

**MWRA ADVISORY BOARD MEETING  
JANUARY 19, 2012  
CHELSEA OPERATIONS CENTER  
TWO GRIFFIN WAY, CHELSEA, MA – 11:30 A.M.  
MINUTES APPROVED AT THE FEBRUARY 16, 2012 MEETING**

Forty people were in attendance, including twenty voting members: Mike Rademacher, ARLINGTON; Peter Castanino, BELMONT; John Sullivan, BOSTON; Jay Hersey, BROOKLINE; Andrew DeSantis, CHELSEA; J. R. Greene, GUBERNATORIAL APPOINTEE; Bill Hadley, LEXINGTON; Jay Fink, LYNN; Charles McCollum, MARBLEHEAD; Cassandra Koutalidis, MEDFORD; Katherine Haynes Dunphy, MILTON; Lou Taverna, NEWTON; Peter Smyrnios, PEABODY; Michael Coffey, QUINCY; Jeff Zager, READING; Nick Rystrom, REVERE; John DeAmicis, STONEHAM; Patrick Fasanello, WALPOLE; Zig Peret, WILBRAHAM; Joe Lobao, WILMINGTON.

Also present: Andrew Pappastergion and Joseph Foti, MWRA BOARD OF DIRECTORS; Michael Bishop, BELMONT; Richard Lagerholm, CAMBRIDGE; George Burnell, LEXINGTON; Robert O'Brien, WALPOLE; Ed Sanderson, CDM-SMITH; Jonathan Yeo and Joel Zimmerman, DCR; Lexi Dewey, WSCAC; Fred Laskey, Michael Hornbrook, Kathy Soni, Stephen Estes-Smargiassi and Pam Heidell, MWRA STAFF; Joe Favaloro, Matthew Romero, Magda Atanasov, Mary Ann McClellan and Cornelia Potter, MWRA ADVISORY BOARD STAFF.

**A. APPROVAL OF THE NOVEMBER 17, 2011 MINUTES OF THE ADVISORY BOARD**

Chairman Katherine Haynes Dunphy called the meeting to order at 11:40 a.m. Jay Fink, Vice-Chair of Operations, announced that former Advisory Board and Executive Committee Member Ted McIntire had passed away; he offered a moment of silence in his memory.

A Motion was made **TO APPROVE THE MINUTES FROM THE NOVEMBER 17, 2011 ADVISORY BOARD MEETING.** It was seconded and passed by unanimous vote.

**B. "DIRECTORS' " CORNER – John Carroll, Andrew Pappastergion, Joseph Foti**

MWRA Board of Directors Member Andrew Pappastergion said the Authority was successful in getting EPA to waive some of the requirements for lead and copper testing. Instead of testing twice a year, the communities that are on MWRA water are only going to have to test once a year, unless you have positive samples. This is a big victory for the MWRA and the communities. The Authority should be commended for pushing for this change.

Mr. Pappastergion said at the Board meeting yesterday, in his capacity as Chairman of the Administration and Finance Committee, staff put forth a proposal to set up a defeasance account. It is common knowledge that going forward into the future years with rate spikes that one of the best tools for mitigating some of those rate increases is defeasing some of the MWRA's debt.

Yesterday the Board voted to set up a defeasance account, which basically takes the variance from the debt service budget that is unexpended and puts it into this account, which has been earmarked for a defeasance transaction in the current fiscal year. This would mitigate some of the disheartening rate spikes that have been predicted in the 2014 and 2015 timeframe.

MWRA is still having discussions on system expansion; selling more water would be another way to mitigate the rate spikes. The Board has committed to that theory of expanding the water base and, on a limited basis, the sewer base as well. There have been discussions that the Executive Director has been involved in regarding expanding to Tri-Town (Braintree, Holbrook and Randolph), Ashland and North Reading.

Mr. Pappastergion reminded members that the Advisory Board worked hard back in the 1980s when the MWRA and the Advisory Board were first created and discussions back then revolved around whether or not to treat problems as a system or individual communities. It was a vote of this body that decided that problems would be treated as a whole system. Specifically, this relates to Combined Sewer Overflows, expansion of the water system and redundancy in the water system, which are all system-wide issues that affect all of us. He said even though certain benefits of some of these projects only affect one or two communities, all of the communities have to share in that because it eventually benefits all of us. This was the path that was set upon back in the 1980s and has governed us; we need to stay on that path.

**C. PRESENTATION: WATERSHED PROTECTION PROGRAM FY12/13 – Jonathan Yeo, Director of the DCR Division of Water Supply Protection, Office of Watershed Protection**

Chairman Dunphy stated that Jonathan Yeo, Director of the Division of Water Supply Protection (DWSP), came before the Advisory Board two years ago and gave a presentation on how the Department of Conservation and Recreation (DCR) DWSP protects the water supply and water quality. In April of that year, due to some pressure by the media and others, the Secretary of the Executive Office of Energy and Environmental Affairs put a moratorium on new logging contracts, which aren't really for logging purposes but rather for maintaining the diversity of species and ages at Quabbin and Wachusett. Now there are issues related to the Secretary's decision and for reasons beyond the control of DCR, there have been no new logging contracts put out. This affects the Massachusetts economy where there is less work for people and there is also the water quality, which is probably the main issue because there is a period of time where the forest management program has not been continuing the way it has in the past and the third issue is revenue.

Mr. Yeo said the DWSP is governed by the Water Supply Protection Trust, of which Fred Laskey is the Chairman of the five-member Board of Trustees. Katherine Dunphy, Advisory Board Chair, also serves as a member of the Trust. DWSP produces annual work plans and a budget. The DWSP has a close working relationship with the MWRA, with financial coordination and effective budgetary controls. Additionally, DWSP reports to several watershed advisory committees that provide advice.

DWSP has a reservoir operations working group and the two agencies work closely on managing the water supply system and water quality issues.

The DWSP has a \$14 million operating budget, give or take a million dollars in revenue from hydropower, forestry, fishing and transmission line agreements. There are about 145 staff

members – labor, trades, engineers, scientists, planners, rangers and some seasonal staff to help various summertime programs. The Payment in Lieu of Taxes (PILOT) Program is an expensive program to compensate municipalities for the land that DWSP owns in the watersheds and the division also has a land acquisition funding mechanism.

DCR owns a lot of land in the Quabbin, a fair amount of land in the Ware River, and over the last 20 to 30 years, has bought a lot of land and other agencies have protected a lot of land in the Wachusett watershed, which was a key factor in getting the filtration avoidance determination through the courts and from DEP.

Step one in the great water supply system is to have lots of protected water supply reservoirs and tributaries. Additionally, there is a real mixture of suburbanized lands with lots of protected land but then lots of private land as well. The great reservoirs help filter the water and the John J. Carroll Water Treatment Plant results in great tap water at the end.

Organizationally, DWSP has a watershed protection plan that was updated in 2008. As part of that plan, there is a public access plan where staff determines the type of access the public can have in and around the watersheds. There are also land management plans for each watershed that detail forestry, road network and other land management efforts that are underway to protect the water supply. There are other planning processes around invasive species and wildlife and water quality as well.

Every year an annual work plan is presented to the Water Supply Protection Trust and is voted on by the Trustees. It takes all the goals and objectives of these plans and puts them into specific tasks; each quarter staff reports on that progress to the Trustees.

There are four goals in the watersheds. Number one is to protect land through ownership or agreement; number two is to manage the properties to protect or enhance water quality and provide stewardship of natural resources; number three is to work with the watershed communities to foster protection on private land; number four is to monitor and identify potential or existing water quality problems. There are various programs to address each of these. The continuing challenges and threats include: poor development, hazardous materials spills, wildlife, catastrophic events, invasive organisms, and infrastructure repair.

Many of the fastest growing towns are in Worcester County; there are a couple of large developers that like to take down entire hillsides as they put in subdivisions. The Watershed Protection Act provides resources to help control the development and DWSP has some money for land acquisition to help offset some of the development. Staff also offers assistance to towns to enhance their local bylaws to protect the water system.

The Watershed Protection Act is a 1992 law that protects and provides some regulatory powers for DCR for regulating land use within 400 feet of surface waters and tributaries and there is a whole process that people have to go through to do even a small project. DWSP has a dedicated team of planners to implement the program.

The land acquisition program has been very effective and is based on a scientific model to identify top priority sites in all of the watersheds for acquisition. DWSP has also bought a lot of Watershed Protection Restrictions (WPRs), which are essentially development rights, especially in the Wachusett watershed. Between WPR land and land acquisition and other agencies, DCR owns about 71% of Quabbin, 50% of Ware and 44% of the Wachusett watersheds. In addition to

using MWRA's money, staff tries to utilize federal monies as well and have been encouraging land owners to give the land to DCR as a gift so they can get state and federal tax benefits.

Staff provides community technical assistance, working with conservation commissions and boards of health to promote water supply protection with the partner municipalities.

Terrestrial, aquatic and insect invasive species remain a large challenge. Terrestrial invasive species include the Japanese barberry which has been found at the Quabbin. The foresters prepare these plants for burning with a propane torch.

DWSP has developed a plan with the MWRA to address aquatic invasive species that come near the reservoirs, tributaries, lakes and backup reservoirs. It is a high priority and there has been a high degree of cooperation between the two agencies. The bottom line concern about aquatic invasives is damage to the infrastructure, destruction of the eco-system and changing of water quality from various species. Milfoil, water chestnuts, fanwort, mussels and hydrilla are some of these invasive species.

Hydrilla was discovered two years ago in the South Meadow Pond in Clinton, which is close to the watershed. Staff moved quickly with the help of the Trust to bring in some consultants and do some treatment. The concern was that a fisherman could bring this into the reservoir. This has been controlled effectively.

DWSP's aquatic biologists also do a lot of microscopic work to make sure there are no small organisms that will cause problems.

The boat sealing procedure at Quabbin ensures that boats that are coming to Quabbin are not carrying an invasive species from any other water bodies. The program has been enormously successful.

The Asian Longhorn Beetle (ALB) has been an infestation based in the City of Worcester and has caused a multi-million dollar deployment of resources from the federal and state governments. This is the worst infestation of ALB in the United States by far. It is a very damaging beetle that takes apart the tree over a number of years. The infestation in Worcester is now believed to be 12 to 15 years old. It started with infested pallets that came from China at an industrial facility in Worcester. It devastated the Worcester landscape; many trees have been taken down and a replanting program has been done. Worcester is very close to the Wachusett watershed, which is of great concern. If it were to spread to the watersheds, it would be much more difficult to control. It is a large priority for the DWSP.

Gulls continue to be a problem because they seem to like to roost at the MWRA intakes. The number one task for staff in fall and winter is dealing with gulls. Staff has done a study by putting wing tags on gulls; more than 1,000 people have called to report these gull locations. There have been calls from northern Canada and Florida. Radio transmitters were attached to two gulls to track their movements to try to understand their roosting and feeding behaviors. There is a real problem with people feeding gulls in parking lots. The gulls should be coming from Canada and flying to New Jersey, maybe staying in Massachusetts for a day or two on the way but instead they are being fed here so they are staying here and are trying to roost at night on the reservoirs.

Staff has been working with Wal-Mart and other big shopping centers to install signs and pass out literature trying to prevent people from doing these mass feedings. DWSP has also worked with

Worcester and Leominster and a few other towns to implement local bylaws to prevent feeding of gulls. The signs say “Help keep wildlife wild.”

Unintentional large scale feeding of gulls was taking place at several wastewater treatment plants. Wires have been installed over open basins with the help of the plant managers and these wires have been incredibly effective in keeping gulls out.

Another problem is landfills where there is a turnover of materials. There are various state rules that say the landfills are supposed to harass the gulls to keep them away. Staff is working to make sure that DEP enforces that rule.

Two air boats that can go on water and ice are used to chase gulls every night. Pyrotechnics and other means are used to harass the gulls. Experiments are now being done with a high-powered laser; the gulls have been quite frightened by the laser.

In regard to hazardous materials spills, there are roads and railroads in close proximity to the reservoirs and tributaries. At Wachusett staff has identified the worst spill locations in and around the watershed and has worked with a team from the University of Massachusetts to identify and do some modeling of spill potentials. These efforts have identified how many days it would take contaminants to get to the intake from different locations.

MWRA has deployed an emergency response trailer with various equipment at a nearby center. Staff has spent a lot of time on boom training on the reservoirs, which has been coordinated by John Gregoire of the MWRA, using DCR staff as well as efforts from the local fire and emergency response teams.

DCR has provided a Wachusett Regional Household Hazardous Waste and Recycling Center in West Boylston. It is a non-profit facility that is on DCR land and volunteers from seven watershed towns run this on a weekly basis.

Catastrophic events such as infrastructure damage, threats to water quality and forests are clean up issues. Tornadoes, hurricanes, ice storms, snow storms, nor'easters, and micro-bursts – the watersheds get them all.

The backbone of the water supply system is the watershed forests. This is an unfiltered system, but really the forests and reservoirs are filtering the water supply. The ideal watershed protection forest is a diverse, multi-layered forest that is vigorous and diverse; it reproduces and controls erosion and sediment, accumulates biomass, regulates temperature, and is patterned in a way that produces its diversity; it is resistant to major events and is resilient over many years of change. At the same time, the habitat and cultural resources are protected and the water supply has remained among the cleanest in the world.

Currently, there is a committee of professional foresters, hydrologists, wildlife biologists and others reviewing DWSP's forestry program. There are a number of older forestry projects that are still ongoing but there was a moratorium put down for any new projects. At this point, staff is waiting for Chairman Paul Barten, who is from U-Mass, to release the report. Staff is hopeful that he will be releasing something within the next few weeks to show to his committee and then on to the advisory committees and MWRA.

## D. COMMITTEE REPORTS

Operations Committee – Jay Fink

### ❖ CHANGES TO MWRA DISINFECTION BYPRODUCTS MONITORING PLAN – Stephen Estes-Smargiassi, Director of Planning

MWRA Director of Planning Stephen Estes-Smargiassi said yesterday he presented to the MWRA Board of Directors where the MWRA stands with water use as of 2011. In 2010, water use had bumped up slightly; 2011 was a more typical year, declining again. Reservoir withdrawals, which is the number compared to the 300 million gallon per day (MGD) safe yield, were down to 195 MGD. This continues a trend that has been in place fairly unabated since the demand management program was instituted back in 1987.

One of the things staff looks at carefully each year is base demand, which is the demand that occurs indoors. Staff measures it as total demand in fully supplied communities from November through March when there is not much outdoor water use. In the last dozen years, there has been a steady 3 MGD drop, roughly a 1.8% drop per year in that base demand. Staff attributes this to appliances and plumbing fixtures that use less water and people using water more efficiently.

After 15 to 18 years, EPA has revised its rules on microbial contamination, things like *cryptosporidium* and *giardia* and disinfection byproducts. The new rule called the Stage 2 Disinfection Byproducts Rule will come into effect this spring. It is a sampling program where each community needs to have one sampling site. MWRA will do that sampling as it always has for disinfection byproducts but it means that staff will be going from 16 sites across the metropolitan area to 30 sites. Staff has shown that it can effectively and efficiently do that testing and is about to submit the final sampling plan to the regulators. Those sites are typically going to be sites where sampling is already done.

The way compliance is calculated will be changing. Under the existing rules, staff is required to take all the samples each quarter from the 16 sites and average them; then four quarters are averaged. The new rule, because they were concerned that there might be places in some systems where individual locations could be much higher than others, requires that staff look at each sampling site. Rather than averaging all 30 sites in the future, there will be an average of four quarters at each site and what will govern will be the highest site across the whole metropolitan area.

Testing will be done by the MWRA for fully supplied communities. If a community is partially supplied, they must do their own programs.

Executive Committee – Katherine Haynes Dunphy

### ❖ LEGISLATIVE UPDATE

MWRA Advisory Board Executive Director Joseph Favaloro said next week the governor will come out with his view on the FY13 State Budget. Clearly of interest to the Advisory Board is whether there will be a Debt Service Assistance (DSA) line item; at this point in time, it looks highly unlikely.

The good news is that state revenues are up significantly but it is countered by the bad news that state expenditures are exceeding the expanded state revenues because of a lot of the mandatory programs.

Staff plans to focus on the House and the Senate to try to have funding included for DSA.

❖ **RECONVENING OF THE CONSTRUCTION IMPACT REVIEW BOARD (CIRB)**

Mr. Favaloro said many years ago the Authority and the Advisory Board instituted a committee that would work with the Authority and any given community on issues about construction mitigation and the impacts of construction. It has been a standing committee of the Advisory Board but it hasn't convened since 1995.

The Executive Committee would like to reconvene that committee so that in the event the committee needs to meet, the individuals would be in place.

If any members are interested in serving on this committee, please contact staff and the names will be turned over to the Executive Committee to make a determination.

The specifics of the committee are as follows: four members of the Advisory Board will serve on that committee, with three voting at any given time and the fourth serving as an alternate; and two members of MWRA staff, specific to what the issue may be.

**Finance Committee** – Bernard Cooper

❖ **CREATION OF A JOINT LONG-TERM RATES MANAGEMENT COMMITTEE**

Chairman Dunphy said at the request of the Advisory Board, a joint Long-Term Rates Management Committee will be created to take a thorough review of how MWRA will manage through the next ten years, particularly with all the debt that has been loaded on. If members of the Advisory Board would be interested in participating on this committee, please contact staff.

❖ **STATUS: ADVISORY BOARD CIP/CEB REVIEW**

Manager of Policy and Finance Review Matthew Romero stated in December, the MWRA Board of Directors voted to transmit the Proposed FY13 CIP to the Advisory Board for its review and it is anticipated that the proposed CEB will be formally transmitted next month.

Staff has begun scheduling briefings to look at what the proposed budgets entail and is working with budget staff to undertake its review in the integrated format.

Through December, on the CEB side, the Authority is \$8.2 million below budget (2.6%), with the largest part due to favorable variable rates, as well as delayed SRF borrowing. Other drivers are maintenance, largely due to timing and project delays, and workers' compensation, which is traditionally a difficult line item to budget and predict.

As Mr. Pappastergion indicated, there is a new defeasance account being set up; it is staff's understanding that the intention of this account is to recognize that the funds were appropriated from the ratepayers and it is an acknowledgement that is where the funds would be preferred to be directed as long as trends don't reverse by the end of the fiscal year.

On the CIP side, all the programs are slightly overspent. The total overspending is at \$8.4 million. The wastewater side is \$7.3 million over, largely due to the timing of CSO projects in the communities and interception and pumping has been overspent; however, treatment and residuals have been under spent.

On the water side, the transmission program is over by \$3.2 million due to the acceleration of the Hultman rehabilitation. The winter has been so mild that the contractor has been able to work ahead of the accelerated schedule.

The distribution and pumping program has been overspent by \$2.3 million, largely due to additional costs for the Northern Intermediate High Reading/Stoneham interconnections, as well as the Lynnfield pipeline.

Business and Operations is overspent by \$705,000 because the Charlestown Wind Turbine was budgeted in FY11 but was finished in FY12; however, stimulus monies paid for this project, it is not actually ratepayer money.

Mr. Favaloro added that next month the MWRA will be before the Advisory Board to present the proposed CIP and CEB for FY13 and will be providing communities with their preliminary assessments on the water and wastewater sides.

#### **E. ADJOURNMENT**

**A MOTION WAS MADE TO ADJOURN THE MEETING AT 12:50 P.M.** It was seconded and passed by unanimous vote.

Respectfully submitted,

Lou Taverna, Secretary