

**MWRA ADVISORY BOARD MEETING
SEPTEMBER 20, 2007
NATIONAL HERITAGE MUSEUM
33 MARRETT RD. (ROUTE 2A), LEXINGTON, MA – 11:30 A.M.
MINUTES APPROVED AT THE NOVEMBER 15, 2007 MEETING**

Forty-two people were in attendance, including twenty-five voting members: E. A. Maguire, ASHLAND; Peter Castanino, BELMONT; John P. Sullivan, BOSTON; John Sanchez, BURLINGTON; Ed Sullivan, CANTON; Andrew DeSantis, CHELSEA; Jerry F. Sheehan, EVERETT; J. R. Greene, GUBERNATORIAL APPOINTEE; Bill Hadley, LEXINGTON; Jay Fink, LYNN; Bruce Kenerson, LYNNFIELD; Dana Snow, MARBLEHEAD; Doran Crouse, MARLBOROUGH; Ron Seaboyer, MELROSE; Katherine Haynes Dunphy, MILTON; John Cosgrove, NEEDHAM; Lou Taverna, NEWTON; Bernie Cooper, NORWOOD; Brian Carlisle, QUINCY; Ted McIntire, READING; Carol Antonelli, SOMERVILLE; Lawrence J. Barrett, STOUGHTON; Walter Woods, WELLESLEY; Earl Forman, WESTON; Bob Angelo, WESTWOOD; Michael Woods, WILMINGTON.

Also present: John Carroll, Andrew Pappastergion and Joseph Foti, MWRA BOARD OF DIRECTORS; Jon Norton, EVERETT; Dennis Meehan and Barbara Stevens, LEXINGTON; Peter Tassi, READING; Ana Singleton, STOUGHTON; Rob Antico, WILMINGTON; Ed Bretschneider, WAC; Jon Beekman, SEA CONSULTANTS, INC.; Michael Hornbrook and Pam Heidell, MWRA STAFF; Joe Favalaro, Cornelia Potter, Matthew Romero, Christine Hevelone-Byler and Mary Ann McClellan, MWRA ADVISORY BOARD STAFF.

A. WELCOME

Chairman Katherine Haynes Dunphy called the meeting to order at 11:40 a.m.

B. APPROVAL OF THE MINUTES FROM JUNE 21, 2007

A Motion was made **TO APPROVE THE MINUTES FROM THE JUNE 21, 2007 ADVISORY BOARD MEETING**. It was seconded and passed by unanimous vote.

C. REPORT OF THE EXECUTIVE DIRECTOR

MWRA Advisory Board Executive Director Joseph Favalaro stated staff is well underway in producing the Advisory Board's Annual Water and Sewer Retail Rate Survey, which is the most requested document the Advisory Board publishes. A significant amount of communities have not yet responded. Staff needs real numbers from communities on their water and wastewater infrastructure needs.

Next month's meeting will be held at the Quabbin Reservoir, where a tour of the reservoir and the fish hatchery will be part of the day's activities. The November meeting will be held at the Boston Water and Sewer Commission instead of the State House. Parking will be available.

D. PRESENTATION: MWRA WATER AND WASTEWATER SYSTEM PERFORMANCE BENCHMARKS – Michael Hornbrook, Chief Operating Officer

MWRA Chief Operating Officer Michael Hornbrook stated that water demand has been dropping drastically. In 1988, total demand was about 330+ million gallons per day (MGD); in 2006, demand was at 225+ MGD, a net reduction of almost 110 MGD. The MWRA's supply is in fantastic shape at the Quabbin and Wachusett Reservoirs as far as volume goes and it supports the MWRA's ability to serve additional communities moving forward.

From July 2006 to July 2007, the John J. Carroll Water Treatment Plant was well above the giardia percentage achievement; further, the plant also met cryptosporidium requirements. The ozone plant is working well. Disinfection byproducts have been reduced by about 80%. MWRA has met lead and copper levels and has been consistently below levels for the last ten quarters of testing. Corrosion control has been effective.

On the wastewater side, MWRA inspected 40 miles of pipeline during the past year and has also maintained its targets for siphon inspection as well. MWRA cleans 15% of the 240 miles of pipeline system on an annual basis.

Staff is tracking maintenance at Deer Island on a preventive and predictive basis. For preventive maintenance, staff set a target of 100% of identified preventive maintenance on equipment and is meeting the preventive maintenance work orders target through a series of efforts including having operators do light maintenance that allows skilled tradesman to do more of the heavier maintenance.

For predictive maintenance, staff set a target of 12% for predictive maintenance work orders. Once these goals are reached, a new goal will be set. Maintenance at Deer Island is becoming more and more important because portions of Deer Island have now been operating for more than ten years. The maintenance budget has increased every year for Deer Island and other facilities; the Authority projects that the maintenance budget will continue to increase every year to continue to maintain the facilities.

John Carroll asked what the difference is between preventive and predictive maintenance. Mr. Hornbrook stated that a study is done of the equipment and the process, looking at actual run time of equipment; staff makes a prediction that a failure could occur within a certain timeframe. Certain pieces of equipment may have a prediction of a failure in 1,000 hours so staff tracks the actual run time to try to do that maintenance before it reaches that level.

Staff has also estimated for the primary and secondary treatment facility that stainless steel chains that hold scuffers at the bottom and top are nearing the end of their useful life and the cost to replace them has been estimated at \$30 million.

The Deer Island Wastewater Treatment Plant has consistently met, or bettered, its secondary permit numerical limits. Water quality standards have been consistently met. There has been significant water quality improvement in Boston Harbor, with more than 3,000 technical reports and 1,000 scientific reports outlining that.

Jon Beekman asked how many of those papers and reports are in-house as opposed to reports from outsiders. Mr. Hornbrook estimated that 70% of the reports are done outside of the MWRA. Further, the Outfall Monitoring Science Advisory Panel, made up of experts in their field

that work outside of the MWRA, was created to review the results that the Authority has done and reviews the Authority's annual outfall monitoring.

A result of the plant performance has been improvements to water quality in Boston Harbor. Discharge of solids has been reduced by 85 to 90%; toxic pollutants have been reduced by 90%. Water clarity in the harbor is twice as clear; beaches are cleaner, beach closings have been reduced. The MWRA has the most extensive outfall monitoring in the United States.

In 1988, CSO discharges to receiving waters were at about 3.3 billion gallons per year and were going into Boston Harbor, the Charles River, Neponset and all the tributary areas. By 1992, the MWRA had cut that in half, with a majority of the flows receiving some form of treatment. By 2002, MWRA further reduced those numbers and provided treatment. By 2015, MWRA's target is to be under a half billion gallons, with 98% being treated. Mr. Hornbrook offered kudos to John Sullivan as the majority of these projects were implemented by the Boston Water and Sewer Commission (BWSC) with funding by the MWRA.

Finally, as far as performance goes, the Authority has told DEP and EPA that our communities are doing a great deal for their infrastructure. In FY08, \$8.5 million is included for the I/I Program on the wastewater side but, more importantly, \$148 million has been distributed to date to the communities (about \$9 million per year). For the Local Pipeline Assistance Program, \$120 million has been distributed to date.

On the I/I side, based on these programs, 900 miles of sewer have been TV inspected; 30 miles have been replaced; 120 miles have been repaired; 8,000 sewer manholes; 6,000 catch basins; 5,000 downspouts. The Authority has a NPDES permit coming up; the current permit has been expired for close to two years, with no discussions with EPA and DEP yet. Informally, staff has heard that the regulators would like to name the member communities as joint permittees for the collection systems; the only reason they would do that is to try to have a regulatory hook for SSOs and I/I. Communities should be recognized for their efforts, which have been ongoing; they don't need enforcement to do it.

On the water side, 164 miles of unlined water main has been replaced with new lined pipe and 113 miles have been rehabilitated with cleaning and lining.

Cornelia Potter asked if there has been any shift in the amount of solids captured, as well as the amount of solids produced; if there is a difference or an increase, is it a function of capture or is it a function of changes in plant operation. Mr. Hornbrook said the amount of solids produced at the pellet plant has increased. Several years ago, we were around 92 tons per day; currently we are closer to 98 to 100 tons per day. MWRA is getting better capture of solids so there is more to be pelletized and the change in how sludge is pumped has impacted the numbers as well. It is a combination of both the capture rate and a change in operation in 2005 and 2006.

Cornelia Potter asked if those changes have reached a new equilibrium or can further increases in sludge quantities be expected. Mr. Hornbrook said he expects to have a variation. For example, if there were a digester cleaning program, more sludge would typically be sent over but as far as a baseline goes, we are getting close to an equilibrium, but it could go up or down off that baseline.

E. COMMITTEE REPORTS

Executive Committee – Katherine Haynes Dunphy

❖ **ACTION ITEM: ELECTION OF THE FY08 EXECUTIVE COMMITTEE**

Chairman Dunphy offered the proposed slate for the FY08 Executive Committee and asked if there were nominations from the floor. Jay Fink made a nomination from the floor **TO NOMINATE BRIAN CARLISLE OF QUINCY AS AN AT-LARGE MEMBER, TO BE ADDED TO THE PROPOSED SLATE.** It was seconded and passed by unanimous vote.

The following slate, including Mr. Carlisle, was submitted for consideration by the full Advisory Board: Chairman: Katherine Haynes Dunphy, Milton; Vice Chair of Finance: Bernard Cooper, Norwood; Vice Chair of Operations: Jay Fink, Lynn; Secretary: Edward Sullivan, Canton; Treasurer: John Sullivan, Boston; At Large Members: *Carol Antonelli, Somerville; Lawrence Barrett, Stoughton; *Brian Carlisle, Quincy; Andrew DeSantis, Chelsea; William Hadley, Lexington; Timothy MacDonald, Cambridge; Edward D. McIntire, Reading; Zigmund Peret, Wilbraham; John Sanchez, Burlington; Ron Seaboyer, Melrose; Louis Taverna, Newton; Walter Woods, Wellesley. * Designates new member for FY08

A Motion was made **TO ADOPT THE PROPOSED FY08 MEMBER SLATE, INCLUDING THE CANDIDATE NOMINATED FROM THE FLOOR, AS THE FY08 EXECUTIVE COMMITTEE.** It was seconded and passed by unanimous vote.

❖ **PRESENTATION: LOOKING BACK/MOVING FORWARD – CHALLENGES FACING THE MWRA/COMMUNITIES** – MWRA Advisory Board Staff

Mr. Favaloro said in September staff begins to plot out what challenges are ahead. This past week a ceremony kicked off the \$200 million North Dorchester Bay soft-rock tunnel project that will better the water quality numbers referred to by Mike Hornbrook.

FY08 will be a critical year for Debt Service Assistance (DSA). MWRA's assumption of where DSA from the Commonwealth was going to be was in the \$60 million range; in reality, it has been reduced significantly. In FY07, \$23 million was appropriated statewide.

The challenge for the future is to get water and sewer infrastructure back on the radar screen. In light of the bridge collapse in Minnesota, discussions have re-defined infrastructure as bridges and roads.

The Governor in the next week or so is going to come out with a massive capital plan; the water and sewer infrastructure line item will not be there.

Staff has reached out to Leslie Kirwan, the Secretary of Administration and Finance (A&F), thanking the Administration for the \$23 million for FY08. Staff asked for the opportunity to sit down with A&F to come up with a long range approach to increase DSA and the role that the Commonwealth of Massachusetts can and should play in providing it. The good news is that the Secretary accepted working with us to come up with that program; however, in the letter she sent back to us, she said clearly that the revenue forecast is tight.

If you are a ratepayer/taxpayer, it does not matter if it is called a tax or a fee it still comes out of your pocket.

The budget between now and FY17, according to the Authority's numbers, will increase by \$334 million, out of cities and towns pockets to pay for it. If DSA were received at the levels that the

Authority had expected, that number would be \$200+ million; if the MWRA gets less than its share of \$23 million, the \$334 million is closer to \$350 million to \$355 million.

Staff plans to report the impacts to the communities using the numbers that appear in the MWRA budget. As an example, between now and FY15, Winthrop's assessment will increase by another \$1.7 million; Milton will increase by over \$3 million; Newton will increase by another \$11 million. This is in no way an indictment of the MWRA. From Mr. Hornbrook's presentation you can see all of the achievements that have occurred. The Authority has done staffing reductions, consolidations and has exhausted opportunities to lower its operating budget. Over the years Advisory Board staff has looked at the MWRA's budgets and found areas to trim. Rate increases are still in the five to six percent range.

On the CIP side, a spending cap was implemented at the Advisory Board's urging; the Authority has embraced it and it is working. The Master Plan, also implemented at the Advisory Board's urging, allows the Authority, with limited resources, to begin to make decisions on what kinds of costs are out there for the future. The Authority, through its Master Planning process, has identified \$2+ billion of additional spending through FY18. That does not include the other layer, which includes those improvements that are necessary in communities. Regardless if it is paid through a community's assessment or it needs to be capitalized through the community's own operating budget, it is still going to lead toward increases.

This year, the Authority and the Advisory Board will establish the next five-year cap. Realistically, that number is probably going to be somewhere in the \$200 million range per year for the next five years, principally driven by CSOs. Clearly, alternative funding sources are necessary. When the Enabling Act was written, the intention of the Commonwealth was a 90/10 split, with 90% of funding coming from the federal and state level and the 10% coming from the local share. Realistically staff understands that the MWRA will never get back to that funding, but the Authority needs to get to a point where DSA isn't hovering in the low 20s and still not knowing in April or May if or when it will receive DSA. DSA, as it was written, needs to be formula driven, based on the eligible debt of the MWRA and the communities throughout the Commonwealth.

With the reduction of water usage, there is ample opportunity to sell more water. The MWRA should not be arguing if it should sell more water; the argument should be how to actively market a reasonable and responsible amount of water to sell.

In an effort to develop new revenue sources, staff and the Executive Committee discussed the concept of assessing a fee on bottled water. Though it is difficult to get up-to-date per capita numbers on bottled water sold, to put in perspective what a fee on bottled water would amount to staff approximates, based on population of Massachusetts, it is possible that every penny on a fee for bottled water assessed to Pepsi, Coca-Cola and the other big players would bring in about \$5.8 million. Those dollars would be dedicated to water and sewer infrastructure statewide. This idea may not muster support, but at least it would get water and sewer infrastructure back on the radar screen.

The Authority had to borrow a lot of money over a very short period of time. Many would argue that one generation has paid for the ills of many generations and for the benefit of future generations. Beyond that argument, there are opportunities to refinance the debt in place to take advantage of a market that is quite volatile. These refinancing opportunities would not increase the term but would reduce the price.

The Authority's National Pollutant Discharge Elimination System (NPDES) permit expired two years ago. Seven years ago EPA aggressively attempted to make the MWRA the enforcement agency on stormwater issues. Will that happen again? There may be other things that EPA will include. The Authority is now in the process of seeking its registration under the Water Management Act. The Authority's current registration is for 320 MGD; however, one interpretation of the registration is the last five years' running average. If that were to come in play, the Authority's potential for selling additional water would go away. Mr. Hornbrook added that additional conditions could also be placed upon the Authority.

EPA agreed to five three-year waivers for the Charles River. EPA and DEP have put the first waiver on the table, which meets the agreed upon language that the Authority move forward with the projects as they are; at the end of that period a reevaluation will be done to see if any additional work needs to be done.

Massport's desire to be more competitive in the cruise ship market requires dredging in the harbor to make a deeper channel. The Authority's cross harbor cable is in the way of dredging so there are liability and legal issues that may result in potentially millions of dollars to relocate or deepen the cable.

Alternative energy is an area where the Authority deserves a lot of credit. In conjunction with Secretary Bowles, the Authority is looking at wind turbines. The location that was most attractive to locate the turbines is the one that is going to be the most difficult; the Federal Aviation Administration believes that locating turbines on Deer Island could cause potential problems with aircraft and creating false reads on radar. The Authority has begun discussions for locating the turbines at Nut Island and other locations. Another area is solar panels. The Authority is in receipt of a major grant and will be doing some of those installations at Deer Island and is also looking at other locations for solar panels.

When the Rutland-Holden Trunk Sewer Line, located in central Massachusetts, has a problem, the MWRA has to send a crew from Chelsea to repair it; this makes no sense. The Advisory Board has brought all the parties together for discussions and will hold its third meeting in early October.

In conclusion, the Advisory Board has challenges that require new strategies to work for the long-term benefits. This year is the critical year to get that foundation in place.

Ron Seaboyer asked why the Cross Harbor Cable would be the MWRA's responsibility to move. Mr. Hornbrook said the Cross Harbor Cable is the primary electric cable feed from the K Street substation out to Deer Island. It was constructed under the fast track projects when Deer Island was being built. The MWRA's was named a co-permittee to get it through the federal court and to get all the permitting out quickly. Massport is alleging, and surveys have shown, that it is a half-foot shallower than the permit issued back in 1992. Because it is a half-foot shallower than the permit, Massport says the MWRA is not in compliance with the permit, therefore, move it.

If the cable must be moved, NStar is looking at varying methods. If the cable has to be replaced all the way from K Street to Deer Island, the cost is in the tens of millions of dollars. NStar is looking at whether the cable can be spliced; it would need to be spliced just to move it to the sides of the channel. NStar is looking for the cheapest ways it could possibly be done.

Unfortunately, MWRA is the only customer of that line so NStar would pass the charges on to us.

Operations Committee – Jay Fink

❖ **PRESENTATION: READING'S REQUEST FOR AN ADDITIONAL 1.5 MGD OF WATER**

SEA Consultant Jon Beekman stated in fall 2005, the MWRA Advisory Board supported the Town of Reading's membership to the MWRA for 0.6 MGD. In spring 2006, the Town Meeting in Reading voted to join the MWRA as a full-time member; through a series of negotiations, that occurred last year on a temporary basis with conditions. Some of those conditions were an Environmental Impact Report that had to be approved by MEPA, negotiations with DEP had to be done, the Water Resources Commission had to approve an inter-basin transfer; fortunately that all occurred and Reading succeeded in completing those steps in August.

The Town is now before you with a willingness to add \$7.8 million to the admission fee structure to increase the average day demand of withdrawal from 0.6 MGD to 2.1 MGD, adding 1.6 MGD into the withdrawal.

Ted McIntire thanked Jon Beekman, as well as Peter Tassi of Reading, MWRA and Advisory Board staffs for their efforts. Mr. McIntire also thanked Advisory Board members for their support.

Finance Committee – Bernard Cooper

❖ **UPDATE: CIP/CEB**

Cornelia Potter said Advisory Board staff is meeting with Authority staff for a series of briefings on three budgets; staff is looking at updates on how FY07 finished for the year; as well as reviewing initial spending patterns and major issues for FY08; further, staff is beginning to get precludes about the FY09 budget, for which Authority staff has now begun the process.

For FY07, the Authority ended the Current Expense Budget with spending just under \$550 million; this year's budget is about \$565 million, net of DSA, and projections for FY09 are expected to bring expenses close to \$600 million, net of projected DSA. Rate increases on a dollar basis, despite the fact that restructuring has helped contain projected rate increases, are still significant on the immediate horizon and through the next seven or eight years until the benefits of restructuring the bond covenants kick in.

On the capital side, the Authority ended the year with spending of \$177 million. Spending in FY08 is expected to rise to as much as \$250 million, largely because of significant increases to the pace of CSO spending. The biggest contract underway is the South Boston North Dorchester Bay Project. Another large contract coming up is the East Boston CSO Project; the construction contract is budgeted at \$52 million. In FY08, CSO spending is projected to be about 40% of all capital spending.

The Authority will be setting the capital spending cap for the next five-year cap for FY09-13. Advisory Board staff will keep an eye on the Authority's assumptions, not only around the selection of projects but the pace of spending and cash flows, which will determine what that five-year level will be.

F. QUESTIONS AND COMMENTS

G. ADJOURNMENT

A MOTION WAS MADE TO ADJOURN THE MEETING AT 1:08 P.M. It was seconded and passed by unanimous vote.

Respectfully submitted,

Edward Sullivan, Secretary