

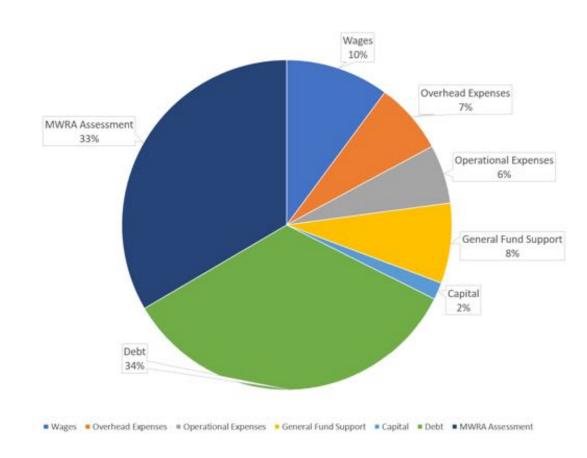
## **Town of Reading**



Water & Sewer Public Forum May 31, 2023



FY24 Water Enterprise Budget \$8,655,507 (2% Reduction vs. FY23)

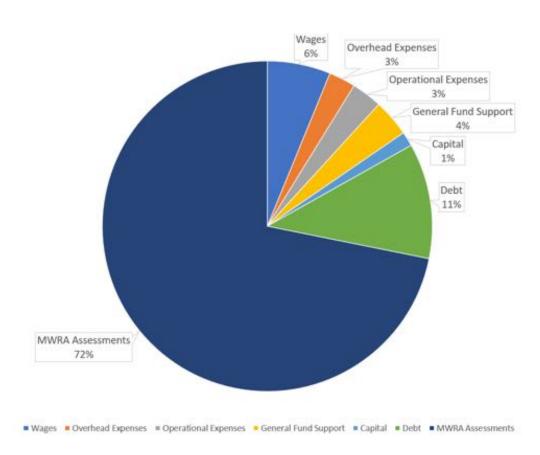


#### **Voted by Town Meeting:**

- \$850,000 Offset from Reserves
- \$145,000 from ARPA to Support Capital



FY24 Sewer Enterprise Budget \$7,791,992 (2.5% Increase vs. FY23)



#### **Voted by Town Meeting:**

\$650,000 Offset from Reserves



## Look at Structural Change for FY24

Wakefield completed Water Rate Study to implement Tiered Water and Sewer Billing

200 0 00	Tiers	Start	End	Water	Sewer
Wakefield	1	1	1,000	\$7.30	\$11.20
	2	1,001	2,500	\$7.72	\$11.70
Data	3	2,501	6,000	\$8.15	\$12.21
	4	6,001	+	\$8.99	\$13.22

- 65 gallons per person per day (8.7 cubic feet) used as basis for setting tiers
- Tier 1 captures person living alone, senior couples, and other small users
- Tier 2 captures average residential user (approx. 1,950 cubic feet) and three-person households
- Tier 3 threshold allows commercial accounts and larger residential users to conserve to avoid or limit tier 4 consumption



## FY24 Rates, Reading is pursuing Tiered Rates

#### Overview:

- Today we have a single rate system, based on water usage
- Proposal is to go to a tiered system that would encourage conservation. Higher usage would be billed at a higher rate
- Town Meeting funded a water & rate study that developed proposals that the Select Board has been reviewing since February
  - Rates have been discussed at three Select board meetings
  - Public Hearing held on May 23, 2023
- Select Board recommended a public forum, which we are holding today to answer residents' questions
- The Select Board will Vote on new water & sewer rates at their meeting on June 6, 2023
- New rates will be in effect on September 1, 2023



#### FY24 Rates – Good News

- Thanks to a more than usual dry-summer in 2022, revenue in the water & sewer enterprise funds is ahead of projections
  - This will result in additional regeneration of retained earnings, more than anticipated
  - Very hard to predict what next summer will be like, we do not want to assume a dry summer every year
- MWRA Preliminary Assessment is very positive for Reading
  - 0.6% Increase in Water Assessment (\$2,825,027)
  - -0.8% Decrease in Sewer Assessment (\$5,337,985)
  - 0.3% Decrease combined

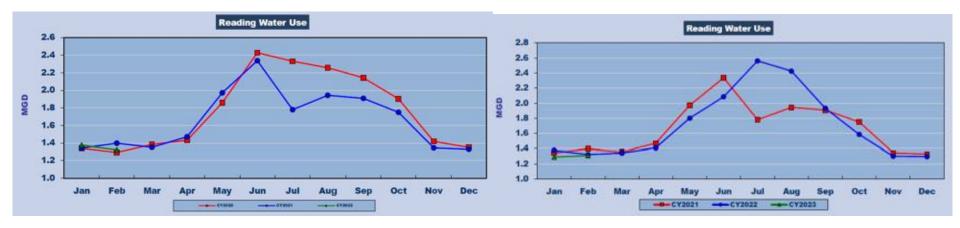
#### Historic MWRA Water Assessments

Fiscal Year>	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024P
MWRA Assessment	\$ 1,726,878	\$ 1,772,389	\$ 1,811,212	\$ 1,854,203	\$ 1,931,410	\$ 2,032,766	\$ 2,109,549	\$ 2,211,234	\$ 2,296,922	\$ 2,370,637	\$ 2,399,752	\$ 2,831,288	\$ 2,807,828	\$ 2,825,027
Change from Prior Yr		2.6%	2.2%	2.4%	4.2%	5.2%	3.8%	4.8%	3.9%	3.2%	1.2%	18.0%	-0.8%	0.6%
											Average La	t Five Years,	incl. FY24P:	4.4%
											Average A	II 12 Years, in	cl. FY24P:	3.9%



## Question: Are we using the right time frame?

- For our analysis we are using, 4 quarters (1-year) worth of data:
  7/27/2021, 10/26/2021, 1/25/2022, 4/26/2022.
- Below is a graphical trend of water usage for Reading, issued on February 2022 and on February 2023.
- Higher water usage the summer of 2020 (presumably because of COVID) and the summer of 2022 (presumably because of weather). It appears that the winter months stay consistent, year over year.
- Going back to 2019 is too dated, especially with development.
- We still think the data used for analysis is the best.





## Question: Are we required to go to tiers?

- M. G. L. c. 165, § 2B was passed in 1993, but was to take effect on July 1, 1994.
  Subsequently, the law was amended to include additional language on July 10, 1994, with the amendment also retroactive to July 1, 1994.
- The original version of G. L. c. 165, § 2B was passed in 1993 and stated as follows: "All municipalities or water districts shall institute water charges and fees that incorporate a base rate for all users; provided, that said base rate shall be increased at an increasing block rate to fairly reflect the resource demand and consumption of high volume users of water." St.1993, c. 110, § 195. Section 196 of that legislation further intended to add that Section 195 was to take effect on July 1, 1994, but contained a typo referring to Section 196, which was subsequently corrected on January 14, 1994.
- On July 10, 1994, the Legislature amended G. L. c. 165, § 2B to include additional language [shown here in italics]: "All municipalities or water districts within the jurisdiction of the Massachusetts Water Resources Authority, but not including communities serviced by the Connecticut Valley Aqueduct shall institute water charges and fees that incorporate a base rate for all users; provided, that said base rate shall be increased at an increasing block rate to fairly reflect the resource demand and consumption of high volume users of water." The amendment was made effective retroactively as of July 1, 1994. St.1994, c. 60, § 140.



## Question: Should we implement second meters?

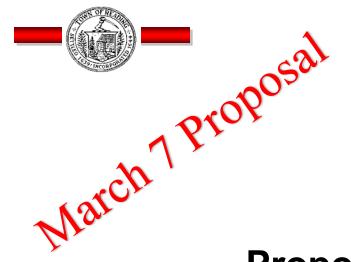
- Commonly known as "Irrigation Meters", this would allow water used for irrigation or pools to be metered separately and not billed for sewer usage
- It will create a deficit in sewer revenue that is hard to predict
- Residents must install and pay all plumbing expenses, permits and purchase second meter to take advantage of this
- If Select Board would like to pursue this option, recommend limiting to 50 Residential Properties for at least 2 fiscal years, to analyze trends and impacts on revenue
- Do not recommend allowing irrigation meters to commercial properties



## Question: How many people in a household would fall in each tier?

- A resident asked the size of home that would fall on each tier. The table below is the best approximation we can show:
  - 45 gallons/person/day is based on MWRA data for Reading
  - 65 gallons/person/day is based on EPA nationwide data
  - Does not account for irrigation, pools, or outside water usage, this accounts for domestic consumption

			of persons in	household pe	r tier	
			45 gallo	ns per day	65 gallon	s per day
Tiers	Start	End	Start	End	Start	End
1	-	500	0	1	0	1
2	501	1,000	1	2	1	1
3	1,001	2,500	2	5	1	3
4	2,501	4,000	5	7	3	5
5	4,001	+	7	or More	5	or More



#### **FY23 Rates**

1	Vater		Sewer					
	Rat	tes						
\$ 11.41 \$ 10.86								
Pate per 100 cubic feet of usage								

Rate per 100 cubic feet of usage

### **Proposed FY24 Tiered Rates**

Water											Sev	ver	•						
	Tiers	1		2		3		4	5	Tiers		1		2		3		4	5
	Start	-		502	1	1,001		2,501	5,001	Start		-		501		1,001		2,501	5,001
	End	500	0	1,000	0	2,500	T	5,000	+	End		500		1,000		2,500		5,000	+
	Rate	\$ 10.10	5	\$ 10.80	0	\$ 11.70	T	\$ 13.00	\$ 13.00	Rate	\$	10.00	Ç	10.50	\$	10.70	\$	12.00	\$ 12.00
% D	ifference	-11	%	-59	%	3%	6	14%	14%	% Difference		-8%		-3%		-1%		10%	10%
Usag	Usage and tiers in cubic feet; rates based on 100 cubic feet of usage						et of usage		Usage and tiers in cubic feet; rates based on 100 cubic feet of usage						f usage				

 Initial Rates Proposed in February 2023. Select Board was concerned with such a high increase to tier 4 & tier 5 users

 Select Board requested that tier 4 & tier 5 be separated and that tier 4 receive a lower increase than tier 5



#### FY23 Rates

V	Vater		Sewer					
Rates								
\$ 11.41 \$ 10.86								
Rate per 100 cubic feet of usage								

### **Proposed FY24 Tiered Rates**

	Water												
Tiers	1	2	3	4	5								
Start	-	501	1,001	2,501	4,001								
End	500	1,000	2,500	4,000	+								
Rate	\$ 10.10	\$ 10.80	\$ 11.70	\$ 12.50	\$ 13.00								
% Difference	-11%	-5%	3%	10%	14%								

	Sewer										
Tiers		1		2		3		4		5	
Start		-		501		1,001		2,501		4,001	
End		500		1,000		2,500		4,000		+	
Rate	\$	9.60	\$	10.30	\$	11.15	\$	11.90	\$	12.35	
% Difference	·	-12%		-5%		3%		10%		14%	

- Big change: modified tier 4: 2,501 to 4,000, to lower the impact on larger households. Tier 4 has a lower increase than tier 5
- The proposal had a significant decrease to tier 1 users but has a large increase to tier 5 users.
- Select Board Chair requested that we lower the reduction to tier 1 and lower the increase to tier 5



#### FY23 Rates

V	Vater		Sewer					
Rates								
\$ 11.41 \$ 10.86								
Rate per 100 cubic feet of usage								

### **Proposed FY24 Tiered Rates**

	Water												
Tiers	1	2	3	4	5								
Start	-	501	1,001	2,501	4,001								
End	500	1,000	2,500	4,000	+								
Rate	\$ 10.75	\$ 10.75	\$ 11.70	\$ 12.00	\$ 12.50								
% Difference	-6%	-6%	3%	5%	10%								

	Sewer											
Tiers	1		2		3		4		5			
Start	-		501		1,001		2,501		4,001			
End	500		1,000		2,500		4,000		+			
Rate	\$ 10.20	\$	10.20	\$	11.15	\$	11.50	\$	12.00			
% Difference	-6%		-6%		3%		6%		10%			

- Big change: modified Tier 1 & Tier 2: from 0 to 1,000 cubic feet charged the same rate. Reduces the distribution between Tier 1 & Tier 5.
- Water: With this plan, billings are projected to go up \$195,848 (or 2.6%) if the new structure is in place for a full year and \$36,252 (0.5%) if the new structure is in place for  $\frac{3}{4}$  of a year.
- Sewer: With this plan, billings are projected to go up \$53,245 (or 0.7%) if the new structure is in place for a full year and \$25,059 (0.3%) if the new structure is in place for  $\frac{3}{4}$  of a year.



## **Projected Billing for Water**

Use	User Impact (per Bill) - Water Bills Only													
User Type	Usage	<b>Current Bill</b>	FY 2024 - TIERS	<b>FY 2024 - NO TIERS</b>										
Low-End User	500	\$ 57.05	\$ 53.75	\$ 58.90										
Avg. Residential User (45 gpd)	1,500	\$ 171.15	\$ 166.00	\$ 176.71										
Avg. Residential User (65 gpd)	2,200	\$ 251.02	\$ 247.90	\$ 259.18										
Large Residential User	4,500	\$ 513.45	\$ 525.50	\$ 530.14										
Large Commercial User	10,000	\$ 1,141.00	\$ 1,213.00	\$ 1,178.08										
Very Large Commercial User	100,000	\$11,410.00	\$ 12,463.00	\$ 11,780.83										

## **Projected Billing for Sewer**

User Impact (per Bill) - Sewer Bills Only								
User Type	Usage	<b>Current Bill</b>	FY	<b>FY 2024 - TIERS</b>		2024 - NO TIERS		
Low-End User	500	\$ 54.30	\$	51.00	\$	55.93		
Avg. Residential User (45 gpd)	1,500	\$ 162.90	\$	157.75	\$	167.79		
Avg. Residential User (65 gpd)	2,200	\$ 238.92	\$	235.80	\$	246.09		
Large Residential User	4,500	\$ 488.70	\$	501.75	\$	503.36		
Large Commercial User	10,000	\$ 1,086.00	\$	1,161.75	\$	1,118.58		
Very Large Commercial User	100,000	\$10,860.00	\$	11,961.75	\$	11,185.80		



# Recommendation for Water & Sewer Rates for FY24

Tiers	1	2	3	4	5
Water Rate	\$ 10.75	\$ 10.75	\$ 11.70	\$ 12.00	\$ 12.50
Sewer Rate	\$ 10.20	\$ 10.20	\$ 11.15	\$ 11.50	\$ 12.00
FY24 Combined Rate	\$ 20.95	\$ 20.95	\$ 22.85	\$ 23.50	\$ 24.50
FY23 Combined Rate	\$ 22.27	\$ 22.27	\$ 22.27	\$ 22.27	\$ 22.27
% Difference	-6%	-6%	3%	6%	10%

Avg. Residential User (45 gpd)	Usage	Cu	rrent Bill	New Bill		
Quarterly Water Bill	1500	\$	171.15	\$	166.00	
Quarterly Sewer Bill	1500	\$	162.90	\$	157.75	
Combined Bill	1500	\$	334.05	\$	323.75	
Usage in cubic feet						



## **Next Steps**

- We developed a tool to project Residents' Water & Sewer bill by inputting their usage. We will demonstrate this tool now. We will also make it available on our website.
- The Board will be asked to vote on Water & Sewer rates on their next meeting on June 6, 2023.

