

**Seattle Public Utilities**  
**2012-2014 Wholesale Water Rate Study**  
**Full and Partial Requirements Contracts**  
 April 8, 2011

**Summary**

Seattle proposes to adjust regional wholesale water rates beginning January 1, 2012 by Option 2 below.

The difference between the options is the split of the negative regional true up balances between years: the first option spreads the balances evenly between all three years, and the second option frontloads a higher portion of the balances to 2012.<sup>1</sup> On April 7, 2011, the Operating Board was presented with both options and recommended Option 2.

**Option 1 – Not selected by Operating Board**

Rates per CCF	2011		2012		2013		2014	
	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak
System Baseline Rates	\$1.29	\$1.91	\$1.48	\$2.19	\$1.52	\$2.26	\$1.58	\$2.35
Change from Prior Year:			15%	15%	3%	3%	4%	4%
Transition Discount:	-\$0.13	-\$0.12	N/A	N/A	N/A	N/A	N/A	N/A
<b>Adjusted Wholesale Rate:</b>	<b>\$1.16</b>	<b>\$1.79</b>	<b>\$1.48</b>	<b>\$2.19</b>	<b>\$1.52</b>	<b>\$2.26</b>	<b>\$1.58</b>	<b>\$2.35</b>
Change from Prior Year:			28%	22%	3%	3%	4%	4%
Interim Growth Charge:	\$0.60		N/A		N/A		N/A	
Sub-regional Surcharge Rates								
Southwest Sub-region:	\$0.05		\$0.06		\$0.07		\$0.07	
East Sub-region, Segment 3:	\$0.05		\$0.15		\$0.16		\$0.16	
East Sub-region, Segment 4:	\$0.07		\$0.18		\$0.19		\$0.19	
ERU Fee (\$/ERU):	\$783		\$783		\$783		\$TBD	

**Option 2 – Selected by Operating Board**

Rates per CCF	2011		2012		2013		2014	
	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak
System Baseline Rates	\$1.29	\$1.91	\$1.52	\$2.25	\$1.53	\$2.26	\$1.53	\$2.27
Change from Prior Year:			18%	18%	0%	0%	0%	0%
Transition Discount:	-\$0.13	-\$0.12	N/A	N/A	N/A	N/A	N/A	N/A
<b>Adjusted Wholesale Rate:</b>	<b>\$1.16</b>	<b>\$1.79</b>	<b>\$1.52</b>	<b>\$2.26</b>	<b>\$1.53</b>	<b>\$2.26</b>	<b>\$1.53</b>	<b>\$2.27</b>
Change from Prior Year:			31%	26%	0%	0%	0%	0%
Interim Growth Charge:	\$0.60		N/A		N/A		N/A	
Sub-regional Surcharge Rates								
Southwest Sub-region:	\$0.05		\$0.06		\$0.07		\$0.07	
East Sub-region, Segment 3:	\$0.05		\$0.15		\$0.16		\$0.16	
East Sub-region, Segment 4:	\$0.07		\$0.18		\$0.19		\$0.19	
ERU Fee (\$/ERU):	\$783		\$783		\$783		\$TBD	

<sup>1</sup> Section IV.I.3 of the contracts state that “Each wholesale rate study shall adjust rates to eliminate the cost pool balances.”

This document describes the calculation of rates for Full and Partial Requirements customers. It is organized to follow the steps involved in the rate study including the assumptions, allocating O&M and asset costs to develop the Regional Cost, allocating this Regional Cost between Block contracts and Full and Partial Requirements customers, incorporating true up adjustments, and designing rates.

This rate study also develops rates for the Southwest and East sub-regions, Renton New Supply block, CWA and Northshore blocks, and North Bend treatment discount.

### **Overall Assumptions**

1. Inflation is assumed to be 2.0% through the period of the rate study.
2. Effective in 2011, the Cities of Bothell, Duvall, and Renton, and Water Districts 49, 90, and 119 will have Full and Partial contracts substantially similar to the existing Full and Partial contracts.
3. Effective in 2011, the City of Edmonds and Lake Forest Park Water Districts will have emergency intertie agreements only, not wholesale contracts.
4. The effect of North Bend 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.
5. Seattle's average cost of debt is assumed at 4.7%, which is the rate calculated for the 2010 Purveyor Statements.
6. 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 2011 year-end true-up balance over the 2013-2014 rate period.

### **Significant Changes since the last Rate Study**

1. Effective in 2011, the Cities of Bothell, Duvall, and Renton, and Water Districts 49, 90, and 119 will have Full and Partial contracts substantially similar to the existing Full and Partial contracts.
2. Effective in 2011, the City of Edmonds and Lake Forest Park Water Districts will have emergency intertie agreements only, not wholesale contracts.
3. Cascade's Declining Block Contract was amended in late 2008 to include a "Supplemental Block" of 3.0 MGD annually, priced at Full and Partial Commodity rates. This acts as 3.0 MGD of additional Full and Partial demand when setting the Full and Partial rates, regardless of actual Cascade consumption.
4. As per section IV.E.12.b of the contracts, the transition growth charge expires at the end of 2011, and these revenues are no longer available to hold down "base" rates in 2012 and beyond.
5. This rate study creates separate rates for Existing Supply, Existing Transmission, New Supply, and New Transmission.

### **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 2009 base and index amounts developed during the 2009 true up. Final (e.g. audited) 2010 costs were not available, so 2010 year end costs as of January 11, 2011 were used. For 2012, the O&M budget by activity was used. For 2012-2016, a general inflation rate of 2.0% was used.

### Regional O&M Costs

	2009 Actual	2010 Estimated	2011 Projected	2012 Projected	2013 Projected	2014 Projected	2015 Projected	2016 Projected
<b>Existing Supply</b>								
PY Base	26,674,018	27,279,519	27,623,053	28,295,113	28,861,015	29,438,236	30,027,001	30,627,541
PY Costs in identified activities	18,545,673	18,967,489	19,206,349	19,673,634	20,067,106	20,468,448	20,877,817	21,295,374
CY Costs in identified activities	18,967,489	19,206,349	19,673,634	20,067,106	20,468,448	20,877,817	21,295,374	21,721,281
Ratio of CY/PY	1.023	1.013	1.024	1.020	1.020	1.020	1.020	1.020
CY Operations Cost Base	27,279,519	27,623,053	28,295,113	28,861,015	29,438,236	30,027,001	30,627,541	31,240,091
Expensed CIP	2,772,725	855,958						
Total CY Cost	30,052,243	28,479,011	28,295,113	28,861,015	29,438,236	30,027,001	30,627,541	31,240,091
<b>Existing Transmission</b>								
PY Base	8,502,433	10,417,181	10,429,556	10,560,100	10,771,302	10,986,728	11,206,463	11,430,592
PY Costs in identified activities	2,232,207	2,734,888	2,738,137	2,772,409	2,827,858	2,884,415	2,942,103	3,000,945
CY Costs in identified activities	2,734,888	2,738,137	2,772,409	2,827,858	2,884,415	2,942,103	3,000,945	3,060,964
Ratio of CY/PY	1.225	1.0012	1.0125	1.0200	1.0200	1.0200	1.0200	1.0200
CY Operations Cost Base	10,417,181	10,429,556	10,560,100	10,771,302	10,986,728	11,206,463	11,430,592	11,659,204
Expensed CIP, gain on sale	(4,513,122)	528,984						
Total CY Cost	5,904,059	10,958,540	10,560,100	10,771,302	10,986,728	11,206,463	11,430,592	11,659,204
<b>New Supply</b>								
PY Base	866,066	705,844	635,077	979,548	999,139	1,019,121	1,039,504	1,060,294
PY Costs in identified activities	387,757	316,031	284,346	438,578	447,349	456,296	465,422	474,731
CY Costs in identified activities	316,031	284,346	438,578	447,349	456,296	465,422	474,731	484,225
Ratio of CY/PY	0.815	0.900	1.542	1.020	1.020	1.020	1.020	1.020
CY Operations Cost Base	705,844	635,077	979,548	999,139	1,019,121	1,039,504	1,060,294	1,081,500
<b>New Transportation</b>								
2009 Costs in identified activities	1,067							
Apply G&A as per CIP	2,059							
Total New Transmission Costs	2,059	0	0	0	0	0	0	0

## **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 pool. 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 cost allocation: existing assets, future assets (in-construction or planned), and special assets.

### **Existing Assets**

The basis for existing assets was the preliminary 2010 asset schedule available in February 2011. Depreciation and Net Book Value were calculated for each asset through 2016 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 2011-2016. The SPU financial system provided spending on these projects through year-end 2010.

For each project, an in-service year was determined – typically the last year of spending in the CIP budget. Exceptions were annual programs, such as Transmission Pipeline Rehabilitation, that are capitalized at the end of each year. Interest costs associated with assets in construction (“AFUDC”) were calculated for assets through June of the year they are to be placed in service, and depreciation was calculated for each project starting with the year after the asset is placed in service. All of these assumptions are consistent with SPU’s actual accounting practices.

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. These assets were categorized where the majority of the costs will be incurred. 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.

## **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 rather than full or partial requirements contract. 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 (171 MGD).

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 (171 MGD). Northshore's allocation of conservation is 6.2%, which is 102% of Northshore's block volume (8.55 MGD) divided by the system firm yield minus the CWA block (171 MGD - 30.3 MGD). CWA's 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 will be participating in Regional Conservation while their purchases from Seattle are only a small portion of their supply. They will be 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 and the 3.0 MGD Cascade Supplemental Block 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) 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 2010 will be calculated in 2011 and applied to 2012's block.

This rate study takes into account the actual Full and Partial Requirements Contracts true up balances from the 2009 true up and the current forecast for the 2010 and 2011 true ups. Rates are set to amortize the projected 2011 balances plus interest over the period 2012-2014.

### **Cost Allocation Summary**

The following schedules presents the summary of Full and Partial Contract costs for 2009-2016. They only differ in the split of the regional true up balances between years.

## Option 1 – Not selected by Operating Board

	2009	2010	2011	2012	2013	2014	2015	2016
<b>Existing Supply Cost Pool</b>								
Asset cost		33,500,624	34,131,392	34,252,425	34,591,548	34,748,272	34,772,304	38,814,429
O&M cost		26,767,095	28,295,113	28,861,015	29,438,236	30,027,001	30,627,541	31,240,091
<b>Regional Cost</b>		<b>60,267,719</b>	<b>62,426,505</b>	<b>63,113,441</b>	<b>64,029,784</b>	<b>64,775,273</b>	<b>65,399,845</b>	<b>70,054,520</b>
Allocation to 1982 contract		(2,195,194)						
Allocation to CWA Base Block		(10,892,597)	(11,282,769)	(11,406,924)	(11,572,541)	(11,707,278)	(11,820,161)	(12,661,433)
Allocation to NUD Block		(3,073,654)	(3,183,752)	(3,218,785)	(3,265,519)	(3,303,539)	(3,335,392)	(3,572,781)
Remaining Costs to F&P rates		44,106,274	47,959,984	48,487,731	49,191,724	49,764,456	50,244,291	53,820,307
includes CWA supplemental block & Renton								
True Up balance applied		-	-	2,400,000	2,350,000	2,200,000	-	-
<b>Amount to be collected through rates</b>		<b>44,106,274</b>	<b>47,959,984</b>	<b>50,887,731</b>	<b>51,541,724</b>	<b>51,964,456</b>	<b>50,244,291</b>	<b>53,820,307</b>
<b>Expected revenues, incl CWA suppl block</b>		41,860,023	45,025,140	50,913,123	51,554,275	51,971,251	50,980,403	53,037,305
CY (under)/Over payment		(2,246,251)	(2,934,844)	2,425,392	2,362,551	2,206,796	736,112	(783,002)
Balance	(1,022,276)	(3,316,573)	(6,407,296)	(4,283,047)	(2,121,799)	(14,728)	720,692	(28,438)
Interest on above, affect following year	(48,047)	(155,879)	(301,143)	(201,303)	(99,725)	(692)	33,873	(1,337)
<b>Existing Transmission Cost Pool</b>								
Asset cost		17,727,969	17,477,844	17,329,624	17,220,237	18,445,610	18,575,665	18,495,287
O&M cost		10,865,874	10,560,100	10,771,302	10,986,728	11,206,463	11,430,592	11,659,204
<b>Regional Cost</b>		<b>28,593,844</b>	<b>28,037,944</b>	<b>28,100,926</b>	<b>28,206,965</b>	<b>29,652,073</b>	<b>30,006,257</b>	<b>30,154,491</b>
Allocation to 1982 contract		(1,041,504)						
Allocation to CWA Base Block		(5,167,961)	(5,067,489)	(5,078,873)	(5,098,038)	(5,359,222)	(5,423,236)	(5,450,027)
Allocation to NUD Block		(1,458,286)	(1,429,935)	(1,433,147)	(1,438,555)	(1,512,256)	(1,530,319)	(1,537,879)
Remaining Costs to F&P rates		20,926,093	21,540,519	21,588,906	21,670,372	22,780,595	23,052,701	23,166,584
includes CWA supplemental block & Renton								
True Up balance applied		-	-	1,120,000	1,120,000	1,120,000	-	-
<b>Amount to be collected through rates</b>		<b>20,926,093</b>	<b>21,540,519</b>	<b>22,708,906</b>	<b>22,790,372</b>	<b>23,900,595</b>	<b>23,052,701</b>	<b>23,166,584</b>
<b>Expected revenues, incl CWA suppl block</b>		19,860,366	20,222,377	22,712,936	22,708,970	23,830,789	23,214,471	22,922,092
CY (under)/Over payment		(1,065,727)	(1,318,142)	1,124,029	1,038,598	1,050,194	161,770	(244,492)
Balance	(441,611)	(1,528,094)	(2,918,056)	(1,931,175)	(983,342)	20,634	183,374	(52,500)
Interest on above, affect following year	(20,756)	(71,820)	(137,149)	(90,765)	(46,217)	970	8,619	(2,467)
<b>New Supply Cost Pool - Rate Based</b>								
Asset cost		N/A	N/A	N/A	N/A	N/A	N/A	N/A
O&M cost		635,077	979,548	999,139	1,019,121	1,039,504	1,060,294	1,081,500
<b>Regional Cost</b>		<b>635,077</b>	<b>979,548</b>	<b>999,139</b>	<b>1,019,121</b>	<b>1,039,504</b>	<b>1,060,294</b>	<b>1,081,500</b>
Allocation to 1982 contract		(23,132)						
Allocation to NUD Block		(39,364)	(60,715)	(61,930)	(63,168)	(64,432)	(65,720)	(67,035)
Allocation to Renton Block		-	-	(56,951)	(58,090)	(59,252)	(60,437)	(61,645)
Remaining Costs to F&P rates		572,581	918,832	880,258	897,863	915,821	934,137	952,820
includes CWA supplemental block								
Transfer from/(to) FC cost pool		-	-	-	-	-	-	-
True Up balance applied		-	-	38,000	38,000	38,000	-	-
<b>Amount to be collected through rates</b>		<b>572,581</b>	<b>918,832</b>	<b>918,258</b>	<b>935,863</b>	<b>953,821</b>	<b>934,137</b>	<b>952,820</b>
<b>Expected revenues, incl CWA suppl block</b>		543,420	862,606	841,749	994,666	976,056	957,446	938,836
CY (under)/Over payment		(29,160)	(56,227)	(38,509)	96,802	60,235	23,309	(13,984)
Balance	(23,050)	(53,294)	(112,025)	(155,799)	(66,320)	(9,201)	13,675	334
Interest on above, affect following year	(1,083)	(2,505)	(5,265)	(7,323)	(3,117)	(432)	643	16
<b>New Transmission Cost Pool</b>								
Asset cost		N/A	N/A	N/A	N/A	N/A	N/A	N/A
O&M cost		N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Regional Cost</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Allocation to 1982 contract		-	-	-	-	-	-	-
Remaining Costs to F&P rates		-	-	-	-	-	-	-
includes CWA supplemental block & Renton								
True Up balance applied		-	-	-	-	-	-	-
<b>Amount to be collected through rates</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Expected revenues, incl CWA suppl block</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CY (under)/Over payment		-	-	-	-	-	-	-
Balance	(14)	(15)	(16)	(16)	(17)	(18)	(19)	(20)
Interest on above, affect following year	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
<b>New Supply Cost Pool - FC Based</b>								
Asset cost		3,071,429	4,819,213	4,714,107	4,609,740	4,506,129	2,698,031	2,708,690
<b>Regional Cost</b>		<b>3,071,429</b>	<b>4,819,213</b>	<b>4,714,107</b>	<b>4,609,740</b>	<b>4,506,129</b>	<b>2,698,031</b>	<b>2,708,690</b>
Allocation to 1982 contract		(111,874)						
Allocation to NUD Block		(190,376)	(298,709)	(292,194)	(285,725)	(279,303)	(167,232)	(167,893)
Allocation to Renton Block		-	-	(107,559)	(109,710)	(111,904)	(114,142)	(116,425)
Transfer from/(to) FC New Supply Rates Cost Pool		-	-	-	-	-	-	-
<b>Remaining Costs to balance FCs</b>		<b>2,769,179</b>	<b>4,520,504</b>	<b>4,314,353</b>	<b>4,214,304</b>	<b>4,114,922</b>	<b>2,416,656</b>	<b>2,424,372</b>
<b>Expected revenues</b>		<b>1,186,432</b>	<b>1,300,563</b>	<b>2,199,447</b>	<b>2,199,447</b>	<b>2,747,010</b>	<b>2,747,010</b>	<b>2,747,010</b>
CY (under)/Over payment		(1,582,747)	(3,219,941)	(2,114,906)	(2,014,857)	(1,367,912)	330,354	322,638
Balance	12,882,597	11,905,332	9,244,941	7,564,547	5,905,224	4,814,858	5,371,510	5,946,609
Interest on above, affect following year	605,482	559,551	434,512	355,534	277,546	226,298	252,461	279,491
New Supply Facility NBV	13,192,711	13,214,262	12,772,230	12,182,195	11,441,200	10,546,226	11,312,163	11,917,902

## Option 2 – Selected by Operating Board

	2009	2010	2011	2012	2013	2014	2015	2016
<b>Existing Supply Cost Pool</b>								
Asset cost		33,500,624	34,131,392	34,252,425	34,591,548	34,748,272	34,772,304	38,814,429
O&M cost		26,767,095	28,295,113	28,861,015	29,438,236	30,027,001	30,627,541	31,240,091
<b>Regional Cost</b>		<b>60,267,719</b>	<b>62,426,505</b>	<b>63,113,441</b>	<b>64,029,784</b>	<b>64,775,273</b>	<b>65,399,845</b>	<b>70,054,520</b>
Allocation to 1982 contract		(2,195,194)						
Allocation to CWA Base Block		(10,892,597)	(11,282,769)	(11,406,924)	(11,572,541)	(11,707,278)	(11,820,161)	(12,661,433)
Allocation to NUD Block		(3,073,654)	(3,183,752)	(3,218,785)	(3,265,519)	(3,303,539)	(3,335,392)	(3,572,781)
Remaining Costs to F&P rates		44,106,274	47,959,984	48,487,731	49,191,724	49,764,456	50,244,291	53,820,307
includes CWA supplemental block & Renton								
True Up balance applied		-	-	3,800,000	2,100,000	800,000	-	-
<b>Amount to be collected through rates</b>		<b>44,106,274</b>	<b>47,959,984</b>	<b>52,287,731</b>	<b>51,291,724</b>	<b>50,564,456</b>	<b>50,244,291</b>	<b>53,820,307</b>
<b>Expected revenues, incl CWA suppl block</b>		41,860,023	45,025,140	52,347,274	51,385,934	50,589,745	50,258,726	53,744,899
CY (under)/Over payment		(2,246,251)	(2,934,844)	3,859,542	2,194,210	825,289	14,435	(75,407)
Balance	(1,022,276)	(3,316,573)	(6,407,296)	(2,848,896)	(788,585)	(359)	14,059	(60,687)
Interest on above, affect following year	(48,047)	(155,879)	(301,143)	(133,898)	(37,063)	(17)	661	(2,852)
<b>Existing Transmission Cost Pool</b>								
Asset cost		17,727,969	17,477,844	17,329,624	17,220,237	18,445,610	18,575,665	18,495,287
O&M cost		10,865,874	10,560,100	10,771,302	10,986,728	11,206,463	11,430,592	11,659,204
<b>Regional Cost</b>		<b>28,593,844</b>	<b>28,037,944</b>	<b>28,100,926</b>	<b>28,206,965</b>	<b>29,652,073</b>	<b>30,006,257</b>	<b>30,154,491</b>
Allocation to 1982 contract		(1,041,504)						
Allocation to CWA Base Block		(5,167,961)	(5,067,489)	(5,078,873)	(5,098,038)	(5,359,222)	(5,423,236)	(5,450,027)
Allocation to NUD Block		(1,458,286)	(1,429,935)	(1,433,147)	(1,438,555)	(1,512,256)	(1,530,319)	(1,537,879)
Remaining Costs to F&P rates		20,926,093	21,540,519	21,588,906	21,670,372	22,780,595	23,052,701	23,166,584
includes CWA supplemental block & Renton								
True Up balance applied		-	-	1,900,000	1,450,000	-	-	-
<b>Amount to be collected through rates</b>		<b>20,926,093</b>	<b>21,540,519</b>	<b>23,488,906</b>	<b>23,120,372</b>	<b>22,780,595</b>	<b>23,052,701</b>	<b>23,166,584</b>
<b>Expected revenues, incl CWA suppl block</b>		19,860,366	20,222,377	23,305,336	23,122,132	22,689,578	22,978,703	22,922,092
CY (under)/Over payment		(1,065,727)	(1,318,142)	1,716,430	1,451,761	(91,017)	(73,999)	(244,492)
Balance	(441,611)	(1,528,094)	(2,918,056)	(1,338,775)	50,064	(38,600)	(114,413)	(364,283)
Interest on above, affect following year	(20,756)	(71,820)	(137,149)	(62,922)	2,353	(1,814)	(5,377)	(17,121)
<b>New Supply Cost Pool - Rate Based</b>								
Asset cost		N/A	N/A	N/A	N/A	N/A	N/A	N/A
O&M cost		635,077	979,548	999,139	1,019,121	1,039,504	1,060,294	1,081,500
<b>Regional Cost</b>		<b>635,077</b>	<b>979,548</b>	<b>999,139</b>	<b>1,019,121</b>	<b>1,039,504</b>	<b>1,060,294</b>	<b>1,081,500</b>
Allocation to 1982 contract		(23,132)						
Allocation to NUD Block		(39,364)	(60,715)	(61,930)	(63,168)	(64,432)	(65,720)	(67,035)
Allocation to Renton Block		-	-	(56,951)	(58,090)	(59,252)	(60,437)	(61,645)
Remaining Costs to F&P rates		572,581	918,832	880,258	897,863	915,821	934,137	952,820
includes CWA supplemental block								
Transfer from/(to) FC cost pool		-	-	-	-	-	-	-
True Up balance applied		-	-	38,000	38,000	38,000	-	-
<b>Amount to be collected through rates</b>		<b>572,581</b>	<b>918,832</b>	<b>918,258</b>	<b>935,863</b>	<b>953,821</b>	<b>934,137</b>	<b>952,820</b>
<b>Expected revenues, incl CWA suppl block</b>		543,420	862,606	841,749	994,666	976,056	957,446	938,836
CY (under)/Over payment		(29,160)	(56,227)	(38,509)	96,802	60,235	23,309	(13,984)
Balance	(23,050)	(53,294)	(112,025)	(155,799)	(66,320)	(9,201)	13,675	334
Interest on above, affect following year	(1,083)	(2,505)	(5,265)	(7,323)	(3,117)	(432)	643	16
<b>New Transmission Cost Pool</b>								
Asset cost		N/A	N/A	N/A	N/A	N/A	N/A	N/A
O&M cost		N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Regional Cost</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Allocation to 1982 contract		-	-	-	-	-	-	-
Remaining Costs to F&P rates		-	-	-	-	-	-	-
includes CWA supplemental block & Renton								
True Up balance applied		-	-	-	-	-	-	-
<b>Amount to be collected through rates</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Expected revenues, incl CWA suppl block</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CY (under)/Over payment		-	-	-	-	-	-	-
Balance	(14)	(15)	(16)	(16)	(17)	(18)	(19)	(20)
Interest on above, affect following year	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
<b>New Supply Cost Pool - FC Based</b>								
Asset cost		3,071,429	4,819,213	4,714,107	4,609,740	4,506,129	2,698,031	2,708,690
<b>Regional Cost</b>		<b>3,071,429</b>	<b>4,819,213</b>	<b>4,714,107</b>	<b>4,609,740</b>	<b>4,506,129</b>	<b>2,698,031</b>	<b>2,708,690</b>
Allocation to 1982 contract		(111,874)						
Allocation to NUD Block		(190,376)	(298,709)	(292,194)	(285,725)	(279,303)	(167,232)	(167,893)
Allocation to Renton Block		-	-	(107,559)	(109,710)	(111,904)	(114,142)	(116,425)
Transfer from/(to) FC New Supply Rates Cost Pool		-	-	-	-	-	-	-
<b>Remaining Costs to balance FCs</b>		<b>2,769,179</b>	<b>4,520,504</b>	<b>4,314,353</b>	<b>4,214,304</b>	<b>4,114,922</b>	<b>2,416,656</b>	<b>2,424,372</b>
<b>Expected revenues</b>		<b>1,186,432</b>	<b>1,300,563</b>	<b>2,199,447</b>	<b>2,199,447</b>	<b>2,747,010</b>	<b>2,747,010</b>	<b>2,747,010</b>
CY (under)/Over payment		(1,582,747)	(3,219,941)	(2,114,906)	(2,014,857)	(1,367,912)	330,354	322,638
Balance	12,882,597	11,905,332	9,244,941	7,564,547	5,905,224	4,814,858	5,371,510	5,946,609
Interest on above, affect following year	605,482	559,551	434,512	355,534	277,546	226,298	252,461	279,491
New Supply Facility NBV	13,192,711	13,214,262	12,772,230	12,182,195	11,441,200	10,546,226	11,312,163	11,917,902

## **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.

### **Transition Discount**

Until January 1, 2012, wholesale customers paid a \$0.60 per CCF “Interim Growth Surcharge” on consumption above 1982 levels (ie. their “Old Water Allowance”). The revenue from this surcharge discounted the base rate charged to wholesale customers (for an example of this mechanism, see the “2011” column on page 1 of this rate study). Because this surcharge has expired, customers who have not been paying the surcharge will experience a significant rate increase, while those paying growth charges may experience a rate decrease.

### **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. Historically, Seattle has underestimated the rate of decline in demand, resulting in significantly negative true up balances. The overall forecast of demand used in this rate study is downward by 1.5% per year. This continues the trend in weather adjusted purchases seen over the last 10 years.

	<b>ccf</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Full and Partial</b>					
Peak		5,697,465	5,528,562	5,359,661	5,190,758
Off-Peak		7,082,444	6,868,726	6,655,007	6,441,288
Total		12,779,909	12,397,288	12,014,668	11,632,046
<b>CWA</b>					
Base Block		14,785,428	14,785,428	14,785,428	14,785,428
Supplemental Block		1,463,904	1,463,904	1,463,904	1,463,904
Actual Demand: Peak		5,732,938	5,748,146	5,763,355	5,778,563
Actual Demand: Off-Peak		6,710,986	6,728,789	6,746,592	6,764,394
Actual Demand: Total		12,443,924	12,476,935	12,509,947	12,542,957
<b>Northshore</b>					
Annual Block		4,172,126	4,172,126	4,172,126	4,172,126
Actual Demand: Peak		1,013,685	990,777	967,869	944,961
Actual Demand: Off-Peak		1,307,769	1,278,215	1,248,662	1,219,108
Actual Demand: Total		2,321,454	2,268,992	2,216,531	2,164,069
<b>Seattle as-if-wholesale</b>					
Peak		11,014,894	10,865,252	10,715,611	10,565,969
Off-Peak		17,599,988	17,361,029	17,122,071	16,883,111
Total		28,614,882	28,226,281	27,837,681	27,449,080

### **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. In the past, these rates were not published individually. This rate study establishes separate rates, since Renton pays for three of the cost pools through rates, and one through a block payment.



Individual rates by cost pool are below for both options.

**Option 1 – Not selected by Operating Board**

Rates per CCF	2012		2013		2014	
	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak
Existing Supply	\$1.01	\$1.50	\$1.04	\$1.55	\$1.07	\$1.59
Existing Transmission	\$0.45	\$0.67	\$0.46	\$0.68	\$0.49	\$0.73
New Supply	\$0.02	\$0.02	\$0.02	\$0.03	\$0.02	\$0.03
New Transmission	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

**Option 2 – Selected by Operating Board**

Rates per CCF	2012		2013		2014	
	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak
Existing Supply	\$1.04	\$1.54	\$1.04	\$1.54	\$1.04	\$1.55
Existing Transmission	\$0.46	\$0.69	\$0.47	\$0.69	\$0.47	\$0.69
New Supply	\$0.02	\$0.02	\$0.02	\$0.03	\$0.02	\$0.03
New Transmission	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

For regional rates, underlying costs were actually not a factor in the large increase from 2011 to 2012. The rate drivers for 2012 are:

Declines in demand	11 %
12/31/2011 true up balance	9 %
<u>Growth charge expiration</u>	<u>8 %</u>
Total	28 %

**SUBREGIONAL RATES AND INDIVIDUAL BLOCK PAYMENTS**

**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 preliminary 2010 true up were carried forward.

**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.

	2009 true up allocators								
		2009	2010 projected	2011	2012	2013	2014	2015	2016
585 Zone Facilities									
Operations Costs			3,579	3,579	3,579	3,579	3,579	3,579	3,579
Asset Recovery Costs			455,365	538,823	528,249	517,303	506,357	495,411	484,283
Total			458,945	542,402	531,828	520,882	509,936	498,990	487,862
Allocation to Southwest Subregion Customers	18.9%		86,741	102,514	100,515	98,447	96,378	94,309	92,206
West Seattle Reservoir									
Operations Costs			2,569	2,569	2,569	2,569	2,569	2,569	2,569
Asset Recovery Costs			2,508,204	3,088,823	3,037,036	3,014,656	2,969,510	2,917,284	2,865,058
Total			2,510,774	3,091,393	3,039,606	3,017,226	2,972,079	2,919,853	2,867,628
Allocation to Southwest Subregion Customers	1.7%		42,683	52,554	51,673	51,293	50,525	49,638	48,750
West Seattle Pipeline									
Operations Costs			7,437	7,437	7,437	7,437	7,437	7,437	7,437
Asset Recovery Costs			160,727	157,319	153,911	150,503	147,094	143,686	140,278
Total			168,164	164,756	161,347	157,939	154,531	151,123	147,715
Allocation to Southwest Subregion Customers	8.0%		13,453	13,180	12,908	12,635	12,362	12,090	11,817
Des Moines Way Pipeline									
Operations Costs			2,357	2,357	2,357	2,357	2,357	2,357	2,357
Asset Recovery Costs			10,698	10,254	9,811	9,368	8,924	8,481	8,038
Total			13,054	12,611	12,167	11,724	11,281	10,837	10,394
Allocation to Southwest Subregion Customers (at 100%)	100.0%		13,054	12,611	12,167	11,724	11,281	10,837	10,394
Military Road Feeder									
Operations Costs			0	0	0	0	0	0	0
Asset Recovery Costs			0	0	0	0	0	0	0
Total			0	0	0	0	0	0	0
Allocation to Southwest Subregion Customers (at 100%)	100.0%		0	0	0	0	0	0	0
East Marginal Way Feeder									
Operations Costs			0	0	0	0	0	0	0
Asset Recovery Costs			0	0	0	0	0	0	0
Total			0	0	0	0	0	0	0
Allocation to Southwest Subregion Customers (at 100%)	100.0%		0	0	0	0	0	0	0
Total Cost Allocated to SW Subregion			155,931	180,859	177,264	174,099	170,547	166,874	163,167
True Up balance applied					90,000	100,000	100,702		
<b>Amount to be collected through rates</b>			155,931	180,859	267,264	274,099	271,249	166,874	163,167
Flow					4,197,000	4,010,000	3,824,000	3,638,000	3,451,000
<b>Calculated Rates</b>					0.064	0.068	0.071	0.046	0.047
<b>Rounded rates, per ccf</b>					<b>\$ 0.06</b>	<b>\$ 0.07</b>	<b>\$ 0.07</b>	<b>\$ 0.05</b>	<b>\$ 0.05</b>
<b>Expected revenues</b>			136,613	219,200	251,820	280,700	267,680	181,900	172,550
CY (under)/Over payment			(19,318)	38,341	74,556	106,601	97,133	15,026	9,383
True up Balance		(250,234)	(281,314)	(256,195)	(193,680)	(96,182)	(3,569)	11,290	21,204
Interest on above, affect following year		(11,761)	(13,222)	(12,041)	(9,103)	(4,521)	(168)	531	997

### East Sub-Region

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**

The utility basis cost of each segment of the existing pipeline was determined using length to divide the total cost. No CIP items were identified that affect the Mercer Island Pipeline. For each segment, the 2006 true up O&M costs were carried forward.

## 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.

Split Cost to Segment by Flows								
	2010	2011	2012	2013	2014	2015	2016	
<b>Segment 1</b>								
Assets	15,788	15,401	15,013	14,626	14,238	13,850	13,463	
O&M	3,351	8,751	3,487	3,700	4,005	4,422	4,980	
<b>Cost</b>	<b>19,140</b>	<b>24,151</b>	<b>18,500</b>	<b>18,326</b>	<b>18,243</b>	<b>18,272</b>	<b>18,443</b>	
Bellevue Taps	2,297	2,899	2,220	2,200	2,190	2,193	2,214	
Downstream	16,843	21,253	16,280	16,126	16,054	16,079	16,229	
<b>Segment 2</b>								
Assets	21,968	21,443	20,919	20,394	19,870	19,345	18,821	
O&M	4,727	4,727	4,727	4,727	4,727	4,727	4,727	
<b>Cost</b>	<b>43,537</b>	<b>47,423</b>	<b>41,925</b>	<b>41,247</b>	<b>40,650</b>	<b>40,151</b>	<b>39,777</b>	
Bellevue Taps	7,887	8,591	7,595	7,472	7,364	7,274	7,206	
Downstream	35,650	38,832	34,330	33,775	33,286	32,878	32,571	
<b>Segment 3</b>								
Assets	29,520	28,795	28,070	27,345	26,621	25,896	25,171	
O&M	6,266	6,266	6,266	6,266	6,266	6,266	6,266	
<b>Cost</b>	<b>71,436</b>	<b>73,893</b>	<b>68,666</b>	<b>67,387</b>	<b>66,173</b>	<b>65,040</b>	<b>64,008</b>	
Mercer Island & Seattle Taps	16,914	17,496	16,258	15,955	15,668	15,400	15,155	
Downstream	54,522	56,397	52,408	51,431	50,505	49,640	48,853	
<b>Segment 4</b>								
Assets	15,634	15,250	14,866	14,483	14,099	13,715	13,331	
O&M	3,319	3,319	3,319	3,319	3,319	3,319	3,319	
<b>Cost</b>	<b>73,475</b>	<b>74,966</b>	<b>70,593</b>	<b>69,233</b>	<b>67,922</b>	<b>66,674</b>	<b>65,503</b>	
Mercer Island Taps	73,475	74,966	70,593	69,233	67,922	66,674	65,503	
<b>Calculate Rates for each segment:</b>								
	2009	2010	2011	2012	2013	2014	2015	2016
<b>Segment 3 Rate Calc:</b>								
Total Cost Allocated to Segment 3		16,914	17,496	16,258	15,955	15,668	15,400	15,155
True Up balance applied				15,000	17,000	15,000		
<b>Amount to be collected through rates</b>		16,914	17,496	31,258	32,955	30,668	15,400	15,155
Flow				206,757	201,017	195,494	189,768	184,259
<b>Calculated Rates</b>				0.151	0.164	0.157	0.081	0.082
<b>Rounded rates</b>				<b>0.15</b>	<b>0.16</b>	<b>0.16</b>	<b>0.08</b>	<b>0.08</b>
<b>Expected revenues</b>		10,119	10,615	31,014	32,163	31,279	15,181	14,741
CY (under)/Over payment		(6,795)	(6,881)	14,755	16,207	15,611	(218)	(415)
True up Balance	(26,035)	(34,054)	(42,535)	(29,779)	(14,971)	(64)	(285)	(713)
Interest on above, affect following year	(1,224)	(1,601)	(1,999)	(1,400)	(704)	(3)	(13)	(34)
	2009	2010	2011	2012	2013	2014	2015	2016
<b>Segment 4 Rate Calc:</b>								
Total Cost Allocated to Segment 4		73,475	74,966	70,593	69,233	67,922	66,674	65,503
True Up balance applied				45,000	50,000	50,000		
<b>Amount to be collected through rates</b>				115,593	119,233	117,922	66,674	65,503
Flow				646,220	626,470	607,510	587,760	568,800
<b>Calculated Rates</b>				0.179	0.190	0.194	0.113	0.115
<b>Rounded rates</b>				<b>0.18</b>	<b>0.19</b>	<b>0.19</b>	<b>0.11</b>	<b>0.12</b>
<b>Expected revenues</b>		82,713	58,940	116,320	119,029	115,427	64,654	68,256
CY (under)/Over payment		9,238	(16,026)	45,726	49,797	47,505	(2,020)	2,753
True up Balance	(115,522)	(111,713)	(132,990)	(93,514)	(48,112)	(2,869)	(5,024)	(2,507)
Interest on above, affect following year	(5,430)	(5,251)	(6,251)	(4,395)	(2,261)	(135)	(236)	(118)

Notes: Bellevue is part of Cascade, so their "rate" is a block payment  
Numbers may not sum due to rounding

### **ERU Fee**

The current Facilities Charge rate of \$783/ERU became effective 1/1/2011. 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 1/1/2014.

### **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 and detailed in Attachment 1, Exhibit C.

The table below shows the calculation of this discount for 2012-2016.

<b>Treatment Costs</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Cedar Treatment NBV	79,598,131	77,084,446	74,569,602	72,206,801	69,842,886
Cedar Treatment Depreciation	2,614,715	2,617,806	2,620,961	2,471,047	2,547,827
<b>Cedar Treatment Util Basis Cost</b>	<b>7,549,799</b>	<b>7,397,041</b>	<b>7,244,276</b>	<b>6,947,868</b>	<b>6,878,086</b>
Tolt Treatment NBV	63,477,279	61,135,963	58,794,647	56,453,331	54,112,014
Tolt Treatment Depreciation	2,341,316	2,341,316	2,341,316	2,341,316	2,341,316
<b>Tolt Treatment Util Basis Cost</b>	<b>6,276,908</b>	<b>6,131,746</b>	<b>5,986,584</b>	<b>5,841,423</b>	<b>5,696,261</b>
Landsburg Chlorination NBV	-	-	-	2,425,515	2,352,015
Landsburg Chlorination Depreciation	-	-	-	-	73,500
<b>Landsburg Chlorination Util Basis Cost</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>150,382</b>	<b>219,325</b>
<b>O&amp;MBudget Items (including overhead)</b>					
N050302 TOLT DBO CONTRACT PAYMENTS	3,909,859	3,988,057	4,067,818	4,149,174	4,232,158
N050303 CEDAR DBO CONTRACT PAYMENTS	3,102,559	3,164,610	3,227,903	3,292,461	3,358,310
N750705 TOLT DBO MANAGEMENT COSTS	433,205	441,869	450,707	459,721	468,915
N750707 CEDAR DBO MANAGEMENT COSTS	936,460	955,189	974,293	993,779	1,013,654
N654003 (CEDAR) CHOLRINATION FAC O&M	841,300	858,126	875,288	892,794	910,650
N654004 FLUORIDATION PROGRAM O&M	521,469	531,898	542,536	553,387	564,455
N790301 SWTR MONITORING,REPRTING & ADM	194,170	198,054	202,015	206,055	210,176
N790302 TCR MONITORING, REPRTING & ADM	1,002,456	1,022,505	1,042,955	1,063,814	1,085,091
N790303 LCR MONITORING, REPRTING & ADM	48,259	49,224	50,208	51,213	52,237
N790304 DBP MONITORING, REPRTING & ADM	87,058	88,800	90,576	92,387	94,235
N790306 REGULATORY SUPPORT	116,793	119,129	121,512	123,942	126,421
<b>O&amp;M Cost</b>	<b>11,193,590</b>	<b>11,417,462</b>	<b>11,645,811</b>	<b>11,878,727</b>	<b>12,116,302</b>
<b>Total Regional Cost related to treatment</b>	<b>25,020,296</b>	<b>24,946,249</b>	<b>24,876,672</b>	<b>24,668,018</b>	<b>24,690,649</b>
CWA Base Block and NUD Allocation	5,798,124	5,780,965	5,764,841	5,716,489	5,721,733
Portion of regional cost to full and partial contract	19,222,172	19,165,284	19,111,830	18,951,530	18,968,916
Flow under full and partial contracts	42,072,436	41,299,970	40,529,549	39,758,129	38,986,662
<b>Treatment discount per ccf</b>	<b>\$ 0.46</b>	<b>\$ 0.46</b>	<b>\$ 0.47</b>	<b>\$ 0.48</b>	<b>\$ 0.49</b>

### Renton New Supply Cost Pool

Renton's Partial Supply Contract has an alternative cost recovery mechanism for the New Supply Cost Pool since their entire retail area will participate in conservation yet only a small portion of the area is served by Seattle water. Beginning in 2012, Renton will be 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.

	2012	2013	2014	2015	2016
<b>Renton New Supply Block, starts in 2012</b>					
Asset cost	1,887,000	1,924,739	1,963,235	2,002,499	2,042,550
Allocation to Renton New Supply Block	107,559	109,710	111,904	114,142	116,425
O&M cost	999,139	1,019,121	1,039,504	1,060,294	1,081,500
Allocation to Renton New Supply Block	56,951	58,090	59,252	60,437	61,645
<b>Total Renton New Supply Block</b>	<b>164,510</b>	<b>167,800</b>	<b>171,156</b>	<b>174,579</b>	<b>178,071</b>

### 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 (171 MGD).

Northshore also participates in the 1% 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 system firm yield minus the CWA block (171 MGD - 30.3 MGD).

Northshore's allocation of each year's costs is shown below. The surpluses shown in 2010 and 2011 are projections only.

	2010	2011	2012	2013	2014	2015	2016
<b>Existing Supply Cost Pool</b>							
Asset cost	33,500,624	34,131,392	34,252,425	34,591,548	34,748,272	34,772,304	38,814,429
O&M cost	26,767,095	28,295,113	28,861,015	29,438,236	30,027,001	30,627,541	31,240,091
<b>Regional Cost</b>	<b>60,267,719</b>	<b>62,426,505</b>	<b>63,113,441</b>	<b>64,029,784</b>	<b>64,775,273</b>	<b>65,399,845</b>	<b>70,054,520</b>
<b>Allocation to NUD Block</b>	<b>3,073,654</b>	<b>3,183,752</b>	<b>3,218,785</b>	<b>3,265,519</b>	<b>3,303,539</b>	<b>3,335,392</b>	<b>3,572,781</b>
<b>Existing Transmission Cost Pool</b>							
Asset cost	17,727,969	17,477,844	17,329,624	17,220,237	18,445,610	18,575,665	18,495,287
O&M cost	10,865,874	10,560,100	10,771,302	10,986,728	11,206,463	11,430,592	11,659,204
<b>Regional Cost</b>	<b>28,593,844</b>	<b>28,037,944</b>	<b>28,100,926</b>	<b>28,206,965</b>	<b>29,652,073</b>	<b>30,006,257</b>	<b>30,154,491</b>
<b>Allocation to NUD Block</b>	<b>1,458,286</b>	<b>1,429,935</b>	<b>1,433,147</b>	<b>1,438,555</b>	<b>1,512,256</b>	<b>1,530,319</b>	<b>1,537,879</b>
<b>Conservation Block</b>							
Asset cost	3,071,429	4,819,213	4,714,107	4,609,740	4,506,129	2,698,031	2,708,690
Allocation to NUD Conservation Block	190,376	298,709	292,194	285,725	279,303	167,232	167,893
O&M cost	635,077	979,548	999,139	1,019,121	1,039,504	1,060,294	1,081,500
Allocation to NUD Conservation Block	39,364	60,715	61,930	63,168	64,432	65,720	67,035
<b>Total Conservation Block</b>	<b>229,740</b>	<b>359,424</b>	<b>354,124</b>	<b>348,893</b>	<b>343,735</b>	<b>232,952</b>	<b>234,927</b>
<b>Revenue for CY expenses, set during 2009-2011 rate study</b>	<b>4,964,616</b>	<b>5,008,133</b>					
<b>Expected CY expenses</b>	<b>4,761,680</b>	<b>4,973,111</b>	<b>5,006,056</b>	<b>5,052,968</b>	<b>5,159,529</b>	<b>5,098,663</b>	<b>5,345,587</b>
<b>Projected (Under)/Over Payment</b>	<b>202,936</b>	<b>35,022</b>					
<b>Amount due for CY Block expenses</b>			<b>5,006,056</b>	<b>5,052,968</b>	<b>5,159,529</b>	<b>5,098,663</b>	<b>5,345,587</b>
<b>Projected amount due for PY (under)/over payment, plus interest</b>			<b>(217,243)</b>	<b>(37,491)</b>			

### **Cascade Water Alliance Declining Bock**

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 (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 3.0MGD block priced at the Full and Partial Commodity rates developed above. As such, Option 1 and Option 2 produce slightly different Supplemental Block costs.

### **Option 1 – Not selected by Operating Board**

	2010	2011	2012	2013	2014	2015	2016
<b>BASEBLOCK</b>							
<b>Existing Supply Cost Pool</b>							
Asset cost	33,500,624	34,131,392	34,252,425	34,591,548	34,748,272	34,772,304	38,814,429
O&M cost	26,767,095	28,295,113	28,861,015	29,438,236	30,027,001	30,627,541	31,240,091
<b>Regional Cost</b>	60,267,719	62,426,505	63,113,441	64,029,784	64,775,273	65,399,845	70,054,520
Allocation to CWA Base Block	10,892,597	11,282,769	11,406,924	11,572,541	11,707,278	11,820,161	12,661,433
<b>Existing Transmission Cost Pool</b>							
Asset cost	17,727,969	17,477,844	17,329,624	17,220,237	18,445,610	18,575,665	18,495,287
O&M cost	10,865,874	10,560,100	10,771,302	10,986,728	11,206,463	11,430,592	11,659,204
<b>Regional Cost</b>	28,593,844	28,037,944	28,100,926	28,206,965	29,652,073	30,006,257	30,154,491
Allocation to CWA Base Block	5,167,961	5,067,489	5,078,873	5,098,038	5,359,222	5,423,236	5,450,027
<b>Total Base Block</b>	<b>16,060,558</b>	<b>16,350,259</b>	<b>16,485,797</b>	<b>16,670,579</b>	<b>17,066,500</b>	<b>17,243,397</b>	<b>18,111,460</b>
<b>CWA SUBREGIONAL COST</b>							
Cascade Subregion A							
Operations Costs	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Asset Recovery Costs	15,803	15,137	14,471	13,805	13,139	12,473	11,807
Cascade Subregion B - Segment 1 calculated on East tab	2,297	2,899	2,220	2,200	2,190	2,193	2,214
Cascade Subregion B - Segment 2 calculated on East tab	7,887	8,591	7,595	7,472	7,364	7,274	7,206
Cascade Subregion B - Segment 3							
Operations Costs	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Asset Recovery Costs	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Total Subregional</b>	<b>25,988</b>	<b>26,627</b>	<b>24,287</b>	<b>23,477</b>	<b>22,693</b>	<b>21,940</b>	<b>21,227</b>
<b>SUPPLEMENTAL BLOCK</b>							
Calculated Supplemental Block Cost	2,153,939	2,176,166	2,705,319	2,786,638	2,897,236	2,889,648	3,022,473
Revenue for CY expenses, set during 2009-2011 rate study	18,619,492	18,737,467					
Expected CY expenses	18,240,485	18,553,052	19,215,402	19,480,694	19,986,430	20,154,986	21,155,160
Projected (Under)/Over Payment	379,007	184,415					
Amount due for CY Block expenses			19,215,402	19,480,694	19,986,430	20,154,986	21,155,160
Amount due for PY (over)/under payment, plus interest			(405,727)	(197,416)			
<b>Total CWA cost</b>			<b>18,809,675</b>	<b>19,283,278</b>	<b>19,986,430</b>	<b>20,154,986</b>	<b>21,155,160</b>

## Option 2 –Selected by Operating Board

	2010	2011	2012	2013	2014	2015	2016
<b>BASE BLOCK</b>							
<b>Existing Supply Cost Pool</b>							
Asset cost	33,500,624	34,131,392	34,252,425	34,591,548	34,748,272	34,772,304	38,814,429
O&M cost	26,767,095	28,295,113	28,861,015	29,438,236	30,027,001	30,627,541	31,240,091
<b>Regional Cost</b>	60,267,719	62,426,505	63,113,441	64,029,784	64,775,273	65,399,845	70,054,520
Allocation to CWA Base Block	10,892,597	11,282,769	11,406,924	11,572,541	11,707,278	11,820,161	12,661,433
<b>Existing Transmission Cost Pool</b>							
Asset cost	17,727,969	17,477,844	17,329,624	17,220,237	18,445,610	18,575,665	18,495,287
O&M cost	10,865,874	10,560,100	10,771,302	10,986,728	11,206,463	11,430,592	11,659,204
<b>Regional Cost</b>	28,593,844	28,037,944	28,100,926	28,206,965	29,652,073	30,006,257	30,154,491
Allocation to CWA Base Block	5,167,961	5,067,489	5,078,873	5,098,038	5,359,222	5,423,236	5,450,027
<b>Total Base Block</b>	<b>16,060,558</b>	<b>16,350,259</b>	<b>16,485,797</b>	<b>16,670,579</b>	<b>17,066,500</b>	<b>17,243,397</b>	<b>18,111,460</b>
<b>CWA SUBREGIONAL COST</b>							
Cascade Subregion A							
Operations Costs	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Asset Recovery Costs	15,803	15,137	14,471	13,805	13,139	12,473	11,807
Cascade Subregion B - Segment 1 calculated on East tab	2,297	2,899	2,220	2,200	2,190	2,193	2,214
Cascade Subregion B - Segment 2 calculated on East tab	7,887	8,591	7,595	7,472	7,364	7,274	7,206
Cascade Subregion B - Segment 3							
Operations Costs	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Asset Recovery Costs	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Total Subregional</b>	<b>25,988</b>	<b>26,627</b>	<b>24,287</b>	<b>23,477</b>	<b>22,693</b>	<b>21,940</b>	<b>21,227</b>
<b>SUPPLEMENTAL BLOCK</b>							
Calculated Supplemental Block Cost	2,153,939	2,176,166	2,779,050	2,793,690	2,801,277	2,852,782	3,052,288
Revenue for CY expenses, set during 2009-2011 rate study	18,619,492	18,737,467					
Expected CY expenses	18,240,485	18,553,052	19,289,134	19,487,745	19,890,471	20,118,120	21,184,975
Projected (Under)/Over Payment	379,007	184,415					
Amount due for CY Block expenses			19,289,134	19,487,745	19,890,471	20,118,120	21,184,975
Amount due for PY (over)/under payment, plus interest			(405,727)	(197,416)			
<b>Total CWA cost</b>			<b>18,883,407</b>	<b>19,290,329</b>	<b>19,890,471</b>	<b>20,118,120</b>	<b>21,184,975</b>