



MWRA Advisory Board

Advisory Board Meeting

Thursday, May 21, 2015
11:30 AM

Bradley Estate
2468B Washington Street
Canton, MA

Attendees (Voting Members)

Michael Rademacher	Arlington	Barbara Wyatt	Gubernatorial Appt	Jeff Zager	Reading
David Manugian	Ashland	Ed Demko	Hingham	Nick Rystrom	Revere
Roy Sorenson	Bedford	Bill Hadley	Lexington	Brendan O'Regan	Saugus
Jay Marcotte	Belmont	Amy McHugh	Marblehead	Rob King	Somerville
John Sullivan	Boston	Cassandra Koutalidas	Medford	Jack Mitchell	Stoughton
Jay Hersey	Brookline	Katherine Dunphy	Milton	Eric Sherman	Wakefield
John G. Sanchez	Burlington	Thom Donahue	Nahant	Patrick Fasanello	Walpole
David Kaplan	Cambridge	Kannan Vembu	Natick	Walter Woods	Wellesley
Michael Trotta	Canton	Lou Taverna	Newton	Joe Lobao	Wilmington
Andrew DeSantis	Chelsea	Bernie Cooper	Norwood	James Gibbons	Winchester
J. R. Greene	Gubernatorial Appt	Michael Coffey	Quincy	Peter Gill	Winthrop

Other Attendees

Karen Golmer	Cambridge	Michael Hornbrook	MWRA	Beth Miller	WAC
Randy Sylvester	Hingham	Dede Vittori	MWRA	Lexi Dewey	WSCAC
Stephen Dempsey	Hingham	Tom Durkin	MWRA	Joseph Favaloro	AB Staff
Ken Johnson	Hingham	Kathy Soni	MWRA	Matthew Romero	AB Staff
Bill Shaughnessy	Wellesley	Pam Heidell	MWRA	Cornelia Potter	AB Staff
Manuel Irujo	NEFCo	Carolyn Fiore	MWRA	Travis Ahern	AB Staff
Andy Pappastergion	MWRA BOD	David Duest	MWRA	Mary Ann McClellan	AB Staff
Fred Laskey	MWRA	Phil Jasset	UCANE		

Fifty-six people were in attendance, including thirty-three voting members.

MWRA ADVISORY BOARD MEETING
MAY 21, 2015
BRADLEY ESTATE
2468B WASHINGTON STREET, CANTON, MA – 11:30 A.M.
Draft Minutes

A. APPROVAL OF THE MARCH 19, 2015 MINUTES OF THE ADVISORY BOARD

Chairman Katherine Haynes Dunphy called the MWRA Advisory Board meeting to order at 11:42 a.m. A motion was made **TO APPROVE THE MARCH 19, 2015 MINUTES OF THE ADVISORY BOARD.** It was seconded and passed by unanimous vote.

B. REPORT OF THE EXECUTIVE DIRECTOR

MWRA Advisory Board Executive Director Joseph Favaloro requested that members "Save the Date" for the Authority and Advisory Board's 30th anniversary celebration on June 18th at the Waterworks Museum. No MWRA or Advisory Board funds will be used for this celebration; funding will come from ticket sales.

C. PRESENTATIONS: UPDATE ON BIOSOLIDS PROCESSING FACILITY/EXTENSION OF NEW ENGLAND FERTILIZER COMPANY'S CONTRACT TO PROVIDE PELLETIZING SERVICES – David Duest, Director, Deer Island Wastewater Treatment Plant, and Carl Pawlowski, Manager, Residuals Operations

David Duest, Director of the Deer Island Wastewater Treatment Plant, and Carl Pawlowski, Manager of Residuals Operations, provided members with an update on [MWRA Residuals Processing and Agreement for Operation and Maintenance of the Fore River Pelletizing Plant with New England Fertilizer Company \(NEFCo\)](#).

Mr. Duest stated that the centerpiece of the MWRA's residuals processing is the Deer Island Treatment Plant (DITP). There are a dozen 12 million gallon egg-shaped digesters at DITP; sludge sits in the digester treatment process for 18 to 21 days. Two-thirds of the material is destroyed and beneficial digester gas is generated and used to heat and power the DITP. The remaining solids are sent to the pelletizing plant where it is converted to a fertilizer pellet and sent out as a "green" fertilizer.

It is a split process separated by a seven-mile pipeline between Deer Island and the pelletizing plant in Quincy. At the DITP, there is primary and secondary treatment. The solid material is collected from the wastewater, it is thickened and is placed in anaerobic digesters, then sent into holding tanks for sludge and gas storage, the sludge continues on through the pipeline that is embedded in the sidewall of the south system pump station pipeline and then travels an additional two miles from the Nut Island headworks to the pelletizing plant where it is centrifuged, de-watered, and sent through thermal dryers to convert it into the fertilizer pellet.

DITP collects about 260 dry-tons of solids out of primary and secondary treatment, about 94% of that is captured and sent into the sludge digestion process. About 70% originates from primary treatment and 30% from secondary treatment. Deer Island gets an amazing 62% of volatile solids destruction whereas most treatment plants peak at 50%.

The digester gas that is produced is 188,000 standard cubic feet per hour, more than 4.5 million cubic feet per day. The digester gas is about 60% methane, of which 96% is beneficially used on the island; 95% of the heat on the island is met by digester gas. Without the digester gas, MWRA would be spending about \$21 million per year on fuel oil to heat the facility. Additionally, the high-pressure steam is sent through steam-topping turbines that create green energy for the plant, which is equivalent to about \$2.3 million of electricity that does not have to be purchased from the grid.

The remaining material from anaerobic digestion, about 100 tons per day, goes on to the pelletizing plant. NEFCo converts it into fertilizer pellets for turf farms, golf courses, fertilizer blenders and cement kilns, as an alternative fuel. In the last few years, MWRA has made great strides to help improve digestion operations to reduce the amount of sludge that has to go on to be pelletized.

The pellet plant is located in Quincy at the Fore River Shipyard. It was designed and constructed for about \$133 million in two phases and is owned by the MWRA. Since day one, it has been a contract operation because the MWRA didn't have the expertise in-house to deal with the operations. NEFCo has had the contract from the beginning. The current version of the contract began in 2001 and ends at the end of 2015. MWRA sends the material to NEFCo, which is required to receive that material, de-water it with centrifuges, thermal-dry it and produce a Class A fertilizer. Class A is the best quality fertilizer with the most unrestricted use. It is a very good product and has a good name in the industry and is in high demand.

In calendar year 2014, 100 dry-tons per day were processed and NEFCo was paid \$14.1 million for this service. The contractor is responsible for developing and maintaining diverse markets. The bulk of the material goes to land application for fertilizer, blenders and then alternative fuel, though alternative fuel has been dropping in recent years.

Massachusetts is receiving about 5% of the materials produced because of the pellet quality relative to the molybdenum limit, for which MassDEP has one of the lowest molybdenum levels in the country. From a permit perspective, the pellets cannot be freely marketed in the Commonwealth unless the material is segregated and prequalified.

In preparation for doing the contract renewal coming up in December, MWRA staff has been preparing for a number of years now. Staff started with a condition assessment of the pellet plant to see how well it is being maintained and if any significant capital funds would be needed for improving the facility or replacing major equipment. The good news is that the facility got a clean bill of health; NEFCo has been doing an excellent job in maintaining the facility. There were only a few minor items that were pointed out and as soon as NEFCo heard about them, they took care of every item. They have been a very responsive contractor.

Additionally, a residuals technology assessment was completed about two years ago. Staff looked at ways to improve the overall residuals processing, not only for Deer Island but for the pellet plant as well. Staff looked at co-digestion and sludge pre-treatment options to help reduce the overall sludge quantities that go to the pellet plant. There were some recommendations for the pellet plant but there has been no real urgency to replace any equipment; staff is focusing on energy efficiency gains.

Currently the dryers can process about 50 dry-tons per day; however, there are newer, more efficient dryers available that can go up to 105 dry-tons per day. In essence, staff could process all of that material with a single dryer train. Staff needs to ensure that this equipment is efficient so it is looking at a Philadelphia facility and NEFCo is also in the process of completing construction of a new pelletizing plant for Detroit; they will be starting operations in September. The eyes of the MWRA are on NEFCo to prove that technology is going to gain major efficiencies on electricity in the long term.

Because of all the changes that may occur with the sludge quantities at Deer Island, either adding more sludge with co-digestion or reducing sludge with pre-treatment, and adding new efficient operations along the way, there are too many variables so staff and the MWRA's technology assessment contractor recommended a short-term extension of the existing contract rather than a 15-year contract. NEFCo has been a very good performer; extending that contract would give staff more time to focus on the best options for the new facility and contract in the long run.

Residuals Manager Carl Pawlowski stated that he manages the contract that MWRA has with NEFCo. With the current contract structure, MWRA is paying \$400 per ton for the first 90 tons, for which a fixed fee is paid. For anything over 90 tons per day, there is a variable fee. Staff has managed to negotiate a better deal with NEFCo for the next five years. Instead of 90 tons per day, they will process 92.5 tons per day for essentially the same price. This will also save the MWRA money on the variable fee because there will be less tonnage over 90. This will save about \$250,000 per year.

In this five-year deal, NEFCo is responsible for capital projects. Several projects have been identified and agreed upon and are capped at \$7 million. Anything above \$7 million is on NEFCo. About \$1.25 million will be saved over five years.

The capital program structure has also been revised. This will allow the Authority to take time to identify and evaluate some energy efficiency improvements that the MWRA might want to add to the facility. It will also give the Authority time to know if there will be impacts from co-digestion and what that might do to the process in Quincy. Further, it will allow time for increased competition. Right now there aren't a lot of other companies competing with NEFCo.

Bay State Fertilizer is the product that the MWRA sells to the public. It is a bagged product and the new packaging is now plastic as a lot of people that buy it want to store it outside. This new weather-proof packaging will allow the product to be marketed to supermarkets and hardware stores. Bay State Fertilizer is available to member communities at no cost if a town wants to use it on their public lands.

Patrick Fasanello asked if this fertilizer is available at retail outfits. Mr. Pawlowski said currently there are a few retailers in Scituate and Weymouth. MWRA recently hired a marketing intern to push the product now that it is in the new packaging to be available at more retail outfits. A resident can come to the Quincy facility and pay \$3.50 for a 40-pound bag; it is comparable to milorganite, which retails for \$13 for a 36-pound bag.

John Sanchez asked if the product can be used in vegetable gardens. Mr. Pawlowski said the product can be used in vegetable gardens; the only place there is a restriction is grazing lands because molybdenum can affect ruminants (animals with two stomachs, such as cows, goats or sheep).

[ENVIRONMENTAL BENEFITS OF RE-EVALUATING MOLYBDENUM STANDARD FOR BIOSOLIDS AND RESIDUAL UTILIZATION](#) – Manuel Irujo, Vice President, Operations, NEFCo

Manuel Irujo, Vice President of Operations at NEFCo, stated that he has been with NEFCo for seven years and is in a good position to understand the environmental benefits and green benefits of reevaluating the molybdenum standard

because he has lived with the current standard for seven years and the challenges it has provided to operations. There are a lot of green benefits to reevaluating the molybdenum standard.

Class A, exceptional quality (EQ), is the best product that a biosolids fertilizer can meet. This product is in demand throughout the country but in Massachusetts that demand is greatly stymied because of the molybdenum standard in Massachusetts. NEFCo generates about 32,000 tons of pelletized biosolids, Class A, EQ, and only 1,500 tons is beneficially reused. That number is going up slightly because of a concerted effort to market within Massachusetts. It is only 5% of the total product. Staff estimates that it could reach 10,000 tons out of the 32,000 in the course of two to three years that could be distributed within Massachusetts if the standard were raised. The current standard is 25 milligrams per kilogram (mg/Kg). If NEFCo goes over that limit, the sales are restricted and extra analysis is required during certain parts of the year. Massachusetts has one of the tightest limits in the United States.

Various parties are requesting a reevaluation of the limit. A reasonable limit is 40 mg/Kg, which is the limit in New York State and has been backed by academic studies. The federal standard is 75 mg/Kg. There is also an economic benefit to farmers in Massachusetts to use the product. These are key pieces that could be used in the Governor's Executive Order 562 (for regulatory reform) to raise the limit. In addition to green benefits, there are economic and operational benefits as well.

One big environmental benefit is lower air emissions. NEFCo has experience in about 30 states with the MWRA product. If NEFCo could market 10,000 tons within Massachusetts, there would be a 40-mile shorter truck travel distance for over 1,250 truck loads in a year that would result in an 80,000 mile reduction, 13,000 gallons less in diesel fuel used and 145 tons per year of CO2 emissions reduced. It would be impactful over the course of a number of years.

Massachusetts has promulgated laws for recycling organic residuals. An increase of the molybdenum limit would be in support of that policy.

There would be a \$20 to \$50 dollar per acre economic savings for farmers to use this product. Organic materials lead to faster plant establishment than chemical fertilizers. It increases water retention as well.

A key contractual item for NEFCo is to ensure that it can continuously ship product; NEFCo has a 100% track record in shipping its product for beneficial reuse. An increase in the Massachusetts molybdenum standard would improve NEFCo's overall market diversification and allow the MWRA contract to be serviced better.

NEFCo has to batch and sample the product if the molybdenum is close to the Massachusetts limit, which requires extra time and inventory delays.

In summary, raising the molybdenum level to 40 mg/Kg would provide green benefits, enhances the regulatory push to recycle organic residuals, supports Executive Order 562 and provides economic benefits.

A member asked how milorganite deals with the molybdenum situation. Mr. Pawlowski stated that milorganite went to court years ago with DEP and successfully convinced DEP that milorganite does not have to put a label on its bag in regard to molybdenum. MWRA gave comments to DEP, making the argument that milorganite doesn't have to list this recently. They did not appropriate those comments into their regulatory information.

Mr. Favaloro stated that he now has information that he did not know. What is the molybdenum level in Milwaukee? Mr. Pawlowski stated that on average, they run at about 25.2 mg/Kg. Mr. Favaloro stated that would put them over the Massachusetts level. DEP gives them one standard and another for Massachusetts.

A member asked about Executive Order 562. Mr. Irujo said Executive Order 562 is the Governor's order to reexamine all policy regulations to see if they make sense; if they are too restrictive and causing economic harm or if they are entirely too restrictive versus federal limits without good reason. Mr. Favaloro stated that when the Governor took office, he

decided to look at every rule and regulation to determine if they are good, who it benefits and how it can be made better. How can government be “less in your face” and “more working for you?” Former MWRA CFO Rachel Madden is the key staff person for the Governor on Executive Order 562. This would be a “win-win” for all involved; it is good for the environment, good for the economy, good for operations and there isn’t really an argument on why it should be implemented at 10 mg/Kg and 25 mg/Kg. Science says otherwise.

Mr. Duest noted that MWRA and the Advisory Board do not want to eliminate the limit or go to the loosest limit of the federal guidelines, but rather going from the most restrictive limit to the top ten most restricted. At 40 mg/Kg it still is one of the most restrictive limits in the United States. Mr. Favaloro stated that raising the limit to 40 mg/Kg would take care of the problem. Absent that change, the only other alternative to get to the ability to market the product 24/7 in Massachusetts would be to put cooling towers under the industrial users category and permit them. This would control the levels of molybdenum going in. It is not the preferred method. There are other products on the market. It is the actions of the Advisory Board, the MWRA, NEFCo and others that have ignited a more broad-based discussion on this topic. There is a national organization called the North East Biosolids & Residuals Association (NEBRA) that is actively involved and they are working on a workshop for mid June where DEP is going to listen to speakers who have put the science behind why raising the level of molybdenum is not a bad thing. DEP is actively looking at making some changes.

Additionally, Advisory Board staff has met with Massachusetts organizations that work with office buildings and towers to get them involved. They are interested in Executive Order 562. The people on the “let’s work on it” side of the discussion is growing daily. Staff is confident that this issue will be resolved one way or the other. Economically and environmentally it would make more sense to raise the limit than it is to restrict it further on the user discharge.

Mr. Pawlowski said molybdenum is actually a micronutrient that people that grow crops and turf want in the soil. Mr. Fasanello asked why the number was set at 10 mg/Kg for grazing. Staff said EPA did a risk assessment and said if you are adding additional molybdenum onto a field where cows are grazing, in parts of the country where the ground level is already high, that you could have an impact on cattle; however, EPA assessed the whole country and couldn’t differentiate between Massachusetts and Montana, so DEP did its own risk assessment and ignored the fact that the residual level of molybdenum in MA soil is low; DEP got ultra-conservative. EPA put out a number of 10 mg/Kg as a suggestion for grazing land. Massachusetts took it a step further and actually put a restriction of 10 mg/Kg and 25 mg/Kg. Mr. Romero noted that Massachusetts is the only state to have a split limit as well.

Mr. Favaloro stated that he was glad to have this topic on the agenda; clearly there is a lot of interest. This has been and will continue to be a major initiative for all the parties that spoke today and of the Advisory Board moving forward.

John Sullivan asked if there is an impact in areas that have a total daily maximum load (TDML) for phosphorous. Mr. Irujo said the biggest difference is that you have to be concerned about runoff. You have to be sure that the slope of the land or any frozen ground would not carry rainwater away versus soluble chemical phosphorous, which will leach out. This won’t leach out but you still have to be concerned about it washing away.

Mr. Sullivan said any city or town that has a tributary to the Charles, which has MS4 hanging over their heads, should be concerned about promoting it. Are there guidelines on that? Mr. Irujo said 150 feet away from a waterway. Mr. Sullivan said his concern is a park with a catch basin, which leads to a waterway.

D. COMMITTEE REPORTS

Executive Committee – Katherine Haynes Dunphy

❖ **ACTION ITEM: NOMINATION AND ELECTION OF A CANDIDATE TO SERVE AS AN ADVISORY BOARD REPRESENTATIVE TO THE MWRA BOARD OF DIRECTORS FROM JULY 1, 2015 TO JUNE 30, 2018**

Mr. Favaloro stated that notices were sent out regarding the election process to all Advisory Board members seeking persons who were interested in serving. One letter of intent and resume was received from the incumbent Andrew Pappastergion to serve on the MWRA Board of Directors. A quorum of 33 voting members is in attendance.

Mr. Pappastergion said this would be his seventh term serving on the Board should members elect him. Eighteen years goes by very quickly. The Board make up is constantly changing; however, the Advisory Board's three representatives are the senior members of the Board. He stated that he will continue to do his best to represent the communities and the ratepayers if given the opportunity.

The Executive Committee, acting as the Nomination Committee, has nominated Andrew Pappastergion to serve as the Advisory Board's representative on the MWRA Board of Directors for another three-year term.

Hearing no nominations from the floor, a motion was made **TO NOMINATE AND ELECT ANDREW PAPPASTERGION TO SERVE AS AN ADVISORY BOARD REPRESENTATIVE ON THE MWRA BOARD OF DIRECTORS FROM JULY 1, 2015 TO JUNE 30, 2018**. It was seconded and passed by unanimous vote.

Mr. Pappastergion thanked members for their support.

❖ **ACTION ITEM: MWRA ADVISORY BOARD DRAFT FY16 OPERATING BUDGET**

Mr. Favaloro noted that staff shared the components of the Advisory Board's proposed FY16 Operating Budget with the Advisory Board at last month's meeting. The request of the MWRA is \$521,645 for FY16; it is an increase of about \$23,000 from FY15. It covers all of the Advisory Board's operating expenses and the major areas that are growing relate to lease costs, salaries for employees and meetings, especially the new MuniWorks workshop, which was a huge success last year and will be carried over to October moving forward. [FY15's MuniWorks workshop on the water/sewer/stormwater topic can be viewed [here](#).]

A motion was made **TO APPROVE THE MWRA ADVISORY BOARD'S FY16 BUDGET OF \$522,520, OFFSET BY INTEREST INCOME OF \$875, WITH A REQUEST OF THE AUTHORITY OF \$521,645**. It was seconded and passed by unanimous vote.

Finance Committee – Bernard Cooper

❖ **ACTION ITEM/PRESENTATION: ADVISORY BOARD INTEGRATED COMMENTS AND RECOMMENDATIONS TO THE AUTHORITY'S PROPOSED FY16 CIP AND CEB**

Communications Director Matthew Romero offered an overview of the [Advisory Board's FY16 Integrated Comments and Recommendations to the Authority's Proposed FY16 CIP and CEB](#). This year's review will begin with the Capital Improvement Program (CIP). More recently, the Advisory Board's review has become more "policy-centric;" however, this year so many of the policy recommendations did apply to the budget so there were monetary recommendations. Staff prepared "[excerpts](#)" from throughout the document and added it to the policy chapter so that members can have a synopsis of the larger issues facing the Authority.

In looking at the CIP, it is gratifying when you realize that you have "stuck to your guns" and can declare victory on a topic. An example of an issue where the Advisory Board was in outright opposition to a particular project is the fish hatchery. By sticking to that conviction it ultimately led to a "win-win-win" situation for everyone involved.

The Advisory Board had been opposed to the fish hatchery project because it involved capital costs for the Authority and its ratepayers that should have been borne by the Commonwealth. The fish hatchery was not part of the Authority's core mission. There was no benefit to the ratepayers.

Over the years, instead of just saying “no” to the project, the Advisory Board had tried various pathways to move forward with the project through an exchange. The first thing that was attempted was to exchange the MWRA/ratepayers’ picking up the cost of the capital project for a streamlined system expansion regulatory process. The argument would be that it would be easier for new water system users to come in and it would spread the base costs for the ratepayers, which would be a benefit to them; it did not come to fruition.

The second was to attempt a cost-neutral situation. The electricity savings that the Commonwealth was going to realize from the new pipeline and not having to pump the water from a different location would save a significant amount of money for electricity and the Advisory Board suggested that the Commonwealth provide the savings it would realize to the Authority toward the debt service on the capital costs for the pipeline. This suggestion didn’t go anywhere as well.

Staff remained adamant that the ratepayers should not be paying for anything that they get no benefit from. On Wednesday, the Secretary of Energy and Environmental Affairs Matthew Beaton announced that the Commonwealth would be transferring \$2.5 million through the Division of Fish and Wildlife and the Department of Fish and Game, which would then be transferred to the MWRA toward the capital costs. Additionally, the Authority had already secured two grants for the hydro-electric turbine. Ultimately the \$3.2 million in capital costs for the fish hatchery project are now being contributed by the Commonwealth.

All three entities are contributing to this project and all three will receive benefits. The MWRA’s contribution will be building the infrastructure of the pipeline with the funds that the Commonwealth is providing. The Advisory Board and the ratepayers are approving the connection to the water. The Advisory Board votes on new connections to the waterworks system. The Commonwealth has reduced costs for pumping, reduced costs for chemicals and reduced costs for maintenance and overtime. They are receiving the benefit of the free water that is being provided to them for the fish hatchery and the fish will no longer be “stressed.”

The MWRA receives the benefit of not having to pay the capital costs and will realize increased revenue through the hydro-electric turbine. Because the capital costs are already paid in full, the first dollar that comes in from hydro will be revenue. Because of the increased revenues the Advisory Board, and its waterworks member communities, will realize a slightly reduced rate base, resulting in lower assessments for the communities. By “drawing a line in the sand” and holding to the Advisory Board’s core mission, which is to represent the interests of the ratepayers and the communities, it resulted in a win-win-win situation.

Mr. Romero said another major item that staff is highlighting is capital under-spending, which the Advisory Board has flagged for quite some time. The original FY04-08 capital spending cap was budgeted at \$1.134 billion and wound up being under-spent by about 22.4%. The FY09-13 cap was set at \$1.4 billion and was under-spent by 28.2%. This led Advisory Board staff to recommend that the Authority budget the FY14-18 cap at no greater than \$800 million, which the Authority did.

Two years in to this cap, it is projected that the Authority will be under-spent by 10.6%. It will only get worse because the Authority is behind in its capital program because of the severe weather during the winter. The concern is not about a percent difference of where the baseline cap is; the cap was only lowered because the Authority only had the institutional capacity to spend in the \$800-\$900 million range, and the Advisory Board additionally wanted to challenge them to a lower spending level than their capacity. It is an absolute dollar value; the Authority should be spending this amount of money to maintain the system and not let it run to failure like the MDC. The reason staff is flagging this is that one of the major findings of the MBTA panel was chronic underinvestment. If this is the correct level, that is fine; however, staff wants to ensure that the Advisory Board is out there ahead of the message recognizing this under-spending. Staff’s recommendation this year is to find out what the reasons are for the under-spending. If it means the Authority should be spending at a lower level, then the next cap should be lowered. Figure out what needs to be spent to be at the right level for the capital program.

With regard to the FY16 CEB, the rate proposed by the Advisory Board is 3.36%. One item flagged is staffing; the recommendation that the Advisory Board is putting forward is to increase their vacancy rate assumption by three for the lag time that it takes them to fill positions that are vacated. The assumption would be \$100,000 per position.

Another item flagged was a CORE fund deposit that was tied to the released reserves. It would have been required had the reserves not been released until next year but because the reserves were released this year, these funds do not need to be budgeted.

The utilities line item had been budgeted on the high side and the Authority planned to reduce its number; staff included a reduction of \$1.6 million that it believes will be closer to the MWRA's new proposal.

Mr. Romero noted that Advisory Board staff also included "add backs" into its Comments and Recommendations if staff knows something is going to increase. Additionally, the proposed use of bond redemption funds has been taken out and that will be offset by the reductions that staff found. The net changes the Advisory Board is recommending for the FY16 proposed budget is a \$4.8 million reduction from the rate revenue requirement, which results in a 3.36% rate increase recommendation.

Mr. Romero stated that last year staff had thrown out the phrase "four no more" as an off-handed title for presentation slides and the MWRA has really taken to it. Advisory Board staff is now looking at the new mantra of "four no more...no more!" Staff is looking ahead and the Authority has listed rates under 4% through FY2021, utilizing the released reserves and rate stabilization and bond redemption funds. The Advisory Board's recommendation will move on to the next target to try to bring the rates down even further.

Mr. Romero noted that the Advisory Board also has several policy recommendations. As noted earlier, the NEBRA organization is going to hold a conference in June and DEP has agreed to come to the table to discuss their molybdenum standard of 25 mg/Kg and what all the stakeholders have to say about adjusting that standard upward. The topic seems to be moving in the right direction.

The Advisory Board staff is in agreement with the recommendation of the Long-Term Rates Management Committee to begin to fund Other Post-Employment Benefits (OPEB) now that the Pension fund is considered to be fully funded. Stormwater – the Advisory Board hit on the NPDES co-permittee language and hit on primacy. The conversation has been how we can incorporate stormwater allocations into the assessment fee to fund primacy for DEP. There is discussion on the Clinton phosphorous removal as well.

In the policy chapter, staff has added a section on water revenue generation. There is a section on system expansion entrance fee payments that allows for a grace period and for payments to be spread out over time, a plan that the MWRA Board of Directors voted to accept. Potential water revenues are also flagged regarding opportunities to sell "untreated water" directly from the reservoir. There are areas in the Wachusett that are interested in getting untreated water. Currently, there is no process or charge to deal with communities that may want "raw" water. There have been meetings with Shrewsbury, Boylston and West Boylston. Perhaps the MWRA is missing an opportunity. A sub-committee of Operations should be convened to look at the viability of creating a direct source water charge. It wouldn't be new in the sense that the MWRA has different charges for different communities, everyone pays a per-gallon charge in the metro area but if you are in the Chicopee Valley Aqueduct, they pay a different assessment charge because they don't get the services from the treatment plant. There is no MetroWest or covered storage, so if the MWRA can sell direct source water to a community and get an entrance fee based on a million gallon charge of direct source water, that may be a more viable opportunity moving forward.

The second recommendation is water capacity insurance, which is essentially revisiting and renaming the standby fee. This would be for communities that have come to the Authority for water on an emergency basis and they are not sure that they will be able to meet their water needs. Is it going to be two years in a row or once every five years? The

emergency rate is hefty for them. The question is how to balance some sort of standby fee for water insurance for these communities and they wouldn't have to go through the approval process every time they needed an emergency hookup with increasing rates on each hookup. A portion of the emergency rate could also be assigned to the entrance fee should the community decide to join the MWRA system in the future. This would all be determined by the committee that will convene to discuss this topic.

Rebuilding watershed forestry should be a priority. The Science and Technical Advisory Committee (STAC) report came out three years ago and watershed revenues seem to be building "one twig at a time." What is wrong? The Advisory Board is also reiterating its recommendation that the Division of Water Supply Protection go for a green recertification for its forestry program.

Mr. Romero stated that staff worked on a [30-year timeline](#) and Travis Ahern put it together in a nice format to tell the history of the Advisory Board's efforts through the years. It is a "snapshot" on accomplishments and efforts over the years. Mr. Favaloro added that there will be a 30th Anniversary Reunion at the Waterworks Museum on June 18th.

A motion was made **TO APPROVE THE ADVISORY BOARD INTEGRATED COMMENTS AND RECOMMENDATIONS TO THE MWRA'S PROPOSED FY16 CIP AND CEB**. It was seconded and passed by unanimous vote.

Operations Committee – Lou Taverna

❖ **PRESENTATION: MWRA'S LOCAL I/I GRANT/LOAN AND WATER LOAN PROGRAMS** – Carl Leone, Senior Program Manager

Senior Program Manager Carl Leone provided members with an [update](#) on the MWRA's Local I/I Grant/Loan and Water Loan Programs.

The Inflow/Infiltration (I/I) Program has a total budget of \$460 million through FY25, of which \$287 million has been distributed. The program began in May of 1993; \$172 million is remaining to be distributed to the communities. Phases 9 and 10 are the most recent phases approved and will be distributed as 75% grant and 25% ten-year loan. The earlier monies remaining from phases 6, 7 and 8 will be distributed as 45% grant and 55% five-year loan. Phases 6 and 7 have sunset provisions; for Phase 6 there are eight communities with \$4.1 million remaining and the sunset provision for the grant portion ends at the end of FY18. For Phase 7, the sunset provision for the grant portion is the end of FY21; there are 11 communities with \$8.1 million remaining to be distributed. Staff encourages the communities with Phase 6 funding to get those funds used over the next two years. All communities have used their monies rolling into these sunset provisions, so the provisions have been effective.

Phase 9 funding is currently available for use by the communities; the Phase 10 monies have been appropriated and allocated by community, however, the communities cannot reach into the Phase 10 monies until half of their Phase 9 monies have been utilized – only then will the Phase 10 money become available in the next fiscal year.

At the suggestion of the Advisory Board, the MWRA did, and will continue, a spring survey of all the communities to ask what they believe they will spend in the next three years on the I/I Program so the Authority can have a better understanding of what will need to be allocated within the Authority's budget. The results of the survey are in the \$25 to \$30 million range and the Authority has about \$26 million budgeted.

The Water Loan Program is a ten-year loan only program. Phase 1 was complete at the end of FY13; however, communities are still repaying those loans. For the Water Program, money is allocated by the year. Each year the community receives an additional 10%, unless the allocation is under \$500,000 – then the community would receive \$500,000 annually.

The total Water Loan Budget is \$210 million; \$84 million has been distributed with \$125 million remaining. The MWRA is likely to begin talking about the next phase in budget discussion on FY16. Staff will work in FY16 on the FY17 budget.

Prior to the Water Loan Program, the region had about 60% of pipes that were lined; through this program, that number has increased by about 7%, constituting about 450 miles of pipes lined through the MWRA Water Loan Program.

Some additional communities have spent their own money as well but there is still about \$1.5 billion needed to improve water quality through pipe lining, which will take about 40 to 50 years to complete and is the goal of this program.

The MWRA is in the beginning of a new three-year contract for leak detection services. There are two contractors providing the services, which the MWRA pays for and then charges the community for the full cost during the following fiscal year. It is essentially a one-year loan.

Walter Woods said a few years ago the Town of Wellesley cement-lined its water pipes and felt secure that it had accomplished something. A few years later, the Town found that the cement-lining had broken away and was resting at the bottom of the pipe. In that vein, we are looking at leaks in sewer lines and have spent over \$100 million on plugging pipes. The Town anticipates spending perhaps \$1 billion to complete the job. Mr. Woods said his strong recommendation is that the Authority revisit some of the work that has been done to ensure that the job that is done is secure. Also, the Authority should look at the various materials being used; perhaps some materials are better than others and the towns could benefit from this information.

Mr. Leone stated from an MWRA standpoint, the Authority helps the communities finance the construction projects. Most communities are working with a consultant engineer to do the contract. Most of the contracts have some type of review or revisit during the following year for quality control purposes. Mr. Leone said he agreed that different types of materials have different useful lives. Testing and sealing joints might have a ten-year life, while other rehabilitations should last 50 years; that is taken into account when these recommendations are made. Generally, between the community and their engineer, those decisions are made; however, MWRA staff will speak to Advisory Board staff on the idea of creating a workshop to look at a few of the community projects and do some type of an update. Mr. Favaloro said staff can take a look at that.

A member asked if the MWRA audits the work that is being done with the I/I monies. Mr. Leone stated before distributing the money, he and his staff have a full process to ensure that these funds are utilized for the approved project. Additionally, there is an internal audit group that audits the MWRA's operations and takes an independent look and has made some suggestions as well.

Mr. Woods reiterated that the MWRA should verify that these projects are holding up and that the MWRA's system is benefitting from these programs. Mr. Favaloro agreed that it would be good to know if the Authority is getting the "biggest bang for the buck" with the funds that are being spent. Between the Authority and the Advisory Board, we can develop a means to take a look at the effectiveness of these programs. Staff will come up with some ideas.

Mr. Leone added that he is obligated to go before the MWRA Board of Directors on an annual basis regarding the flow coming to the DITP and it shows that it has been declining over the years, which is essentially the goal.

E. ADJOURNMENT

A MOTION WAS MADE TO ADJOURN THE MEETING AT 1:42 P.M. It was seconded and passed by unanimous vote.

Respectfully submitted,

William P. Hadley, Secretary