SOUTHWEST SUBURBAN SEWER DISTRICT
KING COUNTY, WASHINGTON

RESOLUTION NO. 2024-03-01

A RESOLUTION OF THE BOARD OF COMMISSIONERS OF SOUTHWEST SUBURBAN SEWER DISTRICT, KING COUNTY, WASHINGTON, UPDATING AND AMENDING THE DISTRICT'S GENERAL FACILITY CONNECTION CHARGES.

WHEREAS, RCW 57.08.005(11) authorizes the Board of Commissioners of Southwest Suburban Sewer District, King County, Washington ("District"), to charge property owners seeking to connect to the District's sewer system in addition to the cost of the connection, such reasonable connection charges as the District Board of Commissioners shall determine to be proper in order that those property owners shall bear their equitable share of the cost of the sewer system, including facilities planned for construction within the next ten years which are contained in an adopted comprehensive plan; and

WHEREAS, the District staff and/or its consultants, periodically review the applicable general facility connection charges to determine whether any adjustments should be made to the existing connection charges; and

WHEREAS, the District desires to update and amend its current general facility charges, taking into consideration the cost of its existing general facilities, and the facilities that are planned for construction within the next ten years which are contained in an adopted comprehensive plan; now, therefore,

BE IT RESOLVED by the Board of Commissioners of Southwest Suburban Sewer District, King County, Washington, as follows:

Section 1. Revised and Updated General Facility Charges.

Effective March 1, 2024, the general facility connection charges and applicable credits identified in **Exhibit A (February 14, 2024 Memorandum prepared by Karyn Johnson)**, attached hereto and incorporated herein, shall be paid and/or applied when property owners seek to connect to, or increase the demand on, the District's sewer system in accordance with Section 5.48.040 of the District's Code of Regulations (as amended by Resolution No. 2024-03-01).

Section 2. Effect on Prior Resolutions, Policies and Procedures.

All prior and existing District resolutions, policies and procedures, relating to the District's sewer general facility connection charges are hereby revised, modified and superseded to be in accordance with the charges and credits set forth herein.

ADOPTED by the Board of Commissioners of Southwest Suburban Sewer District, King County, Washington, at a regular meeting thereof held this 5th day of March, 2024.

SOUTHWEST SUBURBAN SEWER DISTRICT
KING COUNTY, WASHINGTON

Individual Commissioners Vote on Resolution

In Favor of: ✓
Opposed: ____
Abstained ____

William A. Tracy
President and Commissioner

In Favor of: ____
Opposed: ____
Abstained: ____

Scott Hilsen
Vice President and Commissioner

In Favor of: ✓
Opposed: ____
Abstained: ____

ON BEHALF OF SUZY GENZALY
Susan Genzale
Secretary and Commissioner

KLJ Financial Consulting | Project Memorandum

Date: February 14, 2024

To: Ron Hall, General Manager
Southwest Suburban Sewer District
ron.hall@swssd.com

Cc: Mesfin Mekonnen, SWSSD Accounting Supervisor: mesfin.mekonnen@swssd.com

From: Karyn Johnson

Re: General Facilities Charges (GFC) Update

The District contracted with BHC Consultants (BHC) to update the General Sewer Plan (GSP). KLJ Financial Consulting (KLJ) prepared the Financial Program & Chapter for inclusion in the Plan and updated GFCs to reflect current infrastructure investment, planned capital expenditures and projected system capacity. This memorandum summarizes the methodology, assumptions, and proposed schedule of GFCs in support of the updated GSP and capital improvement program.

The District imposes GFCs on new development or redevelopment as a condition of connection to the wastewater system or when increasing the capacity of an existing connection. The GFC represents an equitable share of the cost of the sewer system including treatment plants, sewer pump stations, interceptors, and other general benefit facilities. A separate local facilities charge is imposed to recover the cost of local sewer collection lines and is not included as part of this study.

A. BACKGROUND

The current GFC of $4,402 per residential equivalent unit (REU) became effective January 1, 2023, based on a study prepared by Katy Isaksen & Associates (KI&A). The study outlined the methodology for calculating GFCs including cost recovery for both existing system facilities and future facilities identified in the capital improvement program (CIP). Since the CIP had not yet been updated at the time of that study, the GFC was calculated based only on the cost of existing facilities. The current GFC study incorporates current system investments and eligible capital projects identified in the updated CIP.

B. METHODOLOGY

RCW 57.08.005 (11) authorizes the District to impose a connection charge (called a GFC by the District) on new customers connecting to the system as a condition of service or when increasing the capacity of an existing connection. That paragraph also describes conditions that must be met in calculating the charge. The underlying premise of this charge is that customers placing new demands on system capacity should pay an "equitable share" of the cost of providing system capacity – both the historical cost of existing assets in service and the planned cost of future capital improvements over a defined planning period.

GFCs serve two main purposes: to provide equity between existing and future customers, and to provide a source of capital funding. To avoid dilution of investment of existing customers, new customers are required to buy into the system commensurate with the cost of assets needed to serve them. GFCs can be used to pay for capital projects or to pay debt service incurred to fund eligible projects but cannot be used to pay operating and maintenance expenses.

Given that the RCW does not explicitly define an "equitable share," the District has flexibility in defining an equitable share of sewer system costs. That said, it is important to follow a rational approach to consistently determine cost based GFCs. The calculated charges represent the maximum allowable charge. The District may choose to charge less but cannot charge more than the calculated charge.

There are several documented methods used in the industry to establish connection charges. Within the range of legally defensible approaches, the choice of method is a matter of policy. The basic approach to the GFC calculation is illustrated below:

GFC = Eligible Capital Costs divided by Applicable Customer Base

Three key elements are evaluated in the determination of GFCs:

1) Existing System Cost Basis
2) Future System Cost Basis
3) Customer Base

Legal interpretations of Washington State connection charge statutes have provided the following guidelines:

- Charges should reflect the actual original cost of the existing utility system net of donated facilities and other sources of outside funding (e.g., grants, developer funding, and direct assessments).
- The existing cost basis can include accumulated interest on the net original costs at the rate of interest applicable at the time of construction (up to a 10-year period but not to exceed 100% of construction costs). Conceptually, this interest provision accounts for opportunity costs that District customers incurred by supporting investments in sewer system infrastructure rather than funding other needs.
- The existing cost basis should reflect a net-debt adjustment if applicable. The amount of outstanding debt represents assets that existing customers have acquired but not yet fully paid. Instead, those assets will be paid for in future years as debt service payments are made. New customers will pay rates in the future including a share of any debt service payments. To avoid double-counting of debt costs, new customers should not be charged for outstanding debt in the GFC. However, there is an appropriate offset to the debt deduction - the cash that has been accumulated by existing customers. Cash represents an asset that current customers have funded even though that cash has not yet been used to acquire new assets and/or retire outstanding debt. The net-debt deduction is calculated as unrestricted cash balances less outstanding debt principal.
- Future capital costs should be expressed in current-day dollars and can include capital projects for up to a 10-year period identified in an adopted system plan.

The GFCs were updated following a common approach referred to as the "average integrated approach." Under this method, eligible existing system costs and future capital costs that improve or expand the system are included in the cost basis. As a result, all relevant capital costs (excluding repair and replacement projects) are divided by the entire projected customer base (existing plus projected growth). The main policy emphasis under this method is on intergenerational equity. There is no cost advantage for either existing or new customers. The resulting GFC is stable over time and not overly sensitive to population forecasting assumptions. Exhibit 1 summarizes the proposed GFC calculation, followed by additional methodology detail.

Exhibit 1: GFC Summary Calculation

Existing Cost Basis			Notes
Plant-in-Service			
Total Sewer System Capital Assets		$ 177,829,647	Original Cost of Plant-in-Service as of 2022
Less: Comprehensive System Plans		(540,446)	Not eligible for recovery through GFC
Less: Annexations		(207,632)	Excludes costs not incurred by the utility
Less: Deeded Properties		(5,096,985)	Excludes costs not incurred by the utility
Less: Developer Extensions		(6,097,677)	Excludes costs not incurred by the utility
Less: ULIDs		(9,977,490)	Excludes costs not incurred by the utility
Less: Grant-Funded Assets		(19,829,152)	Excludes costs not incurred by the utility
plus: Interest on Eligible Assets		26,340,615	Interest on assets up to a max 10-year period
Plus: Construction Work In Progress		1,673,232	CWIP as of 2022
Unrestricted Cash Balances	$ 25,470,074		Unrestricted cash balances as of 2022
less: Debt Principal Outstanding	(25,816,229)		Debt principal outstanding as of 2022
less: Net Debt Principal Outstanding		(346,155)	Net debt adjustment
Total Existing Cost Basis		**$ 163,747,958**	
Future Cost Basis			
Capital Improvement Program (Current Day $)			
Total Future CIP Projects		$ 49,445,000	CIP (Years 2023 - 2032)
Less: Ineligible Future Projects		(34,045,000)	Excludes Intangibles, Repair & Replacements
Total Future Cost Basis		**$ 15,400,000**	
Customer Base			
Retail Residential Equivalent Units (REUs)			
Existing ERUs		27,390	Residential Equivalent Units (REUs) as of 2022
Future ERUs (Incremental)		6,720	Projected Incremental REUs
Total Customer Base		**34,110**	No. of REUs (2041)
Resulting Charge			
Existing Cost Basis		$ 163,747,958	
Future Cost Basis		15,400,000	
Total Cost Basis		$ 179,147,958	
Total Customer Base		34,110	
Maximum Allowable GFC per REU		**$ 5,252**	

B1. DATA SOURCES

The following data sources were used for the GFC analysis:

- Current GFCs provided by Resolution No. 2022-12-01.
- Previous GFC update model calculations and Technical Memorandum from KI&A, dated December 2, 2022.
- Listing of sewer system fixed assets as of December 31, 2022 (2022 Depreciation Report).
- Historical interest rates per Bond Buyer Index – 20 Year Bonds.
- Financial statements as of December 31, 2022.
- No. of retail ERUs as of December 31, 2022.
- Southwest Suburban Sewer District General Plan Update – Draft (BHC Consultants), dated July 2023. Chapter 10, Capital Improvement Program, Chapter 3, Table 3-1, Service Area Population Forecast.
- Allocation of 10-year capital improvement projects to upgrade/expansion and repair/replacement provided by BHC per email dated August 11, 2023.

B2. EXISTING SYSTEM COSTS

Existing system costs represent the original cost of investment in assets that are currently in service on the premise that these assets will serve or otherwise benefit new customers. As of December 31, 2022, the original cost of total sewer system assets is $177.8 million. The following required and/or allowable adjustments were made to the cost basis:

- Deduction for comprehensive system planning costs. Per the State Auditor's Office, these costs must be expensed and thus are not eligible for cost recovery through GFCs.
- Deduction for assets not paid for by utility customers including annexations, deeded properties, developer extensions, ULIDs, and assets funded by grants.
- Addition of interest provision on existing assets. Based on the 2022 GFC study analysis of average interest rates for District Bond issues (2011, 2014, and 2018) and interest rates from the Bond Buyer Index for 20-year bonds. Interest is accumulated for a maximum of 10 years from the date of construction for individual assets.
- Addition of construction-work-in progress, paid for but not booked to fixed asset records.
- Deduction for net outstanding debt (unrestricted cash balances minus outstanding debt principal) to avoid double-counting of cost recovery through rates and GFCs.

Total net adjustments of $14.1 are deducted for an existing cost basis of $163.7 million.

B3. FUTURE CAPITAL COSTS

Future system costs refer to the planned capital improvement program (CIP) identified in the GSP for execution within the 10-year planning period (2023-2032).

Capital projects typically fall into three categories depending on the reason for the capital expenditure:

- **Repair & Replacement (R&R) projects** – Replace existing infrastructure due to wear and tear over time. These projects do not increase system capacity and are not updates to functionality or regulatory compliance. R&R costs are most often excluded from GFCs since they are assumed to be replacing assets that are already accounted for within the existing system cost basis.
- **Upgrade Projects** – Broadly benefit both existing and future customers without increasing system capacity. Examples include construction of an operations facility, improving system securing, projects driven by new regulations, and a portion of pipe upsizing projects.
- **Expansion Projects** – Primarily increase capacity to serve additional customers.

A single capital project may have components in more than one of these groups. In that case, an estimate is made of the percentage of the total project cost applicable to each category.

Exhibit 2 presents the detailed list of capital projects identified in the CIP for the current GSP. This does not include the capital projects funded from the Maintenance Fund as those projects are categorized as repair and replacement and paid for through rates. A total of $49.4 million (current day dollars) in capital projects have been identified for execution over the 10-year planning period (2023-2032). For each project, BHC provided the allocation of those costs between upgrades/ expansions and repair/replacement projects to determine eligible project costs for inclusion in the GFC. An estimated $34.0 million of those costs are for repair and replacement projects which are excluded from the GFC calculation. The remaining $15.4 million in project costs forms the future cost basis of the GFC calculation.

Exhibit 2: Capital Improvement Program Detail

Project Name	Project Description	Upgrade/ Expansion	Repair/ Replacement	Total Cost (2023 $)
na	Potential ULIDs	0%	100%	$ 100,000
na	Stub Repair	0%	100%	$ 400,000
na	Mainline Repairs	0%	100%	$ 745,000
na	CIP-WSDOT SR509 & DMMD Salmon Crossing Project	0%	100%	$ 350,000
na	CIP-Rehab Pump Station #18	0%	100%	$ 1,300,000
MC-20A (LS-11)	LS-11 capacity increases up to 1,500-gpm	40%	60%	$ 1,550,000
SC-20A (LS-4)	LS-4 capacity increases up to 850-gpm	40%	60%	$ 1,450,000
I/I Reduction	Data collection and improvements to identified areas - Annual	0%	100%	$ 8,650,000
MC Electrical	Miller Creek Plant Electrical Upgrades	10%	90%	$ 9,000,000
MC Digesters	Miller Creak digester upgrades	40%	60%	$ 6,000,000
MC Office	Miller Creek lab/office and site improvements	25%	75%	$ 12,000,000
MC-20B 4A	1956 ft of 27" pipe rplmt to increase capcity from MH-4389 to MH-4188	100%	0%	$ 3,400,000
MC-7B	2026 ft of 18" pipe rplmt to increase capcity from MH-2650 to MH-2657	100%	0%	$ 2,700,000
MC-25B	977 ft of 10" pipe rplmt to increase capacity from MH-4752 to MH-4653	100%	0%	$ 1,100,000
MC-14A	546 ft of 12" & 15" pipe rplmet to increase capacity from MH-608 to MH-743	100%	0%	$ 700,000
Total Projects Cost (2023-2032)		$ 15,400,000	$ 34,045,000	$ 49,445,000
Percent by Category		31%	69%	100%

B4. CUSTOMER BASE

For purposes of the GFC, the customer base is defined in terms of the number of residential equivalent units (REUs) the system can serve once the capital plan has been executed. At year-end 2022, the District had 27,390 retail customer REUs.

The GSP includes a service area population forecast for the years 2021, 2027, 2041, and build out (2050). This forecast assumes a linear progression of conversions from unsewered to sewered areas through buildout. An important consideration in the determination of the customer base is which year over the planning period best represents the number of REUs that can be served with existing asset capacity and new asset capacity following completion of the 10-year CIP (2023-2032). It is likely that these assets can serve additional customers beyond those connected during the 10-year period. To be conservative, the associated capacity of the sewer system is assumed to serve the projected number of REUs through the 20-year planning period (2041). Growth is extrapolated for the in between years and assumes average annual growth of about 1.2% over the 20 years, for a total customer base of 34,110 REUs. This REU basis serves as the denominator in the GFC calculation.

Exhibit 3 presents the forecasted number of REUs and growth rates through 2041.

Exhibit 3: Current and Projected REUs

Year	Total	
	% Growth	REUs
2022		27,390
2023	1.2%	27,708
2024	1.2%	28,030
2025	1.2%	28,356
2026	1.2%	28,685
2027	1.2%	29,018
2028	1.2%	29,355
2029	1.2%	29,696
2030	1.2%	30,041
2031	1.2%	30,390
2032	1.2%	30,743
2033	1.2%	31,100
2034	1.2%	31,461
2035	1.2%	31,827
2036	1.2%	32,196
2037	1.2%	32,570
2038	1.2%	32,949
2039	1.2%	33,331
2040	1.2%	33,719
2041	1.2%	34,110

[1] 2023 GSP, Table 3-1, Service Area Population Forecast.

B5. CALCULATED MAXIMUM GFC

The calculated maximum GFC of $5,252 per REU is derived by dividing the total cost basis of $179.1 million (existing + future) by the total customer base (existing + new) of 34,110 REUs. This represents the maximum charge per REU that the District can impose under the proposed methodology. While the District may impose a charge less than the maximum calculated GFC, it is important to note that the reduced GFC collections from a lower GFC would suggest a subsidy from existing ratepayers.

In 2022, the District completed a comparative survey of sewer GFCs including passthrough treatment charges where appropriate. The District's current GFC of $4,402 was the lowest of the 20+ sewer agencies survey that included a range of GFCs up to $20,102. It is unlikely that the proposed GFC of $5,252 would move the District from the lowest rung of the current GFCs of districts surveyed.

B6. PROPOSED SCHEDULE OF GFCS

Exhibit 4 presents a comparison of the existing schedule of GFCs and the proposed (max allowable) schedule of GFC.

Exhibit 4: Existing and Proposed Schedule of GFCs

Property Classification	REU Ratio	GFC	
		Existing	Max Allowable
Residential by Dwelling Unit			
Single-Family per Dwelling	1.00	$ 4,402	$ 5,252
Multi-Family Per Dwelling Unit	0.80	$ 3,522	$ 4,202
Commercial by Meter Size			
5/8 x 3/4-Inch	1.00	$ 4,402	$ 5,252
1-Inch	2.50	$ 11,005	$ 13,130
1 1/2-Inch	5.00	$ 22,010	$ 26,260
2-Inch	8.00	$ 35,216	$ 42,016
3-Inch	16.00	$ 70,433	$ 84,032
4-Inch	25.00	$ 110,051	$ 131,301
5-Inch	35.00	$ 154,072	$ 183,821
6-Inch	50.00	$ 220,103	$ 262,601
8-Inch	80.00	$ 352,165	$ 420,162