

DATE: November 6, 2025

TO: Environmental Services Commission

FROM: Matt Hobson, Utilities Fiscal Manager

SUBJECT: Sewer Utility Cost-of-Service Analysis (COSA) and Rate Design Recommendations

ACTION REQUIRED

Staff is seeking the Commission's concurrence on a recommendation to City Council to improve cost equity between the three sewer customer classes (single-family residential, multi-family residential, and non-residential) over a five-year period from 2027-2031. Staff is also seeking feedback on several proposed rate design changes to the City's schedule of sewerage charges, which would increase intraclass cost equity, improve alignment to the City's comprehensive financial policies, and provide customers greater control of their sewer bills through efficient use of utility services.

BACKGROUND / ANALYSIS

On October 2, 2025, City staff presented the Commission with draft cost-of-service analysis (COSA) results for the sewer utility. A cost-of-service analysis is an industry best practice to ensure that rates assessed to customers are equitable and proportional to their demand and use of the utility. State law (RCW 35.92.010) and City financial policy (CFP 7.10.2.1) require that utility rates are based on the cost-of-service, so that the rates are equitable in proportion to each customer class's use of the system and services provided.

A cost-of-service analysis evaluates cost equity between customer classes – a customer class is a group of customers with similar usage/demand characteristics. The draft results indicated that rate revenue collected from the Multi-Family customer class is higher than its cost-of-service (123% cost recovery). As a result, the Multi-Family customer class **subsidizes** the costs of the other two customer classes. Single-Family Residential (91% cost recovery) and Non-Residential (91% cost recovery) rate revenue is lower than the cost-of-service. These two classes are **subsidized** by the Multi-Family customer class. These results are generally consistent and build upon an internal cost-of-service study completed in 2019.

City staff presented options to achieve cost equity for all customer class rates. These options included a three-year phase-in strategy (2027-2029), and a staff recommended five-year phase-in strategy (2027-2031). As part of the presentation and discussion, the Commission requested that City staff also provide a seven-year phase-in strategy (2027-2033) for consideration. The annual rate increases for each phase-in strategy are outlined in **Exhibit 1**, **Exhibit 2** and **Exhibit 3**.

Exhibit 4 provides a comparison of the forecasted monthly bill impact to a typical single-family residential customer for the three phase-in options.

Exhibit 1: Annual Rate Adjustments by Customer Class for Three-Year Phase-In

Customer Class	2027	2028	2029	2030	2031	2032	2033
Single-Family Residential	15.73%	15.34%	13.98%	11.19%	11.21%	7.39%	7.40%
Non-Residential	14.70%	14.70%	14.70%	11.20%	11.20%	7.40%	7.40%
Multi-Family Residential	3.70%	3.70%	3.70%	11.20%	11.20%	7.40%	7.40%
Total	11.30%	11.40%	11.00%	11.20%	11.20%	7.40%	7.40%

Exhibit 2: Annual Rate Adjustments by Customer Class for Five-Year Phase-In (Recommended)

Customer Class	2027	2028	2029	2030	2031	2032	2033
Single-Family Residential	14.13%	14.11%	13.05%	13.28%	13.11%	7.39%	7.40%
Non-Residential	13.20%	13.20%	13.20%	13.20%	13.20%	7.40%	7.40%
Multi-Family Residential	6.60%	6.60%	6.60%	6.60%	6.60%	7.40%	7.40%
Total	11.30%	11.40%	11.00%	11.20%	11.20%	7.40%	7.40%

Exhibit 3: Annual Rate Adjustments by Customer Class for Seven-Year Phase-In

Customer Class	2027	2028	2029	2030	2031	2032	2033
Single-Family Residential	13.23%	13.33%	12.37%	12.69%	12.61%	8.57%	8.50%
Non-Residential	12.75%	12.75%	12.75%	12.75%	12.75%	9.00%	9.00%
Multi-Family Residential	8.00%	8.00%	8.00%	8.00%	8.00%	4.40%	4.40%
Total	11.30%	11.40%	11.00%	11.20%	11.20%	7.40%	7.40%

Exhibit 4: Typical Monthly Sewer Single-Family Residential Bill Impact by Phase-In Strategy

Customer Class	2027	2028	2029	2030	2031	2032	2033
<i>Status Quo</i>	\$137.74	\$153.02	\$168.96	\$186.98	\$206.90	\$222.30	\$238.82
Seven-Year Phase-In	+\$2.93	+\$6.65	+\$10.04	+\$14.39	+\$19.45	+\$24.19	+\$29.25
Five-Year Phase-In	+\$4.35	+\$9.49	+\$14.63	+\$20.88	+\$28.07	+\$30.12	+\$32.33
Three-Year Phase-In	+\$6.73	+\$14.48	+\$22.15	+\$24.52	+\$27.28	+\$29.25	+\$31.46

Public Utility Rate Design Overview

Rate design is the final step in utility rate setting after determining the utility's overall rate revenue needs and determining the equitable allocation of those revenues to the customer classes. The principal objective of rate design is to implement rate structures that collect the appropriate level of revenue that is reasonably aligned with cost-of-service.

Public utilities leverage rate structures as tools to advance their financial, operational, customer communication, and policy goals. For example, assessing fixed charges to utility customers can provide a stable and sustainable revenue source to support utility services. Variable (usage) charges can be aligned to the utility's costs that change in response to higher or lower customer demand. Variable charges can also help promote cost equity between customers and be used by public utilities to promote conservation (e.g., customers can lower their monthly bill by reducing usage). Because utilities oftentimes use rate design as a pricing signal to their customers, it is critical that rate design also account for the understandability and transparency of rate structures.

Given the range and complexity of rate structures on customer bills, a public utility should carefully plan and evaluate changes to an existing rate structure. The following considerations can help the City understand the degree to which potential changes to rate structures will advance the City's objectives:

- **Availability and Quality of Data** – Any rate structure requires reliable, timely, and accurate billing data to develop and administer charges to customers.
- **Cost-of-Service** – Rates and rate structures should be reasonably related to the cost to provide service to different classes of customers.

- **Implementation** – Utilities should consider the time and cost requirements of implementing and administering a new rate structure. New billing data may need to be created, and accounting systems may need to be updated.
- **Intraclass Cost Equity** – Rates assessed to customers within the same class of service should be uniformly applied (e.g., a utility cannot arbitrarily charge a higher or lower rate for customers within the same class).
- **Pricing Signals** – If rates are used to communicate the cost-of-service to customers to promote conservation and efficient use of the utility, the rate structure (e.g., billing frequency, usage charges) should provide customers with the ability to adjust their use on a timely and meaningful basis.
- **Revenue Sufficiency** – Rate structures should be designed to generate a sufficient and appropriate level of revenue to support the utility’s annual and seasonal cash flow requirements.
- **Risk** – When applicable, utilities should consider the financial risks of price elasticity of demand, weather seasonality, and changes in economic activity when developing rates and rate structures.

The following section details four proposed design changes to the City’s schedule of sewerage charges and provides a brief summary of the rationale and benefits of each change based on these considerations.

Proposed Rate Design Change #1: Replace tiered volumetric flow rates with uniform volumetric flow rate for the Single-Family Residential customer class.

- Background: The existing rate structure for the single-family residential class includes two volumetric flow rates. The first-tier rate (\$6.75 per 100 cubic feet) is assessed on the first 5,000 cubic feet of flow over a two-month period. The second-tier rate (\$8.72 per 100 cubic feet) is assessed on all flow over the first 5,000 cubic feet.
- Rationale of Proposed Change: The vast majority of Single-Family Residential customer bills (>99.9%) do not exceed 5,000 cubic feet. As a result, the second tier does not apply to most customers and generates almost no rate revenue.
- Benefits of Proposed Change:
 - *Availability and Quality of Data* – Simplifies billing data required to produce customer bills.
 - *Cost-of-Service* – Aligns with five-year phase-in plan towards full cost recovery.
 - *Implementation* – No anticipated challenges with implementation.
 - *Intraclass Cost Equity* – Improves alignment with cost-of-service results.
 - *Pricing Signals* – Simplified rate structure will make bills more understandable to customers.
 - *Revenue Sufficiency* – Proposal would generate equivalent revenue as the existing rate structure.
- Anticipated Bill Impacts of Proposed Change: The proposed rate structure change would eliminate the second-tier flow rate and increase the first tier (uniform) flow rate by less than \$0.01 per 100 cubic feet. The impact to a typical single-family residential monthly bill using 15 CCFs would be less than \$0.10.

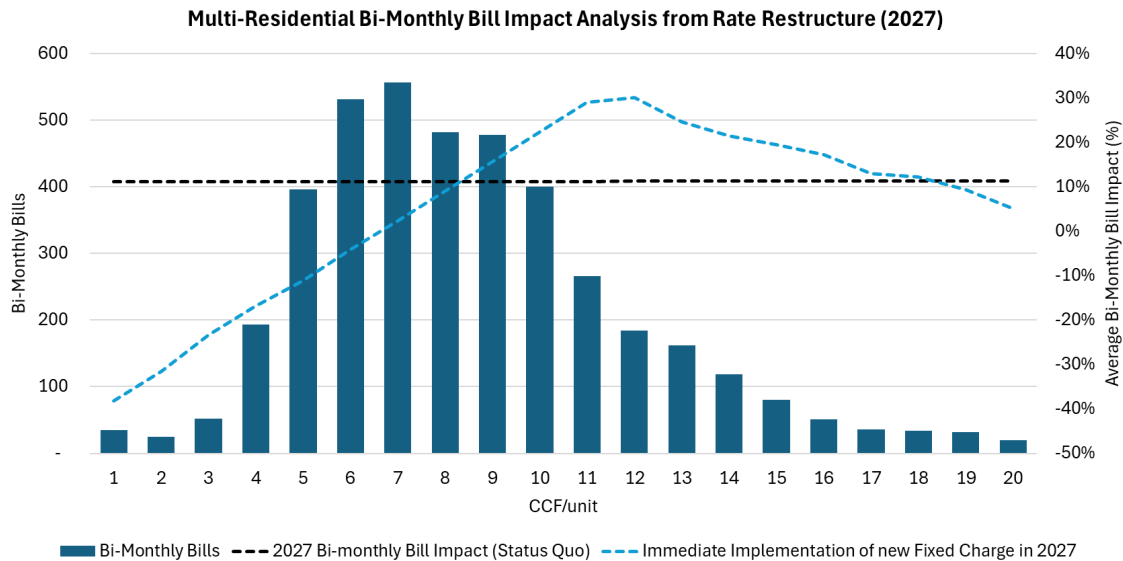
Proposed Rate Design Change #2: Align the Multi-Family Residential rate structure to align with the Single-Family Residential rate structure.

- Background: City financial policy (7.10.2.1) requires that cost increases or decreases to wholesale services (e.g., King County sewer treatment costs) are passed directly through to Bellevue customers. The sewer rate structure for the Single-Family Residential customer class complies with this policy by setting the bi-monthly fixed rate equal to the sewer treatment rate adopted by King County each year. The remaining portion of a Bellevue Single-Family Residential customer’s sewer bill, which pays for the local components of the sewer utility, is recovered through the flow rate. This proposal would restructure the Multi-Family Residential rates to be more consistent with City financial policy and with the Single-Family Residential rate structure.

- As proposed, the fixed bi-monthly rate for a Multi-Family Residential dwelling unit would be set to the adopted King County treatment rate per residential customer equivalent (RCE) multiplied by the RCEs per multi-unit dwelling unit ratio (0.63) used by King County to assess its sewer capacity charge. For example, the 2025 King County treatment bi-monthly rate is \$116.56 per residential customer equivalent, so the City's Multi-Family Residential fixed rate would equal \$116.56 multiplied by 0.63 or \$73.43 per dwelling unit.
- The volumetric flow rate would be assessed on all metered water flow. The City's existing volumetric flow rate for the Multi-Family Residential class only applies to metered water flow after a customer's water use exceeds the 11 CCF allowance per dwelling unit. The proposal would eliminate the 11 CCF allowance and assess the volumetric flow rate on all metered water flow.
- Rationale of Proposed Change: The major driver of the subsidies identified in the 2025 cost-of-service results is the existing rate structure for the Multi-Family Residential customer class. The current fixed charge includes an 11 CCF allowance per dwelling unit, and that allowance is well beyond the actual billed flow for a typical Multi-Family customer account. The proposed rate design changes improve the alignment of this class's rate structure to City financial policy and creates a consistent rate structure across the residential sewer classes.
- Benefits of Proposed Change:
 - *Availability and Quality of Data* – Simplifies billing data required to produce customer bills.
 - *Cost-of-Service* – Aligns with five-year phase-in plan towards full cost recovery.
 - *Implementation* – No anticipated challenges with implementation.
 - *Intraclass Cost Equity* – Improves alignment with cost-of-service results. Customers pay for what they use.
 - *Pricing Signals* – Simplified rate structure will make bills more understandable to customers. Customers will have greater control of their bills as a larger portion of the bill will be variable in proportion to actual use.
 - *Revenue Sufficiency* – Proposal would generate equivalent revenue as the existing rate structure.
- Anticipated Bill Impacts of Proposed Change: While rate design changes such as those proposed for the Multi-Family Residential customer class are revenue neutral for the customer class, they are **not** revenue neutral to individual customer bills. City staff analyzed the impacts of these rate design changes on each of the 700+ Multi-Family Residential customer accounts. **Exhibit 5** illustrates the projected bill impacts from this proposed change, which are summarized as follows:
 - Multi-Family properties with relatively low water use per dwelling unit (up to 6 CCFs per dwelling unit over a two-month period) would experience a decrease to their sewer bill in 2027 compared to 2026. Individual bill impacts for this group range from -4 percent to -38 percent.
 - Multi-Family properties with water use per dwelling unit between 7 and 8 CCFs over a two-month period would experience an increase to their sewer bill in 2027 compared to 2026; however, the bill increase would remain below the overall 11 percent sewer rate revenue increase projected in 2027.
 - Multi-Family properties with water use per dwelling unit at or above 9 CCFs over a two-month period would generally experience bill impacts above the overall 11 percent sewer rate revenue increase projected in 2027. Individual bill impacts would be as high as 30 percent.
 - City staff correlated these bill impacts to reported renter-occupied household incomes in Bellevue from the U.S. Census Bureau's American Community Survey. Based on this analysis, it is anticipated that the higher bill impacts described above would disproportionately impact households in areas of the City with lower household incomes.

- Because this rate design change would generate such variable bill impacts across the customer class and higher bill impacts to the households with affordability challenges, **Staff do not recommend these rate design changes unless they are coupled with the Proposed Rate Design Change #3.**

Exhibit 5: 2027 Bill Impact Analysis of Proposed Rate Design Change #2



Proposed Rate Design Change #3: Transition to the proposed bi-monthly fixed charge structure over five years (2027-2031) to reduce the bill impacts to Multi-Family Residential customer bills.

- **Background:** This proposal would restructure the bi-monthly fixed charge for Multi-Family Residential customers consistent with the methodology described in Rate Design Change #2; however, the City would transition the amount of the fixed charge gradually over a period of five years. Instead of reducing the bi-monthly fixed charge from \$152.65 in 2026 to \$89.02 in 2027, it would be reduced to \$151.45 in 2027. The fixed charge would continue to be gradually adjusted until 2031 when the fixed charge (\$146.76) would be equal to the projected King County treatment rate per residential customer equivalent (RCE) in 2031 multiplied by the RCEs per multi-unit dwelling unit ratio (0.63) used by King County to assess its sewer capacity charge. **Exhibit 6** details the projected bi-monthly fixed charge from 2026 to 2031 based on this proposed rate structure. **Exhibit 7** illustrates the projected bill impacts from this proposed change.

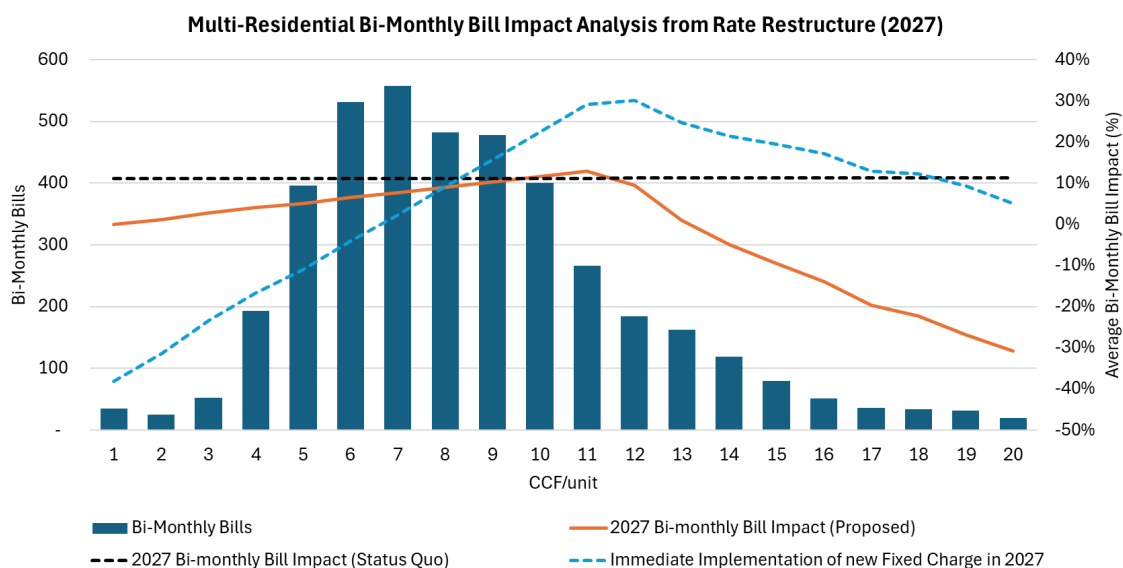
Exhibit 6: Proposed Multi-Family Residential Bi-Monthly Fixed Charge per Dwelling Unit

	2026	2027 Proposed	2028 Proposed	2029 Proposed	2030 Proposed	2031 Proposed
Bi-Monthly Charge per Dwelling Unit	\$152.65	\$151.45	\$150.26	\$149.08	\$147.91	\$146.76
\$ Change		-\$1.20	-\$1.19	-\$1.18	-\$1.17	-\$1.15
% Change		-0.79%	-0.79%	-0.79%	-0.78%	-0.78%

- **Rationale of Proposed Change:** Phasing in the new fixed rate charge over a five-year period significantly reduces volatility in the bill impacts to individual customer bills.

- **Benefits of Proposed Change:** All of the benefits of Rate Design Change #2 are achieved with this proposal by the end of the five-year transition period.
- **Anticipated Bill Impacts of Proposed Change:**
 - The majority of bills (85 percent) in 2027 would be at or below the overall sewer rate increase.
 - Multi-family properties with very low water use per dwelling unit (up to 1 CCFs per dwelling unit over a two-month period) would experience a slight decrease to their sewer bill in 2027 compared to 2026.
 - Multi-family properties with water use per dwelling unit between 2 and 9 CCFs over a two-month period would experience an increase to their sewer bill in 2027 compared to 2026; however, the bill increase would remain below the overall 11 percent sewer rate revenue increase projected in 2027.
 - Multi-family properties with water use per dwelling unit at 10 to 11 CCFs over a two-month period would generally experience bill impacts slightly above the overall 11 percent sewer rate revenue increase projected in 2027.
 - From 2028 to 2031, the proposed phase-in strategy would continue to minimize the volatility of annual bill impacts. The annual bill impacts for the middle 95th percentile of customer bills would range between 1.9 percent and 16.0 percent.

Exhibit 7: 2027 Bill Impact Analysis of Proposed Rate Design Change #3

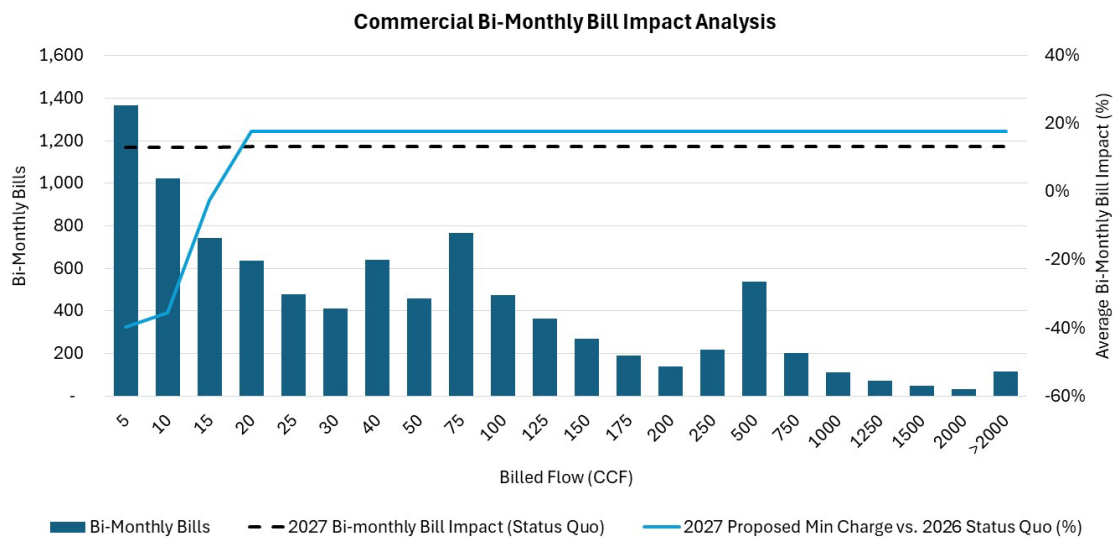


Proposed Rate Design Change #4: Align minimum bi-monthly charge for Non-Residential (Commercial) customers to the King County treatment charge for one residential customer equivalent.

- **Background:** The existing rate structure for the non-residential customer class is based on metered water use (\$13.98 per CCF) with a minimum charge of \$217.50 in 2025. The proposed change would lower the minimum charge to align it with the King County sewer treatment charge assessed for one residential customer equivalent (\$141.30 in 2027).
- **Rationale of Proposed Change:** The proposed rate design change improves the alignment of this class's rate structure to City financial policy and the rate structures for the other sewer classes.
- **Benefits of Proposed Change:**
 - *Availability and Quality of Data* – No change from existing data needs.
 - *Cost-of-Service* – Aligns with five-year phase-in plan towards full cost recovery.
 - *Implementation* – No anticipated challenges with implementation.

- *Intraclass Cost Equity* – Improves alignment with cost-of-service results. Customers pay for what they use.
- *Pricing Signals* – Customers will have greater control of their bills as a larger portion of the bill will be variable in proportion to actual use.
- *Revenue Sufficiency* – Proposal would generate equivalent revenue as the existing rate structure.
- Anticipated Bill Impacts of Proposed Change:
 - The proposed rate structure would reduce the bill amounts for non-residential customers with 15 CCF or less of bi-monthly metered water use by an average \$35 per month in 2027 compared to 2026 projected monthly bills. These customer accounts comprise approximately one-third of all non-residential class customer accounts.
 - The bill impact for customers with bi-monthly flow in excess of 15 CCF is estimated at 18 percent. These customer accounts comprise approximately two-thirds of all non-residential class customer accounts. They also make up over 96 percent of all billed flow for the non-residential class. **Exhibit 8** illustrates the projected bill impacts from this proposed change.

Exhibit 8: 2027 Bill Impact Analysis of Proposed Rate Design Change #4



POLICY ISSUES

The proposed rate design options are consistent with the City’s comprehensive financial policies and state law regarding utility rate-setting. They are also consistent with analytical principles generally accepted and followed in the public utility industry – rates and charges should generate sufficient revenue that is proportional to the cost-of-service. Each rate design option is revenue neutral to the existing rate structure and achieves full cost recovery for each customer class over the five-year phase-in period.

The rate design recommendations also simplify the existing sewer rate structure, provide multi-family and non-residential customers greater control over their bills, and minimize the unfavorable bill impacts from these rate changes to the extent possible.

FISCAL IMPACT

Each rate design option generates the same overall revenue as projected in the City’s most recent financial forecast for the sewer utility. A cost-of-service analysis and the proposed rate design structure are **revenue neutral** with respect to the utility’s overall financial requirements. In other words, a cost-of-service analysis

focuses on the equitable allocation of the revenue needs of the utility to each customer class. And, rate design focuses on how that revenue is recovered through a schedule of fixed and variable charges.

NEXT STEPS

- City staff request ESC concurrence on the recommendation to transition existing sewer rates towards full cost recovery over a five-year time period (2027-2031).
- City staff also request ESC feedback on Proposed Rate Design Changes, including:
 - Residential Single-Family: Replace tiered volumetric flow rates with uniform volumetric flow rate.
 - Multi-Family Residential: Align the Multi-Family Residential rate structure with the Single-Family Residential rate structure. The City would transition the fixed and variable charges towards the new rate structure targets over the cost-of-service phase-in period (i.e., five years).
 - Non-Residential: Align the minimum bi-monthly charge for Non-Residential (Commercial) customers to the King County treatment charge for one residential customer equivalent.

With the Commission's concurrence, the proposed rate design changes as well as recommendation to align planned rates with the cost-of-service results would be presented to City Council in spring 2026 as part of the 2027-2028 budget development process.

If approved, cost-of-service and rate design options would take effect on January 1, 2027.

Attachment A: 2027-2034 Rate Schedule (Recommended 5-Year Phase-In)

Annual Class-Specific Rate Adjustments

Class of Service	2026	2027	2028	2029	2030	2031	2032	2033	2034
Single-Family Residential		14.13%	14.11%	13.05%	13.28%	13.11%	7.39%	7.40%	4.19%
Non-Residential		13.20%	13.20%	13.20%	13.20%	13.20%	7.40%	7.40%	4.20%
Multi-Residential		6.60%	6.60%	6.60%	6.60%	6.60%	7.40%	7.40%	4.20%
Total		11.30%	11.40%	11.00%	11.20%	11.20%	7.40%	7.40%	4.19%

Bi-Monthly Fixed Charges

Class of Service	2026	2027	2028	2029	2030	2031	2032	2033	2034
Single-Family Residential	\$125.32	\$141.30	\$159.32	\$180.83	\$205.24	\$232.95	\$249.84	\$267.95	\$273.31
Non-Residential	\$234.68	\$141.30	\$159.32	\$180.83	\$205.24	\$232.95	\$249.84	\$267.95	\$273.31
Multi-Residential	\$152.65	\$151.45	\$150.26	\$149.08	\$147.91	\$146.76	\$157.40	\$168.81	\$172.19

Bi-Monthly Flow Charges

Class of Service	2026	2027	2028	2029	2030	2031	2032	2033	2034
Single-Family Residential									
Tier 1 (upto 50CCF)	\$7.33	\$8.54	\$9.92	\$11.15	\$12.59	\$14.17	\$15.25	\$16.41	\$17.65
Tier 2 (>50CCF)	\$9.46	\$8.54	\$9.92	\$11.15	\$12.59	\$14.17	\$15.25	\$16.41	\$17.65
Non-Residential	\$15.08	\$17.77	\$20.11	\$22.77	\$25.77	\$29.17	\$31.33	\$33.65	\$35.07
Multi-Residential	\$12.59	\$1.99	\$3.61	\$5.33	\$7.14	\$9.07	\$9.77	\$10.53	\$11.46

Attachment B: 2027-2034 Rate Schedule (Optional 7-Year Phase-In)

Annual Class-Specific Rate Adjustments

Class of Service	2026	2027	2028	2029	2030	2031	2032	2033	2034
Single-Family Residential		13.23%	13.33%	12.37%	12.69%	12.61%	8.57%	8.50%	4.19%
Non-Residential		12.75%	12.75%	12.75%	12.75%	12.75%	9.00%	9.00%	4.20%
Multi-Residential		8.00%	8.00%	8.00%	8.00%	8.00%	4.40%	4.40%	4.20%
Total		11.30%	11.40%	11.00%	11.20%	11.20%	7.40%	7.40%	4.19%

BI-Monthly Fixed Charges

Class of Service	2026	2027	2028	2029	2030	2031	2032	2033	2034
Single-Family Residential	\$125.32	\$141.30	\$159.32	\$180.83	\$205.24	\$232.95	\$249.84	\$267.95	\$273.31
Non-Residential	\$234.68	\$141.30	\$159.32	\$180.83	\$205.24	\$232.95	\$249.84	\$267.95	\$273.31
Multi-Residential	\$152.65	\$154.86	\$157.10	\$159.37	\$161.68	\$164.02	\$166.39	\$168.81	\$172.19

BI-Monthly Flow Charges

Class of Service	2026	2027	2028	2029	2030	2031	2032	2033	2034
Single-Family Residential		\$8.36	\$9.56	\$10.57	\$11.77	\$13.08	\$14.50	\$16.02	\$17.25
Tier 1 (upto 50CCF)	\$7.33	\$8.36	\$9.56	\$10.57	\$11.77	\$13.08	\$14.50	\$16.02	\$17.25
Tier 2 (>50CCF)	\$9.46	\$8.36	\$9.56	\$10.57	\$11.77	\$13.08	\$14.50	\$16.02	\$17.25
Non-Residential	\$15.08	\$17.69	\$19.95	\$22.49	\$25.36	\$28.59	\$31.17	\$33.98	\$35.42
Multi-Residential	\$12.59	\$1.83	\$3.32	\$4.96	\$6.75	\$8.70	\$9.73	\$10.81	\$11.76