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**MWRA ADVISORY BOARD MEETING
OCTOBER 21, 2010
CARY HALL**

1605 MASSACHUSETTS AVENUE, LEXINGTON, MA – 11:30 A.M.

MINUTES APPROVED AT THE FEBRUARY 17, 2011 ADVISORY BOARD MEETING

Thirty-nine people were in attendance, including twenty-eight voting members: E. A. Maguire, ASHLAND; Richard Warrington, BEDFORD; Michael Bishop, BELMONT; John Sullivan, BOSTON; Andrew DeSantis, CHELSEA; Glen Doherty, EVERETT; J. R. Greene and Barbara Wyatt, GUBERNATORIAL APPOINTEES; Bill Hadley, LEXINGTON; Jay Fink, LYNN; Charles R. McCollum, MARBLEHEAD; Cassandra Koutilidas, MEDFORD; Katherine Haynes 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; Bob Angelo, WESTWOOD; Zig Peret, WILBRAHAM; Michael Woods, WILMINGTON; Guy Brandenstein, WINTHROP; Anthony Blazejewski, WOBURN.

Also present: Andrew Pappastergion and Joseph Foti, MWRA BOARD OF DIRECTORS; George Burnell, LEXINGTON; Vicki Quiram, WESTWOOD; Jonathan Yeo, WATER SUPPLY PROTECTION TRUST; Ed Bretschneider, WAC; Lexi Dewey, WSCAC; Joe Favaloro, Cornelia Potter, Matthew Romero and Mary Ann McClellan, MWRA ADVISORY BOARD STAFF.

A. WELCOME

Chairman Dunphy called the meeting to order at 11:46 a.m. and introduced Bill Hadley, Lexington's representative to the Advisory Board, who welcomed everyone to Lexington.

B. APPROVAL OF THE APRIL 15, 2010, MAY 20, 2010 AND JUNE 17, 2010 MINUTES OF THE ADVISORY BOARD

A Motion was made **TO APPROVE THE MINUTES FROM THE APRIL 15, 2010, MAY 20, 2010 AND JUNE 17, 2010 ADVISORY BOARD MEETINGS**. It was seconded and passed by unanimous vote.

C. REPORT OF THE EXECUTIVE DIRECTOR

MWRA Advisory Board Executive Director Joseph Favaloro stated that the 25th Anniversary of the MWRA and MWRA Advisory Board celebration has been postponed indefinitely; however, the Advisory Board is planning a panel discussion/workshop to be held at the Massachusetts Municipal Association's Conference on January 21, 2011 to revisit the ultimate rebirth of the Boston Harbor.

The panel will consist of a legislator (House Speaker Robert DeLeo), a regulator, the Chair of the Advisory Board, the Executive Director of the MWRA, and perhaps a harbor advocate to provide some perspective from each of their different areas of expertise.

Additionally, the move of the Advisory Board office is 100% complete.

D. PRESENTATION: THE CHALLENGES OF PROTECTING OUR WATERSHED – Jonathan Yeo, Director, Division of Water Supply Protection

Jonathan Yeo, Director of the Division of Water Supply Protection (DWSP), a division of the Department of Conservation and Recreation (DCR), stated that the DWSP is facing some frightening challenges.

Mr. Yeo said that DCR and the MWRA have been working closely to combat aquatic invasive species. In the past, there have been presentations on zebra mussels and the latest infestation is called *Hydrilla*, which is an aquatic plant that has been found near the Wachusett Reservoir.

Aquatic invasive management is a high priority of the Water Supply Protection Trust, of which Katherine Dunphy is a member. There is a high level of coordination between DWSP and MWRA on a whole range of projects.

Aquatic invasive plants are a diverse group of non-indigenous organisms that share a sinister key characteristic, which is the ability to become established and spread rapidly within, and overtake, native aquatic communities. There are now up to 184 non-indigenous organisms in Massachusetts. A lot of them are fish, but there are also a lot of plants and other species of reptiles and amphibians like zebra mussels.

The potential impacts to our watersheds and reservoirs are the loss of native species, the degradation of habitat, potential damage to the water supply infrastructure, and the disruption of the entire eco-system. Invasive plants could replace beds of native plants and grow a lot of biomass and pump a lot of nutrients and the sediments could be put into the water column. Staff would like to preserve the stable, excellent, high-quality source water that the consumers are accustomed to.

Eurasian Water Milfoil is already at the Wachusett Reservoir and the MWRA has been hiring contractors since 2002 to address this invasive species. *Fanwort*, *Water Chestnuts*, snails and other fish have been causing problems as well.

Wachusett Reservoir is located just five miles away from several areas where *Eurasian Milfoil* and *Fanwort* have been populated. Over the years, MWRA has hired divers to put benthic barriers on the ground to smother the plants or to hand-harvest these plants and so far MWRA and DCR have been successful to prevent the spread of the *Milfoil*. Staff believes this issue will continue for many years to come.

Another invasive plant that is a big threat in a lot of water bodies is *Water Chestnut*, which is a plant that takes over the entire surface of the water. The best way to address this species is to use a machine harvester and landfill or compost the harvested materials. It takes several years to address this plant. *Water Chestnut* is in the Sudbury Reservoir, which is a backup water supply for the MWRA.

Several invasive species are really being focused on; number one is *Hydrilla*, which is a very dangerous plant. Zebra Mussels have also been a focus, as well as, Asian Clams and the Spiny Water Flea.

In terms of plans to prevent the spread of aquatic invasive plants, staff is taking a three-pronged approach. Public education and outreach campaigns have been undertaken with various stakeholders and groups to prevent the spread; decontamination at boat ramps and other entry points to ensure that plants and mussels are not spread to the Quabbin; and staff has also greatly extended its monitoring efforts to track where these invasives are and how they are spreading.

In terms of monitoring, the DWSP has a team of aquatic biologists at the Quabbin and Wachusett and MWRA has contractors at these locations as well and the responsibilities are split between the two groups to ensure that all of the potential threats are addressed.

Monitoring stations have also been set up at various rivers to look for signs of any of these threatening species.

Zebra Mussels have been a big concern for the Authority and DWSP; they pose a real threat to infrastructure and were found for the first time in Massachusetts at Laurel Lake in Lee in 2010. The fishing program was suspended for several months while a boat decontamination program was established.

A study has been done to analyze the threat of mussels and their ability to grow in the Quabbin Reservoir. The Quabbin Reservoir has a very low amount of calcium in it of 2 mg/l. DWSP contracted with Rensselaer Polytechnic Institute, a college in New York State, to do the study. Mussels were placed in aquariums containing water from the Quabbin and water from Laurel Lake, which we know is conducive to zebra mussels. The mussels were collected from Laurel Lake and various experiments were done, including with mussels that were attached to rocks and mussels that were not attached to rocks. The bottom line was that all of the mussels that were in Quabbin water died. Even though the decontamination program was set up to ensure that zebra mussels would not get into the Quabbin, it will continue because it is also helping to ensure that invasive plants do not get in as well.

The next focus is *Hydrilla*, which has been found in the Town of Clinton in South Meadow Pond, which is next to the Wachusett Reservoir. It is a non-native invasive submerged plant that grows up to one inch per day. Fifty percent of its biomass is at the top of the water column. It does not need very much light and can grow in almost any type of water quality. It has dominated the southern United States and has nearly taken over every water body in Florida and it is heading north and also up the west coast as well. *Hydrilla* reproduces quickly and can survive the digestion by water fowl and can be moved by water fowl.

South Meadow Pond, which has an infestation of *Hydrilla*, is just a five-minute walk from the Wachusett Reservoir. It is technically not part of the watershed but is far too close for comfort. Birds or humans or a variety of things could move *Hydrilla* into the Wachusett Reservoir and staff knows there are many shallow areas that would be ripe for colonization in the Wachusett Reservoir. It is believed that the *Hydrilla* may have come from an aquarium that was dumped into South Meadow Pond. Staff believes the *Hydrilla* is a very serious threat to the Wachusett.

Since the *Hydrilla* was found about one month ago, staff has put up informational signage at the public access areas. The DWSP has been in contact with the Conservation Commission and has now hired a firm to survey and potentially treat South Meadow Pond with herbicides this fall and into next year. The MWRA has hired the same firm to develop an emergency response plan for the Wachusett Reservoir to ensure that it does not get there. Staff will continue to monitor Wachusett to make sure the *Hydrilla* does not get into the Reservoir and staff will work with the Town of Clinton to determine what kind of treatment measures can be taken.

Hydrilla has been found in several other water bodies in Massachusetts, including in Barnstable and Pembroke. There has been some success in treating these two water bodies.

DWSP has made presentations before the MWRA Board of Directors and various other organizations on this topic. The Water Supply Protection Trust has approved spending more

monies on this current year and likely into next year to help to prevent the spread of this invasive species.

The Asian Longhorn Beetle (ALB) has surfaced in a residential area of Worcester that is very close to the Wachusett Reservoir and the full forest that surrounds the Wachusett. There is great concern from the U.S. Forest Service and the U.S. Department of Agriculture (USDA) and state officials that we cannot stop the Asian Longhorn Beetle from getting into some of the larger forest areas and that it will go on into western Massachusetts and continue to Vermont. If you think about the New England fall and the sugar maples in the maple syrup industry, this is a very big problem and is a potential problem in the watersheds as well.

The ALB-Worcester Program has turned into a large program with a lot of federal funding with different agencies involved.

In the study of the ALB in the Worcester area, it was determined that the ALB has been in the area from 12 to 15 years. The beetle chews holes into the trees and creates internal damage to the trees, slowly killing them. It is believed that the ALB came from pallets that were shipped from China to a particular company in Worcester. Almost all of the surrounding homes had to cut down their maple trees because they were infested with ALBs.

The USDA and the state have set up a zone that heavily regulates the movement of any wood products in and out of this area. The zone encompasses Worcester, Boylston, West Boylston, parts of Shrewsbury and a large portion of Holden.

There has been close coordination between the watershed group and our foresters with the ALB team. There have been a couple of instances where the beetle has been found close to the Reservoir and those hosts have been limited and have not spread yet. This is a big concern of the federal government and they are working to bring adequate funds into this program. About 20% of the trees in the watershed are vulnerable to the ALB.

The number one threat to the water supply continues to be birds, especially gulls. Thousands of gulls attempt to land on both reservoirs every night. Staff goes out at dusk, sometimes in dangerous conditions, to harass the birds and move them away from the intakes so that we do not fail the fecal coliform standards. This program has been successful and staff has come up with some new measures within the last year based on some research by the wildlife staff to hopefully reduce the entire population of gulls in the area. Staff has been trying to work with wastewater treatment plants in the area to cover up all of their basins or to put wires over their basins which gulls have been known to land on and feed in those areas.

Staff is also working with Wal-Mart and some other big shopping areas to put up some signage to keep people from feeding birds in parking lots, which is a huge source of the regional food supply for birds. The last thing we are looking at is the use of lasers and other measures. Progress is being made with birds but they continue to be a large threat to the water supply; staff has been successful now for 12 to 13 years in meeting the source water quality standards and keeping the filtration waiver in place for the MWRA.

Mr. Favaloro said that he and Chairman Dunphy had a chance to go out a few weeks ago and see firsthand the issues with *Hydrilla*. As you saw, with the vote of the Trustees, of which the Advisory Board is one, we are fully supportive of providing whatever dollars are necessary to eliminate it; however, what specifically is Clinton doing? Mr. Yeo said Clinton has been cooperative in terms of permitting on any of the treatment measures that have been needed. Clinton has also offered to

communicate with all of the neighbors and to lower the lake levels through the use of a valve they have in one of the dams.

Mr. Favaloro asked if it should be closed to public access. Mr. Yeo said the challenge with this water body is that it is surrounded by private property so many people have their own boat ramps and many ways of launching boats. There is only one public access ramp that the state actually owns through the Fish and Game office and it is located very near to the infestation area; that ramp is for small boats, kayaks and canoes. Mr. Yeo said number one is to educate everyone around the pond.

A member asked who owns South Meadow Pond. Mr. Yeo said it is a publicly owned pond; however, it is surrounded by private property. An industry in Clinton owns the dam structure at the end of this pond, which then flows into the Nashua River through a drainage area underneath the Town of Clinton. So far no one has contested any of the measures being taken and everyone has been working well together.

Bernie Cooper asked who is paying for these measures. Mr. Yeo said so far the DWSP is going to underwrite the initial program, in terms of fees or for survey work and treatment. Mr. Laskey and others are interested in having these problems addressed quickly. There is one treatment that can be made in the fall and then after that a longer-term program will be implemented this spring and summer. At this point, through the Trust, DWSP will be paying for it. For the 18-month long program, it is budgeted at \$45,000 with the consultant.

E. COMMITTEE REPORTS

Executive Committee – Katherine Haynes Dunphy

❖ PRESENTATION: PREVIEW 2011-2012 LEGISLATIVE PACKAGE

Mr. Favaloro said every two years a new Legislative Session begins. Staff has begun to plan its strategy for the next session, which will be filed in January.

A bill that changes the appointment of two representatives to the MWRA Board of Directors recently passed after seventeen years.

In these tough economic times, the legislative strategy is to take the concepts that staff has been working on over the last few years and try to push them forward using articulate arguments that may attract legislators' support rather than filing new legislation as there isn't a lot of money available.

With that, the legislative initiatives will look very similar to the legislation filed two years ago. The initiatives continue to include the expansion of the Bottle Bill. One approach would be to take a piece of the unclaimed deposits. A funding source for infrastructure across Massachusetts is clearly needed. A second approach takes the concept of the Bottle Bill and expands it to include a direct tax or surcharge on bottled water purchases that would provide a funding source for infrastructure repairs.

A third approach would stop the annual odyssey of trying to get Debt Service Assistance (DSA) funding and file a bill similar to the Septic Tax Credit, which is written that anyone that replaces a septic system gets, based on a formula, a tax credit. DSA has a whole legislative process where every year staff must fight for funding. Nearly every year \$20 million in septic tax credits goes to homeowners that replace their septic systems, absent any budget deliberations.

The fourth approach would actually expand the septic tax credit. At times, legislators' response to staff's request for DSA is to ask why they should provide a subsidy to the MWRA, when in actuality, others are also eligible for DSA. Ron Mariano, the MWRA Caucus Chairman, filed this legislation

two years ago that creates language similar to the septic tax credit that would allow homeowners a credit on the capital portion of their sewer bill that would allow the same tax credit that you would get for a septic system replacement. This allows the discussion on infrastructure needs and helping the environment. There needs to be some level of relief for the homeowner and the ratepayer.

Additional refiles include the fringe rate over and above the direct costs for the Division of Water Supply Protection's fringe rate costs. MWRA pays for indirect costs for health insurance and retirement, which is based on an arbitrary number, which can run between 20+% to 30+%. Staff would like to find a way to better calculate the actual costs and only fund actual costs.

Tort Liability would provide the MWRA with the same liability that other Massachusetts agencies, such as Massport, now have and would help to reduce the overall insurance costs of the MWRA.

The MWRA pays payments in lieu of taxes (PILOT) to Quabbin and Wachusett communities. There are a handful of communities within the Quabbin Reservoir that not only receive the PILOT payment, but also get an additional payment for the land that was taken, which is also a payment in lieu of taxes. Staff is just trying to eliminate the second PILOT payment.

Finance Committee – Bernard Cooper

❖ CIP/CEB UPDATE

Cornelia Potter stated that the MWRA is already a quarter of the way through this fiscal year and Authority staff is already underway in preparing the budgets for next fiscal year.

On the capital side, staff is in the process of updating project and contract information and considering candidates for new projects, most of them from the Master Plan. Staff indicates that initial drafts are due in the middle of next week and all reviews and final changes scheduled for mid-November; so staff is well on its way in preparing the CIP. Staff will present the proposed capital budget to the Board of Directors at its December meeting.

On the Current Expense Budget side, the Authority has been working for the past month or so on the Direct Expense Budget for all departments. Drafts are due in December. Initial targets are to keep the growth of direct expenses to within 1% of FY11.

So far this fiscal year, through the first quarter, the Authority is reporting CEB spending of \$140 million, or \$7 million under budget. Much of the under-spending is due to the unprecedented low variable rate interest rates (which also results in lower investment income); the year-to-date surplus is \$5 million for variable rate debt alone. While there is no guarantee that rates will stay at the current level, the Authority could also be impacted by some specific and isolated conditions, such as the liquidity providers, especially the German banks. Yet current results point to a measurable surplus by the end of the fiscal year.

On the capital side, spending has been \$40 million for the first three months of the fiscal year, or about 20% lower than the amount budgeted for the period, much of it due to lower spending for distributions to the CSO program for the year-to-date; that variance can be expected to close as the year progresses.

Operations Committee – Jay Fink

❖ UPDATE: CLINTON PRE-DRAFT NPDES PERMIT

Mr. Favaloro said many people believe that the Clinton draft NPDES permit is a precursor to the MWRA's Deer Island NPDES permit. Some of the changes that EPA hopes to include in this new permit include a significant reduction in phosphorous coming into the plant. If the solution is at the plant, it would add \$3 to \$4 million in capital costs to meet a level that is dramatically lower than the

current level; however, in EPA's defense, it is a level that has been incorporated in all of the permits that are now part of that region and area.

The Clinton Wastewater Treatment Plant was built for a much larger capacity and EPA continues to hold the flow down significantly, below what an average day could be. If EPA continues at that level, it would force MWRA to do even further reductions in that plant as well.

The issue of co-permittees should be on everyone's radar screen. In the Clinton draft NPDES permit, Clinton is listed as a co-permittee. As part of the MWRA's NPDES permit, staff is going to push to ensure that the communities are not listed as co-permittees. It would make it far too easy for EPA to reach out and get communities through the MWRA.

The draft permit talks about I/I reduction but the permit is so written that it looks like the MWRA is on the hook to remove I/I from the Clinton system and in reality it should be Clinton's responsibility; MWRA only has a small amount of pipe, which is directly in the plant and is relatively new and has no visible leaks. It is not likely that there could be I/I coming off of that pipe but rather it is coming from the Clinton system.

Stakeholders have until October 28 to express their concerns via letter on their issues with the draft permit in order to preserve the right to appeal the permit. Staff will send the letter so that more detailed comments can be sent later.

❖ **STATUS: LEAK AT SHAFT 5A**

Accelerated improvements to interconnection points on the Hultman are in process and within a week staff should be able to shut off the section of the MetroWest that will allow the necessary repairs to be made on the leak at Shaft 5A.

F. ADJOURNMENT

A MOTION WAS MADE TO ADJOURN THE MEETING AT 1:04 P.M. It was seconded and passed by unanimous vote.

Respectfully submitted,



Lou Taverna, Secretary