WATER SUPPLY CITIZENS ADVISORY COMMITTEE
to the Mass. Water Resources Authority

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Joint WAC/WSCAC Meeting

April 18, 2017 - 10:30 A.M.
Location: The Waterworks Museum
2450 Beacon Street, Chestnut Hill

Members in Bold in Attendance:

Whitney Beals, WSCAC Chair, NE Forestry
Gerald Eves, Trout Unlimited
Martha Morgan, Nashua River Watershed
Paul Lauenstein, NepRWA
Kurt Tramposch, Wayland Wells
Terry Connolly, Town of Ware & Trout Unlimited
Gina DeNapoli, BWSC
Andrea Donlon, CRWC
Janet Rothrock, LWV
Michael Baram, BU & CLF
Bill Fadden, OARS
Martin Pillsbury, MAPC
William Copithorne, Arlington
Jean McCluskey, MFA Alliance

Non –Members in Attendance:

Lexi Dewey, WSCAC staff
Stephen Greene, WAC
Karen Heinz, WAC
Wendy Leo, MWRA
Tom Durkin, MWRA
Thomas Champion, Auditor
Andreae Downs, WAC staff
Craig Allen, WAC
Chris Goodwin, MWRA
Kathy Soni, MWRA
Adriana Cillo, BWSC
James Guiod, MWRA Advisory Board

MWRA FY18 Proposed Capital Improvement Budget

Tom Durkin, MWRA Director of Finance, began his presentation by thanking the committee for the opportunity to discuss the FY18 Proposed CIP and the CEB. Tom explained that he and Kathy Soni would jointly present the highlights of the CIP and discuss some of the challenges the MWRA is facing with respect to the CEB.

Kathy explained that the MWRA is in its final year of a five-year spending cap of $800 million. The FY18 Proposed CIP meets the overall five-year spending cap requirement. As the MWRA has substantially completed the Combined Sewer Overflow (CSO) program, the FY18 CIP primarily focuses on asset protection and long-term redundancy for the water supply system. Kathy continued to explain that the Metropolitan Tunnel Redundancy Project is the Authority's next massive undertaking and it will be the last major effort on the water side to achieve redundancy in the metropolitan area. Kathy stated that the MWRA continues to reduce debt levels.

Kathy continued by explaining that there is a significant underspending with respect to the cap for the FY18 Proposed CIP. Whereas the cap is about $800 million, proposed spending is about $550 million. However, in midway FY15, at the recommendation of the MWRA Advisory Board, the MWRA excluded the Financial Assistance Program for Communities from the cap. This exclusion accounts for a fairly significant portion of the underspending. The total proposed expenditures for FY18 reach nearly $170 million. The Waterworks budget accounts for forty-five percent of this total with a proposed expenditure of $76.1 million.

With respect to the Capital Program, the MWRA has projected $3.3 billion in future spending. In this cycle of the budget, the MWRA added about $123 million in spending for new projects. The Waterworks projects added this cycle accounted for $85.1 million of that figure. Kathy explained that a significant amount of the $85.1 million pertains to projects that the MWRA would do regardless of whether they make a decision regarding a tunnel or surface piping for long-term redundancy.

Kathy then discussed the top new projects of the FY18 Proposed CIP. The Quabbin Administration Building Rehabilitation is projected to cost $15 million. Kathy explained that although the building is not an MWRA asset, it is in dire need of repair, so the project was included in the FY18 projections.

Overtime, there has been an increasing trend with respect to spending in the areas of asset protection and water redundancy. Kathy explained that these areas are the principal drivers of future capital expenditures.

Michael Baram asked if asset protection includes maintenance. Kathy answered no; this is accounted for separately based on the source of funding.

Kathy then reviewed the top construction projects for FY18 including the Wachusett Aqueduct Pump Station, redundancy for the Northern Intermediate High line, and redundancy for the Southern Extra High line. The total value of contract awards for FY18 is $203.5 million. Awards for Waterworks projects accounts for $47.3 million of the total figure.

Kathy explained that the actual average spending between FY04 and FY16 was $155 million per year. The projected average spending between FY17 and FY23 is $246 million per year. Kathy pointed out that the majority of the first phase of construction of the long-term redundancy tunnel project will be in FY23. This reality accounts for the absence of a significant impact in the next five years. The good news, Kathy explained, is that MWRA’s outstanding debt is, and has been, decreasing.

Finally, Kathy highlighted the next steps in the process: working with the MWRA Advisory Board, finalizing the FY18 CIP, and submitting the final FY18 CIP to the Board of Directors for approval in June. Kathy then turned the presentation to Tom to discuss the FY18 Proposed Current Expense Budget (CEB).

MWRA FY18 Proposed Current Expense Budget

Tom began his presentation of the FY18 Proposed CEB by stating that the theme for this year has been managing the uncertainties to achieve sustainable and predictable rates. The MWRA's financial strategy distills down to one important point: what is the year over year change to the assessments on our communities? If the MWRA, as the regional wholesaler for wastewater and water, can provide assessments that are predictable and sustainable, which relates to affordability and acceptability, the MWRA can provide the best service to the communities.

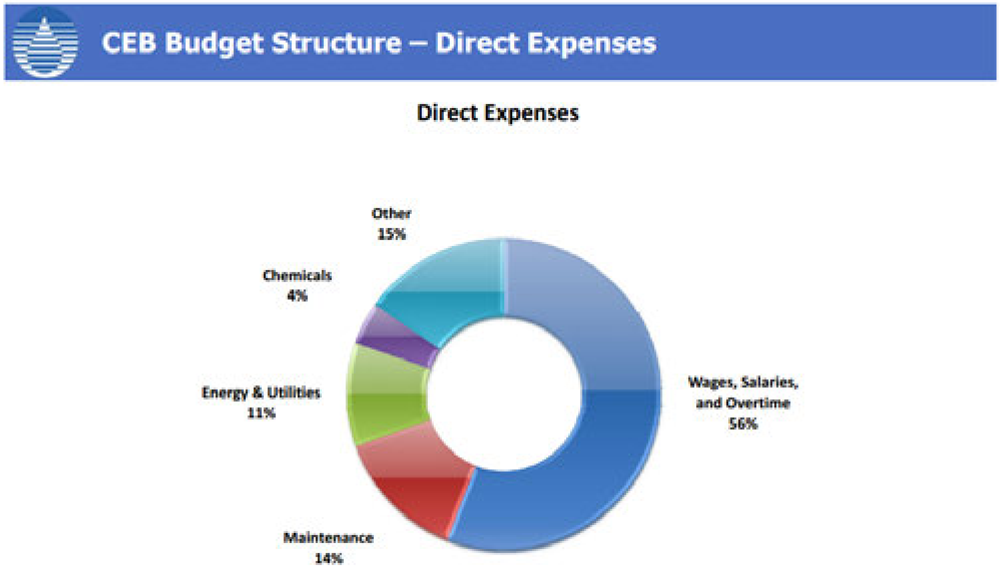
Moving forward, Tom stated that the MWRA will continue to achieve progress toward its long-term goals, such as financing redundancy and providing water to rate-payers long into the future, while focusing on delivering sustainable and predictable rates and managing uncertainties. Uncertainties include global events, domestic events, and market concerns, such as interest rates.

Tom then presented the MWRA's historical spending chart to assess the major budget elements. Tom explained that direct and indirect expenses have historically remained somewhat static. Capital financing, however, which is debt service, is responsible for driving the total operating expense budget upward. Tom stated that if the MWRA can control debt, then they can control the overall budget and carry forward with notions of sustainability and predictability.

The area of uncertainty this year, more than any other year, has been debt. The MWRA has issued some fixed rate bonds and some variable rate bonds. Tom explained that although the MWRA has an idea regarding the interest rate for the variable rate bonds, there is a lot of uncertainty about where interest rates are going. He further explained that interest rates not only affect the debt the MWRA pays, but the interest that the MWRA earns. The MWRA has a sizeable portfolio and the uncertainty is therefore impacting the MRWA's investments. Tom continued to address the uncertainties faced by the MWRA in the following areas:

- Utility and Chemical Prices
- Construction Costs
    - Materials
    - Labor
- Consumer Price Index
- Tax Code Changes
- Environmental Regulations

Tom addressed the three major components of the FY18 Proposed CEB: capital finance, direct expenses, and indirect expenses. Capital finance accounts for 63% of the overall CEB. This means that 63% of the budget is going to pay the principal in interest on the debt that the MWRA used to construct Deer Island, the MetroWest Tunnel, and the Carroll Treatment Plant, for instance. The direct expenses, including wages, salaries, chemicals and utilities account for 32% of the budget. Finally, the indirect expenses, such as pension costs and watershed protection, account for 5% of the budget. All three categories are funded by revenue. Rate revenue is the primary source of funding, but non-rate revenue, such as interest from investments, accounts for the remainder. Tom then briefly compared the proposed FY18 budget with the approved FY17 budget. Overall, the proposed budget increase is at 4.1% resulting in a 3.8% increase to the Rate Revenue~~.~~



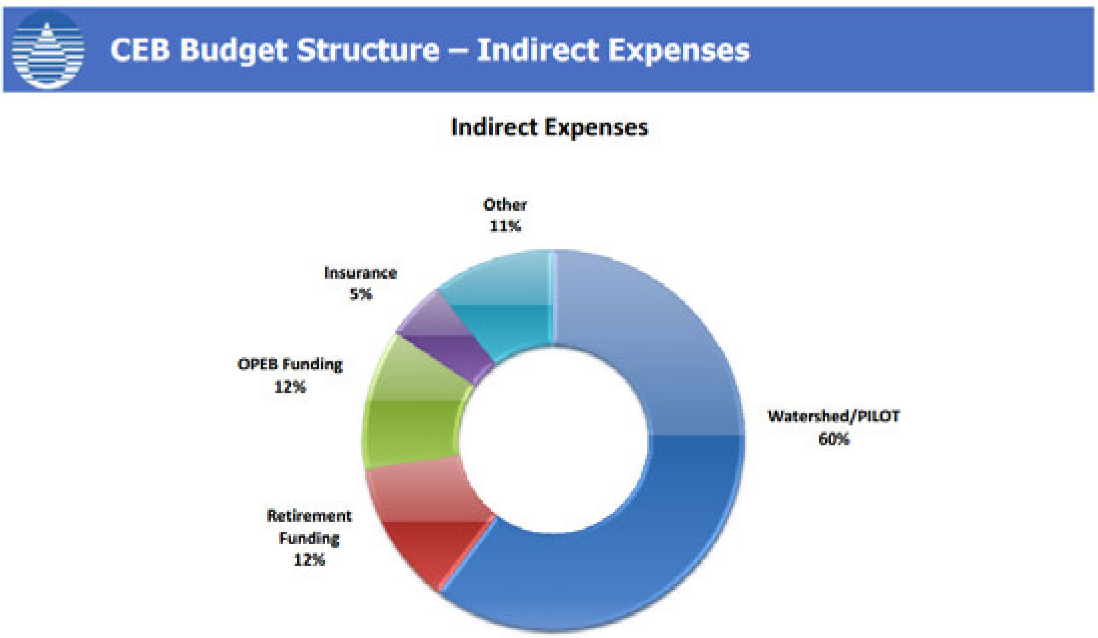
Tom discussed the areas in which uncertainties must be addressed under the direct expense category. The HEEC Cable, for instance, calls for a $4.4 million placeholder for various budget lines. The Deer Island Treatment Plant, Tom explained, has an electric cable that runs from South Boston to Winthrop across the harbor. The HEEC Cable was installed in the late 1980s when Deer Island was being built. MWRA hired Eversource to put the cable beneath the water, beneath the floor of the ocean, to a depth that the Army Corps of Engineers permitted with a permit.

For decades, everything went along swimmingly. Recently, however, Massport decided that it may be advantageous to attract deep draft vessels – vessels which would require dredging the harbor. The Army Corps of Engineers worked out the finances on the federal level and conducted a survey to determine exactly what is in the harbor. MWRA's HEEC Cable was implicated under the survey. Based on sonic testing, the Army Corps determined that the cable was not installed as deep as it should have been. The issue has come to a head and a decision will be reached in the beginning of July 2017. Initially, the projected cost to remedy the issue was $12 million. Today, that cost has increased to $40 million. Tom continued to explain that the MWRA, as required by the EPA, has a backup source of electricity. Although the cable is consistently the most efficient and affordable source of energy, the alternative source is capable of producing enough electricity so that the MWRA does not need the cable. Nonetheless, the alternative is much more expensive. Tom explained that the MWRA has been in negotiations and is seeking to reach a solution that does not impact the budget because sustainability and predictability is crucial for the Authority moving forward.

The following categories also create uncertainties for the MWRA:

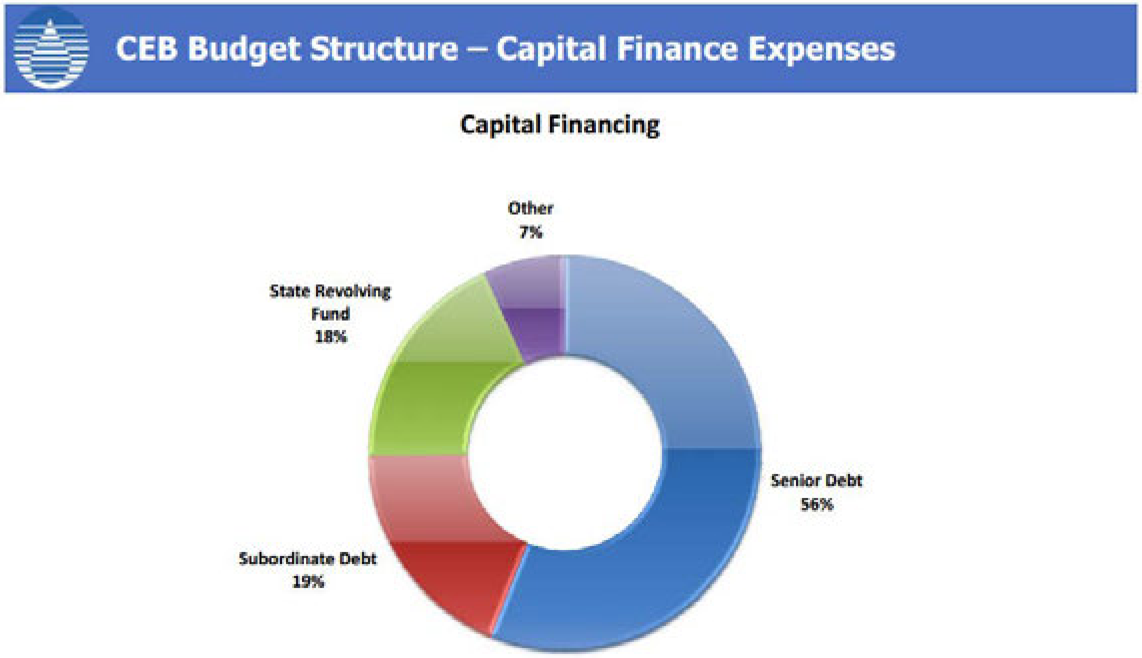
- Health Insurance Increases
- Volatility in Utility Costs
- Chemicals
    - Contractual Increase
    - Regulatory Uncertainty (NPDES)

Michael asked who the beneficiary is for the HEEC Cable project. Tom replied the MWRA is the sole user of the cable. Michael explained that by the term beneficiary, he meant who is benefitting from the requested change. Tom replied that the question is insightful. He said there is an argument to be made that as a user of the electricity, the MWRA will benefit. Additionally, Eversource, as they will be making a profit from the electricity. Michael agreed, but further asked who is going to benefit from the deep draft vessels in the harbor. The room erupted with a general response that the entire regional economy will benefit. Once again, Michael agreed, but voiced a concern regarding whether the direct beneficiaries would be at the table to discuss who would pay for the project. Michael drew a parallel between burden shifting and cost distribution with respect to the railroad at Wachusett. Michael asked if protecting the Wachusett has been factored into the Proposed Budget. Tom replied that it has. The CIP includes funding for Watershed Land Acquisition.



Tom then outlined the indirect expenses category, seen above. The Watershed Program/PILOT allocation constitutes 60% of the indirect expense budget at $25 million. The Pension Fund is nearly fully funded. The MWRA runs a defined contribution pension funding program, which typically has two components. The first is called a normal cost. The second component is the unfunded amortization. The MWRA, as required by regulation, has to pay down the degree to which it did not fund the normal cost in the first place. Due to the fact that the MWRA has been putting in enough for the normal cost and addressing the unfunded actuarial liability, the MWRA is 98.3% funded.

Tom then addressed the CEB Budget Structure with respect to Capital Financing Expenses.



Tom explained that debt service is a concerning point for the MWRA. Tom wished to leave the committees with the following message: getting through the next years with debt service spikes is the drive behind the predictable and sustainable MWRA mantra. The MWRA will have achieved a great milestone around FY22 because that is the peak of the Authority's debt and debt is the biggest part of the budget.

Paul Lauenstein asked when the Metropolitan Tunnel Project starts to impact debt service projections. Tom explained that the project is built into the projections. The cash flow begins in FY18 for the design phase, which will continue for about five years. After five years, construction will begin. Construction is layered in and the entire project is layered in until 2036. Paul then asked if the debt service would spike in the years to come. Tom stated that the debt service will remain level/decrease based on the way in which the MWRA has structured its spending.

Tom outlined the ways the MWRA addresses the challenges presented by debt service:

- Defeasance
- Use of Reserves
- Tactical Issuance – Repayment Structure
- Control Capital Spending
- Strategic Use of Current Revenue/Capital Funding

Finally, Tom outlined the next steps for the FY18 Proposed CEB:

- Transmit Proposed Budget to the Advisory Board for 60-day review
- Public Hearing
- MWRA Board Hearing
- Staff will present Draft Final Budget at the June Board meeting

The committee thanked Kathy and Tom for their presentation.

The Cost of Water Infrastructure: Implications for State Policy And Municipal Budgets

Tom Champion, a Policy Research Analyst at the Office of the State Auditor, Division of Local Mandates, introduced his presentation regarding a municipal impact study on the topic of the cost of water infrastructure and the implications on state policy and state/municipal budgeting

Tom explained that the Division of Local Mandates (DLM) was created to investigate possible unfunded mandates, and look at additional implications of state law & policy on municipalities. The Division sits at the intersection between state law/policy and local budgets by looking at the overall impact of state policy on local budgeting.

In 2012, the Water Infrastructure Finance Commission (WIFC) reported back and set a baseline with respect to the gap between available resources and the likely costs for water infrastructure moving forward. With the imposition of SWMI (Sustainable Water Management Initiative--a Massachusetts DEP program, new MS4 permits (municipal separate stormwater system), the drought, and other changes in critical circumstances, it was time to revisit costs. As the Division began to look at the issue, they repeatedly heard the term ‘holistic’ from a number of sources. Holistic thus became the framework from which the Division examined the issue.

In action, the term holistic treats all aspects of water infrastructure – drinking, waste, and storm – as a single system. Thomas explained that in an effort to achieve the greatest efficiency, a holistic approach regionalizes and shares resources. Furthermore, fiscal policy, at the state level, should incentivize municipalities to truly invest in water infrastructure, rather than discourage it or make it more difficult.

The Division issued surveys to all 351 communities in Massachusetts and received 146 completed surveys. Twenty percent of the respondents were MWRA members. The vast majority of respondents were larger communities. The responses provided a good statistical base to develop statewide models.

Tom then outlined the findings and recommendations based on the responses received.

Finding 1: $17.8 billion in projected municipal water spending needs

Tom explained that this number is low. The original WIFC in 2012 stated that they estimated a $20 billion gap. The basic takeaway is that this number is big! The Division recommends that the state stop lending and start granting money. If the state wants to inspire more municipal spending, they must get into the game to with grants. The Division recommends that the state establish a new trust fund for water infrastructure that is strictly grant-based. Furthermore, the Division recommends $50m/year for the next 10 years. Although this figure will not eliminate the gap, it will establish a principle that if the state puts money on the table, communities will be incentivized to take advantage of historically low rates and start putting money into their infrastructure.

Finding 2: MS4 compliance will add $1.58 billion to 20-yr projected municipal water spending needs

Tom stated that municipalities should start establishing stormwater enterprise funds that function as water & sewer funds function.

Finding 3: Regional collaborations remain a goal, rather than a reality

Tom explained that regional collaborations, like MWRA, are the exception. Thomas reasoned that state legislation is needed in order to get other communities to the same level of professional collaboration and to engage in the shared approach taken by the MWRA. The Division recommends that the state simplify the process of creating regional public entities in order to promote municipal collaborations.

A committee member asked how regionalized models could be applied to stormwater. Andreae Downs explained that small regional collaborations can share technical resources and expertise. Thomas explained that the collaborative groups do not impose rates or performance requirements. Essentially, the regional collaborative exist to share resources and information on best practices.

Finding 4: Municipalities may not be taking full advantage of current loan and grant programs

Tom stated that only 42% of responding communities have received water infrastructure grants or loans from the state or federal government in the past ten years. The Division recommends that the state work to enhance municipal eligibility for loans and grants by reviewing repayment options. Moreover, the state should consider additional funding for MassDEP so the agency can increase its outreach and educate municipalities about the benefits for current and future water infrastructure grants and loans.

Finding 5: Climate change impacts on water systems are not receiving adequate attention

Tom explained that only 6% of the Division's survey respondents have any kind of climate change plan for water infrastructure--not just at the coast but well inland around rivers. The Division contends that Governor Baker should convene a state summit on climate and municipal water infrastructure. The Division additionally recommends that the legislature authorize funds for expert assistance with respect to municipalities developing water infrastructure resiliency and capital investment plans related to climate change impacts.

Whitney Beals asked, couldn't this be a carrot & stick? If you don't include climate planning in your infrastructure upgrades, you don't get the money? Tom agreed, but emphasized that the first step is to build public awareness. Nonetheless, incentives would help.

Finding 6: The rate of adoption for cost-saving and innovative technologies is low

Tom explained that only 18% of respondents reported adopting innovative or alternative technologies to achieve cost savings, enhance capacity, or improve performance. The Division recommends that the Operational Services Division and the Division of Capital Asset Management and Maintenance review regulations and practices to spur the adoption of new technologies. Moreover, the Division recommends the legislature enact legislation that will create funding for communities to adopt new cost saving technologies.

Finding 7: Municipalities favor state administration of stormwater permits

Tom explained that 90% of the communities that expressed a preference between MassDEP and EPA indicated that they would rather have MassDEP administer MS4 permits and other NPDES regulations. Tom stated that the Division recommends that the legislature enable MassDEP to assume responsibility for stormwater permits under EPA's NPDES regulatory standards. Moreover, the legislature should mandate that funding should come from a number of sources. Additionally, MassDEP should work with municipalities to create a ten year rolling capital investment compacts for water infrastructure in order to promote stability and predictability.

The Auditor's Report is issued to the Governor, Legislature, and is distributed as widely as possible.

The committees thanked Tom for his presentation.

WSCAC Business

Whitney made a motion to accept the February minutes as distributed. The motion was seconded. All voted in favor. Whitney then made a motion to accept two new members to WSCAC: William Copithorne and Jean McCluskey. Paul seconded the motion and all voted in favor.

The meeting was adjourned.