



MWRA Advisory Board Summary  
of the  
MWRA Board of Directors Meeting  
Wednesday, December 22, 2010

A meeting of the Board of Directors of the Massachusetts Water Resources Authority was held on December 22, 2010 at the Charlestown Navy Yard. **Present:** Chair Ian Bowles, Joel Barrera and Michael Gove, Gubernatorial Appointees; John Carroll, Andrew Pappastergion and Joseph Foti, Advisory Board Representatives; Vincent Mannering, Kevin Cotter and James Hunt III, City of Boston Representatives; Jack Walsh, City of Quincy Representative. **Absent:** Marie Turner, Town of Winthrop Representative.

**Report of the Chair**

Ian Bowles called the meeting to order for the last time as Chairman of the MWRA Board of Directors. Vice Chairman John Carroll presented Chairman Bowles with a plaque in recognition of his dedicated service to the Board, staff and ratepayers of the MWRA service area.

MWRA Executive Director Fred Laskey expressed the value of Chairman Bowles' leadership on many fronts, but particularly on energy. He stated that Chairman Bowles has made the staff, the organization and him better with his vision, tenacity and drive. Mr. Laskey noted that Mr. Bowles had pushed the Authority to excel but has maintained the highest level of integrity while doing so. Mr. Laskey then presented Chairman Bowles with a collage of photos from his time serving the MWRA.

Chairman Bowles expressed his thanks to the Board members and noted that the Board has always acted in the public interest in the "light of day." Chairman Bowles said it has been a pleasure and an honor to be its Chair; the MWRA should be proud of itself as an agency. He acknowledged the water main break as the best example to date of MWRA's ability to act quickly and efficiently to get the break fixed. The many hours the staff put in is a shining moment for the MWRA.

The Chairman said going forward, water is a strategic asset and will continue to be an economic asset. The MWRA's commitment to conserve is important. Keeping our state with "liquid assets" is vitally important. Stream flow in levels to help the Ipswich and others is a role that MWRA can play. Consolidation of public services is going to continue. The MWRA has something to offer in that regard, providing a service to municipalities that need it.

Having a major water system like the MWRA without filtration is something to be proud of; the land conservation agenda has been an important part of that.

Lastly, the Chairman said when the MWRA facilities were originally being built, the focus was not on how much energy these facilities would use. As we look for environmental quality, we should also look at ways to maximize the use of alternative energy, including solar use and wind energy.

MWRA Advisory Board Chair Katherine Dunphy presented Chairman Bowles with a certificate of appreciation in recognition of his efforts in protecting the environment and his leadership in support of the communities. Chairman Bowles expressed his thanks.

## **Report Of The Executive Director**

Mr. Laskey stated that the MWRA has received some water system expansion inquiries from Ashland, Hopkinton and North Reading.

He also noted the Deer Island and Carroll Treatment Plants responded to an ISO New England demand response event on Monday, which was a test. The MWRA receives roughly \$60,000 a month to be on standby.

FEMA will be reimbursing \$311,535 in overtime for the March storms; MWRA is also awaiting congressional approval of \$1.6 million for diesel fuel. Mr. Laskey offered congratulations to Treasurer Tom Durkin and the finance team for a job well done in securing these reimbursements.

Mr. Laskey also acknowledged soon to be retiree, Charlie Button. Mr. Laskey stated that Mr. Button started with the Authority in 1988 as the Deputy Project Director for all construction associated with the Boston Harbor Project and then left after ten years for the private sector for several years. When asked to come back, it has now translated into a perfect ending to his career. Mr. Laskey stressed that the Authority and the ratepayers owe him tremendous gratitude.

MWRA Advisory Board Chair Katherine Dunphy presented a certificate of appreciation Mr. Button. She noted that, on behalf of the Advisory Board, she is sad to see him go but noted that he will always be considered part of Deer Island and the MWRA.

## **APPROVALS**

### **Proposed Fiscal Year 2012 Capital Improvement Program**

The Board voted to approve the transmittal of the Fiscal Year 2012 Capital Improvement Program to the MWRA Advisory Board for its 60-day review and comment period.

The FY12 Proposed CIP for the FY09-13 Cap period is \$1.06 billion, a decrease of \$82.7 million or 7.2% from the Base-Line Cap and complies with both the annual and the overall five-year Cap requirements.

The FY12 Proposed CIP includes new project requests for Asset Protection initiatives such as the Deer Island Clarifier Rehabilitation Phase 2 and Residuals Facility Rehabilitation Design and Construction, Water Pump Station Rehabilitation, Elevated Storage Tank Repainting, Covered Storage Tank Rehabilitation, and Clinton Phosphorous Removal project. The impact of these projects is \$14.2 million in the current Cap period.

The Combined Sewer Overflow (CSO) program continues to drive spending in the FY09-13 timeframe accounting for \$320.3 million or 31% of the total projected spending. Staff projects that by the end of the Cap period 97.1% of the total CSO program spending will be completed. With the majority of the CSO

Program completed, MWRA will continue to focus on the critical asset protection and water system redundancy initiatives, which will dominate the Capital program going forward.

### **Adoption of the Resolution Authorizing Replacement Liquidity Facilities for 2008 Series A & C Variable Rate Demand Bonds**

The Board voted to approve the recommendation of the Consultant Selection Committee to replace Dexia Credit Local and Bayerische Landesbank on Standby Bond Purchase Agreements for the 2008 Series A and C Variable Rate Bonds with Bank of America, N.A., Barclays Bank, PLC, J.P. Morgan Chase Bank, N.A., T.D. Bank, N.A., and Wells Fargo Bank, N.A. Further, to adopt the Resolution Authorizing Replacement Liquidity Facilities for 2008 Series A and C.

The MWRA received eight proposals for liquidity facilities with six of the proposals being reviewed by the Selection Committee. While proposers offered both Letters of Credit (LOC) and Standby Bond Purchase Agreements (SBPA), the Selection Committee opted to consider only the SBPAs since LOCs are more expensive and would not add any trading value as MWRA's long-term credit ratings are higher than all the banks that proposed. The proposers offered a total of \$709.8 million in SBPAs with terms of one to five years and pricing ranging from 45 to 83 basis points.

### **Appointment of Proxy for Fore River Railroad Corporation**

The Board voted that the Board of Directors, as holder of all voting rights of the issued and outstanding stock of the Fore River Railroad Corporation, vote to appoint Kathy Soni with the power of substitution to vote as proxy at the next annual meeting and any special meeting of the stockholders for the Fore River Railroad Corporation in accordance with the form of proxy. In addition, the Board of Directors directs the proxy to elect the following board members:

Frederick A. Laskey	John J. Walsh	Joel A. Barrera
Michael J. Hornbrook	Rachel C. Madden	Michele S. Gillen
Elizabeth A. Murray	John P. Vetere	Steven A. Remsberg
Lisa R. Grollman		

### **2009-2010 Legislative Summary and Upcoming Agenda for 2011-2012 Session**

The Board voted to adopt a position of support for ten re-filed bills and one new bill for the upcoming 2011-2012 legislative session.

Board Member Joel Barrera stated that he was surprised to learn about a change in the make up of the MWRA Board of Directors, stating that he had no knowledge of the legislation and requesting that the Board receive more frequent updates. Public Affairs Director Michael Morris noted that the legislation to change the appointment of the City of Quincy and the Town of Winthrop's appointee to the Board to a direct appointment, rather than submitting names to the Governor for his selection, was language filed by the Advisory Board and was not an MWRA initiative.

### **Organizational Changes to the Operations Division**

The Board voted to approve organizational changes within the Operations Division including the associated amendments to the Position Control Register and the appointments of Mr. Richard P. Trubiano to the position of Deputy Chief Operating Officer, Programs, Policy & Planning; Mr. John P. Vetere to

the position of Deputy Chief Operating Officer, Operations, Engineering and Construction (with the provisos (i) that the position description include a requirement of a Grade 4 Water Distribution license in addition to the existing position requirements, and (ii) that Mr. Vetere obtain such a license within one year of his appointment); Mr. Jae R. Kim to the position of Chief Engineer; and Mr. Daniel K. O'Brien to the position of Director, Deer Island Wastewater Treatment Plant.

There are four positions that will be part of the reorganization at the Authority. These changes would eliminate three senior management positions. The positions will be consolidated with the intention of taking full advantage of senior staff skills and experience. The net impact of these proposed staffing assignments is an annual savings of approximately \$348,000.

The first position is the Deputy Chief Operating Officer, Programs, Policy & Planning, which has been held by Charles Button who will be retiring. Richard Trubiano, who has held the position of Director of the Field Operations Department for the last ten years, will be the new Deputy Chief Operating Officer, Programs, Policy & Planning.

The second position is the Deputy Chief Operating Officer, which is being amended to the Deputy Chief Operating Officer, Operation, Engineering & Construction. This new position will include a broader scope of responsibilities by consolidating all operational, engineering and construction functions reporting directly to this position. John Vetere has held the position of Director of the Deer Island Wastewater Treatment Plant (DITP) and was responsible for the operation and maintenance of the DITP, the Clinton Wastewater Treatment Plant and the Fore River Pelletizing Facility for the last 13 years and will now move to this new position.

The third position is the Director of Wastewater Engineering, which has been held by Kevin O'Brien who will be retiring. The Wastewater and Water Engineering units will be consolidated into a single unit and will be led by Jae Kim who is currently the Director of Water Engineering.

The final position is the Director of the Deer Island Wastewater Treatment Plant, which has been vacated due to Mr. Vetere's promotion. Daniel O'Brien, currently the Deputy Director of Deer Island Operations, will be promoted to this position. Mr. O'Brien currently oversees operations and maintenance of the Deer Island and Clinton Wastewater Treatment Plants, as well as the residuals processing facility in Quincy; this position will not be backfilled once he moves into his new role.

### **Appointment of Principal Civil Engineer, Engineering and Construction**

The Board voted to approve the Executive Director's recommendation to appoint Mr. Jeremiah Sheehan to the position of Principal Civil Engineer, Engineering and Construction in the Operations Division (Unit 9, Grade 25), at an annual salary of \$86,362.00 to be effective on the date designated by the Executive Director.

## **CONTRACT AWARDS**

### **Sole Source Purchase Order for Annual Maintenance of the Maximo System: IBM Corporation**

The Board voted to approve the award of a sole source purchase order for renewal of the annual maintenance agreement for the Maximo System to IBM Corporation and authorize the Executive

Director, on behalf of the Authority, to execute said purchase order in the amount of \$119,915.38 for the service period of January 1, 2011 through December 31, 2011.

### **Preferred Service Agreement for the Combustion Turbine Generators at the Deer Island Treatment Plant: Pratt & Whitney Power Systems, Inc.**

The Board voted to approve the award of a sole source purchase order for a Preferred Service Agreement to provide technical support, emergency repair services, and spare parts for the combustion turbine generators at the Deer Island Treatment Plant with the original equipment manufacturer, Pratt & Whitney Power Systems, Inc., and to authorize the Executive Director, on behalf of the Authority, to execute said purchase order in an amount not to exceed \$307,580.00 for a period of two years.

The Deer Island Treatment Plant utilizes two 26-megawatt Pratt & Whitney FT-8 combustion turbine generators (CTGs) as the chief component of its emergency back-up power generation. The Pratt & Whitney FT-8s are essentially aircraft derivative design jet engines. The FT-8s were first introduced into the market place in early 1991. To date, there are now approximately 450 FT-8 Power Pac Units manufactured and operating worldwide. Deer Island's FT-8s were among the first production units delivered and were brought on-line in June 1995.

MWRA employs a two-component maintenance strategy to ensure that the CTGs operate reliably and efficiently. The first component is that it has a competitively bid maintenance contract, which addresses many of the routine, mechanical type tasks (e.g., replacing air filters, lubrication, repairing fuel and/or water leaks, etc.). The second and more critical component is a "Preferred Service Agreement" with the original equipment manufacturer, Pratt & Whitney Power Systems, Inc., which addresses the more complex and technical maintenance and repair needs of the CTGs. There are critical control programs that need to function properly and certain components require alignment that must be maintained or re-established to original factory tolerances. There are other important components that may deteriorate through normal operation that must be replaced. The importance of ensuring that the CTGs will start and operate without interruption cannot be overstated. Individual CTG control programs necessary to operate the unit properly are proprietary and require the expertise that only Pratt & Whitney technicians can provide when adjustments are required.

Since 2006, the MWRA has continued to benefit from the Preferred Service Agreement (PSA) as a priority customer when diagnostic troubleshooting or on-site field service is required. This has been instrumental during a number of severe wet-weather events during the past several years. Moreover, the PSA has also provided the MWRA with a comprehensive program of customer support that includes calibration of critical sensors and identification of all immediate-need maintenance requirements. Furthermore, the benefit of the PSA also includes the availability of Pratt & Whitney's patented remote Turbolink troubleshooting/diagnostic system, which allows Pratt & Whitney technicians and engineers to remotely connect with MWRA's CTGs for faster diagnosis and for identifying performance trends and maintenance recommendations.

### **Instrumentation Maintenance Services: New England Controls, Inc., Contract OP-140**

The Board voted to approve the award of Contract OP-140, Instrumentation Maintenance Services, to the lowest eligible and responsible bidder, New England Controls, Inc., and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in the bid amount of \$390,200.00 for a term of 730 calendar days from the Notice to Proceed.

### **Harbor and Outfall Monitoring 2011-2014: Battelle Memorial Institute, Contract OP-142A and Normandeau Associates, Inc., Contract OP-142B**

The Board voted to approve the recommendation of the Consultant Selection Committee to select Battelle Memorial Institute and Normandeau Associates, Inc. to provide Harbor and Outfall Monitoring services from 2011 to 2014 and to authorize the Executive Director, on behalf of the Authority, to execute Contract OP-142A with Battelle Memorial Institute (Water Quality Monitoring) in an amount not to exceed \$2,703,546.24 for a term of 48 months from the Notice to Proceed and Contract OP-142B with Normandeau Associates, Inc. (Benthic, Fish and Shellfish Monitoring) in an amount not to exceed \$1,247,633.81 for a term of 46 months from the Notice to Proceed.

The Harbor and Outfall Monitoring contracts provide environmental monitoring of outfall effects that are required by MWRA's National Pollutant Discharge Elimination System (NPDES) permit for Deer Island. On December 6, EPA and DEP formally approved MWRA's proposal for substantially reduced monitoring requirements. The scope of work for Contracts OP-142A and OP-142B reflect these reductions in the new Ambient Monitoring Plan. EPA has also indicated that it expects to include these same monitoring requirements in the next permit. These contracts will provide field monitoring in 2011, 2012 and 2013, and sample analysis and report preparation in 2011 through 2014.

### **Lynnfield/Saugus Pipelines Project: Albanese Brothers, Inc., Contract 6584**

The Board voted to approve the award of Contract No. 6584, Lynnfield/Saugus Pipelines Project, to the lowest eligible and responsible bidder, Albanese Brothers, Inc., and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in the bid amount of \$4,924,400.00 for a term of 730 calendar days from the Notice to Proceed.

Board Member Joseph Foti asked if the Board is approving the full amount of \$4.9 million even though Saugus is responsible for a portion of the contract. Mr. Laskey said the Authority is issuing payment to the Contractor for the full amount and \$1.7 million will be reimbursed to the Authority from Saugus.

Mr. Foti asked why the Authority budgets the full amount of the contract if it will be reimbursed for a portion of it. Budget Director Kathy Soni said the Authority traditionally budgets for the gross amount of the project.

### **Section 36/New 11B Interconnection/Watertown Section/Waltham Connection Design, Construction Administration and Resident Engineering/Inspection Services: Green International Affiliates, Inc., Contract 6540**

The Board voted to approve the recommendation of the Consultant Selection Committee to select Green International Affiliates, Inc. to provide design, construction administration and resident engineering/inspection services for the Section 36/New 11B Interconnection/Watertown Section/Waltham Connection project and to authorize the Executive Director, on behalf of the Authority, to execute a contract with Green International Affiliates, Inc. in an amount not to exceed \$2,988,492.00 for a term of 72 months from the Notice to Proceed.

## **CONTRACT AMENDMENTS/CHANGE ORDERS**

### **Massachusetts Bay Modeling Services: University of Massachusetts at Dartmouth, Contract S426, Amendment 3**

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Amendment No. 3 to increase the amount of Contract No. S426, with the University of Massachusetts at Dartmouth, Massachusetts Bay Modeling Services, in the amount of \$60,000 and to extend the term by one year from January 1, 2011 to December 31, 2011.

According to the National Pollutant Discharge Elimination System (NPDES) permit, MWRA is required to update, maintain, and run its "Bay Eutrophication Model" to predict and understand the impacts of nutrients in the Deer Island discharge on water quality in Massachusetts Bay. The permit specifies this to be done on a yearly basis. The modeling is a complex, technical process that takes approximately one year to complete once the data from the year to be modeled are available.

The University of Massachusetts/Dartmouth submitted the lowest bid during the initial procurement. The Massachusetts Bay water quality model is integrated into the regional modeling infrastructure of the University's federally-funded Marine Ecosystem Dynamics Modeling Laboratory (MEDML), which provides results from regional weather and ocean circulation models at no cost to MWRA. Furthermore, MEDML has federal grants for closely related projects, which amount to more than \$100,000 per year of in-kind services match. Under the current contract, the University developed an innovative methodology that combined two different modeling tools, which has improved the accuracy, flexibility and efficiency of the modeling. The University has provided excellent service to date.

The cumulative value of all amendments to this contract is \$163,824, added to the original contract amount of \$106,025, provides an adjusted contract amount of \$269,849. There are sufficient funds available for the first half of this amendment in ENQUAD's FY11 Current Expense Budget; appropriate funding will be in the Proposed FY12 CEB request for the remaining term of the contract.

### **Design and Installation of Ground-Mounted Photovoltaic System, Carroll Water Treatment Plant: Nexamp Inc./Florence Electric, JV, Contract 7304, Change Order 1**

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order No. 1 to increase the amount of Contract No. 7304 with Nexamp Inc. / Florence Electric, JV, Design and Installation of Ground-Mounted Photovoltaic System, Carroll Water Treatment Plant, in the net amount of \$228,588.34.

As part of Governor Patrick's Massachusetts Recovery Plan to create jobs and secure the state's economic future, the Commonwealth is investing in solar photovoltaic energy generation on public facilities throughout the state. The Carroll Water Treatment Plant's (CWTP) solar photovoltaic project is being fully funded under the American Recovery and Reinvestment Act grant as part of the State Revolving Fund (SRF) CY2009 Intended Use Plan administered by the Massachusetts Department of Environmental Protection.

Change Order 1 includes design and construction of approximately 300 linear feet of buried high-voltage cable and conduit, 1,000 linear feet of high-voltage cable in existing conduit between the existing manholes with cable supports at manholes, approximately 400 linear feet of high-voltage, pole-supported

cable, one electric pole, one 460v-to-13.8k V transformer and miscellaneous material and equipment to energize, test and make the system operational.

With the addition of this change order in the amount of \$228,558.34, added to the original contract amount of \$2,187,414.00, the adjusted contract amount is \$2,415,972.34. The FY11 CIP includes \$2,187,414 for Contract 7304 based on the original estimated cost of the project. Work on this contact is approximately 75% complete to date.

## **INFORMATION**

### **FY2011 1<sup>st</sup> Quarter Orange Notebook**

MWRA Chief Operating Officer Michael Hornbrook highlighted that Water Distribution System Valves are exercised, rehabilitated, or replaced in order to improve their operating condition. This work occurs year round. Valve replacements occur in roadway locations during the normal construction season, and in off-road locations during the winter season. Valve exercising can occur year round but it is often displaced during the construction season. This is due to the fact that a large number of construction contracts involving rehabilitation, replacement, or new installation of water lines, require valve staff to operate valves and assist with disinfection, dechlorination, pressure-testing, and final acceptance. Valve exercising can also be impacted due to limited redundancy in the water system; valve exercising cannot be performed in areas where there is only one source of water to the community meters or flow disruptions will occur.

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

### **Delegated Authority Report-November 2010**

Staff presented a listing of actions taken by the Executive Director under delegated authority for the period November 1 through November 30, 2010.

Board Member Jack Walsh stated that a lot of money is being spent for safety equipment. Mr. Laskey said that employees out in the field and in sewer facilities are in an environment that is tough on their shoes. Safety shoes run roughly about \$100 and are needed in the wet conditions and to prevent any injuries when operating heavy equipment, machinery or for instance if there is an acid spill. The employee is eligible for a voucher that would assist in paying for the new pair. Ms. Madden noted that 993 of the MWRA's employees are eligible to receive \$100 annually.

### **FY11 Financial Update and Summary as of November 2010**

Director of Administration and Finance Rachel Madden reported that total year-to-date expenses are lower than budget by \$10.7 million, or 4.3%, and total revenues are under budget by \$143,000, or 0.1%, for a net variance of \$10.5 million.

The largest variances are the result of favorable variable rate Debt Service of \$8.4 million; lower direct expenses of \$1.6 million, mostly for wages and salaries, maintenance, other services, utilities, fringe benefits and chemicals. The under spending is partially offset by higher than budgeted overtime of \$573,000 for unanticipated events such as the Shaft 5A leak and hurricane preparation activities, and higher workers' compensation spending of \$342,000. The lower revenues are attributed to lower investment income of \$428,000 as result of lower variable rates.

Ms. Madden responded to questions regarding variable rates trending low. She stated that according to economists, in the next few quarters, basis points will be increasing. Treasurer Tom Durkin stated that rates have seen historic lows for a prolonged period of time but eventually this will come back to an average.

### **Overview of Derivatives**

MWRA Treasurer Thomas Durkin discussed a letter received by MWRA's auditing firm, KPMG, highlighting a new accounting standard for derivatives. Mr. Durkin provided a detailed overview of MWRA's derivative transactions and the new accounting requirements under Government Account Standards Board (GASB) Statement No. 53, Accounting and Financial Reporting for Derivative Instruments. Mr. Durkin also noted that these new requirements are purely accounting treatment changes and have no budgetary impact nor indicate any anomaly or concern relative to its derivative portfolio. MWRA is currently in full compliance with these requirements.

### **Progress of City of Cambridge-Implemented CSO Projects and Projected Financial Assistance through March 2011**

Mr. Hornbrook provided the Board with an update on a series of projects in the Long-Term CSO Control Plan that is funded by MWRA and implemented by the City of Cambridge. Staff plans to transfer \$2,335,581 into the City of Cambridge CSO account to cover anticipated eligible costs in the period October 2010 through March 2011.

### **Update on Recent Lead Service Line Replacement Developments**

MWRA Director of Planning Stephen Estes-Smargiassi discussed a new study released by the Centers for Disease Control and Prevention that examines the effects of various types of lead service line replacements on children's blood lead levels in the Washington D.C. area. The study was prompted by the sudden rise in lead levels found in Washington, D.C.'s water system in 2003. Staff has previously updated the Board on the Washington lead issue.

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*This summary does not include every item discussed by the Board, nor the full extent of the discussions. Please contact Maggie Atanasov at the Advisory Board office with questions, comments or requests for more information.*