





***MWRA Fiscal Year 2020
Draft Final
Current Expense Budget***

May 29, 2019



Rates Management Strategy

Sustainable and Predictable Assessments

Multi-Year Approach



Expenses – FY20 Proposed vs Draft Final

\$s in millions

Category	Proposed	Draft Final	Change Draft Final vs Proposed Budget
			\$
Direct Expenses	\$248.8	\$248.5	(\$0.2)
Indirect Expenses	\$50.7	\$50.9	\$0.2
<u>Capital Financing</u>	<u>\$497.6</u>	<u>\$493.4</u>	<u>(\$4.2)</u>
Total Expenditures	\$797.0	\$792.8	(\$4.2)
Non-Rate Revenue	\$30.4	\$30.5	\$0.1
<u>Rate Revenue Requirement</u>	<u>\$766.7</u>	<u>\$762.3</u>	<u>(\$4.3)</u>
Total Revenue	\$797.0	\$792.8	(\$4.2)
Rate Revenue Requirement	3.74%	3.15%	(0.59%)

Totals may not tie due to rounding



Rate Revenue Requirement FY20 Proposed vs Draft Final

Advisory Board Recommendations

- **Rate Revenue Requirement: \$762,351,321**
- Directs: -\$594,675
- Indirects: - \$400,887
- Capital Financing: - \$3,140,235
- Non-Rate Revenue: \$170,382

MWRA Recommendations

- **Rate Revenue Requirement: \$762,322,000**
- Directs: -\$235,325
- Indirects: +\$217,790
- Capital Financing: - \$4,175,455
- Non-Rate Revenue: \$170,384



Wages & Salaries

- Draft Final FY20 Wages & Salaries includes a reduction of 2 FTEs for Tunnel Redundancy and an overall reduction of \$318,513 from the Proposed FY20 CEB.

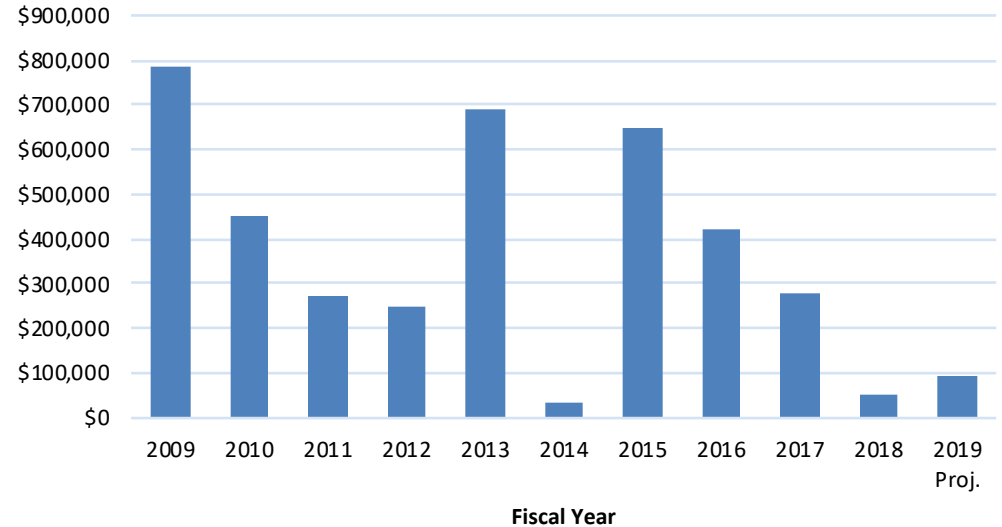
FY20 Draft Final	FTE	Wages
Base per PCR	1,135	\$ 103,528,054
Current Positions To Be Filled	15	\$ 1,706,835
Subtotal Core Business	1,150	\$ 105,234,889
Tunnel Redundancy Additions	10	\$ 1,137,890
Total MWRA	1,160	\$ 106,372,779
Tunnel Redundancy Revisit Shift Diff, Holiday, Longevity, Interns/Temps, Stand By Pay, Sick Buyback, etc.	(2)	\$ (227,578)
Vacancy Adjustment	-	\$ 6,211,051
	-	\$ (2,154,195)
Adjusted Total MWRA	1,158	\$ 110,202,057



Leave Balance Accrual

- FY19 unusual year
- Spending has been difficult to predict
- Employee behavior varies
- More retirement payouts (vacation & sick time) = lower LBA expense
- Advisory Board recommend reduction to \$500,000 budgeted in Wages & Salaries
- Massachusetts Inspector General issued a report on funding in October 2017

Leave Balance Accrual Spending





Fringe Benefits

- Draft Final FY20 Fringe Benefits budget of \$21,717,533 reflects a \$247,677 reduction from the FY20 Proposed CEB

<i>Summary Of Changes from Proposed to Draft Final</i>				
Fringe Category	Proposed	Draft Final	Change	Notes
Health Insurance	\$ 18,975,764	\$ 18,331,265	\$ (644,499)	Updated enrollment #s and plan rates, removed 6% inflation factor
PFML	\$ -	\$ 356,542	\$ 356,542	New item added to Draft Final Budget
Medicare Tax	\$ 1,471,732	\$ 1,492,011	\$ 20,280	Revised calculation based on actuals through December 2018 (previously Q4 CY2018 was an estimate)
Tuition Reimbursement	\$ 50,000	\$ 70,000	\$ 20,000	Adjustment to remain in line with FY19 Final Budget
		Total Changes	\$ (247,677)	



Paid Family and Medical Leave Act (PFML)

Paid Family and Medical Leave Act is a new law requires a deposit of 0.63% of payroll into a state trust fund comprised of employer and employee contributions.

Employer

- The FY20 CEB includes \$356,542 for the employer's 0.312% share of the payroll contribution.
 - Average annual PFML paid by MWRA per FTE = \$308

Employee

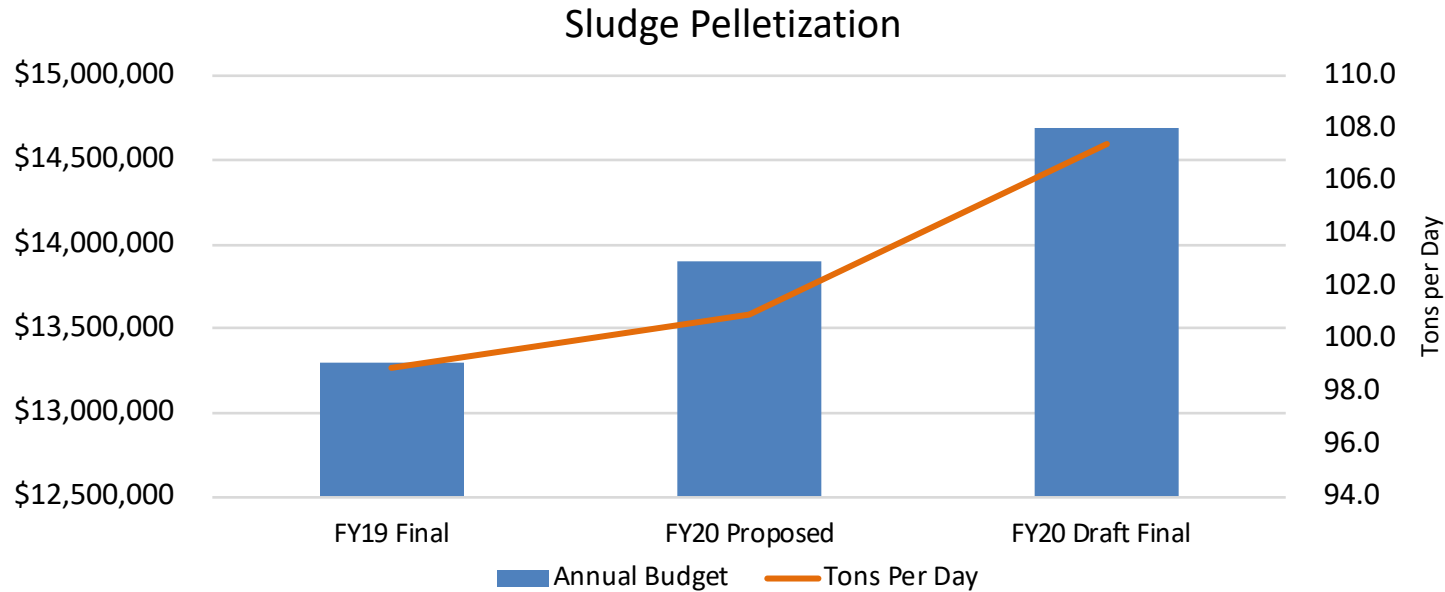
- An employee's share of 0.318% would mean a contribution of \$0.32 on every \$100 earned (up to \$132,900 in total wages)
 - Average annual PFML withholding per FTE = \$314

FY20 Draft Final	Wages
Wages and Salaries	\$ 110,202,057
Overtime	\$ 4,898,965
Exclude Wages > \$132,900	\$ (824,620)
Adjusted Total	\$ 114,276,402

PFML Contribution Rate	0.312%
PFML Total Contribution	\$ 356,542



Sludge Pelletization



- The FY20 Draft Final Budget reflects an increase in cost of \$0.8 million or 5.7% over the FY20 Proposed Budget, due to an increase in dry tons per day of 6.5 or 6.5%.

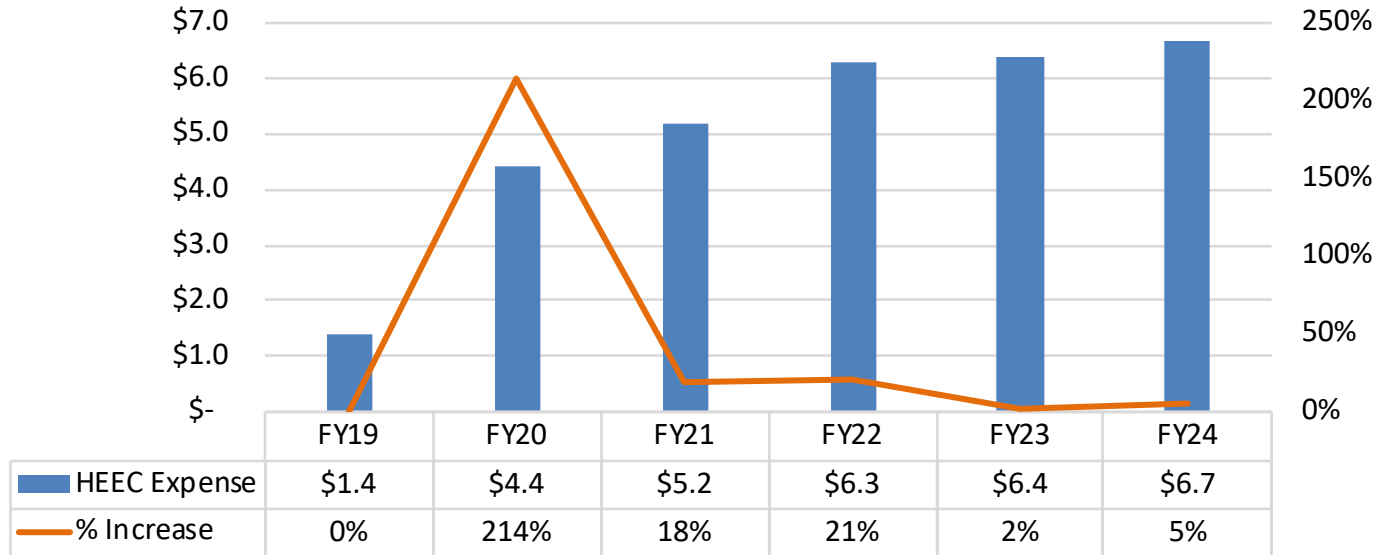


- Draft Final FY20 Watershed/PILOT Budget of \$26,833,600 reflects a \$361,108 reduction from the FY20 Proposed CEB

<i>Summary Of Changes from Proposed to Draft Final</i>				
Watershed Category	Proposed	Draft Final	Change	Notes
Wages & Salaries	\$ 11,063,789	\$ 10,924,239	\$ (139,550)	FTE's reduced from 156.3 to 150.0
PILOT	\$ 8,755,000	\$ 8,500,000	\$ (255,000)	PILOT payment projection reduced based on FY19 actuals
Other Adjustments	\$ 8,450,919	\$ 8,484,361	\$ 33,442	Capital, Professional Services, and Fringe
		Total Changes	\$ (361,108)	



HEEC Expense (in millions)



- The \$4.4M budget in FY20 is level to the planning estimates
- The \$6.5M HEEC reserve is projected to be used between FY21-25
- New cable to be in service in December 2019



Summary of Changes from Proposed to Draft Final

	Proposed CEB	Draft Final CEB	Difference
New Money/Refunding (2019 B&C)	\$ 9,494,713	\$ 7,209,500	\$ (2,285,215)
Defeasance	\$ (5,247,500)	\$ (5,378,250)	\$ (130,750)
Total Senior Debt Changes			\$ (2,415,965)
Subordinate - Interest Rate Reduced to 3.50%	\$ 170,587,702	\$ 169,609,843	\$ (977,859)
SRF - Revised Pool 22 Projection	\$ 93,138,692	\$ 92,797,295	\$ (341,397)
Optional Debt Payment	\$ 4,850,000	\$ 5,300,000	\$ 450,000
Debt Service Assistance	\$ -	\$ (890,239)	\$ (890,239)
		Total Changes	\$ (4,175,459)

- Reflects a reduction of the variable interest rate assumption from 3.75% to 3.50%



Short-Term Variable Interest Rates

MWRA All-In Cost of Variable Rate Debt





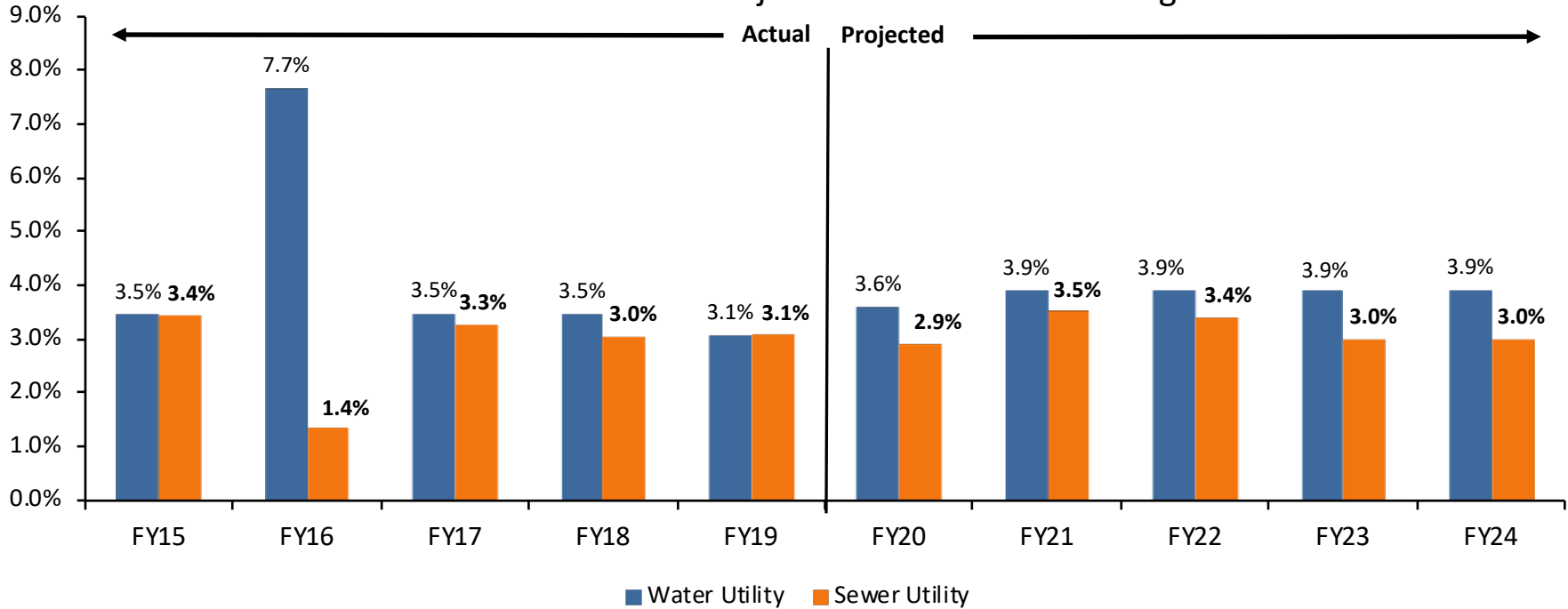
For FY20

- Utilities
- Chemicals
- Residuals Pelletization
- Interest Rates



Actual and Forecasted Rate Revenue Changes by Utility

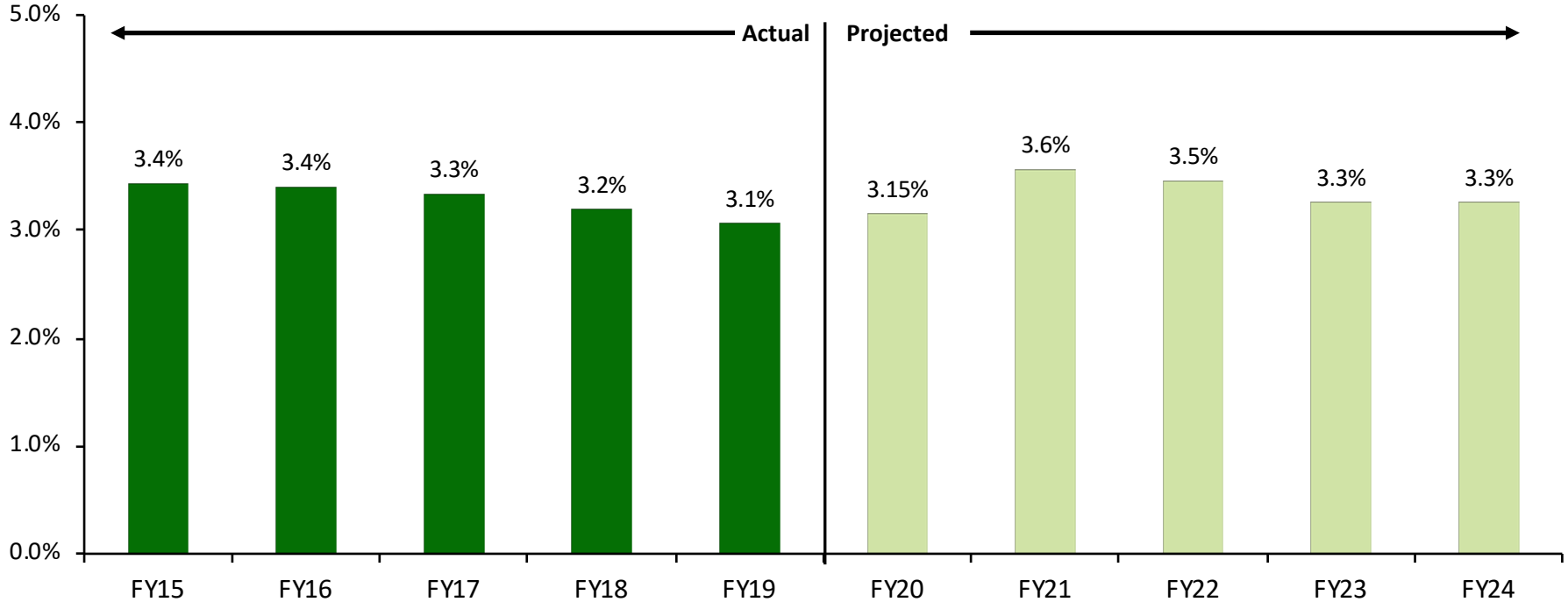
MWRA Water & Sewer Utilities
Historical and Projected Rate Revenue Changes





Actual and Forecasted Rate Revenue Changes up to FY24

MWRA Combined Utilities
Historical and Projected Rate Revenue Changes



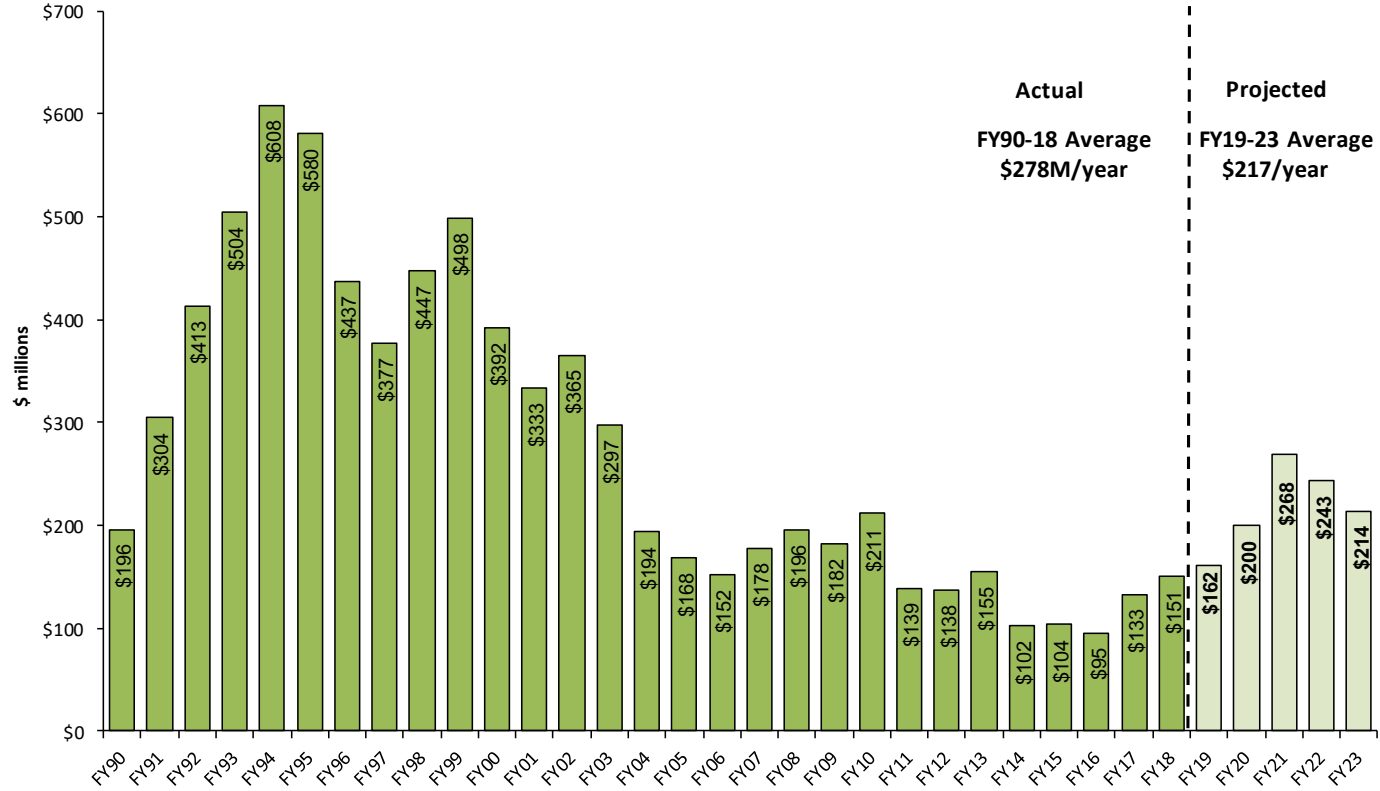


***FY20 Draft Final
Capital Improvement Program***

May 29, 2019

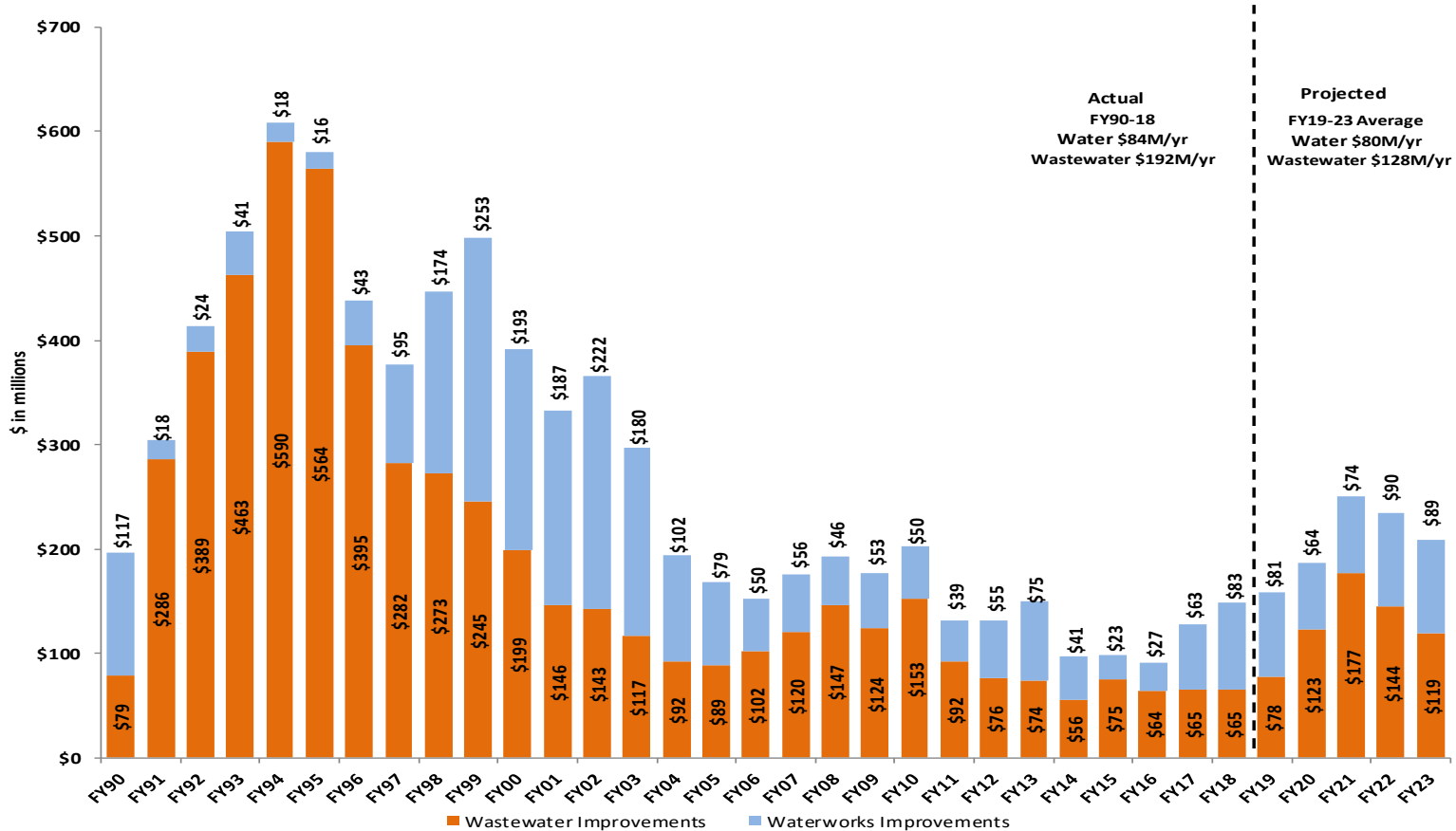


Historic and Projected Capital Improvement Spending





Historic and Projected Capital Improvement Spending by Utility





FY20 Draft Final CIP – Top Construction Projects (\$ in millions)

Project	Contract	FY20 Spending
Facility Asset Protection	Chelsea Creek Upgrades - Construction	\$21.8
DI Treatment Plant Asset Protection	Clarifier Rehab Phase 2 - Construction	\$12.1
SEH Redundancy & Storage	Redundancy Pipeline Sect 111 - Construction 3	\$9.3
Corrosion & Odor Control	Nut Island Odor Control HVAC Improvement Construction Ph 2	\$8.0
Facility Asset Protection	Prison Point Rehabilitation Construction	\$7.5
Total Top 5 Projects Spending in FY20		\$58.7



Chelsea Creek Headworks Upgrade Construction – Asset Protection



FY20 Budget: \$21.8M

Total Contract: \$82.5M

Notice to Proceed: November 2016

Substantial Completion: November 2020



Clarifier Rehabilitation Phase 2 Construction – Asset Protection



FY20 Budget:	\$12.1M
Total Contract:	\$135.0M
Notice to Proceed:	August 2019
Substantial Completion:	May 2024



Southern Extra High Section 111 Phase 3 - Redundancy



FY20 Budget:	\$9.3M
Total Contract:	\$19.0M
Notice to Proceed:	August 2018
Substantial Completion:	November 2020



Nut Island Odor Control & HVAC - Asset Protection



FY20 Budget: \$8.0M
Total Contract: \$45.0M

Notice to Proceed: September 2019
Substantial Completion: July 2022



Prison Point Rehabilitation – Asset Protection



FY20 Budget:	\$7.5M
Total Contract:	\$36.1M
Notice to Proceed:	November 2019
Substantial Completion:	November 2021



FY20 CIP – Watershed Division Capital Projects

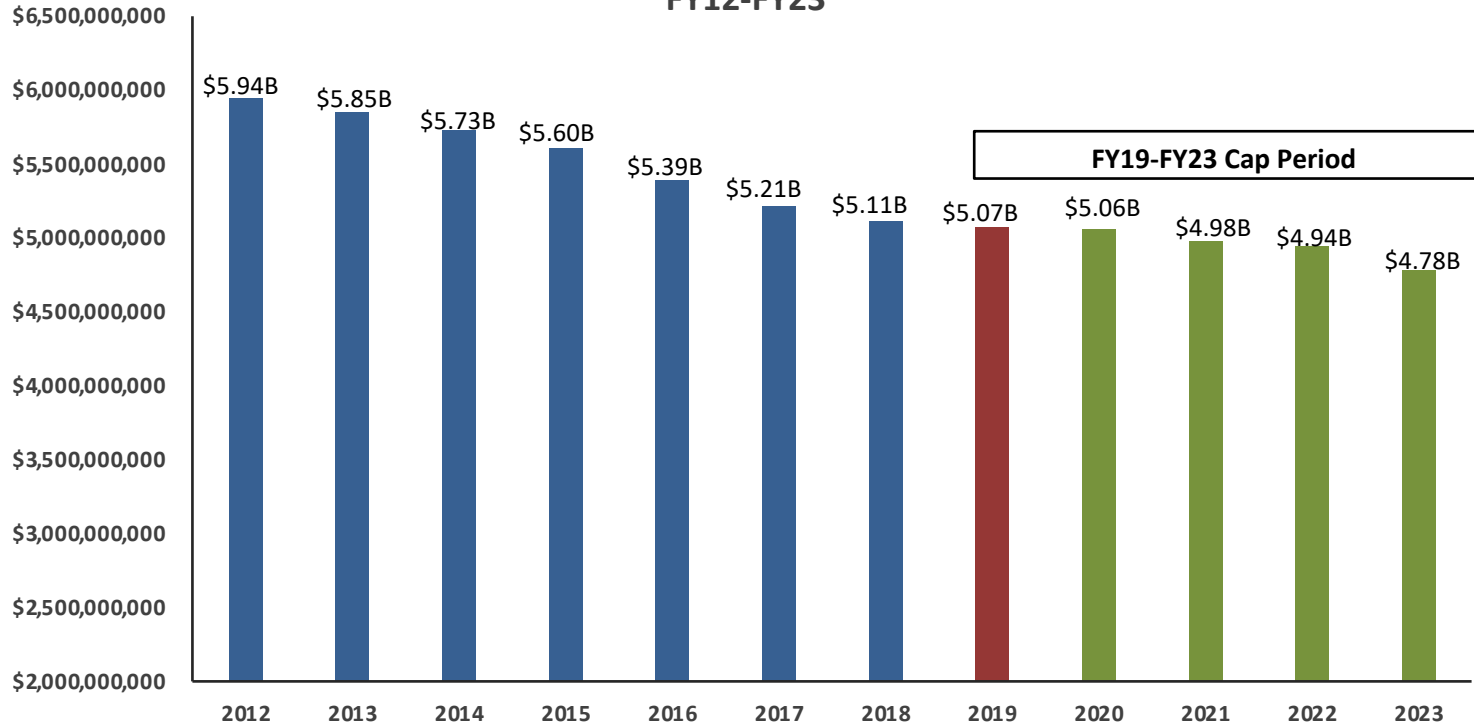
- Quabbin Administration Building Rehabilitation: \$15.0 million
- Maintenance Garage/Washbay/Storage Building: \$4.9 million
- River Road Improvements - Wachusett: \$2.0 million





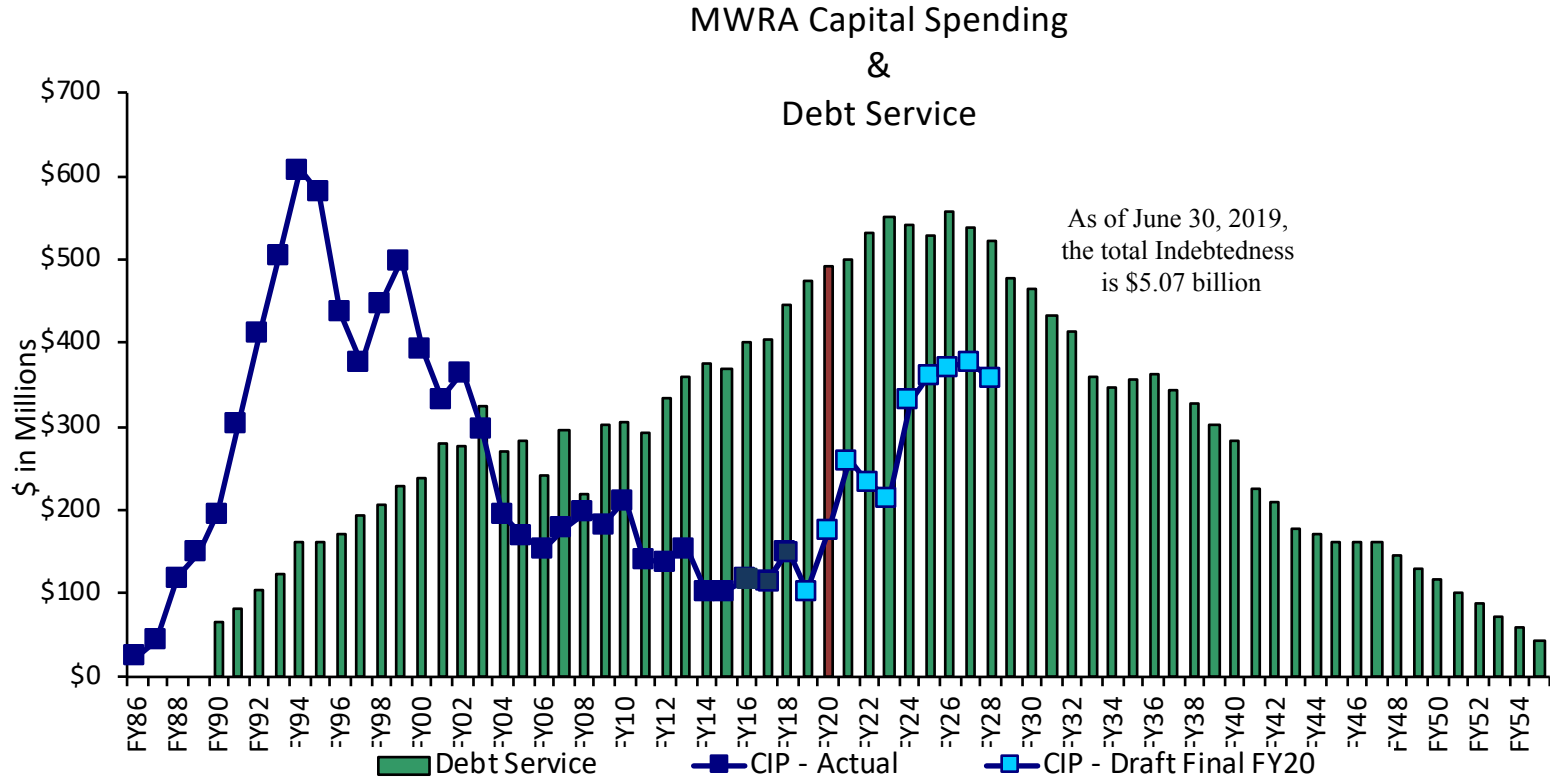
Level of MWRA Indebtedness

Outstanding Debt on June 30 by Fiscal Year
FY12-FY23





Capital Spending and Debt Service





Risks and Uncertainties

- Tariffs
- Economy
- Schedule/Timing
- New Regulatory Requirements



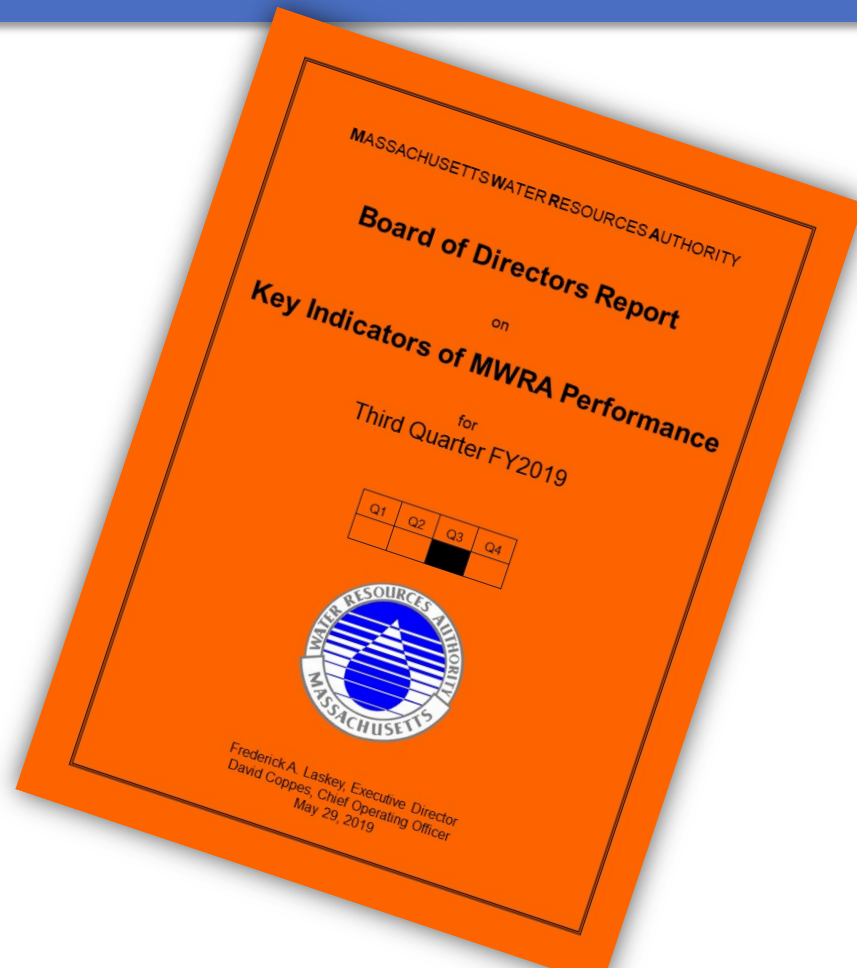


Thank You





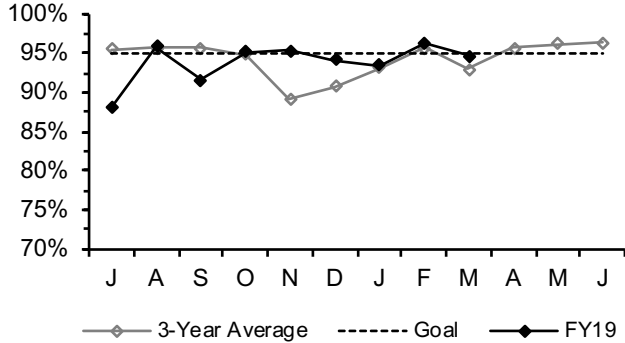
Massachusetts Water Resources Authority



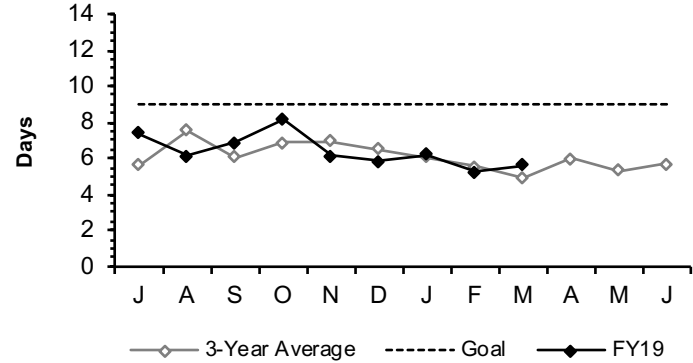


Laboratory Services

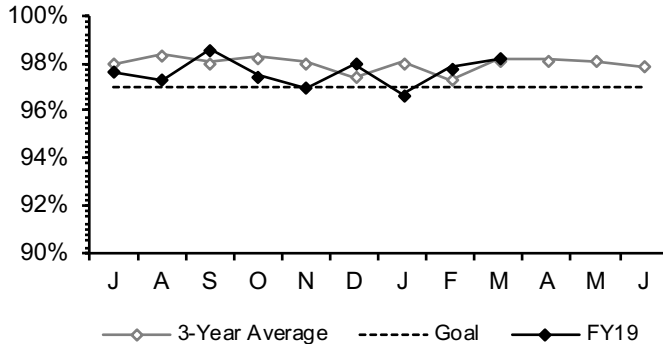
Percent On-Time Results



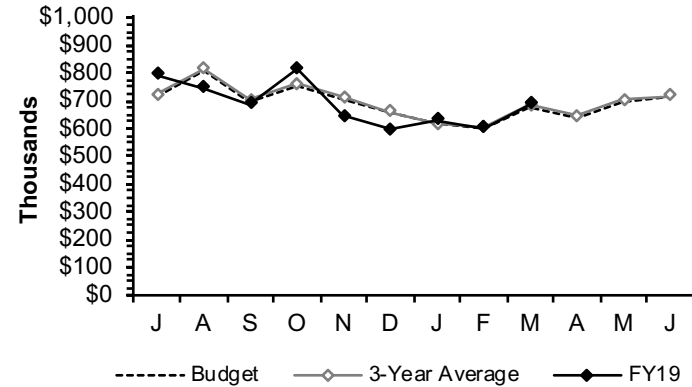
Turnaround Time



Percent QC Within Specifications



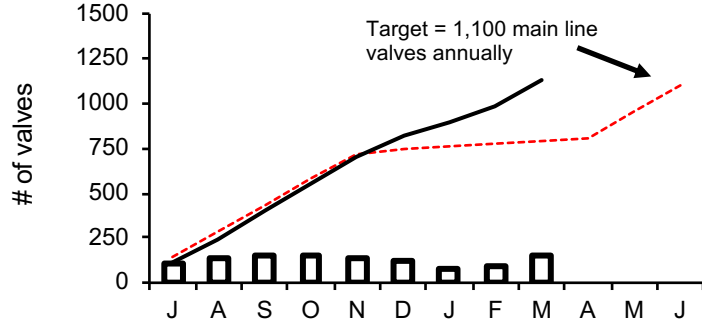
Value of Services Rendered



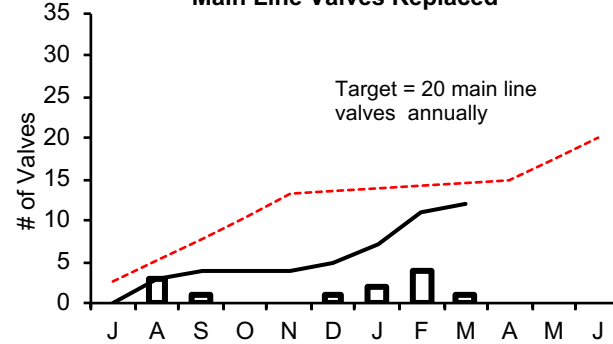


Water Distribution System Valves

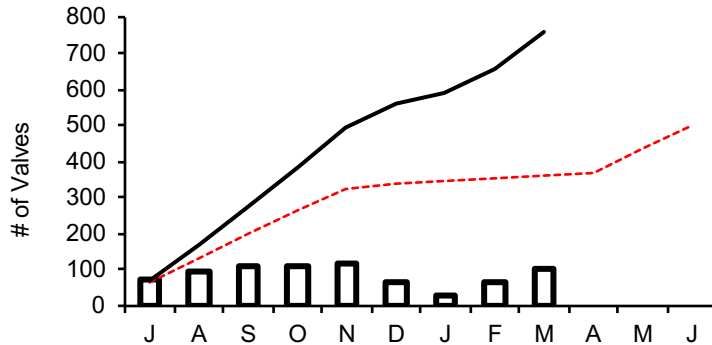
Main Line Valves Exercised



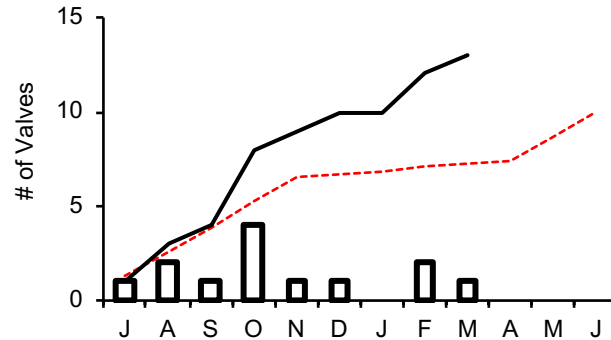
Main Line Valves Replaced



Blow-Off Valves Exercised



Blow-Off Valves Replaced





Water Distribution System Valves

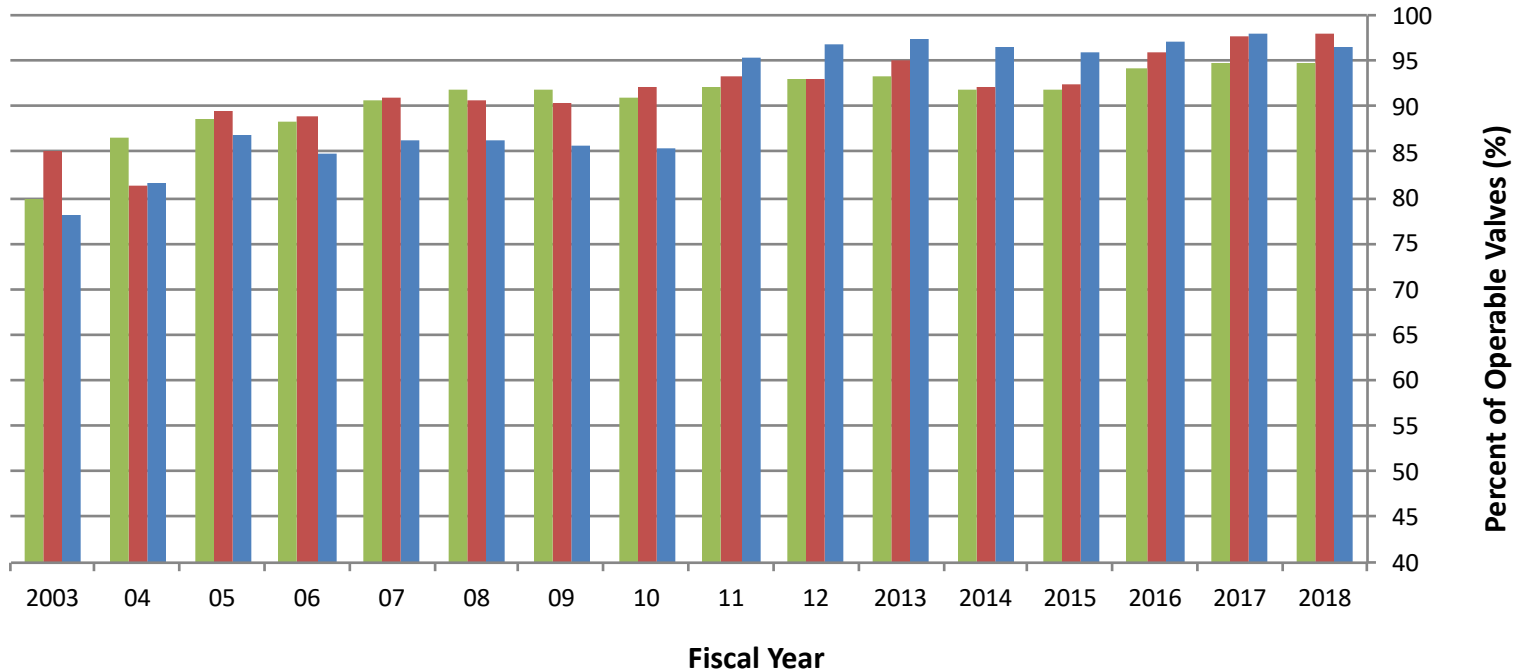
Air Release Valves	Inventory #	Operable Percentage	
		FY19 to Date	FY19 Targets
Main Line Valves	2,159	96.6%	95%
Blow-Off Valves	1,317	98.5%	95%
Air Release Valves	1,380	95.0%	95%
Control Valves	49	100.0%	95%



Valve Operability

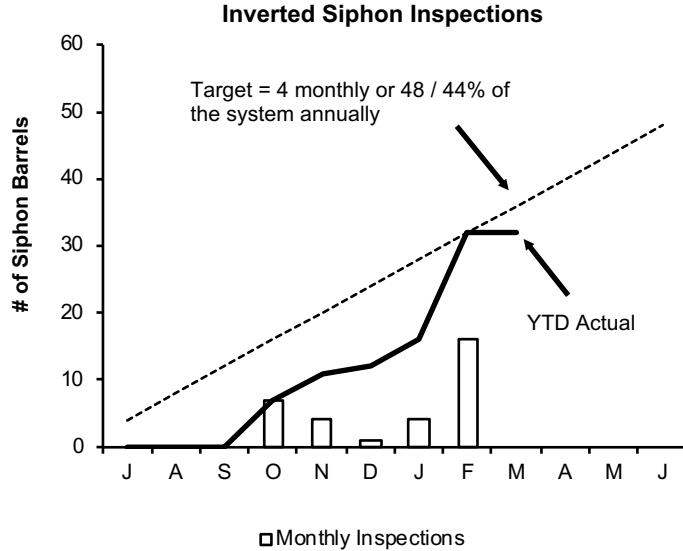
Valve Operability, FY03 to FY19

■ MLV ■ Blow of-V ■ Air R-V

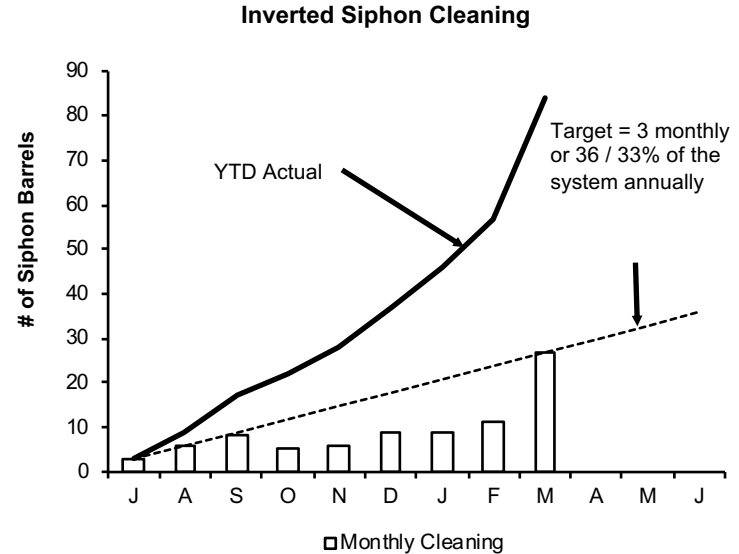




Siphon Inspections and Cleaning



Staff inspected 20 siphon barrels this quarter.
Year to date total is 32 inspections.

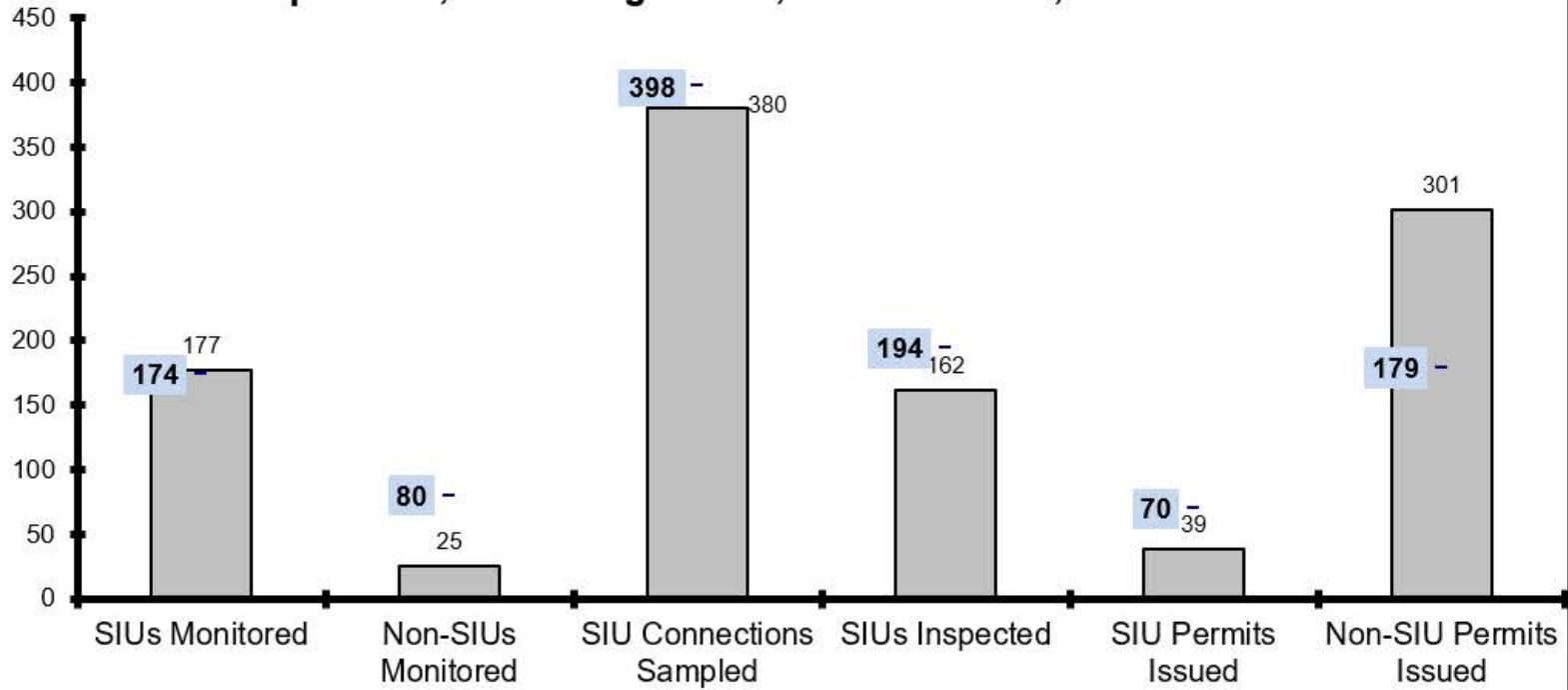


Staff cleaned 47 siphon barrels during this quarter.
Year to date total is 84.



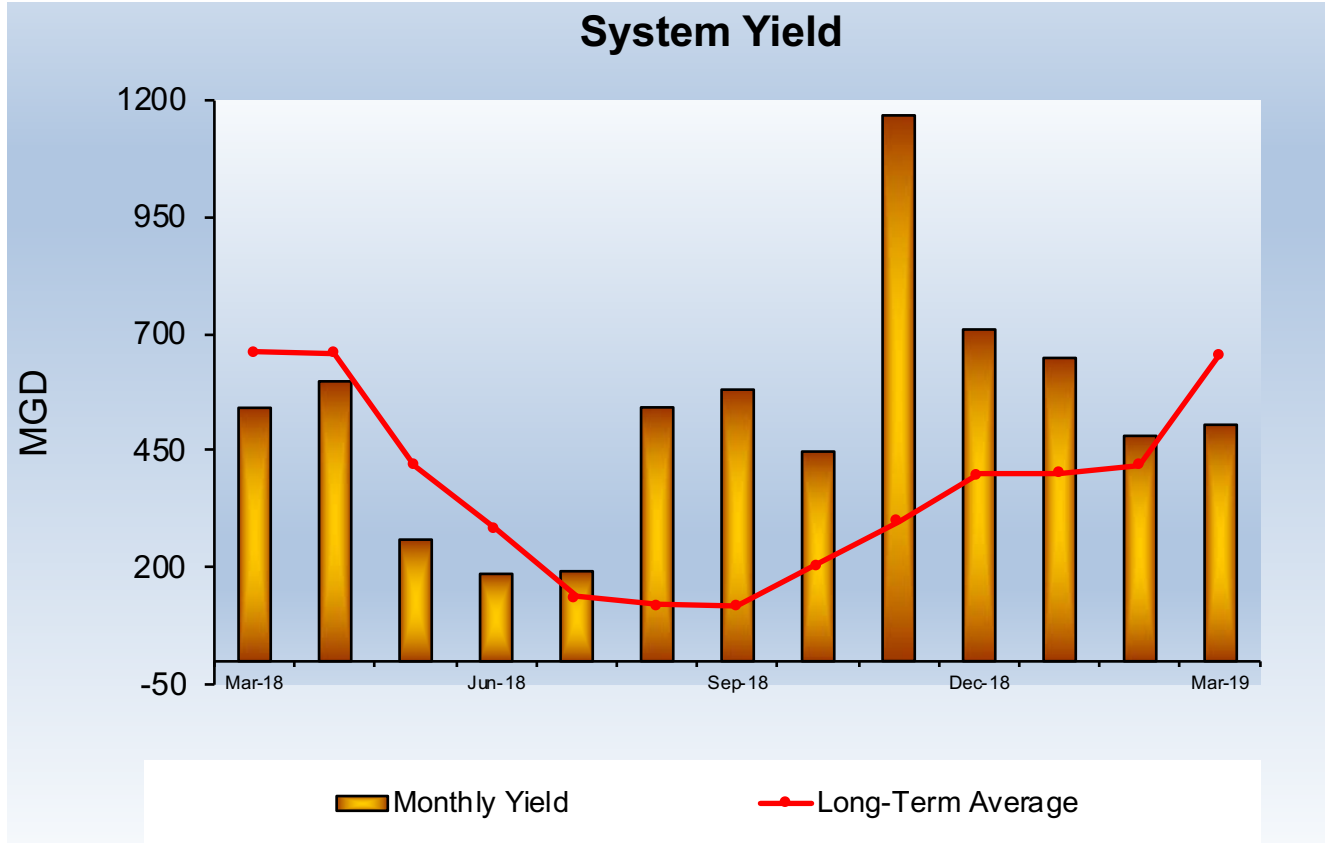
Toxic Reduction and Control

Inspections, Monitoring Events, Permits Issued, Year to Date





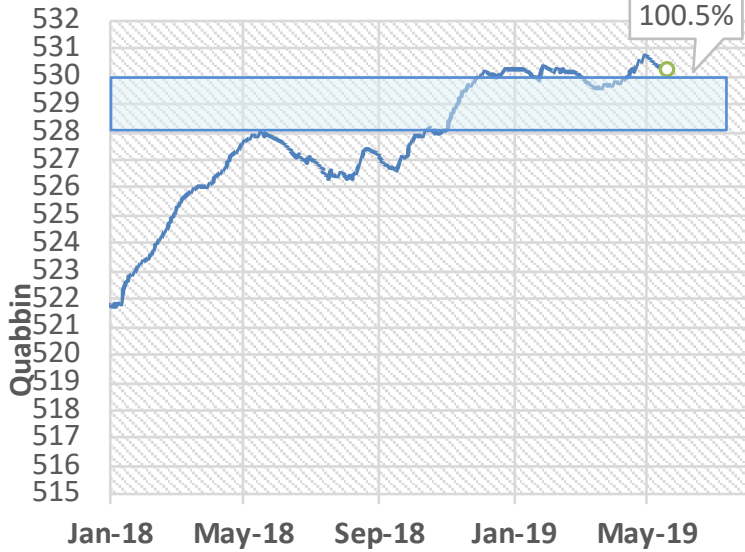
Reservoir Operations





Reservoir Operations

Quabbin Elevations



Wachusett Elevations





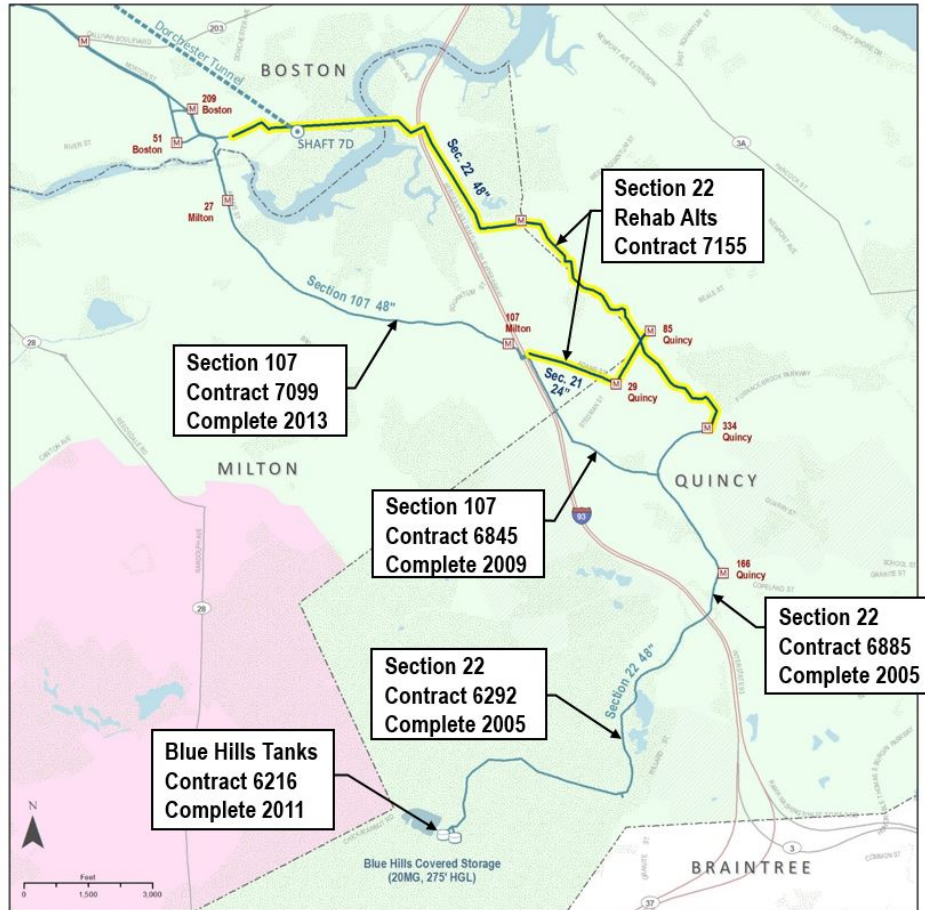


***Section 22 Rehabilitation Alternatives Analysis and
Environmental Permitting
Contract 7155***

May 29, 2019



Project Location and Prior Contracts





Section 22 in DCR's Neponset River Estuary





Project Description

- Pipeline Condition Assessment
 - Extensive pipe and soil testing
 - Multiple subcontractors
 - Subcontractors are approx. 57% of contract value
- Alternatives Development
- Environmental Notification Form
- Environmental Impact Report
- Future contracts for design and construction



Proposals

Proposer	Rank	Proposed Cost	Other Direct Costs	Proposed Hours
Black & Veatch	1	\$2,870,000.00	\$1,633,636	8,863
Kleinfelder	2	\$3,108,086.80	\$2,043,288	8,070
Hazen Sawyer	3	\$4,395,884.00	\$2,166,427	14,498
<i>Engineer's Estimate</i>		\$2,160,000.00	\$1,260,000	6,400



Schedule and Award Summary

Item	Start	Duration	End
Pipeline Condition Assessment Alternatives Analysis Environmental Notification Form	June 2019	18 Months	December 2020
Environmental Impact Report	January 2021	18 Months	June 2022



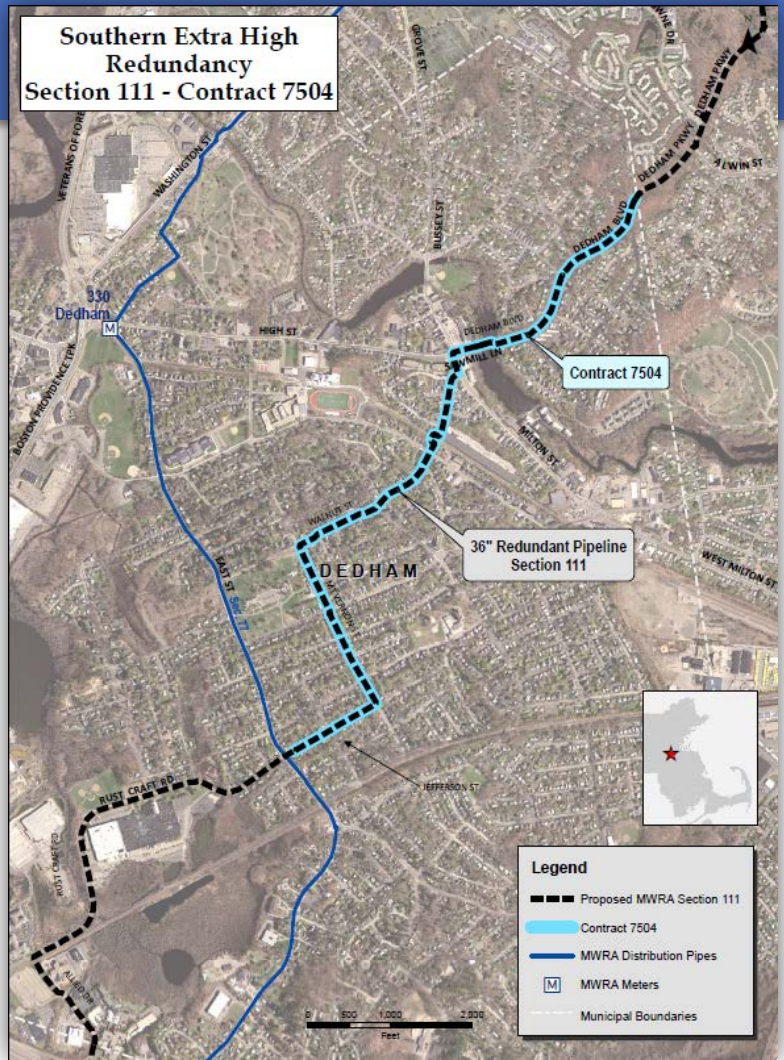


***Southern Extra High Redundancy Pipeline
Section 111
Contract 7504***

May 29, 2019



Project Overview





Valve Vault on Mount Vernon





Gate Valve Vault on Walnut Street





Pipe Installation at Jefferson Street and Mount Vernon



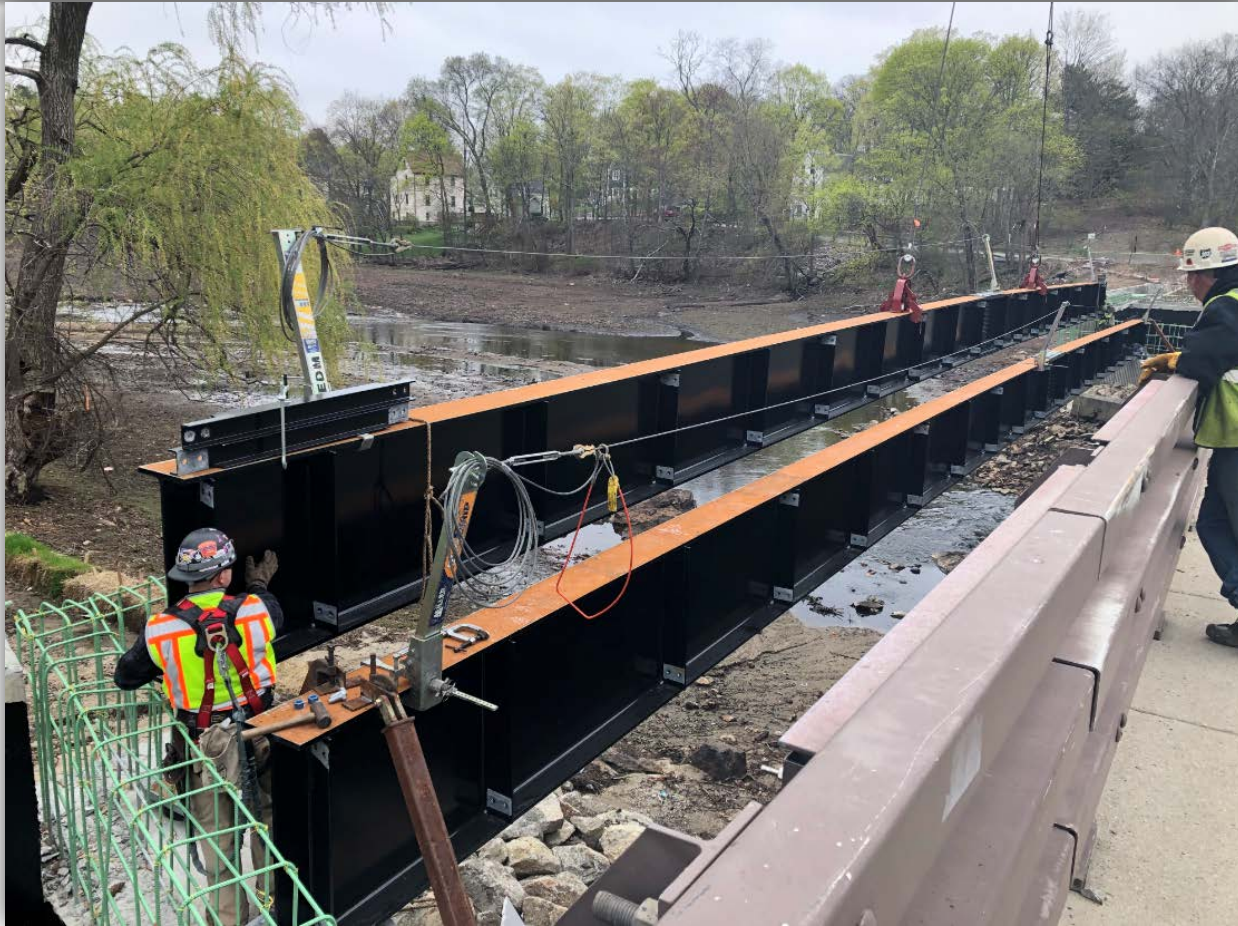


Mother Brook Bridge – Crane Set Up for Beam Installation





Steel Beam Being Installed Across Mother Brook





Steel to Ductile Transition at Walnut Street Bridge and Steel Pipe Crossing Mother Brook





Additional Temporary Paving Width on Dedham Boulevard





Multiple Trenches on Walnut Street





Large And Multiple Trenches Paved Across Milton Street







***Section 89 Drilling Incident
May 3-4, 2019***

May 29, 2019

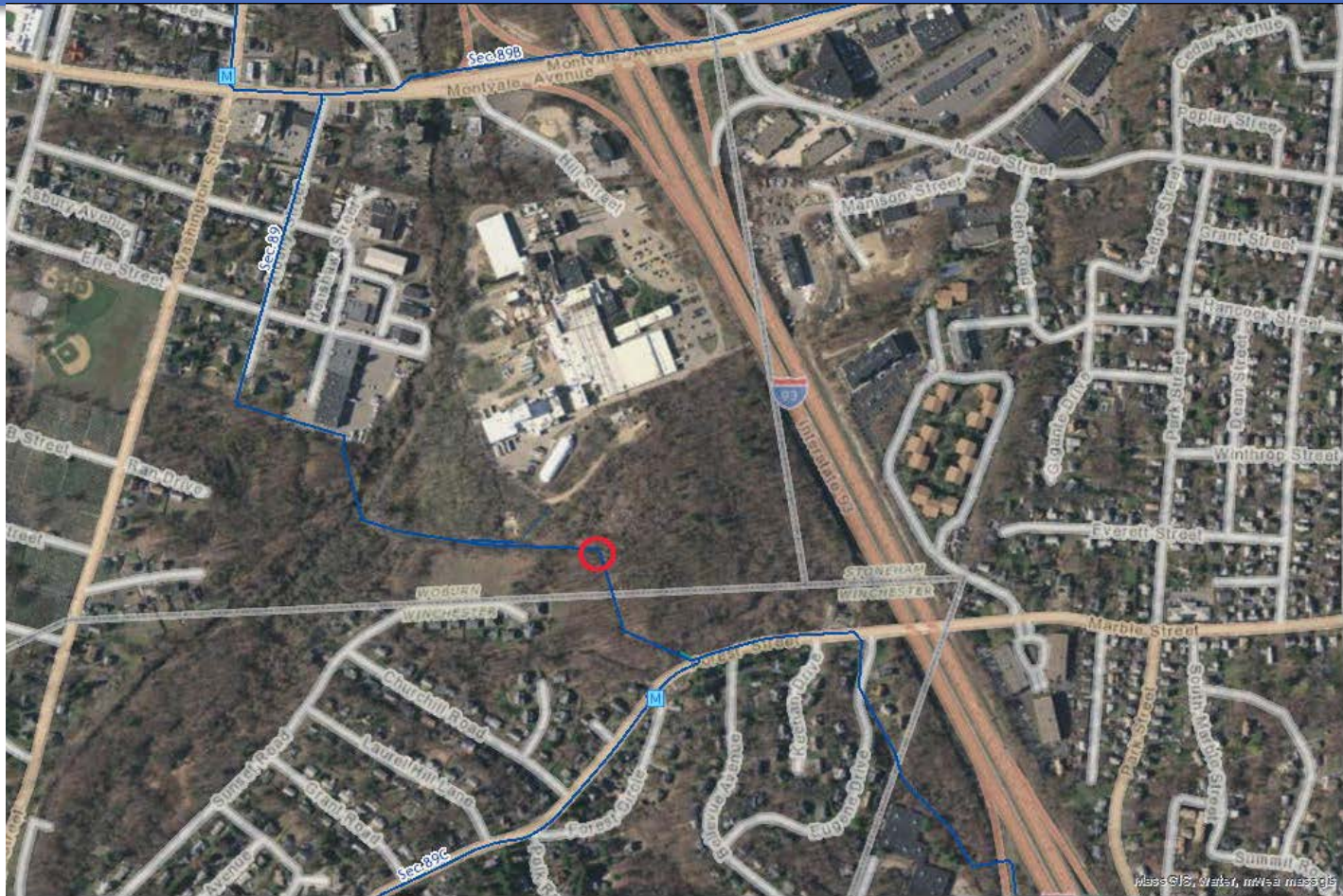


Drill Rig and Leak





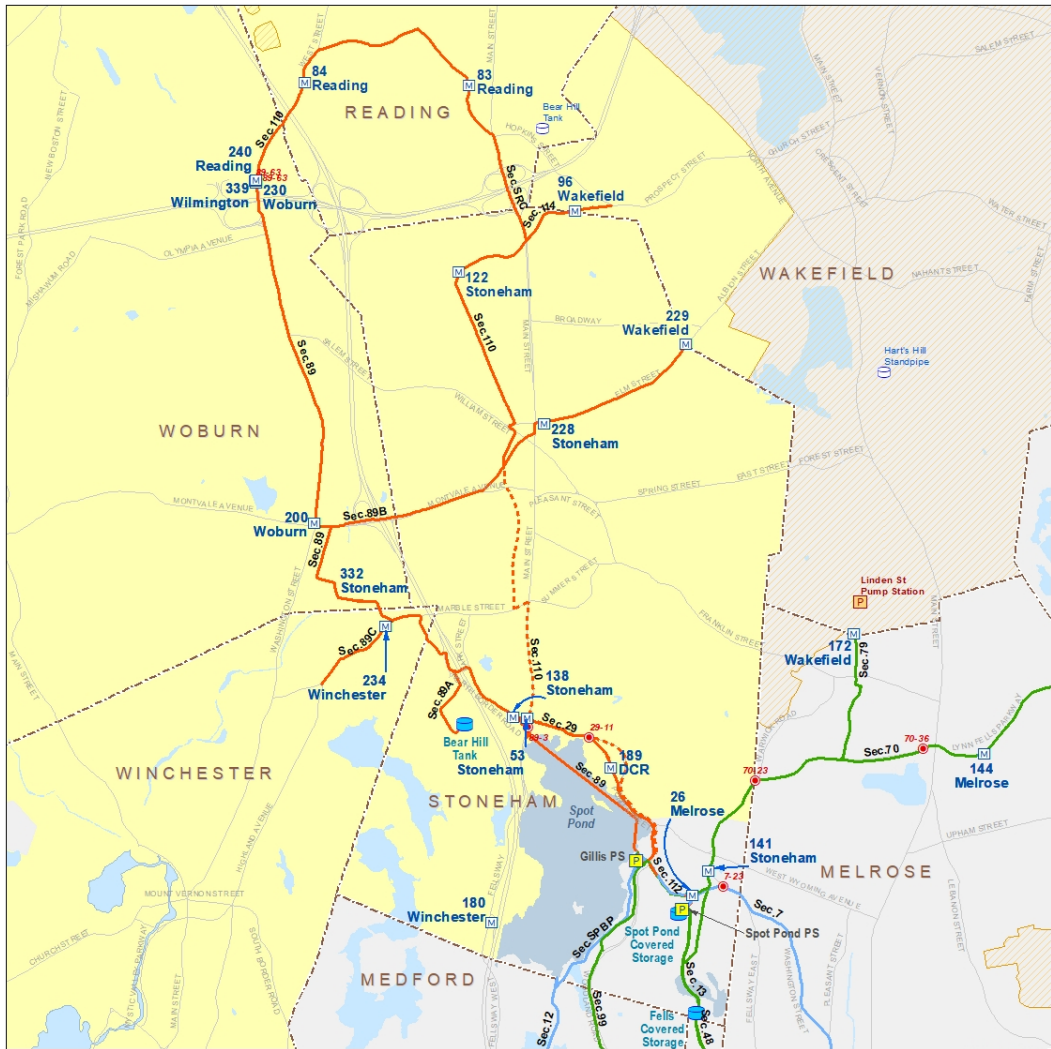
Satellite View of Leak Site

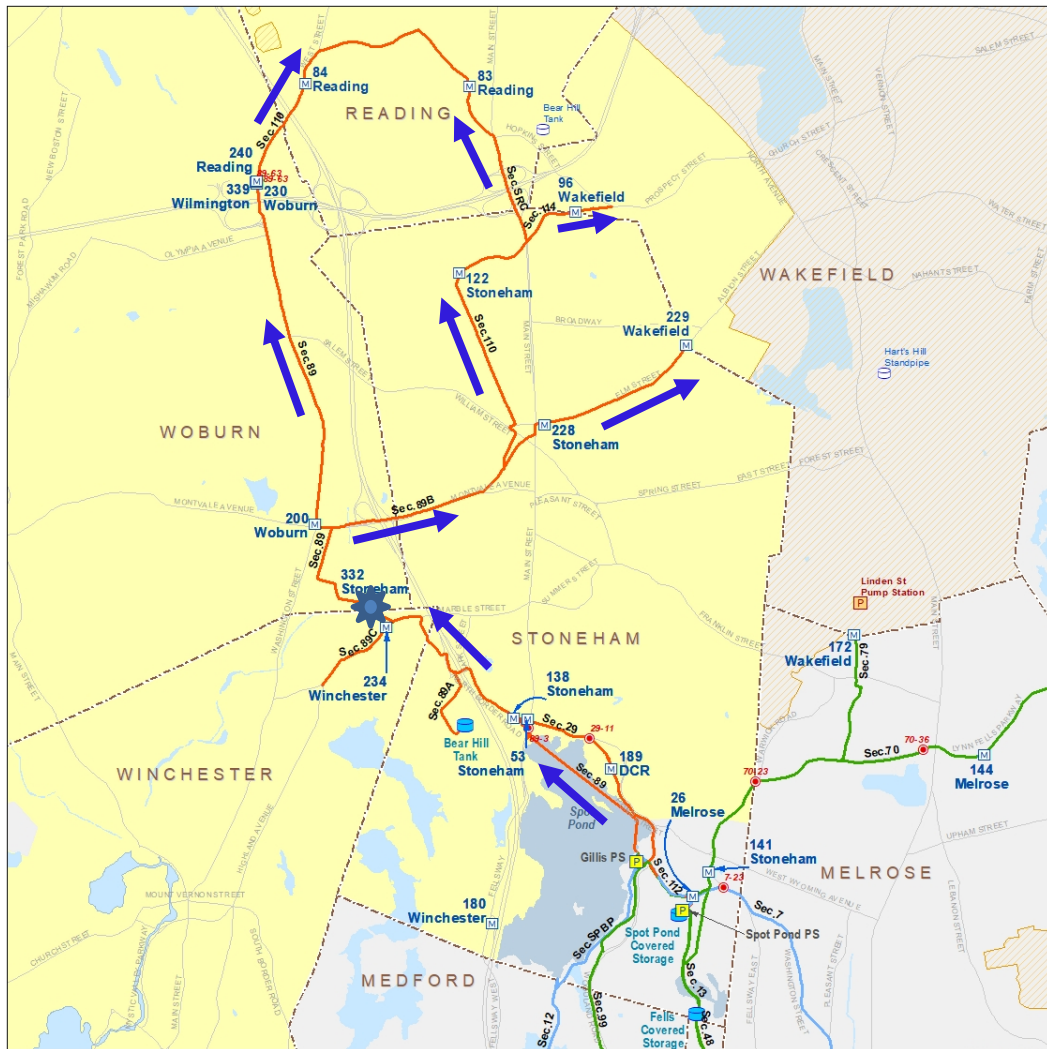


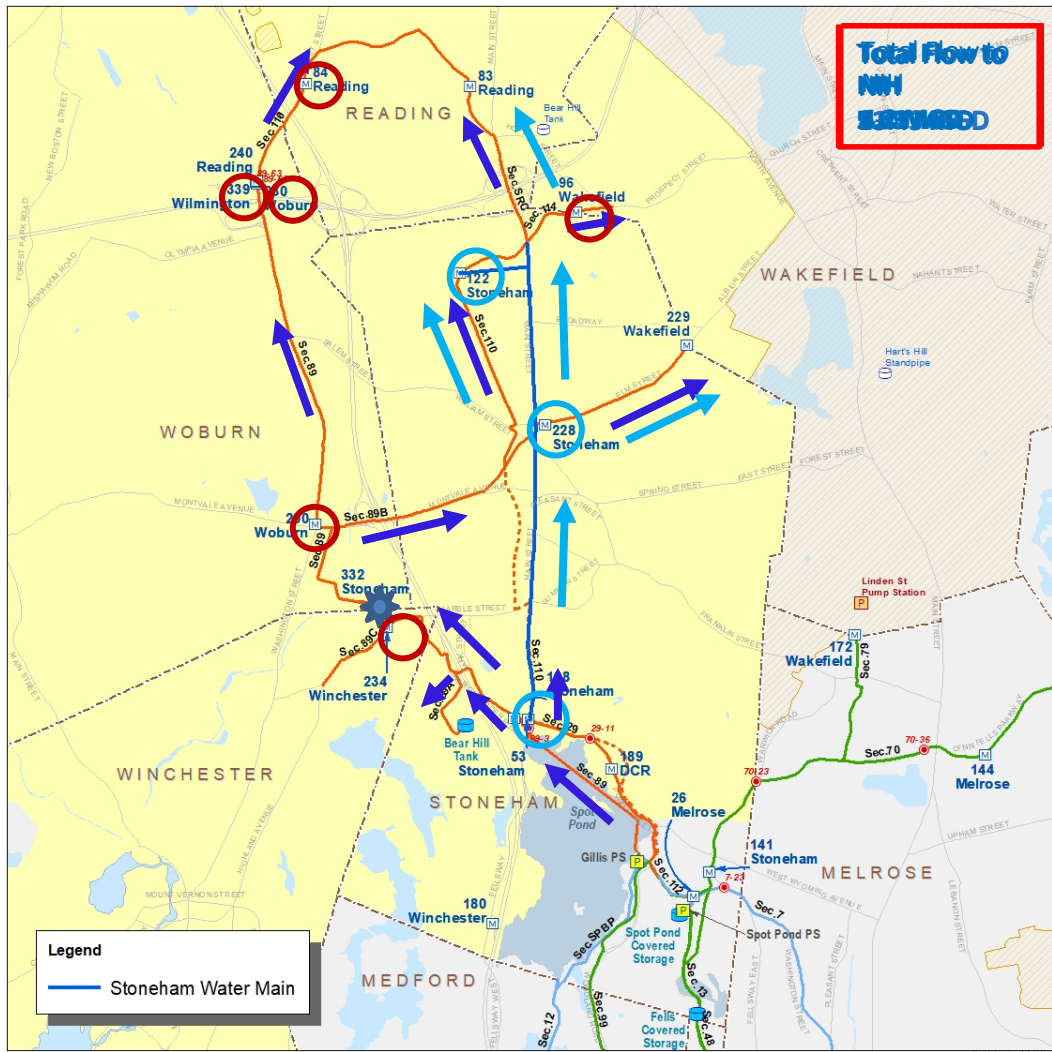


NBC Footage











Excavating and Protecting Leak Site





4-inch Hole in Top of Pipe





Repair Saddle





Installing Saddle





Chipping Concrete





Cutting Pre-Stressing Wires





Cutting Pre-Stressing Wires





Lowering Completion Plug





Adding Grout





Completed Repair





Site Restoration



