



City of Sammamish

Surface Water Utility System Development Charge Study

FINAL REPORT
May 2023

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FCS GROUP
Solutions-Oriented Consulting

May 10, 2023

Audrie Starsy
Interim Public Works Director
City of Sammamish
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Subject: City of Sammamish Surface Water Utility SDC Study 2022

Dear Ms. Starsy:

FCS GROUP is pleased to submit this report documenting the Surface Water Management (SWM) Utility System Development Charge (SDC) Study conducted for the City of Sammamish. SDCs are one-time fees paid at the time of permit issuance. 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 SDC per equivalent service unit (ESU) is shown in the table below. The detailed methodology used to arrive at this result is covered in this report.

SDC Charge	2022 Existing SDC per ESU	Updated SDC per ESU
Per ESU (3,500 impervious sq. ft.)	\$2,085	\$3,654
<i>Dollar and Percent Change</i>		<i>\$1,569 increase / 75% increase</i>

It has been a pleasure to work with you and other City 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 2022, the City of Sammamish (“the City”) contracted with FCS GROUP to update the City’s surface water utility system development charge (SDC). The utility’s SDC was last updated in 2017. The SDC is currently authorized by the City code in section 21.03.050 Surface Water Management (Title 13) of the City of Sammamish Development Code.

An SDC 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. SDCs 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, SDCs 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 that are used in the industry to establish defensible SDCs. The development of such charges always occurs in the context of state law. The City is authorized to assess fees and charges under Section 35.92.025 of the Revised Code of Washington (RCW) as noted below. Additionally, under RCW 35.67.010, “system of sewerage” is defined to include storm or surface water sewers.

RCW Section 35.92.025: “Cities and towns are authorized to charge property owners seeking to connect to the water or sewerage system of the city or town as a condition to granting the right to so connect, in addition to the cost of such connection, such reasonable connection charge as the legislative body of the city or town shall determine proper in order that such property owners shall bear their equitable share of the cost of such system.”

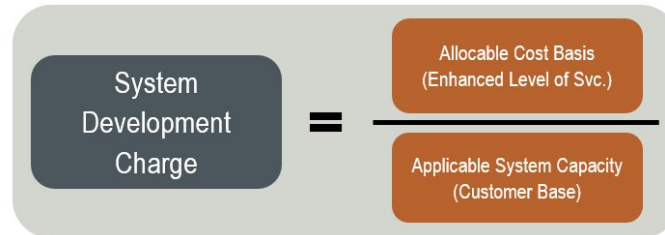
RCW 35.92.025 is silent regarding specific methodology to be used in the charge calculation. However, language contained in the Special District RCW 57.08.005 (11) does provide some guidance regarding specific methodology. While this guidance does not legally apply to municipal surface water utilities, there are elements that help inform the methodology for municipal utilities. Since the calculated charges represent the maximum allowable charge, the City may choose to implement a charge at any level up to the calculated charge.

Section II. METHODOLOGY

GENERAL OVERVIEW

The basic approach to an SDC calculation can be shown in general terms, as shown in **Exhibit 1**.

Exhibit 1: General SDC Calculation Methodology



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

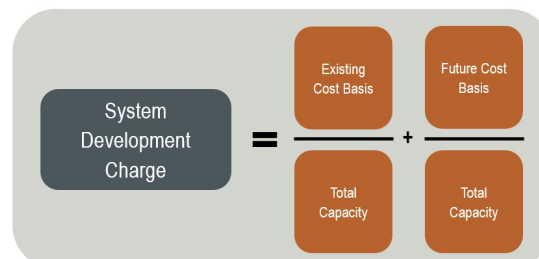
- Existing system: These costs represent the net investment in assets that currently provide service to customers (and that presumably have some amount of capacity to serve growth).
- Future project costs: These costs refer to capital improvement projects that the utility plans to undertake within a 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.

The applicable system capacity (the total customer base) is calculated by applying growth 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 equivalent service units (ESUs) for the utility. One ESU is equal to one developed single-family parcel (charged a flat fee) or one ESU per 3,500 impervious square feet for other (e.g., multi-family, commercial, etc.) developed parcels (charged the fee multiplied by the number of ESUs).

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 is calculated as follows:

Exhibit 2: Average Integrated SDC Calculation Methodology



Under this methodology, all capital costs (the costs of existing assets and future capital projects net of provisions for 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. SURFACE WATER SDC

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 City's asset records consist of original cost values for year-end 2021.
- **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 City had several projects under construction as of the end of 2021.
- **Plus: Interest on Utility-Funded Assets:** The RCW and subsequent legal interpretations provide guidance for SDCs 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 City'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 SDC should only recover costs actually incurred by City rate payers.

Exhibit 3 shows the existing cost basis for the City's SDC, which totals \$67.1 million.

Exhibit 3: Surface Water Utility Existing Cost Basis

Existing Cost Basis	Total
Utility Capital Assets	\$100,995,847
plus: Construction Work-in-Progress	\$2,921,354
plus: Interest on Utility-Funded Assets	\$15,132,153
less: Contributed Capital	\$(51,980,911)
Total Existing Cost Basis	\$67,068,443

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 Capital 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). City 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 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 SDC should only recover costs actually incurred by City ratepayers.

Within this SDC methodology, the Enhanced level of service (LOS) for the 2022-2028 Stormwater CIP is used as the future cost basis, in 2022 dollars. For details regarding the City’s CIP, refer to the *Surface Water Utility Rate Study Final Report*. This can be found on the City website at <https://www.sammamish.us/government/public-works/stormwater/utility/>. **Exhibit 4** shows the utility’s future cost basis.

Exhibit 4: Surface Water Utility Future Costs Basis

Future Cost Basis	Total
Enhanced LOS CIP (2022-2028)	\$34,194,168
less: Provision for Capital Retirement	\$(2,196,921)
less: Contributed Capital	\$(4,034,062)
Total Future Cost Basis	\$27,963,185

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 SWM utility is comprised of two kinds of customers – residential customers and non-residential customers. Equivalent service units (ESUs) are used to scale up non-residential customer SDCs based on measured impervious surface area. For non-residential customers, an ESU is defined as 3,500 square feet of impervious area. For single-family customers, one developed parcel is equal to one ESU regardless of impervious area.

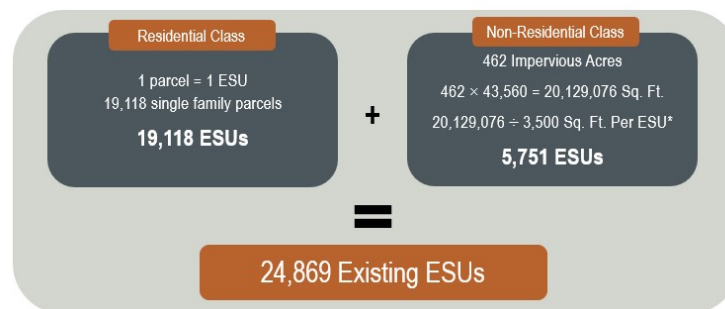
Residential Customers

Within the City’s 2022 customer data, there are 19,118 developed single-family parcels. Because the residential customers are charged as 1 ESU (regardless of the impervious area), the conversion rate from single-family parcels to ESUs is one-to-one.

Non-Residential Customers

Non-residential customers are not charged by parcel, but by their measured impervious footprint. To determine the number of ESUs within the non-residential customer class, the total impervious acres within the class (derived from customer data) are converted to impervious square feet, then divided by 3,500 impervious square feet (total impervious square feet per ESU). **Exhibit 5** shows the existing customer base.

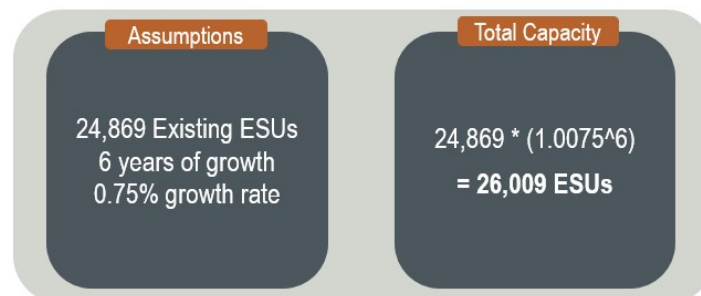
Exhibit 5: Surface Water Utility Total Existing ESUs



Total Capacity

To estimate system capacity at the end of the planning period, an annual growth rate of 0.75% was applied to the 24,869 existing ESUs. This growth rate was estimated from multiple sources including buildable lands reports from the City, the Office of Financial Management population demographics, and discussions with City staff. The total capacity in ESUs at the end of the planning period (2028) is 26,009 ($24,869 \times 1.0075^6 = 26,009$). **Exhibit 6** shows the steps in this calculation.

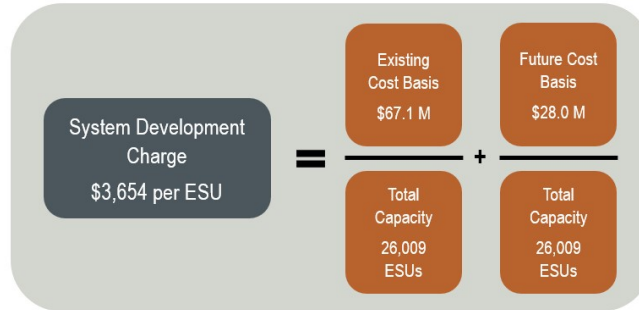
Exhibit 6: Surface Water Utility Total Capacity in ESUs



CALCULATION

The total existing cost basis of \$67.1 million is divided by total estimated capacity (26,009 ESUs), and the future cost basis of \$28.0 million is divided by the total estimated capacity (26,009 ESUs), which results in a SWM SDC of \$3,654 per ESU as shown in **Exhibit 7**.

Exhibit 7: Surface Water SDC Calculation



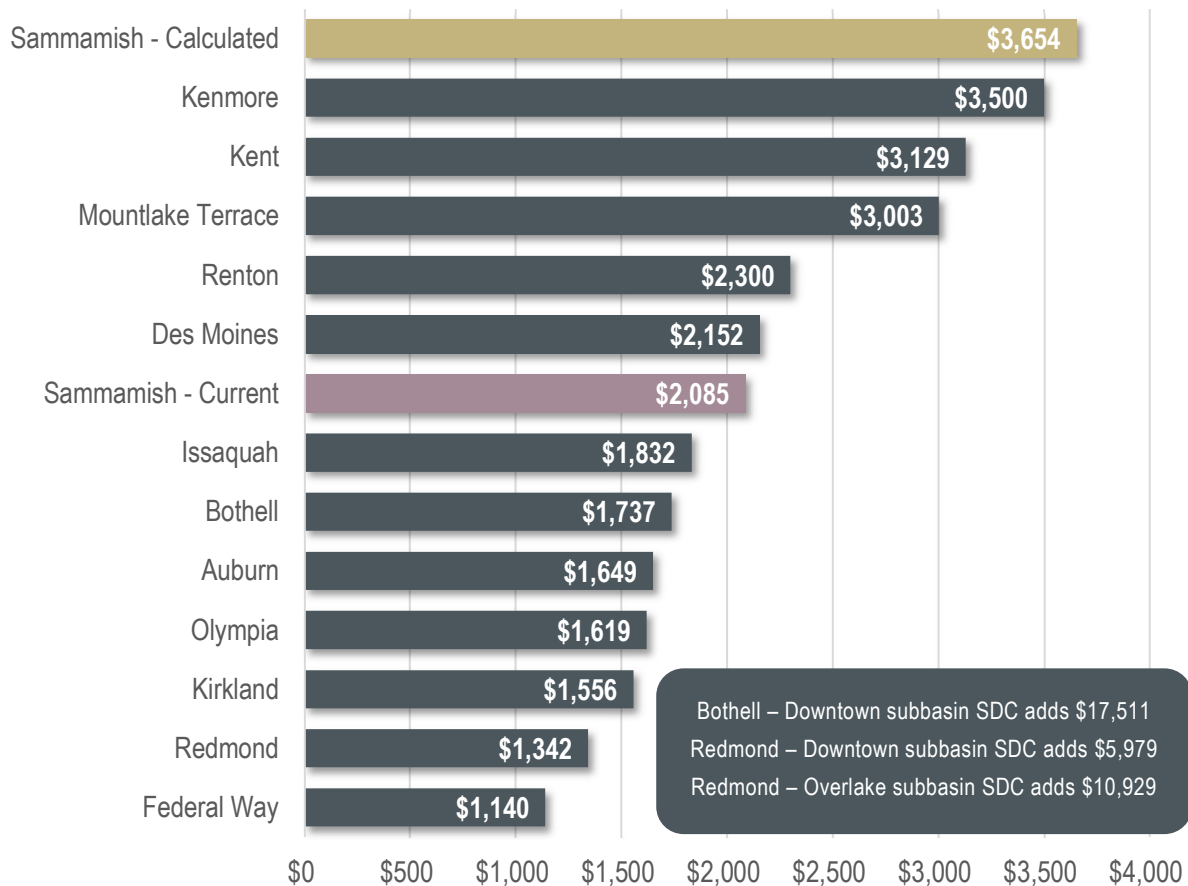
Section IV. SDC SURVEY

SDC SURVEY

The SDC survey provided below compares the City of Sammamish’s current and calculated charges with other cities in the region. The range of total charges varies from \$1,140 in Federal Way to \$3,500 in Kenmore. The City of Sammamish’s current charge is in the middle of the surveyed jurisdictions, while the calculated SDC puts the City at the top of those surveyed.

Exhibit 8 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 SDCs. Additionally, some of these cities may be planning to adjust their SDCs in 2024 as well. Note that cities like Bothell and Redmond have additional SDCs for certain areas within each city that charge a much higher rate.

Exhibit 8: 2023 Surface Water SDC Survey (Single-Family Residential)



Section V. CONCLUSION

SUMMARY

The calculated SDC for the City’s SWM utility is shown below in **Exhibit 9**:

- Single-family residential parcels: \$3,654 per parcel upon development; and
- Other developed parcels: \$3,654 per 3,500 impervious square feet upon development.

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

Exhibit 9: Summary of Existing and Calculated SDCs

SDC Charge	2022 Existing SDC per ESU	Updated SDC per ESU
Per ESU (3,500 impervious sq. ft.)	\$2,085	\$3,654
<i>Dollar and Percent Change</i>		<i>\$1,569 increase / 75% increase</i>

ANNUAL ESCALATION

To help the SDC keep pace with inflationary changes in between studies, the City may choose to annually adjust the SDC 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.

In addition, to ease the administrative burden of changing the code with every SDC adjustment, we recommend the code instead refer to the City’s annual fee schedule.

AFFORDABLE HOUSING

Per direction from the City of Sammamish council members, City staff requested that FCS GROUP survey neighboring jurisdictions to determine if any local communities were providing SDC discounts and / or exemptions for affordable housing. FCS GROUP researched six regional jurisdictions, and none provided affordable housing SDC discounts and / or exemptions.

In general, FCS GROUP recommends that if an agency wishes to grant waivers for SDCs for any reason other than a cost-based reason (e.g., a developer builds an improvement from the CIP as a condition of development – that is a cost-based reason) – and assuming there is the legal authority to do so – then the agency should backfill the capital fund with the amount waived from non-SDCs funds.

Based on an initial review of the Revised Code of Washington, however, this does not appear to be a legal requirement. For example, there does not appear to be a ‘backfill’ type of requirement noted in RCW 35.92.380:

Waiver or delay of collection of tap-in charges, connection, or hookup fees for low-income persons.

Whenever a city or town waives or delays collection of tap-in charges, connection fees, or hookup fees for low-income persons, or class of low-income persons, to connect to lines or pipes used by the city or town to provide utility service, the waiver or delay shall be pursuant to a program established by ordinance. As used in this section, the provision of "utility service" includes, but is not limited to, water, sanitary or storm sewer service, electricity, gas, other means of power, and heat.

<https://app.leg.wa.gov/RCW/default.aspx?cite=35.92.380>

A couple of years ago, the Washington State Department of Commerce created the Connecting Housing to Infrastructure Program (CHIP). The CHIP program helps affordable housing projects connect to water, sewer, and stormwater infrastructure by paying for waived connection fees, the infrastructure to connect to regional water, sewer, or stormwater systems, or for on-site stormwater facilities. This is a good example of backfilling foregone SDC revenue to keep a utility whole.

In recent news, The LOTT Clean Water Alliance Board of Directors approved a pilot program to provide partial rebates of sewer connection fees to low-income and permanent supportive housing units during a meeting on Wednesday, February 8, 2023. The article below does not note the funding source for such a program (rate revenues vs. non-rate/external funding):

<https://www.thejoltnews.com/stories/housing-support-project-providing-partial-rebates-for-sewer-connection-fees-is-being-tried-out-by.9262>

This discussion of reduced SDCs and affordable housing will continue in the State of Washington as House Bill 1326 is being considered to allow municipal utilities to waive certain fees to address affordable housing.

If the City chooses to explore this option further, FCS GROUP recommends that any approach be cleared by the City Attorney, as we are not legal experts.

Section VI. APPENDIX

Existing Cost Basis		Notes
PLANT-IN-SERVICE		
Utility Capital Assets	\$ 100,995,847	Utility Capital Assets at Original Cost through 2021
less: Contributed Capital	(51,980,911)	Contributed Capital at Original Cost through 2021
plus: Interest on Utility Funded Assets	15,132,153	Interest on assets up to a maximum 10-year period
plus: Construction-Work-in-Progress	2,921,354	Construction in progress through 2021
TOTAL EXISTING COST BASIS	\$ 67,068,443	
Future Cost Basis		
CAPITAL IMPROVEMENT PLAN (2022-2028)		
Total Citywide Projects	\$ 34,194,168	
less: Provision for Capital Retirement	(2,196,921)	
less: Contributed Capital	(4,034,062)	
TOTAL FUTURE COST BASIS	\$ 27,963,185	
Customer Base		Notes
Existing Customer Base		
Residential ESUs (Accounts)	19,118	
Total Non-Residential Impervious Acres	462	
Total Non-Residential Impervious Sq Ft	20,129,076	43,560 sq. ft. per Acre
Total Non-Residential ESUs	5,751	3,500 sq. ft. per ESU
Existing ESUs	24,869	Number of ESUs (2022)
Incremental Customer Base	1,140	Projected Incremental ESUs
TOTAL CUSTOMER BASE	26,009	Number of ESUs 2028
Resulting Charge		Notes
Charge Components		
Component for Existing Assets (Cost Basis)	\$ 67,068,443	
Total ESUs	26,009	
	\$2,579	
Component for Future Assets (Cost Basis)	\$ 27,963,185	
Total ESUs	26,009	
	\$1,075	
Total Charge PER ESU	\$3,654	
Existing SDC per ESU	\$2,085	
Increase (%) - Calculated Above Existing SDC	75%	
Increase (\$) - Calculated Above Existing SDC	\$1,569	