Proposed Solid Waste Disposal Fees for 2025

June 2024



I. Contents

II. Ex	ecutive Summary	3
III. Ba	ackground	4
	Landfill Gas Revenues	6
	Capital Spending, Interest Rates, and Inflation	6
	Interlocal Agreement Extensions	7
	Re+, Tonnage, and Rates	7
IV. R	eport Requirements	10
A.	Rate Model Methodology	10
В.	Proposed Fees for 2025	11
C.	Financial Projections	13
	Expenditures	13
	New and Continuing Investments	15
	Revenues	16
D.	Rate Determination	18
V. Co	onclusion/Next Steps	19
VI. A	ppendices	20

II. Executive Summary

The Department of Natural Resources and Parks (DNRP) is seeking an increase of its solid waste revenue requirement by 10 percent in 2025. This increase is necessary due to increases in the overall costs to provide essential solid waste services, including recycling and waste disposal services at transfer stations, continued operations at the Cedar Hills Regional Landfill (CHRLF), recycling and waste-prevention programs, and to fund the department's capital improvement program. The primary drivers of the increased costs of services provided at stations are the financial needs of capital projects, inflation, higher interest rates on bonds, and the ongoing costs to meet environmental and safety controls at the CHRLF and the closed landfill properties managed by the County. The impact of this increase for a typical residential customer, after commercial haulers pass along these costs, is forecasted to be \$0.93 per month in 2025.

This proposed increase to the revenue requirement contains three main elements. The first is an increase to the current per-ton disposal rate by 10 percent in 2025. On average, this change would add an estimated \$0.93 to single-family monthly curbside bills. The second element is an increase to the Cleanup LIFT low-income discount from \$16 per transaction to \$18 in 2025. The final element of this proposal would increase the fee for disposal of construction and demolition waste from the 1993 rate of \$4.25 to \$13.00 per ton, in alignment with inflation over that same period.

In King County, 37 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 (CSWMP) 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 is in a period of significant capital investment that will last several biennia and reorient the outlook from a waste management perspective to a materials management leadership perspective. This proposed rate increase would support DNRP making an estimated investment of \$678 million for critical infrastructure projects between 2025 and 2029. 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 is aimed at diverting or recycling the 70 percent of useful materials that are currently being thrown away. 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 2025 rate proposal has been to maximize value for customers while mitigating financial impacts on rate payers. This rate proposal follows months of

¹ The <u>FCS Group report</u> 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.

²See <u>2019</u> Comprehensive Solid Waste Management Plan.

³ See 2020 King County Strategic Climate Action Plan.

⁴ Additional information about Re+ can be found on the County's Re+ website.

partner engagement that began in January 2024. The department's advisory committees—the Metropolitan Solid Waste Management Advisory Committee (MSWMAC) and Solid Waste Advisory Committee (SWAC)—have been briefed during the rate proposal development process about the underlying drivers of the rate increase and its importance in allowing the department to maintain current service levels, fund key investments in climate and environmental programs, and fulfill the commitments made in the CSWMP.⁵

The proposed increase for 2025 is in line with projections from the 2023-2024 Rate Proposal and is needed to meet the department's commitments to regional partners, to successfully implement actions in the CSWMP 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. 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." 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 periods of time with no rate increase for solid waste disposal as shown in Figure 1, below. Implemented rate increases have typically ranged between five 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. Because of the disruption of the COVID-19 pandemic, the SWD, in consultation with the advisory committees, deferred the 2021 rate increase, but returned to annual increases in 2022. The preference for more incremental adjustment has been reiterated in each subsequent round of rate proposal discussions and is true for the 2025 rate.

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

⁵ More information about the advisory committees can be found here and the CSWMP can be found here.

⁶ DNRP has rebranded these zero waste of resources efforts as Re+.

⁷ Solid Waste Division <u>mission statement</u>.

Figure 1 shows the history of basic fee rate increases since 2020, along with the proposed increase for 2025 and projections through 2029. By staggering rate increases over one-year increments, increases are more gradual over time. This avoids a single large rate increase over several biennia. Figure 1 shows that the projected rate increases after 2022 are expected to be greater than typical annual increases due to continued implementation of major capital projects approved of in the CSWMP, such as building the South County Recycling and Transfer Station (SCRTS) which is now under construction, building the Northeast Recycling and Transfer Station (NERTS), and developing Area 9 at the CHRLF. SCRTS, NERTS, and extending the life of the landfill (the County's least costly garbage disposal option) were approved by the cities through the CSWMP adoption process. While these investments carry significant costs, they remain popular with MSWAC and SWAC.

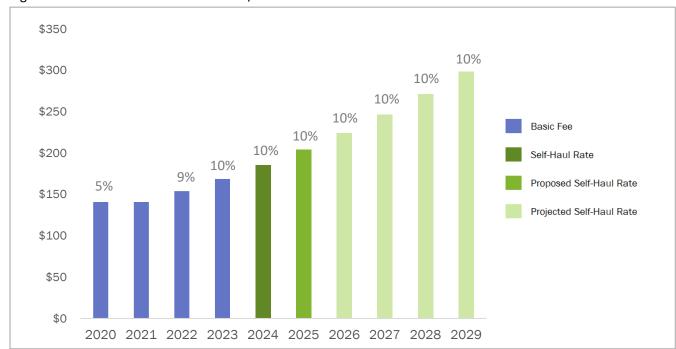


Figure 1: 10-Year Overview of Basic Fee/Self-Haul Rate Increases⁹

Key Current Context: Starting in 2024, the way disposal fees are charged to commercial haulers changed. 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 did alone, but since the FAC is a fixed value that does not vary based on tonnage, it is a more stable revenue stream.

The proposed rates, and the projected rate path, for the commercial tip fee, the self-haul rate, and the FAC are listed in Table 1.

⁸ 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.

⁹ The rate increase percentage shown for 2020-2023 represents a change in the basic fee. In 2024 and beyond, due to the revised rate structure, the percentage increase shown represents an increase in the self-haul fee.

Table 1: Proposed and Projected Rates, 2025-2029

Fee/Rate	2024	2025	2026	2027	2028	2029
Self-Haul Rate	\$185.28	\$203.81	\$224.19	\$246.61	\$271.27	\$298.40
Commercial Rate	\$150.83	\$165.91	\$182.50	\$200.75	\$220.83	\$242.91
Fixed Annual Charge	\$22.6M	\$23.3M	\$24.5M	\$25.7M	\$27.0M	\$28.4M

Landfill Gas Revenues

Historically, DNRP has earned several million dollars a year in revenues from the sale of landfill gas and its accompanying environmental attributes. ¹⁰ However since the summer of 2023, those revenues have ceased, as the processing plant, Bio Energy Washington (BEW), has suspended operations. While the County's goal is to put all landfill gas at CHRLF to beneficial use and expediently achieve a resolution to the dispute with BEW, DNRP is not assuming any revenue from landfill gas until the matters are resolved.

Capital Spending, Interest Rates, and Inflation

DNRP has entered a period of heightened capital investment. Between 2025 and 2029, the SWD forecasts spending approximately \$678 million on capital projects, including SCRTS, NERTS, expanding landfill capacity, and making significant upgrades to its landfill infrastructure. The pandemic recovery was accompanied by significant supply chain disruptions and permitting delays, which pushed capital spending on many projects into the present. Unfortunately, the cost of these capital expenditures has grown significantly over the last two years due to inflation and now higher interest rates on bonds issued to fund this work. Additional details on interest and inflation impacts are included below in the Financial Projects section of this report.

¹⁰ The division has primarily monetized the environmental attributes as Renewable Identification Numbers (RINs), which are credits used in the Renewable Fuel Standard (RFS) program managed by the U.S. Environmental Protection Agency (EPA). Parties needing to comply with RFS regulations purchase RINs, which are registered and regulated by the EPA.

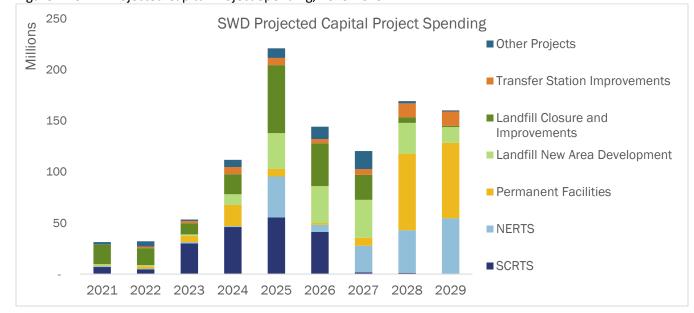


Figure 2: SWD Projected Capital Project Spending, 2025-2029. 11

Interlocal Agreement Extensions

Another issue putting upward pressure on rates are the interlocal agreements (ILAs) that DNRP has with the 37 cities in the King County disposal system. These ILAs are set to expire in 2040, and with them the guaranteed revenue backing needed to issue long-term general obligation bonds to support the SWD's capital improvement program. In 2022, partner cities indicated they did not want to begin ILA extension discussions until after a decision was made on what will be done with waste after the closing of the CHRLF which is expected to occur around 2040. Without ILA extensions past 2040, debt currently issued for capital projects will have ever shorter repayment periods that will increase rates. DNRP has already begun work with consultants, partner cities, and advisory groups to update the 2019 Comprehensive Solid Waste Management Plan, the process through which the long-term disposal decision will be made. The process of seeking extensions to the ILAs is a later part of that project.

Re+, Tonnage, and Rates

During the 2023-2024 rate development and proposal process, DNRP forecasted an annual year over year increase of 9.6 percent in the revenue needed to fund operations, waste diversion and reduction programs, and capital spending. Updated modeling has reduced that need to an average annual increase of 7.1 percent between 2025 and 2029. However, incoming municipal solid waste (MSW) was weaker than forecast in 2022 and 2023. Despite a reduced growth in the forecasted revenue requirement, reduced tonnage continues to put upward pressure on the rate. DNRP believes most of the weakness in tonnage was a result of reduced home renovations and home sales, both of which reduced self-hauled waste to county transfer stations. This reduction in self-haul tons is expected to last as long as interest rates remain high or consumers' expectations about how long they will remain high.

¹¹ Project spending shown in unadjusted for accomplishment rate.

Furthermore, 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." ¹² In 2022, DNRP published the Re+ Plan, which outlines the primary actions the County and its 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 MSW tons and its associated revenue, meaning rates will need to increase.

Figure 3 shows two forecasts for total municipal solid waste (in thousands of tons) that the County anticipates would be generated over the next ten years, along with historic tonnages. The baseline forecast assumes no Re+ actions are taken, while the Re+ forecast shows significant diversion of MSW.

¹² KCC 10.14.020 can be found at https://aqua.kingcounty.gov/council/clerk/code/13 Title 10.htm

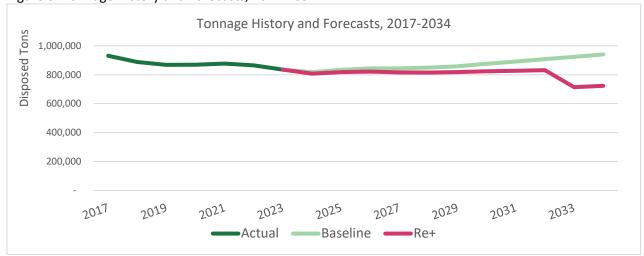


Figure 3: Tonnage History and Forecasts, 2017-2034

The Re+ forecast includes recoverable organics diversion, including food waste diversion resulting from the statewide organics legislation that was passed in 2022. It also reflects reductions due to extended producer responsibility and deposit return system legislation (anticipated in 2030), expanded recycling efforts at transfer stations, and new sorting technologies such as mixed-waste processing (MWP). ¹³ These estimates are based the 2022 Waste Characterization Study, comparisons with historical DNRP efforts and similar programs in other jurisdictions, and consultant studies. ¹⁴

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 January 2024 and continued monthly through development of this proposal. The committees provided input on a variety of topics, including communications, rate options, and capital spending. 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.

¹³ See HB 1799 – 2021-22.

¹⁴ See <u>2022 Waste Characterization Study.</u>

IV. Report Requirements

A. Rate Model Methodology

Revenue generated by the rates charged supports all 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

Of revenues to the Sold Waste Fund, 93 percent are comprised of disposal fees (79 percent) and the FAC (14 percent). As of 2024, three primary variables drive the revenue received from disposal fees: 1) 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 and interest rates, changes in central rates, 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.¹⁵

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." ¹⁶ 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 sum of all non-disposal costs totaled \$100 million dollars, and

¹⁵ 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.

¹⁶ FCS report, Section V.B. Solid Waste Classes of Service

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. The remaining "other" revenues include rents on County owned property, interest income, grant funding, and landfill gas revenues (currently, \$0). So, once the FAC and other revenues are 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 relationship between the cost to provide services (expenditures), revenue, tonnage, and rates can be characterized as shown in Table 2 below.

$$Expenditures + Reserves = \frac{Revenues \ Required - (FAC + Other \ Revenues)}{Tonnage} = \underbrace{Per \ Ton \ Rate}$$

B. Proposed Fees for 2025

Table 2: 2023-2024 Adopted Rates and 2025 Proposed Rates

Per Ton Fees	2024	2025
Commercial Tipping Fee	\$ 150.83	\$ 165.91
Self-Haul Tipping Fee	\$ 185.28	\$203.81
Regional Direct	\$ 157.00	\$ 163.05
Special Waste	\$ 223.00	\$ 244.57
Yard Waste	\$ 115.00	\$ 115.00
Fixed Fee (in millions)	2024	2025
Fixed Annual Charge (FAC)	\$ 22.61	\$ 23.33
Curbside Impact	2024	2025
Avg monthly increase ¹⁷	\$ 0.90	\$ 0.93

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 likely not match the actual curbside impact in any given city. However, it should be accurate in aggregate across the entire SWD service area.

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. 18,19

¹⁷ See Appendix A for additional information on the curbside impact calculation.

¹⁸ KCC 10.04.020 PP defines fixed-rate vehicles.

¹⁹ 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).

Table 3: Proposed Minimum Fees for Self-Haul Garbage and Yard/Wood Waste

Fee	2024	2025
Self-Haul Garbage*	\$29.65	\$32.60
Yard/Wood Waste	\$18.00	\$18.00

^{*}The fee shown here is pre-tax and without a moderate risk waste surcharge. ²⁰

In addition, the department is proposing that the Cleanup LIFT discount be raised from \$16.00 to \$18.00, 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. The County has provided over 67,000 discounts to self-haul customers since the program began in 2019. So far in 2024, approximately 3.7 percent of all self-haul transactions have been Cleanup LIFT transactions up from 2.7 percent in 2022 and 3.14 percent in 2023.

Construction and Demolition Fee

The King County Construction and Demolition (C&D) Materials Diversion Program is funded through a \$4.25 per ton fee on C&D waste sent to landfill which has remained unchanged since it was set in 1993. Revenues collected through this fee can only be spent on expenses related to the handling and disposal of C&D waste. ²² King County contracts with C&D waste transfer and processing facilities to manage these materials and the contracts require that pay the C&D fee to King County. C&D materials which are recycled or that go to beneficial use are not subject to the fee.

Despite the many changes in C&D management and rules since 1993, the fee has remained fixed. Had it been adjusted annually to match the rate of inflation, the fee would have reach \$13.55 per ton in 2023. With the fee at its current level, it allows DNRP to cover the ongoing maintenance of the existing C&D system, \$200,000 in market development grants, one annual deconstruction training, and minimal frontline community coordination and program planning.

Table 4: Proposed C&D Waste Disposal Fee

Fee	1993 - 2024	2025	
C&D Waste Disposal	\$4.25/ton	\$13.00/ton	

Increasing the fee to \$13.00 per ton will enable the following additional activities which will increase diversion from the landfill, support Re+ circular economy goals, and promote equity in frontline communities:

- Fund consulting work to advise King County on methods to increase C&D separation and enforce code compliance.
- Pilot collection of gypsum drywall to promote recycling.

²⁰ The King County Board of Health (KCBOH) sets the moderate risk waste surcharge amount that funds hazardous waste programs throughout the county. The KCBOH is not recommending any increases to this fee in 2025.

²¹ 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.

²² KCC 4A.670.300 establishes the value of the fee and KCC 10.30.050 establishes approved uses of the revenue.

- Initiate an ongoing program to train (and provide refresher training) for up to 30 building assessors each year in salvage and deconstruction best practices.
- Develop and run a program to train people in front-line communities to deconstruct and harvest materials from local homes slated for demolition, then use those materials to help other local low-income residents to renovate their homes at a lower cost.
- Create an incentive program to increase C&D separation and drive those materials towards highest and best use.
- Replace outdated manual reporting to modern digital reporting system at C&D scale houses.
- Assist establishment of new C&D related WMBE businesses

C. Financial Projections

The expenditure, reserve, and revenue 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 CSWMP, to achieve zero waste of resources by 2030, modernize transfer stations built in the 1960s, and maximize the life of the landfill. The 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 CSWMP's strategic goals and commitments. DNRP identified several investments that would fulfill or strengthen these goals. In addition, several key factors contributed to increases in the revenue requirement for 2025. These are outlined below.

Inflation and Interest Rates. Prices have risen significantly since 2022, and construction inflation has far outpaced the standard consumer price index in the last two years. In 2025, the department expects to pay an additional \$7 million dollars for standard operations directly due to inflation. Additional inflationary increases are embedded in central rate increases and transfers necessary to support equipment replacement and post-closure reserves for the landfill. Additionally, delays in capital spending and construction during the pandemic years means increased costs to do the same work now in a higher price environment. The U.S. Bureau of Labor Statistics Producer Price Index (PPI) tracks the cost of construction for various types of buildings. The PPI for industrial construction, which is the category most analogous to the projects in SWD's portfolio, has increased 45 percent since 2021:

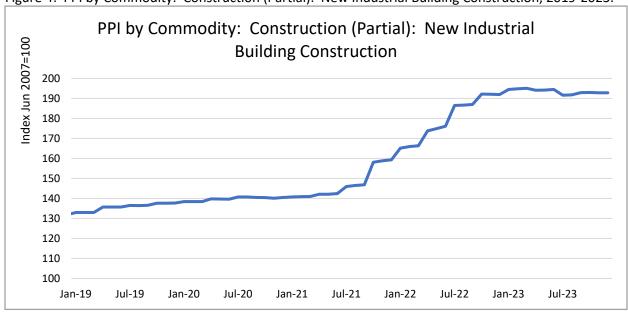


Figure 4: PPI by Commodity: Construction (Partial): New Industrial Building Construction, 2019-2023.²³

Capital Equipment Replacement Program (CERP) Transfer. The department maintains reserves equal to 10 percent of the value of its rolling stock in the CERP to ensure adequate funding is in place to replace vehicles and other equipment that has reached the end of its useful life. The SWD has reviewed planned spending levels relative to the current fund balance and is proposing to keep the transfer at projected levels for the 2025 budget, or \$6.5 million annually. The SWD plans to reduce the transfer to \$6 million in 2026-2027 and utilize fund balance to reduce pressure on the revenue requirement.

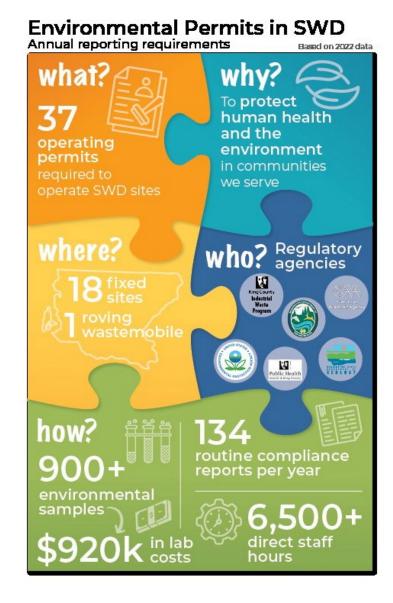
²³ U.S. Bureau of Labor Statistics, Producer Price Index by Commodity: Construction (Partial): New Industrial Building Construction [WPU801104], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/WPU801104, April 22, 2024.

New and Continuing Investments

Environmental. The regulatory requirements for waste disposal and landfill management are ever evolving and complex. As shown in Figure 5, SWD has 37 operating permits and works closely with more than six regulatory bodies to ensure its compliance. In recent years, the frequency and intensity for testing, monitoring, and reporting requirements have increased, resulting in increased workload for staff. The SWD has made efforts to increase its capacity, including replacing term-limited positions with full-time employees, and will continue to do so as requirements warrant. Recently, the Washington Legislature passed legislation increasing regulation for methane emissions from landfills. The SWD estimates that the increased sampling requirements will require two new landfill gas utility operators, as well as a new Engineer III position to oversee the reporting and compliance work. The rate increase will support the proposed additional full-time employees (FTEs) for this body of work.

Capital Projects. Continued department investments are being made in major projects from the CSWMP. These include the South County Recycling and Transfer Station (SCRTS) which is currently under construction, building the Northeast Recycling and Transfer Station (NERTS), for which a siting decision is expected in the third quarter of 2024, maximizing the life and capacity of the Cedar Hills Landfill, and upgrading the landfill gas capture system there. These new transfer stations will expand access to recycling and hazardous waste services, reduce wait times,

Figure 5: Summary of Reporting Requirements for SWD Environmental Permits



increase safety, and reduce the environmental impacts from the older stations they are replacing. The long-term rate path assumes the investment will be needed in new sortation and processing technology, such as co-digestion and mixed waste processing, that will be needed to reach Re+ goals.²⁴ Annual debt service is projected to increase from \$19 million in 2024 to about \$23.4 million by the end of 2025.

²⁴ 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.

The potential economic impact of the SWD's projected capital spending for 2024 and 2025 is estimated to be more than 1,500 new jobs, according to the Washington State Office of Financial Management's Input – Output Model.²⁵

Equity and Social Justice (ESJ). The department is developing a new low-income discount program for vulnerable populations in the UTC-regulated areas of the county. The program, which will use revenue from the Utility and Transportation Commission (UTC) certificated areas to fund the discounts, will be administered by the County in partnership with Seattle-King County Public Health's Access and Outreach Team. This team, which also administers Metro's Orca LIFT program, has expertise in enrollment and eligibility verification, as well as community outreach and language access resource that will augment the accessibility of the program for residents.

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 2025 budget year.

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 gradually replenishes the reserve. With the onset of a recession, the department fully drew down the reserve in 2020. The department started replenishing this reserve in 2023 and is proposing to fully replenish it back to the 5 percent of annual disposal revenues in 2024.

Rate Stabilization Reserve. The Rate Stabilization Reserve for 2024 is expected to be \$41 million. The department plans to spend down this reserve to lower and smooth rates until reaching a target of approximately \$1.6 million at the end of 2029.

Revenues

Disposal Fee Revenue. DNRP is proposing an increase in its tonnage-based fees for garbage, the FAC, and the construction and demolition fee. Historically, the department had proposed rate increases on a biennial basis, but DNRP has been proposing annual increases since 2022. Smaller, more frequent increases are preferred by cities and will minimize the burden on rate payers and create a smoother, more predictable situation for customers.

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 \$150.83 to \$165.91 in 2025.

²⁵ The estimate of the number of new jobs attributable to SWD capital spending was calculated using Washington State Office of Financial Management's Input-Output Model.

- **Fixed-Annual Charge (FAC).** This was a new charge implemented in January 2024. The department proposes increasing the FAC from \$22,614,181 in 2024 to \$23,337,835 in 2025.
 - **NOTE:** The Commercial Fee and the FAC are both disposal charges. Together, they are projected to increase revenues by approximately \$11 million in the 2025 budget 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 \$185.28 per ton in 2024 to \$203.81 per ton in 2025. This increase is expected to bring in \$4.8 million more in revenues in 2025.
- Regional Direct Fee. This is a discounted fee charged to contract commercial collection companies that haul solid waste to the CHRLF 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 self-haul fee, so this fee is increasing from \$157.00 per ton in 2024 to \$163.05 per ton in 2025. For the last several years there has been a dispute between the County and the City of Seattle (SPU) over regional direct tons from material recovery facilities located in Seattle. Since these tons originate as garbage incorrectly placed in recycling bins (alongside good recyclable material) collected within the King County system, DNRP contends that those tons belong to the County system. However, since many of these regional direct tons are sorted out from the recyclable materials at facilities within City of Seattle limits, SPU contends the tons belong in its system. DNRP and SPU have reached a tentative agreement whereby the disputed tons will stay within the SPU disposal system, but SPU will pay DNRP a portion of the disposal fee revenue they collect on these tons. An ILA memorializing this agreement has been adopted by the Metropolitan King County Council and is under review by the Seattle City Council.
- **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 self-haul rate so this fee would increase from \$223.00 per ton in 2024 to \$244.57 per ton in 2025.
- 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. 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 and \$115 in 2023. No increases are being sought for this fee in 2025.
- Construction and Demolition Fee. This fee is collected at designated C&D collection facilities on each ton of C&D waste that is sent to the landfill and then remitted to the County. It does not apply to C&D waste that is recycled. The fee has been set at \$4.25 per ton since its inception in 1993. The department is proposing raising this fee to \$13.00 per ton in 2025. This increase is expected to generate approximately \$1,750,000 in additional revenue if approved.

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. Typically, landfill gas is captured at CHRLF and converted to pipeline-quality natural gas by Bio Energy Washington (BEW). The natural gas has then been sold to Puget Sound Energy (PSE), and the revenue was shared between BEW and the department. In addition, environmental attributes, which are owned solely by the department, are sold on the secondary market. However, since the summer of 2023, BEW has ceased accepting landfill gas, requiring CHRLF to flare all landfill gas per its air operating permit. BEW ceased operations after filing suit against the County. The County has countersued BEW and the litigation is proceeding in federal court. While the County's goal is to put all landfill gas at CHRLF to beneficial use and expediently achieve a resolution to the dispute with BEW, DNRP is not assuming any revenue from landfill gas until the matters are resolved.

The most recent total revenue projected in the rate model for the 2025 budget year is \$184 million. Revenue from disposal fees is projected to be \$149.4 million. The FAC is set at \$23.3 million, and an additional \$11.7 million is projected from other revenue sources.

D. Rate Determination

Each budget period, 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 budget 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 CSWMP 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 \$678 million in funding between 2025 and 2029, leading to a significant increase in debt service.

Figure 6 shows the projected capital investment across the Solid Waste system over the next five years and the corresponding increase in projected debt service costs.

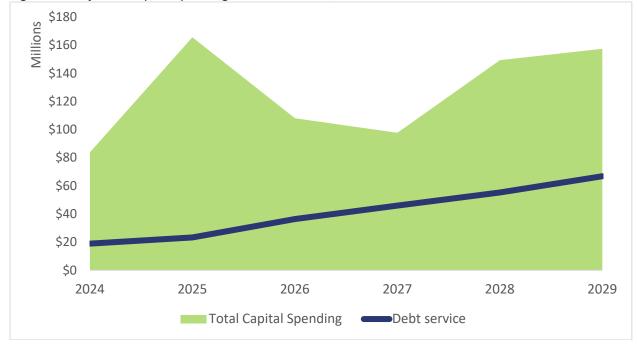


Figure 2: Projected Capital Spending and Debt Service, 2024-2029.

Ultimately, the department has 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

DNRP is in a period of significant capital investment for solid waste rate programs and services that will last several biennia and reorient the outlook from a waste management perspective to a materials management leadership perspective. The proposed rate increase would support DNRP making an investment in critical infrastructure projects between now and 2029. Investments in infrastructure like the South County Recycling and Transfer station, extending the life of the landfill, and improving the efficiency of landfill gas capture, to name a few, will yield long-term financial benefits for rate payers, boost the local economy, and reduce the impact of waste on the environment.

Spending has been prioritized to focus on maintaining delivery of essential services and delivering on the commitments made in the CSWMP 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 CSWMP (transfer stations and maximization of the landfill) is expected to create more than 1,500 new jobs according to the Washington State Office of Financial Management's Input – Output Model.

The focus on the revenue side has been one of mitigating the impact of increased pace of capital spending. The proposed rate increases in fees will result in average revenue growth of seven percent

per year and is largely driven by growth in debt service (37 percent average annual increase). The economic turbulence caused by inflation and higher borrowing costs is impacting the cost of operations and capital spending, as well as resulting in a lower tonnage forecast than expected. 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. In fact, despite increased cost pressure in its capital program and reduced tonnage (largely because of high interest rates), DNRP has been able to maintain a rate increase proposal only slightly above projections from the last two rate cycles. All this while preserving essential services and providing investments needed to reach the County's strategic goals and commitments.

VI. Appendices

Appendix A – Curbside Impact Calculation

Appendix B – Rate Methodology

Appendix C – Tonnage Forecast Through 2029

Appendix D – Summary of Rate Model Through 2029

Appendix A

Appendix A—Curbside Impact Calculation

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, based on amount of garbage generated by a typical household. 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 the aggregate across the entire SWD service area. In addition, the division has gathered rate data and modeled the impact in different jurisdictions for the most common can size, the 32/35 gallon cart. This provides more context for the potential variability of impacts across the service areas.

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.

Historically, city contracts adjusted the disposal component by the rate of increase in the County's tipping fees. With the implementation of the rate restructure, cities and haulers had to adjust the contract terms to account for changes in both the tipping fee and the allocation of the Fixed Annual Charge (FAC). Most cities and haulers elected to use a "Compound Commercial Rate" (CCR) which blended the tipping fee and FAC into a single rate, which could be used to adjust the garbage component.

The estimated CCR in the previous rate cycle was \$185.27, so the rate of increase in 2025 rate cycle would be 10 percent. A typical account in King County is estimated to generate about 102 pounds of garbage per month. Using the CCR, the average monthly impact of the 2025 rate increase would be \$0.93.

Fixed Annual Charge	\$23,337,835
Forecast for Commercial Tons	615,395
FAC/Forecasted Tons	\$37.92
Commercial Tipping Fee	\$165.91
Estimated CCR	\$203.83

Table 1: Calculation of Compound Commercial Rate

The curbside impact to customers varies considerably between cart sizes and collection contract/UTC-service area. To model the potential impact, the division gathered rate data across the service area for the most common residential can size, the 32/35-gallon cart. The amount attributable to the disposal portion of the monthly service cost was not available for all contracts and the UTC areas. The division compiled available contract data and found that on average, 24 percent of the cost was attributable to the disposal fee. This factor was then used across the monthly service cost to estimate the monthly increase. On average, a 32/35-gallon customer would be expected to see a \$0.71 increase per month due to the proposed rate increase.

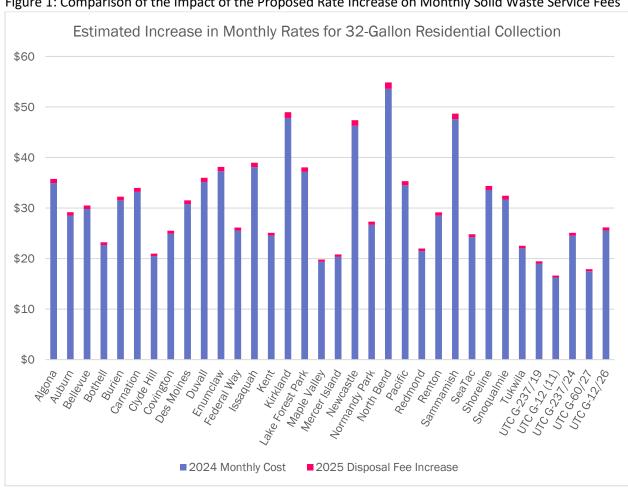


Figure 1: Comparison of the Impact of the Proposed Rate Increase on Monthly Solid Waste Service Fees

Table 2: 32/35 Gallon Service Rates and Proposed Rate Impact

	Monthly Estimated Disposal		Estimated Monthly
City	Cost	Component	Increase
Algona	\$34.95	\$8.27	\$0.83
Auburn	\$28.52	\$6.75	\$0.68
Bellevue	\$29.81	\$7.05	\$0.71
Bothell	\$22.68	\$5.37	\$0.54
Burien	\$31.52	\$7.46	\$0.75
Carnation	\$33.21	\$7.86	\$0.79
Clyde Hill	\$20.50	\$4.85	\$0.49
Covington	\$24.91	\$5.89	\$0.59
Des Moines	\$30.80	\$7.29	\$0.73
Duvall	\$35.16	\$8.32	\$0.83
Enumclaw	\$37.28	\$8.82	\$0.88
Federal Way	\$25.55	\$6.05	\$0.61

Appendix A

City	Monthly Cost	Estimated Disposal Component	Estimated Monthly Increase
Issaguah	\$38.08	\$9.01	\$0.90
Kent	\$24.53	\$5.80	\$0.58
Kirkland	\$47.84	\$11.32	\$1.13
Lake Forest Park	\$37.16	\$8.79	\$0.88
Maple Valley	\$19.36	\$4.58	\$0.46
Mercer Island	\$20.33	\$4.81	\$0.48
Newcastle	\$46.29	\$10.95	\$1.10
Normandy Park	\$26.69	\$6.32	\$0.63
North Bend	\$53.59	\$12.68	\$1.27
Pacific	\$34.50	\$8.16	\$0.82
Redmond	\$21.49	\$5.08	\$0.51
Renton	\$28.48	\$6.74	\$0.68
Sammamish	\$47.56	\$11.25	\$1.13
SeaTac	\$24.24	\$5.74	\$0.57
Shoreline	\$33.58	\$7.95	\$0.80
Snoqualmie	\$31.69	\$7.50	\$0.75
Tukwila	\$22.01	\$5.21	\$0.52
UTC G-237/19	\$19.01	\$4.50	\$0.45
UTC G-12 (11)	\$16.27	\$3.85	\$0.39
UTC G-237/24	\$24.52	\$5.80	\$0.58
UTC G-60/27	\$17.50	\$4.14	\$0.41
UTC G-12/26	\$25.58	\$6.05	\$0.61

3

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.

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 budget year (2025). 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 budget period, 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 —DNRP is 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 Solid Waste construction improvement fund (CIP), the Solid Waste capital equipment replacement program fund (CERP), and the landfill reserve fund (LRF).

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.

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 by DNRP during each rate-setting process.

CERP Fund Transfer

DNRP develops an annual spending plan to address the needs for solid waste equipment replacement over the rate setting period and the next two biennia. 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. 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 between 75 and 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.

Rainy Day Reserve

King County Comprehensive <u>Financial Management Policies</u> 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.

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, by 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 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 example, 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 75 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.

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 five 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 budget periods, 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

Since 2024, about 90 percent of the Solid Waste program's revenue comes from a combination of disposal fees and the proposed 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. Until 2024, the basic fee was charged to both commercial and self-haul customers. However, since the beginning of 2024, upon the implementation of the rate restructure and its FAC, the basic fee was split into the commercial tipping fee and the self-haul fee. The commercial fee dropped in 2024 (relative to the 2023 basic fee) to offset the revenue that now accrues from the new FAC.
- **Fixed Annual Charge.** Beginning in 2024, the 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.

⁶ Per King County Comprehensive Management Policies.

⁷ DNRP is not currently receiving landfill gas revenue because the plant that converts it to pipeline quality natural gas is not operating. As a result, the rate model for this proposal does not assume landfill gas revenues in 2024 or into the future.

⁸ See Haz<u>ardous Waste Management Program</u> for more information about household hazardous waste collection.

The FAC is based on the share of the cost of non-disposal activities allocated to the commercial solid waste hauler customer class.

- **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. Until 2024, the basic fee was charged to both commercial and self-haul customers. However, in 2024, upon the implementation of the rate restructure and its FAC, the basic fee was split into the commercial tipping fee and the self-haul fee. Since the FAC is not collected from self-haul customers, the self-haul tipping fee is higher than the commercial tipping fee starting in 2024.
- 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 will be set at 85 percent of the self-haul rate.⁹
- **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 self-haul rate.
- 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 can be converted to pipeline-quality natural gas at a plant operated by a third-party processor. The natural gas can then be sold, along with its environmental attributes. Energy markets are relatively volatile, and disputes between the division and landfill gas producer have introduced additional uncertainty. Therefore, the division is currently assuming no revenues from this source, pending resolution of the issues.

⁹ The new rate restructure for commercial revenues 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.

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.

Construction and Demolition Fee

DNRP 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

Appendix C – Tonnage Forecast Through 2029

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 base forecast relies on established statistical relationships between waste being disposed and some economic and demographic variables that affect it, namely population, employment, and consumption. After the base forecast is produced, the tonnage is further reduced to account for the impacts of the Re+ program on waste reduction and diversion.

Year	Туре	Transfer Station	Other	Regional	Special	Yard
		Tonnage	Waste	Direct	Waste	Waste
2017	Actual	895,672	19,898	12,161	3,446	21,966
2018	Actual	849,506	18,336	17,039	3,632	19,150
2019	Actual	840,878	17,422	7,542	2,690	22,739
2020	Actual	813,703	21,390	32,553	1,504	23,583
2021	Actual	827,211	22,792	24,736	2,130	24,838
2022	Actual	821,860	25,578	15,730	1,988	23,588
2023	Actual	798,765	30,521	3,741	2,206	17,780
2024	Forecast	771,959	30,000	3,700	2,000	18,000
2025	Forecast	782,738	30,000	3,700	2,000	18,000
2026	Forecast	785,770	30,000	3,700	2,000	18,000
2027	Forecast	780,362	30,000	3,700	2,000	18,000
2028	Forecast	744,982	30,000	3,700	2,000	18,000
2029	Forecast	743,140	30,000	3,700	2,000	18,000

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

1

A. Appendix D – Summary of Rate Model Through 2029

	Act	uals	Proposed	Projected			
Fund Account Summary	2023	2024	2025	2026	2027	2028	2029
Basic Fee	\$168.68						
Commercial Tipping Fee		\$150.83	\$165.91	\$182.50	\$200.75	\$220.83	\$242.91
Percent change			10%	10%	10%	10%	10%
Fixed-Annual Charge (in millions)		\$22.61	\$23.34	\$24.50	\$25.73	\$27.02	\$28.38
Self-Haul Fee		\$185.28	\$203.81	\$224.19	\$246.61	\$271.27	\$298.40
Percent Change		7105.20	10%	10%	10%	10%	10%
Tercent change			10/0	1070	1070	10/0	1070
REVENUES							
Disposal Revenue	\$149,196,699	\$134,270,467	\$149,403,266	\$164,854,481	\$179,990,314	\$189,426,799	\$207,701,116
FAC Revenue	\$0	\$22,614,181	\$23,337,835	\$24,504,727	\$25,729,963	\$27,016,461	\$28,367,284
Non-Disposal Revenue	\$12,355,463	\$11,498,859	\$11,699,904	\$11,872,347	\$12,176,860	\$12,488,472	\$12,799,216
Total Revenues	\$161,552,162	\$168,383,507	\$184,441,005	\$201,231,554	\$217,897,137	\$228,931,732	\$248,867,616
EXPENDITURES							
SWD Operating Expenditures	\$140,404,306	\$117,649,771	\$144,336,076	\$149,697,998	\$156,553,941	\$163,502,128	\$170,487,220
Landfill Reserve Fund Transfer	\$12,816,926	\$15,468,923	\$13,880,306	\$13,931,743	\$13,840,020	\$13,239,990	\$13,208,744
Capital Equipment Recovery Program	\$5,416,667	\$4,583,333	\$6,500,000	\$6,000,000	\$6,000,000	\$6,000,000	\$5,000,000
Construction Fund	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Debt Service	\$16,480,778	\$19,183,113	\$23,377,001	\$36,440,803	\$45,987,152	\$55,354,476	\$66,867,547
Total Expenditures	\$177,118,677	\$158,885,140	\$190,093,383	\$208,070,544	\$224,381,113	\$240,096,594	\$257,563,511
RESERVES							
Rainy Day	\$9,979,177	\$10,860,580	\$13,694,900	\$15,209,343	\$16,557,477	\$17,898,478	\$19,418,875
Recession Reserve		\$6,713,523	\$7,470,029	\$8,242,724	\$8,999,516	\$9,471,340	\$10,385,056
Rate Stabilization Reserve	\$39,612,863	\$41,516,303	\$32,270,404	\$23,144,276	\$14,555,375	\$8,061,664	\$1,612,542
Total Reserves	\$49,592,040	\$59,090,407	\$53,435,332	\$46,596,343	\$40,112,368	\$35,431,481	\$31,416,472