STAFF SUMMARY

TO:Board of DirectorsFROM:Frederick A. Laskey, Executive DirectorDATE:June 22, 2022SUBJECT:Final FY23 Water and Sewer Assessments

COMMITTEE: Administration, Finance & Audit	INFORMATION X VOTE
Michael Cole, Budget Director Leo Norton, Asst. Mgr, Rates, Revenue and Finance	Thomas J. Durkin
Preparer/Title	Director of Finance

The Proposed FY23 Current Expense Budget (CEB) was submitted to the Advisory Board at the February 2022 Board meeting and included a 3.4% combined assessment increase.

MWRA's long-term goal has been to provide sustainable and predictable assessments to its member communities. In the past few years, the Advisory Board challenged MWRA to limit the assessment increases at a level less than 4%. MWRA has continuously been successful in achieving this goal by utilizing a multi-year rates management strategy, which includes controlled spending, the use of historical variable rate assumptions, and the practice of targeted debt defeasance.

Consistent with the FY23 Final Budget, the combined assessment increase of 2.85% includes a 2.27% increase for sewer assessments, and a 3.93% increase for water assessments.

RECOMMENDATION:

To adopt the following effective July 1, 2022:

- 1) Water system assessments of \$288,304,865 and sewer system assessments of \$526,343,135 for FY23.
- 2) FY23 sewer assessments of \$500,000 for the Town of Clinton and \$459,884 for the Lancaster Sewer District.
- 3) FY23 charge to the City of Worcester of \$210,531 representing approximately 7.9% of the direct operating expenses for the Clinton Wastewater Treatment Plant.
- 4) FY23 water assessments of \$3,804,390 for the City of Chicopee, \$805,465 for South Hadley Fire District #1, and \$845,127 for the Town of Wilbraham.
- 5) A wholesale water rate of \$4,628.12 per million gallons.
- 6) A retail sewer rate of \$7,993.14 per million gallons.

DISCUSSION:

The Fina	I FY23	Current	Expense	Budget	includes	а	Rate	Revenue	Requirement	of
\$814,648,	000, an ir	ncrease of	2.85% ove	er the FY	22 require	mei	nt.			

	Rate Revenue	Requirement	Change from FY22			
	FY23 Final	FY22 Final	Dollars	Percent		
Water	\$288,304,865	\$277,415,068	\$10,889,797	3.93%		
Sewer	\$526,343,135	\$514,668,932	\$11,674,203	2.27%		
Total	\$814,648,000	\$792,084,000	\$22,564,000	2.85%		

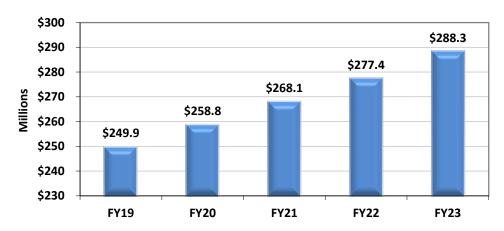
Attachment 1 details the FY23 wholesale water and sewer charges for each MWRA community.

The estimated annual impact of the FY23 assessment increase on the MWRA portion of the average household bill for water and sewer service in a fully served MWRA community that uses close to the system average of 61,000 gallons of water per year is approximately \$17.

Water Assessments

MWRA calculates water assessments for customer communities by apportioning the water rate revenue requirement according to each community's share of total water use for the most recent calendar year. FY23 water assessments are based on each community's share of CY21 water use of 62.294 billion gallons, a 1.48% decrease compared to CY20 water use of 63.232 billion gallons. Changes in FY23 water assessments for customer communities compared to FY22 assessments will vary considerably, depending on each community's use of water and how that use factors into their share of the water system in CY21 compared to CY20. This is particularly true for communities that receive only part of their water from MWRA.

The graph below illustrates the water Rate Revenue Requirement for the past 5 years. The changes from FY22 to FY23 are primarily the result of increased debt service related to water system rehabilitation and improvements.

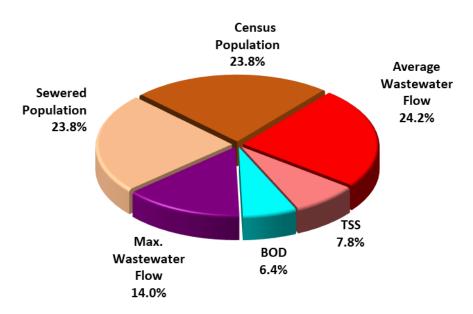


MWRA Water Rate Revenue Requirement

Sewer Assessments

MWRA allocates sewer assessments based on each community's share of the following allocation parameters: three-year average of annual wastewater flow, maximum month flow, strength of flow, census population, and sewered population.

On average, approximately 52% of a community's FY23 sewer assessment is based on each community's share of wastewater flow and strength of flow (total suspended solids or TSS and biochemical oxygen demand or BOD), and approximately 48% is based on population as illustrated in the following graph.



The population component of the FY23 assessments were calculated using the 2020 Census, as well as the percentage of total population receiving municipal sewer service as reported by each MWRA community.

The flow component of the FY23 assessments were calculated using the average of CY19, CY20 and CY21 wastewater flows and strength of flows. CY19 and CY20 flows are based on actual metered flow, and CY21 flows were estimated during the sewer system meter replacement project.

The graph below illustrates the sewer Rate Revenue Requirement for the past 5 years. As with the water utility, the annual changes continue to be primarily the result of increased debt service related to sewer system rehabilitation and improvements.



MWRA Sewer Rate Revenue Requirement

Clinton Sewer Service Area Assessments

FY23 operating and maintenance (O&M) and capital expenses attributable to the Clinton Wastewater Treatment Plant are \$4,878,261, an increase of 12.8% from FY22 expenses. This includes a 9.2% increase in operating costs, and a 20.9% increase in capital expenses.

In accordance with the agreement that allows the City of Worcester to take water from the Wachusett watershed, Worcester is charged approximately 7.9% of the direct operating expenses for the Clinton Wastewater Treatment Plant. FY23 direct operating expenses for the plant total \$2,661,253, resulting in a FY23 charge of \$210,531 for the City of Worcester. Worcester has been paying this annual charge to MWRA or its predecessors since 1914.

The Town of Clinton and the Lancaster Sewer District are allocated proportional shares of the remaining expenses based on annual metered wastewater flow to the Clinton Plant. Based on FY23 expenses and CY21 wastewater flows, Lancaster's FY23 charge is \$459,884, an increase of 3.6% from FY22.

The FY23 charge for the Town of Clinton is \$4,193,345. However, pursuant to Chapter 307, Section 8 of the Acts of 1987, Clinton is only liable for the first \$500,000 of its share of O&M and capital costs.

Attachment 2 details the expenses and corresponding charges for the Clinton Sewer Service Area.

CVA Water Assessments

Based on the Final FY23 CIP and CEB for the Chicopee Valley Aqueduct (CVA) water system, the FY23 system assessment is \$5,454,982, an increase of 3.5% from FY22 assessments.

MWRA's CVA water assessment methodology allocates CVA assessments to the three communities served by the CVA system based on their share of prior calendar year water use. Based on CY21 water use, FY23 assessments are as follows:

• City of Chicopee:	\$3,804,390 (+5.7%)
• South Hadley Fire District #1:	\$ 805,465 (+1.0%)
• Town of Wilbraham:	\$ 845,127 (-3.1%)

As with the metropolitan water system, changes in FY23 water assessments for each CVA community compared to FY22 assessments vary depending on their water use and how that use factors into their share of the CVA water system in CY21 compared to CY20.

Attachment 3 details the expenses and corresponding assessments for the CVA Water Service Area.

Wholesale Water Rate

MWRA's wholesale water rate per million gallons is applied to customers purchasing MWRA water on a pay-as-you-go basis (including customers with emergency agreements). The wholesale water rate for FY23 is \$4,628.12 per million gallons. The FY23 CEB includes revenue of \$174,199 from these customers.

Retail Sewer Rate

MWRA provides direct retail sewer service to Regis College in Weston and the New England Center for Children in Southborough. In accordance with MWRA Policy #OP.11, "Admission of New Community to MWRA Sewer System and Other Requests for Sewer Service to Locations Outside MWRA Sewer Service Area", both entities are charged a modified per million gallon "retail" rate that captures both sanitary and non-sanitary flows. Based on FY23 sewer assessments, the FY23 retail sewer rate will be \$7,993.14 per million gallons. The Final FY23 CEB includes revenue of \$63,526 from these customers.

ATTACHMENTS:

- 1. FY23 Water and Sewer Assessments
- 2. Clinton Wastewater Treatment Plant Sewer User Charge Determination
- 3. Chicopee Valley Aqueduct System Assessment

Massachusetts Water Resources Authority Final FY23 Water and Sewer Assessments

MWRA Fully Served Water and Sewer Customers	Final FY22 Water Assessment	Final FY23 Water Assessment	Percent Change from FY22	Final FY22 Sewer Assessment	Final FY23 Sewer Assessment	Percent Change from FY22	Final FY22 Combined Assessment	Final FY23 Combined Assessment	Dollar Change from FY22	Percent Change from FY22
ARLINGTON	\$5,958,052	\$5,648,095	-5.2%	\$9,124,432	\$9,392,510	2.9%	\$15,082,484	\$15,040,605	(\$41,879)	-0.3%
BELMONT	3,321,668	3,134,847	-5.6%	5,482,714	5,677,766	3.6%	8,804,382	8,812,613	8,231	0.1%
BOSTON (BWSC)	93,962,296	99,390,501	5.8%	148,872,321	149,691,861	0.6%	242,834,617	249,082,362	6,247,745	2.6%
BROOKLINE	8,011,141	8,018,472	0.1%	13,660,245	14,277,389	4.5%	21,671,386	22,295,861	624,475	2.9%
CHELSEA	5,460,223	5,460,876	0.0%	8,986,504	9,362,783	4.2%	14,446,727	14,823,659	376,932	2.6%
EVERETT	6,272,641	6,422,774	2.4%	9,618,364	10,050,685	4.5%	15,891,005	16,473,459	582,454	3.7%
FRAMINGHAM	9,287,668	9,531,024	2.6%	13,764,605	13,631,736	-1.0%	23,052,273	23,162,760	110,487	0.5%
LEXINGTON	8,743,912	8,493,467	-2.9%	8,177,213	8,432,792	3.1%	16,921,125	16,926,259	5,134	0.0%
MALDEN	8,378,155	8,758,033	4.5%	13,820,322	14,707,650	6.4%	22,198,477	23,465,683	1,267,206	5.7%
MEDFORD	7,360,071	7,666,268	4.2%	12,538,844	13,036,794	4.0%	19,898,915	20,703,062	804,147	4.0%
MELROSE	3,511,330	3,499,715	-0.3%	6,842,727	7,179,811	4.9%	10,354,057	10,679,526	325,469	3.1%
MILTON	3,884,900	4,022,582	3.5%	5,910,238	6,075,106	2.8%	9,795,138	10,097,688	302,550	3.1%
NEWTON	13,717,608	14,157,661	3.2%	22,344,621	22,803,628	2.1%	36,062,229	36,961,289	899,060	2.5%
NORWOOD	4,409,127	4,502,690	2.1%	8,482,434	8,789,282	3.6%	12,891,561	13,291,972	400,411	3.1%
QUINCY	13,440,835	13,856,502	3.1%	21,473,437	22,536,755	5.0%	34,914,272	36,393,257	1,478,985	4.2%
READING	2,831,288	2,807,828	-0.8%	5,376,119	5,378,338	0.0%	8,207,407	8,186,166	(21,241)	-0.3%
REVERE	5,756,009	6,348,919	10.3%	11,066,469	12,301,594	11.2%	16,822,478	18,650,513	1,828,035	10.9%
SOMERVILLE	8,973,256	9,471,778	5.6%	17,020,189	17,021,558	0.0%	25,993,445	26,493,336	499,891	1.9%
STONEHAM	3,561,396	3,289,382	-7.6%	5,585,497	5,652,293	1.2%	9,146,893	8,941,675	(205,218)	-2.2%
WALTHAM	10,338,346	11,044,210	6.8%	14,299,920	14,787,237	3.4%	24,638,266	25,831,447	1,193,181	4.8%
WATERTOWN	4,166,126	4,147,401	-0.4%	6,806,903	6,800,246	-0.1%	10,973,029	10,947,647	(25,382)	-0.2%
WINTHROP	2,074,166	1,918,276	-7.5%	3,831,735	3,970,822	3.6%	5,905,901	5,889,098	(16,803)	-0.3%
т	DTAL \$233,420,214	\$241,591,301	3.5%	\$373,085,853	\$381,558,636	2.3%	\$606,506,067	\$623,149,937	\$16,643,870	2.7%

MWRA Sewer and Partial Water Customers	Final FY22 Water Assessment	Final FY23 Water Assessment	Percent Change from FY22	Final FY22 Sewer Assessment	Final FY23 Sewer Assessment	Percent Change from FY22	Final FY22 Combined Assessment	Final FY23 Combined Assessment	Dollar Change from FY22	Percent Change from FY22
ASHLAND	\$0	\$0	-	\$2,752,284	\$2,886,173	4.9%	\$2,752,284	\$2,886,173	\$133,889	4.9%
BURLINGTON	0	1,253,355	-	6,168,357	6,021,746	-2.4%	6,168,357	7,275,101	1,106,744	17.9%
CANTON	1,507,385	2,022,211	34.2%	4,765,395	4,862,295	2.0%	6,272,780	6,884,506	611,726	9.8%
NEEDHAM	1,670,433	1,464,186	-12.3%	6,614,690	6,760,854	2.2%	8,285,123	8,225,040	(60,083)	-0.7%
STOUGHTON	167,480	118,822	-29.1%	5,434,313	5,471,762	0.7%	5,601,793	5,590,584	(11,209)	-0.2%
WAKEFIELD	2,825,130	2,617,209	-7.4%	6,748,184	6,848,043	1.5%	9,573,314	9,465,252	(108,062)	-1.1%
WELLESLEY	2,301,709	3,325,451	44.5%	6,082,193	6,273,587	3.1%	8,383,902	9,599,038	1,215,136	14.5%
WILMINGTON	1,098,672	716,510	-34.8%	3,013,693	3,230,781	7.2%	4,112,365	3,947,291	(165,074)	-4.0%
WINCHESTER	2,093,282	1,943,817	-7.1%	4,535,279	4,592,959	1.3%	6,628,561	6,536,776	(91,785)	-1.4%
WOBURN	4,936,119	5,385,782	9.1%	9,490,135	9,810,358	3.4%	14,426,254	15,196,140	769,886	5.3%
TOTAL	\$16,600,210	\$18,847,343	13.5%	55,604,523	56,758,558	2.1%	\$72,204,733	\$75,605,901	\$3,401,168	4.7%

MWRA Sewer-only Customers	Final FY22 Water Assessment	Final FY23 Water Assessment	Percent Change from FY22	Final FY22 Sewer Assessment	Final FY23 Sewer Assessment	Percent Change from FY22	Final FY22 Combined Assessment	Final FY23 Combined Assessment	Dollar Change from FY22	Percent Change from FY22
BEDFORD				\$3,616,974	\$3,696,479	2.2%	\$3,616,974	\$3,696,479	\$79,505	2.2%
BRAINTREE				10,463,134	10,873,621	3.9%	10,463,134	10,873,621	410,487	3.9%
CAMBRIDGE				27,759,220	28,578,485	3.0%	27,759,220	28,578,485	819,265	3.0%
DEDHAM				6,076,744	6,153,066	1.3%	6,076,744	6,153,066	76,322	1.3%
HINGHAM SEWER DISTRICT				2,061,694	2,132,150	3.4%	2,061,694	2,132,150	70,456	3.4%
HOLBROOK				1,883,097	1,936,893	2.9%	1,883,097	1,936,893	53,796	2.9%
NATICK				6,126,567	6,287,041	2.6%	6,126,567	6,287,041	160,474	2.6%
RANDOLPH				6,830,622	6,940,968	1.6%	6,830,622	6,940,968	110,346	1.6%
WALPOLE				4,280,744	4,449,485	3.9%	4,280,744	4,449,485	168,741	3.9%
WESTWOOD				3,247,430	3,274,616	0.8%	3,247,430	3,274,616	27,186	0.8%
WEYMOUTH				13,632,330	13,703,137	0.5%	13,632,330	13,703,137	70,807	0.5%
τοτ	L			\$85,978,556	\$88,025,941	2.4%	\$85,978,556	\$88,025,941	\$2,047,385	2.4%

MWRA Water-only Customers		Final FY22 Water Assessment	Final FY23 Water Assessment	Percent Change from FY22	Final FY22 Sewer Assessment	Final FY23 Sewer Assessment	Percent Change from FY22	Final FY22 Combined Assessment	Final FY23 Combined Assessment	Dollar Change from FY22	Percent Change from FY22
LYNNFIELD WATER DISTRICT		\$861,938	\$865,543	0.4%				\$861,938	\$865,543	\$3,605	0.4%
MARBLEHEAD		3,092,888	2,941,372	-4.9%				3,092,888	2,941,372	(151,516)	-4.9%
NAHANT		533,340	578,355	8.4%				533,340	578,355	45,015	8.4%
SAUGUS		4,860,987	5,020,868	3.3%				4,860,987	5,020,868	159,881	3.3%
SOUTHBOROUGH		1,232,930	984,014	-20.2%				1,232,930	984,014	(248,916)	-20.2%
SWAMPSCOTT		2,581,317	2,552,649	-1.1%				2,581,317	2,552,649	(28,668)	-1.1%
WESTON		2,837,540	2,456,156	-13.4%				2,837,540	2,456,156	(381,384)	-13.4%
	TOTAL	\$16,000,940	\$15,398,957	-3.8%				\$16,000,940	\$15,398,957	(\$601,983)	-3.8%

MWRA Partial Water-only Customers	Final FY22 Water Assessment	Final FY23 Water Assessment	Percent Change from FY22	Final FY22 Sewer Assessment	Final FY23 Sewer Assessment	Percent Change from FY22	Final FY22 Combined Assessment	Final FY23 Combined Assessment	Dollar Change from FY22	Percent Change from FY22
DEDHAM-WESTWOOD WATER DISTRICT	\$620,024	\$256,078	-58.7%				\$620,024	\$256,078	(\$363,946)	-58.7%
LYNN (LWSC)	125,688	187,732	49.4%				125,688	187,732	62,044	49.4%
MARLBOROUGH	6,589,994	6,733,069	2.2%				6,589,994	6,733,069	143,075	2.2%
NORTHBOROUGH	1,760,228	1,508,715	-14.3%				1,760,228	1,508,715	(251,513)	-14.3%
PEABODY	2,297,770	3,781,670	64.6%				2,297,770	3,781,670	1,483,900	64.6%
TOTAL	\$11,393,704	\$12,467,264	9.4%				\$11,393,704	\$12,467,264	\$1,073,560	9.4%
SYSTEMS TOTAL	\$277,415,068	\$288,304,865	3.93%	\$514,668,932	\$526,343,135	2.27%	\$792,084,000	\$814,648,000	\$22,564,000	2.85%

Massachusetts Water Resources Authority

Clinton Wastewater Treatment Plant

Sewer User Charge Determination

BUDGETED EXPENSES: Final FY23	
Clinton Direct Operating Expenses:	\$2,661,253
MWRA Support Allocation:	617,203
Subtotal O&M Expenses:	\$3,278,456
Total Debt Service Expenses:	\$1,599,804
Total Clinton Service Area Expenses	\$4,878,261
Less Revenue (City of Worcester Payment)	-210,531
Clinton WWTP Rate Revenue Requirement:	\$4,667,729

WASTEWATER FLOW and FLOW	ASTEWATER FLOW and FLOW SHARES:					
	Town of Clinton Flow	Lancaster Sewer District Flow	Total Wastewater Flow			
Average Daily Flow (MGD)	2.436	0.276	2.712			
Average Flow (MG/YR)	889.276	100.602	989.878			
Proportional Share of Flow	89.84%	10.16%	100.0%			

	Sewer User Charge Deter	mination
TOWN OF CLINTON		LAN
O&M Expenses	\$3,278,456	0&1
Less Revenue (City of Worcester Payment)	-210,531	
O&M Expenses to be Recovered	\$3,067,925	0&
Clinton's Share of Flow	89.84%	Lan
Clinton's Share of O&M Costs	\$2,756,130	Lan
Total Clinton O&M Charge	\$2,756,130	Tota
Debt Service Costs to be Recovered	\$1,599,804	Deb
Clinton's Share of Wastewater Flow	89.84%	Lan
Total Clinton Debt Service Charge	\$1,437,215	Tota
Total Clinton O&M and Debt Service Charge	\$4,193,345	Tota
Less MWRA Water Ratepayer Subsidy	-\$3,693,345	
Billable Charge to the Town of Clinton	\$500,000	Billat
as per CH. 307, Section 8 The Acts of 1987		

LANCASTER SEWER DISTRICT	
O&M Expenses	\$3,278,456
Less Revenue (City of Worcester Payment)	-210,531
O&M Expenses to be Recovered	\$3,067,925
Lancaster's Share of Flow	10.16%
Lancaster's Share of O&M Costs	\$311,795
Total Lancaster Sewer District O&M Charge	\$311,795
Debt Service Costs to be Recovered	\$1,599,804
Lancaster's Share of Wastewater Flow	10.16%
Total Lancaster Sewer District Debt Service Charge	\$162,589
Total Lancaster O&M and Debt Service Charge	\$474,384
Billable Charge to Lancaster Sewer District	\$474,384

Clinton WWTP Charges and Payment Schedule

Sewer Customer	Billable		
	Charges	Change from Prior	Year
Town of Clinton (billable)	\$500,000	\$0	0.0%
Lancaster Sewer District (before adj.)	\$474,384		
Lancaster Sewer District (prior yr. adj.)	-\$14,500		
Lancaster Sewer District (billable)	\$459,884	\$16,001	3.6%
Total Billable Sewer Use Charges	\$959,884		
City of Worcester	\$210,531	\$190,780	10.4%

Payment 1	Payment 2	Payment 3	Payment 4
on or before	on or before	on or before	on or before
Sept 15, 2022	Nov 15, 2022	Feb 15, 2023	May 15, 2023
\$125,000	\$125,000	\$125,000	\$125,000
\$114,971	\$114,971	\$114,971	\$114,971
\$239,971	\$239,971	\$239,971	\$239,971
\$0	\$0	\$210,531	\$0

Massachusetts Water Resources Authority

Chicopee Valley Aqueduct Water System Assessment FY2023 Budget and Assessments

			Change from	Prior Year
CVA Operating Budget	FY22	FY23	Dollars	Percent
CVA Cost Center Expenses	\$955,678	\$1,077,970	\$122,292	12.8%
Allocated Waterworks Expenses	151,498	149,654	-1,844	-1.2%
Allocated Watershed/PILOT	463,776	509,913	46,137	9.9%
Allocated Watershed Land Acquisition	28,792	30,433	1,641	5.7%
Allocated MWRA Indirect Expenses	661,503	700,654	39,152	5.9%
SUBTOTAL OPERATING BUDGET	\$2,261,246	\$2,468,624	\$207,378	9.2%
			Change from	Prior Year
CVA Capital Budget	FY22	FY23	Dollars	Percent
Capital Expenses	\$3,048,338	\$3,047,744	-\$594	0.0%

BASE COMMUNITY ASSESSMENT	FY22 ¹	FY23 ²
Chicopee	\$3,628,248	\$3,847,836
South Hadley Fire District #1	803,078	814,572
Wilbraham	878,258	853,960
CVA BASE SYSTEM ASSESSMENT	\$5,309,585	\$5,516,368

PRIOR PERIOD ADJUSTMENTS	FY22 ³	FY23 ³
Chicopee	-\$27,865	-\$43,446
South Hadley Fire District #1	-5,844	-9,107
Wilbraham	-5,699	-8,833
TOTAL ADJUSTMENTS	-\$39,408	-\$61,386

FY22

\$3,600,383

\$5,270,177

797,235

872,559

FY23

\$3,804,390

\$5,454,982

805,465 845,127

Change from Prior Year		
Dollars	Percent	
-\$15,581	55.9%	
-3,263	55.8%	
-3,134	55.0%	
-\$21,978	55.8%	

Change from Prior Year

Percent

6.1%

1.4%

-2.8%

3.9%

Dollars

\$219,588

11,493

-24,298

\$206,783

Change from Prior Year		
Dollars	\$	Percent
\$204	,007	5.7%
8	,230	1.0%
-27	,432	-3.1%
\$184	,805	3.51%

¹ Based on CY2020 water use and before prior period adjustments.

ADJUSTED ASSESSMENT

South Hadley Fire District #1

ADJUSTED ASSESSMENT

Chicopee

Wilbraham

² Based on CY2021 water use and before prior period adjustments.

³ Prior period adjustment to account for budget to actual expenses.