

DATE: October 2, 2025
TO: Environmental Services Commission
FROM: Matt Hobson, Utilities Fiscal Manager
SUBJECT: Sewer Utility Cost-of-Service Analysis (COSA)

ACTION REQUIRED

Staff is seeking Commission's feedback and recommendation to City Council to improve cost equity between the three sewer customer classes (single-family residential, multi-family residential, and non-residential) over the next five years.

BACKGROUND / ANALYSIS

A cost-of-service analysis (COSA) 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 customer classes evaluated by the sewer COSA are:

- Single-Family Residential
- Multi-Family Residential (e.g., duplex, four-plex, apartment buildings)
- Non-Residential (e.g., business, government, institution)

Methodology

The COSA is generally based on the process outlined in the American Water Works Association (AWWA) M1 Manual for Principles of Water Rates, Fees, and Charges. This method provides a rational basis for distributing the full costs of the sewer utility to each customer class in proportion to the demands they place on the system. The key analytical steps of the cost-of-service analysis are as follows:

- **Step 1:** Functionalize the annual revenue requirement by function or activity.
 - Customer: Fixed costs that do not vary with flow or treatment (e.g., customer billing)
 - Flow: Costs associated with transmitting flow through City collection mains
 - Treatment: Cost associated with transmitting, treating, and discharging effluent via the King County wastewater system
 - All Other: Costs not directly assigned or allocable to the other three functions
- **Step 2:** Allocate functional costs to appropriate cost components.
 - Customer: Number of customer accounts assigned to each customer class
 - Flow: Assumed or actual flow as measured at water meter
 - Treatment: Number of residential customer equivalents as defined by King County
 - All Other: Allocated to the other functions based on their respective cost components
- **Step 3:** Distribute costs to customer classes based on each class's units of service for each cost component.

- **Step 4:** Compare the allocated revenue requirement to each customer class to the rate revenue collected from each customer class.

Draft Results

Cost-of-service results are based on the 2027 revenue requirement forecast for the sewer utility presented to ESC and the City Council in 2024. The forecast is adjusted to account for the latest wastewater treatment expense forecast provided by King County in May 2025. The functional allocation of the 2027 revenue requirement is detailed in Table 1.

Table 1: Functional Allocation of 2027 Revenue Requirement by Customer Class

Customer Class	Customer	Flow	Treatment	Total
Single-Family Residential	\$2,120,522	\$20,675,203	\$28,468,632	\$51,264,357
Non-Residential	103,740	11,656,824	11,273,944	23,034,509
Multi-Family Residential	44,760	15,010,764	14,517,721	29,573,245
Total	\$2,269,022	\$47,342,791	\$54,260,298	\$103,872,111

When compared to forecasted rate revenue by customer class in 2027 (see Table 2), the cost-of-service analysis provides a technical evaluation of cost equity between customer classes. 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 cost for 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 on an internal cost-of-service study completed in 2019.

Table 2: Cost-of-Service Analysis by Customer Class

Customer Class	2027 Rate Revenue	2027 Cost-of-Service	Cost Recovery (as a percent)
Single-Family Residential	\$46,497,623	\$51,264,357	91%
Non-Residential	20,940,887	23,034,509	91%
Multi-Family Residential	36,433,601	29,573,245	123%
Total	\$103,872,111	\$103,872,111	100%

Interpreting Cost-of-Service Results

A cost-of-service analysis is a snapshot in time and because costs fluctuate each year, the increase needed by class can fluctuate and interclass rate changes are not suggested unless the class's revenue difference is consistently outside of the plus or minus 10.0 percent range of reasonableness. For classes outside the threshold, public utilities can leverage several financial strategies to align rate revenues with cost-of-service results. These policy decisions may focus on the timing and level of rate adjustments for a particular class of service. For example, an agency may decide to gradually increase rates for a class of service over several years in order to make progress towards cost equity while also keeping the rate increases relatively affordable.

Policy Options to Align Sewer Utility Rates with Cost-of-Service Results

- **Option 1 (recommended):** Achieve cost equity for all customer classes over a five-year period (2027-2031). This option would provide time to gradually adjust rates for each customer class over the next five years. This is the recommended option because the City is forecasting annual overall rate increases for the sewer utility at approximately 11 percent. A five-year phase-in strategy would help

mitigate the combined impact of these overall rate increases and the cost-of-service adjustments required for the Single-Family Residential and Non-Residential customer classes. Additionally, the City will conduct the next cost-of-service analysis within the next five years which would provide an initial indication of progress towards cost equity.

- **Option 2: Achieve cost equity for all customer classes over a three-year period (2027-2029).** This option would achieve cost equity over a shorter timeframe relative to Option 1; however, this option would require higher rate adjustments to the Single-Family Residential and Non-Residential customer classes. Single-Family Residential rates would need to increase 15.75 percent in 2027, 15.35 percent in 2028, and 13.97 percent in 2029.

Table 3 and Table 4 detail the forecasted annual rate increases by customer class for Option 1 and Option 2.

Table 3: Annual Rate Adjustments by Customer Class for Option 1 (Five-Year Phase-In)

Customer Class	2027	2028	2029	2030	2031
Single-Family Residential	14.15%	14.12%	13.04%	13.29%	13.09%
Non-Residential	13.20%	13.20%	13.20%	13.20%	13.20%
Multi-Family Residential	6.60%	6.60%	6.60%	6.60%	6.60%
Total	11.30%	11.40%	11.00%	11.20%	11.20%

Table 4: Annual Rate Adjustments by Customer Class for Option 2 (Three-Year Phase-In)

Customer Class	2027	2028	2029	2030	2031
Single-Family Residential	15.75%	15.35%	13.97%	11.20%	11.20%
Non-Residential	14.70%	14.70%	14.70%	11.20%	11.20%
Multi-Family Residential	3.70%	3.70%	3.70%	11.20%	11.20%
Total	11.30%	11.40%	11.00%	11.20%	11.20%

POLICY ISSUES

Both options are consistent the City's comprehensive financial policies and state law regarding utility rate-setting. It is 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. Staff recommend Option 1 because this option mitigates the immediate rate impacts to customer classes and aligns with the anticipated schedule for the next sewer cost-of-service study.

FISCAL IMPACT

Both options generate the same overall revenue as projected in the City's most recent financial forecast for the sewer utility. A cost-of-service analysis is **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.

NEXT STEPS

City staff are requesting a recommendation by the ESC regarding Option 1 or Option 2 for implementing the cost-of-service results at the next ESC meeting scheduled on November 6, 2025.

As part of the November meeting, City staff will also present several rate design options to implement along with the sewer cost-of-service results. These rate design options are specific to each customer class and are

being considered to simplify the existing rate structures and to align them with industry and regional practice. Recommendations to align planned rates with the cost-of-service results would then 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.