Attachment A

Proposed Solid Waste Disposal Fees for 2023 and 2024

June 2022

King County

I. Contents

II. Executive Summary

The Department of Natural Resources and Parks (DNRP) is proposing to increase its solid waste revenue requirement by 9.6 percent in 2023 and 9.6 percent in 2024.[1] Historically, rate increases have been shown in terms of percent increase in the basic fee since most of the solid waste revenue has been based on that fee. However, for 2023 and beyond, due to the new rate structure adopted by the King County Council in March 2022, the percentage increase shown will represent an increase in the overall revenue requirement (cost to provide services), not simply the basic fee. The impact of this increase for a typical residential customer, after commercial haulers pass along these costs, is forecasted to be $0.79 per month in 2023 and $0.90 in 2024.

The rate changes associated with this proposed revenue requirement increase are needed to sustain current essential services, including recycling and waste disposal services at transfer stations, continued operations at the Cedar Hills Regional Landfill (CHRLF), and recycling and waste-prevention programs. Thirty-seven partner cities and 1.5 million people depend on these disposal services. The proposed increase also provides for investments necessary to achieve the goals contained in the 2019 Comprehensive Solid Waste Management Plan (Comp Plan) and the 2020 King County Strategic Climate Action Plan (SCAP). This increase will allow DNRP to continue the services and programs customers have come to expect and rely on, and that have helped this region become one of the best for recycling in the nation.

DNRP has entered a period of significant capital investment that will last several biennia and reorient the future outlook from a waste management perspective to a materials management leadership perspective. This proposed rate increase would support DNRP making an estimated investment of $770 million for critical infrastructure projects between now and 2028. These investments will yield long-term financial benefits for rate payers, boost the local economy, and reduce the impact of waste on the environment. The department is also investing in its Re+ Plan, which will divert or recycle the 70 percent of useful materials that are currently being thrown away.[2] King County's goal is to achieve zero waste by 2030, which will provide significant environmental and financial benefit to the region. This proposed rate increase funds these key initiatives while also positioning the department to maintain a smooth and steady rate path in future years, as requested by partner cities.

The overarching goal of the fiscal planning work for this 2023-2024 rate proposal has been to maximize value for customers while mitigating financial impacts on rate payers. This rate proposal follows months of partner engagement that began in January 2022. The department's advisory committees—the Metropolitan Solid Waste Management Advisory Committee (MSWMAC) and Solid Waste Advisory Committee (SWAC)—expressed support of a rate increase that would allow the department to maintain current service levels, fund key investments in climate and environmental programs, and fulfill the commitments made in the Comp Plan.[3]

[1] The FCS Group report defines this as the total revenue required to fully fund solid waste services on a standalone basis and includes operating and maintenance expenditures, capital funding needs, and fiscal policy objectives.
[2] Additional information about Re+ can be found on the County's Re+ website.
[3] More information about the advisory committees can be found here [LINK] and the Comp Plan can be found here [LINK].

The proposed increases for 2023 and 2024 are in line with projections from the 2022 Rate Proposal and are needed to meet the department's commitments to regional partners, to successfully implement actions in the Comp Plan and SCAP and fulfill the mandate to maintain essential services.

III. Background

Department Overview: The King County Department of Natural Resources and Parks (DNRP) works in support of sustainable and livable communities and a clean and healthy natural environment. Its mission is to foster environmental stewardship and strengthen communities by providing regional parks, protecting the region's water, air, land, and natural habitats, and reducing, safely disposing of, and creating resources from wastewater and solid waste.

DNRP's Solid Waste Division (SWD) is guided by its vision to achieve zero waste of resources and enhance the environment through collaboration and innovation.[4] The department operates eight transfer stations, two rural drop boxes, and the Cedar Hills Regional Landfill (CHRLF) which is the only operational landfill in the county. DNRP serves residents and business owners in unincorporated King County and 37 cities throughout the county, except the cities of Seattle and Milton, which are part of separate solid waste systems. The department's solid waste mission is to "deliver value to its customers and stakeholders, and to continuously improve waste prevention, resource recovery, and waste disposal."[5] The DNRP solid waste rate supports ongoing services and operations as well as new investments in solid waste infrastructure and capital projects to serve its customers.

Key Historical Context: Historically, DNRP has operated over long periods of time with no rate increase for solid waste disposal as shown in Figure 1, below. Implemented rate increases have typically ranged between 5 percent and 15 percent. During development of the 2019-2020 solid waste rate, interested parties and partner cities requested that DNRP take a more incremental approach to rate setting, to create a more predictable path for rate increases. This preference was reiterated in the current round of rate proposal discussions for the 2023 rate.

The primary drivers of the increased costs of services provided at stations are the financial needs of capital projects, inflation, and the ongoing cost to meet environmental and safety controls at the CHRLF and the closed landfill properties managed by the County.

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[4] DNRP has rebranded these zero waste of resources efforts as Re+.
[5] Solid Waste Division vision statement [LINK]

Figure 1: 20-Year Overview of Rate Increases[6]

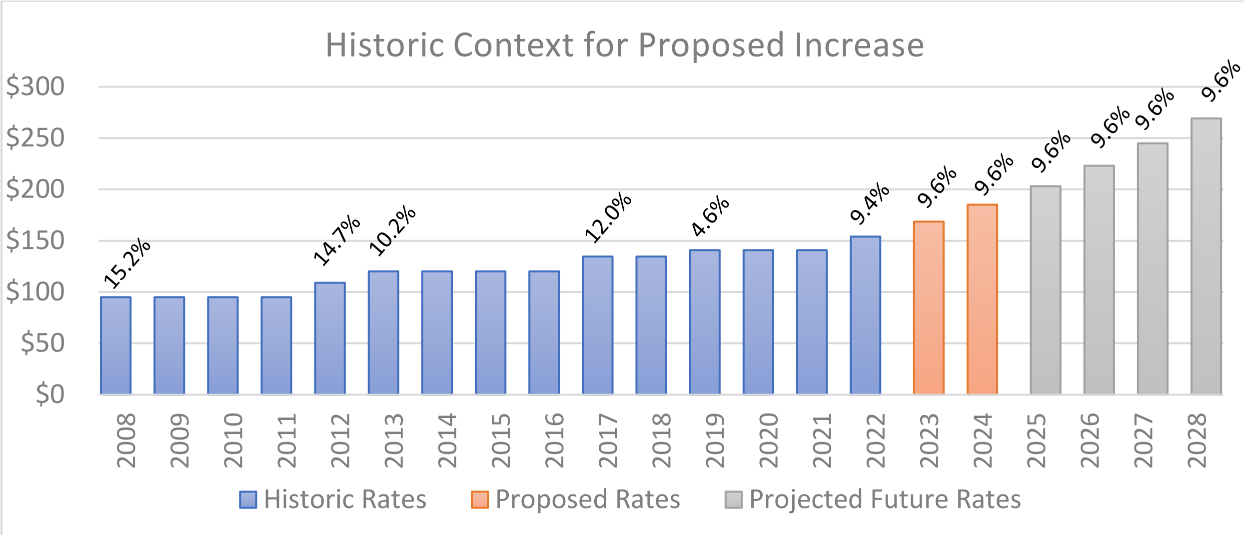


Figure 1 shows the history of basic fee rate increases since 2008, along with the proposed increase for 2023-2024 and projections through 2028. By staggering rate increases over one-year increments, increases are more gradual over time. This avoids a single large rate increase over the biennium or several biennia. Figure 1 shows that the projected rate increases after 2023 are expected to be greater than typical annual increases due to continued implementation of major capital projects approved of in the Comp Plan, such as building the South County Recycling and Transfer Station (SCRTS), building the Northeast Recycling and Transfer Station (NERTS), and developing Area 9 at the CHRLF.[7] SCRTS, NERTS, and extending the life of the landfill (the County's least costly garbage disposal option) were approved by the cities through the Comp Plan adoption process. While these investments carry significant costs, they remain popular with the MSWAC and SWAC. The MSWAC and SWAC have provided letters of support which accompany this proposal.

Key Current Context: The solid waste rate restructure ordinance (19413), passed on March 22, 2022, changed the way disposal fees are charged to commercial haulers. Instead of the basic fee, commercial haulers now pay a commercial tip fee (per-ton) and a fixed-annual charge (FAC). The commercial fee and FAC together are designed to collect the same amount of revenue as the basic fee was by itself, but since the FAC is a fixed value that does not vary based on tonnage, it is a more stable revenue stream.

The restructure of commercial revenues creates a challenge when comparing pre-restructure rates to the new format. To do so, the following table uses the 2022 rate and commercial tonnage to show how the new restructured commercial tip fee and the FAC can be combined to create a rate value called the composite commercial rate (CCR), which can then be compared directly with the pre-restructure basic

[6] Historically, the rate increase percentage shown represents a change in the basic fee. From 2023 and beyond, due to the revised rate structure, the percentage increase shown represents an increase in the overall revenue requirement, not only the basic fee.

[7] Area 9 is the capital project which will develop a new and final waste cell at the landfill. This project is expected to add eight years of useful life to the landfill.

fee. The CCR is used solely to facilitate equal comparisons between pre-restructure rates with rates under the new structure; it is not for billing customers.

Table 1: Creating the CCR for comparison with the pre-restructure basic fee

Step 1: Find the Commercial Fee and Fixed Charge Values			
2022 Under Status Quo		**2022 Under Restructure**	
Basic Fee	$ 154.02	Restructured Commercial Tip Fee	$ 123.82
Fixed Annual Charge (FAC)	None	Fixed Annual Charge (FAC)	$ 19,737,266

Step 2: Convert the New Fixed Annual Charge into a Per-Ton Equivalent[8]			
Commercial Tons	653,508	Commercial Tons	653,508
FAC / Commercial Ton	N/A	FAC / Commercial Ton	$ 30.20

Step 3: Add FAC Per-Ton Equivalent to Restructured Commercial Tipping Fee			
Basic Fee	$ 154.02	Composite Commercial Rate (CCR)	$ 154.02

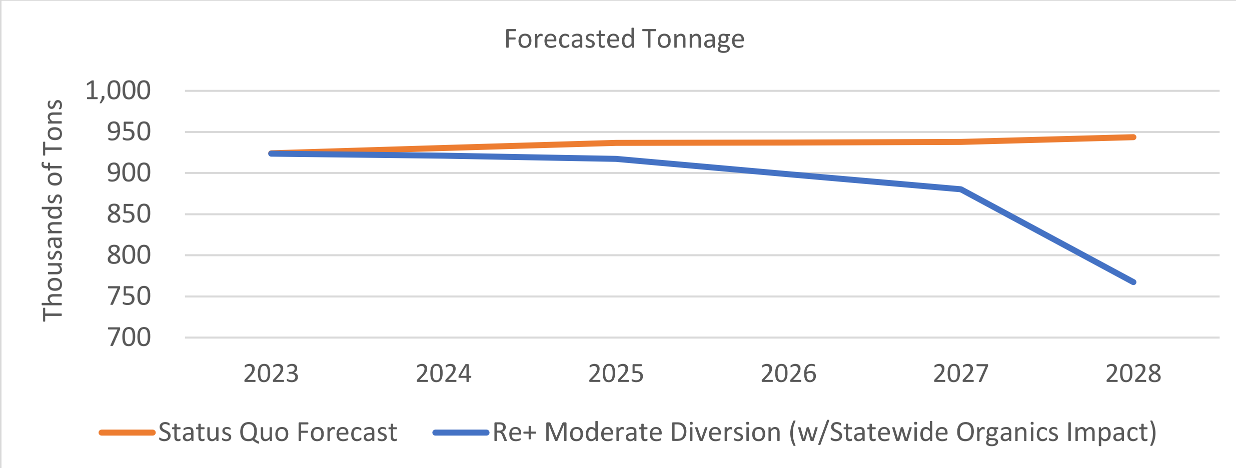
Re+, Tonnage, and Rates

As outlined by King County Code 10.14.020, it is King County's goal to "achieve zero waste of resources by 2030 through maximum feasible and cost-effective prevention, reuse, and reduction of solid wastes going into its landfills and other processing facilities." In late 2022, DNRP will publish the Re+ Plan, which will outline the primary actions the County and other partners (cities, haulers, businesses, etc.) will take to achieve the zero waste of resources goal. However, successful implementation of this plan over the next 10 years could significantly reduce landfill-bound municipal solid waste (MSW) tons and its associated revenue, meaning rates will need to increase.

Figure 2, below, shows two forecasts for total municipal solid waste (in thousands of tons) that the County anticipates would be generated over the next three biennia. The status quo forecast assumes no Re+ actions are taken, while the Re+ moderate forecast shows significant diversion of MSW. The Re+ forecast includes commercial food waste diversion resulting from the recently passed statewide organics legislation (HB 1799 – 2021-22), expanded recycling efforts at transfer stations, and new sorting technologies (all part of Re+). These estimates are based on an examination of the *2019 King County Waste Characterization and Customer Survey Report*, comparisons with historical DNRP efforts and similar programs in other jurisdictions, and consultant studies.

[8] This calculation is the FAC / Commercial Ton, so $19,737,266 / 653,508 = $30.20 per ton.

Figure 2: Total System Tonnage Forecasts 2023-2028



Economic Circumstances

The local economy has a twofold impact on the Department's solid waste services. When the local economy is doing well, consumption tends to increase, which drives up the amount of waste coming to transfer stations. The opposite is true during economic downturns. The local economy also affects the cost of the services provided. Inflation and high demand in the building sector can drive up the cost of operating the system and repairing and replacing aging infrastructure. As the COVID-19 pandemic enters its third year, the economic conditions in the region remain fluid. The pandemic recovery has been accompanied by rising inflation rates and ongoing supply chain disruptions. These two forces, combined with permitting delays, have slowed progress on some capital projects and increased costs for most of them. Furthermore, the war in Ukraine continues to contribute to uncertainty about food and fuel prices, which may affect the amount of waste moving through the system.

Report Methodology: DNRP gathered data from various internal and external systems, including from the cashiering system (Paradigm) used at solid waste facilities for tonnage and revenue information, King County accounting and budget systems (Oracle) for expenditure information, and the PRISM database, which provides expenditure forecasts for capital projects. Ideas and additional information were gathered through internal DNRP collaborations and from various partners. Briefings with the DNRP solid waste advisory committees—the Municipal Solid Waste Advisory Committee (MSWAC) and the Solid Waste Advisory Committee (SWAC)—started in December 2021 and continued monthly through development of this proposal. The committees provided input on a variety of topics, including communications, rate options, and service levels. Letters of support from the MSWAC and SWAC are included in this legislative package. This proposal was also developed with input and direction from the County's Office of Performance, Strategy and Budget.

The methodology used in formulating the rate proposal is explained in detail below.

IV. Report Requirements

A. Rate Model Methodology

Revenue generated by the rates charged support all of the services provided by the Solid Waste Division, including:

- The garbage (MSW) transfer system
- Disposal of MSW and Special Waste at the Cedar Hills Regional Landfill
- Recycling and yard waste collection at most transfer stations
- Hazardous and moderate-risk waste collection (at transfer stations)
- Waste reduction programs
- Education and outreach

Disposal fees comprise 90 percent of revenue to the Solid Waste Fund. Three variables drive the revenue received from disposal fees: 1) the FAC, 2) tonnage, and 3) tipping fees charged for tonnage. When tonnage decreases, revenue is reduced. Revenue, generated by the rates must align with costs to ensure services are available for customers and jurisdictions.

First, the cost to provide services is determined (this is also referred to as the revenue target, revenue requirement, or expenditures) by analyzing SWD's spending patterns, updating assumptions about inflation, reviewing proposals for budget adds and reductions, identifying the level of reserve cash to maintain each year, and examining a host of other factors that play into the cost of solid waste services.[9]

Next, the amount of the FAC must be determined. This is done through a cost-of-service analysis at the customer class level. A customer class is "a grouping of solid waste customers with similar usage characteristics who are served at similar costs."[10] The cost-of-service analysis looks at the cost to provide services to each customer class, including both disposal and non-disposal related costs.

For example, to provide disposal service to commercial haulers, the county employs scale house and transfer station operators, drivers, mechanics, and landfill crews, as well as builds, operates, and maintains transfer stations and the landfill. A portion of each of these costs is allocated to each of the customer classes based on their usage of that resource (usually determined by the number of tons or transactions a class generates).

Non-disposal costs include expenses such as administration, regional planning, Re+ actions, and regulatory compliance. The FAC is based on the commercial hauler customer class's portion of the non-disposal services costs. For example, if the cost of all non-disposal costs totaled $100 million dollars, and the commercial customer class share of those costs was 30 percent, the FAC would be set at $30 million dollars.

Nearly all other Solid Waste Fund revenues (other than the FAC) come from tonnage received at transfer stations. So, once the FAC is subtracted from the overall cost of service (or revenue requirement) the remaining cost must be divided by the projected tonnage to set the per-ton rates. At a high level, the

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[9] The Solid Waste Fund has three reserves. The rainy-day reserve, the recession reserve, and the rate stabilization reserve. Each reserve account has rules for the amount of cash that must be held in reserve and when those monies can be spent. More information about reserves is provided in Section C of this report and in Appendix B.
[10] FCS report, Section V.B. Solid Waste Classes of Service

relationship between the cost to provide services (expenditures), revenue, tonnage, and rates can be characterized as shown in the figure below.

$$\text{Expenditures + Reserves} = \frac{\text{(Revenues Required – FAC)}}{\text{Tonnage}} = \text{Per Ton Rate}$$

B. Proposed Fees for 2023 and 2024

Table 2: Proposed rates for the 2023-2024 biennium

Current Structure			
Per Ton Fees	**2022**	**2023**	**2024**
Basic Fee	$ 154.02	$ -	$ -
New Structure			
Per Ton Fees	**2022**	**2023**	**2024**
Commercial Tipping Fee	$ -	$ 135.64	$ 150.83
Self-Haul Tipping Fee	$ -	$ 168.68	$ 185.28
Regional Direct	$ 131.00	$ 143.00	$ 157.00
Special Waste	$ 185.00	$ 203.00	$ 223.00
Yard Waste	$ 100.00	$ 115.00	$ 115.00
Fixed Fee (in millions)	**2022**	**2023**	**2024**
Fixed Annual Charge (FAC)	$ -	$ 21.80	$ 22.61
Curbside Impact	**2022**	**2023**	**2024**
Average monthly impact		$ 0.79	$ 0.90

Solid waste customers and jurisdictions have historically asked for and come to expect some measure of the impact a rate increase proposal would have on the average retail rate of resident's waste collection bills. This is what is meant by "curbside impact." The curbside impact measure identified in the above table above is an average monthly curbside financial impact for all residents in the County's service area. Notably, because all cities have different starting rates and distribute the disposal costs across their customer bases differently, the identified impact shown in this table will not match the actual curbside impact in any given city. However, it should be accurate in aggregate across the entire SWD service area. See Appendix A for additional information on the curbside impact calculation.

The two proposed one-year rate increases in disposal fees will result in disposal fees increasing at an average rate of 5.2 percent per year since 2019. This exceeds the rate of inflation over the same time period by just 1.6 percent, despite an increase in annual debt service costs of more than $5 million annually.

The department also charges a minimum fee on self-haul and yard/wood waste charges on weights of 320 pounds or less. Some vehicles, such as passenger vehicles, are automatically charged at the minimum fee. The minimum fees are as follows:[11,12]

Table 3: Proposed self-haul and yard/wood waste rates

Fee	2022	2023	2024
Self-Haul *	$24.64	$26.99	$29.65
Yard/Wood Waste	$16.00	$18.00	$18.00

*The fee shown here is pre-tax and without a moderate risk waste surcharge.[13]

In addition, the department is proposing that the Cleanup Lift discount be raised from $14.00 to $15.00 in 2023, and $16.00 in 2024, which would be roughly 50 percent of the minimum fee (including taxes and fees) for garbage transactions if the rates in this proposal are adopted.[14] The County has provided over 35,000 discounts to self-haul customers since the program began in 2019. So far in 2022, approximately 2.3 percent of all self-haul transactions have been Cleanup Lift transactions up from 0.64 percent in 2019 and 1.86 percent last year.

C. Financial Projections

The revenue, expenditure, and reserve assumptions used to develop this proposal are detailed in this section.

Expenditures

It is the policy of King County, as expressed through the adopted 2019 Comp Plan, to achieve zero waste of resources by 2030, modernize transfer stations built in the 1960s, and maximize the life of the landfill. These new transfer stations will expand access to recycling and hazardous waste services, reduce wait times, and increase safety. The department evaluated existing SWD programs and projects to ensure alignment with the Comp Plan's strategic goals and commitments. DNRP identified several investments that would fulfill or strengthen these goals. These are listed below.

Inflation and Supply Chain Disruption. Fuel and other prices have risen significantly in 2022, driving inflation to a 40-year high.[15] Over the course of the next biennium, the department expects to pay an additional $11 million dollars for standard operations due to inflation. Additionally, capital project costs

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[11] KCC 10.40.020 NN defines fixed-rate vehicles.

[12] The minimum fee is typically set at 16 percent of the self-haul per-ton fee and assumes the customer is bringing 320 lbs. or less to the station for disposal (320 lbs. is 16 percent of one ton).

[13] The King County Board of Health sets the moderate risk waste surcharge amount that funds hazardous waste programs throughout the county.

[14] For self-haul customers, the County offers a discount for low-income individuals on their transaction if they can provide an Orca LIFT, Electronic Benefits Transfer card (often referred to as an EBT card), or Medicaid card.

[15] New York Times. Inflation's 40-Year High. Accessed on 4/18/22 [LINK]

for materials and extended project timelines as supply chain disruptions slow the delivery of some materials and increase the costs of others are driving further increases.

Capital Equipment Replacement Program (CERP) Transfer. Traditionally, the department has maintained reserves equal to 15 percent of the value of its rolling stock in the CERP in order to ensure adequate funding is in place to replace vehicles and other equipment that has reached the end of its useful life. In the 2021-2022 biennial budget, this target was reduced to 10 percent in order to keep rates low as the COVID pandemic took hold. DNRP is proposing an incremental increase in the reserve percentage due to increased fiscal demands related to meeting emission reduction goals. Therefore, DNRP will keep the reserve amount between 10 percent and 15 percent of the rolling stock value, or just above $10 million. As a result, the transfer amount to CERP will increase by $4 million (over the 2021-2022 budget) in the 2023-2024 biennium. This increased transfer amount is to maintain sufficient funds to gradually replace the diesel fleet with more expensive electrical vehicles and to ensure adequate funding to deal with emergencies without overburdening rate payers. These newer electric vehicles will reduce carbon emissions and keep the air at transfer stations and along transportation routes cleaner.

New and Continuing Investments

Environmental. It is estimated that 70 percent of the refuse that arrives at the CHRLF each year may have economic value. The Re+ Program aims to divert those materials from the landfill and put them back into the economy. DNRP convened a task force of regional partners (cities, haulers, community members) to develop an implementation plan that identified actions needed to achieve this goal. The department budgeted $8.2 million for the 2023-2024 biennium to begin executing the implementation plan that includes increasing diversion of food waste, organics, and recyclables (implementing statewide organics legislation, investing in co-digestion); investing in green jobs and the community (participating in the Next Cycle Washington business accelerator program, managing a competitive grant program, funding a community panel); and increasing support for communications and implementation of this new program.[16,17] Investing in these projects and programs in the next biennium will help create opportunity and green jobs as the region seeks to emerge from the economic fallout caused by the COVID pandemic. These projects will also extend the life of the landfill, the least expensive disposal option the County has.

Capital Projects. Continued department investments are being made in major projects from the Comp Plan. These include building the South County Recycling and Transfer Station (SCRTS), building the Northeast Recycling and Transfer Station (NERTS), and maximizing the life and capacity of the Cedar Hills Landfill. These new transfer stations will expand access to recycling and hazardous waste services, reduce wait times, and increase safety. The long-term rate path shown in Figure 1 also includes investments in new sortation and processing technology, such as co-digestion and mixed waste processing, starting as soon as 2025. This is expected to increase annual debt service from $15.7 million in 2022 to about $31.3 million in 2024. As SCRTS, NERTS and other capital investments come on line, they are projected to divert more than 100,000 tons away from the landfill in future rate periods. Furthermore, according to the Washington State Office of Financial Management's labor multiplier

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[16] Co-digestion is the process of turning food waste into a slurry and then "co-processing" it in a wastewater (or other) anaerobic digester along with waste water biosolids to produce biogas.

[17] For additional information about Re+ and these actions, visit the County's Re+ website. Please note that Next Cycle Washington is referred to as the "Innovation Platform" on the Re+ website.

model, these projects are expected to generate 1,400 new jobs precisely when the County is working to emerge from the economic turbulence created by the COVID pandemic.[18]

Equity and Social Justice (ESJ). The department is proposing to add two fulltime community relations positions to support outreach and engagement, as well as conduct demographic analysis and equity impact reviews, on capital projects. The department is also increasing funding to compensate community members for their time and insight, which historically was unpaid, to increase partnership with communities impacted by solid waste and recycling services. Other efforts include increased coordination of, and budgeting for, ESJ training of staff to improve knowledge and skills for implementing ESJ in the department's work. The department plans to set aside $1.3 million for the 2023-2024 biennium to promote this collaboration. These positions and the other ESJ investments mentioned here are designed to engage the community and help DNRP improve outcomes for frontline communities.

Asset Management Unit and IT. The department has developed a comprehensive, holistic approach to maintenance and repair of its assets. Additional staffing and funding to implement this work will yield long-term benefits for rate payers, as a deliberate and planned approach to asset management will maximize the life of assets and reduce the more costly emergency repairs helping to keep rates lower than they might otherwise be. Additionally, there will be upgrades to existing IT infrastructure to mitigate security risk. The total proposed cost of these programs will be $7 million in the 2023-2024 biennium.

Reserves

The department has three reserve funds. The Rainy-Day Fund is required by County policy and is equivalent to 30 days of operating expenses. No significant changes to this fund are planned. Two other funds, the Recession Reserve and the Rate Stabilization Reserve, will be impacted during the 2023 - 2024 biennium.

Recession Reserve. The Recession Reserve is meant to provide a buffer to rate payers in the event of a recession. This reserve is equivalent to 5 percent of annual disposal revenue and is meant to be drawn down over the course of two years. After a period of recovery, the department will gradually replenish the reserve. With the onset of a recession, the department fully drew down the reserve in 2020. The department is proposing to start replenishing this reserve in 2023 at a rate of 1.6 percent of annual disposal revenues per year ($2.5 million in 2023, $5.4 million in 2024), and to fully replenish it back to the 5 percent of annual disposal revenues by 2026.

Rate Stabilization Reserve. The Rate Stabilization Reserve for 2022 is expected to be $40 million. The department plans to spend down this reserve to lower and smooth rates until reaching a target of approximately $3.1 million at the end of 2028.

Revenues

[18] Washington State Office of Financial Management's labor multiplier model [LINK]

Disposal Fee Revenue. DNRP is proposing an increase in its tonnage-based fees for garbage, FAC, and yard/wood waste fee. Typically, the department sets these rates on a biennial basis, but DNRP is now proposing annual increases. Smaller, more frequent increases will minimize the burden on rate payers and create a smoother, more predictable situation for customers and are preferred by cities.

The description and revenue projections for each fee are summarized as follows:

- **Commercial Fee.** The Commercial Fee is the per-ton fee charged to commercial hauler customers disposing of municipal solid waste at transfer facilities and to curbside collection vehicles at the CHRLF. The department is proposing to change this fee from $154.02 to $135.64 in 2023, and to $150.83 in 2024.[19]
- **Fixed-Annual Charge (FAC).** This will be a new charge in 2023. Its addition to the rate structure was approved by Council in March 2022. The rates in that ordinance (for 2023) were set at levels that would leave 2023 revenues flat, as compared to the department's 2022 projected disposal revenues.[20] The department proposes raising the FAC from $19,737,266 to $21,829,600 in 2023 and to $22,614,181 in 2024.[21]

  NOTE: The change in the Commercial Fee, combined with the increase in the FAC is projected to increase revenues by approximately $30 million in the 2023-2024 biennium above what they would be if there were no rate increases.

- **Self-haul Fee.** The self-haul fee is a per-ton fee charged to individual customers disposing of municipal solid waste at transfer facilities. All loads greater than 320 pounds pay the per-ton fee, and customers with less than 320 pounds of waste are charged the minimum fee. The department is proposing to raise the self-haul fee from $154.02 per ton to $168.68 per ton in 2023 and $185.28 per ton in 2024. This increase is expected to bring in $10.2 million more in revenues in 2023-2024.
- **Regional Direct Fee.** This is a discounted fee charged to commercial collection companies that haul solid waste to the Cedar Hills Regional Landfill in transfer trailers from their own transfer stations and processing facilities, thus bypassing County transfer stations. Regional Direct tonnage is typically composed of nonrecyclable material removed from recyclables during processing. Regional Direct fees are typically set at 85 percent of the basic fee (and now the CCR), so this fee is increasing from $131.00 per ton in 2022 to $143.00 per ton in 2023 and $157.00 per ton in 2024. This increase is expected to bring in $488,000 more in revenues in 2023-2024.

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[19] The fee drops in 2023 because of the addition of the FAC. When the commercial fee and the FAC are combined into the Compound Commercial Rate (CCR), the rate goes from $154.02 (2022) to $168.68 (2023) and $185.28 (2024).

[20] The intent of setting rates lower than the department anticipated needing in 2023 was to separate a rate increase proposal from the rate restructure proposal. The intent was always to replace those rates set in the restructure ordinance to appropriate levels through the 2023-2024 rate proposal process.

[21] The $19,737,266 figure is the current "placeholder" rate for 2023, approved in the rate restructure ordinance in March 2022.

- **Special Waste.** The fee charged for certain materials that require special handling, record keeping, or both, such as asbestos-containing materials and contaminated soil. This fee is typically set at 120 percent of the basic fee (now the CCR) so this fee would increase from $185.00 per ton in 2022 to $203.00 per ton in 2023 and $223.00 in 2024. This increase is expected to bring in $110,000 more in revenues in 2023-2024.
- **Yard/Wood Waste Fee.** This fee is for separated yard waste and clean wood delivered to facilities that have separate collection areas for these materials. The fee had been set at $75 per ton from 2011 to 2021. In order to bring this fee more in line with the cost of this service, the Council approved a proposal to raise the fee to $100 per ton in 2022. Continuing the process of bringing the fee in line with cost of service, the department is proposing increasing it to $115 per ton in 2023. This fee will increase projected revenues by about $885,000 more in revenues in 2023-2024.

Other Revenues. DNRP collects revenues in other ways not related to disposal.

- **Rental Income.** The department generates additional income through rental income at Harbor Island and smaller leases for use of small spaces for cell phone towers and the like.
- **Sale of Landfill Natural Gas.** Landfill gas is captured at CHRLF and converted to pipeline-quality natural gas by Bio Energy Washington (BEW). The natural gas is sold to Puget Sound Energy (PSE) and the revenue is shared between BEW and the department. In addition, carbon credits, which are owned solely by the department, are sold to PSE, which brokers them on the secondary market.

The most recent total revenue projected in the rate model for the 2023-2024 biennium is $355.3 million.

Revenue from disposal fees is projected to be $323.6 million. An additional $31.6 million is projected from other revenue sources.

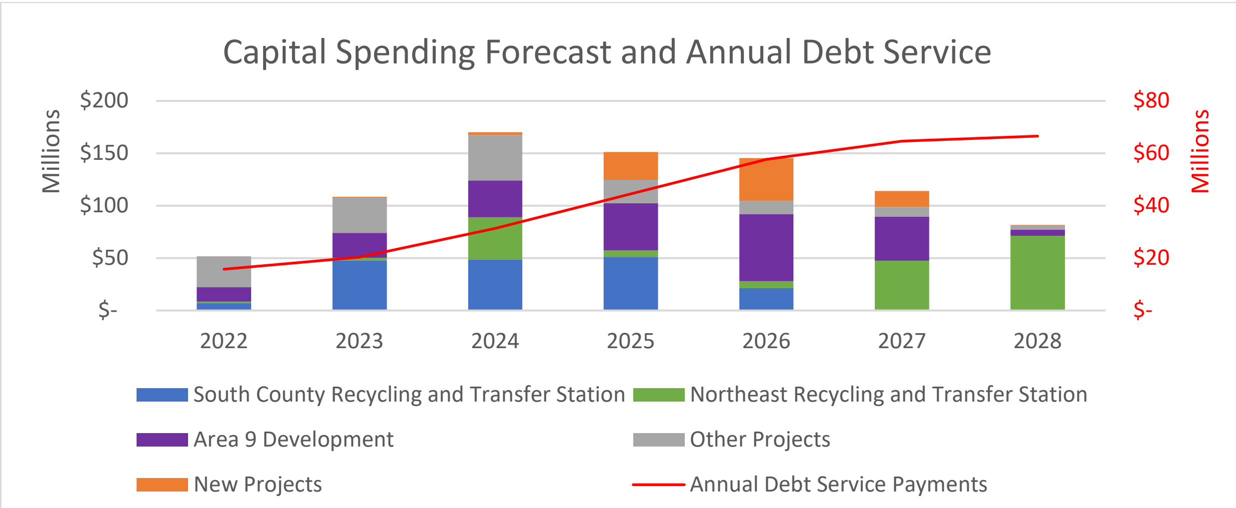
D. Rate Determination

Each biennium, DNRP needs to raise revenue equal to its projected expenditures and required reserves. The amount of revenue required can be buffered by the existing balance in the Rate Stabilization Reserve, but at the end of each biennial cycle, the department must have enough cash on hand to fund its required reserves.

The County's solid waste system is in the early stages of redefining how solid waste is managed. The 2019 Comp Plan and the 2020 SCAP guide this transformation. The Northeast and South County Recycling and Transfer Station building projects will replace aging infrastructure and expand access to recycling. Investments in Re+, including new technologies that will reduce waste and expand processing capacity of recyclable materials, as well as investments in capturing landfill gas through the building of new capture wells, will reduce the County's carbon footprint. So too will construction projects at County-managed closed landfills and the building of electric charging infrastructure in preparation for the electrification of the department's fleet of vehicles. Re+ activities and the Area 9 project will expand the life of the landfill and provide time for the County to decide on and implement a long-term disposal alternative once the landfill closes.

Completing these projects will be a key part of the County's effort to combat climate change and reduce waste, but success requires sustained funding. The department's capital spending plan is estimated to need $770 million in funding between 2023 and 2028, leading to a significant increase in debt service. Figure 3 (below) shows the projected capital investment across the Solid Waste system over the next six years and the corresponding increase in projected debt service costs.

Figure 3: Capital Spending Forecast and Debt Service



Ultimately, the department sought to balance economic uncertainty in the short term with the long-term financial health of the department and the environmental health of the region. DNRP believes that its current proposal strikes a solid balance between these important goals while ensuring continued progress on regional commitments to system partners.

V. Conclusion/Next Steps

The supply chain disruptions caused by the COVID-19 pandemic, rising prices, and armed conflict in Ukraine all contribute to the economic uncertainty of this time. In response to the onset of the pandemic and the economic uncertainty that it created, the department avoided a rate increase in 2021. However, as the region begins to emerge from the threat of the pandemic, city and hauler partners still wish to see DNRP build two new transfer stations and make planned investments in climate and environmental programs.

On the expenditure side, the department has been working to address increased capital costs with rate savings elsewhere. Spending has been prioritized to focus on maintaining delivery of essential services and delivering on the commitments made in the Comp Plan and the SCAP. New investments in Re+ and continuation of capital projects are expected to provide economic stimulus during the economic recovery period. As noted earlier, Re+ could create hundreds of new green jobs while the spending on the major capital projects in the Comp Plan (transfer stations and maximization of the landfill) is expected to create about 1,400 new jobs based on the Washington State Office of Financial Management's labor multiplier model.[22]

The focus on the revenue side has been one of gradual increases. The two proposed one-year rate increases in disposal fees will result in disposal fees increasing at an average rate of 5.2 percent per year since 2019. This exceeds the rate of inflation over the same time period by just 1.6 percent, despite an increase in annual debt service costs of more than $5 million annually. The economic turbulence caused by the COVID-19 pandemic has challenged budgets across the county, whether for households dealing with job losses and illness, businesses absorbing losses from closures and increased operational costs, or municipalities facing falling revenues. During this rate-setting process, the department has been sensitive to the needs of its customers and other partners and worked to reduce the need for rate increases, while preserving essential services and providing investments needed to reach the County's strategic goals and commitments.

The proposed increases for 2023 and 2024 are in line with projections from the 2022 Rate Proposal and are needed for the department's commitments to regional partners, to successful implementation of the Comp Plan and SCAP, and to the mandate to maintain essential services.

VI. Appendices

Appendix A – Revenue Neutral and Curbside Impact Calculation

Appendix B – Rate Methodology

Appendix C – Tonnage Forecast Through 2028

Appendix D – Summary of Rate Model Through 2028

[22] Washington State Office of Financial Management's labor multiplier model [LINK]

Appendix A—Revenue Neutrality and Curbside Impact Calculation

Proposed Solid Waste Rate Restructure

Introduction

The purpose of this brief is to clarify two related yet distinct concepts with the 2022 adopted Solid Waste rate restructure. The first concept is revenue neutrality, where the total revenue collected by the Solid Waste Division (SWD) of the Department of Natural Resources and Parks (DNRP) remains the same after restructuring the way commercial disposal revenues are collected. The second concept is the curbside impact, where SWD calculates (in aggregate) how changes in County disposal rates from one year to the next impact customer retail bills "at the curb."

Revenue Neutrality

Prior to the restructure, the County collected most of its disposal revenues from commercial haulers through the basic fee, which was charged on each ton of municipal solid waste (MSW) they brought to transfer stations for disposal. The amount of revenue collected by the County was thus entirely variable based on the number of tons delivered. However, most of DNRP's SWD costs are fixed. The chief goal of the 2022 rate restructure was to carve out some of this revenue and collect it in a more fixed and predicable way. To do this, the County identified how much revenue was needed from the commercial customer class and split the basic fee into two new fees, the new commercial fee and the new fixed-annual charge (FAC).

While the County does not have authority to dictate how cities and haulers recover the disposal charges levied by SWD, it can seek to ensure the same amount of revenue (from commercial haulers) is collected under both the old and new structure. The following table illustrates how the same amount of revenue is generated in both cases by comparing one year (2022) under both structures.[1]

Table 1: Demonstrating Restructure Revenue Neutrality[2]

Step 1: Find the 2022 Commercial Fee and Fixed Charge Values

	2022 Under Status Quo	2022 Under Restructure
Basic Fee	$ 154.02	$
New Commercial Fee	$	$ 123.82
Fixed Annual Charge (FAC)	$	$ 19,737,266

Step 2: Convert the New Fixed-Annual Charge into a Per/Ton Equivalent[3]

[1] The bottom line of Table 1 shows a $1,324 difference in total revenue, which is due to rounding when calculating the "Fixed Charge Per/Ton Equivalent" rate and amounts to a 0.0013% increase in total annual commercial revenues.

[2] Note the values in this table come from the FCS (SWD rate consultant) report completed in October 2021. See section VI.D.2.c of the FCS report for additional details.

[3] This calculation is the FAC / Commercial Tons so $19,737,266 / 653,508 = $30.20 per ton.

Commercial Tons	653,508	653,508
FAC / Commercial Tons	$ -	$ 30.20
Step 3: Add FAC Per/Ton Equivalent to Commercial Fee		
Compound Commercial Rate	$ 154.02	$ 154.02
Total Revenue (rate * tons)	**$ 100,653,302**	**$ 100,654,627**

It is important to understand how the restructure split the basic fee into the commercial fee and the FAC, in order to understand how to correctly calculate the curbside impact of rate changes under the new structure.

Curbside Impact

Solid waste customers and jurisdictions have historically asked for and come to expect some measure of the impact a rate increase proposal would have on the average retail rate of resident's waste collection bills. This is what is meant by "curbside impact." To fill this need, DNRP created a curbside impact measure that generates an average monthly curbside impact for all residents in the County's service area. It will not match the actual curbside impact in any given city because all cities have different starting rates and distribute the disposal costs across their customer bases differently. However, it should be accurate in aggregate across the entire SWD service area.

Currently, most city/hauler contracts split the rates they charge their customers into two parts, the service and disposal components. The service component reflects the cost of collection, while the disposal component represents disposal charges paid to SWD for the disposal of waste sent to the County's landfill. The status quo commercial fee shown in Step 1 of Table 1 is used in city/hauler contracts as a reference to automatically increase the disposal component of retail rates by the percent increase in the SWD base fee. For example, if the SWD base fee increases by 10 percent, so would the disposal component of a city's retail rate.

The following formula illustrates how SWD rate staff have heretofore provided this measure:

$$(Basic\ Fee_{New} - Basic\ Fee_{Old})\ \text{x}\ Avg.Household\ Tons\ per\ Month = Curbside\ Impact$$

This methodology can still be employed under the newly restructured rate. However, before the new commercial rate and FAC can be compared against the old basic fee, the new fees must be combined into a rate comparable to the basic fee as shown in Table 1 above. The new commercial fee plus the FAC are combined to create a "Compound Commercial Rate" (CCR). This allows the current basic fee to be compared to the new CCR on an "apples-to-apples" basis. So, the formula then becomes:

$$(CCR_{New} - Basic\ Fee_{Old})\ \text{x}\ Avg.Household\ Tons\ per\ Month = Curbside\ Impact$$

It is important to note that current city/hauler contract language does not account for the "basic fee to CCR" process, as illustrated in Table 1. This is the reason the contracts will need updated language. In the process of negotiating that change, cities and haulers may agree to pass along disposal charges in a different way than they traditionally have. This variability is why the County cannot predict the exact curbside impact for any given city (any more than it can at any point when cities and haulers are negotiating new contracts). However, the County can, and has, ensured the restructure itself does not impact the actual dollar amount of revenue it is collecting from its commercial customers (haulers/cities).[4]

[4] If cities and haulers agree to pass through the disposal costs to their customers in the same manner they did under the old structure, then the curbside impact is the same under both the old and the new structure.

Appendix B—Rate Methodology

The Solid Waste rate model seeks to balance expenditures and reserve requirements with anticipated revenues. The ending fund balance can be carried over from prior years to smooth out demands on revenues from biennium to biennium.[1] Descriptions of each of the major components of the rate model are provided below.

A. Expenditures

Expenditures, what the Solid Waste Division (SWD) spends to provide public services, are divided into two major categories: operating and capital expenditures. Within operating expenditures, the Solid Waste rate model distinguishes between expenditures for existing work and new work, which expand or augment existing operations.

Operating Expenses

Existing Work – Projected spending levels for existing operations are calculated by reviewing the current biennial budget, actual spending levels for the biennium, and the pro forma budget for the upcoming biennium (2023-2024).[2] Differences between the existing budget, pro forma budget, and actual spending levels are reconciled to create the projected expenditure for the upcoming biennium. For example, some expenditure levels are directly related to tonnage or revenue projections. For those items, expenditures are calculated based on the tonnage forecast and/or revenue projections. The business and occupation tax the division must pay is, for example, based on the projected revenue in the coming biennium, which is not provided as part of the pro forma budget, while the transfer to public health and the landfill reserve fund are both projected based on tonnage.

New Programs or Expansion of Existing Work – As part of the rate development process, SWD identifies the need for new or additional services across each section. Once new ideas such as new programs or bodies of work to meet County goals are identified, they are evaluated and prioritized based on whether they meet a regulatory mandate, cost, as well as environmental and social justice impacts.

Operational Efficiencies – King County and DNRP are committed to financial stewardship. Employees are empowered to find ways to operate more efficiently and save money for rate payers. The department looks for operational efficiencies on an ongoing basis and evaluates options for expenditure reduction as part of its biennial budget and rate-setting process.

Capital Expenditures, Landfill Reserve Fund, and Debt Service

Solid Waste capital projects and post-closure obligations at the landfill are funded through direct cash transfers to capital funds or by using bond funding to raise revenue. DNRP has three capital funds, the

[1] A fund is a financial accounting unit used to control and monitor the planned use of resources usually having a specific scope and often in compliance with legal and administrative requirements. Ending fund balance, or fund balance refers to the amount of money left in a fund at the end of an operating period. In this document it refers to a calendar year or biennium.

[2] A pro forma budget is a baseline budget projection provided by the County's Office of Performance, Strategy, and Budget (PSB). The pro forma provides a common starting point between PSB and other County departments as they begin to develop their biennial budget proposals.

Solid Waste construction improvement fund (CIP), the Solid Waste capital equipment replacement program fund (CERP), and the landfill reserve fund (LRF).

Construction Fund Transfer

Typically, $4 million per biennium is transferred from the operating fund to the construction fund to pay for small capital projects when bond financing is not the appropriate funding instrument. The transfer amount is evaluated biennially by DNRP as part of the rate-setting process.

CERP Fund Transfer

DNRP develops an annual spending plan to address the needs for solid waste equipment replacement over the next six years. The transfer rate is calculated to provide the necessary funding for the planned spending above the required reserve amount.

LRF Transfer

The landfill reserve fund transfer amount is calculated on a per-ton basis. Key variables include the tonnage forecast, the estimated date that Cedar Hills Regional Landfill reaches capacity, and the projected cost for post-closure activities. Traditionally, new landfill development and closure projects were cash-funded from the LRF. Given the desire to keep rates low and the projected cost of planned development of Area 9, it became apparent that debt-financing these projects (instead of cash financing them) would provide significant relief to rate payers.[3] King County Code 4A.200.390, which governs the LRF, was updated in 2020 to explicitly allow bond proceeds to fund these projects.

Debt Service

DNRP, in consultation with PSB, annually reviews its Capital Improvement Program to update planned spending on existing projects and decide what other projects are needed. The cash flows are then multiplied by an accomplishment rate (typically assume 85 percent) and these amounts are used to project the needed bond issuances to estimate the cost of debt service over the next six years.[4,5] The projected amount of new debt service is added to the scheduled debt service to arrive at an estimated expenditure in the rate model.

Reserve Requirements

DNRP has three financial reserves—the Rainy Day Reserve, the Recession Reserve, and the Rate Stabilization Reserve.

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[3] While cash funding projects is less expensive overall (since there is no interest cost), debt financing spreads those costs over time, so the rate does not have to increase sharply for a few years to cash fund expensive projects like transfer stations or new landfill cells. Thus, employing bond-financing in place of cash-financing (where permitted) rates are kept lower in the near term.

[4] Capital accomplishment rate means how much of the forecasted project cost was actually spent in a given year. For example, if one forecasts spending $100 million in a year but only spends $85 million, the accomplishment rate for that project for that year is 85 percent. Assuming an accomplishment rate below 100 percent means the rate model will expect less debt will need to be issued (in this case 15 percent less) and thus the resulting debt service payments (and by extension, the rate) will be lower.

[5] DNRP, in consultation with PSB, reviewed historical accomplishment rates for SWD and found they were lower than 85 percent for the last four years. The Wastewater Treatment Division of DNRP uses an 85 percent accomplishment rate as well and was used by SWD as a model in 2022.

Rainy Day Reserve

King County Comprehensive [Financial Management Policies] require that operating funds include a Rainy Day Reserve sufficient to cover operating expenditures for up to 60 days but no less than 30 days. The department has set this reserve amount equal to 30 days of operating expenditures.

Recession Reserve

In case of a recession, this reserve provides a buffer for the rate to protect the rate payers from financial impacts resulting from falling tonnage due to a recession, so customers are not faced with major rate increases during a recession. It is set at 5 percent of annual disposal revenue. In years with a recession, this fund is intended to be drawn down by no more than 50 percent per year. After the recession has ended, the fund is gradually refilled over a five-year period.[6]

Rate Stabilization Reserve

The rate stabilization reserve allows for ending fund balances to be carried over between biennia, which when utilized, can help smooth revenue demands over time. This creates a more predictable path for rate payers. For example, when a department spends less than it collects in a given year, it can carry that savings over into future years through the rate stabilization reserve. This reserve can be used to cover costs in future years thus reducing the impact of cost increases in future years, helping keep rates from spiking from one year to the next.

Revenues

About 90 percent of the Solid Waste program's revenue comes from a combination of disposal fees and the fixed-annual charge (FAC). Other sources of revenue include the sale of gas gathered at the Cedar Hills landfill; rental income from real property owned by the department; a fee from construction and demolition waste collected at third-party recycling facilities; and the commodity value of recyclables collected at the stations. DNRP also receives reimbursement income from the Hazardous Waste Management Program in exchange for providing household hazardous waste collection services. Miscellaneous sources of revenue include various grants, interest earnings, and other small-dollar sources.

Disposal and Recycling Fees

Disposal and recycling fees are collected on a per-ton and per-item basis, depending on the material. The projected revenues for these sources are calculated using the tonnage forecast. The rate model is used to determine the revenue requirement and fee schedule needed to balance the expenditure and reserve requirements once all other revenue sources are incorporated into the model.

Per-Ton Fees

- **Commercial Fee.** The per-ton fee charged to customers disposing of municipal solid waste at transfer facilities and to curbside collection vehicles at the Cedar Hills landfill.
- **Fixed Annual Charge.** The fixed fee charged to each of the primary curbside collection haulers based on the share of total tons brought in from each of their service areas. The FAC is based on the share of the cost of non-disposal activities allocated to the commercial solid waste hauler customer class.

[6] Per King County Comprehensive Management Policies [LINK]

- **Self-Haul Fee.** The per-ton fee charged to customers disposing of municipal solid waste at transfer facilities. The minimum fee that a customer would pay is equivalent to 320 pounds.
- **Regional Direct Fee.** A discounted fee charged to commercial collection companies that haul solid waste to Cedar Hills in transfer trailers from their own transfer stations and processing facilities, thus bypassing county transfer stations. This fee is set at 85 percent of the Compound Commercial Fee (CCR).[7]
- **Special Waste Fee.** The fee charged for certain materials that require special handling, record keeping, or both, such as asbestos-containing materials and contaminated soil. This fee is set at 120 percent of the CCR.
- **Yard Waste and Clean Wood Waste.** A fee for separated yard waste and clean wood delivered to facilities that have separate collection areas for these materials.

Per-Item Fees

- **CFC Appliances.** Appliances with CFCs, such as refrigerators, are charged on a per item basis.
- **Mattresses.** Mattresses, box springs, and other mattress like items are charged on a per-item basis.
- **Unsecured Loads.** Vehicles that arrive at our stations with unsecured loads are charged a $25 fee.

Cleanup LIFT

For self-haul customers, the County offers a discount for low-income individuals on their transaction if they can provide an Orca LIFT, Electronic Benefits Transfer card (often referred to as an EBT card), or Medicaid card.

Other Revenue

Sale of Landfill Natural Gas

Methane, which is a natural byproduct of the decomposition of waste, is captured at Cedar Hills Regional Landfill and converted to pipeline-quality natural gas by Bio-Energy Washington (BEW). The natural gas is sold to Puget Sound Energy (PSE), with shared revenue between BEW and the Solid Waste Fund. In addition, the environmental attributes, which are owned solely by the department, are sold to PSE, which brokers them on the secondary market. Energy markets are relatively volatile, so a conservative estimate is included in the rate model.

Rental Income

DNRP receives revenue from a variety of rental properties. The rent from schedule for each lease is modelled, and properties that are near the end of their lease terms are re-evaluated for income potential.

[7] The rate restructure of commercial revenues adopted by Council in March 2022 creates a challenge when comparing pre-restructure rates to the new format. To do so, the restructured commercial fee and the FAC can be combined to create a rate value called the composite commercial rate (CCR), which can then be compared directly with the pre-restructure basic fee. The CCR is used solely to facilitate equal comparisons between pre-restructure rates with rates under the new structure; it is not for billing customers.

Construction and Demolition Fee

DRNP collects a small fee from each ton of construction and demolition waste collected at third-party sorting and reclamation facilities. This revenue funds the cost of administering the Construction and Demolition recycling program.

Moderate Risk Waste Reimbursement Expense

DNRP receives reimbursement income from the Hazardous Waste Management Program in exchange for providing household hazardous waste collection services.

Recyclable Materials Proceeds

Recycling collected at the transfer stations is sent to material processing facilities, and DNRP pays for hauling costs and processing. The department then receives the commodity value of the processed material as revenue. After China implemented a policy that effectively banned the importation of recyclable materials, values for many common materials fell precipitously. Thus, the proceeds from the sale of recyclable material are projected to be a declining revenue source for the department.

Appendix C – Tonnage Forecast Through 2028

The rate proposal was developed using a forecast of the amount of waste that will be disposed of at department facilities during the rate period. The forecast relies on established statistical relationships between waste being disposed and some economic and demographic variables that affect it, namely population, employment, and consumption.[1]

Year	Type	Transfer Station Tons	Regional Direct	Special Waste	Total Tons Disposed	Yard/ Wood Waste	Total System Tons
2017	Actual	915,570	12,161	3,446	931,177	21,966	953,143
2018	Actual	867,842	17,039	3,632	888,513	19,150	907,663
2019	Actual	858,300	7,542	2,690	868,532	22,739	891,271
2020	Actual	836,461	31,500	1,500	869,461	23,567	893,028
2021	Actual	851,338	24,736	1,838	877,912	24,838	902,750
2022	Forecast	870,361	12,500	2,000	884,861	25,700	910,561
2023	Forecast	882,330	12,500	2,000	896,830	28,000	924,830
2024	Forecast	876,938	12,500	2,000	891,438	31,000	922,438
2025	Forecast	869,945	12,500	2,000	884,445	34,000	918,445
2026	Forecast	851,582	12,500	2,000	866,082	34,000	900,082
2027	Forecast	833,181	12,500	2,000	847,681	34,000	881,681
2028	Forecast	720,307	12,500	2,000	734,807	34,000	768,807

[1] Consumption measured in dollars spent for retail sales, excluding automobiles.

Appendix D – Summary of Rate Model Through 2028

	Actuals	Projected	Proposed		Forecast			
Fund Account Summary	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Basic Fee	$ 140.82	$ 154.02	$ -	$ -	$ -	$ -	$ -	$ -
Percent change	0.00%	9.37%	9.60%	9.60%	9.60%	9.60%	9.60%	9.60%
Commercial Tipping Fee	$ -	$ -	$ 135.64	$ 150.83	$ 167.93	$ 186.81	$ 205.95	$ 226.23
Fixed-Annual Charge (in millions)	$ -	$ -	$ 21.83	$ 22.61	$ 23.07	$ 23.30	$ 24.56	$ 23.36
REVENUES								
Disposal Fees	$ 128,952,887	$ 139,148,468	$ 154,659,743	$ 168,978,508	$ 184,251,600	$ 198,050,904	$ 212,852,274	$ 204,825,379
Landfill Gas	$ 2,238,326	$ 2,150,000	$ 3,750,000	$ 3,750,000	$ 3,750,000	$ 3,750,000	$ 3,750,000	$ 3,750,000
Other Revenues*	$ 27,607,086	$ 12,334,080	$ 11,869,937	$ 12,249,015	$ 12,640,114	$ 12,958,277	$ 13,201,081	$ 13,451,803
Total Revenues	**$ 158,798,300**	**$ 153,632,548**	**$ 170,279,680**	**$ 184,977,523**	**$ 200,641,714**	**$ 214,759,181**	**$ 229,803,355**	**$ 222,027,182**
EXPENDITURES								
SWD Operating Expenditures	$ 108,391,693	$ 126,769,526	$ 129,022,400	$ 131,147,191	$ 137,959,737	$ 142,043,647	$ 147,386,835	$ 138,923,021
Landfill Reserve Fund	$ 13,787,230	$ 12,742,954	$ 13,750,160	$ 14,535,689	$ 15,326,461	$ 15,937,390	$ 16,551,724	$ 15,208,916
Capital Equipment Recovery Program	$ 3,373,524	$ 3,373,524	$ 4,500,000	$ 5,500,000	$ 6,500,000	$ 7,500,000	$ 7,000,000	$ 6,000,000
Construction Fund	$ 1,999,992	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000
Debt Service	$ 14,237,888	$ 15,760,180	$ 20,262,454	$ 30,767,171	$ 43,078,469	$ 54,983,624	$ 61,212,025	$ 62,706,300
Total Expenditures	**$ 141,790,327**	**$ 160,646,184**	**$ 169,535,014**	**$ 183,950,052**	**$ 204,864,666**	**$ 222,464,661**	**$ 234,150,585**	**$ 224,838,236**
RESERVES								
Rainy Day	$ 9,979,177	$ 11,554,511	$ 12,288,686	$ 13,347,889	$ 14,950,766	$ 16,294,141	$ 17,265,848	$ 16,703,020
Recession Reserve	$ -	$ -	$ 2,475,087	$ 5,409,300	$ 8,849,329	$ 9,910,544	$ 10,653,237	$ 10,254,551
Rate Stabilization Reserve	$ 48,993,881	$ 40,404,911	$ 37,736,396	$ 34,337,049	$ 24,404,910	$ 13,390,056	$ 6,170,001	$ 3,067,721

*The large increase in 2021 was due to the sale of surplus property (Eastgate) which was a one-time revenue