

#### **TOWN OF JEROME**

# Water and Wastewater Rate Study and Financial Forecast

**Public Hearing** 

September 2021



### Facts about Water and Wastewater Rates in the 21<sup>st</sup> Century

- Average utility has been increasing rates 5-6% per year; trend expected to continue
- AWWA forecasts that US Water and Wastewater rates will triple in the next 15 years
- Many reasons for rate increases beyond the control of the utility: inflation, replacement of aging infrastructure, etc.
- 30-40% of utilities charge rates that do not cover costs
- Conclusion: water and wastewater costs will increase for everyone in 21<sup>st</sup> century







### Town of Jerome Water/Wastewater Utility Background



- Town has very complex water/ww rate structure, and currently rates are too low to cover all costs
  - Water and wastewater fund requires occasional transfers from General Fund and Utility fund balances
- Town requires a rate adjustment to cover costs and eliminate drawdown of utility fund balance
- If Town changes rate structure by implementing a volume-based rate, it is likely to cause substantial changes to many ratepayer monthly bills and may result in backlash from some customers



#### **Current Water and Wastewater Rates**



#### Water Rates

Pesidential

\$ 25.36
33.20
41.05
41.05
25.36
42.24
\$

Non residential rates are based on size, number of employees, or number and type of fixtures.

#### Wastewater Rates

#### **Residential and Non-Residential**

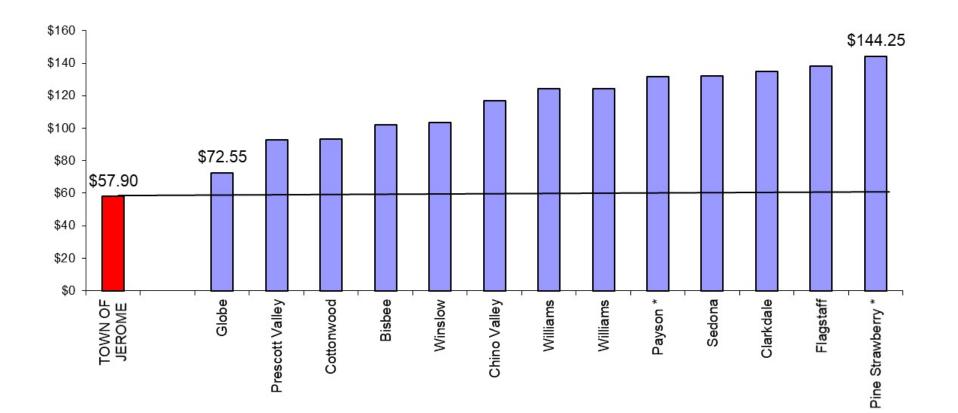
Sewer rates are calculated at 128.3% of monthly water service rates

#### **Non-Residential**

Small Business (1-5 Employees) Small Business (Shared Restroom) Medium Business (6-10 Employees) Large Business (11 + Employees) Bar Only Small Restaurant Only (0-39 seats) Medium Restaurant Only (40-79 seats) Large Restaurant Only (80 + seats) Small Restaurant and Bar (0-30 seats) Medium Restaurant and Bar (40-79 seats) Large Restaurant and Bar (80 + seats) Hotels/Rooms/B*B per unit	\$ 38.99 19.49 52.72 66.39 52.72 66.39 71.90 85.21 97.57 100.94 107.66 10.18
Construction	42.24
Small Industry (2-5 employees) Medium Industry (6-10 employees) Large Industry (11 + employees)	50.70 64.38 42.24



# Residential Rate Comparison 10,000 Gallons Water & 10,000 Gallons WW



\* No sewer service, Jerome rates applied





#### **2020 Accounts**



#### WATER Customers

Residential	228
Residential Outside	18
Commercial	74
Municipal	4
Total	324

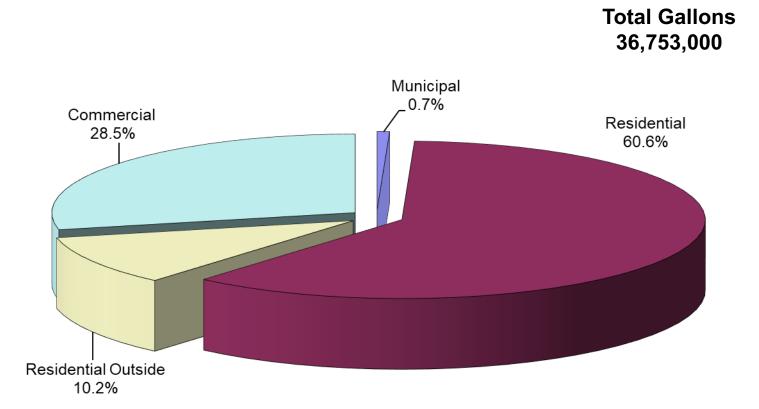
#### **WASTEWATER** Customers

Residential	177
Residential Outside	3
Commercial	72
Municipal	4
	256



# 2020 Water Usage by Customer Class

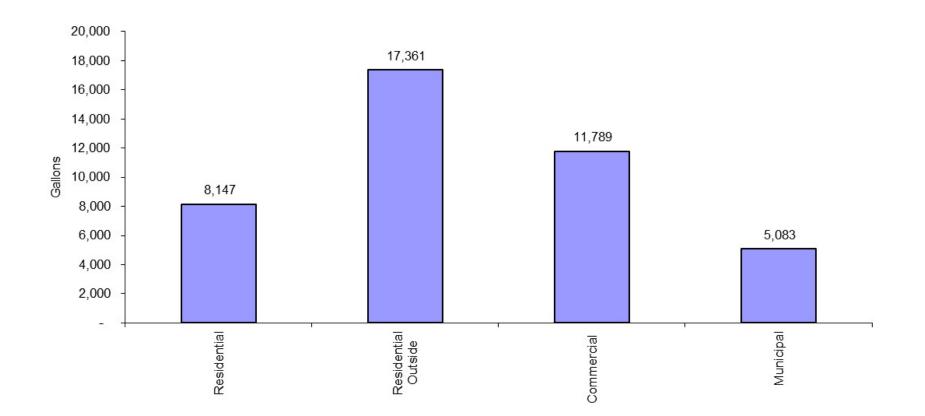






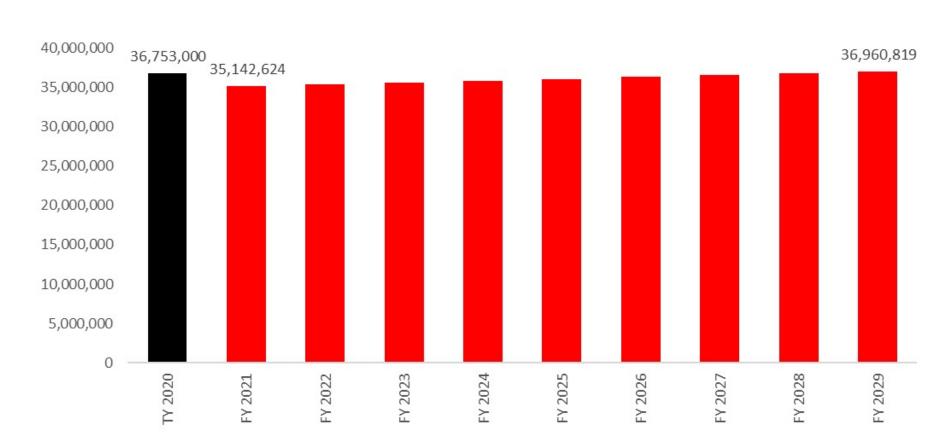
#### Average Monthly Water Consumption by Rate Class







#### Actual and Forecast Annual Water Billed Consumption







#### Water and Wastewater Forecast Cost of Service



	TY 2020		FY 2021	FY 2022	FY 2023	FY 2024
WATER						
Operating	\$	276,768	\$ 285,530	\$ 296,357	\$ 307,622	\$ 319,343
Capital Outlays		25,000	-	-	25,000	-
Debt Service		-	-	-	-	-
Transfers		48,232	49,197	50,673	52,193	53,758
Total		350,000	 334,727	 347,030	 384,815	373,102
WASTEWATER						
Operating	\$	215,368	\$ 221,702	\$ 229,799	\$ 238,210	\$ 246,947
Capital Outlays		-	-	-	-	-
Debt Service		19,021	19,021	19,021	19,021	19,021
Transfers		48,232	 49,197	 50,673	 52,193	 53,758
Total		282,621	289,920	299,493	309,424	319,726
Water/WW Total		632,621	624,647	646,523	694,238	692,828



#### **Notes on Rate Proposals**



- Both scenarios result in a conversion to a volume-based rate; this is a fundamental shift in billing methodology
- Recommend 20% premium for outside customers
- Volume data on which scenarios are based required significant adjustments; future usage must be monitored carefully
- Customer usage patterns and revenues likely to change significantly as a result of implementation of volume-based rate
- Therefore rate plan may require substantial revision in coming years as Town "settles in" to new rate structure



#### **Proposed Rate Plan Alternatives**

- Scenario IA Uniform Rates No Minimum Volume
  - implements a volume-based uniform rate per 1,000 gallons with no monthly minimum volumes
- Scenario IB Uniform Rates 8,000/12,000
  Gallon Minimum Volumes
  - implements a volume-based rate per 1,000 gallons for water customers; with 8,000 minimum gallons in base charge for residential and 12,000 minimum gallons for commercial
- Both rate plans are designed to recover equivalent revenues







#### Scen IA – Uniform Rates – No Min Volume Proposed Rate Plan



	 Current	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	Effective Jan-26
WATER Rates Residential						
Monthly Minimum Charge	\$ 12.50	\$ 12.50	\$ 13.75	\$ 15.13	\$ 16.64	\$ 17.47
Volume Rate/1,000 Gal	2.75	2.75	3.03	3.33	3.66	3.84
WATER Rates Non-Residential						
Monthly Minimum Charge	20.00	20.00	22.00	24.20	26.62	27.95
Volume Rate/1,000 Gal	3.25	3.25	3.58	3.93	4.33	4.54
WASTEWATER Rates Residential						
Monthly Minimum Charge	\$ 13.50	\$ 13.50	\$ 15.53	\$ 17.85	\$ 18.39	\$ 18.94
Volume Rate/1,000 Gal	3.75	3.75	4.31	4.96	5.11	5.26
WASTEWATER Rates Non-Residential						
Monthly Minimum Charge	20.00	20.00	23.00	26.45	27.24	28.06
Volume Rate/1,000 Gal	4.50	4.50	5.18	5.95	6.13	6.31





	Gallons	Current				Effective Jan-23	Effective Jan-24			Effective Jan-25	Effective Jan-26
		WATER	Monthly C	charge							
Residential Single		\$	25.36								
Residential Double Residential Triple			33.20 41.05								
Residential	3,000		ç	20.75	\$	22.83	\$	25.11	\$	27.62	\$ 29.00
	5,000			26.25		28.88		31.76		34.94	36.69
	8,000			34.50		37.95		41.75		45.92	48.22
	10,000			40.00		44.00		48.40		53.24	55.90
	15,000			53.75		59.13		65.04		71.54	75.12
	20,000			67.50		74.25		81.68		89.84	94.33
	30,000			95.00		104.50		114.95		126.45	132.77





	Gallons	Current	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	Effective Jan-26
		WATER Monthly (	Charge				
Small Business (Shared Restroom)		\$ 19.49					
Small Business (1-5 Employees)		38.99					
Construction		42.24					
Medium Business (6-10 Employees)		52.72					
Bar Only		52.72					
Large Business (11 + Employees)		66.39					
Small Restaurant Only (0-39 seats)		66.39					
Medium Restaurant Only (40-79 seats)		71.90					
Large Restaurant Only (80 + seats)		85.21					
Small Restaurant and Bar (0-30 seats)		97.57					
Medium Restaurant and Bar (40-79 seats)		100.94					
Large Restaurant and Bar (80 + seats)		107.66					
Non-Residential	3,000		29.75	32.73	36.00	39.60	41.58
	5,000		35.25	38.78	42.65	46.92	49.26
	10,000		49.00	53.90	59.29	65.22	68.48
	12,000		55.50	61.05	67.16	73.87	77.56
	15,000		62.75	69.03	75.93	83.52	87.70
	20,000		76.50	84.15	92.57	101.82	106.91
	30,000		104.00	114.40	125.84	138.42	145.35
	50,000		159.00	174.90	192.39	211.63	222.21





	Gallons	Current		Current		Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	Effective Jan-26
		WASTE	WATER M	onthly Charge						
Residential Single Residential Double Residential Triple		\$	32.54 42.60 52.67							
Residential	3,000 5,000		:	\$	\$ 28.46 37.09	\$ 32.73 42.65	\$ 33.71 43.93	\$ 34.73 45.25		
	<b>8,000</b> 10,000			<b>43.50</b> 51.00	<b>50.03</b> 58.65	<b>57.53</b> 67.45	<b>59.25</b> 69.47	<b>61.03</b> 71.56		
	15,000 20,000 30,000			69.75 88.50 126.00	80.21 101.78 144.90	92.24 117.04 166.64	95.01 120.55 171.63	97.86 124.17 176.78		





			Effective	Effective	Effective	Effective	Effective
	Gallons	Current	Jan-22	Jan-23	Jan-24	Jan-25	Jan-26
		WASTEWATER M	onthly Chargo				
Small Business (Shared Restroom)		\$ 25.01	ontiny Charge				
Small Business (1-5 Employees)		50.02					
Construction		54.19					
Medium Business (6-10 Employees)		67.64					
Bar Only		67.64					
Large Business (11 + Employees)		85.18					
Small Restaurant Only (0-39 seats)		85.18					
Medium Restaurant Only (40-79 seats)		92.25					
Large Restaurant Only (80 + seats)		109.32					
Small Restaurant and Bar (0-30 seats)		125.18					
		129.51					
Medium Restaurant and Bar (40-79 seats)		138.13					
Large Restaurant and Bar (80 + seats)		150.15					
Non-Residential	3,000		33.50	38.53	44.30	45.63	47.00
	5,000		42.50	48.88	56.21	57.89	59.63
	10,000		65.00	74.75	85.96	88.54	91.20
	12,000		74.00	85.10	97.87	100.80	103.82
	15,000		87.50	100.63	115.72	119.19	122.77
	20,000		110.00	126.50	145.48	149.84	154.33
	30,000		155.00	178.25	204.99	211.14	217.47
	50,000		245.00	281.75	324.01	333.73	343.74



#### Scen IB – Uniform Rates – 8,000/12,000 Min Volume -- Proposed Rate Plan



	 Current	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	 Effective Jan-26
WATER Rates Residential						
Monthly Minimum Charge 8,000 Gal	\$ 34.50	\$ 34.50	\$ 37.61	\$ 40.99	\$ 44.27	\$ 46.04
Volume Rate/1,000 Gal	2.75	2.75	3.00	3.27	3.53	3.67
WATER Rates Non-Residential						
Monthly Minimum Charge 12,000 Gal	58.00	58.00	63.22	68.91	74.42	77.40
Volume Rate/1,000 Gal	3.25	3.25	3.54	3.86	4.17	4.34
WASTEWATER Rates Residential						
Monthly Minimum Charge 8,000 Gal	\$ 43.50	\$ 43.50	\$ 48.29	\$ 53.60	\$ 55.20	\$ 56.86
Volume Rate/1,000 Gal	3.75	3.75	4.16	4.62	4.76	4.90
WASTEWATER Rates Non-Residential Monthly Minimum Charge 12,000 Gal	72.00	72.00	79.92	88.71	91.37	94.11
Monully Minimum Charge 12,000 Gai	72.00	72.00	19.92	00.71	91.37	94.11
Volume Rate/1,000 Gal	4.50	4.50	5.00	5.54	5.71	5.88



# Scen IB – Uniform Rates – Residential Impact on Monthly Charges



	Gallons	Current		Effective Current Jan-22			Effective Jan-23	Effective Jan-24	Effective Jan-25		Effective Jan-26
	1	WATER M	lonthly C	Charge							
Residential Single		\$	25.36		8	3,000 Gal	Volume Cre	dit in Mont	nly C	Charge	
Residential Double			33.20								
Residential Triple			41.05								
Residential	3,000		5	\$ 34.50	\$	37.61	\$ 40.99	\$ 44.2	7\$	46.04	
	5,000			34.50		37.61	40.99	44.2	7	46.04	
	8,000			34.50		37.61	40.99	44.2	7	46.04	
	10,000			40.00		43.60	47.52	51.3	3	53.38	
	15,000			53.75		58.59	63.86	68.9	7	71.73	
	20,000			67.50		73.58	80.20	86.6	1	90.08	
	30,000			95.00		103.55	112.87	121.9	0	126.78	

3,000	\$	20.75 \$	22.83 \$	25.11 \$	27.62 \$	29.00
5,000		26.25	28.88	31.76	34.94	36.69
8,000		34.50	37.95	41.75	45.92	48.22
10,000		40.00	44.00	48.40	53.24	55.90
15,000		53.75	59.13	65.04	71.54	75.12
20,000		67.50	74.25	81.68	89.84	94.33
30,000		95.00	104.50	114.95	126.45	132.77
	5,000 <b>8,000</b> 10,000 15,000 20,000	5,000 <b>8,000</b> 10,000 15,000 20,000	5,00026.258,00034.5010,00040.0015,00053.7520,00067.50	5,00026.2528.888,00034.5037.9510,00040.0044.0015,00053.7559.1320,00067.5074.25	5,00026.2528.8831.768,00034.5037.9541.7510,00040.0044.0048.4015,00053.7559.1365.0420,00067.5074.2581.68	5,00026.2528.8831.7634.948,00034.5037.9541.7545.9210,00040.0044.0048.4053.2415,00053.7559.1365.0471.5420,00067.5074.2581.6889.84



### Scen IB – Uniform Rates – Commercial **Impact on Monthly Charges**



			Effective	Effective	Effective	Effective	Effective
	Gallons	Current	Jan-22	Jan-23	Jan-24	Jan-25	Jan-26
		WATER Monthly C	harge				
Small Business (Shared Restroom)		\$ 19.49					
Small Business (1-5 Employees)		38.99					
Construction		42.24					
Medium Business (6-10 Employees)		52.72					
Bar Only		52.72					
Large Business (11 + Employees)		66.39					
Small Restaurant Only (0-39 seats)		66.39					
Medium Restaurant Only (40-79 seats)		71.90					
Large Restaurant Only (80 + seats)		85.21					
Small Restaurant and Bar (0-30 seats)		97.57					
Medium Restaurant and Bar (40-79 seats)		100.94					
Large Restaurant and Bar (80 + seats)		107.66					
					00.04	74.40	77.40
Non-Residential	3,000		58.00	63.22	68.91	74.42	77.40
	5,000		58.00	63.22	68.91	74.42	77.40
	10,000		58.00	63.22	68.91	74.42	77.40
	12,000		58.00	63.22	68.91	74.42	77.40
	15,000		67.75	73.85	80.49	86.93	90.41
	20,000		84.00	91.56	99.80	107.78	112.10
	30,000		116.50	126.99	138.41	149.49	155.47
	50,000		181.50	197.84	215.64	232.89	242.21

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#### Scenario IA – No Volume Credit in Monthly Charge

Residential	3,000	\$ 24.75 \$	28.46 \$	32.73 \$	33.71 \$	34.73
	5,000	32.25	37.09	42.65	43.93	45.25
	8,000	43.50	50.03	57.53	59.25	61.03
	10,000	51.00	58.65	67.45	69.47	71.56
	15,000	69.75	80.21	92.24	95.01	97.86
	20,000	88.50	101.78	117.04	120.55	124.17
	30,000	126.00	144.90	166.64	171.63	176.78



### Scen IB – Uniform Rates – Commercial Impact on Monthly Charges



			Effective	Effective	Effective	Effective	Effective
	Gallons	Current	Jan-22	Jan-23	Jan-24	Jan-25	Jan-26
Small Business (Shared Restroom)	\$	25.01					
Small Business (1-5 Employees)		50.02					
Construction		54.19					
Medium Business (6-10 Employees)		67.64					
Bar Only		67.64					
Large Business (11 + Employees)		85.18					
Small Restaurant Only (0-39 seats)		85.18					
Medium Restaurant Only (40-79 seats)		92.25					
Large Restaurant Only (80 + seats)		109.32					
Small Restaurant and Bar (0-30 seats)		125.18					
Medium Restaurant and Bar (40-79 seats)		129.51					
Large Restaurant and Bar (80 + seats)		138.13					
Non-Residential	3,000		72.00	79.92	88.71	91.37	94.11
	5,000		72.00	79.92	88.71	91.37	94.11
	10,000		72.00	79.92	88.71	91.37	94.11
	12,000		72.00	79.92	88.71	91.37	94.11
	15,000		85.50	94.91	105.34	108.50	111.76
	20,000		108.00	119.88	133.07	137.06	141.17
	30,000		153.00	169.83	188.51	194.17	199.99
	50,000		243.00	269.73	299.40	308.38	317.63



#### Final Thoughts on Rate Plan



- Agree with citizen comments that conservation is a goal of both the state of Arizona and USA
- Regulatory agencies give cities wide latitude to set rates according to local definitions of "fair, just and reasonable"
- Current rate structure, while uncommon, is still used by cities throughout USA
- Town has several options regarding rate structure:
  - Implement 5-year plan, or any combination of years
  - Limit revisions to commercial customers only



#### **Presentation Summary**

- Conversion to volume-based rate plan likely to be very controversial and will significantly impact certain ratepayers
- Both rate plans forecast to result in equivalent revenues
- Up to Council and community to choose the most appropriate plan
- Implementation may result in significantly altered usage patterns and revenues
- Recommend rate plan be reviewed every 2 years to see if results are in line with forecast; and adjust as necessary







### Questions





