

**MWRA ADVISORY BOARD MEETING**  
**SEPTEMBER 17, 2009**  
**WELLESLEY FREE LIBRARY**  
**530 WASHINGTON STREET, WELLESLEY, MA 02482 – 11:30 A.M.**  
**MINUTES APPROVED AT THE NOVEMBER 19, 2009 MEETING**

Sixty-five people were in attendance, including twenty-three voting members: John Bean, ARLINGTON; E. A. Maguire, ASHLAND; Peter Castanino, BELMONT; John Sullivan, BOSTON; John Sanchez, BURLINGTON; Ed Sullivan, CANTON; Andrew DeSantis, CHELSEA; J.R. Greene, GUBERNATORIAL APPOINTEE; Bill Hadley, LEXINGTON; Jay Fink, LYNN; Bruce Kenerson, LYNNFIELD; Doran Crouse, MARLBOROUGH; Katherine Haynes Dunphy, MILTON; Lou Taverna, NEWTON; Bernie Cooper, NORWOOD; Peter Smyrnios, PEABODY; Jeff Zager, READING; Michael Collins, WAKEFIELD; Pat Fasanello, WALPOLE; Walter Woods, WELLESLEY; Earl Forman, WESTON; Bob Angelo, WESTWOOD; Anthony Blazejowski, WOBURN.

Also present: John Carroll, Andrew Pappastergion and Joseph Foti, MWRA BOARD OF DIRECTORS; Ryan Ferrara, NEWTON; Robert O'Brien, WALPOLE; William Shaughnessy, WELLESLEY; Bob Hoyt, WORCESTER; Jonathan Yeo and Bill Pula, DEPARTMENT OF CONSERVATION AND RECREATION; Roger Frymire, CAM; Margaret Van Deusen, CRWA; Tom Balf, MBC; Jon Beekman, SEACON; Mike Galli, UCANE; Ed Bretschneider and Larry Schafer, WASTEWATER ADVISORY COMMITTEE; Whitney Beals, Mary Booth, Alice Clemente, Lexi Dewey, Andrea Donlon, Paul Lauenstein, Tom Miner, Dona Motts, Mason Phelps, Jeanne Richardson and Martha Stevenson, WATER SUPPLY CITIZENS ADVISORY COMMITTEE; Fred Laskey, John Gregoire, Michael Hornbrook, Ria Convery, Pam Heidell, Steve Estes-Smargiassi, Kathy Soni, Dave Whelan and Rob Belkin and Michael Morris, MWRA STAFF; Joe Favaloro, Cornelia Potter, Matthew Romero, Christine Hevelone-Byler and Mary Ann McClellan, MWRA ADVISORY BOARD STAFF.

**A. WELCOME**

Chairman Dunphy called the meeting to order at 11:40 a.m. and welcomed everyone to the joint meeting of the Wastewater Advisory Committee (WAC), Water Supply Citizens Advisory Committee (WSCAC) and the Advisory Board.

**B. APPROVAL OF THE MINUTES FROM THE MAY 21, 2009 ADVISORY BOARD MEETING**

A Motion was made **TO APPROVE THE MINUTES FROM THE MAY 21, 2009 ADVISORY BOARD MEETING**. It was seconded and passed by unanimous vote.

**C. REPORT OF THE EXECUTIVE DIRECTOR**

MWRA Advisory Board Executive Director Joseph Favaloro noted that Water and Sewer Retail Rate Surveys were sent to communities in mid-August with a due date of September 18; he reminded members to submit their surveys so that the publication can be completed since it is one of the Advisory Board's most requested documents.

**D. PRESENTATION: CHALLENGES FACING THE MWRA – Fred Laskey, MWRA Executive Director**

Mr. Favaloro said in working with the Executive Directors of WAC and WSCAC it became clear that there are mutual topics that all three entities are interested in; the three entities are going to work cooperatively to meet together to share these topics at the same time.

MWRA Executive Director Fred Laskey said the MWRA is well along in its fifteen-year CSO plan, with the most substantial work already completed. The tunnel along the beach in South Boston is now complete. Projects for a pump station, which has already begun, on one end of the tunnel and an odor control facility at the other end will complete this project. Procurement for the odor control facility is on the street. This project has been the subject of substantial discussion, debate and controversy. The Board voted to submerge the facility because of pressure from a nearby landowner. It looks as if the MWRA will receive stimulus funding for that project. The goal for completion is May 2011 to be ready for the 2011 swimming season.

The Morrissey Boulevard storm drain is complete; this was managed by the Boston Water and Sewer Commission (BWSC). This storm drain was a key part of this project that was completed in July.

The East Boston interceptor is well underway. This is basically an addition of a new sewer interceptor in East Boston to limit the overflows, as well as expansion in the size of the pipes in other parts. It is a complicated project in an urban area.

Cottage Farm is complete with the activation of a new line under the Charles River to carry more flow from Cambridge over to the Boston side to help limit the overflows at Cottage Farm on the Charles River.

Sewer separation is underway in South Boston, being run by BWSC. The first phase was awarded in April and is going well. The second phase, in Brookline, will be awarded in January 2010. Brookline is managing this project and it is on schedule.

Another major challenge is the Deer Island Treatment Plant, parts of which have been running for more than ten years. This is a heavy industrial complex in a harsh climate. There are a whole series of capital projects to upgrade, repair and replace equipment that has been worn out through use or needs revitalization.

On water system upgrades, the Authority is moving toward improvement of redundancy in the system. Projects in Revere, Winthrop and Logan Airport are being worked on. Major upgrades to pump stations at Brattle Court, Hyde Park, Belmont, Reservoir Road and Spring Street will provide guaranteed better service for communities that receive at least part of their water from those pump stations.

For the first time since the early 1980s, the MWRA has adequate storage to the south with the completion of the Blue Hills Covered Storage facility. It will provide backup storage for Brookline, Quincy, Milton and parts of Boston.

There is a difference of opinion between the Advisory Board and the MWRA on the location of the low service facility. The MWRA is ready to sign the purchase and sale agreement to purchase nearly six acres of land in Stoneham to build two ten-million gallon tanks and a backup pump station to improve the way the MWRA operates the entire system north of the city. In an emergency it will have a dramatic effect for parts of Cambridge (when they need it), Charlestown, Chelsea, East Boston, Everett, Revere, Somerville and parts of Medford because MWRA will be able to pump out of that into the high service areas north of the City of Boston.

For the lower Hultman, the plan has always been to put in the MetroWest Tunnel and then rehabilitate the Hultman Aqueduct to provide redundancy and upgraded service. That contract has been awarded.

Ultraviolet (UV) disinfection at the Carroll Water Treatment Plant will be moving forward to comply with the federal rules, which require two different forms of disinfection and one that will kill cryptosporidium to a two count. MWRA will continue to use ozone in tandem with UV; the UV will kill cryptosporidium. With the UV, MWRA will be able to reduce the amount of ozone production required and contact time between a third and one-half and will actually be using less electricity with UV than with straight ozone.

Transmission and distribution redundancy is a long-term planning project that involves multiple staff of the Authority to plan what the system should look like. The new line up to the Northern Intermediate High service area with storage tanks will greatly benefit Stoneham, Wakefield, Woburn and Winchester. MWRA is hoping to build storage tanks to the north; however, staff is running into opposition from the elected officials in Reading who are concerned that the tanks are towering and will become the signature for the Town of Reading. Staff is moving forward with design, pending the decision on the tanks.

Another project moving along in the planning phase is a loop down to the Southern Extra High service area for the communities of Canton, Norwood, Stoughton and across Dedham-Westwood.

Staff made a request to modify MWRA's National Pollutant Discharge Elimination System (NPDES) permit and will soon move forward with discussions with the Environmental Protection Agency (EPA) on the new permit requirements. Staff is trying to hold off on any new requirements and reduce testing. There has been some talk that EPA wants the MWRA to become a co-permittee with the communities, so the communities would be part of the MWRA's NPDES permit. It is clearly tied to the stepped up enforcement we are seeing from EPA on the local communities.

Another issue that continues to be a challenge is declining water use. It is great public policy and for the environment; however, it puts the communities in a predicament as they try to forecast their budgets and what to set rates at.

Water system expansion remains an issue on the front burner. The Board has voted to have a facilitated discussion this fall. MWRA has hired, at Mr. Carroll's suggestion, a world-renowned facilitator from MIT who is doing his homework with the staff now in preparation for it. The hope is to get all the players in the room and come up with a sense of where there is agreement and where there is disagreement.

Another thing staff is watching closely is communities looking to leave the MWRA system, which they have the legal right to do. The reality is if a community like Framingham, which is a big customer, pulls out, about 2% of the rates are going to have to be redistributed among the other communities.

The flagger issue has been a huge challenge and has tied up an incredible amount of staff time. The MWRA is the only public entity on someone else's roads; the highway department is on its own roads, DCR is on its roads, the Turnpike Authority is on its own roads. The prevailing wage was set at \$30+ per hour for flaggers; the police are \$38 per hour. The Authority has had some success in using just the signs and flaggers have been used in eleven communities.

Invasives are a huge issue. MWRA has worked closely with DCR on the zebra mussels. MWRA does have an aggressive invasive management program that John Gregoire manages for the MWRA with DCR. The Wachusett Reservoir contains milfoil; there is none in the Quabbin at this point. Invasives have been a great challenge and will remain so moving forward.

MWRA is going to maximize the use of steam at Deer Island, building a steam-topping turbine to maximize use of steam that currently goes to waste, dramatically increasing the amount of renewable energy produced on Deer Island.

On alternative energy, staff is looking at other locations for wind power using stimulus funds. There is a plan to put a wind turbine at the pump station in Charlestown and a plan for wind turbines at Nut Island. Two turbines have already been installed at Deer Island. They will be turned on in the next three weeks and once on, MWRA will petition the Federal Aviation Administration to get the other three wind turbines placed there as well.

A WSCAC member asked if representatives from the watershed areas would be included in the facilitated discussions on the System Expansion Policy. Mr. Laskey responded in the affirmative saying their will be representatives from the Connecticut River, the Nashua River and WSCAC. There will be

someone from Smart Growth, the Advisory Board, the Board of Directors and staff; there will be a well-rounded group.

**E. PRESENTATION: LIFETIME ACHIEVEMENT AWARD TO THE HONORABLE DAVID COHEN, MAYOR OF NEWTON**

Chairman Dunphy noted that Mayor Cohen had an urgent event in the City of Newton and was unable to attend.

**F. COMMITTEE REPORTS**

**Operations Committee – Jay Fink**

**❖ PRESENTATION: PROTECTING OUR RESERVOIRS FROM AQUATIC INVASIVE SPECIES – Jonathan Yeo, Director, Division of Water Supply Protection – Department of Conservation and Recreation**

Jonathan Yeo, the Director of the Division of Water Supply Protection, gave an overview of aquatic invasive species control from the MWRA and DCR perspective. John Gregoire, MWRA Director of Reservoir Operations, and Bill Pula, the Regional Director of the Quabbin/Ware system for DCR, in charge of the Quabbin Reservoir, gave presentations as well.

Mr. Yeo said aquatic invasive species are a huge concern to all water resources across the country. It is a threat to the water supply and is something that the two agencies have been working together on over a number of years.

At Quabbin, DCR has two aquatic biologists who are expert in identifying invasive plants and animals and they perform regular surveys of Quabbin; fortunately they have not found any. In 2006, the MWRA commissioned a study by a consultant to do a comprehensive review of the reservoir and they produced a field guide that shows all of the plants at Quabbin and at this point they are all native plants, with the exception of phragmites, which is shoreline species that are also in the communities and is not something that staff considers to be a big threat to the water supply. The study will be done again within the next year or two.

This comprehensive survey also looked at the Ware River intake; the survey was done one mile upstream from the intake and nothing was found. In addition, DCR's aquatic biologists have been taking plankton samples to look at the microscopic organisms to see if there are spiny water fleas (which are an invasive organism that has come from the Midwest heading in this direction) or zebra or quagga mussels. They have not found anything along those lines.

DCR is also looking at the possibility of doing a tank simulation study where Quabbin water would be used to determine the viability, or lack thereof, of any of the mussel species. Staff is talking with researchers at UMass and other institutions about possibly doing this study.

John Gregoire, Program Manager of Reservoir Operations, said the three plants staff is primarily dealing with right now are Eurasian water milfoil, fanwort and water chestnut. Some of these plants can grow to ten to thirteen feet, they have thousands of tiny fragments on the plants, which is one way this plant propagates; they break off and drift downstream and take root and become a new plant.

In 1999, in Wachusett, the DCR aquatic biologists, then the Metropolitan District Commission (MDC), located the Eurasian water milfoil in the far upstream reach of Stilwater basin; it was mixed in with native plants and was under control but they were keeping an eye on it. The next year they started to see additional expansive growth and it actually jumped into the next downstream basin, Oakdale. At the time the MDC got together resources to hire a contractor to address the initial infestation. The following year MDC had some difficulty with contracting and it was brought to MWRA's attention. With Mr. Hornbrook's assistance, an emergency procurement was received and since 2002 MWRA has taken the lead on doing the procurement of invasive contractors for control of these plants. Every spring DCR deploys

floating fragment barriers in the upstream reaches of the basins. The fragments that accumulate are raked off leaving clean water.

When the plant first jumped into Oakdale basin, a two-acre benthic barrier was placed under water and anchored with rebar. It is a thick poly-tarp and it was successful in smothering all of the plant and it continues to be monitored. A couple of panels have been removed to see if native plants will come back.

Every year divers are sent in to pick the plants out carefully and bag them underwater, they fill the bag and hand it up to the boat tender and when the boat is full of bags, they will go to shore, carry it upwind and dump them and they decay on land. This is done twice a year, once in early summer and a follow up in the late summer to look for any regrowth.

In 2005, the aquatic biologist noticed that we had a sudden arrival of water chestnut, a highly aggressive plant, in the Sudbury Reservoir. Every year a contractor is hired for about one week to deal with this plant as well. This year it took two weeks because of an excessive amount of growth, they hand pull the material out before the end of August because it drops its seed in early fall.

Also Eurasian water milfoil is in about 25% of the Sudbury Reservoir in the northern basin. It is also in Framingham Reservoir No. 3. and staff is grappling with how to deal with it. It is too much to put a benthic barrier on; it is too much to put divers on; a dredging method or harvesting method can't be used because it spreads the fragments everywhere and it's an MWRA policy not to use herbicides on drinking water supplies or even back up supplies. Staff is still evaluating what to do.

Of all the emergency distributions, Chestnut Hill Reservoir was in the worst condition. The entire shoreline all the way around is about 75% to 100% of growth of Eurasian water milfoil. This is an important link in the emergency distribution system, even though it is a backup. Last year a pilot project was begun to draw the reservoir down, freeze off the exposed plant matter, it desiccates (basically the cells collapse) and kills the plant and then slowly return the reservoir to normal elevation. It worked well. This will be done two or three years in a row and then every other year as maintenance.

Mr. Yeo said DCR staff, in conjunction with MWRA staff, over the next six to eight months will do a more thorough survey and investigation of aquatic invasive species throughout the upper watershed areas. There are many lakes and ponds within the Quabbin, Ware and Wachusett watersheds that we do not control directly, or we have limited control, or no control at all. We would like to get a better handle on aquatic invasive species in those lakes.

Bill Pula, Regional Director for the Quabbin Reservoir, said we have been doing plankton studies on a monthly basis. With the discovery of zebra mussels in Laurel Lake in Lee, Massachusetts, the reservoir was closed to private boats. There has been a boating program at the Quabbin since 1952, with rental boats available and shore fishing in three areas spread out around the reservoir. Fishermen use their own boats as well. There are a lot of requirements on the boats; they can only have 20 horsepower motors and cannot be pontoon boats; they cannot have inboard motors. The motor has to be rated for twice the size of the boat so they are not speed boats. The fishermen must have a permit to launch their boat.

The pilot decontamination program was begun in July and then the program was implemented upon the reopening of the Quabbin for 600-plus boats.

Zebra mussels are tiny and out-compete the natives and affect water quality. Once they are there, you can't get rid of them easily. When zebra mussels were discovered at Laurel Lake, staff got very concerned and closed the reservoir on July 16 to private boats. After the closing and inspection was done. Water samples were collected and divers went in to all of the boat launch areas and the major tributaries. An inspection was done at the intake with an underwater camera. The intake structures are the type of thing that the zebra mussels clog; they get on the structure and proliferate all through it. The

divers found no evidence of zebra mussels. Zebra mussels are also a threat to the ecology of the reservoir too because they eat all of the things that other things should be eating.

J. R. Greene asked the size of an adult zebra mussel. Mr. Pula said they are about one-half inch or the size of the thumb nail.

Mr. Pula said that staff believes there is a low probability that there would be a strong infestation at the Quabbin Reservoir because the calcium level is quite low, with 2 to 3 parts per million. The zebra mussels usually need a higher number; however, nobody says “no risk” any more – everything is a risk. In the reservoir, chemistry doesn’t seem to be changing much since we have been doing studies (since 1989). We also have water quality data that goes back to the 1930s.

The pilot program was done for a Special Olympics Fishing Tournament at the Quabbin that ran with only twenty to thirty boats. The boats came in and the owners completed a survey and interview; staff asked where the boat had been, how often it was used to fish at other areas, etc. About half of the fishermen fish at other places besides the Quabbin.

The boats were inspected carefully, then decontaminated and sealed to the trailer with a chain and security seals. Each seal has its own serial number. The chain is secured to the trailer in a place where it can’t be easily removed. The boat leaves the decontamination station and goes to the fishing area. When the boat is launched, staff at the Quabbin records the number, breaks the seal and removes it. He launches the boat, fishes all day and comes back out and another seal is placed on the trailer and boat, the serial number is recorded and the boat can leave the area. It is a chain of custody seal. If the boat returns to the fishing area with one of these seals on, staff knows the boat has been no where else so there is no threat from aquatic invasives. An aquatic biologist was present much of the time. An environmental quality person did the inspections. MWRA staff supplied steam cleaners and a mechanic to help get the motors running.

The last day of fishing this year is October 17. The private boats can go home with a seal and show up on April 15 next year with the seal in tact and the boat can be launched. MWRA paid for the decontamination this year at a cost of \$80 per boat.

A comprehensive, watershed-wide, region-wide study of invasives and how to control them needs to be done. Boats are not the only potential source for Quabbin. At Quabbin, DCR owns over 60% of the watershed but does not own it all. There are tributaries running through streets and people’s backyards and other ponds out there that run into Quabbin that DCR does not control. Research needs to be done to determine which are the big threats and how they can be addressed. Each watershed needs a control program.

Eileen Simonson said there are problems nationally and internationally with ships emptying their bilges in harbors and on waterways like the St. Lawrence and others. This whole issue of boat hygiene, so to speak, is a national problem. Although there were some concerns about how quickly the Quabbin was shut down to private boats, everyone is genuinely coming to awareness that this is an ongoing issue and it is not just the quaggas or zebra mussels. This is a national issue and a national program is needed. A water supply gets priority.

Mr. Yeo said yesterday 13 trees with Asian Longhorn Beetles were found close to the banks of the Wachusett Reservoir. It is heading toward our forests and this is a gigantic problem that is going to have many different implications. The Quabbin has gone from a fairly low level program to a very high level program largely because DCR has the ability to control what happens at Quabbin Reservoir.

George Burnell said there is nothing more important than protecting this water. Any system that you put in for handling boats has to be 100%. A gated lot could be provided for Quabbin only boats. Mr. Yeo said he believed we are heading toward a Quabbin-only boat program. This winter DCR will be working

with MWRA to figure out the logistics of who pays for what and how people can come and go if they can. We know that this tag system works. It is used in industries all across the country to make sure that somebody hasn't broken a seal but over the winter we will be discussing this more with the MWRA and hopefully in December or January we will have further presentations and thoughts on where we are going.

Chairman Dunphy said invasives are an important concern to DCR, the Advisory Board, the MWRA Board of Directors and all of the communities that depend upon Quabbin and Wachusett for their water. We have heard the concerns of people who depend upon Quabbin as a wonderful place to visit for recreation, both for people who use the rental boats and the private boat owners who have had the privilege of taking their boats on Quabbin. As the communities, and the fact that we represent the ratepayers, we have to be concerned about the effects on the quality of the water from Quabbin and also the cost of the water from Quabbin.

Zebra mussels, and quagga mussels, their nastier cousin, came from northern Europe (Russia) to this continent through water in large ships that was discharged into the Great Lakes, which rapidly spread to the Mississippi River, all of the lakes, Lake Champlain and the Hudson River and despite efforts to restrict them to the eastern part of the United States they have reached the southwest, a hot dry climate, Louisiana, a hot, wet climate; and they are in the major Reservoir for the City of San Jose, which is in Silicon Valley; it is a great concern to the State of California because, like Massachusetts, the drinking water travels a long distance from its source to its customers. The Advisory Board is very concerned about the quality of the water, the costs that would be incurred if MWRA or DCR or any entity had to do maintenance and repair and replacement of water infrastructure. We appreciate the fact that DCR has also seen the gravity of this situation and is trying to do the right thing in terms of protecting the use of the Quabbin for everyone and also to protect the ratepayers.

Chairman Dunphy said the Advisory Board has developed a white paper and would like the full Advisory Board to discuss it and support it.

Advisory Board Representative to the MWRA Board of Directors John Carroll said he developed a motion that he was going to submit to the Board of Directors yesterday and it caused a storm of protest. Various people asked Mr. Carroll not to make the motion but rather to discuss the topic in November. The motion was as follows:

Whereas zebra mussels were discovered in Laurel Lake, in Lee, Massachusetts, in June of 2009; whereas a real potential exists that this invasive species could eventually invade Quabbin Reservoir causing widespread damage to the MWRA water supply and intake facility operations; whereas the most probable way that zebra mussels could move from any body of water to Quabbin would be by boats owned by private parties; whereas the MWRA Board of Directors is one of the two parties charged with the water supply for 2.5 million people, the other being DCR, which both agencies recognize the long-standing tradition of allowing private parties to fish in Quabbin Reservoir and wish to allow it to continue; whereas the recent emergency boat washing measures at Quabbin undertaken to protect against the invasion of zebra mussels are by their very nature subject to break down due to relaxed vigilance by those charged with implementing the program (and Mr. Carroll added that he didn't feel any more confidence in that program after what he witnessed today); whereas should such a calamity take place, not only would the MWRA and DCR be subject to understandable criticism and charges of dereliction of duty in allowing the current practices to continue indefinitely, and more importantly that MWRA ratepayers would be subject to substantial rate increases to try to repair the damage caused by zebra mussels; now then it is moved as follows that on or after June 30, 2010, no private boats of any kind will be allowed to use the Quabbin Reservoir; that this Board of Directors strongly recommends to DCR that the agency seek the necessary funds to purchase boats of sufficient size, number and type to allow fishing by private parties in the Quabbin Reservoir to continue indefinitely, that DCR be charged with responsibility of owning, operating and maintaining the rental program, that the cost for the purchase, operation and maintenance of those boats be capitalized over a period of ten years and that the charges

for rental of such boats to private parties be fixed so as to offset and defray the debt service for the program over a ten-year period thus making the program rate neutral to all of MWRA's ratepayers.

Mr. Carroll said he has no problem with the idea of Quabbin-only boats but he truly believes that boats are going to be the major way that zebra mussels are going to get into the Quabbin Reservoir. The boats should be Quabbin only, whether they be private boats that are stored there or rental boats.

In the staff summary the Board received staff did an assessment or survey of other reservoirs throughout the country looking at the national unfiltered reservoirs, Seattle, Washington – no private boating, no boats at all; Portland, Oregon – no/no; San Francisco, California – no/no; Tacoma, Washington – no/no; Bend, Oregon – no/no; and New York, on their reservoirs, boating – yes, non-motorized, private boating yes, must be kept at the reservoir.

Mr. Carroll said it is important to get this line of defense as impenetrable as possible. There are other ways for zebra mussels to get in there, but this particular line of defense I think has to be solid and secure.

J. R. Greene said he has represented the Quabbin and Ware River for eighteen years on the Advisory Board and obviously this is an important issue to him. Mr. Greene believes that Mr. Carroll's position is rather extreme. A lot of people own boats and they are very costly. They don't want to just store them in a fenced up pen somewhere. These fishing areas are several miles from civilization and out in the middle of the woods. Vandals could come out there and destroy the boats.

Laurel Lake is in Lee, Massachusetts, which is on the border with New York State. There is another Laurel Lake about 12 miles from the Quabbin in the town of Erving, Massachusetts as well.

Mr. Greene said that he feels that shutting off the private fishing boats, which was done a few weeks ago, was an overreaction. He understands the requirement to protect the ratepayers' water supply and its quality and that the aquatic invasive species are an extremely important issue for all people that have to deal with water quality. Certainly something has to be done at this time. The fact that more than 600 fishermen have had their boats go through this process of decontamination is a good sign that there are a lot of people who want to cooperate with this program. This is a sign of good faith on the part of people in central and western Massachusetts regarding invasive species.

Mr. Greene stated that recommendation four of the white paper (any chance, remote or otherwise, of the possibility of invasive species should immediately cause the banning of private boats) is a bit nebulous. If we get another one of these threats in some pond someplace in the state, we are just going to shut down the Quabbin; that is a bit of an overreaction.

Obviously fishermen may not want to go and get their boats decontaminated every spring but if that is what it takes, that will have to be done. It would be preferable than trying to do an on-site storage solution.

Mr. Greene said he supports recommendation two – understanding consequences and responsibilities – the fact that the Quabbin was shut down without prior consultation with the Quabbin Watershed Advisory Counsel or the Trust board, on which your chairwoman sits, for the expenditure of the monies of the Quabbin and Wachusett watersheds and also the funds that come from the ratepayers to support those things, that is very unfortunate and there needs to be some clarification of exactly what the chain of command is and the route of power.

This Advisory Board has statutory rights as far as dealing with the budget for the MWRA and also nominating three members to the MWRA Board of Directors so you have specifically stated reasons, legal things to do, whereas for the Quabbin Watershed Advisory Counsel and Wachusett Watershed Advisory Counsel, the word advisory is probably the more important thing but their advice is supposed to

be used in formulating decisions to do with these watersheds. The Trust is the agency through which the monies that are expended that are provided by the ratepayers for the DCR to manage these watersheds. A lot of unfortunate things happened because of this shutdown but it is over and it is done, there is a program in place and it needs to be evaluated. Maybe it is not perfect but it is better than the “nothing” you had before. This type of program is going to be a permanent feature. Invasives are definitely a serious problem but more consideration to the rights of people in the area that “donated” the water supply to this part of the state should be given.

Mary Booth said it seems like, at least with regard to zebra mussels, since the chemistry of Quabbin is thought to be unfavorable that at least with regard to zebra mussels as opposed to the other invasives, experimental work and monitoring work may assuage some worries if such work is carried out and found that they are not able to reproduce or grow in Quabbin water then it may be one less thing to worry about.

❖ **ACTION ITEM: ADVISORY BOARD WHITE PAPER ON PROTECTING OUR DRINKING WATER AGAINST AQUATIC INVASIVE SPECIES**

Mr. Favaloro said from our perspective, the most important thing is the protection of the drinking water supply for 2.5 million residents of Massachusetts and frankly the economic engine for the entire Commonwealth.

First and foremost, zebra mussels are just the illustration of a bigger problem – invasive species and how to deal with them. Is a little bit of risk worth the potential consequence of zebra mussels, which produce at a rate of 30,000 per day, a million over the course of the summer. It is not the size of the zebra mussels, it is their ability to reproduce that is the worry.

Working closely with our chairman and staff, we raised the questions to make the process as tight as it could be. From where it started to where it is is a dramatic improvement. It is a quickly and well put together program that is in place now that is light years ahead of where most other places are now. The Advisory Board’s criticism is constructive because we want to make it even better. Staff recognizes the work that has already occurred but you need to at least honestly state that a process to decontaminate 21 boats, which was the pilot program, to a program that has treated more than 600 boats is dramatically different. The protocols that were in play that had MWRA and DCR staff and an aquatic biologist directly participating to one now at a car wash is different. Is it not as effective? Those are the types of things that staff has raised over the course of the last month.

How do we get the most effective program? Is the pilot program the same as the program that is in place? If we are going to continue, how do we make it even better?

Many stand up and say there is no chance that zebra mussels can survive in Quabbin water. The levels of calcium are such that it won’t happen. Hopefully that is right but staff would like a testing program done with Quabbin water to get a better idea if we are out in left field. The Lake Tahoe study talks about the quagga mussels, which survived in lower levels of calcium. Within the report it said they found that zebra mussels can survive in low calcium water, they believe by using the calcium from its hard shell. Zebra mussels may be adaptable. Monitoring and testing is critical. At the very least it gives a better understanding of what can and can’t survive in our reservoir system.

The recommendation regarding the restriction of boating has evolved to one that talks about any chance, remote or otherwise, of invasive species, immediately ban all private boats. We may want to tweak that to include in the Quabbin Reservoir so it is not an invasive problem that is outside the Quabbin. It also states in the event that you don’t ban boats, you have to look at the protocols and ways to strengthen the decontamination process. Go back to the pilot program and go back to the program that is in place to try to strengthen them in ways that you can ensure as reasonably as possible that you are protecting the reservoirs from invasive species.

It also speaks to onsite storage of private boats, though that might be easier said than done. Staff could work to find out what it would take to satisfy the boaters that their boats are going to be safe and definitely close the last possible link to contamination because it would be in fact Quabbin only at that point.

In the area of cost, there is a huge risk. The easy one is that ratepayers shouldn't be picking up the cost to decontaminate boats. Ratepayers already fund most of the whole recreation program at the Quabbin; they should not have to pay, both in dollars and staff hours that have been committed to this program to date and in fact, what hasn't gotten done, because of all the time that staff has spent making sure that the program they put in play is as good as it could be. Ratepayers should be held harmless as far as costs associated with decontamination.

If in fact there is no chance that we are going to get zebra mussels at the Quabbin Reservoir, let's have a Memorandum of Understanding that in the remote chance that it occurs the state will pick up the cost to deal with the problem. A Wall Street Journal article noted that \$476 million in stimulus funds were set aside to help alleviate and control the problem of zebra mussels in the Great Lakes; however, the total cost is \$40 billion.

The last area is understanding consequences and responsibilities. To put it into perspective, staff wants the Authority or an independent party to come up with a financial analysis of costs and risks that would be associated with problems that would occur at the Quabbin and the other reservoirs. It would be interesting to have an idea of what the numbers would be as it equates to the Quabbin Reservoir and the MWRA drinking water system.

Who is in charge? Is it DCR, the MWRA, the Water Supply Protection Trust? What can they do and where does the Advisory Board fit in? It is important to get a legal opinion.

The Advisory Board's plan includes supplementing the availability of boats with rental boats in the event there is some banning or restrictions to private boats just to send the message that this isn't about eliminating recreational fishing at the Quabbin, it is making sure that it works in relation to protecting the drinking water supply.

Mr. Yeo said he wanted to add that the full decontamination program is even stronger than the pilot program. DCR has not cut corners during the full program. Staff learned lessons from the pilot program that strengthened the full program. DCR's professional environmental staff inspected every boat and tagged every boat. To argue that the full program is anything less than the pilot program is incorrect. There was no lessening of this program.

Mr. Yeo stated that the onsite storage of boats brings with it huge issues around building marinas at each of these three fishing areas to keep the boats onsite for the year, along with giant regulatory problems with DEP. The biggest challenge would be fuel storage. DCR does not store fuel at these fishing areas on the banks of the reservoirs. If private boats are stored onsite, fueling stations would need to be provided. DCR staff looked at what the cost would be to buy more rental boats and it is millions of dollars. It is hundreds of thousands of dollars of additional operating costs for additional staff to run marinas at these areas. DCR has already begun to analyze this and it will be discussed over the winter.

Paul Lauenstein asked if any thought had been given to ensuring that shore fishermen don't introduce an invasive species. Mr. Pula said a lot of the fishermen that come in with the private boats bring bait with them too; there is always a chance, but the likelihood is small. The water that is in the buckets is usually well water because it is the local town's water, which is the way they move the bait from place to place. Over the winter, we will do a more comprehensive look at all of this. There are other sources possible also.

Carol Antonelli said the most important thing I have heard for the ratepayer is the \$40 billion they are looking for in the Great Lakes. What if we are ever in that situation and we have to come up with that money? Who's responsibility will that be? Mr. Favaloro said that point came up at the Board of Directors meeting. Someone needs to take responsibility in the event that there is a problem. Speaking for the Advisory Board, that somebody is not going to be the ratepayers. If the Administration and DCR feel strongly and the program continues then they are going to be on the hook for the cost, we are not going to be. Mr. Yeo noted that there are aquatic invasive species in the reservoirs right now.

Mary Booth asked what happens to the rental boats with regard to storage and gasoline. Mr. Pula said the rental boats are small with small motors with three to five gallon tanks. A fuel truck with less than a hundred gallon tank fills the rental boat's tanks with five gallons, one boat at a time. For private boats, the program would need to be expanded by two to three times. Private boats are much bigger with built-in fuel tanks. The more trucks that move through the watershed with gas, the more chance you have for an accident.

Eileen Simonson asked if the tanks are emptied or are they just left on the boats during the winter. Mr. Pula said everything goes out during the winter.

Bernie Cooper said obviously there will continue to be a great deal of discussion. Many of us are bemused by the issue but the threat is obviously real because both the Authority and DCR staff are taking it seriously and have devoted a tremendous amount of resources to deal with it. The Advisory Board, representing the consumers of the water, needs to take a stand to protect the Quabbin from potential threats.

Jay Fink added in this post September 11 world, the proper procedure for a water supply is to take the most stringent standard at the onset and then follow with evaluations. What are other people doing? What is realistic? What is the level of risk that might be acceptable? Once all those things are done, then perhaps back it off and start to tweak the process. Let's develop the protocol and procedures now to the level that we need to get an acceptable level of risk, be that zero or something else and go through the process now and adopt these recommendations that are subject to modifications at a later date when more information is known.

George Burnell of Lexington said the communities should support this but I think you should work on means to provide even more protection than what you have done so far.

Bernie Cooper made a Motion **THAT THE ADVISORY BOARD ADOPT THE MWRA ADVISORY BOARD WHITE PAPER ON PROTECTING OUR DRINKING WATER AGAINST AQUATIC INVASIVE SPECIES**. It was seconded and passed, with J. R. Greene opposed.

**Executive Committee – Katherine Haynes Dunphy**

**❖ ACTION ITEM: NOMINATION AND ELECTION OF FY10 EXECUTIVE COMMITTEE**

Chairman Dunphy offered the proposed slate for the FY10 Executive Committee and asked if there were nominations from the floor. Hearing none, the following slate was submitted for consideration by the full Advisory Board:

Chair: Katherine Haynes Dunphy, Milton; Vice Chair of Finance: Bernie Cooper, Norwood; Vice Chair of Operations: Jay Fink, Lynn; Secretary: Edward Sullivan, Canton; Treasurer: John P. Sullivan, Boston. At-Large: Carol Antonelli, Somerville; Brian Carlisle, Quincy; Andrew DeSantis, Chelsea; William P. Hadley, Lexington; Timothy MacDonald, Cambridge; Zigmund Peret, Wilbraham; Winfield Peterson, Natick (new member for FY10); John Sanchez, Burlington; Louis Taverna, Newton; Walter Woods, Wellesley; (2) Vacant.

A Motion was made **TO ADOPT THE PROPOSED FY10 MEMBER SLATE AS THE FY10 EXECUTIVE COMMITTEE**. It was seconded and passed by unanimous vote.

❖ **LEGISLATIVE UPDATE**

Mr. Favaloro noted that some important legislative initiatives are coming up. First and foremost, hearings on the expansion of the Bottle Bill to include juice containers and water bottles will occur on October 7 at the State House. There are many versions of that bill. The Advisory Board and the MWRA are supporting a version that takes the unclaimed deposits from water and juice containers and puts them into a water and sewer infrastructure account, with those dollars to be disbursed amongst water and sewer infrastructure projects. The Metro Mayors' Association has offered full support to the Advisory Board's bill.

**G. ADJOURNMENT**

**A MOTION WAS MADE TO ADJOURN THE MEETING AT 1:50 P.M.** It was seconded and passed by unanimous vote.

Respectfully submitted,

Edward Sullivan, Secretary