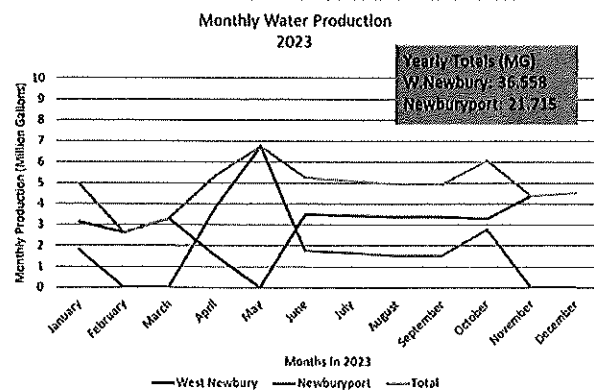
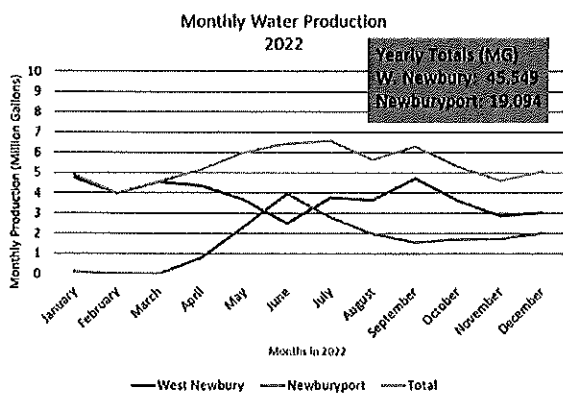


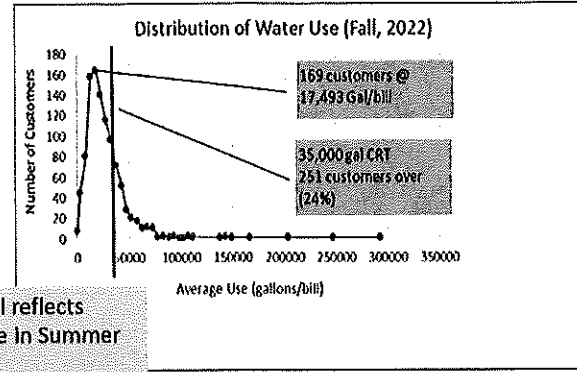
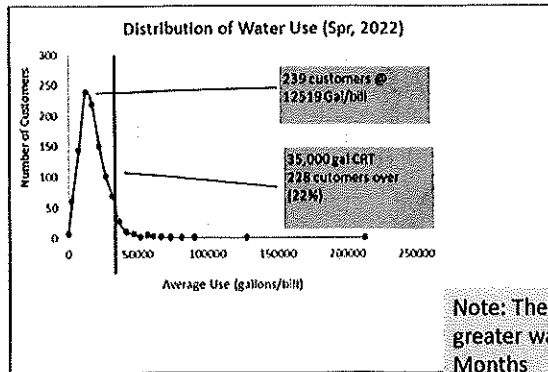
Summary of Water Use and Water Rates

West Newbury Board of Water Commissioners
 Water Rates Hearing
 Annex Auditorium
 March 21, 2024
 6:00 pm

2022 and 2023 West Newbury Production



Customer Use Distribution (2022 data)

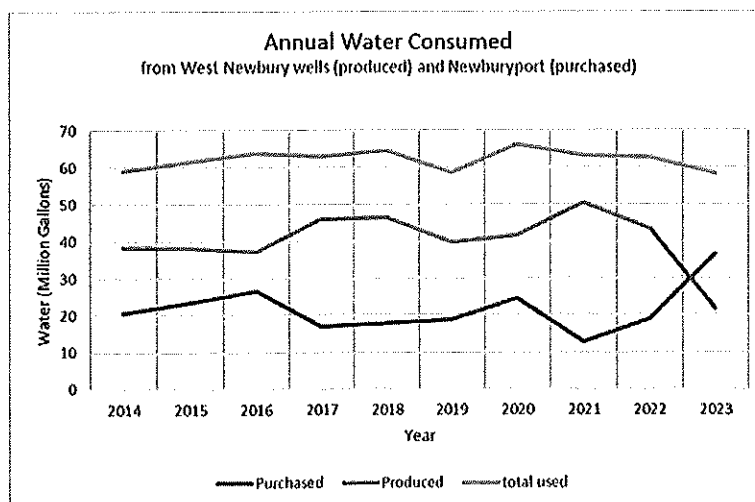


Note: The Fall Bill reflects greater water use in Summer Months

There are 1061 water customers served by the Water Department.
 The average customer (top of usage curves) used 30,012 gallons in 2022
 Total Water used over 35,000/bill (Spr and Fall) in 2022: 5,950,000 gal
 Total Water Used in 2022: 48,553,000 gallons

Percent of total water beyond Conservation Rate Threshold (CRT) in 2022: 12.26%
 Percent of total water under conservation Rate Threshold (CRT) in 2022: 87.74%

Water Source (Average of 32%/yr from N'Port)



10-year average annual volume purchased: 21.7MG

7-year average annual payment: \$158,000

Water Department Revenues Summary

Revenues are set to meet and/or exceed expenses given the uncertainty of demand, water purchase cost and unforeseen system repairs.

Sources of Revenue include:

- Water User Charges (>90% of total revenue)
 - Consumer Base Charge (\$70.00/bill)
 - Consumer Base Rate (currently \$14.43/1000 gallons)
 - Consumer Conservation Rate (currently \$17.48/1000 gallons)
- "Other" Revenue (< 10% of total revenue)

Current Water Rates have not changed since 2019

The 2025 projected budget is \$1,250,014.

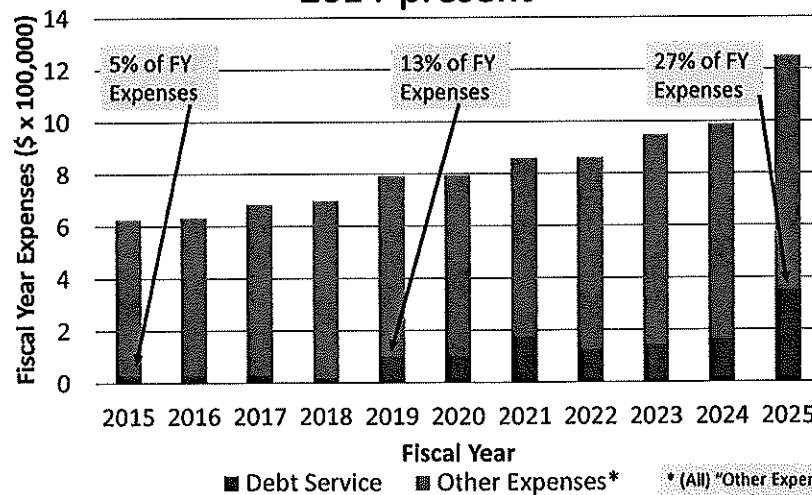
This is an increase of 26.5% from 2024 budget (\$987,171).

Reasons for budget increase:

- 111% increase in debt service (\$353,000 from \$167,913)
- Increase in projected Newburyport water purchase (\$150,000 from \$110,000)
- Increase in Retirement/Insurance premiums for staff

NOTE: to continue to provide current services, future capital projects are required, which will affect debt service in the future.

Annual Water Dept. Expenses 2014-present



* (All) "Other Expenses" include: Salaries, Water Purchase, Insurance, Facilities Materials/Supplies/Equipment, Contractors, etc. (see Budget Line Items)

Conservation Rate Explained

- The Conservation Rate applies for consumption over 35,000 gallons per bill.
- The Conservation Rate is intended to incentivize conservation of water use (mostly summer irrigation)
- The Commonwealth of Massachusetts recommends water use at 65 gal/person/day (this equates to 33,215 gal/bill for West Newbury residents)
- Commonwealth of Massachusetts guidance recommends a Conservation Rate of 1.5-2x the Base Rate
- Currently, West Newbury's Conservation Rate is 1.2x the Base Rate (\$17.48/1000gallons).
- **The proposed new Conservation Rate of 1.67x the Base Rate (\$27.48/1000 gallons)**

Base Rate and Base Charge Explained

- The Base Rate applies to all water consumption under 35,000 gallons/bill.
- >75% of West Newbury consumers use <35,000 gallons/bill
- The current Base Rate is \$14.43/1000 gallons.
- **The proposed Base Rate is \$16.43/1000 gallons**
- The Base Charge applies to all West Newbury Consumers.
- The current Base Charge is \$70.00/bill
- **The proposed Base Charge is \$70.00/bill (unchanged)**

2024-25 Rates Options								
\$1,250,014 Budget								
60MGY sold: 16.2MG @ \$9.25/1000gal, 43.8MG Produced								
Based on 2022, 12% of water (7.2MG) used at over Conservation Rate Threshold (CRT) of 35,000gal								
Base Charge (BC): \$70.00/bill x 2 Bills/yr								
1081 Customers								
$\$1,250,014 = (1081 \times \$140) + (\$BR \times 62800000/1000) + (\$CR \times 7200000/1000)$								
Scenario: 60 MG sold in 2025								
Conservation Rate (CR) to Base Rate (BR) Ratio (i.e., CR/BR)	BR (\$)	CR (\$)	BC Revenue (\$)	BR Revenue (\$)	CR Revenue (\$)	Total Water Customer Revenue (\$) (BR+CR+BC)	TOTAL Water Dept Revenue (\$) (including \$117,000 of "Other" Revenue)	Surplus/(Deficit) (\$)
CR = 2BR	16.39	32.78	148540	865392	236016	1249948	1366948	116934
CR = 1.5BR	17.33	26.00	148540	915024	187200	1250764	1366948	116934
CR = 1.21BR	17.91	21.67	148540	945648	156024	1250212	1367212	117198
Hybrid	16.43	27.48	148540	867504	197856	1213900	1330900	80886

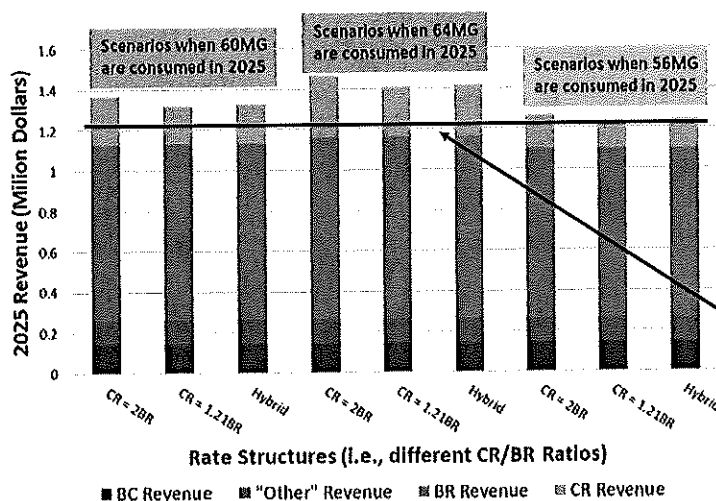
*The Current: Base Rate (\$14.43/1000 gal; Conservation Rate (\$17.48/1000gal; and Base Charge (\$70.00/bill) have not changed since 2019.

- The current BR/CR ratio is 1.21
- A "typical" CR/BR ratio is 1.5-2
- The proposed Hybrid CR/BR ratio is 1.67, which represents a \$2.00 BR increase and \$10.00 CR increase to current rates.

*Water Rates must be set to provide revenue that exceeds projected 2025 expenses.

*Any budget surplus provides resources for future necessary capital projects

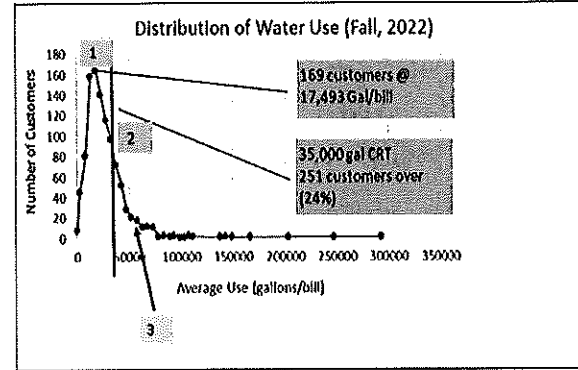
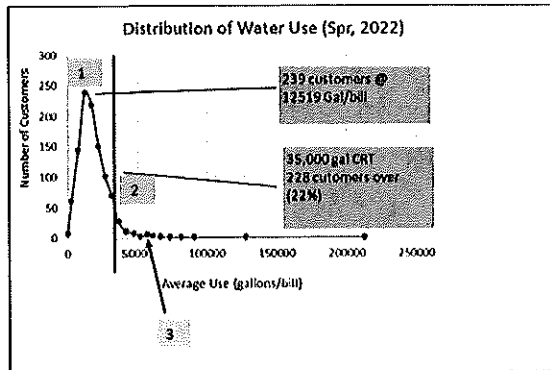
2025 Water Revenue Scenarios Based on Different Rate Structures



The proposed Base Rate Increase of \$2.00/1000gal and Conservation Rate Increase of \$10.00/1000gal will provide revenue to meet expenses and provide a modest surplus under possible anticipated water demand scenarios

The blue line represents the FY2025 Budget Threshold, \$1.25M

Effect of Rate Changes on Customer Bills



Customer 1: Uses the Town Average (gallons/bill)
 Customer 2: Uses 35,000 gallons/bill (70,000/yr)
 Customer 3: Uses 60,000 gallons/bill (120,000/yr)

Examples of Customer Bill Amount Changes for Different Water Use Based on 2025 Rate Changes			Customer 1 Average Customer (top of Bell Curve)			Customer 2 Customer at Conservation Rate Threshold (35000/bill)			Customer 3 Customer using 60,000 gal/bill (25,000gal over CR each bill)		
			Spring	Fall	Total (yr)	Spring	Fall	Total (yr)	Spring	Fall	Total (yr)
	Water Use (gallons)		12519	17493	30012	35000	35000	70000	60000	60000	120000
	BR	CR	Customer Bill (\$)			Customer Bill (\$)			Customer Bill (\$)		
2024 Water Rate	14.43	17.48	250.65	322.42	573.07	575.05	575.05	1150.10	1012.05	1012.05	2024.10
2025 Water Rate (If CR/BR Ratio unchanged)	17.91	21.67	294.22	383.30	677.51	696.85	696.85	1393.70	1238.60	1238.60	2477.20
2025 Water Rates (at proposed CR/BR ratio of 1.87)	16.43	27.48	275.69	357.41	633.10	645.05	645.05	1290.10	1332.05	1332.05	2664.10
			10.5% increase			12.2% increase					

Summary

- ***Water Rates must increase for the first time since 2019*** to meet expense increases due primarily to a 111% increase in debt services.
- The Debt Service increase is due to the expense of necessary infrastructure replacement/improvements.
- Approximately 1/3 of the water consumed in West Newbury is purchased from Newburyport.
- Water demand varies annually and demand increases significantly in the Summer months (reflected in the Fall Bill).
- The Conservation Rate will increase in an effort to decrease summer water use and minimize the increase to the Base Rate.
- The Base Water Rate increase of \$2.00/1000 gallons will increase the cost of water to the average consumer by \$60.00/yr (10.5% increase).
- The Base Charge will remain unchanged (\$70.00/bill)

West Newbury Water Department

Proposed Budget FY 2025, ending June 30, 2025

	FY 2025 Hybrid Budget	FY 2024 Budget
Revenues		
Water User Charges	\$ 1,213,900	\$ 890,000
Water Miscellaneous Revenue	\$ 85,000	\$ 75,000
Water Earnings on Investment	\$ 17,500	\$ 15,171
Water System Development	\$ 9,500	\$ 6,000
Water Interest & Demands	\$ 5,000	\$ 4,000
	\$ 117,000	\$ 100,171
Transfer In		
Total Income	\$ 1,330,900	\$ 990,171
Expenses		FY 2024 Budget
Salaries Wages	\$ 321,688	\$ 318,848
Facilities	\$ 59,000	\$ 59,000
Office Expense	\$ 10,600	\$ 9,500
Dues & Memberships	\$ 4,800	\$ 3,300
Outside Services	\$ 29,070	\$ 29,070
Computer Expense	\$ 7,250	\$ 7,250
Vehicle/Equip. Rental	\$ 9,000	\$ 9,000
Materials/Supplies/Contractor	\$ 93,000	\$ 93,000
DEP Safe Water	\$ 1,000	\$ 1,000
Legal	\$ -	\$ 2,000
Supt. Mileage Stipend	\$ 2,400	\$ 2,000
Extraordinary & Unforeseen	\$ 20,000	\$ 20,000
Water Purchase (NBPT)	\$ 150,000	\$ 110,000
	\$ 386,120	\$ 345,120
Debt Service	\$ 353,033	\$ 167,913
Retirement Expense	\$ 76,533	\$ 47,407
Insurances	\$ 54,200	\$ 52,191
Indirect Costs	\$ 58,440	\$ 56,192
	\$ 542,206	\$ 323,703
Total Expenses	\$ 1,250,014	\$ 987,671
Surplus Generated	\$ 80,886	\$ 2,500