



Advisory Board Meeting

Thursday, April 17, 2014
11:30 AM

Chelsea Operations Center
Two Griffin Way
Chelsea, MA

Attendees (Voting Members)

M. Rademacher	Arlington	Richard Viscay	Everett	Lou Taverna	Newton
Michael Bishop	Belmont	J. R. Greene	Gubernatorial	Bernie Cooper	Norwood
John Sullivan	Boston	William Hadley	Lexington	Jeff Zager	Reading
Jay Hersey	Brookline	Katherine Dunphy	Milton	John DeAmicis	Stoneham
John Sanchez	Burlington	Thom Donahue	Nahant	Michael Woods	Wilmington
Andrew DeSantis	Chelsea	Craig Leiner	Natick		

Other Attendees

Joe Lobao	Wilmington	Jae Kim	MWRA	Lexi Dewey	WSCAC
John Carroll	MWRA BOD	Dan O'Brien	MWRA	Joseph Favaloro	AB Staff
A. Pappastergion	MWRA BOD	Dave Coppes	MWRA	Matthew Romero	AB Staff
Joe Foti	MWRA BOD	Dave Whelan	MWRA	Cornelia Potter	AB Staff
Fred Laskey	MWRA	Pam Heidell	MWRA	Travis Ahern	AB Staff
Kevin McCluskey	MWRA	Rachel Madden	MWRA	Mary Ann McClellan	AB Staff
Kathy Soni	MWRA	Andreae Downs	WAC		

Thirty-seven people were in attendance, including seventeen voting members.

MINUTES APPROVED AT THE JUNE 19, 2014 MEETING.

A. APPROVAL OF THE FEBRUARY 20, 2014

Chairman Katherine Haynes Dunphy called the MWRA Advisory Board meeting to order at 11:52 a.m. A motion was made **TO APPROVE THE FEBRUARY 20, 2014 MINUTES OF THE MWRA ADVISORY BOARD.** It was seconded and passed by unanimous vote.

B. REPORT OF THE EXECUTIVE DIRECTOR

MWRA Advisory Board Executive Director Joseph Favaloro stated that the next "Green Sheet" will feature the history and timeline of the water system, with a focus on entrance fees.

C. PRESENTATIONS: RECOGNITION OF JAE KIM AND DANIEL O'BRIEN'S YEARS OF SERVICE

Chairman Dunphy recognized two individuals who, between them, represent over 57 years of service to the MWRA and its ratepayers.

From 1987 to present, Jae Kim has been designing, engineering and managing MWRA water-related facilities. Since 2010, Jae has been the Chief Engineer in the Operations Division. Mr. Kim said when he joined MWRA 27 years before, staff was feeding chlorine gas at two locations; since then, the MWRA has come a long way. The MetroWest Tunnel and many covered storage facilities have since been completed and all of this work would not have been possible without the support of the communities. Mr. Kim thanked members for this honor.

Chairman Dunphy stated that Dan O'Brien has been involved in all facets of design, construction and management of Deer Island. Since 2007, he has been the Director of the Deer Island Wastewater Treatment Plant. Mr. O'Brien

said he has worked with Advisory Board staff for many years and he believes that this relationship has improved the quality of the product that the MWRA has put out. He stated that he has appreciated the support of the Advisory Board and the three Advisory Board representatives that are on the Board of Directors. He expressed his appreciation.

D. PRESENTATION: COMPLETION OF ULTRAVIOLET DISINFECTION AT THE JOHN J. CARROLL WATER TREATMENT PLANT – David Coppes, Director, Waterworks

Director of Waterworks David Coppes stated that the MWRA has an unfiltered water system. Prior to the water treatment plant, the system used copper sulfate to control algae in the reservoirs and free-chlorine to meet the *giardia* inactivation disinfection requirements. There had been taste and odor concerns at that time.

In 2005, the John J. Carroll Water Treatment Plant (CWTP) came online with ozone as the primary disinfectant, replacing free-chlorine. Ozone deals well with taste and odor issues. As construction was being completed on the plant, the Environmental Protection Agency (EPA) was already talking about new regulations. The ozone plant was built to meet a 2-log *cryptosporidium* inactivation, which was a much higher level of disinfection than was required at that time but staff thought it would be required in the new regulations.

In 2006, the new regulations came into effect just after the plant went into service requiring 2-log *cryptosporidium* inactivation; however, EPA did not accept the way that MWRA met the 2-log inactivation. EPA required the MWRA to have a second primary disinfectant in order to meet the *cryptosporidium* inactivation requirements.

In 2008, the MWRA moved forward with plans to add ultraviolet (UV) disinfection as its second primary disinfectant. In 2011, a \$32 million UV construction project began at the CWTP and on April 1, 2014 the UV disinfection went live to meet the regulatory guidelines, with UV in service.

UV is fairly inexpensive; Mr. Coppes stated that \$30 million sounds like a lot but compared to the \$200 to \$300 million it would take to build a filtration plant, it is quite a bargain. It is also a lot less expensive to operate. Basically, it requires electricity to light the UV lamps and there are not a lot of chemical costs or high maintenance costs associated with UV.

UV is very effective against the pathogens of concern, *cryptosporidium* and *giardia*, so the MWRA is able to meet those treatment targets easily. The contact time in a UV reactor is on the order of seconds, whereas, for ozone, a 2-log (a 99% inactivation) *cryptosporidium* inactivation took thirty to forty minutes, which required giant tanks to provide the contact time. With chlorine, before the plant was built, it took five hours of contact time. UV doesn't change the water quality; disinfection byproducts are not created using UV.

The Authority met the challenge of keeping the plant running during the UV construction. The MWRA is meeting its regulatory targets. If regulations change, the MWRA will be able to meet higher level requirements with UV/ozone.

The Quabbin UV project is underway and staff hopes to have it online in August or September in advance of its October deadline.

The next challenge is the Wachusett Aqueduct Pump Station, which will provide redundancy at the plant for the Cosgrove Tunnel. Design of this project is being finalized and construction will begin shortly.

This year the MWRA won “New England’s Best Drinking Water” competition and is being entered into the National Drinking Water competition during the American Water Works Association’s conference in June.

John DeAmicis asked how much chlorine is used today. Mr. Coppes said the MWRA adds sodium hypochlorite for chlorine and the target is to have 2 to 2.5 mg/L at the end of the city tunnel in Malden. The amount added varies with the seasons. Mr. Coppes explained that ozone and UV carry no residuals so the Authority must have a residual out in the distribution system to keep the pipes clean so chlorine and ammonia, which makes chloramines, are added; these chloramines survive into the community distribution systems.

E. COMMITTEE REPORTS

Executive Committee – Katherine Haynes Dunphy

❖ DRAFT ADVISORY BOARD OPERATING BUDGET

Mr. Favaloro stated that staff expects a 4.7% (\$20,000) increase in its budget this year, principally due to salaries and a change in the structure of staff of the Advisory Board and an increase in lease costs. Unused dollars will be used to offset the request of the MWRA for the FY15 Operating Budget.

❖ ACTION ITEM: TO APPROVE THE REQUEST OF THE TOWNS OF STOUGHTON AND WILMINGTON TO ADJUST THE INTEREST RATE COSTS ASSOCIATED WITH THEIR ENTRANCE FEES TO THE CURRENT PREVAILING FIXED-RATE COST OF THE MASSACHUSETTS WATER RESOURCES AUTHORITY

Mr. Favaloro stated that a request was made, principally by Wilmington, to have their interest rate reviewed on their entrance fee payments. Both Wilmington and Stoughton opted for annual payments on their entrance fee; associated with the annual payment was an interest rate.

The Advisory Board, in discussions on system expansion, changed its rules as related to what communities should pay as an interest rate. The Advisory Board had recommended going to a zero percent interest rate as an incentive for communities to join.

This is part one of potentially a two-part vote of the Advisory Board. As it stands now, the Board of Directors does not have an interest-free policy; in the event that Tri-Town, Weymouth, North Reading, etc. discussions moves further and a zero percent interest rate becomes an adopted policy of the Board of Directors, the Advisory Board would be the first to say we have to go back and support zero percent for the entities that have already paid with an interest rate. Today’s recommendation is a tweak on the interest rate to the MWRA’s current prevailing fixed-rate cost and begins in FY15.

A motion was made **TO APPROVE THE REQUEST OF THE TOWNS OF STOUGHTON AND WILMINGTON TO ADJUST THE INTEREST RATE COSTS ASSOCIATED WITH THEIR ENTRANCE FEES TO THE CURRENT PREVAILING FIXED-RATE COST OF THE MASSACHUSETTS WATER RESOURCES AUTHORITY.** It was seconded and passed by unanimous vote.

❖ STATUS: SYSTEM EXPANSION REQUESTS

Mr. Favaloro stated that he and Mr. Laskey are still aggressively working to have new communities join the MWRA Waterworks System. The focus has mainly been on Tri-Town (Braintree, Holbrook and Randolph) at this time. Discussions are also continuing with Southfield, Weymouth, North Reading and Ashland.

❖ LEGISLATIVE UPDATE

The Governor's Budget was released in February but did not include Debt Service Assistance (DSA). The House Budget came out last week and included \$1.1 million for DSA. Messrs. Favaloro and Laskey will be meeting with Senator Brewer in the next week to discuss DSA on the Senate side. The water/wastewater infrastructure bill, Senate Bill 2021, is awaiting action in the House.

Finance Committee – Bernard Cooper

❖ UPDATE ON ADVISORY BOARD EMERGING CEB/CIP FY15 BUDGET COMMENTS

Director of Communications Matthew Romero stated that a full and detailed document would be presented at next month's meeting; this month's presentation is to ensure that Advisory Board staff is indeed working on the message that the Advisory Board wishes to pursue.

The *Integrated Comments and Recommendations on the Authority's Proposed FY15 CIP and CEB* will take a high-level look at the Authority's budgets and policies.

Yesterday, the MWRA Board of Directors was officially notified of the Advisory Board and Operations Committee's recommendation to double the Inflow/Infiltration (I/I) Program funds for Phases 9 and 10; the Board was receptive and voted in favor of this recommendation. Mr. Favaloro noted at the Board of Directors meeting that the Advisory Board planned to recommend that the 45% grant/55% loan mix be changed to 75% grant/25% loan, along with the recommendation to increase the payback time from five years to ten years.

Another recommendation is to "pay it forward" utilizing the FY14 DSA funds received by the MWRA to offset the FY15 rate revenue requirement. Further, to utilize any future DSA to offset the following year's rate revenue requirement, thus providing immediate rate relief to the communities and their ratepayers.

The Advisory Board is also challenging the Authority to "four no more," which signifies the Advisory Board's desire to have the Authority reduce its proposed rate increases from FY16 to FY20 to less than 4%.

Mr. Romero thanked MWRA staff for their time, effort and responsiveness to the Advisory Board's suggestions.

Operations Committee – Lou Taverna

❖ REGULATORY UPDATE

Mr. Favaloro stated that the Sustainable Water Management Initiative (SWMI) draft regulations are now out for public comment. Three public hearings have been scheduled throughout the state. If members come from a partially-supplied water community, these regulations would be of significant interest.

The second issue is something that the Advisory Board has been working on for years in trying to work with the Water Resources Commission (WRC) on some of the inter-basin transfer act regulations. Between now and the end of this fiscal year, to the credit of the WRC, they are attempting to streamline their process. It took Reading five years to get through the regulatory process and that was the basis for seeking these changes.

There is ongoing discussion on co-digestion and whether the MWRA could make money from this process. The Advisory Board and others have raised questions. As those questions are answered, it should allow the process to move forward.

Chairman Dunphy noted that the three representatives of the Advisory Board that serve on the Board of Directors represented our interests well at yesterday's Board meeting.

The Authority has just gone through another round of promotions. As someone leaves, it causes a ripple effect. MWRA Executive Director Fred Laskey stated that David Coppes is now the Director of Waterworks, which historically has been a very important position. His promotion has left a hole in western operations and Mr. Guy Foss has been promoted into Mr. Coppes's former position.

Dan O'Brien has retired and David Duest has taken his position as Director of the Deer Island Treatment Plant. Additionally, the Board agreed with staff's recommendations to appoint Anandan Navanandan as Chief Engineer to replace Jae Kim; Corinne Barrett has been appointed as Director of Construction to replace Mr. Navanandan; Brian Kubaska has been appointed to the new position of Director of SCADA and Process Control; Ethan Wenger will take Dave Duest's former position as Manager of Process Control on Deer Island; Gus Serino will become Senior Program Manager, SCADA; and the Board approved the creation of a new position developed from the IT Master Plan for a person to be responsible for the architecture and security of the Authority's Management Information Systems.

Mr. Laskey stated that the MWRA cannot replace the years of experience of Mr. Kim and Mr. O'Brien, but he is grateful to have people "in the wings."

F. ADJOURNMENT

A MOTION WAS MADE TO ADJOURN THE MEETING AT 12:53 P.M. It was seconded and passed by unanimous vote.

Respectfully submitted,



William P. Hadley, Secretary