# Conservation Water Rates for Manchester

Recommendations from WRPTF (approved at May 3 Meeting)

For Review with Select Board, May 15, 2023

## RECAP: Our Policy Recommendations (from April 18 Select Board Meeting)

- 1. Water meter replacement/upgrade
- 2. Change water rates for conservation
- 3. Increase conservation awareness & education
- 4. Help define next steps for LSW
- 5. Monitoring wells for Gravelly Pond
- 6. Update source water protections
- 7. Dialogue on watershed protection with Hamilton, Essex and Wenham
- 8. Expedite repairs to WWTP recycled water system
- 9. Accelerate replacement of ancient water mains

#### **CURRENT WATER RATES, FY 2023**



#### MANCHESTER-BY-THE-SEA

BOARD OF SELECTMEN • TOWN HALL Manchester-by-the-Sea, Massachusetts 01944-1399 Telephone (978) 526-2000 FAX (978) 526-2001

To: Board of Selectmen

From: Debbie Powers, Executive Assistant

Date: June 30, 2022

Subject: Policy and Rates for Sewer and Water

#### Water (3.0% increase across all tiers)

- \$6.55 per 100 cf., for first 900 cubic feet used (prior year \$6.36)
- \$6.66 per 100 cf., for 900-1,700 cubic feet used (prior year \$6.47)
- \$7.32 per 100 cf. for 1,700-5,700 cubic feet (prior year \$7.11)
- \$7.95 per 100 cf., for 5,700-16,000 cubic feet used (prior year \$7.72)
- \$8.59 per 100 cf., for 16,000-39,000 cubic feet used (prior year \$8.34)
- \$9.23 per cf., for 39,000+ cubic feet used (prior year was \$8.96)

#### **CURRENT FY2023 WATER RATES (in table format)**

			Rates by Tier (based on quarterly usage)						
		Tier 1 (2023)	Tier 2 (2023)	Tier 3 (2023)	Tier 4 (2023)	Tier 5 (2023)	Tier 6 (2023)		
in \$/HCF	<b>Current Rate</b>	\$6.55	\$6.66	\$7.32	\$7.95	\$8.59	\$9.23		
for CF/Q	<b>Current Tier</b>	<900 cf	<1700 cf	<5700 cf	<16,000 cf	<39.000 cf	>39,000 cf		

#### WRPTF Goals for Recommended New Water Rates:

- **1. Encourage conservation by all households** -- focus on those using the most drinking water in summer (a small fraction).
- 2. Recover the full costs of supplying plentiful clean drinking water to our Town for protecting our water sources and remediating dangerous contaminants, plus regular operating costs of Water Division.
- 3. Allow time for adjustment, ramping up conservation initiatives and installing new water meters by phasing in rate changes.
- **4. Avoid any reduction in total annual Water Division revenues** model potential reductions from conservation by largest current users and get expert advice and counsel.

#### Recommended Rate Changes:





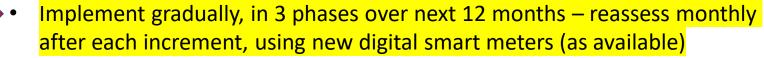


Implement gradually, in 3 phases over next 12 months – reassess monthly

PROPOSED MBTS WATER RATES									
Approved by WRP	TF, May 3 2023								
			Rates by Tier (based on quarterly usage)						
		Tier 1 (2023)	Tier 2 (2023)	Tier 3 (2023)	Tier 4 (2023)	Tier 5 (2023)	Tier 6 (2023)		
in \$/HCF	<b>Current Rate</b>	\$6.55	\$6.66	\$7.32	\$7.95	\$8.59	\$9.23		
for CF/Q	<b>Current Tier</b>	<900 cf	<1700 cf	<5700 cf	<16,000 cf	<39.000 cf	>39,000 cf		
		New TIER 1		New TIER 2	New TIER 3	New <sup>1</sup>	TIER 4		
in \$/HCF	Target Rate	\$3.00		\$13.00	\$32.75	\$45.50			
for CF/Q	Target Tiers	<1900 cf		<4000 cf	<16,000 cf	>16,000 cf			

#### Recommended Rate Changes:

- Reduce to 4 tiers from current 6 tiers
- Significantly increase the rate differentials between lower and higher tiers





PROPOSED MBTS W	ATER RATES							
Approved by WRPTF	, May 3 2023							
			Rates by Tier (based on quarterly usage)					
		Tier 1 (2023)	Tier 2 (2023)	Tier 3 (2023)	Tier 4 (2023)	Tier 5 (2023)	Tier 6 (2023)	
in \$/HCF	<b>Current Rate</b>	\$6.55	\$6.66	\$7.32	\$7.95	\$8.59	\$9.23	
for CF/Q	<b>Current Tier</b>	<900 cf	<1700 cf	<5700 cf	<16,000 cf	<39.000 cf	>39,000 cf	
		New TIER 1		New TIER 2	New TIER 3	New <sup>-</sup>	ΓIER 4	
in \$/HCF	Target Rate	\$3.	00	\$13.00	\$32.75	\$45.50		
for CF/Q	Target Tiers	<190	00 cf	<4000 cf	<16,000 cf	>16,000 cf		
July 2023 - Phase 1	New Rates	\$5.00		\$8.00	\$15.00	\$20.00		
Phase 2	New Rates	\$4.00		\$11.00	\$25.00	\$33.00		
Phase 3	New Rates	\$3.00		\$13.00	\$32.75	\$45	.50	

#### (Same Recommendations in GALLONS instead of CUBIC FEET)

IN GALLO	Rates by Tier (based on quarterly usage)							
		Tier 1 (2023) Tier 2 (2023)		Tier 3 (2023)	Tier 4 (2023)	Tier 5 (2023)	Tier 6 (2023)	
in \$/GALLON	<b>Current Rate</b>	\$ 0.0049	\$ 0.0050	\$ 0.0055	\$ 0.0059	\$ 0.0064	\$ 0.0069	
for GALLONS/Q	<b>Current Tier</b>	<6732 <12,716		<42,636	<119,680	<291,720	>291,720	
		New TIER 1		New TIER 2	New TIER 3	New TIER 4		
in \$/GALLON	Target Rate	\$0.003		\$0.013	\$0.033	\$0.046		
for GALLONS/Q	Target Tiers	<14,000 gals		<30,000 gals	<120,000 gals	>120,000 gals		
July 2023 - Phase 1	New Rates	\$0.0	005	\$0.008	\$0.015	\$0.020		
Phase 2	New Rates	\$0.004		\$0.011	\$0.025 \$0.033		033	
Phase 3	New Rates	\$0.0	003	\$0.013	\$0.033	\$0.046		

### PROJECTED IMPACT ON HOUSEHOLDS – from WRPTF Model of Demand & Usage

# of Households &		# of households + average annual bill (est'd.)					
Average Annual Wa	iter Bill	Tier 1 (2023)	Tier 2 (2023)	Tier 3 (2023)	Tier 4 (2023)	Tier 5 (2023)	Tier 6 (2023)
CURRENT	Households	460	600	670	140	35	10
CURRENT	Ave. \$/year	\$148	\$354	\$819	\$4,453	\$7,943	\$19,425
		\$2	\$264			<b>\$10</b> ,	115
		New '	New TIER 1		<b>New TIER 3</b>	New <sup>-</sup>	TIER 4
TARGET	Households	1,100		500	255	60	
TARGET	Ave. \$/year	\$129		\$1,407	\$6,851	\$30,925	
July 2023 - Phase 1	Households	1,1	00	500	255	6	0
	Ave. \$/year	\$1	40	\$920	\$4,800	\$14,600	
Phase 2	Households	seholds 1,100		500	255	60	
	Ave. \$/year	\$134		\$1,210	\$5,600	\$21,300	
Phase 3	Households	1,1	00	500	255	6	0
	Ave. \$/year	\$1	29	\$1,407	\$6,850	\$30,	925

#### **NOTES**:

- In July 2023, new rates will <u>reduce</u> annual water bills for 58% of households ("conservators").
- July 2023 rates will increase annual bills by an average of **10%** for another 39% of households.
- Only 3% of households will see their annual water bills rise significantly July 2023 rec'd rates.

#### Impact on Water Division Revenues – from WRPTF Model of Demand & Usage

ANNUAL REV	'ENUES -	TOTAL	w/ significant	w/ dramatic	
MBTS WATER	DIVISON	REVENUES	conservation	conservation	
	CURRENT		\$1.31M	\$1.07M	
	TARGET	\$4.48M	\$3.56M	\$2.57M	
July 2023 - Phase 1	New Rates	\$2.3M	\$1.55M	\$1.12M	
Phase 2	New Rates	\$3.5M	\$2.1M	\$1.6M	
			•	•	
Phase 3	New Rates	\$4.48M	\$3.56M	\$2.57M	

#### **NOTES:**

- "Significant Conservation:" 50% reduction by all users in Tiers 3+4 (Top 2 Tiers)
- "Dramatic Conservation:" 67% reduction in Tiers 3+4 plus 20% in Tier 2
- Recommended Rate Changes:
  - Reduce to 4 tiers from current 6 tiers
  - Significantly increase the rate differentials between lower and higher tiers
  - > Implement gradually, in 3 phases over next 12 months

### Back-up: Revenues by Tier & Phase (assuming No Conservation)

	•	TOTAL REVENUES BY TIER (& BY PHASE) - NO CONSERVATION							
	Tier 1 (2023)	Tier 2 (2023)	Tier 3 (2023)	Tier 4 (2023)	Tier 5 (2023)	Tier 6 (2023)			
CURRENT	\$65,000	\$220,000	\$525,000	\$350,000	\$200,000	\$140,000			
	New <sup>-</sup>	TIER 1	New TIER 2	New TIER 3					
TARGET	\$140	,000	\$700,000	\$1,780,000	\$1,860,000				
July 2023 - Phase 1	\$230	,000	\$440,000	\$810,000	\$820,000				
Phase 2	Phase 2 \$185,000		\$600,000	\$1,360,000	\$1,350,000				
Phase 3	\$140	,000	\$700,000	\$1,780,000	\$1,860	0,000			

#### RECOMMENDED NEW POLICY FOR WATER RATES



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To: Board of Selectmen

From: Debbie Powers, Executive Assistant

Date: June 30, 2022

Subject: Policy and Rates for Sewer and Water

A public hearing will be held at the Selectmen's meeting on July 18, 2022 to review the

policy and rates for sewer and water for FY23.

#### 1. Policy

A summary of the policy follows: -

#### **Operational Cost**

• Sewer 100% of the operational cost is paid by the users.

• Water 100% of the operational cost is paid by the users.

#### Capital Cost

Sewer 75% of the bonded capital cost is paid by the users.

25% of the bonded capital cost is paid by all taxpayers.

Water 100% of the bonded capital cost is paid by all taxpayers.

#### WRPTF Recommends Amended Policy -

- 100% of the annual costs of operations, source protection and contaminant monitoring and remediation is paid by the users.
- Bonded capital cost is paid by the users and all taxpayers as determined annually by the Finance Committee.

OLD
Impact on Water Division Revenues – from WRPTF Model of Demand & Usage

ANNUAL REV	ENUES -	TOTAL	w/ modest	w/ significant	
MBTS WATER	DIVISON	REVENUES	conservation	conservation	
	CURRENT		\$1.31M	\$1.07M	
	TARGET	\$4.48M	\$3.56M	\$2.57M	
July 2023 - Phase 1	New Rates	\$2.8M	\$2.2M	\$1.6M	
		(prelim. est.)	(prelim. est.)	(prelim. est.)	
Phase 2	<b>New Rates</b>	\$3.9M	\$3.1M	\$2.2M	
		(prelim. est.)	(prelim. est.)	(prelim. est.)	
Phase 3	New Rates	\$4.48M	\$3.56M	\$2.57M	

#### Recommended Rate Changes:

- Reduce to 4 tiers from current 6 tiers
- Significantly increase the rate differentials between lower and higher tiers
- Implement gradually, in 3 phases over next 12 months