



# Massachusetts Water Resources Authority

*Presentation to the*

**Wastewater Advisory Committee  
&  
Water Supply Citizens Advisory Committee**

***Fiscal Year 2015  
Proposed***

***Capital Improvement and Current Expense Budget***

***Overviews***

**April 8, 2014**



## Agenda for CIP and CEB Budget Review

- **MWRA an agency in Transition**
  - An agency nearing steady-state
  - Debt Repayment
- **Capital Improvement Program**
  - FY13 Actual Results & FY14 Year to Date Results through February
  - FY15 Proposed CIP Overview
  - FY15 Proposed FY14-18 Cap Overview
  - FY14-18 Proposed Spending
  - FY14-18 Major Initiatives
- **Current Expense Budget**
  - FY13 Actual Results & FY14 Results through February
  - FY15 Proposed Overview
  - Expenses and Revenues
  - Rates Outlook



## FY15 Proposed CIP and CEB Budgets

### The FY15 Proposed Budgets:

- Presents the 2<sup>nd</sup> year of the five-year Cap which meets all Cap requirements;
- Continues to project the lowest five-year spending to date;
- Recommends a 3.6% combined rate increase;
- Reduces FY17 Assessments; and
- Continues to reduce outstanding debt levels;



## FY15 Proposed CIP and CEB Budget Summaries

### FY15 Proposed CEB (in millions)

Rate Revenue Requirement	\$651.2	3.6% increase from FY14	
Direct Expenses	\$218.2	Rate Revenue	\$651.2
Indirect Expenses	\$47.8	Investment Income	\$9.8
Capital Financing (net)	<u>\$417.3</u>	Other Revenue	<u>\$22.3</u>
<b>Total Expenses</b>	<b>\$683.3</b>	<b>Total Revenue</b>	<b>\$683.3</b>

### FY15 Proposed CIP

FY14-18 Base-Line Spending Cap	\$791.7 million
FY14-18 Spending Cap (per FY15)	\$787.1 million
FY15 Spending	\$124.6 million



## Fiscal Year 2013 Capital Improvement Program Year-End Results

<b>Fiscal Year 2013 (000s)</b>				
<b>\$ in Millions</b>	<b>Budget</b>	<b>Actuals</b>	<b>\$ Var.</b>	<b>% Var.</b>
<b>Wastewater System Improvements</b>				
Interception & Pumping	6,435	1,931	-4,504	-70.0%
Treatment	34,422	16,027	-18,394	-53.4%
Residuals	595	380	-216	-36.2%
CSO	28,058	35,431	7,374	26.3%
Other	1,844	20,436	18,593	1008.3%
<b>Total Wastewater System Improvements</b>	<b>71,354</b>	<b>74,207</b>	<b>2,853</b>	<b>4.0%</b>
<b>Waterworks System Improvements</b>				
Drinking Water Quality Improvements	46,429	35,475	-10,953	-23.6%
Transmission	17,634	17,170	-464	-2.6%
Distribution & Pumping	9,317	4,426	-4,890	-52.5%
Other	109	18,038	17,930	16485.6%
<b>Total Waterworks System Improvements</b>	<b>73,489</b>	<b>75,112</b>	<b>1,623</b>	<b>2.2%</b>
<b>Business &amp; Operations Support</b>	<b>11,094</b>	<b>5,208</b>	<b>-5,886</b>	<b>-53.0%</b>
<b>Total MWRA</b>	<b>155,937</b>	<b>154,526</b>	<b>-1,410</b>	<b>-0.9%</b>

Spending through year-end totaled \$154.5 million which was \$1.4 million or 0.9% below budget. Spending without the Local Water Pipeline program and the Inflow and Infiltration (I/I) program, would have been \$38.1 million or 24.7% under budget.



## FY13 Capital Improvement Program Year-End Results (continued)

The main reasons for FY13 underspending were:

- **Wastewater Treatment** of \$18.4 million – mainly for delays for Electrical Equipment Upgrade Construction, Scum Skimmer Replacement, Miscellaneous VFD Replacements, Power System Improvements, Thermal/Power Plant Boiler Control, HVAC Equipment Replacement Design, Fire Alarm System Replacement Design, Sodium Hypochlorite Pipe Replacement Design. Expansion Joint repair – Construction 2 and a variety of other projects.
- **Drinking Water Quality Improvements** of \$11.0 million – mainly for lower than budgeted spending for Spot Pond due to project delays, Carroll Water Treatment Plant due to delays in CP7 Existing Facilities, Quabbin Water Treatment Plant due to schedule change and lower award value on Ultraviolet Disinfection Construction, and Blue Hills Covered Storage.
- **Business and Operations Support** of \$5.9 million – mainly for lower spending on MIS projects of \$2.8 million due to timing of IT Strategic Plan implementation, Alternative Energy of \$2.6 million due to delay of Deer Island Phase 2 Wind Construction, lower than projected need for technical assistance, and lower Centralized Equipment Purchase of \$443,000 mainly due to timing of larger vehicle purchases.



## FY13 Capital Improvement Program Year-End Results (continued)

- **Water Distribution and Pumping** of \$4.9 million – mainly for lower spending on Northern Intermediate High primarily due to delay in award of Gillis Pump Station Improvements, Southern Spine Distribution Mains due to less than anticipated Section 21, 43, & 22 Design, Construction Administration, and Resident Inspection work, Weston Aqueduct Supply Mains due to schedule change for WASM3 Design/Construction Administration/Resident Inspection, Valve Replacement due to less than anticipated change orders, and net underspending on a variety of other projects.
- **Wastewater Interception & Pumping** of \$4.5 million – mainly for Facility Asset Management Plan (FAMP) due to Prison Point CSO facility pump and gearboxes rebuilt project for schedule changes, Melrose Sewer repayment for past work budgeted in FY12 and received in FY13, Rehabilitation of Sections 186 and 4, DeLauri Pump Station Upgrades, Braintree-Weymouth Relief Facilities mainly due to delay in Wetlands Replication, Upper Neponset Valley Sewer System due to easement settlement being less than anticipated, and net underspending on other projects.



## FY13 Capital Improvement Program Year-End Results (continued)

The underspending was offset by overspending for:

- **Wastewater Other** of \$18.6 million – primarily due to Inflow and Infiltration (I/I) community requests for grants and loans being greater than budgeted.
- **Water Other** of \$17.9 million – primarily due to community requests for Local Water Pipeline Improvement Loans being greater than budgeted.
- **Combined Sewer Overflow (CSOs)** of \$7.4 million – primarily for Reserved Channel Sewer Separation due to contractors progress and Cambridge Sewer Separation for greater than anticipated award and progress offset by North Dorchester Bay due to schedule shift and lower than projected need and additional nominal underspending on other projects.





# Fiscal Year 2014 Capital Improvement Program through February

<b>Fiscal Year 2014 thru February (000's)</b>				
<b>\$ in Millions</b>	<b>Budget</b>	<b>Actuals</b>	<b>\$ Var.</b>	<b>% Var.</b>
<b>Wastewater System Improvements</b>				
Interception & Pumping	4,801	3,477	-1,323	-27.6%
Treatment	11,147	9,161	-1,985	-17.8%
Residuals	231	115	-116	-50.1%
CSO	16,083	6,484	-9,598	-59.7%
Other	-471	4,534	5,006	-1063.3%
<b>Total Wastewater System Improvements</b>	<b>31,790</b>	<b>23,774</b>	<b>-8,014</b>	<b>-25.2%</b>
<b>Waterworks System Improvements</b>				
Drinking Water Quality Improvements	24,295	17,384	-6,910	-28.4%
Transmission	4,425	3,573	-852	-19.3%
Distribution & Pumping	6,478	2,935	-3,542	-54.7%
Other	2,006	6,068	4,063	202.5%
<b>Total Waterworks System Improvements</b>	<b>37,204</b>	<b>29,960</b>	<b>-7,243</b>	<b>-19.5%</b>
<b>Business &amp; Operations Support</b>	<b>4,316</b>	<b>3,123</b>	<b>-1,192</b>	<b>-27.6%</b>
<b>Total MWRA</b>	<b>73,309</b>	<b>56,859</b>	<b>-16,450</b>	<b>-22.4%</b>

Spending through February totaled \$56.9 million which is \$16.4 million or 22.4% under budget. Spending without the Local Water Pipeline program and the Inflow and Infiltration (I/I) program, would have been \$20.6 million or 28.7% under budget.



Massachusetts Water Resources Authority

## **Fiscal Year 2015 Proposed Capital Improvement Program**



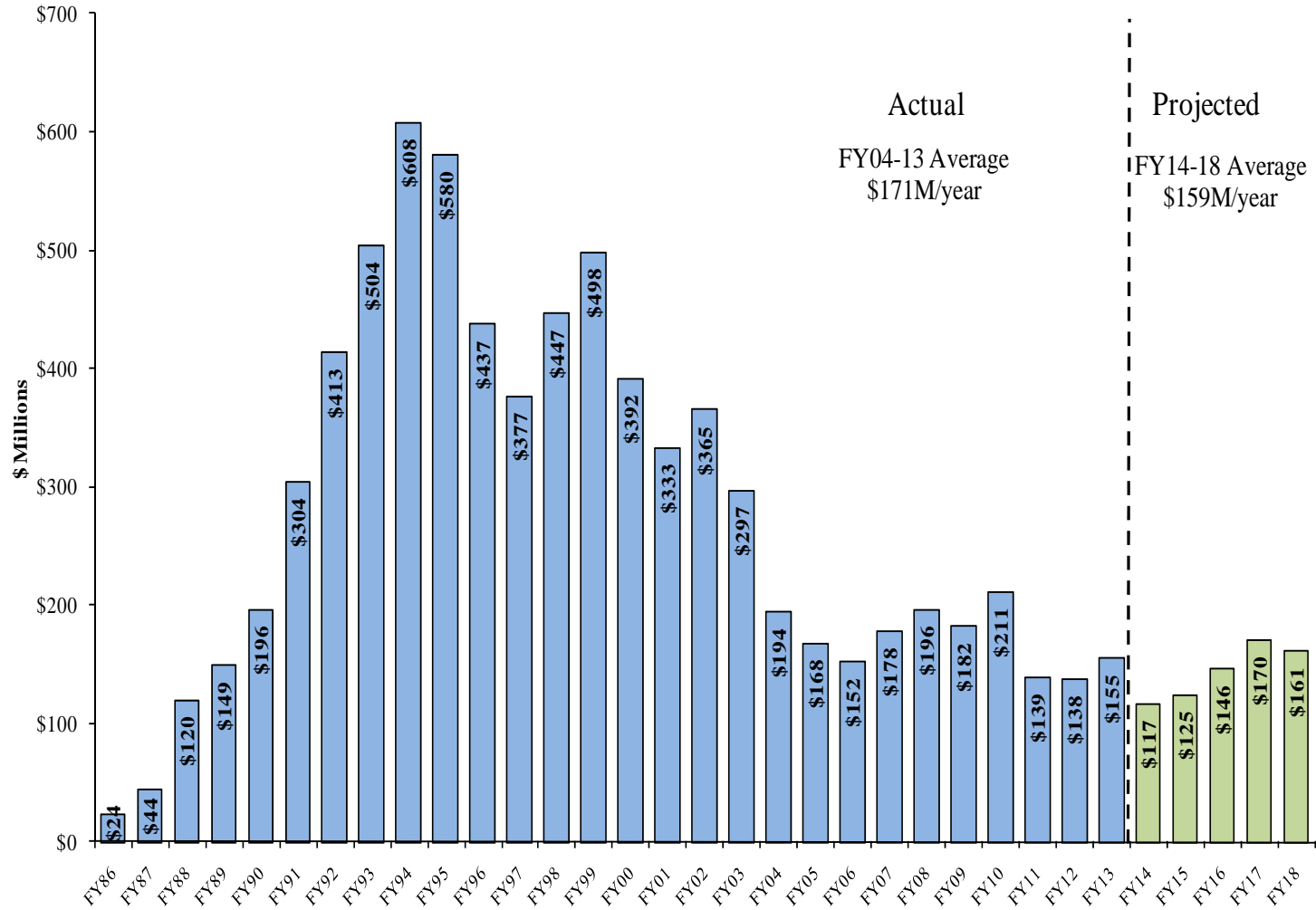


## FY15 Community Assistance Program – Inflow & Infiltration

- No additional I/I funding;
- Advisory Board Operations Committee recently voted on two additional phases;
- FY15 Final CIP will include additional funding;
- Will likely have Cap implications; and
- Will consider exempting the Community Financial Assistance Programs from the Cap.

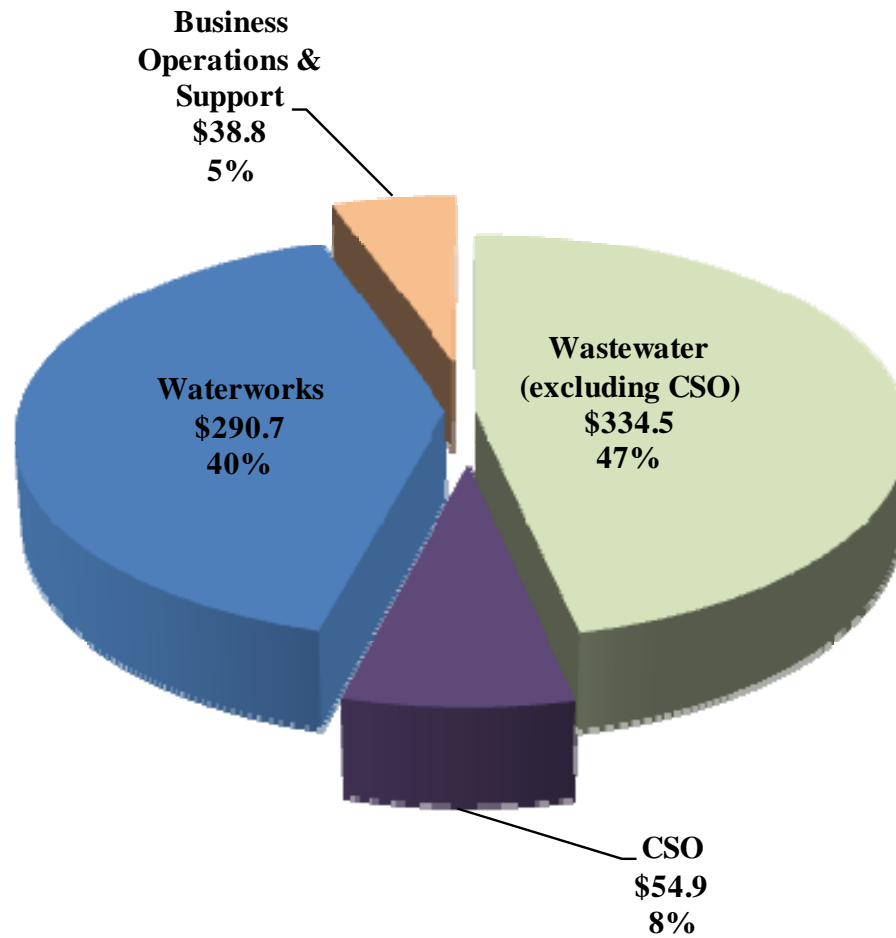


# Historical and Projected CIP Spending



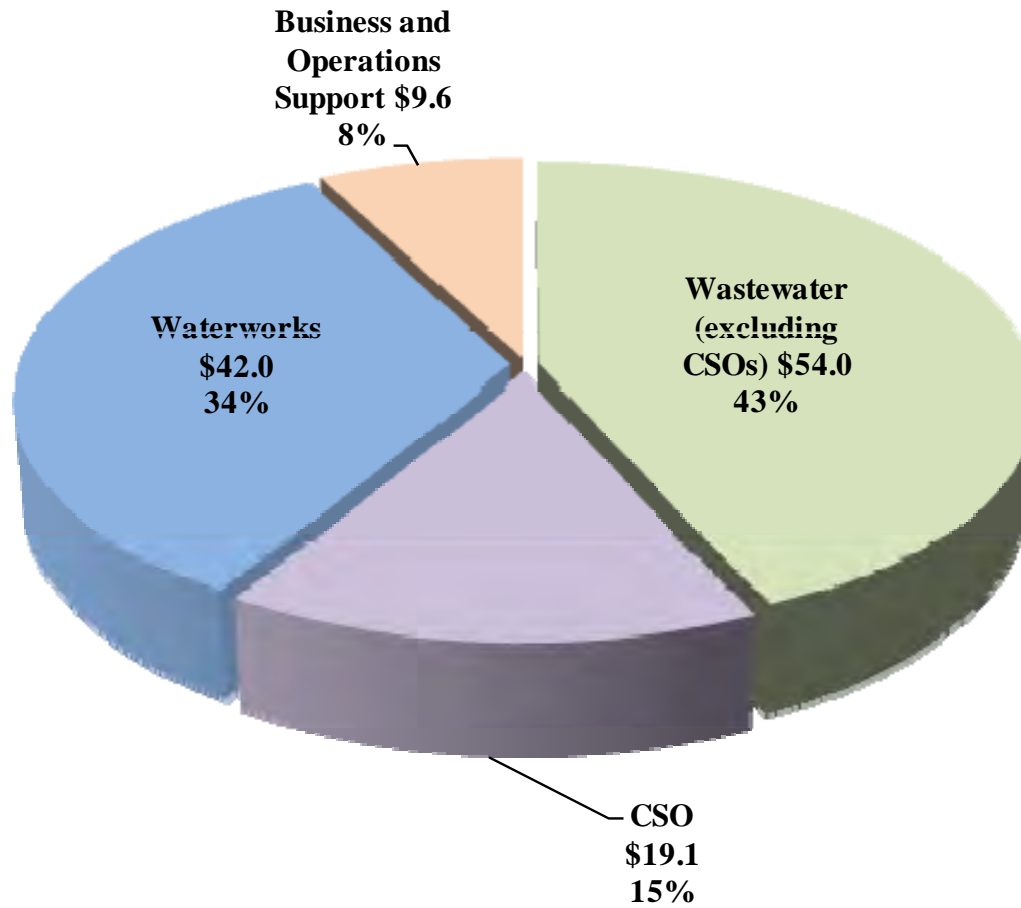


# FY14-18 Proposed CIP Expenditures by Major Programs





# FY15 Proposed CIP Expenditures by Major Programs





## FY15 Big Spenders

	<b>FY15 Planned Spending</b>
DI Treatment Plant Asset Protection	\$ 39.5
Long-Term Redundancy	14.8
Facility Asset Protection	12.7
Cambridge Sewer Separation	11.9
Spot Pond Storage Facility	8.3
Carroll Water Treatment Plant	8.1
Weston Aqueduct Supply Mains	3.9
Dorchester Bay Sewer Separation (Commercial Point)	3.8
Equipment Purchase	2.7
Applications Improvement Program	2.3
<b>Top 10 Spending in FY15</b>	<b>\$ 108.0</b>
<b>FY15 Spending</b>	<b>\$ 124.6</b>

The top ten projects account for 86.7% of FY15 planned spending.



## Capital Improvement Program – Shift from Mandated Projects

Approximately 80% of the spending to date has been for mandated projects, most notably the Combined Sewer Overflow (CSO) program.

Having nearly completed the first phase of its mission, the Authority now must preserve its operating assets and establish redundancy to ensure continuous operations.

Going forward the majority of spending will support the following:

Asset Protection

Water Redundancy

Pipeline Replacement and Rehabilitation

Energy Initiatives





## Capital Improvement Program – Shift from Mandated Projects

	Total Contract	FY09-13	FY14-18	Beyond 18
Asset Protection	\$ 1,934.3	\$ 250.6	\$ 384.2	\$ 664.1
Carroll WTP	\$ 432.3	\$ 39.1	\$ 20.4	\$ 0.1
Water Redundancy	\$ 1,853.6	\$ 141.2	\$ 243.5	\$ 606.2
CSO	\$ 842.3	\$ 315.7	\$ 28.8	\$ 0.3
Other	\$ 535.5	\$ 85.8	\$ 55.1	\$ (100.1)
<b>Total</b>	<b>\$ 5,598.0</b>	<b>\$ 832.5</b>	<b>\$ 732.0</b>	<b>\$ 1,170.6</b>

<b>Asset Protection</b>	<b>34.6%</b>	<b>30.1%</b>	<b>52.5%</b>	<b>56.7%</b>
Carroll WTP	7.7%	4.7%	2.8%	0.0%
<b>Water Redundancy</b>	<b>33.1%</b>	<b>17.0%</b>	<b>33.3%</b>	<b>51.8%</b>
CSO	15.0%	37.9%	3.9%	0.0%
Other	9.6%	10.3%	7.5%	-8.5%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Striking a balance between maintenance and infrastructure improvements



# **On-Going Capital Projects**



## Deer Island Asset Protection



Total Budget	\$651.7M
Spending Through FY13	<u>\$147.5M</u>
Remaining Spending:	\$504.1M
FY14-18 Spending:	\$195.5M
FY15 Spending:	\$39.5M



## Deer Island: Scum Skimmer Replacement

NTP: October 2013

SC : October 2016

Total Contract:           \$20.2M

FY14-18 Spending:       \$20.2M

FY15 Spending:           \$6.7M





## Deer Island: North Main Pump Station Motors/VFDs



NTP: December 2011

SC : March 2016

Total Contract: \$24.3M

FY14-18 Spending: \$17.7M

FY15 Spending: \$ 3.2M





# North Main Pump Station and Winthrop Terminal Facility Butterfly Valve Replacements

NTP: May 2014

SC: May 2016



Total Contract: \$14.6M

FY14-18 Spending: \$14.6M

FY15 Spending: \$ 4.9M



## Deer Island Electrical Upgrades - Construction 4

NTP: May 2013

SC : May 2016

Total Contract: \$10.9M

FY14-18 Spending: \$10.9M

FY15 Spending: \$ 3.9M





## Carroll Water Treatment Plant UV



NTP: May 2011

SC: March 2014



Total Contract: \$32.0M

Spending thru FY13: \$29.2M

FY14-18 Spending: \$2.8M

FY15 Spending: \$0.1M





# Quabbin Ultraviolet Disinfection Project



NTP: January 2013

SC: August 2014



Total Contract: \$5.7M

FY14-18 Spending: \$4.0M

FY15 Spending: \$0.0M



# Spot Pond Covered Storage Facility and Pump Station

NTP: November 2011

SC: November 2014



Total Contract:	\$50.0M
FY14-18 Spending:	\$32.4M
FY15 Spending:	\$ 7.2M



# Spot Pond Covered Storage Facility and Pump Station





# Cambridge Sewer Separation - Construction



Total Contract: \$61.7M

FY14-18 Spending: \$32.5M

FY15 Spending: \$8.9M



NTP: July 1998

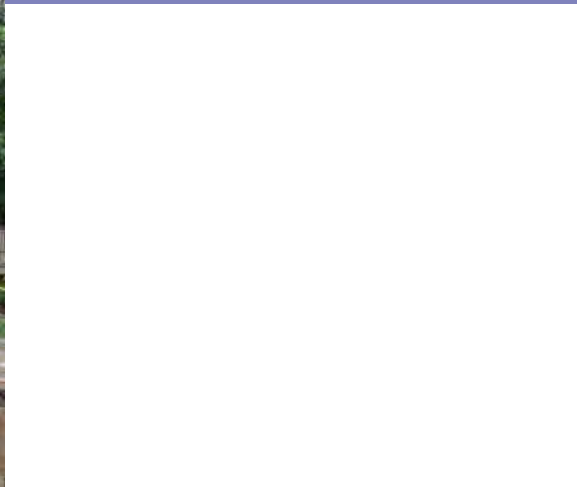
SC: December 2015



# Cambridge Sewer Separation - Construction



Drain Vault #1 Vassal Lane



Track removal along Concord Ave



# Alewife Brook Pump Station Rehabilitation

NTP: January 2015

SC: May 2017



Total Contract: \$9.3M

Fy14-18 Spending: \$9.3M

FY15 Spending: \$2.1M



# Upcoming Capital Projects



# Chelsea Headworks Rehabilitation

## Design

NTP: July 2010

SC : December 2019

Total Contract: \$7.9M

FY14-18 Spending: \$4.2M

FY15 Spending: \$0.1M



## Construction

NTP: July 2015

SC : December 2018

Total Contract: \$53.7M

FY14-18 Spending: \$42.2M

FY15 Spending: \$0.0M





# Wachusett Aqueduct Pump Station

NTP: August 2014

SC : January 2017

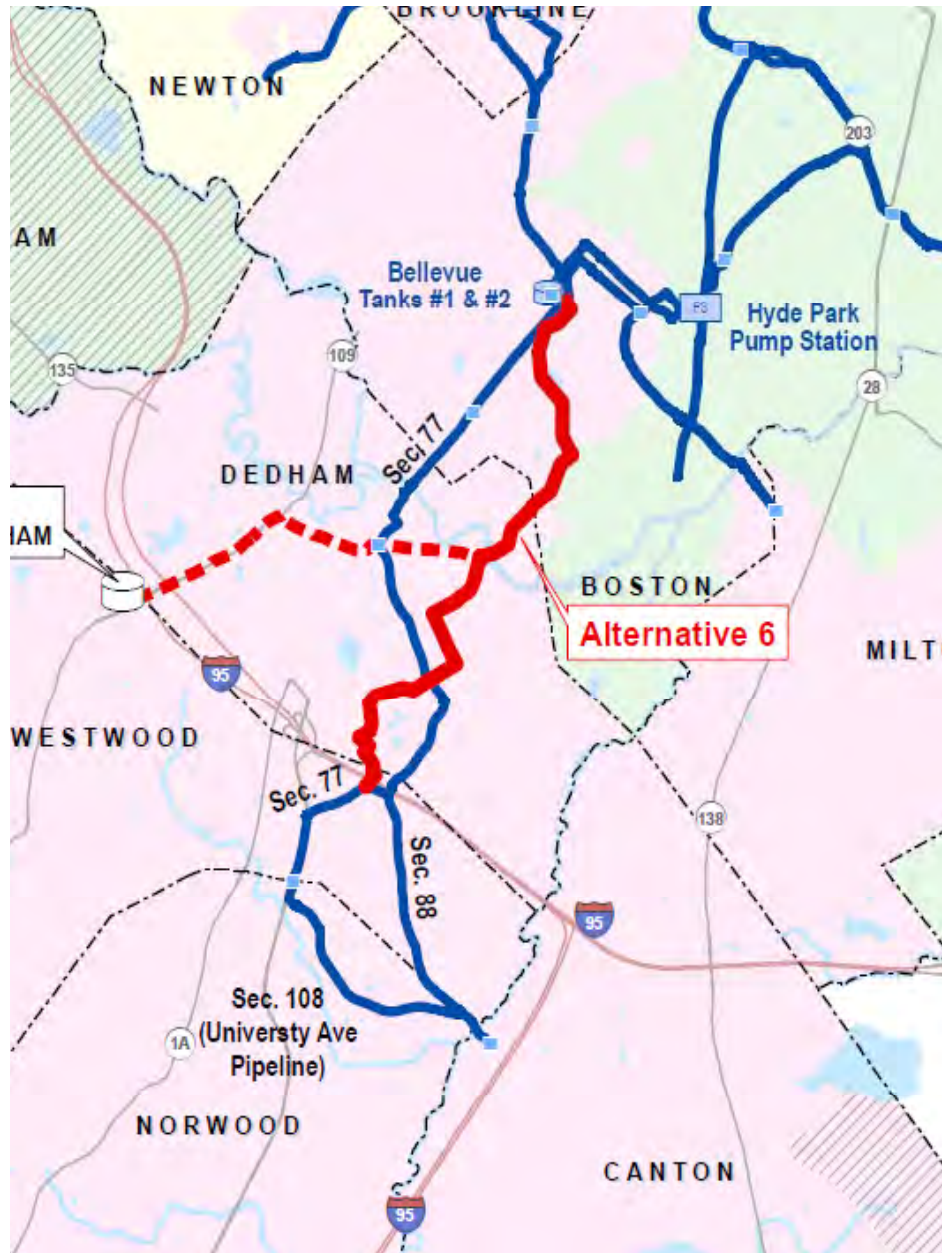


Total Contract:	\$47.0M
FY14-18 Spending:	\$47.0M
FY15 Spending:	\$12.5M



# Southern Extra High Redundancy – Section 111

NTP: August 2016  
SC: June 2020



Total Contract:	\$29.2M
FY14-18 Spending:	\$16.7M
FY15 Spending:	\$0.0M



# Clinton Treatment Plant Phosphorous Removal



Design & Construction

NTP: December 2013

SC: August 2017

Total Contract: \$6.9M

FY14-18 Spending: \$6.9M

FY15 Spending: \$0.3M



## Projects with Significant Future CIP Impacts

- Residual Processing/Asset Management;
- Sudbury Aqueduct – tunnel vs. surface pipeline;
- Chelsea Creek Headworks Rehabilitation; and
- New regulatory mandates.



Massachusetts Water Resources Authority

**MWRA Fiscal Year 2015**

*Proposed*

**Current Expense Budget**



## Fiscal Year 2013 Current Expense Budget Year-End Results

Fiscal Year 2013 (000s)				
Expenses	Budget	Actual	Variance	%
Direct Expenses	\$214,916	\$208,607	-\$6,310	-2.9%
Indirect Expenses	\$45,693	\$45,124	-\$569	-1.2%
Debt Service	\$375,248	\$380,244	\$4,996	1.3%
<b>TOTAL EXPENSES</b>	<b>\$635,857</b>	<b>\$633,976</b>	<b>-\$1,879</b>	<b>-0.3%</b>
<b>TOTAL REVENUE</b>	<b>\$635,857</b>	<b>\$636,983</b>	<b>\$1,127</b>	<b>0.2%</b>
<b>REVENUE LESS EXPENSES</b>	<b>\$0</b>	<b>\$3,008</b>	<b>\$3,008</b>	

- Lower Direct Expense of \$6.3 million reflects lower spending on Wages and Salaries, Other Services, Maintenance, and Professional Services.
- The debt service of \$380.2 million includes \$25.4 million defeasance.
- Year-End Surplus of \$3.0 million, after the \$25.4 million FY13 Defeasance funded primarily from favorable interest rates. This defeasance provides targeted relief in FY15 and FY16.



## Fiscal Year 2014 Current Expense Budget through February

<b>Fiscal Year 2014 year-to-date February (000s)</b>				
<b>Expenses</b>	<b>Budget</b>	<b>Actual</b>	<b>Variance</b>	<b>%</b>
Direct Expenses	\$136,988	\$136,664	-\$324	-0.2%
Indirect Expenses	\$35,563	\$35,081	-\$482	-1.4%
Debt Service	\$263,454	\$263,454	\$0	0.0%
<b>TOTAL EXPENSES</b>	<b>\$436,004</b>	<b>\$435,198</b>	<b>-\$806</b>	<b>-0.2%</b>
<b>TOTAL REVENUE</b>	<b>\$443,894</b>	<b>\$445,583</b>	<b>\$1,689</b>	<b>0.4%</b>
<b>REVENUE LESS EXPENSES</b>	<b>\$7,890</b>	<b>\$10,386</b>	<b>\$2,496</b>	

- Direct Expense underspending is due to lower wages and salaries, other services, fringe benefits, workers' compensation, professional services, and utilities.
- Indirect Expense underspending is mainly due to lower insurance claims.
- Debt Service is at budgeted levels after transferring year-to-date favorable variable rate debt savings of \$8.6 million into the Defeasance Account.



## FY14 CEB Year-End Projection

<b>Fiscal Year 2014 CEB year-end projection (000s)</b>				
<b>Expenses</b>	<b>Budget</b>	<b>Projection</b>	<b>Variance</b>	<b>%</b>
Direct Expenses	\$214,374	\$211,955	-\$2,420	-1.1%
Indirect Expenses	\$46,823	\$46,080	-\$743	-1.6%
Debt Service	\$397,226	\$397,226	\$0	0.0%
<b>TOTAL EXPENSES</b>	<b>\$658,423</b>	<b>\$655,261</b>	<b>-\$3,162</b>	<b>-0.5%</b>
<b>TOTAL REVENUE</b>	<b>\$658,423</b>	<b>\$658,923</b>	<b>\$500</b>	<b>0.1%</b>
<b>REVENUE LESS EXPENSES</b>	<b>\$ -</b>	<b>\$3,663</b>	<b>\$3,663</b>	

The defeasance account is projected to reach \$16.5 million by year-end.





## FY14 CEB Year-End Projection

- Overall, year-end surplus of \$3.7 million projected.
- Lower Direct Expenses of \$2.4 million mainly for lower Wages and Salaries due to lower headcount.
- Lower Indirect Expenses of \$743,000 primarily due to lower insurance claims and Watershed expenses.



## FY15 Proposed Current Expense Budget (CEB)

### The FY15 Proposed CEB:

- The MWRA employs a multi-year rates management strategy of providing predictable and reasonable rate increases to our member communities.
- The FY15 Proposed Budget puts forth a 3.6% combined rate increase, consistent with the FY14 planning estimates.
- Partially addresses the significant assessment increase projected for FY17.



## Authority's Continued Strategy

- Support the core operations and ensure meeting the operating permits;
- Holistic approach to addressing liabilities;
- Continue the Authority's long standing multi-year assessment strategy; and
- Continued debt reduction from current \$5.7 billion level.

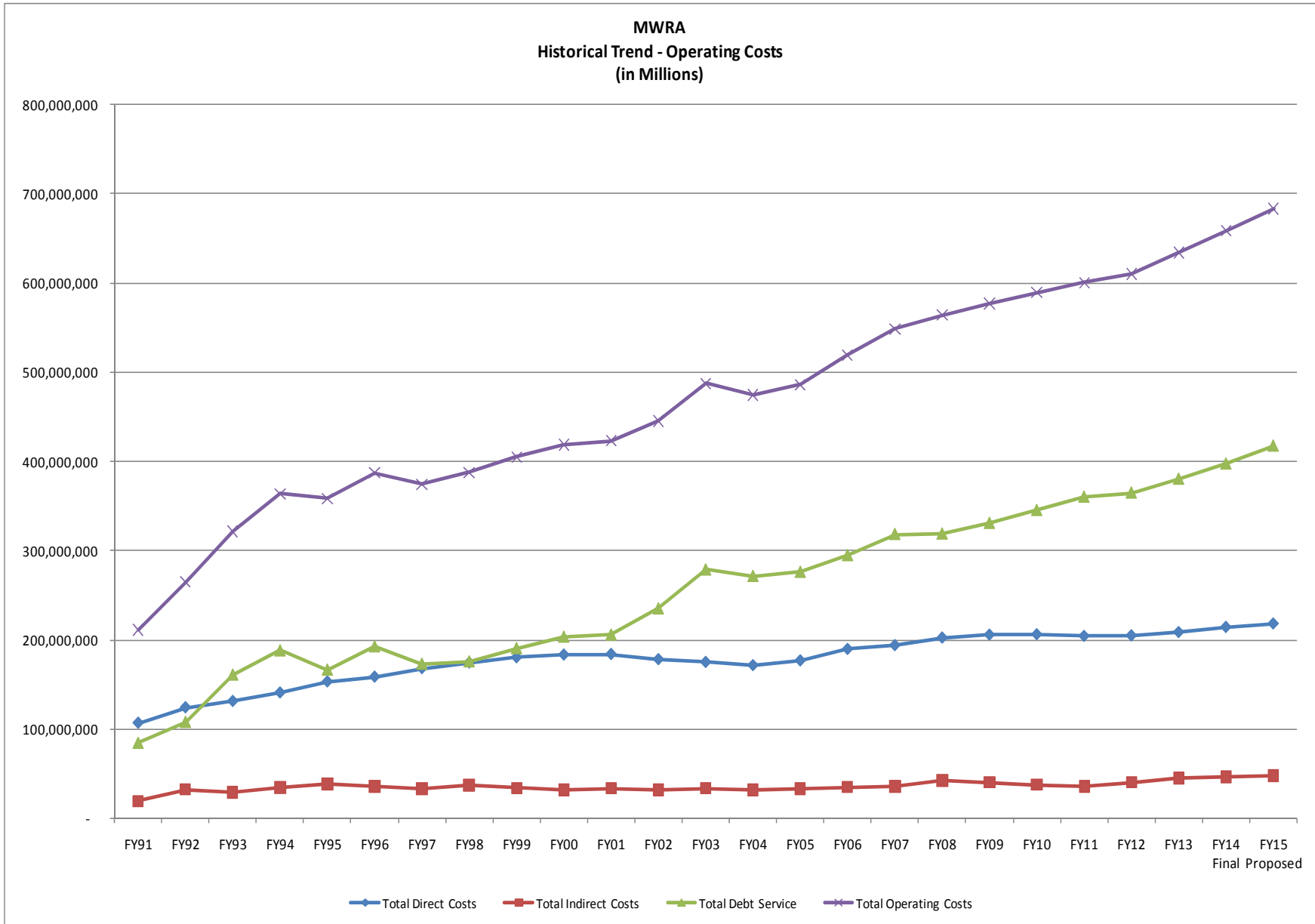


## To Attain Long-Term Strategy Goal

- Continued conservative fiscal management;
- Management of all expenses, with focus on controlling costs;
- Recognition of the changing nature of the capital program; and
- Targeted used of defeasance funding.



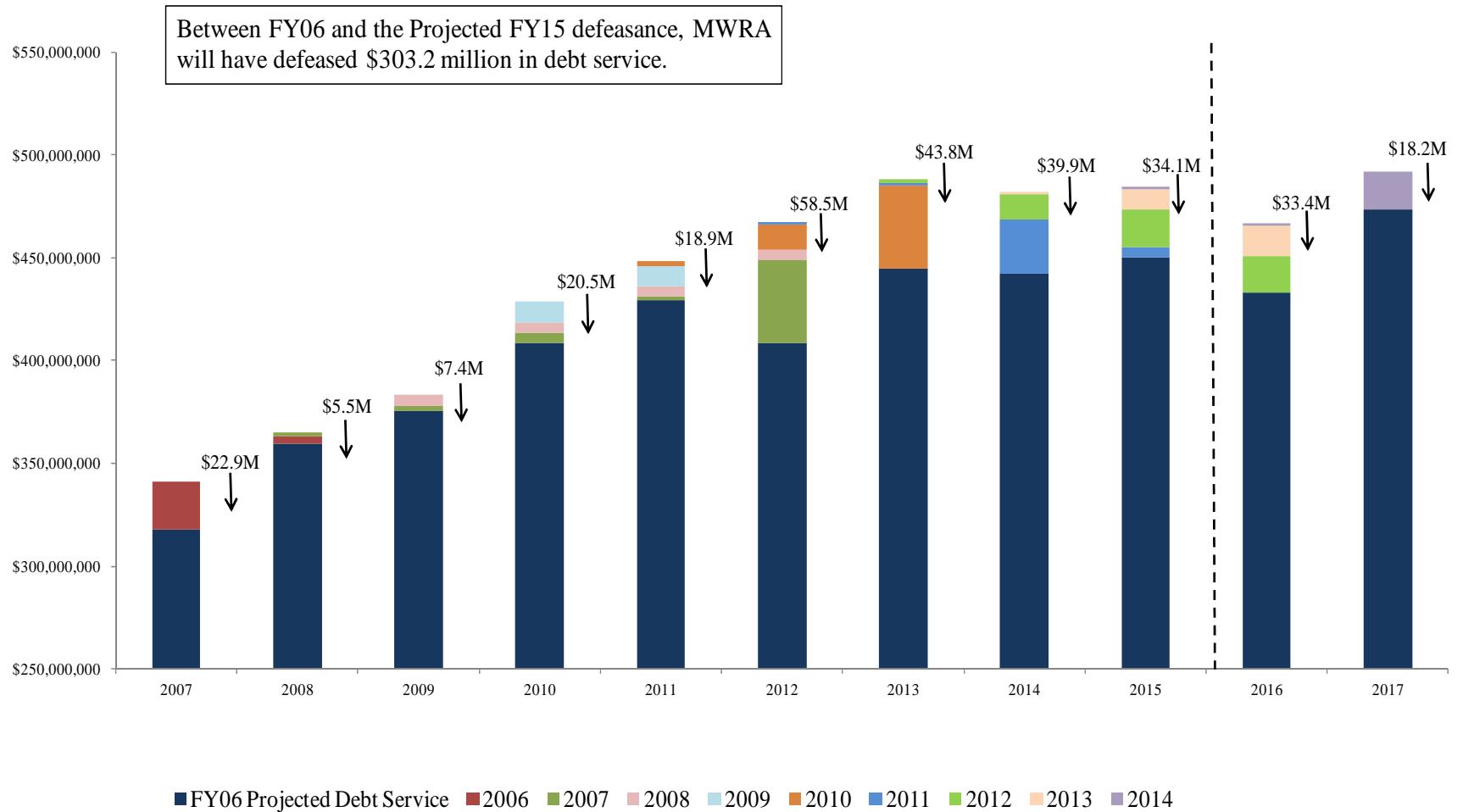
# Historical Spending Chart





# Impact of Defeasances Since FY06

## Impact of the FY06 - Projected FY15 Defeasances



Since FY06, MWRA has used defeasances to reduce future years debt service by \$303.2M



## FY15 Defeasance Account

- Continuation of defeasance account.
- FY14 Projected surplus of \$20.0 million is imbedded in the FY15 Proposed Budget.
- The FY14 defeasance is targeting FY17.



## Use of Reserves in Long-Term Rates Management Strategy

The MWRA has a total of \$69.4 million in Rate Stabilization and Bond Redemption funds.

\$36.5 million in Rate Stabilization

\$32.9 million in Bond Redemption Fund

Fiscal Year	Rate Stabilization	Bond Redemption	Total Reserve Impact	Total Reserve Balance
		-	-	69,366
2015	7,862	1,300	9,162	60,204
2016	9,559	2,441	12,000	48,204
2017	6,217	5,783	12,000	36,204
2018	10,688	1,312	12,000	24,204
2019	-	204	204	24,000
2020	2,187	9,813	12,000	12,000
2021	-	-	-	12,000
2022	-	12,000	12,000	-
2023	-	-	-	-
2024	-	-	-	-
<b>TOTAL</b>	<b>\$ 36,513</b>	<b>\$ 32,853</b>	<b>\$ 69,366</b>	





## FY15 Major Budget Assumptions

- Headcount remains level funded at 1,175 positions;
- Use of \$7.9 million use of Rate Stabilization funds;
- Use of \$1.3 million in Bond Redemption funds; \$2.8 million lower than projected.
- Over \$790,000 of debt service savings in FY15 & FY16 from a proposed \$20 million defeasance in FY14 targeting FY17;



## FY15 Major Budget Assumptions (continued)

- Variable rate debt budgeted at 3.25% - same level as FY14;
- Investment Income budgeted at .20% - same level as FY14;
- Pension Funding Required Contribution based on latest actuarial evaluation funded at \$7.8 million;
- Inclusion of \$4.8 million additional pension deposit; and
- No Debt Service Assistance.



## FY15 Proposed CEB

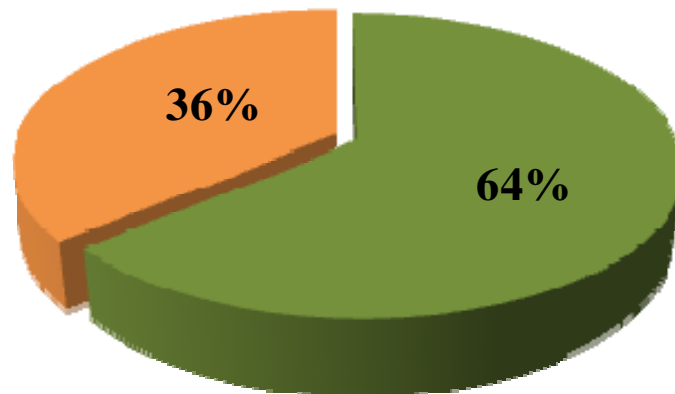
As shown below, 61% of the Authority's FY15 CEB is related to its debt obligations.

	<b>FY15 Proposed Budget</b>	<b>% of Total Budget</b>
<b>Direct Expenses</b>	\$ 218,220,990	32%
<b>Indirect Expenses</b>	\$ 47,765,268	7%
<b>Total Debt Service (after offsets)</b>	\$ 417,305,411	<b>61%</b>
<b>Total Expense</b>	\$ 683,291,669	
<b>Rate Revenue</b>	\$ 651,169,443	95%
<b>Non-Rate Revenue</b>	\$ 32,122,226	5%
<b>Total Revenue</b>	\$ 683,291,669	

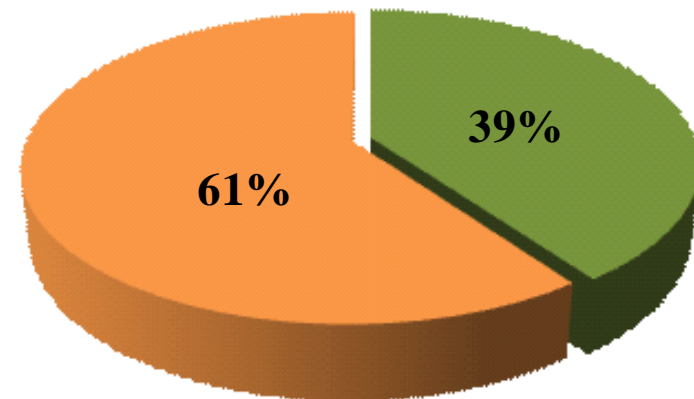


## Debt Service Is The Largest Driver of Rate Increases

**FY1990**



**FY2015**



■ Direct and Indirect Expenses ■ Debt

Debt Service is anticipated to increase to 64% by FY22.



## FY15 Proposed CEB – Direct Expenses

Direct Expenses \$ in Millions	FY14 Budget	FY15 Proposed Budget	\$ Change	% Change
Wages and Salaries	\$ 94.9	\$ 96.8	\$ 1.9	2.0%
Overtime	3.6	3.6	0.0	1.1%
Fringe Benefits	18.1	18.5	0.5	2.6%
Workers' Compensation	2.0	2.2	0.2	10.0%
Chemicals	10.7	10.7	(0.0)	0.0%
Energy and Utilities	22.8	23.4	0.6	2.6%
Maintenance	27.8	28.0	0.3	1.0%
Training and Meetings	0.3	0.4	0.0	9.1%
Professional Services	6.1	6.1	0.1	1.0%
Other Materials	6.0	5.9	(0.1)	-1.4%
Other Services	22.3	22.6	0.4	1.6%
<b>TOTAL DIRECT EXPENSES</b>	<b>\$ 214.4</b>	<b>\$ 218.2</b>	<b>\$ 3.8</b>	<b>1.8%</b>



## FY15 Direct Expenses

Direct Expenses are \$218.2 million, an increase of \$3.8 million or 1.8%.

- Increased Wages and Salaries of \$1.9 million;
- Increased Utilities of \$590,000 for higher electricity pricing and increased diesel usage;
- Increased Fringe Benefits of \$476,000 for health insurance;
- Increased Other Services of \$353,000 for higher Sludge Pelletization inflation indices and Space/Lease Rentals; and
- Increased Maintenance of \$275,000.



## FY15 Proposed CEB – Indirect Expenses

Indirect Expenses \$ in Millions	FY14 Budget	FY15 Proposed Budget	\$ Change	% Change
Insurance	\$ 2.1	\$ 2.1	\$ 0.0	1.6%
Watershed/PILOT	27.2	27.5	0.3	1.2%
HEEC	3.3	3.2	(0.1)	-4.4%
Mitigation	1.6	1.6	0.0	2.5%
Addition to Reserves	0.2	0.7	0.5	290.8%
Retirement Fund	7.5	7.8	0.4	4.7%
OPEB/Additional Pension Deposit	5.0	4.8	(0.2)	-3.1%
<b>TOTAL</b>	<b>\$ 46.8</b>	<b>\$ 47.8</b>	<b>\$ 0.9</b>	<b>2.0%</b>



## Indirect Expenses

Indirect Expenses increased \$972,000 or 2.0%.

- Addition to Reserves of \$492,000;
- Increased Required Pension Fund contribution of \$353,000; and
- Higher Watershed expenses of \$327,000.





## FY15 Proposed CEB – Debt Service Expenses

<b>Debt Service</b> \$ in Millions	<b>FY14 Budget</b>	<b>FY15 Proposed Budget</b>	<b>\$ Change</b>	<b>% Change</b>
<b>Total Debt Service (before offsets)</b>	\$ 397.2	\$ 418.6	\$ 21.4	5.4%
Bond Redemption	-	(1.3)	(1.3)	-
Debt Service Assistance	-	-	-	-
<b>TOTAL</b>	<b>\$ 397.2</b>	<b>\$ 417.3</b>	<b>\$ 20.1</b>	<b>5.1%</b>



## FY14 Defeasance Effect

### Massachusetts Water Resources Authority Proposed \$20 million Defeasance\*

	Par	Defeasance Cost	Debt Service Savings		
			2015	2016	2017
<b>Total Senior Candidates</b>	\$ 17,550,000	\$ 19,924,650	\$ 791,550	\$ 791,550	\$ 18,341,550
<b>Total Subordinated Candidates</b>	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Defeasance Candidates</b>	\$ 17,550,000	\$ 19,924,650	\$ 791,550	\$ 791,550	\$ 18,341,550

\*Pending Board approval in coming month.



## FY15 Proposed CEB - Revenue

Revenue	FY14 Budget	FY15 Proposed Budget	\$ Change	% Change
Rate Revenue	\$ 628.7	\$ 651.2	\$ 22.4	3.6%
Other User Charges	8.1	8.3	0.1	1.6%
Other Revenue	6.4	6.2	(0.2)	-3.8%
Rate Stabilization	3.5	7.9	4.4	
Investment Income	11.6	9.8	(1.8)	-15.7%
<b>TOTAL</b>	<b>\$ 658.4</b>	<b>\$ 683.3</b>	<b>\$ 24.9</b>	<b>3.8%</b>



# Longer Range View

## MWRA PLANNING ESTIMATES

### Final FY14 Budget

	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Direct Expenses (\$ in Mil)	\$ 214,374	\$ 220,466	\$ 226,613	\$ 233,113	\$ 239,490	\$ 246,197	\$ 252,762	\$ 259,461	\$ 266,034	\$ 273,293	\$ 280,751
Indirect Expenses (\$ in Mil)	\$ 46,823	\$ 49,959	\$ 49,543	\$ 50,193	\$ 52,604	\$ 54,023	\$ 55,412	\$ 56,913	\$ 59,681	\$ 55,775	\$ 57,460
Capital Expenses (\$ in Mil)	\$ 397,226	\$ 417,519	\$ 440,460	\$ 491,778	\$ 495,445	\$ 506,895	\$ 561,341	\$ 560,066	\$ 590,687	\$ 545,427	\$ 522,103
Total Rate Revenue (\$ in Mil)	\$ 628,721	\$ 651,551	\$ 678,509	\$ 736,413	\$ 755,600	\$ 775,286	\$ 829,570	\$ 847,999	\$ 875,457	\$ 845,784	\$ 831,337
Rate Revenue Change (\$ in Mil)	\$ 21,209	\$ 22,830	\$ 26,959	\$ 57,904	\$ 19,187	\$ 19,686	\$ 54,284	\$ 18,429	\$ 27,458	\$ (29,673)	\$ (14,447)
<b>Rate Revenue Change</b>	<b>3.49%</b>	<b>3.6%</b>	<b>4.1%</b>	<b>8.5%</b>	<b>2.6%</b>	<b>2.6%</b>	<b>7.0%</b>	<b>2.2%</b>	<b>3.2%</b>	<b>-3.4%</b>	<b>-1.7%</b>
Use of Rate Stabilization & Bond Redemption	\$ 3,500	\$ 12,000	\$ 12,000	\$ 12,000	\$ 4,900	\$ 4,466	\$ 12,000	\$ -	\$ 12,000	\$ -	\$ -
Rate Stabilization & Bond Redemption Balance	\$ 69,366	\$ 57,366	\$ 45,366	\$ 33,366	\$ 28,466	\$ 24,000	\$ 12,000	\$ 12,000	\$ (0)	\$ (0)	\$ (0)

### Proposed FY15 Budget

	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Direct Expenses (\$ in Mil)	\$ 214,374	\$ 218,221	\$ 224,533	\$ 230,768	\$ 237,195	\$ 243,799	\$ 250,333	\$ 257,122	\$ 263,641	\$ 270,831	\$ 278,217
Indirect Expenses (\$ in Mil)	\$ 46,823	\$ 47,765	\$ 47,943	\$ 49,141	\$ 51,582	\$ 53,070	\$ 54,574	\$ 56,209	\$ 59,035	\$ 55,264	\$ 57,095
Capital Expenses (\$ in Mil)	\$ 397,226	\$ 418,605	\$ 442,647	\$ 475,550	\$ 500,650	\$ 514,275	\$ 569,759	\$ 569,588	\$ 601,097	\$ 556,463	\$ 533,795
Total Rate Revenue (\$ in Mil)	\$ 628,721	\$ 651,169	\$ 679,107	\$ 719,981	\$ 751,330	\$ 782,068	\$ 833,175	\$ 852,786	\$ 881,132	\$ 851,963	\$ 838,217
Rate Revenue Change (\$ in Mil)	\$ 21,209	\$ 22,448	\$ 27,938	\$ 40,874	\$ 31,348	\$ 30,738	\$ 51,108	\$ 19,611	\$ 28,346	\$ (29,169)	\$ (13,746)
<b>Rate Revenue Change</b>	<b>3.49%</b>	<b>3.6%</b>	<b>4.3%</b>	<b>6.0%</b>	<b>4.4%</b>	<b>4.1%</b>	<b>6.5%</b>	<b>2.4%</b>	<b>3.3%</b>	<b>-3.3%</b>	<b>-1.6%</b>
Use of Rate Stabilization & Bond Redemption	\$ 3,500	\$ 9,162	\$ 12,000	\$ 12,000	\$ 12,000	\$ 204	\$ 12,000	\$ -	\$ 12,000	\$ -	\$ -
Rate Stabilization & Bond Redemption Balance	\$ 69,366	\$ 60,204	\$ 48,204	\$ 36,204	\$ 24,204	\$ 24,000	\$ 12,000	\$ 12,000	\$ (0)	\$ (0)	\$ (0)

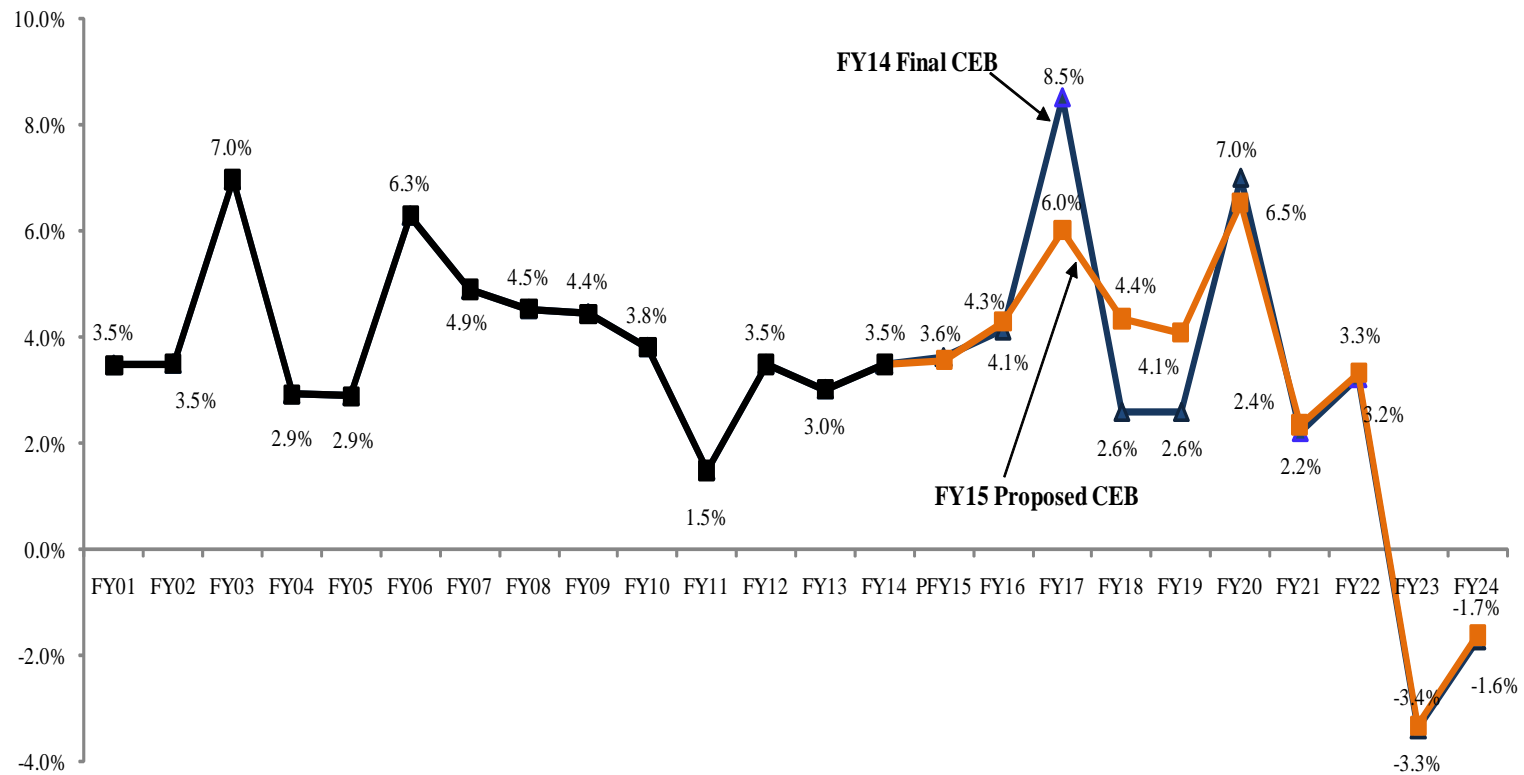
### Change

	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Direct Expenses (\$ in Mil)	\$ -	\$ (2,245)	\$ (2,080)	\$ (2,346)	\$ (2,295)	\$ (2,398)	\$ (2,429)	\$ (2,339)	\$ (2,392)	\$ (2,462)	\$ (2,534)
Indirect Expenses (\$ in Mil)	\$ -	\$ (2,194)	\$ (1,600)	\$ (1,052)	\$ (1,022)	\$ (953)	\$ (838)	\$ (704)	\$ (647)	\$ (511)	\$ (365)
Capital Expenses (\$ in Mil)	\$ -	\$ 1,086	\$ 2,187	\$ (16,228)	\$ 5,205	\$ 7,380	\$ 8,418	\$ 9,521	\$ 10,411	\$ 11,037	\$ 11,692
Total Rate Revenue (\$ in Mil)	\$ -	\$ (381)	\$ 598	\$ (16,432)	\$ (4,271)	\$ 6,781	\$ 3,605	\$ 4,787	\$ 5,675	\$ 6,179	\$ 6,880
Rate Revenue Change (\$ in Mil)	\$ -	\$ (381)	\$ 979	\$ (17,030)	\$ 12,161	\$ 11,052	\$ (3,176)	\$ 1,182	\$ 888	\$ 504	\$ 701
<b>Rate Revenue Change</b>	<b>0.0%</b>	<b>-0.1%</b>	<b>0.2%</b>	<b>-2.5%</b>	<b>1.7%</b>	<b>1.5%</b>	<b>-0.5%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>
Use of Rate Stabilization & Bond Redemption	\$ -	\$ (2,838)	\$ (0)	\$ 0	\$ 7,100	\$ (4,262)	\$ 0	\$ -	\$ (0)	\$ -	\$ -
Rate Stabilization & Bond Redemption Balance	\$ -	\$ 2,838	\$ 2,838	\$ 2,838	\$ (4,262)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)



## Longer Range View (continued)

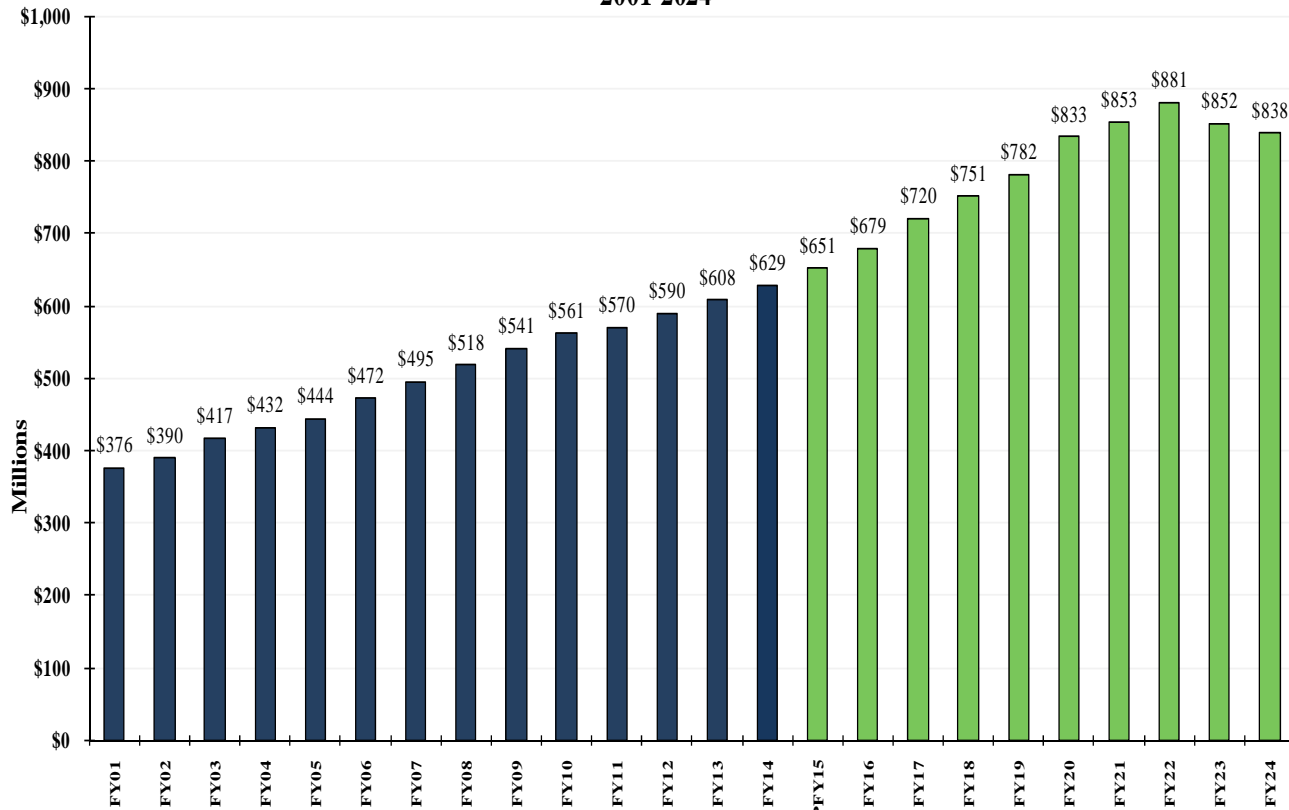
### Rate Revenue Requirement Increases FY14 Final CEB vs. FY15 Proposed CEB





# FY01-24 Rate Revenue Requirement

MWRA Rate Revenue Requirement  
2001-2024

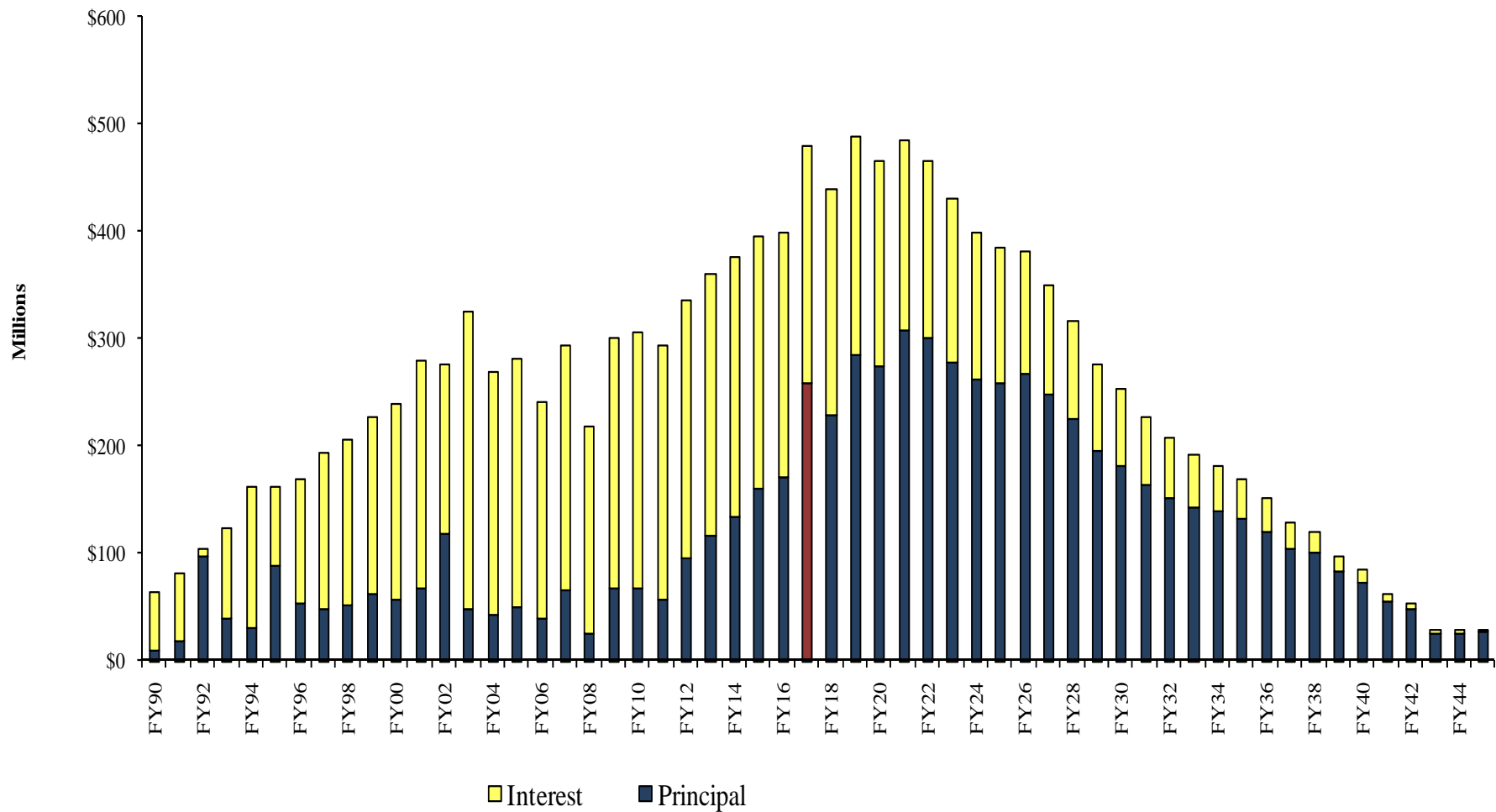


FY15-FY24 average yearly Rate Revenue Requirement increase is \$21.0M



# Paying More Principal than Interest

## MWRA Principal and Interest Payment History and Projections





## FY06-15 Assessment Increases vs. Household Wholesale Rate Increases

<b>Historical Household Wholesale rate increase based on annual average water use of 61,000 gallons</b>		
<b>Fiscal Year</b>	<b>MWRA Assessment Change</b>	<b>Household \$ Increase</b>
FY06	4.2%	\$19
FY07	4.9%	\$20
FY08	4.5%	\$22
FY09	4.5%	\$16
FY10	3.8%	\$10
FY11	1.5%	\$5
FY12	3.5%	\$12
FY13	3.0%	\$14
FY14	3.5%	\$14
PFY15	3.6%	\$15
Average FY06-15	3.7%	\$15





## Challenges

1. Short-term interest rate market conditions;
2. Regulatory requirements;
3. Pension and OPEB obligations;
4. Uncertainty of Health Insurance premiums;
5. Limited system expansion opportunities;
6. Continued prioritization of CIP projects;
7. Inflationary pressures as economy improves; and
8. Availability of Debt Service Assistance.



**QUESTIONS?**