

**MWRA ADVISORY BOARD MEETING
OCTOBER 21, 2004
STATE HOUSE
ROOM 350, BOSTON, MA**

Minutes Approved at the November 18, 2004 Meeting

Forty-seven people were in attendance, including twenty-two voting members: John Sanchez, ARLINGTON; Peter Castanino, BELMONT; John Sullivan, BOSTON; Ed Sullivan, CANTON; Andrew DeSantis, CHELSEA; Jon Norton, EVERETT; J. R. Greene and Barbara Wyatt, GUBERNATORIAL APPOINTEES; William Hadley, LEXINGTON; Jay Fink, LYNN; Bruce Kenerson, LYNNFIELD; Doran Crouse, MARLBOROUGH; Don Ouellette, MEDFORD; Katherine Haynes Dunphy, MILTON; Gerry Rovner, NEEDHAM; Lou Taverna, NEWTON; Bernie Cooper, NORWOOD; Ted McIntire, READING; Barbara Stevens, SOMERVILLE; Ralph Pecora, WALTHAM; Walter Woods, WELLESLEY; Earl Forman, WESTON.

Also present: John Carroll, Andrew Pappastergion and Joe Foti, MWRA BOARD OF DIRECTORS; Walter Heller, MILTON; Glenn Garbati, EVERETT; Jimmy Gibbons, WINCHESTER; Representatives Robert DeLeo, Ronald Mariano and Paul Donato; Former Speaker of the House Thomas Finneran; Senate President Robert Travaglini; Senator Stephen Brewer; Alexis Finneran and Christopher Klaskin, REPRESENTATIVE EUGENE O'FLAHERTY'S OFFICE; Ed Bretschneider, WAC; Eileen Simonson, WSCAC; Matt Boger, UCANE; Marcis Kempe, Michael Ralph, Pamela Heidell and Tracy Wadsworth, MWRA STAFF; Joe Favaloro, Cornelia Potter, Ryan Ferrara and Mary Ann McClellan, MWRA ADVISORY BOARD STAFF.

A. WELCOME

Chairman Katherine Haynes Dunphy called the meeting to order at 11:59 a.m.

B. APPROVAL OF THE MINUTES FROM SEPTEMBER 16, 2004

A Motion was made **TO APPROVE THE MINUTES FROM THE SEPTEMBER 16, 2004 ADVISORY BOARD MEETING**. It was seconded and passed by unanimous vote.

C. REPORT OF THE EXECUTIVE DIRECTOR

Executive Director Joseph Favaloro stated in light of the serious illness of the Honorable A. David Mazzone, Federal District Court Judge, the Boston Harbor Case has been reassigned to the Honorable Richard G. Stearns, the Judge who presided over the filtration discussion with EPA and ruled with MWRA and ratepayers in avoidance of filtration.

In his first compliance order, Judge Stearns paid homage to Judge Mazzone. Following is an excerpt from his statement: *"...through acumen and force of personality, he accomplished what cynics had said was impossible to achieve, a harbor environmentally worthy of a City as great as Boston. Judge Mazzone's approach was hands-on – whether the task required the*

insight of an engineer, a scientist, an environmentalist, a sandhog, a legislator, or a shop steward. ...His preference, as in all things, was for persuasion, conciliation, and cooperation, all with the ultimate goal of advancing the public interest. His respect for everyone involved in this project, and the reciprocal respect and affection that has been felt for him, is the reason why the goal of a healthy Boston Harbor is in reach."

D. 2004 LEGISLATOR(S) OF THE YEAR AWARDS

Chairman Dunphy stated for the first time the Advisory Board is awarding plaques and certificates to the legislators in the MWRA Caucus who have been so helpful over the years. The Caucus members have been the Advisory Board's strongest allies and supporters and, without them, rates would be much higher than they are today. In addition to the six people honored today, 105 legislators have received Certificates of Appreciation for their help as well.

SPEAKER THOMAS M. FINNERAN has always been sympathetic to ratepayer issues; Debt Service Assistance was first enacted when Mr. Finneran was Chairman of Ways and Means.

Speaker Finneran stated, "I swam regularly in the Neponset River in the 1960s and 1970s, when water quality was not what you would like. Sometime later in life, I found myself with the honor, responsibility and privilege of representing 40,000 people and, as in any District, there are a number of youngsters. The beaches of greater Boston were the recreational outlet. It always struck me as an urgent priority to clean up the Boston Harbor. It is a delight to hear all the progress that has been made in large part because of the very active energy and focus of the Advisory Board."

Chairman Dunphy noted Representatives Robert DeLeo and Ron Mariano have been the backbone of the MWRA Legislative Caucus. Bob and Ron's leadership and hands on relationship with the Authority and Advisory Board staffs has been instrumental in making the Caucus the success it is today.

REPRESENTATIVE ROBERT DeLEO created/led the MWRA Caucus since day one and was a member of the Advisory Board, representing Winthrop, before he was a State Representative. The Caucus, through his leadership, has become a force.

Representative DeLeo stated, "Of all the accomplishments that we have seen here at the Legislature, this is definitely one of the ones that I am most proud of, being able to help the constituents that we represent and bring them some water and sewer rate relief."

REPRESENTATIVE RONALD MARIANO has also been part of the leadership of the MWRA Caucus since the beginning, serving as Vice Chair. He has been an effective advocate and is part of every decision. He has worked closely with the Advisory Board, especially on the disposition of the former Quincy shipyard.

Representative Mariano stated, "One of the great joys of my legislative lifetime was creating the Commonwealth Sewer Rate Relief Fund. When I was first elected, MWRA sewer and water rates was the only issue heard consistently. Working together, we have been able to maintain a consistent stable rate. Thank you for the recognition."

Chairman Dunphy acknowledged the efforts of the entire House leadership team, particularly Representative Rogers, Chairman of Ways and Means.

SENATE PRESIDENT ROBERT TRAVAGLINI has been a strong voice for ratepayers for many years. The \$10 million for Debt Service Assistance, the language for the Watershed Protection Trust and tort liability were all part of the Senate Budget. The Advisory Board also acknowledges the President's leadership team, particularly Senator Havern, for their efforts.

Senate President Travaglini stated, "This continued assistance is not only appropriate, it is good business. The price tag of the Boston Harbor Project was so severe that to accept just a small portion of people to bear the brunt of that tag was unrealistic. When equated with the increase in costs, it was clear the appropriate legislative action was to bring some rate relief."

SENATOR STEPHEN BREWER was instrumental in ensuring the creation of the Watershed Protection Trust. If it were not for Senator Brewer leading the effort, fostering a better understanding of shared common interests between us and central/western Massachusetts, the Trust language would not have been successful in the FY05 Budget. He and his staff continue to work closely with the Advisory Board and the Authority to fine tune the Trust language.

Senator Brewer stated, "Whenever I walk in (to the State House) I pray that I'll always be honest and fair to the people in my District. Four towns (Dana, Enfield, Prescott and Greenwich) were taken by the Swift River Valley to create the Quabbin Reservoir, 58,000 acres of beautiful drinking water supplies. I am ever mindful of the 3,000 people who lost their homes and can never go home again and the 39 cemeteries that were dug up. I am honored to receive this. Thank you for recognizing me."

SENATOR CHARLES SHANNON has been the lead sponsor of Advisory Board legislation in the Senate over the years – from the Clinton Wastewater Treatment Plant to transferring the former MDC Watershed Division. Senator Shannon worked closely with Senator Brewer in shepherding the Watershed Protection Trust into reality. Senator Shannon was out of town and unable to attend the presentation.

E. PRESENTATION: PROGRESS REPORT ON MWRA SECURITY ISSUES AND PROGRAMS – Marcis Kempe, Deputy Director, Operations

Marcis Kempe, Deputy Director of Operations, reported that the MWRA has an internal working group that does all of the Authority's security plans and implementation. The overall security strategy was defined in the early days prior to 9/11, but worked more intently after 9/11. The working group put together a series of improvements.

Risk reduction through capital improvements is an enormously important part of the plan. Defending a water system is not like defending a port, where you can guard with personnel. There are Reservoirs and a lot of facilities spread across the state. Risk reduction is needed, through things like redundancy development and hardening of assets. The capital program already had a lot of these elements within it, for example, the Walnut Hill Water Treatment Plant (WHWTP) and the MetroWest Tunnel. These were important programs in terms of reducing MWRA's system vulnerabilities.

Physical hardening was important to improve water quality monitoring because water supplies are no longer just concerned about environmental hazards, now we have to watch that people may be willfully putting things into your water supply. Emergency response measures needed to be strengthened.

Staff addressed Reservoir security by limiting access to those reservoirs by very large vehicles (i.e. trucks, etc.). Increased barriers were permanently placed around the perimeters of main facilities. Truck access areas needed for MWRA deliveries have guards. The most important danger for reservoirs are spills. MWRA invested in setting up emergency response booms.

Aqueduct hatches have been welded down in places that immediate access was not needed and shrouds have been placed over door locks. Pipe gates (to keep vehicles from passing) have been installed on access roads that lead to important facilities.

Completion of the MetroWest Tunnel bypassed the vulnerability of the 17-mile Hultman Aqueduct, which was flagged early in vulnerability assessments as a single point of failure. Because the MetroWest Tunnel only comes to the surface at certain locations, it is a much more secure facility. The old Norumbega Reservoir was an open distribution reservoir and was obviously a vulnerable point because people could have access to the water surface. Now that the Norumbega Covered Storage facility is in service, for the first time MWRA has no open access to Reservoirs.

Another major issue found during vulnerability assessments is the chemicals used to protect the water supply. The old Norumbega Distribution System was disinfected by gaseous chlorine. By taking that facility out of service, MWRA has decommissioned the plant that held a ton of chlorine and removed the hazard. The Chlorine disinfection has been replaced with hypochlorite, which is an easier chemical to handle.

MWRA has installed steel plates over hatches at tanks to make it more difficult to access, as well as intrusion alarms, security cameras and a variety of other things. New plants have been designed with 3/8" plates of steel that cannot be drilled through with a hand drill. In places that occasional access for cleaning purposes once every few years was needed to get into underground tanks, a concrete box was placed over the aluminum hatch. The concrete box cannot be lifted without a substantial crane.

Manhole covers have been fitted with bolts that only a special tool can open. Gates and boulders have been effective in keeping vehicles away from facilities. Ladders at the Bellevue Tanks were removed to keep local teenagers out. Staff found a way to move sensors to a location where the ladder would not be needed. New fencing, with mesh that cannot be climbed easily, and barbed wire going in both directions is also in place.

Part of the security strategy was to put detection on the outer limits, but when intrusion detectors are triggered, there must be something else keeping the attacker from getting to the facility that needs to be protected. Staff placed double doors in internal walling at some facilities. Doors were replaced at manned facilities to allow visual access to see who is outside the door. All field facilities are being retrofitted with card access controls.

Water quality monitoring covered environmental issues, such as bacteria or primary pollutants. If someone were to add a random chemical at an unknown point at an unknown time, it is a difficult thing to try to catch. MWRA has added sensors to look for pH, conductivity and chlorine residual. Water has certain characteristics. If a chemical is added, it would react with chlorine residuals. Sensors were placed below points of risk.

Employees must wear badges and visitors must wear a guest pass. Signage at all MWRA facilities is purposely limited and security cameras have been placed in critical locations. Intrusion alarms are on doors and windows and infrared sensors have been placed in some locations. MWRA has upgraded its security contract.

The Authority has spent a lot of time working with its partner agencies: the State Police, Homeland Security, DCR, EPA and MEMA. The State Police have been the Authority's closest ally; they are the first call and will respond to all MWRA facilities.

A site characterization team has been assembled and received safety training to enter a facility with an unknown hazard to take a water sample to confirm the possibility of contamination. EPA developed a protocol that MWRA has adopted. Staff is trained to check for booby traps and spills and all around safety awareness and procedures. MWRA has invested in some devices beyond the normal, such as air quality measurement, radiation measurement and immediate tests for normal characteristics at the facility. Aggressive safety gear is available for employees. Notification drills have been performed to verify that staff responds when they are supposed to and hypothetical exercises have been run as an equipment deployment drill.

Chelsea facilities have been upgraded with remote monitoring, security information, readings of water quality and hydraulics and put into display panels. Staff is working on cyber security as well. The SCADA system has been modified to ensure that hackers cannot enter and turn a vital facility off.

There are a number of items the Authority is working toward. What if a railcar was knocked into the Wachusett Reservoir? Staff did a boom deployment yesterday with EPA.

An Advisory Board member asked if the security cameras are real time cameras. Mr. Kempe said the camera is not a detection device. The sensors on the doors and windows are the devices that pick up that someone is doing something and the camera will turn to focus on the door or window to do an immediate assessment. The camera is on all the time, but it goes through a rotating shift.

Barbara Wyatt asked if any funding is available from Homeland Security. Mr. Kempe stated the MWRA has applied for the opportunities it has seen; however, currently the funds are being allocated to first responders, such as police and fire departments. MWRA considers the site characterization team a first responder, but it is unclear that MWRA will receive any funding.

Chairman Dunphy asked for an update on the Cosgrove leak. Mr. Kempe stated when staff was trying to bring Walnut Hill online, a 1 MGD leak was observed at Shaft C (a 12' diameter pipe). Shaft C is at the end of the Cosgrove Tunnel. Because of the leak, there is an

opening of one of the pipe joints. The Authority shutdown overnight and sent a diver down to examine the leak. There is some failure of the restraining system at this point. Staff cannot get to the ultimate cause of failure until they are able to access the inside of the pipe.

Since the leak was identified, staff has been taking preparatory steps to bring the Wachusett Aqueduct back online. Currently MWRA is in the process of disinfecting the aqueduct and then it will be reactivated. The Next step is to go inside and complete an engineering assessment of the failure. A variety of experts have been brought in by the MWRA and the contractors. The cure is easier to define than the failure. Staff will inspect other joints that are similar and make repairs.

F. COMMITTEE REPORTS

Executive Committee – Katherine Haynes Dunphy

PREVIEW: 2004 WATER & SEWER RETAIL RATE SURVEY

Ryan Ferrara stated proofs have been sent out for each community as will be represented in the final *2004 Water & Sewer Retail Rate Survey*. Staff requests that communities provide any changes by close of business on Monday, November 1.

Preliminary results (subject to change with receipt of rate information from Ashland and Lexington) reveal that the system household average is \$887.33, a 5.4% increase from the 2003 survey. Over the past five years, the average has been a 4.9% increase for each year. On a national basis, rates are assessed for a series of other cities throughout the country and their average is \$597.10. The pressure on MWRA communities is still relatively high. Through the fine work of the Legislature, staff will continue to try to keep these rates down.

Finance Committee – Bernard Cooper

CIP/CEB UPDATE

Cornelia Potter stated the real pressure point on spending in both the Capital and Current Expense Budgets has to do with debt service. First quarter spending through September on the Current Expense Budget came to nearly \$115 million. Revenues, including rate revenue and investment income, totaled nearly \$121 million, a difference of \$6 million. The primary contributor to the gap is somewhat lower Direct Expense spending, especially for *Wages*, *Fringe Benefits* and *Workers Compensation* expense and lower *Chemical* and *Utilities* expense, partially offset by nearly \$0.5 million in greater than budgeted spending for *Maintenance* so far this year.

For Direct Expense components, the difference between budgeted and actual spending was \$1.2 million. The rest of the expenses fall under *Debt Service* expense. *Debt Service* expense is \$2+ million less than budgeted so far this year. Interest rates for variable rate debt, while rising, have not risen to the point the Authority assumed in building this budget.

On the Capital side, spending totals \$60 million, nearly \$4 million more than budgeted for the first quarter of the year. This is the lowest first quarter spending in more than a dozen years. Only two years ago, spending during the first quarter was \$90 million.

Debt service on the existing borrowings is what dominates spending. Now that the Authority is coming up on 15 years into 30-year borrowings, some of the major principal payments are

coming due. Rescheduling and refinancing have reduced some of these payments. Rate projections over the next several years are creating considerable pressure; even though they are conservatively cast, they still contain very significant assumptions about the repayment principal.

Traditionally, the Capital Budget process begins over the summer, with project proposals and prioritization well under way, to be completed by the end of November. Staff will request Board authorization to transmit the proposed FY06 Capital Budget to the Advisory Board at the mid-December meeting, just two months from now.

The Current Expense Budget process is just getting started, with general guidance for Direct Expense of limiting growth to within 2.5% of this year's budget plus the cost of new facilities, some of which represent savings because of automation and reduced staffing. With the first full year of operation of the Walnut Hill facility and the Braintree-Weymouth facility, including the Intermediate Pump Station, the first full year of expenses of running those facilities will be a major component and the potential for growth in Direct Expense spending (particularly in *Chemicals* and *Electricity*) in FY06.

Operations Committee – Jay Fink

STATUS: WASTEWATER METER REPLACEMENT PROGRAM

Jay Fink stated that only 59 meters have been accepted to date. The contractor is doing better with the installation process, but the prognosis of meeting the one-year deadline for installations is up in the air. Installations began March 29.

UPDATE: INFLOW/INFILTRATION AND LOCAL PIPELINE ASSISTANCE PROGRAMS

Jay said the I/I Financial Assistance Program has been in the works for a while. It is a grant/loan program. Last year the Operations Committee incorporated sunset dates for eligibility, which mean the first sunset date for Phase II is coming up in 2006. Five communities have not taken advantage of those loans and stand the chance of losing their grant portion. Mr. Fink advised members to look into their eligibility.

The Local Water Pipeline Assistance Program is in year five of a ten-year program. The Operations Committee agreed to re-evaluate the program after five years and is currently in that process. Further, a Lead Service Replacement Program has been added for eligibility. Discussion is underway to look at formulas for communities that have just joined the MWRA water system and communities that want to address lead services but have utilized all of their present allocations.

Mr. Favaloro noted that a new approach of holding the Operations Committee meeting one hour before the full Advisory Board meeting was attempted. Are people comfortable with that approach? Staff is interested in members' feedback.

Walter Woods asked if it would be feasible to make the Local Water Pipeline Assistance Program eligible for a grant component. Mr. Favaloro said the topic could be brought up at the next Operations Committee meeting.

G. QUESTIONS AND COMMENTS

H. ADJOURNMENT

A MOTION WAS MADE TO ADJOURN THE MEETING AT 1:16 P.M. It was seconded and passed by unanimous vote.

Respectfully submitted,

Edward Sullivan, Secretary