WASTEWATER
ADVISORY COMMITTEE

April 20, 2021
Remote via zoom

Attendees:

WAC Members: **Karen Lachmayr** (Chair), **Wayne Chinouard** (Vice-Chair)**, Adrianna Cillo** (BWSC)**, Craig Allen, Dan Winograd, George Atallah, James Guiod** (AB)**, Kannan Vembu, Martin Pillsbury, Mary Adelstein, Philip Ashcroft, Stephen Greene, Taber Keally (**Members in attendance in **bold**)

WSCAC Members: Bill Fadden, Bill Copithorne (Arlington),

Guests: Tom Durkin, Mike Cole, Jim Coyne, Wendy Leo, Matt Horan, Sally Carroll (MWRA), Fred Russell (Brookline), Jim Barsanti (DEP), Lou Taverna (AB),

VOTE: March Minutes

REPORTS:

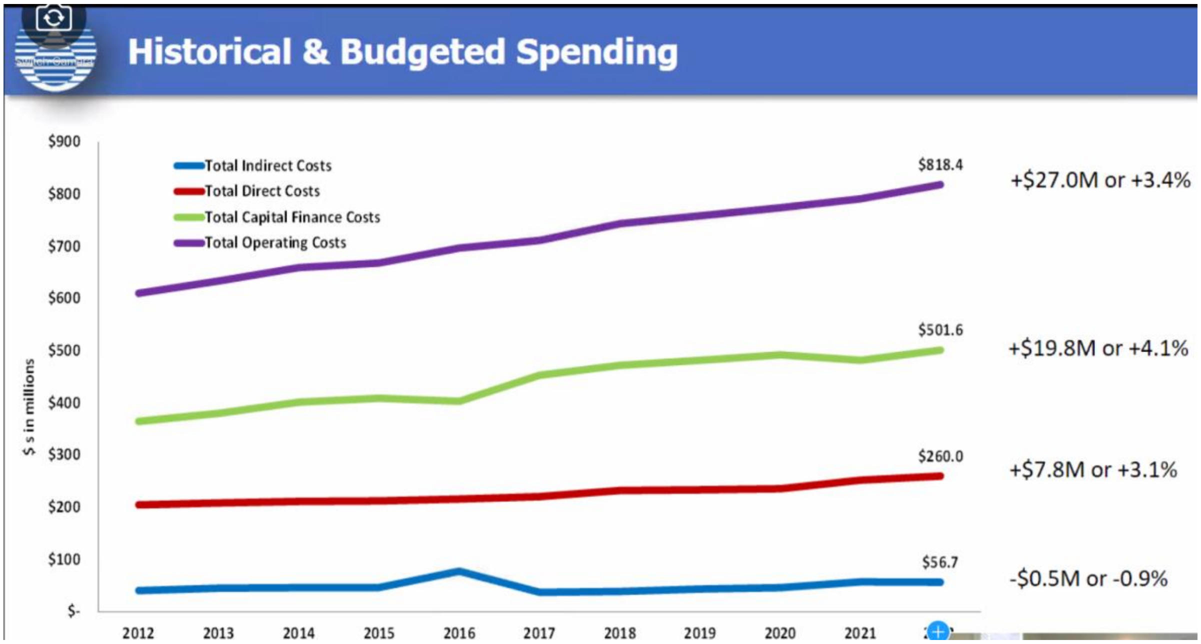
MWRA: Still performing COVID wastewater sampling. Chelsea Headworks completion imminent--lessons learned will be applied to Ward St and other Headworks. Prison Point is just getting underway. Clinton valve replacement starting.
CSO separation projects getting identified with communities to reduce CSOs further--Chelsea, South Boston. Semi-annual Report #6 released April 30. May 21 public presentation. May 11 OMSAP meeting.

AB: Middle of budget review process. May--official AB vote on comments & recommendations; delivery of same. June--MWRA Board budget vote. One of the recommendations may deal with the likely vacancy rate of DCR watershed staffing by reducing that budget line.
Anticipating Debt Service Assistance of $1.3m for FY21
May AB meeting will also review the lead & copper rule changes.
September may start hybrid in-person/remote meetings.

PRESENTATION

MWRA budgets--Tom Durkin, Director of Finance, Mike Cole, Budget Director

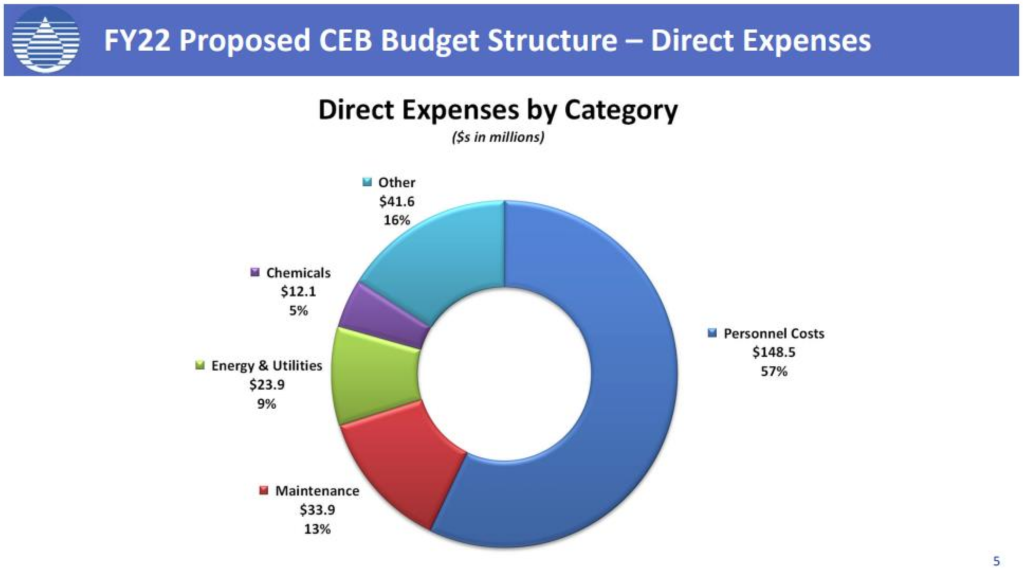
Tom: Keeping it steady--predictable assessments in water and in sewer. Also in combined assessment. Try to keep increases as flat and low as can be, over time.



Blue line--indirect costs. Slow & steady line. Dip/bump in 2016 is paying for watershed lands in one lump sum, saving on debt service longer term. Did that instead of defeasing. See the changes in the green line also--those are linked.

Red line--Direct costs up by 3.1%--wages and chemicals--this is our proposed budget. Proud of that, because it's held steady.

Capital finance, the green line is the driver.

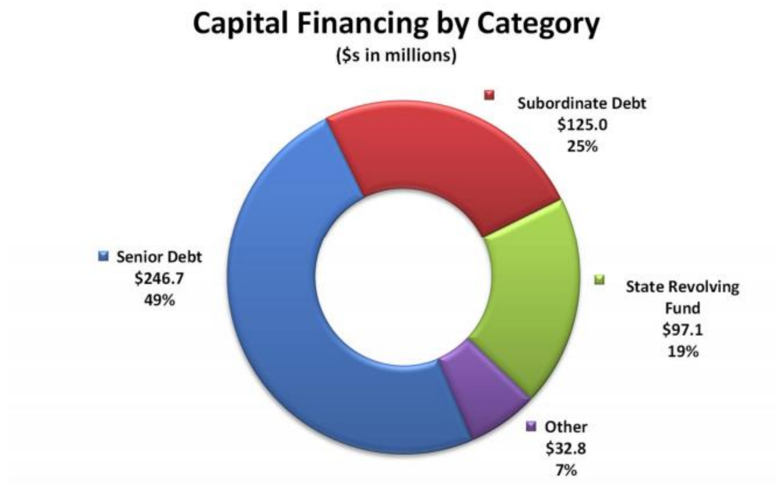


Personnel is 57% of the direct expenses. Increase of $5.6m-4 new FTEs, 3 in tunnel redundancy, one in occupational health. Health insurance up 6%

Maintenance is increasing by $1.3M over FY21. Of that increase, $770K is due to software maintenance. Utilities are down because of electricity rates. Within “other” $41.6m, is trainings and meetings, professional services--driven by biobot engagement ($600K for testing), other materials, and other services – driven by the NEFCo contract.

Indirect expenses--dropping by $537K, just under 1%. Watershed is increasing $845K: mostly operations, wages, salaries, fringe & PILOT. Pension increasing 1.9%, based on actuarial valuation. OPEB reducing 22.9%, also per valuation. HEEC at $7m is a reduction based on latest numbers. Insurance costs are up 15.8%, because FY21 budget was finalized early last year, to give communities extra time to prepare, but MWRA premium increases weren’t final by then.

FY22 Proposed CEB Budget Structure – Capital Finance Expenses



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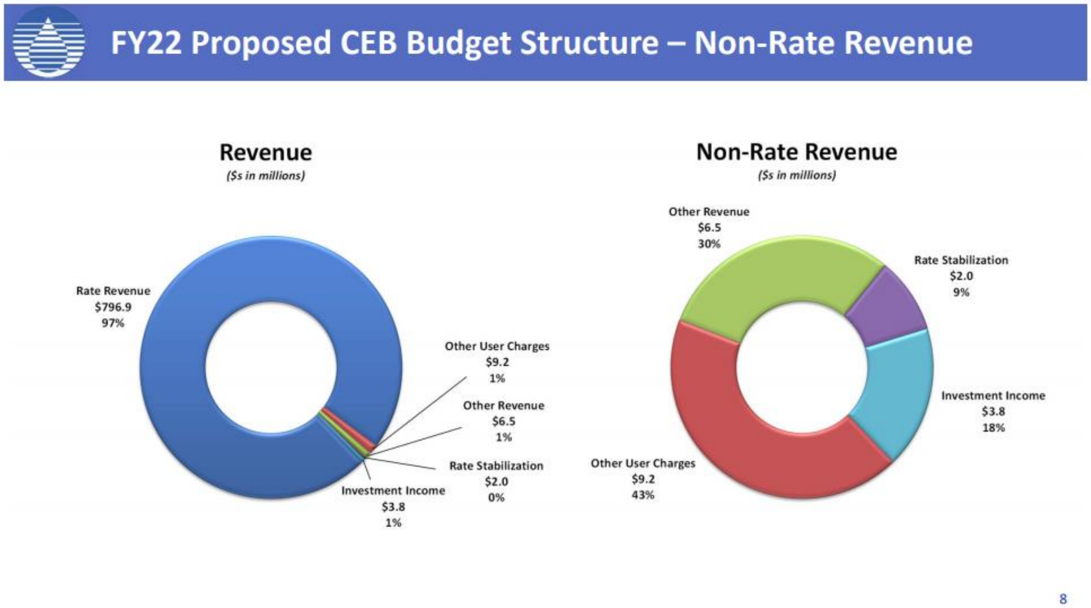
Capital Finance: largest component of budget. Senior debt is fixed rate--includes impact of $15m defeasance and two new issuances. State revolving fund at 2% interest rate. Includes $10.5m borrowing this spring and next. Other debt--lease, debt prepayment costs, local pipeline loans. Not included is Debt Service Assistance, which will be incorporated and will reduce this figure.



Revenue. Increasing 3.6% Rate revenue is largest piece of MWRA revenue. Non-rate revenue is down, mostly interest rates on investments. Big change from disposal of equipment--hadn't budgeted for in the past because it was so inconsistent. Over the last 3-5 years seen more consistency, so were comfortable adding it into budget this year.

Tom: rate projections--change over last year combined water/sewer assessments. FY21 went up 1% because of pandemic and uncertainties. Not smooth, but we thought we could manage through that.

FY22 project 3.6% increase--projecting future years and trying to make the combined rate increase rate lower and flatter.

Most of customers are water & sewer customers, so utility-specific changes are obscured. But there are some that have just one service. Try to give them some predictability in rate increases. Water utility is carrying debt service from Carroll Water Treatment plant and other major investments, which have higher interest rates.

Another layer is individual communities. Boston has had lower water used during the pandemic. Will be looking at calendar 2020, what happened then and so their share will also come down. Others are going to have to pick up the difference. In your particular utility, in your community, these averages may not hold. Stoneham, for instance, will have a 24.6% increase because of usage and because of Boston's lower demand. We have been communicating directly with utilities in communities to warn them of these changes.

Capital Improvement Program: more of a plan than a budget

These are larger items. Capitalized, because for the life of the asset, want to finance over time so everyone enjoying the asset is paying for it.

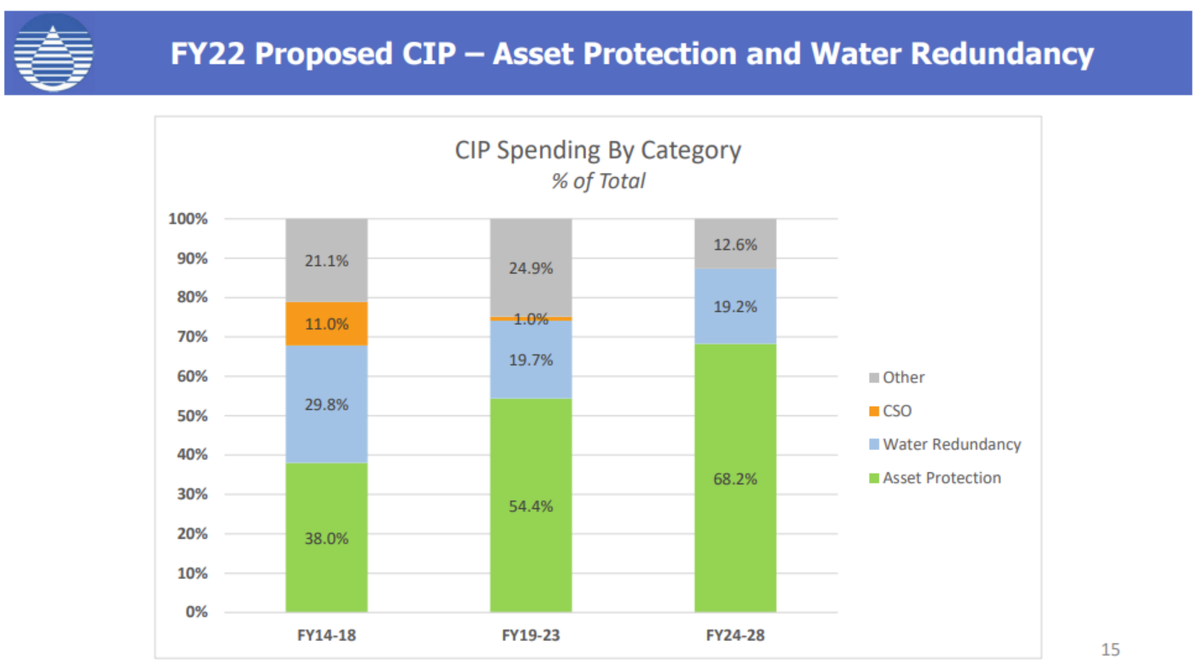
Look at the budget in 5-year increments, with a cap proposed by the Advisory Board.

Focus is on asset protection and redundancy. $1.5 billion metro tunnel program.

By design, it's optimistic--we expect to do all these projects, but there are delays, changes in scope. Expected to be less than the total projected. FY22 cap total spending projected to be $888.1 million, down from $984.8m expected in FY19.

Changes by year--each year the projections change to reflect what was actually done/possible.

Other--is computer replacements, business side capital projects, etc.



Can see there's more asset protection, less CSO, less water redundancy. Projecting in next cap period more tunnel costs, more asset protection & almost no CSO spending.

Watch progress by month, categorized by cap period.

Mike Cole:
Table showing top 10 projects and threshold greater than $14m through FY23. Make up about ⅓ of the cap period.

56 awards anticipated mostly water. Also most of the spending. For FY22 alone.

Total expenditures, mostly wastewater FY 22 $260.5m. Mostly ongoing projects.

Top spenders include Nut Island odor control HVAC--$22.9m this FY. Expect to have substantial completion Dec. 22

Clarifier rehab--not begun yet. $21.8m finished May 2025

Prison Point rehab: $21.2m Did not get started, but hope this FY will start.

DI fire alarm replacement--likely to be pushed back. $7.8m total

Water projects; NIHigh. Hope will start by the end of this fiscal year
Metro tunnel preliminary design & MEPA review--this year
WASM 3--underway.

DI combined heat & power--use so much energy at DI, over $10m budget for electricity alone. Idea of generating heat is one effort, power production or purchase is also important. Engineering science brings these together. Use digester gas to make energy--95% of all heat and 22% of electricity. When you add solar arrays on roofs, wind turbines and hydro--about 65% off grid. We can do better. June 2019 contract to study this. Making big changes to an ongoing operation is a challenge. Not a lot of empty space for a big heat/power initiative. Expected that recommendation to take 15 months. Had to extend that--October recommendation expected. Black & Veatch evaluating all the CHP technologies across the world challenge to increase DI green energy. Also look at how to decrease emissions from fossil fuels and Deer Island's reliance on the grid. Hoping we can improve 65% to about 85%. Financing for their recommendation is expected to be about $90m, depending on location and logistics on the island. Think MWRA can get about 30% in grant funding from DEP and EPA. Hope to have a presentation to board in September.

Debt service graph with savings in blue

Always looking at how to make debt service affordable. $558 m lower than where thought we would be in FY2016. Continue to shave and alter the debt. Like chasing a wave. Outstanding debt trend going down.

Looking ahead:

- Lessons learned from Chelsea Creek headworks. Over 40 change orders. Expected that.
- Continue asset protection
- Watching Metro tunnel redundancy--having great successes. Communities are supportive. Staffing up.

Budget process underway. The Advisory Board has quite a challenge to review all of our budgets, bring in all departments for briefings. Lot of time for both MWRA and AB.

Public hearings ongoing.

Working on AB recommendation to reduce RRR to 2.95% from 3.6%.

Q&A
Are pensions planned for? Yes--have annual assessment--Unfunded liability. Ours is near 90% funded. Have to make it up over time. Pay up any unfunded amount over time, and put more in as regular practice. Full funding goal FY2029. Challenges: funded by paycheck deductions, investment income & finally rate payers --$10m this year and $11 m next from ratepayers.

OPEB--trust set up. Funded at ½ required contribution. Advantageous for MWRA communities and retirees.

Is there any plan to use less debt in the future--in the “other” category is $$ to use current revenue to cover capital costs, so less borrowing in the future.

Why are Stoneham rates going up and Boston’s going down? Stoneham has had more usage, more leaks-->particular to Stoneham. But Boston also seeing less usage because hospitals, hotels and businesses closed. That changes Boston’s demand. As share of water usage goes up or down, so do rates. Theme of presentation--try to be steady, consistent. These bumps also don’t serve Boston either. Volatility can cause extra stress on finances.

MWRA also looking at office uses. Charlestown lease for administration expires in 2 years. With work from home, we are in the office less. 3 days in/out. For the most part, this works for us. Chosen not to renew in the Navy Yard and using Chelsea and Deer Island instead. This frees up about $2m/year in costs.

Advisory Board will need to find new office locations--would be good to be close to the MWRA. WAC will also need space for its files and more collaborative work.

WAC May 7 meeting: BWSC modeling storm surges, sea level rise, flooding. 10:30 am. By Zoom