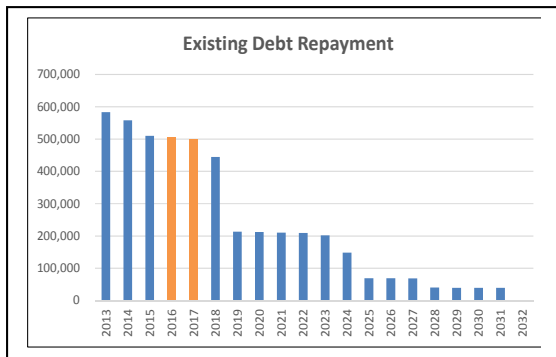
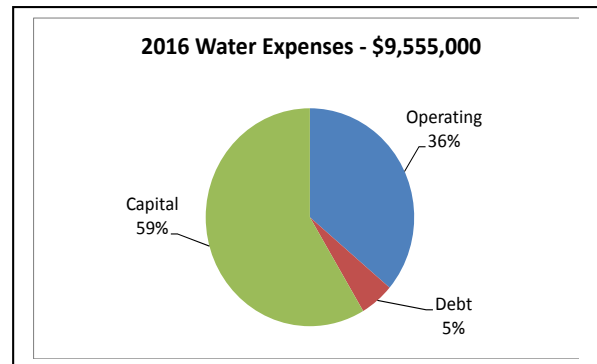




CROSS VALLEY WATER DISTRICT 2016 WATER RATE OUTLOOK (Board Adopted Rates on 2/25/16)

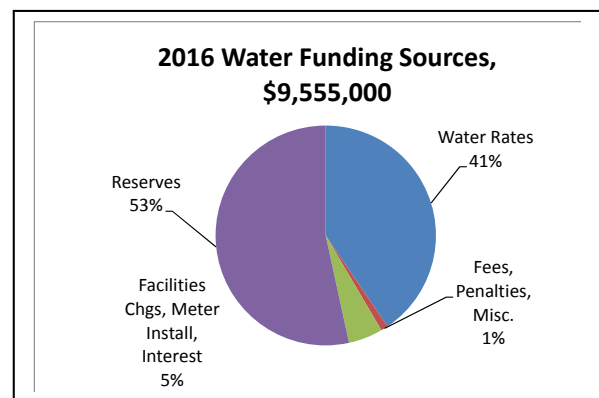
The Water Rate Outlook has been updated to reflect current costs and revenue, along with anticipated changes to ensure that the water rates are sufficient to meet the operating, debt and the capital expenditures over the next six years. The first pie chart shows the anticipated 2016 water expenses in three slices. About a third of the expenses will be for operations, the debt slice is about 5% and the capital investment in the system is greater than 50%. The rate focus is on the 2-year period of 2016-17.

Operations – The operating expenses are expected to increase about 3% each year for the next two years. In addition to water from Cross Valley wells, the District purchases water from the joint Clearview Water Supply Agency (CWSA) of which they are an owner, the City of Everett and a small amount from Silver Lake. CWSA also purchases water from the City of Everett at a lower rate. Everett sets water rates in four-year increments. While the rate study will be completed later this year, Cross Valley is anticipating that the rate increases on purchased water will be slower at 5.5%, down from 8.5%-10.5% per year for 2013-16.



Existing Debt – Cross Valley has been successful in obtaining low-interest loans from Washington State’s Public Works Trust Fund (P WTF) to complete major projects. These loans are being paid off over 20-years and the current outstanding debt averages less than 1.0% interest. As the loans have been retiring, the District has been able to invest more in system replacement without impacting rates. Unfortunately, the P WTF has been on hold with the legislature instead directing the funds toward education. The District continues to work with others to lobby the legislature to return the P WTF loan program to support major water and sewer infrastructure needs.

Capital Investment Program – The District is careful to adjust the capital program each year to strike a balance with making progress on the priority projects and programs, considering the amount of current growth, the level of reserves and the impact on rates. The District is proceeding with Echo Lake water improvements and will need to use reserves to fund the projects due to the lack of P WTF loans. The reserves have been building over the years as new customers have paid their facilities charges and savings have accrued. As the District looks at the existing debt chart (2016-17 in orange), the plan is to direct additional funds toward annual system replacement to continue to provide high-quality water and manage the system for future generations.



Rate Outlook & Recommendation: 3.0% Annual Increase for 2016 & 2017

After reviewing the expense projections for savings, considering the anticipated increases in costs and the need to continue funding system replacement, a 3.0% annual rate increase is recommended to meet planned water expenses for 2016 & 2017.



Other Proposed Adjustments:

- **Base rate is recommended to be lowered and water to be removed. All water will be billed as used.** The current base rates include up to 500 cubic feet of water. Instead, the water will be removed and all customers will pay for the water used. For the average customer using 1,600 cubic feet in two months, there should be no change from the old method.

Water Rate Recommendation	2015	2016	2017
Average Single Family 2-Mo. Bill	\$80.00	\$82.43	\$84.96
\$ Increase per 2-Mo. Bill		\$2.43	\$2.53

- **Residential Class customers to pay a base rate per dwelling unit.** Currently the multiple unit properties pay a meter-based rate plus a lower multiple unit rate. Now all will pay a base rate for each dwelling unit.
- **Commercial Class customers to pay a base rate by the size of the meter.** Currently use meter size with a surcharge for additional units. Current commercial class users with multiple units connected to the same meter and located on the same tax parcel will be reclassified as Mixed Use/Other Class customers.
- **Larger meter sizes to be equalized to a residential meter.** This is a periodic realignment and will be based on 60% of the American Water Works Association (AWWA) meter factors.
- **Mixed Use/Other Class customers to pay a combined rate based on units and meter size.** This class is for customers that do not fit well into either residential or commercial classes. Rate to be based on 60% of AWWA meter factors plus a base rate for each additional unit.
- **Detector Check Class customers to be equalized to a residential meter.** The base rate will be set using 5% of the AWWA meter factors times the residential rate.

See Recommended Rates on page 4 for details.

Capital Improvements Funded in this period – The table below shows the capital improvements by funding source in the two-year rate period. No new borrowing is anticipated and the improvements will be either funded by drawing down on reserves or funded by rates as shown.

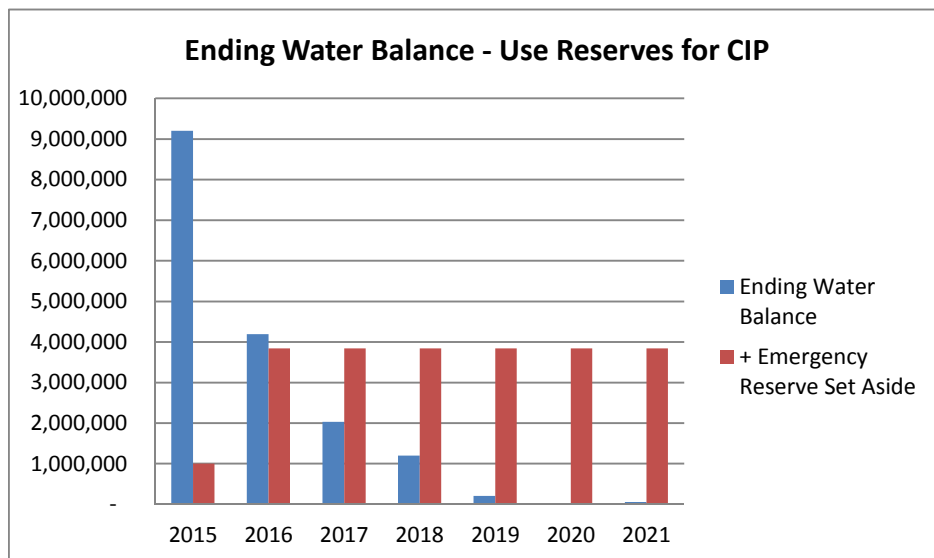
CIP FUNDING:				
The following projects are included by identified funding source.				
#	Cross Valley Water Capital Improvements	Subtotal 2016-17	2016	2017
Reserves				
3b	New Echo Lake Well		767,500	252,500
3c	Echo Lake Standpipe and 700 Zone Creation		3,150,000	1,050,000
8	SCADA System Upgrade		251,500	252,067
15	Water System Plan Update (DOH approved 2/11)		-	109,974
NEW	4" AC Water Main Replacement - Fobes Hill		534,713	-
19	Misc. Snohomish Co. and WSDOT Road/Culvert Improv.		275,625	289,406
NEW	Sno Co Major Road Improvements (Broadway) AC main		175,000	-
Subtotal Reserves		\$7,308,285	\$5,154,338	\$2,153,948
Rates				
1	Financial Plan, Connection Charges, Rates		18,000	-
5	Well Head Protection Program Implementation		10,000	10,500
20	PRV Replacements		80,000	84,000
NEW	Meter Replacement Program (plus 50k existing in oper exp)		200,000	210,000
New	CWSA System Improvements		110,250	115,763
Subtotal Rates		\$838,513	\$418,250	\$420,263
Total CIP Planned for 2016-17		\$8,146,798	\$5,572,588	\$2,574,210



Six-Year Outlook - This scenario demonstrates the impact on rates and reserves for completing the six-year capital improvement program. After a 3.0% increase in 2016 and in 2017, it appears that a 6.0% annual increase for 2018-2021 will be necessary to fund the recommended CIP. Of course the District will revisit the financial outlook and capital improvements scheduled in two years before any future increases are approved.

SCENARIO: No Borrowing in 2016-17	2015	2016	2017	2018	2019	2020	2021	DRAFT 2/12/16
Additional Revenue for Capital		481,440	351,080	232,720	221,720	220,720	220,720	
Total Available for Capital		492,188	226,424	18,759	86,362	(72,443)	(237,345)	
Capital Improvements Funded								
Special Projects	27,605	20,000	20,000	20,000	20,000	20,000	20,000	
Capital Funded by Rates		418,250	420,263	459,276	713,339	759,006	786,457	from CIP
New Bond Sale			-	-	-	-	-	
New PWTF Loan for Capital								
Add'l Revenue from Rate Increase		94,807	208,651	417,487	645,415	873,456	1,101,611	
Annual Increase/(Use) of Reserves		148,745	(5,188)	(43,030)	(563)	22,006	57,809	WITH CAPITAL
Rate Increase This Scenario		3.00%	3.00%	6.00%	6.00%	6.00%	6.00%	
Single Family Base Rate 2-Mo. Bill	\$55.40	\$1.66	\$1.71	\$3.53	\$3.74	\$3.96	\$4.20	
		\$57.06	\$58.77	\$62.30	\$66.04	\$70.00	\$74.20	
Water Reserves								
Vehicle Replacement								
Office Machine Replacement								
Capital Funded by Reserves		(5,154,338)	(2,153,948)	(790,079)	(990,416)	(3,138,063)	(901,785)	from CIP
Borrow from Sewer						2,905,000	902,000	set up internal-loan
Annual Increase/(Use) of Reserves from Rates		148,745	(5,188)	(43,030)	(563)	22,006	57,809	
Ending Water Balance	9,200,605	4,195,013	2,035,877	1,202,768	211,789	732	58,757	
+ Emergency Reserve Set Aside	1,000,000	3,843,000	3,843,000	3,843,000	3,843,000	3,843,000	3,843,000	

Ending Water Balance – The chart below demonstrates the impact on the reserves as the scenario uses the ending water balance to fund improvements. The blue bars indicate the available water balance as it is spent down. The red bars represent the emergency set aside as it remains constant from 2016-2021. This scenario will require internal borrowing from sewer funds in 2020 and 2021. In addition, a new PWTF loan (other loan or bond sale) would be required in 2021 for the new 1.9 MG Reservoir at Lee Forest.





Cross Valley Water District
Water Rate Structure Analysis

Version 2/17/16

RECOMMENDED RATES - 3.0% Increase in March 2016 & March 2017

a. RESIDENTIAL customers to pay a base rate per dwelling unit.

Bimonthly Base Rate per Unit	Existing	2016	2017
	\$55.40	\$45.70	\$47.10

x number of dwelling units

b. NON-RESIDENTIAL (Commercial, Agriculture, Public, Industrial, Irrigation, etc.) to pay a base rate by meter size.

The differential between meter sizes adjusted to be 60% of AWWA Industry Standard meter capacity factors..

Bimonthly Base Rates	Existing 2015	Meter Factor*	2016	2017
5/8" x 3/4" meter	\$55.40	1.00	\$45.70	\$47.10
3/4" x 3/4" meter	\$55.40	1.00	\$45.70	\$47.10
1" meter	\$78.76	1.50	\$68.60	\$70.70
1 1/2" meter	\$102.16	3.00	\$137.10	\$141.30
2" meter	\$166.18	4.80	\$219.40	\$226.10
3" meter	\$638.12	9.00	\$411.30	\$423.90
4" meter	\$813.00	15.00	\$685.50	\$706.50
6" meter	\$1,221.50	30.00	\$1,371.00	\$1,413.00

*Meter factors for base rates are based on 60% of AWWA meter factors

c. OTHER/MIXED-USE to pay a base rate combination of meter size and number of units.

A base rate by meter size as shown in Non-residential, plus a base rate for each additional unit.

Bimonthly Base Rates	Existing 2015	Meter Factor*	2016	2017
5/8" x 3/4" meter	\$55.40	1.00	\$45.70	\$47.10
3/4" x 3/4" meter	\$55.40	1.00	\$45.70	\$47.10
1" meter	\$78.76	1.50	\$68.60	\$70.70
1 1/2" meter	\$102.16	3.00	\$137.10	\$141.30
2" meter	\$166.18	4.80	\$219.40	\$226.10
3" meter	\$638.12	9.00	\$411.30	\$423.90
4" meter	\$813.00	15.00	\$685.50	\$706.50
6" meter	\$1,221.50	30.00	\$1,371.00	\$1,413.00
Plus a per unit charge	\$36.60	1.00	\$45.70	\$47.10

*Meter factors for base rates are based on 60% of AWWA meter factors

d. WATER CONSUMPTION CHARGES per 100 cubic feet on all metered water usage per bimonthly period.

Usage Tier	Existing	2016	2017
0-1,500 cf	\$2.20	\$2.27	\$2.33
1,501-3,000 cf	\$2.60	\$2.68	\$2.76
3,001-6,000 cf	\$3.40	\$3.50	\$3.61
6,001+ cf	\$4.43	\$4.56	\$4.70

1 cf = 7.48 gallons
100 cf = 748 gallons

e. Other adjustments:

Current locked off rates will be replaced by base rate.

f. Detector check rates will also be equalized using meter factors at 5% of AWWA x residential base rate

Bi-monthly Rate Detector Checks	Existing 2015	Meter Factor**	2016	2017
2" DC	\$32.98	0.40	\$18.30	\$18.80
2.5"-3" D.C.	\$39.76	0.75	\$34.30	\$35.30
4" D.C.	\$53.68	1.25	\$57.10	\$58.90
6" D.C.	\$70.20	2.50	\$114.30	\$117.80
8" D.C.	\$84.92	4.00	\$182.80	\$188.40
10" D.C.	\$104.34	5.75	\$262.80	\$270.80

**Meter factors for detector checks are based on 5% of AWWA meter factors



How do Cross Valley water rates compare? While it is nice to know what others are paying for water, it is important to remember that each water system must be self-sufficient. The costs will vary depending on the type and source of water, treatment and storage requirements, transmission and distribution systems, number/type of customers and other factors.

This chart compares a single family customer using 1,000 cubic feet of water in one month. Note that Cross Valley bills for two months but this is the typical industry comparison using the same customer in each water utility. The rate information used was available on websites as of February, 2016.

