King County

Metropolitan King County Council
Budget & Fiscal Management Committee

Staff Report

Agenda item No:	5	Date:	May 21, 2013
Ordinance No:	2013-0217	Prepared by:	Beth Mountsier

STAFF REPORT

SUBJECT:

AN ORDINANCE setting the sewer rate and capacity charge for 2014.

SUMMARY:

King County's sewer rates are set for the following year by June 30 of each year. Proposed Ordinance 2013-0217 would:

- Set the 2014 **monthly sewer rate at $39.79** per residential customer equivalent (RCE) per month, which is the same rate as 2013[1].
- Set the **monthly capacity charge** for new connections to the regional system occurring in 2014 **at $55.35**, which is a 3.5% or $1.85 increase over the 2013 rate of $53.50.

BACKGROUND:

Wastewater Services Contracts
King County provides wastewater treatment services for 17 municipalities and 17 sewer districts (including the Muckleshoot Tribe) in King County, southern Snohomish County and the northern tip of Pierce County. The municipalities constitute approximately three-fourths of the county's ratepayer base and the sewer districts constitute roughly one fourth of the ratepayer base.

The County does not provide wastewater services directly to residential or business customers. Rather, the County has a contractual relationship with cities and utility districts to collect wastewater from them in large interceptor lines, and convey the wastewater to County treatment plants for treatment and discharge. The sewerage service provided by the County's Wastewater Treatment Division (WTD) includes construction, operation and maintenance of main trunk and interceptor sewers, pumping stations, and treatment plants. The wastewater treatment services protect water quality and prevent water and broader environmental pollution.

[1] Last year the rate was raised 10.4% or a $3.69 increase over the 2012 rate of $36.10.

There are two main sewer charges to customers, a monthly sewer fee and a capacity charge for new connections to the system. The monthly sewer rate collected by the county goes towards all WTD expenses, including operating costs, debt service, and capital expenses. The capacity charge goes towards capital improvements required to provide capacity for new customers.

The County charges the contracted city and sewer district agencies the monthly sewer rate, which in turn bill the customers to whom they provide sewage collection services. Many residents see these charges on their sewer bills, but they are not paying the County directly. Their utility providers, as direct service providers, set their own rates to recoup the payments to the County for wastewater treatment plus their own "local" cost of service. Unlike the monthly sewer rate, the capacity charge is directly billed by and paid to King County.

The contracts specify that the sewer rate be in place by **June 30th** of each year.

Monthly Sewer Rate

The monthly sewer rate for both residential and commercial customers is calculated on the basis of Residential Customer Equivalents (RCEs). One RCE (750 cubic feet of wastewater) represents the average amount of wastewater a single family residence would generate in a month and is codified as one RCE. Commercial and industrial customers are charged based on the amount of wastewater generated, converted into RCEs.

The Executive's proposal includes maintaining the monthly sewer rate charge at $39.79 per RCE per month. Historical sewer rates are provided in the following table, along with the Executive's latest projections through 2018 (based on maintaining a rate of $39.79 in 2014 and raising the capacity charge to $55.35):

Table 1. Sewer Rates (1996-2013 Actual; 2014-2018 Projected)

Year	Rate ($/RCE/ Month)	% Increase
1996 - 1999	$19.10	
2000	19.50	2.1%
2001	19.75	1.3%
2002 - 2004	23.40	18.5%
2005 - 2006	25.60	9.4%
2007 - 2008	27.95	9.2%
2009 - 2010	31.90	14.1%
2011 - 2012	36.10	13.2%
2013-2014	**39.79**	**10.4%**
2015	41.95	5.4%
2016	42.73	1.9%
2017	44.52	4.2%
2018	45.16	1.5%

Last year the sewer rate was raised to $39.79; approximately a 10.4 percent increase over the 2011-12, with the intent that this would be a two-year rate. With this year's rate proposal, the out-year rate projections are slightly lower than had been forecast when the 2013 rate was adopted last year. Additional information regarding the projections and use of the rate stabilization fund are discussed below.

Most of the sewer rate (56%) goes towards debt service payments. About a quarter of the rate (23%) goes towards operating expenses (everything from labor costs to operational costs at the treatment plants and conveyance facilities). The remainder pays for overhead charges from county agencies and other interdepartmental services, including water quality testing (7%) and direct capital payments (14%)[2]. The latter is assumed to increase by almost 5% over previous years because in 2013 WTD will complete the payoff of an interfund loan that was arranged four years ago to terminate short-term/variable rate debt when it was extremely volatile during the economic downturn.

Capacity Charge

New connections to the regional wastewater system are assessed a capacity charge designed to pay for capital improvements required to provide capacity for these new customers. This is in accordance with the adopted policy of "growth pays for growth" (K.C.C. 28.86.160 FP-15 and Ordinance 14219). New connection customers are locked into the capacity charge rate that is in effect at the time they connect to the system and begin to be assessed the charge by the county. The capacity charge is payable over a fifteen year period, or it can be paid in a lump sum (up front or at any time).

The executive's proposed capacity charge of $55.35 is an increase of 3.5%, or $1.85 over the 2013 capacity charge of $53.50. The capacity charge as proposed for 2014 at $55.35 would amount to $9,963 if paid monthly for the full term of 15 years. An up-front payment, discounted at approximately 2.7%[3] compounded over the 15 years, would amount to a reduced payment of $8,225 in 2014, if the total amount was paid at once.

A history of the capacity charge along with projections through 2018 is below:

Table 2. Capacity Charge (1996 – 2013 Actual; 2014-2019 Projected)

Year	Rate/Month/RCE 15-yr. duration	% Increase
1996 - 1997	$7.00	
1998 - 2001	10.50	50.0%
2002	17.20	63.8%
2003	17.60	2.3%

[2] MWPAAC and the Executive are recommending that WTD increase the amount of direct capital payments (also known as 'pay-as-you-go') to pay for capital projects and decrease the amount of borrowing necessary for the proposed capital program.

[3] This discounted rate for 2014 assumes action by the Council on Proposed Ordinance 2013-0225, which would index the rate to reflect fifteen-year mortgage and ten- and twenty-year investment rates, that beginning in December 2013 would be updated in December of each year. The code currently provides discount rate 5.5% percent annually.

2004	18.00	2.3%
2005 - 2006	34.05	89.2%
2007	42.00	23.3%
2008	46.25	10.1%
2009	47.64	3.0%
2010	49.07	3.0%
2011	50.45	2.8%
2012	51.95	3.0%
2013	53.50	3.0%
2014	**55.35**	**3.5%**
2015	57.01	3.0%
2016	58.72	3.0%
2017	60.48	3.0%
2018	62.30	3.0%
2019	64.17	3.0%

The sharp increase in 2005-2006 was due to a Regional Wastewater Services Plan (RWSP) update, with new cost estimates for all components of the RWSP, including Brightwater.

The capacity charge is based on long-term 30-year projections (of customers and anticipated debt burdens for capacity projects through the year 2030) and therefore tends to be stable over time. The projections are updated every three years (per policy). 2014 is an update year[4]. In the off years, the charge increased by 3 percent to reflect the standard inflationary and cost estimate increases. The three year update is intended to 'true up' those assumptions based on the most recent information on cost estimates, cost actuals for projects and the same with RCE projections, etc.

The capacity charge is calculated using methodology laid out in Wastewater Financial Policy 15 (FP-15), K.C.C. 28.86.160. The Regional Water Quality Committee (RWQC) is currently reviewing the capacity charge methodology and procedures based on work conducted in previous years by its chartered Financial Policies Work Group. Though the capacity charge review occurs every three years, should the RWQC and Council act to amend the financial policies regarding the capacity charge – those changes would be expected to be reflected in the capacity charge calculation for the following year (i.e. not postponed to the three year update).

ANALYSIS

The $39.79 proposed monthly sewer rate maintains the rate set for 2013. The following is a summary of the components or factors related to revenues and expenses that are changing relative to when the rate was set in 2013.

[4] The projections were last updated in 2010 for the 2011 proposed capacity charge.

Table 3. Changes from 2013 Adopted Rate to 2014 Proposed Rate

Components of Change	Change	Rate
2013 Adopted Rate		**$39.79**
Revenues and Customer Charges		
Investment Income (interest rate decline)	($0.03)	
Increased RCEs	($0.20)	
Capacity Charge (pre-payments and rate increase)	($0.48)	
Reduced use of rate stabilization	$0.81	
Sub-total	*$0.44*	
Operating Expenses	$0.07	
Capital Program and Debt Service		
Long-term Bond Refunding	($0.51)	
Sub-total	*($0.51)*	
Total Rate Increase		**$0.00**
2014 Proposed Rate		**$39.79**

A summary of the factors affecting the 2014 sewer rate compared to 2013 are:

- ***RCE Forecasts – ($0.20)***
  RCE projections for the proposed sewer rate remain conservative reflecting continuing economic uncertainty. Although, based upon stronger residential units projections, the Executive has adjusted the outlook for new connections (compared to last year's projections) The forecast for 2014 has been increased from 8,500 to 9,000 connections and the 2015 forecast has also been increased by 500 connections compared to the 2013 adopted budget.

- ***Long-term Bond Refunding – ($0.51)***
  Interest rates have continued to be favorable and in March 2013, $143.4 million in existing long-term debt was refinance achieving $45.3 million in debt-service savings over the life of the bonds. All savings from the refinancing are included in the rate proposal. Although 2012 and 2013 debt issue and refunding have provided positive results, the Executive notes that the outlook for future interest rates remains uncertain. The financial plan accompanying the rate proposal assumes interest rates for borrowing of 5.25% in 2013/14, rising to 5.5% in 2015/16 with additional increases in the out years.

Table 4. Current Residential Customer Equivalents Forecast

	2012	2013	2014	2015	2016
2014 Rate Proposal	708,894	710,524	712,656	715,293	718,369
Percent Change	0.23%	0.23%	0.30%	0.37%	0.43%
2013 Adopted Budget	707,278	707,278	709,046	712,591	716,154
Percent Change	0.00%	0.00%	0.25%	0.50%	0.50%
Change from 2013 Forecast	1,616	3,246	3,610	2,702	2,215

- ***Capacity Charge – ($0.14)***
  Between new connections, pre-payments of the connection charge and the proposed capacity charge rate for 2014; the net effect is a benefit to the 2014 rate of approximately 14 cents. Stronger than anticipated new construction growth is pushing up the projections for new connections, but lump sum payments on the capacity charge are continuing to exceed the conservative projections in the financial plan

Table. 5 Projected New Sewer Connections by Year of Connection

	2012	2013	2014	2015	2016
2014 Rate Proposal	7,745	7,500	9,000	10,500	11,000
2013 Adopted Budget	5,800	6,500	8,500	10,000	11,000
Change	1,945	1,000	500	500	0

- ***Rate Stabilization Reserve - ($0.81)***
  Rate stabilization is a way of reserving operating revenues for use in subsequent years to help smooth out (or offset) rate increases that would otherwise fluctuate more with the ups and downs in the revenues and expenses that occur. The planned draw-down of the rate stabilization reserve offsets/reduces what would otherwise be a greater increase in the sewer rate.

  Current projections show the rate stabilization reserve is anticipated to have a balance of $46.4 million by the end of 2013. This is greater than the 2013 adopted budget forecast (November 2012) where an ending 2013 balance of $41.1 million was projected. This difference reflects debt refunding and positive overall financial results of other factors. Significantly less funding will need to be drawn down in 2014, meaning there will be greater reserves which the Executive proposed to be used for additional future sewer rate mitigation. The 2014 rate proposal assumes this reserve balance will be zero entering 2017; (i.e. it will be used to manage sewer rates between 2014 and 2016).

Table 6. Amount of Rate Stabilization Reserve and Use (2012 – 2016)

	2011	2012	2013	2014	2015	2016
Rate Stabilization Reserve (000's)						
2013 proposed – beginning balance	$76,500	$60,600	$38,000	$8,900	$3,600	
2014 proposed - beginning balance		$76,500	$62,600	$46,400	$24,200	$10,3
Difference	-	$16,100	$24,600	$37,500	$3,600	20,600
Rate Stabilization Additions and Use (000's)						
Additions	---	---	---	---	---	---
Reductions		$13,900	$16,200	$22,200	$13,900	$10,300
Ending balance		$62,600	$46,400	$24,200	$10,300	---

The Executive's proposal draws down less of the rate stabilization reserve than previously forecast, which results in the reserve being available longer. Although the amount of the draw-down is built into the Executive's rate projections, how much to draw down each year is a policy decision.

- ***WTD Operating Costs - $0.07***
  Operating expenses for 2013 are projected and budgeted to be $121.5 million, a 4.2 percent increase over the 2012 adopted budget. This increase mainly reflects the impact of higher labor costs; adjustments to chemicals for prices and usage; increases in maintenance parts and materials; and adjustments to central charges. In 2014, operating expenses are projected to be $126.5 million, an increase of $5 million or 4.1 percent over the 2013 adopted budget.

  Major changes from 2013 to 2014 include increases in labor costs; supplies; treatment chemicals; diesel fuel; biosolids haul and application costs; anticipated electricity price increases; and intragovernmental costs. All of the 2013 and 2014 operating expense projections are consistent with the 2013 and 2014 biennial budget the King County Council adopted for WTD in November 2012.

  With the payoff of the intrafund loan, the Executive is proposing to shift more of the revenues to direct capital payments (see below) starting in 2014. The Council is also expecting a budget proviso report regarding water quality testing and reporting in fall 2013 prior to the budget. Based on that report there might be some addition operational costs for this testing, if the Council is interested in restoring or investing in additional testing.

WTD Capital Projects

The table below shows the differences in WTD's proposed Capital Spending Plan compared to the capital spending projections made last year. The WTD budget does not include any cost impact from the Brightwater litigation (neither the amount claimed by King County nor the amount cross-claimed against King County). Although the initial rulings on the case have been favorable to King County, appeals are expected in 2013.

Table 7. WTD Capital Spending Plan (2012-2018) in $Millions

Brightwater	**2012***	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
2013 Adopted	$89.1	$32.6	$0.0				
2014 Updated	$74.0	$45.0	$2.9				
Difference	($15.1)	$12.4	$2.9	$0.0	$0.0	$0.0	$0.0
Non-Brightwater	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
2013 Adopted	$144.9	$163.3	$170.4	$199.4	$206.4	$205.8	$209.9
2014 Updated	$118.4	$162.9	$171.6	$199.4	$206.4	$205.8	$207.8
Difference	($26.5)	($0.4)	$1.2	$0.0	$0.0	$0.0	($2.1)
Total CIP	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
2013 Adopted	$234.0	$167.3	$170.7	$179.4	$193.7	$212.0	$175.1
2014 Updated	$192.4	$207.9	$174.5	$199.4	$206.4	$205.8	$207.8
Difference	($41.6)	$40.6	$3.8	$20.0	$12.7	($6.2)	$32.7

With the Brightwater Project essentially completed, WTD has returned to normalized capital budgets and borrowing on an annual basis. Projects that could be safely deferred during construction of Brightwater were delayed – there is something of a backlog of projects that need to be addressed. Careful evaluation, prioritization and timing of these projects is necessary to balance impacts to the rate with the necessity to ensure the wastewater system and facilities are meeting regulatory standards, capacity projections and being maintained through prudent asset management investments. The Metropolitan Water Pollution Abatement Advisory Committee has raised concerns in the last two years regarding debt loads for WTD. See discussion below.

WTD's Capital Project Prioritization Process

WTD employs a prioritization scoring process for all active projects each year until they reach the Implementation Phase (e.g., when a construction contract is signed). The purpose of the process is to allocate resources to the most needed projects in alignment with WTD's goals and objectives.

Capital projects are prioritized within three major categories: 1) major capital projects which include addressing regional capacity needs, 2) asset management to reduce service disruption and impacts from asset failure, and 3) planning for regional service needs.

For each of the three categories of capital projects, first the Project Manager completes a project information sheet. Then a six-member scoring panel reviews the information and each member assigns a score to each project. The Project Management system generates project rankings based on the scores, for each project type (major capital, asset management, planning). Finally, the WTD Management team reviews the results in combination with cash flow, life to date budget performance, and other factors to develop WTD's proposed 6-year capital budget. The project list and prioritization is also reviewed with the Metropolitan Water Pollution Abatement Advisory Committee (MWPAAC) for feedback.

Major Capital Projects Incorporated into the 2014 Rate

Staff analysis of capital projects is continuing. As reported by the Executive, key projects that are underway or proposed to be added through the 2014 budget process that represent a significant portion of the necessary borrowing during the 6 year capital planning horizon include the following:

- **Combined Sewer Overflow (CSO) Projects at Murray, Magnolia, Barton, and North Beach** ($139.1 million) The four CSO beach projects had baseline budgets established in 2012 and are currently on schedule. Construction for the projects is scheduled to start in the third to fourth quarter of 2013 with substantial completion in 2015.

- **North Creek Interceptor** ($55.9 million) The project will fund the design and construction of 9,650 feet of 36- to 48- inch-diameter gravity sewer using open cut and trenchless construction methods to meet the 20-year peak flow standard to avoid sanitary sewer overflows. The project was had a baseline budget

established in 2012 and is currently on schedule for completion at the end of 2017.

- **West Point Influent and Effluent Pump Station Variable Frequency Drive and Dewatering Equipment Replacement** ($35.3 million) This project replaces solids treatment equipment that has reached the end of its useful life with new energy efficient equipment. The current schedule for completion is 2018.

- **Combined Sewer Overflow (CSO) Control Hanford at Rainier and Bayview North** ($27.4 million) This project was started in 2013 following the adoption of an updated long-term CSO Control Plan in 2012. It will control combined sewer overflows (CSO) at Hanford at Rainier, and Bayview North to one event per year on a 20-year moving average in accordance with Washington State Department of Ecology standards. The current schedule for completion is 2019.

- **West Point Treatment Plant Oxygen Generating and Distribution System Replacement** ($23.5 million) This project replaces the oxygen generating system which is used in the digesters. It has reached the end of its useful life and will be replaced with a new energy efficient system. The current schedule for completion is 2018.

As reported by the Executive, new 2014 project requests are as follows:

- **Michigan/Brandon CSO Control** ($165 million) The project consists of building an equalization basin and Wet Weather Treatment Facility (WWTF), conveyance and outfall to treat CSOs prior to discharge into the Lower Duwamish Waterway. Modifications to both the Brandon Street and South Michigan Street Regulator Stations will be required for diversion of flows to the WWTF. Ancillary facilities include an odor control facility, electrical/controls building, and emergency generator. The current scheduled completion date is 2026.

- **North Beach Pump Station and Force Main Improvements** ($38.4 million) This project will assess, evaluate, and implement asset improvements to the facility's pump station and forcemain to bring it up to the current capacity standards. The current scheduled completion date is 2020.

- **North Beach Outfall Replacement** ($25.9 million) This project will replace an aged offshore outfall pipe with limited capacity at North Beach with a new larger capacity pipe to reduce the chance of overflows on the beach. The current scheduled completion date is 2018.

The Council will have an opportunity to review the Executive's proposed WTD capital projects as part of the 2014 budget process this fall. Until then, WTD continues to work on capital projects in accordance with the adopted 2013 budget.

Metropolitan Water Pollution Abatement Advisory Committee Comments

The Metropolitan Water Pollution Abatement Advisory Committee, or MWPAAC, advises the King County Council and Executive on matters related to water pollution

abatement. It was created by state law (RCW 35.58.210) and consists of representatives from cities and local sewer utilities that operate sewer systems with in King County. Most of these cities and sewer utilities deliver their sewage to King County for treatment and disposal.

MWPAAC recently transmitted a comment letter related to the proposed 2014 rate (Attachment 3). MWPAAC acknowledges the accomplishments of WTD in cost containment and productivity, but expresses concern, similar to last year, about debt management and on-going investments in reclaimed water. To address this, MWPAAC has agreed to participate in a review of WTD's long-term debt and capital funding strategy that will provide MWPAAC with the opportunity to comment on future capital funding strategies and debt levels.

As noted above, debt service is a significant component of the sewer rate. Below are three figures showing 1) debt service for 2008-2012 long-term bonds in millions of dollars, 2) debt service expressed as cents on the sewer rate; and 3) a debt profile of retiring and new debt that is anticipated through 2030. These are being updated for staff and potentially Council review, if requested. In addition staff is researching a historical perspective on debt loading per RCE to provide some further context for the Council.

As noted already, direct capital transfers/expenditures are expected to increase starting in 2014 after the interfund loan is retired this year. In addition, capacity charge income is growing in comparison to what is owed on debt for capacity projects – meaning more of that income will be available for the operating budget and/or direct capital expenditures.

Figure 1. Cumulative Debt Service Associated with Long-term Bonds Issued 2008 through March 2012 (in millions of $)

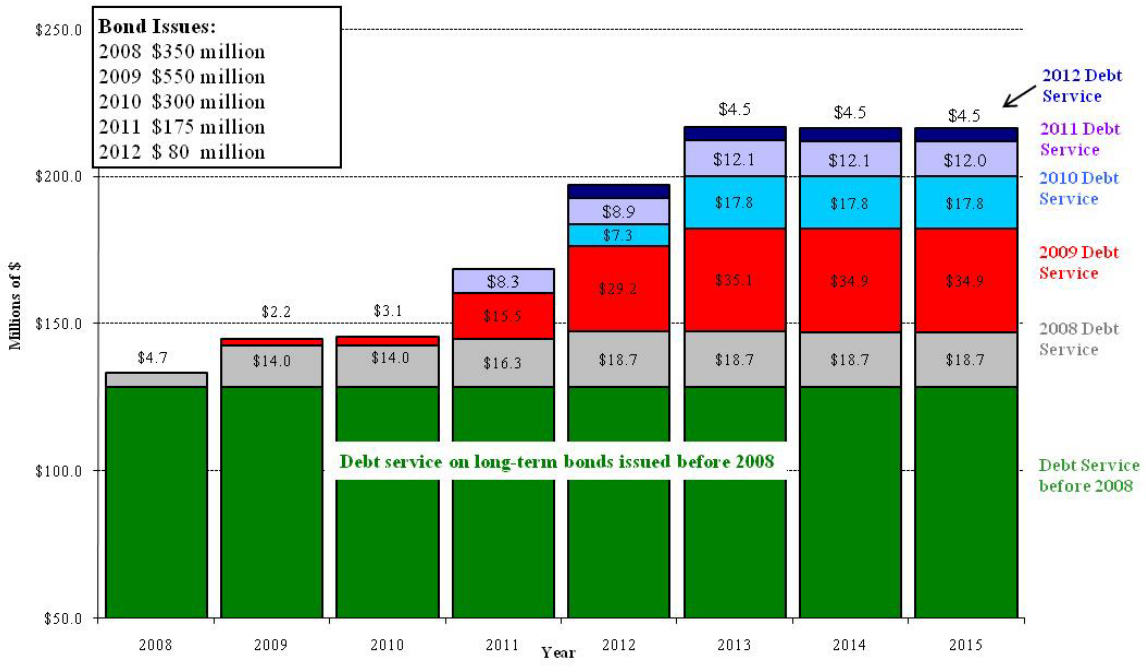


Figure 2. Cumulative Debt Service Associated with Long-term Bonds Issued 2008 through March 2012 (in $ per RCE per month)

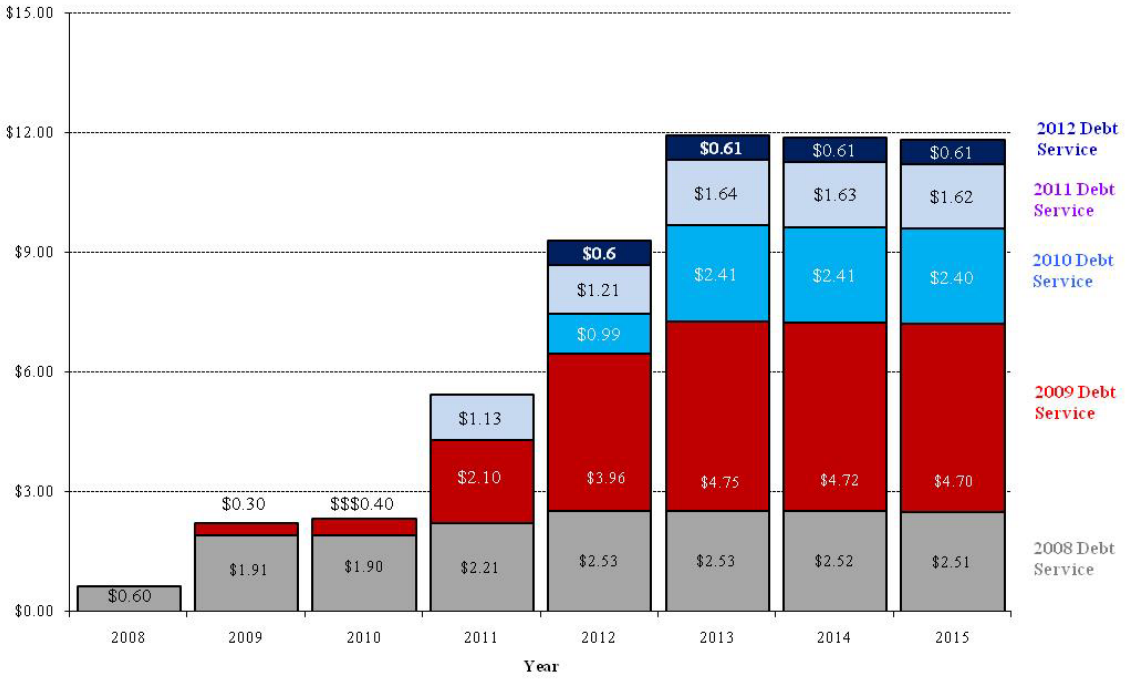
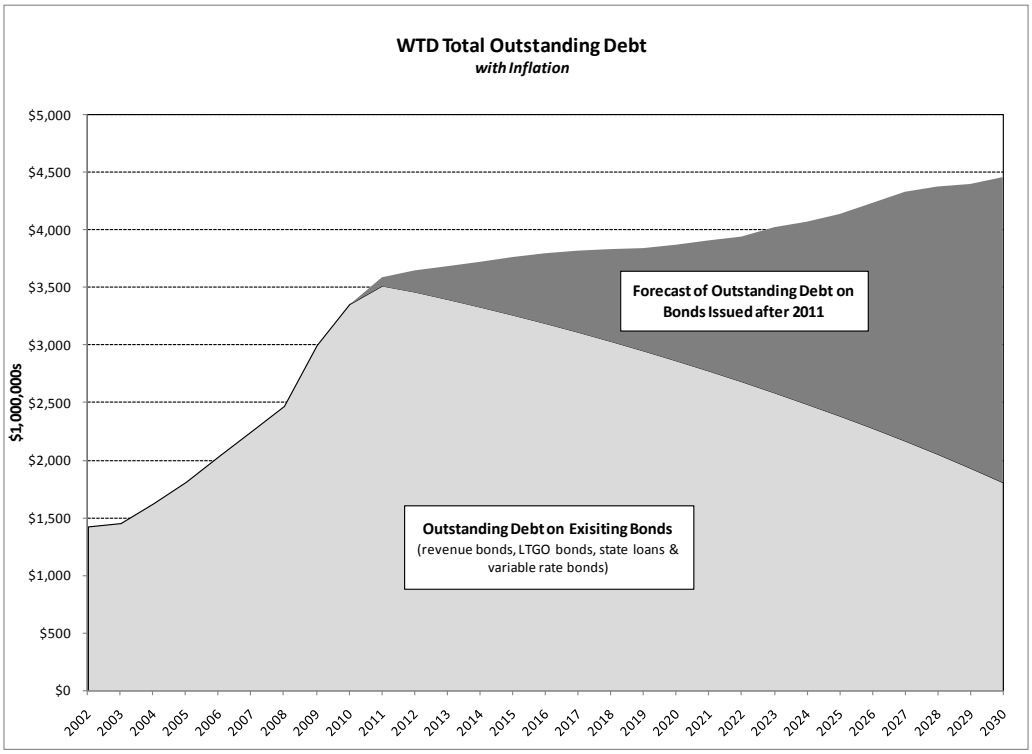


Figure 3. WTD Debt Forecast through 2030



Anticipated new bond issuances in 2012 – 2014 were already incorporated into the 2013/14 sewer rate and capacity charge. With those included the debt payments represent $22.48 out of the $39.79 monthly sewer rate. Debt refinancing at favorable rates in 2012 offsets approximately $0.51 on the rate in 2014.

It should be noted that debt issuances during the most intense period borrowing for the Brightwater project between 2008 and 2011 were structured to increase incrementally to smooth out the rate impacts. There is one more major adjustment in interest/principal payments on this debt scheduled for 2015 which is anticipated to be the major driver for a rate increase in the next rate period.

Alternative Financing

Supporting materials for the 2014 rate proposal note that another element of cost containment and strategic debt financing has been WTD's aggressive pursuit of low-cost financing for capital projects resulting in some capital projects being funded by grants or low-interest loans through the years. Collectively, these funds are referred to as alternative financing. Historically, WTD has received nearly $130 million in Washington State Revolving Fund and Public Works Trust Fund loans saving nearly $150 million over the life of the loans compared to conventional financing.

Eight projects currently in design or construction have state revolving loan funds for a total of $61.7 million.

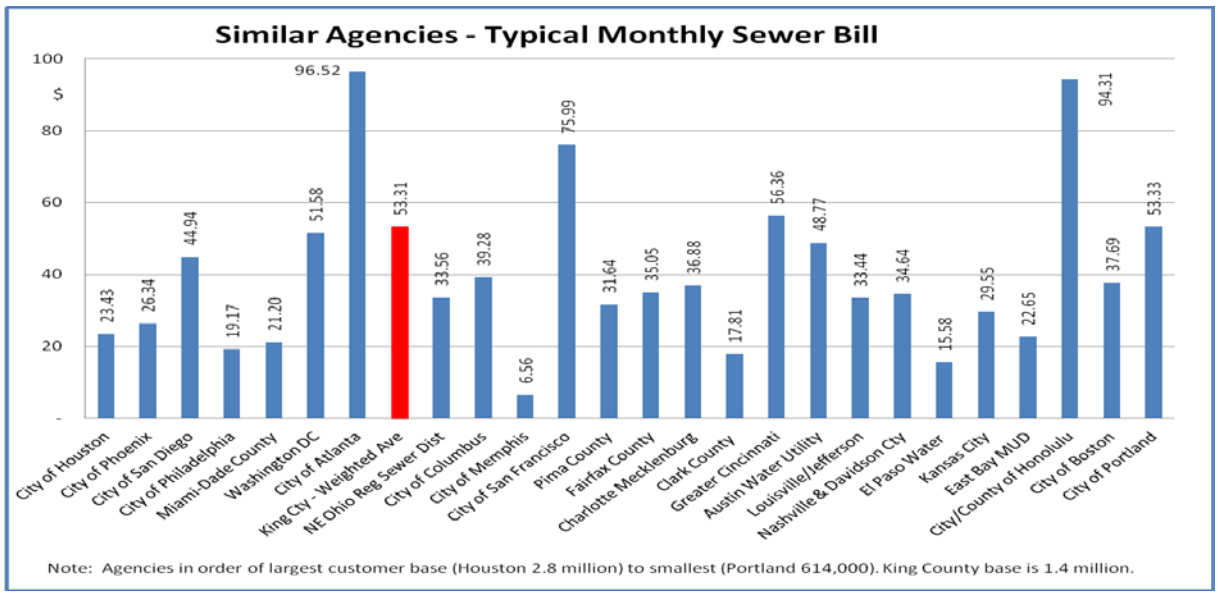
Comparison with Other Agencies

The Executive compared 2011 retail rates for 25 agencies across the country to King County. The Executive determined that King County ranks sixth among the surveyed agencies. Nine of the 26, including King County, fell within the range of $35 to $56 per month, with an average rate of $39.98 for all agencies.

The Executive also compared the average annual percent increase from 2001 to present. In Black and Veatch's, "50 Largest Cities Water and Wastewater Rate Survey", the average annual increase in wastewater rates between 2001 and 2009 was 5.5 percent for the 50 largest utilities in the country. During this same period WTD rates increased an average of 5.6 percent. If the period is expanded to 2001 to 2014 to include the rates from this proposal, the average annual rate of increase is 5.2 percent.

Comparing systems is difficult. For example, these numbers do not take into account the condition of each jurisdiction's wastewater treatment system, their ability to meet the needs of their regions, capacity to handle overflows, and age of their systems.
The following chart (Figure 4) presents the Executive's comparison of 2011 retail rates for 25 agencies to the weighted average of King County agencies. To approximate an average retail rate for King County, the rates of the 14 largest local component agencies were weighted by the number of RCEs and an average was calculated. The resulting weighted average rate was $53.31 for the typical homeowner and $63.01 at the standard usage of 750 cubic feet per month.

Figure 4. WTD comparison of typical monthly sewer bills.



Timing

The wastewater contracts specify that the sewer rate be in place by June 30 of each year. For a non-emergency ordinance, after Council approval, the Executive would need to sign by June 26 to meet this deadline. Therefore, the Council would ideally adopt the rate by its June 10 meeting, but no later than June 17 for a non-emergency ordinance. The last scheduled BFM committee meeting before those dates would be June 4.

REASONABLENESS:

Proposed Ordinance 2013-0217 would maintain sewer rates $39.79 and increase the capacity charge from $53.50 to $55.35 (a 3.5% increase). Staff analysis of the rate proposal is continuing.

INVITED:

- Pam Elardo, Director, Wastewater Treatment Division, DNRP
- Tim Aratani, Manager, Finance and Administrative Services, Wastewater Treatment Division, DNRP
- Tom Lienesch, Economist, Wastewater Treatment Division, DNRP
- Dwight Dively, Director, Performance, Strategy and Budget

ATTACHMENTS:

1. Proposed Ordinance 2013-0217 (with Attachment)
   A. WTD Financial Plan for the 2014 Proposed Sewer Rate
2. Fiscal Note
3. Executive's Transmittal Letter
4. King County Executive 2014 Monthly Sewer Rate and Capacity Charge Proposal, dated April 18, 2013

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King County

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

KING COUNTY

Signature Report

May 20, 2013

Ordinance

Proposed No. 2013-0217.1 **Sponsors** McDermott and Phillips

AN ORDINANCE determining the monetary requirements for the disposal of sewage for the fiscal year beginning January 1, 2014, and ending December 31, 2014, setting the sewer rate for the fiscal year beginning January 1, 2014, and ending December 31, 2014, and approving the amount of the sewage treatment capacity charge for 2014, in accordance with RCW 35.58.570; and amending Ordinance 12353, Section 2, as amended, and K.C.C. 4A.670.100, and Ordinance 11398, Section 1, as amended, and K.C.C. 28.84.055.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. Ordinance 12353, Section 2, as amended, and K.C.C. 4A.670.100 are each hereby amended to read as follows:

A. Having determined the monetary requirements for the disposal of sewage, the council hereby adopts a ((~~2013~~)) 2014 sewer rate of thirty-nine dollars and seventy-nine cents per residential customer equivalent per month. Once a sewer rate ordinance becomes effective, the clerk of the council is directed to deliver a copy of that ordinance to each agency having an agreement for sewage disposal with King County.

B. The King County council approves the application of Statement of Financial Accounting Standards No. 71 (FAS 71) to treat pollution remediation obligations and RainWise Program expenditures as regulatory assets, and establish a rate stabilization reserve for the purpose of leveling rates between years.

C. As required for FAS 71 application, amounts are to be placed in the rate stabilization reserve from operating revenues and removed from the calculation of debt service coverage. The reserve balance shall be an amount at least sufficient to maintain a level sewer rate between 2013 and 2014, and shall be used solely for the purposes of: maintaining the level sewer rate in 2014; and if additional reserve balance is available, moderating future rate increases beyond 2014. The estimated amount of the reserve, as shown in the financial forecast, Attachment A to ((~~Ordinance 17343~~)) this ordinance, shall be revised in accordance with the ((~~2013~~)) 2014 adopted budget and financial plan. If the reserve needs to be reduced to meet debt service coverage requirements for ((~~2012~~))2013, the county executive shall notify the council of the change by providing an updated financial forecast.

D. The executive shall provide monthly cost reports to the council on Brightwater as outlined in K.C.C. 28.86.165.

SECTION 2. Monetary requirements for the disposal of sewage as defined by contract with the component sewer agencies for the fiscal year beginning January 1, 2014, and ending December 31, 2014. The council hereby determines the monetary requirements for the disposal of sewage as follows:

Administration, operating, maintenance repair and replace (net of other income): $64,930,132.

Establishment and maintenance of necessary working capital reserves: ($21,812,667).

Requirements of revenue bond resolutions (not included in above items and net of interest income): $296,912,277.

TOTAL: $340,029,742.

SECTION 3. Ordinance 11398, Section 1, as amended, and K.C.C. 28.84.055 are each hereby amended as follows:

A. The amount of the metropolitan sewage facility capacity charge adopted by K.C.C. 28.84.050.O. that is charged monthly for fifteen years per residential customer or residential customer equivalent shall be:

1. Seven dollars for sewer connections occurring between and including January 1, 1994, and December 31, 1997;

2. Ten dollars and fifty cents for sewer connections occurring between and including January 1, 1998, and December 31, 2001;

3. Seventeen dollars and twenty cents for sewer connections occurring between and including January 1, 2002, and December 31, 2002;

4. Seventeen dollars and sixty cents for sewer connections occurring between and including January 1, 2003, and December 31, 2003;

5. Eighteen dollars for sewer connections occurring between and including January 1, 2004, and December 31, 2004;

6. Thirty-four dollars and five cents for sewer connections occurring between and including January 1, 2005, and December 31, 2006;

7. Forty-two dollars for sewer connections occurring between and including January 1, 2007, and December 31, 2007;

8. Forty-six dollars and twenty-five cents for sewer connections occurring between and including January 1, 2008, and December 31, 2008;

9. Forty-seven dollars and sixty-four cents for sewer connections occurring between and including January 1, 2009, and December 31, 2009;

10. Forty-nine dollars and seven cents for sewer connections occurring between and including January 1, 2010, and December 31, 2010;

11. Fifty dollars and forty-five cents for sewer connections occurring between and including January 1, 2011, and December 31, 2011;

12. Fifty-one dollars and ninety-five cents for sewer connections occurring between and including January 1, 2012, and December 31, 2012; ((~~and~~))

13. Fifty-three dollars and fifty cents for sewer connections occurring between and including January 1, 2013, and December 31, 2013; and

14. Fifty-five dollars and thirty-five cents for sewer connections occurring between and including January 1, 2014, and December 31, 2014.

B.1. In accordance with adopted policy FP-15.3.d. in the Regional Wastewater Services Plan, K.C.C. 28.86.160.C., it is the council's intent to base the capacity charge upon the costs, customer growth and related financial assumptions used in the Regional Wastewater Services Plan.

2. In accordance with adopted policy FP- 6 in the Regional Wastewater Services Plan, K.C.C. 28.86.160.C, the council hereby approves the cash balance and reserves as contained in the attached financial plan for ((~~2013~~)) 2014.

3. In accordance with adopted policy FP- 15.3.c., King County shall pursue changes in state legislation to enable the county to require payment of the capacity charge in a single payment, while preserving the option for new ratepayers to finance the capacity charge.

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

_____

Larry Gossett, Chair

ATTEST:

_____

Anne Noris, Clerk of the Council

APPROVED this _____ day of _____, _____.

_____

Dow Constantine, County Executive

Attachments: A. Wastewater Treatment Division Financial Plan for the 2014 Proposed Sewer Rate

ATTACHMENT A: Wastewater Treatment Division Financial Plan for the 2014 Proposed Sewer Rate

	2012 Unaudited	2013 Forecast	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast	2019 Forecast
RESIDENTIAL CUSTOMER EQUIVALENTS (RCEs)	708.89	710.52	712.66	715.29	718.37	721.47	724.57	727.69
MONTHLY RATE	$36.10	$39.79	$39.79	$41.95	$42.73	$44.51	$45.16	$45.90
% Increase		10.2%	0.0%	5.4%	1.8%	4.2%	1.5%	1.6%
BEGINNING OPERATING FUND	86,900	74,063	58,500	36,832	23,544	13,737	14,287	14,858
OPERATING REVENUE:								
Customer Charges	307,167	339,261	340,279	360,099	368,323	385,334	392,626	400,821
Investment Income	1,757	1,734	1,295	1,344	2,063	4,702	7,460	10,038
Capacity Charge	50,957	46,652	50,569	55,563	61,378	67,501	73,691	79,197
Rate Stabilization *	13,900	16,250	22,165	13,850	10,335			
Other Income	11,003	9,492	10,968	11,187	11,411	11,639	11,988	12,348
TOTAL OPERATING REVENUES	384,784	413,389	425,276	442,042	453,511	469,175	485,765	502,403
OPERATING EXPENSE	(114,630)	(121,504)	(126,467)	(132,090)	(137,373)	(142,868)	(148,583)	(155,642)
DEBT SERVICE REQUIREMENT PARITY DEBT	(195,392)	(219,083)	(220,998)	(226,369)	(233,701)	(241,048)	(248,913)	(256,901)
SUBORDINATE DEBT SERVICE	(14,166)	(16,941)	(18,855)	(21,329)	(22,739)	(25,478)	(28,357)	(31,292)
DEBT SERVICE COVERAGE RATIO PARITY DEBT **	1.38	1.33	1.35	1.37	1.35	1.35	1.35	1.35
DEBT SERVICE COVERAGE RATIO TOTAL PAYMENTS	1.29	1.15	1.15	1.15	1.15	1.15	1.15	1.15
INTER-FUND LOAN REPAYMENTS	(20,135)	(20,336)	(301)	(301)	(301)	(301)	(301)	(301)
LIQUIDITY RESERVE CONTRIBUTION	(1,064)	(687)	(496)	(562)	(528)	(549)	(571)	(706)
TRANSFERS TO CAPITAL	(39,397)	(34,838)	(58,159)	(61,392)	(58,868)	(58,931)	(59,039)	(57,562)
RATE STABILIZATION RESERVE *	62,600	46,350	24,185	10,335				
OPERATING LIQUIDITY RESERVE BALANCE	11,463	12,150	12,647	13,209	13,737	14,287	14,858	15,564
OPERATING FUND ENDING BALANCE	74,063	58,500	36,832	23,544	13,737	14,287	14,858	15,564
CONSTRUCTION FUND								
BEGINNING FUND BALANCE	91,648	102,493	43,504	5,020	5,000	5,000	5,000	5,000
REVENUES:								
Parity Bonds	80,000	50,000	30,000	106,135	108,097	118,194	120,502	121,315
Variable Debt Bonds	100,000	0	22,157	6,512	6,382	7,280	7,009	6,472
Grants & Loans	15,992	42,123	3,284	0				
Other	500	500	500	6,500	500	500	500	500
Transfers From Operating Fund	39,397	34,838	58,159	61,392	58,868	58,931	59,039	57,562
TOTAL REVENUES	235,889	127,461	114,100	180,539	173,848	184,905	187,050	185,850
CAPITAL EXPENDITURES	(192,367)	(183,425)	(148,737)	(169,526)	(175,418)	(174,892)	(176,590)	(175,323)
DEBT ISSUANCE COSTS	(748)	(1,000)	(711)	(2,155)	(2,194)	(2,400)	(2,445)	(2,459)
BOND RESERVE TRANSACTIONS	(20,480)	(2,998)	(1,822)	(6,612)	3,770	(7,609)	(8,009)	(8,063)
DEBT SERVICE, CAPITALIZED INTEREST RESERVE	(7,366)	0						
ADJUSTMENTS	(4,084)	973	(1,313)	(2,266)	(5)	(4)	(5)	(5)
ENDING FUND BALANCE	102,493	43,504	5,020	5,000	5,000	5,000	5,000	5,000
CONSTRUCTION FUND RESERVES								
Bond & Loan Reserves	180,831	183,757	186,892	195,770	192,005	199,618	207,632	215,700
Policy Reserves	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
TOTAL FUND RESERVES	195,831	198,757	201,892	210,770	207,005	214,618	222,632	230,700
CONSTRUCTION FUND BALANCE	298,324	242,261	206,913	215,770	212,006	219,619	227,633	235,701

* This revenue is accounted for as a regulatory asset to be deferred to future years in accordance with FAS-71.

** This includes a Regulatory Asset for a $54.1 million estimate of Environmental Remediation Liability in accordance with FAS-71 which will be amortized over a 30-year average bond term.

FISCAL NOTE

Ordinance/Motion No. 2013-XXXX
Title: 2014 Sewer Rate and Capacity Charge Ordinance
Affected Agency and/or Agencies: Wastewater Treatment Division, Department of Natural Resources and Parks
Note Prepared By: Dennis Barnes, Financial Services Administrator, WTD
Note Reviewed By: Tom Lienesch, Economist, WTD

Impact of the above legislation on the fiscal affairs of King County is estimated to be:

Revenue: ($000's)

Fund/Agency	Fund Code	Revenue Source	2013	2014	2015	2016
Water Quality/WTD	4610	Customer Charges		0	0	0
Water Quality/WTD	4610	Capacity Charge		2,849	7,409	6,573
TOTAL			**0**	**2,849**	**7,409**	**6,573**

Expenditures:

Fund/Agency	Fund Code	Department Code	2013	2014	2015	2016
TOTAL			**0**	**0**	**0**	**0**

Expenditures by Category

	2013	2014	2015	2016
Salaries & Benefits				
Supplies and Services				
Capital Outlay				
Other				
TOTAL	**0**	**0**	**0**	**0**

Assumptions: This legislation maintains the sewer rate at $39.79 for 2014. The capacity charge would increase from $53.50 to $55.35 per residential customer equivalent for 15 years for customers that connect in 2014. Most of the revenue impact is delayed until after 2014 due to a lag in the beginning of the 15-year billing period. Revenues increase sharply in 2015 as a portion of the new customers choose to make a lump sum payoff of their future payments. The capacity charge for customers connecting in previous years remains fixed at rates established for their year of connection.

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April 23, 2013

The Honorable Larry Gossett
Chair, King County Council
Room 1200
C O U R T H O U S E

Dear Councilmember Gossett:

This letter transmits an ordinance proposing a 2014 monthly wholesale sewer rate and capacity charge. The contracts with our component sewer agencies require the King County Council to adopt the 2014 sewer rate by June 30, 2013.

The proposed legislation keeps the rate at $39.79 for the second year in a row and increases the monthly capacity charge by 3.5 percent to $55.35. To help keep the 2013 rate in effect through 2014, and keep sewer rates lower than originally projected in 2015, the Wastewater Treatment Division (WTD) continues its commitment to identifying and implementing operating and debt financing efficiencies.

This legislation will maintain the financial health of our clean-water utility and reflects prudent financial management. This proposal was developed pursuant to the County's adopted financial policies for the wastewater utility that are included in King County Code 28.86.160. This proposal aligns with the environmental and financial stewardship goals of King County's Strategic Plan by instituting rates that guarantee funding for infrastructure that is crucial for the continuing protection of our region's water quality, public health, and economic development. This proposal emphasizes the following objectives:

- **Continued emphasis on cost containment.** WTD continues to maintain tight control of its operating expenditures. Although the division's Productivity Initiative ended in 2011, WTD has implemented the Bright Ideas Program which will help identify and implement new efficiencies as well as optimize efficiencies made through the Productivity Initiative. In addition, since March 2012, over $470 million in outstanding bonds have been refinanced resulting in over $64 million in debt service savings.
- **Maintain WTD's Infrastructure.** With the completion of the Brightwater treatment system, WTD capital spending levels are returning to more typical long-run levels. However, even at reduced levels of spending, the construction activity generated by the capital program in 2013 and 2014 will generate as many as 1,675 full- and part-time jobs. To ensure we are meeting our highest capital priorities, WTD has been

critically reviewing project scopes, schedules, cash flow projections, and risk analyses to ensure that projects addressing our most critical current needs are funded.

The recommendations of the Metropolitan Water Pollution Abatement Advisory Committee (MWPAAC) were also considered in preparing this proposal. MWPAAC includes representatives of the 34 customer agencies that contract with the County for wastewater treatment services. I have enclosed a letter from MWPAAC indicating their support for the 2014 rate, reviewing status with regard to ratemaking principles they identified last year, and outlining issues and recommendations that may impact future rates. I appreciate MWPAAC continued collaboration and commitment to our partnership and have directed the Wastewater Treatment Division (WTD) of the Department of Natural Resources and Parks to continue work with MWPAAC on the topics addressed in their letter.

I have also enclosed a discussion paper that describes critical forecasting parameters, assumptions, and policy options as required per Financial Policy-16. Financing for WTD's capital program continues to follow the guidance outlined in Financial Policy-13. A detailed financial forecast for the wastewater utility for the period 2013-2019 is attached to the ordinance.

If you have any questions about this legislation, please feel free to contact Pam Elardo, P.E.,Division Director of the Wastewater Treatment Division in the Department of Natural Resources and Parks, at 206-684-1236 or pam.elardo@kingcounty.gov.

Sincerely,

Dow Constantine
King County Executive

Enclosures

cc: King County Councilmembers
ATTN: Michael Woywod, Chief of Staff
Anne Noris, Clerk of the Council
Rob Shelley, Financial Advisor, Seattle Northwest Securities
Carrie S. Cihak, Chief Advisor, Policy and Strategic Initiatives, King County Executive Office
Dwight Dively, Director, Office of Performance, Strategy and Budget
Caroline Whalen, County Administrative Officer, Department of Executive Services (DES)
Ken Guy, Division Director, Finance and Business Operations Division, DES
Christie True, Director, Department of Natural Resources and Parks (DNRP)
Pam Elardo, P.E., Division Director, Wastewater Treatment Division, DNRP

King County
Department of Natural Resources and Parks
Wastewater Treatment Division

King County Executive 2014Monthly Sewer Rate and Capacity Charge Proposal

April18, 2013

This information is available in alternative formats upon request by calling 206-684-1280 (voice) or Relay Service 711 (TTY).

Table of Contents

List of Tables

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1.0 Introduction

This paperdescribes the underlying assumptions, projections, and key factorsconsidered in developing the King County Executive's proposal for the 2014 monthly sewer rate and capacity charge. The proposed2014monthly sewer rate is $39.79, the same rate as 2013.This proposal fulfills the commitment to maintain a level rate for 2013 and 2014.The proposed2014monthly capacity charge is $55.35, an increase of 3.5percentfrom the 2013 charge of $53.50.

In addition to maintaining the rate in 2014, several factors have contributed to lowering projected sewer rates beginning in 2015. These include several long-term bond refundings in 2012 and 2013 and higher than projected Residential Customer Equivalents (RCEs); capacity charge revenues; and investment income. The individual and cumulative impacts of these factors on future rates will be discussed later in this paper.

The remainder of this document outlines the major factors underlying the 2014 monthly sewer rate and capacity charge proposal: (1) sewer rate management; (2) WTD's operating revenues and expenses; (3) WTD's capital improvement program's spending, revenues, and financing; (4) new customer connections; (5) changes from the 2013 sewer rate to the 2014 proposed rate; and (6) a summary of projections and assumptions. The paper concludes with a comparison of King County's sewer rates with similar agencies.

2.0 Sewer Rate Management

The monthly sewer rate is determined by the amount of revenue required to pay all the costs of the utility in a given year, consistent with financial polices and requirements. During periods of time in which costs (capital or operating) are particularly volatile, the resulting revenue requirements could lead to large annual fluctuations in the rate. Examples include (1) the energy crisis in 2001, which led to a sharp spike in operating costs, and (2) the construction of Brightwater, which led to a period of high capital costs.Unmanaged, theresulting sewerrate fluctuations could prove disruptive to residential and commercial customers.

During these periods, the level and pattern of changes in the monthly sewer rate can be managed in several ways. One of these is by structuringinterest and principal payments on debt (debt service) to affect the annual revenue requirements and, therefore, the resulting sewer rate. The common characteristic of this approach is to structure the payment of debt service such that either principal or principal and interest payments are at levels less than full amortization for a period of time. A simple example is for debt service to reflectinterest payments only for a period of time before commencing full principal and interest payments. Another example is capitalizing a portion of interest payments during the construction period and including them in the total bond issue amount. This produces aperiod of relatively low debt service payment that is then "made up" in subsequent periods once the facility beginsoperation.

While useful for shaping the patterns of rate increases, someof these structures come with higher costs over time.WTD adopted a more conservative financial approach in structuring debt service for bond issues after 2010.However, approximately $3.35, or 91percent of the 2013/2014 rate

increase,was attributed to accommodating additional debt service from bondsissued in 2008 through 2010.

Two other effective means of managing sewer rates are the deferral of revenues through the use of a rate stabilization reserve and effective cost containment.These are the preferred methods of managing rate increases, and eachis discussed ingreater detail in the following sections.

2.1 Rate Stabilization

It is King County policy to have multi-year sewer rates when financially prudent. A rate stabilization reserve allowing the deferral of operating revenues into a future year has been used to help manage multi-year rate patterns starting with the 2005and2006 sewer rates. Current projections show the rate stabilization reserve is anticipated to have a balance of $46.4million by the end of 2013. This contrasts to the 2013 adopted budget forecast (November 2012) where an ending 2013 balance of $41.1 million was projected. This difference reflects debt refunding and positive overall financial results, discussed later in the paper, which allows for additional future sewer rate mitigation. The 2014rate proposal assumes thisreserve balance will be zero entering 2017; that is, it will be used to manage sewer rates between 2014 and 2016.

As shown in Table 2-1, therate stabilizationreserve balance of $62.6 million at the end of 2012is expected to decrease by $16.2 million in 2013. Thereafter, the reserve will be drawn down by $22.2 million in2014, $13.9 million in 2015, and finally $10.3 million in 2016. This pattern of rate stabilization usage maintains the utility's required minimum debt service coverage ratio of 1.15.

Table 2-1. Rate Stabilization Reserve, 2012-2016 (million dollars)

	2012	2013	2014	2015	2016
Beginning balance	$76.5	$62.6	$46.4	$24.2	$10.3
Additions	---	---	---	---	---
Reductions	$13.9	$16.2	$22.2	$13.9	$10.3
Ending balance	$62.6	$46.4	$24.2	$10.3	---

The continued use of rate stabilization in 2016 and beyond may need to be re-evaluated as projected sewer rate increases arerelatively small for that time period. During the 2016 to 2019 period, sewer rates are projected to increase by 2.3 percent on an average annual basis. This period of relatively small projected rate increases reflects four major elements:

1. Completion of Brightwaterwith a return of the capital program to lower, long-term levels.
2. The stabilization of debt service payments.
3. The growing importance of the capacity charge as revenue.
4. A larger share of the capital program will be funded with transfers from the operating fund (cash funding).

2.2 Cost Containment

While the rate stabilization reserve provides a means of managing rate increases by redistributing a portion of operating revenues, it is only one of the tools of rate management. Cost containment is another. As in prior years, WTD scrutinized all planned capital and operatingexpenditures with the goal of making reductions and implementing efficiencieswhile continuing to fulfill its regulatory obligations to protect public health and the environment. As part of the King County Executive's "EfficiencyInitiative," WTD developed a list of efficiency proposals for implementation in 2013 totaling $2.5 million. These proposals include productivity improvements of $0.9 million, cost reductions of $0.7 million, revenue enhancements of $0.7 million,and cost avoidance items of $0.2 million.Many of these will carry over into 2014. As a result of the Executive's efficiency initiative, WTD has implemented a Bright Ideas program, which encourages creative problem-solving throughout the organization and uses employee ideas to improve how we do business. Using these tools, WTD will continue to develop efficiencies in 2014.

The following sections provide additional detail on the progress made in managing costs in the operating and capital programsof WTD and how they affect the current rate proposal.

3.0 Operations

3.1 Revenues

Total operating revenues (including capacity charge receipts[1]) are projected to be $425.3million in 2014, a2.2 percent increase over the 2013adopted budget of $416.2 million. Most of this increase results from additional customer equivalents, compared to the 2013adopted budget and an increase in the monthly capacity charge rate by $1.85.As shown in Table 3-1,revenue from the sewer rate and capacity charge account for $6.9 million or 75.8 percent of the total operating revenue increase compared to the 2013 adopted budget.

Table 3-1. 2013 and 2014 Operating Revenues (million dollars)

	2013 Budget	2014 Proposed	Difference	% Change
Sewer Rate	$337.7	$340.3	$2.6	0.8%
Investment Income	$1.1	$1.3	$0.2	18.2%
Capacity Charge	$46.3	$50.6	$4.3	9.3%
Rate Stabilization	$21.5	$22.2	$0.7	3.3%
Other Income	$9.5	$11.0	$1.5	15.8%
Totals	**$416.2**	**$425.3**	**$9.1**	**2.2%**

Note: Totals may not add due to rounding

[1]Although the capacity charge does not fund any operating expenses, capacity charge revenues are categorized as operating revenue for purposes of debt service coverage calculation.

3.2 Expenses

Operating expenses for 2013 are projected and budgeted to be $121.5 million, a 4.2 percent increase over the 2012 adopted budget. This increase mainly reflects the impact of higher labor costs; adjustments to chemicals for prices and usage; increases in maintenance parts and materials; and adjustments to central charges. In 2014, operating expenses are projected to be $126.5 million, an increase of $5 million or 4.1 percent over the 2013 adopted budget.

Major changes from 2013 to 2014 include increases in labor costs; supplies; treatment chemicals; diesel fuel;biosolids haul and application costs;anticipated electricity price increases; and intragovernmental costs. All of the 2013 and 2014 operating expense projections are consistent with the 2013 and 2014 biennial budget the King County Council adopted for WTD in November 2012.

4.0 Capital Improvement Program

4.1 Capital Spending

In contrast to the previous several years, WTD capital spending levels returned to more typical long-run levels in 2012 as Brightwater approached completion. Reflecting this, total capital spending in 2012 was $192.4 million and is estimated to be $183.4 million in 2013. After 2013, spending is projected to remain near this level, at $148.7 million in 2014, $169.5 million in 2015, and $175.4 million in 2016. The planned spending in these years shows a substantial decrease from the peak of capital program spending of $456 million in 2009; $400 million in 2010; and $274 million in 2011.

Although the WTD capital program is returning to more typical long-term levels, the construction activity generated continues to be a significant source of regional job creation. In 2013 and 2014,it is expected that WTD will invest $332 million in construction projects supporting more than 1,675 full- and part-time jobs in the region.

WTD has continued to exert effective control on capital spending during the period of maximum impact from Brightwater. In the process of defining capital priorities for 2013 and 2014, WTD critically reviewed project scopes, schedules, cash flow projections, and risk analyses to ensure funding for the most critical projects. Key criteria for assessing risk include ensuring the continued operation and reliability of existing wastewater conveyance and treatment assets; enhancing regional water quality in compliance with federal, state, and local regulations pertaining to wastewater treatment; reducing combined sewer overflow events; and continuing to create resources from wastewater.

Two aspects of capital project spending can affect the sewer rate: (1) the total cost of the project over its lifetime, and (2) the amount of spending in the specific rate period under consideration. In terms of impact on the sewer rate, changes in total project cost may not be reflected for many years in the future. Brightwater spending in 2012 was $12.4 million less than budgeted as

lessconstruction work was completed during the year than planned. This work is reflected in Brightwater's revised spending estimate for 2013.Below are key projects in the capital program.

- **Combined Sewer Overflow (CSO) Projects at Murray, Magnolia, Barton, and North Beach ($139.1 million)** The four CSO beach projects were baselined in 2012 and are currently on schedule. Construction for the projects is scheduled to start in the third to fourth quarter of 2013 with substantial completion in 2015.

- **North Creek Interceptor ($55.9 million)** The project will fund the design and construction of 9,650 feet of 36- to 48- inch-diameter gravity sewer using open cut and trenchless construction methods to meet the 20-year peak flow standard to avoid sanitary sewer overflows. The project was baselined in 2012 and currently on schedule for completion at the end of 2017.

- **West Point Influent and Effluent Pump Station Variable Frequency Drive and Dewatering Equipment Replacement ($35.3 million**) This project replaces solids treatment equipment that has reached the end of its useful life with new energy efficient equipment. The current schedule for completion is 2018.

- **Combined Sewer Overflow Control Handford at Rainier and Bayview North ($27.4 million)** This project was started in 2013 to control combined sewer overflows (CSO) at Hanford at Rainier, and Bayview North to one event per year on a 20-year moving average in accordance with Washington State Department of Ecology standards. The current schedule for completion is 2019.

- **West Point Treatment Plant Oxygen Generating and Distribution System Replacement ($23.5 million)** This project funds replacement of the oxygen generating system, which has reached the end of its useful life with a new energy efficient system. The current schedule for completion is 2018.

New 2014 project requests are as follows:

- **Michigan/Brandon CSO Control ($165 million)** The project consists of building an equalization basin and Wet Weather Treatment Facility (WWTF), conveyance and outfall to treat CSOs prior to discharge into the Lower Duwamish Waterway. Modifications to both the Brandon Street and South Michigan Street Regulator Stations will be required for diversion of flows to the WWTF. Ancillary facilities include an odor control facility, electrical/controls building, and emergency generator. The current scheduled completion date is 2026.

- **North Beach Pump Station and Force Main Improvements ($38.4 million)** This project will assess, evaluate, and implement asset improvements to the facility's pump station and forcemain to bring it up to the current capacity standards. The current scheduled completion date is 2020.

- **North Beach Outfall Replacement ($25.9 million)** This project will replace an aged offshore outfall pipe with limited capacity at North Beach with a new larger capacity pipe to reduce the chance of overflows on the beach. The current scheduled completion date is 2018.

4.2 Capital Accomplishment Rate

Another factor affecting the sewer rate and financing of the capital program relates to the accomplishment rate. The accomplishment rate is not intended as a measure of project delivery progress but provides an estimate of the cash needs of the program. It reflects the capital program as a whole and is arrived at by estimating the difference between planned capital spending in the budget and the capital spending that actually occurs. In this way, the program's revenue requirements attempt to anticipate possible delays in the execution of the capital program that reduce spending and therefore cash needs. The accomplishment rate is expressed as the percentage of the capital budget expected to actually be spent in a given year.

During 2012, the actual accomplishment rate for Brightwater was 90 percent compared to an assumed rate of 100 percent. The accomplishment rate for non-Brightwater projects was 91 percent. Going forward, the accomplishment rate for Brightwater is assumed at 100 percent in 2013 as the project approaches completion. For non-Brightwater projects, the accomplishment rate is assumed to be 85 percent for the forecast period 2013-2019. Combining Brightwater and non-Brightwater projects in aggregate, the accomplishment rate for the entire program in 2013 is projected to be approximately 88 percent.

To further illustrate the relationship between the sewer rate and the accomplishment rate, if the aggregate accomplishment rate was lowered by 5 percentage points to 80 percent for 2014, estimated capital spending would be reduced by approximately $10.2 million or the equivalent of lowering approximately $0.09 from the sewer rates for 2014. Conversely, if the program accomplishment rate were increased to 100 percent for 2014, estimated capital spending would increase by $28.8 million, or the equivalent of increasing approximately $0.26 to the sewer rates for 2014. It is believed that 88 percent, reflecting the combined Brightwater and non-Brightwater projects is a prudent assumption for the accomplishment rate.

4.3 Capital Revenues and Financing

4.3.1 Capacity Charge

The proposed capacity charge for 2014 is $55.35, a 3.5 percent increase from 2013. The capacity charge is a monthly charge for 15 years levied on new connections to the wastewater system in accordance with King County Code (K.C.C.) 28.84.050 and the financial policies in K.C.C. 28.86.160. It is set at a level to ensure that new sewer connections, over the long-term, will pay for the costs of the additional capacity required to serve them.

Financial Policy 15.3-d states that customer growth and projected costs, including inflation, shall be updated every three years. The 2013 capacity charge of $53.50 was the final year of the

previous three-year cycle. The increasefor 2014reflects the first year of the current three-year period, with a planned increase of 3 percent per year for 2015 through 2016. The update included a review ofthe forecasts for new connections, an increase in the costs associated with Brightwater, and a review of long-term borrowing costs.

The previous update to the capacity charge was completed in 2010 in the midst of the recent recession, and as such, the forecast for new connections reflected the great uncertainty of future economic performance present at that time. In the current update, the number of new connections has been revised upward in the near-term to reflect a strengthening housing market, with a slightly slower recovery in the mid-term. As Brightwater nears completion, the final actual costs are able to be included in the calculation of the capacity charge as opposed to forecasted numbers. Finally, the record-low interest rates over the past three years have impacted the timing of projects in the Capital Improvement Program. WTD has taken advantage of reduced borrowing costs to smooth out the impact of the capital program on the capacity charge across time. These major changes along with other updates to assumptions, forecasts, and actual financial results have led to the modest increase in the proposed capacity charge.

4.3.2 Bonds and Interest Rates

With the completion of Brightwater and the capital program returning to more typical long-run levels, the need to issue new debt has also moderated.In March 2012, $80 million in long-term debt with a 4.65 percent interest rate was issued. New issuances of long-term bonds are projected at $50 million in 2013; $30 million in 2014; $106million in 2015; and $108 million in 2016.

In addition to long-term bonds, WTD uses the proceeds from short-term variable rate bonds to finance a portion of the capital program, subject to a 20 percent of total debt ceiling. Current plans areto use approximately $22 million in wastewater variable rate bond proceedsin 2014, followed by $6 million in 2015, and $6 million in 2016.This will bring total wastewater treatment variable debt to approximately 15 percent of total long-term debt, leaving 5 percent remaining capacity in policy for the use of variable debt.

Interest rates have continued to be favorable and in March 2013, $143.4 million in existinglong-term debt was refinanced achieving $35.3 million in debt-service savings over the life of the bonds. All savings from the refinancing are included in this rate proposal.Although the recent debt issue and refunding have provided positive results, it should be noted that the outlook for future interest rates remains uncertain. The financial plan accompanying this rate proposal assumes on new borrowings interest rates of 5.25percent in 2013 and 2014, rising to 5.5 percent in 2015 and 2016; 5.75 percent in 2017;and 6.0 percent for 2018 and 2019.

Balancing against the upward pressure on municipal bond interest rates is continuing weakness in the economic recovery in the United States (U.S.) and industrialized nations generally. This outlook, which is reflected in reduced investment earnings assumptions in the current 2014 sewer rate proposal, can also moderate interest rate increases for long-term bonds. The current bond rate assumptions are a conservative outlook based on this combination of upward and downward influences on future interest rates.

Investment interest rates have remained at historic lows in the market. The rate of return in the county investment pool was 0.58 percent in 2012.In accordance with theMarch 2013 rates from King County's Office of Economics and Financial Analysis, the investment interest rate for this proposal is 0.45 percent in 2013;0.40 percent in 2014; 0.40 percent in 2015;0.60 percent in 2016;1.32 percent in 2017;and 2.03 percent in 2018.

4.3.3 Alternative Financing

This section highlights another element of cost containment achieved through WTD's aggressive pursuit of low-cost financing for capital projects. As a result, some capital projects have been funded by grants or low-interest loans through the years. Collectively, these funds are referred to as alternative financing. Grants for capital projects tend to be funded by federal or state agencies and, for energy-related projects, local utilities. While the allowable use of these grants is often highly restricted, they have the obvious benefit of not having to be repaid in contrast to the low-interest loans. Grants received in the past assisted in the financing of upgrades to the South and West Point Treatment Plants, as well as the Alki Transfer/CSO Facilities project and the Denny Way CSO Control project. Currently, there are no projects financed in whole or in part with grants.

Low-interest loans are provided by the Washington State Department of Ecology's State Revolving Fund (SRF) or the Washington State Public Works Trust Fund (PWTF). Loan applications to fund specific water quality projects are submitted by local jurisdictions statewide on an annual basis. These loan applications then go through a competitive process where the first step is ensuring that specific criteria and thresholds are met in order to proceed to the review process. They are then ranked on a point system. The point system is based on minimum and maximum points earned for narrative portions of the loan application in order to fund the highest priority water quality projects statewide.

Capital projects selected for loan application submittal go through a review process to ensure that they are competitive enough to be considered a high priority water quality project in the ranking process, to ensure that the project schedule fits within the loan criteria, and to ensure that the project meets specific criteria or thresholds. Projects that meet all of these are then eligible for the loan application stage. The grants administrator then coordinates with the project manager to ensure that the thresholds are met in time and takes the lead in writing and completing the application.

Table 4-1lists some of the completed projects that received SRF and PWTF funding. Table 4-2lists the current SRF and PWTF loans that partially or entirely fund the indicated WTD capital projects.

Table 4-1. Previous State Revolving Fund and Public Works Trust Fund for the Wastewater Treatment Division Loan Funded Capital Project (million dollars)

Project	Loan Amount	Loan Type	Term (Years)	Interest Rate	Estimated Debt Service Savings Compared to Conventional Financing
Brightwater Outfall	$1.6	SRF	20	2.6%	$11.8
Henderson/MLK CSO	$57.5	SRF	20	1.5%	$64.8
Denny Way CSO/Elliott West Pipelines	$12.5	SRF	20	1.5%	$14.1
Carnation Treatment Plant	$14.1	SRF	20	3.1%	$14.1
Vashon Treatment Plant	$5.0	SRF	20	1.5%	$3.9
Barton CSO Facilities Plan	$1.1	SRF	20	1.5%	$0.9
Murray CSO Facilities Plan	$0.6	SRF	20	1.5%	$0.5
North Beach CSO Facilities Plan	$0.5	SRF	20	1.5%	$0.4
North Creek Storage	$10.0	PWTF	20	0.5%	$10.4
Juanita Bay Pump Station	$10.0	PWTF	20	0.5%	$12.3
Brightwater Reclaimed Water Pipeline	$7.0	PWTF	20	0.5%	$8.6
Hidden Lake Pump Station	$10.0	PWTF	20	0.5%	$12.0

Table 4-2. Current State Revolving Fund for WTD Loan Funded Capital Projects (million dollars)

Project	Loan Amount	Loan Type	Term (Years)	Interest Rate	Estimated Debt Service Savings Compared to Conventional Financing
Ballard Siphon	$31.9	SRF	20	2.8%	$41.7
Barton CSO Control - Design	$5.0	SRF	20	2.7%	$5.7
Murray CSO Control - Design	$4.6	SRF	20	2.7%	$6.2
North Beach CSO Control - Design	$2.9	SRF	20	2.7%	$3.6
S Magnolia CSO Control - Design	$5.1	SRF	20	2.7%	$6.4
Fremont Siphon – Facilities Plan	$2.2	SRF	20	2.7%	$2.7
Ballard Siphon	$10.0	PWTF	20	0.5%	$13.4

In 2012, WTD received a $3 million Qualified Energy Bond for the South Plant Raw Sewage Pumps Replacement project.

5.0 Residential Customer Equivalents and New Connections

The national and regional economic outlook has recently improved after heightened uncertainty during the second half of 2011about the European sovereign debt crisis and the strength of the U.S. economic recovery. The March 2013 Conway-Pederson economic outlook forecasts that U.S. Gross Domestic Product growth will be 1.8 percent in 2013 and 2.8 percent in 2014. The forecast growth in employment for the Seattle-Tacoma region is 2.6 percent in 2013 and 2.5 percent in 2014.

RCE projections for the proposed sewer rate remain conservative reflecting continuing economic uncertainty. Commercial, multi-family residential, and industrial customers can affect the number of customer equivalents they comprise, and therefore their sewer bill, through reducing

water consumption. In this manner, increased water conservation or reductions in production can result in lowgrowth or reductions in the WTD customer base. In 2012, there were 708,894 RCEs being served by WTD, an increase of 0.23 percent from 2011actual levels. The current RCE forecast anticipates continued growth with a slight increase for 2013 of 0.23 percent;a 0.30 percent increase in 2014;a 0.37 percent increase in 2015; and a 0.43 percent increase in 2016.

Table 5-1shows projected RCEsand compares the current assumptions to those made for the 2013adopted budget. The current outlook is more positive, based in part on the stability of RCEs in 2012 and 2013 relative to the impacts of the economic downturn.

Table 5-1. Current Residential Customer Equivalents Forecast

	2012	2013	2014	2015	2016
2014Rate Proposal	708,894	710,524	712,656	715,293	718,369
Percent Change	0.23%	0.23%	0.30%	0.37%	0.43%
2013Adopted Budget	707,278	707,278	709,046	712,591	716,154
Percent Change	0.00%	0.00%	0.25%	0.50%	0.50%
Change from 2013 Forecast	1,616	3,246	3,610	2,702	2,215

New sewer connections to the regional wastewater system are levied a capacity charge to help pay for the cost of providing new capacity. New additions to the system tend to follow the residential and commercial construction cycle. For reference, during the 1998 to 2008 period, the number of new connections averaged 11,200 per year with a peak of 12,700. Average connections for 2009-2011 dropped to 5,700. The current forecast shown in Table 5-2assumes there will be 7,500 connections in 2013, and connections will not fully recover to the pre-recession average of 11,000 until 2016.[2]

Table 5-2. Projected New Sewer Connections by Year of Connection

	2012	2013	2014	2015	2016
2014 Rate Proposal	7,745	7,500	9,000	10,500	11,000
2013 Adopted Budget	5,800	6,500	8,500	10,000	11,000
Change	1,945	1,000	500	500	0

The outlook for new connections has been adjusted slightly from the numbers in the 2013 adopted budget. The forecast for 2014 has been increased from 8,500 to 9,000 connections, and the 2015forecastincreased by 500 compared to the 2013 adopted budget. Theseadjustments reflect an improvement in the region's construction sector and the positive actual results from 2012.

[2] Annual connection totals are for the year that new customers connect to the sewer system. WTD also monitors connections by the year that new capacity accounts are created. Connections by year connected are a better indicator of emerging trends.

6.0 Change from 2013 Sewer Rate to 2014 Proposed Sewer Rate

Table 6.1 comparescomponents of the sewer rate that are changing from the 2013 adopted sewer rate to the proposed sewer rate for 2014. The net impact of the changes,including the use of the rate stabilization reserve is to keep the sewer rate at $39.79. This meets the commitment made last year to keep the sewer rate at $39.79 for both 2013 and 2014. In addition, the current proposal reduces the use of the Rate Stabilization by $8.7 million in 2014 ascompared to the 2013 adopted budget.Not using rate stabilization in thisearlier year allows the amounts to be moved to future years for rate relief. Not having to use the $8.7 million Rate Stabilization in 2014 is equivalent to providing $0.81 of rate relief for a year after 2014.

Table 6-1. Changes from2013 Adopted Rate to2014 Proposed Rate

Components of Change	**Change**	**Rate**
2013 Adopted Rate		**$39.79**
Revenues and Customer Charges		
Investment Income (interest rate decline)	($0.03)	
Increased RCEs	($0.20)	
Capacity Charge (pre-payments and rate increase)	($0.14)	
Reduced use of rate stabilization	$0.81	
Sub-total	*$0.44*	
Operating Expenses	$0.07	
Capital Program and Debt Service		
Long-term Bond Refundings	($0.51)	
Sub-total	*($0.51)*	
Total Rate Increase		**$0.00**
2014 Proposed Rate		**$39.79**

7.0 Summary of 2014Rate Proposal Projections and Assumptions

Table 7-1presents a summary of the general assumptions used in developing the 2014 rate proposal. Discussion of the various assumptions is included in the main body of the text in this paper.

Table 7-1. WTD Comparison of Forecast Assumptions
2013 Adopted Budget and 2014 Proposed Rate

	2012	2013	2014	2015	2016	2017	2018
I. Wastewater Spending							
Operating Expense (000's)							
2014 Proposed Rate Forecast	$114,630	$121,504	$126,467	$132,090	$137,373	$142,868	$148,583
Adopted 2013 Budget Forecast	$116,620	$121,504	$125,857	$131,742	$137,012	$142,493	$148,193
Difference (proposed minus adopted)	($1,990)	-	$610	$348	$361	$375	$390
Capital Expenditures (000's)							
2014 Proposed Rate Forecast	$192,367	$183,425	$148,737	$169,526	$175,418	$174,892	$176,590
Adopted 2013 Budget Forecast	$213,816	$172,181	$144,856	$174,645	$175,418	$174,892	$176,590
Difference (proposed minus adopted)	($21,449)	$11,244	$3,881	($5,119)	-	-	-
CIP Accomplishment Rate							
2014 Proposed Rate Forecast, Brightwater	95%	100%	---	- - -	- - -	- - -	- - -
2014 Proposed Rate Forecast, Non-Brightwater	85%	85%	85%	85%	85%	85%	85%
Adopted 2013 Budget, Brightwater	100%	100%	---	- - -	- - -	- - -	- - -
Adopted 2013 Budget, Non-Brightwater	85%	85%	85%	85%	85%	85%	85%
II. Customers							
Total RCEs							
2014 Proposed Rate Forecast	708,894	710,524	712,656	715,292	718,369	721,472	724,574
Percent Change	0.23%	0.23%	0.30%	0.37%	0.43%	0.43%	0.43%
Adopted 2013 Budget Forecast	707,278	707,278	709,046	712,591	716,154	721,525	726,937
Percent Change	0.00%	0.00%	0.25%	0.25%	0.50%	0.75%	0.75%
Difference (proposed minus adopted)	1,616	3,246	3,610	2,701	2,215	(53)	(2,363)
New Connections							
2014 Proposed Rate Forecast	7,745	7,500	9,000	10,500	11,000	11,250	11,000

	2012	2013	2014	2015	2016	2017	2018
Adopted 2013 Budget Forecast	5,800	6,500	8,500	10,000	11,000	11,500	11,000
Difference (proposed minus adopted)	1,945	1,000	500	500	-	(250)	-
III. Interest Rates							
Bond Interest Rate							
2014 Proposed Rate Forecast	4.00%	5.25%	5.25%	5.50%	5.50%	5.75%	6.00%
Adopted 2013 Budget Forecast	4.00%	5.50%	5.75%	5.75%	5.75%	5.75%	5.75%
Difference (proposed minus adopted)	0.00%	-0.25%	-0.50%	-0.25%	-0.25%	0.00%	0.25%
Variable Debt Interest Rate							
2014 Proposed Rate Forecast	1.00%	1.25%	1.25%	1.25%	1.50%	2.00%	2.50%
Adopted 2013 Budget Forecast	1.00%	1.25%	1.25%	1.75%	2.50%	3.25%	4.00%
Difference (proposed minus adopted)	0.00%	0.00%	0.00%	-.50%	-1.00%	-1.25%	-1.50%
Investment Interest Rate							
2014 Proposed Rate Forecast	0.58%	0.45%	0.40%	0.40%	0.60%	1.32%	2.03%
Adopted 2013 Budget Forecast	0.45%	0.35%	0.35%	0.45%	1.32%	2.11%	2.78%
Difference (proposed minus adopted)	0.13%	0.10%	0.05%	-0.05%	-0.72%	-0.79%	-0.75%
IV. Reserves							
Bond and Loan Reserves (000's)							
2014 Proposed Rate Forecast	$180,831	$183,757	$186,892	$195,770	$192,005	$199,618	$207,632
Adopted 2013 Budget Forecast	$156,177	$184,159	$190,177	$199,504	$197,814	$205,814	$214,104
Difference (proposed minus adopted)	($24,654)	($402)	($3,285)	($3,734)	($5,809)	($6,194)	($6,472)
Rate Stabilization Reserve (000's)							
2014 Proposed Rate Forecast	$62,600	$46,350	$24,185	$10,335	-	-	-
Adopted 2013 Budget Forecast	$62,600	$41,100	$10,280	-	-	-	-
Difference (proposed minus adopted)	-	$5,250	$13,905	$10,335	-	-	-
Rate Stabilization Use (000's)							
2014 Proposed Rate Forecast	$13,900	$16,250	$22,165	$13,850	$10,335	-	-
Adopted 2013 Budget Forecast	$13,900	$21,500	$30,820	$10,280	-	-	-
Difference (proposed minus adopted)	-	($5,250)	($8,655)	$3,570	$10,335	-	-

8.0 Comparison ofKing County Rateswith Similar Agencies

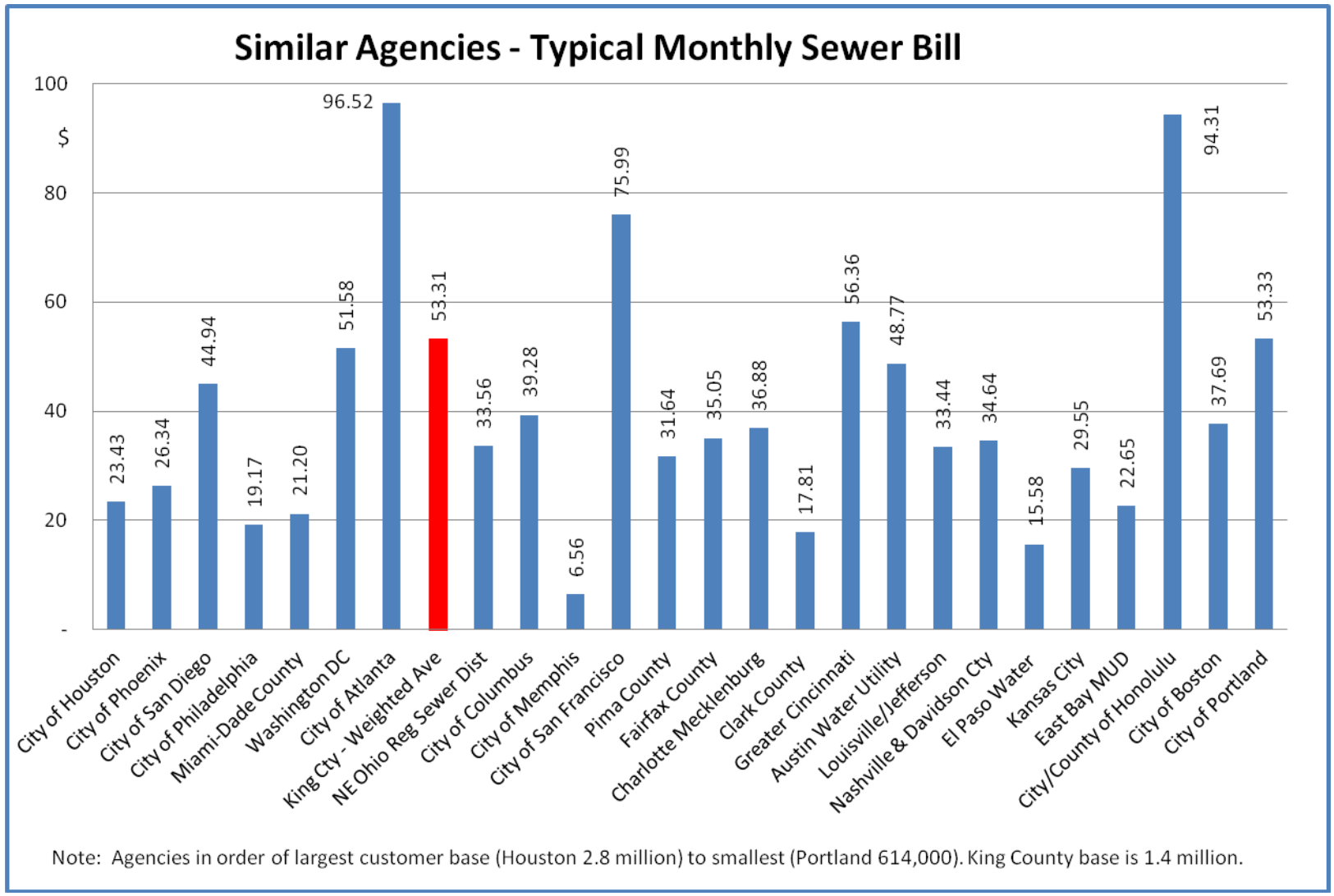
During 2010 and 2011, WTD surveyed the retail wastewater rates of 25 jurisdictions around the country. These retail rates were compared to the weighted average retail rates charged by the 14 largest jurisdictions in King County that contract with King County for wastewater treatment services. These agencies provide service to 90 percent of all customers in the sewer service area.

A consistent comparison of sewer rates is complicated by the myriad differences among utilities in sources of revenues, physical facilities, topography,and weather, among other factors. A further complicating factor is the outlook for the various utilities being compared. For example, in the last decade WTD's rates have been heavily influenced by the construction of the largest project in its history in anticipation of growth to come in the future. In light of these complicating factors, WTD is committed to continuing to refine its rate comparison methodology in order to provide the best possible "apples to apples" comparison.

In addition to absolute rate levels and typical bills, another comparison of rates is the average annual percent increase over a given period of time. In Black and Veatch's"50 Largest Cities Water and Wastewater Rate Survey," the average annual increase in wastewater rates between 2001 and 2009 was 5.5 percent for the 50 largest utilities in the country.During this same period WTD rates increased an average of 5.6 percent. If one adjusts for 2009 being the first of a two-year rate, the average annual WTD sewer rate increase between 2001 and 2010 is 5.1 percent. While this period includes the maximum years of spending for the Brightwater project, some of the rate impact of that activity is included in later years as previsouly discussed in this paper. If the period is expanded to 2001 to 2014 to include the rates from this proposal, the average annual rate of increase is 5.2 percent.

The followingchart presents a comparison of 2011 retail rates for 25 agencies from various parts of the country to the weighted average for King County agencies. To approximate an average retail rate for King County, the rates of the largest 14 local component agencies were weighted by the number of RCEs and an average was calculated. The resulting weighted average rate was $53.31 for the typical homeowner and $63.01 at the standard usage of 750 cubic feet per month.

In terms of typical monthly rates, King County ranks sixth among the surveyed agencies. The first chart shows the typical monthly sewer bill for each agency based on information from theirwebsites. The agencies are in order of number of customers served, with Houston, Texas, being the largest (2.8 million) at the left margin and Portland, Oregon, the smallest (614,000) on the right margin. In the case of the typical monthly bill, King County's weighted average ranks sixth. As the chart shows, rates vary widely for the 26 agencies from a high of $96.52 for Atlanta, Georgia, and a low of $6.56 for Memphis, Tennessee.Nine of the 26, including King County, fall within the range of $35 to $56 per month with an average of $39.98 for all agencies.



Note: Agencies in order of largest customer base (Houston 2.8 million) to smallest (Portland 614,000). King County base is 1.4 million.