



Water and Wastewater *Community Meeting* Rate Study *October 24th, 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
- Address proposed structure changes
 - *Meet Proposition 218 requirements*
 - *Ensure customer equitability*
- Rate Adoption Timeline



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

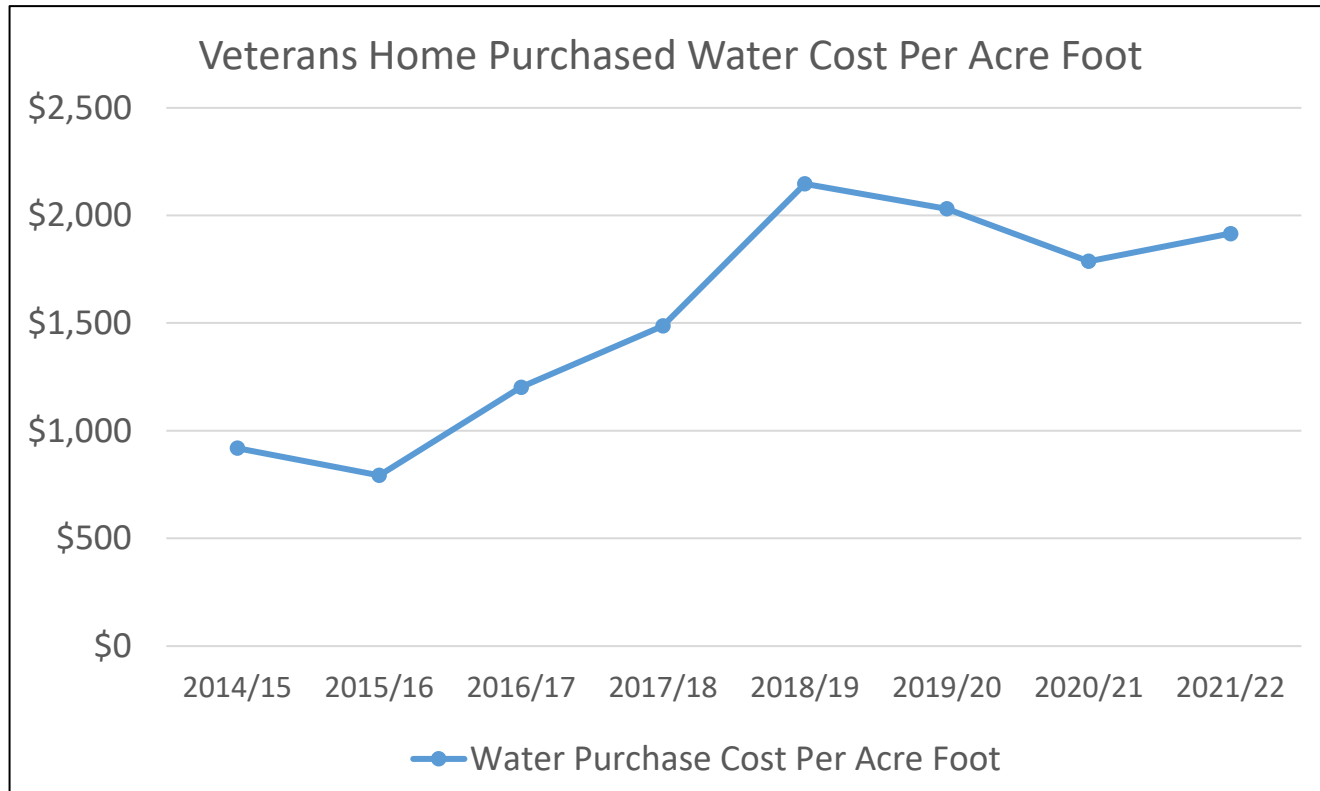
- Monthly Usage Charges

- *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	0-4,000 gallons \$4.15
	Tier 2	5,000+ gallons \$4.76
Multi Family	All Use	\$4.62
Non-Residential	All Use	\$4.62



The Cost of Water is Increasing



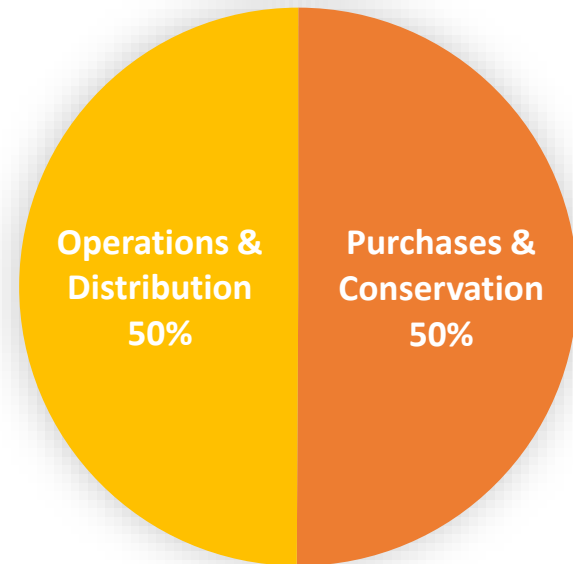
*The Town purchases water from the Veterans Home
Prices can be volatile and are steadily increasing
Costs increased at an 11% average annual growth rate since
2014/15*





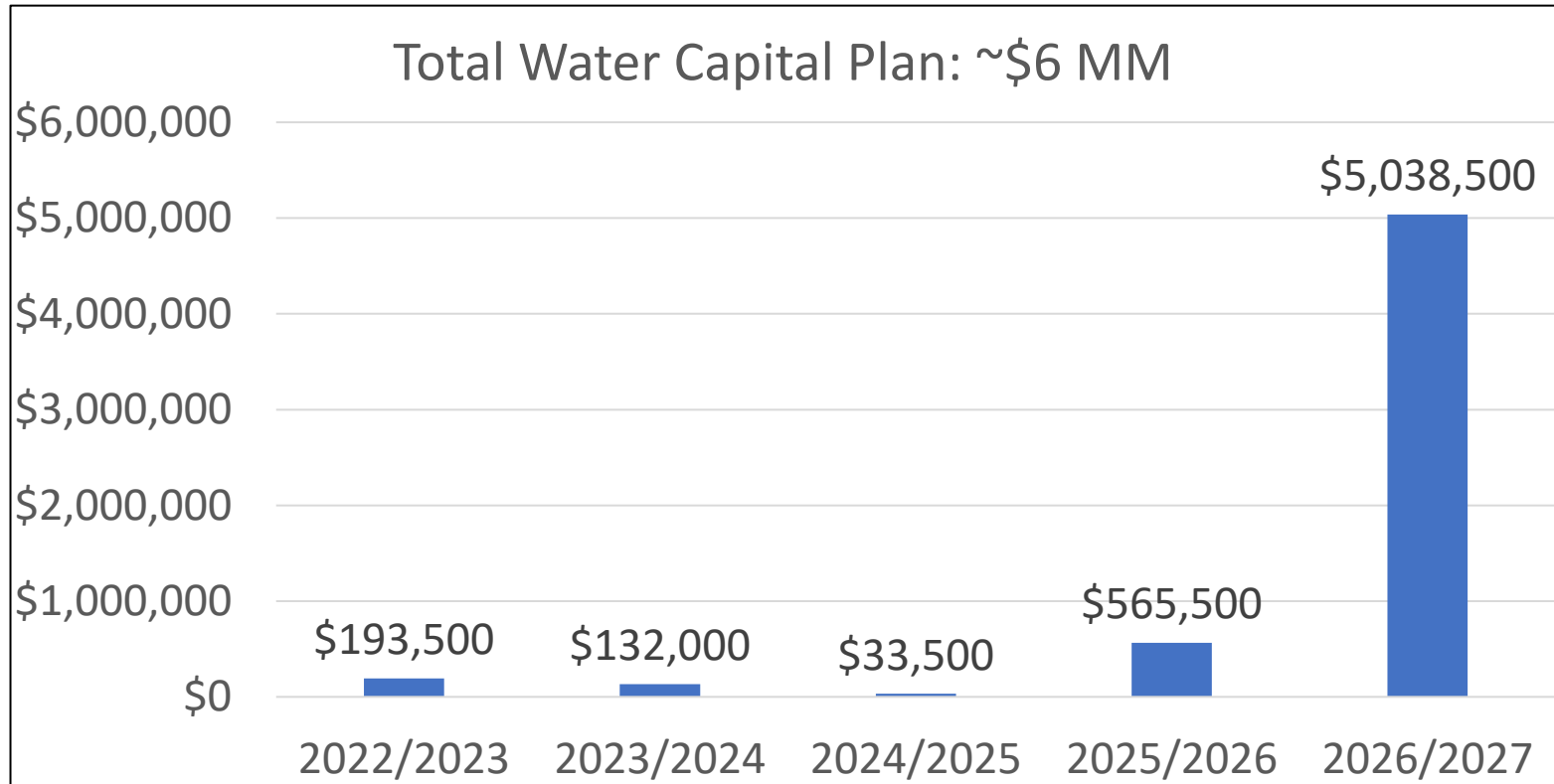
2022/23 Water Operations Budget

- 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





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

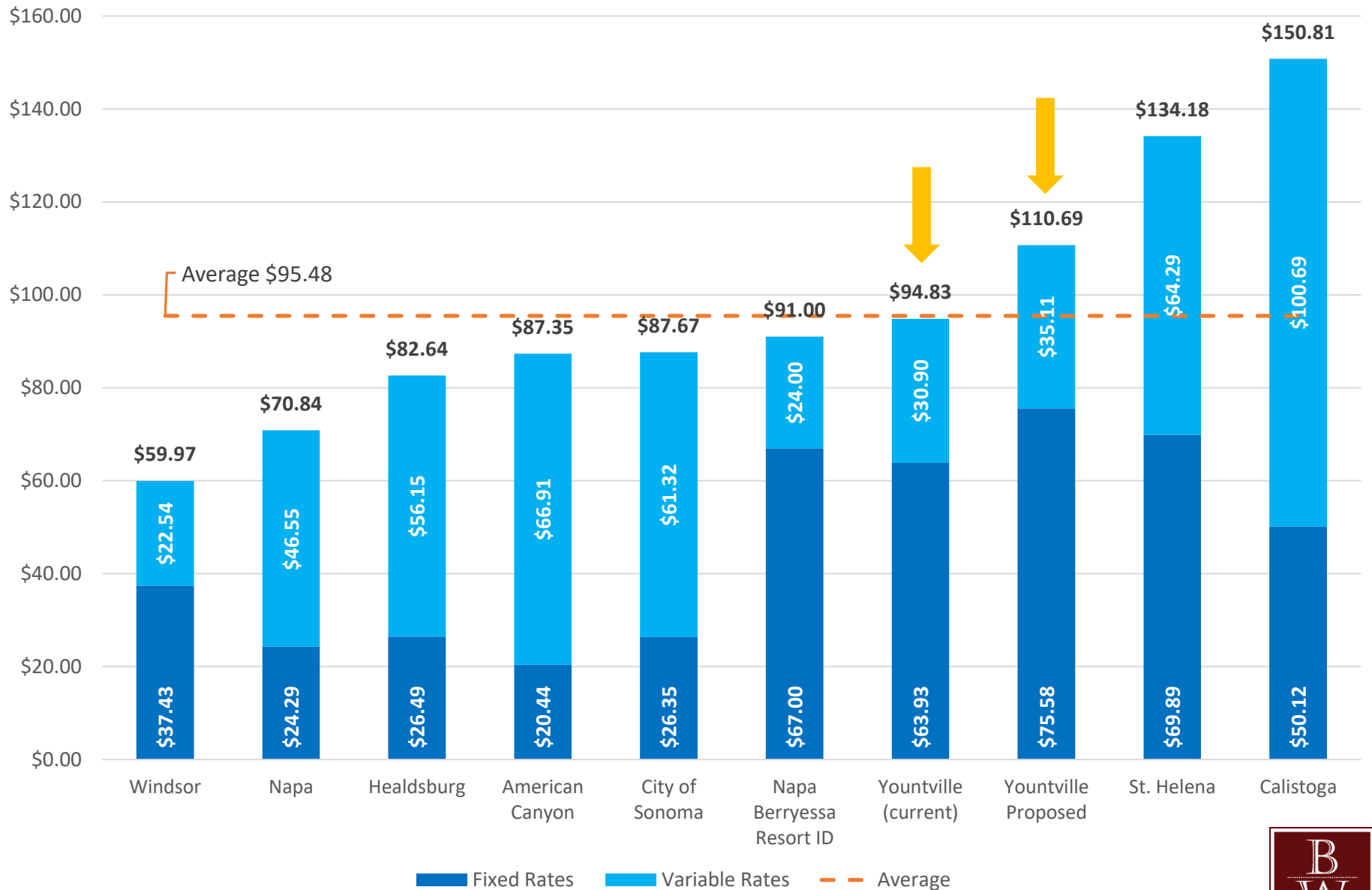
Customer Class	Current	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Single Family Use						
Tier 1 (0-4 1,000 gallons)	\$4.15	\$4.64	\$5.16	\$5.72	\$6.35	\$7.05
Tier 2 (5+ 1,000 gallons)*	\$4.76	\$5.51	\$6.02	\$6.59	\$7.22	\$7.92
All Other Use**	\$4.62	\$5.01	\$5.52	\$6.08	\$6.71	\$7.41
*Proposed rates 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							
Single Family Bill Impact	1,000 gallons usage	Current	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Low User	4	\$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>
Average User	7	\$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>
High User	10	\$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>

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





October 18th Council Action to Potentially Reduce Water Rates

- \$1,650,000 will be setup in a Water and Wastewater Utility Enterprise Capital Project Restricted Fund.
- Water Capital Improvement Fund 60 debt of \$888,668 will be paid off.
- BWA projects 8.5% increases would be required based on this action.
- Water System Replacement Charge would not need to be increased in Year 1 beyond 8.5%.

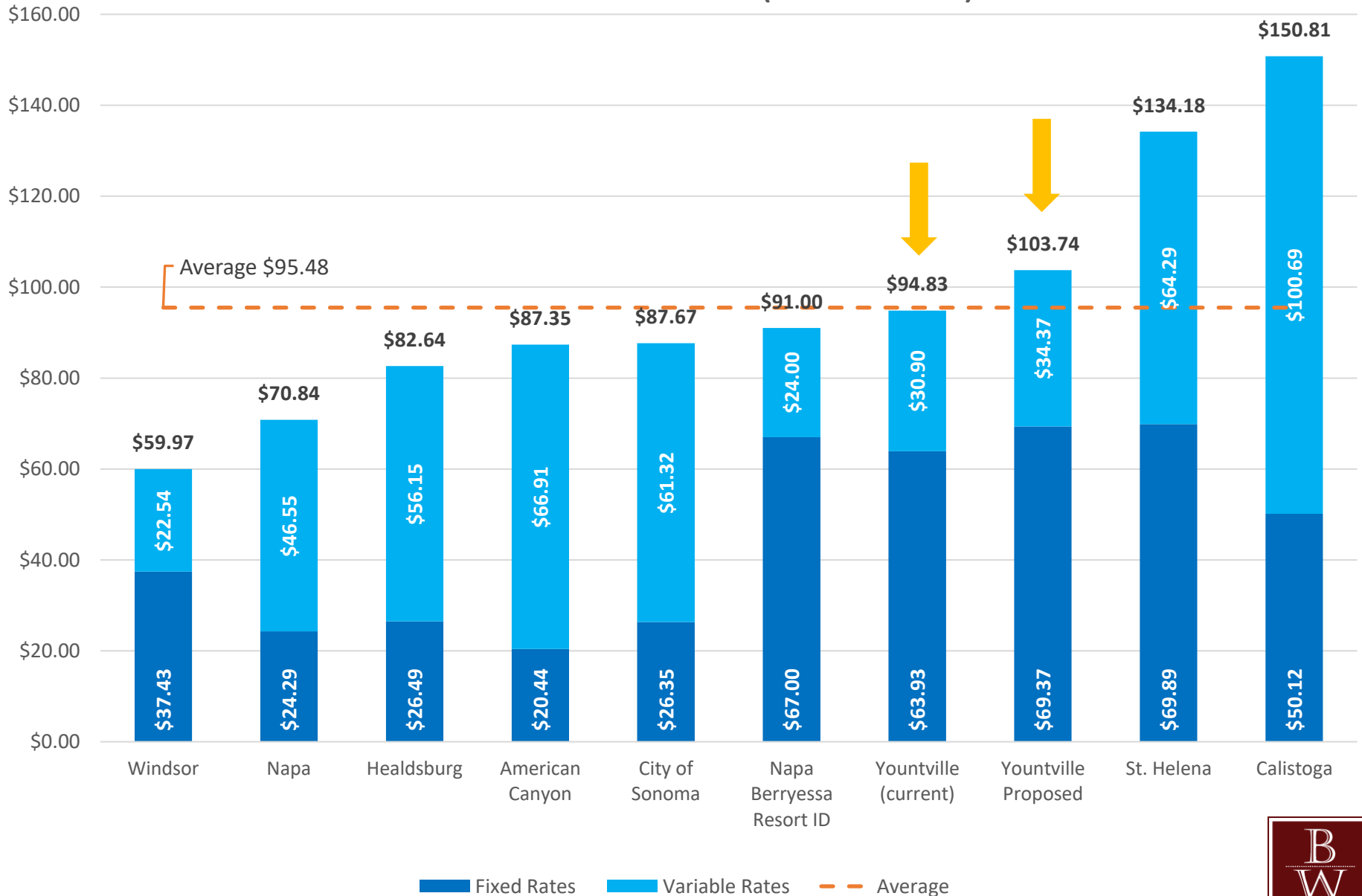


Comparison of Bill Impacts – Noticed Versus Reduced Rates

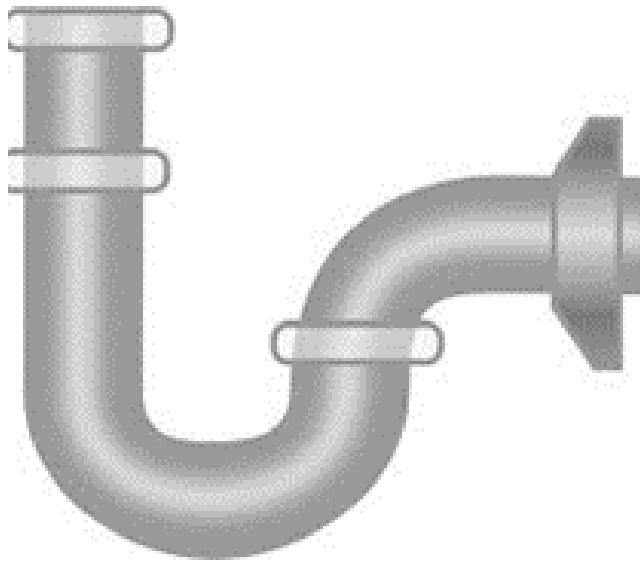
Monthly Bill Impact for Single Family Customers Within Town (Noticed Rates)							
Single Family Bill Impact	1,000 gallons usage	Current	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Low User	4	\$80.54	\$94.16	\$104.52	\$116.01	\$128.78	\$142.94
\$ Increase			\$13.61	\$10.36	\$11.50	\$12.76	\$14.17
Average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

Monthly Bill Impact for Single Family Customers Within Town (Reduced Rates - 8.5% Increases)							
Single Family Bill Impact	1,000 gallons usage	Current	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Low User	4	\$80.54	\$87.53	\$94.97	\$103.04	\$111.80	\$121.30
\$ Increase			\$6.98	\$7.44	\$8.07	\$8.76	\$9.50
Average User	7	\$94.83	\$103.74	\$112.34	\$121.67	\$131.79	\$142.77
\$ Increase			\$8.91	\$8.60	\$9.33	\$10.12	\$10.98
High User	10	\$109.12	\$119.96	\$129.71	\$140.30	\$151.78	\$164.24
\$ Increase			\$10.84	\$9.76	\$10.58	\$11.48	\$12.46

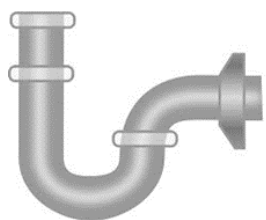
Single Family Residential Monthly Water Rates as of July 1, 2022 (7,000 gallons) Reduced Water Bills (8.5% Increases)



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*

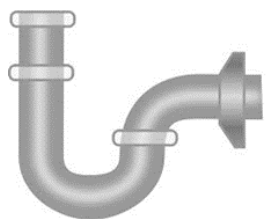
Current Residential Monthly Sewer Service Charge

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



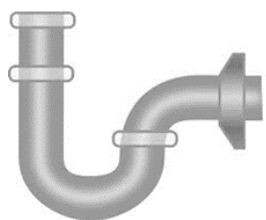
Current Wastewater Rates

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

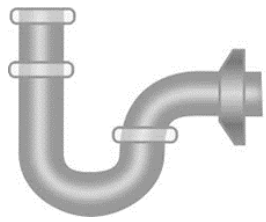


Current Wastewater Rates Usage Charges

- Monthly Usage Charges Non Residential Accounts Only

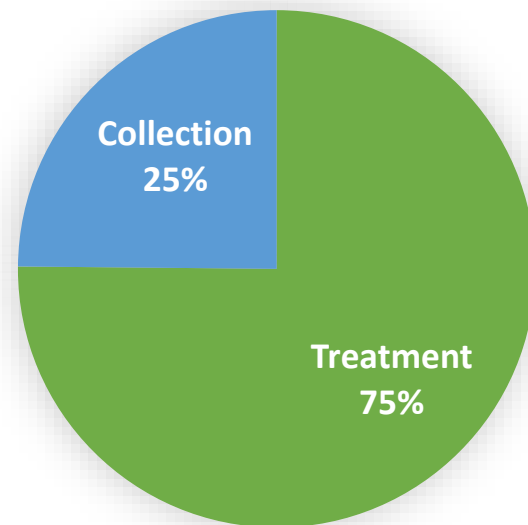
- *Low Strength: Church, Schools, Group Homes, Town Use, Office, Barber Shop*
- *Medium Strength: Hotels/Inns, Multi-Commercial*
- *High Strength: Restaurants, Tasting Rooms*

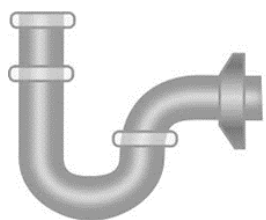
Volumetric Strength Charges	
<u>Non-Residential Customer Class</u>	<u>\$/kgal</u>
Low Strength	\$5.02
Medium Strength	\$7.08
High Strength	\$18.41



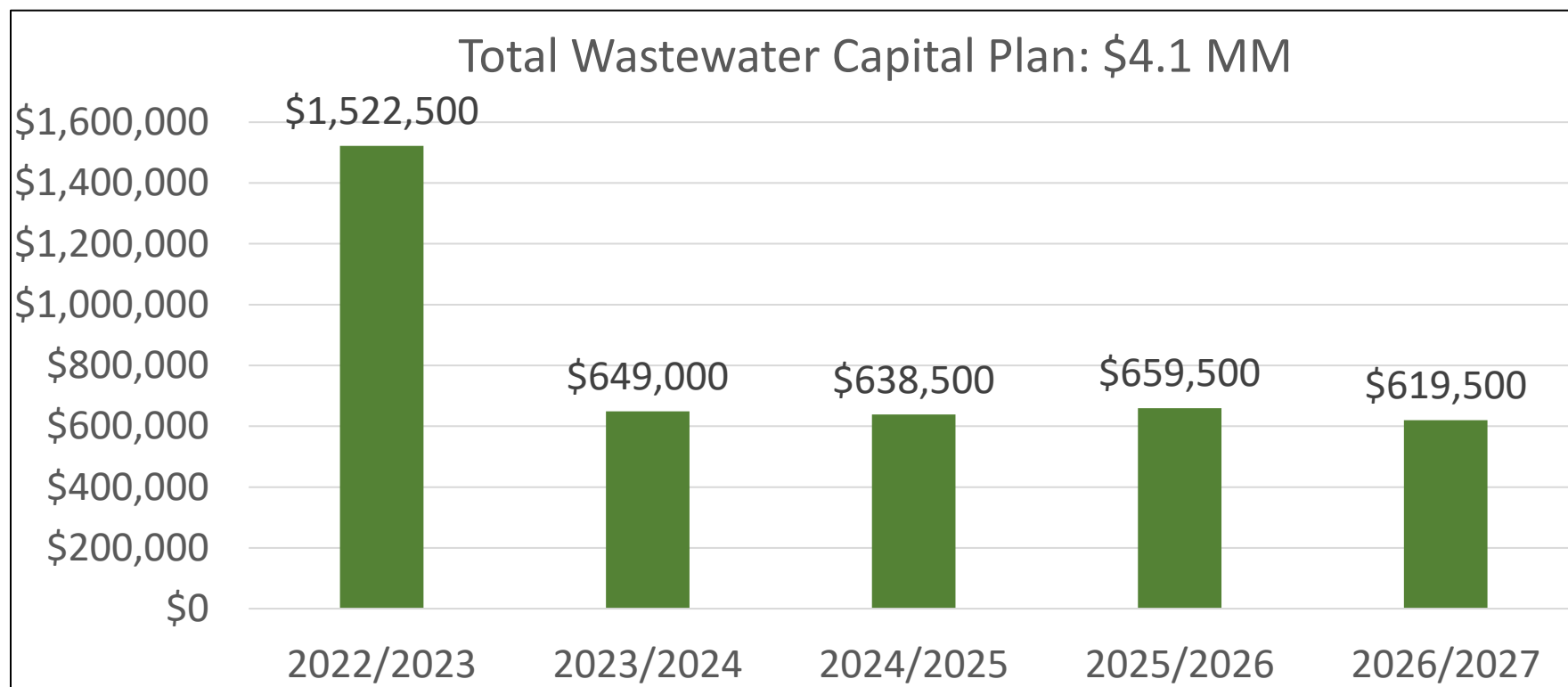
2022/23 Sewer Operations Budget

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



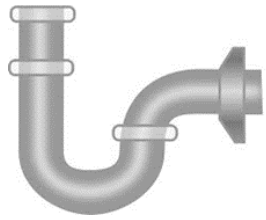


5-Year Wastewater Capital Plan



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

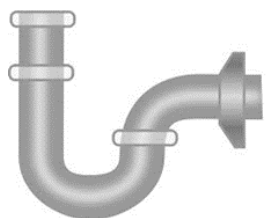




Proposed Wastewater Rate Increases

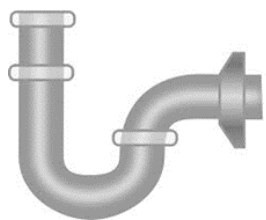
- Proposed increases are sufficient to cover all capital projects, meet debt service coverage requirements and maintain adequate reserves

<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

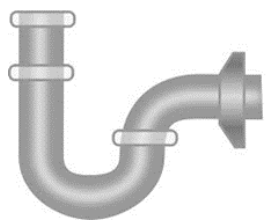


Proposed Wastewater Volume Rates

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

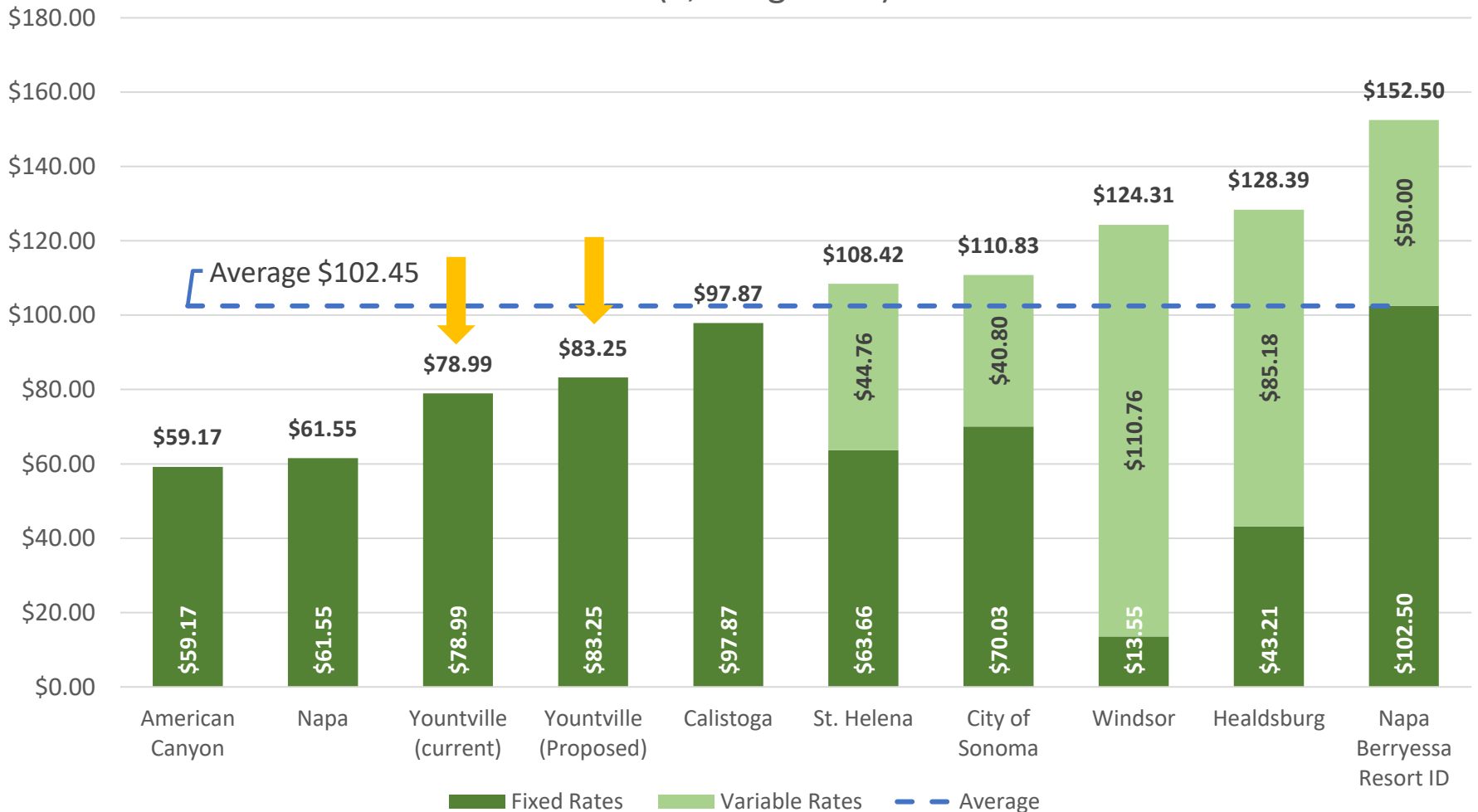
- *Low Strength: Church, Schools, Group Homes, Town Use, Office, Barber Shop*
- *Medium Strength: Hotels/Inns, Multi-Commercial*
- *High Strength: Restaurants, Tasting Rooms*



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

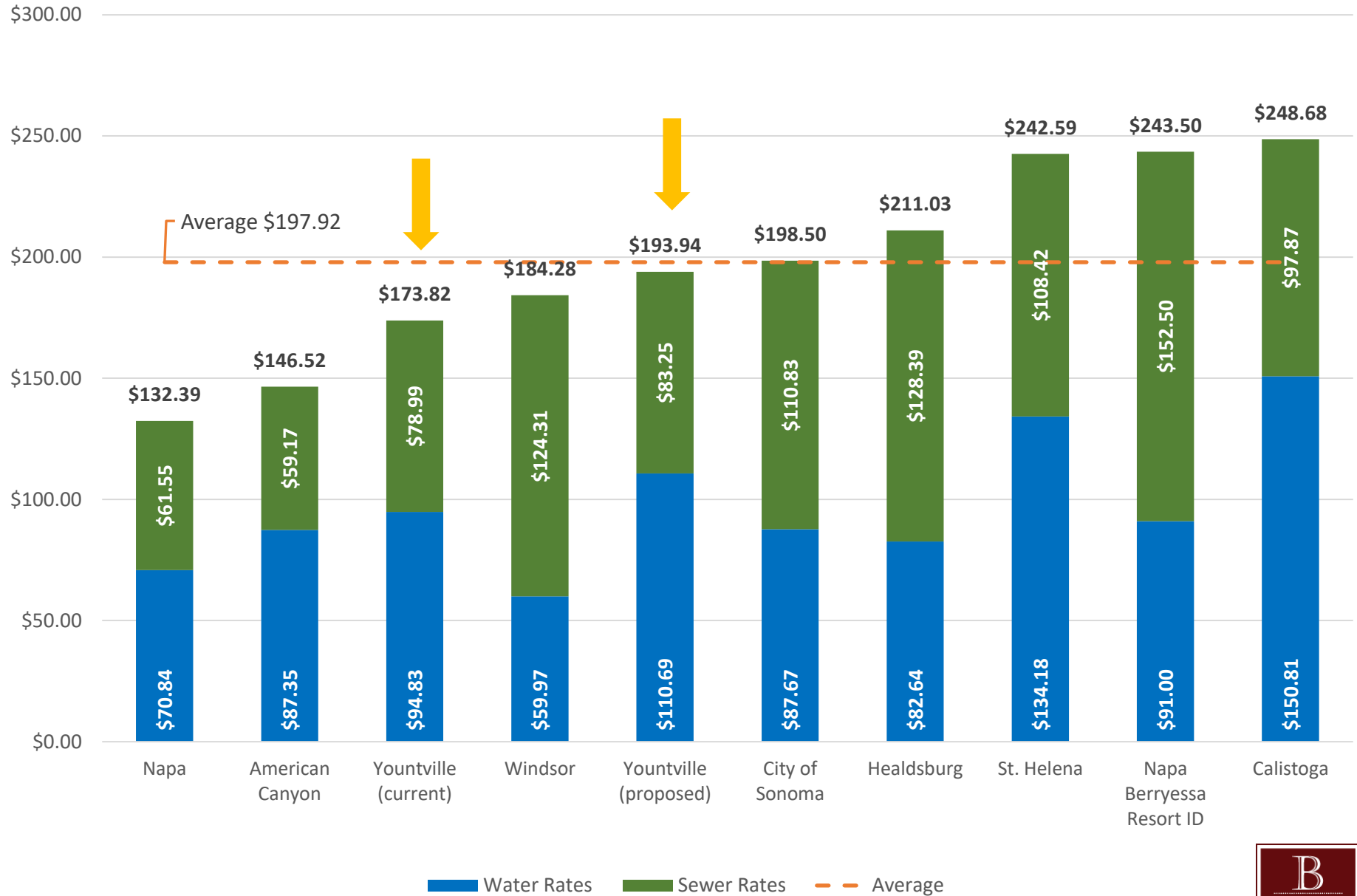
Single Family Residence Monthly Wastewater Rates July 1, 2022 (6,000 gallons)



The Town's rate is among the lowest in the area and will maintain its position with the proposed rate increase

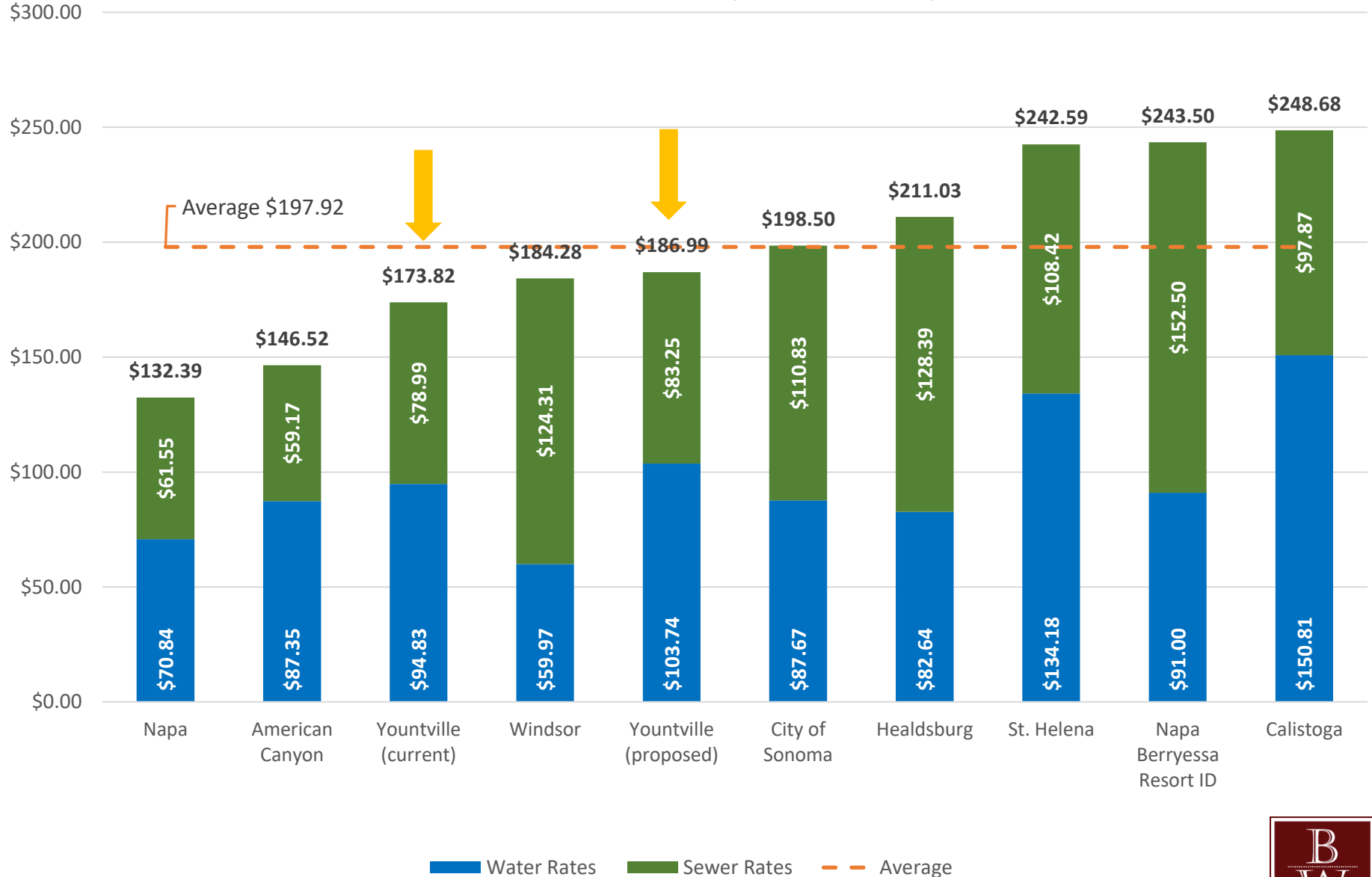


Single Family Residential Monthly Combined Water & Sewer Bills as of July 1, 2022



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

Reduced Water Bills (8.5% Increases)



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
- Public hearing scheduled for Tuesday, November 15, 2022, at or about 3:00 p.m. in the Town Council Chambers
- 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*



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

Water Appendix Slides



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

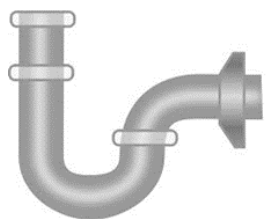


Wastewater Appendix Slides

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





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