

**MWRA ADVISORY BOARD MEETING
MAY 20, 2010
BOSTON WATER AND SEWER COMMISSION
980 HARRISON AVENUE, BOSTON, MA – 11:30 A.M.
MINUTES APPROVED AT THE OCTOBER 21, 2010 MEETING**

Forty-three people were in attendance, including thirty-two voting members: John Bean, ARLINGTON; E. A. Maguire, ASHLAND; Peter Castanino, BELMONT; John Sullivan, BOSTON; Charles Barry, BROOKLINE; Ed Sullivan, CANTON; Andrew DeSantis, CHELSEA; David Field, DEDHAM; Glen Doherty, EVERETT; J. R. Greene and Barbara Wyatt, GUBERNATORIAL APPOINTEES; Bill Hadley, LEXINGTON; Jay Fink, LYNN; Bruce Kenerson, LYNNFIELD; Charles McCollum, MARBLEHEAD; Cassandra Koutalidis, MEDFORD; Katherine Dunphy, MILTON; Wiff Peterson, NATICK; John Cosgrove, NEEDHAM; Lou Taverna, NEWTON; Bernie Cooper, NORWOOD; Peter Smyrnios, PEABODY; Jeff Zager, READING; Carol Antonelli, SOMERVILLE; John DeAmicis, STONEHAM; Richard Stinson, WAKEFIELD; Walter Woods, WELLESLEY; Earl Forman, WESTON; Zig Peret, WILBRAHAM; Michael Woods, WILMINGTON; Anthony Blazejowski, WOBURN.

Also present: Andrew Pappastergion and Joseph Foti, MWRA BOARD OF DIRECTORS; Ray Gelinas, CHELSEA; George Burnell, LEXINGTON; Phil Jasset, NEWTON; Joe Welch, NORWOOD; William Shaughnessy, WELLESLEY; Joe Lobao, WILMINGTON; Michael Hornbrook, MWRA STAFF; Joe Favaloro and Matthew Romero, MWRA ADVISORY BOARD STAFF.

A. WELCOME

Chairman Katherine Haynes Dunphy called the meeting to order at 11:36 a.m. and introduced Vincent Mannering, Executive Director of the Boston Water and Sewer Commission (BWSC), who welcomed everyone to BWSC.

Chairman Dunphy recognized the efforts of long-time Executive Committee Member Edward Sullivan, who has served for 20-plus years as an active member of the Advisory Board and as the long-time Secretary to the Executive Committee, who has chosen to retire. Mr. Sullivan said he has been an elected or appointed official for the Town of Canton since 1968 and has served on many committees, commissions and boards; he stated that the Advisory Board is one of the most professional, well-organized and functional organizations that he has served on.

B. REPORT OF THE EXECUTIVE DIRECTOR

MWRA Executive Director Joseph Favaloro stated that the Advisory Board's Annual Field Trip on August 26 will focus on redundancy in the water system, as well as a tour of the Shaft 5 break site.

C. PRESENTATION: SHAFT 5A PIPE BREAK – Fred Laskey, MWRA Executive Director
MWRA Executive Director Fred Laskey said the Authority experienced a break in a coupling at Shaft 5A. Water comes into the MetroWest Tunnel from Marlborough, goes through the Norumbega Covered Storage Tank, drops back down and continues east and goes through a ten-foot surface pipe to a valve chamber and then continues over to Shaft 5, which is the start of

the city tunnel. The City Tunnel continues on to Boston College in Chestnut Hill where it branches north and south; so it is the heart of the MWRA's transmission system.

At mid-day on a Saturday, all of a sudden the Authority went from a flow rate of 200 million gallons per day (MGD) to 482 MGD, which was the first indication that something was wrong. Luckily the location of the leak allowed the water to run down hill about 100 yards into the Charles River. If the break had occurred elsewhere in the area, it could have flooded out the Mass Pike or the ramps for 128. That morning, the Department of Conservation & Recreation (DCR) called saying that the gauge had gone through the roof.

At 10:01, an alarm sounded about a loss of communication, which is a fairly common alarm for the Authority because there are all kinds of electrical systems and backup batteries. Within minutes, MWRA security guards called to report that they were seeing water coming out of the ground at the Shaft 5 location. Shortly after that, the spike in flow at the MetroWest Tunnel occurred and staff knew there was a problem and the calls began to go out.

Mark Johnson, Director of Metropolitan Operations, and David Coppes, Director of Western Operations headed to the location. MWRA immediately opened up the Emergency Operations Center in Chelsea where staff stepped up to help manage this problem.

The first step staff took was to increase the plant flows at the John J. Carroll Water Treatment Plant (CWTP) as high as it could go to keep the flow of water into the city. Turbines at Cosgrove were shut off because they sometimes trip out. Flows were increased enough to keep stable pressure throughout the service area, which was critically important.

Staff contacted MWRA's partial users and asked them to come offline; they all responded immediately. Tank levels at the Blue Hills and Loring Road facilities were managed to help maintain the stable pressure.

Staff knew this was a big problem with statewide implications. Phone calls were made immediately, first to get the staff in. Drills have been done on emergencies such as this and staff began communications with the communities, the Board of Directors, the Governor, the Public Health Department, DEP, the fire marshal and the Massachusetts Emergency Management Agency (MEMA). It became a team effort as the communication went out.

Deputy Director of Operations Marcis Kempe added that a follow-up meeting on communications has been set up for June 3 at 10:00 a.m. to discuss how communications went during the incident because improvements can be made. Mr. Laskey said staff had a list of communications in place, but inevitably cell phones and emails change and positions change. There is going to be a concerted effort to make sure everything is fresh. Communications were sent out by email blasts and reverse 911 calls, which worked well for the most part. The Authority's website was continually updated as well.

The normal flow comes through the MetroWest Tunnel and then splits north and south. There is also a line that goes toward the Loring Road tank with an 84-inch valve that hadn't been opened in years; staff opened it, which enabled the ability to loop water up to the Loring Road tank and then back down into the city tunnel after the break. Staff was also able to flow water across to Shaft 8, which is over at Genzyme near the banks of the Charles River.

A few years ago the east and west Spot Pond supply mains that run from Chestnut Hill up to Spot Pond were rehabilitated and as part of that project staff had valves put in that would allow an express lane of water from Loring Road over to Shaft 8 in just such an emergency.

An emergency pump station was installed underground next to the old pump station at Chestnut Hill a number of years ago. People said the MWRA would never use it. During this emergency, staff needed this pump station to maintain pressure in the service area so this was a case of a strategic decision that was made that paid off. The key to this station is the hydraulic grade line to make sure there was enough pressure for firefighting in the peak hours of the day.

The power of the water was taking power lines down at that location so the MWRA was in imminent danger of losing power to that shaft. MWRA ran the pump station for seven hours during the peak of the day on day 1 and eight hours on May 2. The Sudbury Aqueduct, which has been maintained as a backup, was activated and 90 million gallons of water was transferred. It took about eight hours for the water to come out at the Chestnut Hill Reservoir.

Cassandra Koutalidis asked if Cambridge was asked for water. Mr. Kemp said the only way the Authority could do that would be through Somerville and it was an all or nothing deal; staff didn't think it was worth trying for but it was considered.

Staff made a quick decision to bring in Barletta Heavy Division, which had equipment and materials nearby for the Hultman project and was actually on site and mobilized before the water was shut off. Staff was relieved to find that the pipe itself had not been compromised.

MWRA worked closely with DEP and the Department of Public Health and agreed to a sampling regime that included two rounds of sampling eight hours apart. When the average person woke up on Monday everything was clear and the boil order was lifted by 7 a.m. for all thirty communities. A third round of sampling was also done that all came back clean, reassuring that the correct decisions were made.

Mr. Laskey noted that staff has done drills for emergencies such as dam failures, pipe collapses, dam collapses, etc. and has a good emergency response program in place. MWRA not only invested in training but also in specialized equipment. People knew what to do. It has proven to be a good investment.

In trying to recover the collar that broke, staff dug down to two feet below the pipe to firmer ground and had a geotech from Camp Dresser & McKee come in with a six-foot rod to be driven down into the ground in a grid and nothing was found. The river was dredged and the State Police dive team searched 200 yards up and down the river all the way to the dam in Waltham and nothing was found. Sonar was used with no luck. Staff is confident that the collar is not in the river. MWRA worked closely with the Conservation Commission, DEP and DCR and everyone was flexible and understood the urgency of the situation. Ground penetrating radar was used and two or three hot spots that look like metal at a particular depth were located and will be investigated.

One theory is that it is still underneath the pipe; if so, then the question is "what do we do then?" To date the costs are \$1.2 million including overtime; a decision will have to be made whether it is worth recovering. The Board of Directors has voted to create a special panel to review these events, which is being put together for the Board's approval.

The Hultman rehabilitation is an expensive but necessary project to rehabilitate that Aqueduct and make interconnections between it and the MetroWest Tunnel to allow the MWRA to have complete redundancy and also to bring sections of both the MetroWest Tunnel and the Hultman off in case of an emergency. The Board has directed staff to look at sequencing of that project to see if there are things that can be done to speed up the December 2014 completion date. Staff will go back to the Board in June with ideas on how to speed that up.

An average of \$71 million per year has been spent on water redundancy projects and that trend will likely continue. MWRA has spent \$7 billion to upgrade its infrastructure, with 85% being court-mandated projects having to do with the Safe Drinking Water Act and the Clean Water Act. Those are additions to the system. The main system needs that kind of investment over the next ten to twenty years to bring it up to the standards that it should be.

Mr. Laskey praised the efforts of his smart, dedicated staff at the MWRA; they had the foresight for preparation and planning and had the ability under extreme pressure to respond magnificently.

An Advisory Board member stated that his community has a growing population that has cell phones only, which are not in the reverse 911 system. Who should that concern be communicated to? Mr. Laskey said this is an issue that is statewide and is a growing problem, stating that he believes it is an issue that the 911 people will have to deal with.

Chairman Dunphy offered the following resolution recognizing MWRA’s efforts:

Whereas 47 communities serving 2.8 million residents who rely on the MWRA to provide safe, reliable and potable water; whereas any interruption in service is detrimental to the physical well being of our residents as well as the economic viability of the greater Boston region; whereas on the morning of May 1, 2010 an interruption occurred when the Shaft 5A water pipe ruptured causing potentially catastrophic consequences for 30 MWRA communities; whereas the Authority immediately mobilized assembling not only the highly capable MWRA staff, but also contractors and engineers to find and fix the catastrophic break in the system within 72 hours, maintaining the system pressure, which ensured full non-potable uses of water at all times; therefore, be it resolved that the MWRA Advisory Board, representing the MWRA communities, recognizes and applauds the herculean efforts of the MWRA under the leadership of Mr. Laskey to identify and fix the break at Shaft 5A in a timely and transparent manner. Be it further resolved that a copy of this resolution be sent to every town/city clerk in the service area along with the members of the MWRA Legislative Caucus. Adopted this 20th day of May, 2010. signed by Katherine Dunphy, Chair of the MWRA Advisory Board.

Mr. Laskey thanked the Advisory Board on behalf of the MWRA’s 1,205 employees.

D. COMMITTEE REPORTS

Executive Committee – Katherine Haynes Dunphy

❖ ACTION ITEM: NOMINATION/ELECTION FOR MWRA ADVISORY BOARD REPRESENTATIVE TO THE MWRA BOARD OF DIRECTORS

Chairman Dunphy stated that Joseph Foti has submitted his name for nomination to the MWRA Board of Directors. The Executive Committee, acting as the Nomination Committee, did nominate Joseph Foti.

Chairman Dunphy asked if there were any nominations from the floor; hearing none, nominations were declared closed.

Joe Foti said it has been an honor to represent all of the communities for the last nine years and he would love the opportunity to continue to do so for another three years. The three Advisory Board representatives on the Board of Directors do our best to make sure we represent all of the communities to the best of our ability.

A Motion was made **TO NOMINATE AND ELECT JOSEPH C. FOTI TO SERVE AS AN ADVISORY BOARD REPRESENTATIVE ON THE MWRA BOARD OF DIRECTORS FROM JULY 1, 2010 TO JUNE 30, 2013.** It was seconded and passed by unanimous vote.

Mr. Foti expressed his thanks.

❖ **LEGISLATIVE UPDATE**

Mr. Favaloro stated that the Senate Budget was released yesterday and it did not include Debt Service Assistance (DSA); the House had placed \$500,000 for DSA in its budget. Senator Petruccelli, co-chair of the MWRA Legislative Caucus, is going to file an amendment for the \$500,000 on the Senate side for DSA.

The Senate Budget did include monies for the Clinton Wastewater Treatment Plant.

Finance Committee – Bernard Cooper

❖ **ACTION ITEM: MWRA ADVISORY BOARD FY11 OPERATING BUDGET**

Mr. Favaloro said if it were not for interest income, the Advisory Board would have had a significant reduction in its FY11 request; however, because of the complete loss of interest income, the overall Advisory Board budget is nearly level funded at \$450,305, essentially \$1,000 less than last year's budget.

A motion was made **TO APPROVE THE MWRA ADVISORY BOARD FY11 OPERATING BUDGET.** It was seconded and passed by unanimous vote.

❖ **PRESENTATION / ACTION ITEM: MWRA ADVISORY BOARD'S INTEGRATED COMMENTS AND RECOMMENDATIONS ON THE MWRA'S PROPOSED FY11 CIP AND CEB** – Matthew Romero, Senior Finance and Policy Analyst

Senior Finance and Policy Analyst Matthew Romero said the Advisory Board, in conjunction and close coordination with the MWRA budget staff, began working on the FY11 process early on. At this point there really aren't a lot of CEB recommendations.

The increase in the rate revenue requirement for FY11 is 1.49%, which is the lowest increase since 1996. The Advisory Board's recommendation is to concur with the 1.49% increase, with no additional reductions at this time. The wholesale rate increase should remain at 1.49% with the final MWRA Board of Directors vote in June so cities and towns can go into their budget season with that information.

Another CEB recommendation is the staffing study that the MWRA Board of Directors recently approved to be conducted as a follow up to the Black and Veatch study from several years ago. It is basically to take a look at the MWRA as an organization that has moved from a massive capital construction organization to more of a maintenance mode to benchmark the Authority

with facilities that provide similar services. What is the correct distribution of staff over the agency in order to meet its goals and core mission?

Similarly, the Board of Directors is expected to approve an information technology study on the Authority's IT needs and the Advisory Board supports that assessment and the goals and recommendations that would come out of that.

For CIP recommendations, the Advisory Board would like to challenge the Authority to keep future spending caps, from FY14 moving forward, at a not exceed cap calculation of \$1 billion.

The shaft break made the topic of redundancy come to the forefront. The Advisory Board does support evaluating and accelerating redundancy projects at this time where practical.

Another recommendation is to make future budgets more realistic; for example, in the current CIP, the five-year cap exceeds the rules of plus or minus 20% in any given year within the cap. The Authority is well over that amount in one of those years so staff knows they will have to push some of those projects into the next cap period of FY14 to FY18. A review of the projects in the current cap should be made, particularly since they now want to move redundancy projects up.

The Advisory Board recommends supporting the new Local Water Supply Assistance Program, which is basically the next phase of the Local Water Pipeline Assistance Program. The program has been expanded beyond just pipelines.

Moving to an integrated review of the CIP and CEB has served well in policy recommendations. Recommendations centering around the watershed division include supporting the independent audit of forestry management. In the press there was some concern regarding some clear cutting that was taking place on DCR lands, particularly watershed lands. There was some concern that there were some violations or that it had gone too far. The Advisory Board has supported the forestry management program as put forth by DCR but does support an independent audit to ensure that everything is being done properly and to confirm that the plan serves the watershed's needs.

As part of the reaction to the independent audit there has been a suspension of forestry sales and thereby revenue that comes in to help offset DCR expenditures. Ratepayers should not be making up for the loss of that revenue; it needs to be made up by reduced expenses by DCR.

In the *Comments and Recommendations*, staff outlines a sampling of a series of expenditures that are arguably watershed related that the Authority has assumed control of and financial responsibility for over time. Certain expenses are treated as Indirect Expenses and the watershed reimbursements count for that. The problem is when you don't have expenses that are counted that way you don't get the same benefit for coverage purposes. The Advisory Board is asking that those expenses be treated as an Indirect Expense, which could result in the potential of hundreds of thousands of dollars and staff should take a look at the coverage calculation and the potential impacts of that.

The Advisory Board is recommending that a working group be created, including the Advisory Board, to establish a long-term plan for rates and debt management through 2022. The Authority has already begun discussions with its financial advisors as to how best to manage that moving forward. It is a long horizon and there are many tools that are available. In

particular, a release of reserves is expected when the new bond covenants kick in during 2014. The working group could work on how best to strategically plan for the use of those reserves between now and 2022 to help keep rates down for the communities.

Recent reports have indicated that the Insurance Reserve may be over funded and there might be a potential to reduce that, providing several million dollars in potential funds. What is the best use between now and 2022, in tandem with the release of the other reserves and other tools to maximize the rate benefit for cities and towns?

The maximum use of optional payments fund is particularly an FY10 issue. This is in reference to Other Post-Employment Benefits (OPEB), which is the GASB 45 issue. The Authority has a nominal amount in FY10 and also, because they are treating OPEB and the pension fund as one overall liability, has an additional payment beyond its required contribution for FY10 of about \$2.8 million. Between those two liabilities it is \$3.6 million in FY10. The argument the Advisory Board is making is before the MWRA decides to make that payment, stop and have the discussion on whether this is the best “bang for the buck” putting \$3.6 million toward these liabilities or should this \$3.6 million be used in some other fashion, be it defeasance or putting it into rate stabilization funds for future years in which the monies could best be used.

Discussing future defeasance options is a tool that the Authority consistently uses every year, making sure that it is wrapped into a long-term rates management strategy. How do we factor in any additional revenues such as DSA into rates management?

On the residuals side, the MWRA is conducting a technology assessment for the pelletizing plant, which is in its CEB. The study is moving forward in FY11 and the Advisory Board wants to highlight goals that the Authority should look at as part of this assessment. One is just to reduce the quantities of sludge that is being processed. The Authority has lucked out with the structure of its current contract because once the pipeline in to the Fore River facility was put in, the costs for the Authority went down dramatically. Unfortunately for the private entity that runs it, their costs went up and their profit went down dramatically. As that contract runs out, if MWRA continues with privatized operations, it is expected that the new contract will not be quite so advantageous for the Authority and will seek to make sure that the balance is leveled out between the contractor and the Authority. The cost per ton of sludge processed will increase so any ability to reduce the quantities being processed is a huge potential savings for the Authority.

The Advisory Board recommends taking a look at new technologies for beneficial reuse of byproducts, such as creating renewable fuel sources and using it for heat energy or converting it into glass that can be reused. There are a lot of different technologies, many of which have not been tested on a large scale. Similarly, the Authority should make sure that it gets green credits in the process. Because the technology is new and emerging, it does not count under the existing credits that the Authority can take advantage of. In tandem with picking a new technology, working with the Administration and the Legislature, the Authority should make sure that it gets the maximum benefit since the MWRA is already doing so much on the renewable energy side of things.

There are three basic elements that system expansion is centered around. In 2006, there was a study that estimated the safe yield for each of these three elements was 12 MGD to be sold for system expansion for new communities or entities coming into the system; 12 MGD to be used for downstream releases, which is something that has also been a huge topic as part of this discussion; and 12 MGD to be held in reserve just in case MWRA needs additional capacity.

MWRA has added new users yet consumption has continued to drop. The Advisory Board recommends another look at whether the 12/12/12 MGD is still an appropriate number. Perhaps the safe yield should be updated.

The Advisory Board believes the “entrance fee” might be better termed the “former asset investment recovery” or “FAIR”; it is a fair charge. The entrance fee, in recent discussions on the system expansion, seems to have an implication that this is a “luxury tax” or some sort of slush fund for the MWRA. The Advisory Board would like to remind people that there are former assets that all of the member communities have invested in previously and paid debt service on, as well as operating costs, and those costs need to be recovered. This is the reason the entrance fee was created. The conversation should not be about waiving the entrance fee but rather making sure that the cities and towns that already invested their hard earned money in the form of their assessments over the years should be reimbursed for the investment that they have made over time.

In the current CIP, scheduled for FY12, a pipeline for a fish hatchery that would provide oxygenated water downstream to a trout fishery has been included that would also be the mechanism for system releases. Quite frankly this pipeline was one of the bargaining chips that the MWRA had to get the Commonwealth to come to the negotiating table to discuss a streamlined process for system expansion. The Advisory Board’s question is why give away the incentive and then continue the negotiations. Don’t give the Commonwealth what it wants yet; this is what is getting them to the table. The Advisory Board recommends not moving forward on the hatchery pipeline project until a streamlined process and the first “FAIR” charge is received.

Understanding that an upfront entrance fee of potentially millions of dollars is sometimes a hard sell for town meetings and city councils, there may be other ways that the communities could still recover those full entrance fee costs but still provide some relief or make it easier for new communities to join. One example would be to offer interest-free payments over multiple years; instead of requiring the fee up front, spread it over ten to fifteen years.

MWRA should work to make sure that DSA comes back in the long term because the ratepayers should not bear these costs alone. The Bottle Bill tax would direct funds to water infrastructure, which is something the Advisory Board has supported before; since the Shaft 5 break, there has been some renewed interest in this bill as a potential down the line revenue. Additional revenues could be earned by putting up advertising near the pike at Norumbega or advertisements on Deer Island.

A Motion was made **TO APPROVE THE MWRA ADVISORY BOARD’S INTEGRATED COMMENTS AND RECOMMENDATIONS ON THE MWRA’S PROPOSED FY11 CIP AND CEB.** It was seconded and passed by unanimous vote.

E. ADJOURNMENT

A MOTION WAS MADE TO ADJOURN THE MEETING AT 1:06 P.M. It was seconded and passed by unanimous vote.

Respectfully submitted,

Lou Taverna, Interim Secretary