

MWRA ADVISORY BOARD

Summary Of:

MWRA BOARD OF DIRECTORS' MEETING

September 17, 2003

A meeting of the Board of Directors of the Massachusetts Water Resources Authority was held on **September 17, 2003** at the Nut Island Headworks. **Present:** Chair Ellen Roy Herzfelder and Lucile Hicks, Gubernatorial Appointees; John Carroll, Andrew Pappastergion and Joseph Foti, Advisory Board Representatives; Vincent Mannering, Kevin Cotter and Antonia Pollak, City of Boston Representatives; Joseph MacRitchie, City of Quincy Representative; Marie Turner, Town of Winthrop Representative. **Absent:** Donald Mitchell, Gubernatorial Appointee.

AGENDA

Report of the Chair

Chair Ellen Roy Herzfelder stated that Katherine Abbott has been named as the first Commissioner of the new Department of Conservation and Recreation. The Administration looks forward to continuing to work with MWRA on areas of joint interest.

The Board voted to 1) designate the September 17, 2003 meeting as the Annual Meeting of the MWRA Board of Directors; 2) elect John Carroll as Vice Chairman of the Board; 3) appoint Joseph MacRitchie as Secretary of the Board, Bonnie Hale and Rose Marie Convery as Assistant Secretaries, Kenneth Wissman as Treasurer, and Kate Murray and Seth Newton as Assistant Treasurers; and 4) ratify the appointments of Board members to standing Committees.

Report of the Executive Director

Fred Laskey, MWRA Executive Director, stated that efforts have begun to test the new MetroWest Water Supply Tunnel to prepare for start up by running over 100 million gallons through the tunnel into the Weston Reservoir. The test was successful and kudos to Mike McBride, Rick Trubiano, Dave Coppes and all of the Construction and Operations staff.

Ms. Hicks asked if the chlorine was stripped from the water that was discharged into the Weston Reservoir. Mr. Laskey replied in the affirmative and noted that the Reservoir was drained to half full so that it would not overflow. Transfer to the Wachusett Aqueduct is scheduled for November 3.

To date, 12 former MDC and 62 MWRA employees have filed their intentions for the Early Retirement Incentive Program. October 15 is the deadline to file and June for retirement. Since the former MDC employees are some of the frontline Operations employees, efforts have been made to speed up the backfills in Operational areas, such as electricians, plumbers, etc.

APPROVALS

Forty-fourth Supplemental Bond Authorization – SRF

The Board voted to adopt the forty-fourth Supplemental Resolution authorizing the issuance of up to \$65,000,000 of Massachusetts Water Resources Authority Revenue Bonds (2003 Series C subordinate series) and to adopt the supporting issuance resolution.

The Massachusetts Water Pollution Abatement Trust (commonly called the SRF) is planning to borrow approximately \$280 million for water and wastewater capital projects in up to 60 other Massachusetts cities, towns and water/sewer districts, including the MWRA. A pool financing is expected to receive a AAA rating and achieve an interest rate lower than on an SRF borrowing pending discussions with the rating agencies related to MWRA's share of the total borrowing.

The debt service on this borrowing will average approximately \$2,900,000 annually. Funds are available in the FY04 CEB for this borrowing.

Authorization to Negotiate Revisions to Schedule Six for the Fort Point Channel CSO Storage Conduit

The Board voted to authorize staff, on behalf of the Authority, to negotiate revisions to Schedule Six of the Federal Court Order in the Boston Harbor Case with the court parties relative to MWRA's recommendation to change the Fort Point Channel CSO Storage Conduit Project.

Staff hopes to change the scope of the Fort Point Channel Project and possibly its construction milestones. The reference to the Fort Point Channel Project in Schedule Six will be changed from the Storage Conduit along A Street in South Boston recommended in the 1997 FP/EIR to the sewer separation and optimization work proposed in the Notice of Project Change. Staff anticipates that it would only be necessary to change construction milestones if the BWSC encountered difficulties procuring a consultant to perform final design and construction services for the new project. Staff believes that this project should follow similar sewer separation projects in that BWSC would perform final design and construction with MWRA providing funding. BWSC would also own and operate the separate systems upon construction completion.

Mr. Hornbrook, Chief Operating Officer, stated that the change from the storage conduit to limited sewer separation can achieve a higher level of CSO control for less cost. Water quality improves, the neighborhood wins, and it is good for the ratepayers. MWRA received favorable comments from DEP and EPA.

Extension of One Employment Contract, Operations Division

The Board voted to approve the extension of the employment contract for Paul DiLuca, Hazardous Waste Specialist, Operations Division, for 13 weeks, from October 1, 2003 through December 31, 2003, at an hourly rate of \$36.77, for a total compensation amount not to exceed \$17,925.38.

The Field Operations Department identified a short-term need for skilled staff to assist with the development of an Emergency Response Plan to meet the requirements of the Public Health Security and Bio Terrorism Preparedness Act of 2002. The necessary Emergency Response Plan, which is scheduled to be completed by September 30, 2003, is intended to focus on the results of the recently completed MWRA Vulnerability Assessment and to guide MWRA response to such threats as terrorist attacks using explosives or serious contaminants.

Training of all involved staff on the extensive new material may require up to several months following the Plan completion. While the Field Operations Department intends to assign responsibility for the annual support of this

program to full-time, in-house staff, Mr. DiLuca's services will be required over the next three months to assist with training plan implementation requirements and training content development. The Emergency Response Plan material must also be presented to communities as response partners. Mr. DiLuca will assist with these activities. This will be the final extension of this contract.

September PCR Amendments – FY04

The Board voted to approve the amendments to the Position Control Register. Those that make up the financial impact are as follows:

| Current Title | Amended Title | Financial Impact |
|---------------------------|------------------------------|---------------------------|
| Statistical Supervisor | Project Manager, Meter Data | \$5,281 - \$ 5,281 |
| Program Manager | Senior Program Manager | \$3,462 - \$ 3,462 |
| Senior Instrument Tech | Communication & Control Tech | \$4,868 - \$ 4,868 |
| Senior Sampling Associate | Sampling Coordinator | -\$4,176 - \$15,491 |
| | | |
| Total | | \$9,435 - \$29,102 |

Staff will ensure that any cost increases associated with these PCR amendments will not result in spending over the approved FY04 Wages and Salaries Budget.

CONTRACT AMENDMENTS/CHANGE ORDERS

Union Park Detention/Treatment Facility, Barletta Engineering Corp., Contract 6265, Change Order 3

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order 3 to increase the amount of Contract 6265 with Barletta Engineering Corp., Union Park Detention/Treatment Facility, in an amount not to exceed \$900,000. Further, the Board authorized the Executive Director to approve additional change orders as may be needed to Contract 6265 in amounts not to exceed the aggregate of \$250,000.

The Union Park Detention/Treatment Facility, being constructed at the corner of Albany and Union Park Streets, will treat CSO flows that are discharged from the Boston Water and Sewer Commission's (BWSC) Union Park Pump Station to Fort Point Channel. A portion of the site contained a neighborhood park, which limited the amount of design phase subsurface exploration. However, the remainder of the site was investigated and the construction project is being conducted under a Release Abatement Measure plan, due to known contamination on the property. Staff also reported that during excavation work, the Contractor encountered substantially different subsurface conditions that will require a future change order. The Contractor is redesigning the earth retention system for the detention basins, which will be the subject of a separate staff summary.

The cumulative value of all change orders to this contract total \$901,500, or 2.4% of the original contract amount of \$37,224,444, for an adjusted contract amount of \$38,125,944. Work on this Contract is approximately 9% complete. The FY04-06 CIP includes a budget of \$37,224,000 for Contract 6265. BWSC will pay 11.55%, or \$4,299,423 of the contract award amount. Therefore, MWRA's cost is \$33,826,521 of the adjusted subphase total.

Wastewater Hydraulic Optimization Planning, Metcalf & Eddy, Contract 6733, Amendment 4

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Amendment 4 to increase the amount of Contract 6733 with Metcalf & Eddy, Inc. (M&E), Wastewater Hydraulic

Optimization, in the amount of \$71,300 and to extend the time for completion by an additional 365 days to August 21, 2004.

Most project tasks were completed prior to the expiration of the contract on August 21, 2003. Since this date, M&E was directed to stop work and no additional charges have been incurred. The only remaining project tasks include completion of extreme event alternative evaluations, preparation of final reports and training documents, and conducting training of MWRA staff in the use and maintenance of the new wastewater computer model. All of these originally scoped tasks can be completed within the remaining contract balance but a time extension will be necessary. It was not possible to complete the originally scoped work by the contract's end date given the absence of a key MWRA project staff member who is responsible for overseeing the maintenance and use of the new model and is currently on leave and not expected to return until fall.

This Amendment also includes funds for additional consultant assistance to work jointly with MWRA staff in performing new modeling work.

The FY04-06 CIP includes a budget of \$822,900 for Contract 6733. The cumulative value of all Amendments to this contract is \$154,101, added to the original contract amount of \$800,099, for an adjusted contract of \$954,200, or \$131,300 over budget. This amount will be covered within the five-year CIP spending cap.

Boston Low Service Pipeline Improvements, Black & Veatch, Contract 5122, Amendment 4

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Amendment 4 to extend the time for completion of Contract 5122 with Black & Veatch, Boston Low Service Pipeline Improvements, by 335 days to November 30, 2004.

Contract 5122 provides engineering design and construction administration services to improve and rehabilitate portions of the Boston Low Service water distribution system. The completion date for this construction contract is September 29, 2003, a date nine months later than anticipated when the design contract was awarded in 1992.

The FY04-06 CIP includes a budget of \$1,753,000.00 for Contract 5122. The cumulative value of all Amendments to Contract 5122 total \$1,052,697.08, added to the original contract amount of \$698,538.42, for an adjusted contract amount of \$1,751,235.50.

Waterworks Microwave Communication, New England Digital Distribution, Inc., Contract 6816, Change Order 5

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order 5 to increase the amount of Contract 6816 with New England Digital Distribution, Inc., Waterworks Microwave Communications, in the amount of \$33,030, and to extend the time for completion by 95 days to January 24, 2004. Further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 6816 in amounts not to exceed the aggregate of \$250,000.

The contract documents required the installation of an 80-foot monopole with a reflective panel at Shaft W to act as a mirror to redirect the signals from Shaft 5A of the MetroWest Tunnel to an existing tower at Norumbega. MWRA Field Operations staff expressed concern regarding the reliability of the reflective panel and the safety of servicing monopoles higher than 35 feet. Based on reliability and safety concerns, staff has determined that a 35-foot monopole could be installed adjacent to the existing gatehouse and the signal sent directly to Bellevue.

Additionally, this change order provides for the installation of 350-feet of 2-inch conduit from the manhole at the top of Nash Hill into the control building.

The FY04-06 CIP includes a budget of \$1,830,000 for Contract 6816. Including this Change Order, adjustments total \$207,599.83, added to the original contract amount of \$1,690,216.00, for an adjusted contract total of \$1,897,815.83, or \$67,815.83 over budget. This amount will be covered within the five-year spending cap.

Walnut Hill Water Treatment Plant Design and ESDC, Camp Dresser & McKee, Inc., Contract 5017, Amendment 13

The Board voted, with Ms. Hicks abstaining, to authorize the Executive Director, on behalf of the Authority, to approve Amendment 13 to increase the amount of Contract 5017 with Camp Dresser & McKee, Inc. (CDM), Walnut Hill Water Treatment Plant Design and Engineering Services During Construction, in an amount not to exceed \$1,768,384.

Amendment 13 will provide funds for work resulting from Overall Start-Up Planning, including flow testing of the MetroWest Water Supply Tunnel, inspection of the Cosgrove Tunnel and additional start-up coordination. Also included are funds for necessary additional Engineering Services During Construction to support the completion of the Ozonation Treatment Facilities and Cosgrove Intake Screens contracts.

Mr. Mannering asked who watches over the changes to make sure that the design/construction people are not covering mistakes they have made. Staff responded that changes are submitted and are tracked all the way through the entire project. Mr. Hornbrook stated that the Procurement Department reviews changes to determine if it is a design error, design omission or change in operating conditions.

Ms. Hicks stated that a better method to manage these types of projects is needed. It seems like an ad hoc way to manage: “we are just reacting to what the designer is doing.” Mr. McBride responded that “we have a very rigid process.” If an error in design is discovered, often times MWRA tells the Contractor upfront that it will not pay to fix the problem. The changes are tracked through the process. In some instances, staff knows that the number will probably vary. Mr. McBride noted that a lot of these amendments came in response to the Court Order. Jae Kim, Director of Capital Engineering, added that contracts were signed six to seven years ago, based on knowledge from that time. Since then, work was added by MWRA. Mr. McBride noted that some agencies allow contingencies. MWRA takes proposals on the actual scope and comes back to the board with Amendments.

Mr. Carroll inquired on cost recovery from CDM. Mr. Hornbrook stated that the Authority has a Consultant Review Committee that looks at all the change orders for design errors or omissions. Staff has a tolling agreement with CDM, while negotiations are under way.

Mr. MacRitchie stated that a Contractor, knowing that there will be Change Orders allowed, has an opportunity to low-ball the rates and know that they will make it up in later years.

Ms. Pollak asked if the variables are out of MWRA’s control. Is there a reporting mechanism up front that could have a disclaimer that these are the 16 variables that impact this? If we have a sense that the cost will change, let’s say that. Mr. Laskey stated that the point was well taken. Staff will go back with greater emphasis on how MWRA got to this point.

Mr. Mannering noted that the original contract was a dual track design for filtration and ozonation. Did it also include Engineering Services During Construction? Mr. Kim replied yes, at some point MWRA dropped dual design and went to ozonation; however, there was a limited amount of engineering services based on the knowledge we had seven years ago.

INFORMATION

Report of Internal Audit Department Activities

During the year, Internal Audit performed numerous internal and contract audit assignments that strengthened management controls and realized \$2.3 million in savings. Internal Audit continues to utilize programs intended to provide coverage sufficient to give reasonable assurance that internal and management controls are functioning as intended and that reasonable, allowable and allocable costs are paid to consultants, contractors and vendors.

Ms. Hicks asked if the Internal Audit Department had more staff, would MWRA be able to realize a bigger savings. Staff responded that MWRA has the right number of staff, which fairly reflects other water and sewer authorities.

Ms. Hicks inquired on certain physical security conditions at three facilities that were noted in the staff summary. Staff stated that the conditions include an open door and window. Action was taken immediately.

Ms. Hicks also inquired on the Bellevue hatch incident. Mr. Hornbrook stated that an employee noticed an open hatch on Bellevue Tank 2. The area has a history of juvenile crime. Tank 2 was isolated and Tank 1 was brought online. An investigation of the tank found no evidence of foul play. All the field testing and lab results came back clean. As a precaution, the tank is being drained to do a physical evaluation to see if anything is on the bottom. The first 20 feet have been cut from the ladder; however, vandals have continued to be clever getting up there. Additional security measures will be taken. Mr. Laskey stated that MWRA believes the fence is inadequate and that all MWRA tanks need to be reinforced or fortified. Overall, however, MWRA did well on the study with 17 facilities having no problems at all.

Internal Audit Annual Work Plan FY04

The FY04 Internal Audit Work Plan is the result of a collaborative effort involving the Advisory Board, MWRA managers and Internal Audit staff. The Plan includes traditional internal and system audits, unannounced audits of compliance with MWRA policies and procedures, and contract audits.

Internal Audit performs follow up on all recommendations made to management and all recoveries identified during the contract audit process. Internal Audit recommendations are tracked quarterly in the Yellow and Orange Notebooks. Contract Audit recoveries are tracked and reported on quarterly to ensure the recovery of any monies owed.

FY2003 Fourth Quarter Management Indicators (Orange Notebook)

The Orange Notebook presents performance indicators for operational, financial, workforce and customer service parameters tracked by MWRA management each month.

Mr. Hornbrook stated that staff looked at a variety of indicators to determine if MWRA was doing enough maintenance. From FY02-03, there was a significant loss of staff due to early retirement and internal transfers, which has created an increase in work order backlog. Based on an annual average, it would look that the MWRA

was doing well with maintenance; however, a monthly breakdown shows the backlog increasing significantly since April 2003. Since May, hiring for Deer Island has been more aggressive for maintenance positions.

FY2003 Year End Capital Project Performance Report

Carl Erickson, Budget Manager, stated that this is the first capital budget report prepared by staff since the 5-year spending cap was implemented. The revised management policies require staff to provide mid-year and year-end capital budget reports, and based on the report, staff may recommend revisions to the spending cap. Based on the FY03 year-end report, staff does not recommend any changes to the five-year spending cap or the annual expenditure limits for FY04-FY08.

Total capital spending for FY03 was \$297 million, within 2% of the budget. MWRA awarded 56 contracts valued at \$138 million in FY03, 64% of the \$216 million scheduled for award. Including \$31 million in planned awards deferred because of the loss of debt service assistance, MWRA would have awarded 79% of the value of contracts planned to start in FY03.

Change orders remain below 10% for completed and ongoing projects and MWRA continues to experience competitive construction bids. Ms. Hicks asked how the percentages for change orders are computed. Are all the costs blocked together and then computed or weighted by how big the project was? There are a lot of different ways to look at these statistics. Mr. Erickson stated that the capital budgeting system looks at all of the projects in the capital plan. In total, change orders remain below 10%. Mr. McBride noted that MWRA continues to utilize consultant review groups and is trying to identify areas where cost recovery is reasonable.

Department of Environmental Protection's Proposed Extension of the Alewife Brook/Upper Mystic River and Lower Charles River Basin Variances

MWRA's 1997 Long-term CSO Control Plan identified a set of projects to minimize CSO discharges to the Alewife Brook/Upper Mystic River and to minimize or treat CSO discharges to the Lower Charles River Basin. The 1997 plan included information to support a change of water quality classification for these receiving waters, from Class B to Class B(CSO). In both cases, the Department of Environmental Protection (DEP) determined that additional data was necessary to make a decision on the appropriate level of CSO control and the water quality designation.

After earlier extensions of the Alewife Brook/Upper Mystic River Variance and Lower Charles River Basin Variance, both were scheduled to end this fall. However, DEP recently announced its intent to further extend both CSO Variances until June 1, 2004. DEP believes the extensions are needed to allow sufficient time for public and agency review of the detailed CSO reassessment reports and to accommodate the public and agency processes associated with the regulatory decisions regarding levels of CSO control and water quality classifications in these watersheds.

Mr. Laskey stated that this move by the regulators puts decisions for all MWRA CSO projects into the same time frame. EPA has asked questions about affordability and pointed out that MWRA saved money on water filtration, so it can spend more on the sewer side.

Progress of BWSC-Implemented CSO Projects and Projected Financial Assistance through December 2003

Mike Hornbrook stated that the BWSC, working through MOAs with MWRA, is implementing five CSO projects, currently budgeted at \$163 million. These projects are typically sewer separation initiatives. The Authority funds the projects and BWSC will own and operate them upon completion. Staff plans to transfer \$11,095,561 into the BWSC CSO account to cover anticipated eligible costs in the period July to December 2003.

Through June 2003, BWSC incurred approximately \$69 million in eligible expenses, funded by MWRA, and has made considerable progress toward completing the CSO projects it is responsible for implementing. BWSC is in compliance with Schedule Six of the Federal Court Order in the Boson Harbor Case.

BWSC's efforts to date have resulted in closing CSO regulators and eliminating CSO discharges to the Neponset River and Constitution Beach. BWSC has also completed the installation of floatables control at regulators within its system not associated with other CSO control projects. Sewer separation projects at South Dorchester Bay and Stony Brook are approximately 43% and 37% complete respectively.

Ms. Hicks asked, since MWRA is not a storm drain agency, does it exacerbate the situation because we are dealing with the sewer separation issue? Mr. Hornbrook stated that this is a CSO control issue. It was cheaper to operate the combined system to put in a storm drain rather than a new sewer and connections to the houses. It is a means to eliminate CSOs. .

Organizational Changes

Over the next three months, organizational changes designed to streamline and improve the effective functioning of the MWRA will occur. These actions begin to address operational and personnel gaps that resulted from resignations and other attrition related to the 2002 Early Retirement Program or to the filled position eliminations in February of this year. In other cases, the recommended changes simply result from an opportunity to make more effective use of staff talents and capabilities.

Leroy Walker stated that the major change is the consolidation of the planning functions of the Finance and Operations Divisions. Consolidation of these separate units maximizes the use of remaining resources.

Mr. MacRitchie asked if there would be the same number of positions at the same salaries with a clear chain of command. Mr. Walker, Director of Human Resources, responded that the positions and the salaries are the same. Marian Orfeo will be the Director of Planning and Coordination. It is anticipated that Ms. Orfeo will review the organizational structure over the next six months and make recommendations.

Mr. Laskey noted that the CSO Unit will remain under the Chief Operating Officer and will be supervised directly by Ralph Wallace. In Finance, responsibility for rates methodology and multi-year rate projections has been moved to Patricia Filippone, the Controller. These moves allow a separation of responsibilities to provide independence or oversight. In the Central Support Department, Fleet Services and Facilities Management will both report directly to Kate Murray.

This Summary does not include every item discussed by the Board, nor the full extent of the discussions. Please contact Mary Ann McClellan at the Advisory Board office with questions, comments and requests for additional information.