

**MWRA ADVISORY BOARD MEETING
MAY 17, 2001
WELLESLEY TOWN HALL
525 WASHINGTON STREET, WELLESLEY, MA**

MINUTES APPROVED AT THE JUNE 21, 2001 MEETING

Eighteen members were present: Philip Farrington, ARLINGTON; Edward A. Maguire, ASHLAND; Ed Sullivan, CANTON; Al Renzi, FRAMINGHAM; J. R. Greene and Barbara Wyatt, GUBERNATORIAL APPOINTEES; Gary Genovese, LEXINGTON; Bruce Kenerson, LYNNFIELD; Edward Bates, MAPC; Richard Littlefield, MEDFORD; John Craig, NATICK; Stanley Stanzin, NEEDHAM; Ted McIntire, READING; Joseph Foti, SOMERVILLE; Jeanne M. Fleming, STOUGHTON; David Savoy, WALTHAM; Walter Woods, WELLESLEY; Jean Thurston, WESTON.

Also present: Laurence Barrett, STOUGHTON; Donald A. McCabe, Jr., WALTHAM; Amy Panek, SENATOR JACQUES' STAFF; Michael Hornbrook, Kevin McManus, Tom Coffey, Carolyn M. Fiore, Denise K. Breitenicher and Tracy McGrath, MWRA STAFF; Joe Favaloro, Cornelia Potter, Ryan Ferrara, Nathalie Grady and Mary Ann McClellan, MWRA ADVISORY BOARD STAFF.

AGENDA

A. WELCOME

Chairman Joe Foti called the meeting to order at 7:36 p.m. and introduced Mrs. Warshaw of the Wellesley Board of Selectmen. Mrs. Warshaw welcomed everyone to Wellesley and extended the town's appreciation to the Advisory Board for efforts in keeping rates down.

B. APPROVAL OF THE MINUTES FROM APRIL 26, 2001

A Motion was made **TO APPROVE THE MINUTES FROM THE APRIL 26, 2001 ADVISORY BOARD MEETING**. It was seconded and passed by unanimous vote.

C. REPORT OF THE EXECUTIVE DIRECTOR

Joe Favaloro reported that at the last Board of Directors meeting, Fred Laskey was unanimously appointed as the new Executive Director of the MWRA. Mr. Laskey graciously accepted an invitation to the June 21st Advisory Board meeting in Canton to meet Advisory Board members and express his ideas and direction for the MWRA.

At the Boston Harbor Symposium, there was a daylong series of panel discussions that culminated with the transfer of Judge Mazzone's papers to the University of Massachusetts. Mr. Favaloro's speech at the Symposium emphasized the role of the 43 wastewater communities and all 60 communities for water and wastewater improvements.

Mr. Favaloro noted that there will be an opportunity in June to honor Norman Jacques for his contributions to the Advisory Board, not only as a member of the Board of Directors, but as the second Chairman of the Advisory Board as well. Norman's term runs through the end of June. June 8th is the deadline for anyone who is interested to submit a letter of intent to the Advisory Board offices. On June 15th the Executive Committee will serve as the Nominating Committee to interview candidates who have shown interest. At their discretion they may nominate one of those individuals; and on June 21st the action item on the agenda will be an election – one vote for each community.

Additionally, Mr. Favaloro reported that Andrew Pappastergion is doing well and is back at home after being hospitalized.

Two alternatives were offered for the Advisory Board's Annual Field Trip to be held on the third Thursday in August. One alternative is a tour of the new Chelsea North Maintenance Facility, continuing in the Greater Boston vicinity touring a CSO facility and a visit to the Cambridge Water Treatment Plant. Gubernatorial Representative J. R. Greene, who conveyed an invitation from the Superintendent of the Quabbin and Ware River to do a Quabbin tour and sites in between, offered the other alternative.

The Advisory Board recently published a Special Report detailing accomplishments since 1985 and future goals. The document will be sent to local officials, Aldermen and Selectmen in addition to the normal mailing list.

D. PRESENTATION: FRAMINGHAM EXTENSION SEWER/ODOR AND CORROSION CONTROL/MWRA MUNICIPAL ENFORCEMENT RESPONSE PLAN – Kevin McManus, Director of TRAC, et al

Kevin McManus, Director of TRAC, relayed the efforts that MWRA has undertaken to deal with significant amounts of corrosion and odor concerns in the Framingham Extension Sewer (FES), which is essentially the entire western part of the service area. The basic issue is that the Authority is trying to maintain the structural integrity of this section of the sewer system to provide uninterrupted service to the western service area and ensure a safe and healthy environment.

Sulfate is naturally occurring in domestic fluids and in industrial discharges. Sulfate is a benign substance that can convert to sulfide, which then can turn to hydrogen sulfide gas. That gas is very toxic and a concern. Hydrogen sulfide gas can in turn generate into a type of sulfuric acid, which then becomes a corrosive substance that can affect the integrity of concrete pipe.

This happens in every sewer and is not unique to the FES. It is the degree to which it is occurring in FES that is the issue. The problems that have been observed in the past several years include actual sections of sewer collapsing, in some cases in people's back yards. It is a huge concern in terms of structural integrity of the system, not to mention the health and

welfare of people who might be affected by these collapses. These pipes should have lasted longer. MWRA has recently been doing assessments of both the Wellesley Extension Sewer replacement and the West Roxbury Tunnel, which are down stream near the Charles River crossing; the assessment of those areas also showed significant corrosion. The collapses have all occurred in concrete structures.

J. R. Greene asked what the pipes are replaced with in the repair process. Mr. McManus replied that a combination of new liners or new concrete that has epoxy liners. There have been circumstances, however, that the lining itself has not been sufficient to be able to withstand the type of corrosion that has been generated. All of the pipes that have been replaced are concrete with epoxy lining.

Ed Bates asked if the 440 linear feet collapsed simultaneously in the 1989 occurrence. Mr. McManus stated that his understanding is that there was a significant section that collapsed, but not all at once; but it began and as they looked at it, they saw further erosion and deterioration.

There are newer sections of the system that have had failures of the lining and have had crown corrosion in fifteen to twenty years. It is not necessarily chronological. The Authority hasn't seen anything to rival the FES in terms of the accelerated corrosion and collapse concern. MWRA believes that this is certainly the most problematic area in the system. Mike Hornbrook added that the only thing unique here is the long detention time in the sewer.

David Savoy asked if there is any kind of chemical process that could be tried that could coat the system, or could at least slow it down. Mr. McManus stated that the Authority has been dosing the FES at the Archer Street Pump Station in Framingham with a variety of chemicals, nitrate and most recently potassium permanganate to try to maintain the sulfates as sulfates. They have had some success, but it is nothing more than a band-aid. The Authority has not had the sort of success it wanted in dealing with this problem. Ashland has been dosing their system with chemicals.

Walter Woods asked if this has been happening in the infrastructure of the towns. Mr. McManus noted that Ashland has had serious problems, and most of those are odor and corrosion. The material of the pipe makes a big difference. Some of the material that is used in the municipal systems is mortar resistant to these types of crown corrosion problems. This is occurring over time so material is relatively fresh in a municipal system and hasn't had the time to generate the sulfide levels as in MWRA's system downstream.

Mr. McManus noted some of the specific rehabilitation and repair work that is currently going on, including a 14,000 linear foot rehabilitation now occurring in Natick and Dover issued in October of last year. An additional contract is to be awarded for the West Roxbury Tunnel rehabilitation downstream by the Charles River in a week. An inspection was completed of the Wellesley Extension Sewer in August; so far the Authority is confident that the condition doesn't need immediate repair, but there is still some accelerated corrosion. The problems in the West Roxbury Tunnel are of great concern to the MWRA's structural engineering, which is why it is on a fast track to repair that section of the sewer.

Since July of last year the Authority has been adding potassium permanganate at the Archer Street Pump Station (Station) to try to keep the sulfate as sulfate. It does appear to be used

rapidly in the system. In looking at various sampling places downstream from the Station, there is significant sulfide in the water and atmospheric hydrogen sulfide numbers during low-flow, higher temperature conditions, which are significantly higher than other parts of the system. MWRA is not confident that it has the appropriate dosing and will be doing more adjustments. Also, potassium permanganate is not cheap and is not considered to be a final solution to deal with an immediate short-term odor and corrosion problem. Feed facilities have been added recently to improve the ability to dose at higher rates. MWRA does have the ability to go beyond the current dosage of 990 pounds of potassium permanganate per day. That can be upped, but at a cost; MWRA needs to look at what is going to have the best effect before those decisions can be made.

Ms. Potter asked how the Authority decides how much potassium permanganate to use. Mr. McManus replied that MWRA has meters installed, which are providing real time data on the atmospheric hydrogen sulfide in the pipe and the air surface above the wastewater at several locations downstream from Archer Street. That data is being analyzed to adjust the dosage to get a more acceptable level of the atmospheric hydrogen sulfide gas. Ms. Potter asked if the chemical feed facility has the ability to accept substitute chemicals. Mr. McManus stated that it could be done with some reasonably simple modifications.

Ms. Potter noted that since the facility has the ability to accept a greater dosage, how does that gibe with staff's assumptions in the budget. Mr. McManus replied that there are some cost issues associated with going above the 990 or 1000 pounds per day. That is where the trade off is going to have to be made.

Mr. Woods stated that in the past MWRA received a few complaints on odor coming from MWRA siphons for piping going under the rivers. The answer given was that the potassium permanganate would cure that problem. Has it been cured? Mike Hornbrook replied that it hasn't been cured because MWRA hasn't been able utilize higher dosages; the Authority now has that capability and with the warmer season, the dosage will be increased to reduce those odors a great deal.

Mr. McManus noted that MWRA plans to issue municipal permits, which each of the communities have for sulfide control. There is now a municipal permit limit of .3 mg/l for all of the communities that discharge in the MWRA system. Beginning in April, communities will be required to do that sampling. MWRA will do independent sampling. MWRA also developed a draft Municipal Enforcement Response Plan, which details how MWRA will handle violations.

Stanley Stanzin asked what communities could do to meet the permit limits. Mr. McManus stated that communities can look at: their own chemical addition program and different ways of operating the municipal system so that the wastewater gets into the MWRA system as quickly as it can.

Additionally, the Authority is trying to utilize a concept called Escalating Enforcement. Communities must develop a sustained action plan to deal with their portion of the problem. The initial violation will be addressed to them via phone calls or contact. Constant violations would then go to a more formal enforcement action, such as enforcement orders or a consent agreement with a negotiated compliance schedule; and in circumstances where that isn't successful in getting the types of sustained action needed, MWRA does have the ability to go to more formal types of penalties, such as assessment notices. The key thing is that this plan

is not intended to be punitive, but rather to ensure that communities stay focused on the problem.

Last year MWRA did a study on a particular industry, Nyacol, which generates a lot of sulfate into the FES. Nyacol had a period of time when they were shut down and MWRA tried to take advantage of that period to study what was going on in the FES downstream from them when they were shut down and then when they started their production back up. Industries are quite concerned because MWRA has been talking to them about limiting their sulfate levels into the system.

Mr. Woods asked if Nyacol has made any changes to reduce the generation of sulfates. Mr. McManus stated that Nyacol is working with the Town of Ashland to install a chemical dosing site downstream from their facility for the dual purpose of trying to help the Ashland municipal flow into which they are discharging and to meet their permit limit. MWRA is also exploring other options with Nyacol. The industries look at this data with some concern and they are not convinced at this point that they see the same problem from their discharges as MWRA does. The Authority continues to work with the industries, but still have some significant differences with industries. All of the communities have expressed concern about not pushing business out as a result of these decisions, but we think industries are going to need to invest in technologies to mitigate these issues.

E. COMMITTEE REPORTS

Operations Committee - Andy DeSantis

❖ ACTION ITEM: SIX MONTH EMERGENCY WATER SUPPLY AGREEMENT WITH THE TOWN OF STOUGHTON

Mr. Favaloro reported that the Executive Committee approved the extension of a six-month emergency water supply agreement with the Town of Stoughton at their last meeting.

Jeanne Fleming, Town Manager, noted that Stoughton has serious water supply problems. At Stoughton Town Meeting on Tuesday there will be a vote on two regional solutions. One is membership with the MWRA and the other is a contract with a desalination plant that is being proposed by Bluestone Energy. Town officials realize that the best solution for the Town of Stoughton is MWRA membership and have done their best to convince Town Meeting Representatives to vote for the MWRA option.

A Motion was made TO APPROVE A SIX-MONTH EMERGENCY WATER SUPPLY AGREEMENT WITH THE TOWN OF STOUGHTON. MWRA MADE AN OFFICIAL DETERMINATION IN A LETTER TO STOUGHTON, DATED AUGUST 20, 1997, THAT THE TOWN'S WATER PROBLEMS AND OCCASIONAL NEED TO BUY MWRA WATER WAS DUE TO A CHRONIC WATER SUPPLY DEFICIENCY. THIS AGREEMENT SHALL THUS BE CONSISTENT WITH MWRA POLICY #OP.05 FOR EMERGENCY WATER WITHDRAWALS, INCLUDING THE REQUIREMENT FOR THE TOWN OF STOUGHTON, DURING THIS SPECIFIC SIX-MONTH PERIOD, PAY A 5% NON-REFUNDABLE SURCHARGE PLUS A TWO-THIRDS ASSET VALUE CONTRIBUTION – EQUIVALENT TO AN ENTRANCE FEE PAYMENT. It was seconded and passed by unanimous vote.

❖ STATUS: SYSTEM EXPANSION REQUESTS

Reading is in the process of putting forward its application to request water from the MWRA. One of the first and principle steps is the Environmental Notification Form, which Reading has

begun. Ted McIntire will be at the Operations Committee in June and will be providing an informational presentation for the June Advisory Board meeting.

Mr. McIntire stated that Reading is making this request due to stress on the Ipswich River and is seeking approval for 219 million gallons per year, equivalent to 600,000 gallons per day.

Mr. Favaloro noted that Wilmington came before the Operations Committee to discuss its request for an emergency dry tap into the MWRA service area. The Operations Committee reiterated the importance for Wilmington to put together a comprehensive plan for both water and wastewater.

Additionally, Mr. Favaloro noted that there was a problem with a well in Burlington; Lexington provided them with 750,000 gallons of water. This incident reinforces the need for the System Expansion Committee meeting in September to deal with what the process should be when one community requests water from another community, be it inside or outside the MWRA service area, on the right to use water or allowing a connection into the wastewater side.

Executive Committee - Joe Foti

❖ **PRESENTATION: MDC WATERSHED DIVISION REQUEST FOR INFORMATION – Amy Panek, Senate Post Audit and Oversight Bureau**

Amy Panek of the Senate Post Audit and Oversight Bureau (Bureau) spoke on behalf of Senator Cheryl Jacques who is the Chair of the Post Audit and Oversight Committee. Ms. Panek noted that Norman Jacques and Joe Favaloro brought to the Senator's attention the fact that there are concerns about the MDC Watershed Division (Division) and the inability to get a true accounting of their expenditures.

Senator Jacques considered the request and decided to write a letter to Commissioner Balfour. The Bureau is the investigatory arm of the Senate with subpoena power and can go to any state agency and look into their files. The letter was written on May 8th to Commissioner Balfour and gave the Division three weeks to provide the documents listed.

Barbara Wyatt noted that the Wachusett Watershed was told that Division had budgeted for technical assistance, but often when it is requested, the Division says that the position isn't filled. The Watershed would like to know where that leftover funding goes.

Mr. Favaloro asked what the next step would be if the Division doesn't turn over the documents. Ms. Panek stated that the Bureau follows through on all requests. If the documents are not received, then the Bureau will either call or write another letter.

❖ **LEGISLATIVE UPDATE**

Mr. Favaloro stated that staff is in the process of trying to find ways to get the MDC Watershed Division to become more accountable.

The House budget is now in final form and includes debt service assistance that would cover the MWRA's needs, as well as the 100 other communities that draw from the Sewer Rate Relief Fund. Staff is now working on the Senate side and is relatively comfortable that the monetary piece will be in on the Senate side, which means that the financial piece is not

touchable in Conference Committee. It then needs to be approved by the Governor. Mr. Favaloro noted that vigilance is going to be a key component over the next four to six weeks.

Finance Committee - Phil Farrington/Katherine Dunphy

❖ **STATUS: REPORT ON THE BOARD OF DIRECTORS HEARINGS ON THE CIP AND CEB**

Cornelia Potter stated that the Board of Directors held its annual budget hearings on Tuesday, looking at both the Capital and Current Expense Budgets. On the capital side the most significant part of the deliberations that day was the Authority affirmed its commitment to stay within the cap for next year, for the three-year period, and for the ten-year period. The Authority assumes that spending for FY01 will be \$345 million, well under the budgeted amount of \$500 million, meaning that over \$150 million will be carried forward into the future. The Advisory Board recommended that the Authority reduce its ten-year budget by \$42 million. The Authority agreed with \$18 million of it and disagreed with \$23 million. Almost half of that had to do with the Boston Harbor Project where much of the disagreement was framed as preliminary or too soon for implementation.

The Authority also increased other elements of the capital budget by nearly \$40 million. At the same time, the Authority has reworked its estimates for the ten-year program to allow for those increases to be incorporated into the ten-year budget.

On the Current Expense Budget side of the picture, the Authority agreed with the total dollar amount of the Advisory Board's recommended reductions, and then some. Debt service is the principle driver for rate increases next year. It is important to note as part of the deliberations on Tuesday there were extensive reports about how the Authority has been able to contain direct expense spending, making it easier for the Board to see how the role of the rate stabilization fund is utilized.

The Authority did change debt service assumptions pushing a planned fall borrowing back by a full five months. This allowed for a huge reduction in their proposed spending by more than \$5 million. At the same time, they used this decision to add revenue of \$6 million in investment income.

Mr. Foti commended the Authority and Advisory Board staffs for their accomplishments. It says a lot for the communication between the two organizations and the work that they are both doing.

F. QUESTIONS AND COMMENTS

G. ADJOURNMENT

A MOTION WAS MADE TO ADJOURN THE MEETING AT 9:13 P.M. It was seconded and passed by unanimous vote.

Respectfully submitted,

Edward Sullivan, Secretary