



MWRA Advisory Board

Advisory Board Meeting

Thursday, September 15, 2016
11:30 AM

Samuel Hadley Public Services Building
201 Bedford Street
Lexington, MA 02420

Attendees (Voting Members)

Mike Rademacher	Arlington	Barbara Wyatt	Gubernatorial Appt	Lou Taverna	Newton
Mike Bishop	Belmont	Bob Higgins	Hingham	Bernie Cooper	Norwood
Jay Hersey	Brookline	Ralph Pecora	Lexington	Paul DellaBarba	Quincy
David Manugian	Bedford	Jim Finegan	Lynnfield Water District	Jeff Zager	Reading
John G. Sanchez	Burlington	Amy McHugh	Marblehead	Nick Rystrom	Revere
Andrew DeSantis	Chelsea	Elena Proakis Ellis	Melrose	John DeAmicis	Stoneham
Blake Lucas	Framingham	Martin Pillsbury	MAPC	Carol Antonelli	Wakefield
Andrew Fisk	Gubernatorial Appt	Jeremy Marsette	Natick	Patrick Fasanello	Walpole
J. R. Greene	Gubernatorial Appt	John Cosgrove	Needham	Joe Lobao	Wilmington

Other Attendees

Wayne Chouinard	Arlington	Michael Hornbrook	MWRA	Janet Rothrock	WSCAC
Rajita Purimetla	Ashland	Fred Laskey	MWRA		
Fred Russell	Brookline	Kathy Soni	MWRA	Karen Lachmayr	WAC
Mark Van Dam	BWSC	Louise Miller	MWRA	Tabor Keally	WAC
Anthony Comeau	Natick	Sean Navin	MWRA	Adriana Cillo	WAC
Melissa Panza	Newton	Betsy Reilley	MWRA	Stephen Greene	WAC
William Shaughnessy	Wellesley			Jim Pappas	WAC
		Lexi Dewey	WSCAC		
John Carroll	MWRA BOD	Michael Baram	WSCAC	Joseph Favalaro	AB Staff
Joe Foti	MWRA BOD	Terry Connolly	WSCAC	Matthew Romero	AB Staff
Andrew Pappastergion	MWRA BOD	Andrea Donlon	WSCAC	Cornelia Potter	AB Staff
		Jerry Eves	WSCAC	James Guidod	AB Staff
Ria Convery	MWRA	Bill Fadden	WSCAC	Lenna Ostrodka	AB staff
Pam Heidell	MWRA	Paul Lauenstein	WSCAC		
Matt Horan	MWRA	Martha Morgan	WSCAC		

Sixty-five people were in attendance, including twenty-eight voting members.

SEPTEMBER 15, 2016
201 BEDFORD STREET
LEXINGTON, MA 02420 – 11:30 A.M.

Draft Minutes

The Chairman called the meeting to order at 11:40 am.

A. APPROVAL OF ADVISORY BOARD MEETING MINUTES FROM MAY 19 AND JUNE 16, 2016

A motion was made to approve the Advisory Board Minutes from May 19, and June 16; the motion carried.

B. ACTION ITEM: NOMINATION AND ELECTION OF THE FY17 EXECUTIVE COMMITTEE

A motion was made and seconded to approve the slate of Executive Committee members. The motion passed

Mr. Favaloro also noted that there are two additional open at-large slots on the Committee. As is the normal practice, nominations are kept open for the whole year. He invited expressions of interest. It is a really critical component of the Advisory Board as its governing committee. Members have a chance to shape the agenda of the Advisory Board. A list of the nominated Executive Committee members, can be found in the Advisory Board packet.

C. ACTION ITEM: ASHLAND'S REQUEST FOR A 4TH EMERGENCY WATER CONNECTION

A motion was made to allow Ashland to activate a fourth emergency water supply connection to the MWRA waterworks system, via the town of Southborough, for a six-month period with a start date of August 22, 2016 to February 22, 2017. Ashland will abide by the rules stipulated under emergency water supply withdrawals (Policy # OP.05) including payment of 110% of the MWRA prevailing rate plus 110% of the annual asset value contribution (entrance fee equivalent) amortized over fifteen years.

The chairman introduced Rajitha Purimetla, Junior Engineer from the Department of Public Works in the Town of Ashland. She reported that in the past, Ashland had connected to the Authority's system. The town is in the process of connecting to the Authority's system; a vote of the Town Meeting in 2015 approved joining the MWRA system, and at an upcoming town meeting is a request for approving funding for the construction costs. The town has instituted strict conservation measures, including no outdoor watering. The conservation measures have been published on the town's website, as well as in the newspapers. In October each year there is a leak detection program to ensure the water lines are not losing water. In calling for the vote, the Chairman noted that this action item was approved at the Executive Committee meeting September 9. The motion was moved and seconded and passed by unanimous vote.

D. PRESENTATION: MWRA CHALLENGES AHEAD FY17 – FRED LASKEY, MWRA EXECUTIVE DIRECTOR

Mr. Favaloro introduced the presentations noting that at the first meeting of the new fiscal year in September, the Authority provides their perspective on challenges moving forward and the Advisory Board provides a similar presentation on its perspectives on challenges. The meeting also serves as the annual joint meeting with the Wastewater Advisory Committee and the Water Supply Citizens Advisory Committee.

There is often similarity between the Authority and the Advisory Board on challenges moving forward and then in June we report on how we did. Mr. Laskey noted that one of the reasons the two entities have worked so well together is that we often see eye to eye on what at least the challenges are, although we may have different ways in how we fix things. Overall, there is a good consensus on what the challenges are for the Authority.

Two huge issues are the **drought** and **system expansion**. The drought issue could go away with heavy rain, while system expansion is probably the single most important decision that the Authority will make in the next ten years. The MWRA has a separate and distinct drought action plan from the rest of the state because of the size and magnitude of our storage. The Quabbin Reservoir is basically at 85% full; we remain at normal operating levels. Part of the issue is that we started the year low, due to a dry year last year. We are coming now to that time of year when the levels ease with heavy rain in the fall and snow in the winter and rain in the spring. But because of the size of the Authority's system, we have the ability to weather more than one year at a time. If we continue with this severe dry weather, it will be at least

six months before we drop into the next level of drought management. We need to urge our customers to conserve water, to be responsible with the use of water because we don't know when this is going to end. The drought of the 1960s was a six-year drought. We need to set an example with ourselves and with our customers. He pointed to brochures describing indoor water and outdoor water conservation measures. Even though we are not in a drought situation ourselves, we need to set the tone that people need to be responsible in their use of water and not waste water.

As time has gone on, more of our surrounding communities have been looking to us for assistance. Our partially supplied communities are using 38% more water as compared to last year. The City of Worcester fired up two pumps; they are taking 15 mgd from our system, and putting it into their watershed. The City of Cambridge is experiencing dry conditions. The Ipswich Watershed Association has met with us, and the Neponset River Watershed Association, in their newsletter, has observed that the MWRA was perhaps a partial solution to the drought for those rivers. Time will only tell where all that goes. Other discussions about possible connections include: Natick, which has talked to Framingham, Sudbury, which has called, and Hudson, and Shrewsbury, which are inquiring. It is now becoming of interest to the press; the Globe has initiated a front page story today and New England Cable News and Channel 5 have also requested interviews.

Regarding an **update on lead**: many of our communities expressed interest in having the drinking water in schools tested. In a very short period of time, we have ramped up the testing for our local communities to the point that we are doing over 500 tests per week. 164 schools have been tested; more than 20 communities have taken advantage of the testing program. We continue to get samples and we will continue to process those. This is a testament to the staff in the laboratory who showed how nimbly they were able to ramp this up while they maintain their other testing. Interestingly, it is about a 5.8% failure rate for the samples which is about the same for the regular lead testing that is done annually on the homes (which is reassuring that we are not too far afield). The Board did approve \$100 million in ten-year zero-interest loans for lead service replacement. The City of Newton was the first applicant with a request for \$4 million; Quincy anticipates submitting their application within a week or so; and Peabody, Winchester, and Woburn have initiated conversations with the hope to receive funding this fiscal year. More applications are anticipated next year. The outreach for the testing includes a cooperative effort with the Massachusetts Department of Public Health to try to see if there is a connection between lead service lines and children with high lead levels. He also noted the difficulty of meeting the HPAA rules.

Turning to **regulatory issues**, results have been dramatic for the CSO Plan. The Authority is now coming into a critically important period where we have to do a study for the Court Parties to show if we have accomplished what we said we would accomplish with the \$900 million surplus that we have spent. While it won't take effect until January 2018, there will be negotiations this year on the protocols for testing and what the goals will be. Getting a good and reasonable testing program will be important in demonstrating the success of the CSO control program.

One of the issues evolving over time is whether there will be regulatory changes that will change the paradigm between the Authority and the municipalities. There is generally a clear delineation now between who is doing what with regard to wastewater and storm-water. The possibility of adding co-permittees to the Authority's permit for Deer Island would be a way for EPA to get at your wastewater collection system. This is something we need to understand and work closely with the Advisory Board. The other issue is the MS4 permits that are coming out. The question is what does that do to the relationship between the Authority and the communities? Are there things the Authority can do as a regional entity to help the communities? These are issues that will be discussed over the next year or so. It is anticipated that the MS4 permits may require communities to do some kinds of maintenance that they may not do now – is there a way the MWRA could help communities through the I/I program with equipment, or whatever it may be? Should there be a blanket contract for certain services? These are examples for discussion as the year unfolds.

The **Deer Island cross-harbor cable** and the **future of Deer Island power** are priorities. The cable dispute is related to the dredging of Boston Harbor to deepen the channel for new, larger container ships. The stakes are very high. The Authority has been sued by the Justice Department on behalf of the Army Corps of Engineers saying the Authority is responsible for redoing the cable; the Authority originally paid for installation to do it right. At risk could be over \$100 million if the Authority is ordered to pay for a new cable because the cable company put the cable in wrong. That is expected to unfold over the next twelve months; it appears that the trial will be in the spring.

The other issue is: what is the future of power at Deer Island? We use a lot of energy and have a national reputation for being efficient and for using renewable energy. At the same time the plant is aging and the cable is now 25 years old, There have also been such changes in the way power is produced that the energy experts are saying our paradigm needs to be changed. At this time we make steam with the methane to heat the plant, to dump it into turbines to make electricity which is inefficient. They are now saying that the way to do it is to make electricity and use the heat that is the byproduct of making electricity is also more efficient although expensive. This is a huge issue that we need to address with the involvement of the Advisory Board, as we move forward. Also being discussed is an offshore gas line.

Regarding the **Wachusett railroad**, it is an Achilles heel for us in our efforts to protect the water system. The railroad goes right over the reservoir. We have had discussions with the Governor's office about such questions as: is it possible for the Authority to pay to have it improved, or even to own part of the rail bed so that we can control it, armor it, and monitor it better. This is an issue that is expected to unfold in the next twelve months.

Metropolitan Tunnel Redundancy is a major decision and the notion that we need tunnel redundancy dates back to the master plan of 1938. So it is not a new idea; it is a standard best practice in the water industry to have full redundancy. The issue for us is not that we think we are going to have any problem with the tunnels, but with all the appurtenances above – the valves, the blow offs, that in some cases have been in place for almost 100 years and need updating. Right now, if there were a failure at Shaft 7 there would be a cascading series of areas that would run out of water quickly; it would be of a catastrophic nature. It would be months before we could get back to normal operations. There is a wide range of options; there are six "families" of options and within that there are three or four options in each grouping. The options range from several hundreds of millions of dollars to \$2 billion. We want to end up in a responsible place to ensure that we have adequate redundancy without bankrupting our customers. We have an offsite meeting scheduled for the Board on October 6.

The pressure continues on **holding the line on rates**. The defeasances have been an important tool; Mr. Laskey thanked the Advisory Board for holding the line on this idea of prepaying debt. The easiest thing to do would have been to keep rates very low and let another generation worry about paying off the money that we have spent. We have held the line, and maximized the advantage of the low interest rates by using available funds to prepay debt. That said, we still have a way to go; we are still not at the peak yet and every dollar that we have is going to go to those peaks to bring them down.

We are also addressing the issue of **succession planning**.

In response to a question on the MS4 permits and the co-permittee issue, Mr. Hornbrook stated that the Authority wants to see some clarity on the roles and responsibilities. It will be the first time that wastewater communities will have this provision in their permits. If there is enforcement action, if one defaults, does the other one also face a default? We also have had questions of the legality of it. While stormwater is recognized as a pollution source, there are questions about the areas that are in between. Can we provide some assistance on some of those stormwater issues; it takes a lot of effort and a lot of money. Mr. Laskey also observed that the cynics would say that the new permit requirements are like the Trojan horse: they are going to get in the MS4 and the co-permittees issue, and minimize the additional requirements that may materialize.

In response to another question about the issue of use of heat and methane at Deer Island, and how much time and money it might take to implement these ideas, staff stated that it could take an estimated \$80 million with a payback period estimated at 7.5 years. It could make the Authority 70% energy independent. A related question referred to the sense that the Authority is actually trying to create a new utility. Whether it is under the DPW or whoever is responsible for that, how would you set rates for the utility? Mr. Favaloro noted that MAPC has been a phenomenal resource regarding storm-water activity. Communities are addressing how best to meet the new requirements under the permit. A few communities have already put stormwater fees in place. It is not an easy task to do. Two years ago, in October 2014, we had over 100 people with a series of presentations and workshops to discuss stormwater fees; Reading came in, the City of Newton had a discussion, and Gloucester talked about what it took to put stormwater fees in place. The Water and Sewer Rate Survey now includes a section on communities and stormwater fees. The real costs associated with putting the new permits in place are really not known. The first couple of years will involve data gathering; beyond that the costs will be huge. Before you can determine how to address the situation, you have to determine what the problem is. Once the problem is defined and identified within the community there has to be a commitment to then address them. That is, in the third, fourth, fifth year you'll begin to see the costs and how the communities will pay for them. Will they go to the general fund? Utilize an enterprise fund? (MWRA Advisory Board staff noted that the workshop had been videotaped and is on the new website; Martin Pillsbury noted that materials are on the MAPC website as well. Mr. Favaloro also observed that it is not a coincidence that the new staff member at the Advisory Board has an M.S. in environmental science, with an emphasis on stormwater.)

Mr. Carroll asked about the status of co-digestion. Mr. Laskey indicated that the proposal is considered pretty much dead because Winthrop would not permit additional trucks to come through the community to get to the Deer Island plant. The Authority had a plan for processing the additional food waste (and deicer wastewater from the airport), and there was room in the digesters. In Winthrop, there is one road in and one road out from Deer Island, with houses along the side of the road. Still, in the back of our minds, we would like to find a way to do it.

E. PRESENTATION: ADVISORY BOARD CHALLENGES AHEAD FY17 – JOE FAVALORO, EXECUTIVE DIRECTOR

Mr. Favaloro presented the Advisory Board's perspective on challenges ahead for FY 2017. Noting that Mr. Laskey had gone into some of the challenges common to both entities in some detail, Mr. Favaloro focused on system challenges, and, in particular, the drought. We are blessed with the genius of engineers who many years ago developed the reservoir system, which allows the Authority in a better position than other areas in the state. The Quabbin system is still in "normal" operating range, although in the spring the level was at 92% of capacity and currently we are closer to 84%. A lot of our neighbors have asked for water: Peabody has been in discussions with the Authority, Dedham-Westwood, Ashland, Worcester is taking nearly 16 mgd, and there has been discussion with Lynn and Cambridge.

Metropolitan Tunnel System: this is the biggest capital project potentially coming forward. The goal is finding the right approach at the right price. The stakeholders need to begin to have the discussion about the direction that can be developed. There is time to do so; as we move into the 2020s that is when this project will be moving forward if the Board decides to do it.

Getting the Lead Out: This subject is now on the radar screen, and the Authority is ahead of the curve with the new \$100 million loan program. As communities begin to determine how they want to handle the private side of the lead services, the size of the program can be better identified. These concerns will always be among the top two or three things that communities are going to have to deal with.

Regulatory Challenges: Co-permittee language is coming and the NPDES permit is coming. The upcoming elections and the change of administration may be a factor. As of now, both Clinton and Lancaster (in the Clinton Wastewater Treatment Plant service area) were both issued letters in which the Administrator is waiving NPDES application and

signatory requirements. So neither town has to sign a permit that they are a critical part of, demonstrating how muddy and murky this situation has become. One can expect that the next permit coming would be the Deer Island permit. Is EPA going to be telling the MWRA communities that they don't have to sign that permit? It appears that EPA wants the situation to be cloudy so that they can decide who and when and if they want to go after someone. And MWRA will be drawn into the issue even if the responsibilities for the communities and the MWRA are not outlined in the permit. It must be made clear that stormwater is not the responsibility of the MWRA. For the purposes of the NPDES permit, if the responsibilities are not defined, this is going to become very, very difficult to deal with.

Cross-Harbor Cable: The MWRA originally paid over \$100 million to HEEC/NStar when the cable was first laid. The work was based on a contract that specified the depth for installation of the cable. Not only was the depth requirement not met, the contractors got a bonus from MWRA, as provided in the installation contract, for having completed the work ahead of schedule. Now the MWRA is being told that not only were the specifications not met by the contractors, but that the MWRA should pay for the cable's replacement or reinstallation. This all came to light because the development of bigger ships which require greater depths in the harbor, and a dredging program is planned. This issue ties back to the co-permittee issue: because of the MWRA is to be a co-permittee on the NPDES permit, it is deemed also responsible for the costs of relaying the cross harbor cable.

MS4 Permits: The first years of implementing the permits will involve collecting data and related information and then the actual costs of meeting the new permit requirements will become more clear. EPA is no longer a regulator; it is a litigator. They don't negotiate until after they file a formal action against you. We have to work through this so that MS4 permits can do what they are supposed to do for the environment but also takes into consideration what it can't do to the communities; they can't bankrupt them.

Rates and Budgets: The Advisory Board came up with the "four, no more" phrase for future rate increases; it really has evolved into "'four no more' no more". All the hard work, including the use of defeasances, the work of MWRA budget staff to keep budgets tight, the reviews by the Advisory Board, the actions by the Board of Directors, have really got us to the point where we are in pretty good shape. Moving forward, where should the annual rate settle out – is it 3.9%, is it 3.2%, is it 3.5%. Where should the "sweet spot" be? Where is it for the MWRA to have what it needs to do its job while at the same token only asking from the communities what it really needs to. When everything seemed to be going better, all of a sudden, toward the end of last year, the bottom fell out of the state budget. If there are issues at the state level, it trickles down to every community, every authority, every individual in some way, shape or form. In the current fiscal year, in August alone the state missed the benchmark numbers, which had already been reduced, by \$45 million. 9C cuts can also be expected. State debt service assistance is not a huge number: \$1.1 million for the statewide program; that is probably gone. There is still no funding for the landmark infrastructure bill. It is going to be very difficult moving forward, to get funding until the state's economy begins to get better.

System Expansion Challenges: This will be a good news story. All the pieces are there. You just have to get everyone onto the same page. Just in the past year or so, we have been to a number of communities. All of this points to a regional approach. But there won't be more water until there is a pipe, which calls for people to work together. We are planning to hold, in December, a regional workshop about the regionalization of water. It's good for the communities, it is good for the economy, and it is good for the environment (such as the Ipswich and Neponset River watersheds). We plan on reaching out to the stakeholders -- the regulators, the communities, the MWRA and Advisory Board staffs.

All of these challenges, and many more, are interrelated and are pretty much the same from the MWRA and the Advisory Board's point of view. The relationship between the Authority and the Advisory Board works. It is all about getting to "yes" and finding a better way of getting things done.

PRESENTATION: WSCAC FY17 PRIORITIES AND CHALLENGES

Lexi Dewey, the Executive Director of WSCAC, reported on priorities and challenges facing the Committee. They are very similar to what has been presented today. Priorities include: the MWRA's redundancy project is of great interest and WSCAC will be represented at the October meeting; the Wachusett Pump Station project (and hope to have a site visit sometime in the spring); progress on the Northern Intermediate High and Southern Extra High redundancy projects; the Shaft 12 redundancy project (WSCAC recently had a visit to the site; and to the island, Mount Zion); the drought and related issues of system expansion. Challenges include the issue of hazardous materials going over the Wachusett Reservoir (the Committee is hoping there will be another preparedness drill this fall). Challenges in the watershed include illegal biking (DCR is working very hard in the Ware River area and issuing warnings but are not making a lot of headway, so WSCAC has said that higher fines need to be imposed); and watershed forestry (the Committee believes that third party oversight and certification is needed to make sure that the best possible practices are being done with forestry to protect the water supply. A WSCAC subcommittee will be put together this fall. Additional challenges include NPDES permitting is expected to be coming up in January and the transferring of permitting from EPA to DEP is of interest to the Committee. There are upcoming revisions to the Interbasin Transfer Act, including the opportunity for regional water suppliers like the MWRA to review a donor basin and establish a set amount of water that can be sold over a multi-year period (with periodic check-ins); the Committee anticipates commenting on that language. With regard to the drought, the Committee is glad to see that the MWRA and the Advisory Board are talking a lot about water conservation; the Committee has a seat on the drought management task force and is hoping that there will be a review this winter to look at the process from the drought management task force has worked out and opportunities for doing better; there have been a lot of challenges all across the state.

The Committee meets monthly; meetings are open to the public.

F. PRESENTATION: WAC FY17 PRIORITIES AND CHALLENGES

Tabor Keally, Chairman of the Wastewater Advisory Committee, noted that the Committee meets the first Friday of most months at the offices of the MAPC (there are seven to eight meetings per year). He provided a handout of the 2015-2016 Highlights of activities and outputs plus a list of the meeting schedule for FY17 including topics and speakers. They also unveiled a short video.

The Committee generally produces comments and letters on a number of topics including NPDES delegation; a letter in May to the Globe on DEP funding (important for effective delegation of NPDES permitting responsibilities); molybdenum in biosolids and to the Water Resources Commission; comments to EPA on takebacks for pharmaceuticals; and a number of other topics. He reviewed upcoming meetings and planned speakers. A video created for the Committee was shown.

G. OPERATIONS COMMITTEE UPDATE

John Sanchez reported that a meeting of the Operations Committee will be scheduled in the near future to talk about items that can be purchased through the I/I grant/loan program.

H. REPORT OF THE EXECUTIVE DIRECTOR

Mr. Favaloro reported that staff have been redoing the entire website over the summer, including a new logo. The site went live recently. The office is now at full staffing level with the arrival of Lenna Ostrodka as a Community Specialist. She has recently moved from the Chicago area and has a background in natural resources and environmental science, with experience dealing with stormwater issues.

Mr. Romero gave a short presentation on the new Advisory Board website. Staff spent a considerable amount of time over the summer on the new website, using a web design service, which has resulted in a brand new look and feel to the

website. The site is organized by functional group; there is a section for ratepayers, Advisory Board members, elected officials, members of the press, those that are interested in environmental and system information. There is information on upcoming meetings, including meeting materials and map; information on past and future rates and assessments, water and sewer retail rate survey. There will be a separate page for every single community. The focus is on making the website more user-friendly.

I. ADJOURNMENT

A MOTION WAS MADE TO ADJOURN THE MEETING AT 1:05 pm. It was seconded and passed by unanimous vote.

The Chairman also noted that there would be no October meeting. The next meeting will be November 17 at the Boston Water and Sewer Commission.

Respectfully submitted,

Michael Rademacher, Secretary