



Massachusetts Water Resources Authority

*Presentation to the*

**Wastewater Advisory Committee**

**Proposed**  
*Fiscal Year 2010*

*Current Expense and Capital Improvement Budget*

*Overviews*

May 15, 2009



## Outline

### **AGENDA - CEB & CIP Budgets at a Glance**

- Proposed FY10 Current Expense Budget
  - Overview
  - Expenses and Revenues
  - Rates Outlook
- Proposed FY10 Capital Improvement Program
  - Proposed FY10 CIP
  - FY09-13 Cap Overview
  - Proposed FY10 FY09-13 Spending
  - FY09-13 Major Initiatives
- Capital Financing
  - Accessing Capital Markets
  - Debt Mix
  - Ratings and Outlook



## Budgets at a Glance

### **FY10 Proposed CEB**

Rate Revenue Requirement:	\$566.8 million	4.8% increase	
Direct Expenses	\$214.5	Rate Revenue	\$566.8
Indirects	41.6	Investment Income	13.3
Capital Financing (net)	<u>347.4</u>	Other Revenue	<u>23.4</u>
Total Expenses	\$603.5	Total Revenue	\$603.5

### **FY10 Proposed CIP**

Total Budget	\$5.0 billion	
Spending thru FY08	\$2.9 billion	
Remaining Balance	\$2.1 billion	
FY09-13 Spending	\$1.1343 billion	< \$1.1438 billion 5-year Cap



Massachusetts Water Resources Authority

**Proposed FY10  
Current Expense Budget**



## Proposed FY10 CEB - Overview

On February 11<sup>th</sup> the MWRA Board of Director's approved transmittal of the Proposed FY10 CEB to the Advisory Board for its review and comment.

Rate Revenue Requirement is \$566.8 million.

- \$387.7 million, a 7.5% increase over FY09, will fund the sewerage system
- \$179.1 million, a 0.6% decrease from FY09, will fund the water system

Preliminary combined rate increase is 4.8% which assumes Debt Service Assistance of \$7.0 million from the Governor's Bottle Bill initiative.



## Proposed FY10 CEB - Overview

Some of the driving forces of the Proposed FY10 CEB include:

- Revised investment assumptions to reflect current market conditions results in a \$7.2 million decrease in Investment Income;
- Reduced level of Debt Service Assistance appropriation of \$4.3 million. The FY10 budget includes \$7.0 million based on the Governor's budget versus the \$11.25 million included in the FY09 original budget. Debt Service Assistance was ultimately eliminated as part of the Governor's 9 C cuts to address the Commonwealth's fiscal challenges; and
- Increased budgetary pressures due to pension liability, contractual salary increases, and ongoing contributions relating to GASB45, funding of other post-employment benefits.

The Authority plans to use the projected FY09 Surplus, an estimated \$10 million, to defease debt with direct Rate Revenue relief in FY10.



## FY10 Proposed versus FY09 Original Budget

	<b>FY09 Original Budget</b>	<b>FY10 Proposed Budget</b>	<b>\$ Chge.</b>	<b>% Chge.</b>
Direct Expenses	\$215.9	\$214.5	(1.4)	-0.7%
Indirect Expenses	45.8	41.6	(4.3)	-9.3%
Total Debt Service (after offsets)	317.5	347.4	29.9	9.4%
<b>Total Expenses</b>	<b>\$579.3</b>	<b>\$603.5</b>	<b>24.2</b>	<b>4.2%</b>
Rate Revenue	\$540.8	\$566.8	26.0	4.8%
Non-Rate Revenue	38.5	36.7	(1.8)	-4.6%
<b>Total Revenue</b>	<b>\$579.3</b>	<b>\$603.5</b>	<b>24.2</b>	<b>4.2%</b>



## Proposed FY10 CEB – Direct Expenses

### FY10 CEB DIRECT EXPENSES

	FY10 PROPOSED	% of FY10 PROPOSED
WAGES AND SALARIES	\$92,200,261	43.0%
OVERTIME	\$3,508,791	1.6%
FRINGE BENEFITS	\$16,072,161	7.5%
WORKER'S COMPENSATION	\$1,325,000	0.6%
CHEMICALS	\$11,304,992	5.3%
ENERGY AND UTILITIES	\$25,988,079	12.1%
MAINTENANCE	\$29,387,611	13.7%
TRAINING	\$173,203	0.1%
PROFESSIONAL SERVICES	\$6,226,213	2.9%
OTHER MATERIALS	\$4,138,597	1.9%
OTHER SERVICES	\$24,164,016	11.3%
<b>TOTAL</b>	<b>\$214,488,924</b>	<b>100.0%</b>

Personnel, Energy & Utilities, and Maintenance costs total \$168.5 million and account for 78.6% of the \$214.5 million in Direct Expense budget.





## FY10 Personnel Costs

### **Wages & Salaries \$92.2M**

- FY10 Proposed increases \$1.5 million or 1.7% over the FY09 original budget primarily due to contractual wage increases.
- FY10 recommends a reduction of 24 positions from the FY09 funding level of 1,246 to achieve a year end target of 1,222 positions.
- No funding for non-union manager salary increases for \$227,000 in savings.

### **Overtime \$3.5M**

- FY10 reduction of \$398,000 or 10.2% to recognize estimated savings due to staffing re-organization/automation initiatives primarily at the Authority's Headworks facilities.

### **Fringe Benefits \$16.1M**

- FY10 reduction of \$390,000 or 2.4% to reflect Governor's House One recommendation to change employer's contribution on healthcare to an income based system.



## FY10 Utilities

### Utilities \$26M

- FY10 Proposed Utilities budget decreases \$3.7 million or 12.6% from the FY09 original budget.
- Electricity is decreasing \$2.5 million or 10.8% largely due to lower projected pricing.
- Diesel Fuel is decreasing \$1.3 million or 36% largely due to lower pricing and reduced requirement. It is the Authority's intention to top off all tanks in FY09 given the favorable pricing.
- Utility pricing always represents a risk.
- Actions taken to ameliorate risk include:
  - competitively bid electricity contracts (new DITP contract opens 5/21);
  - maximize self-generation;
  - participate in load response programs; and
  - embrace green initiatives, such as energy audits which will result in an estimated \$723,000 in annual savings.



## FY10 Maintenance

### **Maintenance \$29.4M**

- FY10 Proposed Maintenance budget increases \$1.3 million or 4.6% from the FY09 original budget.
- The Deer Island maintenance budget is \$15.1 million, a \$600,000 or a 3.8% increase as compared with the FY09 original budget and the Field Operations budget is \$8.7 million, an increase of 900,000 or 11.2%.
- Maintenance costs to preserve the Authority's operating assets and maintain its infrastructure will continue to rise.
- Authority continues to employ the use of a Preventative maintenance program to minimize asset downtime and operating risks.



## FY10 Indirect Expenses

### FY10 CEB INDIRECT EXPENSES

	FY10 PROPOSED	% of FY10 PROPOSED
INSURANCE	\$2,625,000	6.3%
WATERSHED/PILOT	\$23,599,674	56.7%
HEEC PAYMENT	\$3,877,500	9.3%
MITIGATION	\$1,481,367	3.6%
ADDITION TO RESERVES	\$210,954	0.5%
RETIREMENT FUND	\$8,392,192	20.2%
POSTEMPLOYMENT BENEFITS	\$1,400,000	3.4%
<b>TOTAL</b>	<b>\$41,586,687</b>	<b>100.0%</b>

Indirect expenses total \$41.6 million, \$4.3 million or 9.3% under the FY09 Original budget.



## Expenses and Revenues - Debt Service

### Debt Service

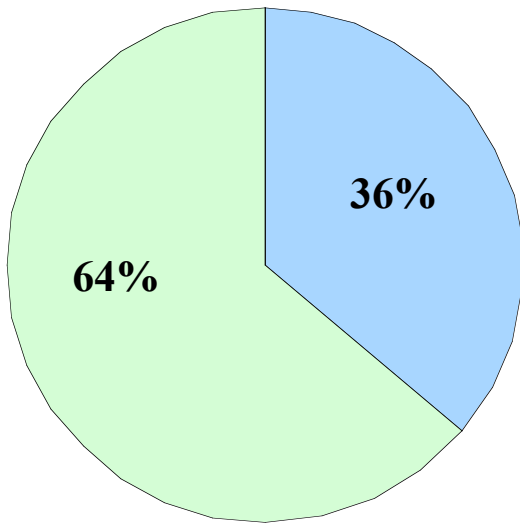
Total Debt Service (before offsets)	\$354.4 Million
<u>Debt Service Assistance</u>	<u>(7.0)Million</u>
TOTAL	\$347.4 Million

- Capital Financing costs increased by \$29.9 million as the \$25.5 million increase in interest expense was compounded by a \$4.3 million drop in Debt Service Assistance (FY10 Proposed of \$7.0 million versus FY09 original of \$11.25 million).
- Debt accounts for 58.7% of total expenses, after offsets, largely to support capital improvements already completed.

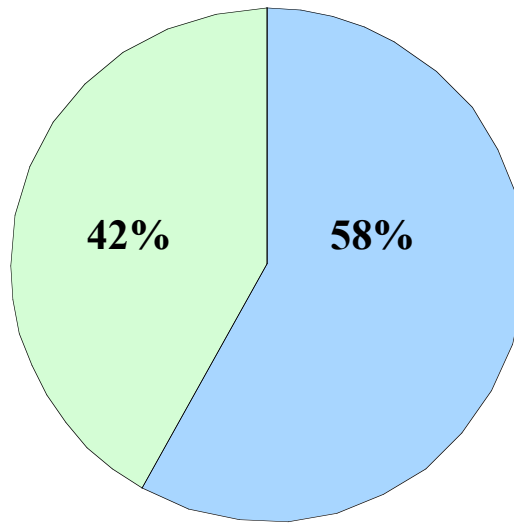


## Debt Service is the Largest Portion of CEB - \$354.4 million

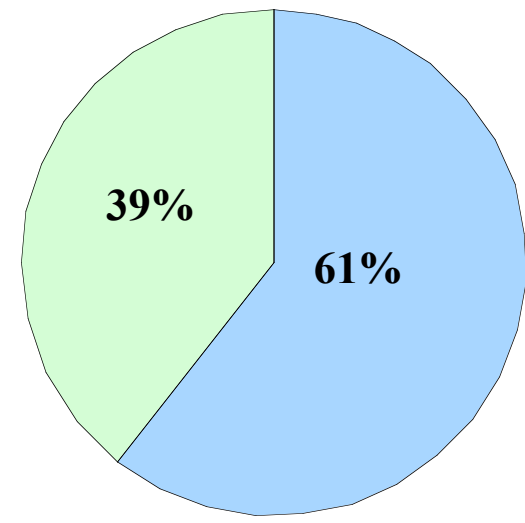
**FY1990**



**FY2010**



**FY2016**

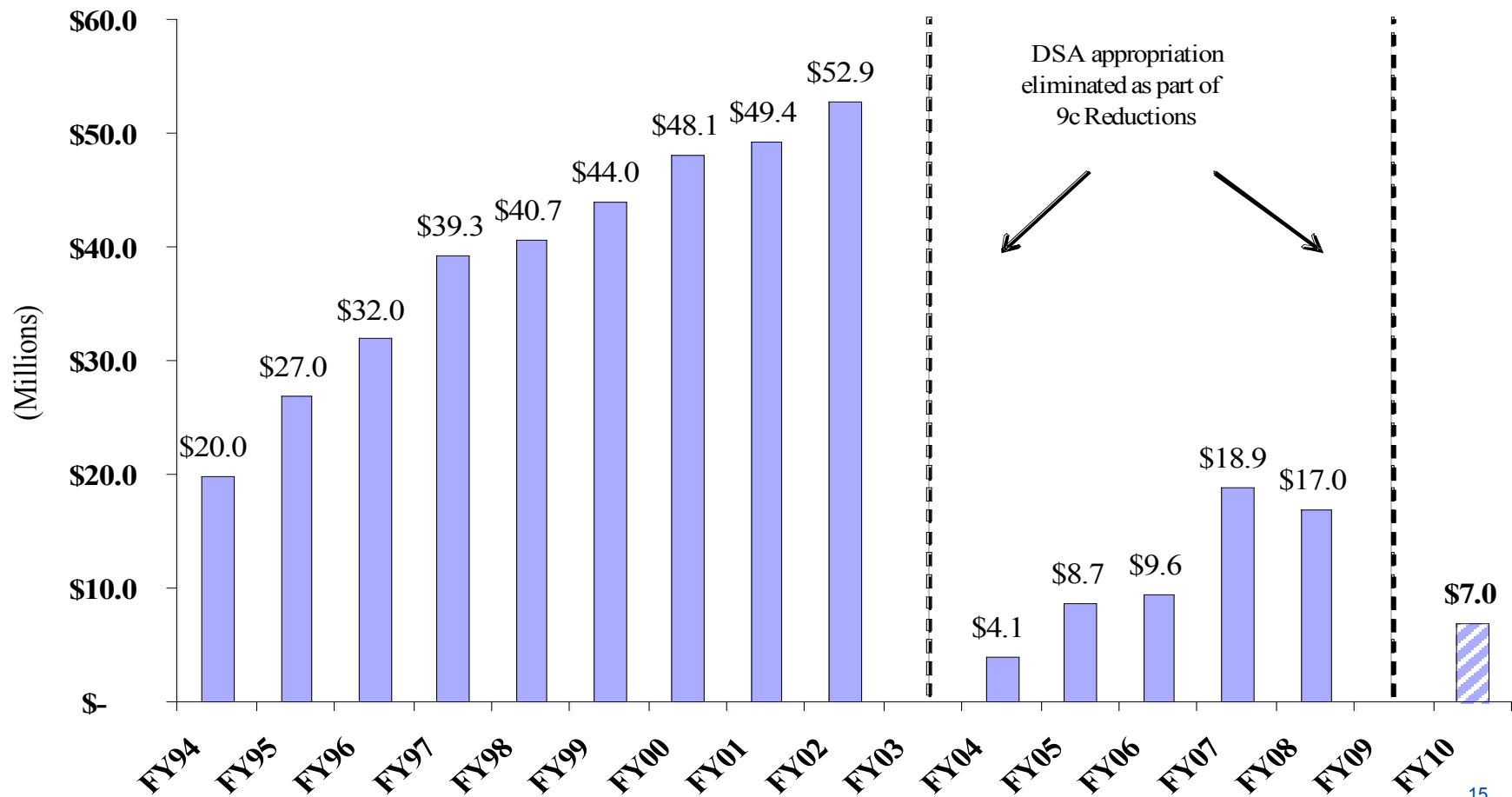




## Debt Service Assistance is Key

Debt Service Assistance (DSA) appropriation levels are varied.

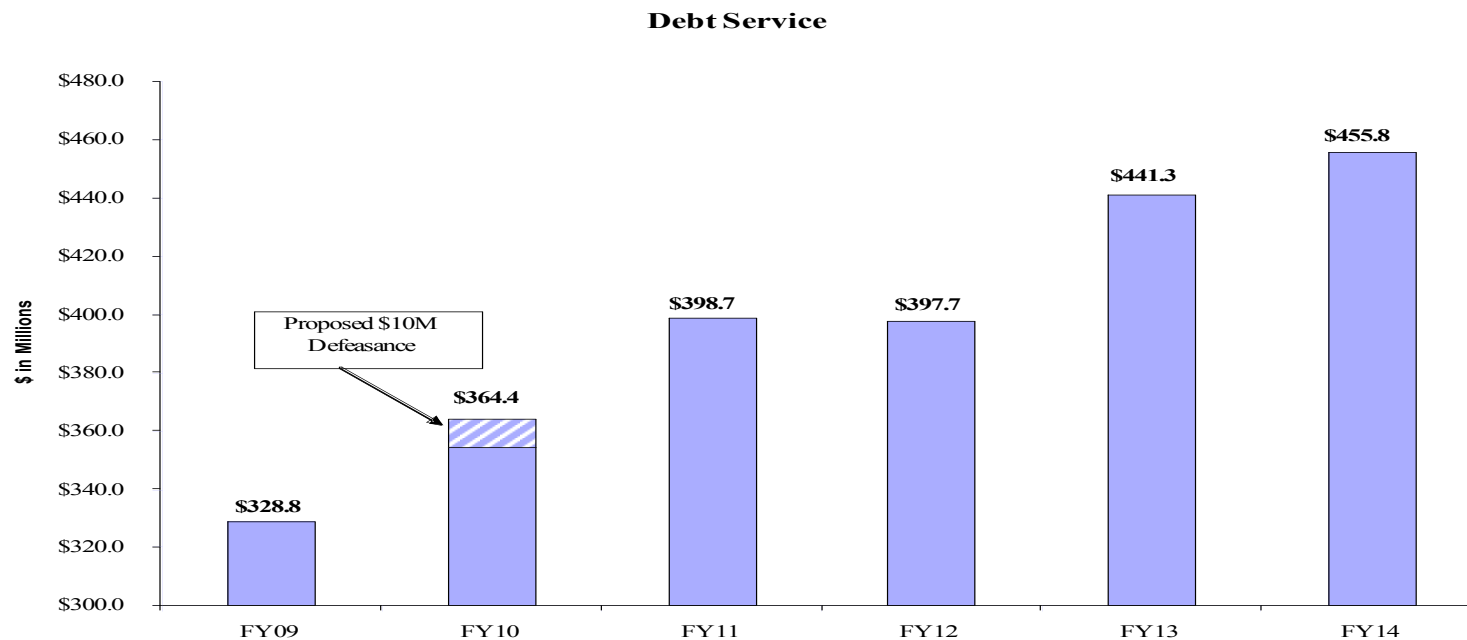
**History of MWRA Actual Debt Service Assistance (DSA) Receipts (FY94-10)**





## Managing Debt Service

- MWRA is proactive about restructuring, refunding and defeasing debt in order to keep rate increases at a reasonable and predictable level.
- Even with all of the proactive steps, FY10 debt service would have grown by 11% or \$35.6 million over FY09.
- In order to offset this massive increase, staff propose a targeted defeasance, using a projected surplus from FY09, to provide \$10 million in rate relief in FY10.







## Expenses and Revenues – Use of Reserves

The Authority plans to use \$10.3 Million in Rate Stabilization funding in FY10.

- Rate Stabilization funds are generally used to “smooth” rate increases.
- Projected Rate Stabilization usage in FY10 is over two times the FY09 level due to the increasing debt service expenses for past capital spending.
- Current planning estimates assume that Rate Stabilization and Bond Redemption funds will be exhausted in FY2014.



## FY10 Budget – Major Assumptions/Risks

### **Assumptions:**

The Proposed 4.8% rate increase assumes:

- \$7.0 million in Debt Service Assistance;
- \$10 million defeasance from FY09 surplus – inclusive of the \$3.3 million delayed pension contribution; and
- \$10.3 million in Rate Stabilization.

### **Risks:**

- \$7.0 million in Debt Service Assistance is still under debate within the Commonwealth's budget;
- \$10.0 million in projected surplus needed to defease debt in FY10;
- Utility and chemical pricing;
- Changing regulatory requirements; and
- Debt financing and investment income interest rate assumptions.

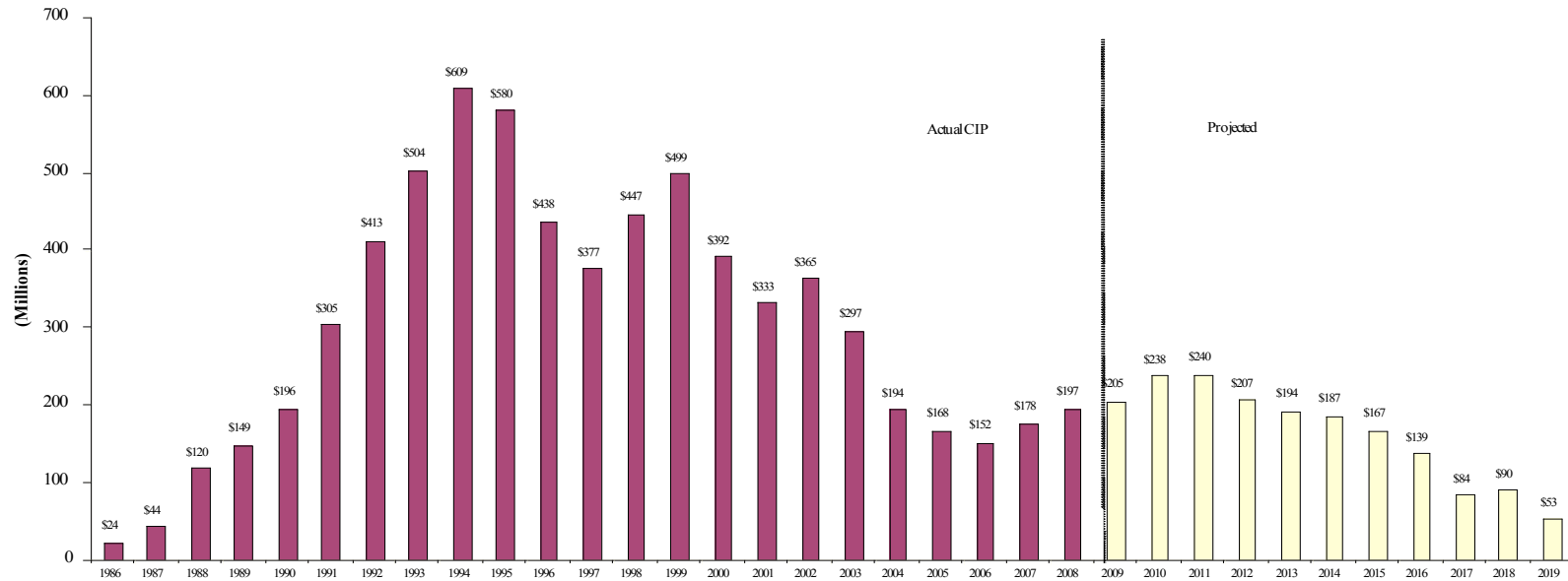


Massachusetts Water Resources Authority

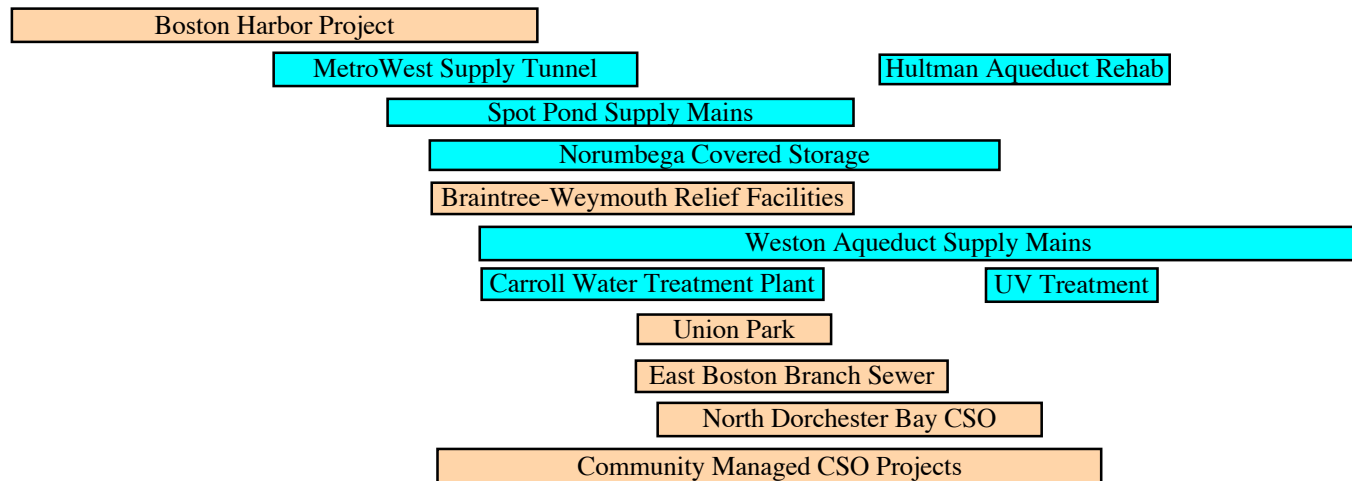
**Proposed FY10  
Capital Improvement Program**



# MWRA's Capital Improvement Program - 80% Mandated



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## Proposed FY10 CIP

Program	Total Contract	Spending thru FY08	Remaining Balance	FY09	FY10	FY11	FY12	FY13	FY09-13
<b>Wastewater System Improvements</b>	<b>\$2,454.1</b>	<b>\$1,216.1</b>	<b>\$1,238.0</b>	<b>\$131.9</b>	<b>\$170.3</b>	<b>\$181.5</b>	<b>\$125.8</b>	<b>\$86.7</b>	<b>\$696.1</b>
Interception & Pumping	717.4	487.3	230.1	9.2	4.3	28.0	16.0	23.5	81.0
Treatment	510.1	51.8	458.3	18.8	59.5	66.4	61.2	35.8	241.6
Residuals	212.4	63.8	148.6	0.2	1.3	1.6	2.1	1.3	6.6
CSO	927.3	522.2	405.1	102.6	106.4	87.8	47.2	26.7	370.6
Other	86.9	91.0	-4.2	1.0	-1.1	-2.3	-0.7	-0.6	-3.6
<b>Waterworks System Improvements</b>	<b>2,415.6</b>	<b>1,598.9</b>	<b>816.7</b>	<b>64.8</b>	<b>58.1</b>	<b>50.0</b>	<b>74.1</b>	<b>103.7</b>	<b>350.6</b>
Drinking Water Quality Improvements	641.8	508.5	133.3	19.9	12.3	4.9	16.3	18.0	71.3
Transmission	994.1	672.9	321.2	12.6	18.8	21.0	29.9	31.7	113.9
Distribution And Pumping	749.0	302.0	447.0	23.0	21.1	19.7	24.4	44.6	132.8
Other	30.8	115.5	-84.7	9.3	5.9	4.4	3.5	9.4	32.6
<b>Business &amp; Operations Support</b>	<b>86.2</b>	<b>42.9</b>	<b>43.3</b>	<b>8.6</b>	<b>9.6</b>	<b>8.3</b>	<b>7.6</b>	<b>3.2</b>	<b>37.3</b>
<b>Total MWRA</b>	<b>\$4,955.9</b>	<b>\$2,858.0</b>	<b>\$2,098.0</b>	<b>\$205.3</b>	<b>\$238.0</b>	<b>\$239.8</b>	<b>\$207.5</b>	<b>\$193.6</b>	<b>\$1,084.1</b>



## Proposed FY10 CIP Spending Highlights

FY10 CIP budget of \$238.0 million is dominated by large projects.

The federally mandated CSO program remains the Authority's largest initiative in terms of spending, \$106.4 million or 44.7% of FY10 spending.

The CIP is dominated by several large projects. The ten largest projects account for over 76% of FY10 spending:

<b>Project</b>	<b>Total Contract</b>	<b>FY10 Spending</b>	<b>%</b>
S.206 DI Treatment Plant Asset Protection	\$424.5	\$56.7	23.8%
S.347 East Boston Branch Sewer Relief	\$86.8	\$37.8	15.9%
S.339 North Dorchester Bay	\$238.0	\$24.1	10.1%
S.359 Reserved Channel Sewer Separation	\$113.3	\$14.3	6.0%
S.604 MetroWest Tunnel	\$703.4	\$10.6	4.4%
S.346 Cambridge Sewer Separation	\$57.8	\$9.7	4.1%
S.360 Brookline Sewer Separation	\$24.0	\$9.1	3.8%
S.542 John J. Carroll Water Treatment Plant	\$430.2	\$6.6	2.8%
S.704 Rehab of Other Pumping Stations	\$29.7	\$6.6	2.8%
S.721 Southern Spine Distribution Mains	\$74.4	\$5.8	2.4%
<b>Top 10 FY10 Spending</b>	<b>\$2,182.1</b>	<b>\$181.3</b>	<b>76.2%</b>
<b>FY10 Spending</b>	<b>\$4,955.9</b>	<b>\$238.0</b>	<b>100.0%</b>



## FY10 CIP - Major Wastewater Project Spending FY09 - 13 Period

<b>Wastewater Improvement Projects</b>	<b>Total Contract Amount</b>	<b>FY09-13 Spending</b>
S.206 DI Treatment Plant Asset Protection	424.5	225.0
S.339 North Dorchester Bay	238.0	98.9
S.359 Reserved Channel Sewer Separation	113.3	80.9
S.347 East Boston Branch Sewer Relief	86.8	76.0
S.346 Cambridge Sewer Separation	57.8	36.4
<b>Top 5 Wastewater Improvement Projects</b>	<b>\$920.4</b>	<b>\$517.2</b>
<b>Total Wastewater Program Spending</b>	<b>\$2,454.1</b>	<b>\$696.1</b>

Top 5 Wastewater projects (FY09-13) account for 74.3% of anticipated Wastewater spending.



## FY10 CIP - Major Waterworks Project Spending FY09 - 13 Period

<b>Waterworks Improvement Projects</b>	<b>Total Contract Amount</b>	<b>FY09-13 Spending</b>
S.604 Metro West Tunnel (Hultman Aqueduct Rehabilitation)	703.4	62.7
S.542 John J. Carroll Water Treatment Plant	430.2	41.1
S.702 New Connecting Mains - Shaft 7 To WASM 3	62.3	27.2
S.721 Southern Spine Distribution Mains	74.4	25.9
S.722 NIH Redundancy & Covered Storage	89.0	23.0
<b>Top 5 Waterworks Improvement Projects</b>	<b>\$1,359.3</b>	<b>\$179.9</b>
<b>Total Waterworks Program Spending</b>	<b>\$2,415.6</b>	<b>\$350.6</b>

Top 5 Waterworks projects (FY09-13) account for 51.3% of anticipated Waterworks spending.





## Fiscal Year 2009 – 2013 Base-Line Cap

### FY09 Base-Line Cap Overview

- Second 5-year limit of \$1.1438 billion for FY09-13 was established by the Board in FY08.
- Annual spending may vary by +/- 20%

	FY09	FY10	FY11	FY12	FY13	Total FY09-13
Projected Expenditures	\$230.0	\$251.7	\$224.3	\$196.7	\$178.7	\$1,081.4
Contingency	15.6	13.8	12.0	12.1	11.4	64.8
Inflation on Unawarded Construction	0.0	0.5	2.8	7.8	11.3	22.4
Less: Chicopee Valley Aqueduct Projects	(1.2)	(1.9)	(9.1)	(9.5)	(2.9)	(24.8)
<b>Final FY09 CIP FY09-13 Spending</b>	<b>\$244.4</b>	<b>\$264.1</b>	<b>\$230.0</b>	<b>\$207.0</b>	<b>\$198.4</b>	<b>\$1,143.8</b>



## Fiscal Year 2010 (FY09-13 Spending Cap)

### FY09-13 Cap Overview

- Currently projecting to spend \$1.1343 billion, which is \$9.5 million less than the Base-Line FY09-13 Cap established in the FY09 Final Budget

	FY09 Projection	FY10 Projection	FY11 Projection	FY12 Projection	FY13 Projection	Total FY09-13
Expenditures	\$205.3	\$238.0	\$239.8	\$207.5	\$193.6	\$1,084.1
Contingency	0.0	13.0	10.9	11.0	11.9	46.9
Inflation on Unawarded Construction	0.0	0.5	3.3	7.5	12.1	23.4
Less: Chicopee Valley Aqueduct Projects	(1.0)	(1.1)	(1.3)	(9.7)	(7.0)	(20.1)
<b>FY09-13 Cap (Projection)</b>	<b>\$204.3</b>	<b>\$250.4</b>	<b>\$252.8</b>	<b>\$216.2</b>	<b>\$210.6</b>	<b>\$1,134.3</b>
<b>Change (FY09 Base-Line to Proposed FY10)</b>						
Expenditures	(\$24.7)	(\$13.7)	\$15.5	\$10.7	\$14.8	\$2.7
Contingency	(15.6)	(0.8)	(1.1)	(1.0)	0.5	(17.9)
Inflation on Unawarded Construction	0.0	0.0	0.5	(0.3)	0.8	1.0
Less: Chicopee Valley Aqueduct Projects	0.3	0.7	7.9	(0.2)	(4.1)	4.7
<b>FY09-13 CAP (\$ Change)</b>	<b>-\$40.0</b>	<b>-\$13.7</b>	<b>\$22.8</b>	<b>\$9.2</b>	<b>\$12.2</b>	<b>-\$9.5</b>
<b>FY09-13 CAP (% Change)</b>	<b>-16.4%</b>	<b>-5.2%</b>	<b>9.9%</b>	<b>4.5%</b>	<b>6.1%</b>	<b>-0.8%</b>

**The MWRA is complying with both the 5 year spending Cap and the Annual Cap Limitations.**



## Fiscal Year 2010 (FY09-FY13 Spending Cap)

The FY10 Proposed CIP shows a decrease of \$9.5M in the FY09-13 Cap as compared with the Base-Line Cap established in the Final FY09 CIP, reflecting:

- \$17.9 million in lower contingency;
- \$2.7 million net increase in spending resulting from inclusion of FY10 new projects of \$7.8 million offset by schedule and spending shifts; and
- \$4.7 million increase for Chicopee Valley Aqueduct projects mainly due to timing of Winsor Hydroelectric initiatives.



## FY09-13 Energy Initiatives

The Proposed FY10 CIP includes \$9.1 million of capital investment for Alternative Energy Initiatives which include the following:

- |                     |        |
|---------------------|--------|
| • Deer Island Wind  | \$3.6M |
| • Nut Island Wind   | \$3.6M |
| • Loring Road Hydro | \$1.5M |
| • Deer Island Solar | \$0.4M |

These programs, when installed, will result in an estimated \$700,000 in annual savings.

Other efficiency improvements which will result in energy savings include:

- Steam Turbine Generator upgrades
- Variable Frequency Drive Replacement
- Low Voltage Lighting at various facilities





Massachusetts Water Resources Authority

**Proposed FY10  
Capital Financing**

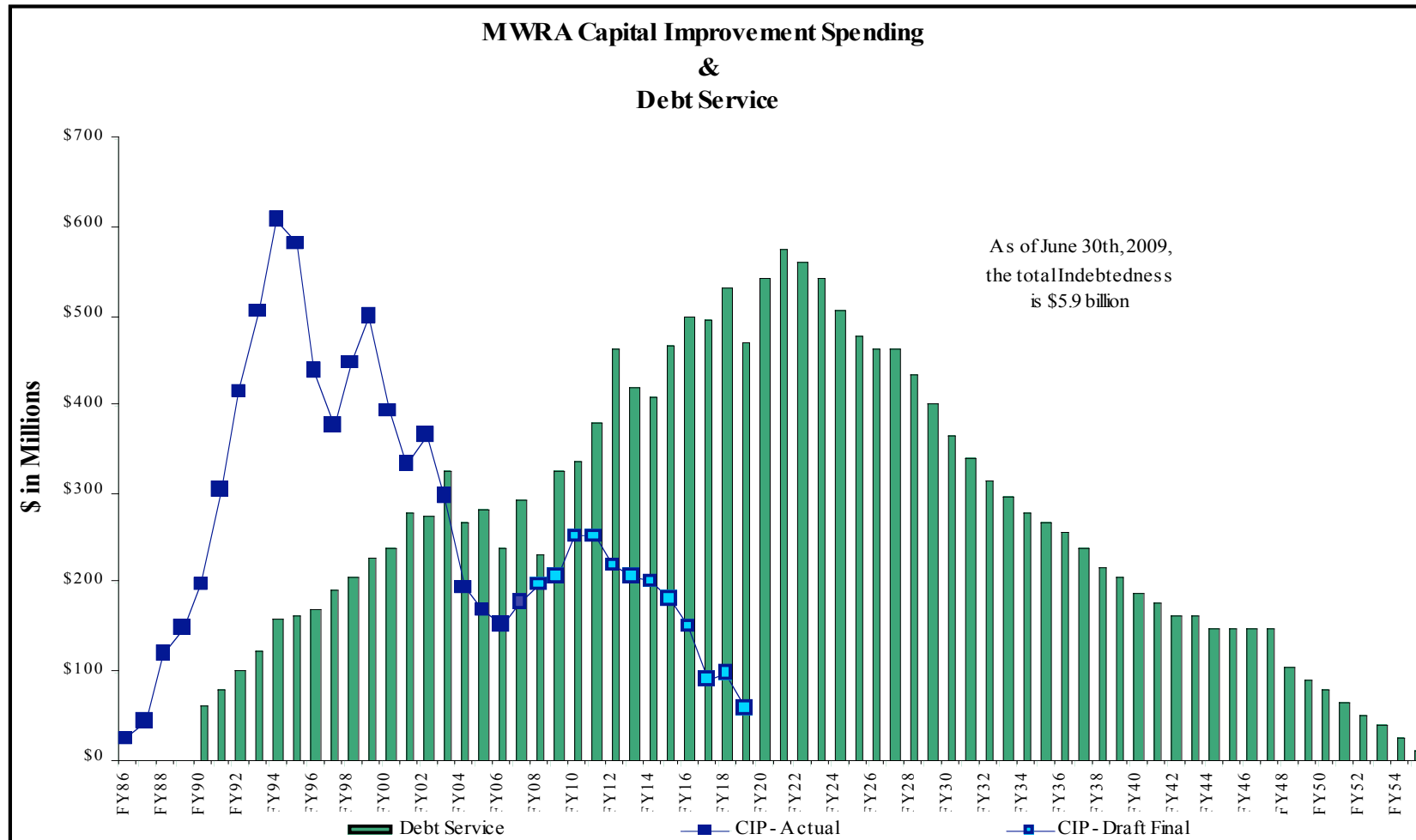


## Credit Strength

- Access to the capital markets is essential to the Authority's overall mission.
- Preservation of strong credit ratings is important not only to accessing the capital markets but also reducing the interest costs on borrowed funds.
- The Authority currently has strong credit ratings of AA+, AA, and Aa2, from Standard and Poor's, Fitch Ratings, and Moody's Investor Service, respectively.
- One factor cited in the Authority's January 2009 upgrade from Standard and Poor's was its "strong management, which has generated a trend of satisfactory reserves and solid liquidity over a multi-year period while successfully implementing numerous large construction projects."



## Expenses and Revenues – Debt Service



Nearly 80% of MWRA's capital spending is mandated



# MWRA's Debt Portfolio as of April 30, 2009

Type	FY09 Debt Service Budget	% of Total	Principal Outstanding April 30, 2009	% of Total
Senior General Revenue Bonds	\$ 176,164,720	55.4%	\$ 3,214,710,000	54.8%
Subordinate General Revenue Bonds	\$ 87,515,208	27.5%	\$ 1,367,215,000	23.3%
Massachusetts Water Pollution Abatement Trust	\$ 54,177,684	17.0%	\$ 1,088,225,003	18.6%
Tax Exempt Commercial Paper <sup>(1)</sup>	\$ -	0.0%	\$ 194,000,000	3.3%
<b>Total</b>	<b>\$ 317,857,612</b>	<b>100.0%</b>	<b>\$ 5,864,150,003</b>	<b>100.0%</b>

(1) The debt service on tax exempt commercial paper (TECP) is capitalized until the financed asset is put into service, at which time the TECP is permanently financed.

