



Water and Wastewater *Town Council Meeting* Rate Study *September 20th, 2022*



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

Presentation Overview

- Review current water and wastewater rates, current state of each enterprise
- Outline projected costs
- Address proposed rate increases
 - *Ad-Hoc Committee recommendation*
- Address proposed structure changes
 - *Meet Proposition 218 requirements*
 - *Ensure customer equitability*
- Rate Adoption Timeline
 - *Meeting Goal: receive approval to mail Prop 218 notices (Maximum Rates)*



Water System Overview



- Water system is a self-supporting enterprise
 - *Revenues must be sufficient to cover operating expenses*
- Water is purchased from the Veterans Home
 - *The cost of water is increasing*
- The water enterprise currently holds no debt
- 5-Year Capital Improvement Plan ~\$6 Million
- 2021/22 Ending Fund Balance
 - *Operating Reserves: \$435,000*
 - *Capital Reserves: \$497,000*
 - *Restricted Drought Water Reserve Bank: \$984,000*
- Rates were last increased January 2022



Current Water Rates

Fixed Charges

Monthly Fixed Charges

- *Meter Service Charge*
 - Varies by meter size
 - 70% Surcharge Outside Town
- *System Replacement Fee*
 - Recovers a portion of capital expenses
 - 70% Surcharge Outside Town

Current Meter Service Charge		
Meter Size	\$/Meter Inside Town	\$/Meter Outside Town
3/4"	\$55.15	\$93.75
1"	\$93.76	\$159.39
1-1/2"	\$182.02	\$309.44
2"	\$292.35	\$496.99
3"	\$551.60	\$937.71
4"	\$921.17	\$1,565.99
6"	\$1,836.82	\$3,122.60
8"	\$2,940.03	\$4,998.05
Current Water System Replacement Fee		
Meter Size	\$/Meter Inside Town	\$/Meter Outside Town
3/4"	\$8.78	\$14.93
1"	\$14.94	\$25.39
1.5"	\$28.99	\$49.28
2"	\$46.55	\$79.14
3"	\$87.84	\$149.33
4"	\$146.71	\$249.40
6"	\$292.53	\$497.30
8"	\$468.21	\$795.96





Current Water Rates Usage Charges

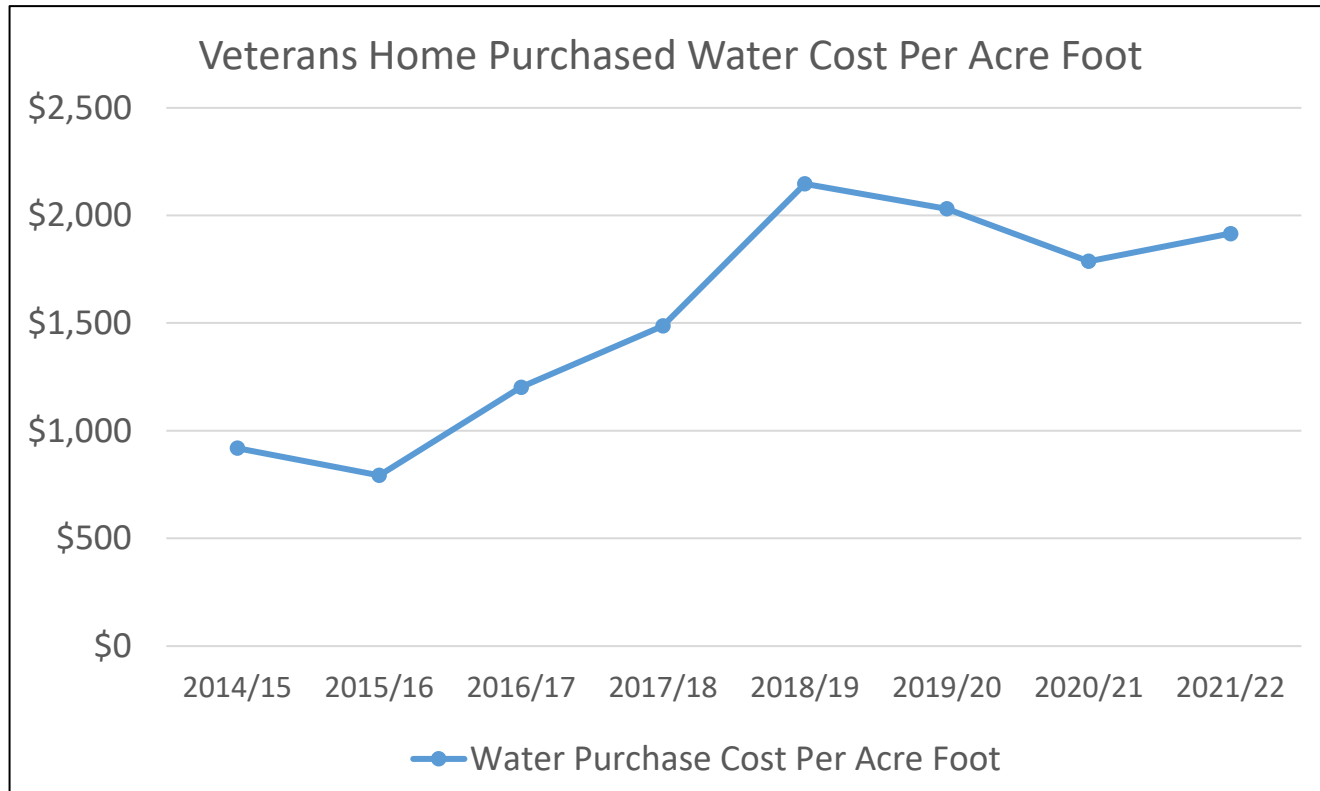
- Monthly Usage Charges

- *Single Family Residential Users – 2 Tier Structure*
- *All Other Users – Flat Rate per 1000 gallons*

Current Usage Charge		
User Class	Usage Tier	\$/1000 gallons
Single Family		
	Tier 1	0-4 1,000 gallons \$4.15
	Tier 2	5+ 1,000 gallons \$4.76
Multi Family	All Use	\$4.62
Non-Residential	All Use	\$4.62



The Cost of Water is Increasing



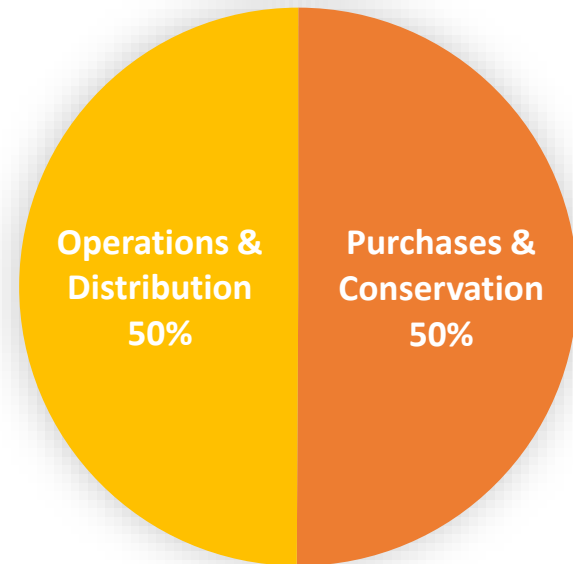
*The Town purchases water from the Veterans Home
Prices can be volatile and are steadily increasing
Costs increased at an 11% average annual growth rate since
2014/15*





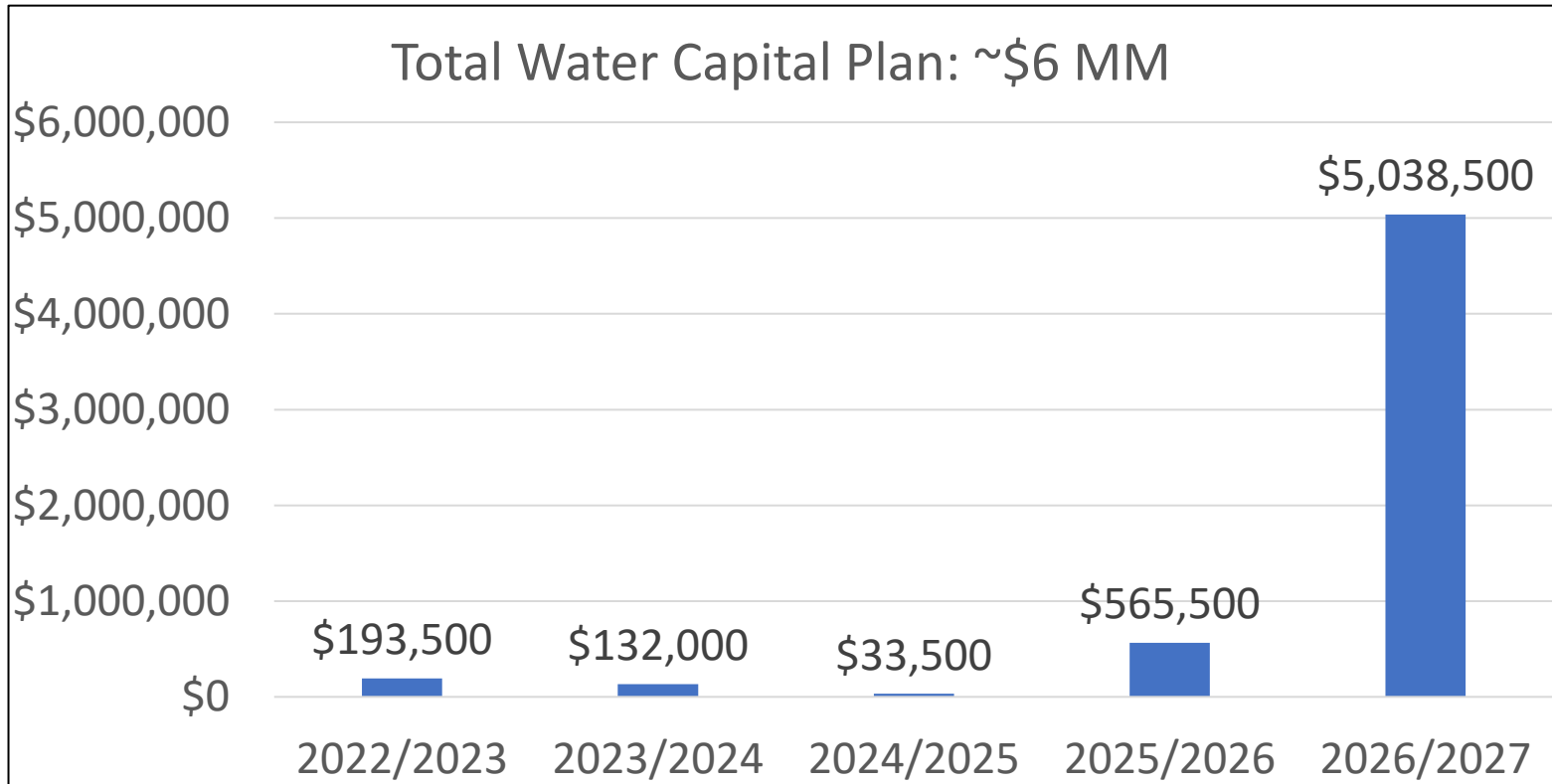
2022/23 Water Operations Budget

- Total: \$1.6 million excluding depreciation
- Largest Expense: Water Purchases
 - 97% *Veterans Home*
 - 3% *City of Napa emergency supply*
- Conservation Program
 - \$50,000 (*portion of personnel, supplies*)
 - *Can be used to cost-justify second tier*
- VH purchase cost estimated to increase 10% per year.
- Total expenses projected to increase an average of 7.6% per year.





Five-Year Water Capital Plan



Town is pursuing grants and low interest loans for ~\$5 MM





Five-Year Water Capital Plan

Project	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	Total
Hydrant Repair and Replacement		\$35,000		\$38,500		\$73,500
Upgrade SCADA System Emergency Well to Operational Well	\$140,000					\$140,000
1MG Well Water Tank/ Pump Station and Transmission Main; Design, Permitting and Construction				\$250,000	\$4,800,000	\$5,050,000
Water System Inter tie projects		\$65,000				\$65,000
Relocation of Harvest Ct Fire Hydrant	\$15,000					\$15,000
Clay Valve Rebuild at Finnell Rd and Yount, and Finnell Rd and Yountville XRd	\$8,000					\$8,000
Water Meter Replacement Program	\$30,500	\$32,000	\$33,500	\$35,500	\$37,500	\$169,000
Main and Service Lateral Replacement Program				\$191,500	\$201,000	\$392,500
Hydrant & Main Flushing with No- Des				\$50,000		\$50,000
TOTAL	\$193,500	\$132,000	\$33,500	\$565,500	\$5,038,500	\$5,963,000





Proposed Water Rate Increase

- Proposed increases are sufficient to cover all capital projects and maintain adequate reserves
- BWA recommends increasing the System Replacement Fee in Year 1 to adequately cover capital expenditures without the need to transfer operating reserve funds.
 - *Overall Rate Increase (excluding the system replacement fee)*

<u>1/1/2023</u>	<u>1/1/2024</u>	<u>1/1/2025</u>	<u>1/1/2026</u>	<u>1/1/2027</u>
11%	11%	11%	11%	11%

- *Increases the system replacement fee in Year 1 by a fixed \$ amount and 11% each year over the next 4 years.*
- *All other rates would increase 11% each year over 5 years.*





Proposed Monthly Fixed Rates*

Effective Date	Current	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Monthly Fixed Charges**						
Meter Size	Current	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
3/4"	\$55.15	\$61.22	\$67.95	\$75.43	\$83.73	\$92.94
1"	\$93.76	\$104.07	\$115.52	\$128.23	\$142.33	\$157.99
1-1/2"	\$182.02	\$202.02	\$224.25	\$248.91	\$276.29	\$306.69
2"	\$292.35	\$324.46	\$360.15	\$399.77	\$443.75	\$492.56
3"	\$551.60	\$612.20	\$679.54	\$754.29	\$837.26	\$929.36
4"	\$921.17	\$1,022.37	\$1,134.83	\$1,259.66	\$1,398.22	\$1,552.02
6"	\$1,836.82	\$2,038.61	\$2,262.86	\$2,511.77	\$2,788.07	\$3,094.75
8"	\$2,940.03	\$3,263.00	\$3,621.93	\$4,020.34	\$4,462.58	\$4,953.47

***Private fire meters pay 20% of the monthly fixed charge*

Monthly Water System Replacement Fee						
Meter Size	Current	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
3/4"	\$8.78	\$14.36	\$15.94	\$17.70	\$19.64	\$21.80
1"	\$14.94	\$24.41	\$27.10	\$30.08	\$33.39	\$37.06
1-1/2"	\$28.99	\$47.39	\$52.61	\$58.39	\$64.82	\$71.95
2"	\$46.55	\$76.12	\$84.49	\$93.78	\$104.10	\$115.55
3"	\$87.84	\$143.62	\$159.42	\$176.95	\$196.42	\$218.02
4"	\$146.71	\$239.84	\$266.22	\$295.51	\$328.01	\$364.10
6"	\$292.53	\$478.25	\$530.85	\$589.25	\$654.06	\$726.01
8"	\$468.21	\$765.48	\$849.68	\$943.15	\$1,046.90	\$1,162.05

**Customers outside of town subject to a 70% surcharge*



Proposed Volumetric Rates

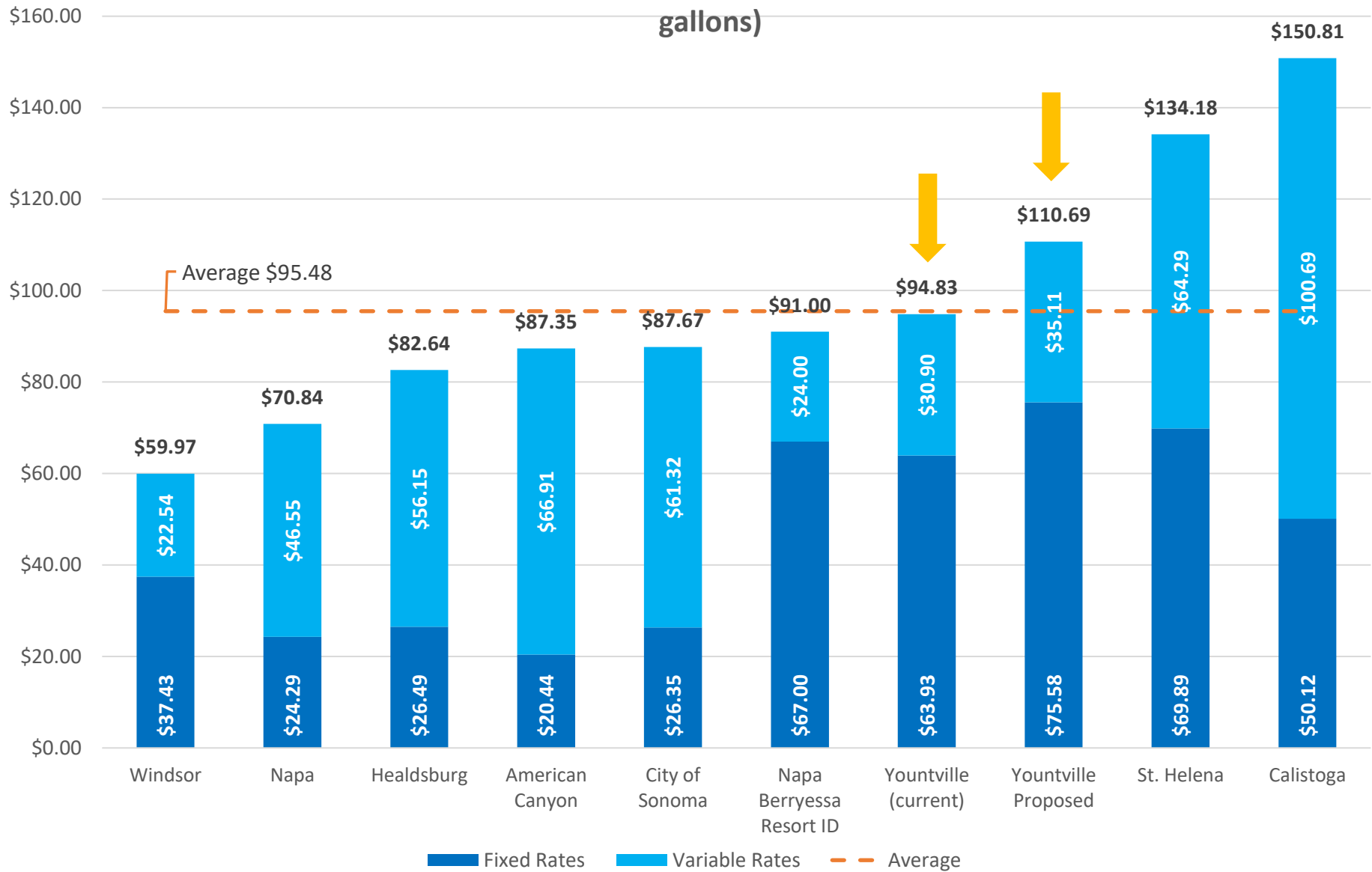
Customer Class	Current	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Single Family Use						
Tier 1 (0-4 1,000 gallons)	\$4.15	\$4.64	\$5.16	\$5.72	\$6.35	\$7.05
Tier 2 (5+ 1,000 gallons)*	\$4.76	\$5.51	\$6.02	\$6.59	\$7.22	\$7.92
All Other Use**	\$4.62	\$5.01	\$5.52	\$6.08	\$6.71	\$7.41
*Proposed rates include a ~\$0.86 tier 2 conservation charge per unit						
**Proposed rates include a ~\$0.36 conservation charge per unit						



Proposed Bill Impacts

Monthly Bill Impact for Single Family Customers Within Town							
	1,000 gallons usage	Current	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
	4						
Low User		\$80.54	\$94.16	\$104.52	\$116.01	\$128.78	\$142.94
<i>\$ Increase</i>			<i>\$13.61</i>	<i>\$10.36</i>	<i>\$11.50</i>	<i>\$12.76</i>	<i>\$14.17</i>
	7						
Average User		\$94.83	\$110.69	\$122.58	\$135.78	\$150.43	\$166.69
<i>\$ Increase</i>			<i>\$15.86</i>	<i>\$11.89</i>	<i>\$13.20</i>	<i>\$14.65</i>	<i>\$16.26</i>
	10						
High User		\$109.12	\$127.22	\$140.64	\$155.54	\$172.08	\$190.43
<i>\$ Increase</i>			<i>\$18.10</i>	<i>\$13.42</i>	<i>\$14.90</i>	<i>\$16.54</i>	<i>\$18.36</i>

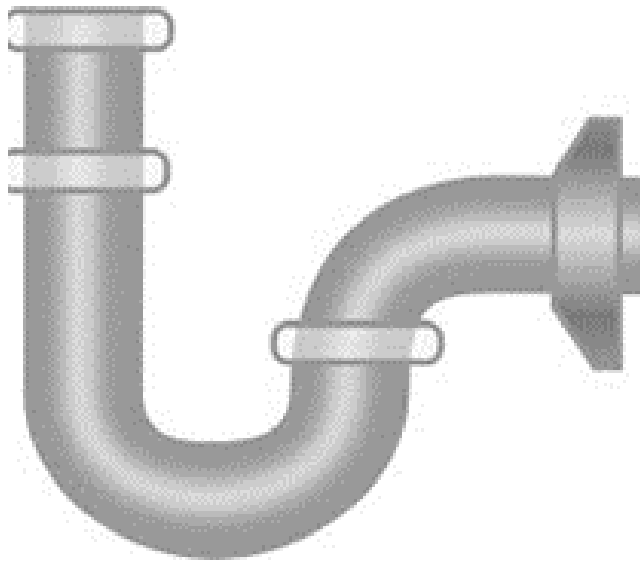
Survey: Single Family Residential Monthly Water Rates as of July 1, 2022 (7,000 gallons)



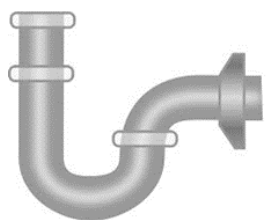
The Town's rate is slightly below the area average



Wastewater System Overview



- Sewer system is a self-supporting enterprise
 - *Revenues must be sufficient to cover operating expenses*
- Veterans Home contributes revenue based on usage and shared capital costs
- 2021/22 Fund Balance
 - *Operating Fund: \$1.3 MM*
 - *Capital: \$2 MM*
- 5-Year Capital Improvement Plan \$4.1 million
- Rates were last increased January 2022



Current Wastewater Rates

Fixed Charges

- Monthly Fixed Charges

- *Residential users – flat rate per dwelling unit*
- *Commercial users – rate based on meter size*

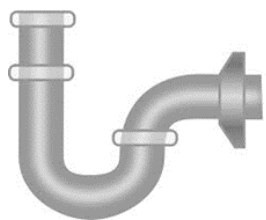
Current Residential Monthly Sewer Service Charge

Classification	Per Dwelling Unit
Single Family	\$62.07
Multi-Family	\$40.92
Mobile Homes	\$40.92

Current Non-Residential Sewer Rates

Monthly Sewer Service Charge

Meter Size	All Non-Res Accounts
3/4"	\$88.22
1"	\$149.98
1.5"	\$291.12
2"	\$467.55
3"	\$882.18
4"	\$1,473.23
6"	\$2,937.65
8"	\$4,702.00



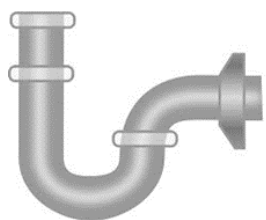
Current Wastewater Rates

Fixed Charges (cont'd)

- Monthly Fixed Charges

- *System Replacement Fee*
– *flat rate by meter size*
 - Recovers a portion of capital expenses

Monthly System Replacement Fee	
<u>Meter Size</u>	<u>Current</u>
3/4"	\$16.92
1"	\$28.76
1.5"	\$55.83
2"	\$89.67
3"	\$169.18
4"	\$282.54
6"	\$563.39
8"	\$901.75

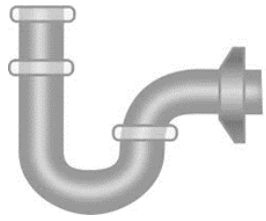


Current Wastewater Rates Usage Charges

- Monthly Usage Charges Non Residential Accounts Only

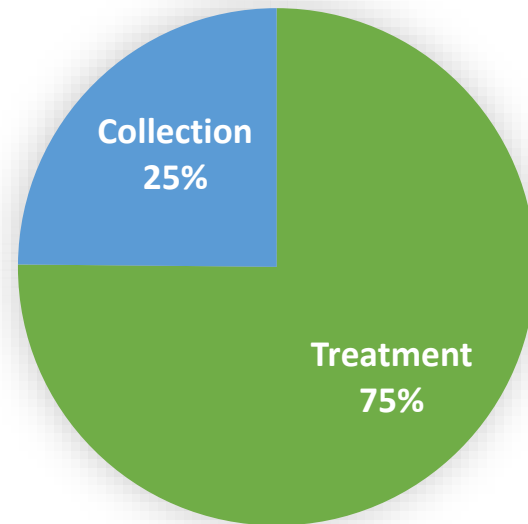
- *Low Strength: Church, Schools, Group Homes, Town Use, Office, Barber Shop*
- *Medium Strength: Hotels/Inns, Multi-Commercial*
- *High Strength: Restaurants, Tasting Rooms*

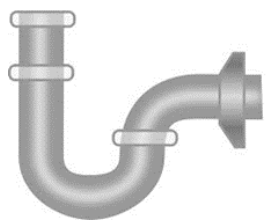
Volumetric Strength Charges	
<u>Non-Residential Customer Class</u>	<u>\$/kgal</u>
Low Strength	\$5.02
Medium Strength	\$7.08
High Strength	\$18.41



2022/23 Sewer Operations Budget

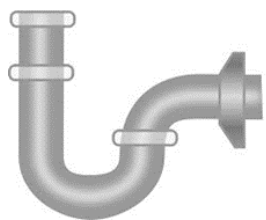
- Total: \$1.9 million excluding depreciation/transfers
- Largest Expense: Sewer Treatment
- Expenses projected to increase an average of 4.8% per year





Wastewater Debt Service Obligations

Issue	2022/23	2023/24	2024/25	2025/26	2026/27
2014 SRF Loan	\$164,661	\$164,661	\$164,661	\$164,661	\$131,331
<u>2013 Madison Yount Project</u>	<u>29,990</u>	<u>30,043</u>	<u>30,088</u>	<u>29,697</u>	<u>30,158</u>
Total Wastewater Enterprise Debt Service	\$194,651	\$194,704	\$194,748	\$194,358	\$161,489



5-Year Wastewater Capital Plan



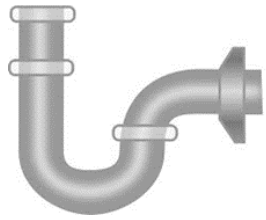
Town is pursuing low interest loans for ~\$803,000



5-Year Wastewater Capital Plan

Project	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	Total
Joint Treatment Plant Office Modernization Project	\$803,000					\$803,000
SCADA Controls	\$50,000					\$50,000
Rebuild Sludge Heater & Add Sludge Mixing System		\$250,000				\$250,000
Clean & Inspect Primary/Secondary Digester	\$35,000					\$35,000
Assess & Replace Trickling Filter Media				\$40,000	\$300,000	\$340,000
Design & Construct Headworks Improvements			\$150,000			\$150,000
Sludge Handling/Drying/Disposal Improvements				\$200,000		\$200,000
Second Fuzzy Filter Instillation			\$100,000			\$100,000
Paint Wastewater Facilities, Structures, and Equipment				\$100,000		\$100,000
Safety net and safety hinged doors for hand well access	\$20,000					\$20,000
Pump Station Assessment and Capacity Evaluation	\$40,000					\$40,000
WWTP Basin Assessment, Maintenance and Repair	\$300,000					\$300,000
Recycled Water Transmission Main to Veterans Park		\$10,000	\$60,000			\$70,000
Recycled Water Truck Filling Station at South Parking Lot		\$50,000				\$50,000
Headworks Grit Screw Chamber Improvement		\$25,000				\$25,000
Pond Site Fencing, Grading and Drainage Improvements		\$25,000	\$25,000			\$50,000
Inflow and Infiltration Reduction Program (A-Line)	\$91,000	\$95,500	\$101,000	\$106,500	\$106,500	\$500,500
Sewer Main Replacement and Repair Program	\$88,500	\$93,000	\$97,500	\$102,500	\$102,500	\$484,000
Plant Equipment Replacement Program	\$81,500	\$86,000	\$90,000	\$94,500	\$94,500	\$446,500
Town Pump Station Equipment Replacement Program	<u>\$13,500</u>	<u>\$14,500</u>	<u>\$15,000</u>	<u>\$16,000</u>	<u>\$16,000</u>	<u>\$75,000</u>
Total	\$1,522,500	\$649,000	\$638,500	\$659,500	\$619,500	\$4,089,000

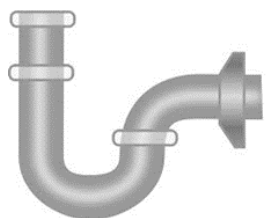




Proposed Wastewater Rate Increases

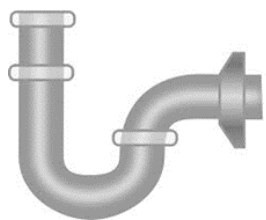
- Proposed increases are sufficient to cover all capital projects, meet debt service coverage requirements and maintain adequate reserves

<u>1/1/2023</u>	<u>1/1/2024</u>	<u>1/1/2025</u>	<u>1/1/2026</u>	<u>1/1/2027</u>
5.4%	5.4%	5.4%	5.9%	5.9%



Proposed Wastewater Fixed Rates

Effective Date	Current	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Residential Sewer Rates - Fixed by Account						
Monthly Sewer Service Charge (\$/unit)						
Classification	Current	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Single Family	\$62.07	\$65.42	\$68.95	\$72.68	\$76.97	\$81.51
Multi-Family	\$40.92	\$43.13	\$45.46	\$47.91	\$50.74	\$53.73
Mobile Homes	\$40.92	\$43.13	\$45.46	\$47.91	\$50.74	\$53.73
Non-Residential Sewer Rates						
Monthly Sewer Service Charge (\$/meter)						
Meter Size	Current	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
3/4"	\$88.22	\$92.98	\$98.01	\$103.30	\$109.39	\$115.85
1"	\$149.98	\$158.08	\$166.62	\$175.61	\$185.97	\$196.95
1.5"	\$291.12	\$306.84	\$323.41	\$340.87	\$360.99	\$382.28
2"	\$467.55	\$492.80	\$519.41	\$547.46	\$579.76	\$613.96
3"	\$882.18	\$929.82	\$980.03	\$1,032.95	\$1,093.89	\$1,158.43
4"	\$1,473.23	\$1,552.78	\$1,636.63	\$1,725.01	\$1,826.79	\$1,934.57
6"	\$2,937.65	\$3,096.28	\$3,263.48	\$3,439.71	\$3,642.65	\$3,857.57
8"	\$4,702.00	\$4,955.91	\$5,223.53	\$5,505.60	\$5,830.43	\$6,174.42
All Accounts						
Monthly Wastewater System Replacement Fee (\$/meter)						
Meter Size	Current	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
3/4"	\$16.92	\$17.83	\$18.80	\$19.81	\$20.98	\$22.22
1"	\$28.76	\$30.31	\$31.95	\$33.68	\$35.66	\$37.77
1.5"	\$55.83	\$58.84	\$62.02	\$65.37	\$69.23	\$73.31
2"	\$89.67	\$94.51	\$99.62	\$105.00	\$111.19	\$117.75
3"	\$169.18	\$178.32	\$187.94	\$198.09	\$209.78	\$222.16
4"	\$282.54	\$297.80	\$313.88	\$330.83	\$350.35	\$371.02
6"	\$563.39	\$593.81	\$625.88	\$659.68	\$698.60	\$739.81
8"	\$901.75	\$950.44	\$1,001.77	\$1,055.86	\$1,118.16	\$1,184.13

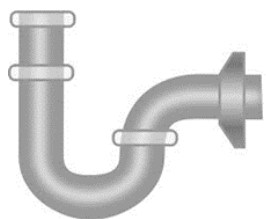


Proposed Wastewater Volume Rates

Non Residential Volume Rates (\$/1,000 gallons)						
Strength Charge	1/1/2022	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Low	\$5.02	\$5.29	\$5.58	\$5.88	\$6.22	\$6.59
Medium	\$7.08	\$7.46	\$7.87	\$8.29	\$8.78	\$9.30
High	\$18.41	\$19.40	\$20.45	\$21.56	\$22.83	\$24.18

- Strength Categories

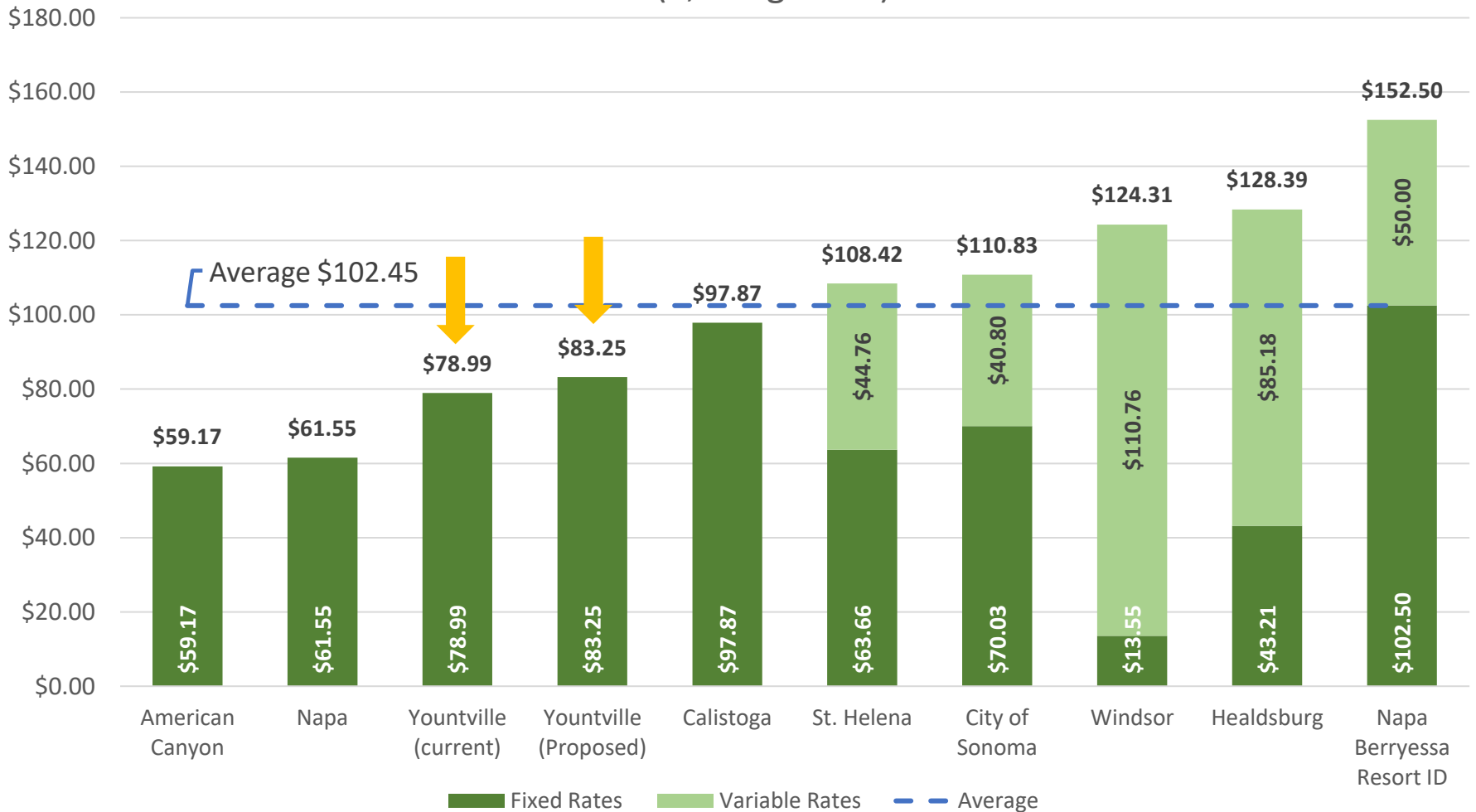
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- *Medium Strength: Hotels/Inns, Multi-Commercial*
- *High Strength: Restaurants, Tasting Rooms*



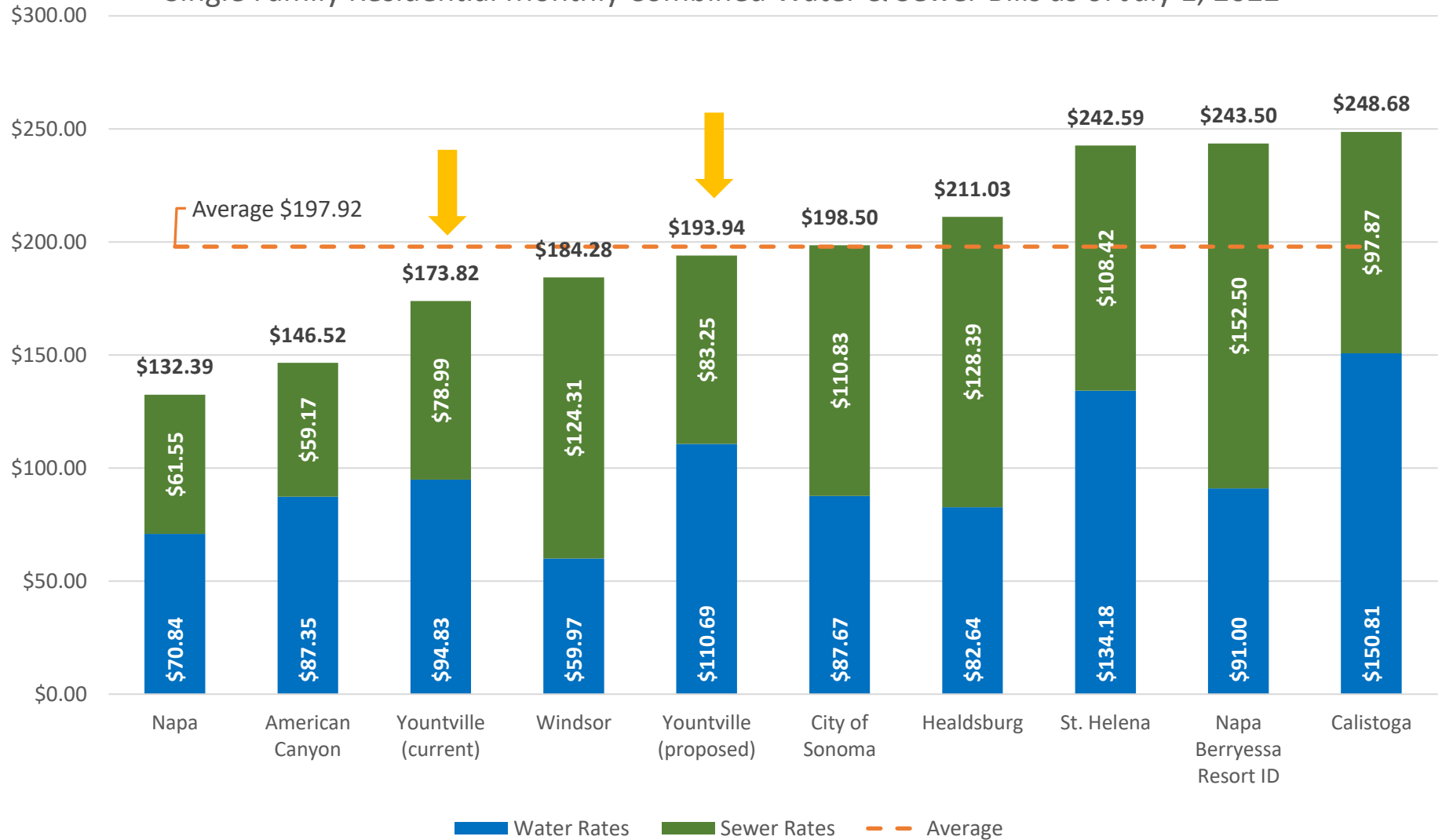
Proposed Monthly Bill Impacts

Single Family Monthly Bill Impact	Current	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Single Family Rate	\$78.99	\$83.25	\$87.75	\$92.49	\$97.95	\$103.73
<i>\$ per Month Increase</i>		\$4.26	\$4.50	\$4.74	\$5.46	\$5.78

Single Family Residence Monthly Wastewater Rates July 1, 2022 (6,000 gallons)



Single Family Residential Monthly Combined Water & Sewer Bills as of July 1, 2022



The Town's proposed combined water and sewer bills would remain below average for the region.



Proposition 218 Procedures

- Mail a notice to all ratepayers outlining proposed rates
 - *Notice Maximum Rates*
- Hold a Public Hearing at least 45 days later to consider proposed rates
 - *Receive public comments and written protests*
 - *If a majority of rate payers submit written protests (one per parcel), rates may not be passed*
 - *If there is no majority protest, rates may be passed by Council resolution*
- If approved, rates would be effective January 1, 2023
 - *Increased January 1 each year thereafter*





Water and Wastewater Rate Study

*Questions &
Comments*



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