

PFY17 (#2.4)	MASSACHUSETTS WATER RESOURCES AUTHORITY RATES AND BUDGET PROJECTIONS (\$000)											
See Comments												
	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	ASSUMPTIONS
COMBINED UTILITIES												
EXPENSES												Run Date 12-Feb-16 Run Time 1:26 PM
Direct Expenses	\$222,834	\$228,588	\$234,687	\$242,180	\$248,900	\$255,738	\$263,020	\$270,742	\$277,978	\$285,850	\$293,946	
Indirect Expenses	46,953	44,156	46,192	47,620	48,686	49,078	51,459	47,158	47,497	50,335	46,206	Future CEB Inflation
Capital Financing (before offsets)	432,689	451,409	472,375	493,054	522,786	569,667	596,132	560,986	544,766	532,358	569,154	Salaries FY2018-2050 2.7%
Sub-Total Expenses	\$702,477	\$724,153	\$753,254	\$782,854	\$820,372	\$874,484	\$910,611	\$878,886	\$870,241	\$868,543	\$909,305	Other Directs FY2018-2050 3.0%
Debt Service Assistance	0	0	0	0	0	0	0	0	0	0	0	
Bond Redemption Savings	0	0	0	0	0	(13,200)	(12,908)	0	0	0	0	
Variable Rate Savings	0	0	0	0	0	0	0	0	0	0	0	Use of Reserves for Rate Stabilization
Total Expenses	\$702,477	\$724,153	\$753,254	\$782,854	\$820,372	\$861,284	\$897,703	\$878,886	\$870,241	\$868,543	\$909,305	Rate Stabilization Bond Redemption Combined
REVENUE & INCOME												
Non-Member and Other Revenue	\$20,684	\$15,752	\$16,027	\$16,317	\$16,513	\$16,831	\$17,164	\$17,027	\$17,346	\$17,632	\$17,998	FY2017 0 0 0
Interest Income	9,353	9,701	11,533	12,900	14,753	15,596	15,606	15,817	16,201	16,689	17,173	FY2018 0 0 0
Rate Stabilization	0	0	0	0	4,273	11,565	11,234	9,441	0	0	0	FY2019 0 0 0
Total Other Revenue	\$30,037	\$25,453	\$27,560	\$29,217	\$35,538	\$43,992	\$44,003	\$42,285	\$33,547	\$34,322	\$35,171	FY2020 4,273 0 4,273
												FY2021 11,565 13,200 24,765
												FY2022 11,234 12,908 24,141
												FY2023 9,441 0 9,441
												FY2024 0 0 0
												FY2025 0 0 0
												FY2026 0 0 0
Total Rate Revenue	\$672,440	\$698,700	\$725,693	\$753,637	\$784,833	\$817,291	\$853,700	\$836,601	\$836,694	\$834,221	\$874,134	TOTAL 36,512 26,108 62,620
Rate Revenue Change	3.4%	3.9%	3.9%	3.9%	4.1%	4.1%	4.5%	-2.0%	0.0%	-0.3%	4.8%	FY17 B.O.Y. 36,512 26,108 62,620
Estimated Annual Household Charge **												
Based on water use of 61k gpy (weighted)	\$1,055	\$1,102	\$1,152	\$1,204	\$1,261	\$1,319	\$1,382	\$1,419	\$1,467	\$1,516	\$1,590	
Based on water use of 90k gpy (weighted)	\$1,556	\$1,626	\$1,700	\$1,777	\$1,860	\$1,947	\$2,040	\$2,093	\$2,164	\$2,236	\$2,346	
WASTEWATER UTILITY	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Debt Terms
EXPENSES												Type Fiscal Year Term Rate
Direct Expenses	\$150,055	\$152,085	\$155,981	\$161,187	\$165,601	\$170,061	\$174,891	\$180,127	\$184,822	\$190,072	\$195,471	Fixed Debt FY17 30 5.00%
Indirect Expenses	12,998	9,453	10,446	10,922	11,110	10,586	12,023	12,363	11,698	13,497	10,260	Fixed Debt FY18 30 5.25%
Capital Financing (before offsets)	293,405	313,252	327,623	340,701	359,847	375,463	397,734	356,764	339,264	315,547	337,566	Fixed Debt FY19 30 5.50%
Sub-Total Wastewater Expenses	\$456,457	\$474,791	\$494,051	\$512,810	\$536,557	\$556,110	\$584,648	\$549,253	\$535,785	\$519,116	\$543,297	Fixed Debt FY20 30 5.75%
Debt Service Assistance	0	0	0	0	0	0	0	0	0	0	0	Fixed Debt FY21-FY50 30 6.00%
Bond Redemption Savings	0	0	0	0	0	(200)	(5,583)	0	0	0	0	
Variable Rate Savings	0	0	0	0	0	0	0	0	0	0	0	SRF - Sewer FY17-FY50 30 2.50%
Total Wastewater Expenses	\$456,457	\$474,791	\$494,051	\$512,810	\$536,557	\$555,910	\$579,065	\$549,253	\$535,785	\$519,116	\$543,297	SRF - Water FY17-FY50 20 2.00%
REVENUE & INCOME												
Non-Member and Other Revenue	\$5,455	\$6,089	\$6,198	\$6,311	\$6,431	\$6,555	\$6,688	\$6,776	\$6,884	\$6,994	\$7,148	Variable Rate FY17 Existing Issues 3.25%
Interest Income	4,935	5,206	6,399	7,224	8,294	8,966	9,158	9,282	9,249	9,288	9,423	Variable Rate FY18 Existing Issues 3.50%
Rate Stabilization	0	0	0	0	2,898	1,026	0	0	0	0	0	Variable Rate FY19 Existing Issues 3.75%
Prior Year Utility Surplus/Deficit Transfer	0	0	0	0	0	0	0	0	0	0	0	Variable Rate FY20-FY50 Existing Issues 4.00%
Total Revenue/Income/Utility Transfers	\$10,390	\$11,295	\$12,597	\$13,536	\$17,623	\$16,547	\$15,846	\$16,058	\$16,133	\$16,282	\$16,572	TECP FY17-FY50 3.75%
												Water Pipeline FY17-FY50 20 3.25%
Wastewater Rate Revenue	\$446,067	\$463,496	\$481,454	\$499,274	\$518,934	\$539,363	\$563,220	\$533,196	\$519,652	\$502,834	\$526,725	
Rate Revenue Change	1.4%	3.9%	3.9%	3.7%	3.9%	3.9%	4.4%	-5.3%	-2.5%	-3.2%	4.8%	FY17 Borrowing Plan
Estimated Annual Household Charge **												Type Amount Term Rate
Based on water use of 61k gpy (weighted)	\$620	\$648	\$678	\$708	\$741	\$775	\$812	\$821	\$841	\$860	\$902	Fixed Debt 100,000 30 5.00%
Based on water use of 90k gpy (weighted)	\$914	\$956	\$1,000	\$1,045	\$1,093	\$1,143	\$1,198	\$1,212	\$1,240	\$1,268	\$1,331	SRF-Sewer 26,000 30 2.50%
												SRF-Water 16,000 20 2.00%
WATER UTILITY	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	TOTAL 142,000
EXPENSES												
Direct Expenses	\$72,780	\$76,502	\$78,706	\$80,993	\$83,299	\$85,677	\$88,129	\$90,615	\$93,156	\$95,778	\$98,474	
Indirect Expenses	33,955	34,703	35,745	36,697	37,576	38,492	39,436	34,795	35,798	36,838	35,947	Average Investment Rates
Capital Financing (before offsets)	139,285	138,157	144,752	152,353	162,940	194,205	198,398	204,222	205,501	216,811	231,588	Type Fiscal Year Rate
Sub-Total Water Expenses	\$246,020	\$249,362	\$259,203	\$270,044	\$283,815	\$318,373	\$325,963	\$329,632	\$334,456	\$349,427	\$366,009	
Debt Service Assistance	0	0	0	0	0	0	0	0	0	0	0	Short Term FY17 0.50%
Bond Redemption Savings	0	0	0	0	0	(13,000)	(7,325)	0	0	0	0	Short Term FY18 0.75%
Variable Rate Savings	0	0	0	0	0	0	0	0	0	0	0	Short Term FY19 1.00%
Total Water Expenses	\$246,020	\$249,362	\$259,203	\$270,044	\$283,815	\$305,373	\$318,638	\$329,632	\$334,456	\$349,427	\$366,009	Short Term FY20 1.25%
REVENUE & INCOME												Short Term FY21-FY50 1.50%
Non-Member and Other Revenue	\$15,229	\$9,664	\$9,829	\$10,005	\$10,082	\$10,276	\$10,476	\$10,251	\$10,462	\$10,638	\$10,850	Long Term FY17 3.25%
Interest Income	4,418	4,495	5,134	5,676	6,459	6,630	6,448	6,535	6,951	7,402	7,750	Long Term FY18 3.50%
Rate Stabilization	0	0	0	0	1,375	10,539	11,234	9,441	0	0	0	Long Term FY19 3.75%
Prior Year Utility Surplus/Deficit Transfer	0	0	0	0	0	0	0	0	0	0	0	Long Term FY20-FY50 4.00%
Total Revenue/Income/Utility Transfers	\$19,647	\$14,158	\$14,964	\$15,681	\$17,916	\$27,445	\$28,157	\$26,227	\$17,413	\$18,040	\$18,600	
												Other Comments
Water Rate Revenue	\$226,373	\$235,204	\$244,240	\$254,363	\$265,899	\$277,928	\$290,481	\$303,405	\$317,043	\$331,388	\$347,409	
Rate Revenue Change	7.7%	3.9%	3.8%	4.1%	4.5%	4.5%	4.5%	4.4%	4.5%	4.5%	4.8%	1) 2/3's CIP CAP FY20-FY22.
Estimated Annual Household Charge **												2) FY18 Current Rev. Capital increased from \$17M to \$21.3M
Based on water use of 61k gpy (weighted)	\$435	\$454	\$474	\$496	\$520	\$545	\$571	\$598	\$626	\$656	\$688	3) FY19 Current Rev. Capital increased from \$18M to \$19M.
Based on water use of 90k gpy (weighted)	\$642	\$670	\$700	\$732	\$767	\$804	\$842	\$882	\$924	\$968	\$1,015	4) FY20 Current Rev. Capital unchanged @ \$19M.
												5) FY22 Current Rev. Capital reduced

** Annual household charges are estimated for communities that receive full water and wastewater services from MWRA weighted by the number of households in each of these core communities. Based on community responses to the 2014 MWRA Advisory Board's Annual Water and Sewer Retail Rate