Table 20

Line Item/Description	Final FY15	Proposed FY16	Δ ($s)	Δ (%)
Proposed Fiscal Year 2016 **Capital Financing Summary** ($ millions)				
Total Senior Debt Service	**$220.84**	**$283.41**	**$62.58**	**28.3%**
Outstanding	219.04	276.01	56.98	26.0%
New FY15/FY16	1.80	8.31	6.51	361.4%
Potential Defeasance/Restructuring	0.00	-0.90	-0.90	-
Fixed rate debt service, existing and new borrowings during FY13/14.				
Total Subordinate Debt Service	**99.69**	**49.22**	**-50.46**	**-50.6%**
Outstanding	99.69	49.22	-50.46	-50.6%
New FY15/FY16	0.00	0.00	0.00	-
Potential Defeasance/Restructuring	0.00	0.00	0.00	-
Variable rate debt service: 3.25% interest rate assumption.				
Total SRF Debt Service	**78.46**	**81.37**	**2.91**	**3.7%**
Outstanding	76.66	76.80	0.14	0.2%
New FY15/FY16	1.80	4.56	2.76	153.5%
Low-interest loans from the Commonwealth. 2.0% interest rate (Water); 2.5% (Sewer).				
TOTAL DEBT SERVICE	**398.98**	**414.00**	**15.02**	**3.8%**
Water Pipeline Commercial Paper	**4.15**	**4.15**	**0.00**	**0.0%**
Debt service supporting $25 million/year for the Local Water Pipeline Improvement and Local Water System Assistance Loan Programs.				
Current Revenue/Capital	**10.20**	**11.20**	**1.00**	**9.8%**
Amount of current revenue used to fund ongoing capital projects and to meet coverage requirements.				
CORE Fund Deposit	**0.88**	**6.66**	**5.79**	**660.2%**
The CORE Fund is 10% of Senior Debt Service for the fiscal year per the Bond Resolution.				
Capital Lease	**3.22**	**3.22**	**0.00**	**0.0%**
Chelsea facility lease payment.				
TOTAL OTHER CAPITAL EXPENSES	**18.44**	**25.23**	**6.79**	**36.8%**
Bond Redemption	**-6.75**	**-3.55**	**3.20**	**-47.4%**
Bond Redemption funds used to reduce capital financing expense.				
Debt Service Assistance (offset)	**-0.85**	**0.00**	**0.85**	**-100.0%**
The state-wide program providing assistance with wastewater debt service is not expected in the Commonwealth's FY13 budget.				
TOTAL CAPITAL FINANCING EXPENSES	**$409.83**	**$435.68**	**$25.86**	**6.3%**

Other Highlights

- Outstanding principal: $5.467 billion[30]
    - Lower than one year ago
- Planned FY16 borrowings:
    - MWRA: $100 million
    - SRF: $47.9 million and $15.8 million, total of $63.7 million
- FY15 CEB also includes funding for a $100 million borrowing transaction in June of 2015
- No new Debt Service Assistance is assumed

[30] Through December 31, 2014

Capital Financing Expenses Increase $21.8 Million[31]

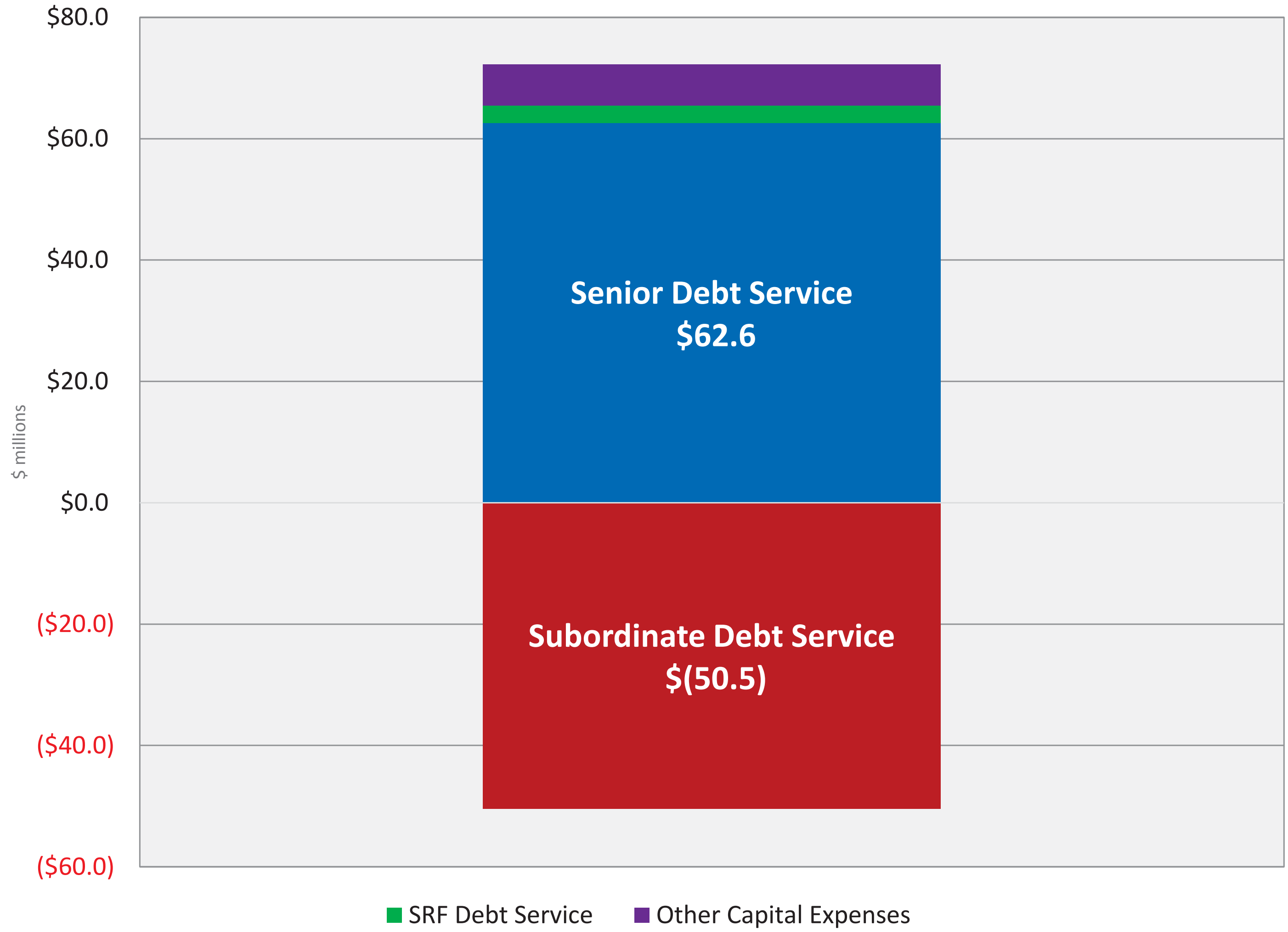

Figure 13

Debt Service vs. Operating Expenses

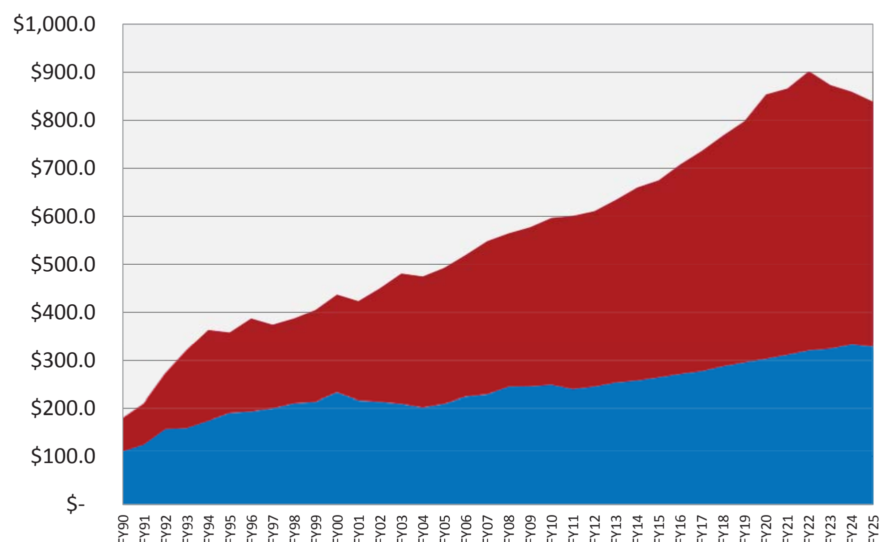

Figure 12

MWRA Debt Financing and Principal

- The Authority relies heavily on debt financing to fund its capital program
- The Authority has spent $7.84 billion on its capital improvement program[32]
- For FY16, capital financing expense as a percent of all expenses is 61.6% (For reference (See Figure 12)
- Outstanding principal borrowed totals $5.467 billion[33] and includes four categories:
  - State Revolving Fund (SRF)

[31] Before offsets
[32] Through FY14
[33] As of December 31, 2014.

- Pure Variable (subordinate debt)
- Swap Notional (subordinate debt)
- Senior Debt

- Commercial paper (CP) outstanding: $130 millic
    - Including CP, total outstandi principal = $5.658 billion
- Outstanding principal is declining and is $46 milli less than the prior year

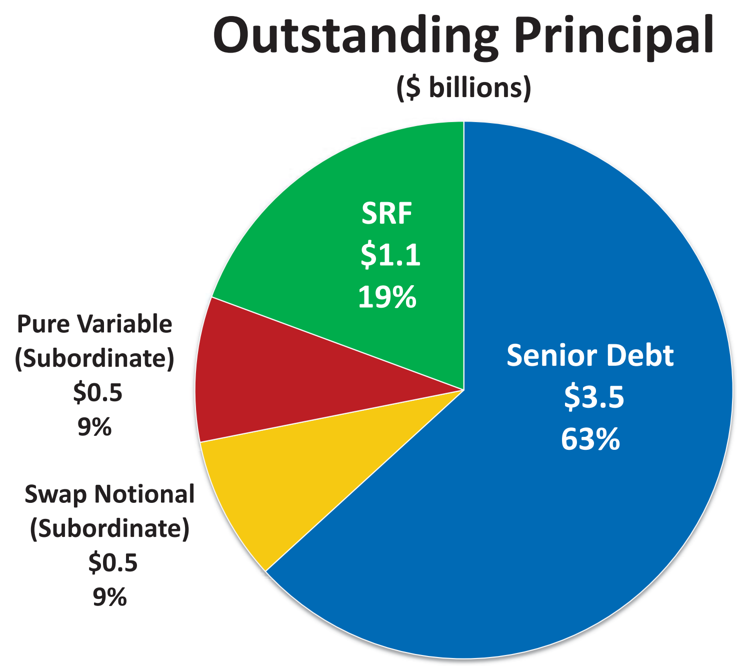

Figure 14

Debt Service on Senior Debt

- FY16 debt service on senior debt is $283.41 milli including:
    - $6.5 million for full first-year costs planned spring 2015 borrowing of $1 million
    - $1.8 million for partial year debt service new borrowing of $100 million next spri 2016
    - $0.90 million in estimated reduced debt service in FY16 from projected 2015 defeasance transaction

Debt Service on Subordinate MWRA Debt

- FY16 debt service on subordinate debt: $49
- Variable rate debt interest rate assumption
    - Same as the last four fiscal years
    - Based on a 20-plus year average
    - Federal Reserve Board has indicat may increase in the coming fiscal conservative rate assumption will shield the Authority from risk
- One factor rating agencies consider when Authority's bond rating is how much varial exposure the Authority has
- Outstanding variable rate debt: $963.4 milli
    - Makes up 17.4% of all outstanding c
    - Percentage has been declining o several years: just three years earli of all outstanding debt
- Total variable rate debt exposure expectec to 16.5% by the end of FY16, and to 15.3% FY18

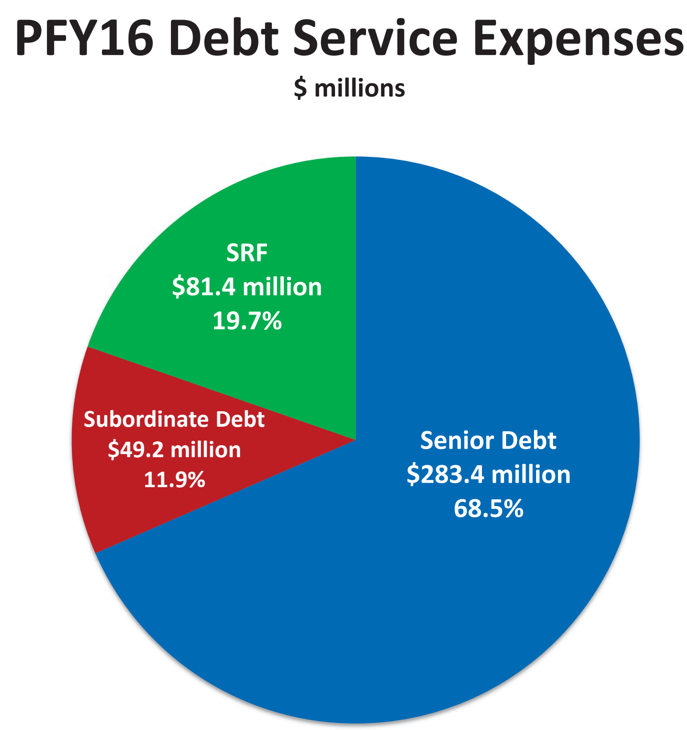

Figure 15

SRF Borrowings

- FY15 debt service on SRF borrowings: $81.37 million
    - $4.56 million of this is for Pool 19 new borrowings

- These amounts may be updated in the final FY16 CEB
- Outstanding SRF debt: $1.05 billion
  - 19.4% of total outstanding debt[34]

Policy Point

Tax-Exemption for Municipal Bonds at Risk

"Money Grab"

At its April 2015 meeting, the Advisory Board received a presentation from the Massachusetts Municipal Association (MMA), the Clean Water Trust, and MWRA staff about a potentially huge issue facing member communities, both at the local level and through their MWRA assessments. Specifically, there are proposals being floated by President Obama and some legislators to restrict or remove the abilities of cities and towns to issue tax-exempt municipal bonds. What does that mean? In short, higher costs for cities and towns.

The proposals come as a potential strategy to raise additional revenues at the federal level, but in essence they amount to a shifting of costs from the federal government onto state and local governments. Removing or curtailing the federal tax-exemption of interest on municipal bonds would cause investors to "demand higher interest payments to offset their new tax liabilities, forcing states and localities to pay more to finance projects."[35]

At the local level, this issue would affect any bonds issued to pay for bridges, schools, and municipal buildings, dramatically increasing interest costs. Moreover, member communities would also see an increase through their MWRA assessments as well when the Authority's bonds were similarly impacted.

Authority staff has estimated the impacts of the loss of tax-exempt bonds to be approximately $15 million in additional cost per $100 million in today's favorable interest market. The MWRA expects to borrow over $2 billion over the next ten years to fund its capital program. When applying this estimated cost to the $2 billion anticipated borrowing plan, the cost to the communities over the life of the bonds would be $300 million in additional debt service. Moreover, these estimates assume the current low-interest rate market – when (not if) interest rates increase in the future, the additional costs to ratepayers will similarly increase. Moreover, some of the proposals include a retroactive component, which is especially worrisome for the Authority, who has $3.5 billion in outstanding senior debt.

The Advisory Board will be discussing this issue and taking an official position at its June 2015 meeting, but felt it was important to highlight and provide background on the topic in this year's *Integrated Comments*, given the prominence of capital financing costs in the MWRA's Current Expense Budget.

Bond Defeasance and Refunding

- Proposed FY16 CEB assumes a defeasance transaction of $20.44 million
  - The funds represent underspending during FY15, particularly for variable rate debt
  - Total estimated benefit in future years: $20.44 million
    - Benefits are mainly in FY17 (42%) and FY18 (47%)

[34] As of December 31, 2014

[35] MMA Executive Director's Report The Beacon, May 2013 (http://www.mma.org/advocacy-mainmenu-100/exec-directors-reports/11871-tax-exemption-for-bonds-threatened-by-dc-money-grab)

- Updated June 2014 defeasance transaction is $29.7 million
    - Total benefit is estimated at $31.3 million
- Since 2006, through the planned spring 2015 defeasance, MWRA will have defeased $335 million for targeted debt service reductions over multiple years (See Figure 16)
- The Authority continues to look for opportunities for refunding and refinancing to reduce projected debt service

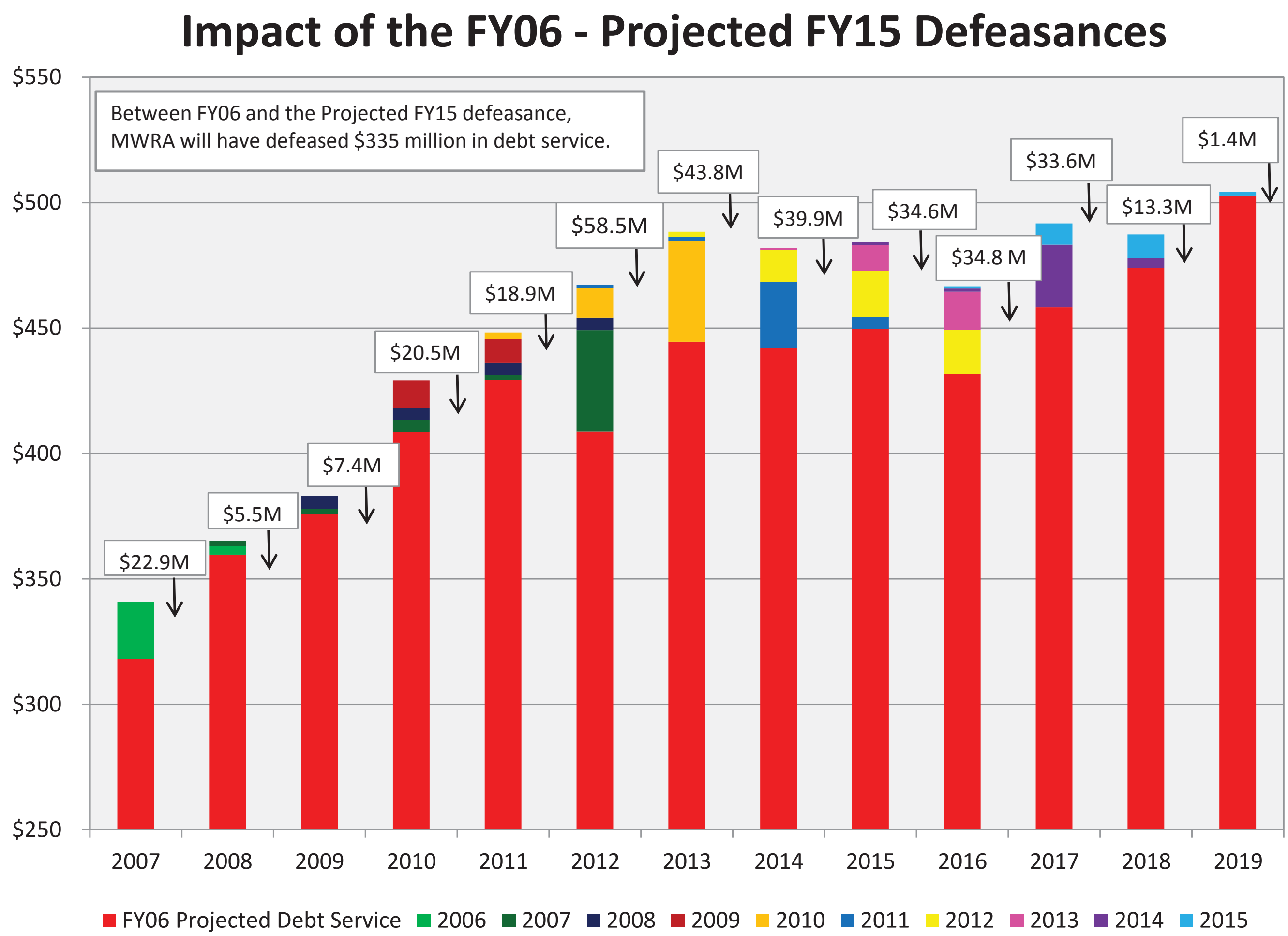

Figure 16

- The Board has authorized the continuation of the defeasance account to receive surplus funds raised for capital financing expenses to manage future rates. The account ensures that these funds are used in a manner consistent with the purpose for which they were budgeted and raised from the ratepayers. [36]
- ***The Advisory Board supports the continued use of the defeasance account strategy, which clearly identifies a use of variable rate debt service savings that is consistent with the original intended use of the funds that were raised.***
- ***The Advisory Board expects the Authority to reduce capital financing by an additional $400,000 to reflect the spring 2015 defeasance transaction.***
- ***The Advisory Board expects the Authority to increase the line item for State Revolving Fund (SRF) debt service by $1,000,000 to reflect the updated amounts anticipated for FY16.***

Other Components of Capital Financing Expense

- Water Pipeline Commercial Paper: $4.15 million

[36] Figure 16 includes the **projected** FY15 defeasance transaction.

- Interest payments on commercial paper borrowings for:
    - Local Pipeline Assistance Program (LPAP)
    - Local Water System Assistance Program (LWSAP)
  - Assumptions include:
    - 3.25% interest rate (same as past five years)
    - $127.67 million average balance of commercial paper outstanding (same as FY15 budget)
    - Chelsea facility capital lease payment: $3.22 million
  - The amount has remained the same since 2002
  - The current portion of the annual payment is included in the CEB (See Other Services)
- Capital Lease Payment: $3.2 million
  - Relating to capital costs of Chelsea administration and maintenance facilities; flat annual cost
  - Annual lease costs, insurance and taxes are included in the “Other Services” section
- Current revenue for the capital program: $11.2 million
  - The FY15 budget was $10.2 million; the FY14 budget was $9.2 million

Community Obligation and Revenue Enhancement (CORE) Fund Deposit

- As senior debt service has increased, the requirement to fund the CORE fund has reappeared in the budget after a number of years when the conditions for fund deposits had been met
- Funding is proposed at $6.66 million, but is only required under the terms of the original bond covenants
- **Due to the official release of reserves in April 2015 and the corresponding change in bond covenant requirements, the Advisory Board recommends that the $6,663,030 CORE Fund deposit is removed from the final FY16 CEB.**

Debt Service Offsets

- Bond redemption funds: $3.55 million
  - FY15 budget: use of $6.75 million
  - Current balance: $26.1 million (including the $3.55 million above)

The Advisory Board recommends reducing the anticipated use of bond redemption funds by $3,547,000. This reduction in bond redemption fund use is offset by the other recommendations/adjustments being made/identified by the Advisory Board.

- Debt Service Assistance funds from the Commonwealth have been a critical tool in managing sewer (and some water) revenue increases for MWRA communities
  - Proposed FY16 budget assumes $0 funding
  - The Advisory Board’s goal is to keep the line item funded in the state budget. Staff will continue to work to support inclusion in the FY16 state budget

Bond Covenant Changes

- Bond covenant changes from January 2007 will allow certain reserves balances to be released when two-thirds of outstanding principal has been issued or restructured pursuant to the revised covenants
  - Current projected release is April 2015
- Current projected release total: $113.4 million
  - $10.0 million will be contributed to OPEB Trust Fund
  - $103.4 million will be used to lower wholesale rate assessments
- Funds eligible for release before FY16 were included in ongoing defeasance transactions

Policy Point

Released Reserves

"Advisory Board Initiative Pays Dividend"

History and Background

As mentioned earlier, the Authority has reached another milestone, which opened up a host of options. Over the last several years, one of the "future tools" referred to by both the Advisory Board and the Authority were the "release of reserves." At the time of this writing, the requirements to release the reserves have been met, allowing for their use as a powerful rates management tool. However, this tool was only made possible through years of effort by both the MWRA and the Advisory Board.

In 1990, the MWRA did not have a track record as a standalone debt issuer, so when the General Bond Resolution was approved, a "belt and suspenders" approach was employed to provide additional security to the bondholders.

Over time, the Advisory Board has made recommendations for pursuing a multi-year rates management strategy, including the formation of many working groups and committees to consider a variety of issues and options to manage future budgets and rate requirements including changing the bond covenants and the restructuring of debt.

This has been a recurring theme of the Advisory Board since at least 1999. The level of effort was stepped up in the spring of 2006 with a recommendation to convene a working committee to include members of the MWRA's Board of Directors and the Financial Advisor as well as staff from the MWRA and the Advisory Board. The committee would be charged with developing a debt restructuring plan to provide sustainable and predictable rate revenue requirements to achieve rate stability. The Advisory Board continued to request presentations and meetings of the working committee on long-range rates management to achieve, among other things, significant changes in the bond covenants. The purpose of the proposed changes was to free up some of the significant amounts of reserves required by the initial general bond resolution for use as a rates management tool. The first bonds incorporating the amendments were issued in February 2007.

Types of Reserves

Though the released reserves were to come from three different funds - the Debt Service Reserve (DSR), the (Community Obligation Revenue Enhancement) CORE Fund, and the Renewal and Replacement Reserve – these reserves fell into two distinct categories.

The first category would be made up of the funds released from the Debt Service Reserve, currently estimated at approximately $67.1 million (See Table 21). Because the DSR was funded by bond proceeds, their application is limited by IRS tax-exempt regulations; as such, these funds will be used to defease outstanding bonds in the same series limiting the years in which they can be used. It should be noted that the

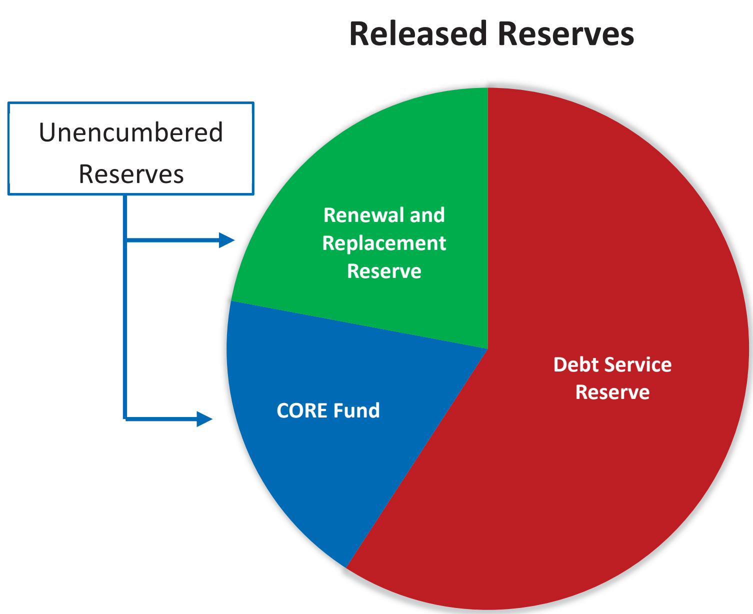

Figure 17

Authority began incorporating the use of the DSR funds into the FY14 rate projections.

The second category of funds include the reserves released from both the CORE Fund (currently estimated at $21.3 million) and the Renewal and Replacement Fund (currently estimated at $25 million). Because these funds were not limited in the same way as the DSR funds, these "unencumbered reserves," for lack of a better, term offered much more flexibility in their use as a management tool.

In an effort to create a proactive plan for the released reserves, and especially the unencumbered reserves, in the *Proposed FY11 Integrated Comments* the Advisory Board recommended convening a committee to evaluate the range of tools that could be used for long-term rates management. The Long-Term Rates Management Committee (LTRMC) was made up of representatives from the Advisory Board, the MWRA Board of Directors with staff from both agencies offering support. Though many options were presented and discussed, ultimately it was decided to table further discussion and a final recommendation until the release of reserves was imminent.

In last year's *Comments*, armed with the knowledge that the reserves would likely be eligible for release at some point in FY 2015 or FY 2016, the Advisory Board recommended reconvening the LTRMC to make a final recommendation on the best use of the unencumbered reserves.

In March 2015, the LTRMC - again with representatives from the MWRA, the Advisory Board, and staff in attendance - met to discuss updated options for the use of the reserves. At this time, the updated amounts being released in the CORE and Renewal and Replacement Funds totaled $46.3 million (See Table 21). Many options were presented, ranging from putting the entire $46.3 million into an OPEB Trust (see additional discussion on page 63) to using the entire $46.3 million for rate relief. Ultimately, the LTRMC made the recommendation to place $10 million into an OPEB Trust, and to use the remaining $36.3 million to reduce debt service.

Two benefits made this a compelling option for the Committee:

> 1) When combining the $36.3 million with the DSR Funds, over 91% of the released reserves would ultimately be used for rate relief.
>
> 2) Using the $36.3 million as part of a defeasance allowed the Authority to keep the combined rate revenue requirement increase under 4% through FY21. As previously mentioned, the Advisory Board's "Four No More" recommendation in last year's *Comments* challenged the Authority to bring rate revenue increases below the 4% level from FY15-20.

Table 21

Reserve Balances
Pre- and Post-Amendment

Reserve Account	Current Balance	Post-Amendment	Release as Result of Amendment
Debt Service Reserve Fund	$ 217,108,010	$ 150,040,431	$ 67,067,579
CORE Fund	$ 21,323,633	$ -	$ 21,323,633
Renewal and Replacement Reserve	$ 35,000,000	$ 10,000,000	$ 25,000,000
Total	**$ 273,431,643**	**$ 160,040,431**	**$ 113,391,212**

In April 2015, the MWRA Board of Directors voted to approve the recommendation of the LTRMC. ***The Advisory Board officially supports and endorses the recommendation of the Long-Term Rates Management Committee and subsequent vote of the MWRA Board of Directors for the intended use of the unencumbered released reserves.***

The Advisory Board thanks Authority staff for all of the time and effort that went into preparing the materials needed to fully discuss the range of options for the use of the released reserves.

<u>Longer Term Outlook for Principal and Interest Payments</u>

- Debt Service payments increase rapidly in the coming years and are currently projected to peak in FY2022
- Current projections indicate that debt service payments will not return to today's levels until 2027
- FY13 debt service: $368.5 million[37]
    - FY13 principal: $116.2 million
    - FY13 new borrowing: $40.6 million[38]
    - First year more principal was repaid than amount of new borrowings
- FY19 debt service: $518.9 million[39]
    - FY19 principal: $264.1 million
    - FY19 interest: $254.9 million

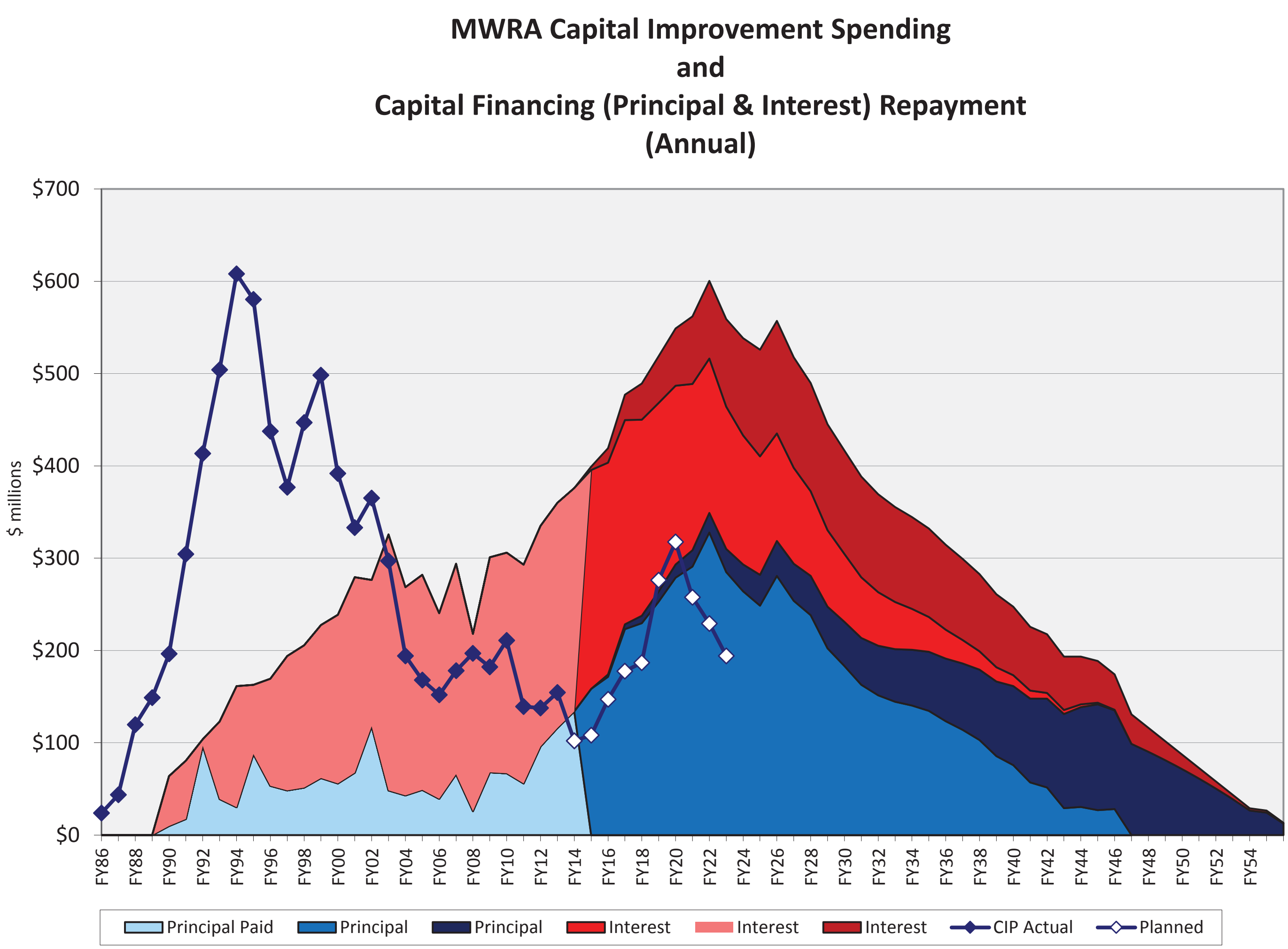

Figure 18

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[37] Actuals. Does not include commercial paper, current revenue for the capital program, or capital lease costs.
[38] SRF borrowing. Does not include commercial paper, current revenue for the capital program, or capital lease costs.
[39] Projected.