



CITY OF KIRKLAND
Department of Public Works
123 Fifth Avenue, Kirkland, WA 98033 425.587.3800
www.kirklandwa.gov

MEMORANDUM

To: Kurt Triplett, City Manager

From: John MacGillivray, Solid Waste Programs Lead
Julie Elsom, Senior Operation and Finance Analyst
Marilynne Beard, Interim Public Works Director

Date: August 21, 2014

Subject: RATE PROCESS OVERVIEW AND 2015/2016 SOLID WASTE RATES

RECOMMENDATION

Staff recommends that the City Council receive an overview of the rate-setting process and review the proposed 2015/2016 solid waste rates and provide direction to staff.

BACKGROUND

Overview

In preparation for the budget process, City staff has been updating the utility rate projections for 2015-2016 for all four City utilities (water, sewer, surface water, and solid waste). Consultants assisted with the process as needed and the recommendations for each utility will be presented to the City Council over the next few meetings. At the September 2 meeting, a general overview of the rate-setting process will be presented as context for all of the rate results and the solid waste utility recommendations will be reviewed. A copy of the Powerpoint slides for the process overview is included as Attachment 1.

Solid Waste Rates

The Solid Waste Utility provides for collection and disposal services that are provided to Kirkland residents and businesses by Waste Management Inc. (WMI). Billing services are performed by the utility billing division in Finance, and program development and outreach activities are implemented by Public Works.

The current monthly solid waste rate for a 35 Gallon Cart (most popular cart size with weekly pick up) is \$22.25; the effective utility tax rate is 10.50%. The solid waste rates were last updated in 2012 after a thorough review of solid waste rate policies to ensure the financial stability of the Solid Waste Utility in 2013/2014 and beyond. At that time City Council adopted a two year-rate with an average rate increase of 12.99% effective January 1, 2013. The rate increase reflected the following major factors:

- **Disposal Fee Increase:** The King County Council increased its cost-per-ton disposal fee paid to King County by 11% (\$109/ton to \$121.17/ton)
- **Cost-of-Living Increase:** The rates included a 2013 2.67% cost-of-living increase paid to WMI for collection per the terms of our solid waste contract. The cost-of-living increase estimated for 2014 in the rate model was 2.5% but the actual increase was lower at 1.2%.
- **Downsizing Estimate:** Rates included a post-annexation estimated rate of cart downsizing of 5.5% per year or approximately .45% per month (see discussion below on downsizing).
- **Change in Rate Linearity:** The linearity of the solid waste rates was changed slightly from fully linear rates to nearly linear rates to mitigate the effects of downsizing. The price per gallon rate increase for the smaller cart sizes was slightly higher than the price per gallon rate increase for the larger cart sizes.
- **Elimination of Subsidies:** To mitigate the rate increase, the 100% subsidy of yard waste extras was eliminated and the full cost of each extra unit was passed on to the customer. Similarly, the slight subsidization of garbage extras was also eliminated in the rates. For more information regarding the impact of this change please see Attachment 2, *Yard Waste Extra Update Memo* which was presented to the City Council Public Works Committee on June 4, 2014.

SOLID WASTE BUDGET

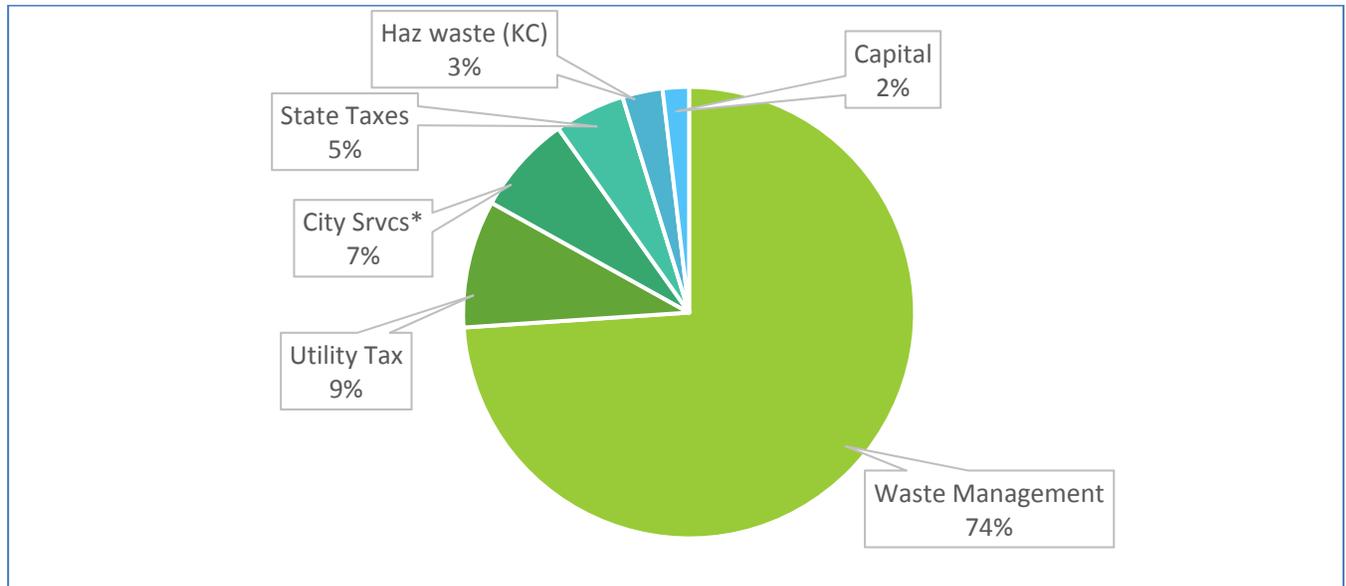
The Solid Waste budget is approximately \$16 million per year. Approximately 74% of the expenditures are payments made to Waste Management for collection services. Another 19% is composed of taxes and fees collected and passed through to King County, the State of Washington and other City funds:

- Waste Management charges a wholesale rate for the cost of service, this includes the cost of collection and the King County 'tipping fee' or cost for disposal;
- The City collects a utility tax that is charged on the utility bill and then transferred from the utility fund to the General Fund;
- The State of Washington imposes a utility excise tax (State Tax) on the "gross revenues" of the utility;
- King County imposes a Hazardous Waste Fee on business, multi-family and residential accounts; and

- The Solid Waste utility Contributes to the Capital Improvement Street Preservation Program to account for the negative impacts that heavy waste hauling vehicles have upon the City's pavement infrastructure.

City services account for 7% of the budget and include education and outreach programs and billing services.

The following chart is a proportionate representation of the Solid Waste budget:



2015-2016 UTILITY RATE ASSUMPTIONS

The process of developing the 2015-2016 rate proposal was based on the financial performance of the utility over the past two years, trends in customer demands for services and cart sizes and adjustments for other agency actions and contractual obligations. The rates were designed to ensure the future financial integrity of the utility, keeping in mind impacts on ratepayers.

Downsizing

Kirkland's Solid Waste retail rates (rates billed to our customers) are nearly linear; that is, the price per gallon for each service level is roughly the same: between 63 and 72 cents per gallon. In contrast, the wholesale rates paid to Waste Management (WMI) are cost-of-service. Cost-of-service rates approximate the cost for WMI to collect and dispose of waste at a given service level so the price per gallon varies substantially across the individual service levels. For example, fixed costs incurred by WMI such as labor and transportation are the same to collect a 20 gallon cart as a 96 gallon cart. There is less garbage in a smaller cart which results in lower disposal costs for Waste Management (their "cost of service") while the City's rates are based on gallons of garbage collected.

Linear rates naturally encourage customers to downsize to smaller containers because customers receive no price break by having a larger cart. Customers naturally recycle and compost more to ensure that all of their garbage fits in their smaller cart. In contrast, cost-of-service rates give customers with larger carts a "volume discount" which does not encourage waste reduction and recycling behaviors.

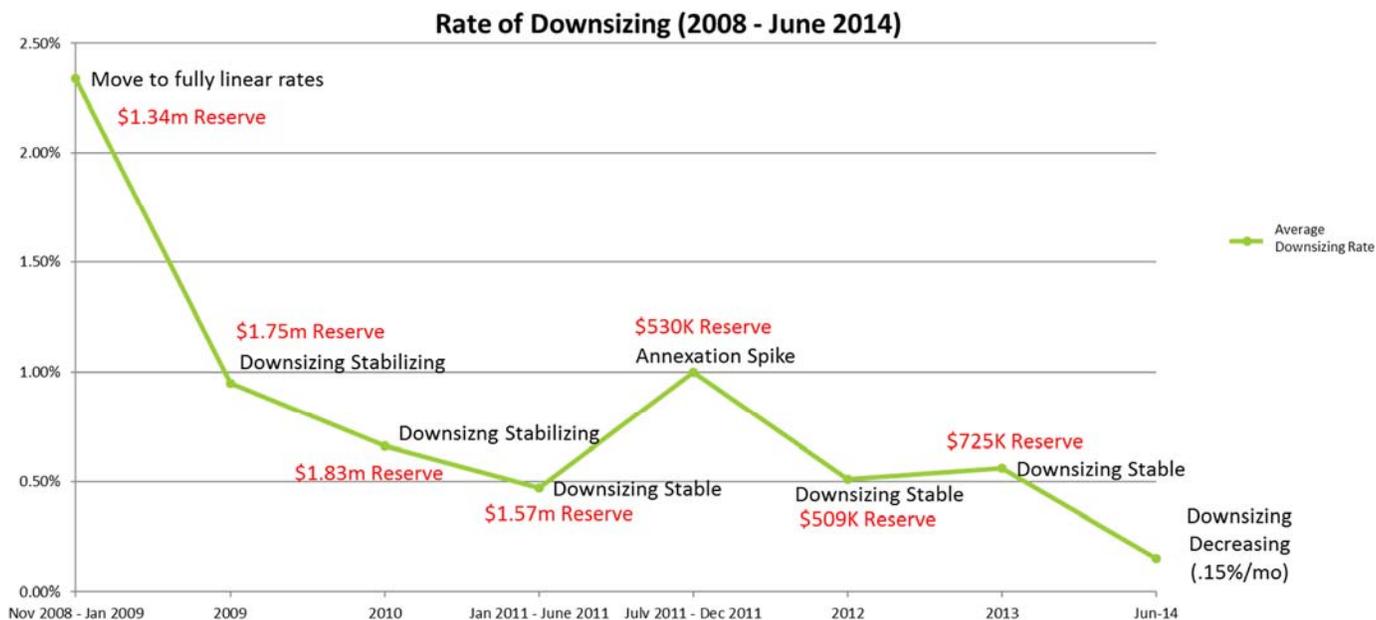
Currently, Kirkland pays more to WMI in wholesale rates than it receives in retail revenue for the smaller cart sizes (10, 20, and 35 gallon) but receives more in retail revenue than it pays to WMI for the larger cart sizes (64 and 96 gallon). In fact, Kirkland loses about \$1.00 per cart per month for the 35 gallon cart service level (~11,000 customers). While downsizing estimates are built into our rate model, if the rate of downsizing exceeds estimates as it did post-annexation, then revenues will be less than expenditures and cash reserves will be gradually depleted as more customers downsize or migrate to the smaller cart service levels where the Utility loses money.

In the years following annexation, downsizing increased substantially to an average of over 1% per month as annexation area customers transitioned from cost-of-service rates under their old service provider to Kirkland's linear rates. In order to fully account for the unanticipated downsizing, rates would have had to be increased considerably for some customers. Staff recommended and City Council approved a lower rate increase with the understanding that the rest of the rate increase would need to be imposed in later years. As a result of the phased-in rate approach, downsizing caused solid waste cash reserves to be depleted to \$725,000 – about half of the target amount. Fortunately, as the economy has slowly recovered the rate of downsizing has gradually slowed and stabilized to about .15% per month as shown in the graph below.

In the proposed 2015/2016 rate model, the rate of downsizing has been conservatively estimated at .35% per month as a hedge against unanticipated spikes in downsizing. Other major assumptions reflected in the solid waste recommendation include:

Reserve Replenishment (Goal: \$1.3 million cash reserve by end of 2016)

Since mid-2011, the Utility's cash reserve has gradually been depleted from a high of over \$1.3 million in 2009 to a low of about \$725,000 at the end of 2013 as discussed above. Prudent and conservative financial management strategies suggest that the Utility should maintain at least one month's worth of invoice payments to WMI in cash reserves in the event City revenues are interrupted by a work stoppage or natural disaster. A minimum cash reserve is also important as the City bills its customer every two months but pays WMI monthly. Accordingly, one of the primary rate assumptions and goals in the proposed 2015/2016 solid waste rate is to replenish cash reserves back to \$1.3 million by the end of the biennium.



Contributions to Street Preservation (\$300,000 annually)

For the past several years, the Solid Waste Utility has contributed \$300,000 to the Capital Improvement Street Preservation Program to account for the negative impacts that heavy waste hauling vehicles have upon the City’s pavement infrastructure. This transfer is assumed to continue in both 2015 and 2016.

Maintenance of Commercial to Residential Cross Subsidization

Kirkland’s existing rate structure generates revenue from multifamily/commercial customers that exceeds the multifamily/commercial cost of service, creating a subsidy for single family residential customers. This cross subsidy has been in existence for many years and mirrors the practice of many other cities. The proposed average rate increase for single family residential and multifamily/commercial customers is 3.25% and 3.24% respectively in 2015 and 3.3% across the board in 2016. The proposed rate increase continues the cross subsidy but reduces it slightly from an average per year of \$381,000 over 2013-2014 to an average of \$317,000 per year over the 2015-2016 biennium.

Elimination of Roll-off Container Subsidy

For several years, the rates for roll-off customers have been subsidized by the commercial sector. Roll-off containers (pictured below) are the larger 10, 20, 30, or 40 cubic yard rectangular containers. The proposed 2015/2016 solid waste rates continue to gradually phase in the reduction of the cross subsidy from \$25,000 annually to \$6,000 by 2016. Accordingly, the proposed rate increase to roll-off customers is 5.35%.



Cost-of-living Increase to WMI

Per the terms of our solid waste contract, WMI is entitled to receive 100% of the June to June Seattle-Tacoma-Bremerton Metropolitan Area CPI for Urban Wage Earners and Clerical Workers (CPI-W). The CPI adjustment is applied only to the collection component of the wholesale rates. For 2015, the CPI is 2.23%. For rate modeling purposes a 2016 CPI of 2.14% was assumed.

Stable King County Solid Waste Disposal Fees

The King County Solid Waste Division conducted their own solid waste rate analysis and determined that the current \$121.17/ton disposal fee will remain stable for 2015 and 2016.

New Local Hazardous Waste Management Program Fee Structure

Effective April 1, 2015, the Local Hazardous Waste Management Program (LHWMP) will implement a new fee structure intended to increase rate equity among its commercial and multifamily customers. In lieu of the current flat fee of \$11.24 per month paid by each business or multifamily customer, customers will now pay LHWMP fees based upon the size of their garbage cart, dumpster, and/or roll-off container. Single family rates will not be affected. For more information on the new LHWMP fee structure, please see the attached memoranda that was presented to the City Council Finance Committee on July 29, 2014 (Attachment 3). The LHWMP fees are set by the King County Board of Health, not the individual cities.

PROPOSED RATES

Staff is proposing a two year implementation for 2015 and 2016 solid waste rates with an average rate increase of 3.29% in both years. The single family residential rates are shown below in *Table 1* with the most common 35 gallon container size highlighted.

Table 1 – Proposed 2015/2015 Single Family Solid Waste Rates						
Cart Size (Frequency)	# Customers	2014 Rate	Two Year Implementation			
			2015	\$ change	2016	\$ change
35 gal (monthly)	1,146	\$5.78	\$5.97	\$0.11	\$6.16	\$0.19
10 gal (weekly)	184	\$7.15	\$7.38	\$0.23	\$7.63	\$0.25
20 gal (weekly)	2,290	\$14.30	\$14.76	\$0.46	\$15.25	\$0.49
35 gal (weekly)	11,264	\$22.25	\$22.97	\$0.72	\$23.73	\$0.76
64 gal (weekly)	5,175	\$40.66	\$41.99	\$1.33	\$43.38	\$1.39
96 gal (weekly)	1,164	\$60.99	\$62.98	\$1.99	\$65.07	\$2.09

Solid Waste rates were presented to the Finance Committee July 29. At that time the recommended rate increase for single family, commercial and multifamily residential was 3.6% and 5.7% per year for roll-off customers. The rate has been updated to reflect the most current customer cart size data and the actual CPI of 2.23% for 2015. The rate model estimates a CPI of 2.5% for 2016. The proposed Solid Waste rates include the following components:

- A 3.29% overall average rate increase in both 2015 and 2016. The average rate increases by sector are:
 - 3.235% per year to Single Family Residential customers
 - 3.24% in 2015 and 3.25% in 2016 to Multifamily Residential and Commercial customers
 - 5.35% per year to Roll-off Customers

The following is a summary of the impact of the recommended rate increase to single family residents, based on the most popular cart size, 35 gallon cart, with weekly pickup.

	Recommended		
	2014	2015	2016
Typical Monthly Rate	\$22.25	\$ 22.97	\$ 23.73
Monthly \$ increase:		\$0.72	\$0.76
Percentage increase:		3.24%	3.30%

SUMMARY AND NEXT STEPS

Based on the full Council feedback and direction, Public Works will present the final rates to the Council for adoption at the October 7, 2014 meeting. Please note that, based on customer notification requirements established by state law, Council action must be taken on Solid Waste rates on or before the October 21 City Council meeting in order for the rates to be effective January 1, 2015.

Rates Adoption Timeline

<u>Month/Date</u>	<u>Task</u>	<u>Status</u>
July 29	Finance Committee	Complete
September 2	City Council Meeting, Utility Rate Review	Pending
October 7	City Council Meeting, Utility Rate Ordinance/Adoption	Pending
October 21	Deadline to pass rates ordinance	Pending

- Attachment 1: Yard Waste Extra Update Memo*
- Attachment 2: LHWMP Fee Structure Memo*
- Attachment 3: LHWMP Staff Report*
- Attachment 4: LHWMP Rate Change FAQ*

Utility Rates 101

Purpose

Overview of Process Applied to All Utilities:

- Solid Waste
- Surface Water
- Sewer
- Water

Review Assumptions that Apply to All Utilities

Provide Context for Results for each Utility

Why Now?

Kirkland 2035

- Water System Plan
- Surface Water Plan
- Transportation Management Plan

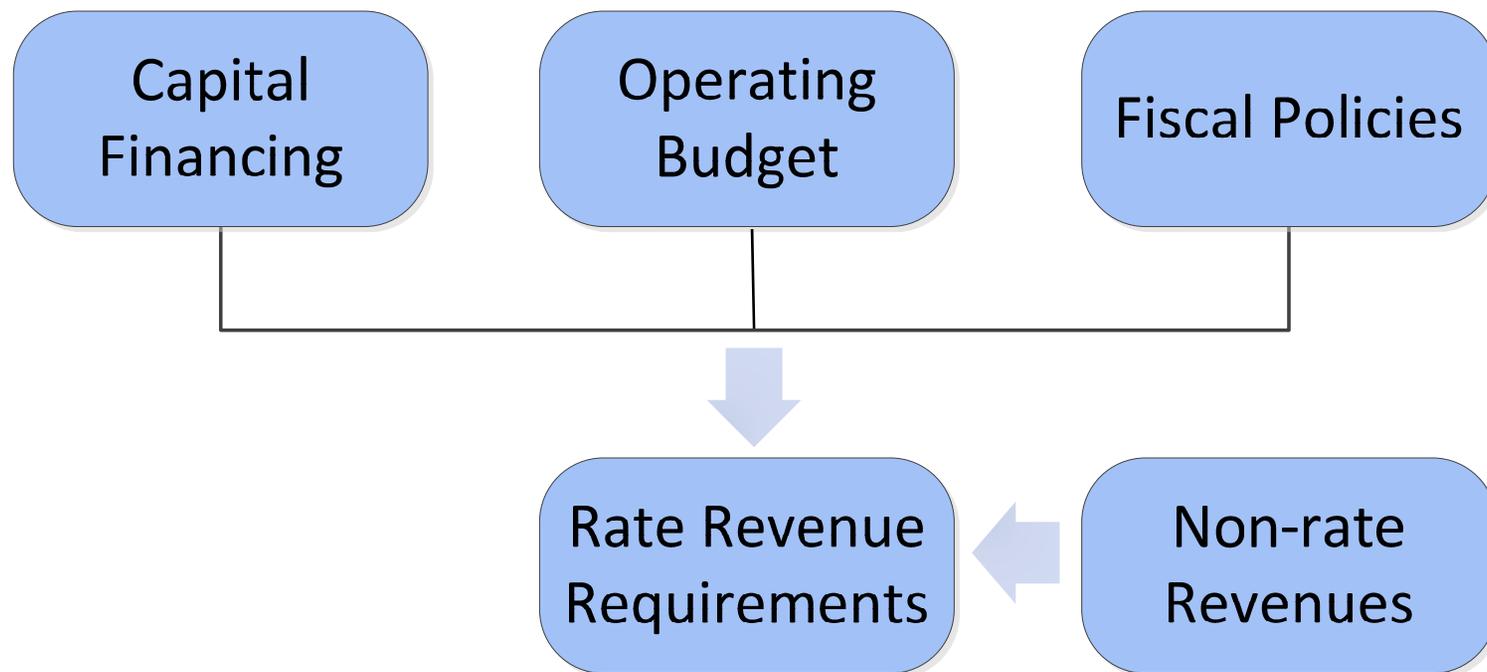
Continued Impacts of Annexation on:

- Surface Water
- Solid Waste

Key Process Steps



Rate Revenue Requirements



Capital Financing

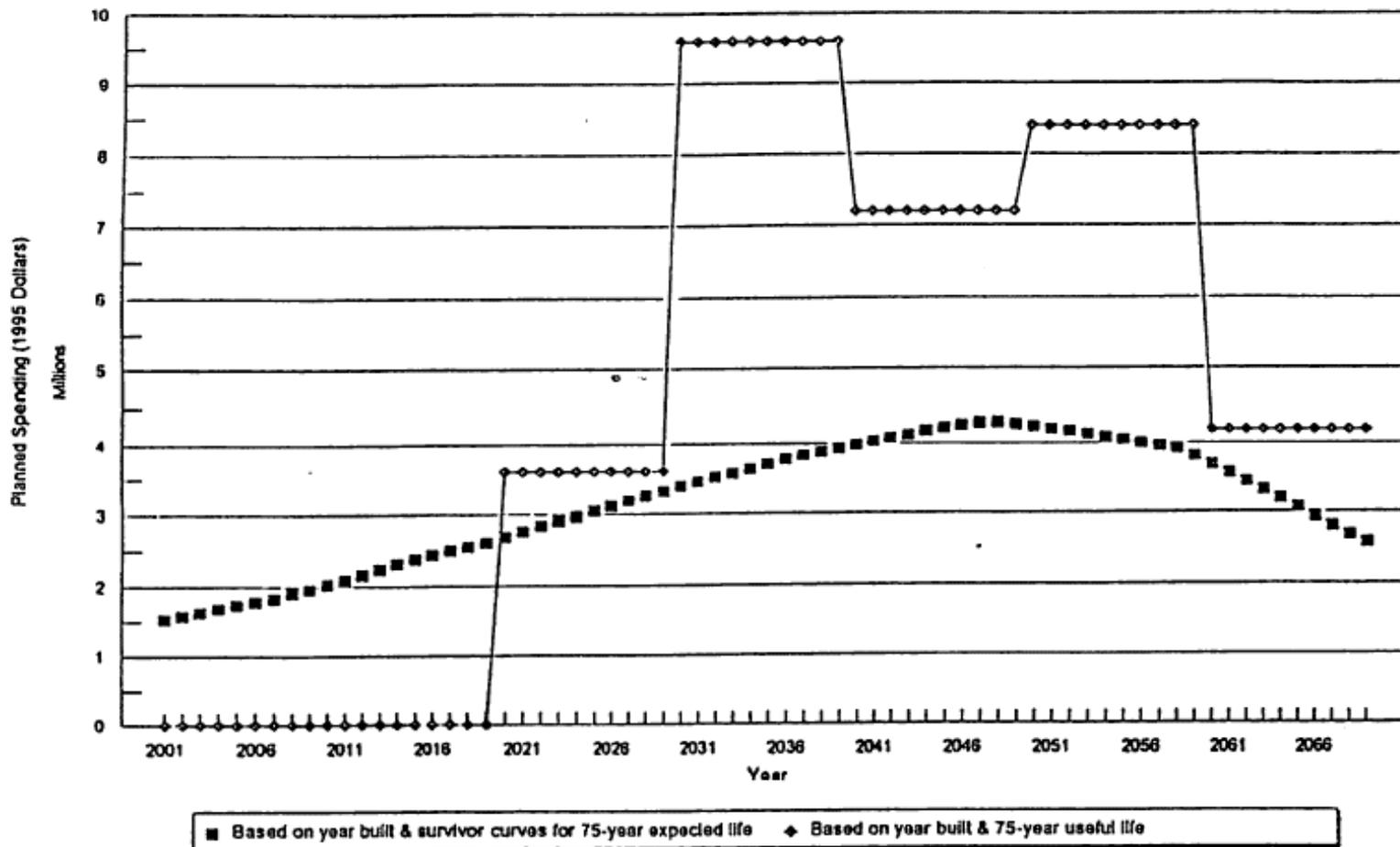
Depreciation is an accounting measure of the “consumption” of assets; generating capital funding capacity using depreciation as a base helps keep capital impacts on rates regular and predictable

Based on 2008 study, minimum system reinvestment target for each utility (except solid waste, which has no capital assets) is based on a multiplier of the annual depreciation expense (2014 projection shown):

- Water – 1.25 times annual depreciation expense of \$1.36 million
- Sewer – 1.65 times annual depreciation expense of \$1.31 million
- Surface Water – 1.0 times annual depreciation expense of \$1.37 million
 - This recommendation should be revisited once more after the storm system has been inspected

These funding rates have been phasing in over time and the long-term financing plan assumes that up to 25% of system reinvestment could be funded by debt

Water Main Replacement Spending Example



Capital Facilities Charges

Capital facilities charges (CFCs) on new development also help to fund system expansion

CFC is a one-time charge to new development based on the utilities' existing and planned investment in plant-in-service

Revenues are applied to projects as part of the capital financing analysis

CFCs are for funding capital projects in the City's utilities; there are also regional connection charges that are passed through to wholesale service providers:

- RCFCs for water supply to Cascade Water Alliance
- Capacity charge for wastewater treatment to King County Wastewater Division

Fiscal Policies - Reserves

	Water	Sewer	Surface Water	Solid Waste
Working Capital To recognize normal cyclical fluctuations in annual cash flow	45 days of O&M expense	45 days of O&M expense	180 days of O&M expense	30 days of O&M expense
Operating Contingency To protect against adverse financial performance due to revenue/expense variations	12% of O&M expense	12% of O&M expense	Not Applicable	Not Applicable
Capital Contingency To provide a hedge against unanticipated system failure/cost over-runs	10% of 6-year CIP	10% of 6-year CIP	10% of 6-year CIP	Not Applicable

Operating Budget & Non-Rate Revenue

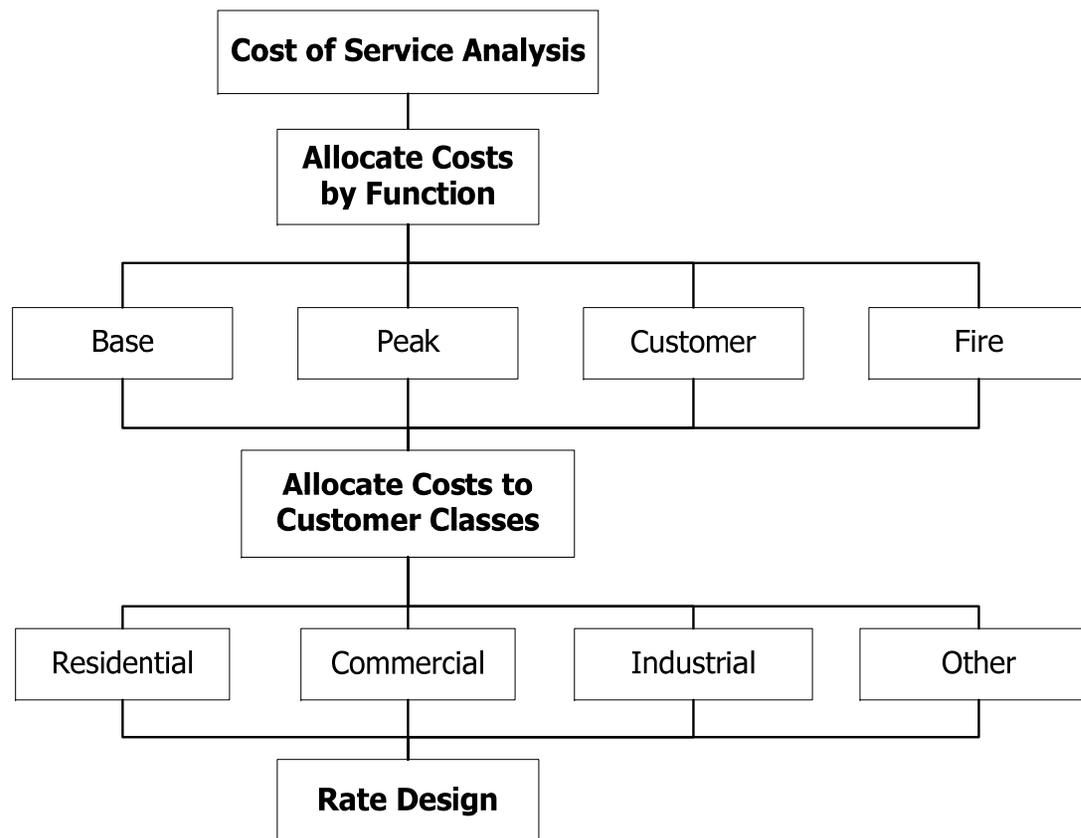
Preliminary rate results reflect the operating budget, recommended service packages, and debt service (if applicable)

To determine the amount of revenue needed from rates, non-rate revenues are subtracted from the total needs, including:

- Operating grants
- Interest earnings on operating balances
- Penalties
- Miscellaneous fees and charges

The rate revenue requirement is then compared to the revenue generated by current rates to determine the overall percentage rate increase needed

Cost of Service Analysis & Rate Design



Functional Cost Allocation

The Water System Plan update is an opportune time to revisit the cost of service (the example shown in the graphic)

Cost of service analysis allocates costs to the functions they serve based on the system design criteria and cost causation. For water:

- Base usage
- Peak usage
- Customer costs
- Fire protection

Allocation to Customer Classes

Functional costs are then allocated to customer classes by the demand they place on those functions, for example:

- Base costs are allocated based on year-round demands
- Residential and irrigation customers contribute most to peak period usage
- Customer costs are generally distributed by number of customers and/or meter size
- Fire protection costs are allocated based on the design of facilities to provide the different flow and duration for different types of land use

Functional allocation is simpler for sewer: collection (City costs) and treatment (King County Wastewater charge)

Surface water rates are collected on an equivalent service unit basis

Solid waste rates are not based on the cost of service, but instead reflect a conservation pricing signal

Rate Design

Rate design is how the costs are collected from customers within each customer class

Generally,

- Water rates consist of fixed charges and volume based charges
- Sewer rates consist of fixed charges and volume based charges
- Surface water rates are collected by equivalent service unit (based on the average impervious surface area of single family)
- Solid waste rates vary based on container size and frequency of pick up

Summary

The total revenue to be collected from rates is based on operating costs, capital funding, and fiscal policy choices

The percentage increase in overall rate revenue might vary from the rate increases individual customers might experience due to:

- Differences in demands that each customer class put on the system
- Differences in rate structures
- Policy decisions reflected in rates



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MEMORANDUM

To: Public Works, Parks, and Human Services Committee

From: John MacGillivray, Solid Waste Programs Lead
Marilynne Beard, Deputy City Manager and Interim Public Works Director

Date: June 4, 2014

Subject: Yard Waste Extra Policy Update

RECOMMENDATION

Staff recommends that the Committee receive an update on the implementation of the pass through charge for extra units of yard waste policy established by the Kirkland City Council in 2013.

BACKGROUND

Prior to 2013, the Solid Waste Utility fully subsidized yard waste extras in its solid waste rates and Kirkland single family residents were allowed to place out an unlimited amount of extra yard waste at the curb at no additional cost. In 2012 post-annexation, residents placed out over 28,000 units of extra yard waste which cost the Solid Waste Utility and rate payers over \$130,000 in payments to Waste Management (WMI). By comparison, prior to annexation the annual cost to rate payers was a more sustainable \$60,000. The size of each unit of extra yard waste is up to 32 gallons.

During the solid waste rate setting process for 2013/2014 biennium, staff proposed alternatives to mitigate the growing cost of the subsidy to include maintaining the full subsidy, adjusting the subsidy, imposing limits on the number of free extras, or eliminating the subsidy to be consistent with all other cities in King County. The alternatives to the status quo were proposed as a means to cut costs in the face of a looming double digit solid waste rate increase attributed to rampant downsizing and a 10% increase in the King County garbage disposal fee.

Upon the adoption of the 2013/2014 solid waste rates, the City Council authorized staff to bill residents for the full cost of each unit of extra yard waste (\$5.07) to fully recover costs. Customers are billed exactly what the City pays to WM for each extra plus applicable refuse taxes.

EDUCATION AND OUTREACH

Subsequent to the adoption of the new policy, Solid Waste and Utility Billing staff undertook an education and outreach effort to notify all Kirkland residents of the change in policy. The information was communicated in the following manner:

- Information printed on each customer's first bill (2013 and 2014)
- Rates information included in the annual comprehensive recycling guide (Jan 2013 and 2014)
- Articles in Spring/Fall editions of *Reuse, Recycle, Conserve* newsletters (2013 and 2014)
- Two billing inserts
- City newsletter
- City website
- Social media (Twitter, Facebook)

IMPACTS OF POLICY CHANGE

During the 2013/2014 rate setting process, several questions were voiced by staff and the City Council concerning the potential negative effects of changing the City's extra yard waste policy. Since the new policy has taken effect, staff has observed, tracked, and/or managed the several anticipated and even some unforeseen and interesting environmental, behavioral, financial, and administrative impacts of the new policy.

Environmental Impacts

It was predicted that the new policy could encourage residents to throw their extra yard waste in the garbage. The opposite has held true and 930 less tons of garbage were disposed of in 2013 relative to 2012, a decrease of about 9%. At the same time, the amount of yard waste tonnage collected at the curb decreased in 2013 by about 10% or 1,492 tons. It could be inferred that the substantial decrease in yard waste tonnage implies an increase in illegal dumping activity; however, the decrease can mostly be attributed to a drastic 24% decrease in annual rainfall between March-July 2013 relative to March-July 2012. For the City of Seattle, this lower-than-average rainfall during the prime growing season resulted in a 27% decrease in the amount of yard waste collected in 2013. Beyond the weather pattern, other factors that accounted for some the decrease in yard waste tonnage in Kirkland included:

- Residents deferring large yard clean-up projects or hiring landscapers to haul large loads
- Self-haul diversion to private organics processors such as Pacific Topsoils and Cedar Grove
- Self-haul diversion to King County transfer stations
- Backyard composting

In terms of impacts to the single family recycling diversion rate, the rate in 2013 increased slightly to 67.9% in 2013 from 67.8% in 2012. All things being equal, if the 1,492 tons less yard waste collected in 2013 relative to 2012 was included in calculating the 2013 diversion

rate, then the total recycling diversion rate would have been 1.5 percentage points higher at 69.3%.



Behavioral Impacts

As shown above, the number of extra units of yard waste collected in 2013 fell by 55% relative to 2012. Given that the amount of yard waste tonnage collected only dropped 10%, the drop in the number of extras is indicative of a behavioral change on the part of residents: they're simply using all the capacity provided in their yard waste carts. When there was no limit on the amount of extra yard waste in the past, there was no incentive for customers to pack their carts full or even use their carts at all. Other behaviors seen include:

- Some customers regularly use extra space in a neighbor's cart to avoid extra charges.
- Many customers that have historically placed out large amounts of yard waste have opted to temporarily subscribe to one or more additional 96 gallon yard waste carts at \$12.92/month during the spring growing or fall leaf seasons. This is a more economical alternative than paying \$5.07 per 32 gallon extra.
- To better manage their yard waste, others attended free Backyard Composting 101 classes offered by Solid Waste's Sustainability Education Series. Classes held to date have been sold out and 50 free backyard composting bins have been distributed. Classes will continue to be offered in the spring and fall as long as there is demand.

Rate Impacts

Based upon the pre-2013, post-annexation use of the unlimited yard waste service, rate payers have saved approximately \$156,000 between January 2013 and May 2014.

Administrative Impacts

Since the new policy was implemented in 2013, Solid Waste staff has responded to about 100 complaints out of a customer base of 20,000. The majority of the complainants called to request a credit claiming that they were unaware of the new policy and did not read the aforementioned informational materials that were distributed. Each complaint received has been considered on a case-by-case basis but, out of fairness, credits have consistently not been issued to customers that have chosen to ignore the numerous informational materials made available. If collection service was provided in full by WMI and no extenuating circumstances existed, then the issuance of a credit would constitute a gift of public funds.

Some of the extenuating circumstances that have led to a negotiated settlements or full credits include:

- Customers disputing the number of extra units that were placed out for collection
- A neighbor's yard waste extras inadvertently assigned to the customer's account
- The customer had possession of an extra cart or carts for which he was not being billed. Each time the extra 96 gallon cart was placed out, three extras were accrued ($3 \times 32 = 96$). These issues have been resolved by crediting the customer for all of the extras but back billing for the monthly fee for each extra yard waste cart. In the fall 2013 and spring 2014, Solid Waste and WMI pro-actively conducted yard waste route audits to identify customers with extra carts to give them the option to subscribe to the extra cart(s) service or have their additional cart(s) picked up.
- Customer used a neighbor's cart and left it in front of his house which resulted in the accrual of three extra charges.



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MEMORANDUM

To: City Council Finance Committee

From: John MacGillivray, Solid Waste Programs Lead
Marilynne Beard, Interim Public Works Director

Date: July 29, 2014

Subject: Changes to Local Hazardous Waste Management Program Rate Structure

RECOMMENDATION

Staff recommends that the Finance Committee receive a briefing on the new Local Hazardous Waste Management Program in King County (LHW) rate structure as approved by the King County Board of Health on July 19, 2014.

BACKGROUND

For more detail, please refer to these attachments provided by Local Hazardous Waste Management Program staff:

Attachment 1: A Staff Report to the King County Board of Health (April 17, 2014) and the Attachment 2: Frequently Asked Questions for King County Rate Payers (May 22, 2014) Attachment 3: Recommended Rate Design for Solid Waste Fee – FCS Group (December 2013)

Services Provided by the Local Hazardous Waste Management Program

The LHW Program fulfills local government's responsibilities under State law to manage hazardous wastes from single family and multifamily residents and limited volumes of waste generated by small businesses. The Program serves approximately 1.2 million residents and a 60,000 small businesses (small quantity generators (SQGs)) in 38 King County cities by providing for the safe disposal of hazardous wastes such as oil-based paints, pesticides, automobile products, various solvents and chemicals, batteries, and mercury-containing lights and thermostats. An SQG generates less than 220 lbs/27 gallons of hazardous waste in a given month and stores less than 2,200 lbs/five 55 gallon drums of hazardous waste. Medium and large quantity generators are regulated by the Department of Ecology.

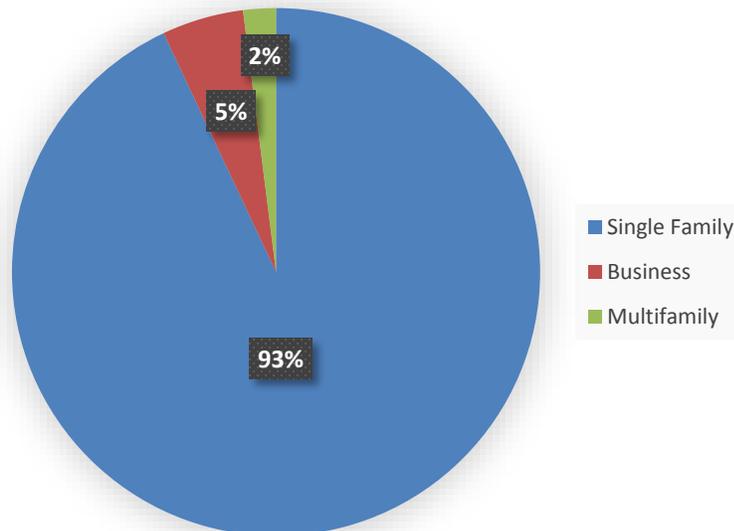
Moderate risk hazardous waste collection services are provided at four permanent facilities and a seasonal Waste Mobile that visits various communities through the County. The Waste Mobile typically comes to Kirkland for one weekend each year. The Program also provides prevention and recognition programs like EnviroStars to reduce risk and exposure to hazardous wastes and is active in advocating for product stewardship initiatives such as the E-Cycle Washington Program, the new Light Cycle Washington Program, and secure medicine take-back initiatives.

The Program provides grant funding to cities to assist them collect hazardous wastes and Kirkland Solid Waste receives about \$25,000 each year.

How is the Program Funded?

Funding for the program is provided by fees charged to single family and multifamily residential and commercial solid waste collection accounts (61%), transfer station use (14%), waste water utilities (20%), and grants (5%). The LHW fees are collected from 503,102 accounts across King County and are broken down as shown in *Chart 1*. Currently, each single family customer pays a flat fee of \$1.08 per month and each multifamily property and business pays a flat fee of \$11.24 per month. In Kirkland, the LHW fees are collected from customers on their bi-monthly solid waste bills and the City subsequently remits fees collected to the LHW Program on a quarterly basis. The LHW fees are not included in Kirkland’s Solid Waste rates and appear as separate line items on customers’ bills.

Chart 1: Collection Services by Type



Discussion of Rate Structure Change

On July 17, the King County Board of Health unanimously approved a revenue-neutral structural change to its commercial and multifamily account fees to more fairly distribute fees among affected ratepayers. The new rates will take effect on April 1, 2015. Instead of paying a flat rate, the new fee is roughly based upon the volume of solid waste generated so that larger generators pay a higher fee. The new rate structure will not affect single family customers which account for 93 percent of the rate base nor will it affect transfer station or waste water fees. Under the new multifamily and commercial rate structure, 20% of customers will pay less, 71% will pay about a dollar more, and 8% will pay about \$35 more.

Three rate tiers have been created and rates will be charged based upon the size of a customer’s solid waste container(s) and the number of service units a customer has in each tier, as shown in *Table 1*. A “service unit” is defined as “...one or more containers of the same size

from which solid waste is collected on the same regular or on-call schedule from one site, containing either compacted or uncompacted solid waste.”

For example, an apartment property with one 6-yard container picked up once per week and another property with one 6-yard container picked up twice per week would each have only one service unit in the Medium Tier. Both would pay \$12.01 per month. Volume is roughly accounted for in the model by distinguishing between the same sized containers with a different number of pickups per week. For instance, a single property with one 6-yard container picked up once per week and one 6-yard container picked up twice per week, by definition, would have two Medium tier service units and pay \$24.02/month.

However, the number of containers for each service level is not included in the service unit calculation. A property with four 6-yard containers picked up once per week will pay the same and a property with one 6-yard container picked up once per week.

Rate Tier	Solid Waste Container Size	Current LHW Fee	New LHW Fee
1. Small	≤ .48 cy/96 gal (Cart or can)	\$11.24/mo.	\$1.46/mo.
2. Medium	.48 cy/96 gal < 10 cy (Dumpster)	\$11.24/mo.	\$12.01/mo.
3. Large	≥ 10 cy (Roll-off container)	\$11.24/mo.	\$46.15/mo.

Rate Impacts to Kirkland Customers

Table 2 presents several real world examples from actual Kirkland multifamily and commercial customers and shows how individual service units are assigned based upon the size of a container and the frequency of service. The volume per week for each customer roughly tracks with the amount of the fee increase and the largest properties and businesses will see a proportionally larger increase where the medium and smaller customers will see a nominal increase or a decrease, respectively.

The Volume Tier Alternative Rate Model

In consultation with local solid waste haulers and several cities, the LHW Program did propose an alternative to the new “Container Tier” model. The alternative “Volume Tier” model would have based the LHW fees off of the actual total weekly volume (number of containers X container size X number of pickups per week). However, cities including Kirkland and Waste Management contended that this option was too administratively cumbersome given that the components making up the volume calculation can vary significantly from month-to-month and even week-to-week and that Waste Management’s billing software is unable to effectively report the volume calculations to those cities that do their own billing such as Kirkland, Auburn, and Renton. The alternative volume tier model would have calculated volume by incorporating pick-up frequency, compaction, and multiple containers of the same size with different service frequencies but would have also resulted in a more complicated rate structure for cities and Waste Management. The less complex alternative Container Tier model tries to approximate the accuracy of the volume tier model by substituting the container size as a proxy for actual volume.

Shortcomings of Container-based Rate Structure

The LHW Program-stated goals of the new rate structure were to provide for fairness by achieving better *equity* among commercial and multifamily ratepayers and *feasibility* to ensure that the changes could be effectively incorporated within various city financial systems. The LWH Program readily admits that the new rate model is imperfect but nonetheless does a comparably better job of creating a higher level of rate equity by ensuring that most of the larger generators of waste are paying more than smaller generators. However, the Container Tier rate model falls significantly short of achieving the more precise equity seen in the Volume Tier model.

- **Customers with the same weekly garbage service volume may pay different fees.**

For example, an apartment property with one 6-yard container picked up once per week and one 6-yard container picked up twice per week would have two service units in the Medium Tier and would pay \$24.02 per month. A similar property with one 6-yard container picked up three times per week would only have one service unit and pay \$12.01 per month. The weekly volume for each property is the same (18 cubic yards) but each property will pay different fees. However, less than 6% of customers have more than one service level within their accounts and outreach can be provided to those customers to advise them that consolidation of services can save them money on LHW fees as well as solid waste collection costs.

- **Fees are not always equitable between the tiers**

A customer with one 6-yard dumpster picked up three times per week has 18 cubic yards of volume per week and pays the Medium Tier fee of \$12.01. A roll-off customer with a 10-yard roll-off drop box picked up once per week has only 10 cubic yards of volume per week but will pay a disproportionate LHW fee of \$46.15 per month.

- **The rate model does not account for compaction ratios.**

A customer with a 6-yard compactor pays the Medium Tier rate when technically it should pay the higher Large Tier rate. Compactors compact at about a 2.5-to-1 ratio which makes the actual volume of the compactor in this example actually 15 cubic yards and more appropriate to be included in the Large Tier.

- **The amount of garbage volume is not necessarily directly related to the amount of hazardous waste that a business or multifamily property produces.**

For example, Small Business A might have several large dumpsters due to the nature of its operations but creates very little if any hazardous wastes. However, Small Business B may have just a couple of 96-gallon carts but may frequently haul a substantial amount of hazardous wastes to LHW Program collection sites. Business B will pay less fees than Business A but will use a disproportionate amount of system services and resources.

Implementation Plan

The new LHW Program fee structure will take effect on April 1, 2015. In the interim, City of Kirkland Utility Billing staff will have to contract with the utility billing software vendor, Springbrook, to generate a new fee code to ensure that the new fees are applied to the accounts correctly. Additionally, Springbrook software will have to be made capable to report

out the revenues that have collected on the new fee code to ensure the fees are accurately remitted. Kirkland staff advised LWH Program staff that the City would request LHW funding for a one-time upgrade to the Springbrook and LHW has acknowledged its obligation to fund the upgrades. In addition to the funding for the upgrades, staff will request that the LWH Program pay for education and outreach materials to be send to all multifamily and commercial customers to advise them of the new fee structure. Similarly, City staff will begin work with Waste Management to ensure that their billing system is prepared for the change and that the rate calculations and data downloaded from Waste Management is accurate.

LHWMP Fee Structure Comparison										
Customer	# Residential Units	MSW Service Level				Monthly Fees		# Service Units	Tier Type of Service Unit	Fee Increase - Decrease
		# Containers	Container Size	Pickups per week	Volume per week	Old LHW Fee	New LHW Fee			
Large MF Property 1	200	2	4 yd	1x	102 yds	\$11.24	\$12.01	1	Medium	\$36.80
		4	4 yd	2x			\$12.01	1	Medium	
		1	8 yd	1x			\$12.01	1	Medium	
		4	8 yd	2x			\$12.01	1	Medium	
	Total					\$11.24	\$48.04	4	Total	
Large MF Property 2	149	1	25 yd Comp	1x	75 yds	\$11.24	\$46.15	1	Large	\$34.91
	Total					\$11.24	\$46.15	1	Total	
Medium MF Property	88	4	6 yd	1x	24 yds	\$11.24	\$12.01	1	Medium	\$0.77
	Total					\$11.24	\$12.01	1	Total	
Small MF Property	28	6	96 gal	1x	2.85 yd	\$11.24	\$1.46	1	Small	(\$9.78)
	Total					\$11.24	\$1.46	1	Total	
Large Business	N/A	1	25 yd	1x	37 yds	\$11.24	\$46.15	1	Large	\$46.92
		1	6 yd	2x			\$12.01	1	Medium	
	Total					\$11.24	\$58.16	2	Total	
Medium Business	N/A	1	3 yd	4x	12 yds	\$11.24	\$12.01	1	Medium	\$0.77
	Total					\$11.24	\$12.01	1	Total	
Small Business	N/A	2	96 gal	1x	0.95 yds	\$11.24	\$1.46	1	Small	(\$9.78)
	Total					\$11.24	\$1.46	1	Total	



King County

King County Board of Health

Staff Report

Agenda Item No: 8

Date: April 17, 2014

BOH Briefing No: 14-B10

Prepared by: Lynda Ransley

Subject

A proposed Rule and Regulation which changes the Local Hazardous Waste Management Program's fee structure for business and multi-family residential solid waste accounts to a volume-based tiered system; proposed changes to be effective no sooner than six months after Board of Health approval.

Summary

The Local Hazardous Waste Management (Program) is proposing a structural change to its Local Hazardous Waste (LHW) fees on business and multi-family residential solid waste accounts. The change will more fairly distribute fees among affected ratepayers, based on the volume of solid waste generated. These changes are intended to be revenue-neutral to the Program. The LHW rate structure for single-family residential accounts will not be affected, nor will transfer station or sewer account fees.

The proposed revisions to Board of Health Code Section 11.04.060 "Fees" would change the current flat monthly LHW fee on commercial solid waste accounts (business and multi-family residential) to a three-tiered rate ranging from \$1.46 to \$46.15. Tier rates would be charged for each solid waste collection service based on the size of ratepayers' solid waste container(s). The proposed change would also resolve current inconsistencies between multi-family accounts in Seattle (which are charged at the Program's residential rate of \$1.08) and those in other areas of King County (which are charged at the Program's business rate of \$11.24).

**Table 1: Proposed LHW Rates for Commercial Solid Waste Services
(Business and Multi-Family)**

Proposed Tier	Solid Waste Container Size	Current LHW Fee	Proposed LHW Fee
1. Small volume	≤ 0.48 cu. yds. (Cart or can)	\$ 11.24/mo.	\$ 1.46/mo.
2. Medium volume	0.48 to < 10 cu. yds. (Dumpster)	\$ 11.24/mo.	\$ 12.01/mo.
3. Large volume	≥ 10 cu. yds. (Roll-off container)	\$ 11.24/mo.	\$ 46.15/mo.

Background

The Local Hazardous Waste Management Program in King County is a multi-jurisdictional program for King County and its 38 cities. The Program fulfills local government responsibilities under state law (RCW 70.105.220) for managing hazardous waste from residents and in limited volumes by businesses and other “small quantity generators” (medium and large quantity hazardous waste generators are directly regulated by the Washington Department of Ecology). The Program serves King County’s 1.9 million residents and 60,000 businesses, providing safe disposal of hazardous materials, as well as delivering prevention programs to reduce exposure and risk from hazardous materials. The Program was chartered in 1990, and is authorized under Board of Health Code 11.04. Program funding comes through Local Hazardous Waste (LHW) fees, which are set by the King County Board of Health. The fee structure was established in 1990 and has not changed since. Adjustments were made to LHW fees in 1995, 2006, and 2012.

Program oversight, including approval of annual budgets and work plans, is delegated to the Program’s Management Coordination Committee. The Management Coordination Committee is comprised of representatives from Public Health - Seattle & King County, the City of Seattle, the King County Solid Waste Division, the King County Water and Land Resources Division and the Sound Cities Association.

Program Funding Structure

Program revenues come from Local Hazardous Waste (LHW) fees charged to solid waste collection accounts, transfer station use and wastewater utilities. The approximate proportion of Program revenues from LHW fee types is outlined below:

- Solid Waste Account Fees (61%)
 - Commercial (business, institutional and multi-family residential)
 - Single-family residential
- Transfer Station Fees (14%)
 - Private vehicles
 - Commercial vehicles
- Wastewater (Sewer) Fees (20%)
- Grants (5%)

Solid Waste Collection - Service Types

LHW solid waste fees are currently charged to 503,102 accounts across King County and are collected by solid waste utilities (solid waste hauling companies and cities).

Table 2: Solid Waste Collection Services by Type

Solid Waste Service Type	Number	Percent
Single-Family Residential (<i>no change proposed</i>)	467,462	93%
Commercial		
Business/Institution	25,136	5%
Multi-Family Residential	10,504	2%
TOTAL	503,102	100%

Analysis

Rate Structure Change Proposal

A change to the LHW rate structure is proposed to more fairly apportion fees among commercial ratepayers – by establishing a tiered system which assigns fees based on relative volume of solid waste generated (i.e., those generating small volumes would pay less than those generating large volumes). The proposed changes will affect only commercial accounts, which include businesses, institutions and multi-family residential complexes.

This proposed change would replace the existing flat-rate business fee with a three-tiered fee structure based upon solid waste container size. Small-volume ratepayers (using carts or cans, less than 0.48 cubic yard) would pay the Tier 1 fee (\$1.46). Medium-volume ratepayers (using dumpsters, less than 10 cubic yards) would pay the Tier 2 fee (\$12.01), and Large-volume ratepayers (using containers of 10 cubic yards or more) would pay the Tier 3 fee (\$46.15). Fees would continue to be charged on a per-month basis.

The proposed fees would be applied per solid waste “service” type charged by solid waste utilities. Billing by service type differs from the current billing unit (which is per account). This change was preferred by the billing entities, as it enables them to systematically incorporate LHW fees within their respective billing systems.

How the Proposed Change was Determined

Working with a consultant, the Program obtained data from solid waste billing entities, developed analytical models, and evaluated different billing methodologies - to capture relative solid waste volume within a rate structure. Various alternatives were analyzed and presented to the billing entities and the Management Coordination Committee for feedback. A detailed description of the analysis, alternatives considered and rationale for the recommendations presented in this proposal is contained in a report entitled Recommended Rate Design for Solid Waste Fee, Final Report (Dec. 2013) and is provided as Attachment 1. Supplemental information which updates and clarifies the December numbers is provided as Attachment 2.

Key guidance from the Management Coordination Committee for the rate structure change proposal was to balance both fairness and feasibility: 1) fairness - in terms of achieving better equity among business and multi-family ratepayers by incorporating relative solid waste volume in the determination of LHW fees, and 2) feasibility - related to how proposed changes could most effectively be incorporated within the financial systems of our various billing partners.

The proposal represented here provides greater fee equity than the current flat rate, as it incorporates consideration of volume. Some alternatives captured volume more precisely by incorporating frequency of pick-up, compaction, and/or multiple containers of the same size. However, these would have resulted in a more complicated rate structure and created significant implementation challenges for the billing entities. The selected alternative uses service type and container size as a proxy for volume, with a rate structure that can be reasonably accommodated within the billing systems of solid waste service providers.

The Program believes the existing proposal achieves increased fairness while being administratively feasible for billing entities to implement. These recommendations were approved by the Management Coordination Committee on December 17, 2013, to be brought forward to the Board of Health for consideration.

Impacts and Affected Parties

Based upon the distribution of solid waste accounts within the tiered structure (shown in Table 1), approximately 20% of ratepayers would see a significant reduction in their fees; approximately 71% would see a slight increase; and approximately 8% would see a more significant increase. The highest LHW rate (\$46.15) would still represent less than 3% of the ratepayers' solid waste collection costs.

A small percentage of commercial ratepayers (approximately 6%) have more than one service within their accounts. Under the proposed structure changes, these ratepayers will pay LHW fees on each service. LHW fees on most of these multiple service accounts (about 85%) will be less than the Tier 3 rate. A small number of multiple service accounts (about 30 countywide) will see LHW fees over \$100/month. Though higher in total, LHW fees for these ratepayers will be consistent with other commercial ratepayers and will comprise a small proportion of their total solid waste collection costs.

Conclusion

The Local Hazardous Waste Management Program's Management Coordination Committee requests that the King County Board of Health consider the proposed volume-based, tiered fee model for LHW fees on commercial solid waste accounts – as detailed above. If approved by the Board of Health, changes would become effective no earlier than six months after adoption - allowing billing entities the time necessary to incorporate the new rate structure into their billing systems.

Attachments

Attachment 1: Local Hazardous Waste Management Program in King County, *Recommended Rate Design for Solid Waste Fee, Final Report*, FCS Group (Seattle, WA: LHWMP, December 2013). Cited hereafter as *December 2013 Final Rate Design Report*.

Attachment 2: Local Hazardous Waste Management Program in King County, *Supplemental Information to December 2013 Final Rate Report*.

LOCAL HAZARDOUS WASTE RATE - STRUCTURE CHANGE PROPOSED

Frequently Asked Questions for King County Ratepayers

Updated 5.22.14

The Local Hazardous Waste Management in King County (Program) fulfills local government responsibilities under state law (RCW 70.105.220) for managing hazardous waste. The Program provides safe disposal of hazardous materials and wastes from residents and small businesses throughout King County, as well as a range of services and prevention programs to reduce exposure and risk from hazardous materials. The Program is funded by local hazardous waste (LHW) fees on solid waste (garbage) and sewer accounts, and nominal fees charged at transfer stations. Monthly LHW fees are collected on garbage accounts—currently \$1.08 for residents and \$11.24 for businesses.¹The Program is proposing to change how these fees are charged to businesses and multi-family residential solid waste accounts.

The King County Board of Health (Board) sets the Program's rates. The Board was briefed on this proposal at their April meeting. They will decide whether to adopt it at their July meeting. If the proposal is adopted, changes to the rates would become effective April 1, 2015.

1. Why is a change being proposed to LHW solid waste (garbage) fees?

The Program is interested in making its rates fairer by considering relative volumes of waste generated by different ratepayers. The current flat rate system isn't fair for businesses or multi-family residences that generate small amounts of solid waste because they are charged the same flat rate as companies and multi-family developments that produce large volumes of solid waste. Also, some multi-family residences pay different fees depending on how their accounts are structured with their garbage collection service provider. Under the new system, multi-family residences throughout King County will be charged in a consistent manner, using the same volume-based fee structure

2. Who will be affected by the change in rate structure?

Rate changes will affect commercial (business and multi-family residential) garbage accounts (7% of accounts countywide). Single-family residential accounts (93% of accounts) will not be affected. The new rate structure will be applied to all types of non-residential accounts including businesses, private enterprises, not-for-profit organizations, public agencies, schools, medical organizations and healthcare facilities. It will also apply to all multi-family residences including condominiums, apartment buildings, townhouses, and multiplexes.

3. How will rates change under the new structure?

LHW rates are currently charged as a flat fee. Under the new structure, affected accounts (businesses and multi-family residences) would pay fees based upon the size of their garbage containers. Three rates would be established, reflecting small, medium, and large-size containers. Single-family homes will continue to be charged a flat fee.

¹ See King County Board of Health Code 11.04.040.

http://www.kingcounty.gov/healthservices/health/BOH/~/_media/health/publichealth/documents/boh/code/BOHCodeTITLE11.ashx

4. Will fees change for recycling, composting, or yard waste services?

This proposed change will not affect recycling, composting, or yard waste services.

5. How much will my rates change?

If you are a business or multi-family residence, the answer depends on how much garbage you produce – fees are based on the size of your garbage container. Details are provided in the table below.

Proposed Tier	Solid Waste Container Size	Current Fee	Proposed Fee
Small volume	≤ 0.48 cu. yds. (Carts and cans)	\$ 11.24	\$ 1.46
Medium volume	> 0.48 cu. yds. and <10 cu. yds. (Dumpsters)	\$ 11.24	\$ 12.01
Large volume	≥ 10 cu. yds. (Roll-off containers)	\$ 11.24	\$ 46.15

Under the new structure, approximately 20% of accounts will pay less than they are now; 71% will pay about a dollar more, and about 8% will pay about \$35 more.

6. Are there other changes associated with the proposed new rate structure?

Yes. Fees will shift from being charged per account to being charged per “service,” so accounts that include multiple garbage collection services would now be charged separately under the proposed structure.

Example: A business with a 10-gallon garbage can and a dumpster will pay LHW fees for both services. The business would pay \$1.46 per month (for the 10-gallon can service), and \$12.01 per month (for the dumpster service) – for a total of \$13.47 per month.

The per-service billing will be similar for accounts that cover multiple sites.

Example: A school district has an 8-yard dumpster at each of its five campuses, and a 12-yard roll-off container at a sixth site.

The school district would be charged monthly fees of \$12.01 x 5 (for each 8-cubic yard dumpster service), and \$46.15 (for the 12-yard roll-off container at the sixth site) – for a total of \$107.66 per month. If the school district currently is paying the LHW fee at each site, this is an increase of \$38.76 over their current fee.

Relatively few accounts currently bundle multiple services or sites, so the number of those who will be billed for more than one service is expected to be fairly small. A relatively small number of accounts (estimated to be fewer than 50) will see rates increase to above \$100 per month.

7. How does the proposed rate structure change affect single-family residences?

The proposed LHW rate structure change does not apply to single-family residences. However, these residents would see a slight reduction in their LHW fee (a decrease of 24 cents each month), because the total cost to safely dispose of hazardous waste would be shared more fairly between small and large volume residential ratepayers.

8. Will my garbage bill look the same?

Yes, your garbage bill will look the same physically, but you may see a change in the amount you are billed for the LHW fee.

9. Who do I contact for more information?

For more information about the proposed garbage surcharges, contact Liz Tennant at Liz.Tennant@kingcounty.gov or (206) 284-7974.

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About the Local Hazardous Waste Management Program

The Local Hazardous Waste Management Program in King County (LHWMP) is a multi-jurisdictional program that focuses on reducing public and environmental exposure to hazardous materials.

Four government agencies, 37 cities, and tribal governments in King County are working together to help citizens, businesses, non-profit organizations, and government agencies reduce the threat posed by the production, use, storage, and disposal of hazardous materials and wastes. LHWMP provides services to 1.9 million residents and 60,000 businesses throughout King County. Visit us on line at www.lhwmp.org



**Local Hazardous Waste
Management Program
in King County**

**Alternate Formats Available
Voice: 206-263-3050
TTY Relay: 711**