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ORDINANCE 118213

AN ORDINANCE relating to water services of Seattle Public Utilities; revising water rates and charges for service to wholesale customers, and amending Seattle Municipal Code Chapter 21.04.440.E in connection therewith.

WHEREAS, Seattle Public Utilities provides wholesale water service to many water utilities surrounding Seattle (Wholesale Customers) under the provisions of various long-term water supply contracts; and

WHEREAS, these water supply contracts establish procedures for allocation of Seattle Public Utilities' costs to Wholesale Customers and treatment of accumulated surpluses or deficits of annual revenues as compared to annual costs; and

WHEREAS, the existing wholesale rates authorized by Ordinance 124367 were based on a rate study covering 2012 through 2014; and

WHEREAS, wholesale demand has been higher than projected under the 2012 through 2014 rate study resulting in accumulated surpluses of annual revenues as compared to annual costs; and

WHEREAS, Seattle Public Utilities completed a rate study covering Wholesale Customers for 2015 through 2017 and resulting rates consistent with the wholesale contracts have been calculated; NOW, THEREFORE,

BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

Section 1. Seattle Municipal Code Section 21.04.440.E is amended to read as follows:

21.04.440 Rates outside the City of Seattle

* * *

E. Wholesale Customers—Commodity and Base Charges.

1. Reserved

2. Full or Partial Requirements Contracts. The rate to be charged to wholesale customers being served under the provisions of contracts substantially in the form of the Full and Partial Requirements Contracts for the Supply of Water that were authorized by Ordinance 120362 or 123559 ("Full or Partial Requirements Contract") shall consist of a commodity charge, surcharges, discounts and facilities charges as follows:

Commodity Charge Per 100 Cubic Feet of Water	(Effective Jan. 1, 2013)	Effective Jan. 1, 2014	<u>Effective Jan. 1, 2015</u>
Summer (May 16th - September 15th)	(\$2.26)	\$2.27	<u>\$2.10</u>
Winter (September 16th - May 15th)	(\$1.53)	\$1.53	<u>\$1.42</u>

The following surcharges and discounts apply to each wholesale customer that has agreed to them in a contract substantially in the form of the Full or Partial Requirements Contracts:

Additional Charge Per 100 Cubic Feet of Water	(Effective Jan. 1, 2013)	Effective Jan. 1, 2014	<u>Effective Jan. 1, 2015</u>
Northwest Wheeling Rate Surcharge	(\$0.02)	\$0.02	<u>\$0.02</u>
Southwest Subregion Surcharge	(\$0.07)	\$0.07	<u>\$0.16</u>
East Subregion, Segment #3 Surcharge	(\$0.16)	\$0.16	<u>\$0.08</u>
East Subregion, Segment #4 Surcharge	(\$0.19)	\$0.19	<u>\$0.16</u>
((Renton New Supply Discount))	(\$0.02)	(\$0.02)	

Renton New Supply Discount Per 100 Cubic Feet of Water	Effective Jan. 1, 2014	Effective Jan. 1, 2015
Summer (May 16th - September 15th)	\$0.02	\$0.02
Winter (September 16th - May 15th)	\$0.02	\$0.01

In addition, each wholesale customer served under a contract substantially in the form of the Full or Partial Requirements Contracts that requires payment of facilities charges based on each new metered service connection installed within its service area shall pay the facilities charges according to the following schedule:

((Meter Size	Facilities Charge
1 inch and smaller	\$877.00
1 1/2 inch	3,915.00
2 inch	6,264.00
3 inch	17,226.00
4 inch	24,273.00
6 inch	51,678.00
8 inch	87,696.00
10 inch	132,327.00
12 inch and larger	186,354.00

Effective February 1, 2014:))

Meter Size	Facilities Charge
1 inch and smaller	\$936.00
1 1/2 inch	4,180.00
2 inch	6,688.00
3 inch	18,392.00
4 inch	25,916.00
6 inch	55,176.00
8 inch	93,632.00
10 inch	141,284.00
12 inch and larger	198,968.00

* * *

1 Section 2. This ordinance shall take effect and be in force 30 days after its approval by
2 the Mayor, but if not approved and returned by the Mayor within ten days after presentation, it
3 shall take effect as provided by Seattle Municipal Code Section 1.04.020.

4
5 Passed by the City Council the ____ day of _____, 2014 and signed by me in open
6 session in authentication of its passage this ____ day of _____, 2014.

7
8 _____
9 President _____ of the City Council

10 Approved by me this ____ day of _____, 2014.

11
12 _____
13 Edward B. Murray, Mayor

14
15 Filed by me this ____ day of _____, 2014.

16
17 _____
18 Monica Martinez Simmons, City Clerk

19 (Seal)

FISCAL NOTE FOR NON-CAPITAL PROJECTS

Department:	Contact Person/Phone:	CBO Analyst/Phone:
Seattle Public Utilities	Regina Carpenter/4-0836	Aaron Blumenthal/3-2656

Legislation Title:

AN ORDINANCE relating to water services of Seattle Public Utilities; revising water rates and charges for service to wholesale customers, and amending Seattle Municipal Code Chapter 21.04.440.E in connection therewith.

Summary of the Legislation:

This ordinance would adjust water rates to wholesale water customers of the Seattle Regional Water Supply System consistent with the provisions of the Full and Partial Requirements Contract for Supply of Water between SPU and these utilities.

Background:

SPU's contracts describe the procedures for cost allocation and development of rates for wholesale customers. The current wholesale rates were set in 2011 for 2012 through 2014. SPU has a new wholesale rate study covering 2015 through 2017. An independent rate consultant reviewed the rate study for compliance with the contracts and it has been presented to wholesale customers at the Water Supply Operating Board. This ordinance reflects the results of that rate study.

The wholesale rate is decreasing due to demand that has increased faster than costs since 2011 when wholesale rates were last set. Since rates are calculated as costs divided by demand, a higher demand results in a lower rate. Also, the contracts have a mechanism that tracks accumulated surpluses (or deficits) of annual revenues as compared to annual costs so that there is no over (or under) collection of revenues from wholesale customers over time. The contracts require the surplus or deficit balance be used to lower or raise rates in the next rate study. There is currently a surplus due to higher demand in 2013 and 2014 than that projected and used for setting rates for 2012-2014. As per the Contracts, this surplus is being applied to decrease rates over 2015 through 2017 with the goal of decreasing the surplus to zero by the end of 2017.

Other surcharges and discounts that apply to certain wholesale customers are also being adjusted according to their particular contracts, with some surcharges increasing and some decreasing.

Please check one of the following:

This legislation does not have any financial implications.

This legislation has financial implications.

Anticipated Revenue/Reimbursement Resulting from this Legislation:

Fund Name and Number	Department	Revenue Source	2014 Revenue	2015 Revenue
Water Fund 43000	Seattle Public Utilities	Wholesale Water Rates	\$ 0	\$ (1,442,700)
TOTAL			\$ 0	\$ (1,442,700)

Revenue/Reimbursement Notes:

This legislation would decrease wholesale rates for the regional cost pool and therefore decreases revenues below what they would be without the legislation. Only one area, the Southwest Subregion, has an accumulated revenue deficit and requires an increase in rates to offset this deficit. The net decreases in revenue in 2016 and 2017 are \$2.3M and \$3.3M. However, there are two items to note about this rate decrease:

- Wholesale *demand* has increased to the point that, even with this *rate* decrease, wholesale revenues are higher than what were projected in the Strategic Business Plan
- The wholesale contracts have a feature that ensures no under or over collection of revenues from wholesale customers over time. Since the current rates were set assuming lower demand and therefore are over-collecting revenues as compared to allocated costs, a surplus will continue to accumulate until rates are decreased.

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 primary cost of not implementing this legislation is that the cumulative surplus from wholesale customers would continue to grow, resulting in a larger decrease in rates in the future.
- c) **Does this legislation affect any departments besides the originating department?**
No other departments are affected.
- d) **What are the possible alternatives to the legislation that could achieve the same or similar objectives?**
There are no alternatives that would achieve the same or similar objectives.
- e) **Is a public hearing required for this legislation?**
No
- f) **Is publication of notice with *The Daily Journal of Commerce* and/or *The Seattle Times* required for this legislation?**
No

g) Does this legislation affect a piece of property?
No

h) Other Issues:
None

List attachments to the fiscal note below:

Exhibit A – 2015-2017 Wholesale Rate Study (by SPU)

Exhibit B – 2014 Independent Review of the 2015-2017 Wholesale Water Rate Study (by Cuthbert Consulting)

Exhibit A

Seattle Public Utilities 2015-2017 Wholesale Water Rate Study July 15, 2014

Summary

Seattle proposes to adjust regional wholesale water rates beginning January 1, 2015, as shown below.

Rates per CCF	2014		2015		2016		2017	
	Off-Peak 9/16-5/15	Peak 5/16-9/15	Off-Peak 9/16-5/15	Peak 5/16-9/15	Off-Peak 9/16-5/15	Peak 5/16-9/15	Off-Peak 9/16-5/15	Peak 5/16-9/15
Full & Partial Rates	\$1.53	\$2.27	\$1.42	\$2.10	\$1.42	\$2.10	\$1.42	\$2.10
Change from Prior Year:			(7.2)%	(7.5)%	0%	0%	0%	0%
Sub-regional Surcharge Rates								
Southwest Sub-region:		\$0.07		\$0.16		\$0.16		\$0.16
East Sub-region, Segment 3:		\$0.16		\$0.08		\$0.08		\$0.08
East Sub-region, Segment 4:		\$0.19		\$0.16		\$0.16		\$0.16

This document describes the calculation of rates for wholesale customers. It is organized to follow the steps involved in the rate study process including the assumptions, allocation of O&M and asset costs to develop the regional cost, allocation of the regional cost between Block contracts and Full and Partial Requirements customers, incorporation true up adjustments, and design of rates. This rate study also develops rates for the Southwest and East subregions, Renton New Supply block, CWA and Northshore blocks, and North Bend treatment discount.

Overall Assumptions and Background Information

1. The effect of North Bend, Edmonds, and Lake Forest Park demand and revenue is excluded because it is unknown and minimal. The actual effect of any water sales will be captured through the true up process.
2. Seattle's average cost of debt is assumed at 4.6% throughout the rate study period, which is the rate calculated for the 2013 Purveyor Statements.
3. A true up is performed each year to compare the prior year's actual revenues and actual costs of service. A running balance of the excess or deficit in revenues is maintained. This rate study sets rates to amortize the projected 2014 year-end true-up balance over the 2015-2017 rate period.
4. The Northwest wheeling rate is updated on a separate schedule and any changes will not affect this rate study.
5. The Facilities Charge Rate is updated on a separate schedule and is not due to be adjusted until 2018.
6. Regional O&M is based on Seattle's 2014 spending plan and Seattle's Strategic Business Plan baseline for 2015-2017.
7. Assets are based on the 2015-2020 CIP presented at the April 3, 2014 Operating Board meeting.

Exhibit A

Significant Changes since the last Rate Study

The mechanics of the CWA Supplemental Block calculation have changed. Since it is priced at Full and Partial rates, past rate studies included the Supplemental Block as F&P for both the cost and demand sides of the calculation. However, the true up does not include the Supplemental Block as F&P, making it difficult to compare actuals to rate study projections. The 2015-2017 rate study is now consistent with the true up treatment of the Supplemental Block.

Total Regional O&M Costs

Yearly operations costs for each cost pool (e.g. Existing Supply) are calculated by applying an index to a base amount. The index is developed from the cost of certain O&M activities as identified in the contract. The original base amount for each cost pool is identified in the contracts. The starting point for this rate study was the 2013 base and index amounts developed during the 2013 true up. For 2014, SPU's O&M Spending Plan by activity was used. For 2015-2017, the rate study uses the O&M baseline budget developed as part of the Strategic Business Plan.

	2013 Actual	2014 Projected	2015 Projected	2016 Projected	2017 Projected
Existing Supply					
PY Base		28,987,370	30,272,017	33,385,438	34,368,715
PY Costs in identified activities		20,154,839	21,048,051	23,212,804	23,896,474
CY Costs in identified activities		21,048,051	23,212,804	23,896,474	24,835,544
Ratio of CY/PY		1.044	1.103	1.029	1.039
CY Operations Cost Base	28,987,370	30,272,017	33,385,438	34,368,715	35,719,317
Expensed CIP, loss/gain on sale	679,988				
Total CY Cost	29,667,357	30,272,017	33,385,438	34,368,715	35,719,317
Existing Transmission					
PY Base		9,725,985	9,885,774	10,061,697	10,455,093
PY Costs in identified activities		2,553,314	2,595,263	2,641,447	2,744,723
CY Costs in identified activities		2,595,263	2,641,447	2,744,723	2,838,938
Ratio of CY/PY		1.016	1.018	1.039	1.034
CY Operations Cost Base	9,725,985	9,885,774	10,061,697	10,455,093	10,813,975
Expensed CIP, loss/gain on sale					
Total CY Cost	9,725,985	9,885,774	10,061,697	10,455,093	10,813,975
New Supply					
PY Base		878,110	900,336	890,795	926,089
PY Costs in identified activities		393,145	403,096	398,824	414,626
CY Costs in identified activities		403,096	398,824	414,626	430,843
Ratio of CY/PY		1.025	0.989	1.040	1.039
CY Operations Cost Base	878,110	900,336	890,795	926,089	962,310
New Transmission					
2009 Costs in identified activities					
Apply G&A as per CIP					
Total New Transmission Costs	0	0	0	0	0

Exhibit A

Total Regional Capital Costs

Yearly capital costs for the Existing Supply and Existing Transmission cost pools are calculated on the utility basis for assets assigned to those cost pools. Under the utility basis, the annual cost of an asset is depreciation plus the Net Book Value of the asset multiplied by a return on assets. The capital costs for the New Supply cost pool are calculated on the utility basis for assets created prior to 2011, and on a cash basis for assets added in 2011 and later.

The assets to be included in each cost pool are identified in the contract. Administratively, there are three categories of assets to be included in the rate study calculation: existing assets, future assets (in-construction or planned), and special assets.

Existing Assets

The basis for existing assets was the 2013 asset schedule. Depreciation and Net Book Value were calculated for each asset through 2017 and allocated to the appropriate cost pool.

In-Construction and Future Assets

Identification of future assets came from the 6-year Capital Improvement Plan for the Water Fund, which covers 2014-2020. The SPU financial system provided Work-in-Progress balances on these projects as of December 31, 2013. For each project, an in-service year was determined – typically the last year of spending shown in the CIP budget. Exceptions were annual programs, such as Transmission Pipeline Rehabilitation, that are capitalized at the end of each year. Another exception is the Morse Lake Pump Plant; this project is expected to have an initial close in 2016, with any additional spending in 2017 closing in 2017.

Assets were assigned to cost pools per the lists in the contract exhibits. In a few cases, the CIP item consists of smaller projects (such as the Cathodic Protection Program), some included in the wholesale rate base and some not. For rate setting purposes, these assets were prorated 50:50 between regional and Seattle retail. When the projects are executed, they will be disaggregated for tracking and allocating actual costs.

Special Assets

There are several assets that receive special treatment for rate making/cost allocation purposes.

1. Interest paid during construction on the Tolt Filtration Plant.

Wholesale customers agreed to pay a portion of interest costs during construction of the Tolt Filtration Plant. These payments reduce the rate-based cost of the Tolt Filtration Plant now that construction is complete. This appears as a contributed asset on the existing asset schedule.

2. Interest paid during construction on the Cedar Treatment Plant.

Wholesale customers agreed to pay a portion of the interest costs for the Cedar Treatment Plant during construction. These payments reduce the rate-based cost of the Cedar Treatment Plant now that construction is complete. This appears as a contributed asset on the existing asset schedule.

3. Contributed assets.

Any assets or portion of assets that were directly “paid for by others” such through a grant or direct payment by a customer are categorized separately and not included as regional or subregional assets.

Exhibit A

Allocation of Total Regional Costs

The work above determines total regional costs, which are then allocated between wholesale customers. For cost allocation purposes, Seattle's retail service area is considered a wholesale customer of the water system. Each allocation described below is done in parallel for each cost pool, where applicable.

Allocation to Block Customers

Cascade Water Alliance (CWA) has a Declining Block contract with Seattle. For its Base Block, CWA shares in the Regional Existing Supply and Existing Transmission cost pools but not New Supply or New Transmission. The allocation to Cascade's Base Block is done according to the CWA contract; CWA pays 18.1% of the regional existing supply and transmission costs. This allocation is 102% times the CWA block volume (30.3 MGD) divided by the system firm yield as defined in the Declining Block contract (171 MGD). The cost of Cascade's Supplemental Block is calculated using 3.0 MGD priced at the Full & Partial rates for each year.

Northshore has a Fixed Block contract with Seattle. Northshore shares in the Regional Existing Supply and Existing Transmission cost pools, and the conservation related portions of the New Supply and Facilities Charge cost pools. The allocation of Existing Supply and Existing Transmission is 5.1%, which is 102% of Northshore's block volume (8.55 MGD) divided by the system firm yield as defined in the Fixed Block contract (171 MGD). Northshore's allocation of conservation is 6.2%, which is 102% of Northshore's block volume (8.55 MGD) divided by the contract based system firm yield minus the CWA Base Block (171 MGD - 30.3 MGD). CWA's Base Block is not included in conservation calculations since CWA does not participate in SPU's regional conservation programs.

Renton has a Partial Requirements Contract, but their allocation of New Supply costs is being handled as a block allocation. This is because their entire retail area participates in Regional Conservation while their purchases from Seattle are only a small portion of their supply. As per their contract, they are allocated 5.7% of New Supply O&M costs and New Supply asset costs for assets added in 2012 and later.

Remainder to Full and Partial Requirements Contract Holders

Full and Partial Requirements customers, including Seattle-as-wholesale, pay the remaining costs in the new contract cost pool.

True Up Adjustments

Although regional cost development is done jointly for Full and Partial Requirements Customers and the CWA, Northshore, and Renton blocks, the true ups and resulting excesses/deficiencies for these groups are maintained separately. As such, Seattle (rather than Full and Partial wholesale customers) temporarily funds any excesses or deficiencies in the CWA, Northshore, and Renton blocks.

For costs recovered through rates, the true up balance is applied during rate studies to raise or lower future rates. For costs recovered through block payments, the excess or deficiency is applied to the following year's block payments; For example, the true up covering 2014 will be calculated in 2015 and applied to the 2016 block.

Exhibit A

This rate study takes into account the actual Full and Partial Requirements Contracts true up balances from the 2013 true up and the current forecast for the 2014 true up. Rates are set to amortize the projected 2014 year end balances plus interest over the period 2015-2017.

Cost Allocation Summary

The following schedule presents the summary of Regional Full and Partial Contract costs for 2013-2017. It is worth noting that the Facilities Charge cost pool is projected to reach its upper funding limit (equal to the Net Book Value of regional conservation assets) in 2018, with \$38,014 in revenues moving from the FC cost pool to the rate based New Supply cost pool. This has no material effect on 2015-2017 commodity rates and the limit is acting the way it was intended in the contracts, but this will need to be monitored during the annual true up cycle.

Exhibit A

Regional Costs & Allocation Between Contract Types

	2013	2014	2015	2016	2017
Existing Supply Cost Pool					
Asset cost	35,132,788	34,634,232	34,383,611	36,608,822	37,654,936
O&M cost	29,667,357	30,272,017	33,385,438	34,368,715	35,719,317
Regional Cost	64,800,145	64,906,249	67,769,049	70,977,537	73,374,253
Allocation to CWA Base Block	(11,711,774)	(11,730,950)	(12,248,364)	(12,828,256)	(13,261,431)
Allocation to CWA Supplemental Block	(1,885,484)	(1,892,745)	(1,768,608)	(1,768,608)	(1,768,608)
Allocation to NUD Block	(3,304,807)	(3,310,219)	(3,456,222)	(3,619,854)	(3,742,087)
Remaining Costs to F&P rates	47,898,080	47,972,335	50,295,856	52,760,818	54,602,127
PY cost adjustment	-	-	-	-	-
True Up balance applied	-	-	(720,000)	(3,800,000)	(6,250,000)
Amount to be collected through rates	47,898,080	47,972,335	49,575,856	48,960,818	48,352,127
Expected F&P revenues	56,075,231	53,017,077	49,594,490	49,042,616	48,423,139
CY (under)/Over payment	8,177,151	5,044,712	(701,365)	(3,718,203)	(6,178,988)
Balance	4,257,461	9,498,016	9,233,559	5,940,100	34,357
Interest on above, affect following year	195,843	436,909	424,744	273,245	1,580
Existing Transmission Cost Pool					
Asset cost	19,998,965	19,696,583	19,688,746	20,203,024	20,039,502
O&M cost	9,725,985	9,885,774	10,061,697	10,455,093	10,813,975
Regional Cost	29,724,950	29,582,358	29,750,443	30,658,117	30,853,477
Allocation to CWA Base Block	(5,372,394)	(5,346,622)	(5,377,001)	(5,541,051)	(5,576,360)
Allocation to CWA Supplemental Block	(847,766)	(847,766)	(781,949)	(781,949)	(781,949)
Allocation to NUD Block	(1,515,972)	(1,508,700)	(1,517,273)	(1,563,564)	(1,573,527)
Remaining Costs to F&P rates	21,988,818	21,879,270	22,074,220	22,771,553	22,921,641
PY cost adjustment	-	-	-	-	-
True Up balance applied	-	-	(230,000)	(1,130,000)	(1,030,000)
Amount to be collected through rates	21,988,818	21,879,270	21,844,220	21,641,553	21,291,641
Expected F&P revenues	25,196,800	23,777,970	21,801,984	21,658,554	21,284,449
CY (under)/Over payment	3,207,981	1,898,700	(172,236)	(1,112,999)	(1,537,192)
Balance	783,690	2,718,439	2,671,252	1,681,130	221,271
Interest on above, affect following year	36,050	125,048	122,878	77,332	10,178
New Supply Cost Pool - Rate Based					
Asset cost	N/A	N/A	N/A	N/A	N/A
O&M cost	878,110	900,336	890,795	926,089	962,310
Regional Cost	878,110	900,336	890,795	926,089	962,310
Allocation to CWA Supplemental Block	(36,539)	(36,539)	(21,900)	(21,900)	(21,900)
Allocation to NUD Block	(54,428)	(55,805)	(55,214)	(57,402)	(59,647)
Allocation to Renton Block	(50,052)	(51,319)	(50,775)	(52,787)	(54,852)
Remaining Costs to F&P rates	737,091	756,673	762,906	794,000	825,912
PY cost adjustment	-	-	-	-	-
Transfer (from)/to FC cost pool	-	-	-	-	(38,014)
True Up balance applied	-	-	(145,000)	(185,000)	(108,000)
Amount to be collected through rates	737,091	756,673	617,906	609,000	679,898
Expected F&P revenues	1,070,452	1,022,892	597,160	591,341	583,529
CY (under)/Over payment	333,361	266,219	(163,746)	(202,660)	(204,369)
Balance	178,056	452,466	307,533	119,020	(79,874)
Interest on above, affect following year	8,191	20,813	14,147	5,475	(3,674)
New Transmission Cost Pool					
Asset cost	N/A	N/A	N/A	N/A	N/A
O&M cost	N/A	N/A	N/A	N/A	N/A
Regional Cost	N/A	N/A	N/A	N/A	N/A
Remaining Costs to F&P rates	-	-	-	-	-
includes CWA supplemental block & Renton	-	-	-	-	-
True Up balance applied	-	-	-	-	-
Amount to be collected through rates	-	-	-	-	-
Expected F&P revenues	-	-	-	-	-
CY (under)/Over payment	-	-	-	-	-
Balance	-	-	-	-	-
Interest on above, affect following year	-	-	-	-	-
New Supply Cost Pool - FC Based					
Asset cost	4,603,141	4,520,826	2,661,685	2,658,118	2,655,289
Regional Cost	4,603,141	4,520,826	2,661,685	2,658,118	2,655,289
Allocation to NUD Block	(285,316)	(280,214)	(164,979)	(164,758)	(164,583)
Allocation to Renton Block	(100,965)	(104,894)	(104,847)	(106,944)	(109,083)
Transfer from/(to) FC New Supply Rates Cost Pool	-	-	-	-	38,014
Remaining Costs to balance FCs	4,216,860	4,135,718	2,391,859	2,386,416	2,419,638
Expected revenues	3,625,430	3,625,430	3,625,430	3,625,430	3,625,430
CY (under)/Over payment	(591,430)	(510,288)	1,233,572	1,239,014	1,205,792
Balance	7,289,046	7,114,054	8,674,872	10,312,930	11,993,118
Interest on above, affect following year	335,296	327,246	399,044	474,395	551,683
New Supply Facility NBV	10,172,605	9,044,580	9,660,116	10,274,916	10,888,966

Exhibit A

Rate Making

The essence of rate making is to determine the unit price by dividing the revenues to be collected by the units of service. Water rates are set in whole penny amounts and are seasonally differentiated (i.e. there is a peak rate and an off-peak rate). Seasonal rate rounding was selected to generate revenues that were closest to the annual revenue requirement while maintaining the existing ratio of peak rate to off-peak rate of 1.45 to 1.5. The peak season May 16 to September 15 with the remainder of the year being off-peak.

Demand Volumes

Since the revenue generated by rates is dependent on the amount of water sold, the forecast of demand has an impact on rates. The current forecast is flat for most contract types, with the exception of a planned decrease in the Full and Partial Contracts in 2016 & 2017 due to utilization of an alternative supply source.

	2014	2015	2016	2017
Full and Partial (metered)				
Peak CCF	5,895,000	5,869,500	5,676,300	5,424,200
Off-Pk CCF	7,255,400	7,224,300	6,964,400	6,622,800
Total Base CCF	13,150,400	13,093,800	12,640,700	12,047,000
CWA (metered)				
Peak CCF	5,995,800	6,028,500	6,061,300	6,094,000
Off-Pk CCF	7,046,100	7,084,600	7,123,000	7,161,500
Total Base CCF	13,041,900	13,113,100	13,184,300	13,255,500
Northshore (metered)				
Peak CCF	1,117,600	1,121,800	1,126,000	1,130,200
Off-Pk CCF	1,444,900	1,450,400	1,455,800	1,461,300
Total Base CCF	2,562,500	2,572,200	2,581,800	2,591,500
Seattle Retail (metered)				
Peak CCF	10,620,800	10,602,995	10,636,782	10,602,946
Off-Pk CCF	15,988,800	16,078,005	15,999,518	16,118,254
Total Base CCF	26,609,600	26,681,000	26,636,300	26,721,200
Total Metered Demand				
Peak CCF	23,629,200	23,622,795	23,500,382	23,251,346
Off-Pk CCF	31,735,200	31,837,305	31,542,718	31,363,854
Total Base CCF	55,364,400	55,460,100	55,043,100	54,615,200
Non-Revenue Water (8.0 MGD, 5-yr avg)				
Peak CCF	1,315,508	1,315,508	1,315,508	1,315,508
Off-Pk CCF	2,588,235	2,588,235	2,588,235	2,588,235
Total Base CCF	3,903,743	3,903,743	3,903,743	3,903,743
Transmission Non-Revenue Water (2%)				
Peak CCF	498,894	498,766	496,318	491,337
Off-Pk CCF	686,469	688,511	682,619	679,042
Total Base CCF	1,185,363	1,187,277	1,178,937	1,170,379
Remainder of Non-Revenue to Seattle				
Peak CCF	816,614	816,742	819,190	824,171
Off-Pk CCF	1,901,767	1,899,724	1,905,616	1,909,194
Total Base CCF	2,718,380	2,716,466	2,724,806	2,733,364
Seattle as Wholesale				
Peak CCF	11,437,414	11,419,737	11,455,972	11,427,117
Off-Pk CCF	17,890,567	17,977,729	17,905,134	18,027,447
Total Base CCF	29,327,980	29,397,466	29,361,106	29,454,564
Total F&P Demand + Seattle as wholesale				
Peak CCF	17,332,414	17,289,237	17,132,272	16,851,317
Off-Pk CCF	25,145,967	25,202,029	24,869,534	24,650,247
Total Base CCF	42,478,380	42,491,266	42,001,806	41,501,564

Exhibit A

Cost Pools and Regional Rates

Full and Partial Contract customers technically have separate rates for each cost pool: Existing Supply, Existing Transmission, New Supply, and New Transmission. While not often shown separately, this breakdown is necessary since Renton pays for three of the cost pools through rates, and one through a block payment (New Supply).

Rates per CCF	2015		2016		2017	
	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak
Existing Supply	\$0.98	\$1.44	\$0.98	\$1.44	\$0.98	\$1.44
Existing Transmission	\$0.43	\$0.64	\$0.43	\$0.64	\$0.43	\$0.64
New Supply	\$0.01	\$0.02	\$0.01	\$0.02	\$0.01	\$0.02
New Transmission	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Full and Partial Rate Drivers

For regional rates, demand was the main driver of the change in rates. The rate drivers for 2014 are:

Increase in Regional Costs	3.4 %
True Up Balance	(2.7) %
<u>Increase in demand</u>	<u>(8.0) %</u>
Total	(7.3) %

ERU Fee

The current Facilities Charge rate of \$836/ERU became effective 2/1/2014. This charge recovers the cost of durable investments made as part of the 1% conservation plan. Per Operating Board guidance, this charge is expected to be updated effective 1/1/2018.

Southwest Sub-Region

Calculating rates for the Southwest Sub-region uses data from the main rate study, but is done as a separate step. The Southwest Sub-region is comprised of six "Facilities" as defined in the contract. For each Facility, total O&M and utility basis capital costs are determined. Then, for each of the six facilities, the percent used by all wholesale customers (as opposed to Seattle) is determined, and that percent is applied to the O&M and asset cost for the corresponding facility. These are combined to form the Southwest Sub-region cost pool.

Capital Cost

During the main rate study, certain existing assets and future/planned assets were identified as Sub-regional. The utility basis cost was calculated using the same method as for the regional cost pools.

O&M

O&M cost tracking for sub-regions was done a little differently than for the regional cost pools. Location codes are pulled from the financial system, rather than using budgeted spending per activity code. For each Facility, the O&M costs from the 2013 true up were carried forward.

Exhibit A

Setting Rates

The procedures above produce a total Sub-regional cost for all wholesale customers served by the sub-region. This total cost was divided by the total flow for all wholesale customers in the sub-region, regardless of the exact location of their wholesale meter, to produce a rate per ccf.

	2013 true up allocators	2013	2014	2015	2016	2017
585 Zone Facilities						
Operations Costs		5,730	5,730	5,730	5,730	5,730
Asset Recovery Costs		319,674	314,658	309,641	304,442	299,437
Total		325,404	320,388	315,371	310,172	305,168
Allocation to Southwest Subregion Customers	45.5%	148,059	145,776	143,494	141,128	138,851
West Seattle Reservoir						
Operations Costs		11,831	11,831	11,831	11,831	11,831
Asset Recovery Costs		2,987,613	2,936,126	2,918,038	2,968,203	2,916,217
Total		2,999,444	2,947,957	2,929,868	2,980,034	2,928,048
Allocation to Southwest Subregion Customers	4.1%	122,977	120,866	120,125	122,181	120,050
West Seattle Pipeline						
Operations Costs		0	0	0	0	0
Asset Recovery Costs		148,863	145,510	142,157	138,803	135,450
Total		148,863	145,510	142,157	138,803	135,450
Allocation to Southwest Subregion Customers	36.7%	54,633	53,402	52,171	50,941	49,710
Des Moines Way Pipeline						
Operations Costs		0	0	0	0	0
Asset Recovery Costs		9,332	8,896	8,459	8,023	7,587
Total		9,332	8,896	8,459	8,023	7,587
Allocation to Southwest Subregion Customers (at 100%)	100.0%	9,332	8,896	8,459	8,023	7,587
Military Road Feeder						
Operations Costs		0	0	0	0	0
Asset Recovery Costs		0	0	0	0	0
Total		0	0	0	0	0
Allocation to Southwest Subregion Customers (at 100%)	100.0%	0	0	0	0	0
East Marginal Way Feeder						
Operations Costs		0	0	0	0	0
Asset Recovery Costs		0	0	0	0	0
Total		0	0	0	0	0
Allocation to Southwest Subregion Customers (at 100%)	100.0%	0	0	0	0	0
PY adjustment						
Total Cost Allocated to SW Subregion		(338,933)				
True Up balance applied				360,000	295,000	210,000
Amount to be collected through rates				684,249	617,274	526,198
Flow			4,298,600	4,287,500	3,868,700	3,289,400
Calculated Rates				0.160	0.160	0.160
Rounded rates, per ccf			0.07	0.16	0.16	0.16
Expected revenues		299,665	300,902	686,000	618,992	526,304
CY (under)/Over payment		303,598	(28,038)	361,751	296,718	210,106
True up Balance		(743,464)	(805,702)	(481,013)	(206,422)	(5,812)
Interest on above, affect following year		(34,199)	(37,062)	(22,127)	(9,495)	(267)

East Sub-Region

Exhibit A

The East sub-region consists of four segments of the Mercer Island Pipeline, each serving different combinations of wholesale customers. Because the segments are in series (each segment feeds the next one) cost allocation is a sequential calculation based on flows.

Capital Cost and O&M

Since no CIP items were identified that affect the Mercer Island Pipeline, the asset costs are based only on the exiting asset schedule. O&M costs were based on 2013 actuals as typical years for segments 1 & 4. Segments 2 & 3 were based on 2012 since 2013 was not a typical year for these segments. Segment 3 also includes O&M costs in 2014 for work on a slow moving slide affecting that section of the pipeline.

Setting Rates

Consistent with the contract, a rate was calculated for each segment of the pipeline and the rate will be applied to flow through wholesale meters on that segment. These rates and the revenues they generate will be tracked and trued up separately for each segment. As a result, Mercer Island, who has meters on two different segments, will experience two different Sub-regional surcharges on their monthly bills.

Exhibit A

Split Cost to Segment by Flows					
	2013	2014	2015	2016	2017
Segment 1					
Assets	14,490	14,109	13,728	13,346	12,965
O&M - based on 2013 actual O&M cost	1,149	1,149	1,149	1,149	1,149
Cost	15,640	15,258	14,877	14,495	14,114
Bellevue Taps	1,486	1,450	1,414	1,378	1,341
Downstream	14,153	13,808	13,463	13,118	12,773
Segment 2					
Assets	20,202	19,686	19,170	18,653	18,137
O&M	11,421	166	166	166	166
Cost	45,776	33,660	32,798	31,937	31,076
Bellevue Taps	7,917	5,822	5,673	5,524	5,375
Downstream	37,858	27,838	27,126	26,413	25,701
Segment 3					
Assets	27,093	26,380	25,667	24,954	24,241
O&M	51,307	154,400	14,475	14,475	14,475
Cost	116,258	208,618	67,267	65,842	64,417
Mercer Island & Seattle Taps	24,267	43,546	14,041	13,743	13,446
Downstream	91,991	165,072	53,226	52,099	50,971
Segment 4					
Assets	14,349	13,971	13,594	13,216	12,838
O&M	1,138	1,138	1,138	1,138	1,138
Cost	107,478	180,181	67,958	66,452	64,947
Mercer Island Taps	107,478	180,181	67,958	66,452	64,947
Calculate Rates for each segment:					
	2013	2014	2015	2016	2017
Segment 3 Rate Calc:					
Total Cost Allocated to Segment 3	24,267	43,546	14,041	13,743	13,446
True Up balance applied			8,000	8,000	8,000
Amount to be collected through rates			22,041	21,743	21,446
Flow		277,000	276,824	276,655	276,442
Calculated Rates			0.080	0.079	0.078
Rounded rates		0.16	0.08	0.08	0.08
Expected revenues	47,986	44,320	22,146	22,132	22,115
CY (under)/Over payment	23,719	774	8,105	8,389	8,669
True up Balance	(20,808)	(20,990)	(13,851)	(6,099)	2,290
Interest on above, affect following year	(957)	(966)	(637)	(281)	105
	2013	2014	2015	2016	2016
Segment 4 Rate Calc:					
Total Cost Allocated to Segment 4	107,478	180,181	67,958	66,452	64,947
True Up balance applied			47,000	49,000	51,000
Amount to be collected through rates			114,958	115,452	115,947
Flow		729,000	729,900	730,800	731,550
Calculated Rates			0.157	0.158	0.158
Rounded rates		0.19	0.16	0.16	0.16
Expected revenues	169,500	138,510	116,784	116,928	117,048
CY (under)/Over payment	62,022	(41,671)	48,826	50,476	52,101
True up Balance	(98,658)	(144,868)	(102,705)	(56,954)	(7,473)
Interest on above, affect following year	(4,538)	(6,664)	(4,724)	(2,620)	(344)

Notes: Bellevue is part of Cascade, so their "rate" is a block payment

Exhibit A

North Bend Treatment Discount

North Bend's Contract is designed to use the published rates for Full and Partial Requirements (the "Basic Services Rate" defined in the contract) with a discount for untreated water. This discount is mentioned in Section IV.C.2 of their contract and detailed in Attachment 1, Exhibit C.

The table below shows the calculation of this discount and resulting North Bend rates for 2015-2017.

Treatment Costs	2015	2016	2017
Cedar Treatment NBV	72,099,654	69,823,609	67,508,581
Cedar Treatment Depreciation	2,501,045	2,568,536	2,659,473
Cedar Treatment Util Basis Cost	6,899,124	6,827,776	6,777,497
Tolt Treatment NBV	56,453,331	54,112,014	51,770,698
Tolt Treatment Depreciation	2,341,316	2,341,316	2,341,316
Tolt Treatment Util Basis Cost	5,784,969	5,642,149	5,499,329
O&M Budget Items			
N050302 TOLT DBO CONTRACT PAYMENTS	2,898,800	2,985,764	3,075,337
N050303 CEDAR DBO CONTRACT PAYMENTS	2,936,120	3,024,204	3,114,930
N750705 TOLT DBO MANAGEMENT COSTS	320,702	340,756	361,635
N750707 CEDAR DBO MANAGEMENT COSTS	731,434	770,734	811,490
N674101 (CEDAR) CHOLRINATION FAC O&M	687,220	716,811	745,617
N674102 FLUORIDATION PROGRAM O&M	275,614	281,597	287,677
N751300 SWTR MONITORING, REPRTING & ADM	129,498	135,488	141,580
N751301 TCR MONITORING, REPRTING & ADM	709,244	733,139	761,479
N751302 LCR MONITORING, REPRTING & ADM	34,463	36,171	37,925
N751303 DBP MONITORING, REPRTING & ADM	111,754	117,225	122,837
N751304 PUBLIC INFRMATION/NOTIFICATION	79,647	83,607	87,653
N751305 REGULATORY SUPPORT	71,260	74,617	78,027
Overhead on above at 43.823%	3,937,827	4,075,589	4,218,485
O&M Cost	12,923,582	13,375,702	13,844,673
Total Regional Cost related to treatment	25,607,675	25,845,627	26,121,499
CWA Base Block and NUD Allocation	5,934,242	5,989,384	6,053,314
Portion of regional cost to full and partial contract	19,673,433	19,856,243	20,068,185
Flow under full and partial contracts (incl. CWA Supplemental)	43,955,170	43,465,710	42,965,468
Treatment discount per ccf	\$ 0.45	\$ 0.46	\$ 0.47
North Bend Rates			
Off Peak	\$ 0.97	\$ 0.96	\$ 0.95
Peak	\$ 1.65	\$ 1.64	\$ 1.63

Renton New Supply Cost Pool

Exhibit A

Renton's Partial Supply Contract has an alternative cost recovery mechanism for the New Supply Cost Pool since their entire retail area participates in conservation yet only a small portion of the area is served by Seattle water. As per their contract, Renton is allocated 5.7% of the Renton New Supply cost pool, which differs from the regional New Supply cost pool in that it does not include the costs for conservation assets created prior to 2012. The resulting costs for Renton are shown below, *before any prior year true up adjustments*.

	2015	2016	2017
Renton New Supply Block			
Asset cost	1,839,426	1,876,214	1,913,739
Allocation to Renton New Supply Block	104,847	106,944	109,083
O&M cost	890,795	926,089	962,310
Allocation to Renton New Supply Block	50,775	52,787	54,852
Total cost for each year, before prior year true up adjustment	155,623	159,731	163,935

Renton Commodity Rates

Because Renton pays for the New Supply Cost Pool through a block payment, their commodity rate is slightly lower than the base Full and Partial rate.

Rates per ccf	2015		2016		2017	
	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak
Full and Partial Rates	1.42	2.10	1.42	2.10	1.42	2.10
Minus New Supply Cost Pool portion of rate	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.02)
Renton Commodity Rates	1.41	2.08	1.41	2.08	1.41	2.08

Northshore Fixed Block

Northshore is allocated a portion of the Existing Supply and Existing Transmission cost pools. This allocation is 5.1%, which is 102% of Northshore's block volume (8.55 MGD) divided by the system firm yield as defined in the Fixed Block contract (171 MGD).

Northshore also participates in the regional conservation program and shares in the conservation portion of the New Supply and Facilities Charge cost pools. These costs have been combined into a "Conservation" cost pool and allocated to Northshore at 6.2%, which is 102% of Northshore's block volume (8.55 MGD) divided by the contract based system firm yield minus the CWA Base block (171 MGD - 30.3 MGD).

The resulting costs for Northshore are shown below, *before any prior year true up adjustments*.

Exhibit A

	2015	2016	2016
Existing Supply Cost Pool			
Asset cost	34,383,611	36,608,822	37,654,936
O&M cost	33,385,438	34,368,715	35,719,317
Regional Cost	67,769,049	70,977,537	73,374,253
Allocation to NUD Block	3,456,222	3,619,854	3,742,087
Existing Transmission Cost Pool			
Asset cost	19,688,746	20,203,024	20,039,502
O&M cost	10,061,697	10,455,093	10,813,975
Regional Cost	29,750,443	30,658,117	30,853,477
Allocation to NUD Block	1,517,273	1,563,564	1,573,527
Conservation Block			
Asset cost	2,661,685	2,658,118	2,655,289
Allocation to NUD Conservation Block	164,979	164,758	164,583
O&M cost	890,795	926,089	962,310
Allocation to NUD Conservation Block	55,214	57,402	59,647
Total Conservation Block	220,193	222,160	224,229
Total cost for each year, before prior year true up adjustment	5,193,687	5,405,578	5,539,844

Cascade Water Alliance Declining Block

Cascade's Base Block is allocated a portion of the Existing Supply and Existing Transmission cost pools. This allocation is 18.1%, which is 102% of Cascade's Base block volume (30.3 MGD) divided by the system firm yield as defined in the Declining Block contract (171 MGD).

Cascade is also allocated subregional costs for the facilities that serve only Cascade or that Cascade shares with a few neighboring utilities (ie. the Cascade Sub-Region). Subregion A is the Bellevue Feeders, which are used solely by Cascade (NE 8th St., Bellevue Redmond Road, and NE 24th St). Segments 1 and 2 are the same as East Subregion 1 and 2, and the costs below were developed under that section. Segment 3 is specific to the CWA contract; the costs are currently zero because the West Marginal Way feeder is not yet identified separately in the asset schedule.

Cascade's Supplemental Block is a 3.0 MGD block priced at the Full and Partial Commodity rates developed above. The resulting total costs for Cascade are shown below, *before any prior year true up adjustments*.

Exhibit A

	2015	2016	2017
BASE BLOCK			
Existing Supply Cost Pool			
Asset cost	34,383,611	36,608,822	37,654,936
O&M cost	33,385,438	34,368,715	35,719,317
Regional Cost	67,769,049	70,977,537	73,374,253
Allocation to CWA Base Block	12,248,364	12,828,256	13,261,431
Existing Transmission Cost Pool			
Asset cost	19,688,746	20,203,024	20,039,502
O&M cost	10,061,697	10,455,093	10,813,975
Regional Cost	29,750,443	30,658,117	30,853,477
Allocation to CWA Base Block	5,377,001	5,541,051	5,576,360
Total Base Block Cost	17,625,365	18,369,307	18,837,791
CWA SUBREGIONAL COST			
Cascade Subregion A			
Operations Costs	N/A	N/A	N/A
Asset Recovery Costs	12,445	11,790	11,135
Cascade Subregion B - Segment 1 calculated on East tab	1,414	1,378	1,341
Cascade Subregion B - Segment 2 calculated on East tab	5,673	5,524	5,375
Cascade Subregion B - Segment 3			
Operations Costs	N/A	N/A	N/A
Asset Recovery Costs	N/A	N/A	N/A
Total Subregional Cost	19,532	18,692	17,851
SUPPLEMENTAL BLOCK			
Supplemental Block Cost at Full & Partial rates	2,572,457	2,572,457	2,572,457
Total cost for each year, before prior year true up adjustment	20,217,354	20,960,455	21,428,099

Exhibit B

Final Report

2014 INDEPENDENT REVIEW OF THE 2015-2017 WHOLESALE WATER RATE STUDY

Seattle Public Utilities

Prepared by
Cuthbert Consulting, Inc.
July 24, 2014

Seattle Public Utilities

2014 INDEPENDENT REVIEW OF THE 2015-2017 WHOLESAL WATER RATE STUDY

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Seattle Public Utilities

2014 INDEPENDENT REVIEW OF THE 2015-2017 WHOLESAL WATER RATE STUDY

Introduction

The City of Seattle through its water utility, a separate enterprise fund within Seattle Public Utilities (SPU), supplies water on a wholesale basis to 21 regional wholesale customers under a variety of contract agreements. These agreements provide for a variety of water supply and transmission services, including full and partial requirements service, block supply service, and various other service options (see Table 1). The City of Seattle has separate contracts with each wholesale customer entered into in or after 2001 that are collectively referred to as the "2001 Contracts" in this report.

In July 2014 SPU staff completed the 2015-2017 Wholesale Water Rate Study (the 2015-2017 Rate Study or the study) that develops projections of wholesale water revenue requirements for the period of 2015 to 2017, and is used as the basis for establishing wholesale customer water rates and charges over this time period. Cuthbert Consulting Inc. was retained by SPU to complete an independent review of the 2015-2017 Rate Study and to evaluate whether the water rates and charges presented in the study are consistent with the requirements of the 2001 Contracts that Seattle maintains with its wholesale customers.

The basis for this independent review is provided for in the full and partial requirements service contracts (Section IV.G.2) and similar requirements in the other 2001 Contracts that contains the following requirements for an independent rate consultant:

Rate Consultant. An independent rate consultant shall be selected by Seattle in consultation with the Operating Board. Detailed information and progress reports from the consultant will be made to Water Utility during the course of the study upon drafting each major study section directly affecting Water Utility and other Wholesale Customers. A final consultant report shall be made available to Water Utility not less than 30 days before Seattle formally transmits any resulting rate adjustment proposal to the Operating Board.

As described in more detail in this report, the 2015-2017 Rate Study and the off-peak and peak volume rates that are presented in the study and applicable to all wholesale customers served under full and partial requirements service agreements are consistent with the requirements of the 2001 Contracts.

This report also evaluates whether cost allocations made to the Cascade Water Alliance (CWA) and to the Northshore Utility District (NUD) as well as certain new supply costs to the City of Renton are consistent with their respective agreements. As water supplied under these block contracts is provided on a revenue requirements recovery basis for fixed quantities of water

deliveries to each of these wholesale customers, water rates for the CWA, NUD and Renton new supply block supply deliveries are not developed in the study.

Table 1. Current SPU Wholesale Customers by Contract Type and Sub-Region

Contract Type	Customer	Sub-Regions		
		East	Southwest	NW Wheeling
Full Requirements	Cedar River Water and Sewer District City of Bothell City of Duvall			
	City of Mercer Island	X		
	City of Seattle ¹	X		
	Coal Creek Utility District			
	KCWD 20		X	
	KCWD 45		X	
	KCWD 49		X	
	KCWD 119			
	KCWD 125		X	
	North City Water District			X ²
	Soos Creek Water and Sewer District Woodinville			
Partial Requirements	City of Renton			
	Highline Water District		X	
	KCWD 90			
	Olympic View Water and Sewer District			X
Partial Requirements (for Supply of Untreated Water)	City of North Bend			
Declining Block	Cascade Water Alliance ³	X		
Fixed Block	Northshore Utility District			
Emergency Intertie	City of Edmonds			
	Lake Forest Park Water District			

Notes:

- 1. The City of Seattle's retail distribution system is treated as the equivalent of a wholesale customer for the purpose of charging the same wholesale and East Sub-Region rates and charges for regional supply and transmission.*
- 2. North City Water District, formerly Shoreline, only has two taps within the NW Wheeling Sub-Region.*
- 3. Cascade Water Alliance also has specific CWA Sub-Region requirements.*

The Southwest Sub-Region surcharge is applicable to the Highline Water District and King County Water Districts 20, 45, 49, and 125. The East Sub-Region Stage 3 surcharge is applicable to both the City of Mercer Island and to SPU's retail demand located on Mercer Island while the East Sub-Region Stage 4 Surcharge is applicable only to the City of Mercer Island. The CWA Sub-Region Surcharge is applicable only to CWA. As discussed further in this report, all of the cost allocations and Sub-Region surcharges developed by SPU in the study are calculated in a manner consistent with the applicable agreements.

This independent review includes a summary of the following:

- Description of the methodology used in the 2015-2017 Rate Study,
- Summary of key assumptions of the 2015-2017 Rate Study,
- Summary of the results of the 2015-2017 Rate Study,
- An evaluation as to whether the ratemaking requirements of the various agreements are met,
- Summary on one methodological ratemaking change that has occurred since the prior wholesale rate study was completed in 2011.

The 2015-2017 Wholesale Water Rate Study

Overview of Methodology

The 2015-2017 Rate Study covers the five-year period from 2013 through 2017, and proposes a revised schedule of wholesale customer rates and charges for 2015, 2016 and 2017. The following paragraphs provide an overview of the methodology used by SPU to develop the wholesale customer rates and charges with additional detail provided in the report sections that follow.

Identification of the Regional Supply and Transmission Revenue Requirements. The 2015-2017 regional revenue requirements are the sum of applicable operational and capital costs necessary for supply and transmission services. Annual true-up adjustments exist to reconcile projected costs and revenues with actual costs and revenues each year, and aggregated true-up adjustments are applied in each three-year rate study.

Allocation of Regional Revenue Requirements into Cost Pools. SPU's actual and projected water system costs are separated into cost pools that represent existing supply, new supply, existing transmission, and new transmission categories (although no new transmission costs exist at the current time). Additional cost pools are established to identify the costs associated with specific facilities that serve wholesale customers in the Southwest Sub-Region, the East Sub-Region, and the CWA Sub-Region.

Full and Partial Requirements Service Rate Design. The cost pools associated with existing regional supply and transmission revenue requirements as well as the operation costs of the new supply cost pool are used to establish rates applicable to the wholesale customer served under full and partial requirement agreements. Rates for water sales during both an off-peak period (effective from September 16th through May 15th) and a peak period (effective from May 16th through September 15th) are estimated. Additionally, cost pools covering assets associated with new regional supply revenue requirements are used to establish facility charge rates. For

ratemaking purposes water used to serve the City of Seattle's retail customers are treated as an equivalent wholesale full requirements customer.

CWA Block Agreement and Sub-Region Costs. In 2003 a long-term declining block water supply agreement was established between the City of Seattle and CWA. This agreement obligates Seattle to supply 30.3 million gallons per day (MGD) of water annually through 2023 and reduced amounts of water thereafter through the term of the contract and includes provisions for cost recovery. The cost pool associated with existing regional supply and transmission revenue requirements is used to establish the CWA base block revenue requirements. Additionally CWA Sub-Region costs are identified and recover the costs associated with certain facilities necessary to the CWA Sub-Region. The cost pools associated with CWA Sub-Region costs are used to establish the CWA Sub-Region revenue requirements to be recovered from CWA.

NUD Block Agreement. In 2004 a long-term fixed block water supply agreement was established between the City of Seattle and NUD. This agreement obligates Seattle to supply 8.5 MGD of water annually through 2061. The cost pool associated with existing regional supply and transmission revenue requirements along with certain conservation costs of the new supply cost pool are used to establish the NUD block revenue requirements.

Renton New Supply Costs: The City of Renton also has agreed to pay a portion of the regional New Supply cost pool, which is identified as the Renton New Supply Block in the rate study. The cost pool associated with the conservation portion of the new supply cost pool is used to establish the Renton New Supply revenue requirements.

Southwest Sub-Region Surcharge. The cost pool associated with Southwest Sub-region revenue requirements is used to establish a surcharge applied to five wholesale customers recovers the costs associated with certain facilities in the Southwest Sub-Region.

East Sub-Region Surcharge. The cost pool associated with East Sub-region revenue requirements is used to establish a surcharges applicable to SPU retail customers and the City of Mercer Island that recovers the costs associated with certain facilities in the East Sub-Region.

CWA Supplemental Block Costs: In 2008 the CWA block agreement was amended to provide for an additional 3.0 MGD of water to be supplied to CWA through 2023. The payment provisions for this supplemental water supply indicate that this water will be paid for at the off-peak and peak volume rates set for full and partial requirements service.

North Bend Treatment Discount: Water sales to the City of North Bend are priced at full and partial requirement rates, subject to a discount calculated by identifying the costs associated with SPU's water treatment facilities, and water quality monitoring and reporting requirements.

All of these rates and charges are summarized in the 2015-2017 Rate Study for the period 2013 through 2017. The calculations that support these rates and charges were developed by SPU and provided predominately in one spreadsheet file titled "Rate Calc 06302014 FOR RATE PROPOSAL".

Key Assumptions

The 2015-2017 Rate Study includes a number of assumptions that are instrumental in determining wholesale rates. The following paragraphs summarize certain key assumptions that were made in preparing the study.

- Projected water demands were developed by SPU staff for full and partial requirements wholesale customers (including Seattle's retail service area usage treated as an equivalent wholesale customer), CWA, NUD, the City of Renton, and for wholesale customers served in the Southwest and East Sub-regions. These projected wholesale water demands are shown in Appendix A.
- The SPU total water system firm yield is defined in the block contracts as 171 MGD for ratemaking purposes.
- Non-revenue water totals approximately 3.9 million CCF through 2017, which is the difference between the volume of water produced and the volume of water sold. It includes distribution non-revenue water from SPU's retail distribution system and transmission non-revenue water.
- Transmission non-revenue water is defined in the contracts as 2.0 percent of the sum of metered sales and distribution non-revenue water.
- Projected O&M expenditures were provided by SPU for 2015, 2016, and 2017.
- Facilities charge rates are unchanged until 2018, thus the revenues in 2013 through 2017 in the study equal actual facilities charge revenues in 2013 of approximately \$3.6 million per year.
- True-up adjustments in 2015, 2016 and 2017 are used to offset increases in the revenue requirements that are not covered by the projected revenues under the proposed wholesale rates and charges. The projected 2012-2014 true-up balance as of December 31, 2014 for the regional revenue requirement cost pools is estimated at \$12.7 million for purposes of the development of the wholesale rates in the projection period. Any difference from this initial balance at the end of 2014 will be included in the calculation of the future true-up balance.
- The SPU rate of return on investment equals SPU's average cost of debt plus 1.5 percent. In the 2015-2017 Rate Study, the cost of debt is 4.6 percent and the rate of return on investment is 6.1 percent and is referred to as the return on assets.

2015-2017 Regional Revenue Requirement

The 2015-2017 Rate Study regional revenue requirements consist of operations and infrastructure costs from the supply and transmission cost pools described above. The 2015-2017 Rate Study contains a calculation of the projected regional revenue requirements defined as the sum of the costs from the existing supply cost pool, the existing transmission cost pool, and the portion of the new supply cost pool that is funded by rates.

Table 2 summarizes the regional revenue requirements for 2014 through 2017 as presented in the study. Additional detail regarding specific numbers in this table is included in the 2015-2017 Rate Study.

Table 2. Projected 2015-2017 Rate Study Revenue Requirements

	2014	2015	2016	2017
Existing Supply Cost Pool	\$64,906,249	\$67,769,049	\$70,977,537	\$73,374,253
Existing Transmission Cost Pool	\$29,582,358	\$29,750,443	\$30,658,117	\$30,853,477
New Supply Cost Pool – Rate Based	\$900,336	\$890,795	\$926,089	\$962,310
New Transmission Cost Pool	\$0	\$0	\$0	\$0
Total Revenue Requirement	\$95,388,943	\$98,410,287	\$102,561,742	\$105,190,041
Change in Cost	--	3.4%	4.5%	2.8%
Change in Demand	--	-8.0% ¹	1.2%	1.2%
True Up Application	--	-2.7%	-5.6%	-4.0%
Total % Impact on Rates	--	-7.3%	0.0%	0.0%

1. The main driver in the -8% change in demand is a difference between lower predicted demand and higher actual demand in the last rate study. This 8% adjustment reflects the new prediction for 2015-2017.

Figure 1 summarizes the projected 2015 regional revenue requirements, showing the operations and the infrastructure costs of the various cost pools. Similar regional revenue requirements were projected for the years 2016 and 2017.

The contracts require infrastructure costs be determined using a utility basis that is the total annual depreciation expense plus the product of net book value and the return on assets for each asset type (Section IV.E.2). Interest costs may be included during the construction of new facilities but then not included as part of future net book value calculations. The 2015-2017 Rate Study is consistent with these requirements of the contract.

The contracts list the specific operations and maintenance activities that can be recovered in existing supply, new supply, existing transmission, new transmission charges (Section IV.E.3) and in the Southwest Sub-Region, CWA Sub-Region, East Sub-Region cost pool (Exhibit IX). SPU's water system operations costs are broken out into approximately 700 activities, each identified by a unique activity number within the rate study model. In addition to recovering the costs of these direct activities, the contracts have a provision for recovering indirect expenditures using the percentage change from year to year in directly recoverable costs. The 2015-2017 Rate Study is consistent with these requirements of the contracts.

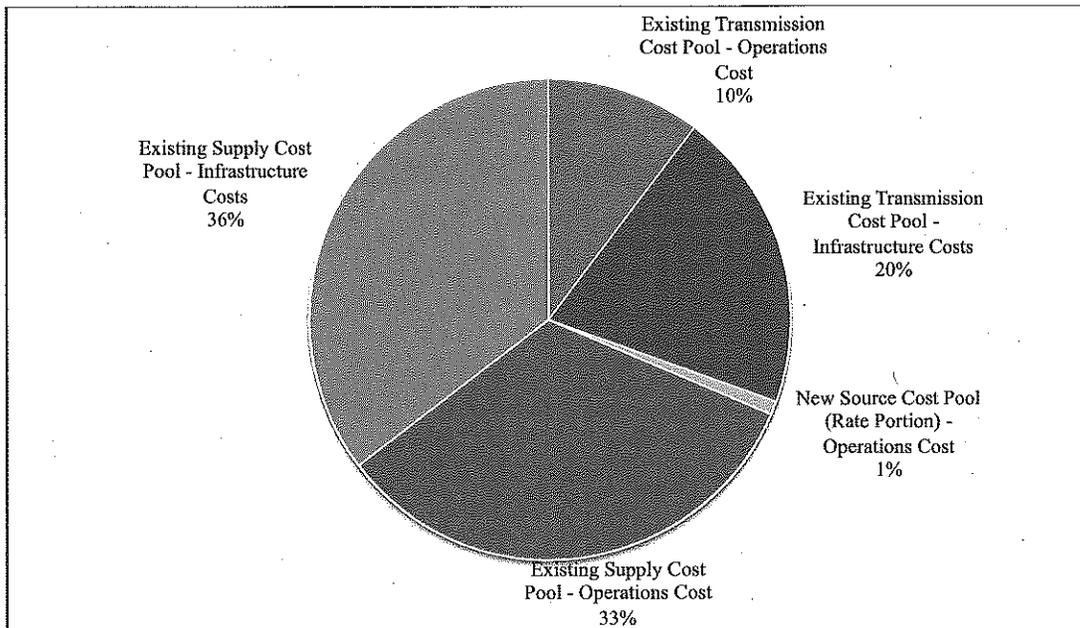


Figure 1. Projected 2015 Regional Revenue Requirements

The contracts require the use of specific accounting principles (Section IV.E.1) that include:

- Separate asset accounts must be maintained for each facility that record the original cost, betterments, and retirements.
- Facilities should be depreciated according to Standard Water System Asset Lives.
- Net book value should be determined by the original cost of facilities plus betterments less retirements and recorded depreciation expensed.

The 2015-2017 Rate Study is consistent with these requirements of the contract.

The contracts require Seattle's distribution system that serves its retail customers to be treated as the equivalent of a wholesale customer for the purposes of developing wholesale customer rates (Section IV.A.9 of the full requirements contracts). The 2015-2017 Rate Study is consistent with this provision of the contracts.

The contracts specify that the costs of the disposing of assets within a cost pool are to be included in the cost pool (Section IV.E.4). The 2015-2017 Rate Study is consistent with this requirement of the contracts.

The contracts specify that the wholesale customer rates shall not collect revenues that exceed the allowable costs (Section IV.E.10). The contracts describe the true-up mechanism for reconciling cost and revenue targets during each year with actual costs incurred and revenues received within the year (Section IV.I). SPU is required to maintain a running balance of the excess or deficit in actual rate revenues and actual expenses incurred. This balance earns simple interest at Seattle's average cost of debt and a statement of this balance is to be reviewed and approved by an external auditor. The revenue requirements are to be adjusted to zero the balance in each cost pool. The true-up calculations in the 2015-2017 Rate Study are consistent with these requirements of the contracts.

Allocation of Regional Revenue Requirements into Cost Pools

After the regional revenue requirements are projected, the next step is to determine the proportions of these regional costs that each of the wholesale customers are responsible. Figure 2 illustrates how the regional revenue requirements are separated into four contract type cost pools, and three separate sub-region cost pools. For each cost pool, the cost recoverable through rates is the sum of applicable operations and infrastructure costs necessary to serve the customers in that cost pool.

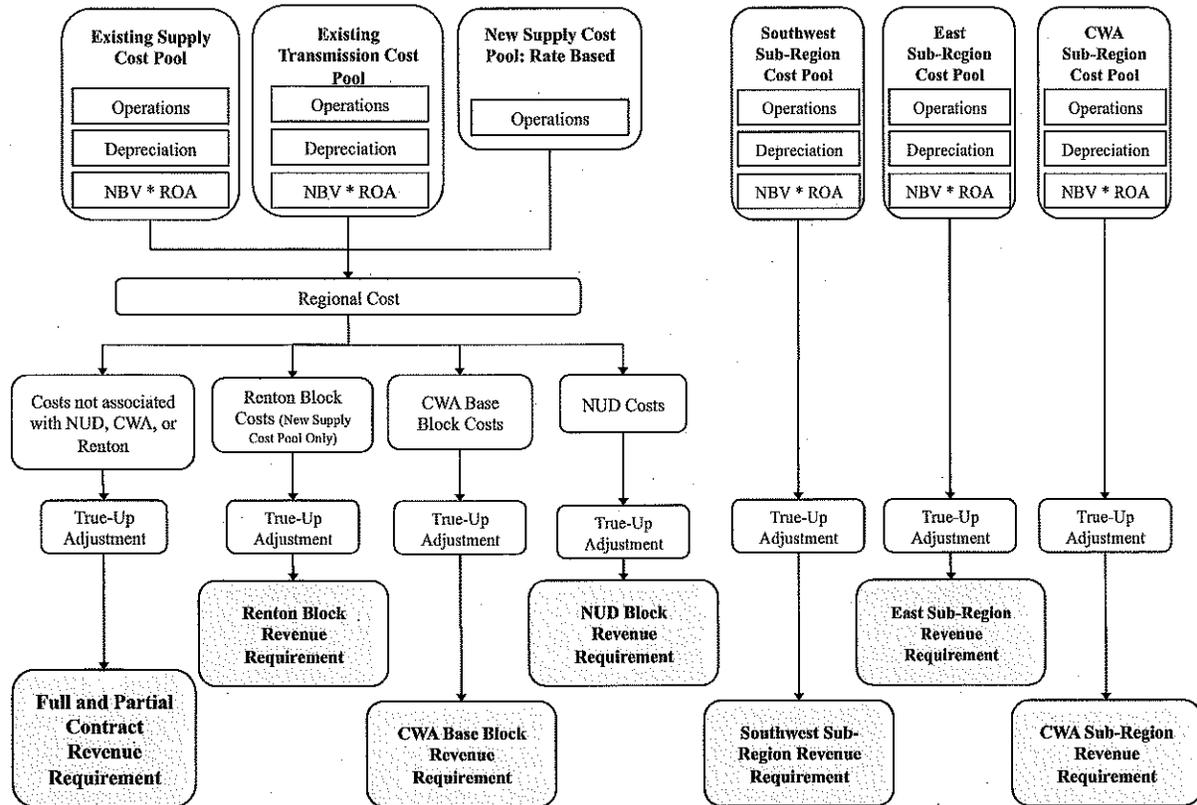


Figure 2. Calculation of Cost Pool Revenue Requirements

The City of Seattle is authorized in Section IV.E.5 of the contracts to create additional cost pools. In the 2015-2017 Rate Study, certain contract specified facilities are used to identify costs that are segregated into other cost pools, such as the Southwest Sub-Region and the East Sub-Region cost pools. Costs associated with these additional cost pools are not incorporated into the 2015-2017 Rate Study to establish full and partial requirement rates or block service rates.

The CWA, NUD and Renton cost pool revenue requirements are subtracted from the regional revenue requirements based on their respective portions of existing system capacity and used to develop block contract revenue requirements. The Renton block contract costs only cover the conservation portion of new supply costs.

The final step in calculating the 2015-2017 Rate Study cost pool revenue requirements is the application of the true-up balance amortizations. Wholesale water rates are established in advance for each three-year period for all of the costs pools based on projected costs and water usage. True-up mechanisms exist for each cost pool to account for differences between actual revenue requirements and actual water sales in succeeding years with the projected revenue requirements and actual water sales used to set the rates, allocated costs and surcharges. These true-up balance amounts are tracked over the three-year rate study period and used as either an over-recovered offset amount or an under-recovered makeup amount to be used in the next rate review process.

The projected 2012-2014 true-up balance as of December 31, 2014 for the full and partial requirements cost pool is \$12.7 million. Thus the rates developed in the study for the 2015-2017 period include a significant initial positive true-up balance that is used to offset full and partial requirement rates for this period.

Additionally, there are true-up balances for each sub-region which are allocated to offset rates in the sub-region in which they were collected. The Southwest Sub-Region is predicted to have a true-up balance shortfall of approximately \$800,000 at the end of 2014, which is recovered as part of the rates in 2015-2017. The East Sub-Region is also predicted to have a true-up balance surplus of \$165,000 between segments 3 and 4 at the end of 2014. The two East Sub-Region true-up balances are applied to the segment in which it was collected to offset rates for 2015-2017.

In general, the 2015-2017 Rate Study shows recovery of only those costs authorized in the contracts. There are newer activities that are included in the 2015-2017 Rate Study that are not explicitly authorized in the contract. Many of these costs are included under newer cost accounts, billing numbers or departments which are tracked and accounted for separately by SPU through the use of a crosswalk document identifying modified accounts, numbers and billing departments for each line item from the contracts. There are a few activities not found in the true-up report due to programs or expenses that have ended since the contracts were executed. The cost recovery for more recently establish activities and contractually listed activities is consistent with the contracts.

Section IV.E.8 of the contracts specifies that once the costs allocated to the block contracts has been subtracted, the remaining costs are allocated to the full and partial requirements customer class. The 2015-2017 Rate Study is consistent with this provision of the contract.

The contracts require creation of an existing supply cost pool and a new supply cost pool (Section IV.C) and creation of an existing transmission cost pool, a new transmission cost pool, a Southwest Sub-Region cost pool, and an East Sub-Region cost pool (Section IV.D). The 2015-2017 Rate Study is consistent with these requirements, although no assets or operations costs are allocated to the new transmission cost pool at this time.

Rate Design

Full and Partial Requirement Rates

The first step used by SPU in the rate study in determining the wholesale customer rates and charges using the cost pool revenue requirements is projecting water demands for SPU and for the wholesale customers provided water within each cost pool. Appendix A summarizes the projections provided by SPU and used in the 2015-2017 Wholesale Rate Study. Generally the projected usage for wholesale customers in aggregate shows an increase in 2015 followed by approximately a 400,000 hundred cubic feet (ccf) decrease in each of the following two years due to the reduced water demand in the Southwest Sub-region.

Figure 3 shows the steps used in the study to develop full and partial requirement customer rates and charges for the 2015 through 2017 period. The wholesale customer usage for both the peak and off-peak periods are used to calculate rates and charges in units of dollars per hundred cubic feet (\$/ccf).

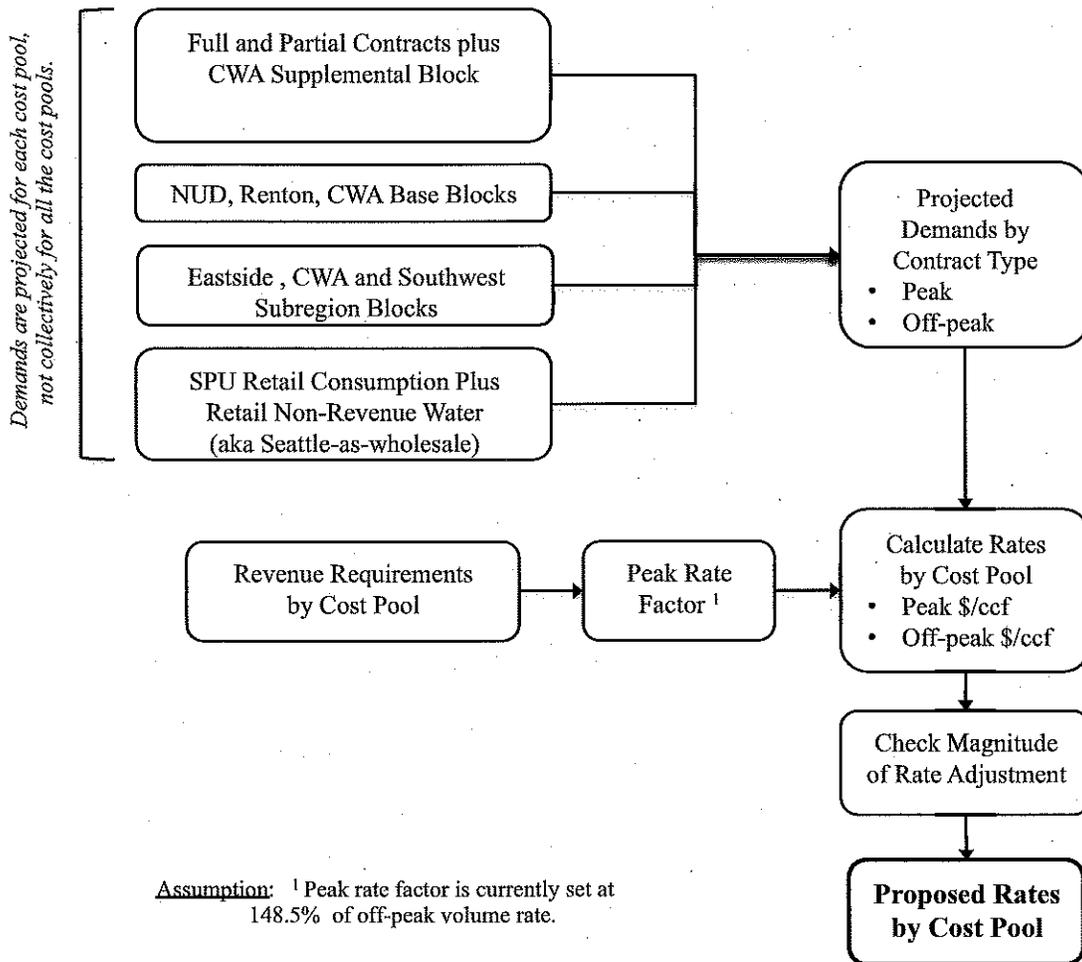


Figure 3. Calculation of Rates by Cost Pool

The projected cost pool revenue requirements, the projected water demands, and the peak rate factor are used to generate the full and partial requirements service volume rates. The full and partial requirements service volume rates consist of a peak volume rate and an off-peak volume rate. The peak rate factor is set by SPU so that the adjusted peak volume rate is 1.485 times the adjusted off-peak volume rate and is consistent with peak rate factor used by SPU in prior rate studies.

Wholesale customer rates are summarized in Table 3, which include existing and projected rates through 2017. The revenue comparisons prepared by SPU in the rate study show that revenue from the proposed volume rates through 2017 combined with the true-up balance allotments approximately equal the projected cost pool revenue requirements over the rate projection period.

Table 3. Existing and Proposed Wholesale Customer Rates

<i>Rate Component (\$/ccf)</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>
Off-Peak Volume Rate ¹	\$1.53	\$1.53	\$1.42	\$1.42	\$1.42
Peak Volume Rate ¹	\$2.27	\$2.27	\$2.10	\$2.10	\$2.10
Southwest Sub-Region Surcharge ²	\$0.07	\$0.07	\$0.16	\$0.16	\$0.16
East Sub-Region Surcharge					
Segment 3	\$0.16	\$0.16	\$0.08	\$0.08	\$0.08
Segment 4	\$0.19	\$0.19	\$0.16	\$0.16	\$0.16

¹ Applicable to all wholesale customers.

² Applicable to Highline Water District and King County Water Districts 20, 45, 49, and 125.

The contracts describe certain ratemaking principles that are applicable to the design of rates and to the recovery of regional revenue requirements (Section IV.A) and which are provided in Appendix B to this report. The development of wholesale rates included in the 2015-2017 Rate Study is consistent with the ratemaking requirements of the contracts.

The contracts specify that revenues from facilities charges shall offset new supply cost pool infrastructure costs and how they shall be used to do so (Section IV.E.7). The 2015-2017 Rate Study is consistent with this requirement of the contract.

The contracts also specify provisions regarding the establishment and calculation of facilities charges (Section IV.E.9). Revision of facilities charges was not part of SPU's 2015-2017 Rate Study and review of facilities charges for consistency with the contract was not a part of this independent review.

The contracts include two additional provisions for rate setting policies that were effective only through December 31, 2011 (Section IV.E.12). The first provision concerns the collection of facilities charges, and the second provision concerns the transition growth surcharge. As these provisions are no longer applicable, neither of these are included in this review nor are they any longer relevant to the development of SPU's wholesale rates.

CWA Cost Recovery Calculations

The CWA agreement authorizes recovery of costs from the existing supply cost pool, the existing transmission pool, and the CWA Sub-Region which includes a portion of the East Sub-Region costs. CWA is not required to pay for costs for new supply facilities. CWA's costs are allocated based on the ratio of CWA's block of capacity to SPU water system firm yield adjusted for non-revenue water. In addition, the CWA supplemental block agreement authorizes cost recovery at the full and partial requirements contract rates for this additional water.

In 2015, CWA's portion of the existing supply cost pool is projected to be \$12.2 million and the existing transmission pool is projected to be \$5.4 million, with an additional \$2.6 million cost for the Supplemental block. These costs remain proportionately constant through 2017, with a slight increase in the base block costs due to the regional increase in the existing supply and existing transmission cost pools, as seen in Table 2. The 2015-2017 Rate Study's calculations of CWA's cost recovery are consistent with the requirements of the contract.

NUD Cost Recovery Calculations

The NUD agreement authorizes recovery of costs from the existing supply cost pool, the existing transmission pool, and the conservation cost pool but no other costs for new supply facilities. Allocation of these costs is based on NUD's ratio of block of capacity to total system capacity. In 2015, NUD's portion of the existing supply cost pool is projected to be approximately \$3.4 million and the existing transmission pool is projected to be approximately \$1.5 million. Similar amounts for 2016 and 2017 are projected.

NUD participates in Seattle's Regional Conservation Program, which establishes an annual regional conservation goal. NUD's portion of the conservation pool costs in 2015 is \$220,193 with similar amounts projected for 2016 and 2017. The 2015-2017 Rate Study's calculations of the NUD cost recovery are consistent with the requirements of the contract.

Renton New Supply Costs

The Renton partial requirements contract provides for conservation and water supply services. The contract allows for a Renton new supply cost pool to cover the specific conservation costs for Renton's retail service area. Renton's allocation is calculated as 5.7 percent of the operations costs and assets costs for the Renton new supply pool. This comes out to \$155,623 in 2015, \$159,731 in 2016, \$163,935 in 2017. Calculation of the Renton new supply cost pool allocation is consistent with the requirements of the contract.

Table 4. Fixed and Declining Block Rates

	<i>2015</i>	<i>2016</i>	<i>2017</i>
CWA Base Block	\$17,625,365	\$18,369,307	\$18,837,791
CWA Sub-Region	\$19,532	\$18,692	\$17,851
CWA Supplemental	\$2,572,457	\$2,572,457	\$2,572,457
NUD Base Block	\$4,973,494	\$5,183,418	\$5,315,614
NUD Conservation	\$220,193	\$222,160	\$224,229
Renton	\$155,623	\$159,731	\$163,935
Total All Blocks	\$25,566,664	\$26,525,765	\$27,131,877

Southwest Sub-Region Surcharge

The Southwest Sub-Region cost pool is based on the costs of operating, maintaining, repairing, and replacing certain transmission facilities defined in the contracts for applicable customers. Wholesale customers that are served by these transmission facilities are referred to in the 2015-2017 Wholesale Rate Study as "Southwest Wholesale Customers." Southwest wholesale customers are the Highline Water District and King County Water Districts 20, 45, 49, and 125.

The Southwest Sub-Region surcharge in 2014 is currently \$0.07/ccf and the surcharge for 2015 through 2017 is calculated to be \$0.16/ccf. Projected revenues from the Southwest Sub-Region surcharge are approximately \$686,000 in 2015, \$618,992 in 2016, and \$526,304 in 2017. These revenues include a true-up balance recovery of approximately \$805,702 estimated for the end of 2014.

Requirements for the Southwest Sub-Region surcharge are specified in these contracts and include the following:

- The costs for each facility shall be allocated between Seattle and Southwest wholesale customers based on peak seven-day flows through each facility, and peak month flows can be substituted if seven-day flows are not available.
- Southwest Wholesale Customers shall pay a uniform rate to collect the costs of the Southwest Sub-Region cost pool.
- The rate shall apply to every unit of water delivered to a Southwest wholesale customer without regard to the location at which the water was delivered.
- Actual Southwest Sub-Region costs and revenues shall be true-up consistent with the methodology of the other cost pools, as described above.

The 2015-2017 Rate Study's calculations of the Southwest Sub-Region surcharge are generally consistent with the requirements of the contract.

East Sub-Region Surcharge

The East Sub-Region cost pool consists of infrastructure costs for the four segments of the Mercer Island Pipeline, an existing transmission asset. No future capital improvement costs are recovered through the surcharge. Cost allocations are based on 2013 peak month demand data reported by SPU.

Bellevue's share of the East Sub-Region surcharge is \$7,087 in 2015, and will be recovered as a lump sum payment under the CWA agreement. The surcharges set for Mercer Island's and Seattle's payment will be \$0.08/ccf for water delivered through segment 3 and Mercer Island's payment will be \$0.16/ccf for water delivered through segment 4. These surcharges will remain constant through 2017.

Projected revenues from the East Sub-Region surcharge, not including Bellevue's CWA portion, remain relatively consistent at approximately \$138,930 in 2015, \$139,060 in 2016, and \$139,163 in 2017. Calculation of the East Sub-Region surcharge is consistent with the requirements of the contract.

The East Sub-Region surcharge was created to recover the costs of the four segments of the Mercer Island Pipeline. The costs are allocated among the Cities of Bellevue (CWA), Mercer Island, and Seattle based on the proportion of demand at each respective pipeline segment. Requirements of the contract include:

- The costs for each facility shall be allocated based on peak seven-day flows through each facility and peak month flows can be substituted if seven-day flows are not available.
- A common rate for each segment will be developed and will apply to every unit of water delivered through each respective segment.
- Actual East Sub-Region costs and revenues shall be trued-up consistent with the methodology of the other cost pools.

The 2015-2017 Rate Study's calculations of the East Sub-Region surcharge are consistent with these requirements of the contract.

CWA Sub-Region Surcharge

The CWA agreement allocates certain costs for facilities that solely or partly serve CWA as a separate surcharge. The CWA Sub-Region costs are based on costs for four segments: Sub-Region A and Sub-Region B – Segments 1 and 2 are covered exclusively by CWA. The CWA Sub-Region A predicted costs are \$12,445 for 2015, \$11,790 for 2016, and \$11,135 for 2017. These costs combine with the Sub-Region B – Segments 1 and 2 (which are also known as East Sub-Region segments 1 and 2 under the Mercer Island contract) to create the total CWA Sub-Region surcharge, as seen above in Table 4. The 2015-2017 Rate Study's calculation of the CWA Sub-Region surcharge is consistent with the requirements of the contract.

North Bend Treatment Discount

North Bend's partial supply contract is for the supply of untreated water. The rates for this service are based on the full and partial requirements service rates reduced for the costs of treatment for the water supplied. The SPU calculated treatment cost discount is \$0.45 for 2015, \$0.46 for 2016, and \$0.47 for 2017. Table 5 shows the impact of these discounts on North Bend's peak and off-peak rates. The 2015-2017 Rate Study's calculation of the North Bend treatment discount is consistent with the requirements of the contract.

Table 5. North Bend Untreated Water Rate Discount Calculation

<i>Rate Component (\$/ccf)</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>
Discount	\$0.45	\$0.46	\$0.47
Peak	\$1.65	\$1.64	\$1.63
Off-Peak	\$0.97	\$0.96	\$0.95

Methodology Change from SPU's Prior Rate Study

Only one methodological change was made in the preparation of this 2015-2017 Water Rate Study compared with the prior water rate study. In the calculation of the rates for CWA supplementary block usage and the applicable impact of this usage on the calculation of full and partial requirement service rates, the model calculation methodology was modified to allow SPU to more readily update the annual true-up calculations in the future. This change did not result in a modification of any rate calculations or resultant rates calculated in the 2015-2017 Rate Study.

Appendix A
Estimated and Projected Wholesale Water Demands for 2013 - 2018

	2013	2014	2015	2016	2017
Full and Partial, excluding separately identified below					
Peak ccf	3,644,300	3,583,900	3,562,500	3,546,200	3,539,100
Off-Peak ccf	4,302,600	4,249,100	4,223,800	4,204,600	4,196,300
Total Base ccf	7,946,900	7,833,000	7,786,300	7,750,800	7,735,400
Renton					
Peak ccf	17,300	17,700	17,700	17,700	17,700
Off-Peak ccf	26,500	29,100	29,100	29,100	29,100
Total Base ccf	43,800	46,800	46,800	46,800	46,800
East Sub-Region (Mercer Island)					
Peak ccf	504,200	478,600	479,200	479,800	480,300
Off-Peak ccf	499,700	493,400	494,000	494,600	495,100
Total Base ccf	1,003,900	972,000	973,200	974,400	975,400
SW Sub-Region (Highline, WD20, WS45, WD49, WD125)					
Peak ccf	1,777,200	1,814,800	1,810,100	1,632,600	1,387,100
Off-Peak ccf	2,524,700	2,483,800	2,477,400	2,236,100	1,902,300
Total Base ccf	4,301,900	4,298,600	4,287,500	3,868,700	3,289,400
CWA (metered)					
Peak ccf	5,912,700	5,995,800	6,028,500	6,061,300	6,094,000
Off-Peak ccf	7,007,600	7,046,100	7,084,600	7,123,000	7,161,500
Total Base ccf	12,920,300	13,041,900	13,113,100	13,184,300	13,255,500
Northshore (metered)					
Peak ccf	1,027,200	1,117,600	1,121,800	1,126,000	1,130,200
Off-Peak ccf	1,459,500	1,444,900	1,450,400	1,455,800	1,461,300
Total Base ccf	2,486,700	2,562,500	2,572,200	2,581,800	2,591,500
Total Wholesale					
Peak ccf	12,882,900	13,008,400	13,019,800	12,863,600	12,648,400
Off-Peak ccf	15,820,600	15,746,400	15,759,300	15,543,200	15,245,600
Total Base ccf	28,703,500	28,754,800	28,779,100	28,406,800	27,894,000

	2013	2014	2015	2016	2017
Retail					
Peak ccf	10,407,100	10,620,800	10,602,995	10,636,782	10,602,946
Off-Peak ccf	16,004,600	15,988,800	16,078,005	15,999,518	16,118,254
Total Base ccf	26,411,700	26,609,600	26,681,000	26,636,300	26,721,200
Total Retail & Wholesale (sales)					
Peak ccf	23,290,000	23,629,200	23,622,795	23,500,382	23,251,346
Off-Peak ccf	31,825,200	31,735,200	31,837,305	31,542,718	31,363,854
Total Base ccf	55,115,200	55,364,400	55,460,100	55,043,100	54,615,200
Non revenue water (8.0 MGD)					
Peak ccf	1,315,508	1,315,508	1,315,508	1,315,508	1,315,508
Off-Peak ccf	2,588,235	2,588,235	2,588,235	2,588,235	2,588,235
Total Base ccf	3,903,743	3,903,743	3,903,743	3,903,743	3,903,743
Retail as wholesale					
Peak ccf	11,230,498	11,437,414	11,419,737	11,455,972	11,427,117
Off-Peak ccf	17,904,567	17,890,567	17,977,729	17,905,134	18,027,447
Total Base ccf	29,135,064	29,327,980	29,397,466	29,361,106	29,454,564
Shorewood					
Total Base ccf	34,483	34,000	33,524	33,055	32,592

Appendix B Ratemaking Principles

(Extracted from Section IV.A. of Full and Partial Requirements Contracts)

The following general principles and policies shall apply to the establishment of all rates and charges for water supply and related services hereunder beginning on January 1, 2002. Prior to that date, the pricing method of the 1982 Water Purveyor Contract shall be maintained.

1. No expenses attributable to electric power development may be allocated to the cost pools identified herein unless the pools are allocated a commensurate share of revenue derived from such development.
2. Seattle shall utilize generally accepted accounting principles consistently applied as a basis for developing the financial information upon which rates and charges are based.
3. Abrupt changes in financial policies should be avoided.
4. The rate structure should encourage the efficient use of water, conservation and the timely development of new environmentally responsible water sources and should incorporate seasonal rates and other pricing approaches to encourage efficient use.
5. The rate structure should be innovative, flexible and adaptive whenever it is cost effective and beneficial in furthering the rate-making policies.
6. The rate structure should be simple to administer and easily understandable.
7. The rate structure should be fair and equitable while balancing the needs of all parties.
8. Capital costs which benefit only a new Wholesale Customer shall be allocated to that customer and not to any cost pool described in this contract.
9. Seattle's distribution system which serves its retail customers shall be treated as the equivalent of a Wholesale Customer of the Seattle Water Supply System for the purpose of charging Seattle the same wholesale rates and charges as Water Utility for water supply and transmission. Costs calculated under the cost pools described below shall apply equally to Water Utility and to Seattle's distribution system which serves its retail customers.
10. The allocation of costs associated with capital construction activities within the Seattle Water Supply System shall be the responsibility of the Operating Board. The Operating Board shall use its best efforts to determine and approve a cost allocation method for infrastructure projects prior to the capital project obtaining construction approval from the Seattle City Council. Failure of the Operating Board to determine and approve a cost allocation method shall not hinder the Seattle City Council from approving capital infrastructure projects in order to assure Seattle's ability to fulfill the requirements of this contract.
11. The purveyor balance account as that term is defined in the 1982 Water Purveyor Contract between Seattle and Water Utility shall be credited to the Wholesale Customers in a ratable and equitable manner commencing with the application of rate making policies and framework.



City of Seattle
Edward B. Murray
Mayor

September 2, 2014

Honorable Tim Burgess
President
Seattle City Council
City Hall, 2nd Floor

Dear Council President Burgess:

I am transmitting the attached proposed Council Bill that would adjust rates for wholesale water customers of the Seattle Regional Supply System. These rate adjustments are the result of a recently completed wholesale water rate study which was reviewed by an independent rate consultant for consistency with the terms of Seattle's wholesale water contracts.

Seattle's wholesale water contracts describe the procedures for allocating costs and developing rates for wholesale customers. The primary wholesale rate is decreasing due to wholesale demand that has increased faster than costs since 2011 when wholesale rates were last set. Also, the contracts have a mechanism that tracks accumulated surpluses or deficits of annual revenues as compared to annual costs so that there is no over or under collection of revenues from wholesale customers over time. The contracts require the current surplus balance be used to lower rates in the upcoming rate period. Several other surcharges and discounts that apply to certain wholesale customers are also being adjusted according to the terms of their particular contracts, with some surcharges increasing and some decreasing.

Thank you for your consideration of this legislation. If you have questions, please contact Regina Carpenter at 684-0836

Sincerely,

A handwritten signature in black ink, appearing to read "Edward B. Murray".

Edward B. Murray
Mayor of Seattle

cc: Honorable Members of the Seattle City Council