



Silver Lake Water & Sewer District

Water & Sewer Rate Study

May 26, 2021 - Final Summary Report

Katy Isaksen & Associates (KI&A) was contracted for a utility rate study to prepare a 6-year rate outlook for the water and sewer. The recommended rate scenario and rates are summarized in this report.

Each year the District prepares a Utility Rate Forecast to review projected revenue and expenses for the upcoming year and make sure the District remains in a positive net financial position. A significant portion of the expenses come from the cost of purchased water and wastewater treatment services according to contracts with the service providers. The increased costs for these two services are “passed-through” to the customers each year in April. The other District costs are monitored and adjusted every few years. The last rate adjustment for this purpose was in 2015.

In April 2020 during the early stages of the pandemic, the Board delayed the “pass-through” rate adjustment. The costs for purchased water and wastewater treatment increased in 2020 and again in 2021 for wastewater, and income/expenses were impacted by COVID mandates. Costs have increased due to regulations, policy and staffing changes, and general cost escalation. Other policy changes have resulted in savings, such as extending the useful life of mains that resulted in lower depreciation each year. The rate study outlook is aligned with the projected expenses from the 2021 Utility Rate Forecast. The rate study then matches revenue and expenses by utility to be sure that the rates are supporting the necessary costs (water rates for water costs, etc.)

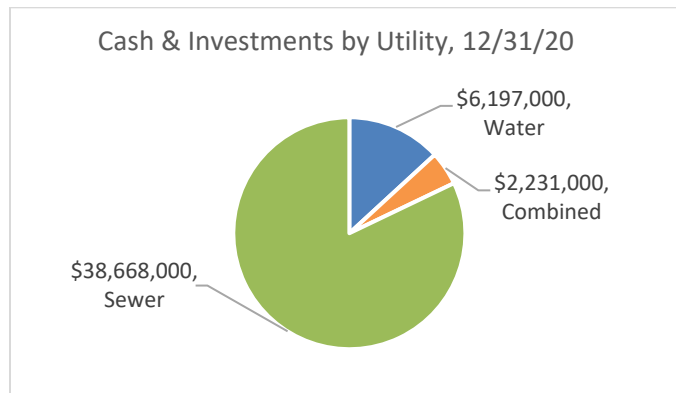
A rate model was developed to compare water and sewer operating revenue and expenditures, including depreciation and excluding new connection fees. The yellow line shows the result, revenue minus expenditures, and reflects the corresponding Increase or (Use) of Reserves necessary to meet the operating needs of each utility. Water is out of balance and rates need adjustment, and sewer has been in balance but needs adjustment in 2021 to maintain balance. The model estimates the impact on rates to be in balance with proportional increases on base & volume. Specific rate scenarios are then tested.

Rate Study Outlook	2019	2020	2021	2022	2023	2024	2025
WATER							
Growth - New ERU's per year	110	540	190	150	150	150	150
Water Sales (existing rates)	6,217,420	6,281,333	6,438,300	6,481,500	6,524,700	6,567,900	6,611,100
Projected Other W Revenue*	539,185	428,686	428,714	422,014	422,014	422,014	422,014
Projected W Expenditures**	7,617,568	8,235,912	9,269,900	9,479,600	9,695,000	9,916,500	10,144,100
Increase/(use) of Reserves	(860,963)	(1,525,893)	(2,402,886)	(2,576,086)	(2,748,286)	(2,926,586)	(3,110,986)
SEWER							
Growth - New ERU's per year	122	783	281	356	356	356	356
Sewer Service Sales (existing rates)	14,511,733	14,744,846	14,940,400	15,188,200	15,436,000	15,683,800	15,931,600
Projected Other Sewer Revenue*	1,034,218	458,055	458,000	458,000	458,000	458,000	458,000
Projected Sewer Expenditures**	13,564,267	15,111,101	16,349,200	16,731,300	17,119,000	17,512,600	17,912,300
Increase/(use) of Reserves	1,981,684	91,800	(950,800)	(1,085,100)	(1,225,000)	(1,370,800)	(1,522,700)
COMBINED WATER/SEWER							
Increase/(use) of Reserves	1,120,721	(1,434,093)	(3,353,686)	(3,661,186)	(3,973,286)	(4,297,386)	(4,633,686)
*Projected Other Revenue includes miscellaneous other revenue, permits, interest.							
**Projected expenditures include labor & benefits, purchased water/sewer treatment, maint. & oper., admin., depreciation.							



New connection fees include General Facilities Charges (GFC's) from new or upsized connections and developer constructed facilities that are transferred to the District. GFC's were updated earlier in the rate study in late 2020. The new connection fees are included in the District's Utility Rate Forecast but are treated differently in the rate study. The water and sewer GFC's are collected for funding capital improvements and not for operating expenses. The model uses the GFC revenue for funding the water and sewer capital projects and does not include the non-cash developer donated facilities. The rate outlook assumes that capital projects will be funded by depreciation from existing customers and new connection fees from new customers, then using reserves that have built up from the customer base in each utility. Depreciation is funded by rates as part of the operating expenses and is used for payment of debt principal and capital projects.

The District has healthy reserves overall, with the bulk for Sewer at \$38.7 million, compared to Water at \$6.2 million. This will be helpful to the District as the Everett wastewater treatment facilities are planned for capacity expansion for an estimated \$88.8 million. SLWSD will be required to fund their share, \$14.2 million at 16%, when the project proceeds. The rate outlook assumes this would come from reserves. The District will also have an option to fund their share with borrowing, such as selling bonds. In order to get the lowest interest rates and best borrowing terms, the District will want to keep in financial health and make sure that rates are sufficient to fund operating expenses, existing debt and some extra known as coverage. By funding depreciation with rates each year, the District should be able to demonstrate healthy coverage and receive good terms for borrowing.



RECOMMENDED RATES

The following water and sewer rates are recommended to meet the operating and capital needs, pay their share of the District costs, and include the 2020-21 "pass-thru" increases for contracted services.

Rate Study Recommendation	Water Rates			Sewer Rate By Basin	
	Base	Winter per ccf	Summer per ccf	Everett	AWWD
Current Rate	\$ 7.60	\$ 2.15	\$ 2.60	\$ 58.25	\$ 57.65
Recommended 2021*	\$ 14.60	\$ 2.95	\$ 3.55	\$ 66.45	\$ 62.50
Increase	\$ 7.00	\$ 0.80	\$ 0.95	\$ 8.20	\$ 4.85

*includes 2020 & 2021 increases for "pass-thru" charges from contracted water and wastewater treatment services.

Combined Residential Monthly Base Rate**	Current	Recommended	Increase	% Increase
Water + Sewer in Everett Basin	\$ 65.85	\$ 81.05	\$ 15.20	23%
Water + Sewer in AWWD Basin	\$ 65.25	\$ 77.10	\$ 11.85	18%

** Plus customers pay for metered water usage.



WATER Rates – SLWSD has historically attempted to keep water rates low. While this is helpful for customers, it has caused the water utility to be out of balance and reserves for future water capital projects are slim. Capital projects have been delayed to allow the reserves to build up. Customers pay a monthly base rate + a water rate on metered water use. SLWSD purchases water from Clearview, Alderwood and City of Everett. While the costs vary, SLWSD averages the purchased water prices and charges the same rate to customers inside the District. The pass-thru rate adjustment is also averaged.

The residential base rate is per dwelling unit, there is 50% discount for qualified low-income seniors, and commercial, irrigation, schools and fire sprinkler meters are charged based on meter size. All metered water is charged in 100 cubic foot units (ccf), equivalent to 748 gallons, depending on season of usage – winter or summer. Summer is charged 20% higher than winter to encourage conservation and delay significant future capital expenses to meet peak demand. New in this proposal is to have the multifamily rate at 95% of single family to be consistent with sewer.

After review and discussion of various rate scenarios, the Board’s preference was to bring water into balance for 2021 and spread the District portion increases over the remaining five years. Volume rates are also planned to increase so that higher volume customers pay their share, with summer (peak season) rates increasing more than winter (non-peak).

The recommended adjustments to the water rate structure are to charge larger meters based on the AWWA industry-standard meter equivalency factors to increase the equity among customer classes. These adjustments will affect the larger meter customers, such as commercial, irrigation, schools, and fire meters with base rates by meter size. With the meter size rate structure adjustments included, the “District portion” increase on the base rate was lowered by \$0.50 per month in 2021.

WATER Rate SCEN. D RECOMMENDED: Lower Base Increase by \$0.50 due to larger meter base by AWWA meter ratios							
Monthly Water Rates	2021 Base	Winter per ccf	Summer per ccf	2022 Base	2023 Base	2024 Base	2025 Base
Existing 2020	\$ 7.60	\$ 2.15	\$ 2.60				
Pass Thru	\$ -	\$ 0.05	\$ 0.05	TBD	TBD	TBD	TBD
District	\$ 7.00	\$ 0.75	\$ 0.90	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20
Estimated 2021 Rate	\$ 14.60	\$ 2.95	\$ 3.55				
Estimated Total Water Expense	\$ 9,269,900	SCEN. D:	Over/(Under)				
Less: Non-rate revenue	\$ (428,714)						
Less: Reduction in Pass-Thru*	\$ (69,000)						
Total Rate Revenue Requirement	\$ 8,772,186						
Estimated Water Rate Revenue		\$ 8,823,880	\$ 51,694				

**purchased water costs reduced to reflect lower Pass-Thru (from \$0.10 to \$0.05 per ccf)*

The rate model estimates the total water expenses for 2021 at \$9,269,900. Non-rate revenue from permits, interest income, and miscellaneous operating revenue are deducted. A reduction was made based on new information on the pass thru costs to match the revised pass thru charge. The Total Rate Revenue Requirement of \$8,772,200 reflects the target amount to be collected from customer rates for balanced revenue and expenditures. The recommended rates are estimated to generate \$8,823,900, or \$51,700 over the target. Of course, the actual amount of revenue will depend on water usage by the customers, as influenced by weather, conservation, the pandemic and post-pandemic patterns, etc.



SEWER Rates – Residential sewer is charged a flat rate per dwelling unit. Qualified low-income senior or disabled customers receive a 25% discount. Multifamily units are proposed to be adjusted to 95% (currently 98% Everett Basin and 92% AWWD basin) of single family based on average numbers of people and associated flow. Commercial, industrial and schools are charged base + volume rates. There are two sewer basins within the District (Everett and Alderwood). SLWSD contracts for wastewater treatment service from the City of Everett and King County in the Alderwood basin. The costs vary by provider, and thus the rates are different by basin: \$55.45 per month for Everett, and \$56.45 per month for Alderwood. The 2020 pass thru cost increases were delayed to SLWSD customers to assist during the pandemic. The District reviewed the 2021 Everett pass thru and was able to lower it. The total 2020-21 pass thru cost increases (\$5.70 for Everett and \$2.35 for Alderwood) will be in effect for the second half of this year. The reduction in the Everett amount from \$8.15 to \$5.70 represents significant savings for the District and customers in the Everett basin.

In addition, the District portion of the costs have increased, and rates need to be adjusted to remain in balance. An increase in the District portion would be applied the same to both basins. After review and discussion, the Board’s preferred scenario brings sewer into balance for 2021 and spreads the District portion increases over the remaining five years. Volume rates on commercial, industrial and schools also increase a proportionate amount. The equity adjustments for sewer are not as significant because sewer is charged by ERU, not meter size.

SEWER Rate SCEN. B RECOMMENDED: Spread District portion increase over 2021-2025							
Monthly Sewer Rates		Everett	AWWD	2022	2023	2024	2025
Current Monthly Rate		\$ 58.25	\$ 57.65				
Pass thru (delayed '20 + '21)		\$ 5.70	\$ 2.35	TBD	TBD	TBD	TBD
District		\$ 2.50	\$ 2.50	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00
Estimated Jul-Dec 2021 Rate		\$ 66.45	\$ 62.50				
Estimated Total Sewer Expense	\$ 16,349,200	SCEN B:	Over/(Under)				
Less: Non-rate revenue	\$ (458,000)						
Less: Reduction in EV Pass-Thru*	\$ (253,000)						
Total Rate Revenue Requirement	\$ 15,638,200						
Estimated Sewer Rate Revenue		\$ 15,689,105	\$ 50,905				

**sewer treatment costs reduced to reflect lower Everett Pass-Thru (from \$8.15 to \$5.70)*

The rate model estimates the total sewer expenses for 2021 at \$16,349,200. Non-rate revenue from permits, interest income, and miscellaneous operating revenue are deducted. A reduction was made based on new information on the pass thru costs to match the revised pass thru charge. The Total Rate Revenue Requirement of \$15,638,200 reflects the target amount to be collected from customer rates for balanced revenue and expenditures. The recommended rates are estimated to generate \$15,689,100, or \$50,900 over the target. Of course, the actual amount of revenue will depend on sewer customer patterns.

WATER and SEWER GFC’s – General Facilities Charges were updated effective January 2021. GFC’s are paid by new and upsized connections for the right to connect to the system. This revenue is used to pay for capital improvements. The rate study included the 2020 General Facilities Charge update based on recent water and sewer comprehensive plans and was summarized in the 12/7/20 GFC Final Report.



SIX-YEAR CAPITAL IMPROVEMENT PLANS (CIP)

Water CIP – The six-year Water CIP planned for 2020-2025 totals \$7,743,000. The CIP is planned to be paid for with a combination of rates, reserves and GFC’s. For the first half of the period, specific main replacement projects may be listed. In 2023, a main replacement program is shown where the District will determine the highest priority segments to complete each year. These planning level cost estimates are based on the 2017/18 Water Comprehensive Plan. Those estimates have been updated where new information is available, and construction cost escalation of 5% per year was added after 2022. The cost estimates will be refined during design and will depend on conditions in the local area and industry when going to bid.

WATER CAPITAL IMPROVEMENTS	2020	2021	2022	2023	2024	2025
Headquarters Remodel Project						
Reservoir No. 3 Improvement Project						
Annual Valve Adjustments	35,000	150,000	100,000	53,000	56,000	59,000
Water GFC & Rate Study	10,000	40,000				
Seattle Hill Road Water and Sewer Phase II						
Site Security Upgrades	-	40,000	40,000	42,000	44,000	46,000
Asset Management System						
131st Waterline Replacement	292,174	65,000				
Financial Management System			125,000			
485 Zone Pressure Monitoring	-	25,000	25,000	26,000	27,000	28,000
Silver Acres Intertie/Relocate Master Meter	60,000	350,000				
Developer Participation Projects		280,000	53,000	56,000	59,000	62,000
Annual Main Replacement			-	1,584,000	1,663,000	1,746,000
CWSA - Reservoir Electrical Maintenance		201,525				
Chlorine Boosters, Reservoir 3		125,000				
Chlorine Boosters, Reservoir 4		125,000				
SnoCo - 43rd Ave SE/Sunset Rd		50,000				
Total Six-Year Water CIP	397,174	1,451,525	343,000	1,761,000	1,849,000	1,941,000
Water CIP 2020-2025	7,742,699					

Sewer CIP – The six-year Sewer CIP planned for 2020-2025 totals \$28,523,000. The CIP is planned to be paid for with a combination of rates, reserves and GFC’s. These planning level cost estimates were included in the 2017/18 Sewer Comprehensive Plan. Those estimates have been updated where new information is available, and construction cost escalation of 5% per year was added after 2022. The cost estimates will be refined during design and will depend on conditions in the local area and industry when going to bid.

The contract with City of Everett for wastewater treatment requires a 16% contribution to capital improvements. Everett is planning on a costly capacity expansion and provides planning estimates on a multi-year basis for SLWSD planning, shown in the lower section of the table. The sewer reserves are sufficient to meet the 6-year schedule, with rates and GFC’s. If needed, the District has access to the bond market and is in good financial health to receive preferred terms.

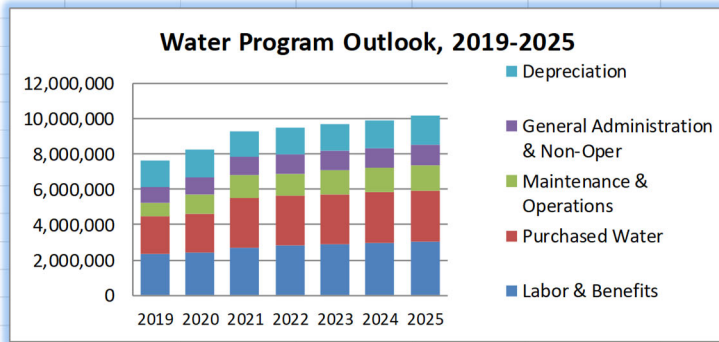


SEWER CAPITAL IMPROVEMENTS	2020	2021	2022	2023	2024	2025
District Sewer Projects						
Headquarters Remodel Project						
Waldenwood Lift Station	4,734,601	313,764				
Lift Station #3 Modifications						
Annual Manhole Adjustments	30,000	150,000	100,000	79,000	83,000	87,000
Security Upgrades	-	50,000	50,000			
Sewer GFC/Rate Study	11,000	39,000				
Generator Upgrades Project	10,000	15,000	-	26,000	27,000	28,000
Concrete Sewer Rehabilitation	3,508	850,000	50,000	53,000	56,000	59,000
Windsong Terrace Lift Station Abandonment	57,605	556,043				
Asset Management System						
Seattle Hill Road Water and Sewer Phase II						
General LS Improvements	-	50,000	50,000	21,000	22,000	23,000
Pioneer Trails Lift Station	75,000	2,000,000	337,000			
Thomas Lake Lift Station	50,000	2,000,000	83,000			
Lift Station #4 Improvements, Phase I	30,000	225,000				
Contract T V Inspection	100,000	100,000	100,000	105,000	110,000	116,000
Financial Management System		-	125,000			
Lowell Larimer I Lift Sta Improv		150,000	341,000			
Woodlands North Rehab				47,000	196,000	
Silver Firs Rehab				232,000	974,000	
Lift Sta #3 Force Main Replacement			500,000	3,000,000		
Highlands East LS Rehabilitation		150,000	600,000			
SnoCo - 43rd Ave SE / Sunset Rd		50,000				
Developer Participation - Brasswood		400,000				
Developer Participation - Highland Park TH		250,000				
Everett Sewer @ SLWSD Share 16%						
WPCF Capacity Expansion - Phase C 2 & 3	-	-	-	320,000	2,144,000	2,144,000
WPCF Facilities Plan		-	-	800,000		
WPCF North Chlorine Bldg Repl. w/ Fen Proje	-	-	16,000			
WPCF Trickling Filter Media		224,000	184,000			
WPCF Lagoon Capacity Expansion					2,560,000	
Total Six-Year Sewer CIP	5,101,714	7,572,807	2,536,000	4,683,000	6,172,000	2,457,000
Sewer CIP 2020-2025	28,522,521					



APPENDIX - MODEL

Silver Lake W/S District	The yellow line for Water has been down for several years and beginning 2021 has no funding for depreciation.							
Water/Sewer Utility Rate Study	CIP is funded with dep'r, GFC's and reserves. CIP delayed to fit within available resources.							
Prepared by KI&A	Updated with 2019 & 2020 actuals, 2021 based on District Forecast							
Water Utility	Base Year						Rate Study Final, 5/2021	
Financial Outlook	2019	2020	2021	2022	2023	2024	2025	Comments
Assumptions	355 MF pd GFC, begin rates '21							
Growth - New ERU's per year	110	540	190	150	150	150	150	or Equiv. Residential Units (ERU)
Cost escalation - general			3.0%	3.0%	3.0%	3.0%	3.0%	
Cost escalation - purchased water			0.0%	0.0%	0.0%	0.0%	0.0%	actual cost to be passed thru
Residential Monthly Water Rate	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	avg SFR 6 ccf winter/9 ccf summer
Water General Facility Charge - GFC	\$3,540	\$3,540	\$4,028	\$4,028	\$4,028	\$4,028	\$4,028	Residential 5/8" Meter
Water Utility								
Revenue	added 355 MF							
Water Sales	6,217,420	6,281,333	6,438,300	6,481,500	6,524,700	6,567,900	6,611,100	adds # new ERU x rate x 12 mos
Misc. Operating Revenue	356,429	347,302	347,300	347,300	347,300	347,300	347,300	flat
Permits	28,730	42,670	42,700	36,000	36,000	36,000	36,000	# new ERU x \$240
Interest Income	154,026	38,714	38,714	38,714	38,714	38,714	38,714	flat
Water Meter Connections	0	-	-	-	-	-	-	new homes x meter fee
Subtotal W Operating Revenues	6,756,605	6,710,019	6,867,014	6,903,514	6,946,714	6,989,914	7,033,114	
<i>Revenue excludes Non-Operating Income & New Connection Fees - available for system improvements</i>								
Expenditures	Dist. Forecast							
Labor & Benefits	2,331,611	2,414,853	2,719,600	2,801,200	2,885,200	2,971,800	3,061,000	by general cost escalation
Purchased Water	2,173,307	2,167,640	2,798,700	2,814,200	2,829,700	2,845,200	2,860,700	incr. for new cust + will be pass-thru
Maintenance & Operations	727,888	1,117,032	1,255,100	1,292,800	1,331,600	1,371,500	1,412,600	by general cost escalation
General Administration & Non-Oper	884,762	976,387	1,043,100	1,074,400	1,106,600	1,139,800	1,174,000	by general cost escalation
Depreciation	1,500,000	1,560,000	1,453,400	1,497,000	1,541,900	1,588,200	1,635,800	by general cost escalation
Subtotal Expenditures	7,617,568	8,235,912	9,269,900	9,479,600	9,695,000	9,916,500	10,144,100	
Increase/(use) of Reserves	(860,963)	(1,525,893)	(2,402,886)	(2,576,086)	(2,748,286)	(2,926,586)	(3,110,986)	Available for CIP





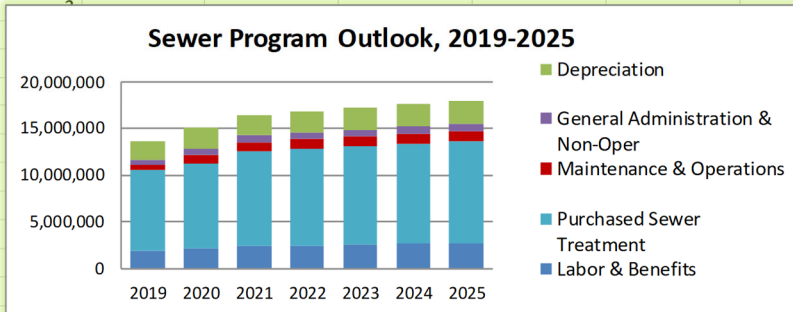
SIX-YEAR CAPITAL IMPROVEMENTS - ¹	2019	2020	2021	2022	2023	2024	2025	Rate Study Final, 5/2021
Headquarters Remodel Project	2,655,793							
Reservoir No. 3 Improvement Project	3,567,868							
Annual Valve Adjustments		35,000	150,000	100,000	53,000	56,000	59,000	
Water GFC & Rate Study	25,000	10,000	40,000					
Seattle Hill Road Water and Sewer Phas	132,214							
Site Security Upgrades		-	40,000	40,000	42,000	44,000	46,000	
Master Meter #2								\$180k deferred to build up reserves
Asset Management System	124,536							
131st Waterline Replacement		292,174	65,000					
156th Street SE Main								Deferred until Sno Co proceeds \$1M
Silver Crest Drive Water Main Replacement								Deferred until needed & build up reserv
9th Drive SE Water Main Replacement								Would incl w larger Silver Acres area plan
Reservoir No. 5 and Booster Stations								Deferred until further notice & build up
Financial Management System				125,000				Delayed from 2021
485 Zone Pressure Monitoring		-	25,000	25,000	26,000	27,000	28,000	reduced in scope by ops staff
10th Street Drive SE Water Main Replacement								Would incl w larger Silver Acres area plan
Silver Acres Intertie/Relocate Master Meter		60,000	350,000					
Developer Participation Projects			280,000	53,000	56,000	59,000	62,000	Bertrand SP, Highland Pk TH, Oakwood C
Annual Main Replacement				-	1,584,000	1,663,000	1,746,000	Deferred until needed or DE action to bu
CWSA - Reservoir Electrical Maintenance			201,525					SLWSD share of \$750k (26.87%)
Chlorine Boosters, Reservoir 3			125,000					
Chlorine Boosters, Reservoir 4			125,000					
SnoCo - 43rd Ave SE/Sunset Rd			50,000					
Total Six-Year CIP	6,505,411	397,174	1,451,525	343,000	1,761,000	1,849,000	1,941,000	
CIP Funding Sources - W								
Est. CIP Funding Available	1,415,777	397,174	2,876,615	343,000	1,761,000	1,849,000	1,898,064	Annual Dep'r - Debt Pymt + Conn Fees
Funded by Reserves	5,089,634	-	(1,425,090)	-	-	-	42,936	
Total CIP Funding Sources - W	6,505,411	397,174	1,451,525	343,000	1,761,000	1,849,000	1,941,000	



Silver Lake W/S District	SCEN. D: Lower increase on Base - Equity			Monthly	Consumption per CCF		
Water/Sewer Utility Rate Study	Resulting from Larger Meter Adjustments			Base	Winter	Summer	
Prepared by K&A	Balanced		Existing 2020	\$ 7.60	\$ 2.15	\$ 2.60	
Recommended Rates	**purch wtr exp adjusted		Pass Thru	\$ -	\$ 0.05	\$ 0.05	
with equity adjustments			District	\$ 7.00	\$ 0.75	\$ 0.90	
			2021 Rate	\$ 14.60	\$ 2.95	\$ 3.55	
WATER SERVICE RATES	2021	CONSUMPTION		REVENUE			TOTAL
Customer Class	Count	Winter CCF per Year	Summer CCF per Year	Monthly Base Rate	Winter Per CCF*	Summer Per CCF*	ANNUAL 2021
Residential							
Single Family Residential	16,925	601,348	811,978	\$ 2,372,885	\$ 1,533,437	\$ 2,880,067	\$ 6,786,389
Low Income Senior/Disabled	169	4,177	5,909	\$ 11,805	\$ 10,651	\$ 20,959	\$ 43,415
Multi-Family/Duplex	3,481	74,303	92,595	\$ 470,248	\$ 189,473	\$ 328,432	\$ 988,153
Single Family Res. Outside District	39	1,395	1,962	\$ 6,835	\$ 4,454	\$ 8,699	\$ 19,987
Schools							
Schools	14	765	5,959	\$ 1,963	\$ 1,951	\$ 21,136	\$ 25,050
Commercial & Irrigation							
5/8" Meter (now 5/8-1")	257	52,456	12,467	\$ 36,031	\$ 133,763	\$ 44,220	\$ 214,014
1" Meter	176	see 5/8"	see 5/8"	\$ 51,656			\$ 51,656
1.5" Meter	91	29,110	8,678	\$ 56,648	\$ 74,231	\$ 30,781	\$ 161,659
2" Meter	69	28,490	17,049	\$ 68,041	\$ 72,650	\$ 60,472	\$ 201,163
3" Meter	5	11,408	9,075	\$ 9,408	\$ 29,090	\$ 32,189	\$ 70,687
4" Meter	1	see 3"	see 3"				
6" Meter	1	see 3"	see 3"				
8" Meter	-	-	-	\$ -	\$ -	\$ -	\$ -
Master Meter 8"	1	33	-	\$ 3,400	\$ 105	\$ -	\$ 3,505
Fire Sprinkler Meter							
Fire 5/8" Meter (now 5/8-1")	69	1	35	\$ 6,619	\$ 3	\$ 124	\$ 6,746
Fire 1" Meter	100			\$ 14,563	\$ -	\$ -	\$ 14,563
Fire 1.5" Meter	30	-	1	\$ 9,480	\$ -	\$ 4	\$ 9,484
Fire 2" Meter	64	3	1	\$ 31,905	\$ 8	\$ 4	\$ 31,916
Fire 3" Meter	1	-	1	\$ 956	\$ -	\$ 4	\$ 959
Fire 4" Meter	10			\$ 14,342	\$ -	\$ -	\$ 14,342
Fire 6" Meter	5			\$ 13,152	\$ -	\$ -	\$ 13,152
Fire 8" Meter	2	-	-	\$ 9,761	\$ -	\$ -	\$ 9,761
Hydrant 1"	18	3,812	1,077	\$ 5,283	\$ 9,721	\$ 3,820	\$ 18,824
Subtotal Existing Customers	21,528	807,301	966,787	\$ 3,194,979	\$ 2,059,535	\$ 3,430,911	\$ 8,685,425
NEW CONNECTIONS							
Single Family 5/8" Meter	146	1,729	1,167	\$ 20,469	\$ 4,409	\$ 4,139	\$ 29,017
Multi-Family	355	2,526	1,574	\$ 47,957	\$ 6,441	\$ 5,583	\$ 59,981
Duplex	4	28	18	\$ 540	\$ 71	\$ 64	\$ 676
Commercial/Irrigation 2" Meter	6	826	247	\$ 5,917	\$ 2,106	\$ 876	\$ 8,899
Fire Meter 5/8"	25	715	5,402	\$ 2,398	\$ 1,823	\$ 19,161	\$ 23,382
Fire Meter 4"	6	-	1	\$ 8,605	\$ -	\$ 4	\$ 8,609
Fire Meter 6"	3	-	-	\$ 7,891	\$ -	\$ -	\$ 7,891
Subtotal New Connections	545	5,824	8,409	\$ 93,777	\$ 14,851	\$ 29,827	\$ 138,455.01
TOTAL ESTIMATE 2021	22,073	813,125	975,196	\$ 3,288,756	\$ 2,074,386	\$ 3,460,737	\$ 8,823,880
*CCF = 100 cubic feet or 748 gallons of metered water usage				Over/Under Rate Requirement			\$ 51,694
Estimated Total Water Expense							\$ 9,269,900
Less: Non-rate revenue							\$ (428,714)
Less: Reduction in Pass-Thru**				**purchased water costs reduced for lower pass-thru			\$ (69,000)
Total Rate Revenue Requirement							\$ 8,772,186



Silver Lake W/S District	The yellow line for Sewer has been up, but beginning 2021 the outlook shows the rates need to be increased to meet expenses.							
Water/Sewer Utility Rate Study								
<i>Prepared by KI&A</i>	Updated with 2019 & 2020 actuals, 2021 based on District Forecast							
Silver Lake Sewer Utility	Base Year						Rate Study Final, 5/2021	
Financial Outlook	2019	2020	2021	2022	2023	2024	2025	Comments
Assumptions	355 MF pd GFC, begin rates '21							
Growth - New ERU's per year	122	783	281	356	356	356	356	
Cost escalation - general	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	
Cost escalation - sewer treatment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	actual cost to be passed thru
Residential Monthly Sewer Rate	\$58.00	\$58.00	\$58.00	\$58.00	\$58.00	\$58.00	\$58.00	flat rate per dwelling unit
Sewer GFC - Everett (expected growth)	\$4,595	\$4,595	\$6,865	\$9,135	\$9,135	\$9,135	\$9,135	
Revenue ERU's (Sales/rate/12 mos)	20,850	21,185	21,466	21,822	22,178	22,534	22,890	
Sewer Utility								
Revenue	need to add 355 MF?							
Sewer Sales (existing rates)	14,511,733	14,744,846	14,940,400	15,188,200	15,436,000	15,683,800	15,931,600	adds # new ERU's x rate x 12 mos
Misc. Oper Rev.	128,849	137,946	137,900	137,900	137,900	137,900	137,900	flat
Permits	43,296	76,464	76,500	76,500	76,500	76,500	76,500	flat
Interest Income	862,073	243,645	243,600	243,600	243,600	243,600	243,600	flat
Subtotal Sewer Revenues	15,545,951	15,202,901	15,398,400	15,646,200	15,894,000	16,141,800	16,389,600	
<i>Revenue excludes Non-Operating Income & New Connection Fees - available for system improvements</i>								
Expenditures	Dist. Forecast							
Labor & Benefits	1,944,004	2,149,566	2,420,900	2,493,500	2,568,300	2,645,300	2,724,700	by general cost escalation
Purchased Sewer Treatment	8,651,627	9,110,372	10,079,900	10,274,000	10,468,100	10,662,200	10,856,300	incr. for new cust + will be pass-thru
Maintenance & Operations	477,574	885,513	994,900	1,024,700	1,055,400	1,087,100	1,119,700	by general cost escalation
General Administration & Non-Oper	511,062	661,650	706,900	728,100	749,900	772,400	795,600	by general cost escalation
Depreciation	1,980,000	2,304,000	2,146,600	2,211,000	2,277,300	2,345,600	2,416,000	by general cost escalation
Add'l Needed for CIP								assumes use of reserves for cip
Subtotal Expenditures	13,564,267	15,111,101	16,349,200	16,731,300	17,119,000	17,512,600	17,912,300	
Increase/(use) of Reserves	1,981,684	91,800	(950,800)	(1,085,100)	(1,225,000)	(1,370,800)	(1,522,700)	Available for CIP



Current Single Fam Res Mo. Rate:	
Everett Basin	\$58.25
Alderwood Basin	\$57.65



SIX-YEAR CAPITAL IMPROVEMENTS - S	2019	2020	2021	2022	2023	2024	2025	Rate Study Final, 5/2021
District Sewer Projects								
Headquarters Remodel Project	2,269,403							
Waldenwood Lift Station	451,525	4,734,601	313,764					
Lift Station #3 Modifications	78,850							
Annual Manhole Adjustments		30,000	150,000	100,000	79,000	83,000	87,000	catch up on deferred adj in 2021
Security Upgrades	16,433	-	50,000	50,000				expect continued work in 2022 & 2021
Sewer GFC/Rate Study	25,000	11,000	39,000					expected completed early 2021
Generator Upgrades Project		10,000	15,000	-	26,000	27,000	28,000	propane gen. being repl. w diesel gen. o
Concrete Sewer Rehabilitation		3,508	850,000	50,000	53,000	56,000	59,000	2021 constr per AWWD ILA, 22 design fro
Windsong Terrace Lift Station Abandon	48,370	57,605	556,043					
Asset Management System	50,000							
Seattle Hill Road Water and Sewer Phas	131,230							
General LS Improvements		-	50,000	50,000	21,000	22,000	23,000	G&O scope of work & work in field
Pioneer Trails Lift Station		75,000	2,000,000	337,000				final design w Muraysmith, constr in 2021
Thomas Lake Lift Station		50,000	2,000,000	83,000				final design w G&O, constr in 2021
Lift Station #4 Improvements, Phase I		30,000	225,000					generator repl design w BHC, constr in 20
Contract T V Inspection		100,000	100,000	100,000	105,000	110,000	116,000	2020 should be complete by end of 2020
Financial Management System			-	125,000				delayed 2021
Lowell Larimer I Lift Sta Improv			150,000	341,000				in comp plan for 2021. New est. at \$550
Woodlands North Rehab					47,000	196,000		defer to 2023 for design, constr in 2024
Silver Firs Rehab					232,000	974,000		defer to 2023 for design, constr in 2024
Lift Sta #3 Force Main Replacement				500,000	3,000,000			prior to SnoCo overlay, Project LS-10 in cc
Highlands East LS Rehabilitation			150,000	600,000				funding w special conn fee Glacier View
SnoCo - 43rd Ave SE / Sunset Rd			50,000					potential relocation of w/s mains, scope
Developer Participation - Brasswood			400,000					pipe busting on 132nd Pl SE for Sector 7 c
Developer Participation - Highland Park TH			250,000					uncertain costs, part of project LS-10 in cc
Everett Sewer @ SLWSD Share 16%								
WPCF Capacity Expansion - Phase C 2 &	-	-	-	-	320,000	2,144,000	2,144,000	Total est. 88.8M x 16% SLWSD = \$14.2M
WPCF Facilities Plan					800,000			
WPCF North Chlorine Bldg Repl. w/ Fen Project				16,000				
WPCF Trickling Filter Media			224,000	184,000				
WPCF Lagoon Capacity Expansion						2,560,000		
Total Six-Year CIP	3,070,811	5,101,714	7,572,807	2,536,000	4,683,000	6,172,000	2,457,000	
Subtotal District	3,070,811	5,101,714	7,348,807	2,336,000	3,563,000	1,468,000	313,000	
Subtotal Everett	-	-	224,000	200,000	1,120,000	4,704,000	2,144,000	
CIP Funding Sources - S								
Est. CIP Funding Available	2,771,446	3,095,446	2,938,046	2,536,000	3,672,200	3,000,038	2,457,000	
Funded by Reserves	299,365	2,006,268	4,634,761	-	1,010,800	3,171,962	-	
Total CIP Funding Sources - S	3,070,811	5,101,714	7,572,807	2,536,000	4,683,000	6,172,000	2,457,000	
Use of Reserves in 2021-2025			8,817,523	<i>Compare to Year End 2020 Sewer Cash & Investments \$38 M - Everett future investment</i>				



Silver Lake W/S District		Everett	AWWD	Revised 2021 pass-thru			Everett	AWWD	SCEN. B: RESERVES FUND CIP IN EXCESS OF DEPRECIATION			
Water/Sewer Utility Rate Study		\$ 55.45	\$ 56.45				\$ 58.25	\$ 57.65	***swr treat expense reduced for pass-thru			
Prepared by KI&A		Pass thru					\$ 5.70	\$ 2.35				
Recommended Rates		District		Incl. in Base:			\$ 2.50	\$ 2.50	Incl. in Base:			
				7.5			\$ 66.45	\$ 62.50	7.5			
SEWER SERVICE RATES	2021	JAN-JUN 2021					JUL-DEC 2021					TOTAL ANNUAL 2021
Customer Class	Count	Consumption	Monthly Base Rate	Usage per CCF*	Jan-Jun Base Charges	Jan-Jun Cons. Chg.	Monthly Base Rate	Usage per CCF*	Jul-Dec Base Charges	Jul-Dec Cons. Charges		
EVERETT BASIN												
Residential												
Single Family Residential	13,334	1,115,723	\$ 58.25	N/A	\$ 4,660,233		\$ 66.45	N/A	\$ 5,316,266		\$ 9,976,499	
Low Income Senior Citizen	138	8,170	\$ 43.75	N/A	\$ 36,225		\$ 49.91	N/A	\$ 41,325		\$ 77,550	
Multi-Family	1,904	97,640	\$ 55.34	N/A	\$ 632,204		\$ 63.13	N/A	\$ 721,197		\$ 1,353,401	
Commercial, Schools, Industrial												
Commercial	116	39,377	\$ 58.25	\$ 7.77	\$ 40,542	\$ 112,420	\$ 66.45	\$ 8.86	\$ 46,249	\$ 128,191	\$ 327,402	
Industrial	1	5,800	\$ 61.75	\$ 8.23	\$ 371	\$ 23,497	\$ 70.44	\$ 9.39	\$ 423	\$ 26,808	\$ 51,098	
Schools	13	4,752	\$ 58.25	\$ 7.77	\$ 4,544	\$ 13,916	\$ 66.45	\$ 8.86	\$ 5,183	\$ 15,868	\$ 39,511	
ALDERWOOD BASIN												
AWWD Residential												
Single Family Residential	2,206	190,908	\$ 57.65	N/A	\$ 763,055		\$ 62.50	N/A	\$ 827,250		\$ 1,590,305	
Single Family Res. - Outside District	39	3,357	\$ 72.06	N/A	\$ 16,862		\$ 78.13	N/A	\$ 18,282		\$ 35,144	
Low Income Senior Citizen	16	1,153	\$ 43.24	N/A	\$ 4,151		\$ 46.88	N/A	\$ 4,500		\$ 8,652	
Multi-Family (Duplex)	1,693	79,884	\$ 54.77	N/A	\$ 556,354		\$ 59.38	N/A	\$ 603,182		\$ 1,159,536	
AWWD Commercial, Schools, Intertie												
Commercial	46	22,348	\$ 57.65	\$ 7.69	\$ 15,911	\$ 70,010	\$ 62.50	\$ 8.33	\$ 17,250	\$ 75,836	\$ 179,007	
Schools	5	2,206	\$ 57.65	\$ 7.69	\$ 1,730	\$ 6,752	\$ 62.50	\$ 8.33	\$ 1,875	\$ 7,314	\$ 17,670	
Intertie	1,011	-	\$ 2.88	N/A	\$ 17,470		\$ 3.13	N/A	\$ 18,987		\$ 36,457	
CROSS VALLEY Residential (Ev)												
Single Family Residential	649	-	\$ 68.15	N/A	\$ 265,376		\$ 77.75	N/A	\$ 302,759		\$ 568,135	
Multi-Family	10	-	\$ 64.74	N/A	\$ 3,884		\$ 73.86	N/A	\$ 4,432		\$ 8,316	
Subtotal Existing Customers	21,181	1,571,318			\$ 7,018,912	\$ 226,595			\$ 7,929,160	\$ 254,018	\$ 15,428,684	
NEW CONNECTIONS												
Everett Single Family	147	12,300					\$ 66.45	N/A	\$ 58,609		\$ 58,609	
Everett Multifamily (Duplex)	355	18,205					\$ 63.13	N/A	\$ 134,467		\$ 134,467	
Everett Duplex	4	205					\$ 63.13	N/A	\$ 1,515		\$ 1,515	
Everett Commercial	5	1,697					\$ 66.45	\$ 8.86	\$ 1,994	\$ 5,524	\$ 7,518	
AWWD Single Family	-	-					\$ 62.50	N/A	\$ -		\$ -	
Cross Valley Residential	125	-					\$ 77.75	N/A	\$ 58,313		\$ 58,313	
Subtotal New Connections	636	32,407							\$ 254,897	\$ 5,524	\$ 260,421	
TOTAL ESTIMATE 2021	21,817	1,603,725			\$ 7,018,912	\$ 226,595			\$ 8,184,057	\$ 259,542	\$ 15,689,105	
*CCF = 100 cubic feet or 748 gallons of metered water usage											Over/Under Rate Requirement \$ 50,905	
Estimated Total Sewer Expense											\$ 16,349,200	
Less: Non-rate revenue											\$ (458,000)	
Less: Reduction in EV Pass-Thru***											\$ (253,000)	
Total Rate Revenue Requirement											\$ 15,638,200	



Key Rate Study Assumptions							
Updated for 2019 & 2020 Actual revenue & expenditures							
Updated with 2021 Forecasted expenses and CIP							
2021 revenue projected by adding (new customers * existing rate * 12) to 2020 revenue							
Rate model assumes depreciation is funded with rates & operating income, and is available for debt principal & CIP (interest on debt in admin. expenses)							
This outlook assumes additional CIP will be funded with reserves							
Rate model shows impact on rates to have balanced revenue & expenditures for each year.							
RECOMMENDED RATE SCENARIOS							
Balanced revenue & expenditures for operations including depreciation							
Updated for adjustments to rate structure							
- Meters larger than 5/8" have Base rates per AWWA Meter Ratios							
- Multifamily @ 95% of Single Family Residential per dwelling unit							
"Pass-thru" Portion will be refined for actual impacts by District each year (2021 to be refined when actual impact is known)							
"District Portion" is the focus of rate study							
SEWER Rate SCEN. B RECOMMENDED: Spread District portion increase over 2021-2025							
Monthly Sewer Rates		Everett	AWWD	2022	2023	2024	2025
Current Monthly Rate		\$ 58.25	\$ 57.65				
Pass thru (delayed '20 + '21)		\$ 5.70	\$ 2.35	TBD	TBD	TBD	TBD
District		\$ 2.50	\$ 2.50	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00
Estimated Jul-Dec 2021 Rate		\$ 66.45	\$ 62.50				
Estimated Total Sewer Expense	\$ 16,349,200	SCEN B:	Over/(Under)				
Less: Non-rate revenue	\$ (458,000)						
Less: Reduction in EV Pass-Thru*	\$ (253,000)						
Total Rate Revenue Requirement	\$ 15,638,200						
Estimated Sewer Rate Revenue		\$ 15,689,105	\$ 50,905				
<i>*sewer treatment costs reduced to reflect lower Everett Pass-Thru (from \$8.15 to \$5.70)</i>							
WATER Rate SCEN. D RECOMMENDED: Lower Base Increase by \$0.50 due to larger meter base by AWWA meter ratios							
Monthly Water Rates	2021 Base	Winter per ccf	Summer per ccf	2022 Base	2023 Base	2024 Base	2025 Base
Existing 2020	\$ 7.60	\$ 2.15	\$ 2.60				
Pass Thru	\$ -	\$ 0.05	\$ 0.05	TBD	TBD	TBD	TBD
District	\$ 7.00	\$ 0.75	\$ 0.90	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20
Estimated 2021 Rate	\$ 14.60	\$ 2.95	\$ 3.55				
Estimated Total Water Expense	\$ 9,269,900	SCEN. D:	Over/(Under)				
Less: Non-rate revenue	\$ (428,714)						
Less: Reduction in Pass-Thru*	\$ (69,000)						
Total Rate Revenue Requirement	\$ 8,772,186						
Estimated Water Rate Revenue		\$ 8,823,880	\$ 51,694				
<i>*purchased water costs reduced to reflect lower Pass-Thru (from \$0.10 to \$0.05 per ccf)</i>							