

Capacity Charge Methodology Update

Regional Water Quality Committee

April 1, 2026

Existing Capacity Charge Background

- 1999 Robinswood Agreement established guiding principles to manage wastewater through **2030**

“The regional wastewater financing structure should reflect uniform regional rates for existing and new customers and achieve the principle of “growth pays for growth.”

What is the capacity charge?

- A separate charge assessed on development that results in new connections to the sewer system
- Billed by and paid to King County in addition to the regular monthly sewer rate over 15-year timeframe, unlike other similar charges
- How it works:
 1. Growth-related costs are identified
 2. Monthly rate revenue from growth customers is calculated
 3. Capacity charge is set to cover any shortfall from rate revenues
 4. Includes discount rate for payment upfront

Why Change Methodology?

- We're now 26 years into a 30-year Regional Wastewater Services Plan (RWSP) – the system is different than it was in 2000
- RWSP Update in progress that will help identify capital needs over the next 40 years
- Practically, complex to keep track of existing v. growth-related costs and subject to volatility based on past performance and market conditions (discount rate)
- 2016 Auditor's report recommended a more transparent model

Goals of Methodology Update in Proposed Ordinance 2026-0066

- Aligned with Revised Code of Washington (RCW) Requirements
- Key concept in RCW 35.58.570 is “equitable share”
- Industry standard methodologies are aligned with the “equitable share” concept
- Accounts for current system investments and capacity, and future expanded capacity investments
- Based on the value of system assets (existing and future)
- Existing and future capacity will determine cost per Residential Customer Equivalent (RCE)
- More transparent and predictable calculation

Methodologies endorsed by water sector associations AWWA & WEF

- Buy-In Approach
 - Focuses on existing facilities with available capacity to serve new customers
 - Analysis based on fixed asset records
- Incremental Cost Approach
 - Focuses on additional facilities required to meet anticipated growth
 - Analysis based on capital improvement plan
- Combined Approach

System Development Charges

A *system development charge* (SDC) is a one-time charge paid by a new water system customer for system capacity. It is also assessed to existing customers requiring increased system capacity. The receipts from this charge are used to finance the development of growth-related or capacity-related water facilities and are an important funding/financing source for these facilities.

Although a one-time charge, SDCs are not always paid up front. Some states require utilities to offer an option to pay the SDC in installments if the fee is over a certain amount. Utilities often offer such an option with the potential for financing terms that allow for installment payments spread over several months or years.

The development of the appropriate level of SDCs provides utilities and policymakers with a cost-based analysis of the value of existing and planned capacity that is available or will be developed to serve and accommodate new capacity demands. By understanding the costs of providing capacity, policymakers can make an informed decision concerning the equity of allocating system capacity costs between existing and new customers.

Utilities make investments in capacity-related facilities that will provide service to new development in advance of when the new development occurs. Typically, the capacity-related facilities are constructed in fairly large increments, and the new customers that this capacity is intended to serve will typically connect to the system over many years. As a result of the size of the capacity expansion and the timing of when customers connect to the system, the timing of receipts generated from the SDCs is rarely synchronized with the construction of the capacity-related facility. Therefore, SDCs provide an equitable method for recovering the costs of system capacity additions from those who will use the increased capacity; although in most cases, some portion of the capacity-related costs must still be recovered from user rates and charges assessed to all customers due to the aforementioned timing issues.

In general, SDCs are based on the costs for major backbone infrastructure components that are necessary to provide service to all customers, including source-of-supply facilities, raw water transmission, treatment facilities, pumping facilities, storage tanks, and major treated-water transmission mains (e.g., "general benefit" facilities; see

Washington Dept. of Commerce endorses the average cost approach

- “The average cost approach acknowledges that the utility invests ... to benefit both existing and future customers equally.”
- “Commonly used ... because it results in generally moderate and stable SDC [System Development Charge] over time and provides a straightforward and equitable allocation of system costs between existing and new customers.”
- Equivalent to the combined approach

$$\frac{\text{(Existing system cost + future system cost - adjustment for asset retirement*)}}{\text{(total capacity units the system can serve)}} = \text{SDC per unit}$$



Capacity Charge

	Adopted	Proposed	Forecast			
Capacity Charge	2026	2027	2028	2029	2030	2031
Monthly Charge	\$77.99	\$83.10	\$85.86	\$88.71	\$91.65	\$94.69
Increase %	2.50%	6.55%	3.32%	3.32%	3.31%	3.32%
Increase \$	\$1.90	\$5.11	\$2.76	\$2.85	\$2.94	\$3.04
Annual Total	\$936	\$997	\$1,030	\$1,065	\$1,100	\$1,136
Total Payments (15 years)	\$14,038	\$14,958	\$15,455	\$15,968	\$16,497	\$17,044
Upfront Payment*	\$9,870	\$10,516	\$10,865	\$11,226	\$11,598	\$11,983

*Discount Rate of 5.14%

- WTD's rate consultant (Raftelis) recalculated the proposed capacity charge based on industry standard methodology for 2027
- Broadly in line with previous charge
- Propose indexing capacity charge to Construction Cost Index (CCI)
- Will update after RWSP process results in new capital plans

Q & A

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Appendix: Summarized Charge Calculation

WTD has invested \$6.8 billion in sewer system infrastructure used to provide service today

Existing Facilities Purchase Costs (Millions \$)	Treatment Plants	Conveyance	CSO/Regulatory	General Plant
Interceptors and Lines	\$980	\$1,035	\$320	\$289
Buildings	1,504	265	325	27
Land	191	21	23	13
Machinery/Equipment	857	238	106	151
Building Improvements	55	24	25	61
Other Misc.	29	5	10	32
Total	\$3,619	\$1,591	\$810	\$819
Grand Total				\$ 6,839

The asset investment is adjusted as part of the System Buy-in calculation

- Exclude ineligible items:
 - Vashon Island and Carnation treatment facilities
 - Grant-funded or contributed assets
 - Small equipment and vehicles
 - Capitalized interest
- Add allowable carrying costs per RCW 35.58.570

(Millions \$)	All Assets
Total Assets	\$ 6,839
Capitalized Interest, Small Equipment, and Vehicles	(335)
Vashon and Carnation Treatment Plants	(52)
Grant-funded Assets	(431)
Debt Credit	(1,924)
Plus Carrying Cost	2,939
Grand Total	\$7,037

Capital Improvement Plan (CIP) and preliminary long-range capital project needs reflect \$6.9 billion in growth-related incremental costs through 2060

- Capital project sources:
 - 2019 Treatment Plant Flows and Loadings Study
 - 2017 Collection System Improvement Plan
- Projects designed to meet service requirements through 2060
- Project costs will ultimately be updated RWSP following the RWSP planning process

2025 Dollars (\$ Millions)	Est. Costs of Growth Projects	Growth Share of Cost
South WWTP	\$ 4,860	\$ 2,793
West WWTP	1,719	1,244
Brightwater WWTP	616	616
Conveyance System	3,675	2,235
TOTAL	\$ 10,870	\$ 6,887

Capital projects can address both renewal/replacement and capacity improvement. Engineering and planning identified the portion of each project that will serve future growth.

The Combined Approach uses the total costs to serve current and future system RCEs¹

- Current system investment and future capital projects are included in capacity fee calculations, like the average cost approach²
- The \$7.0 billion of investment in the existing system can serve approx. 910,000 RCEs
- The \$6.9 billion of growth-related CIP will serve approximately 415,000 new RCEs by 2060

1. The capacity charge RCE is based on a medium-sized, single-family home of 2.88 persons per household and an average loading per person of 0.15 lbs Biological oxygen demand (BOD) per month

2. Methodology recommended by the State Dept. of Commerce in “Residential Proportional Impact Fees and System Development Guidebook.”

Combined Approach Calculation

		Total Investments (Millions \$)		
		Current System Investment	Growth-Related CIP Investment	Total Costs to Recover
System Investment				
	Treatment Plants	\$ 3,994	\$ 4,653	\$ 8,647
	Conveyance	2,056	2,235	4,290
	CSO/Regulatory	987	-	987
Total	(a)	\$ 7,037	\$ 6,887	\$ 13,924
Total Available System RCEs (2060)				1,325,000
	(b)			
Total Fee Per RCE	(a/b)			\$ 10,516
Total Monthly Charge	(1)			\$ 83.10

(1) Per State law, the capacity charge is assessed monthly over 15 years. The monthly charge is calculated using the current early payoff discount rate.



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