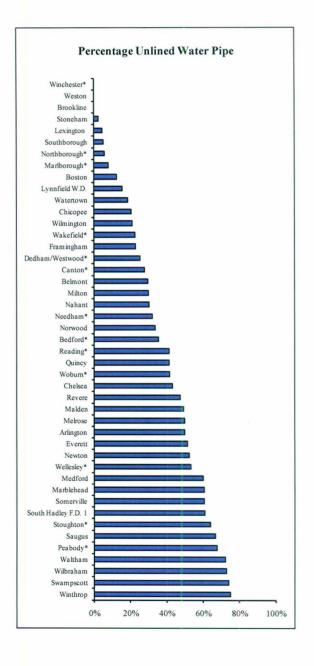
Arlington Bedford * \$2,418,000 Bedford * \$2,418,000 Belmont \$3,477,000 Boston \$38,754,000 Brookline \$3,426,000 Canton * \$3,216,000 Chelsea \$3,814,000 Everett \$4,672,000 Framingham \$7,357,000 Lexington \$3,024,000 Lynnfield Water Dist. \$1,396,000 Marlbehead \$4,237,000 Marlberough * \$1,917,000 Medford \$6,959,000 Melrose \$3,988,000 Milton \$4,123,000 Needham * \$794,000 Needham * \$794,000 Northborough * \$1,048,000 Northborough * \$1,048,000 Northborough * \$1,048,000 Northborough * \$1,048,000 Somerville \$7,419,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoneham \$2,339,000 Stoneham \$2,339,000 Wakefield * \$2,325,000 Wilmington * \$882,000	Community Annual Allocation	Allocation To Date (Year 3)	Funds Distributed Thru Dec 12	Percent Distributed (Year 3)	Total Remaining Funds	Funds Currently Available
Belmont \$3,477,000 Boston \$38,754,000 Brookline \$3,426,000 Canton * \$3,216,000 Chelsea \$3,814,000 Dedham/Westwood * \$503,000 Everett \$4,672,000 Framingham \$7,357,000 Lexington \$3,024,000 Lynnfield Water Dist. \$1,396,000 Marlborough * \$1,917,000 Marlborough * \$1,917,000 Melrose \$3,988,000 Milton \$4,123,000 Nahant \$1,490,000 Needham * \$794,000 Needham * \$794,000 Northborough * \$1,048,000 Northborough * \$1,048,000 Northborough * \$1,048,000 Northborough * \$1,048,000 Revere \$5,034,000 Reading \$4,146,000 Revere \$5,034,000 Somerville \$7,419,000 Southborough \$1,512,000 Somerville \$7,419,000 Southborough \$2,339,000 Stoughton* \$2,339,000 Stoughton* \$2,339,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Waltham \$10,293,000 Wellesley * \$2,350,000 Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 South Hadley F.D. 1 \$1,538,000 South Hadley F.D. 1 \$1,538,000	\$622,500	\$1,867,500		0%	\$6,225,000	\$1,867,500
Boston \$38,754,000 Brookline \$3,426,000 Canton * \$3,216,000 Chelsea \$3,814,000 Dedham/Westwood * \$503,000 Everett \$4,672,000 Framingham \$7,357,000 Lexington \$3,024,000 Lynnfield Water Dist. \$1,396,000 Malden \$7,272,000 Marlborough * \$1,917,000 Medford \$6,959,000 Melrose \$3,988,000 Milton \$4,123,000 Nedham * \$794,000 Newton \$13,602,000 Northborough * \$1,048,000 Norwood \$4,395,000 Peabody * \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Stoneham \$2,339,000 Stoneham \$2,339,000 Swampscott \$3,755,000 Wakefield * \$2	\$500,000	\$1,500,000	\$1,000,000	67%	\$1,418,000	\$500,000
Brookline \$3,426,000 Canton* \$3,216,000 Chelsea \$3,814,000 Dedham/Westwood* \$503,000 Everett \$4,672,000 Framingham \$7,357,000 Lexington \$3,024,000 Lynnfield Water Dist. \$1,396,000 Malden \$7,272,000 Marlborough* \$1,917,000 Medford \$6,959,000 Melrose \$3,988,000 Milton \$4,123,000 Nahant \$1,490,000 Needham* \$794,000 Newton \$13,602,000 Northborough* \$1,048,000 Norwood \$4,395,000 Peabody* \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield* \$2,325,	\$500,000	\$1,500,000	\$1,000,000	67%	\$2,477,000	\$500,000
Canton * \$3,216,000 Chelsea \$3,814,000 Dedham/Westwood * \$503,000 Everett \$4,672,000 Framingham \$7,357,000 Lexington \$3,024,000 Lynnfield Water Dist. \$1,396,000 Malden \$7,272,000 Marblehead \$4,237,000 Marlborough * \$1,917,000 Medford \$6,959,000 Melrose \$3,988,000 Milton \$4,123,000 Nahant \$1,490,000 Newton \$13,602,000 Northborough * \$1,048,000 Norwood \$4,395,000 Peabody * \$1,048,000 Norwood \$4,395,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield * \$2,325,000 Waltham <td< td=""><td>\$3,875,400</td><td>\$11,626,200</td><td>\$8,948,040</td><td>77%</td><td>\$29,805,960</td><td>\$2,678,160</td></td<>	\$3,875,400	\$11,626,200	\$8,948,040	77%	\$29,805,960	\$2,678,160
Chelsea \$3,814,000 Dedham/Westwood * \$503,000 Everett \$4,672,000 Framingham \$7,357,000 Lexington \$3,024,000 Lynnfield Water Dist. \$1,396,000 Malden \$7,272,000 Marblehead \$4,237,000 Marlborough * \$1,917,000 Medford \$6,959,000 Melrose \$3,988,000 Milton \$4,123,000 Neathant \$1,490,000 Needham * \$794,000 Newton \$13,602,000 Northborough * \$1,048,000 Norwood \$4,395,000 Peabody * \$1,089,000 Quincy \$10,505,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Weston <t< td=""><td>\$500,000</td><td>\$1,500,000</td><td></td><td>0%</td><td>\$3,426,000</td><td>\$1,500,000</td></t<>	\$500,000	\$1,500,000		0%	\$3,426,000	\$1,500,000
Dedham/Westwood * \$503,000 Everett \$4,672,000 Framingham \$7,357,000 Lexington \$3,024,000 Lynnfield Water Dist. \$1,396,000 Malden \$7,272,000 Marblehead \$4,237,000 Marlborough * \$1,917,000 Medford \$6,959,000 Melrose \$3,988,000 Milton \$4,123,000 Nahant \$1,490,000 Needham * \$794,000 Newton \$13,602,000 Northborough * \$1,048,000 Norwood \$4,395,000 Peabody * \$1,089,000 Quincy \$10,505,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Watertown \$2,978,000 Wellesley * \$2,350,000 Winthrop	\$500,000	\$1,500,000	\$910,000	61%	\$2,306,000	\$590,000
Everett \$4,672,000 Framingham \$7,357,000 Lexington \$3,024,000 Lynnfield Water Dist. \$1,396,000 Malden \$7,272,000 Marblehead \$4,237,000 Marblehead \$4,237,000 Medford \$6,959,000 Melrose \$3,988,000 Milton \$4,123,000 Nahant \$1,490,000 Needham* \$794,000 Newton \$13,602,000 Northborough* \$1,048,000 Northborough* \$1,048,000 Peabody* \$1,089,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Walkfield* \$2,325,000 Waltham \$10,293,000 Waltham \$10,293,000 Wellesley* \$2,350,000 Wilmington* \$611,000 Winchester* \$882,000 Winthrop \$3,312,000 Woburn* \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,500,000		0%	\$3,814,000	\$1,500,000
Framingham \$7,357,000 Lexington \$3,024,000 Lynnfield Water Dist. \$1,396,000 Malden \$7,272,000 Marblehead \$4,237,000 Marblehead \$1,917,000 Medford \$6,959,000 Melrose \$3,988,000 Milton \$4,123,000 Nahant \$1,490,000 Needham* \$794,000 Newton \$13,602,000 Northborough* \$1,048,000 Norwood \$4,395,000 Peabody* \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Waltham \$10,293,000 Waltham \$10,293,000 Weston \$1,625,000 Wilmington* \$611,000 Winchester* \$882,000 <td>\$503,000</td> <td>\$503,000</td> <td>\$503,000</td> <td>100%</td> <td>\$0</td> <td>\$0</td>	\$503,000	\$503,000	\$503,000	100%	\$0	\$0
Lexington \$3,024,000 Lynnfield Water Dist. \$1,396,000 Malden \$7,272,000 Marblehead \$4,237,000 Marblehead \$6,959,000 Medford \$6,959,000 Melrose \$3,988,000 Milton \$4,123,000 Nahant \$1,490,000 Needham* \$794,000 Newton \$13,602,000 Northborough* \$1,048,000 Norwood \$4,395,000 Peabody* \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Waltham \$10,293,000 Waltham \$10,293,000 Weston \$1,625,000 Wilmington* \$611,000 Winchester* \$882,000<	\$500,000	\$1,500,000	\$500,000	33%	\$4,172,000	\$1,000,000
Lynnfield Water Dist. \$1,396,000 Malden \$7,272,000 Marblehead \$4,237,000 Marblehead \$4,237,000 Marblehead \$6,959,000 Medford \$6,959,000 Melrose \$3,988,000 Milton \$4,123,000 Nahant \$1,490,000 Needham* \$794,000 Newton \$13,602,000 Northborough* \$1,048,000 Norwood \$4,395,000 Peabody* \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Waltham \$10,293,000 Waltham \$10,293,000 Weston \$1,625,000 Wilmington* \$611,000 Winchester* \$882,000	\$735,700	\$2,207,100	\$2,207,100	100%	\$5,149,900	\$0
Lynnfield Water Dist. \$1,396,000 Malden \$7,272,000 Marblehead \$4,237,000 Marblehead \$6,959,000 Medford \$6,959,000 Melrose \$3,988,000 Milton \$4,123,000 Nahant \$1,490,000 Needham* \$794,000 Newton \$13,602,000 Northborough* \$1,048,000 Norwood \$4,395,000 Peabody* \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Waltham \$10,293,000 Watertown \$2,978,000 Wellesley* \$2,350,000 Weston \$1,625,000 Winthrop \$3,312,000 Woburn* \$2,591,000 </td <td>\$500,000</td> <td>\$1,500,000</td> <td></td> <td>0%</td> <td>\$3,024,000</td> <td>\$1,500,000</td>	\$500,000	\$1,500,000		0%	\$3,024,000	\$1,500,000
Malden \$7,272,000 Marblehead \$4,237,000 Marlborough * \$1,917,000 Medford \$6,959,000 Melrose \$3,988,000 Milton \$4,123,000 Nahant \$1,490,000 Needham * \$794,000 Newton \$13,602,000 Northborough * \$1,048,000 Norwood \$4,395,000 Peabody * \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Waltham \$10,293,000 Waltham \$10,293,000 Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000	\$500,000	\$1,396,000		0%	\$1,396,000	\$1,396,000
Marblehead \$4,237,000 Marlborough * \$1,917,000 Medford \$6,959,000 Melrose \$3,988,000 Milton \$4,123,000 Nahant \$1,490,000 Needham * \$794,000 Newton \$13,602,000 Northborough * \$1,048,000 Norwood \$4,395,000 Peabody * \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Waltham \$10,293,000 Waltham \$10,293,000 Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000	\$727,200	\$2,181,600	\$1,454,000	67%	\$5,818,000	\$727,600
Marlborough * \$1,917,000 Medford \$6,959,000 Melrose \$3,988,000 Milton \$4,123,000 Nahant \$1,490,000 Needham * \$794,000 Newton \$13,602,000 Northborough * \$1,048,000 Norwood \$4,395,000 Peabody * \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Waltham \$10,293,000 Waltham \$10,293,000 Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538	\$500,000	\$1,500,000		0%	\$4,237,000	\$1,500,000
Medford \$6,959,000 Melrose \$3,988,000 Milton \$4,123,000 Nahant \$1,490,000 Needham* \$794,000 Newton \$13,602,000 Northborough* \$1,048,000 Norwood \$4,395,000 Peabody* \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Waltham \$10,293,000 Waltham \$10,293,000 Weston \$1,625,000 Wilmington* \$611,000 Winchester* \$882,000 Winthrop \$3,312,000 Woburn* \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,500,000		0%	\$1,917,000	\$1,500,000
Melrose \$3,988,000 Milton \$4,123,000 Nahant \$1,490,000 Needham* \$794,000 Newton \$13,602,000 Northborough* \$1,048,000 Norwood \$4,395,000 Peabody* \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield* \$2,325,000 Waltham \$10,293,000 Weston \$1,625,000 Wilmington* \$611,000 Winchester* \$882,000 Winthrop \$3,312,000 Woburn* \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$695,900	\$2,087,700		0%	\$6,959,000	\$2,087,700
Milton \$4,123,000 Nahant \$1,490,000 Needham* \$794,000 Newton \$13,602,000 Northborough* \$1,048,000 Norwood \$4,395,000 Peabody* \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield* \$2,325,000 Waltham \$10,293,000 Weston \$2,978,000 Wellesley* \$2,350,000 Wilmington* \$611,000 Winchester* \$882,000 Winthrop \$3,312,000 Woburn* \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,500,000		0%	\$3,988,000	\$1,500,000
Nahant \$1,490,000 Needham* \$794,000 Newton \$13,602,000 Northborough* \$1,048,000 Norwood \$4,395,000 Peabody* \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield* \$2,325,000 Waltham \$10,293,000 Watertown \$2,978,000 Wellesley* \$2,350,000 Wilmington* \$611,000 Winchester* \$882,000 Winthrop \$3,312,000 Woburn* \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,500,000		0%	\$4,123,000	\$1,500,000
Needham * \$794,000 Newton \$13,602,000 Northborough * \$1,048,000 Norwood \$4,395,000 Peabody * \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Watertown \$2,978,000 Wellesley * \$2,350,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,490,000	\$884,000	59%	\$606,000	\$606,000
Newton \$13,602,000 Northborough * \$1,048,000 Norwood \$4,395,000 Peabody * \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Welesley * \$2,350,000 Wellesley * \$2,350,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$794,000	1	0%	\$794,000	\$794,000
Northborough * \$1,048,000 Norwood \$4,395,000 Peabody * \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Wellesley * \$2,350,000 Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$1,360,200	\$4,080,600	\$2,720,400	67%	\$10,881,600	\$1,360,200
Norwood \$4,395,000 Peabody * \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Wellesley * \$2,350,000 Weston \$1,625,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,048,000	1-,,	0%	\$1,048,000	\$1,048,000
Peabody * \$1,089,000 Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Wellesley * \$2,350,000 Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,500,000	\$1,500,000	100%	\$2,895,000	\$0
Quincy \$10,505,000 Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Wellesley * \$2,350,000 Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,089,000	\$1,500,000	0%	\$1,089,000	\$1,089,000
Reading \$4,146,000 Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Wellesley * \$2,350,000 Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$1,050,500	\$3,151,500	\$3,151,500	100%	\$7,353,500	\$0
Revere \$5,034,000 Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Watertown \$2,978,000 Wellesley * \$2,350,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,500,000	\$134,000	9%	\$4,012,000	\$1,366,000
Saugus \$6,621,000 Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield* \$2,325,000 Waltham \$10,293,000 Watertown \$2,978,000 Wellesley* \$2,350,000 Wilmington* \$611,000 Winchester* \$882,000 Winthrop \$3,312,000 Woburn* \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$503,400	\$1,510,200	4101,000	0%	\$5,034,000	\$1,510,200
Somerville \$7,419,000 Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Watertown \$2,978,000 Wellesley * \$2,350,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$662,100	\$1,986,300	\$1,880,000	95%	\$4,741,000	\$106,300
Southborough \$1,512,000 Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Watertown \$2,978,000 Wellesley * \$2,350,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$741,900	\$2,225,700	\$1,000,000	0%	\$7,419,000	\$2,225,700
Stoneham \$2,339,000 Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Watertown \$2,978,000 Wellesley * \$2,350,000 Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,512,000		0%	\$1,512,000	\$1,512,000
Stoughton* \$2,506,000 Swampscott \$3,755,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Watertown \$2,978,000 Wellesley * \$2,350,000 Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,500,000	\$1,000,000	67%	\$1,339,000	\$500,000
Swampscott \$3,755,000 Wakefield * \$2,325,000 Waltham \$10,293,000 Watertown \$2,978,000 Wellesley * \$2,350,000 Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,500,000	\$1,000,000	0%	\$2,506,000	\$1,500,000
Wakefield * \$2,325,000 Waltham \$10,293,000 Watertown \$2,978,000 Wellesley * \$2,350,000 Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,500,000	\$249,468	17%	\$3,505,532	\$1,250,532
Waltham \$10,293,000 Watertown \$2,978,000 Wellesley * \$2,350,000 Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,500,000	\$1,400,000	93%	\$925,000	\$1,230,332
Watertown \$2,978,000 Wellesley * \$2,350,000 Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$1,029,300	\$3,087,900	\$1,400,000	0%	\$10,293,000	\$3,087,900
Wellesley * \$2,350,000 Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,500,000		0%	\$2,978,000	\$1,500,000
Weston \$1,625,000 Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,500,000	\$241,569	16%	\$2,108,431	\$1,258,431
Wilmington * \$611,000 Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,500,000	Ψ2-1,309	0%	\$1,625,000	\$1,500,000
Winchester * \$882,000 Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$611,000		0%	\$611,000	\$611,000
Winthrop \$3,312,000 Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$882,000		0%	\$882,000	\$882,000
Woburn * \$2,591,000 Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,500,000		0%	\$3,312,000	\$1,500,000
Chicopee \$7,153,000 South Hadley F.D. 1 \$1,538,000	\$500,000	\$1,500,000	\$1,000,000	67%	\$1,591,000	\$500,000
South Hadley F.D. 1 \$1,538,000	\$715,300	\$2,145,900	\$2,085,000	97%	\$5,068,000	\$60,900
2	\$500,000	\$1,538,000	\$2,000,000	0%	\$1,538,000	\$1,538,000
	\$500,000	\$1,338,000		0%	\$1,338,000	\$1,338,000
TOTAL \$210,000,000			\$32,768,077		\$177,231,923	\$50,562,123

^{*} Partially Served Communities

ATTACHMENT 2

MWRA LOCAL PIPELINE AND WATER SYSTEM ASSISTANCE PROGRAMS LINED AND UNLINED PIPE BY COMMUNITY AS OF DECEMBER 2012

	T			
	Total	Miles	Miles	
Community	Miles	of Lined	of Unlined	Percent
Community	of Pipe	I TO THE PARTY OF		Unlined
4 25 4	132	Pipe 66	Pipe 66	50%
Arlington	85	55	30	36%
Bedford*	88	62	26	30%
Belmont	1009	883	126	12%
Boston	140	140	0	0%
Brookline	_	87	34	28%
Canton*	121 59	33	25	43%
Chelsea	262	209	54	21%
Chicopee				
Dedham/Westwood*	190	141	49	26%
Everett	68	33	35	51%
Framingham	274	211	63	23%
Lexington	157	150	7	5%
Lynnfield W.D.	29	25	5	16%
Malden	118	60	58	49%
Marblehead	80	31	48	61%
Marlborough*	168	154	14	8%
Medford	120	48	72	60%
Melrose	80	40	40	50%
Milton	138	97	41	30%
Nahant	23	16	7	30%
Needham*	133	90	43	32%
Newton	319	151	167	52%
Northborough*	65	61	4	6%
Norwood	118	78	40	34%
Peabody*	170	55	115	68%
Quincy	238	140	98	41%
Reading	110	65	45	41%
Revere	91	48	43	47%
Saugus	125	41	84	67%
Somerville	120	47	73	61%
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	14	41	74%
Wakefield*	114	88	26	23%
Waltham	157	44	113	72%
Watertown	80	65	15	19%
Wellesley*	136	64	72	53%
Weston	105	105	0	0%
Wilbraham	74	20	54	73%
Wilmington	126	99	27	21%
Winches ter*	105	105	0	0%
Winthrop	45	11	34	75%
Woburn*	182	106	76	42%
TOTAL	6,404	4,284	2,120	33%



^{*} Partially Served Communities



Town of Reading 16 Lowell Street Reading, MA 01867-2685

FAX: (781) 942-9071

Email: townmanager@ci.reading.ma.us

Website: www. readingma.gov

TOWN MANAGER (781) 942-9043

January 8, 2013

Mr. Frederick A. Laskey, Executive Director MWRA Charlestown Navy Yard 100 First Ave, Building 39 Boston, MA 02129

Re: Local Water Assistance Program

Dear Mr. Lasky:

The Town of Reading recently completed a water distribution system master plan. The study was performed to evaluate the new MWRA connections, system nitrification, chlorine decay, and to recommend system water quality improvements. Through hydraulic modeling analysis it was determined that while less than 30 percent of the distribution system is comprised of unlined pipe, unlined pipe is responsible for over 50 percent of the total chlorine decay in Reading's water distribution system.

The report recommends capital improvements to the distribution system totaling \$25M, focused on water main rehabilitation to improve water quality consisting of:

- Replacement of unlined pipes under 6 inch in size
- Cleaning and relining of unlined pipes greater than 6 inches
- · Removal of unnecessary parallel mains

The master plan further identifies a recommended primary phase of improvements which targets projects that will achieve the greatest level of system improvements, especially to the northern end of Reading where the greatest level of nitrification is occurring. This initially phase is estimated at \$10M and the Town of Reading desires to implement the first portion of this project beginning in July 2013. A warrant article will be included in the 2013 Annual Town Meeting warrant to authorize this first phase totaling \$4 to \$5 million. A complete listing of projects is identified on the attached sheet.

To accomplish this goal the Town of Reading respectfully requests approval to access the entire remaining Local Water System Assistance funds of \$4,012,000 in interest free loans to expedite the first phase of these needed water quality improvement projects.

Thanks you for your assistance and for consideration of this request at the MWRA Board meeting in January 2013.

Sincerely,

Peter I. Hechenbleikner

Town Manager

cc:

Board of Selectmen

DPW Director Town Engineer

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READING CAPITAL IMPROVEMENTS PROGRAM WATER MAIN PHASE A-1 IMPROVEMENTS

Phase	Street Name	From and To Street Limits	Diam (in)	Install Year	Length (feet)	Recommendation	Year 2012 Project Cost
		9					
A-1	MAIN ST	Woburn St to Mill St	12	1890	12,313	Clean & Line	\$1,723,809
A-1	MILL ST	Main St to Town Line	12	1890	1,724	Clean & Line	\$241,360
A-1	LOCUST ST	Main St to Auburn St Tank	12	1890	1,016	Clean & Line	\$142,250
A-1	MAIN ST	South St to Hopkins St	6	1892	658	Abandon	\$32,879
A-1	MAIN ST	Ash St to Hopkins St	6	1892	4,633	Repl w/ 8" DI	\$764,390
		,				Phase R1-A	\$2,904,687
			8				
A-1A	Chute St.	Woburn St to Haven St	6	1890	450	Repl w/ 8" DI	\$74,324
A-1A	Haven St	Main St to High St	8	1890	1,228	Repl w/ 8" DI	\$202,539
A-1A	Sanborn St	Haven St to Woburn St	6	1890	576	Repl w/ 8" DI	\$95,012
A-1A	Linden St	Haven St to Woburn St	6	1891	600	Repl w/ 8" DI	\$99,000
A-1A	High St	Haven St to Washington St	6	1890	1,226	Repl w/ 8" DI	\$202,282
A-1A	Washington St	Minot St to Ash St	6	1930	518	Repl w/ 8" DI	\$85,436
						Phase R2-A	\$758,593
•							
A-1B	Bear Hill Rd.	Summer Ave to Hopkins St	12	1929	1,186	Clean & Line	\$166,048
A-1B	Linden St	Woburn St to Lowell St	6	1891	968	Repl w/ 8" DI	\$159,746
A-1B	Minot St	Main St to Washington St	6	1892	1,559	Repl w/ 8" DI	\$257,159
A-1B	Summer Ave	Hopkins St to Bear Hil Rd	6	1909	1,486	New 12" DI	\$274,845
A-1B	Libby Ave	Salem St to end	6	1925	2,282	Repl w/ 8" DI	\$376,550
A-1B	X Country	Belmont St to Libby Ave			1,105	New 8" DI	\$220,901
				ж.		Phase R2-B	\$1,455,249

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

January 16, 2013

SUBJECT:

Miscellaneous Fencing and Guard Rail

STEELCO Chain Link Fence Erecting Co., Inc.

Contract 6760T, Change Order 2

COMMITTEE: Water Policy & Oversight

Carmine DeMaria, Senior Engineer

A. Navanandan, P.E., Director, Construction

Preparer/Title

INFORMATION

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VOTE

Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Change Order 2 to Contract 6760T, Miscellaneous Fencing and Guard Rail, with STEELCO Chain Link Fence Erecting Co., Inc., for an amount not to exceed \$51,760, increasing the contract amount from \$328,198 to \$379,958, with no increase in contract term.

Further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 6760T in an amount not to exceed the aggregate of \$50,000, in accordance with the Management Policies and Procedures of the Board of Directors.

DISCUSSION:

Contract 6760T was awarded under delegated authority in June 2011. This two-year contract includes unit price bid items for installation of fencing, posts, gates, and guardrails as determined by MWRA's Security Task Force, and to repair or replace existing fencing at any of MWRA's facilities. The contract expires on July 20, 2013. The original contract amount was estimated based upon reasonable assumptions and past similar contract history but the actual quantities of the various unit bid price items can vary.

Change Order 1, also approved under delegated authority, added gate hardware and fencing sizes not included in the contract. Staff determined that fencing should be installed at the Southborough Facility to establish a property boundary along a public access path constructed near the facility. Change Order 1 also included storm damage repairs to gates and fencing at the Turkey Hill Tank in Arlington and the Walnut Hill Tank in Lexington.

This Change Order

Change Order 2 consists of the following item:

Increases in Various Unit Price Bid Items

\$51,760

MWRA's Security Task Force recommended the installation of additional fencing around expanded storage areas at the Chelsea Facility and replacement of a deteriorated fence around the employee parking lot at Deer Island. In addition, Hurricane Sandy resulted in the need to repair damaged fencing at Reservoir Road in Weston. These projects have almost depleted the estimated quantity of several bid items. To ensure that MWRA will be able to continue to address as-needed fencing requirements until the contract expiration date in July, staff recommend that the estimated quantity of several of the most commonly used bid items be increased, as itemized in the attached list.

It should be noted that upon contract completion, staff anticipate processing a balancing change order which will include credits for other unit price bid items that will not be fully expended.

The approved proposed change order (PCO) for this work has been identified by MWRA staff as overruns in estimated quantities.

CONTRACT SUMMARY:

	Amount	Time	Dated
Original Contract: Change Orders:	\$287,129.00	730 Days	07/21/11
Change Order 1*: Change Order 2: Total Change Orders:	\$41,069.00 \$51,760.00 \$92,829.00	0 Days <u>0 Days</u> 0 Days	02/09/12 Pending
Adjusted Contract:	\$379,958.00	730 Days	

^{*}Approved under delegated authority (original delegated authority limit is 25% of contract amount or \$71,782.25).

BUDGET/FISCAL IMPACT:

Sufficient funds are available for this change order in the FY13 CIP for Security Equipment and Installation.

MBE/WBE PARTICIPATION:

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

ATTACHMENT:

Table of Unit Price Bid Item Adjustments

Contract 6760T, Change Order 2 Table of Unit Price Bid Item Adjustments

Bid Item	Original Quantity	Unit Price	Previous Quantity Adjustments	Increase this Change Order	Total Increase this Change Order
2 – 8-feet-tall chain link fence with 1-inch mesh	2,000 lf	\$53.15/lf	None	760 lf	\$40,394.00
3 – 8-feet-tall line posts	200 each	\$25/each	None	2 each	\$50.00
4 – 8-feet-tall end posts	20 each	\$120/each	None	7 each	\$840.00
5 – 8-feet-tall corner posts	30 each	\$140/each	None	10 each	\$1,400.00
6 –8-feet-tall, double-swing gates between 12 feet and 20 feet long with 1-inch mesh	160 lf	\$99/lf	None	39 lf	\$3,861.00
7 – 8-feet-tall pedestrian gates, 5 feet wide with 1-inch mesh	4 each	\$1,200/each	None	3 each	\$3,600.00
8 – Removal and disposal of existing chain link fence	2,000 lf	\$2.50/lf	None	646 lf	\$1,615.00
Total Amount					\$51,760

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

January 16, 2013

SUBJECT:

Hultman Aqueduct Interconnections

Barletta Heavy Division, Inc. Contract 6975, Change Order 26

COMMITTEE: Water Policy & Oversight

A. Navanandan, P.E., Director, Construction Frank Westberg, P.E. Construction Coordinator

Preparer/Title

INFORMATION

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Michael J. Hornbrook

Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Change Order 26 to Contract 6975, Hultman Aqueduct Interconnections, with Barletta Heavy Division, Inc., for a lump sum amount of \$153,551, increasing the contract amount from \$52,795,037 to \$52,948,588, with no increase in contract term.

Further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 6975 in an amount not to exceed the aggregate of \$250,000, in accordance with the Management Policies and Procedures of the Board of Directors.

DISCUSSION:

Under Contract 6975, the Contractor has constructed interconnections on the Hultman Aqueduct at Shaft L in Framingham, and at Shafts N, 5, and W in Weston. These interconnections consist of 10-foot-diameter pipes and valves housed inside underground, reinforced-concrete valve chambers varying in size from 30 feet to 60 feet long, 25 feet to 40 feet wide, and approximately 30 feet deep. The Contractor also has constructed two large concrete overflow structures on the Hultman at Norumbega to protect the aqueduct from potential transient hydraulic pressure surges. The Hultman Aqueduct has been inspected and rehabilitated and all interconnections complete between Shaft 4 in Southborough and Shafts 5 and W in Weston, a distance of approximately 13.2 miles, except for punchlist items.

Existing community connections, air relief structures, blow-off manholes, access hatches, and numerous culverts under the Hultman have been repaired or replaced to restore the aqueduct to safe and efficient operation after more than 65 years of service without an overhaul.

MWRA now has in place and available for service, two independent, reliable, and fully interconnected water transmission lines to provide system redundancy. The remaining contract work at Loring Road and River Road commenced on June 1, 2012 and will be completed by March 31, 2013. All landscaping work at Norumbega Covered Storage is due to be completed by the current contract end date of May 31, 2013.

This Change Order

Change Order 26 consists of the following three items:

Furnish and Install Two Access Manways at River Road

\$131,299

There are five large MWRA water transmission lines (WASM 1, WASM 2, WASM 3, WASM 4, and the Hultman Branchline) that all interconnect at River Road in Weston. Because there is limited access to the valves on these lines (closest access/egress is 11,000 feet away on WASM 3 and 5,000 feet away on WASM 4), it was determined that additional manways at this key River Road location are necessary. The picture on the right depicts the installation of one these manways.

The approved proposed change order (PCO) for this item has been identified by MWRA staff as an unforeseen condition. MWRA staff, the Design Engineer (Dewberry Engineers, Inc.), and the Contractor, have agreed to a lump sum amount of \$131,299 for this additional work with no increase in contract term.



Furnish and Install Conduit, Wire, Switch, and an Exit Sign in Valve Chamber 5A2

\$14,061

Under Change Order 16, the size of Valve Chamber 5A2 was enlarged and a second set of access stairs was added. During construction of the change order work, the Contractor was required to furnish and install a switch to activate the HVAC ventilation system from the second set of stairs and an exit sign, both of which were omitted from Change Order 16. Additional conduit and wiring were required to install the switch and exit sign.

The approved PCO for this item has been identified by MWRA staff as an omission in Change Order 16. MWRA staff, Dewberry Engineers, Inc., and the Contractor have agreed to a lump sum amount of \$14,061 for this additional work with no increase in contract term.

Raise the Grade Around the Bifurcation Structure and Furnish and Install Additional Waterproofing

\$8,191

As designed, there is a three-foot elevation difference between the roof slab where the entrance hatch and stairs are located and the ground level on the east side of the Bifurcation Structure. There is a concrete lip around the access hatch extending an additional six inches above the roof slab. Therefore, it was necessary to raise the grade elevation so that the roof slab is only 12 inches above ground level (shown in the picture on the right) to provide safe access to the hatch. This change in elevation also required additional waterproofing on the east-facing exterior wall.

The PCO for this item has been identified by MWRA staff as an error. MWRA staff, Dewberry Engineers,

Inc., and the Contractor have agreed to a lump sum amount of \$8,191 for this additional work with no increase in contract term. The Contractor has completed the

work on these change order items at its own risk in order to proceed with the remainder of the contract work.

CONTRACT SUMMARY:

	<u>Amount</u>	<u>Time</u>	<u>Dated</u>
Original Contract:	\$47,542,388.00	1,826 Days	09/02/09
Change Orders:			
Change Order 1:	\$18,215.00	0 Days	04/29/10
Change Order 2*:	\$21,079.00	0 Days	05/13/10
Change Order 3*:	\$0.00	0 Days	05/18/10
Change Order 4*:	\$13,917.00	0 Days	05/27/10
Change Order 5	\$1,259,041.00	(155 Days)	07/14/10

\$357,919.00	0 Days	10/14/10
\$10,392.00	0 Days	12/07/10
\$20,100.00	0 Days	12/14/10
\$16,000.00	0 Days	01/03/11
\$21,860.00	0 Days	01/19/11
\$7,200.00	0 Days	02/24/11
\$24,913.00	0 Days	02/25/11
\$148,885.00	0 Days	06/01/11
\$1,772,345.00	0 Days	07/14/11
\$247,190.00	0 Days	10/06/11
\$110,086.00	0 Days	10/13/11
\$504,427.00	(304 Days)	01/04/12
\$15,754.00	0 Days	01/04/12
\$19,768.00	0 Days	01/17/12
\$23,922.00	0 Days	01/19/12
\$185,356.00	0 Days	05/17/12
\$79,116.00	0 Days	06/21/12
\$245,264.00	0 Days	Pending
<u>\$153,551.00</u>	<u>0 Days</u>	Pending
\$5,406,200.00	(459 Days)	
\$52,948,588.00	1,367 Days	
	\$10,392.00 \$20,100.00 \$16,000.00 \$21,860.00 \$7,200.00 \$24,913.00 \$148,885.00 \$1,772,345.00 \$247,190.00 \$110,086.00 \$504,427.00 \$15,754.00 \$19,768.00 \$23,922.00 \$185,356.00 \$79,116.00 \$245,264.00 \$153,551.00 \$5,406,200.00	\$10,392.00

^{*}Approved under delegated authority

If Change Order 26 is approved, the cumulative total value of all changes orders to this contract will be \$5,406,200 or 12% of the original contract amount. Of the \$5,406,200, \$1,643,960 (3.45%) is due to acceleration costs and \$1,003,643 (2.1%) is due to Shaft 5 change order work, which reduces the total remaining change order work to 6.45%. Work on this contract is approximately 91.5% complete.

BUDGET/FISCAL IMPACT:

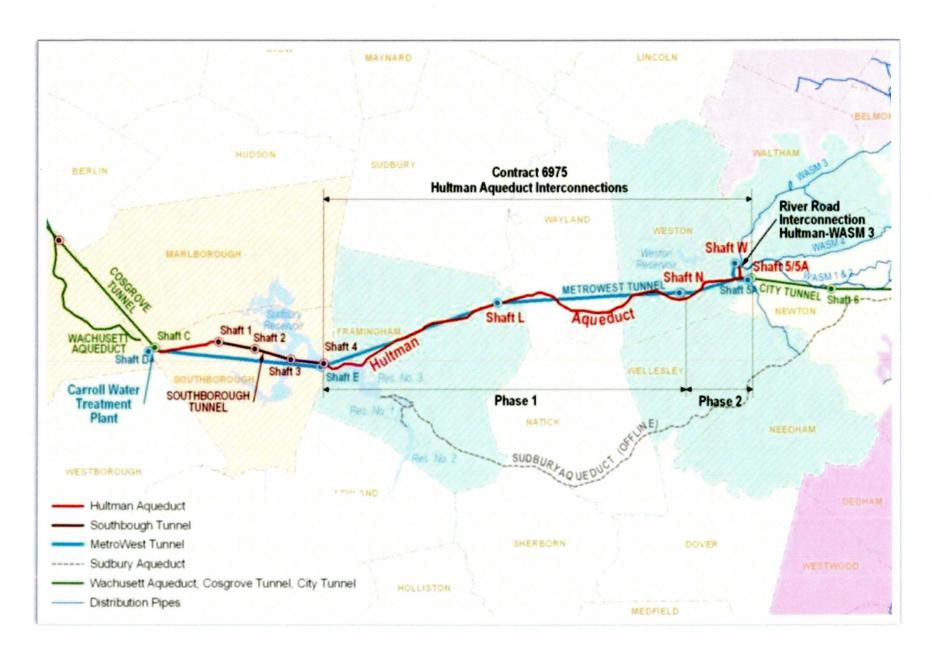
The FY13 CIP contains a budget of \$52,699,240 for Contract 6975. Including this change order for \$153,551, the adjusted subphase total is \$52,948,588 or \$249,348 over budget. This amount will be covered within the five-year spending cap.

MBE/WBE PARTICIPATION:

The minimum MBE and WBE participation requirements for this project were established at 5.30% and 4.40%, respectively. The Contractor will be notified that these requirements are still expected to be met.

ATTACHMENT:

Project Site Map



STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

January 16, 2013

SUBJECT:

Southern Extra High Redundancy Plan

SEA Consultants, Inc.

Contract 6452, Amendment 6

COMMITTEE: Water Policy & Oversight

Paul T. Rullo, Design Manager Jae R. Kim, Chief Engineer
Preparer/Title

INFORMATION

VOTE

Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 6 to Contract 6452, Southern Extra High Redundancy Plan, with SEA Consultants, Inc., increasing the contract term by 12 months, from February 28, 2013 to February 28, 2014, with no increase in contract amount.

Further, to approve a change in the name of the Consultant for Contract 6452 from SEA Consultants, Inc. to Kleinfelder Northeast, Inc.

BACKGROUND:

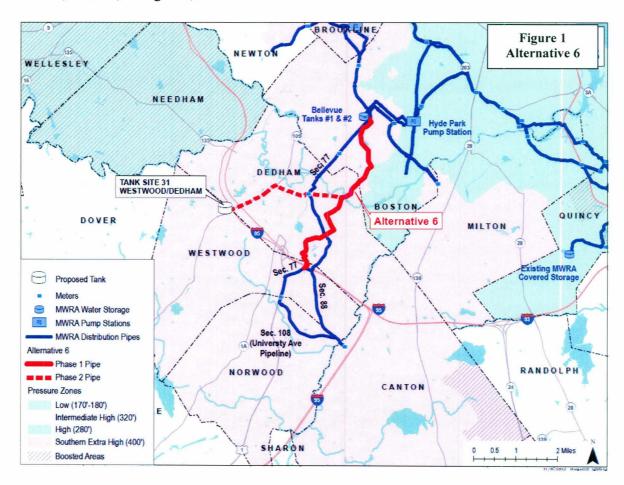
On February 7, 2007, the Board approved the award of Contract 6452 to SEA Consultants, Inc. to provide concept planning services for the Southern Extra High Distribution Storage and Redundancy Plan. MWRA's Southern Extra High service area provides water to Canton, Dedham, Norwood, Stoughton, Westwood, portions of Brookline and Milton, and the Roslindale and West Roxbury sections of Boston. The five communities in the southern portion of the service area (Canton, Norwood, Dedham, Westwood, and Stoughton) are served by a single 36-inch-diameter transmission main (Section 77), which is five miles long. Canton and Stoughton are served by a branch (Section 88) off of Section 77. Although several of these communities are partially supplied by MWRA, the loss of this single transmission main (Section 77) would result in a rapid loss of service in Norwood and Canton, and potential water restrictions for Stoughton and Dedham/Westwood.

In January 2009, staff presented the Board with 11 alternatives, which were initially evaluated in the study to provide redundancy. At that time, staff had not yet recommended a preferred alternative and Contract 6452 has since been extended several times to coordinate this project

with a larger MWRA study to provide transmission redundancy for the metropolitan tunnel system and to coordinate with the potential expansion of MWRA's water system to serve the communities of Braintree, Holbrook, and Randolph (also known as "Tri-Town").

After extensive evaluations, staff have determined that both redundancy for the metropolitan tunnel system and the potential expansion of the system to the south to serve Tri-Town and possibly the Southfield development in South Weymouth would not require any modifications to the Southern Extra High service area and could proceed independent of the Southern Extra High Redundancy project.

On November 14, 2012, staff presented the Board with a recommendation that MWRA move forward with Phase 1 of "Alternative 6," which is shown in Figure 1 below. The proposed alternative would provide a redundant pipeline from the Bellevue Tanks in West Roxbury to Norwood, Canton, Stoughton, and Dedham/Westwood.



DISCUSSION:

This Amendment

Due to the length of the proposed pipeline, Massachusetts Environmental Policy Act (MEPA) regulations require that MWRA file an Environmental Notification Form (ENF). As discussed at

the November 14, 2012 Board meeting, SEA will prepare the ENF, as well as provide additional assistance to MWRA staff during the public review process.

The original contract was executed in the amount of \$840,072. To date approximately \$533,425 has been expended. Although there is adequate funds remaining in the contract, the contract's current expiration date is February 28, 2013. Therefore, staff recommend the approval of Amendment 6 to Contract 6452, which will extend the contract term for an additional 365 calendar days, from February 28, 2013 to February 28, 2014 with no increase in contract amount.

In addition to the recommended time extension, Amendment 6 will include a formal name change for the Consultant from SEA Consultants, Inc. to Kleinfelder Northeast, Inc. This change will be in name only and will have no impact on the existing terms and conditions of the contract, or Consultant staff assigned to this project.

CONTRACT SUMMARY:

	<u>Amount</u>	<u>Time</u>	Approval Date
Original Contract:	\$840,072	548 Days	02/27/07
Amendment 1*:	\$0.00	182 Days	10/16/08
Amendment 2:	\$0.00	365 Days	01/14/09
Amendment 3:	\$0.00	365 Days	02/10/10
Amendment 4:	\$0.00	365 Days	12/14/11
Amendment 5:	\$0.00	365 Days	01/18/12
Proposed Amendment 6:	\$0.00	<u>365 Days</u>	Pending
Adjusted Contract Amount:	\$840,072	2,555 Days	

^{*}Approved under delegated authority

BUDGET/FISCAL IMPACT:

The FY13 CIP includes a budget of \$840,072 for Contract 6452. Amendment 6 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 7.18% and 5.77%, respectively. These requirements will remain unchanged by this amendment.



MASSACHUSETTS WATER RESOURCES AUTHORITY

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

Telephone: (617) 242-6000

Fax: (617) 788-4899

TTY: (617) 788-4971

PERSONNEL & COMPENSATION COMMITTEE MEETING

Chair:

Vice-Chair: K. Cotter Committee Members:

J. Barrera

J. Carroll

J. Foti

A. Pappastergion

J. Walsh

to be held on

Wednesday, January 16, 2013

Location:

100 First Avenue, 2nd Floor

Charlestown Navy Yard

Boston, MA 02129

Time:

Immediately following Water Comm.

Α. **Approval**

1. PCR Amendments – January 2013

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Personnel and Compensation Committee

December 12, 2012

A meeting of the Personnel and Compensation Committee was held on December 12, 2012 at the Authority headquarters in Charlestown. Chairman Mannering presided. Present from the Board were Messrs. Barrera, Carroll, Flanagan, Foti, Pappastergion, Swett and Walsh. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, and Bonnie Hale. The meeting was called to order at 12:10 p.m.

Approval

PCR Amendments – December 2012

The Committee recommended approval of an amendment to the Position Control Register (ref. agenda item A.1).

The meeting adjourned at 12:15 p.m.

Approved as recommended at December 12, 2012 Board of Directors meeting.

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

January 16, 2013

SUBJECT:

January PCR Amendments

COMMITTEE: Personnel and Compensation

INFORMATION

Robert Donnelly, Director of Human Resources

Preparer/Title

Rachel C. Madder

Director, Administration & Finance

RECOMMENDATION:

To approve the amendment to the Position Control Register (PCR) included in the attached chart¹.

DISCUSSION:

The PCR amendment included in this package reflects organizational changes aimed at improving the cost-effectiveness, structural soundness and staffing patterns as well as addressing union settlements.

The amendment included in today's summary is:

1. Title, grade and location change for a filled position (Electrician to Security Specialist) to address staffing needs in the Office of Emergency Preparedness.

This amendment requires Board approval after Personnel and Compensation Committee review.

BUDGET/FISCAL IMPACT:

The annualized budget impact of this PCR amendment is \$6,200. Staff will ensure that the cost increases associated with this PCR amendment will not result in spending over the approved FY13 Wages and Salaries budget.

ATTACHMENTS:

New/Old Job Descriptions

¹ The Position Control Register lists all regular positions in this fiscal year's Current Expense Budget. Any changes to positions during the year are proposed as amendments to the PCR. The Personnel and Compensation Committee of the Board of Directors must approve all PCR amendments. In addition, any amendments resulting in an upgrade of a position by more than one grade level or increasing a position's annual cost by \$10,000 or more must be approved by the Board of Directors after review by the Personnel and Compensation Committee.

MASSACHUSETTS WATER RESOURCES AUTHORITY POSITION CONTROL REGISTER AMENDMENTS FISCAL YEAR 2013

Current V/F Type Current Title UN GR Amended Title UN GR Salary New Salary \$ Impact	Reason
	For Amendment
B15 Operations Trade Labor Maint 2988066 F T,G,L Electrician 3 16 Security Specialist 3 18 \$62.573 \$68.773 - \$68.773 \$6,200 - \$6,200 To meet staffing ne	eds in Office of Emergency Preparedness



MWRA POSITION DESCRIPTION

POSITION:

Electrician

PCR#:

DIVISION:

Operations, Support Services

DEPARTMENT:

Field Operations, Maintenance/Deer Island, Central Support/FRSA

BASIC PURPOSE:

Performs electrical installations and repairs at various locations throughout the Authority. Provides a range of possible duties, but will not necessarily perform all of the duties listed below.

SUPERVISION RECEIVED:

Works under the direct supervision of the Unit Supervisor.

SUPERVISION EXERCISED:

May exercise supervision of entry level staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Installs, modifies, troubleshoots, repairs, loads and tests new and existing electrical lines, circuits, systems, fixtures, associated equipment and controls for industrial use, and other equipment/systems as required and/or assigned.
- Performs electrically related activities specified by work order.
- Inspects and troubleshoots electrical systems, equipment and fixtures using testing devices.
- Performs preventive, predictive and corrective maintenance on electrical systems, equipment and fixtures according to vendor specifications.
- Installs new or replacement electrical systems, equipment and fixtures.

Page 1 of 4 Electrician - Old

- Selects and obtains appropriate stock or materials per established procedures, and tools or machines for the job.
- Performs work in conformance with relevant building and electrical codes and in a safe and professional manner.
- Follows established safety, operating, and emergency response procedures and policies established by MWRA.
- Operates motor vehicles, such as vans and pickup trucks, to transport materials to work sites, and pick up and deliver supplies and equipment.
- Performs work in a safe and professional manner.
- Trains peers and subordinates as requested.
- Prepares documents and reports results in the Maximo, Lawson or other appropriate Database of inspections and work performed.
- Assists other trades in the performance of their work, as required or assigned.
- Performs light maintenance independently or as part of a team. Light maintenance shall include but not limited to:
 - Performs routine testing, lockout/tagout, operation (startup/shutdown) and adjustment of process equipment.
 - Installs and retrofits new equipment related to plant systems.
 - With proper training sets up ladders, staging and rigging and utilizes hoists, jacks, dollies, lifts, etc. for proper access to job and to remove and install equipment.
 - Operates portable pumping, ventilation and other equipment to prepare work area for access.
 - > Opens hatches.
 - Installs safety rails.
 - Removes snow from immediate work area in order to perform tasks.

SECONDARY DUTIES:

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

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A high school education or the equivalent; and
- (B) Satisfactory completion of a certified journey level electrician apprenticeship training program, or a similar formal training program; or
- (C) Any equivalent combination of education and/or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of Massachusetts electrical and other applicable codes.
- (B) Thorough knowledge of pumps, compressors, generators and other related electrical equipment, including polyphase circuits and motors and associated controls.
- (C) Thorough knowledge of the standard practices, materials, tools, occupational hazards and safety practices common to the trade as well as the completion of MWRA safety training.
- (D) Ability to diagnose problems and recommend repair or replacement.
- (E) Ability to work with tools and equipment of the electric trade. Ability to work with hazardous chemicals and in adverse weather conditions.
- (F) The ability to read and interpret wiring diagrams, sketches, blue prints, and vendor instructions to plan and set up work for the complete installation, modification, maintenance and repair of a wide variety of industrial electrical systems.
- (G) Ability to attain knowledge and work processes required to perform maintenance tasks required by Reliability Centered Maintenance or similar Maintenance Management Program.
- (H) Excellent interpersonal, oral and written communication skills.
- (I) Basic reading, writing, mathematical, scientific and oral communication skills.

SPECIAL REQUIREMENTS:

A valid Massachusetts Journeyman Electrician's license.

A valid Massachusetts Drivers License.

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

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

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

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

The employee must frequently lift and/or move up to 25 pounds and occasionally lift and/or move more than 100 pounds. Specific vision abilities required by this job include close vision, distance and peripheral vision, depth perception, and the ability to adjust focus.

WORK ENVIRONMENT:

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

While performing the duties of this job, the employee regularly works in outside weather conditions. The employee regularly works near moving mechanical parts and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals, and risk of electrical shock.

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

September, 2001

Page 4 of 4 Electrician - Old

MWRA POSITION DESCRIPTION

POSITION:

Security Specialist

PCR#:

DIVISION:

DEPARTMENT:

Office of Emergency Preparedness

BASIC PURPOSE:

Assists the Director, Operations Support & Emergency Preparedness and the Security Services Administrator with coordinating security activities to ensure the safety and security of MWRA personnel, property and equipment. Assists in the coordination of all aspects of the MWRA security and emergency response process, including the operation of security monitoring systems and establishment of related policies and procedures.

SUPERVISION RECEIVED:

Works under the general supervision of the Director, Operations Support & Emergency Preparedness. May receive work instruction and direction from the Security Services Administrator.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Administers intrusion alarm contract. Works with Procurement to establish and
 implement necessary service contracts including scope development, reporting
 requirements and review of proper qualifications. Serves as the liaison to various site and
 facility supervisors regarding proper maintenance and operation of the electronic security
 equipment.
- Orders maintenance/repair service as needed. Reviews costs for services provided by the contractor and approves for payment. Visits all field sites to inspect intrusion alarm

Page 1 of 4 Security Specialist - New

- systems. Identifies work needed to be done to bring system up to code. Schedules the service contractor to come on site to perform needed repair or maintenance.
- Organizes fire alarm inspections by local fire department and electrical inspectors. Orders any needed equipment. Makes service recommendations as needed and prepares and produces reports on facility fire alarms.
- Performs on-call duty for alarms. Determines when the services of the vendor are required.
- Assists with updating and administering operating/maintenance standards, policies and standard operating procedures (SOPs) for the security system, including access control devices, locks and key control, fire alarms, and other systems and activities relating to security and facility access.
- Assists the Director, Operations Support & Emergency Preparedness and Security Services Administrator with the coordination and development of the MWRA's security and emergency planning, policies, and procedures. Assists with the preparation of reports and communications necessary to carry out the activities of the program.
- Participates in audit programs by performing equipment audits (inventory review);
 maintaining records for repairs and replacement. Visits facilities to check equipment levels and condition.
- As part of the Security team, participates in department meetings and suggests improvements in department procedures and methods of implementing new audit findings.
- Retrieves and reviews documents, develops spreadsheets and compiles contract information.
- Develops and maintains tracking logs for the intrusion alarm system, audits the quality of the data and ensures its timely update.
- Assists with the preparation of contingency and emergency plans and procedures.
- Assists with weekend/off-hours on-call coverage of security system alarms as part of a
 weekly coverage rotation.

SECONDARY DUTIES:

Serves as a member of the Emergency Service Unit and is part of the security on call
 Page 2 of 4
 Security Specialist - New

rotation.

• Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A high school education or the equivalent; and
- (B) One (1) to three (3) years of related military or security experience; and
- (C) Previous experience in public sector administration, preferred; or
- (D) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated knowledge and skills in fire alarm and security systems, operations and maintenance.
- (B) Working knowledge of database management and PC applications (e.g. Office).
- (E) Strong organizational skills, experience with SOPs, EAPs, facility manuals and training procedures is preferred.
- (F) Demonstrated written and oral communication skills.

SPECIAL REQUIREMENTS:

A valid Massachusetts Journeyman Electrician's license.

Site specific F1 Certification with demonstrated knowledge of facility specific Fire Alarm Systems within 6 months.

A valid Massachusetts Drivers license.

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

Page 3 of 4 Security Specialist - New The physical demands described are representative of those that must be met by an employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

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

The employee may frequently be required to lift and/or move up to 10 pounds and occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision and the ability to focus.

WORK ENVIRONMENT:

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

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

May 2012

Frederick A. Laskey Executive Director

Chairman: R. Sullivan Vice-Chair: J. Carroll Secretary: J. Foti

Board Members: J. Barrera K. Cotter

A. Pappastergion B. Swett

P. Flanagan M. Gove

J. Walsh

MASSACHUSETTS WATER RESOURCES AUTHORITY

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

> Telephone: (617) 242-6000 Fax: (617) 788-4899

TTY: (617) 788-4971

REVISED

BOARD OF DIRECTORS' MEETING

to be held on

Wednesday, January 16, 2013

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. Approval of the Sixty-Fifth Supplemental Resolution (ref. AF&A B.1)
- 2. Authorization to Surplus Waban Hill Reservoir, Newton (ref. AF&A B.2)
- Local Water System Assistance Program Approval of Water Loan Program Guidelines Revision for the Town of Reading Due to Water Quality Concerns (ref. W B.1)
- 4. PCR Amendments January 2013 (ref. P&C A.1)
- 5. Authorization to Acquire Land in Weston (ref. AF&A B.3)

B. Contract Amendments/Change Orders

- 1. Miscellaneous Fencing and Guard Rail: STEELCO Chain Link Fence Co., Contract 6760T, Change Order 2 (ref. W C.1)
- 2. Hultman Aqueduct Interconnections: Barletta Heavy Division, Inc., Contract 6975, Change Order 26 (ref. W C.2)
- 3. Southern Extra High Redundancy Plan: SEA Consultants, Inc., Contract 6452, Amendment 6 (ref. W C.3)

V. CORRESPONDENCE TO THE BOARD

VI. OTHER BUSINESS

VII. <u>EXECUTIVE SESSION</u>

- A. Real Estate:
 - 1. Authorization to Surplus Parcel located in Chelsea
- B. <u>Litigation</u>:
 - 1. Litigation Update (verbal)

VIII. ADJOURNMENT

Meeting of the Board of Directors

December 12, 2012

A meeting of the Board of Directors of the Massachusetts Water Resources

Authority was held on December 12, 2012 at the Authority headquarters in Charlestown.

Chairman Sullivan presided. Present from the Board were Messrs. Barrera, Carroll,

Flanagan, Foti, Mannering, Pappastergion, Swett, and Walsh. Messrs. Cotter and Gove were absent. Among those present from the Authority staff were Frederick Laskey,

Executive Director, Steven Remsberg, General Counsel, Michael Hornbrook, Chief

Operating Officer, Rachel Madden, Director of Administration and Finance, David

Coppes, Director, Western Operations, and Bonnie Hale, Assistant Secretary. The meeting was called to order at 1:00 p.m.

APPROVAL OF MINUTES

Upon a motion duly made and seconded, it was

<u>Voted</u> to approve the minutes of the Board of Directors' meeting of November 14, 2012, as presented and filed with the records of the meeting.

REPORT OF THE CHAIR

Chairman Sullivan reported that Dr. Barten's presentation of the STAC Forestry Report to the Wastewater and Quabbin Advisory Committees went well and that the public hearing process was underway.

REPORT OF THE EXECUTIVE DIRECTOR

Mr. Laskey briefly reported on a few items of note.

BOARD ACTIONS

APPROVALS

<u>Transmittal of the Proposed Fiscal Year 2014 Capital Improvement Program to MWRA Advisory Board</u>

Upon a motion duly made and seconded, it was

Voted to approve the transmittal of the FY14 Proposed Capital Improvement

Program and the next five-year spending cap for FY14-18 to the MWRA Advisory

Board for its 60-day review and comment period.

2012 Legislative Summary and Upcoming Agenda for 2013-2014 Session

Mr. Favaloro of the MWRA Advisory Board noted that as the Commonwealth would now be collecting online sales tax, the Advisory Board intends to file legislation for the Authority to receive a portion of it. He asked that the Board support this bill in addition to those referenced in the staff summary, and the vote was amended to include it.

Upon a motion duly made and seconded, it was

<u>Voted</u> to adopt a position of support for establishing MWRA Rate Relief as the top legislative priority for the upcoming 2013-2014 session and support the refiled bills, as presented and filed with the records of the meeting, and to support the filing of a bill by the MWRA Advisory Board for the Authority to receive a portion of the new online sales tax.

Approval of New Wastewater Advisory Committee Member

Upon a motion duly made and seconded, it was

<u>Voted</u> to approve the appointment of Craig A. Allen to the Wastewater Advisory Committee.

PCR Amendments – December 2012

Upon a motion duly made and seconded, it was

<u>Voted</u> to approve an amendment to the Position Control Register, as presented and filed with the records of the meeting.

CONTRACT AWARDS

<u>Waste Sludge Centrifuges Power and Control Systems Upgrade – Deer Island Treatment</u> Plant: J.F. White Contracting Company, Contract 7057

Upon a motion duly made and seconded, it was

<u>Voted</u> to approve the award of Contract No. 7057, Waste Sludge

Centrifuges Power and Control Systems Upgrade – Deer Island Treatment Plant,
to the lowest eligible and responsible bidder, J.F. White Contracting Company, and
to authorize the Executive Director, on behalf of the Authority, to execute and
deliver said contract in the bid amount of \$3,932,000.00 for a term of 730 calendar
days from the Notice to Proceed.

North Main Pump Station Variable Frequency Drives and Synchronous Motors
Replacement – Deer Island Treatment Plant, ESDC and RE/I Services: Fay, Spofford & Thorndike, LLC, Contract 7062

Upon a motion duly made and seconded, it was

Voted to approve the recommendation of the Consultant Selection

Committee to select Fay, Spofford & Thorndike, LLC to provide engineering services during construction and resident engineering/inspection services for the North Main Pump Station Variable Frequency Drives and Synchronous Motors

Replacement – Deer Island Treatment Plant project, and to authorize the Executive Director, on behalf of the Authority, to execute Contract 7062 with Fay, Spofford & Thorndike, LLC in the amount of \$1,321,624.00 for a term of 42 months from the Notice to Proceed.

Quabbin Ultraviolet Disinfection Facilities: Daniel O'Connell's Sons, Inc., Contract 6776

Upon a motion duly made and seconded, it was

Voted to approve the award of Contract No. 6776, Quabbin

Ultraviolet Disinfection Facilities, to the lowest eligible and responsible bidder,

Daniel O'Connell's Sons, Inc., and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in the bid amount of

\$5,476,000.00 for a term of 580 calendar days from the Notice to Proceed.

CONTRACT AMENDMENTS/CHANGE ORDERS

<u>Phase 1A Electrical Upgrade Design – Oakdale Facility, ESDC and RE Services: Fay, Spofford & Thorndike, LLC, Contract 7229, Amendment 1</u>

Upon a motion duly made and seconded, it was

<u>Voted</u> to authorize the Executive Director, on behalf of the Authority, to approve Amendment No. 1 to extend the term of Contract No. 7229 with Fay, Spofford & Thorndike, LLC, Phase 1A Electrical Upgrade Design – Oakdale Facility, by eighteen months to July 20, 2014, with no increase in contract amount.

INFORMATION

Aquatic Invasive Species Control in Wachusett Reservoir

Staff gave a presentation on this information item which had been referred to the Board by the Water Policy and Oversight Committee, describing the problem, the control strategy implemented, progress made, and additional measures being considered.

REPORT OF THE CHAIRMAN (continued)

Retirement of Board Member Vincent Mannering

Chairman Sullivan, Board members, Mr. Laskey and staff thanked Mr. Mannering for his 17 years of dedicated service on the MWRA Board of Directors. Since it was not realized in advance that this would be his last official meeting, Mr. Laskey noted that Mr.

Mannering had agreed to return for the January 16, 2013 meeting so that the Authority could honor him appropriately at that time.

EXECUTIVE SESSION

It was moved to enter executive session to discuss litigation, real estate and collective bargaining.

Upon a motion duly made and seconded, it was, upon a roll call vote in which the members were recorded as follows:

Yes No Abstain

Barrera

Carroll

Flanagan

Foti

Mannering

Pappastergion

Swett

Walsh

Sullivan

<u>Voted</u> to enter executive session for the purpose of discussing strategy with respect to litigation, real estate and collective bargaining, in that such discussion in open session may have a detrimental effect on the litigating and negotiating positions of the Authority.

It was stated that the meeting would return to open session solely for the consideration of adjournment.

EXECUTIVE SESSION

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The meeting returned to open session at 1:50 p.m. and adjourned.