FY16 (#5.4)	MASSACHUSETTS WATER RESOURCES AUTHORITY RATES AND BUDGET PROJECTIONS (\$000)														
COMPINED LITERA	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	ASSUMPTIONS			
COMBINED UTILITIES EXPENSES												Run Date			24-Jun-15
Direct Expenses	\$217,149	\$222,834	\$228,739	\$235,557	\$242,031	\$248,476	\$254,990	\$261,901	\$269,463	\$276,359	\$283,886	Run Time	F	51.0.0	12:44 PM
Indirect Expenses Capital Financing (before offsets)	47,512 417,424	46,953 432,689	41,673 451,512	45,734 469,313	46,625 491,771	47,739 <u>551,679</u>	48,928 564,219	51,429 596,187	47,201 <u>551,211</u>	48,416 <u>528,572</u>	49,896 511,078	Salaries	Future CE FY201		2.5%
Sub-Total Expenses	\$682,085	\$702,477	\$721,923	\$750,604	\$780,426	\$847,895	\$868,136	\$909,518	\$867,875	\$853,347	\$844,860	Other Directs	FY201		3.0%
Debt Service Assistance	(854)	0	0	0	0	0	0	0	0	0	0				
Bond Redemption Savings	(6,746)	0	0	0	0	(24,598)	(1,510)	0	0	0	0	Us		r Rate Stabilization	<u>on</u>
Variable Rate Savings Total Expenses	<u>0</u> \$674,485	\$702,477	<u>0</u> \$721,923	<u>0</u> \$750,604	\$780,426	\$823,297	\$866,626	<u>0</u> \$909,518	\$867,875	\$853,347	<u>0</u> \$844,860		Rate Stabilization	Bond Redemption	Combined
DEVENUE & INCOME												FY2016 FY2017	0	0	0
REVENUE & INCOME Non-Member and Other Revenue	\$14,440	\$20,684	\$15,314	\$15,719	\$16,025	\$16,219	\$16,799	\$17,134	\$16,926	\$17,063	\$17,149	FY2017 FY2018	0	0	0
Interest Income	9,729	9,353	8,003	9,095	10,483	13,298	13,221	13,423	13,634	13,917	14,279	FY2019	0	0	0
Rate Stabilization	<u>0</u>	<u>0</u>	<u>o</u>	<u>0</u>	<u>0</u>	10,084	12,136	13,136	<u>1,156</u>	<u>0</u>	<u>0</u>	FY2020	10,084	24,598	34,682
Total Other Revenue	\$24,170	\$30,037	\$23,317	\$24,814	\$26,509	\$39,601	\$42,156	\$43,692	\$31,716	\$30,980	\$31,428	FY2021	12,136	1,510	13,646
Total Rate Revenue	\$650,316	\$672,440	\$698,606	\$725,790	\$753,918	\$783,697	\$824,471	\$865,825	\$836,159	\$822,366	\$813,431	FY2022 FY2023	13,136 1,156	0	13,136 1,156
Rate Revenue Change	3.4%	3.4%	3.9%	3.9%	3.9%	3.9%	5.2%	5.0%	-3.4%	-1.6%	-1.1%	FY2024	0	0	0
_												FY2025	<u>o</u>	<u>0</u>	<u>0</u>
Estimated Annual Household Charge **	A	A	** **-			61.05-	** ***	6. 6.	A	A	£2 -2=	TOTAL	36,512	26,108	62,620
Based on water use of 61k gpy (weighted) Based on water use of 90k gpy (weighted)	\$1,007 \$1,486	\$1,055 \$1,556	\$1,100 \$1,622	\$1,154 \$1,703	\$1,204 \$1,777	\$1,253 \$1,848	\$1,326 \$1,956	\$1,393 \$2,055	\$1,425 \$2,102	\$1,460 \$2,154	\$1,497 \$2,208	FY16 B.O.Y.	36,512	26,108	62,620
WASTEWATER UTILITY	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025		Debt [*]	Terms	
EXPENSES												<u>Type</u>	Fiscal Year	Term	Rate
Direct Expenses	\$148,145	\$150,055	\$153,958	\$158,698	\$163,048	\$167,342	\$171,637	\$176,264	\$181,511	\$186,047	\$191,141	Fixed Debt	FY16	30	5.00%
Indirect Expenses Capital Financing (before offsets)	14,552	12,997.5	9,126	11,177	11,292 337,149	11,610	11,972	12,420	12,899	13,180	13,695	Fixed Debt Fixed Debt	FY17 FY18	30 30	5.50% 5.75%
Sub-Total Wastewater Expenses	285,404 \$448,100	293,405 \$456,457	316,677 \$479,761	317,386 \$487,261	\$511,489	379,865 \$558,816	370,988 \$554,596	390,496 \$579,180	337,532 \$531,942	317,587 \$516,814	310,897 \$515,733	Fixed Debt	FY19-FY50	30	6.00%
Debt Service Assistance	(785)	0	0	0	0	0	0	0	0	0	0	SRF - Sewer	FY16	See Below	See Below
Bond Redemption Savings	0	0	0	0	0	(5,783)	0	0	0	0	0	SRF - Sewer	FY17-FY50	30	2.50%
Variable Rate Savings	0	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	0	0	0	0	0	<u>0</u>	SRF - Water	FY17-FY50	20	2.00%
Total Wastewater Expenses	\$447,315	\$456,457	\$479,761	\$487,261	\$511,489	\$553,033	\$554,596	\$579,180	\$531,942	\$516,814	\$515,733	Variable Rate	FY16	Existing Issues	3.25%
REVENUE & INCOME												Variable Rate	FY17	Existing Issues	3.50%
Non-Member and Other Revenue	\$5,256	\$5,455	\$5,568	\$5,671	\$5,792	\$5,929	\$6,044	\$6,180	\$6,260	\$6,373	\$6,504	Variable Rate	FY18	Existing Issues	3.75%
Interest Income	6,152	4,935	4,147	4,786	5,600	7,364	7,586	7,732	7,788	7,748	7,871	Variable Rate	FY19-FY50	Existing Issues	4.00%
Rate Stabilization Prior Year Utility Surplus/Deficit Transfer	(4,175)	0	0	0	0	3,923 0	0	0	0	0	0	TECP	FY16-FY50		3.75%
Total Revenue/Income/Utility Transfers	\$7,232	\$10,390	\$9,716	\$10,457	\$11,392	\$17,216	\$13,630	\$13,912	\$14,049	\$14,121	\$14,375	Water Pipeline	FY16-FY50	20	3.25%
Wastewater Rate Revenue	\$440,082	\$446,067	\$470,045	\$476,804	\$500,096	\$535,817	\$540,967	\$565,268	\$517,893	\$502,693	\$501,358				
Rate Revenue Change	3.4%	1.4%	5.4%	1.4%	4.9%	7.1%	1.0%	4.5%	-8.4%	-2.9%	-0.3%		FY16 Borre	owing Plan	
												Type	Amount	<u>Term</u>	Rate
Estimated Annual Household Charge ** Based on water use of 61k gpy (weighted)	\$598	\$620	\$652	\$675	\$709	\$750	\$776	\$813	\$813	\$831	\$859	Fixed Debt	200,000	30	5.00%
Based on water use of 90k gpy (weighted)	\$883	\$914	\$961	\$996	\$1,046	\$1,106	\$1,144	\$1,199	\$1,199	\$1,227	\$1,267	SRF-Sewer	26,000	30	2.50%
WATER UTILITY	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	SRF-Water	16,000	20	2.00%
<u>EXPENSES</u>												TOTAL	242,000		
Direct Expenses	\$69,004	\$72,780 33,955	\$74,781 32,547	\$76,859 34,557	\$78,983 35,333	\$81,135	\$83,353 36,956	\$85,637	\$87,952 34,303	\$90,312	\$92,745		Avoraga Ir.	etmont Dates	
Indirect Expenses Capital Financing (before offsets)	32,960 <u>132,021</u>	33,955 139,285	32,547 134,834	34,557 151,927	35,333 154,623	36,129 <u>171,815</u>	36,956 193,231	39,009 205,691	34,303 213,679	35,235 210,985	36,201 200,180	Туре	Average Inve	stment Rates I Year	Rate
Sub-Total Water Expenses	\$233,985	\$246,020	\$242,162	\$263,343	\$268,938	\$289,079	\$313,540	\$330,338	\$335,933	\$336,532	\$329,127		<u></u>		
Debt Service Assistance	(68)	0	0	0	0	0	0	0	0	0	0	Short Term	FY		0.20%
Bond Redemption Savings	(6,746)	0	0	0	0	(18,815)	(1,510)		0	0	0	Short Term	FY		0.25%
Variable Rate Savings Total Water Expenses	<u>u</u> \$227,171	<u>0</u> \$246,020	<u>0</u> \$242,162	0 \$263,343	<u>0</u> \$268,938	\$270,264	\$312,030	0 \$330,338	\$335,933	0 \$336,532	0 \$329,127	Short Term Short Term	FY FY		0.50% 0.75%
·	. =:,	,0	,	,	, ,,,,,,,	,		, , , , , , , ,	, ,			Short Term	FY20		1.00%
REVENUE & INCOME		A		.	A/	A/	A/				A/	Long Term	FY		2.70%
Non-Member and Other Revenue	\$9,184 3,578	\$15,229 4,418	\$9,746 3,856	\$10,048 4,309	\$10,233 4,883	\$10,290 5,934	\$10,755 5,635	\$10,953 5,691	\$10,665 5,846	\$10,690 6,169		Long Term Long Term	FY17		2.80% 3.00%
Rate Stabilization	0	4,410	0,000	4,309	4,003	6,161	12,136	13,136	1,156	0,109	0,408	Long Term	FY18 FY19		3.20%
Prior Year Utility Surplus/Deficit Transfer	4,175	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	Long Term	FY20-FY50		4.00%
Total Revenue/Income/Utility Transfers	\$16,937	\$19,647	\$13,602	\$14,357	\$15,116	\$22,385	\$28,526	\$29,780	\$17,667	\$16,859	\$17,053				
Water Pate Pevenue	\$210,234	\$226,373	\$228,561	\$248,986	\$253,822	\$247,879	\$283,504	\$300,557	\$318,266	\$319,674	\$312,073		Other Comments		
Water Rate Revenue Rate Revenue Change	\$210,234 3.5%	\$226,373 7.7%	\$228,561 1.0%	\$248,986 8.9%	\$253,822 1.9%	\$247,879 -2.3%	\$283,504 14.4%	\$300,557 6.0%	\$318,266 5.9%	\$319,674 0.4%		1) CEB Model #		millents	
	5.570	,0		2.370	1.576		770	2.570	2.570	2	2.770	2) FY16 R&B Projection run #5.3 plus:			
Estimated Annual Household Charge **												3) Updated debt service schedules			
Based on water use of 61k gpy (weighted) Based on water use of 90k gpy (weighted)	\$409 \$604	\$435 \$642	\$448 \$661	\$479 \$707	\$496 \$731	\$503 \$742	\$550 \$811	\$580 \$856	\$612 \$902	\$629 \$927	\$638 \$941				
Dasca on water use or suk gpy (weighted)	\$004	\$04Z	1,000	\$107	\$131	\$142	POIT	9000	\$9UZ	⊅92 /	\$941				

^{**} 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 reponses to the 2014 MWRA Advisory Board's Annual Water and Sewer Retail Rate Survey.