

**PROJECT:** DISCUSSION - Amending the Consolidated Fee Schedule for Water Rates (15.2, 15.3, 15.4)  
**APPLICANT:** Staff  
**REQUEST:** Feedback for Proposed Water Rates  
**TYPE OF ACTION:** Discussion

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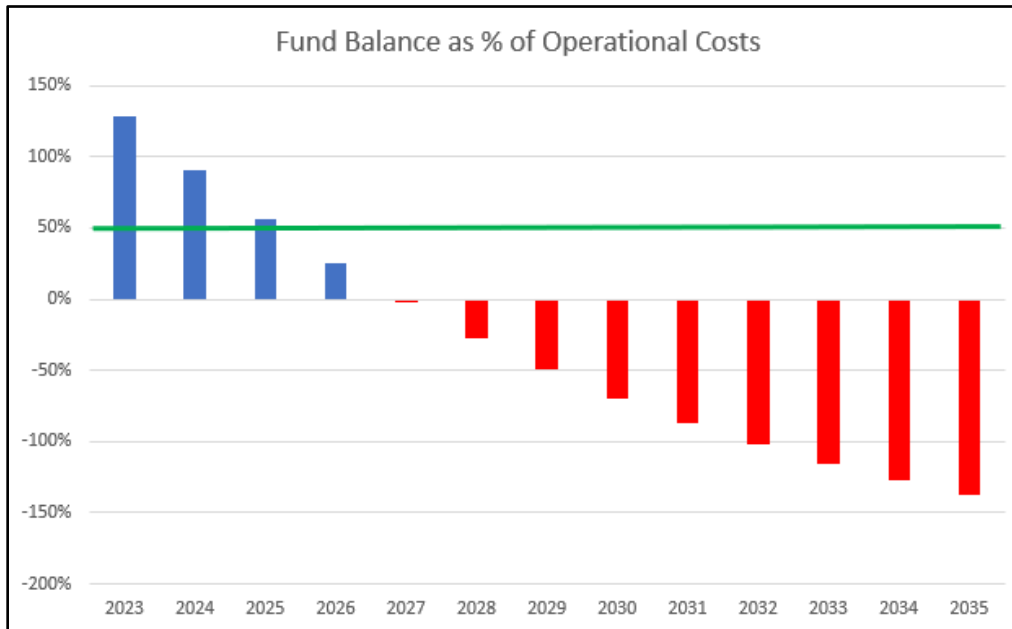
## BACKGROUND

Water is one of Eagle Mountain City's most essential services to the community. The Water Department strives to operate efficiently and cost-effectively. Planning remains a challenge, and regular reviews are needed. The 2023 Water Rate Study has three objectives (1) Water funds need to be self-sufficient, meaning that water rates provide adequate revenue to cover operating costs. (2) Water rates ought to be fair and equitable in charging all its customers (residential vs. commercial users) with rates equal to the service cost. (3) To ensure rate stability, there should be a balance between the consumption and base rates in covering operating costs.

Staff analyzed the water fund for the fiscal year 2023. Eagle Mountain City's water rates are not enough to cover its operating expenses. Last year, ground wells needed repairs, such as Well #1, which cost the City about \$106,232.38; Well #5, about \$316,643.50; and Golf Course Well, about \$152,648.53. Overtime costs of \$47,818 rose due to at least two water breaks that lasted for weeks. Personnel turnover was about 42.86% which cost the City to rehire and provide competitive pay, benefits, and training that cost to additional \$295,712. Equipment and rental lease went above \$78,000 due to the White Hills Well upgrade project. An additional \$701,760 was allocated for contracted water from the Central Utah Water Conservancy District, which was taken down ahead of our schedule due to growth and the need for water in the city. Those were the main factors for the cost increase in the operating expenses for the water fund in the last year.

In March 2022, the City Council approved an annual increase of 4% to water rates. With the unforeseeable increases in expenses, the 4% increase in water rates will not be sufficient to cover its operating expenses in the coming year. Although last year's rate increase affords us more time to respond (recall that we were one away from a negative fund balance), if no additional action is taken, our fund balance will be negative by the fiscal year 2027.





## PROPOSED WATER RATES

Staff proposes to amend the current base and consumption rates as follows:

Meter Size	Water Capacity (gpm)	Meter Equivalent Ratios	New Base Rate
0.75	30	1.00	\$ 25.50
1	50	1.67	\$ 42.50
1.5	100	3.33	\$ 85.00
2	160	5.33	\$ 136.00
3	320	10.67	\$ 272.00
4	500	16.67	\$ 425.00
6	1000	33.33	\$ 850.00
8	1600	53.33	\$ 1,360.00
10	4200	140.00	\$ 3,570.00

The new base rate will be based on water meter size, commonly practiced by different cities. It is calculated based on meter equivalent ratios, including the water capacity for each water meter size, as the American Water Works Association (AWWA) recommended. The primary

reason for changing the base rate is to allow fair and equitable rates reflected on the service cost for each customer type (residential vs. commercial users). The larger the meter size, the larger the base amount of the bill. That difference is because large meter sizes require the City to increase its system capacity to provide more water per second. Converting to billing by meter size would not impact residential users but ensure that commercial and industrial users consistently pay their fair share. The starting base rate will remain at \$25.50 for Year 1 and Year 2, and it will increase to \$26.50 in Year 3 as forecasted in the 2023 Water Rate Study.

Usage Rates	CURRENT	NEW
<b>Residential Tiered Water</b>		
Tier 1 (0-65,000)	\$1.08	\$1.23
Tier 2 (65,000-115,000)	\$1.14	\$1.30
Tier 3 (115,000-165,000)	\$1.19	\$1.36
Tier 4 ( Over 165,000)	\$1.24	\$1.41
<b>Res Tiered Wtr Over .5 Acre</b>		
Tier 1 (0-120,000)	\$1.08	\$1.23
Tier 2 (120,000-170,000)	\$1.14	\$1.30
Tier 3 (170,000-230,000)	\$1.19	\$1.36
Tier 4 (Over 230,000)	\$1.24	\$1.41
<b>Commercial Tiered Water</b>		
Tier 1 (0-170,000)	\$1.08	\$1.23
Tier 2 (170,000-220,000)	\$1.14	\$1.30
Tier 3 (Over 220,000)	\$1.19	\$1.36
<b>Institutional Tiered Water</b>		
Tier 1 (0-500,000)	\$1.08	\$1.23
Tier 2 (500,000-750,000)	\$1.14	\$1.30
Tier 3 (Over 750,000)	\$1.19	\$1.36
<b>Other</b>	\$1.08	\$1.23
<b>Industrial</b>	\$1.24	\$1.41

The consumption rate will increase by 14% in Year 1 and 12% in Year 2 to Year 4. All these changes in the base and consumption rates are based on the current data and financial



information available to the staff. Regular water rate studies can help the City evaluate its revenue and expenses to help plan for operations, maintenance, and other needs and initiatives.

## NEW WATER RATE IMPACT

Since there are no changes in the starting base rate of \$25.50 for most residents that use meter size 5/8 or 3/4 (0.75-meter size in the table above), the increase in the consumption rate of 14% does not translate to a 14% increase in the water monthly bill. The table below shows the potential increase based on the number of gallons per one thousand gallons.

RATE CALCULATOR							
7 Kgal				15 Kgal			
	NEW	OLD			NEW	OLD	
Number KGal	7	7		Number KGal	15	15	
Consumption	\$ 8.61	\$ 7.56		Consumption	\$ 18.45	\$ 16.20	
Base	\$ 25.50	\$ 25.50	\$ Change \$ 1.05	Base	\$ 25.50	\$ 25.50	\$ Change \$ 2.25
Monthly Bill	\$ 34.11	\$ 33.06	% Change 3.18%	Monthly Bill	\$ 43.95	\$ 41.70	% Change 5.40%
<b>Tier Start</b>	<b>Rates</b>	<b>Tier Start</b>	<b>Rates</b>	<b>Tier Start</b>	<b>Rates</b>	<b>Tier Start</b>	<b>Rates</b>
0	\$1.23	0	\$1.08	0	\$1.23	0	\$1.08
65	\$1.30	65	\$1.14	65	\$1.30	65	\$1.14
115	\$1.36	115	\$1.19	115	\$1.36	115	\$1.19
165	\$1.41	165	\$1.24	165	\$1.41	165	\$1.24

50 Kgal				100 Kgal			
	NEW	OLD			NEW	OLD	
Number KGal	50	50		Number KGal	100	100	
Consumption	\$ 61.50	\$ 54.00		Consumption	\$ 125.45	\$ 110.10	
Base	\$ 25.50	\$ 25.50	\$ Change \$ 7.50	Base	\$ 25.50	\$ 25.50	\$ Change \$ 15.35
Monthly Bill	\$ 87.00	\$ 79.50	% Change 9.43%	Monthly Bill	\$ 150.95	\$ 135.60	% Change 11.32%
<b>Tier Start</b>	<b>Rates</b>	<b>Tier Start</b>	<b>Rates</b>	<b>Tier Start</b>	<b>Rates</b>	<b>Tier Start</b>	<b>Rates</b>
0	\$1.23	0	\$1.08	0	\$1.23	0	\$1.08
65	\$1.30	65	\$1.14	65	\$1.30	65	\$1.14
115	\$1.36	115	\$1.19	115	\$1.36	115	\$1.19
165	\$1.41	165	\$1.24	165	\$1.41	165	\$1.24



Total Monthly Bill Increase Scenarios (Summer Months)

Scenario	Water	Sewer	Storm	S. Waste	TOTAL	
Current Low	\$52.50	\$46.89	\$8.25	\$9.50	\$117.14	
New Low	\$56.25	\$46.89	\$8.25	\$9.50	\$120.89	<b>+ \$3.75</b>
Current Mid	\$79.50	\$46.89	\$8.25	\$14.50	\$149.14	
New Mid	\$87.00	\$46.89	\$8.25	\$14.50	\$156.64	<b>+ \$7.50</b>
Current High	\$135.60	\$46.89	\$8.25	\$20.75	\$211.49	
New High	\$150.95	\$46.89	\$8.25	\$20.75	\$226.84	<b>+ \$15.35</b>

Low, implies 25Kga water use, NSA, single garbage can.

Mid, implies 50Kga water use, SSA, single garbage can + recycling can

High, implies 100Kga water use, WSA, two garbage cans + recycling can

The table above shows the different scenarios of total bill increase during the summer, the peak season for water usage, for residential users. The bill includes the new sewer rate, which increases by 2.5% annually, and the current stormwater and solid waste rates. The difference in the bill will depend on water usage.

**IMPLEMENTATION**

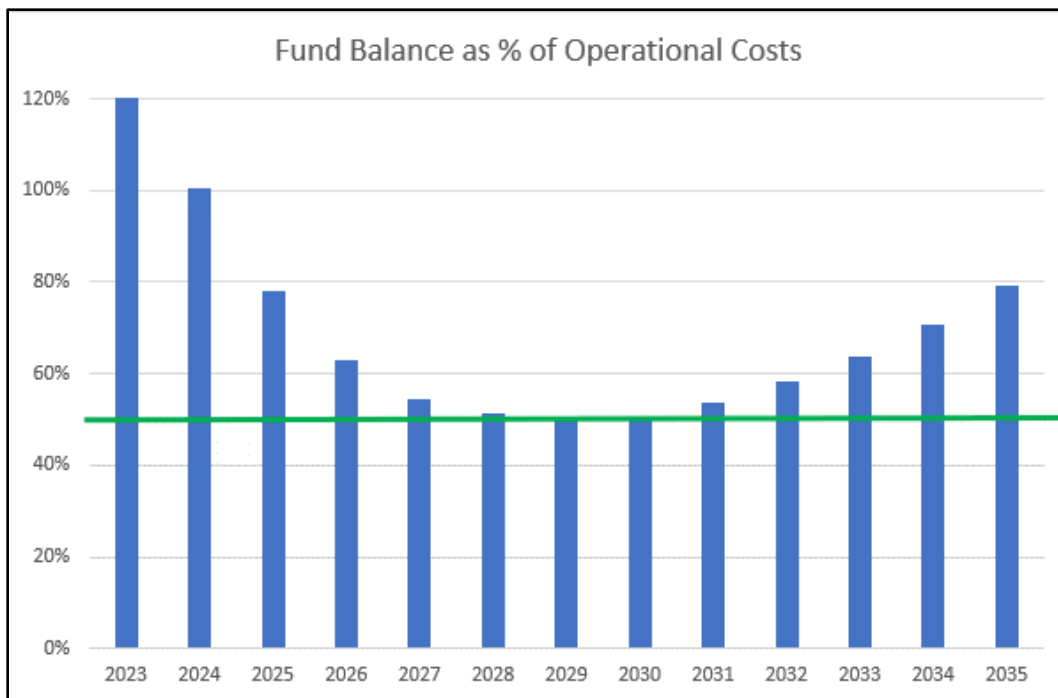
Staff proposes that the new water rates will be effective on October 1, 2023, which will take effect in the billing month of November. Based on a regular water rate study, the water rates will increase or decrease annually beginning July 1, 2024.

## RECOMMENDATION

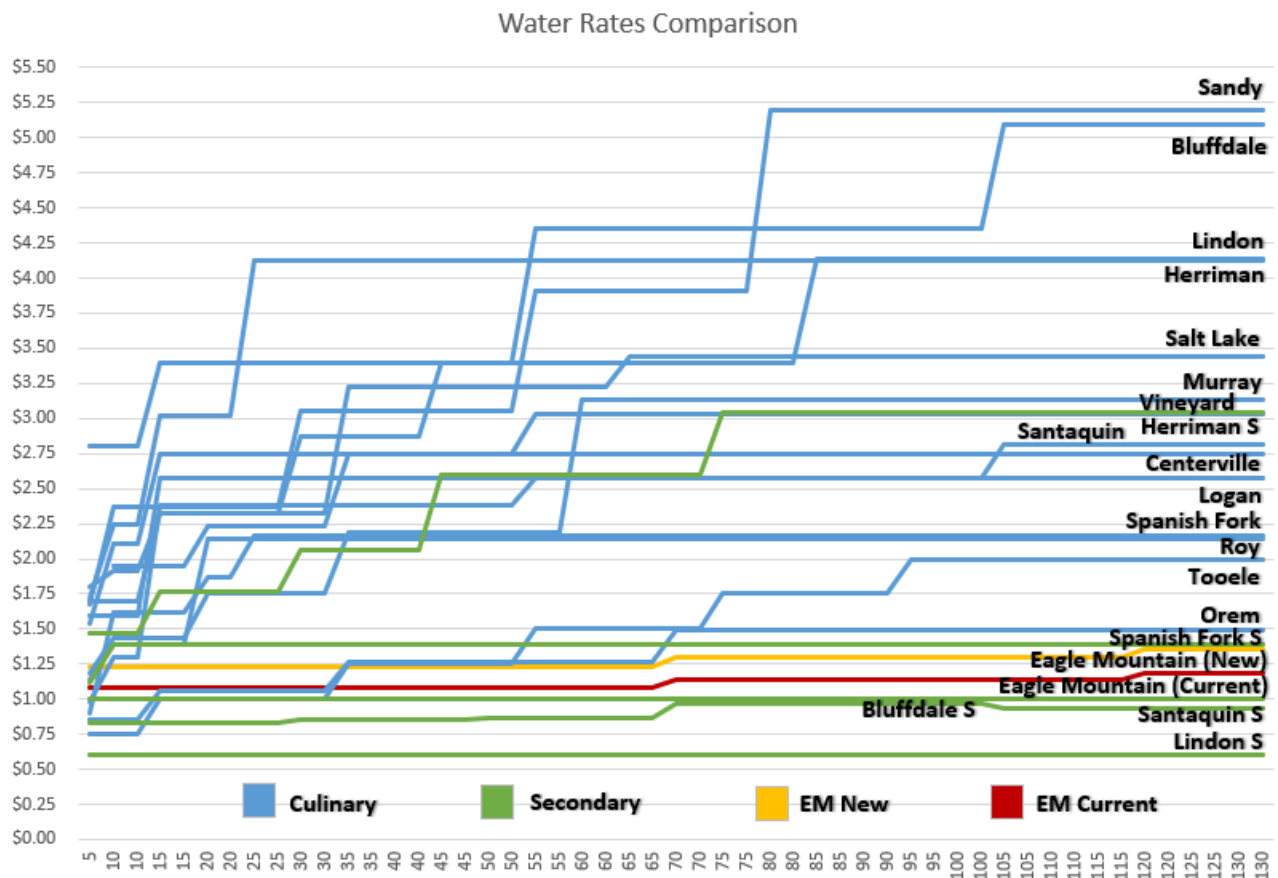
Staff recommends that the City Council consider the new proposed water rates with the new base and consumption rates to ensure that water rates will provide adequate revenue to cover its operating expenses. The new base rate will help charge various customers (residential vs. commercial users) fair and equitable rates equal to the service cost and demand. With the proposed water rates, the City will be able to cover its expenses while saving for rainy days to ensure good fiscal management.

## ITEMS FOR CONSIDERATION

The City Council must consider that continuing with the current rates will deplete our fund balance by the fiscal year 2027. The City is in an advantageous position to make incremental changes now and in the next few years to ensure that we have a healthy fund balance and avoid the potential big water rate increase later on if there are no further changes in water rates. If the proposed water rates are adopted, the projection for our fund balance is shown below. The green line shows the 50% reserve goal acceptable by bonding and financial institutions.



Water rates among cities in Utah vary due to its unique water infrastructure systems and water supply and resources. The graph below shows how the proposed rates are compared to other cities' water rates. Remember that each city is unique, and Eagle Mountain City's water rates will be below the average if secondary water rates are also considered in the comparisons.



The red line shows the current water rates for Eagle Mountain, and the yellow line shows the proposed consumption rate increase. The blue lines show the culinary water rates, while the green lines show the secondary water rates. The left side of the graph shows that we are among the lowest rate, and the proposed water rate is starting to go above because most of our water ratepayers still only pay in the first tier.



**APPENDIX**

Consolidated Fee Schedule for Water Rates with red lines:

**15. WATER RATES**

**15.1. | CONSTRUCTION WATER FEES** *Last Revision: 03/21/2023*

Construction Water Hydrant Rental Deposit*	\$3,000
Construction Water Hydrant Rental Fee	\$200 per Calendar Month + <del>\$1.08/kgal</del>
Non-monthly Meter Read	\$50
Non-permitted Water Connection	\$2,500 per occurrence

*\*Damage to hydrant or hydrant meter by contractor will be deducted from the water hydrant deposit.*

**15.2. | WATER BASE RATE** *Last Revision: 03/01/2022*

Monthly Base Rate	<del>\$25.50/ERU</del>
<b>per meter size</b>	
<b>3/4" or 5/8" Meter Size</b>	<b>\$25.50</b>
<b>1" Meter Size</b>	<b>\$42.50</b>
<b>1 1/2" Meter Size</b>	<b>\$85.00</b>
<b>2" Meter Size</b>	<b>\$136.00</b>
<b>3" Meter Size</b>	<b>\$272.00</b>
<b>4" Meter Size</b>	<b>\$425.00</b>
<b>6" Meter Size</b>	<b>\$850.00</b>
<b>8" Meter Size</b>	<b>\$1,360.00</b>





10" Meter Size .....\$3,570.00

**15.3. | RESIDENTIAL WATER RATES\***

*Last Revision: 03/01/2022*

<u>Residential (&lt;0.5 Acres)</u>	<u>Quantity (in thousands)</u>	<u>Rate (per 1,000 gallons)</u>	
Tier 1	0 – 65	<del>\$1.08</del>	\$1.23
Tier 2	65 – 115	<del>\$1.14</del>	\$1.30
<u>Tier 3</u>	115 – 165	<del>\$1.19</del>	\$1.36
Tier 4	Over 165	<del>\$1.24</del>	\$1.41
<u>Large Residential (&gt;0.5 Acres)</u>	<u>Quantity (in thousands)</u>	<u>Rate (per 1,000 gallons)</u>	
Tier 1	0 – 120	<del>\$1.08</del>	\$1.23
Tier 2	120 – 170	<del>\$1.14</del>	\$1.30
Tier 3	170 – 230	<del>\$1.19</del>	\$1.36
Tier 4	Over 230	<del>\$1.24</del>	\$1.41

*\*Water rates will increase by 4% annually beginning July 1, 2023.*

**15.4. | NONRESIDENTIAL WATER RATES\***

*Last Revision: 03/01/2022*

<u>Commercial</u>	<u>Quantity (in thousands)</u>	<u>Rate (per 1,000 gallons)</u>	
Tier 1	0 – 170	<del>\$1.08</del>	\$1.23
Tier 2	170 – 220	<del>\$1.14</del>	\$1.30
Tier 3	Over 220	<del>\$1.19</del>	\$1.36
<u>Institutional</u>	<u>Quantity (in thousands)</u>	<u>Rate (per 1,000 gallons)</u>	
Tier 1	0 – 500	<del>\$1.08</del>	\$1.23
Tier 2	500 – 750	<del>\$1.14</del>	\$1.30
Tier 3	Over 750	<del>\$1.19</del>	\$1.36
<u>Industrial</u>	<u>Quantity (in thousands)</u>	<u>Rate (per 1,000 gallons)</u>	
Uniform Rate	N/A	<del>\$1.24</del>	\$1.41
<u>Other</u>	<u>Quantity (in thousands)</u>	<u>Rate (per 1,000 gallons)</u>	
Uniform Rate	N/A	<del>\$1.08</del>	\$1.23

*\*Water rates will increase by 4% annually beginning July 1, 2023. The new water rates will be effective on October 1, 2023.*