



WAC and WSCAC Presentation

***FY19 Proposed
Capital Improvement Budget***

April 24, 2018



FY19 Proposed CIP

- Establish five-year spending Cap for FY19-23
- Establish FY19 Proposed CIP

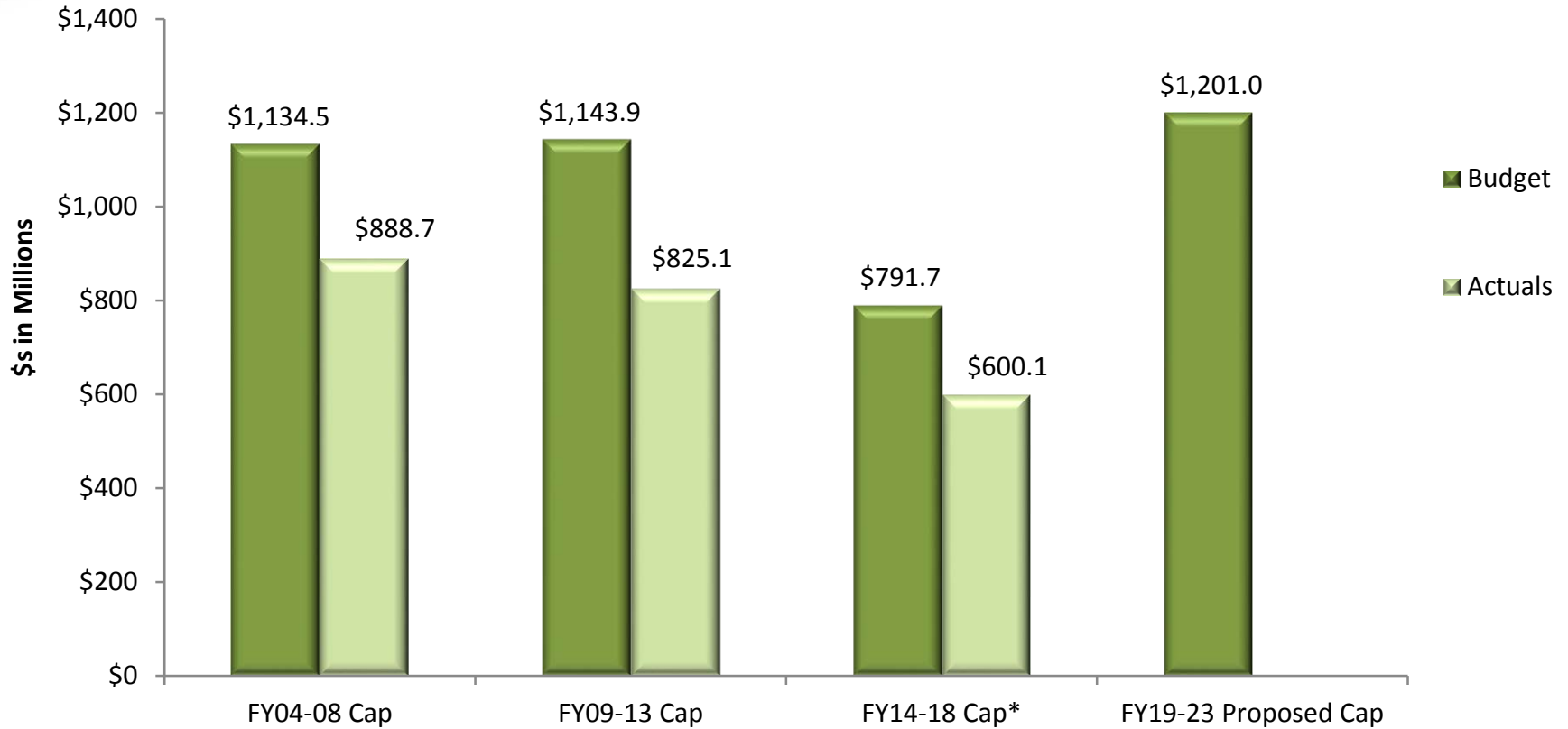


FY19 Proposed CIP – Key Statistics

- Total CIP Spending since 1986: \$8.2 billion
- Future CIP Spending: \$3.3 billion from FY18-FY46
- New Projects added to CIP: \$235 million from FY19-29
 - New Phases 11 and 12 of local I/I grant/loan program



CAP History, Actual Spending and Proposed FY19-23 CAP



*FY18 Projected



CAP History, Actual Spending and Proposed FY19-23 Cap

- FY04 – 08 Cap \$1,134.5 million
Actual Spending: \$888.7 million (78.3%)
- FY09-13 Cap \$1,143.9 million
Actual Spending: \$825.1 million (72.1%)
- FY14-18 Cap \$791.7 million
Estimated Spending: \$600.1 million (75.8%)
- FY19-23 Proposed Cap \$1,201.0 million

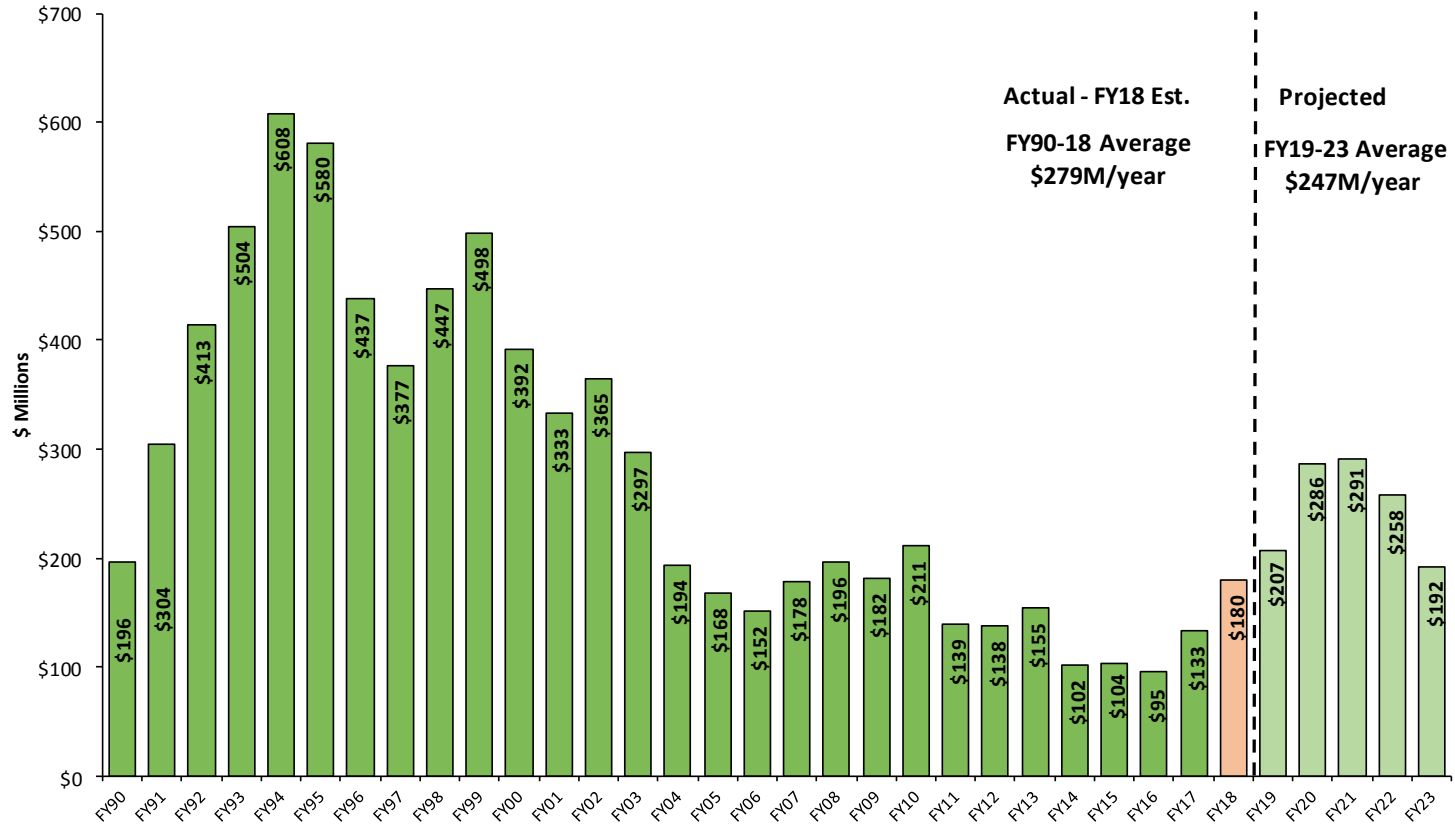


FY19 Proposed CIP – Key Statistics

- FY19-23 Spending: \$1.2 billion
- FY19 Spending: \$207.2 million
 - 52.9% of FY19 spending awarded
- FY19 Contract Awards: 46 awards totaling \$266 million

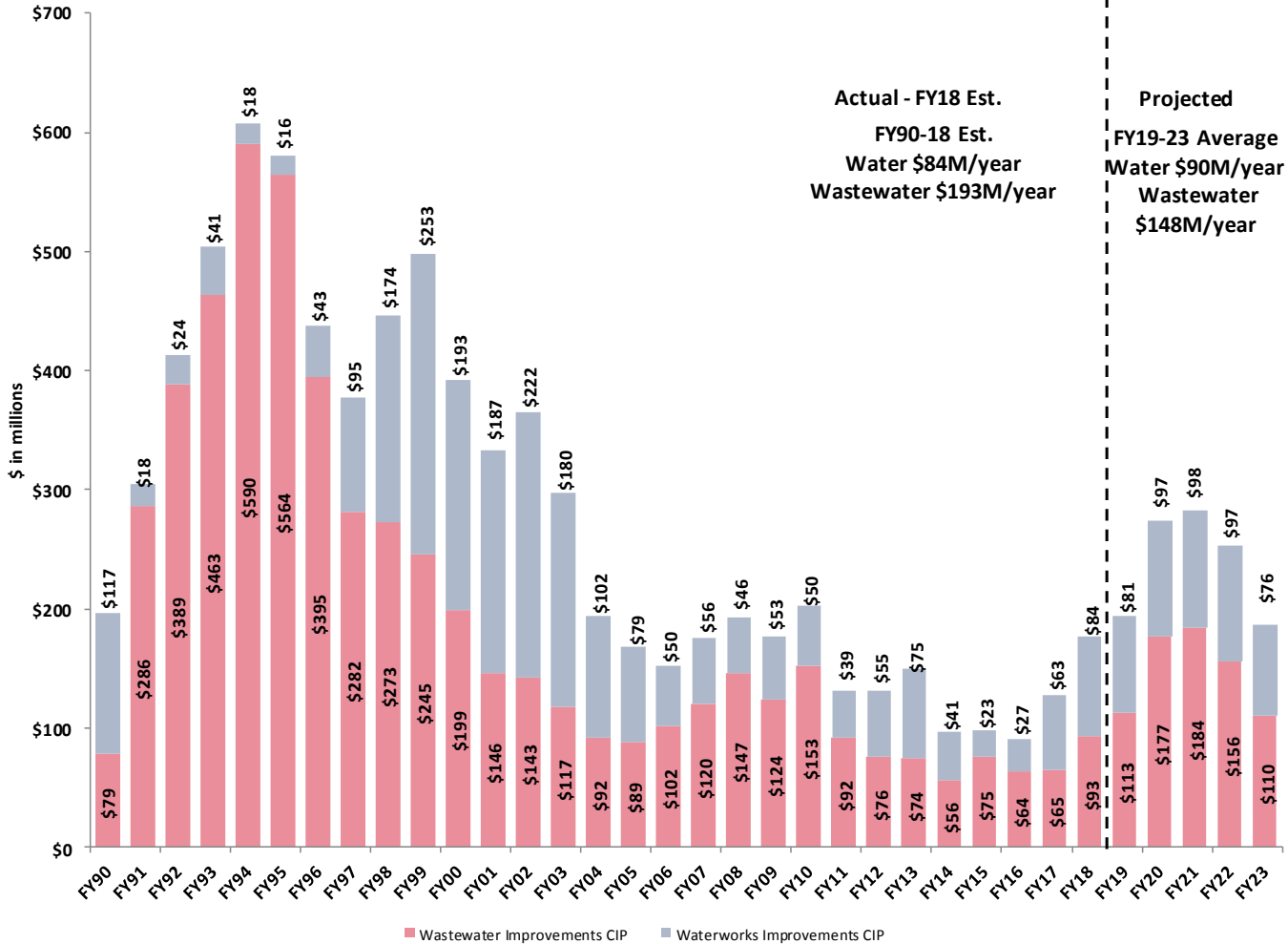


Historic and Projected Capital Improvement Spending





Historic and Projected Capital Improvement Spending by Utility





FY19-23 Proposed Cap

	FY19	FY20	FY21	FY22	FY23	Total FY19-23
Projected Expenditures	\$207.2	\$285.8	\$290.8	\$258.0	\$192.3	\$1,234.1
I/I Program	(14.0)	(23.2)	(27.2)	(22.4)	(25.0)	(111.8)
Water Loan Program	(13.3)	(14.0)	(10.7)	(8.7)	(5.5)	(52.3)
MWRA Spending	179.9	248.6	252.9	226.9	161.8	\$1,070.1
Contingency	12.5	17.2	17.5	15.9	11.3	74.2
Inflation on Unawarded Construction	0.0	8.2	15.1	18.9	15.7	58.0
Chicopee Valley Aqueduct Projects	0.0	0.0	0.0	(0.3)	(1.0)	(1.3)
FY19 Proposed FY19-23 Spending	\$192.4	\$274.0	\$285.4	\$261.4	\$187.7	\$1,201.0



Drivers of FY19-23 Spending

- Drivers of FY19-23 Spending: Asset Protection and Interim Water System Redundancy
- Start of Long-Term Water System Redundancy



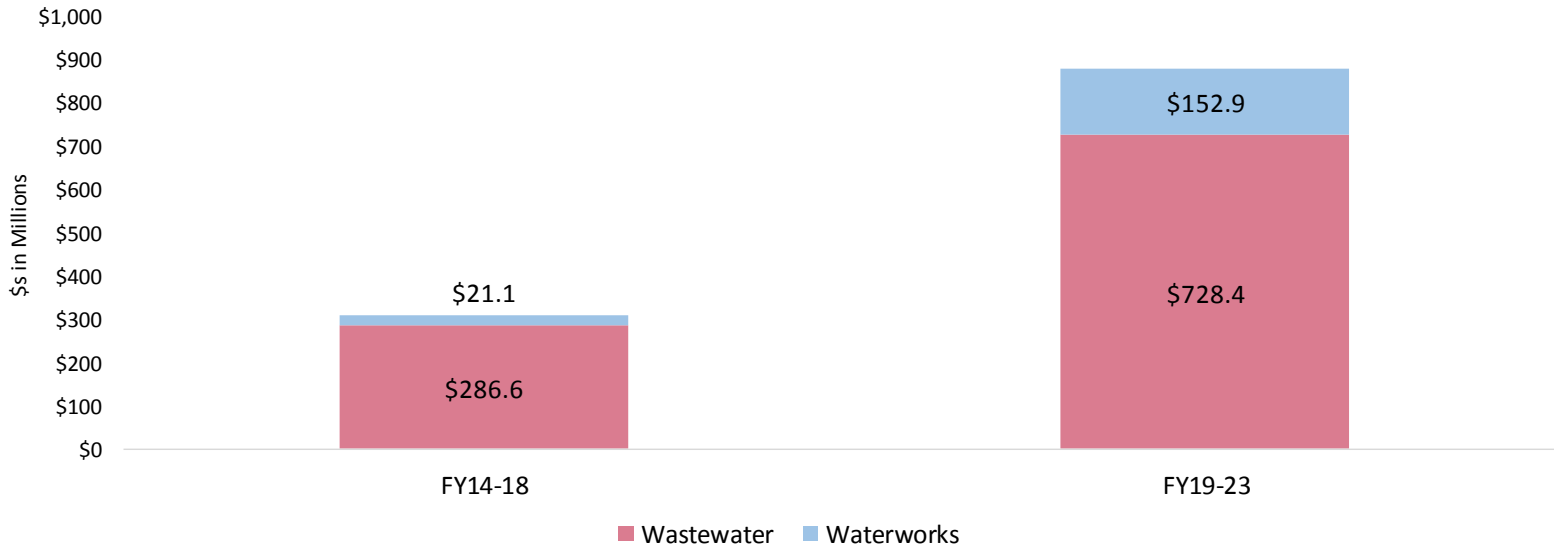
Elements of major plant assets are aging

- Deer Island - \$3.8 billion (1995-2001)
- Carroll Water -\$420 million (2005)
- Nut Island -\$248 million (1998)
- Residuals Plant - \$172 million (2001)
- Chelsea Creek Headworks (built 1967 – rehabilitated 1987)
- Ward Street Headworks (built 1967 – rehabilitated 1987)
- Columbus Park Headworks (built 1967 – rehabilitated 1987)
- Prison Point Pump Station and CSO (built 1980 – rehabilitated 1999)



Asset Protection Current and Proposed Cap

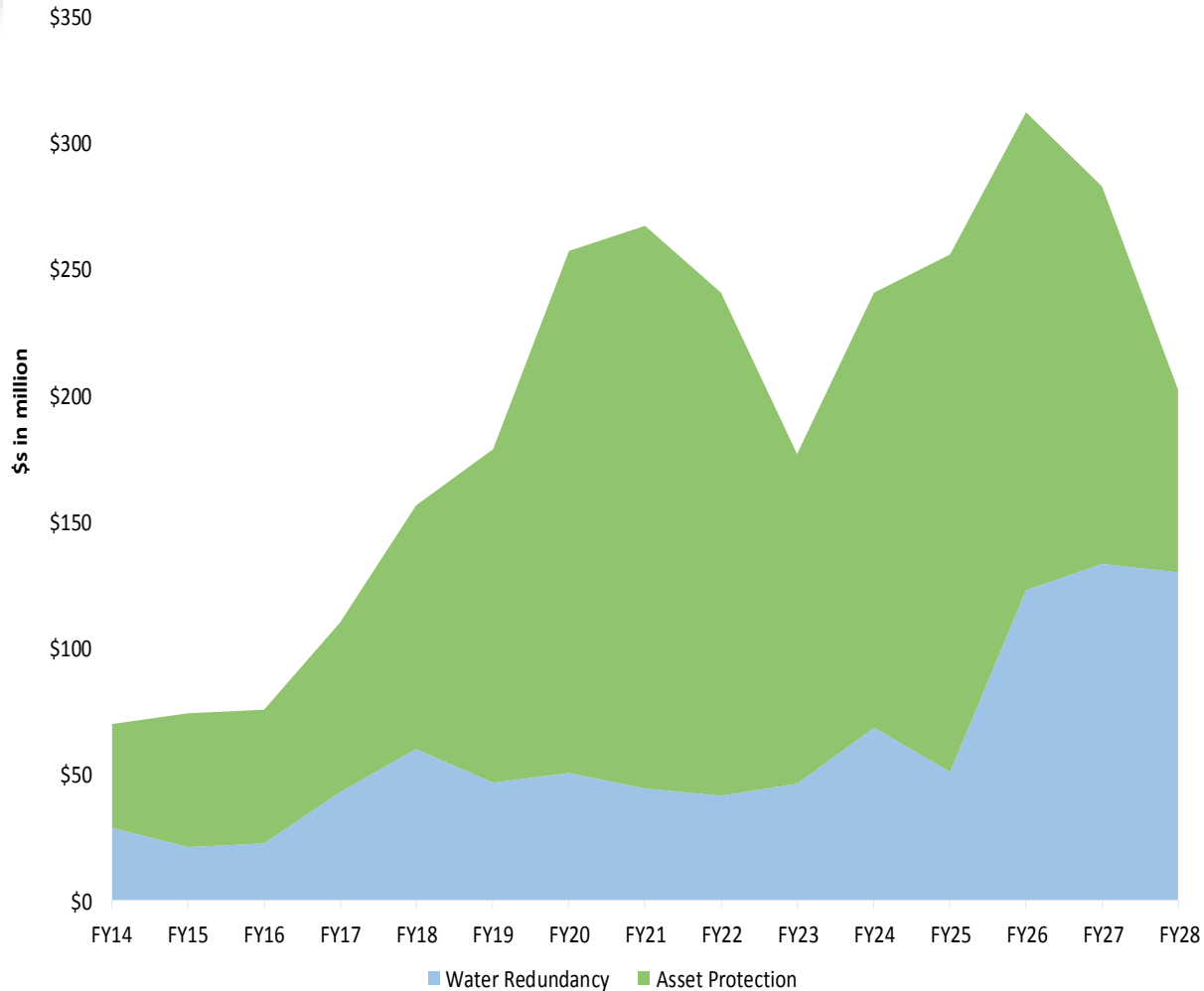
Asset Protection by Utility



- Asset Protection accounts for the largest share of capital expenditures for the FY19-23 period.
- Deer Island accounts for over \$366 million in spending in FY19-23 period.



Asset Protection and Water Redundancy



Asset Protection and Water Redundancy represent the next two waves of capital expenditures with spending for FY19-23 total \$892 million and \$229 million, respectively.



Top Asset Protection Contracts FY19-23

Contract	Projected FY19-23 Expenditures
Deer Island Clarifier Rehabilitation Phase 2 - Construction	\$129.9
Chelsea Creek Headworks Upgrades - Construction	42.7
Deer Island HVAC Equipment Replacement - Construction	38.8
Nut Island Odor Control HVAC Improvement Construction Phase 2	38.5
Prison Point Rehabilitation - Construction	34.1
NIH Sec 50 & 57 Water & 21/20/19 Sew Rehab Construction	25.5
Deer Island Fire Alarm System Replacement - Construction	20.0
Deer Island SSPS VFD Replacement Construction	19.6
Deer Island Gravity Thickener Rehab	18.0
Deer Island Digester & Storage Tank Rehab - Construction	12.9
Waterworks Facility Steel Tank/Improvement Construction	12.0
NHS Section 53 Connections - Construction	11.5
Deer Island MCC & Switchgear Replacement Construction	10.6
Total Contracts > \$10 million	\$414.2
% of Asset Protection	46.4%
Total FY19-23 Asset Protection	\$891.8

Asset Protection contracts > \$ 10 million total \$414.2 million or 46.4% of total projected Asset Protection expenditures for FY19-23.



Top Water Redundancy Contracts FY19-23

Contract	Projected FY19-23 Expenditures
Interim Redundancy - WASM3 - Construction 1	\$19.8
SEH Redundancy - Pipeline Sect 111 - Construction 3	17.3
NIH Redundancy Section 89 & 29 Rehabilitation - Construction	16.0
NIH Section 89 & 29 Redundancy Construction 2	15.3
Interim Redundancy - WASM/Spot Pond Supply Mains West PRV Construction	15.2
SEH Redundancy Pipeline Sect 111 - Construction 2	13.8
Interim Redundancy - Section 101/Waltham Section - Construction	11.2
Long-Term Redundancy Conceptual Design Environmental Impact Report	10.6
Total Contracts > \$10 million	\$119.2
% of Water Redundancy	51.9%
Total FY19-23 Water Redundancy	\$229.5

Water Redundancy contracts > \$ 10 million total \$119.2 million or 51.9% of total projected Water Redundancy expenditures for FY19-23.



New Projects

Total New Projects added to CIP: \$234.7 million

Division	Total Contract Amount	FY19 Spending	FY19-23 Spending
Wastewater	\$105.0	\$5.8	\$77.0
Waterworks	\$125.2	\$1.1	\$27.7
Business and Ops Support	\$4.5	\$0.8	\$4.5
Total New Projects	\$234.7	\$7.7	\$109.2



New Projects

(\$s in millions)

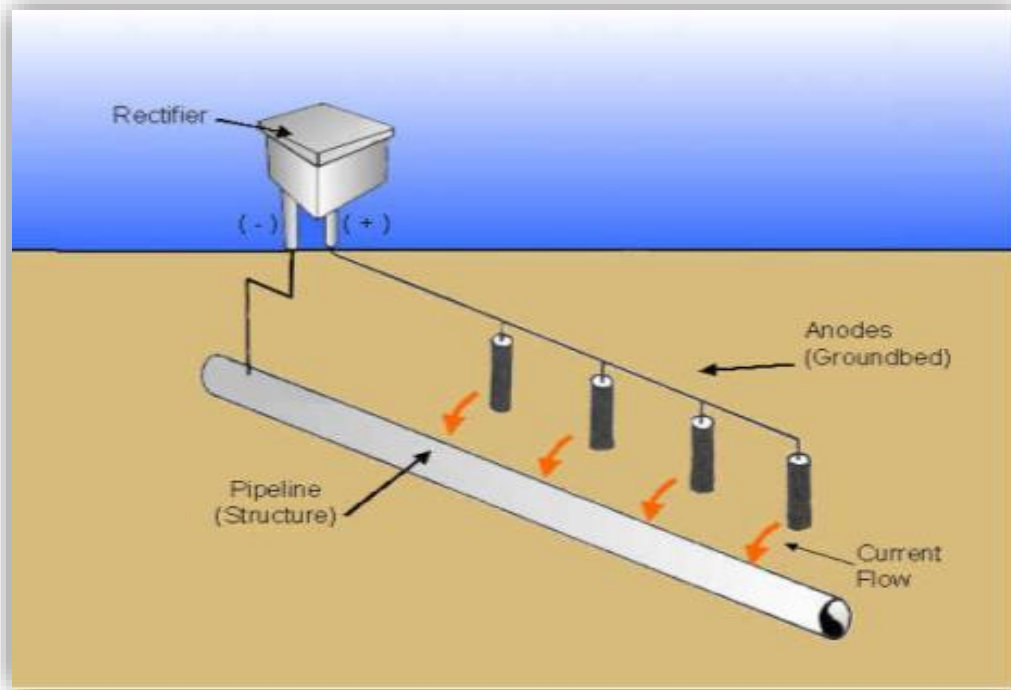
Project	Total Contract Amount	FY19-23 Spending
I/I Local Financial Assistance Program	\$90.0	\$63.7
Deer Island Asset Protection	\$15.0	\$13.3
Cathodic Protection	\$62.2	\$18.1
Carroll Water Treatment Plant Asset Protection	\$38.3	\$2.3
NHS Revere & Malden Pipeline Improvements	\$12.9	\$0.0
Watershed Land	\$5.0	\$5.0
Sudbury/Weston Aqueduct Repairs	\$3.9	\$0.0
Dam Projects	\$1.8	\$1.8
Waterworks Facility Asset Protection	\$0.6	\$0.0
Distribution System Facilities Mapping	\$0.5	\$0.5
Capital Maintenance Planning & Support	\$4.5	\$4.5
Total New Projects	\$234.7	\$109.2
Total New MWRA Capital Projects (excludes Loan Programs)	\$144.7	\$45.5



Cathodic Protection - \$62 million

Metro System Cathodic Protection - \$57 million

Western System Cathodic Protection - \$5.4 million



*needed to maintain
pipe and steel storage
tanks integrity in order
to provide reliable
water delivery*



John Carroll Treatment Plant Asset Protection - \$38 million

Ultra Violet
Reactor
Replacement -
\$10 million



*needed to maintain
water quality for safe
water supply*



Ozone Generator
Replacement - \$20
million



Deer Island Asset Protection - \$15.0 million

Hydroturbine Replacement \$12.0 million



*continue to capture hydropower
to Outfall Tunnel*

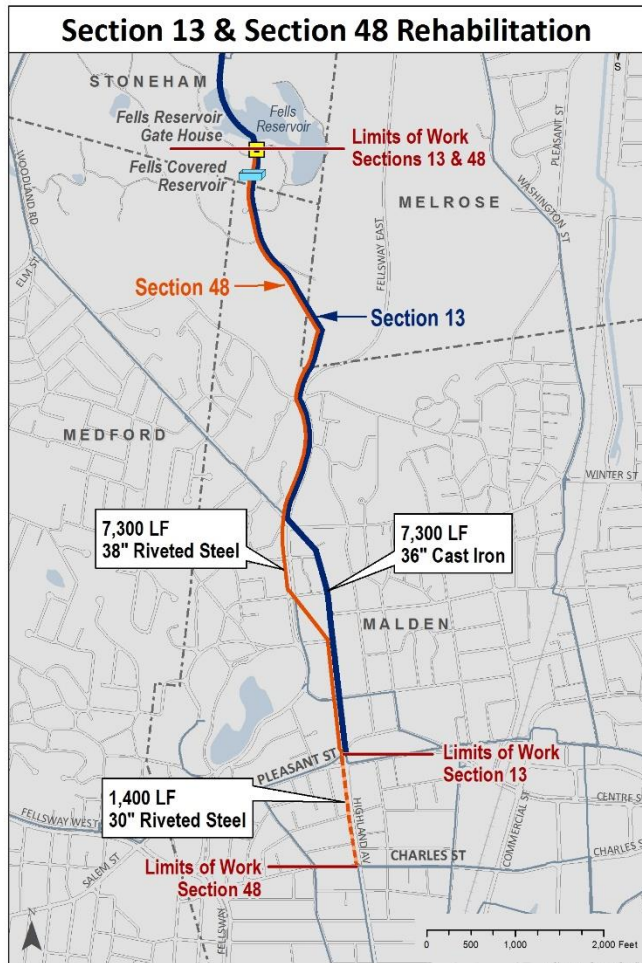
peak generation: 6.4 million kWh

annual revenues > \$600k





NHS – Revere and Malden Pipeline Improvements \$12.9 million



Total Contract: \$12.9 million
(design & construction)
Sections 13 & 48 Rehabilitation

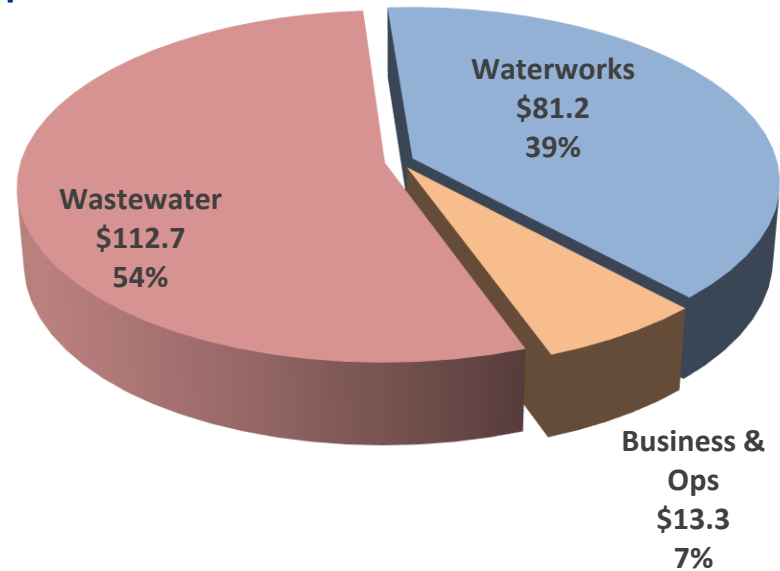
Approx. 7,300 Lf of Section 13
Approx. 7,300 Lf of Section 48

to improve hydraulic and water quality problems, and to meet the Safe Drinking Water Act requirements



FY19 Expenditures by Program

- Total Proposed FY19 Expenditures: \$207.2 million
 - Wastewater: \$112.7 million
 - Waterworks: \$81.2 million
 - Business and Operations: \$13.3 million





Top Spending FY19 Contracts

Contract	Projected FY19 Expenditures \$s in millions
Chelsea Creek Headworks Upgrades - Construction	\$25.8
LWSAP Phase 2 Distributions	20.3
Deer Island Clarifier Rehabilitation Phase 2 - Construction	16.2
NIH Section 89 & 29 Redundancy Construction Phase 2	11.0
LWSAP Phase 3 Distributions	10.0
SEH Redundancy Pipeline Section 111 - Construction 2	8.4
Deer Island HVAC Equipment Replacement - Construction	7.8
I/I Local Financial Assistance - Phase 9 Grants	7.5
SEH Redundancy Pipeline Section 111 - Construction 3	7.1
NI Odor Control HVAC Improvement - Construction 2	6.5
Steel Tank Painting Deer Island, Bellevue 2 & Turkey Hill	5.5
Lead Service Line Replacement Loans	5.0
Total Contracts > \$5.0 million	\$131.1
% of FY19 Spending	63.3%
Excluding Community Loan Programs	\$88.3
% of FY19 Spending	42.6%
Total projected FY19 Spending	\$207.2



Top FY 19 Spenders – Chelsea Creek Headworks

Total Contract: \$77.5 million
FY19 Spending: \$25.8 million





Major FY 19 Spenders – Deer Island Clarifier Rehabilitation

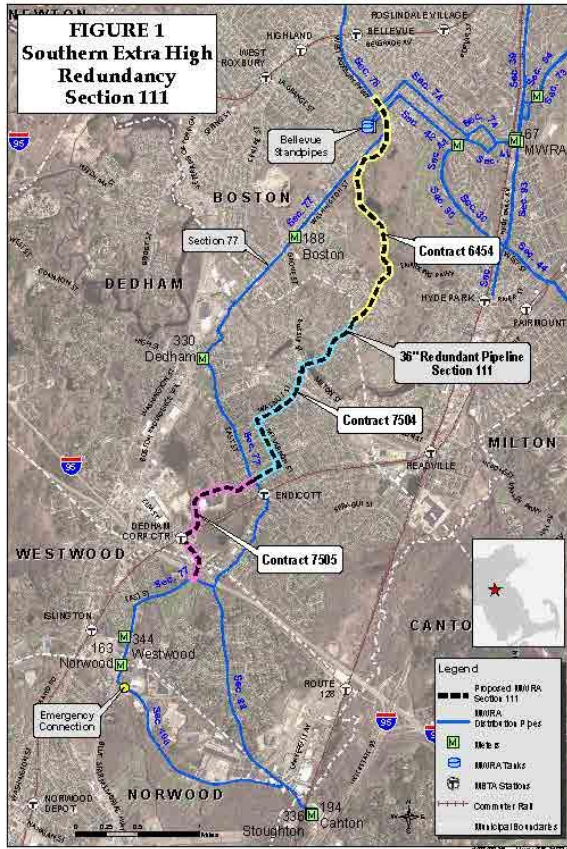
Total Contract: \$129.9 million
FY19 Spending: \$16.2 million





Top FY 19 Spenders – SEH Redundancy

Total Contract: \$47.1 million
FY19 Spending: \$15.5 million



Contract 1 - \$12.5 million

Approx. 11,000 LF

Substantially Complete in FY18

Contract 2 - \$17.2 million

Approx. 10,000 LF

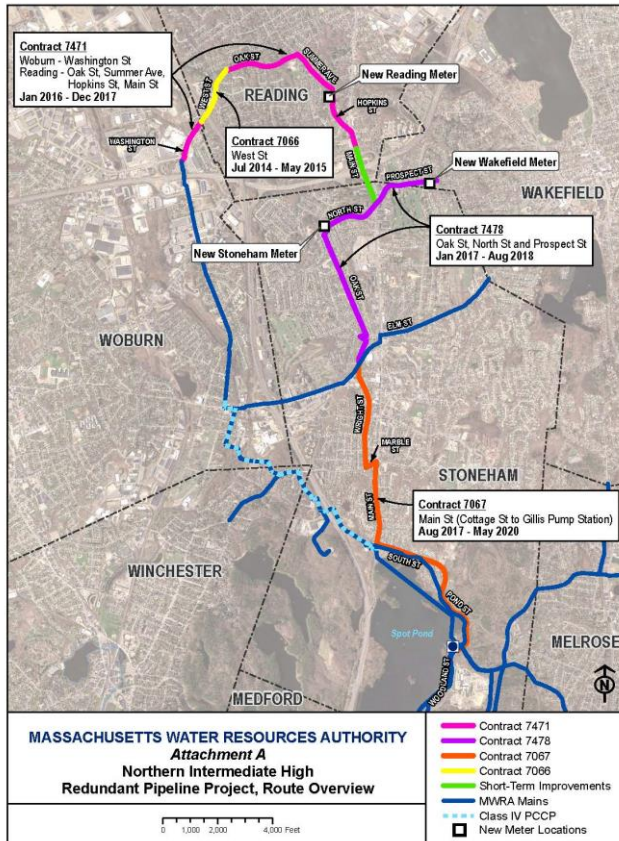
Contract 3 - \$17.3 million

Approx. 6,800 LF



Top FY 19 Spenders – NIH Redundancy and Storage

Total Contract: \$55.4 million
FY 19 Spending: \$13.7 million



- █ **Contract 1A - \$1.9 million**
Approx. 2,400 lf
Completed in FY16
- █ **Contract 1B - \$12.2 million**
Approx. 8,800 lf
Completed in FY18
- █ **Contract 1C - \$18.6 million**
Approx. 10,400 lf
2 revenue meters
- █ **Contract 2 - \$22.7 million**
Approx. 14,000 lf

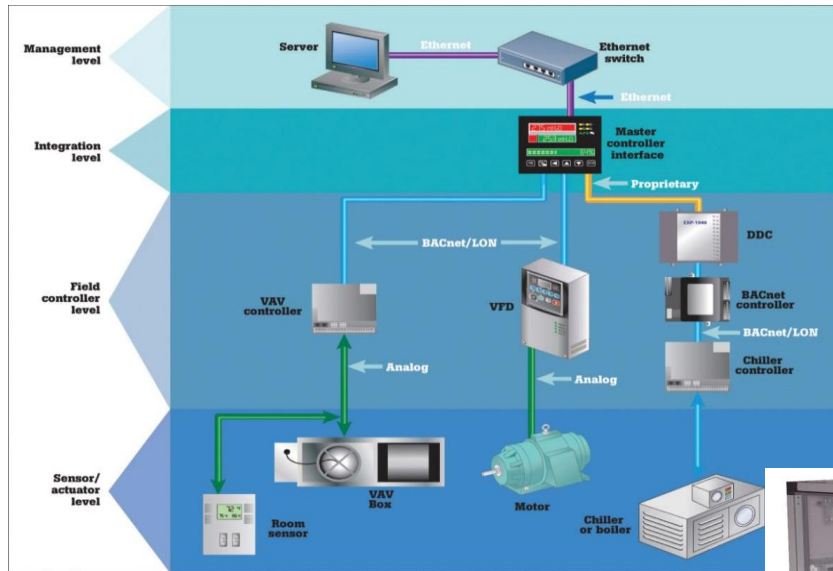


Major FY 19 Spenders – Deer Island HVAC

Total Contract: \$38.8 million
FY19: \$7.8 million



Air Cooled Condensing Compressor Units



Chiller

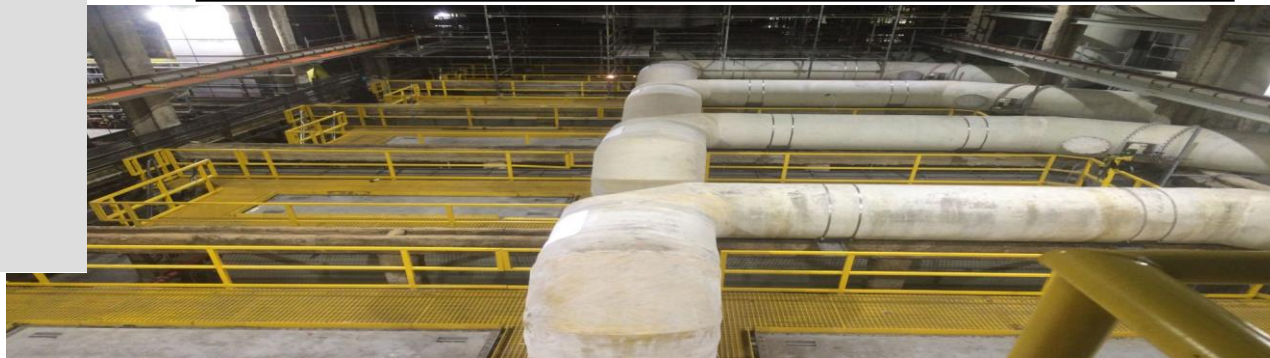
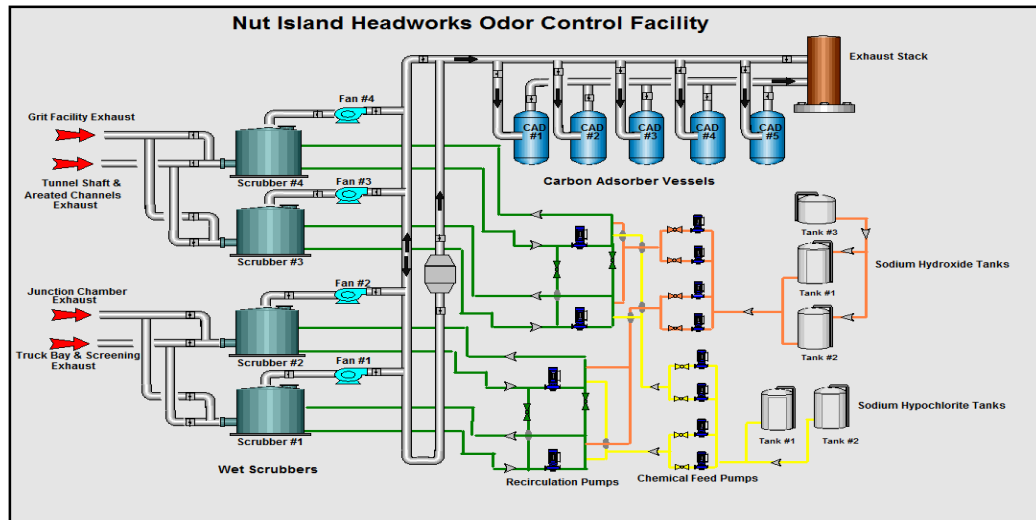
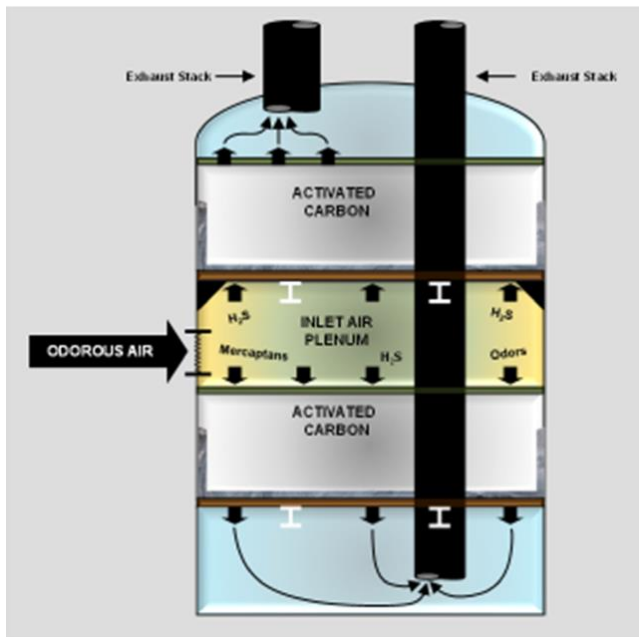


Air Handler



Major FY 19 Spenders – Nut Island Odor Control and HVAC

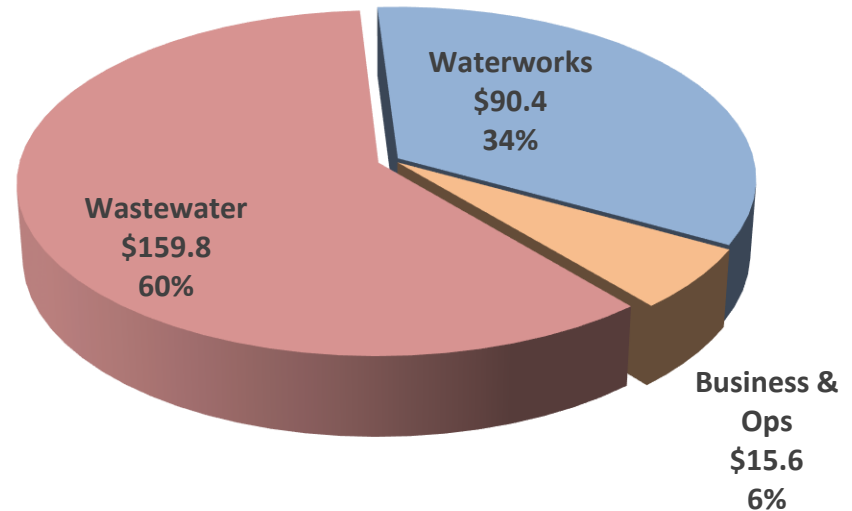
Total Contract: \$38.5 million
FY19 Spending: \$6.5 million





Proposed FY19 Contract Awards by Program

- 46 Contract Awards Planned for FY19
 - Total Contract Value: \$266 million
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- Wastewater: \$159.8 million
 - Waterworks: \$90.4 million
 - Business and Operations: \$15.6 million



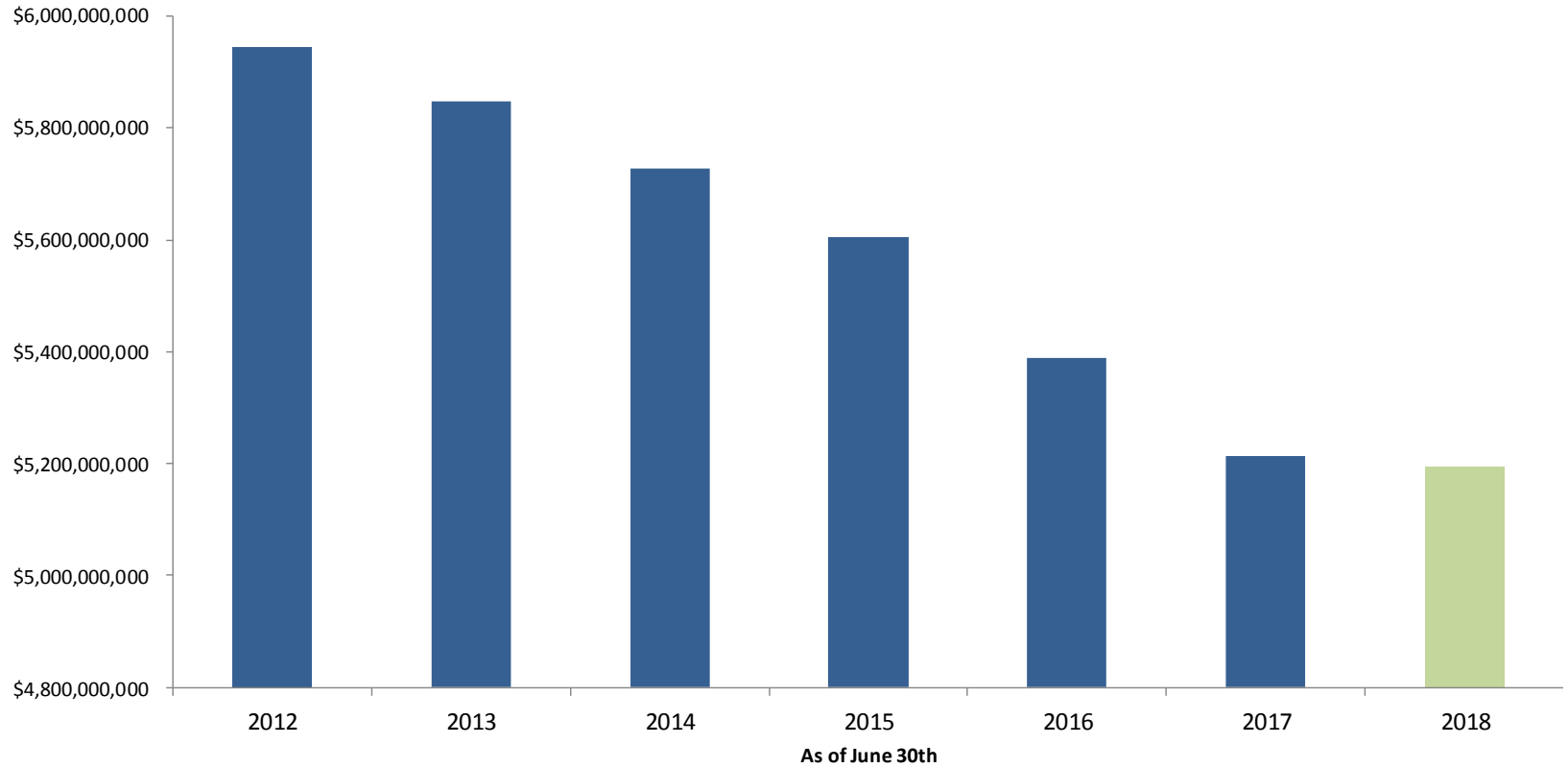


Top 10 Projected Contract Awards (\$'s in millions)

Contract	Contract Budget	FY19-23 Spending
	(\$s in millions)	
Nut Island Odor Control HVAC Improvement - Construction 2	\$38.5	\$38.5
Prison Point Rehabilitation - Construction	\$34.1	\$34.1
Northern Low Section 50 & 57 Water & 21/20/19 Sewer Rehab Construction	\$25.5	\$25.5
Deer Island Fire Alarm System Replacement - Construction	\$20.0	\$20.0
Ward Street & Columbus Park Headworks Des/CA/REI	\$12.0	\$6.4
Metro Tunnel Conceptual Design - Environmental Impact Review	\$10.6	\$10.6
Deer Island MCC & Switchgear Replacement Construction	\$10.6	\$10.6
Peabody Pipeline Construction	\$9.4	\$9.4
New Connecting Mains CP3-Sect 23,24,47 Rehabilitation	\$9.4	\$9.4
Switchgear Relay Replacement Construction	\$8.0	\$8.0
Top 10 Contract Awards FY19	\$178.0	\$172.4
% of Total Awards	67%	68%
Total 46 Contracts for FY19	\$265.7	\$253.5

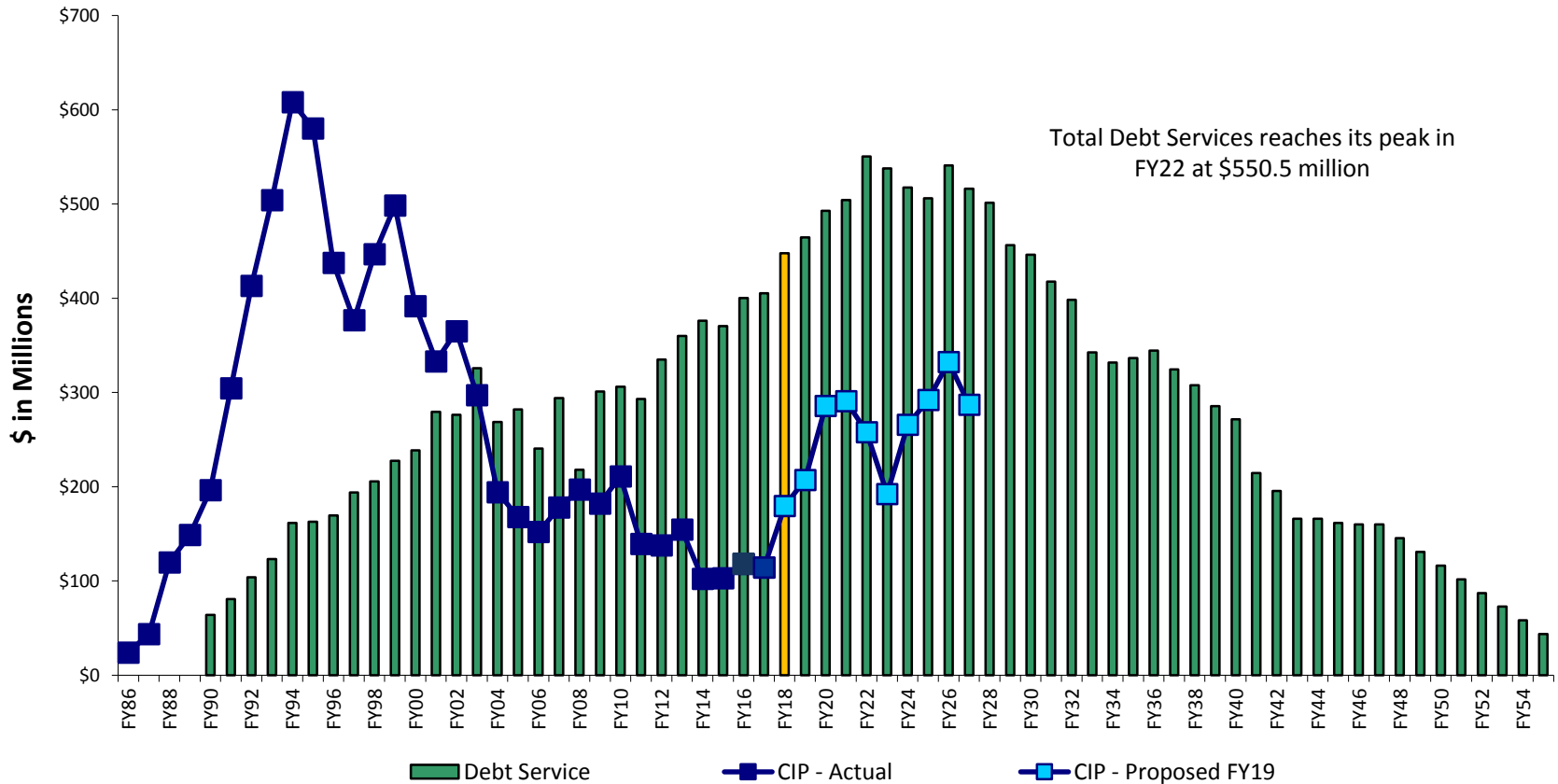


Outstanding Debt





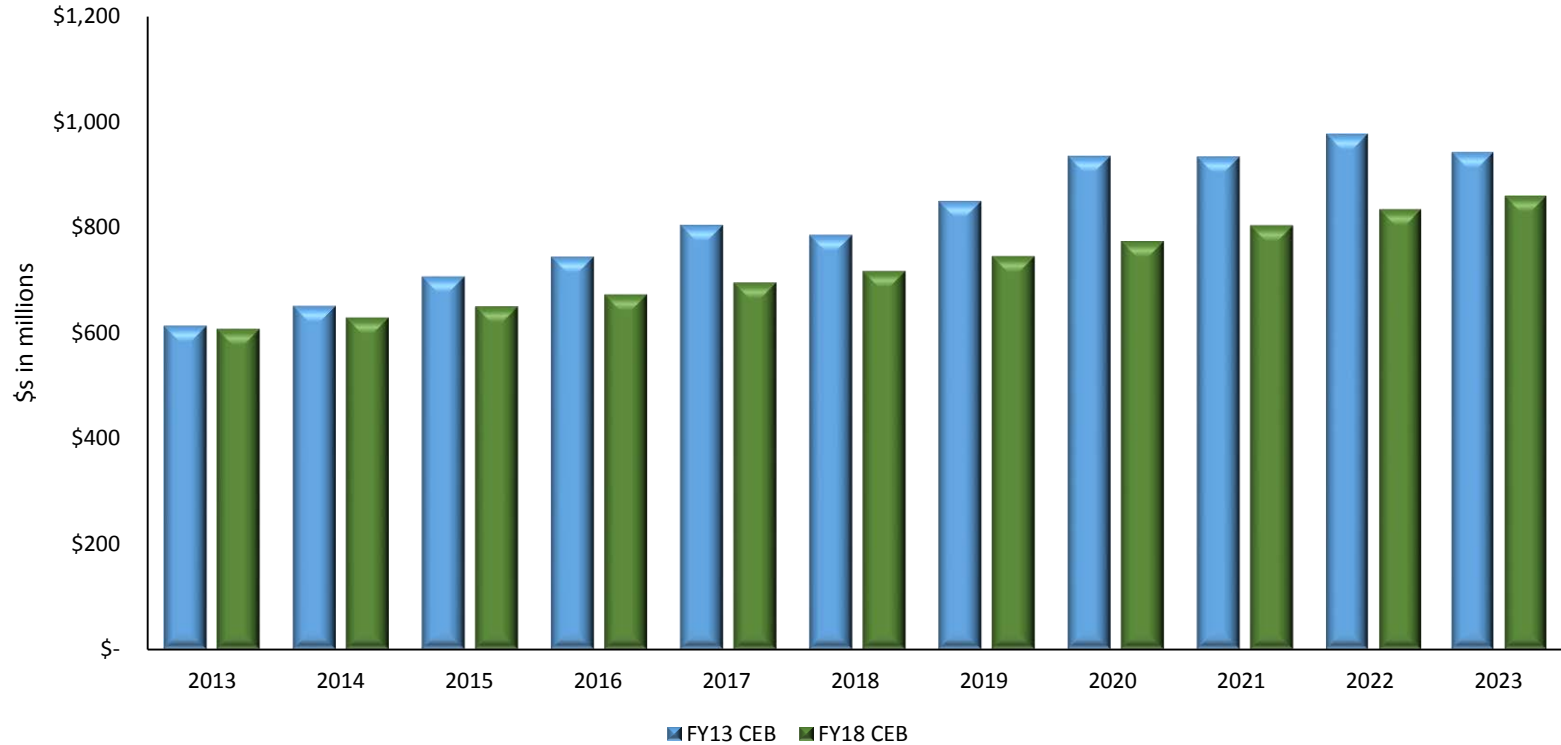
CIP Spending and Debt Service





Rate Revenue Requirement FY13 vs. FY18

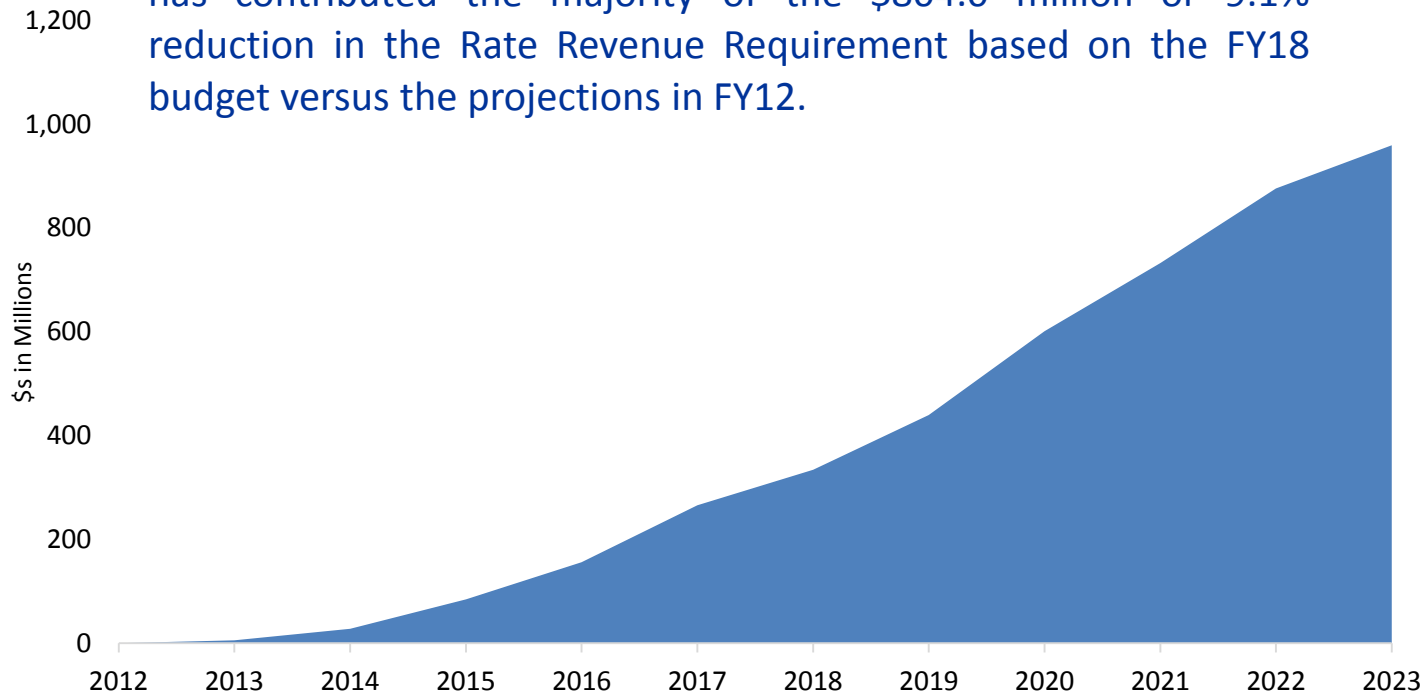
MWRA Rate Revenue Requirement





Cumulative Rate Revenue Savings

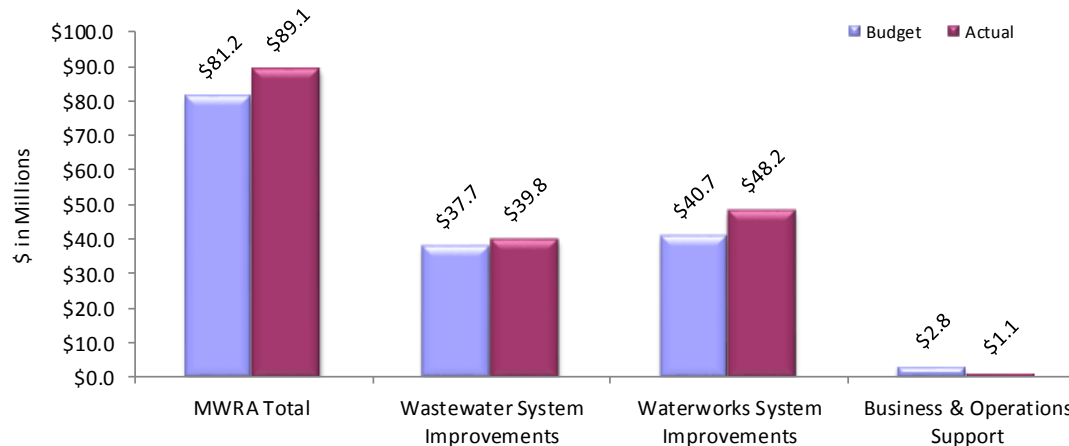
Debt service associated with the reduction in total indebtedness has contributed the majority of the \$804.0 million or 9.1% reduction in the Rate Revenue Requirement based on the FY18 budget versus the projections in FY12.





Capital Improvement Program spending thru December 2017

- Year to date spending thru December 2017 - \$89.1M
- \$7.9M greater than budget.





Community Financial Assistance Programs Spending thru December 2017

MWRA remains committed to its Community Financial Assistance Programs

- Infiltration/Inflow YTD spending: \$13.3M, +\$4.7M
- Local Water Pipeline Assistance YTD spending: \$3.6M, +\$1.2M
- Lead Service Replacement: \$1.3M, - \$0.5M



Completed Projects thru December 2017

- Deer Island North Main Pump Station and Winthrop Terminal Facility Butterfly Valve Replacements
- Deer Island Treatment Digester Sludge Pump Replacement Phase 2
- Fish Hatchery Pipeline Construction
- Chicopee Valley Aqueduct Screens Replacement
- Deer Island Personnel Dock Rehabilitation



On-going Projects FY18

- Chelsea Creek Headworks Upgrades
- Wachusett Aqueduct Pump Station
- Alewife Brook Pump Station Rehabilitation
- Deer Island Winthrop Terminal Facility Variable Frequency Drives Construction
- Clinton Phosphorus Reduction Construction
- Water system redundancy projects in both the Northern Intermediate High and Southern Extra High Service areas



Contract Awards thru December 2017

- 8 contracts awarded valued at \$29.6 million, including:
 - Southern Extra High Water Redundancy Section 111 Construction 2 - \$17.2 million
 - Section 57 Water & Sections 21/20/19 Sewer Design and Construction Engineering Services - \$6.0 million
 - Combined Sewer Overflow Performance Assessment - \$2.9 million



**WAC/WSCAC Presentation
Fiscal Year 2019
Proposed
Current Expense Budget**

April 24, 2018



Multi-Year Rates Management Strategy

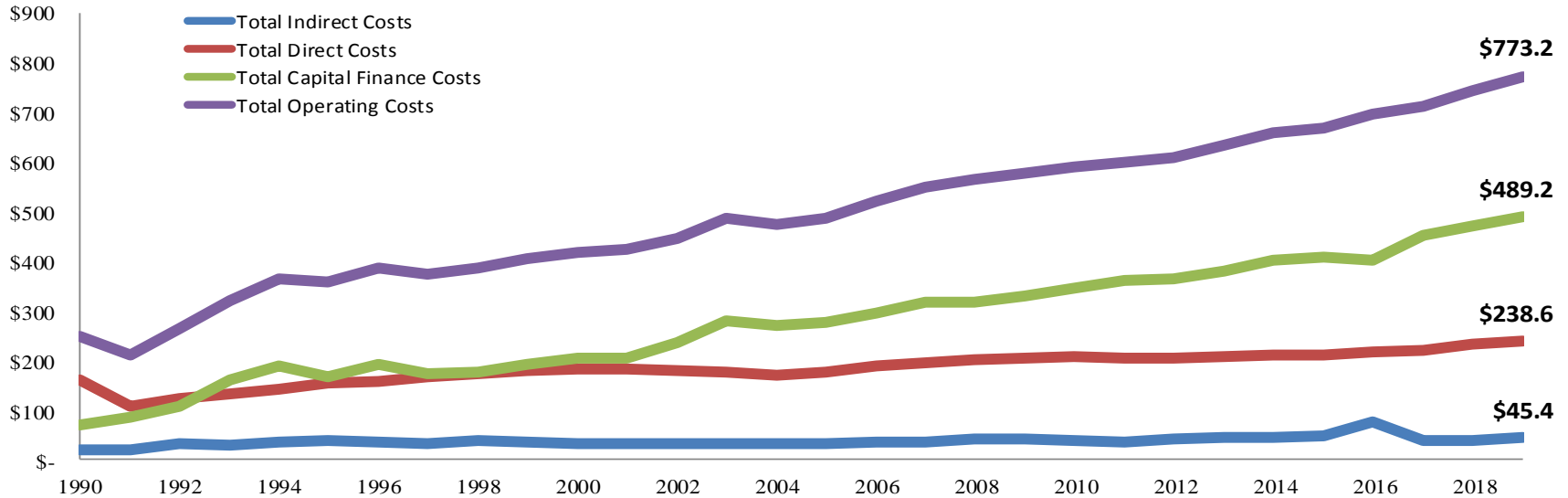


- Deliver Sustainable and Predictable Assessments
- Continue Multi-Year Rates Management



Historical Budgeted Spending

\$s in millions





Budget Drivers For Multi-Year Planning

- Capital Finance Expenses
- Existing Expenses and Revenue - inflation
- New Expenses
 - Long-Term Water Redundancy Program Staffing
 - New HEEC Cable Operating and Maintenance Costs
- Long-Term Liabilities



Ways to address the Debt Service challenge

- Defeasance
- Refundings
- Use of Reserves
 - Rate Stabilization Fund
 - Bond Redemption Fund
- Tactical Issuance – Repayment Structure
- Control Capital Spending
- Strategic Use of Current Revenue/Capital Funding



Current Expense Budget Assumptions

- Inflation assumptions
- Actuarial valuations
- Interest rate assumptions




- Long-Term Water Redundancy Staffing
 - FY19 FTEs: 1,150 + 5
 - First 5 FTEs of the projected new 15 FTEs for the Metropolitan Tunnels Long-Term Redundancy project



New Expenses

- New HEEC Cable to be operational by December 2019
- \$6.5 million established HEEC Reserve Fund in FY18
- 30 year repayment schedule

New HEEC Cable in place Dec 2019 

(\$s in millions)

	FY19	FY20	FY21	FY22	FY23	FY24
Projected HEEC Payments	\$1.4	\$4.1	\$5.7	\$5.4	\$8.9	\$7.9

- FY19 existing cable
- FY21-24 new cable payments
 - \$2.5 million reserve offset in FY21
 - \$4.0 million reserve offset in FY22



Long-Term Liabilities

- FY 19 retirement contribution: \$7.1 million, increase of \$3.8 million or 117.0% over FY18
- Pension fund is currently 96.5% funded
- Projected contributions to fully fund the plan by 2024

	(\$s in millions)					
	FY19	FY20	FY21	FY22	FY23	FY24
Retirement Contributions	\$7.1	\$9.2	\$10.8	\$10.5	\$10.9	\$11.4

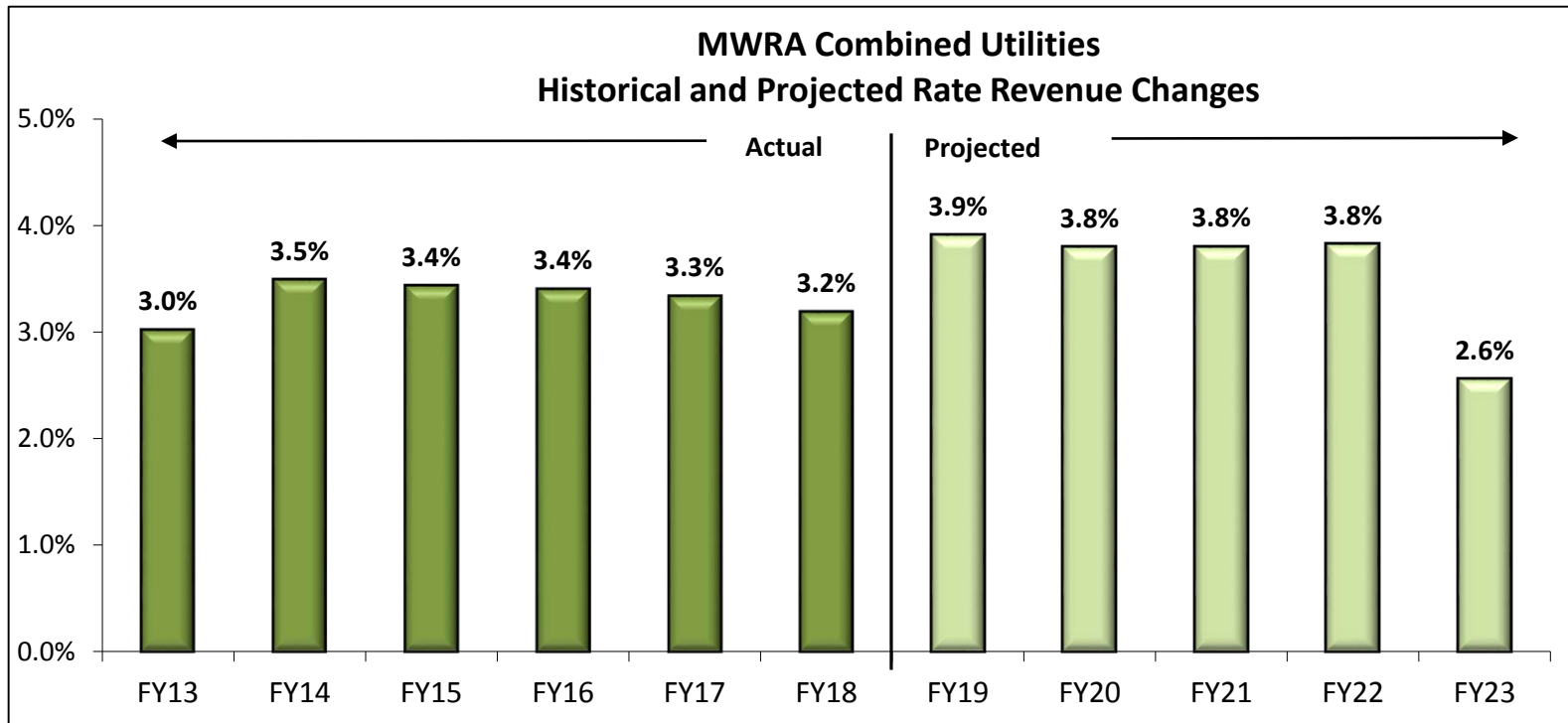


Long-Term Liabilities

- OPEB liability funding: \$5.6 million based on 50% of the contribution per actuarial report
- Current OPEB Trust balance: \$24.4 million

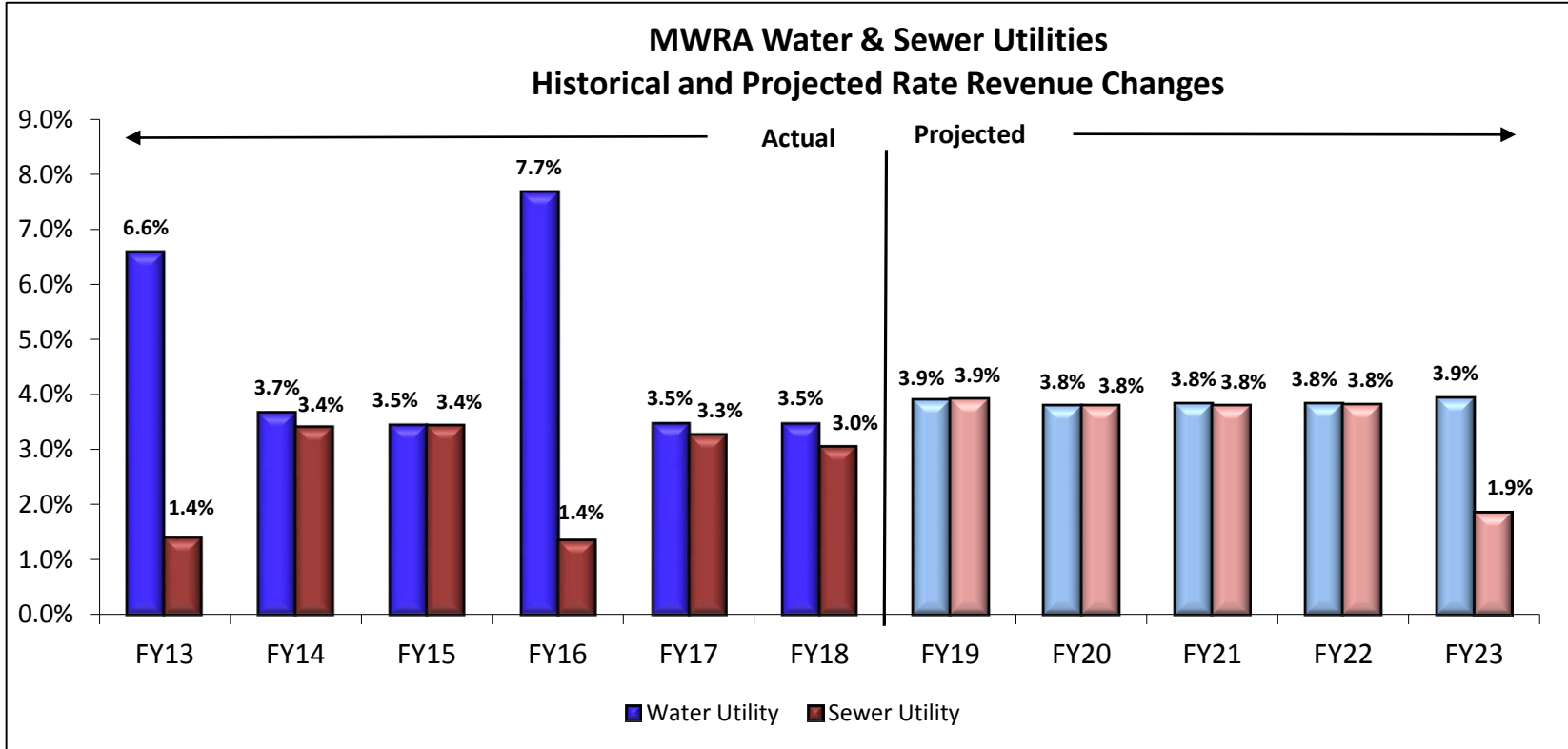


Actual and Forecasted Rate Revenue Changes





Actual and Forecasted Rate Revenue Changes by Utility





CEB Budget Structure

- Direct Expenses
- Indirect Expenses
- Capital Finance Expenses
- Non-Rate Revenue
- Rate Revenue

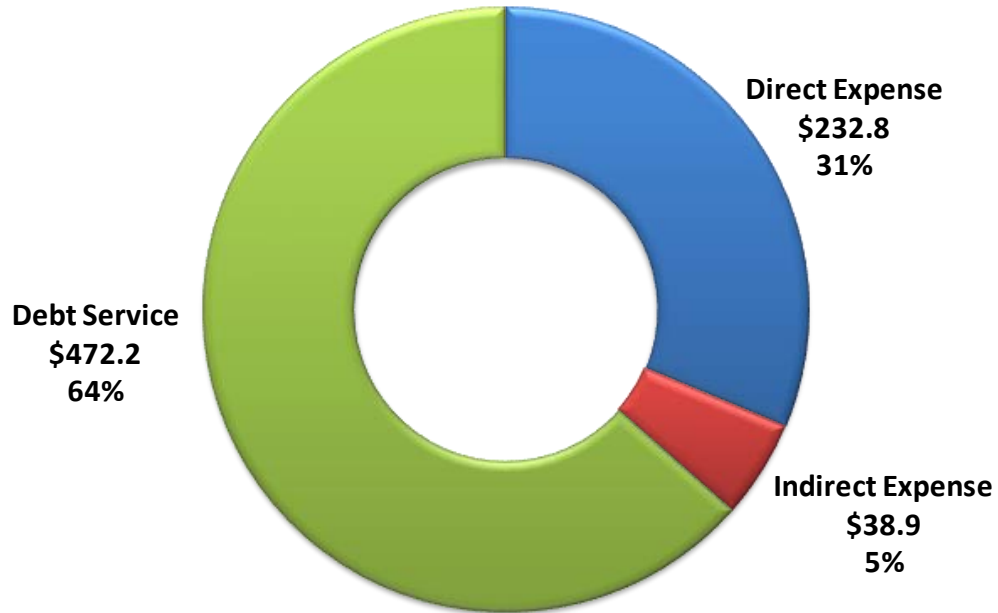
ATTACHMENT A
FY19 Proposed Budget vs FY18 Approved Budget

TOTAL MWRA	FY17 Actuals	FY18 Approved Budget	FY19 Proposed Budget	Change	
				FY19 Proposed Budget vs FY18 Approved Budget	%
EXPENSES					
WAGES AND SALARIES	\$ 98,494,291	\$ 104,286,370	\$ 107,118,716	\$ 2,832,346	2.7%
OVERTIME	4,951,621	4,110,637	4,247,554	136,917	3.3%
FRINGE BENEFITS	19,623,635	20,975,975	21,274,617	776,642	3.7%
WORKERS COMPENSATION	2,565,336	2,322,980	2,322,609	(371)	0.0%
CHEMICALS	2,502,849	9,836,933	10,855,856	1,018,923	10.4%
ENERGY AND UTILITIES	20,259,799	21,735,222	22,041,919	306,697	1.4%
MAINTENANCE	30,798,709	32,200,786	31,637,582	(563,204)	-1.7%
TRAINING AND MEETINGS	360,115	406,269	455,770	49,501	12.2%
PROFESSIONAL SERVICES	6,698,861	7,221,622	7,617,117	395,495	5.5%
OTHER MATERIALS	5,851,449	6,692,659	7,381,098	688,439	10.3%
OTHER SERVICES	21,862,445	22,264,526	23,150,692	886,167	4.0%
TOTAL DIRECT EXPENSES	\$ 220,721,905	\$ 232,875,979	\$ 238,668,532	\$ 6,027,553	2.6%
INSURANCE	\$ 1,739,542	\$ 2,013,452	\$ 2,009,064	\$ 85,612	4.3%
WATERSHED/PILOT	23,911,694	22,164,006	25,906,427	742,421	3.0%
HEEC PAYMENT	789,258	987,445	1,386,832	429,387	44.8%
MITIGATION	1,542,800	1,596,960	1,614,262	17,312	1.1%
ADDITION	(167,742)	821,116	1,732,193	911,077	111.0%
RETIREMENT TO RESERVES	4,632,624	3,277,369	7,110,663	3,833,294	117.0%
TOTAL INDIRECT EXPENSES	\$ 4,876,050	\$ 5,031,422	\$ 5,574,152	\$ 538,730	10.7%
STATE REVOLVING FUND	\$ 80,459,851	\$ 84,911,906	\$ 89,180,358	\$ 4,448,452	5.2%
SENIOR DEBT	287,931,637	264,560,267	273,126,129	8,565,862	3.2%
SUBORDINATE DEBT	69,997,992	85,443,447	92,032,294	6,588,847	7.7%
LOCAL WATER PIPELINE CP	858,685	3,794,944	4,750,393	955,449	25.2%
CURRENT REVENUE/CAPITAL	3,217,060	12,200,000	14,200,000	2,000,000	16.4%
CAPITAL LEASE	12,200,000	10,994,960	10,900,000	(9,039,040)	-73.6%
DEBT PREPAYMENT	10,994,960	10,900,000	12,500,000	1,600,000	14.7%
BOND REDEMPTION	(11,027,773)	(391,580)	-	391,580	-100.0%
VARIABLE RATE SAVINGS	(1,265,384)	6,532,146	-	(6,532,146)	-100.0%
DEBT SERVICE ASSISTANCE	-	-	-	-	-
HEEC CABLE CAPACITY RESERVE FUND	-	-	-	-	-
TOTAL DEBT SERVICE	\$ 453,267,028	\$ 472,488,190	\$ 489,206,234	\$ 17,018,044	3.6%
TOTAL EXPENSES	\$ 711,413,158	\$ 743,629,929	\$ 772,233,360	\$ 29,603,431	4.0%
REVENUE & INCOME					
RATE REVENUE	\$ 694,878,500	\$ 717,054,000	\$ 745,080,300	\$ 28,026,300	3.91%
OTHER REVENUE	8,309,434	9,011,070	9,469,933	458,863	5.1%
OTHER USER CHARGES	13,087,910	7,359,078	6,225,719	(1,133,359)	-15.4%
RATE STABILIZATION	-	-	-	-	-
INVESTMENT INCOME	9,758,400	10,305,781	10,457,408	2,251,627	22.1%
TOTAL REVENUE & INCOME	\$ 726,534,324	\$ 743,629,929	\$ 772,233,360	\$ 29,603,431	4.0%



FY18 Proposed Current Expense Budget (CEB)

FY19 Proposed Current Expense Budget





FY19 Proposed CEB vs FY18

Category	\$s in thousands		Change	
	FY18	FY19	FY19 Proposed Budget vs FY18 Approved Budget	
	Approved Budget	Proposed Budget	\$	%
TOTAL DIRECT EXPENSES	\$ 232,576	\$ 238,604	\$ 6,028	2.6%
TOTAL INDIRECT EXPENSES	\$ 38,866	\$ 45,424	\$ 6,558	16.9%
TOTAL CAPITAL FINANCING	\$ 472,188	\$ 489,206	\$ 17,018	3.6%
TOTAL EXPENSES	\$ 743,630	\$ 773,233	\$ 29,603	4.0%



FY19 Proposed Direct Expenses vs. FY18

Highlights –

- Wages and Salaries: \$107.1M, \$2.8M or 2.7% increase
- Chemicals: \$10.9M, \$1.0M or 10.4% increase
- Fringe Benefits: \$21.8M, \$0.8M or 3.7% increase
- Other Materials: \$7.4M, \$0.7M or 10.3% increase
- Utilities: \$22.0M, \$0.3M or 1.4% increase

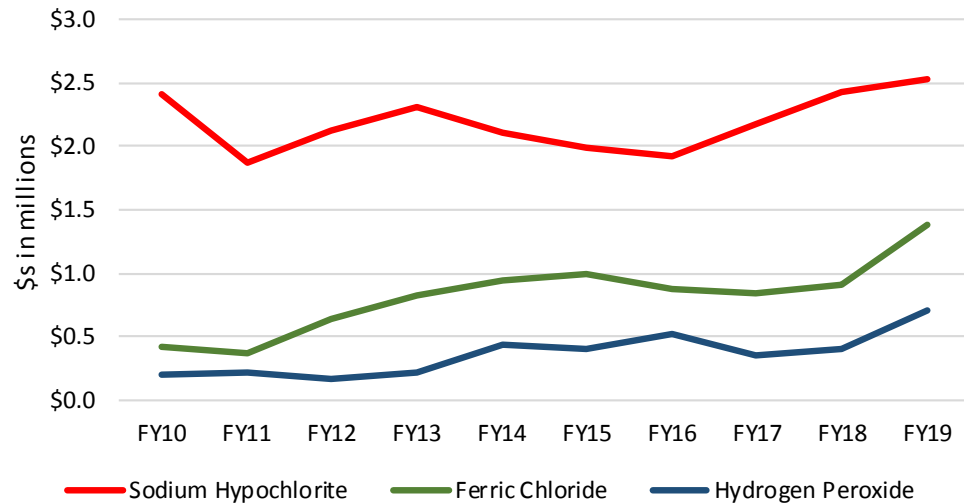


Chemicals

Chemicals - \$10.9M, \$1.0 million or 10.4% increase Budget

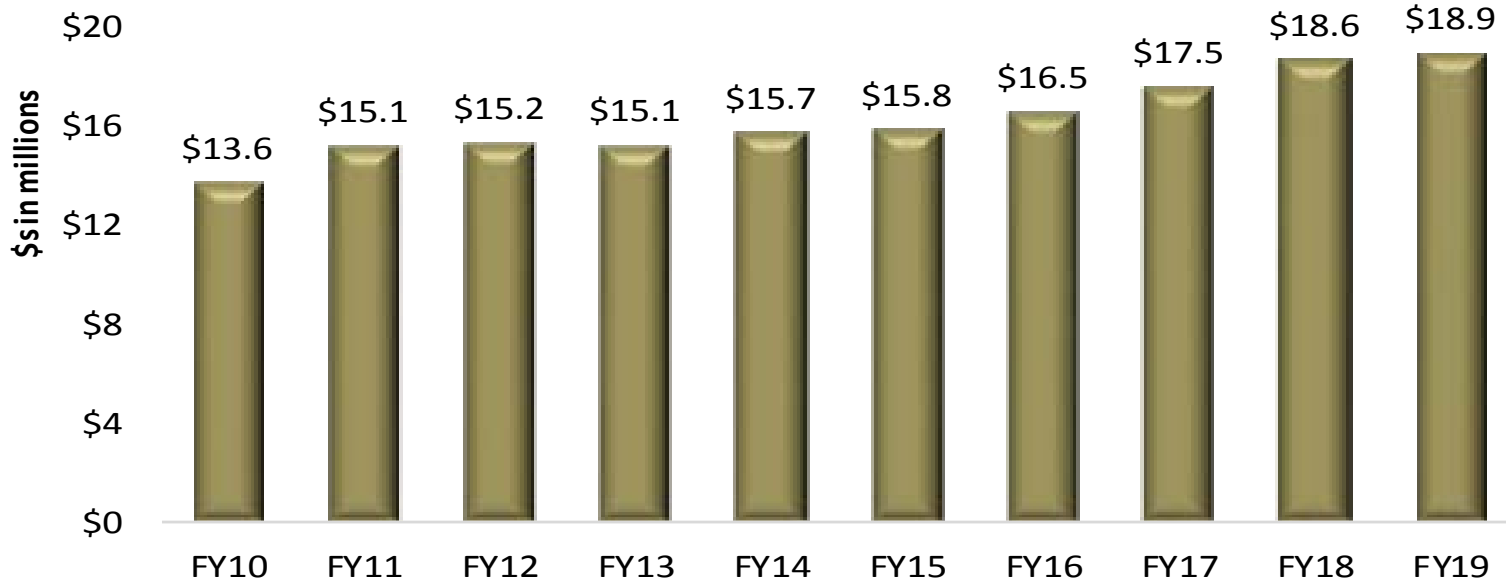
- 3 months funding for the Deer Island NPDES permit, \$294k.
- Increased pricing for Ferric Chloride at the Deer Island, \$1.4M budget - increase of \$476k.
- Increased use of Hydrogen Peroxide for odor control at Deer Island and a projected increase in pricing, \$0.7M budget - increase of \$308k.

Historical & Projected Chemical Cost





Historical Health Insurance Cost



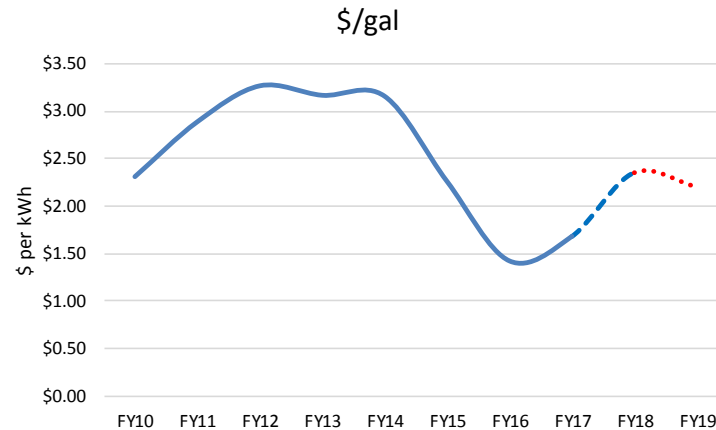
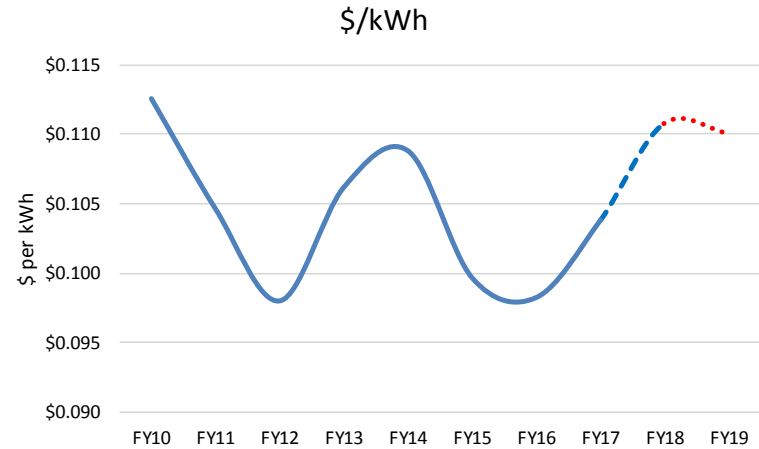
GIC: assume 5% increase in health insurance



Utilities

\$22.0M for Utilities, \$307k or 1.4% increase

- \$16.5M for Electricity, level funded with FY18 with similar usage and price
 - *New Eversource/NGRID T&D rate structure with potential \$1.0M impact, \$600k @ DI alone.*
- \$2.5M for Diesel level funded with FY18 with lower projected pricing offset by higher usage

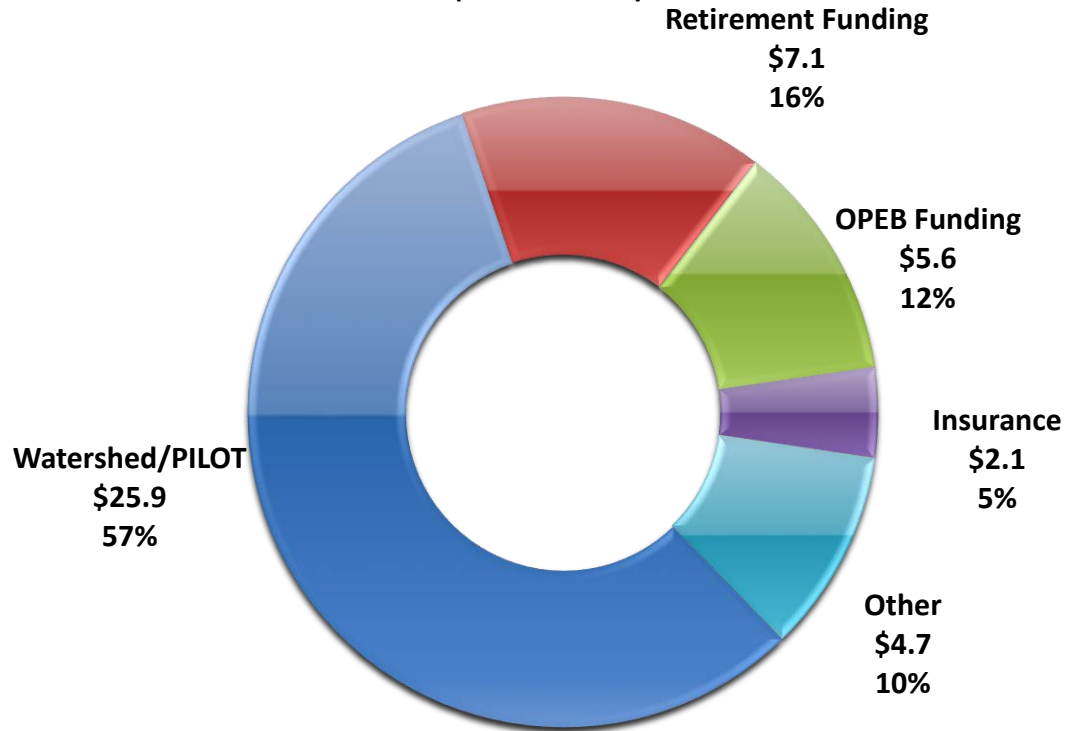




CEB Budget Structure – Indirect Expenses

Indirect Expenses

(\$s in millions)





FY19 Proposed Indirect Expenses vs. FY18

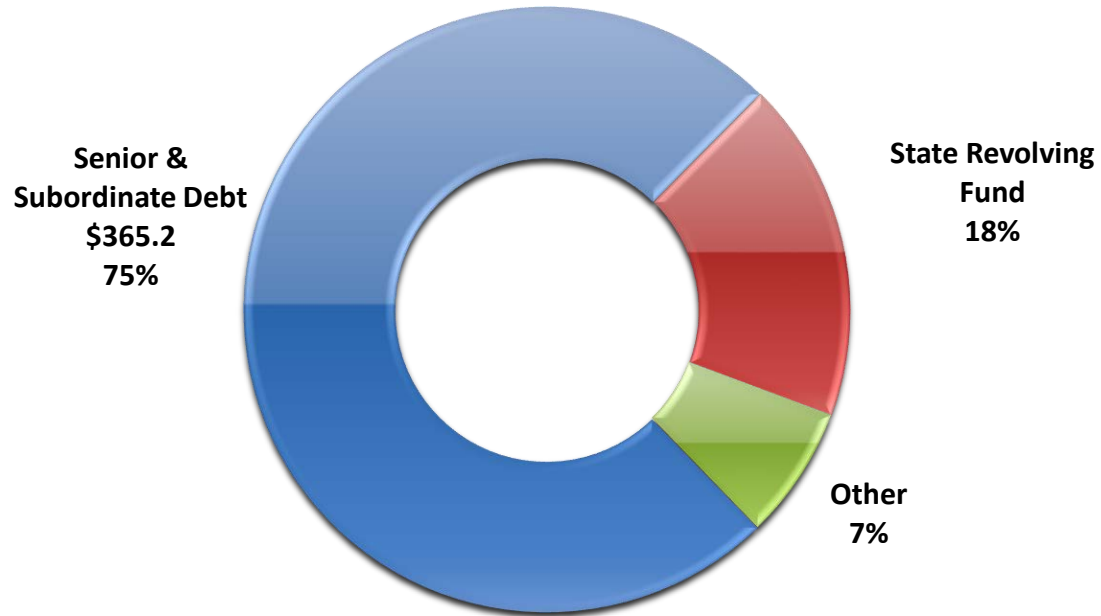
Highlights:

- Watershed Program operating and PILOT: \$25.9M, \$0.7M or 3.0% increase
- Pension Fund required contribution: \$7.1M, \$3.8M or 117.0% increase
- OPEB half of actuarial contribution: \$5.6M, \$0.5M or 10.7% increase
- Insurance: \$2.1M, level funded
- Mitigation: \$1.6M, level funded
- HEEC contract: \$1.4M, \$0.4M or 44.8% increase due to capital improvements on sub-stations



CEB Budget Structure – Capital Finance Expenses

Capital Financing *(\$s in millions)*





Highlights:

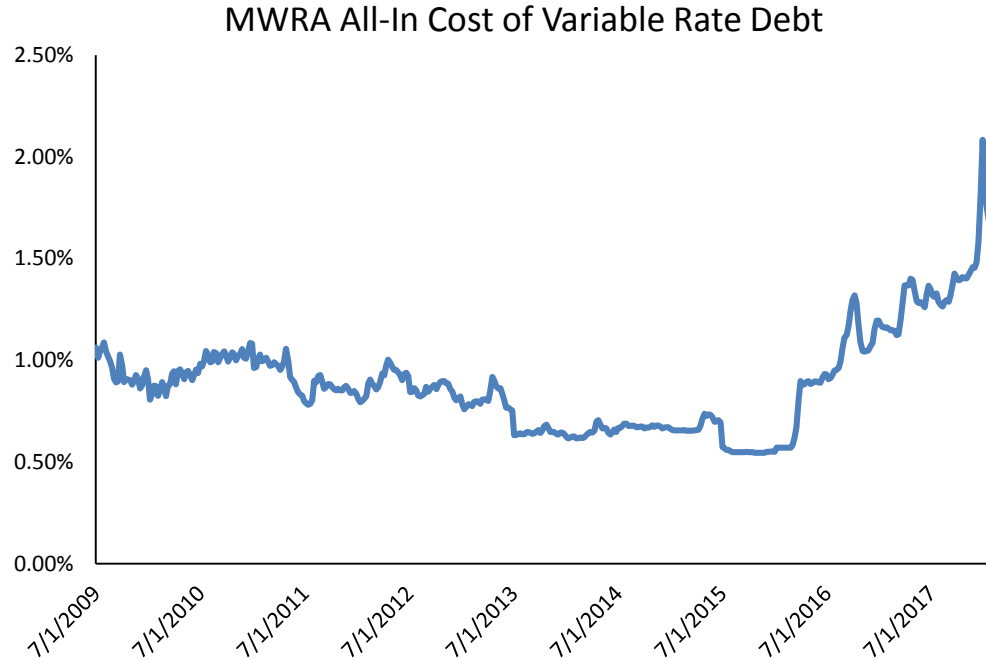
- Variable Rate Debt Assumption 3.50%, 25 bp increase
- \$25.9M defeasance
- \$12.5M prepayment of debt
- \$14.2M to Current Revenue for Capital
- No Debt Service Assistance



Interest Rates

Interest trending up with the Fed balancing economic expansion, inflation and employment

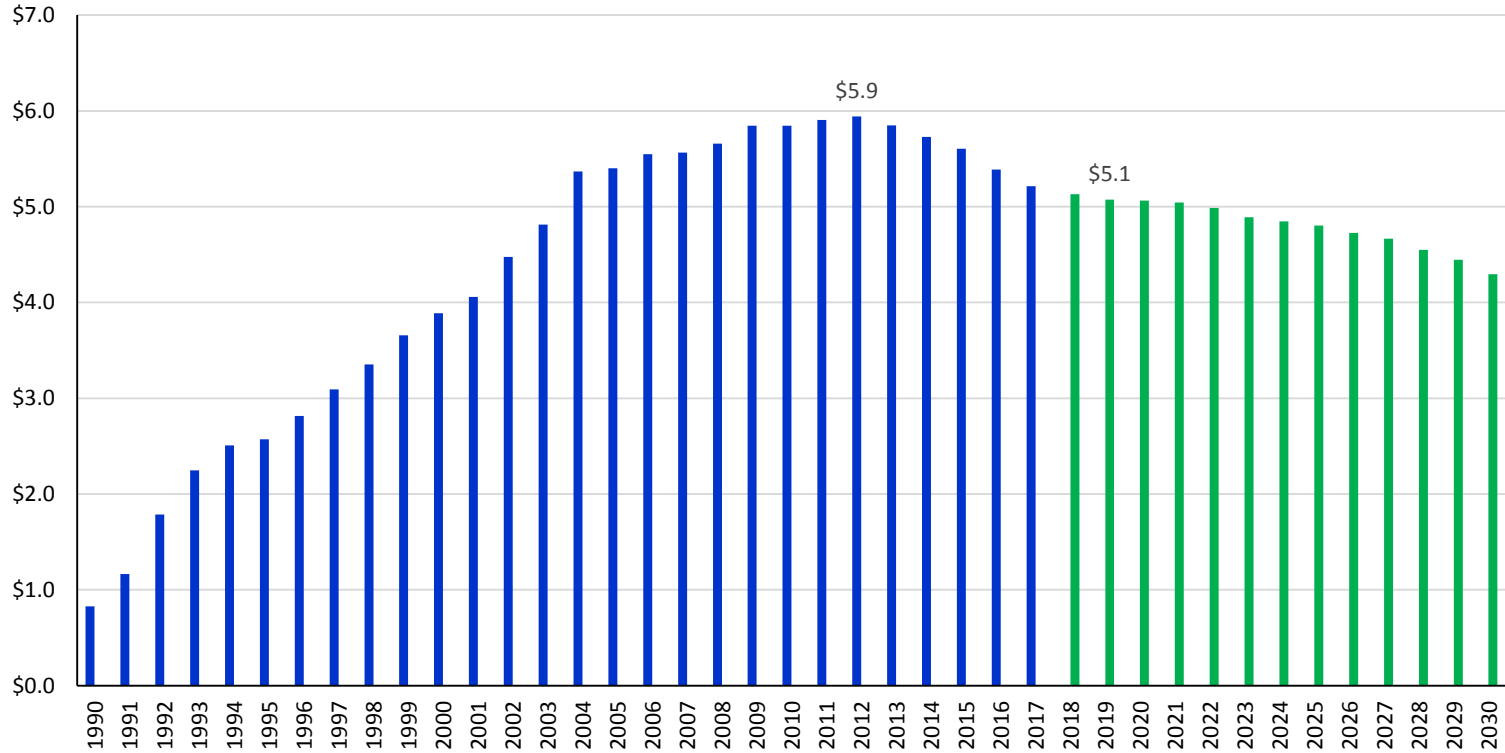
- 3 rate hikes projected in 2018 with the next 25 bp increase expected in March
- 2 rate hikes projected in 2019





Outstanding Debt Matt to Update

Outstanding Debt
\$s in billions





FY19 Non-Rate Revenue vs. FY18

Highlights -

- Other User Charges: \$9.5M, \$0.5M or 5.1% increase
- Other Revenue: \$6.2M, \$1.1M or 15.4% decrease (related to demand response and RPS programs)
- Investment Income: \$12.5M, \$2.3M or 22.1% increase

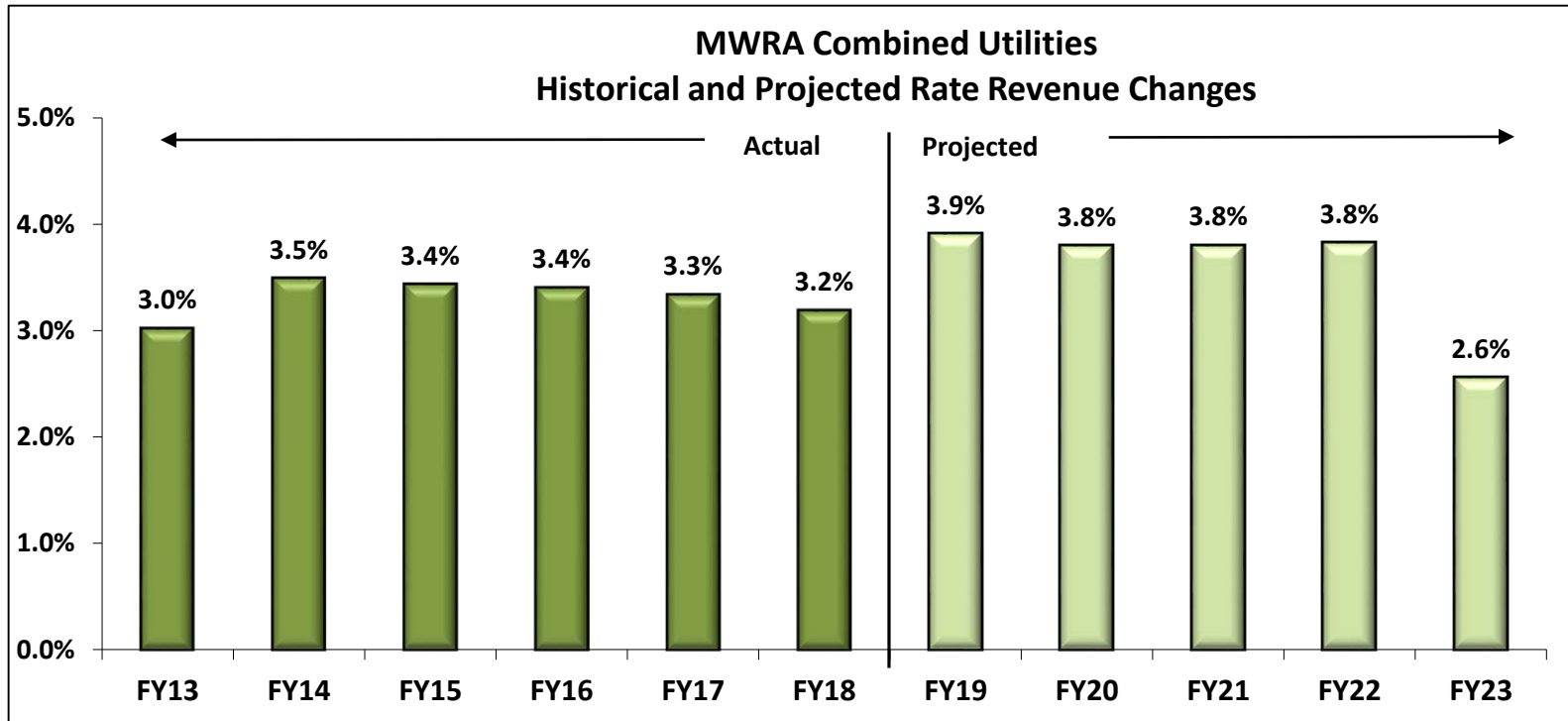


Rate Revenue Requirement \$s in Millions

Direct Expenses	\$238.6
Indirect Expenses	\$45.4
Capital Financing	\$489.2
Non-Rate Revenue	(\$28.2)
Rate Revenue Requirement	<hr/> <u>\$745.1</u>



Actual and Forecasted Rate Revenue Changes





FY19 Current Expense Budget Next Steps

- Advisory Board 60 day review
- Public Hearing
- MWRA Board Hearing
- Staff will present Draft Final Budget to Board of Directors in May



Thank You