

**MWRA ADVISORY BOARD MEETING
NOVEMBER 17, 2005
CARY HALL
1625 MASSACHUSETTS AVENUE, LEXINGTON, MA
Minutes Approved at the January 19, 2006 Meeting**

Thirty-eight people were in attendance, including seventeen voting members: John Sanchez, ARLINGTON; Richard Warrington, BEDFORD; Peter Castanino, BELMONT; John Sullivan, BOSTON; Ed Sullivan, CANTON; Andrew DeSantis, CHELSEA; Jon Norton, EVERETT; J. R. Greene and Barbara Wyatt, GUBERNATORIAL APPOINTEES; William Hadley, LEXINGTON; Jay Fink, LYNN; Bruce Kenerson, LYNNFIELD; Katherine Haynes Dunphy, MILTON; Lou Taverna, NEWTON; Ted McIntire, READING; Carol Antonelli, SOMERVILLE; Bob Angelo, WESTWOOD.

Also present: Joseph Foti, MWRA BOARD OF DIRECTORS; Nan Crossland, DEDHAM/WESTWOOD WATER DISTRICT; David Sanderson, DEDHAM; Glenn Garbati, EVERETT; Richard Pagett and Dennis Meehan, LEXINGTON; Peter Tassi, READING; Jeff Diercks, CAMP DRESSER & McKEE; Ed Bretschneider, WAC; Matt Boger and Phil Jasset, UCANE; David Caton, VEOLIA WATER; Michael Hornbrook, Steve Estes Smargiassi, Lise Marx and Pamela Heidell, MWRA STAFF; Joe Favaloro, Cornelia Potter, Ryan Ferrara, Andrea Briggs and Mary Ann McClellan, MWRA ADVISORY BOARD STAFF.

A. WELCOME

Chairman Katherine Haynes Dunphy called the meeting to order at 11:57 a.m. and introduced Richard Pagett, a member of the Lexington Board of Selectmen. Mr. Pagett welcomed members to Lexington.

Chairman Dunphy presented the Town of Reading with a welcome banner as the newest member of the MWRA Waterworks System. Reading Director of Public Works Ted McIntire thanked members and staff for their support.

B. REPORT OF THE EXECUTIVE DIRECTOR

MWRA Advisory Board Executive Director Joseph Favaloro reported that a joint meeting sponsored by the MWRA and the Waterworks Association on preparation for the Stage Two Disinfection Byproduct Rule will be held on December 9th from 8:30 a.m. to 3 p.m. at the Authority's Operations Center in Chelsea.

Staff has visited 42 communities over the last 36 working days seeking community support; the Advisory Board's message has been clear and concise: 1) with the level of debt that the MWRA is holding, more Debt Service Assistance is needed; 2) because most of the water debt (the fastest growing line item in the MWRA's budget) is not eligible for Debt Service Assistance, the System Expansion Policy needs to allow for growth within the water system to spread out those

costs; 3) seek to have the communities work with the Advisory Board to hold the regulators at bay on CSOs, water conservation standards, lead & copper, etc.

The next step is a “Resolution” that the Advisory Board is asking each community to endorse, to be presented to the legislators at a January 19th meeting at the State House. The Advisory Board will invite the Chief Elected Officials of MWRA communities to utilize the day to speak to their Representatives and Senators to emphasize the importance of more Debt Service Assistance. The Resolution is a three-pronged request of the legislature: 1) for the legislature to once again use the formula driven methodology of the Sewer Rate Relief Fund; 2) to minimally fund DSA for FY07 at \$25 million; 3) fully fund the Sewer Rate Relief Fund by FY11.

The Advisory Board will also be presenting its “Legislator of the Year” award to one member of the House and Senate at its January meeting.

The Water & Sewer Retail Rate Survey is just about complete and will be mailed in early December. Ryan Ferrara noted the report will also be available on the Advisory Board’s website at www.advisoryboard.com; older surveys can be obtained on the web as well.

For the last ten years combined MWRA water and sewer rates have increased 59%. In the one year between 2004 and 2005, there was a retail household rate increase of \$56.00. Rates have been, and continue to be, an issue. The Advisory Board has prepared a projection, based on the MWRA’s estimate in the Final FY06 CEB, which shows between 2000 and 2005 retail water rates have increased 43% and retail sewer rates have increased by 25%. Moving forward to FY11, wholesale rate increases are projected to be 49% on the water side and 42% on the sewer side, based on MWRA’s own projection.

C. PRESENTATION: BEYOND CSO’S – MWRA’S WATER & SEWER CAPITAL IMPROVEMENT PRIORITIES – Michael Hornbrook, MWRA Chief Operating Officer

MWRA Chief Operating Officer Michael Hornbrook stated the CSO program still dominates the MWRA’s Capital Improvement Program and takes the lion share of costs. The Authority is constantly under attack by the regulatory agencies to continue to expand CSO spending.

This presentation focuses on some of the other water and wastewater projects that are currently being done, or will be done in the near future, throughout the communities.

On the water side, staff chose projects to highlight that were reflective of what is being done in the treatment/distribution/transmission portions of the system, including the Ultra Violet (UV) treatment requirements upcoming at both Wachusett and Quabbin; the Weston Aqueduct Supply Mains; rehabilitation of pump stations; the Blue Hills Covered Storage Project.

Pending regulations will soon be finalized that will require non-filtered water suppliers to have two methods of primary disinfection. Currently, MWRA uses ozonation at the new John J. Carroll Water Treatment Plant (JJCWTP) as its primary disinfection method and will be required to have a second in the near future. The regulations, as they are currently drafted, require operation of a second primary disinfection facility by the year 2013. MWRA’s current capital budget contains \$45 million for UV treatment, which is expected to be the recommendation for the second primary disinfection at the JJCWTP. Much of MWRA’s spending is driven by regulatory requirements and mandated projects.

The Weston Aqueduct Supply Main extends from Loring Road through Medford and Arlington and has an overall cost of \$100 million for rehabilitation and replacement of water service lines. The lines will have a conveyance capacity of about one-third of the total water demand in the MWRA service area. To date, about \$50 million worth of this program have been completed covering about 12 miles. More than half the program remains to be completed from 2008 to 2016, consisting of slip lining some pipe where it is corroded and needs to be replaced, as well as rehabilitation of the pipes with cement lining, cleaning joints and valve replacement. This program serves Waltham, Bedford, Lexington, Belmont, Watertown, Arlington, Winchester, Medford and Somerville.

The Authority has evolved from the large capital programs, such as the JJCWTP and the MetroWest Tunnel, to basic replacement and rehabilitation of water and sewer lines and an operation and maintenance program.

Another important priority in the current CIP for water is the rehabilitation of five pump stations (Belmont, Brattle Court, Spring Street, Hyde Park and Reservoir Road Pumping Stations), which were constructed from 1907 to 1960. The pump stations need to be modernized and upgraded for reliability, emergency power and Supervisory Control and Data Acquisition (SCADA) System and security improvements. A large number of member communities will benefit from the \$20 million improvements to begin in 2006 and end in 2009.

The Southern Spine (nine miles of water line) is another example in the water transmission system that needs to be rehabilitated and updated; the current water mains are either insufficient size to carry peak capacity or are leaking. This project, at a cost of \$28 million, has a series of five construction contracts, two of which have already been completed; the Southern Spine serves Quincy and parts of Milton and Dorchester.

The Blue Hills Reservoir is currently an open backup emergency drinking water supply located in the Blue Hills Reservation; public access and fishing are prohibited. The Authority must meet regulatory requirements for a covered storage reservoir in this area and has no storage in this part of the water system. MWRA plans to drain the reservoir and construct two ten-million gallon circular tanks that will be buried underground and recreate a recreational pond for the Blue Hills public access area as part of mitigation. MWRA received a wetlands variance to construct the Blue Hills Covered Storage Project, which was appealed by the Friends of the Blue Hills (FOB), which claims the project has impacted wetlands and MWRA should replicate them. MWRA has argued that one-third of the project cost is for mitigation at this site and goes above and beyond the call to meet requirements relating to the Wetlands Act. The DEP Commissioner agreed and has allowed the MWRA to move forward. Communities benefiting from this project are Quincy, parts of Milton, Brookline and Boston at a cost of \$35 million.

Deer Island remains in the capital budget for protection and optimization projects plus repair and replacement work. It took \$3.4 billion to construct the Deer Island Wastewater Treatment Plant, with parts of the facility now ten years old. Because of the harsh environment the facility is in, it is imperative to repair and replace equipment on a regular basis.

Because technology changes, some electronic equipment is becoming obsolete sooner than expected because the manufacturers no longer make replacement equipment. The MWRA's current budget includes \$100 million for spending on Deer Island asset protection from 2006 to

2014. As the plant ages and deteriorates, funds will also be included in the CEB for MWRA personnel to perform maintenance. Deer Island serves all 43 wastewater communities.

MWRA has water and wastewater control rooms at its Chelsea facility and has some limited monitoring capability in its remote sites on the wastewater side. Remote site monitoring will be enhanced through a new SCADA project that will provide the Authority with additional monitoring and the capability to control sites remotely. Currently MWRA has a number of automated facilities with some primitive monitoring; if something happens at those sites, a crew must be dispatched from Chelsea to get to that pump station or facility and take appropriate action. With the new SCADA system, staff will be able to turn pumps or screens off and on remotely, issue a work order and send a crew to the site to undertake the repair in a timely fashion, but without any interruptions of service. This will help with reliability and reduce maintenance expenses and will cost \$13 million.

The Upper Neponset Valley Sewer Project, serving Brookline and parts of Newton and Boston, will replace sewer lines located under the VFW Parkway at a cost of \$43 million. The current lines are over 100 years old and have had storm related backups of wastewater into homes and streets.

The Cummingsville Sewer Replacement Project, serving parts of Woburn and Winchester, will replace a 100 year old sewer that does not have adequate capacity to serve the needs of the communities.

MWRA has four headworks where all the wastewater flows into Boston from the service area on its way to Deer Island. Three of them (Chelsea Creek, Ward Street and Columbus Park headworks), were constructed in the 1950s. One of the most important components is their screens; the purpose of these facilities is to screen flow as it comes through and to remove grit so that the pumps at Deer Island are not damaged by anything coming through. There are twelve screens at these three remote facilities that are beyond their useful life of twenty years and have frequent repair and reliability issues. If these screens are not operational, there could be a backup of flow into communities. It is a vital project, even though it is a relatively low cost of \$7 million. This is included as an example of the type of asset management protection that it is important to continue with.

Now that MWRA is beyond the mega projects, staff must determine how to go forward keeping rates affordable and how to identify and prioritize projects. For example, last year the Authority, looking at the capital debt and at the future rates, removed about \$450 million of capital projects from its current CIP with the understanding that it just could not afford to do them right now.

Further, there is another \$150 million in projects that were identified that never made it into the CIP; so there are a total of about \$600 million of capital projects that have been identified but are not currently in the CIP. The big question the Authority faces is how will it evaluate and prioritize all of its projects, both water and wastewater, and move forward with its highest priority initiatives, while still maintaining affordable rates.

The Authority is in the process of putting together a Master Planning Document that will include both water and wastewater projects to provide comprehensive identification of all of its needs. It is easier to prioritize a water project against another water project and wastewater against wastewater projects, but it becomes more difficult prioritizing between water and wastewater

projects. Through Master Planning, staff will identify a methodology on how to prioritize those projects once they are combined and still comply with the CIP spending cap.

Cornelia Potter asked if the Authority plans to transmit the proposed CIP in the usual December schedule to the Advisory Board for its review. Mr. Hornbrook replied in the affirmative.

D. **COMMITTEE REPORTS**

Executive Committee – Katherine Haynes Dunphy

❖ **ACTION ITEM: APPLICATION OF THE DEDHAM-WESTWOOD WATER DISTRICT TO JOIN THE MWRA WATERWORKS SYSTEM**

Camp Dresser & McKee consultant Jeff Diercks made a presentation on behalf of the Dedham-Westwood Water District. The District is one of the largest groundwater suppliers in the Commonwealth; its wells are located in the Charles and Neponset River Basins.

From past decisions of the Massachusetts Water Resources Commission, there will be no further withdrawals during low flow periods in either of these basins, so there is no reason to consider constructing additional wells in either basin for summer needs. The District is governed by the Inter-basin Transfer Permit and whenever flow in the Rivers goes below a certain level, the wells must be turned off regardless of how much water may be needed.

In the late 1990s the District first approached the MWRA in connection with a storage tank replacement project to seek an emergency connection to the MWRA water system to ensure public safety and fire protection. The Authority granted permission and a connection was constructed; it has seen limited use when storage problems existed or the large well had to be turned off.

To determine how much water would be needed, CDM built a hydrological model for low flows in the Neponset River to determine when and for how long those triggers would be enacted and another model to predict water demands in the future and joined them together to calculate how much water might be needed; the worst case was about 30 million gallons per year, which averages to 0.1 million gallons per day (MGD), the number cited in the application process. The maximum amount that might be needed in any one 24-hour period is about 2 MGD.

In August of 2004, the MEPA process was begun by filing an expanded Environmental Notification Form. The District's compliance with the OP.10 standards were also documented. In the proposal, the District would build a new permanent interconnection in Westwood; the existing emergency connection in Dedham would remain, but would only be used for emergency purposes. The EOEa Secretary issued a certificate in October 2004 and directed what should be in the draft Environmental Impact Report (EIR). Those requirements were submitted in June 2005 and the Secretary accepted the draft as the Final EIR and on September 16, 2005 the Secretary issued the certificate to the District indicating the MEPA process had been complied with in a satisfactory manner.

The District has been proactive on water conservation and demand management issues for many years and has done well in meeting the various performance standards, including the 65 gallons per capita per day (gpcpd) standard for residential users – the District's demand is in the mid 50 gpcpd.

The following Motion was made: **Whereas the Dedham-Westwood Water District meets the admission criteria set forth in MWRA Policy #: OP.10: 'Admission of New Community to Waterworks System' including, but not limited to, the safe yield of the watershed system, on the advice of the Department of Conservation and Recreation, is sufficient; that no existing or potential water supply source for the community has been abandoned; effective demand management measures have been implemented; adoption of a water management plan; and the proposed expansion provides for no negative impact on the interests of the current forty-seven user communities, water quality, the interests of the watershed communities and achieves economic benefit for existing user communities.**

Therefore, the MWRA Advisory Board recommends the application of the Dedham-Westwood Water District to become a member of the MWRA water distribution system be approved subject to the following conditions:

- 1. The Dedham-Westwood Water District must continue to protect and maintain all local sources of supply.**
- 2. The Dedham-Westwood Water District will continue to maintain all reasonable conservation measures and abide by MWRA regulations for leak detection.**
- 3. Payment of an entrance fee will be made to the MWRA consistent with MWRA policies and procedures in an estimated amount of \$548,748.**
- 4. Annual usage will be capped at 36.5 million gallons.**
- 5. That the Dedham-Westwood Water District and the MWRA develop an enforceable water supply agreement stipulating appropriate terms and conditions of service.**
- 6. Upon acceptance of the Dedham-Westwood Water District application to join the MWRA Waterworks System by the MWRA Advisory Board and the MWRA Board of Directors, the Dedham-Westwood Water District will be eligible for funding through the Local Pipeline Assistance Program. The Dedham-Westwood Water District is qualified for program funds based on 1) said community's percentage of MWRA water use as a portion of total community use 2) proportional share of total MWRA community based unlined pipe and 3) prorating available funds to the number of years remaining in the program. The provision of interest-free loans through the Local Pipeline Assistance Program shall be in addition to the \$250 million currently allocated within the MWRA Capital Improvement Program. Existing community allocation levels will remain unchanged. The MWRA staff summary seeking approval for the Dedham-Westwood Water District to join the MWRA Waterworks system shall include a separate section that establishes the level of funding the Dedham-Westwood Water District will be eligible for under the Local Pipeline Assistance Program. It was seconded and passed by unanimous vote.**

❖ LEGISLATIVE UPDATE

The Advisory Board was successful in including a waiver in both the House and Senate versions of the supplemental budget for the Administration & Finance Indirect fee assessed to the Water Supply Protection Trust (Trust) for the Department of Conservation & Recreation, which amounts to slightly less than \$1.4 million for FY05 and could be as high as \$1.8 to \$2 million for

FY06. If the Governor does not veto the language, it will be enacted. If the Governor does veto it, the next step would be to try to have the veto overridden.

Finance Committee – Bernard Cooper

❖ CIP/CEB UPDATE

Cornelia Potter reported that the Authority still does not have a target date for printing of the final FY06 budget documents. Staff continues to emphasize that an agency of this size, with budgets of this size, should have public budget documents available to its members and on its website.

The Authority continues to monitor current expense spending for this year, having previously identified a number of budget risks estimated at \$3.5 million, which some observers regard as being low. A more up-to-date version of what the budget risks are will be provided at the mid-December Board of Directors meeting.

Spending through October was \$68 million on the capital program, of which \$48 million was for wastewater projects and nearly \$20 million was for water projects. Spending for the Current Expense Budget was \$168 million through the month of October while revenues were \$173 million, a difference of nearly \$5 million or a little more than \$2 million more than MWRA projected to this point. However, because of the budget risk issues, the Advisory Board staff does not believe that the variance report is a good guide for what the spending pressures may be or what the non-revenue shortfalls may be because they don't yet reflect what the Authority can expect to be facing as the year progresses.

The Authority is continuing to develop the FY07 Capital Improvement Program and Budget and proposals for the new five-year cap period of FY09-13. Usually the Board authorizes transmittal of the proposed capital budget to the Advisory Board for its review at the December meeting, although last year this process was put off until the budget document was available in early February.

Preparation of the Direct Expense Budget category of the FY07 Current Expense Budget is also underway with efforts to remain within the 2.5% increase guidelines, not including the costs of implementing or bringing online new facilities; however, connected to the budget risk issue are full year costs of new facility start ups and pressures from outside the agency regarding energy and chemicals pricing, as well as health insurance premiums, which will challenge the FY07 budget preparation process.

Rising interest rates and increases in debt service payments will continue to represent the largest dollar increase for the year ahead. The special discussion on rates management is now scheduled for the December Board meeting. Rate increases, especially over the next four to five years, represent the most challenging issue facing the Authority as many of the maturities from borrowings are coming due. To this point, the debt service has been primarily interest, with little repayment of principal. It is the increasing amount of principal, together with the rising interest rates, that are causing the pressure on rate increases, particularly over the next five years.

Operations Committee – Jay Fink

❖ RECONVENING THE SYSTEM EXPANSION COMMITTEE

Mr. Favaloro stated the MWRA Board of Directors, at yesterday's Board meeting, asked the Advisory Board to reconvene the System Expansion Committee to determine if the System Expansion Policy needs to be tweaked or enhanced.

Staff solicited Advisory Board members to volunteer for the Committee and will also contact former System Expansion Committee members to see if they wish to serve again. Staff will put together an outline and ask members to supplement the outline with their ideas to facilitate the system expansion discussion.

E. QUESTIONS AND COMMENTS

Steve Estes Smargiassi said, as of September, the good news is the MWRA system as a whole is under the lead action level of 15 parts per billion (ppb), the fourth time consecutively and seventh out of the last nine rounds of testing. The bad news is the MWRA was only a few samples away from 15 ppb. Staff will continue its efforts on corrosion control to make additional tweaks before the spring round of testing.

Currently, nine communities exceeded the lead action level individually and will need to develop a lead service line replacement program.

The source water has no lead; the lead comes from home plumbing, primarily brass faucets and lead service lines. The simplest answer for a homeowner is to let the water run; there is no lead in the water when it is fresh, only when the water has been sitting stale for a while. Most people don't drink stale water and are not being exposed to those elevated levels, but nonetheless there is a legitimate public anxiety anytime the sample results indicate that they are elevated.

Mr. Favaloro noted that Advisory Board staff provided testimony on House Bills 1321 and 1322, which deal with lead service replacements for the municipal portion and private portion of the waterlines.

F. ADJOURNMENT

A MOTION WAS MADE TO ADJOURN THE MEETING AT 1:14 P.M. It was seconded and passed by unanimous vote.

Respectfully submitted,

Edward Sullivan, Secretary