#30

Maria Coe
SPU Drainage Rates ORD
10-26-12
Version #4

CITY OF SEATTLE

ORDINANCE _____

COUNCIL BILL 117520

AN ORDINANCE relating to drainage services of Seattle Public Utilities (SPU); amending Section 21.33.010 of the Seattle Municipal Code to update definitions; amending Section 21.33.030 of the Seattle Municipal Code to update exemptions from drainage rates and adjust drainage rates; amending Sections 21.33.050 and 21.33.070 to clarify billing and collection procedures; and amending Section 21.76.040 of the Seattle Municipal Code to revise credits to low-income drainage customers.

WHEREAS, certain definitions used for drainage billing do not accurately reflect current billing policies; and

WHEREAS, drainage rates were last increased on January 1, 2012, as authorized by Ordinance 123449 to pass through increased King County treatment charges; and

WHEREAS, Seattle Public Utilities (SPU) has identified additional infrastructure needs requiring additional capital funding; and

WHEREAS, SPU has completed a rate study showing that existing drainage rates will not provide sufficient revenues to pay the costs of providing drainage services and debt service and that rate increases therefore are required; and proposing certain undeveloped areas be exempt from drainage fees; and

WHEREAS, billing and collection procedures have been updated; and

WHEREAS, credits for qualified low-income customers need to be revised to reflect an increase in drainage rates; NOW THEREFORE,

BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

Section 1. Definitions in Subsections E, I, M, Q, and U-AA of Section 21.33.010 of the Seattle Municipal Code are amended and a new definition is added as Subsection T as follows:

SMC 21.33.010 Definitions

For purposes of this chapter, the words or phrases below shall have the following meanings:

* * *

E. "Condominiums" or "townhouses" means properties which contain ((~~more than~~))two (((~~2~~)))or more residential dwelling units which are individually owned and are billed separately for property taxes.

* * *

I. "General service properties or parcels" means properties or parcels with no existing single family or duplex dwelling unit, including vacant properties, condominium complexes, ((~~townhouses,~~)) apartment buildings, and institutional, commercial or industrial properties.

* * *

M. "Large residential property or parcel" means any single family residential property or townhouse whose billable area is 10,000 square feet or greater.

* * *

Q. "Property owner of record", also referred to as "owner" or "property owner", shall be the person or persons recorded by the King County Assessor to be the owner(s) of property and to whom property tax statements are directed.

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T. "Riparian corridors" are the riparian watercourse and riparian management area as defined in SMC 25.09.020.D.5.a.

((~~T~~))U. "Single-family residential property or parcel" means any property or parcel which contains one (1) or two (2) residential dwelling units, ((~~excluding~~))including townhouses((~~ which are considered general service properties or parcels~~)).

((~~U~~))V. "Small residential property or parcel" means any single family residential property or townhouse whose billable area is less than 10,000 square feet.

((~~V~~))W. "Stormwater facility credit" means a percentage credit, up to the allowable maximum, in accordance with Section 33.040 of this Chapter, which reduces the drainage service charge for a particular parcel because one or more approved stormwater management facilities are installed and maintained on the parcel that relieve some of the burden on the City's stormwater system.

((~~W~~))X. "Stormwater performance goals" mean minimum requirements for flow control and treatment as appropriate for the drainage discharge point and thresholds as more particularly described in the Stormwater Code Chapters 22.800 through 22.808.

((~~X~~))Y. "Stormwater system" means the entire system of flood protection and stormwater drainage and surface water runoff facilities owned or leased by the City or over which the City has right of use for the movement and control of storm drainage and surface water runoff, including both naturally occurring and man-made facilities.

((~~Y~~))Z. "Submerged" means that portion of a parcel that extends beyond the shoreline, as delineated by ((~~the City's~~)) Geographic Information System (GIS).

((~~Z~~))AA. "Utility" means Seattle Public Utilities.

* * *

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Section 2. Section 21.33.030 of the Seattle Municipal Code is amended as follows:

SMC 21.33.030 Drainage service charges and drainage rates -- Schedule -- Exemptions.

A. A drainage service charge is imposed on every parcel within the City, and the owner(s) thereof, except for the following exempted property(ies):

1. The portion of a parcel that contains ((~~H~~))houseboats ((~~and~~))or piers that extend beyond the shoreline, as delineated by Geographic Information Systems (GIS) data;

2. That portion of a parcel that is submerged. If the parcel is entirely submerged, the entire parcel is exempt. If a portion of the parcel is submerged, only the submerged part will be exempt and the remainder of the parcel shall be billed as all other properties;

3. City streets;

4. State of Washington highways, so long as the State of Washington shall agree to maintain, construct and improve all drainage facilities associated with State highways as required by the Utility in conformance with all Utility standards for maintenance, construction and improvement hereafter established by the Utility and so far as such maintenance, construction and improvements shall be achieved at no cost to the Utility or to the City; and

5. All other streets, so long as such streets provide drainage services in the same manner as City streets and the owner(s) shall agree to maintain, construct and improve all drainage facilities

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associated with such streets as required by the Utility in conformance with all Utility standards for maintenance, construction and improvement hereafter established by the Utility and so far as such maintenance, construction and improvements shall be achieved at no cost to the Utility or to the City.

6. Effective January 1, 2013, that portion of a parcel containing a riparian corridor that contains highly infiltrative pervious surface and meeting all qualification critera established by the Utility by Director's Rule under Section 3.32.020 of the Seattle Municipal Code. The Utility may consider Geographic Information System data and any other information determined necessary in identifying qualifying riparian corridors.

7. Effective January 1, 2013, that portion of a parcel containing an island that contains highly infiltrative pervious surface and less than ten percent impervious surface area. The Utility may consider Geographic Information System data and any other information determined necessary in identifying qualifying islands.

8. Effective upon the date set by Directors Rule, but no later than January 1, 2014, that portion of a parcel containing a wetland that contains highly infiltrative pervious surface and meets all qualification criteria as established by the Utility by Director's Rule under Section 3.32.020 of the Seattle Municipal Code. The Utility may consider Geographic Information System data and any other necessary information in identifying qualifying wetlands.

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B. The drainage service charge shall be based upon a parcel's estimated contribution to City-wide surface and storm water runoff. A parcel's run-off is estimated based on its size and surface characteristics, including the amount and type of impervious and pervious surface it contains.

C. Drainage service charges shall be determined as follows:

1. Small single-family residential properties shall be assigned to one of four (((~~4~~))) flat rate categories based on a billable area. Within each category, properties will be charged a uniform annual drainage rate per parcel which is calculated based on an estimated average contribution of surface and storm water runoff for the category. The applicable drainage rate shall equal the drainage service charge.

2. General service and large residential properties shall be assigned to a rate category based on the estimated percent of impervious surface contained within the parcel. Subsequently, properties assigned to the "undeveloped," "light," and "moderate" rate categories that also contain sufficient quantities of highly infiltrative pervious surface cover to meet Utility-defined performance requirements shall be assigned to a "low impact" rate category. A separate drainage rate shall apply to each general service and large residential rate category. The drainage service charge shall be calculated by multiplying the drainage rate, as determined by the parcel's rate category assignment, by the parcel's billable area (rounded to the nearest whole number of a square foot and divided by one thousand). For condominiums, the drainage service charge shall be determined for the entire parcel and then divided evenly among the owners. Present use code, site visits, planimetric maps based on aerial photography, and other information shall be used to estimate the percentage of impervious area.

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D. Drainage rates used in the calculation of drainage service charges shall be the sum of the treatment rate and the system rate, as follows:

1. Treatment rate: The "treatment rate" shall be the rate required to pay the drainage share of "treatment cost" which is the cost of wastewater treatment, interception and disposal service, and any associated costs necessary to meet Drainage and Wastewater Fund policies. The treatment rate shall be the amount obtained when (a) the projected drainage treatment cost for each rate category is divided by (b) the projected number of billing units in each rate category and the result is multiplied by ((~~one hundred eighteen percent (~~))118((~~%~~))) percent to cover the costs of taxes, low income rate assistance and other allowances. The projected treatment cost shall be the treatment cost anticipated for the upcoming calendar year, which may include an adjustment to reflect the difference, whether positive or negative, between the drainage share of expected total treatment cost for the current year and the total drainage service charge revenues attributable to the treatment rate expected for the current year. The treatment rate is designed to pass through cost changes driven by King County and may be adjusted by ordinance at any time in response to such charges.

2. System rate: The "system rate" shall be the rate required to fund the expense associated with operating, maintaining, and constructing the City's surface and stormwater management system, including any share of combined sanitary and stormwater system expense assigned to drainage.

3. The rate categories and the corresponding annual drainage rates are as follows:

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((~~Effective January 1, 2010:~~

~~Rate Category~~		~~Treatment Rate~~	~~System Rate~~	~~Total Drainage Rate~~	~~Billing Unit~~
~~Small Residential~~					
	~~Under 3000 sq. ft.~~	~~$4.48~~	~~$100.42~~	~~$104.90~~	~~per parcel~~
	~~3000 - 4999 sq. ft~~	~~$6.50~~	~~$145.96~~	~~$152.46~~	~~per parcel~~
	~~5000 - 6999 sq. ft~~	~~$8.78~~	~~$197.31~~	~~$206.09~~	~~per parcel~~
	~~7000 - 9999 sq. ft.~~	~~$11.13~~	~~$250.22~~	~~$261.35~~	~~per parcel~~
~~General Service/Large Residential~~					
~~Undeveloped~~	~~(0 - 15% impervious)~~				
	~~Low Impact~~	~~$0.44~~	~~$9.95~~	~~$10.39~~	~~per 1000 Sq. Ft.~~
	~~Regular~~	~~$0.73~~	~~$16.45~~	~~$17.18~~	~~per 1000 Sq. Ft.~~
~~Light~~	~~(16 - 35% impervious)~~				
	~~Low Impact~~	~~$0.82~~	~~$18.53~~	~~$19.35~~	~~per 1000 Sq. Ft.~~
	~~Regular~~	~~$1.09~~	~~$24.60~~	~~$25.69~~	~~per 1000 Sq. Ft.~~

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~~Moderate~~	~~(36--65% impervious)~~				
	~~Low Impact~~	~~$1.29~~	~~$28.99~~	~~$30.28~~	~~per 1000 Sq. Ft.~~
	~~Regular~~	~~$1.59~~	~~$35.73~~	~~$37.32~~	~~per 1000 Sq. Ft.~~
~~Heavy~~	~~(66--85% impervious)~~	~~$2.06~~	~~$46.20~~	~~$48.26~~	~~per 1000 Sq. Ft.~~
~~Very Heavy~~	~~(86--100% impervious)~~	~~$2.45~~	~~$54.87~~	~~$57.32~~	~~per 1000 Sq. Ft.~~

~~Effective January 1, 2011:~~

~~Rate Category~~		~~Treatment Rate~~	~~System Rate~~	~~Total Drainage Rate~~	~~Billing Unit~~
~~Small Residential~~					
	~~Under 3000 sq. ft.~~	~~$8.67~~	~~$125.39~~	~~$134.06~~	~~per parcel~~
	~~3000-4999 sq. ft~~	~~$11.21~~	~~$161.89~~	~~$173.10~~	~~per parcel~~
	~~5000-6999 sq. ft~~	~~$15.22~~	~~$219.72~~	~~$234.94~~	~~per parcel~~

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	~~7000-9999 sq. ft.~~	~~$19.22~~	~~$279.10~~	~~$298.32~~	~~per parcel~~
~~General Service/Large Residential~~					
~~Undeveloped~~	~~(0-15% impervious)~~				
	~~Regular~~	~~$1.28~~	~~$18.44~~	~~$19.72~~	~~per 1000 Sq Ft~~
	~~Low Impact~~	~~$0.80~~	~~$11.55~~	~~$12.35~~	~~per 1000 Sq Ft~~
~~Light~~	~~(16-35% impervious)~~				
	~~Regular~~	~~$1.92~~	~~$27.70~~	~~$29.62~~	~~per 1000 Sq Ft~~
	~~Low Impact~~	~~$1.52~~	~~$21.95~~	~~$23.47~~	~~per 1000 Sq Ft~~
~~Moderate~~	~~(36-65% impervious)~~				
	~~Regular~~	~~$2.78~~	~~$40.11~~	~~$42.89~~	~~per 1000 Sq Ft~~
	~~Low Impact~~	~~$2.23~~	~~$32.20~~	~~$34.43~~	~~per 1000 Sq Ft~~
~~Heavy~~	~~(66-85% impervious)~~	~~$3.66~~	~~$52.91~~	~~$56.57~~	~~per 1000 Sq Ft~~
~~Very Heavy~~	~~(86-100% impervious)~~	~~$4.33~~	~~$62.57~~	~~$66.90~~	~~per 1000 Sq Ft~~))

Effective January 1, 2012:

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Rate Category		Treatment Rate	System Rate	Total Drainage Rate	Billing Unit
Small Residential					
	Under 3000 sq. ft.	$11.44	$137.89	$149.33	per parcel
	3000-4999 sq. ft	$14.78	$178.01	$192.79	per parcel
	5000-6999 sq. ft	$20.06	$241.60	$261.66	per parcel
	7000-9999 sq. ft.	$25.34	$306.89	$332.23	per parcel
General Service/Large Residential					
Undeveloped	(0-15% impervious)				
	Regular	$1.69	$20.27	$21.96	per 1000 Sq Ft
	Low Impact	$1.06	$12.70	$13.76	per 1000 Sq Ft
Light	(16-35% impervious)				
	Regular	$2.53	$30.45	$32.98	per 1000 Sq Ft
	Low Impact	$2.01	$24.13	$26.14	per 1000 Sq Ft
Moderate	(36-65% impervious)				

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	Regular	$3.66	$44.10	$47.76	per 1000 Sq Ft
	Low Impact	$2.94	$35.41	$38.35	per 1000 Sq Ft
Heavy	(66-85% impervious)	$4.83	$58.18	$63.01	per 1000 Sq Ft
Very Heavy	(86-100% impervious)	$5.70	$68.79	$74.49	per 1000 Sq Ft

Effective January 1, 2013

Rate Category		Treatment Rate	System Rate	Total Drainage Rate	Billing Unit
Small Residential					
	Under 3000 sq. ft.	$14.59	$148.13	$162.72	per parcel
	3000-4999 sq. ft	$18.92	$192.04	$210.96	per parcel
	5000-6999 sq. ft	$25.68	$260.71	$286.39	per parcel
	7000-9999 sq. ft.	$32.30	$330.05	$362.34	per parcel
General Service/Large Residential					
Undeveloped	(0-15% impervious)				
	Regular	$2.06	$20.91	$22.97	per 1000 Sq Ft

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	Low Impact	$1.21	$12.25	$13.46	per 1000 Sq Ft
Light	(16-35% impervious)				
	Regular	$3.20	$32.45	$35.65	per 1000 Sq Ft
	Low Impact	$2.51	$25.53	$28.04	per 1000 Sq Ft
Moderate	(36-65% impervious)				
	Regular	$4.65	$47.22	$51.87	per 1000 Sq Ft
	Low Impact	$3.74	$37.98	$41.72	per 1000 Sq Ft
Heavy	(66-85% impervious)	$6.25	$63.42	$69.67	per 1000 Sq Ft
Very Heavy	(86-100% impervious)	$7.39	$75.06	$82.45	per 1000 Sq Ft

Effective January 1, 2014

Rate Category		Treatment Rate	System Rate	Total Drainage Rate	Billing Unit
Small Residential					
	Under 3000 sq. ft.	$17.44	$161.93	$179.37	per parcel
	3000-4999 sq.	$22.62	$209.93	$232.55	per parcel

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	ft				
	5000-6999 sq. ft	$30.70	$285.00	$315.70	per parcel
	7000-9999 sq. ft.	$38.61	$360.82	$399.43	per parcel
General Service/Large Residential					
Undeveloped	(0-15% impervious)				
	Regular	$2.46	$22.86	$25.32	per 1000 Sq Ft
	Low Impact	$1.44	$13.39	$14.83	per 1000 Sq Ft
Light	(16-35% impervious)				
	Regular	$3.82	$35.47	$39.29	per 1000 Sq Ft
	Low Impact	$3.01	$27.90	$30.91	per 1000 Sq Ft
Moderate	(36-65% impervious)				
	Regular	$5.56	$51.62	$57.18	per 1000 Sq Ft
	Low Impact	$4.47	$41.51	$45.98	per 1000 Sq Ft
Heavy	(66-85% impervious)	$7.47	$69.33	$76.80	per 1000 Sq Ft
Very Heavy	(86-100%	$8.84	$82.05	$90.89	per 1000 Sq

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	impervious)				Ft

Effective January 1, 2015

Rate Category		Treatment Rate	System Rate	Total Drainage Rate	Billing Unit
Small Residential					
	Under 3000 sq. ft.	$17.34	$179.93	$197.27	per parcel
	3000-4999 sq. ft	$22.48	$233.27	$255.75	per parcel
	5000-6999 sq. ft	$30.52	$316.67	$347.19	per parcel
	7000-9999 sq. ft.	$38.38	$400.90	$439.28	per parcel
General Service/Large Residential					
Undeveloped	(0-15% impervious)				
	Regular	$2.45	$25.40	$27.85	per 1000 Sq Ft
	Low Impact	$1.43	$14.88	$16.31	per 1000 Sq Ft
Light	(16-35% impervious)	-	-		
	Regular	$3.80	$39.41	$43.21	per 1000 Sq

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					Ft
	Low Impact	$2.99	$31.01	$34.00	per 1000 Sq Ft
Moderate	(36-65% impervious)				
	Regular	$5.53	$57.36	$62.89	per 1000 Sq Ft
	Low Impact	$4.45	$46.12	$50.57	per 1000 Sq Ft
Heavy	(66-85% impervious)	$7.43	$77.03	$84.46	per 1000 Sq Ft
Very Heavy	(86-100% impervious)	$8.79	$91.16	$99.95	per 1000 Sq Ft

4. SPU shall provide a 10((%)) percent reduction in the drainage service charge for parcels containing new or remodeled commercial buildings that, after July 27, 2003, install and utilize rainwater harvesting systems that meet the performance requirement that the systems are sized to use the amount of rain that falls on the roofs of such buildings during a one year, 24-hour storm event. A system that involves indoor uses of rainwater must be permitted by Seattle-King County Department of Health to qualify for the rate reduction. A system that relies solely on the capture and indoor use of rainwater shall qualify for the drainage service charge reduction only if the system is sized to meet the performance requirement stated above. Qualifying for the drainage service charge reduction does not relieve the property owner from the obligation to comply with applicable stormwater and drainage code requirements for the buildings and site.

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5. Open space properties or parcels shall be charged only for the area of impervious surface and at the rate under which the parcel is classified using the total parcel acreage.

E. Each bill shall be rounded to the nearest cent. The minimum annual drainage service charge shall be ((~~Five Dollars ($~~))$5((~~)~~)) per parcel.

Section 3. Section 21.33.050 of the Seattle Municipal Code is amended as follows:

SMC 21.33.050

Drainage service charges -- Adjustments.

A. Any person receiving a drainage service charge may apply in writing to the Utility for a bill adjustment. Filing such a request does not extend the period for payment of the charge. Requests for adjustments on delinquent accounts will not be acted upon until paid in full.

B. A request for a bill adjustment may be based on one (((~~1~~))) or more of the following:

1. The billable area of the parcel is incorrect;

2. The percent of impervious surface on a large residential or general service parcel places the parcel in a different rate category than the category assigned by the Utility;

3. The parcel is a large residential or general service parcel which contains highly infiltrative pervious surface and meets all Utility requirements for low-impact rate category designation but has not been properly assigned to such a category by the Utility;

4. The parcel meets the definition of exempted property;

5. The parcel is wholly or partially outside City of Seattle limits; or

6. The parcel's stormwater facility credit was calculated with inaccurate data related to the parcel or to the approved stormwater management facility.

7. The drainage service charge is otherwise erroneous in applying the terms of this chapter.

C. Applications for adjustments may be made to the Utility. The burden of proof shall be on the applicant to show that the ((~~rate~~)) adjustment sought should be granted. All decisions of the Utility shall be final.

D. Applications for ((~~rate~~)) adjustment must be filed within ((~~one (1) year~~))90 days of the billing date((~~. To receive credit in the current billing year, however, applications for rate adjustment must be made no more than ninety (90) days after the billing date~~)), except for the low-income credit, which shall be administered as defined in Seattle Municipal Code Section 21.76.030. Applications received after ((~~ninety (~~))90((~~)~~)) days of the billing date shall be effective for subsequent years only.

E. If the Utility grants an adjustment which reduces the charge for the current year, the applicant shall receive an adjusted bill or be refunded the amount overpaid. If the Utility determines that an adjustment should be made which increases the charge due for the current year, the applicant shall receive a supplemental bill that will be due within ((~~forty-five (~~))45((~~)~~)) days of the date of issue. Applicants for rate adjustments shall be notified in writing of the Utility's decision.

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Section 4. Subsection 21.33.070.B of the Seattle Municipal Code is amended as follows:

SMC 21.33.070 Billing and Collection Procedures

B. The drainage service charge shall be displayed and billed on the annual King County property tax statement for the parcel and shall be mailed to the name and address shown on the real property tax roll at the time annual property bills are prepared. ((~~Properties not subject to property taxes and not otherwise exempted will receive a separate drainage service charge billing statement.~~)) The drainage service charge billed on the annual King County property tax statement((~~, or separate drainage service charge billing statement,~~)) shall be net of any stormwater facility credit, that has been approved by December 1st of the calendar year prior to the applicable billing year. Stormwater facility credit applications that are received timely in accordance with Section 21.33.040.B, but not approved until after December 1, will receive credit within the applicable billing year.

* * *

Section 5. Subsection 21.76.040.A.2 of the Seattle Municipal Code is amended as follows:

21.76.040 Low Income Rate Credits.

A. Drainage, Wastewater, and Water. Persons qualified by the Human Services Department as eligible recipients of low income utility credits provided for in Section 21.76.010 (eligible recipients) shall be granted low income billing credits in the following amounts:

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* * *

2. Drainage. Eligible recipients residing inside The City of Seattle shall receive the following credits for drainage services based on dwelling type:

	((~~Effective January 1, 2010~~	~~Effective January 1, 2011~~	Effective January 1, 2012	Effective January 1, 2013	Effective January 1, 2014	Effective January 1, 2015
Single-family	~~$8.95 per month~~	~~$9.80 per month~~	$10.90 per month	$11.93 per month	$13.15 per month	$14.47 per month
Duplex	~~4.29 per month~~	~~$4.90 per month~~	$5.45 per month	$5.97 per month	$6.58 per month	$7.24 per month
Multifamily	~~0.92 per month~~	~~$1.05 per month~~))	$1.17 per month	$1.28 per month	$1.41 per month	$1.55 per month

* * *

Section 6. The provisions of this ordinance are declared to be separate and severable. If a court of competent jurisdiction, all appeals having been exhausted or all appeal periods having run, finds any provision of this ordinance to be invalid or unenforceable as to any person or circumstance, then such provision or provisions shall be null and severed from the rest of this

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ordinance with respect to the particular person or circumstance. The offending provision with respect to all other persons and all other circumstances, as well as all other provisions of this ordinance, shall remain valid and enforceable.

Section 7. This ordinance shall take effect and be in force 30 days from and after its approval by the Mayor, but if not approved and returned by the Mayor within ten days after presentation, it shall take effect as provided by Seattle Municipal Code Section 1.04.020.

Passed by the City Council the ____ day of _____, 2012, and signed by me in open session in authentication of its passage this _____ day of _____, 2012.

_____
President _____of the City Council

Approved by me this ____ day of _____, 2012.

_____
Michael McGinn, Mayor

Filed by me this ____ day of _____, 2012.

_____
Monica Martinez Simmons, City Clerk

(Seal)

COUNCIL CLERK

Maria Coe/MAC
SPU Drainage Rates FISC
June 27, 2012
Version #2

Form revised: December 6, 2011

FISCAL NOTE FOR NON-CAPITAL PROJECTS

Department:	Contact Person/Phone:	CBO Analyst/Phone:
Seattle Public Utilities	Maria Coe 233-7905	Karl Stickel 684-8085

Legislation Title:
AN ORDINANCE relating to drainage services of Seattle Public Utilities (SPU); amending Section 21.33.010 of the Seattle Municipal Code to update definitions; amending Section 21.33.030 of the Seattle Municipal Code to update exemptions from drainage rates and adjust drainage rates; amending Sections 21.33.050 and 21.33.070 to clarify billing and collection procedures; and amending Section 21.76.040 of the Seattle Municipal Code to revise credits to low-income drainage customers.

Summary of the Legislation:
This ordinance adopts drainage rates for general service and residential customers in 2013, 2014, and 2015 and adjusts the low-income assistance credits for drainage customers. It also amends sections of the Seattle Municipal Code related to definitions.

Background:
Drainage rates were last raised on January 1, 2012. The cost of drainage services are supported by rates charged to drainage customers. These rates are set in accordance with financial policies adopted by the City Council. Seattle Public Utilities has completed a rate study showing that existing rates will not provide sufficient revenues to fund planned infrastructure investment and new operating programs to be implemented between 2013-2015, including Operations and Maintenance (O&M) programs to meet National Pollutant Discharge Elimination System (NPDES) compliance requirements, Genesee, Windermere, and Henderson combined sewer overflow (CSO) projects, sewer pipe rehabilitation, the Long Term Control Plan, and utility relocation work necessitated by the Alaskan Way Viaduct Replacement Project. Rate increases in 2013 - 2015 are required to pay these additional costs and allow the Drainage and Wastewater Fund to maintain strong financial performance. In addition, the study proposes offering additional discounts to large natural areas that offer systemic benefits greater than those offered by other types of undeveloped lands or which clearly do not benefit from or impact the stormwater system.

A complete description of the 2013-2015 rate package is contained in the 2013-2015 Drainage and Wastewater Fund Rate Study.

Please check one of the following:

____ **This legislation does not have any financial implications.**

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_X_ This legislation has financial implications.

Anticipated Revenue/Reimbursement Resulting from this Legislation:

Fund Name and Number	Department	Revenue Source	2012 Revenue	2013 Revenue
Drainage and Wastewater Fund 44010	Seattle Public Utilities	Drainage Utility Services	$0	$7,262,288
TOTAL			**$0**	$7,262,288

Revenue/Reimbursement Notes:
The 2013 revenues are the additional revenues resulting from the increase in SPU's drainage rates. These revenues include the impact of the additional drainage credits in the amount of $92,400 for 2013.

Other Implications:

a) **Does the legislation have indirect financial implications, or long-term implications?**
No

b) **What is the financial cost of not implementing the legislation?**
The Drainage and Wastewater Fund would not fully recover the cost of its business operations.

c) **Does this legislation affect any departments besides the originating department?**
Several City departments have facilities that incur drainage costs. These facilities' costs will increase commensurate with the rate increases proposed in this legislation. The impacted departments include: Seattle Center, Seattle City Light, the Department of Neighborhoods, the Seattle Department of Transportation, the Department of Finance and Administrative Services, the Department of Parks and Recreation, and the Seattle Public Library.

d) **What are the possible alternatives to the legislation that could achieve the same or similar objectives?**
Not raising the rates at this time would result in the Drainage and Wastewater Fund failing to recover the cost of its operations in accordance with its financial policies. Alternatively, the Fund could meet its financial policies without raising rates by cutting the cost of its operations by the amounts shown above; however, this would result in an inability to pay for basic operations or make important investments in the system.

e) **Is a public hearing required for this legislation?**
No.

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Maria Coe
SPU Drainage Rates FISC EXH A
June 22, 2012
Version #1

Seattle Public Utilities
Drainage and Wastewater Fund
2013-2015 Rate Study
JUNE 2012

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I. EXECUTIVE SUMMARY

The Drainage and Wastewater Utility provides wastewater and stormwater management services to residences and businesses in the City of Seattle. It is supported almost entirely by utility fee revenue. For wastewater, Seattle Public Utilities ("SPU") collects charges based on metered water usage via the SPU combined utility bill. For drainage, SPU charges City of Seattle property owners fees based on property characteristics contributing to stormwater runoff. The drainage fee appears as a line item on King County property tax bills. Wastewater and drainage rates consist of a system component, set to recover SPU expenses, and a treatment component, set to recover payments to King County and Southwest Suburban Sewer District, whose facilities treat the wastewater conveyed by SPU's system.

Wastewater and drainage rates were last increased on January 1, 2012, when wastewater rates were increased by 3.9 percent and drainage rates were increased by 11.4 percent.

Since 2008, a percentage of the costs associated with the combined stormwater and wastewater system ("Combined System"), previously assigned solely to wastewater, have been recovered through drainage rates in order to recognize that a portion of these costs support the drainage system.

Rate increases for both drainage and wastewater will be necessary in 2013, 2014, *and* 2015 for the Drainage and Wastewater Enterprise Fund ("DWF") to cover increasing operating and capital expenses, which are required to address significant needs for both systems. Cash and debt financing of new capital projects is a major driver of rates for both drainage and wastewater. Some of the major capital programs proposed for 2013- 2015 are:

- Flooding Control and Sanitary Sewer Capacity
- Windermere, Genesee, Henderson Combined Sewer Overflow (CSO)
- CSO Long Term Control Plan
- Sewer Pipe Rehabilitation

In June 2012, King County approved a 10.2 percent increase for the 2013 sewerage treatment rate. The impact of this increase on the wastewater and drainage rates is discussed in Appendix A. Per Seattle Municipal Code, 21.28.040, the King County treatment rate is adopted via the "pass-through mechanism." As a result, legislation adjusting City of Seattle rates for the King County treatment rate will be submitted separately.

The total projected DWF direct service rate revenue requirement is $291.4 million in 2013, $298.2 in 2014, and $306.4 million in 2015. In order to satisfy these revenue requirements, the typical monthly residential wastewater bill will require an increase of $0.77 in 2013, $0.56 in 2014, and $0.47 in 2015. Also, the typical monthly residential drainage fee will need to increase by $2.17 in 2013, $2.40 in 2014, and $2.60 in 2015.

The proposed rate increases will allow the DWF to meet or exceed all financial policy targets in 2013, 2014, and 2015. Table I-1 presents the annual revenue requirements and the monthly impact of the proposed fees for different drainage customers and the typical residential wastewater customer.

Table I-1

Proposed Drainage & Wastewater Revenue Requirement and Bill Impacts

	2012	2013 Proposed	2014 Proposed	2015 Proposed

	Projected		Change from 2012		Change from 2013		Change from 2014
Revenue Requirement ($M)[1]							
Wastewater[2]	$214.0	$211.4	($2.5)	$210.3	($1.1)	$209.9	($0.4)
Drainage	$74.7	$79.9	$5.2	$87.8	$7.9	$96.5	$8.7
Total DWF	**$288.7**	**$291.4**	**$2.6**	**$298.2**	**$6.8**	**$306.4**	**$8.3**
Wastewater							
Rate per CCF[1,3]							
Treatment	$6.94	$6.88	($0.06)	$6.91	$0.03	$6.96	$0.05
System	$3.74	$3.98	$0.24	$4.08	$0.10	$4.14	$0.06
Total	$10.68	$10.86	$0.18	$10.99	$0.13	$11.10	$0.11
Typical Monthly Residential Bill[1,4]	**$45.92**	**$46.70**	**$0.77**	**$47.26**	**$0.56**	**$47.73**	**$0.47**
Typical Monthly Drainage Bills[1]							
Typical Residential (5,000-6,999 sq ft)	$21.81	$23.97	$2.17	$26.37	$2.40	$28.97	$2.60
Convenience Store (8,700 sq. ft.)	$54.08	$60.07	$5.99	$66.06	$5.99	$72.58	$6.52
Supermarket (125,000 sq. ft.)	$776.04	$863.13	$87.09	$949.19	$86.07	$1,042.86	$93.67

Table I-1 Notes:

1) Wastewater and drainage revenue requirements, rates, and bill impacts assume no change in the King County treatment rate; however, King County in June 2012 approved a 10.2 percent increase in its 2013 treatment rate. Please refer to the Appendix A for an analysis of the drainage and wastewater rate impacts associated with this change.

2) Wastewater revenue excludes industrial surcharge.

3) "CCF" is an industry acronym for 'one hundred cubic feet' and is equivalent to 748 gallons.

4) The typical monthly residential wastewater bill is based on 4.3 ccf per month.

II. INTRODUCTION

The City of Seattle operates an integrated storm and sanitary sewerage system. Although funded through separate rate structures, the City's stormwater ("drainage") and sanitary sewer ("wastewater") systems share common infrastructure, administrative and maintenance services, debt financing, and financial budgeting and reporting systems.

SPU finances the acquisition, operation, and maintenance of Seattle's drainage and wastewater system through the DWF. An enterprise fund functions like a self-supporting business that must generate operating revenues, predominantly through user charges (or "rates"), which are sufficient to cover all operating costs and meet financial policy targets. Separate drainage and wastewater service charges, or rates, are the source of most revenues. Non-rate revenues include permit fee revenue, operating grants, capital grants, and contributions in aid of construction ("CIAC"). These non-rate revenues reduce the amount of revenue that must be recovered through rates.

Financial policies provide a guiding framework for DWF finances. The policies help determine how much revenue DWF must collect from its customers each year to remain financially healthy while meeting its financial obligations. In addition, financial policies:

- Shape the financial profile that DWF presents to lenders and other members of the financial community;
- Establish DWF's exposure to financial risk; and
- Allocate DWF's costs between current and future ratepayers.

DWF financial policies were adopted by City Council in 2003 by Resolution 30612. The policies and associated targets, as well as their importance are as follows:

Net Income
Net income should be generally positive. Positive net income is a contingency against projection variances and uncertainties regarding revenues. It is also a signal to bond rating agencies that the City is committed to establishing fees that cover costs.

Net income is projected to be positive for 2013, 2014, and 2015.

Debt Service Coverage Ratio
Debt service coverage should be at least 1.8 times debt service cost in each year on a planning basis. A higher debt service coverage ratio means that more revenue is available after debt payments are made. This reduces financial risk and provides more flexibility to respond to revenue shortfalls.

Projected coverage, including coverage for a new bond issue in 2014, is well above both the legal bond covenant requirement (1.25) and the policy target (1.80).

Operating Cash Balance
The year-end operating cash balance should be at least equal to one month's contract expenses. The purpose of the cash balance target is to have sufficient cash on hand to pay operating expenses, taking into account the lag between cash disbursements and cash receipts, and to provide a reserve against projection variances. Contract costs for treatment of sewage

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and stormwater by King County is the DWF's largest expense, thus it is used as a proxy for the DWF cash balance target. In 2012, one month of treatment expenses is $10.4 million.

Year-end cash balance projections are at or above the policy target.

Cash Contribution to the Capital Improvement Program (CIP)
The cash contribution to the CIP should be at least 25% of total CIP expenses based on a four-year average. This policy 1) helps to prevent a rapid increase in debt levels and 2) limits the escalation in the debt-to-asset ratio.

The four-year rolling average of cash contribution to the CIP is expected to be at least 25% for 2013, 2014, and 2015.

Debt to Asset Ratio
The ratio of debt to assets should not exceed 70%. This ratio is an indicator of reliance on debt for infrastructure financing. A high ratio suggests less flexibility, as a greater portion of each year's revenues is used to repay debt.

Over the rate period, the debt to asset ratio is expected to remain below the 70% threshold.

Variable Rate Debt
No more than 15% of total debt should be variable rate debt. A cap on variable rate debt balances the advantages of lower interest costs with the risk of unexpected increases in interest rates.

The DWF currently does not have any variable rate debt and does not have any plans to issue any variable rate debt.

Table II-1 presents DWF actual and projected performance of financial policy targets from 2011 to 2017.

Table II-1

DWF Financial Policy Performance 2011-2017

($ millions)

Policy	Target	2011 Actual	2012 Projected	2013 Proposed	2014 Proposed	2015 Proposed	2016 Estimated	2017 Estimated
Net Income	Generally Positive	$17.2	$10.4	$11.4	$10.0	$9.9	$22.5	$23.1
Debt Service Coverage	1.8x	2.80	2.78	3.03	2.72	2.46	2.46	2.64
Cash Balance Year End	1 Month Treatment	$29.3	$24.3	$16.2	$10.3	$10.2	$10.2	$9.7
	Target	*$10.4*	*$10.3*	*$10.3*	*$10.2*	*$10.2*	*$10.1*	*$10.1*
Cash Financing of CIP	25% (4 year avg)	27%	28%	28%	27%	25%	25%	25%
Debt-to-Asset Ratio	Less than or equal to 70%	58%	62%	60%	63%	66%	68%	66%
Variable Rate Debt	Less than or equal to 15%	0%	0%	0%	0%	0%	0%	0%

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III. REVENUE REQUIREMENTS

Financial policies provide a guiding framework for drainage and wastewater finances. The policies help determine how much revenue DWF must collect from its customers each year to remain financially healthy. In any year (on a planning basis), the desired revenue requirement is the lowest amount of money necessary to simultaneously satisfy all financial policies in that year. At this desired revenue, some financial policies may be exceeded, but none will be missed – the financial target that is met last is known as the "binding constraint." For this 2013-2015 rate proposal, the binding constraint is the sum of cash required to meet year-end cash balance and CIP cash financing targets. The rates revenue requirement is equal to the total revenue requirement necessary to meet the binding constraint, less any non-rates revenues. Drainage and wastewater service fees (or "rates revenues") typically account for over 95 percent of drainage and wastewater revenues. Non-rate drainage revenues include permit fees, miscellaneous operating revenues, interest income, operating grants, capital grants, and CIAC.

Tables III-1 and III-2 summarize the components of change in the drainage and wastewater revenue requirement for 2013, 2014, and 2015. The top sections of these tables present the components of expense which make up the total revenue requirement. The bottom section of the table presents other sources of funding which reduce the amount of expense which must be recovered through direct service rates. Following the tables below is a more detailed description of the components of change in the revenue requirement.

Table III-1

Components of the Change in the Wastewater Revenue Requirement

($ millions)

	2012 Rev Req	2013 Rev Req	2013 $ Change	2014 Rev Req	2014 $ Change	2015 Rev Req	2015 $ Change
Expense							
Operations & Maintenance (O&M)							
Base O&M	$41.7	$47.1	$5.5	$48.3	$1.2	$49.2	$0.9
New Operating Expense	$0.0	$0.1	$0.1	$0.5	$0.4	$0.9	$0.4
Total	$41.7	$47.3	$5.6	$48.8	$1.6	$50.1	$1.3
Treatment							
King County Treatment	$138.0	$137.3	($0.6)	$136.8	($0.5)	$132.5	($4.3)
Capital Financing							
Cash	$20.0	$22.5	$2.5	$24.4	$1.9	$12.4	($12.0)
Debt Financing	$22.2	$21.0	($1.2)	$22.1	$1.1	$20.7	($1.4)
Total	$180.1	$180.8	$0.7	$183.2	$2.4	$165.5	($17.7)
Total Revenue Requirement	**$221.8**	**$228.1**	**$6.3**	**$232.0**	**$3.9**	**$215.6**	**($16.4)**
Other Funding Sources							
Non-Rates Revenue	($6.9)	($6.7)	$0.2	($6.7)	$0.0	($6.4)	$0.3
Cash Balance	($0.9)	($3.8)	($2.9)	($2.5)	$1.3	$0.7	$3.2
Total	($7.8)	($10.6)	($2.8)	($9.2)	$1.3	($5.7)	$3.5
Net Rates Revenue Requirement[1] Before Combined System Shift	**$214.0**	**$217.5**	**$3.5**	**$222.8**	**$5.3**	**$209.9**	**($12.9)**
Combined System	$0.0	($6.1)	($6.1)	($12.5)	($6.4)	$0.0	$12.5
Net Rates Revenue Requirement[1] After Combined System Shift	**$214.0**	**$211.4**	**($2.5)**	**$210.3**	**($1.1)**	**$209.9**	**($0.4)**

Table III-1 Notes:

1) Total Net Rates revenue requirement does not include industrial surcharge.

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Table III-2

Components of the Change in the Drainage Revenue Requirement

($ millions)

	2012 Rev Req	2013 Rev Req	2013 $ Change	2014 Rev Req	2014 $ Change	2015 Rev Req	2015 $ Change
Expense							
O&M							
Base O&M	$46.1	$49.4	$3.2	$51.0	$1.6	$54.2	$3.2
New Operating Expense	$0.0	($0.2)	($0.2)	($0.4)	($0.2)	($0.3)	$0.1
Total	$46.1	$49.2	$3.0	$50.6	$1.4	$53.9	$3.3
Treatment							
King County Treatment	$5.8	$5.7	($0.0)	$5.7	($0.0)	$8.5	$2.8
Capital Financing							
Cash	$6.1	$4.1	($2.0)	$3.8	($0.3)	$1.3	($2.5)
Debt Financing	$23.7	$26.4	$2.7	$27.6	$1.3	$35.7	$8.0
Total	$29.8	$36.1	$0.6	$37.1	$1.0	$45.4	$8.3
Total Revenue Requirement	**$81.7**	**$85.3**	**$3.6**	**$87.7**	**$2.4**	**$99.3**	**$11.6**
Other Funding Sources							
Non-Rates Revenue	($6.8)	($5.0)	$1.8	($4.7)	$0.3	($4.8)	($0.1)
Cash Balance	($0.1)	($4.1)	($4.1)	($3.0)	$1.1	$2.0	$4.9
Total	($6.9)	($9.1)	($2.3)	($7.7)	$1.5	($2.8)	$4.9
Net Rates Revenue Requirement Before Combined System Shift	**$74.8**	**$76.2**	**$1.4**	**$80.1**	**$3.9**	**$96.5**	**$16.4**
Combined System	$0.0	$3.7	$3.7	$7.7	$4.0	$0.0	($7.7)
Net Rates Revenue Requirement After Combined System Shift	**$74.8**	**$79.9**	**$5.1**	**$87.8**	**$8.1**	**$96.5**	**$8.7**

Operations and Maintenance (O&M)

The drainage and wastewater O&M revenue requirement includes direct operating expense associated with managing sanitary sewer and stormwater programs (i.e., regulatory oversight, community outreach and education) and aggressively maintaining the system infrastructure, as well as a portion of DWF shared administrative expense. As operating expenses are budgeted for the DWF as a whole and not by line of business (wastewater or drainage), operating expenses must be assigned to each line of business in order to establish separate revenue requirements for rate-setting purposes. The factors used to assign expense between the two lines of business are periodically updated, which can result in changes in the share of expense paid by either wastewater or drainage.

The proposed O&M budget enables SPU to continue to provide core services to our customers, invest in critical capital assets, and meet our federal mandates. The large majority of SPU's adds allow us to comply with our CSO and stormwater regulatory requirements. This includes implementing the Capacity Maintenance Operations Management (CMOM) Roadmap for

$750K, adding $500K for developing an Integrated Plan, adding $200K and staff to update and manage side sewer and drainage GIS data, and maintaining roadside rain gardens for $300K starting in 2015. To offset these adds SPU is cutting the budgets of activities that are more discretionary and lower priority. Reductions that do not impact service levels include a one-time savings of $285K in 2013 due to changes in monitoring requirements per the City's NPDES stormwater permit. Other reductions have some impact to service levels but do not impact compliance. This includes reducing cleaning stormwater pipes to the Duwamish River ($100K), and reducing non-regulatory monitoring and performance evaluation of the drainage and wastewater system ($88K), Reductions also include scaling back discretionary programs such as long-term strategic planning for the city's urban watersheds ($167K), outreach and education related to policy changes, local flooding, NPDES permit requirements and water quality ($319K), and corporate support activities.

Table III-3 summarizes the components of change in the wastewater and drainage rate revenue requirement for 2013 to 2015.

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Table III-3

Proposed Changes in Base and New O&M Expenditures

($ millions)

	2013 Wastewater Increase	2013 Drainage Increase	2014 Incremental Wastewater Increase	2014 Incremental Drainage Increase	2015 Incremental Wastewater Increase	2015 Incremental Drainage Increase
Base O&M						
Inflation	$1.5	$1.5	$1.2	$1.2	$1.8	$1.8
Change in G&A Credit	$0.3	$0.6	$0.7	($0.1)	($0.1)	$0.4
Baseline Adjustments/Miscellaneous	$3.4	$0.3	($0.5)	($0.5)	($0.7)	($0.2)
Drainage/Wastewater Allocation Revisions	($0.2)	$0.2	$0.0	$0.0	$0.0	$0.0
Taxes	$0.6	$0.5	($0.2)	$0.9	($0.0)	$1.1
Sub-total Base O&M Expense	$5.5	$3.2	$1.2	$1.6	$0.9	$3.2
New O&M Expense						
Reductions	**(1.1)**	**(1.4)**	**(0.8)**	**(1.2)**	**(0.8)**	**(1.2)**
BIP-107 Shared - Corporate Cuts	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)
BIP-108 Shared - Position Changes	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
BIP-109 DWF - Duwamish Source Control	0.0	(0.1)	0.0	(0.1)	0.0	(0.1)
BIP-110 DWF - Urban Watersheds	0.0	(0.2)	0.0	(0.2)	0.0	(0.2)
BIP-111 DWF - Below Ground Sewer Rat Baiting	(0.1)	0.0	(0.1)	0.0	(0.1)	0.0
BIP-113 DWF - WQ Monitoring and Spill Kits	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
BIP-114 DWF - SOPA Non-NPDES Monitoring	0.0	(0.1)	0.0	(0.1)	0.0	(0.1)
BIP-116 DWF - Education and Outreach Reduction	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
BIP-117 DWF - Technical Cuts	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
BIP-121 DWF - CSO Consent Decree Negotiations	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
BIP-115 DWF - Regulatory Compliance	(0.2)	(0.1)	0.1	0.1	0.1	0.1
Adds	**1.2**	**1.2**	**1.2**	**1.0**	**1.2**	**1.2**
BIP-112 DWF - Green Stormwater Infrastructure	0.0	0.0	0.0	0.0	0.0	0.3
BIP-118 DWF - NPDES Side Sewer Mapping	0.2	0.0	0.2	0.0	0.2	0.0
BIP-119 DWF - NPDES Stormwater Code & Manual	0.0	0.3	0.0	0.1	0.0	0.0
BIP-120 DWF -Green Seattle Partnership	0.0	0.0	0.0	0.0	0.0	0.0
BIP-122 DWF - SOPA and Control Center Staffing	0.0	0.0	0.0	0.0	0.0	0.0
BIP-123 DWF - CMOM Consent Decree	0.4	0.3	0.4	0.3	0.4	0.3
BIP-125 Shared - Technical	0.3	0.4	0.3	0.4	0.3	0.4
BIP-303 DWF - Integrated Planning	0.3	0.2	0.3	0.2	0.3	0.2
Sub-total New O&M Expense	**0.1**	**(0.2)**	**0.4**	**(0.2)**	**0.4**	**0.1**
Total Change in Revenue Requirement	**$5.6**	**$3.0**	**$1.6**	**$1.4**	**$1.3**	**$3.3**

Table III-3 Notes:

1) National Pollutant Discharge Elimination System (NPDES)
2) System Operations Planning & Analysis (SOPA)
3) Capacity Management, Operations & Maintenance (CMOM)
4) Water Quality (WQ)

Base O&M Expense

The base O&M for 2013 is assumed to equal the spending required to support operations and maintenance functions budgeted under the 2012 Adopted Budget, including any adjustments identified to date. Base O&M does not include debt service which is discussed under capital financing.

Wastewater

The 2013-2015 wastewater O&M increases in each year primarily due to inflation and an increase in taxes associated with increased O&M and treatment costs. The G&A credit represents the cost of administrative and management support, which is paid or reimbursed by the capital program, acting as an offset to O&M.

Drainage

In this rate proposal, base drainage O&M increases in 2013-2015 due primarily to inflation and increased taxes as a result in shifting of O&M and treatment costs from wastewater to drainage.

New Operations and Maintenance Expense

The proposed 2013, 2014, and 2015 drainage and wastewater O&M additions support several new programs, along with addressing current regulatory requirements. SPU also proposes several programmatic cuts to help offset the rate impact of the new programs.

The net impact of the new O&M additions and reductions is net reduction of $0.1 million in 2013, $0.2 in 2014 and $0.5 million in 2015.

In 2013, SPU is proposing a $2.4 million increase in the 2013 DWF revenue requirement, to fund expanded and/or new operations programs, including NPDES side sewer mapping, NPDES stormwater code and manual updates, CMOM Consent Decree, Shared and Technical projects, and Integrated Planning.

For 2014 and 2015, SPU is proposing an additional $2.2 million and $2.4 million, respectively, in each year in the DWF revenue requirement for expenses associated with the aforementioned programs.

In an effort to offset the additional expenses, SPU is proposing cuts in all three years: $2.5 million in cuts in 2013 and $2.0 million in both 2014 and 2015. The impacted programs include Duwamish Source Control, Urban Watersheds, Regulatory Compliance, Education and Outreach, and internal cuts to Corporate and Technical departments.

Allocation Revision in Detail

Operating expenses are budgeted for the DWF as a whole and not by line of business (wastewater or drainage). Consequently, operating expenses must be assigned to each line of business in order to establish separate revenue requirements for rate-setting purposes. SPU has developed a series of factors to assign cost, by budget activity, to wastewater and to drainage.

The DWF budgeted O&M expenses include both line-of-business-specific expenses (e.g., water quality monitoring or wastewater treatment), as well as shared administrative and business support expense. Shared expenses are assigned to each line of business based on prior period actual direct labor expense or on management estimates (where labor expense is not appropriate).

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As part of the current rate study, SPU reviewed the existing labor-based cost assignment factors and adjusted the allocation based on 2011 actual spending. While some branches saw increases in the wastewater share, the net cost shift as a result of this update was from wastewater to drainage.

Table III-4 presents a summary of 2011 cost assignment changes by branch.

Table III-4

Change in Drainage Share of DWF Base O&M Spending

($ millions)

		2011 Drainage		
Program	**Total DWF**	**2009 Base**	**2011 Base**	**Change**
Customer Service	$6.2	$1.9	$1.8	($0.0)
Director's Office	$2.0	$1.1	$1.0	($0.1)
Project Delivery	$5.5	$3.4	$3.5	$0.1
Pre-Capital Planning & Development	$2.1	$1.2	$1.2	$0.0
Field Operations	$19.0	$8.3	$9.7	$1.4
Finance & Administration/HR & Service Equity	$10.7	$5.4	$5.4	($0.0)
Utility Systems Management	$16.6	$9.6	$8.4	($1.2)
SPU General Expenses	$2.6	$1.6	$1.6	($0.0)
Total Drainage	**$64.7**	**$32.4**	**$32.6**	**$0.2**

The change in allocation based on 2011 actual data shifts $0.2 million from wastewater to drainage in base operations and maintenance spending.

Appendix D provides more detailed information on the cost assignment process.

Capital Financing Expense

DWF funds capital projects through a combination of cash (from direct service and non-rates revenue) and debt financing (revenue bonds).

Debt Service

SPU is projected to issue approximately $70 million in new DWF revenue bonds in April 2014 and $85 million in June 2015. These bonds are expected to fund a portion of drainage and wastewater capital improvements between April 2014 and December 2016. The 2014 bond issue will increase debt service beginning in 2014, which impacts 2014 wastewater and drainage rates, while the 2015 bond issue will not increase debt service until 2016.

Annual debt service is proportioned between drainage and wastewater based on the net book value of current fixed assets ("asset basis"). This methodology, which is similar to that used by SPU's Water and Solid Waste funds, correlates financing expense with the assets actually financed.

CIP Cash Financing

Financial policy targets are directed toward the financial performance of the total DWF fund. No formal, separate policy targets have been adopted for the drainage program or for the wastewater program. SPU meets financial targets by balancing revenue requirements and rate changes between wastewater and drainage.

Wastewater

In 2012, SPU opted to use excess cash to fund the CIP beyond the 25% requirement. As such, the 2012 additional cash contribution helps lower the contribution needed to meet the 25% four-year rolling average over the rate period. The proposed 2013 wastewater rate assumes a $2.5 million increase in wastewater cash financing of the CIP from 2012 to 2013 due to an increase in the CIP.

For 2014 and 2015, the proposed wastewater rates assume a $1.9 million increase and $9.4 million decrease, respectively, in the wastewater cash financing of the CIP due to an increase in the cash financing of the CIP in 2014, which is partially offset by a decrease in CIP. In 2015, a lower cash-to-CIP contribution and lower CIP reduces the cash contribution.

Drainage

The proposed 2013 drainage rate increase assumes a $2.0 million decrease in cash financing of the CIP from 2012 due to a decrease in the cash financing of the 2013 CIP.

For 2014 and 2015, the proposed drainage rates assume a $0.3 million decrease and $2.5 million decrease, respectively, in the drainage cash financing of the CIP due to a higher CIP cash contribution in 2014 and in 2015, a lower CIP and percent contributed to cash.

Table III-5 summarizes the drivers underlying these changes.

Table III-5

Change in Cash Financing of the CIP

($ millions)

	Wastewater			Drainage		
	2013	**2014**	**2015**	**2013**	**2014**	**2015**
Change in Cash Financing due to:						
Increase in CIP	$9.0	($3.7)	($3.7)	($0.6)	($1.4)	($1.0)
Change in % Cash Contribution	($6.5)	$5.6	($5.7)	($1.4)	$1.2	($1.6)
Total Change from Previous Year	**$2.5**	**$1.9**	**($9.4)**	**($2.0)**	**($0.3)**	**($2.5)**

Table III-5 Notes:

1) For 2013 and 2014, an 85 percent accomplishment of the DWF CIP is assumed and in 2015, a 90 percent rate is assumed as projects move further into the final phases of construction, allowing for less deviation from the schedule.

2) The change in the cash financing of CIP due to the Combined System shift is incorporated under "Combined System Cost Allocation."

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Use of Cash Balances

Revenue generated by rates is used to fund current operating expenses, maintain a cash balance as a safeguard against unexpected expense, and fund a portion of the current capital program. Net cash revenue is equal to total cash revenue less total cash expense and for a given year net cash revenue may be positive or negative. This differs from net income which includes non-cash items such as depreciation and amortization and excludes cash expenses such as debt service principal payments. A change in net cash revenue from one rate period to the next will impact the revenue requirement. An increase in total net cash revenue will drive a revenue requirement increase while a decrease will reduce the revenue requirement.

Wastewater

Extra cash in 2011 will be used to fund 2012 expenses associated with the consent decree, a voluntary agreement between the Environmental Protection Agency and the City to reduce combined sewer outfalls. The remainder will be used to reduce and smooth rates over the 2013-2015 period. As a result of the smoothing, wastewater revenue requirement will decrease $2.9 million in 2013, as the fund spends down existing cash and increase $1.3 million in 2014. In 2015, to generate net cash revenue sufficient to fund expenses and meet year-end cash targets, the revenue requirement increases $3.2 million.

Drainage

Extra cash in 2011 will be used to fund expenses and smooth rates in 2013 and 2014. As a result of smoothing rates over the three year path, the drainage revenue requirement will decrease by $4.1 million in 2013 to offset a larger-than currently projected rate increase in 2013. In 2014 and 2015, revenues will increase by $1.1 million and $4.9 million, respectively, to build cash balances back up to meet year-end targets.

Non-Rate Revenue

Non-rate revenue includes permit fees, operating and capital grants, contributions in aid of construction (CIAC), interest income and other miscellaneous revenues and capital contributions. An increase in non-rate revenues has the effect of reducing the revenue requirement that must be recovered through rates.

Wastewater

Non-rate revenues are expected to remain relatively flat during the 2013-2015 rate period. In 2013 and 2015, the small fluctuations are due to changes in expectations of grants received by the fund.

Drainage

Changes in non-rate revenues result in revenue requirement increases of $1.8 million in 2013 as the result of a decline in anticipated grants. In 2014 and 2015, the utility expects to receive grant revenue equal to the amount received in 2013.

Combined System Cost Allocation

In 2008, the new drainage rate design methodology recommended that drainage rates fund a share of the expense associated with the combined portions of the drainage and wastewater system. Historically, these costs had been assigned entirely to the wastewater line of business. In reality, a portion of combined sewer pipes and combined sewer overflow (CSO) structures

support the drainage system. In order to avoid the impact of a one-time significant cost shift to drainage, a policy decision was made to phase in the sharing of combined system costs between wastewater and drainage that began in 2008, when one-sixth of the appropriate share of Combined System costs were allocated to drainage. In 2009, another one-sixth (for a total of two-sixths) was allocated to drainage rates and this allocation was held constant for 2010. Another one-sixth was shifted in each year of the 2011-2012 rate study. This proposal allocates an additional one-sixth in 2013 and the final one-sixth in 2014.

Wastewater

Shifting-in one-sixth of the allocation of combined system costs decreases the wastewater revenue requirement by $6.1 million in 2013 and an additional $6.4 million in 2014.

Drainage

Shifting one-sixth of the allocation of combined system costs increases the drainage revenue requirement by $3.7 million in 2013 and an additional $4.0 million in 2014.

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IV. PROPOSED WASTEWATER RATE

Overview

City of Seattle residents pay a single fee per one hundred cubic feet (ccf) of wastewater based on water consumption. This single fee is composed of two components, a system rate and a treatment rate, which are adopted through two distinct processes. The system rate is proposed by the Executive and formally adopted by Council. In contrast, the treatment rate, which is adopted by King County, is presented to Council in the form of a memorandum and adopted outside of the formal rate study process as a 'pass-through'. As a reminder, this rate study assumes no change in the King County treatment rate; however, King County approved a 10.2 percent increase in its 2013 treatment rate. Under the proposed scenario, the treatment rate decreases as a result of the combined systems shift. Please refer to Appendix A for an analysis of the drainage and wastewater rate impacts.

Proposed 2013-2015 Wastewater Rates

Table IV-1 presents the proposed 2013 through 2015 wastewater rates.

Table IV-1

Proposed 2013-2015 Wastewater Rate (per CCF)

	2012 Adopted	2013 Proposed	2014 Proposed	2015 Proposed
System Rate (SPU)	$3.74	$3.98	$4.08	$4.14
Treatment Rate (KC)	$6.94	$6.88	$6.91	$6.96
Total Wastewater Rate	$10.68	$10.86	$10.99	$11.10

Treatment Rate

Payments to King County[1] for wastewater treatment are the single largest component of both wastewater and total DWF operating expense. The inability to fully recover this expense through the wastewater rate could seriously impact DWF financial performance. To mitigate this risk the Council adopted Ordinance 122292, providing for an annual adjustment to the treatment rate when there is a change in the underlying cost drivers. The formula for this adjustment is defined in the ordinance, allowing for the treatment rate to be adopted outside of a normal rates process. The formula is as follows:

Projected wastewater treatment expense / Projected annual wastewater volumes

X

A 16.9 percent multiplier (to recover revenue reductions and revenue taxes)

Projected treatment expense includes an adjustment for cash lags in the full recovery of treatment expense in years in which there is a rate increase. For the purposes of this

[1] King County treats over 99 percent of the City's sewage. The Southwest Suburban Sewer District treats the remainder.

calculation, treatment expense excludes the portion of budgeted treatment expense associated with King County's High Strength Industrial and Contaminated Stormwater Surcharges. These expenses are recovered directly from applicable customers and not through the wastewater direct service rate.

The City recovers wastewater expense exclusively through a volume-based fee. However, the County charges a fixed rate per residential premise, while commercial water volumes are converted to a "Residential Equivalent Unit" (REU) and charged accordingly based on flow treated. Residential flows account for about 37 percent of total volumes (and therefore total City revenues). Charges for residential premises account for about 47 percent of total treatment expense paid to the County. Consequently, if the County treatment rate is held constant but Seattle billed wastewater volumes decline, the resulting decline in treatment expense will be less than the decrease in the City's wastewater revenues. Therefore, the annual pass-through mechanism provides for an increase in the treatment rate when volumes decline, even in the absence of a King County rate increase.

The 16.9 percent multiplier provides for the payment of revenue taxes on increased revenues generated to pay additional treatment expense. It also includes an allowance for customers paying less than the full rate (i.e. low income credits) and non-payments/delinquencies.

The rates presented in this section reflect no change in the King County treatment rate for 2013 through 2015; however King County approved a 10.2 percent increase in the 2013 treatment rate and any impact to SPU wastewater and drainage rates will be accomplished via the pass-through mechanism.

Table IV-2 presents the inputs underlying the calculation of the 2013 through 2015 treatment rate before the pass-through of the King County rate increase.

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Table IV-2

2011-2012 SPU Treatment Rate Calculation

($ millions)

	2013	2014	2015
Treatment Expense (rates based)[1]	$115.4	$113.7	$113.1
Revenue lags/leads[2]	$0.0	$0.0	$0.1
Net Cash Treatment Expense	$115.4	$113.8	$113.2
Multiplier[3]	16.9%	16.9%	16.9%
Total Treatment Expense	$134.9	$133.0	$132.3
Projected Volumes (100 ccf in 000's)	$19.6	$19.3	$19.0
Treatment Rate per ccf[4]	$6.88	$6.91	$6.96

Table IV-2 Notes:

1) Excludes high strength industrial surcharge component of King County treatment expense. This expense is charged directly to the applicable customers and not recovered through rates. Also excludes portion of treatment expense shifted to drainage as a result of the combined system cost shift.
2) December revenues collected in January. When there is a rate increase, assumes one month cash at old rate, 11 months at new rate.
3) The treatment multiplier recovers taxes and revenue lost to credits/non-payment. The projected SPU treatment rate assumes no change in the treatment multiplier of 16.9 percent.
4) Per resolution, treatment rate equals treatment expense divided by projected volumes.

SPU System Rate

The system component of the SPU wastewater rate is proposed by the Executive via rate studies and adopted through a normal Council process. The system rate recovers all other operating expense, including operations and maintenance expense, capital financing expense (debt service and cash), and related revenue taxes. This component of the rate is also set to ensure that financial policy targets are met in the case that the revenue required to meet the targets exceeds the revenue required to recover operating expense (see Section II of this proposal for more detail).

The current proposal assumes a wastewater system rate of $3.98 per ccf in 2013, a $0.24 per ccf increase compared with 2012, an increase of $0.10 per ccf in 2014, and an increase of $0.06 in 2015. The components of these increases are presented in Table IV-3.

Table IV-3
2013-2015 Wastewater System Expense
($ millions)

	2013	2014	2015
Net Revenue Requirement	$211.4	$210.3	$209.9
Revenue lags/leads	$1.5	$1.1	$1.1
Less Unadjusted Treatment Expense	$117.0	$115.3	$114.6
Less Tax	$18.0	$17.8	$17.7
Total Expense Increase	$77.9	$78.4	$78.7
Projected Volumes (100 ccf in 000's)	19.6	19.3	19.0
System Rate per ccf	$3.98	$4.08	$4.14

Tables IV-4 and IV-5 present the 2013 through 2015 Sources and Uses of system and treatment revenue/expense, assuming proposed rates and spending.

Table IV-4
2013 Change in Wastewater System & Treatment Expense
($ millions)

	System	Treatment	Total Wastewater
SOURCES			
Direct Service			
Gross Revenue	$79.2	$137.0	$216.3
Less: Credit/Non Payment	($1.8)	($3.1)	($4.8)
Net Revenue	$77.5	$134.0	$211.4
Less: leads/lags	($0.3)	($0.0)	($0.3)
Net Direct Service Cash Revenue	$77.2	$134.0	$211.2
Other Revenue			
Other Operating	$3.8		$3.8
Other Non-Operating	$2.0		$2.0
SCL Reimbursement	$1.6		$1.6
Total Sources	**$84.5**	**$134.0**	**$218.5**
USES			
O&M	$45.4	$123.2	$168.6
Taxes	$10.4	$17.9	$28.3
Debt Service	$8.7		$8.7
Cash Financing of CIP	$17.3		$17.3
Total Uses	**$81.9**	**$141.2**	**$223.0**
SOURCES NET OF USES	**$2.7**	**($7.2)**	**($4.5)**

Table IV-4 Notes:

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Assumes treatment rate of $6.88 and system rate of $3.98 in 2013 multiplied by projected volumes.

Table IV-4

2014 Change in Wastewater System & Treatment Expense

($ millions)

	System	Treatment	Total Wastewater
SOURCES			
Direct Service			
Gross Revenue	$80.1	$136.3	$216.4
Less: Credit/Non Payment	($2.0)	($3.4)	($5.4)
Net Revenue	$78.1	$132.9	$210.3
Less: leads/lags	($0.2)	($0.0)	($0.2)
Net Direct Service Cash Revenue	$77.9	$132.9	$210.1
Other Revenue			
Other Operating	$3.8		$3.8
Other Non-Operating	$1.8		$1.8
SCL Reimbursement	$1.6		$1.6
Total Sources	**$85.1**	**$132.9**	**$217.3**
USES			
O&M	$45.9	$122.7	$168.7
Taxes	$10.4	$17.7	$28.1
Debt Service	$9.3		$9.3
Cash Financing of CIP	$16.7		$16.7
Total Uses	**$82.3**	**$140.4**	**$222.7**
SOURCES NET OF USES	**$2.8**	**($7.5)**	**($4.7)**

Table IV-4 Notes:

Assumes treatment rate of $6.91 and system rate of $4.08 in 2014 multiplied by projected volumes.

Table IV-5

2015 Change in Wastewater System & Treatment Expense

($ millions)

	System	Treatment	Total Wastewater
SOURCES			
Direct Service			
Gross Revenue	$80.1	$135.6	$215.7
Less: Credit/Non Payment	($2.0)	($3.4)	($5.4)
Net Revenue	$78.1	$132.2	$209.9
Less: leads/lags	($0.2)	($0.0)	($0.2)
Net Direct Service Cash Revenue	$77.9	$132.2	$209.7
Other Revenue			
Other Operating	$3.8		$3.8
Other Non-Operating	$2.0		$2.0
SCL Reimbursement	$1.7		$1.7
Total Sources	**$85.3**	**$132.2**	**$217.2**
USES			
O&M	$47.9	$122.0	$169.9
Taxes	$10.4	$17.6	$28.1
Debt Service	$10.6		$10.6
Cash Financing of CIP	$10.2		$10.2
Total Uses	**$79.1**	**$139.7**	**$218.7**
SOURCES NET OF USES	**$6.3**	**($7.4)**	**($1.2)**

Table IV-5 Notes:

Assumes treatment rate of $6.96 and system rate of $4.14 in 2015 multiplied by projected volumes.

Wastewater Demand

Overall, annual average wastewater volumes of commercial customers are declining at the same rate as residential customer volumes, approximately 2.4 percent per year (for 2000 through 2011). Since the most recent recession began in 2009, annual average residential volumes decreased at a faster rate, declining 3.6 percent through 2011.

The volume of wastewater conveyed from retail customers is expected to decline by about 1.5 percent in 2012 and 2013, 1.8 percent in 2014, and 1.3 percent in 2015. These declines continue a downward trend that started in the 1980s. Indeed, since 2000, total demand declined by approximately 24 percent. Figure IV-1 below presents commercial and residential annual Seattle wastewater volumes (in ccf) between 2000 and 2015.

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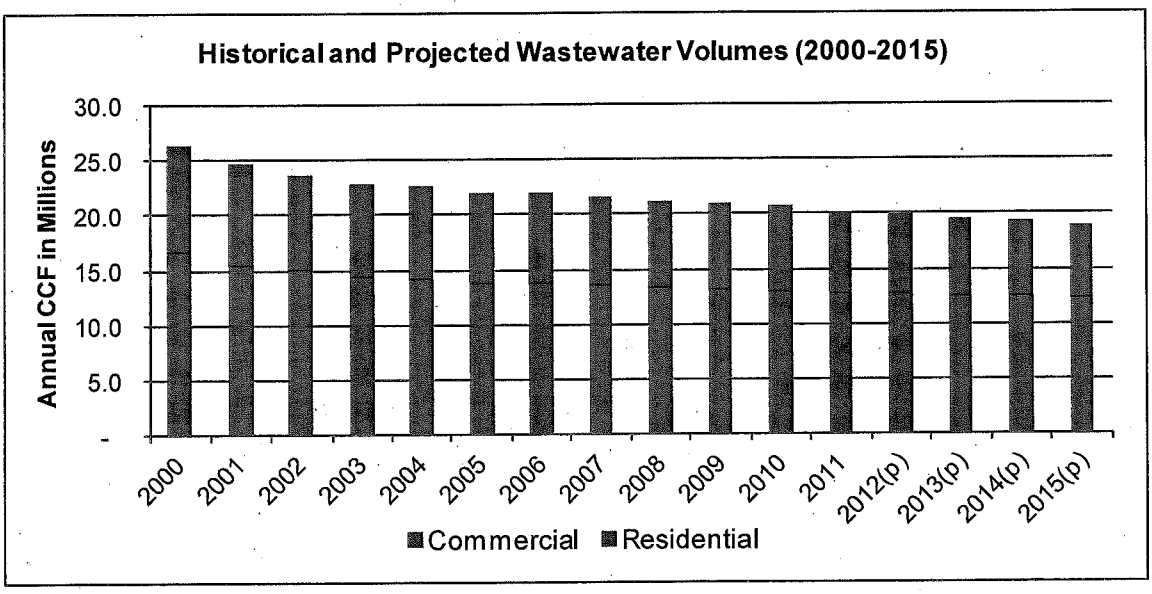
Figure IV-1



The residential forecasting model utilizes trend for forecasting volumes. The trend captures impacts of the drivers of residential wastewater volumes such as overall decreasing water use (which is used to calculate sewer volumes) and shifts between peak and off-peak period water use. The commercial model utilizes employment to capture economic fluctuations and an underlying trend in consumption associated with increased efficiency in water use.

The demand model also takes into account expected water conservation impacts on peak-period wastewater volumes. Because a significant quantity of water is used for irrigation purposes during the summer, water volumes depend on summer weather. Although the effect on wastewater volumes is moderated by use of average winter sewer bills for determining residential volumes, there is some impact from early or late summer weather on commercial volumes since they are based on actual year-around water consumption. The model used to forecast demand for this rate study assumes the weather of a "normal" year in which summer weather is not particularly wet or dry, hot or cool. Actual demand will vary from forecast partly because summer weather varies.

In order to obtain required revenues, sewer rates have to rise to offset this reduction in demand since many costs do not vary with volume. There is very little expense elasticity relative to changes in wastewater volumes for several reasons, including:

- SPU system operating expenses are typically not capacity-driven, with maintenance focused on the existing network;
- SPU customer service expense is account, not demand driven;
- A large component of the rate base, existing debt service, is entirely fixed (with the exception of re-financing opportunities);
- New capital investment are typically not capacity-driven, with the exception of combined sewer overall expense which is driven more by stormwater than wastewater volumes; and

- The King County treatment bill is volume-based for commercial customers but premise-based for residential customers. Therefore, only about 51 percent of the total treatment bill (commercial portion) is volume-based.

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V. DRAINAGE COST ALLOCATION / RATE DESIGN

General

Once the drainage revenue requirement is set, it is apportioned between different customer classes. This section describes the cost allocation process and the proposed 2013 through 2015 drainage rates by class.

Cost Allocation

All properties in Seattle, except city streets and state highways, are charged a drainage fee. Docks and other similar properties which rest over natural water bodies are exempt from drainage fees. Costs are assigned to different customer classes based on the estimated stormwater flow and number of parcels for each class.

King County administers the billing and collecting of drainage fees for the City of Seattle. The drainage fee appears as a line item (Surface Water Management or "SWM" fee) on semi-annual King County property tax statements.

Small Residential Rate Tier

All single-family homes and duplexes on parcels less than 10,000 square feet fall into one of four tiers, based on parcel size, and are charged a flat annual drainage fee. The four rate tiers for parcels less than 10,000 square feet based on parcel size are as follows:

Sub-Tier A	Less than 3,000 SF
Sub-Tier B	3,000 to less than 5,000 SF
Sub-Tier C	5,000 to less than 7,000 SF
Sub-Tier D	7,000 to less than 10,000 SF

General Service and Large Residential Rate Tiers

General service parcels and residential properties 10,000 square feet or greater are assigned to one of five rate groups and are charged a drainage fee based on percent impervious area and actual parcel size. The three rate tiers of Undeveloped, Light and Medium are further split into "Low-Impact" and "Regular" sub-tiers based on calculated runoff rates for these parcels. A customer qualifies for a Low Impact rate if their parcel includes a significant amount of highly pervious surface which results in their average stormwater runoff being below the parcel runoff threshold for each tier.

Drainage Discounts

Various discounts are available which reduce the total drainage bill. See Chapter VI for more detail.

Drainage Flow Factors

SPU's costs for constructing, maintaining and administering the drainage system consist of operations and maintenance (O&M) costs, capital and other costs, and taxes. The costs-of-service imposed on the system by a given customer (or parcel) are determined primarily by two factors: 1) an estimate of the total flow of stormwater that runs off into SPU's drainage system; and 2) the size of a customer's parcel. For the purposes of cost allocation, the amount of stormwater reaching SPU's system, for a customer class, is calculated by the following equation:

$$Total\ Flow_i = Flow\ Factor_i\ x\ Area_i$$

A flow factor is an estimate of how much rainfall enters the storm drainage system for a given storm event. Flow factors are determined by two factors: 1) the type of surface; and 2) the intensity of the storm. Surface type characterizes how absorptive a given surface is. Impervious surface absorbs less runoff than pervious, or porous surface, and therefore generates more stormwater runoff during a given storm event. Likewise, pervious surface with significant ground and tree cover will generate less runoff than a highly managed pervious surface such as a lawn. The more intense the storm, the greater the runoff for all surface types.

SPU's cost allocation utilizes four different types of storm events, each with its own runoff factor for each of four surface types. Runoff factors reflect: 1) the stormwater runoff generated by storm events of differing intensities; and 2) runoff factors for four, surface types. The four types of storm events are:

- 25 Year;
- 2 Year;
- 6 Month; and
- Average Storm.

The four surface types are:

- Impervious – All Types;
- Pervious – All Other;
- Pervious – Unmanaged Grass; and
- Pervious – Good Forest.

Each of these surface types has different runoff factors for the different storm events. The availability of aerial photo and other data allows SPU to assign commercial and large residential properties to the pervious surface categories and therefore create flow estimates from individual properties and customer rate classes.

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Table V-1 summarizes the flow factors by surface type and storm event.

Table V-1

Storm-Specific, Surface-Specific Flow Factors

Surface Type	Average storm	6-month storm	2-year storm	25-year storm
Impervious- All Types	61.3%	84.8%	89.0%	92.5%
Pervious – All Other	2.2%	31.4%	43.3%	56.4%
Pervious – Unmanaged Grass	2.1%	11.4%	21.4%	34.9%
Pervious – Good Forest	2.0%	4.8%	12.7%	24.9%

These four factors, for each surface type, are reduced to a single runoff factor for a given surface type by weighting the storm events based on an analysis of drainage cost of service. The development of the weightings by storm event is described in the section, "Cost Classifications and Allocation Factors," with the weightings summarized in Table V-5. Table V-2 shows the results of the weighting by surface type:

Table V-2

Weighted Flow Factors by Surface Type

Surface Type	Weighted Flow Factor
Impervious- All Types	78.1%
Pervious – All Other	27.9%
Pervious – Unmanaged Grass	15.1%
Pervious – Good Forest	9.8%

The weighted flow factors are applied to customer level data by surface type in order to estimate the total stormwater runoff, which determines if a parcel qualifies for a Low-Impact sub-tier.

Cost Classifications and Allocation Factors

Drainage costs are grouped into three cost classifications, along with a fourth category for certain credits and allowances:

1) Operations & Maintenance (O&M) Costs;
2) Capital & Other Costs;
3) Taxes; and
4) Low Income Credits / Non Payments / Drainage Rate Credits.

Table V-3 outlines the costs and their percent of the total drainage revenue requirement.

Table V-3

Cost Classifications, Credits and Allowances

($ millions)

	2013	% of Total	2014	% of Total	2015	% of Total
O&M	$49.2	61.5%	$50.6	57.6%	$53.9	55.9%
Capital and Other	$22.3	27.9%	$28.1	32.0%	$32.6	33.8%
Taxes	$10.5	13.2%	$11.4	13.0%	$12.6	13.0%
Low Income Credits/Non-Payment/ Drainage Rate Credits	($2.1)	-2.6%	($2.3)	-2.7%	($2.6)	-2.7%
Total	$79.9	100.0%	$87.8	100.0%	$96.5	100.0%

The first three items above are allocated between customer classes based on parcel count or stormwater flow. Costs allocated based on flow are assigned to different storm events in order to determine a weighted cost of service by storm event. Most capital expense and O&M infrastructure maintenance expense is allocated to the storm event(s) which the associated infrastructure is designed to manage, with the exception of pipe expense which is allocated between storm events using an incremental cost approach. Flow allocated expenses not directly related to a specific type of infrastructure are typically assigned to the Average Storm event.

Operations & Maintenance (O&M) Costs

O&M costs are associated with managing stormwater runoff volumes and their impact on the aquatic environment. These costs include infrastructure maintenance and repair (pipes, culverts, detention systems, etc.), regulatory oversight, water quality monitoring, and support services.

O&M costs are broken down into three cost groups:

- Billing;
- King County Treatment; and
- Other O&M.

Billing costs are assigned to an "Account" cost group and are allocated to customer rate groups based on accounts. The drainage portion of King County Treatment costs is assigned 100 percent to a 2 year storm event. Other O&M costs are allocated between the four types of storm events based on an analysis of 2011 actual O&M and the types of assets these costs support.

For example, cost associated with drainage cleaning and inspection are split 50/50 percent to 25-year storm events and 50 percent to six-month storms.

Table V-4 shows a summary of the allocation of drainage O&M costs by storm event.

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Table V-4

Summary of O&M Allocation by Storm Event

	25 Year	2 Year	6 Month	Average Storm	Accounts	Total
O&M-KC CSO's	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
O&M Billing	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Other O&M	6.6%	0.2%	6.6%	85.7%	1.0%	100.0%

Capital & Other Costs

Capital & Other Costs includes debt service payments and any other cash requirements necessary to support current operations and financial policy targets, such as cash financing of the CIP. Capital & Other costs are allocated to the following five asset groups based on an analysis of the net book value of existing drainage assets as of December 31, 2011:

- Pipe;
- CSO;
- Billing System;
- Water Quality Facility; and
- Other Assets.

Similar to O&M, each of the assets groups, except Billing System, are further allocated between the four types of storm events based on the types of assets in each group and the types of storm events each is intended to support.

For example, the net book value of a sewer pipe addition would be assigned to the "Pipe" asset group, which would further be split to assign 50 percent to the 25-year storm event and the other 50 percent to the 6-month storm event.

Table V-5 summarizes the asset group allocations by storm event:

Table V-5

Summary of Asset Allocation by Storm Event

	25 Year	2 Year	6 Month	Average Storm	Accounts	Total
Billing System	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
CSO	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Pipe	50.0%	0.0%	50.0%	0.0%	0.0%	100.0%
WQ Facility	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Other Assets	37.3%	25.8%	14.9%	22.1%	0.0%	100.0%

Taxes

Taxes are allocated among the storm events based on each event's respective share of total O&M and Capital & Other cost.

Low Income Credits / Non Payments / Drainage Credits

Drainage rates must be set at a sufficient level to allow for:

1) Reduced revenues from customers receiving credits and discounts (see Chapter VI for discussion of specific discounts);
2) Drainage bills delinquencies; and,
3) Changes to customer property characteristics that result in significant changes in total calculated runoff.

These allowances and rate credit impacts are incorporated in order that the total received drainage revenues will equal the total drainage revenue requirement. The 2013-2015 proposed drainage rates include an increase in allowances due to the fact that the federal government has withheld paying drainage fees on most of its parcels in the City of Seattle for several years.

Low Impact Threshold

General Service/Large Residential customers in the Undeveloped, Light or Medium rate tiers may qualify for a Low Impact rate if their estimated stormwater runoff is below the parcel runoff threshold. Table V-6 below illustrates how the threshold value for a parcel's runoff is calculated for each tier. For example, for the Light rate tier, the impervious flow factor (from Table V-2) above receives a 16 percent weight in the calculation, while the Other Pervious Flow Factor receives a weighting of 84 percent. Consequently, the Light rate tier Low Impact threshold equals 35.9% ((78.1% * 16%) + (27.9% * 84%)).

Table V-6

Thresholds for Low Impact Rates

	Impervious Flow Factor	Weighting	Other Pervious Flow Factor	Weighting	Parcel Runoff Threshold for Low Impact
Undeveloped	78.1%	0%	27.9%	100%	**27.9%**
Light	78.1%	16%	27.9%	84%	**35.9%**
Medium	78.1%	36%	27.9%	64%	**46.0%**

Table V-6 Notes:

The weight for the impervious flow factor is the lower end of each tier's impervious range, which requires a parcel to have some Unmanaged Grass and/or Good Forest pervious surface to qualify for the Low Impact rate.

Customer Class Assignment Process

Residential parcels less than 10,000 square feet are assigned to one of four sub-tiers based on parcel size. Meanwhile, General Service/Large Residential parcels are assigned to individual customer classes using the weighted flow factors and Low Impact thresholds. The following steps summarize the customer class assignment process for a General Service/Large Residential parcel:

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1. Determine the percent impervious for a parcel based on its impervious area as a percent of its total billable area.
2. Assign the parcel to one of five General Service/Large Residential rate tiers based on its percent impervious.
3. If a parcel is in the Undeveloped, Light or Medium rate tier, calculate the parcel runoff by multiplying each of the weighted flow factors in Table V-2 times each of the parcel's areas by surface type.
4. Total the calculated runoff by surface type to determine the total runoff for a parcel and divide by the total billable area to determine the percent runoff.
5. If the percent runoff for a parcel is less than its rate tier's Low Impact Threshold, then the parcel qualifies for the Low Impact rate.

Table V-7 summarizes information for each customer class.

Table V-7

Drainage Customer Characteristics by Class

Customer Class		Percent Impervious	Parcel Count	Acres	Total Flow in Acres	Avg Runoff Factor
Small Residential						
Sub-Tier A	<3k sq. ft.		6,398	347	226	0.65
Sub-Tier B	3k to <5k sq. ft.		43,316	4,035	2,130	0.53
Sub-Tier C	5k to <7k sq. ft.		50,945	6,744	3,452	0.51
Sub-Tier D	7k to <10k sq. ft.		27,147	5,024	2,397	0.48
Sub-Total			**127,806**	**16,151**	**8,205**	
General Service/Large Residential						
Undeveloped	Regular	0-15%	4,190	1,862	344	0.18
	Low Impact	0-15%	2,687	3,722	1,154	0.31
Light	Regular	16-35%	5,686	2,544	813	0.32
	Low Impact	16-35%	866	799	324	0.41
Moderate	Regular	36-65%	11,056	3,317	1,441	0.43
	Low Impact	36-65%	188	335	176	0.53
Heavy		66-85%	9,792	2,968	1,962	0.66
Very Heavy		86-100%	12,659	5,874	4,458	0.76
Sub-Total			**47,124**	**21,421**	**10,672**	
Total			**174,930**	**37,572**	**18,877**	

Table V-7 Notes:

Parcel and acreage data is from drainage billing system records as of May 2012.

Percent Impervious: The percentage of the parcel area that is covered by impervious surface (any hard or impermeable surface that is not green, grassy, growing vegetation or landscaped). Examples of impervious surfaces are pavement, blacktop, rooftops, parking lots, or patios. Impervious surface is used to determine the customer class assignment for General Service/Large Residential parcels.

Parcel Count: The number of King County tax parcels within Seattle city limits.

Acres: The total parcel area used in the calculation of the total flow by customer class.

Total Flow in Acres: Equal to total estimated runoff for each customer class. This calculation approximates stormwater runoff that flows off the property into the public drainage system. Total flow is used to allocate the majority of drainage costs among the customer classes.

Average Runoff Factor: The average percentage of precipitation falling on parcels within a customer class that is expected to enter the drainage system as runoff. The overall runoff factor is calculated based on the total flow by customer class divided by total square footage.

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Cost of Service by Customer Class

The total drainage cost of service is assigned to customer classes based primarily on an estimate of the stormwater runoff for each customer class. The development of the cost of service for each customer class can be summarized by the following steps:

1. The flow factors from Table V-2 are applied to total acreage by surface type to arrive at an estimate of total runoff by surface type for each storm event. These estimates are used to determine the weighted cost allocation by surface type.
2. The weighted allocation factor for each surface type is split among customer classes based on acreage for each class. An exception is the account component of the revenue requirement which is allocated among customer classes based on accounts.
3. The allocations for each customer class are summed to determine total cost allocation factor by customer class.
4. The total drainage revenue requirement is allocated to each customer class using the total cost allocation factors.

Table V-8 shows a summary of proposed 2013 through 2015 drainage costs by cost classification.

Table V-8

Drainage Cost of Service Summary

($ millions)

Customer Class		Total 2013 Cost	Percent of 2013 Cost	Total 2014 Cost	Percent of 2014 Cost	Total 2015 Cost	Percent of 2015 Cost
Small Residential		**$34.8**	**42.3%**	**$38.2**	**42.3%**	**$42.0**	**42.3%**
Sub-Tier A	<3k sq. ft.	$1.0	1.3%	$1.2	1.3%	$1.3	1.3%
Sub-Tier B	3k to <5k sq. ft.	$9.2	11.2%	$10.1	11.2%	$11.1	11.2%
Sub-Tier C	5k to <7k sq. ft.	$14.7	17.8%	$16.1	17.8%	$17.7	17.8%
Sub-Tier D	7k to <10k sq. ft.	$9.9	12.0%	$10.9	12.0%	$11.9	12.0%
General Service/Large Residential		**$47.4**	**57.7%**	**$52.1**	**57.7%**	**$57.3**	**57.7%**
Undeveloped	Regular	$1.9	2.3%	$2.1	2.3%	$2.3	2.3%
	Low Impact	$2.2	2.7%	$2.4	2.7%	$2.6	2.7%
Light	Regular	$4.0	4.8%	$4.4	4.8%	$4.8	4.8%
	Low Impact	$1.0	1.2%	$1.1	1.2%	$1.2	1.2%
Moderate	Regular	$7.5	9.2%	$8.3	9.2%	$9.1	9.2%
	Low Impact	$0.6	0.7%	$0.7	0.7%	$0.7	0.7%
Heavy		$9.1	11.0%	$10.0	11.0%	$10.9	11.0%
Very Heavy		$21.2	25.8%	$23.3	25.8%	$25.6	25.8%
Total		**$82.2**	**100.0%**	**$90.4**	**100.0%**	**$99.3**	**100.0%**

Proposed Drainage Rates

The cost of service by customer class and the billable units (parcels for Small Residential and thousand-square-foot units for General Service/Large Residential) are used to develop the proposed drainage rates. Table V-9 presents proposed annual Small Residential drainage rates by sub-tier for 2013 through 2015.

The rates presented in this section reflect no change in the King County treatment rate for 2013 through 2015; however King County approved a 10.2 percent increase in the 2013 treatment rate and any impact to SPU wastewater and drainage rates will be accomplished via the pass-through mechanism.

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Table V-9

2013-2015 Proposed Annual Drainage Rates

Small Residential Per Parcel

Class (% impervious)		2012 Adopted	2013 Proposed				2014 Proposed				2015 Proposed			
			System	Treatment	Total	Change from '12	System	Treatment	Total	Change from '13	System	Treatment	Total	Change from '14
Small Residential, per parcel														
Sub-Tier A	<3k	$149.33	$146.25	$17.26	$163.51	$14.18	$162.89	$16.93	$179.82	$16.31	$180.91	$16.66	$197.57	$17.75
Sub-Tier B	3k to <5k	$192.79	$189.56	$22.37	$211.93	$19.14	$211.13	$21.94	$233.07	$21.14	$234.48	$21.59	$256.07	$23.00
Sub-Tier C	5k to <7k	$261.66	$257.32	$30.37	$287.69	$26.03	$286.60	$29.78	$316.38	$28.69	$318.29	$29.31	$347.60	$31.22
Sub-Tier D	7k to <10k	$332.23	$325.77	$38.18	$363.95	$31.72	$362.80	$37.45	$400.25	$36.30	$402.90	$36.85	$439.75	$39.50

Note: Rates assume no change in the King County treatment rate; however, King County approved a 10.2 percent increase in its 2013 treatment rate. Please refer to Appendix A for an analysis of the drainage and wastewater rate impacts.

Table V-10 presents proposed annual General Service/Large Residential drainage rates by customer class for 2013 through 2015.

Table V-10

2013-2015 Proposed Annual Drainage Rates

General Service/Large Residential Per 1,000 Square Feet

Class (% impervious)		2012 Adopted	2013 Proposed				2014 Proposed				2015 Proposed			
			System	Treatment	Total	Change from '12	System	Treatment	Total	Change from '13	System	Treatment	Total	Change from '14
General Service/ Large Residential, per 1000 sq. ft.														
Undeveloped	Regular	$21.96	$20.62	$2.43	$23.05	$1.09	$22.96	$2.39	$25.35	$2.30	$25.50	$2.35	$27.85	$2.50
(0-15%)	Low Impact	$13.76	$12.08	$1.42	$13.50	-$0.26	$13.44	$1.40	$14.84	$1.34	$14.93	$1.38	$16.31	$1.47
Light	Regular	$32.98	$32.01	$3.78	$35.79	$2.81	$35.65	$3.71	$39.36	$3.57	$39.60	$3.65	$43.25	$3.89
(16-35%)	Low Impact	$26.14	$25.19	$2.97	$28.16	$2.02	$28.06	$2.91	$30.97	$2.81	$31.15	$2.87	$34.02	$3.05
Moderate	Regular	$47.76	$46.61	$5.50	$52.11	$4.35	$51.92	$5.39	$57.31	$5.20	$57.66	$5.31	$62.97	$5.66
(36-65%)	Low Impact	$38.35	$37.48	$4.42	$41.90	$3.55	$41.74	$4.34	$46.08	$4.18	$46.36	$4.27	$50.63	$4.55
Heavy	(66-85%)	$63.01	$62.62	$7.39	$70.01	$7.00	$69.74	$7.25	$76.99	$6.98	$77.45	$7.13	$84.58	$7.59
Very Heavy	(86-100%)	$74.49	$74.11	$8.75	$82.86	$8.37	$82.54	$8.58	$91.12	$8.26	$91.67	$8.44	$100.11	$8.99

Note: Rates assume no change in the King County treatment rate; however, King County approved a 10.2 percent increase in its 2013 treatment rate. Please refer to Appendix A for an analysis of the drainage and wastewater rate impacts.

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VI. DISCOUNTS AND CREDITS

Low Income Utility Credit

The City subsidizes qualified low-income customers by giving them discounts on their utility services. Low income assistance customers may receive their discount in one of three ways: 1) as a credit to their SPU wastewater bill; or 2) where no wastewater bill is received, as a credit to the customer's City Light Bill; or 3) in the form of a credit voucher. The latter two options are typically applicable to renters who pay drainage, wastewater, and water utility fees indirectly as part of their rental payment.

For customers who do not receive a wastewater bill, a fixed credit is calculated which is equal to 50 percent of a typical residential bill for the class of customer receiving the credit[2]. The discounts proposed by SPU for 2013 through 2015 are shown in Tables V-11 and V-12.

Table V-11
Wastewater Low Income Utility Credit

Customer Type	2013 Proposed	2014 Proposed	2015 Proposed
Receives SPU Bill	50% discount	50% discount	50% discount
Does not receive sewer bill			
Single family & duplex	$23.34 per month	$23.61 per month	$23.87 per month
Multi-family	$16.29 per month	$16.47 per month	$16.65 per month

Note: Rates assume no change in the King County treatment rate; however, King County approved a 10.2 percent increase in its 2013 treatment rate. Please refer to Appendix A for an analysis of the drainage and wastewater rate impacts.

Table V-12
Drainage Low Income Utility Credit (Monthly)

	2013 Proposed	2014 Proposed	2015 Proposed
Single Family	$11.99	$13.18	$14.48
Duplex	$6.00	$6.59	$7.24
Multi-Family	$1.28	$1.41	$1.55

Note: Rates assume no change in the King County treatment rate; however, King County approved a 10.2 percent increase in its 2013 treatment rate. Please refer to Appendix A for an analysis of the drainage and wastewater rate impacts.

[2] The typical residential bill is calculated by multiplying the rate per ccf by average monthly consumption. The discounts assume an average monthly usage of 4.3 ccf for a single family and 3.0 ccf for multi-family.

Other Drainage Credits and Discounts

Drainage bill discounts are available for property owners that help reduce the impact of stormwater on the City's system. SPU currently offers bill reductions to both natural areas whose characteristics enhance retention of stormwater runoff, as well as to engineered systems that provide stormwater flow control and/or provide water quality treatment for run-off from impervious area. Current discounts include:

- Low impact rates;
- Stormwater Facility Credit Program
- Rainwater Harvesting Discount

This rate study proposes offering additional discounts to large natural areas that offer systemic benefits greater than those offered by other types of undeveloped lands or which clearly do not benefit from or impact the stormwater system.

Existing Discounts

A. Low Impact Rates

Discounts[3] of 20 to 41 percent are applied to the rate for undeveloped natural areas of 0.5 acres or greater containing sufficient amounts qualifying "highly infiltrative" surface (i.e. forested areas, unmanaged grasslands, etc.). Certain athletic facilities with engineered designs that mimic the stormwater retention benefits of these large natural areas are also eligible for low impact rates.

B. Stormwater Facility Credit Program (SFCP)

This program offers credits of up to 50 percent privately-owned systems that slow down stormwater flow and/or provide water quality treatment for run-off from impervious area, thus lessening the impact to the City's stormwater system, creeks, lakes or Puget Sound. Stormwater systems are structures such as vaults, rain gardens, permeable pavements and filtration systems. SPU offers a 10 percent discount for any new or remodeled commercial building that utilizes a rainwater harvesting system meeting credit requirements. Those systems that involve indoor uses of rainwater must be permitted by Seattle-King County Department of Health in order to qualify for the rate reduction. Systems must meet the applicable stormwater and drainage code requirements for the building and site.

C. Rainwater Harvest Credit

SPU offers a 10 percent discount for any new or remodeled commercial building that utilizes a rainwater harvesting system meeting credit requirements. Those systems that involve indoor uses of rainwater must be permitted by Seattle-King County Department of Health in order to qualify for the rate reduction. Systems must meet the applicable stormwater and drainage code requirements for the building and site.

Proposed Discounts

[3] Relative to the rates for non-qualifying properties with like amounts of impervious surface

Proposed discounts build on the 2006 drainage rate design work, focusing on the benefits of certain low impact areas that provide natural hydrological and water quality benefits that extend beyond the management of a property's flows, providing a greater drainage system benefit, at no current cost to the drainage utility.

Proposed discounts are not fixed credits. Rather, drainage bills are discounted by exempting qualifying area from the parcel billing area. Therefore, the "credit" or discount applied to the bill with vary by parcel and depend on how much the qualifying riparian corridor, wetland, or island area represents of total parcel area is represented.

The reduced revenue associated with these discounts is factored into the allowance made, when developing rates, for various areas of revenue reduction such as low income credits, drainage delinquencies, and other existing credits (see Chapter V., "Low Income Credits/Non Payments/Drainage Credits"). It is estimated that proposed credits will reduce revenues by $0.09 million in 2013, $0.1 million in 2014, and $0.1 million in 2015.

A. Undeveloped Riparian Corridor Credit

Developed riparian corridors[4] with small buffers and bank armoring increase the risk of flooding and downstream property damage. In contrast, undeveloped riparian corridors with a sufficient buffer act as floodplains which allow creeks to expand during peak period, mitigating downstream flood damage.

Qualification criteria:

- Must contain low impact surface[5] in the riparian corridor
- Additional criteria, such as maximum percent of impervious surface in the riparian corridor buffer area, as will be defined in a related Director's Rule.

The discount assumes exemption of the entire 100 foot qualifying creek buffer from the parcel's billable area.

Implementation consideration:

Properties may be qualified using existing Geographic Information Systems (GIS) data. Credits could be applied to 2013 drainage bills upon Council approval.

B. Wetlands Credit

Wetlands act like natural drainage systems, protecting and improving water quality and storing floodwaters which are slowly released over time. In addition wetlands also serve as an important habitat for fish and wildlife.

Not all wetlands provide the same level of benefits. The Washington State Department of Ecology has developed a wetland rating point system for Western Washington which

[4] Riparian corridor is defined SMC 25.09.020.B.5.A.

[5] Highly infiltrative pervious area, such as undeveloped forestland or unmanaged grass. This is the same type of surface required to qualify for low impact rates.

provides a qualitative evaluation of a wetland's hydrologic, water quality and habitat functions. For development purposes, a wetlands report is required which uses this rating system to assign the wetland to one of four categories. Development requirements vary by category.

The Department of Ecology rating system provides useful metrics which could be tailored to evaluate hydrologic and water quality benefits from a drainage system standpoint. Wetlands meeting a minimum point benchmark would qualify for the applicable credit. SPU could verify if a wetland meets defined criteria either by reviewing defined components of an existing Wetlands Report or via a site inspection which would only look at SPU specific criteria.

Qualification criteria:

- Credit applies only to wetland areas designated as "low impact", as further described under the riparian corridor credit above.
- Application is required.
- Must demonstrate that wetlands meet minimum SPU rating requirements.

Implementation:

Work processes must be developed for the application and rating process. It is expected that this work can be undertaken with existing staff. A schedule for work process design would be developed upon Council approval of this discount, with administrative details for the program and the effective date adopted via subsequent Director's Rule. First credits would most likely be applied in either 2014 or 2015.

C. Undeveloped Islands Credit

This credit would apply to undeveloped islands with less than ten percent impervious area. These islands do not benefit from nor impact the drainage system or surrounding receiving waters.

Implementation:

Properties can be qualified using existing GIS data and begin to receive the credit in 2013, if approved by Council.

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APPENDIX A — KING COUNTY SEWERAGE TREATMENT RATE

Payments to King County[6] for wastewater treatment are the single largest component of both wastewater and total DWF operating expense. The inability to fully recover this expense through the wastewater and drainage rates can seriously impact DWF financial performance. To mitigate this risk the Council adopted Ordinance 121675 in 2004, providing for an annual adjustment to the treatment rate when there is a change in the underlying cost drivers. The formula for this adjustment is defined in the ordinance, allowing for the treatment rate to be adopted outside of a normal rates process. The formula is as follows:

Projected wastewater treatment expense/Projected annual wastewater volumes

X

A 16.9% multiplier (to recover revenue reductions and revenue taxes)

In June 2012, the County adopted a 10.2 percent treatment rate increase for 2013 and 2014, raising the cost per Residential Consumption Equivalent (RCE) from $36.10 to $39.79. The following tables illustrate SPU's estimate[7] of the combined impact of the rates proposed in the 2013-2015 Rate Study and adopted by the King County Council for their treatment rate.

Table A-1

King County Wastewater Bill Impact

	2012 Adopted Rate	2013 Proposed Rate	Estimated 2013 Rate with KC	KC Impact
Treatment Rate	$6.94	$6.88	$7.69	$0.81
System Rate	$3.74	$3.98	$3.98	-
Total Wastewater Rate	**$10.68**	**$10.86**	**$11.67**	**$0.81**
Typical Monthly Residential Bill (4.3 ccf per month)	*$45.92*	*$46.70*	*$50.18*	*$3.48*

[6] King County treats over 99% of the City's sewage. The Southwest Suburban Sewer District treats the balance.

Table A-2
King County Drainage Bill Impact

		2012 Adopted Rate	2013 Proposed Rate	2013 Estimated Rate with KC	KC Impact
General Service/Large Residential					
(per 1,000 square feet)					
1 - Undeveloped	**Regular**	$21.96	$23.05	$23.32	$0.27
	Low Impact	$13.76	$13.50	$13.67	$0.17
2 - Light	**Regular**	$32.98	$35.79	$36.14	$0.35
	Low Impact	$26.14	$28.16	$28.47	$0.31
3 - Moderate	**Regular**	$47.76	$52.11	$52.67	$0.56
	Low Impact	$38.35	$41.90	$42.32	$0.42
4 - Heavy		$63.01	$70.01	$70.74	$0.73
5 - Very Heavy		$74.49	$82.86	$83.73	$0.87
Small Residential					
(per parcel)					
6 - Residential < 10K	**Sub-Tier A**	$149.33	$163.51	$165.19	$1.68
	Sub-Tier B	$192.79	$211.93	$214.21	$2.28
	Sub-Tier C	$261.66	$287.69	$290.77	$3.08
	Sub-Tier D	$332.23	$363.95	$367.88	$3.93

APPENDIX B — FINANCIAL STATEMENT

Drainage and Wastewater Fund Financial Summary

	2011 Actual	2012 Projected	2013 Estimated	2014 Estimated	2015 Estimated	2016 Estimated	2017 Estimated
Operating Revenue							
Wastewater Service							
Wastewater Rates Revenue	204.6	207.5	211.4	210.3	209.9	215.5	217.6
High Strength Industrial	2.1	1.6	1.6	1.6	1.6	1.6	1.5
Drainage Rates Revenue	67.6	74.9	79.9	87.8	96.5	108.0	117.9
Other Charges							
Permit Fees	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Other	3.5	2.7	2.2	2.2	2.2	2.2	0.2
Total Operating Revenue	**279.0**	**288.0**	**296.4**	**303.2**	**311.4**	**328.5**	**338.5**
Operating Expenses							
Operating and Maintenance Expenses							
Wastewater Treatment	125.3	123.7	123.2	122.7	122.0	121.3	120.6
Other Operating Expenses	72.0	82.0	84.2	86.8	91.1	91.2	94.8
Taxes Other Than City Taxes	3.6	4.0	4.1	4.0	4.1	4.5	4.7
Other Expenses							
City Taxes	32.4	33.7	34.8	35.6	36.5	38.5	39.9
Depreciation	19.8	20.6	21.4	22.1	22.9	23.4	23.9
Total Operating Expenses	**253.1**	**264.0**	**267.6**	**271.2**	**276.6**	**278.8**	**283.9**
Net Operating Income	**25.9**	**24.0**	**28.8**	**32.0**	**34.9**	**49.7**	**54.6**
Other Income (Expenses)							
Investment and Interest Income	2.8	2.6	2.5	2.2	2.8	2.6	3.1
Interest Expenses and Amortization of Debt Issue Costs and Net Discount	(21.0)	(21.5)	(22.6)	(26.9)	(30.5)	(32.5)	(37.4)
Gain on sale Cap Assets/Other	0.5	1.6	-	-	-	-	-
Total Other Income (Expenses)	**(17.7)**	**(17.3)**	**(20.1)**	**(24.7)**	**(27.7)**	**(29.9)**	**(34.3)**
Capital and Operating fees, Contributions, and Grants	9.8	3.7	2.7	2.7	2.7	2.7	2.7
Net Income (Loss)	**18.0**	**10.4**	**11.4**	**10.0**	**9.9**	**22.5**	**23.1**
Revenue Available for Debt Service	82.5	84.6	91.2	95.5	100.7	117.9	125.2
Average Annual Debt Service	29.5	30.5	30.1	35.1	41.0	47.9	47.4
Debt Service Coverage	2.80	2.80	3.00	2.70	2.50	2.50	2.60

APPENDIX C — DATA TABLES

Table C-1
Drainage and Wastewater Fund
Historical and Forecast Revenues
($ millions)

	2010	2011	2012	2013	2014	2015
Forecast Revenue[1]						
Capital/Operating Grants	$6.5	$5.2	$3.4	$2.7	$2.7	$2.7
Public Toilets Service Fee	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Wastewater Service Rates	$184.2	$209.4	$214.1	$211.4	$210.3	$209.9
Drainage Service Rates	$59.0	$67.2	$74.7	$79.9	$87.8	$96.5
Side Sewer Permit Fees	$0.9	$0.9	$0.9	$1.0	$1.0	$1.0
Drainage Permit Fees	$0.2	$0.2	$0.2	$0.2	$0.2	$0.2
SCL Call Center Service	$1.8	$1.8	$1.9	$1.7	$1.7	$1.8
Interest Earnings	$1.8	$0.8	$1.7	$2.5	$2.2	$2.8
Other Misc. Revenues	$4.8	$4.2	$3.7	$2.2	$2.2	$2.2
Use of Bond Proceeds	$55.9	$63.6	$69.5	$72.5	$75.4	$55.0
Total	$315.1	$353.4	$370.1	$374.1	$383.6	$372.1
Actual Revenue						
Capital/Operating Grants						
Public Toilets Service Fee	$5.1	$9.8				
Wastewater Service Rates	$0.0	$0.0				
Drainage Service Rates	$185.2	$204.6				
Side Sewer Permit Fees	$58.3	$67.6				
Drainage Permit Fees	$0.9	$1.0				
SCL Call Center Service	$0.2	$0.2				
Interest Earnings	$1.6	$1.6				
Unreald Gns/Losses	$2.6	$2.8				
Other Misc. Revenues	$3.7	$3.5				
Use of Bond Proceeds	$43.6	$46.4				
Total	$301.2	$337.5				

Table C-1 Notes:

1) Historical Revenue Forecast = Adopted Revenue for years in which rates were proposed.

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Table C-2
Drainage and Wastewater Fund
Historical and Forecast O&M
($ millions)

	2010	2011	2012	2013	2014	2015
Forecast O&M[1]						
Drainage	$34.4	$37.8	$40.4	$43.4	$44.9	$47.4
Treatment	$111.1	$125.0	$123.7	$123.2	$122.7	$122.0
Wastewater	$35.9	$38.2	$37.8	$42.1	$43.3	$45.0
Total	$181.4	$201.0	$201.8	$208.7	$210.9	$214.4
Actual O&M						
Drainage	$34.8	$34.9				
Treatment	$111.3	$125.3				
Wastewater	$34.5	$35.7				
Total	$180.5	$195.8				

Table C-2 Notes:

1) This forecast data was used as a basis for rate studies in the applicable years. Forecast O&M does not include revenue-based taxes (city and state utility) or debt service which is reported separately in the rates model. Non-revenue based taxes, such as property assessments, are included in forecast O&M figures. The table does include certain non-cash expenses which are not included in the budget but are considered part of O&M expense on Financial Statements. The O&M data is net of the SCL revenue presented under forecast revenue above. For financial reporting purposes, this "revenue" is treated as an offset to expense. For budgeting purposes it is presented as revenue.

2) Non-treatment actual O&M is allocated between lines of business by the SPU rates group.

Table C-3
Drainage and Wastewater Fund
Operating Fund Cash Flow, 2009-2010
($ millions)

	2011 Actual	2012 Projected
Beginning Cash Balance	$28.8	$29.0
Sources of Funds		
Interlocal Grants-Operating	$2.3	$0.8
Capital Contribution/Grant	$7.5	$2.9
Wastewater Utility Services	$204.6	$207.5
Drainage Utility Services	$67.6	$74.9
Side Sewer Permit Fees	$1.0	$1.0
Drainage Permit Fees	$0.2	$0.2
SCL Call Center Payments	$1.6	$1.6
Inv Earn-Residual Cash	$2.8	$2.6
Other Miscellaneous Revenues	$3.5	$2.7
Sources Subtotal:	**$291.1**	**$294.3**
Uses of Funds		
SPU General Expenses	$174.5	$177.8
Director's Ofc/Corp Strat&Comm	$2.0	$2.3
F&A/HR & Service Equity	$10.7	$12.6
Customer Service	$6.2	$7.4
Project Delivery	$8.7	$11.1
Pre-Capital Plng & Devlpmnt	$2.1	$1.6
Field Operations	$19.0	$19.6
Utility Systems Mgmt	$16.6	$18.9
G&A Credits	-$8.0	-$9.3
Operations Subtotal:	**$231.8**	**$242.0**
Debt Service		
Interest	$24.2	$27.3
Principal	$14.0	$15.0
Total Sources Net Uses:	$21.0	$10.0
Adjustments:		
Lags and Leads in Revenue	-$2.5	-$0.7
Other Assets and Liabilities	$1.5	$3.5
Ending Cash Balance	**$29.5**	**$24.3**

COUNCIL

Table C-4

Drainage and Wastewater Fund
Construction Fund Cash Flow, 2011-2015
($ millions)

		2011	2012	2013	2014	2015
		Actual	Projected	Proposed	Proposed	Proposed
Starting Cash Balance		$76.5	$80.4	$84.7	$72.9	$60.3
Sources of Funds						
	2009 Bond Issue	$44.3	$28.8			
	2012 Bond Issue		$17.7	$64.4	$4.9	
	Future Bonds				$55.9	$53.3
	Bond Issuance Costs		$1.6		$1.7	
	Contributions in Aid of Construction	$3.3	$2.6	$1.6	$1.6	$1.6
	Interest Earnings	$0.6	$0.2	$0.1	$0.1	$0.1
	Transfers from Operating Fund	$17.5	$20.1	$18.7	$23.8	$12.4
	Total Sources:	$65.7	$71.0	$84.8	$87.9	$67.3
Uses of Funds						
	Combined Sewer Overflows	$15.3	$16.6	$43.8	$49.2	$36.1
	Wastewater Conveyance	$8.9	$11.2	$9.2	$8.8	$10.0
	Flooding/Sewer Backup	$15.4	$19.4	$16.7	$17.2	$7.2
	Protection of Beneficial Uses	$3.4	$3.4	$5.1	$5.1	$4.3
	Landslide Mitigation & Special Programs	$0.0	$0.0	$0.0	$0.0	$0.0
	Sediments	$7.6	$3.4	$1.7	$2.1	$1.6
	Shared Cost Projects	$8.0	$7.9	$12.6	$10.4	$8.8
	Technology	$3.2	$4.7	$7.4	$7.7	$5.4
	Total Uses:	$61.8	$66.6	$96.6	$100.5	$73.4
	Sources Net of Uses:	$3.8	$4.3	($11.8)	($12.6)	($6.1)
Ending Cash Balance		$80.4	$84.7	$72.9	$60.3	$54.3

APPENDIX D— DWF COST ASSIGNMENT DETAIL

Drainage and Wastewater Cost Assignment Methodology

SPU conducted its last review of DWF cost assignment factors in 2010, using 2009 actual data. Those factors were used to determine the 2010 drainage and wastewater system cost of service.

The 2013-2015 rate study uses the methodology described below for assigning operating expenses between drainage and wastewater lines of business. The cost assignment methodology is consistent with that of the 2004 through 2012 rate studies. The current rate study uses 2011 actual labor expense as the basis for labor related cost splits. Consistent use of actual expense over time helps to minimize errors in cost assignment resulting from variations between actual and budgeted spending.

DWF Operating Expenses are grouped into three categories:

1) Direct Operating Expense;
2) Branch and Division Administration; and
3) General and Administrative Expense.

Direct Operating Expense

Some expenses are assigned 100 percent to the applicable line of business (e.g., drainage billing administration). The majority of shared direct operating expenses are assigned based on actual direct labor expenses of an identified proxy. For example, most regulatory direct operating expense is related to water quality and combined sewer overflow (CSO) issues. Therefore, these activities are assigned based on actual direct labor expense for a subset of water quality and CSO-related capital and operating activities. The use of a programmatic proxy is useful in capturing any shifts in the focus of regulatory support over time.

Management estimates are used to identify the cost assignment factors for a limited number of activities. The bulk of activities using management estimates are related to billing and customer service activities. SPU is responsible for wastewater billing and for drainage and wastewater customer service.[8] Management estimates are used to identify labor effort associated with the support of each line of business for a targeted subset of customer service budgeted activities.

Branch and Division Administration

With the exception of the Project Delivery Branch, the cost assignment of all division general management expense is based on the sum of actual direct labor expenses for direct operating activities which charge to the division budget. The assignment of branch management expense is based on the sum of actual direct labor charged to direct operating and division administration activities rolling up to the branch budget.

Administrative expense for project delivery is assigned based on actual direct labor expense charged to capital projects by each division. Project delivery branch management expense is

[8] King County administers billing for drainage.

assigned based on the sum of actual direct labor expense charged to capital projects by all project delivery branch divisions.

This methodology creates a direct link between administrative functions and the activities they support. In addition, this methodology provides a consistent mechanism for updating administration cost assignment from year to year in the event that the programmatic focus of a particular branch or division changes.

General and Administrative Expense

Finance and Administration Branch expense is assigned based on the sum of actual direct labor expense for all direct operating and branch/division administrative activities which charge to the DWF budget.

Cost Assignment Factor

The DWF total operating budget for each operating activity is divided between the wastewater and drainage lines of business using the cost assignment factors in Table D-1. These factors represent the typical amount of support provided to each line of business in carrying out a specific type of activity. For example, the "FO Branch OH" factor assumes that the branch management of field operations is related to drainage services about 52 percent of the time and to wastewater services about 48 percent of the time. Therefore, drainage and wastewater each receive their proportional shares of the activities assigned this factor.

Table C-1 (on the following page) presents detail on the applicability, basis, and drainage expense share associated with each cost assignment factor. The fourth column in this table shows the percentages which were applied in prior rate studies. The final column presents revisions to these factors, where applicable, based on 2011 direct labor data.

The application of the 2011 revised cost assignment factors decreases the 2013 wastewater share of DWF pre-existing O&M by $0.3 million, and increases the drainage share by a corresponding amount.

Table D-1
DWF Cost Assignment Factors

Factor	Applicability	Basis	Drainage Share Base	Drainage Share Revised
BRANCH LABOR				
CS Branch OH	Customer Service Branch Administration	2011 Division Direct O&M Labor	17%	19%
HR Branch OH	F&A/HR & Service Equity Branch Administration	2011 Division Direct O&M Labor	60%	68%
FO Branch OH	Field Operations Branch Administration	2011 Division Direct O&M Labor	49%	52%
USM Branch OH	Utility Systems Management Branch Administration	2011 Division Direct O&M Labor	72%	51%
PD Branch OH	Project Delivery Branch Administration	2011 Division Direct O&M Labor	62%	63%
DIVISION LABOR				
CS CB	Customer Billing Srvcs	2011 Division Direct O&M Labor	1%	7%
CS CPM	Customer Progs & Contract Mgmt	2011 Division Direct O&M Labor	100%	83%
CS CR	Customer Response	2011 Division Direct O&M Labor	5%	5%
CS UST	Utility SVC Teams	2011 Division Direct O&M Labor	51%	36%
PD CM	Construction Management	2011 Division Direct O&M Labor	54%	62%
PD E	Project Mgmt & Engineering	2011 Division Direct O&M Labor	62%	56%
PD PS	Project Support	2011 Division Direct O&M Labor	66%	73%
FO DWW	Field Operations Drainage and Wastewater Division Administration	2011 Division Direct O&M Labor	57%	55%
FO Water	Field Operations Water (included because some Drainage & Wastewater work is done by this Division)	2011 Division Direct O&M Labor	15%	0%
FO UOC	Field Operations Utility Operations Center	Reorg	0%	0%
FO Crew	Field Operations Crew Schedule and Project Delivery	Reorg	0%	0%
USM LOB	Utility Systems Management Drainage and Wastewater Line of Business	2011 Division Direct O&M Labor	66%	39%
USM QD	USM Drainage and Wastewater Quality Division	2011 Division Direct O&M Labor	84%	64%
USM Tech	USM Technical Services Division	2011 Division Direct O&M Labor	0%	0%
EC	Pre-Capital Planning and Development, Expensed Capital	2011 Division Direct O&M Labor	99%	60%
FA FRP	F&A/HR & Service Equity, Facilities and Real Property Services	2011 Division Direct O&M Labor	60%	68%

Table D-1 (cont.)

Factor	Applicability	Basis	Drainage Share Base	Drainage Share Revised
DIRECT				
CIP	CIP management, G&A Credit, and Corps Design Permit Review	2011 CIP Direct Labor	55%	55%
CSO	Combined System Overflows	Stormwater portion of the average annual flow	18%	18%
CS Credit	Customer Service Utility Credit	Drainage Portion of Utility Credit	19%	19%
D	Direct drainage services such as drainage repair, storm water management, etc.	Utility Specific	100%	100%
Labor	Finance, human resources, and information technology expenses. Labor refers to the basis for the factor (i.e. direct labor expense for activities that the finance and Administration functions support).	2011 Actual non-Finance & Administration Direct O&M Labor (All)	52%	50%
Management	Activities with no alternate indicator. Factor based on management estimates of support required for each line of business. Used for all direct customer service activities, environmental justice and neighborhood planning, and limited environmental regional planning activities.	Management Estimate of labor required	0%	0%
Model	Debt service and taxes are calculated for each utility by the rates model based on forecast CIP spending requirements and operating revenues respectively.	Rates Model	0%	0%
S	Direct wastewater services such as wastewater treatment, pomps station maintenance, etc.	Utility Specific	0%	0%
SewerPipe	Maintenance of sewer pipes	Drainage Portion of Combined pipe relative to all Sewer Pipe	6%	6%
SideSewer	DPD Side Sewer Contract and Side Sewer GIS Drafting	2011 Permit Revenue	19%	20%

APPENDIX E— COMPARATIVE RATES

The following tables compare 2012 City of Seattle drainage and wastewater fees to those of other regional utilities.

Figure E-1
Monthly Drainage Bill Comparison
Single Family Residence

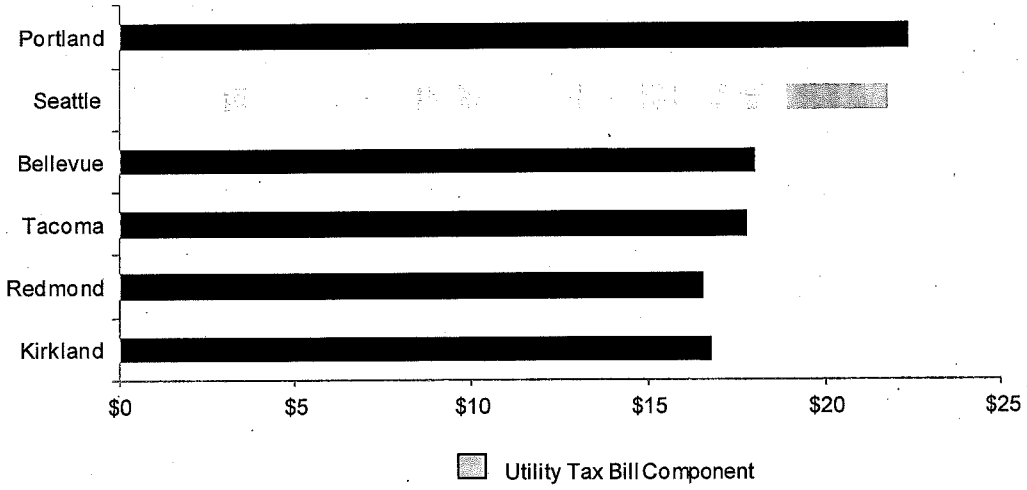

Figure E-2
Monthly Wastewater Bill Comparison
Single Family Residence
Based on typical Seattle monthly usage of 4.3 ccf

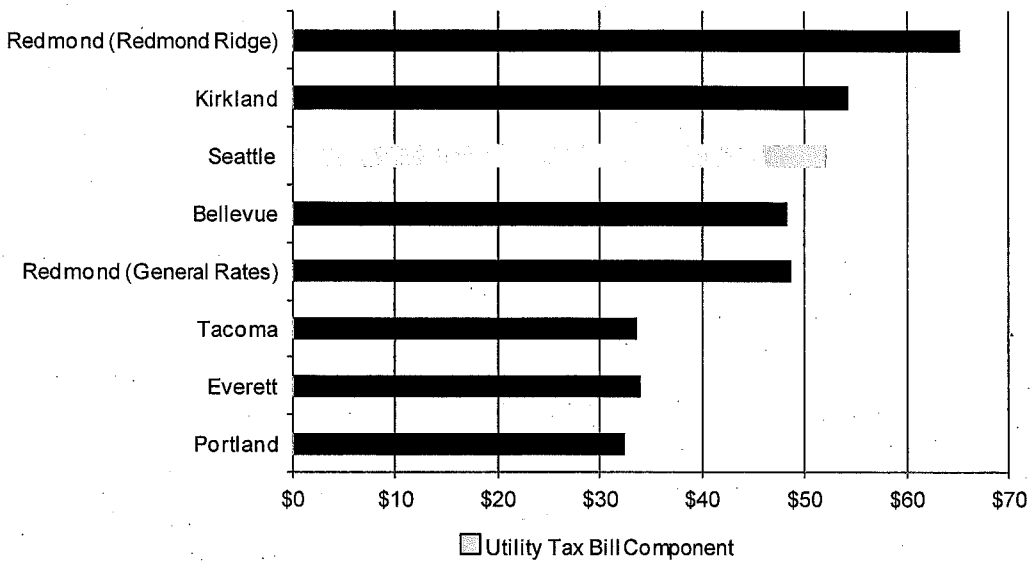

Figure E-3
Monthly Drainage Bill Comparison
Commercial (1 acre parcel)

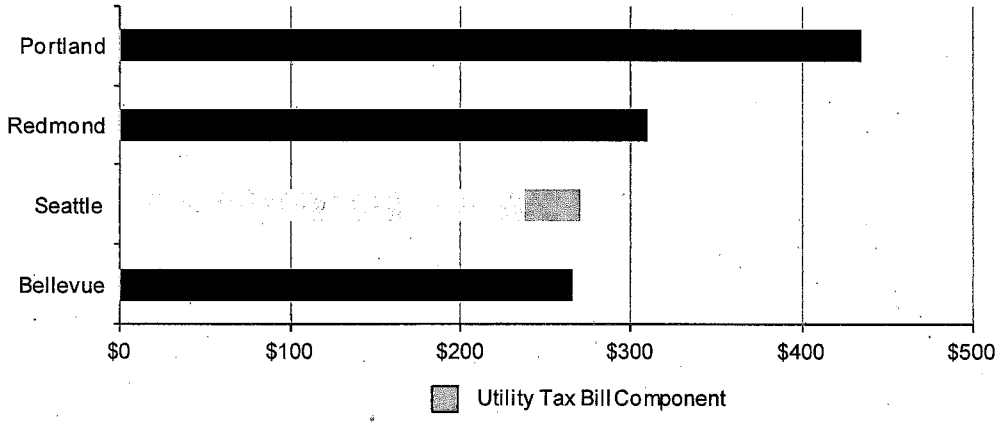
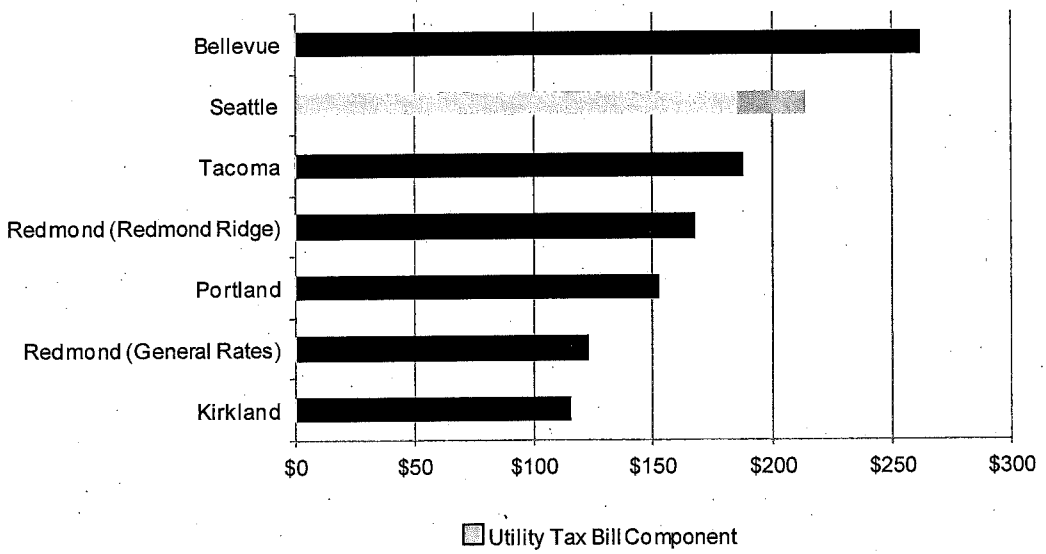
Figure E-4
Monthly Wastewater Bill Comparison
Commercial
Based on Monthly Usage of 20 ccf