

**MWRA ADVISORY BOARD MEETING
JUNE 20, 2002
STATE HOUSE
ROOM 350, BOSTON, MA**

MINUTES APPROVED AT THE SEPTEMBER 19, 2002 MEETING

Twenty-one members were present: Guy Carbone, BELMONT; John Sullivan, BOSTON; Timothy MacDonald, CAMBRIDGE; Ed Sullivan, CANTON; Albert Renzi, FRAMINGHAM; Barbara Wyatt, GUBERNATORIAL APPOINTEE; Ralph Pecora, LEXINGTON; Ed Bates, MAPC; Lenny Riley, MEDFORD; Peter Hersey, MELROSE; Katherine Haynes Dunphy, MILTON; Lou Taverna, NEWTON; Bernie Cooper, NORWOOD; Joseph Delaney, READING; Thom Donahue, SOMERVILLE; Silvio Baruzzi, SWAMPSCOTT; David Savoy, WALTHAM; Walter Woods, WELLESLEY; Earl Forman, WESTON; Michael Woods, WILMINGTON; Elizabeth Cregger, WINCHESTER.

Also present: John Carroll, Andrew Pappastergion and Joseph Foti, MWRA BOARD OF DIRECTORS; Bob Rooney, NEWTON; Don McCabe, WALTHAM; Robert Antico, WILMINGTON; Jean Hogan, Representative Rogers' Staff; John Shawcross, Frank DePaola and Mary McCarthy, MWRA STAFF; Joe Favaloro, Cornelia Potter, Ryan Ferrara, Nathalie Grady and Mary Ann McClellan, MWRA ADVISORY BOARD STAFF.

AGENDA

A. WELCOME

Chairman Katherine Haynes Dunphy called the meeting to order at 11:56 a.m.

B. APPROVAL OF THE MINUTES FROM APRIL 25, 2002 AND MAY 16, 2002

A Motion was made **TO APPROVE THE MINUTES FROM THE APRIL 25, 2002 AND MAY 16, 2002 ADVISORY BOARD MEETINGS.** It was seconded and passed by unanimous vote.

C. REPORT OF THE EXECUTIVE DIRECTOR

Joseph Favaloro, MWRA Advisory Board Executive Director, stated that the Advisory Board's field trip has been scheduled for August 8, 2002 and will focus on the start up of the Walnut Hill Water Treatment Plant. The field trip will provide an opportunity for members to go into the MetroWest Tunnel in small groups.

A straw poll of members at the last Advisory Board meeting determined that the FY03 meetings will be held as daytime luncheon meetings.

There are two openings on the Executive Committee for FY03. Notices will go out in August detailing the election process for interested members. Additionally, in August, the Water and Sewer Retail Rate Survey will be sent out as well.

D. PRESENTATION: START UP OF WALNUT HILL WATER TREATMENT PLANT – John Shawcross, Director, Capital Engineering and Frank DePaola, Acting Deputy Director, Capital Construction

John Shawcross, Director of Capital Engineering, stated that the major Waterworks Projects have a \$1.7 billion budget. MWRA has been working closely with MDC on watershed protection and has made improvements to the disinfection system by adding disinfection at the Reservoir Intake and improved the disinfection downstream at Norumbega Reservoir. The MetroWest Water Supply Tunnel is the major \$600+ million project paralleling the Hultman Aqueduct and will provide redundancy from the treatment plant in Marlborough to Route 128.

It is going to take 90 working days to make a connection to the Cosgrove Tunnel so MWRA will need to have a back up water supply during this period of time. Staff has been working to rehabilitate the old Wachusett Intake Aqueduct by putting a lining inside the Aqueduct to ensure that it won't fail during service. It will be tested later this year and will provide 240 million gallons a day. At WHWTP it will have to run under the storage tanks because there is not enough pressure yet and will go into Shaft D and run to Shaft E (above Sudbury Reservoir) cross over to the Hultman aqueduct, run to the MetroWest Tunnel and come up to the surface at Norumbega. All of these operations must be tested and running before connecting to the WHWTP.

In November 2003, the plan is to connect to Shaft C at the Hultman Aqueduct and put in a direct connection to WHWTP. Shaft B needs to be raised because additional pressure is needed to push the water through the new water treatment plant. When the connection is completed about May 2004, MWRA will then be able to turn the Cosgrove Tunnel back online and run the water through the treatment plant. At this point it is not being treated since the ozonation equipment will not yet be running and water will still be chlorinated. There will be temporary disinfection facilities at the Wachusett Intake and the Norumbega Covered Storage facility because chlorination will still be needed at that point. When connected back to the Cosgrove system, MWRA will be back on line with the original Shaft A disinfection system.

The interim corrosion control facility, which raises the pH and the alkalinity of the system, will be re-piped to feed into the water from the Wachusett Aqueduct to get corrosion control. The system will be put back together, except it will now go down the Cosgrove Tunnel, through Shaft C, by the water treatment plant into Shaft D and on into the system. At that point there will be sufficient water to test the treatment plant facility.

Frank DePaola stated that when the Cosgrove Tunnel is reactivated, the current transmission system will be restored to its current configuration and the water will be maintained at its current quality standards and pressure capacity. The renovations at both the Wachusett Reservoir and Cosgrove Intakes and tunnel will allow staff to take enough water from the Cosgrove Tunnel to do an extensive series of tests of the treatment plant in parallel with maintaining water supplies of the system.

The treatment plant is made up of a series of four ozone units. The primary disinfection treatment will be ozone and the corrosion control process will still be in place. Fluoride will be added at the plant and MWRA will also do secondary disinfection to reduce the residuals in the resultant water. Each of these systems, once we have water supply running in the plant will be tested individually and in concert together to ensure water quality. MWRA can take a segment of the plant out for maintenance at any time in the future and can still maintain at least 75% of flow capacity.

After each individual system test is done, there will be a 45-day period of plant simulation. Each of the four segments of the plant can run up to 80 million gallons individually, so when all four are running parallel, depending on the water demand, there will be a simulation close to peak design of 400 million gallons per day.

The Contractor has to match 15 days of uninterrupted run time, continuous 24 hours per day, before a system is finally accepted. When each of the systems are accepted, the Authority can then go online by transferring the plant to the MetroWest Tunnel. The Contractor, for the first 30 days of run time, guarantees that there will be no breakdowns during that 30 days and supplies all power and chemicals during that period of time. At that point, assuming that it meets all the criteria, the MWRA will accept the plant as an operating facility. If at any point during the 30 days something breaks down, the Contractor has to make the repairs and then the clock restarts and an additional 7 days are added.

When the process is finished, the new transmission system, including the renovated Cosgrove Intake, the Walnut Hill Water Treatment Plant, Norumbega Covered Storage and the MetroWest Tunnel will all be online by the end of the calendar year 2004.

John Sullivan asked if MWRA has conducted an enhanced vulnerability analysis for the plant. Mr. DePaola stated that there is an extensive security component in the design, which has since been enhanced. Staff is in the process of finalizing a change order to upgrade the security system for more surveillance card access. There is an inherent benefit to security by taking open water storage and putting it in reinforced concrete locked vaults underground. When the program is complete, all of MWRA's drinking water supply will be in Covered Storage or behind locked doors that have access control and video surveillance.

Guy Carbone asked the current status of filtration. Mr. Shawcross stated that it is off the table. Staff will come back to the Board in 2004 to give an assessment of whether additional treatment will be necessary. One issue is whether the ozonation facility will be effective at very low temperatures and if not, what would we do about it? One of the solutions MWRA is looking at is Ultra Violet (UV). Staff is about to do tests of ozone and UV, independently and in combination. UV is extremely effective against cryptosporidium and giardia. At some point, it might be worthwhile to incorporate UV into the existing treatment plant.

E. COMMITTEE REPORTS

Finance Committee – Phil Farrington

❖ STATUS: CIP/CEB REVIEW PROCESS

Cornelia Potter stated that the Authority is planning to spend over \$1.6 billion over the next ten years on its Capital Program, more than half of which will be spent in the next three years (nearly \$900 million). The key recommendation that the Advisory Board made in its review addressed the issue of how the Capital Program cap is administered. Advisory Board staff recommended that the Authority should not borrow from the new tenth year of the ten-year program each year because cost increases and new projects are shifted into the earlier portions of the ten-year period. The Authority disagreed but conceded to reconvene the CIP Review Committee, with representation from the Board of Directors, the Advisory Board and both staffs to talk about how the cap has been working and whether modifications are required.

On the Current Expense Budget (CEB) side, the Authority's final budget is over \$400 million in rate revenue, with an overall rate increase of 2.9%. It supports a budget, before the offset of debt service, of \$515 million. A number of key themes and issues need to be monitored, including staffing. The Early Retirement Program pushes the Authority toward the Black and Veatch target for FY03, but for FY04 and beyond, it will continue to be a challenge for the Authority.

Another key area is capital financing. With the next major ten-year anniversary of borrowings coming up this summer, the Authority has significant opportunities for restructuring and refinancing existing debt. Continuing in the late fall, the 1993B issues will also come up, so there are two important opportunities for the Authority to consider refinancing and restructuring debt.

A third category is the development of a Comprehensive Regulatory Strategy for the Authority on the CSO Control Program, harbor research, energy generation and schedules for other projects such as the Clean State Initiative that involve relationships with federal and state agencies. The Authority staff should take more of a global view on how it approaches goals and schedules that fall under regulatory purview.

Staff continues to work with the Authority staff on the subject of Energy Management. The Authority has a significant energy demand, one of the biggest categories of spending after staffing. With start up of new facilities looming closer, how can the Authority position itself with respect to Deer Island supplies? What kind of schedule should it pursue? The current contract is for 17-months. Should the Authority design the next Deer Island contract to not go beyond or just slightly overlap the start up of Walnut Hill and the new Weymouth Pump Station? The Advisory Board is encouraging staff at the Authority to address this kind of thinking earlier rather than later.

Another important topic is the MDC Division of Watershed Management (DWM) and its ability to meet its watershed protection goals, especially with budget constraints. The Advisory Board staff has recommended that the Authority consider the transfer of DWM to the Authority to ensure accountability and adequate management.

Executive Committee – Katherine Haynes Dunphy

❖ **LEGISLATIVE UPDATE**

Mr. Favaloro relayed the good news that through the support of the Legislative Caucus and leadership, MWRA and the debt service fund were spared a major cut. There is \$55.5 million allocated for debt service assistance for this year. The Authority's approximate portion will be about \$47 million, supporting a 2.9% overall rate increase.

The Governor has announced that revenue projections that have already been downsized three times in the past six months were \$540 million too high; this means more funds must be taken from tobacco and rainy day funds just to get through FY02. If the economy does not begin to turn around, for FY04 there is substantial potential for cuts in debt service assistance.

Between the House and the Senate, the maximum amount of money that will be available for the operation of the DWM will be \$8.9 million. Over the last three fiscal years the number has approximated anywhere from \$10.7 million down to slightly over \$10 million. Thus, there is a \$1.8 million reduction in funds available to provide the Division with the resources to accomplish its mission.

The case that the Authority put forward successfully to avoid filtration was that you needed a “three-legged stool”. One of the legs on the stool was the ozonation plant and covered storage. The second leg was the \$25 million per year loan program for communities so that they can make repairs to their local systems. Two plus years into the program, spending is not approaching anywhere near the \$25 million per year budgeted.

The third leg of the stool is protection of the watersheds by DWM. The lack of accountability and a lack of funds could further diminish the ability to provide watershed protection. If all three legs of the stool are not as stable as before, that will become the critical point that filtration discussions begin again.

Each year there is \$500,000 set aside through the MDC budget (not through the Watershed Division) for the Clinton Wastewater Treatment Plant, which is sent to Clinton. Clinton then submits the \$500,000 to the MWRA for payment for the treatment plant. Two days ago staff found that there is a problem with the transfer language in the FY02 budget. At this juncture, the MWRA has not received its \$500,000 for FY02.

❖ PRESENTATION: MWRA ADVISORY BOARD SYSTEM EXPANSION COMMITTEE RECOMMENDATIONS

Ms. Dunphy stated that the System Expansion Committee was reconvened last fall and has held 11 meetings to review the existing System Expansion Policy on whether it would be advisable to alter the existing policies.

For water, the Committee decided that there are additional costs when MWRA provides water to a non-member community and it is fair that the non-member community pay those additional costs so that, under the proposed changes for all emergency connections, the receiving community will pay a 10% premium charge. The premium charge will only apply if water is actually used and will increase with each water withdrawal. In the fifth period of water withdrawal, the community would be asked to present a detailed plan on its long range plans to address water supply problems.

On the wastewater side, the first proposed change is to remove the five-year moratorium on communities applying to enter the wastewater system.

Additionally, any entity that joins is required to offset its flows by a 4:1 reduction of peak inflow, downstream of where it is entering to ensure that it does not cause problems in the transport system. Flow removal must be documented. Updates will be provided to the MWRA and the Advisory Board on an annual basis. The work must be done before the entity can join the system.

Ryan Ferrara stated that the 2001/2002 System Expansion Committee Mission Statement is: TO PROVIDE THE MASSACHUSETTS WATER RESOURCES AUTHORITY BOARD OF DIRECTORS WITH RECOMMENDATIONS FOR ANY NECESSARY REFINEMENTS TO THE EXISTING SYSTEM EXPANSION POLICIES OF THE MWRA.

Regarding water/system expansion, in addition to premium charges to all emergency water connections, the MWRA shall also assess an asset value contribution charge. Applicant communities usage would be capped and any increase beyond that specific amount would require a contract revision and the process must be reopened.

The key item on the wastewater side is the lifting of the moratorium for a community or significant portion of a community to seek entrance to the MWRA sewer system. A verifiable removal of 4:1 peak inflow for all new communities based on DEP's one-year, six-hour storm will be required. Flow removal reports on how the 4:1 reduction will be achieved within the transporting community and/or downstream are also required.

Any community seeking entrance to the MWRA water and/or wastewater system must provide a Comprehensive Water and Wastewater Master Plan and the Committee recommends that the Authority require that the community of origin, transporting community and proponent entity seek to develop the appropriate institutional arrangements regarding management, maintenance and auditing procedures.

General recommendations for both the water and wastewater side include adoption of language to ensure that the entity seeking legislative approval specifically refer to the existing rules established in the MWRA System Expansion Policies; provision of an annual update to the MWRA Board of Directors regarding new water and wastewater connections; update on I/I progress; payments that the entity has made and ensuring that the conditions of approval are met. The System Expansion Committee will reconvene in five years.

The System Expansion Committee requested that members take time over the summer to review the proposed changes and come back for a vote at the next Advisory Board meeting.

John Carroll stated that, at the last Executive Committee meeting, Walter Woods had a good idea. Rather than have a community go through the 4:1 reductions, establish an amount of money and have the applicant pay it to the Authority to come back out to the cities and towns to help everyone.

Ms. Dunphy responded that the Committee was trying to stick to the no negative impact focus and would want to see the work done within the lines of the towns affected and beyond. The Committee wants to ensure that no community has to experience surcharges, overflows and backups because a new community joins.

Operations Committee – Jay Fink

❖ **UPDATE**

Mr. Favaloro noted that the Operations Committee will reconvene in the fall.

F. QUESTIONS AND COMMENTS

G. ADJOURNMENT

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

Respectfully submitted,

Edward Sullivan, Secretary