

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Discussion of the Update of the Wastewater Rate Study – General Facility Charges
DEPARTMENT:	Public Works and Administrative Services Departments
PRESENTED BY:	Sara Lane, Administrative Services Director Randy Witt, Public Works Director
ACTION:	<input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution <input type="checkbox"/> Motion <input checked="" type="checkbox"/> Discussion <input type="checkbox"/> Public Hearing

PROBLEM/ISSUE STATEMENT:

The City assumed the Ronald Wastewater District on April 30, 2021. After assumption, the City retained FCS Group (FCSG) to conduct a wastewater rate study to review the utility’s existing rate structure (from Ronald at assumption) and determine if adequate funds are provided for operations and to support the Utility’s maintenance activities and Capital Improvement Plan, or if a rate update is needed.

On April 4, 2022, staff and FCSG discussed policy alternatives regarding capital funding tools, rate design, and low-income customer assistance options. Council supported staff recommendations and directed staff to incorporate the options presented into the rate study for further analysis. On July 27, 2022, staff presented Council with an update and received additional policy confirmation on the wastewater rate study following the guidance received on April 4, 2022.

At tonight’s City Council meeting, staff and FCSG will present Council with a review and update on the General Facility Charge. Staff will also provide some additional information related to policy questions discussed on July 27, 2022. Staff are seeking Council input and direction to inform the wastewater rate study in advance of preparation of the 2023-2024 biennial budget later this year.

RESOURCE/FINANCIAL IMPACT:

There is no immediate resource or financial impact associated with tonight’s wastewater rate study discussion. Guidance received tonight will impact the wastewater rates that will be incorporated into the study and inform the 2023-2024 biennial budget. Actual proposed rates and charges may vary from those discussed in this report, depending upon the final proposed operating and CIP budget that will be presented to Council.

RECOMMENDATION

No action is required tonight; staff recommends that the City Council provide input and guidance on the FCSG wastewater rate study and the policy questions associated with

the study. The guidance received tonight will be incorporated into the 2023-2024 biennial budget development process.

Approved By: City Manager **DT** City Attorney **MK**

BACKGROUND

On December 7, 2020, the City Council [authorized the assumption of the Ronald Wastewater District](#) (Ronald), and the City formally assumed Ronald on April 30, 2021. In December 2022, the City retained FCS Group (FCSG) to conduct a wastewater rate study to review the utility's existing rate structure (from Ronald at assumption) and determine if adequate funds are provided for operations and to support the Utility's maintenance activities and Capital Improvement Plan (CIP) from current rates, or if a rate update is needed. In addition, FCSG has examined policy alternatives regarding capital funding tools, rate design, and low-income customer assistance options.

On April 4, 2022, staff and FCSG discussed policy alternatives regarding capital funding tools, rate design, and low-income customer assistance options. Council supported staff recommendations and directed staff to incorporate the options presented into the rate study for further analysis. The staff report for this discussion can be found at the following link:

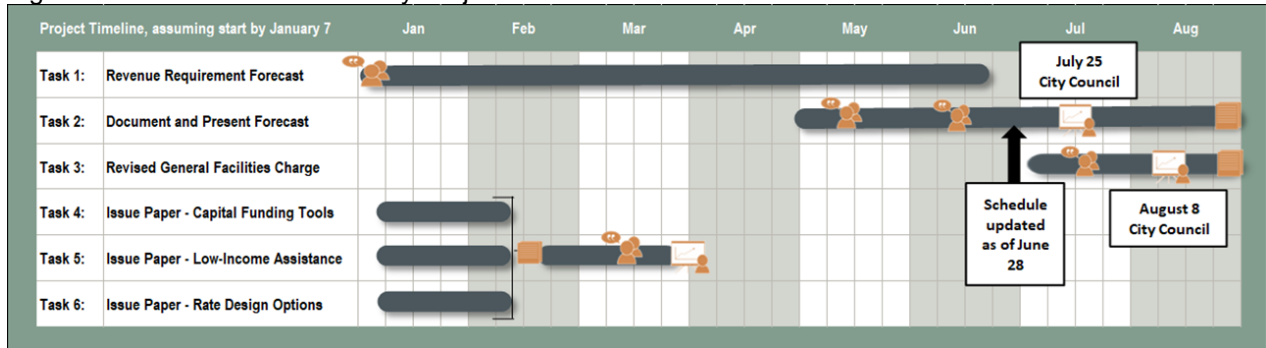
<http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2022/staffreport040422-8d.pdf>.

On July 27, 2022, staff presented Council with an update and status on the wastewater rate study following the guidance received on April 4, 2022. The staff report for this discussion can be found at the following link:

<http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2022/staffreport072522-9a.pdf>.

The current schedule for this work is shown in Figure 1 below:

Figure 1 – Wastewater Rate Study Project Timeline



DISCUSSION

Parallel with the wastewater rate, FCSG has been reviewing the City's General Facility Charges (GFC). GFCs are one-time fees, paid at the time of development, intended to recover a share of the cost of system capacity needed to serve growth. They serve two primary purposes: 1) to provide equity between existing and new customers, and 2) to provide a source of funding for system capital costs as growth occurs. The charge is an upfront charge imposed on growth and is primarily a charge on new development, although also applicable to expansion or densification of development when such actions increase requirements for utility system capacity.

The City is authorized to assess such charges under Section 35.92.025 of the Revised Code of Washington (RCW). The City's methodology to determine cost-based general facilities charges must be consistent with RCW 35.92.025 and applicable case law. RCW 35.92.025 states, in part:

“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...”

Additionally, the Shoreline Municipal Code (SMC) address GFCs. Specifically, SMC 13.05.110 states:

“General facility charges shall be paid by property owners in order that each new or change in use connection bears an equitable share of the cost of the public wastewater system”.

The GFC rates are reviewed with budget and included in the Wastewater rates. Ronald performed a GFC rate study in 2021 and those GFC rates have been carried over without change with assumption of the Ronald Wastewater District. There are compelling reasons to review the GFCs as part of this rate study, including:

- Reviewing and updating the CIP,
- Using a 20-year CIP to set GFC rates (Ronald could only use a 10-year CIP for calculation of GFCs),
- Incorporating 2021 booked assets and construction work in progress,
- Calculating an additional year of interest for eligible assets, and
- Updating King County and Edmonds Residential Customer Equivalent (RCE) counts.

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.

In Washington, there is more than one approach that can be used to construct a defensible GFC. In this evaluation we use the average integrated approach, which provides stability over time and equity between new and existing customers. It is a simple calculation - the total cost (existing assets plus planned capital improvements) divided by the total RCEs (existing capacity plus growth allowed by future capital investment) equals the GFC.

We recommend a uniform GFC of \$4,351 per RCE that would apply to all development and an additional \$3,377 Edmonds Treatment Facilities Charge that would apply to the area that flows toward the Edmonds Wastewater Treatment Plant and not through a King County transmission line. The detailed calculations are shown in the technical appendix to Attachment A.

The calculation of the GFC is shown as follows:

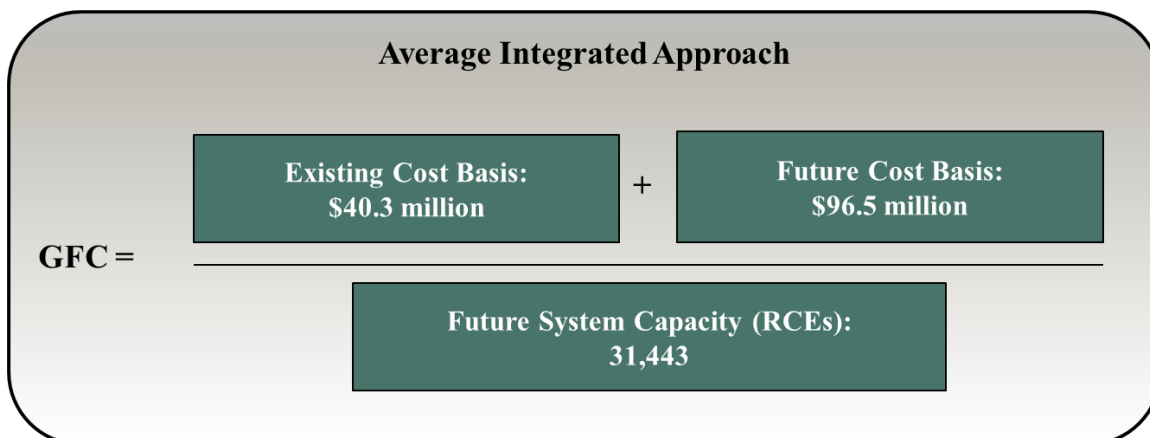
City-Wide General Facilities Charge	
Existing Cost Basis Plant in Service + CWIP - Edmonds Treatment Assets - Contributed Assets - Provision for Retirement of Assets + Applicable Cumulative Interest Total Existing Cost Basis	+
	Future Cost Basis 20-Year CIP in current dollars - Outside Funded Capital Total Future Cost Basis
City-wide RCEs at the end of the period	

*CWIP - Capital Work In Progress

Edmonds Incremental General Facilities Charge	
Existing Cost Basis City Share of WWTP + CWIP + Cumulative Interest Total Existing Cost Basis	+
	Future Cost Basis City Share of Edmonds WWTP CIP
Edmonds RCEs at the end of the period	

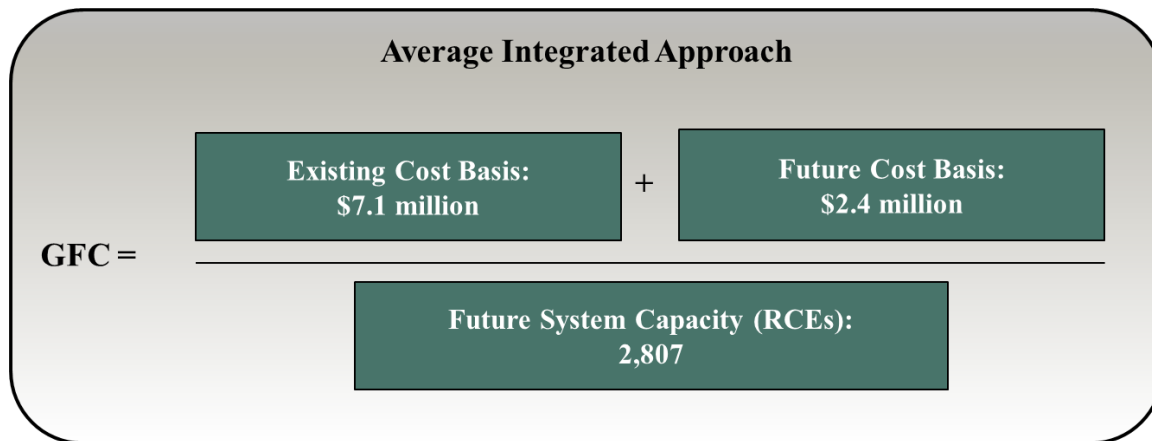
GFC Methodology – City Wide

A GFC of \$4,351 per RCE (\$136.8 million ÷ 31,443 RCEs as shown below)



GFC Methodology – Edmonds Wastewater Treatment Plant

A GFC of \$3,377 per RCE (\$9.5 million ÷ 2,807 RCEs as shown below)



The primary driver for the increase is using the 20-year CIP cost estimates which increased the CIP Costs from \$51M Cost over the 10-year period to \$96.5M over the 20-year period. Another driver for the increase is that while the cost basis period (the numerator in the calculation) increased from 10 to 20 years it is important to note that the prior study used RCE's at the end of the 20-year period as the denominator. In the updated calculation the time period for both aspects of the calculation are aligned.

It is also important to note that, in anticipation of the City's assumption of RWD, when FCS Group did the analysis in 2021, they estimated what the GFC would be if a 20-year Cost Basis period was used. The amounts estimated at that time were slightly higher than the current estimated amounts. The April 14, 2021, FCSG GFC Technical Memo to the Ronald Board s provided in Attachment A.

July 25, 2022 Policy Discussion Update

During the Discussion of the Wastewater Rate Study Project and Policy on July 25th, staff presented several recommendations on policies for Council's direction. While Council was generally supportive of the staff recommendation, there were questions and comments raised during the discussion. Below staff present answers to those questions, some alternate options for consideration and a revised recommendation on one policy.

Low Income Discount Program

During the discussion there was support of the staff recommendation to extend the low-income discount program to all customers currently qualified as Low Income by Seattle City Light (SCL).

There were two questions posed that I want to address here:

- 1. Do residents of MFTE housing already receive a discount on their utilities? There is a maximum rent amount set for MFTE buildings that varies based on whether the tenant pays their own utilities or if the landlord pays the utilities. Figure 2 below is the schedule for the maximum rent.*

Figure 2

80% AMI	BEDROOMS	Maximum Monthly Housing Costs	Maximum Rent if No Other Expenses	Maximum Rent if Tenant Pays Own Utilities, and No Other	Maximum Rent if Tenant Pays Own
		Two	\$2,145	\$2,145	\$2,011
Three	\$2,479	\$2,479	\$2,309	\$2,296	
Four	\$2,669	\$2,669	\$2,458	\$2,445	

Because of this model, renters who live in these units are receiving a housing discount on either rent or utilities to ensure that their housing costs don't exceed the maximum. The discount is not directly on the utility bill, and renters that are not paying their utilities directly would not be qualified with SCL and thus would not receive a credit or rebate.

As noted in the presentation, in our exploration of this option with SCL, we are likely moving toward a 3-way partnership with the City, SCL and Hopelink, where SCL would release data to Hopelink and the City would contract with Hopelink to issue rebates. Recognizing that our low-income residents need the benefit of this discount on a regular basis, we will seek to issue rebates as frequently as possible while minimizing administrative overhead.

2. Why are we considering a credit or rebate through SCL rather than giving a directed credit on each bill?

As part of the issue paper on this topic, FCS Group analyzed several different options for extending the discount to all low-income customers. The options were discussed with Council on April 4, 2022. Details are found on page 32 of the staff report, which can be found at the following link: <http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2022/staffreport040422-8d.pdf>.

Figure 3 below provides a summary of the options and pros and cons for each option. The staff recommendation to explore options 3 and 4 were driven by a desire to offer the discount more broadly.

Figure 3 – Low Income Discount Expansion Options

Level	Description	Pros	Cons
One	Status Quo	<ul style="list-style-type: none"> Known administrative costs 	<ul style="list-style-type: none"> Only available to low income senior citizens or disabled citizen homeowners who occupy their home
Two	Expand Current Discount to Renters	<ul style="list-style-type: none"> More residents benefit 	<ul style="list-style-type: none"> Not available to all low-income Does not impact multi-family residents who may be more likely to be low-income Significant administrative cost for limited benefit
Three	Discount on Electricity Bill for Low-Income Residents	<ul style="list-style-type: none"> More residents benefit including multi-family No increase and potential decrease in administrative costs 	<ul style="list-style-type: none"> Requires negotiating program with Seattle City Light (SCL) Will require some routine/reconciliation and coordination with SCL
Four	City Issues Direct Rebate Checks to Low-Income Shoreline Residents	<ul style="list-style-type: none"> More residents benefit; includes multi-family 	<ul style="list-style-type: none"> Would require increased annual administration

Credit Card Processing Fee

During Council discussion the question was raised about how much the WW Utility paid in credit card fees and what percent of customers are paying their bills using credit cards.

In 2021 the WW Utility paid around \$56,300 in credit card fees. We had previously noted that the majority of our payments were now made by credit card. In further evaluation, we realized that while that is true for our Electronic Billing customers, the majority of customers are not on electronic billing and thus only 17.9% of the customers pay their bills using credit cards. The City also pays about \$14,400 in ACH fees annually, which is the most prevalent form of payment at this time. Given this additional information, and the significantly higher cost of credit card fees versus ACH, staff are amending their recommendation to reinstate the Credit Card fee.

We do anticipate that the percent of credit card payments will increase when we implement an integrated electronic billing and payment processing system in 2023. Currently the City uses a 3rd party service for this functionality. It is not the easiest system to use. With the upgrade to our Springbrook billing software completed recently, we will be able to implement a Springbrook module that can perform this service. It will provide real-time account inquiries and we expect it to be much more user friendly and encourage greater user adoption. When we see the credit card usage exceeding other payment methods, we can revisit this policy. Given that the credit card fees were included in the rate study, we anticipate that this change in policy would result in approximately a 3-cent reduction in the proposed rate.

Refund Request Fee

While Council members supported the staff recommendation to reinstate the \$11 refund request fee, there was concern expressed about the necessity of this and that it created a perceived bureaucratic barrier.

While we recognize that this could be perceived in this way, we frequently receive refund requests for small amounts on active ongoing accounts. The cost of processing a refund far exceeds the \$11 charge, but in these cases, the fee is enough to discourage these types of refund requests where a customer can use the credit on a future bill. As an alternative, we could change the refund request fee to apply only on open accounts not on closed accounts. Staff would be supportive of that change. This revenue was not included in the rate study and so this change would not have an impact on rates.

Late Fee and Interest

Staff recommended the reinstatement of the 10% late fee and the elimination of the 8% interest. There was general support of this proposal. However, there was a suggestion to explore the application of interest for accounts that reach a certain threshold.

An alternative that Council could consider is to apply 8% interest to:

- *Accounts that have been sent to collection, are more than 1 year delinquent and who have not implemented or complied with a payment agreement; or*
- *Accounts that have been sent to collection, have not implemented or complied with a payment plan and are moving to foreclosure.*

Either of these options would impose consequences for chronic late payments and be targeted at the most delinquent accounts. Additionally, our collections attorney noted that it provides a “carrot” to encourage resolution of the delinquency as well as a “stick.” Because there is already significant manual work on the part of our collection’s attorney for these accounts, the application of interest, while manual would not add significant effort to the process.

The reinstatement of the 10% penalty is estimated to generate \$165,000 annually, adding that revenue into the budget would reduce the rate by up to 10-cents. Interest revenue was not considered in the rate study and given the small number of accounts that it might apply to, we would not budget for this revenue.

Impact of Policy Recommendations on Rates

The full impact of the policy recommendations on rates would be evaluated with the budget process. Based on our estimate we would anticipate that implementing the revised recommendations included in this staff report would impact rates as follows:

- **Extending Low Income Discount** - Increase of monthly rate by up to \$1 (already included in rates presented to Council)
- **Reinstating Credit Card Processing Fee** – Estimated to reduce the monthly rate by up to 3 cents from the rates presented to Council
- **Reinstating the 10% Late Penalty** - Estimated to reduce the monthly rate by up to 10 cents.

As a reminder, there will be cost increases and supplemental requests made during the budget process that will be impacting the rate calculation that will likely more than offset these noted reductions. The final proposed rate will be presented to Council as part of the 2023-2024 biennial budget, with discussion of the changes made since our preliminary discussions. The rates adopted with the budget will go into effect in 2023.

COUNCIL GOAL(S) ADDRESSED

This item addresses City Council Goal #2: Continue to deliver highly-valued public services through management of the City's infrastructure and stewardship of the natural environment.

RESOURCE/FINANCIAL IMPACT

There is no immediate resource or financial impact associated with tonight's wastewater rate study discussion. Guidance received tonight will impact the wastewater rates that will be incorporated into the study and inform the 2023-2024 biennial budget. Actual proposed rates and charges may vary from those discussed in this report, depending upon the final proposed operating and CIP budget that will be presented to Council.

RECOMMENDATION

No action is required tonight; staff recommends that the City Council provide input and guidance on the FCSG wastewater rate study and the policy questions associated with the study. The guidance received tonight will be incorporated into the 2023-2024 biennial budget development process.

ATTACHMENTS

Attachment A – April 14, 2021 FCSG Memorandum - Ronald GFC Update

To: Scott Christensen, P.E., District Engineer
Ronald Wastewater District

Date: April 14, 2021

From: Gordon Wilson, Senior Program Manager
Tage Aaker, Project Manager



RE Ronald Wastewater District—General Facilities Charge (GFC) Update

INTRODUCTION

In January 2021, Ronald Wastewater District contracted with FCS GROUP to perform a General Facilities Charge (GFC) update. The most recent previous GFC update was performed in 2010.

This memo documents the GFC methodology, an updated districtwide GFC for the collection system, and an Edmonds Treatment Facilities Charge. The Edmonds Treatment Facilities Charge applies to the part of the District that is outside the King County wastewater service area. (The County imposes a separate treatment capacity charge within its service area.) Both the collection GFC and the Edmonds Treatment Facilities Charge are calculated on a per-Residential Customer Equivalent (RCE) basis.

Change of Methodology

We recommend changing the GFC methodology to a uniform per-RCE charge rather than separate charges for high-density and low-density development. The following discussion explains why.

In 2010, the District was on the front end of a major capital program that was driven largely by the need for more capacity in the pipes and pumps. The increased demand came primarily from the growth that was projected to occur as a result of higher-density zoning. The District area is fully built-out, primarily with single-family housing, so any increased growth must come from higher density multi-family and commercial development. For that reason, it made sense to assign the cost of growth-related capital investment to projected high-density development—multi-family and commercial. The high-density GFC was calculated at \$2,506 per RCE, while the low-density GFC (for single-family housing) was \$1,222.

Eleven years later, two things have changed. First, much of the capital investment planned in 2010 has now been made, so those costs are shown as existing assets instead of future capital projects. While *capital projects* can sometimes be attributed to high-density redevelopment, *existing assets* are spread equally to all types of development. From 2010 to 2021, the existing plant-in-service nearly doubled, from \$28 million to nearly \$50 million. The cost basis that is allocated to all customers is therefore much larger now than it was in 2010.

Secondly, in 2010 the portion of the CIP attributable to high-density development was \$11.1 million. In the 2020 Comprehensive Sewer Plan, the comparable figure is \$5.1 million. According to the District Engineer, there are actually more capacity-increasing projects in the current CIP than there were in 2010. However, now more of the population growth and planned sewer upgrades are spread across the District rather than concentrated in a limited area, and the capital costs are less directly attributable to a particular type of development.

So the part of the cost basis attributable to all development has *increased*, and the part attributable solely to high-density development has *decreased*. As a result, the calculated high-density and low-density charges this time are within \$100 of each other, and it no longer makes sense to separate them. For that reason, we recommend going back to the simpler method used prior to 2010, which is a uniform charge for all types of development. The remainder of this memo describes the updated GFC assuming a uniform charge.

The methodology for the Edmonds Treatment Facilities Charge has not changed from 2010.

Summary of Results

The recommended charges are shown in **Exhibit 1** and summarized below:

- The current Single-Family GFC is \$1,257 per residential customer equivalent (RCE).
- The current Multi-Family / Commercial GFC is \$2,506 per RCE.
- The recommended GFC (which applies to both Single-Family and Multi-Family/Commercial development) is \$3,012 per RCE.
- The recommended Edmonds Treatment Facilities Charge is \$2,505 per RCE, compared with the current increment of \$1,222.

Exhibit 1: Current and Recommended GFCs

Description	Current Charge per RCE	Recommended Charge per RCE
Integrated GFC (all development)	n/a	\$3,012
Single-Family (low-density development)	\$1,257	n/a
Multi-Family/Commercial (high-density development)	\$2,506	n/a
Edmonds WWTP Increment	\$1,222	\$2,505

BACKGROUND ABOUT GENERAL FACILITIES CHARGES

GFCs are one-time fees paid at the time of development, intended to recover a share of the cost of system capacity needed to serve growth. They serve two primary purposes:

- to provide equity between existing and new customers; and
- to provide a source of funding for system capital costs as growth occurs.

GFCs are primarily a charge on new development, but they also apply to redevelopment that increases the demand for system capacity. Charges on redevelopment are net of previously paid-for capacity.

Legal Basis

RCW 57.08.005 (11) gives the District authority to impose GFCs and establishes guidelines for their calculation. An excerpt is provided below:

RCW 57.08.005 (11): ... “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.” ...

The calculated charges represent the maximum allowable charge. The District may legally choose to implement a charge less than the maximum.

Average Integrated Approach

In Washington, there is more than one approach that can be used to construct a defensible GFC. Here we use the *average integrated approach*, which provides stability over time and equity between new and existing customers. It is a simple calculation. The total cost (existing assets plus planned capital improvements) divided by the total RCEs (existing capacity plus growth allowed by future capital investment) equals the GFC. The GFC represents the average unit cost of capacity. **Exhibit 2** illustrates how the average integrated approach is calculated.

Exhibit 2: Calculation Using the Average Integrated Approach

$$\text{SDC} = \frac{\text{Existing System Cost} + \text{Future Project Cost}}{\text{Existing + Future Customer Base (System Capacity)}}$$

The following discussion addresses the calculation of the districtwide GFC for the collection system. The Edmonds Treatment Facilities Charge is discussed later.

Existing Cost Basis

The existing cost portion of the calculation is intended to recognize the current ratepayers’ net investment in the original cost of system assets. The calculation includes the following elements:

- **Utility Plant-In-Service:** The existing cost basis begins with the original cost of plant-in-service., as documented in the fixed asset schedule of the utility.
 - » The District’s records as of the end of 2020 identify **\$49.8 million** in assets.
- **Plus: Construction Work in Progress:** Construction work in progress (CWIP) is added to recognize expenditures on projects currently underway but not yet complete.
 - » Based on the District’s CWIP Summary Trial Balance, the utility had just over **\$1.1 million** in construction work in progress as of the end of 2020.

- **Less: Edmonds WWTP Assets:** These assets will counted in the cost basis for the Edmonds Treatment Facilities Charge, so they are subtracted here to avoid a double-count.
 - » The District’s records as of the end of 2020 identify **\$4.2 million** of Edmonds WWTP assets.
- **Less: Contributed Capital:** Assets funded by grants or local improvement districts are excluded, as is developer-built infrastructure. Capital funded by rates or past GFC revenue is included.
 - » Capital contributions of **\$11.2 million** (excluding GFC revenues) were identified in the District’s historical financial statements.
- **Less: Provision for Capital Retirement:** All District capital projects are repairing or replacing existing assets (excluding Edmonds WWTP projects). To avoid including the value of these projects twice – in the existing assets and in the capital plan – a deduction is made for future asset retirements related to CIP projects classified as repair and replacement (R&R). The provision for future asset retirement estimates the approximate original cost of the asset that the R&R project is replacing, using the useful life of the new project and a historical inflation index (the ENR-CCI). In simple terms, if a lift station expected to last 25 years is to be installed in 2025, replacing an existing list station, the provision for future asset retirement estimates how much that asset would have cost in 2000 and removes that amount from the existing cost basis.
 - » This adjustment reduces the existing cost basis by approximately **\$5 million**.
- **Plus: Interest on Utility-Funded Assets:** The RCW and subsequent legal interpretations allow GFCs to include interest on an asset at the rate applicable at the time of construction. Interest can accumulate for a maximum of ten years from the date of construction for any particular asset. Conceptually, this interest provision accounts for opportunity cost that District customers incur by funding infrastructure investments rather than having it available for other needs.
 - » After deducting interest from the Edmonds WWTP and contributed capital, accumulated interest adds about **\$12.5 million** to the existing cost basis.

The sum of these elements results in an existing cost basis of \$43.0 million, as shown in **Exhibit 3**.

Exhibit 3: Existing Cost Basis

Component	Amount
Existing Wastewater Plant-in-Service	\$49,819,598
Plus: Construction Work in Progress as of 12/31/2020	1,100,283
Less: Edmonds WWTP through 12/31/2020	(4,227,979)
Less: Contributed Facilities through 12/31/2020	(11,171,351)
Less: Provision for Retirement of Assets to be Replaced	(5,036,074)
Cumulative Interest	19,235,318
Less: Cumulative Interest on Edmonds WWTP	(1,409,404)
Less: Cumulative Interest on Contributed Facilities	(5,291,177)
Total Existing Cost Basis	\$43,019,215

Future Cost Basis

The future cost basis is intended to recognize ratepayer future capital investment and is based on ten years of the District’s adopted CIP. The CIP is summarized in **Exhibit 4** and totals **\$51 million**. No cost escalation is applied to these numbers.

Exhibit 4: District’s Ten-Year CIP (2021-30)

ID	Project	Amount (2020 \$)
P-1	Lift Station No. 12 Pre-Design Report	\$50,000
P-2	Lift Station No. 12 Design and Construction	850,000
P-3	Lift Station No. 15 Pre-Design Report	50,000
P-4	Lift Station No. 15 Design and Construction	1,700,000
P-5	Lift Station No. 5 Pre-Design Report	50,000
P-6	Lift Station No. 5 Design and Construction	1,275,000
C-1	Annual Sewer Repair and Replacement Projects	22,500,000
C-2	Small Works Annual Sewer Repair and Replacement Projects	3,600,000
2021 CIP	2021 CIP: Edmonds Treatment Plant (excluded)	6,425,000
2022 CIP	2022 CIP	1,918,958
2023 CIP	2023 CIP	1,291,906
2024 CIP	2024 CIP	1,667,223
2025 CIP	2025 CIP	1,695,176
2026 CIP	2026 CIP	1,243,386
2027 CIP	2027 CIP	1,850,407
2028 CIP	2028 CIP	842,990
2029 CIP	2029 CIP	848,523
2030 CIP	2030 CIP	1,199,696
O-1	Personnel Retrieval Davits for Lift Stations	70,000
O-2	Vibration Analysis, Thermal Imaging, & Energy Audit on Lift Stations	25,000
O-3	Lift Station No. 3 Backup Power	435,000
O-4	Lift Station No. 11 Backup Power	522,000
O-5	Lift Station No. 14 Backup Power	557,000
O-6	Annual I/I and Hydraulic Model Update and Review	315,000
	Total (2021-30)	\$50,982,265

System Capacity

So far we have discussed the numerator in the GFC, with its two main components: the value of existing assets and future capital costs. The denominator in the GFC calculation is the projected number of residential customer equivalents, or RCEs.

The time horizon for the capital improvement plan used in this update is ten years (2021 through 2030), but the infrastructure built during this period is assumed to serve growth that takes place over the next 20 years. The use of a longer-term growth forecast results in a larger denominator and lower charge, and it creates a conservative relationship between costs and the capacity provided by the District's investment. (The 2010 GFC made the same assumption—ten years of capital projects serving 20 years of growth.)

Based on data from September 2020, the District serves 22,168 RCEs. This number is forecast to 2040, based on projected population growth shown in Table 3.1 in the *2020 Ronald Wastewater District Comprehensive Sewer Plan (CSP)*. Table 3.1 in the CSP cites a 2020 population of 71,730 and a projected 2040 population of 101,000, which is a 41% increase. If this same increase is applied to the current number of RCEs, then 2040 RCEs can be estimated to be 31,214 ($22,168 * 1.41$), as shown in **Exhibit 5**.

Exhibit 5: Future System Capacity (in RCEs), Assuming CIP Serves 20 Years of Growth

Description	Amount
RCEs as of 09/2020	22,168
Growth in Population 2020-2040 (Table 3.1 in CSP)	1.41 (101,000 ÷ 71,730)
Projected RCEs in 2040	31,214

GFC Calculation

The following exhibit shows the summary calculation for the District's GFC. The total existing cost basis (\$43 million) plus the future cost basis (\$51 million) totals \$94 million. This is divided by the estimated future system capacity of 31,214 RCEs, which results in a GFC of \$3,012 per RCE. This is shown in **Exhibit 6**.

Exhibit 6: GFC Calculation

Description	Amount
Existing Cost Basis	\$43,019,215
Future Cost Basis	<u>\$50,982,265</u>
Total Cost Basis	\$94,001,480
Future System Capacity	31,214 RCEs
Calculated GFC per RCE	\$3,012

Edmonds Treatment Facilities Charge

The Edmonds Treatment Facilities Charge is an additional charge that applies to an area that flows toward the Edmonds Wastewater Treatment Plant and not through a King County transmission line. This area is sometimes referred to (with only approximate accuracy) as the “ULID #2” area.

To make things a bit confusing, there is another area, Richmond Beach, that falls within the King County wastewater service boundaries but that physically flows toward the Edmonds WWTP under the terms of a “flow swap” agreement between King County and the City of Edmonds. Even though the Richmond Beach flows do end up in Edmonds, that area is still within the King County wastewater service area, so new development in Richmond Beach pays the King County capacity charge and does *not* pay the Edmonds Treatment Facilities Charge to the Ronald Wastewater District. Only development in the ULID #2 area pays the Edmonds Treatment Facilities Charge.

The Edmonds Treatment Facilities Charge recovers a share of treatment capital costs. By agreement, the District is charged 9.488% of the cost of the City of Edmonds’ treatment capital projects. The value of existing assets related to the Edmonds WWTP totals \$5.6 million including the cumulative interest. The forecasted capital projects total \$1.5 million, so the total cost basis for this charge is \$7.1 million.

Using a twenty-year time horizon for growth, the total denominator for the Edmonds WWTP increment is 2,849 RCEs. This is based on an estimated 2,706 RCEs currently served (based on 2019 data). Conservatively assuming twenty years of growth at 0.5% per year, this increases the denominator by 143 RCEs. **Exhibit 7** shows that after dividing the cost basis by the projected number of future RCEs, the Edmonds Treatment Facilities Charge is \$2,505 per RCE.

Exhibit 7: GFC Calculation – Edmonds WWTP Increment

Description	Amount
Existing Cost Basis	\$5,637,383
Future Cost Basis	<u>\$1,500,000</u>
Total Cost Basis	\$7,137,383
Future System Capacity	2,849 RCEs
Calculated Edmonds WWTP GFC per RCE	\$2,505

Potential Change to Definition of RCE

When new development occurs, the District reports it to King County, so the County can begin sending out bills for its capacity charge. The County reporting form contains information needed to define the number of RCEs for new development.

For the sake of consistency, the District has traditionally calculated the number of RCEs for its own GFC the same way that King County does. (There is a limited exception having to do with microhousing.) The practice of connecting the District definition to the County definition avoids a situation where—for example—a given multi-family building counts as 3.6 RCEs for the County and 3.9 RCEs for the District.

In September 2020 King County adopted a new RCE definition to use with its capacity charges effective January 1, 2021. The new County definition followed a study of the relationship between types of development and wastewater demand, with particular emphasis on the various types of residential development. **Exhibit 8** shows the District’s current RCE values for various types of developments alongside the new King County RCE values.

Exhibit 8: Definition of Residential Customer Equivalents (RCEs)

Type of Development	Current Ronald RCE Definition	Updated King County RCE Definition
Small Single Family (less than 1,500 net square feet)	1.0 RCE	0.81 RCE
Medium Single-Family (1,500-2,999 net square feet)	1.0 RCE	1.00 RCE
Large Single Family (3,000 net square feet or greater)	1.0 RCE	1.16 RCE
Detached Accessory Dwelling Unit	1.0 RCE	0.59 RCE
Attached Accessory Dwelling Unit	0.60 RCE	0.59 RCE
Multi-Unit Structures with 2-4 units	0.80 RCE per unit	0.81 RCE per unit
Multi-Unit Structures with 5 or more units	0.64 RCE per unit	0.63 RCE per unit
Microhousing Structures	0.50 RCE per unit	0.35 RCE per unit
Senior Resident, Low-Income, and Special Purpose Housing	0.32 RCE per unit	0.32 RCE per unit
Adult Family Homes and Student Dormitories	1.0 RCE per 20 fixture-units	1.0 RCE per 20 fixture-units
Commercial with Standard Fixtures	1.0 RCE per 20 fixture-units	1.0 RCE per 20 fixture-units
Commercial with Non-Standard Fixtures or Process Water (for example, fountains, spas, cooling towers, swimming pools, commercial laundry, car washes, commercial dishwashers, or industrial process water)	1.0 RCE per 20 fixture-units, plus 1.0 RCE per 187 gpd of projected process water, as self-reported by applicant.	1.0 RCE per 20 fixture-units, plus 1.0 RCE per 187 gpd of projected process water, as self-reported by applicant.

If the District wants its RCE definition for GFC purposes to continue to be consistent with the King County definition, it will need to take action to that effect. We recommend that the resolution adopting the updated GFC also state that the RCE definition used to calculate the District GFC shall follow the RCE definition King County uses to calculate its capacity charge.

We recommend that the City of Shoreline also adapt its policies accordingly. In July 2017, we submitted a Wastewater Revenue and Customer Policy document to the City, to assist it in establishing the structure for a City wastewater utility. If that document was adopted as recommended, the City will need to update Section 10.5.1 and 10.5.2 to match the new residential classes and their equivalence factors. Similarly, Section 10.6 should be adapted if the District adopts a uniform GFC. In the draft policy we submitted to the City, the last two sentences of Section 10.6 refer to both a high-density and a low-density GFC; those sentences can be deleted.

Note that the RCE definition for GFC purposes is separate from the RCE definition for the purpose of ongoing monthly rates. For the administration of monthly rates, the King County RCE definition

for non-single family customers is based on metered water consumption. Since metered water usage is not known at the time new development is occurring, a GFC cannot be based on the same ERU definition as monthly rates. For charging monthly rates to non-residential customers, one RCE is defined as 750 cubic feet of metered water usage, and that definition has not changed.

Longer CIP Time Horizon

Districts are governed by RCW Chapter 57, which limits the GFC future cost basis to a ten-year CIP. Cities are governed by RCW Chapter 35, in which there is no ten-year limit to the time horizon of a future CIP. The 2020 Comprehensive Sewer Plan just adopted by the District contains a CIP that extends 20 years. As an informational item for benefit of the City of Shoreline, we were asked to calculate an alternate GFC assuming the full 20-year CIP instead of just the first 10 years. The result would be a GFC of \$4,565 instead of \$3,012 and an Edmonds Treatment Facilities Charge of \$2,822 rather than \$2,505. While the District Board cannot adopt the alternate GFCs at the higher levels, the City of Shoreline could opt to do so after it completes the assumption of the District.

Summary

Exhibit 9 repeats the information contained at the beginning of this memo, summarizing the recommended GFCs. We recommend a uniform GFC of \$3,012 per RCE that would apply to all development and an additional \$2,505 Edmonds Treatment Facilities Charge that would apply to the area that flows toward the Edmonds Wastewater Treatment Plant and not through a King County transmission line. The detailed calculations are shown in the technical appendix to this memo.

We also recommend that the GFC be revisited every few years to ensure that the charge is keeping pace with the utility’s capital investments. Regular updates can help avoid the steep increases that we see this year, as a result of the GFC not having been updated in 11 years.

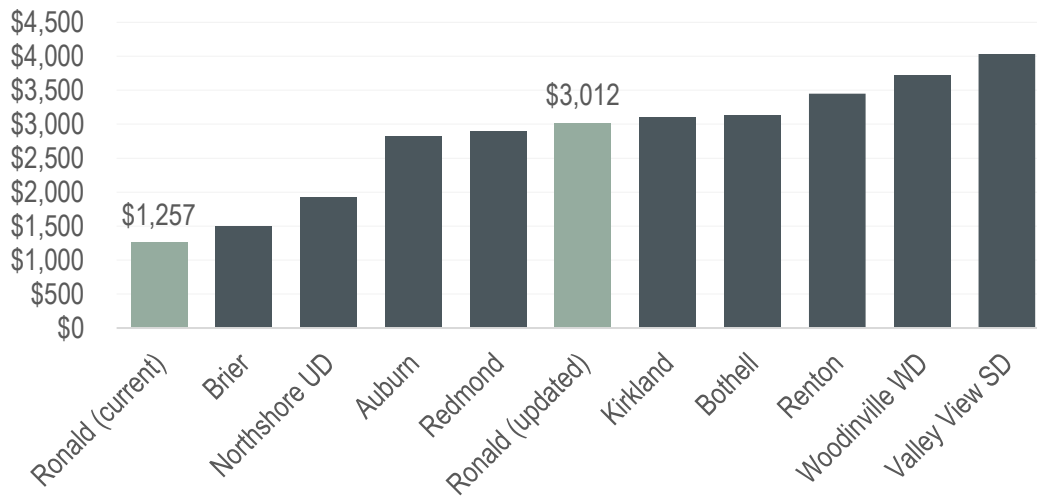
Exhibit 9: Current vs. Recommended GFC per RCE

Description	Current Charge per RCE	Recommended Charge per RCE
Integrated GFC (all development)	n/a	\$3,012
Single-Family (low-density development)	\$1,257	n/a
Multi-Family/Commercial (high-density development)	\$2,506	n/a
Edmonds WWTP Increment	\$1,222	\$2,505

GFC Survey

A survey of GFCs from regional sewer collection-only utilities is provided in **Exhibit 10**. All of these collection-only systems are served by King County Wastewater Treatment Division and therefore are assessed a monthly treatment capacity charge that applies to new development for 15 years. The District's current low-density GFC is the lowest among the survey group. The recommended GFC would move the District toward the middle of the group.

Exhibit 10: Single-Family Residential 2021 GFCs for Collection-Only Systems



Technical Appendix – District GFC

RONALD WASTEWATER DISTRICT General Facilities Charge Calculation, March 2020 Average Integrated Approach	
General Facility Charge Components	2021
1. Existing Cost Basis	
Existing District-funded Capital Assets	
Existing Wastewater Plant-in-Service	\$ 49,819,598
Plus: Construction Work in Progress as of 12/31/2020	<u>1,100,283</u>
Total Existing Assets as of December 2020	50,919,881
Less: Edmonds WWTP through 12/31/2020	\$ (4,227,979)
Less: Contributed Facilities through 12/31/2020	(11,171,351)
Less: Provision for Retirement of Assets to be Replaced	<u>(5,036,074)</u>
Equity in Net Existing Wastewater Plant-in-Service before Interest	\$ 30,484,477
2. Cumulative Interest	
Up to 10 Years of Interest on Net Existing Wastewater Plant-in-Service	\$ 19,235,318
Less: Cumulative Interest on Edmonds WWTP	(1,409,404)
Less: Cumulative Interest on Contributed Facilities	<u>(5,291,177)</u>
Net Cumulative Interest	\$ 12,534,737
Total Existing Cost Basis	<u>\$ 43,019,215</u>
3. Future Cost Basis	
Future Capital Projects from 10-Year CIP (excluding Edmonds)	<u>\$ 50,982,265</u>
Total Future Cost Basis	\$50,982,265
Total Cost Basis	<u>\$ 94,001,480</u>
Future System Capacity (in RCEs), assuming CIP serves 20 years of growth	31,214
General Facilities Charge per RCE - Average Integrated Method	\$3,012

Customer Group	RCEs as of 09/2020
Number of RCE's for residential (to King County)	15,180
Number of RCE's for non-residential (to King County)	4,565
Number of RCE's for residential (to Edmonds)	1,362
Number of RCE's for non-residential (to Edmonds)	<u>1,061</u>
Total	22,168

Projected Population and RCEs	Amount
Table 3.1 Estimated & Projected Population Comprehensive Sewer Plan - December 2020	
Existing (2020) Population for Hydraulic Modeling	71,730
Projected (2040) Population for Hydraulic Modeling	101,000
Multiplier from 2020 to 2040	1.41
Existing (2020) RCEs	22,168
Projected (2040) RCEs based on Population Multiplier	31,214

Technical Appendix – Edmonds WWTP Increment

RONALD WASTEWATER DISTRICT - EDMONDS TREATMENT AREA		
General Facilities Charge Calculation, March 2020		
Incremental Charge for Treatment in Edmonds Service Area		
Existing Cost Basis:		
District Share of Existing WWTP	\$	4,227,979
Accumulated Interest		1,409,404
Total Existing Cost Basis - Edmonds Service Area	\$	5,637,383
Future Cost Basis - Edmonds Service Area		
District Share of Edmonds WWTP Projects (9.488% of planned project cost)	\$	1,500,000
Collection System Projects in Edmonds WWTP Service Area		-
Total Future Cost Basis - Edmonds Service Area	\$	1,500,000
Total Cost Basis - Edmonds Service Area	\$	7,137,383
Existing RCEs Edmonds Service Area (2019 Report)		
Residential		1,362
Multi Family and Commercial		1,061
Ballinger Commons & Holyrood		283
		2,706
Projected Growth in RCEs		
Residential growth at 0.5% per year for twenty years		143
Total Projected Customer Base		2,849
Incremental Charge per RCE in Edmonds Service Area		\$2,505

Edmonds Treatment Plant RCEs - 2019	
Edmonds Treatment Area	
Residential	1,362
Commercial	1,061
Ballinger Commons & Holyrood	283
Total RCEs	2,706