



Lower Basin Water Treatment Plant

Open House Follow Up | Frequently Asked Questions

February 1, 2018

Q: What is the timeline of the Lower Basin Water Treatment Plant and where we in the process?

January: Tap Fee Increase (Resolution 03-2018) and EQR table approved (Ordinance 01-2018).

February: Town to conduct further analysis on the financial model for the variable surcharge which includes conducting an audit of metered water services, review of capital improvements to the water system and how best to utilize tap fee revenue.

February: Public Information, Education and Outreach continues

BOT Public Hearing: February 13, 2018

BOT Public Hearing: February 27, 2018 (Potential approval of water rate increase)

March: March 1 Tap Fee Increase and EQR goes into effect

June: SRF Loan Funds are available (earliest opportunity to start construction on a new plant)



Q: How will the surcharge and fee increase effect my monthly water bill?

The Town is considering two options that include a monthly surcharge. In each option the amount charged to your water bill will be dependent on how much water you use (see tiers breakdown). The final surcharge amount has not yet been determined and the Town is investigating various options including using a variable surcharge formula based on usage. Look below to access what type of water user you are: Low, Average, High.

The surcharge sunsets when the loan for the LBWTP is paid off. (Approx. 20 years)

**PROPOSED SURCHARGE
Options 1 & 2**

Customer Surcharge Categories & Monthly Surcharge for Options 1 & 2

Sur-charge Category	Usage % Range	Avg Monthly Usage (kgal)		Monthly Surcharge			2018 Avg. Residential Monthly Bill	
		Resid-entia	Non-Resid-entia	Op. 1	Op. 2	% of Avg	Op. 1	Op. 2
1: Low Usage	0 - 20%	0 - 4.1	0 - 1.6	\$11.75	\$18.25	65%	\$53 (4 kgal)	\$55 (4 kgal)
2: Avg Usage	20 - 80%	4.1 - 13.8	1.6 - 46.2	\$18.00	\$28.00	100% (avg)	\$82 (8.9 kgal)	\$85 (8.9 kgal)
3: High Usage	80 - 100%	> 13.8	> 46.2	\$24.50	\$38.00	136%	\$184 (21.2 kgal)	\$181 (21.2 kgal)



Town of Eagle
Variable Surcharge Study
January 2018

The Town is analyzing a tiered structure for applying a water rate pricing increase. In this model the surcharge is variable depending on your usage.

**PROPOSED WATER RATE
FEE INCREASE
Options 1 & 2**

	2018 Existing	2018 Proposed Option 1	2018 Proposed Option 2
Average Monthly Bill - TOTAL	\$ 55	\$ 82	\$ 85
Base Fee	\$35.29	\$35.29	\$37.05
Water Usage Charge	\$19.71	\$28.71	\$19.95
Surcharge	--	\$18.00	\$28.00
Average % Increase		49%	56%



Town of Eagle
Variable Surcharge Study
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Q: What are the various rate increase options under consideration and how do they work?

Option 1: \$18 Average Surcharge and Rate Structure Changes

This option implements an average surcharge of \$18 per month per customer and adopts water rate structure for water in Tier 1, implement conservation-oriented rates for Tiers 2, 3 and 4 (See below chart for in-town Tier structure)

Base Rate \$35.29 in town \$52.94 out of town

Tier 1	0-6,000 Gallons	\$1.50 per 1000 gallons (In Town) \$2.25 per 1000 gallons (Out of Town)
Tier 2	6,001 – 18,000 Gallons	\$6.62 per 1000 gallons (In Town) \$9.89 per 1000 gallons (Out of Town)
Tier 3	18,001 – 29,000 Gallons	\$9.92 per 1000 gallons (In Town) \$14.84 per 1000 gallons (Out of Town)
Tier 4	29,001 + Gallons	\$14.88 per 1000 gallons (In Town) \$22.25 per 1000 gallons (Out of Town)

How to calculate:

1) Apply Base Rate

2) Apply Tiered Water Rates Per Gallons Usage

3) Apply Monthly Surcharge – Based on Usage (Low, Average, High)

Option 2: \$28 Average Surcharge and No Rate Structure Changes

This option implements an average surcharge of \$28 per month per customer and does not adopt rate changes recommended in the SGM Rate Study Report, except that the rate increase applies 5% during 2018, 2019, 2020 and then rate increase of 3% per year in 2021 and onward.

Base Rate \$37.05 in town \$55.59 out of town

Tier 1	0-6,000 Gallons	Included in base rate (In Town) Included in base rate (Out of Town)
Tier 2	6,001-29,000 Gallons	\$6.95 per 1000 gallons (In Town) \$10.42 per 1000 gallons (Out of Town)
Tier 3	29,001 + Gallons	\$8.99 per 1000 gallons (In Town) \$13.48 per 1000 gallons (Out of Town)



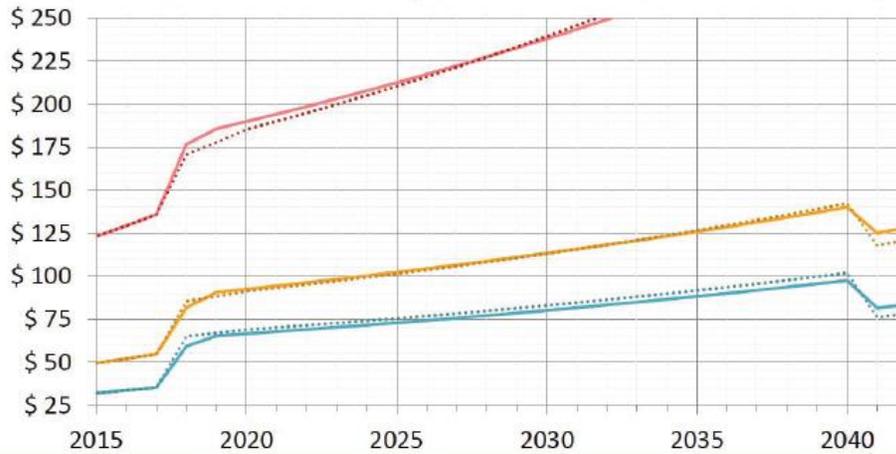
As you can see from the comparison chart below Option 1 and Option 2 are similar.

Q: Is there an Option 3? As we get closer to refining our analysis and narrowing the options, a third option may be considered and may include a hybrid of Option 1 and Option 2.

Average Monthly Water Bill

for a Residential Customer In-Town Within the Average Usage Surcharge Category (\$18 Op. 1 vs \$28 Op. 2)

- Option 1: Typical Summer Use (21,200 gal)
- Option 1: Avg Annual Use (8,900 gal)
- Option 1: Typical Winter Use (4,000 gal)
- Option 2: Typical Summer Use (21,200 gal)
- Option 2: Avg Annual Use (8,900 gal)
- Option 2: Typical Winter Use (4,000 gal)



Town of Eagle
Variable Surcharge Study
January 2018





Q: Simply put, what is the average percent increase to my water bill?

Your water bill will increase by approximately 45% - 50% increase – dependent on usage.

Q: Why can't future growth and new residential and commercial developments pay for the new plant? Why can't the increase of the tap fees pay for the new plant?

Eagle has been saving for this plant with base rate charge increases since 2008. The Town implemented the plant investment fees requiring new construction to pre-pay 60% at the time of approval and pay the remainder at building permit since 2012, and currently has 10 million dollars in the water fund to help pay for the new plant.

Development growth is not predictable. Fluctuations in the real estate market cause for an unstable source of revenue.

The SRF Loan option for the LBWTP does not include a substantial penalty for pre-payment of the loan after 10 years. It is possible the Town could use revenue from tap fees to pay the loan off early, if all other obligations and capital projects were funded appropriately.

The Town imposes tap fees on new development to offset the costs of the Town's wholesale water infrastructure system. Tap fees revenues get deposited into the Town's Water Fund. This Water Fund is responsible for all capital improvement projects, maintenance and water system operations.

Q: Will there be financial assistance program available for low income residents?

The Town is considering a variety of options to provide financial assistance to low income residents. This may include applying for a waiver, exclusion from the surcharge or a grant program.

Q: What funds go into the Water Fund and where do they come from?

Revenues from the increase in tap fees, the water surcharge and the water rate increase will all be deposited into the Town's Water Fund. **The Water Fund includes:**

- 1) Water System Capital Improvements (\$40 million)
- Capital Projects Schedule (see end of this document)
- 2) Lower Basin Water Treatment Plant (\$27 million)
- 3) Operations and Maintenance
- 4) Reserve Balance (\$4 million)



Q: Is the Town investigating how to use new development to pay for the cost of construction of the new plant?

Staff is evaluating an option to use revenue from tap fees to be directly applied to the LBWTP and capital improvements.

Q: Can you explain how the tap fee increase works?

A Plant Investment Fee (**Tap Fee**) is paid by all new developments/homes. This fee paid to the Town of Eagle for the permanent reservation of water plant capacity and right to use water from the water system. Tap Fees deposited in the water enterprise fund and can be used only for water system related purposes.

Current fee is \$7,000 per one EQR. The Tap Fee Increase, effective Spring 2018 will increase to \$8,050 per EQR.

Q: What about water conservation? Isn't this a viable alternative?

The town is committed to conservation, with a five-year water efficiency goal of 10% reduction outdoor water use and per capita water use.

Targeted measures that are underway to achieve this goal are:

- Decrease Outdoor Irrigation and Reduce Peak Month Use
- Upgrade Town Policies and Practices to Reflect Water Efficiency Goals
- Community Outreach and Involvement

While these measures are underway, peak demands this past summer already approach the maximum capacity of the plant, even with 90% of customers complying with odd-even day watering restrictions. The plant is operating 16-18 hours per day to meet summertime demands.

More information is located on pages 9-24, Attachment C of the Town of Eagle Five Year Efficiency Plan.

Conservation measures the Town currently uses or is undertaking:

- Budgeted \$40,000 irrigation system upgrades.
- Uses non-potable water irrigation systems for:
 - Chambers Park
 - Brush Creek Pavilion
 - Public Works Facility Grounds
 - the new Eagle River Park
 - Pool and Ice Rink Landscaping
- Encourages non-potable irrigation restriction for new development



Q: What is the timeline for the surcharge and rate increase to go into effect?

Both fee increases are targeted to go into effect in Spring 2018. The Town Board of Trustees will make the final determination on implementing rate increases and how tap fees will be used.

Q: How will a second water plant benefit me?

- Reliable water infrastructure is the foundation for maintaining high quality of life for residents in Eagle.
- Water system redundancy guarantees not only safe but consistent delivery of high quality water. Without redundancy the community's water supply is at risk.
- Utilizing the Town's water rights.
- Significantly reduces water supply risk.

Q: Why is it important to build the LBWTP now? What is the urgency?

Allows the town to utilize new legal and physical water rights on the Lower Brush Creek and the Eagle River. The Town's current water supply is limited by Upper Brush Creek water rights, and the current water plant is operating close to peak capacity.

Construction cost escalation and the ability to lock down the construction cost in early 2018 is imperative. The current plant capacity will not support near-term growth. Both construction and financing costs will continue to increase if the project is delayed. Delay also means that the Town will continue to be exposed to the increased risks associated with having a single water supply and treatment plant.

The LBWTP will provide redundancy in the water system and increases water supply capacity. Both meet the needs of our growing community. With respect to capacity, continued residential and commercial growth will increase water demand. Eagle has seen its population double in the past decade. Currently, Eagle receives 100% of its water from Upper Brush Creek. Peak demand for water occurs in the summer months due to outdoor irrigation. **2017** saw the current water plant operating at close to **80%** capacity.

The LBWTP guarantees service reliability, a single water treatment plant does not provide for system redundancy, which means that reliable service is at risk in the event of Brush Creek blockages or contamination. It also makes the town more resilient to severe weather events and protects the ecosystem of Brush Creek as it flows through town. This guarantees service levels to the entire community and maintaining availability of high quality safe water. Increasing flows in Brush Creek, provides environmental benefits, for the creek and surrounding land.

Meeting summer demand (& peak day demands) – irrigation needs. Peak water demands in the summer already approach the maximum capacity of the plant, even with **90%** of customers complying with odd-even day watering restrictions.



Q: What is included in the Water Capital Projects Plan?

Capital Projects Schedule

Water Utilities Projects 2013-2016 Average Annual Cost was \$1.02M	Estimated Construction Year		Project Cost (Dollars)
Brush Creek Transmission Main Replacement-Phase I	2013		\$ 316,324
I-70/Eby Creek Road	2014		\$ 1,474,471
Downtown Distribution: Wall St.	2015		\$ 620,000
Downtown Distribution: Second St and Capitol	2015		\$ 430,000
Brush Creek Transmission Main Replacement-Phase II	2015		\$ 779,000
New Diversion Screen	2016		\$ 275,000
Downtown Distribution: Wall St.	2016		\$ 175,000
Other 2016 projects	2016		\$ -
Water Utilities Projects Projected 2017-2020 Average Annual Cost is \$7.46M	Estimated Construction Year	Estimated Project Cost (2016 Dollars, except LBWTP Ph. I is 2018 \$)	Estimated Project Cost at Construction (Dollars)*
Cemetery Tank Replacement	2017	\$ 662,759	\$ 680,654
Lower Basin Water Treatment Plant Phase I (2018 \$)	2018	\$ 27,350,000	\$ 28,123,435
Loop line- Violet Lane	2018	\$ 1,000,000	\$ 1,054,729
Water Utilities Projects Projected 2021-2025 Average Annual Cost is \$1.68M	Estimated Construction Year	Estimated Project Cost (2016 Dollars)	Estimated Project Cost at Construction (Dollars)*
Loop Line - Fairgrounds	2021	\$ 2,075,000	\$ 2,370,666
UBWTP - 3 Filter Trains	2022	\$ 3,012,542	\$ 3,351,312
Downtown Distribution: Capitol	2023	\$ 468,724	\$ 564,820
Eby Creek Pump Station	2024	\$ 361,505	\$ 447,381
Downtown Distribution: Fourth St.	2024	\$ 458,181	\$ 567,023
Downtown Distribution: Howard St.	2025	\$ 862,452	\$ 1,096,147
Water Utilities Projects Projected 2026-2030 Average Annual Cost is \$1.17M	Estimated Construction Year	Estimated Project Cost (2016 Dollars)	Estimated Project Cost at Construction (Dollars)*
Brush Creek Transmission Main Replacement-Phase III	2026	\$ 1,024,264	\$ 1,336,954
Brush Creek Transmission Main Replacement-Phase IV	2027	\$ 1,024,264	\$ 1,301,805
Eby Creek Lower Tank Replacement	2028	\$ 1,024,264	\$ 1,336,954
Eby Creek Upper Tank Project	2029	\$ 783,261	\$ 1,049,981
Terrace Distribution	2030	\$ 610,707	\$ 840,772
Water Utilities Projects Beyond 2030	Estimated Construction Year	Estimated Project Cost (2016 Dollars)	Estimated Project Cost at Construction (Dollars)*
Eagle Ranch Distribution -Seg C	2033	\$ 1,605,134	\$ 2,393,690
Grand Avenue utilities	2034	\$ 3,012,542	\$ 4,613,815
West Eagle Redevelopment Utilities	2035	\$ 3,012,542	\$ 4,738,388
Chambers Distribution	2036	\$ 813,386	\$ 1,313,908
LBWTP - Phase 2	2040	\$ 4,493,508	\$ 8,074,865
LBWTP - Phase 3	2049	\$ 1,405,050	\$ 3,209,042

*Using a Construction Inflation Rate of 2.7%