



MADISON
NEW JERSEY



Water Rate Discussion

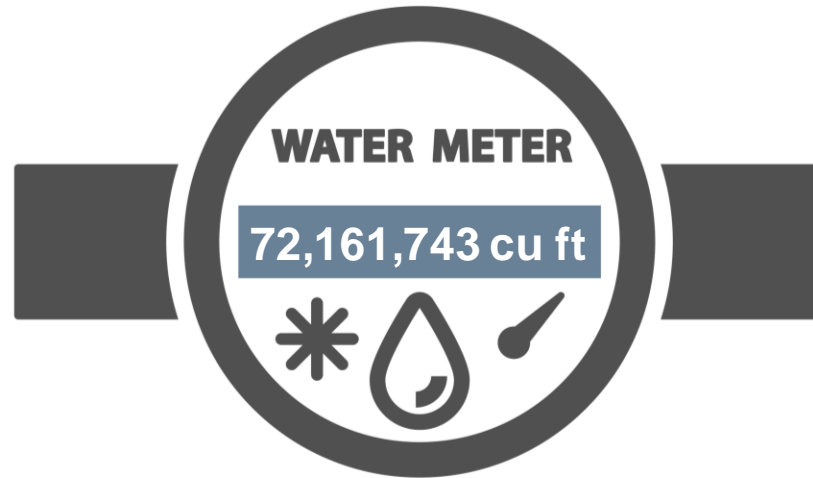
November 14, 2022

Madison Water Department

- The Madison Water Department is a public community water system consisting of 5 wells, 0 wells under the influence of surface water, and 0 surface water intakes.
- This system's source water comes from the Buried Valley Aquifer System.
- The capacity of the wells ranges from 1.1 million gallons per day (MGD) to 1.9 MGD.
 - The wells discharge into a system of underground piping and two elevated water tanks. The Madison Avenue tank holds 500,000 gallons and the Midwood Terrace tank holds 750,000 gallons.

Water Use In Madison

In 2021, we billed for



Which brought in \$2,428,443

2023 Rates

Usage	Rate Per Cubic Foot
0-1,000	0.0367
1,001-3,000	0.0386
3,001 and up	0.0422





How much does one
5-gallon jug of water
currently cost a Madison
customer?



How much does one
5-gallon jug of water
currently cost a Madison
customer?
= 2 cents

Compare that to a bottle of water at the store



We have multiple residents with quarterly summer water bills over \$2,000.00.

Over the 90 days, they consume...

A decorative border of blue water jugs surrounds the central text. The jugs are arranged in a grid-like pattern, with a horizontal row at the top, a vertical column on the left, a vertical column on the right, and a horizontal row at the bottom. Each jug is a standard 5-gallon size with a blue cap and a handle.

Over 77,000 5-Gallon Jugs

That is 855 jugs of water a day.

The highest consumer uses 1,645 jugs of water a day.

Strain on the System and the Water Supply

- On the hottest days of the year, we are pumping 3.2 million gallons a day.
 - On these days, all wells are pumping, sometimes continuously. It is difficult for our system to maintain proper levels of water in the tanks (impacts water pressure).
- At times, our water consumption at 4am exceeds our water consumption at 7am.
- 50 years ago, water bubbled up out of the ground at our wells (think Jed Clampett).
 - Now, the water level is 60 feet or deeper.
 - The water level in the aquifer is dropping.



Statistics on Residential Usage

Residential Water Usage Breakdown by Cubic Foot (summer consumption)	
0-10,000	4,323 customers
10,001-20,000	328 customers
20,001-30,000	48 customers
30,001 +	26 customers

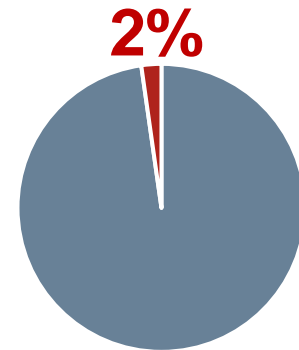
- 91.4% of the residential customers consume under 10,000 cubic feet in a summer quarter.
- Just 1.5% (74 of the 4,725) of the residential customers consume over 20,000 cubic feet of water in a summer quarter.

Proposed Rate Increase

Current 2023 Rate Structure	
Usage	Rate Per Cubic Foot
0-1,000	0.0367
1,001-3,000	0.0386
3,001 and up	0.0422

Proposed New 2023 Rate Structure	
Usage	Rate Per Cubic Foot
0-1,000	0.0367
1,001-3,000	0.0386
3,001-10,000	0.0422
10,001 and up	0.06

- Adding higher rate for consumption over 10,000 would generate an additional \$75-85k in revenue if usage continues at the same level. But our goal is not to increase revenue, it's to reduce the consumption of water and strain on our system.
- This change would impact about 420 bills (2%) out of the 19,000 residential bills we send annually.
- Rate change could be implemented January 1, 2023.



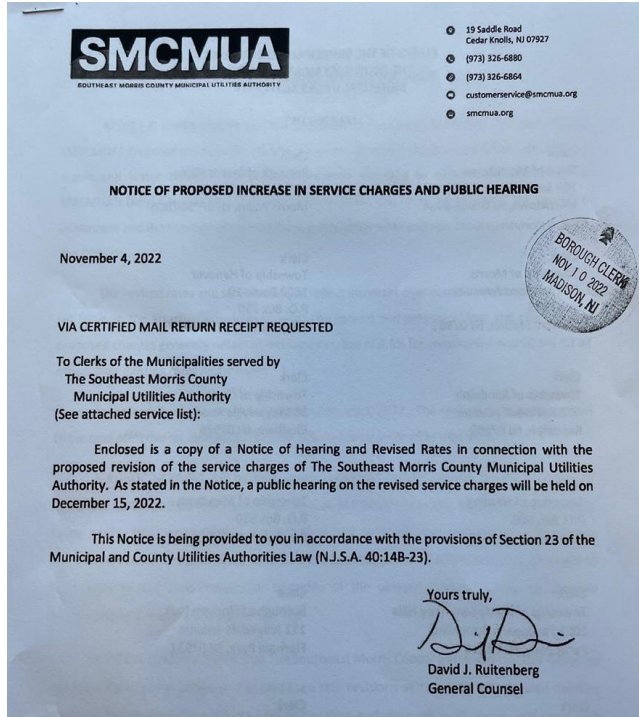
Our Water Utility Rates Compared to Neighbors

All rate tables are converted to cubic feet which is the unit of measure used by Madison

Water Provider	Usage	Rate per cubic foot	Bill at 5,000	Bill at 15,000	Bill at 25,000
Borough of Madison <i>Current Rates</i>	0-1,000	0.0367	\$198.44	\$620.30	\$1,042.30
	1,001-3,000	0.0386			
	3,001 and up	0.0422			
Borough of Madison <i>Proposed Increase</i>	0-1,000	0.0367	\$198.44	\$709.30 (+\$89)	\$1,309.3 (+267)
	1,001-3,000	0.0386			
	3,001-10,000	0.0422			
Randolph	0-3,342	0.033	\$206.45	\$1,077.52	\$2,007.52
	3,342-6,684	0.058			
	6,684 and up	0.093			
Denville	0-802	\$30	\$218.91	\$668.91	\$1,118.91
	802 and up	0.045			
Chatham	Flat Rate	0.041	\$205.00	\$615.00	\$1,025.00
NJ American Water	Flat Rate	0.053	\$265.00	\$795.00	\$1,325.00
SMCMUA	0-3,000	0.04	\$240.00	\$1,012.00	\$1,812.00
	3,001-6,000	0.06			
	6,100 and up	0.08			


Administration is proposing that we increase the residential water rate for consumption over 10,000 cubic feet.

Just Announced: SMCMUA is proposing a 10.5% Increase



CONSUMPTION CHARGE

**RESIDENTIAL RATE
(BILLED QUARTERLY)**



<u>Quantity Used</u> <u>Quarterly (CCF)</u>	<u>EXISTING</u>		<u>PROPOSED</u>	
	RATE (per 100 Cubic Feet)			
	<u>EXISTING</u>	<u>PROPOSED</u>	<u>EXISTING</u>	<u>PROPOSED</u>
Conservation Rate	0-30	0-30	\$4.002	\$4.423
High Usage Rate	31-60	31-60	\$6.002	\$6.632
Incentive Rate	61 & Over	61 & Over	\$8.004	\$8.844

Impact of Rate Change on Top Residential Users

Quarterly Consumption for the Top 20 Residential Customers				
Customer	Usage CF	Old Bill	New Bill	Difference
1	99,000	\$4,165	\$5,749	\$1,584
2	72,000	\$3,026	\$4,129	\$1,103
3	69,810	\$2,933	\$3,998	\$1,065
4	63,624	\$2,672	\$3,627	\$955
5	51,900	\$2,177	\$2,923	\$746
6	50,000	\$2,097	\$2,809	\$712
7	50,000	\$2,097	\$2,809	\$712
8	42,000	\$1,760	\$2,329	\$569
9	41,312	\$1,731	\$2,288	\$557
10	38,400	\$1,608	\$2,113	\$505
11	38,100	\$1,595	\$2,095	\$500
12	38,000	\$1,591	\$2,089	\$498
13	37,761	\$1,581	\$2,075	\$494
14	37,100	\$1,553	\$2,035	\$482
15	36,003	\$1,507	\$1,969	\$462
16	33,100	\$1,384	\$1,795	\$411
17	32,930	\$1,377	\$1,785	\$408
18	32,900	\$1,376	\$1,783	\$407
19	32,000	\$1,338	\$1,729	\$391
20	32,000	\$1,338	\$1,729	\$391

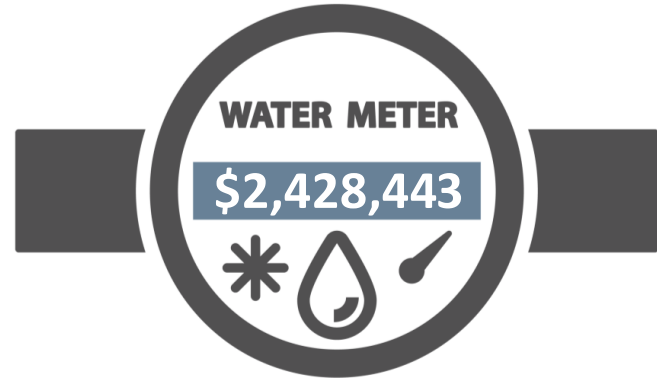
Customer 1 used over 8,200 gallons of water on average **every day** for the entire quarter.

That is 5.7 gallons of water every minute of every day for 90 days.

Residential Water Usage Breakdown by Cubic Foot (summer consumption)	
0-10,000	4,323
10,001-20,000	328
20,001-30,000	48
30,001 +	26

Water Use In Madison

As a reminder, in 2021, we billed for **72,161,743 cubic feet**, which generated revenue of:



For comparison, with the same **72,161,743 cubic feet**, NJ American Water & Chatham Borough generated revenue of:

New Jersey American Water

\$3.8 Million

Chatham Borough

\$2.9 Million

Questions?