Valley View Sewer District

Sewer General Facilities Charge

FINAL REPORT
May 2024

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May 31, 2024

Andrew LaRue
General Manager
Valley View Sewer District
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Subject: Valley View Sewer District GFC Study

Dear Mr. LaRue:

FCS GROUP is pleased to submit this report documenting the Sewer General Facilities Charge (GFC) Study conducted for Valley View Sewer District. GFCs are one-time fees paid at the time of development. These charges help provide equity between existing and new customers, and they also provide a source of funding for utility-related capital projects as growth occurs. The resulting GFC per equivalent residential unit (ERU) is shown in the table below. The detailed methodology used to arrive at this result is covered in this report.

GFC Charge	Existing GFC	Updated GFC
Single-Family (per dwelling unit)	$4,033	$13,429
Dollar and Percent Change		*$9,396 increase / 233% increase*

It has been a pleasure to work with you and other District staff on this effort. Please let us know if you have any questions or need additional information. Tage can be reached at (425) 615-6487 or TageA@fcsgroup.com.

Sincerely,



John Ghilarducci
Project Principal

Tage Aaker
Project Manager

Amanda Levine
Project Consultant

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Section I. INTRODUCTION

UTILITY BACKGROUND

In 2023, Valley View Sewer District ("the District") contracted with FCS GROUP to update the District's general facilities charge (GFC). The GFC is currently authorized in section 57.08.005 (11) of the Revised Code of Washington (RCW).

A GFC is a method of recovering from new customers a proportionate share of the utility's investment in capital infrastructure – both the historical cost of existing capital assets and the planned cost of future capital improvements. GFCs serve two main purposes: to provide equity between existing and new customers and to provide a source of utility capital funding as growth occurs. In addition, GFCs help ensure that growth pays for the cost of growth. The charge is imposed on both new development and redevelopment that increases demand for system capacity.

LEGAL BASIS

There are a variety of approaches in the industry to establish defensible GFCs. The development of such charges always occurs in the context of state law. As mentioned previously, the District is authorized to assess fees and charges under Section 57.08.005 (11) of the RCW as noted below.

> RCW Section 57.08.005 (11): "Subject to subsection (7) of this section, to fix rates and charges for water, sewer, reclaimed water, and drain service supplied and to charge property owners seeking to connect to the district's systems, as a condition to granting the right to so connect, in addition to the cost of the connection, such reasonable connection charge as the board of commissioners shall determine to be proper in order that those **property owners shall bear their equitable share of the cost of the system**. For the purposes of calculating a connection charge, the **board of commissioners shall determine the pro rata share of the cost of existing facilities and facilities planned** for construction within the next **ten years** and contained in an **adopted comprehensive plan** and other costs borne by the district which are directly attributable to the improvements required by property owners seeking to connect to the system. The cost of existing **facilities shall not include those portions of the system which have been donated or which have been paid for by grants.** The connection charge **may include interest** charges applied from the date of construction of the system until the connection, or for a period **not to exceed ten years**, whichever is shorter, **at a rate commensurate with the rate of interest applicable to the district at the time of construction** or major rehabilitation of the system, or at the time of installation of the lines to which the property owner is seeking to connect."

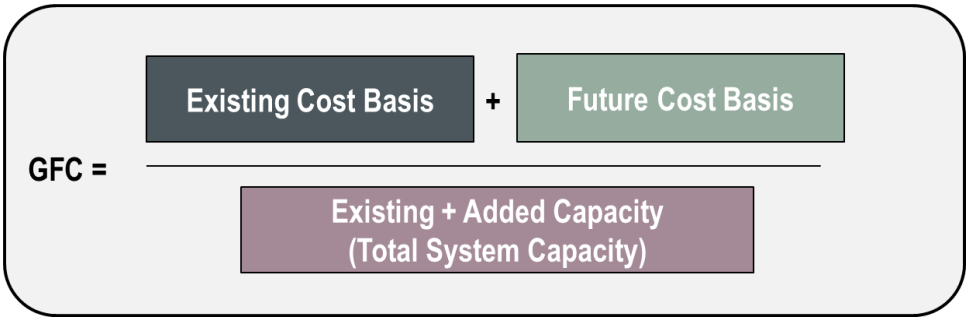
RCW 57.08.005 (11) provides some guidance regarding specific methodology to help inform the charge calculation. Since the calculated charges represent the maximum allowable charge, the District may choose to implement a charge at any level up to the calculated charge.

Section II. METHODOLOGY

GENERAL OVERVIEW

The basic approach to a GFC calculation is shown below **Exhibit 1**.

Exhibit 1: General GFC Calculation Methodology



The capital costs (the allocable cost basis) used in the GFC calculation can be separated into two major categories:

- Existing cost basis: These costs represent the net investment in assets that currently provide service to customers (and that presumably have some amount of capacity to serve growth).
- Future cost basis: These costs refer to capital improvement projects that the utility plans to undertake within a period, typically specified in system planning documents. A provision for capital retirement – a calculation to account for the original value of the assets any new capital projects are repairing or replacing – is deducted from the total future capital projects.

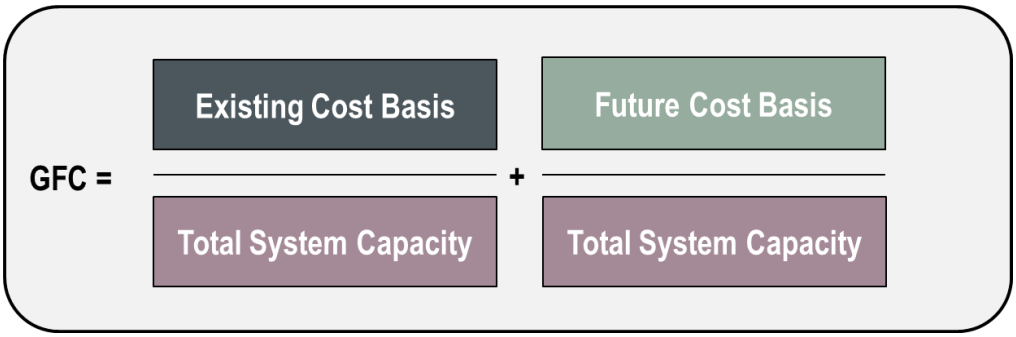
Total system capacity (the total customer base) is calculated by adding the predicted additional customers to the existing customer base through the end of the applicable planning period (i.e., estimated capacity once the capital projects in the capital improvement plan have been completed).

The units are measured in dwelling units and equivalent residential units (ERUs) for the utility. According to the District's RESOLUTION NO. 2020-5, this means one "ERU for a single-family residence, 80 percent of an ERU for a multi-family dwelling unit, and 80 percent of an ERU for an accessory dwelling unit. "Equivalent residential unit or ERU" means for non-residential buildings (1) the number of fixture units divided by 20, or (2) the total expected discharge of wastewater flow, in gallons per day, divided by 187."

RECOMMENDED APPROACH

Exhibit 2 describes the more detailed approach used in this analysis, which builds on **Exhibit 1**. FCS GROUP refers to this approach as the "average integrated" approach and it is calculated as follows:

Exhibit 2: Average Integrated GFC Calculation Methodology



Under this methodology, all capital costs (the costs of existing assets and future capital projects net of provisions for asset retirement) are divided by estimated capacity upon completion of the projects within the proposed timeframe. This method emphasizes intergenerational equity – the goal is to implement an approach where there is no cost advantage for either existing or new customers. This calculation is like a simple buy-in charge (which consists of existing costs divided by existing customers), with the exception that it is a projection into a future year assuming planned capital projects are complete.

Section III. SEWER GFC

SYSTEM COSTS

Existing Costs

The existing cost basis is intended to recognize the current ratepayers' net investment in the original cost of system assets. The main provisions of the calculation include:

- **Utility Capital Assets:** The existing cost basis is typically comprised of the original cost of plant-in-service, as documented in the utility's fixed asset schedule. The District's asset records consist of original cost values for year-end 2022.
- **Plus: Construction Work-in-Progress:** The cost of construction work in progress is added to the existing cost basis to recognize investments that the utility has made in capital projects that are currently underway, even though these projects have not yet been placed into service. The District had several projects under construction as of the end of 2022.
- **Plus: Interest on Utility-Funded Assets:** The RCW and subsequent legal interpretations provide guidance for GFCs which suggests that charges can include interest on an asset at the rate applicable during the time of construction. Using the historical Bond Buyer Index for 20-year term bonds, interest can accumulate for a maximum of ten years from the date of construction. Conceptually, this interest provision accounts for the opportunity costs that the District's customers incurred by supporting investments in infrastructure rather than having it available for other needs.
- **Less: Contributed Capital:** Assets funded by developers or grants are excluded from the cost basis on the premise that the GFC should only recover costs actually incurred by District ratepayers.

Exhibit 3 shows the existing cost basis for the District's GFC, which totals $101.6 million.

Exhibit 3: Sewer Utility Existing Cost Basis

Existing Cost Basis	Total
Utility Capital Assets	$68,862,955
plus: Construction Work-in-Progress	$2,177,163
plus: Interest on Utility-Funded Assets	$31,576,993
less: Contributed Capital	$(970,554)
Total Existing Cost Basis	**$101,646,557**

Future Costs

The future cost basis is intended to recognize the ratepayers' net investment in the projects to be completed in the future, and includes the following elements:

- **Capital Improvement Plan:** A utility capital improvement plan (CIP) includes projects that address many needs, including system expansion, upgrades, and the repair and replacement of infrastructure. In some cases, a single CIP project can serve more than one of these purposes.

  Less: Provision for Asset Retirement: Many capital projects are repairing or replacing existing assets. To avoid including the value of these projects twice – in the existing assets and the capital plan – a provision for capital retirement is used on projects that are deemed repair and replacement (R&R). District staff helped determine which projects, or portions of projects, were R&R and not an upgrade or expansion of the system. The provision for capital asset retirement determines the approximate original cost of the asset the R&R project is replacing, using the useful life of the new project and the historic 20-City Engineering News-Record's construction cost index (CCI). The sum of the provision for capital retirement calculations is then removed from the future capital project total.

- **Less: Contributed Capital:** As with existing costs, future assets assumed to be funded by developers or grants may be excluded from the cost basis on the premise that the GFC should only recover costs actually incurred by District ratepayers.

Exhibit 4 shows the utility's future cost basis.

Exhibit 4: Sewer Utility Future Costs Basis

Future Cost Basis	Total
CIP (2023-2032)	$74,731,913
less: Provision for Capital Retirement	$(9,020,742)
less: Contributed Capital	$(9,593,060)
Total Future Cost Basis	**$56,118,112**

SYSTEM CAPACITY

A key objective in defining the system capacity is to determine the number of "customer units" the system can support. In other words, "How many customer equivalents can the system serve, once the capital plan has been fully executed?"

Existing Customer Base

The District's GFC schedule is comprised of three kinds of customers – residential single-family customers, multi-family customers, and non-residential customers. ERUs are used to scale up non-residential customer GFCs based on a measurement of unit fixtures or flow. For non-residential customers, an ERU is defined as (1) the number of fixture units divided by 20, or (2) the total discharge of wastewater flow, in gallons per day, divided by 187. For single-family customers, one

developed parcel is equal to one ERU regardless of fixture units, and a multi-family customer is considered 80% of the single-family charge. As of 2023, there are 10,998 total ERUs in the District.

Additional Customers

Based on discussions with District staff, it is estimated that there will be approximately 750 new ERUs added to the system during the 2023-2032 planning period.

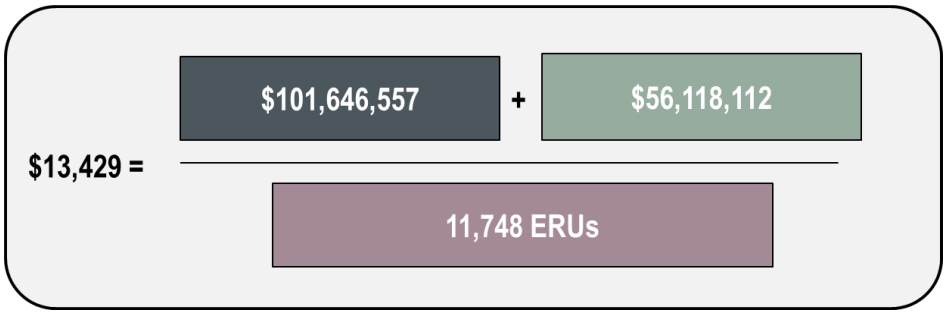
Total Capacity

To estimate system capacity at the end of the planning period, the new ERUs (750) are added to the current customer base (10,998) to make 11,748 total ERUs at the end of the planning period.

CALCULATION

The total existing cost basis of $101.6 million is divided by total estimated capacity (11,748 ERUs), and the future cost basis of $56.1 million is divided by the total estimated capacity (11,748 ERUs), which results in a sewer GFC of $13,429 per ERU as shown in **Exhibit 5**.

Exhibit 5: Sewer GFC Calculation



IMPLEMENTATION OPTIONS

Despite having an updated charge for 2023 ($13,429), this charge will not be implemented in 2023, but rather in 2024 or at a later date. The District has options when it comes to implementing the updated charge. The District can increase the calculated charge with ENR-CCI inflation (20-City average). **Exhibit 6** shows a 2.5% annual assumption in charge increases to keep up with inflation, though the District should use actual results from the CCI index if applying this adjustment.

Exhibit 6: Sewer GFC with Inflation: Full Adoption

Customer	Current Charge	2023 Updated Charge	2024 Charge with CCI inflation	2025 Charge with CCI inflation	2026 Charge with CCI inflation	2027 Charge with CCI inflation	2028 Charge with CCI inflation
Single-Family	$4,033	$13,429	$13,765	$14,109	$14,462	$14,823	$15,194
Multi-Family (per dwelling unit)	$3,266	$10,742	$11,010	$11,286	$11,568	$11,857	$12,153
Accessory Dwelling Unit (per unit)	$3,266	$10,742	$11,010	$11,286	$11,568	$11,857	$12,153
Non-residential (per number ERUs)	$4,033	$13,429	$13,765	$14,109	$14,462	$14,823	$15,194

Phased Approach

As the calculated charge in the previous section is the limit to what the District can charge (rather than the minimum), the District also has the option to phase into the full charge over several years. This approach would alleviate pressure on new development, but therefore would not be able to recover the full calculated costs for the utility until the end of each phasing period. **Exhibits 7** and **8** show how the charges would increase over the 5 and 3 year phasing period in order to get to the full $13,429 charge, plus any adjustments for estimated inflation.

Exhibit 7: Sewer GFC with Inflation: 5-Year Phased Adoption

Customer	Current Charge	2024 Implementation Year	2025	2026	2027	2028
Single-Family	$4,033	$6,265	$8,497	$10,729	$12,961	$15,194
Multi-Family (per dwelling unit)	$3,266	$5,011	$6,797	$8,582	$10,368	$12,153
Accessory Dwelling Unit (per unit)	$3,266	$5,011	$6,797	$8,582	$10,368	$12,153
Non-residential (per number ERUs)	$4,033	$6,265	$8,497	$10,729	$12,961	$15,194

Exhibit 8: Sewer GFC with Inflation: 3-Year Phased Adoption

Customer	Current Charge	2024 Implementation Year	2025	2026
Single-Family	$4,033	$7,509	$10,986	$14,462
Multi-Family (per dwelling unit)	$3,266	$6,007	$8,787	$11,568
Accessory Dwelling Unit (per unit)	$3,266	$6,007	$8,787	$11,568
Non-residential (per number ERUs)*	$4,033	$7,509	$10,986	$14,462

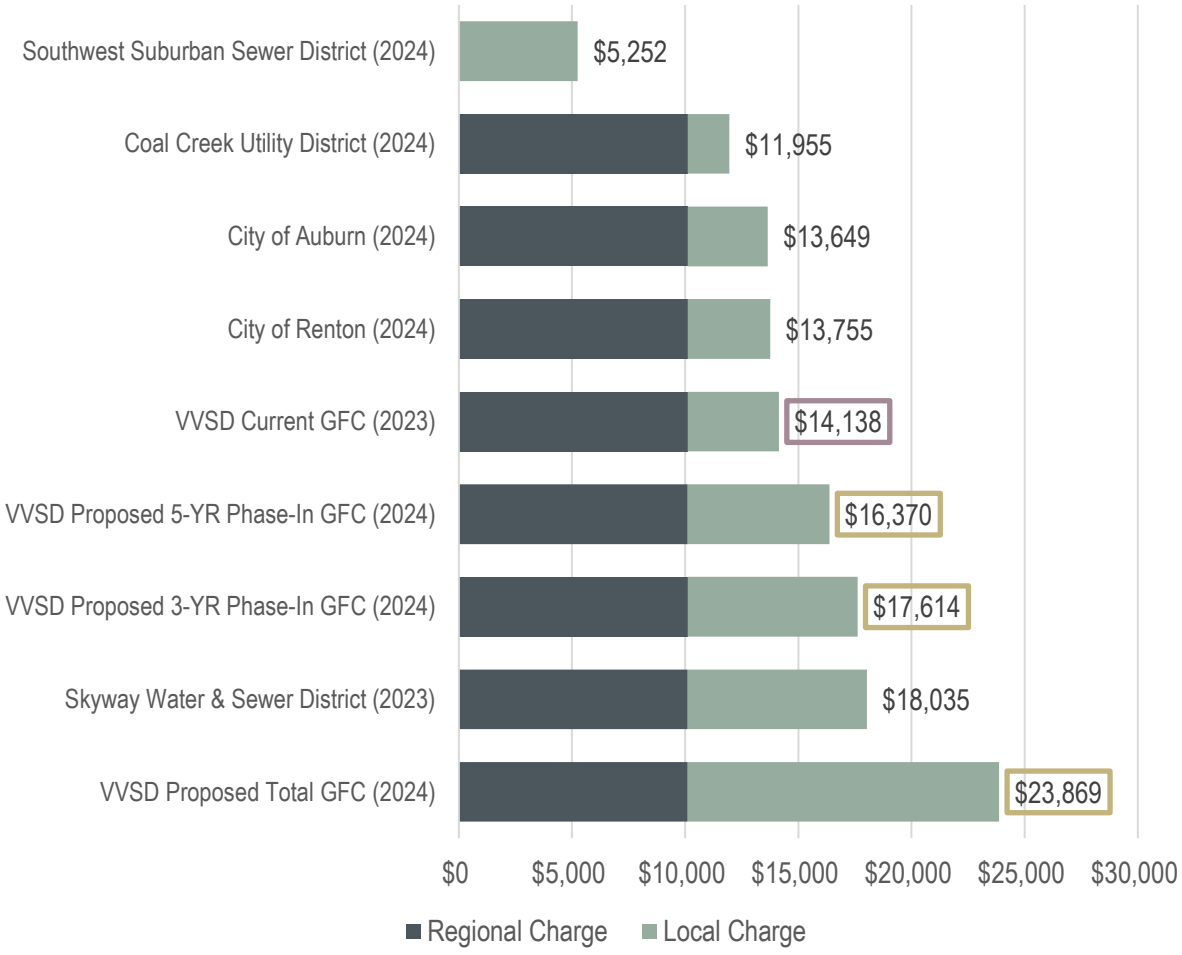
Section IV. GFC SURVEY

GFC SURVEY

The GFC survey provided below compares Valley View Sewer District's current and calculated charges with other jurisdictions in the region. The majority of jurisdictions are also charged the King County capacity charge, which in 2024 is $10,105 (the dark colored regional charge). The range of total charges varies from $5,252 in the Southwest Suburban Sewer District to $18,035 in the Skyway Water and Sewer District. Valley View Sewer District's current charge is at the top of the surveyed jurisdictions, as is the calculated GFC.

Exhibit 9 shows the breakdown of charges by jurisdiction. Note that each jurisdiction has a unique set of geographic traits, customers, and system characteristics that can have a significant impact on GFCs. Additionally, some of these jurisdictions may be planning to adjust their GFCs in 2025 as well. Please note that this survey assumes single-family residential and / or smallest meter size.

Exhibit 9: 2024 Sewer GFC Survey (Single-Family Residential)



Section V. CONCLUSION

SUMMARY

The calculated GFC for the District's sewer utility is shown below in **Exhibit 10**:

- Single-family: $13,429 per dwelling unit; and
- Non-residential: $13,429 per ERU.

This calculated charge represents the maximum allowable charge; the District may choose to implement a charge at any level up to the calculated charge.

Exhibit 10: Summary of Existing and Calculated GFCs

GFC Charge	Existing GFC	Updated GFC
Single-Family (per dwelling unit)	$4,033	$13,429
Dollar and Percent Change		*$9,396 increase / 233% increase*
Multi-Family (per unit)	$3,226	$10,742
Accessory Dwelling Unit (per unit)	$3,226	$10,742
Non-Residential (per ERU)	$4,033	$13,429

ANNUAL ESCALATION

To help the GFC keep pace with inflationary changes in between studies, the District may choose to annually adjust the GFC based on an index such as the 20-City Engineering News-Record's construction cost index (CCI). The calculation should be revisited regularly (e.g., every 5 years) or upon completion of a new system plan.

Section VI. APPENDIX

Existing Cost Basis		
PLANT-IN-SERVICE		
Utility Capital Assets		$ 68,862,955
less: Contributed Capital		(970,554)
plus: Interest on Utility-Funded Plant		31,576,993
plus: Construction-Work-in-Progress		2,177,163
2022 Year-end Estimated Cash Balances	$ 11,173,001	
less: Debt Principal Outstanding	(4,261,454)	
less: Net Debt Principal Outstanding		$ -
TOTAL EXISTING COST BASIS		**$ 101,646,557**

Future Cost Basis	
CAPITAL IMPROVEMENT PLAN	
Total Projects	$ 74,731,913
less: Provision for Asset Retirement	$ (9,020,742)
less: Developer Contributions/Grants	$ (9,593,060)
Growth Related Projects	**$ 56,118,112**
TOTAL FUTURE COST BASIS	**$ 56,118,112**

System Capacity	
Existing Capacity Utilization (ERUs)	10,998
Added Capacity (ERUs)	750
TOTAL SYSTEM CAPACITY	**11,748**

Resulting Charge

Charge Components	Cost Basis	Capacity	Charge
Component for Existing Assets	$ 101,646,557	11,748	**$ 8,652**
Component for Future Assets	$ 56,118,112	11,748	**$ 4,777**
	$ 157,764,669		**$ 13,429**
Total GFC per ERU			**$ 13,429**
Existing GFC			$4,033
Increase (%) - Calculated Above Existing GFC			233.0%
Increase ($) - Calculated Above Existing GFC			$9,396