

**City of Kalama**  
**Water Rate Study**  
**Summary of the Water Revenue Requirement**  
**Exhibit 1**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>Revenues</b>											
Rate Revenues	\$1,618,420	\$1,650,788	\$1,683,804	\$1,717,480	\$1,751,829	\$1,786,866	\$1,822,603	\$1,859,055	\$1,896,237	\$1,934,161	\$1,972,845
Other Revenues	220,350	234,351	249,377	268,650	289,627	312,459	333,239	343,872	353,355	363,114	373,158
<b>Total Revenues</b>	<b>\$1,838,770</b>	<b>\$1,885,139</b>	<b>\$1,933,181</b>	<b>\$1,986,130</b>	<b>\$2,041,456</b>	<b>\$2,099,325</b>	<b>\$2,155,843</b>	<b>\$2,202,927</b>	<b>\$2,249,591</b>	<b>\$2,297,275</b>	<b>\$2,346,002</b>
<b>Expenses</b>											
Total Operations & Maintenance	\$1,078,500	\$1,113,365	\$1,149,370	\$1,186,552	\$1,224,951	\$1,264,607	\$1,305,562	\$1,347,857	\$1,391,539	\$1,436,653	\$1,483,246
Rate Funded Capital	55,000	125,000	425,000	410,000	100,000	20,000	210,000	325,000	400,000	500,000	600,000
Taxes & Transfers	484,500	501,476	525,047	553,189	583,327	615,624	646,124	666,616	686,245	706,468	727,301
Net Debt Service	219,701	237,935	19,321	221,526	761,581	1,045,239	1,045,239	1,045,239	1,045,239	1,045,239	1,045,239
Reserve Funding	1,068	24,946	63,306	38,349	(7,836)	(3,467)	2,736	(7,476)	14,324	16,939	25,694
<b>Total Revenue Requirement</b>	<b>\$1,838,770</b>	<b>\$2,002,722</b>	<b>\$2,182,045</b>	<b>\$2,409,617</b>	<b>\$2,662,024</b>	<b>\$2,942,003</b>	<b>\$3,209,660</b>	<b>\$3,377,237</b>	<b>\$3,537,347</b>	<b>\$3,705,298</b>	<b>\$3,881,480</b>
Bal. / (Def.) of Funds	\$0	(\$117,583)	(\$248,864)	(\$423,487)	(\$620,568)	(\$842,678)	(\$1,053,817)	(\$1,174,310)	(\$1,287,756)	(\$1,408,023)	(\$1,535,478)
Bal as a % of Rate Adj. Req'd	0.0%	7.5%	15.6%	26.0%	37.3%	49.7%	60.9%	66.5%	71.5%	76.7%	82.0%
<b>Proposed Rate Adjustment</b>	<b>0.0%</b>	<b>7.5%</b>	<b>7.5%</b>	<b>9.0%</b>	<b>9.0%</b>	<b>9.0%</b>	<b>7.5%</b>	<b>3.5%</b>	<b>3.0%</b>	<b>3.0%</b>	<b>3.0%</b>
Add'l Revenue with Rate Adj.	\$0	\$123,809	\$262,042	\$445,911	\$653,429	\$887,300	\$1,109,620	\$1,236,493	\$1,355,946	\$1,482,582	\$1,616,786
Bal. / (Def.) After Rate Adj.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Additional Rate Adjustment Required</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Debt Service Coverage Ratio (all debt)</b>											
Before Rate Adjustment	2.46	2.26	27.66	2.40	0.69	0.50	0.49	0.49	0.48	0.48	0.47
After Proposed Rate Adjustment	2.46	2.78	41.22	4.41	1.55	1.35	1.56	1.67	1.78	1.89	2.02
<b>Average Residential Customer Bill</b> (Current rates; 3/4" meter + 6 CCF)											
Customer Bill after Rate Adj. Proposed	\$23.60	\$25.37	\$27.27	\$29.73	\$32.40	\$35.32	\$37.97	\$39.30	\$40.48	\$41.69	\$42.94
<b>Total Reserve Funds</b>	<b>\$827,259</b>	<b>\$294,023</b>	<b>\$458,905</b>	<b>\$552,563</b>	<b>\$629,886</b>	<b>\$730,199</b>	<b>\$976,785</b>	<b>\$1,228,664</b>	<b>\$1,518,020</b>	<b>\$1,826,399</b>	<b>\$2,160,764</b>

City of Kalama  
 Water Rate Study  
 Escalations  
 Exhibit 2

	<i>Budgeted</i>	<i>Projected</i>										<i>Notes</i>
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
<b>Revenues</b>												
Res - Cust Growth	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Com - Cust Growth	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
All - Cust Growth	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Misc Revenues	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
<b>Expenses</b>												
Salary	Budget	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Benefits	Budget	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Medical Benefits	Budget	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
Materials & Supplies	Budget	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Equipment	Budget	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Miscellaneous	Budget	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Utilities	Budget	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Flat	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Rate Adjustment	0.0%	7.5%	7.5%	9.0%	9.0%	9.0%	7.5%	3.5%	3.0%	3.0%	3.0%	3.0%
Insurance	Budget	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
<b>Interest</b>												
	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
<b>New Debt Service</b>												
<i>Low Interest Loans</i>												
Term in Years	20	20	20	20	20	20	20	20	20	20	20	20
Rate	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%
<i>Revenue Bond</i>												
Term in Years	20	20	20	20	20	20	20	20	20	20	20	20
Rate	3.5%	3.8%	4.0%	4.2%	4.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%

	<i>Budgeted</i>	<i>Projected</i>										<i>Notes</i>
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
<b>Revenues</b>												
<b>Rate Revenues</b>												
Residential - Inside	\$223,965	\$228,444	\$233,013	\$237,673	\$242,427	\$247,275	\$252,221	\$257,265	\$262,410	\$267,659	\$273,012	As Res - Cust Growth
Residential - Outside	504,145	514,228	524,512	535,002	545,702	556,617	567,749	579,104	590,686	602,500	614,550	As Res - Cust Growth
Low Income - Inside	66,930	68,268	69,633	71,026	72,447	73,896	75,374	76,881	78,419	79,987	81,587	As Res - Cust Growth
Low Income - Outside	55,015	56,115	57,237	58,382	59,550	60,741	61,956	63,195	64,459	65,748	67,063	As Res - Cust Growth
Multi-Family - Inside	49,884	50,882	51,899	52,937	53,996	55,076	56,177	57,301	58,447	59,616	60,808	As Res - Cust Growth
Multi-Family - Outside	319	325	332	338	345	352	359	366	373	381	389	As Res - Cust Growth
Com / Ind - Inside	146,562	149,494	152,483	155,533	158,644	161,817	165,053	168,354	171,721	175,156	178,659	As Com - Cust Growth
Coml / Ind - Outside	571,601	583,033	594,693	606,587	618,719	631,093	643,715	656,590	669,721	683,116	696,778	As Com - Cust Growth
<b>Total Rate Revenues</b>	<b>\$1,618,420</b>	<b>\$1,650,788</b>	<b>\$1,683,804</b>	<b>\$1,717,480</b>	<b>\$1,751,829</b>	<b>\$1,786,866</b>	<b>\$1,822,603</b>	<b>\$1,859,055</b>	<b>\$1,896,237</b>	<b>\$1,934,161</b>	<b>\$1,972,845</b>	
<b>Other Revenues</b>												
Other Misc. Revenue	\$500	\$505	\$510	\$515	\$520	\$526	\$531	\$536	\$541	\$547	\$552	As Misc Revenues
Water Utility Tax	181,500	195,113	209,746	228,623	249,199	271,627	291,999	302,219	311,286	320,624	330,243	
Water - Other Sales Tax Collection	2,350	2,374	2,397	2,421	2,445	2,470	2,495	2,520	2,545	2,570	2,596	As Misc Revenues
Hydrant Permit Meter Deposits	5,000	5,050	5,101	5,152	5,203	5,255	5,308	5,361	5,414	5,468	5,523	As Misc Revenues
Engineering Serv - Reimbursement	500	505	510	515	520	526	531	536	541	547	552	As Misc Revenues
Sale of Surplus - Scrap Metal	500	505	510	515	520	526	531	536	541	547	552	As Misc Revenues
Water - Labor	10,000	10,100	10,201	10,303	10,406	10,510	10,615	10,721	10,829	10,937	11,046	As Misc Revenues
Water - Parts	20,000	20,200	20,402	20,606	20,812	21,020	21,230	21,443	21,657	21,874	22,092	As Misc Revenues
<b>Total Other Revenues</b>	<b>\$220,350</b>	<b>\$234,351</b>	<b>\$249,377</b>	<b>\$268,650</b>	<b>\$289,627</b>	<b>\$312,459</b>	<b>\$333,239</b>	<b>\$343,872</b>	<b>\$353,355</b>	<b>\$363,114</b>	<b>\$373,158</b>	
<b>Total Revenues</b>	<b>\$1,838,770</b>	<b>\$1,885,139</b>	<b>\$1,933,181</b>	<b>\$1,986,130</b>	<b>\$2,041,456</b>	<b>\$2,099,325</b>	<b>\$2,155,843</b>	<b>\$2,202,927</b>	<b>\$2,249,591</b>	<b>\$2,297,275</b>	<b>\$2,346,002</b>	

	<i>Budgeted</i>	<i>Projected</i>										<i>Notes</i>
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
<b>Expenses</b>												
<b>Operations &amp; Maintenance</b>												
Salaries - Admin. General	\$75,000	\$77,250	\$79,568	\$81,955	\$84,413	\$86,946	\$89,554	\$92,241	\$95,008	\$97,858	\$100,794	As Salary
Benefits - Admin.	32,000	33,120	34,279	35,479	36,721	38,006	39,336	40,713	42,138	43,613	45,139	As Benefits
Supplies	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610	2,688	As Materials & Supplies
Travel - Administrative	1,000	1,025	1,051	1,077	1,104	1,131	1,160	1,189	1,218	1,249	1,280	As Miscellaneous
Equipment Maintenance - Admin	13,000	13,520	14,061	14,623	15,208	15,816	16,449	17,107	17,791	18,503	19,243	As Equipment
Miscellaneous	6,000	6,150	6,304	6,461	6,623	6,788	6,958	7,132	7,310	7,493	7,681	As Miscellaneous
Salaries - Water / Maintenance	230,000	236,900	244,007	251,327	258,867	266,633	274,632	282,871	291,357	300,098	309,101	As Salary
Overtime Earnings	35,000	36,050	37,132	38,245	39,393	40,575	41,792	43,046	44,337	45,667	47,037	As Salary
Regular Benefits	135,000	139,725	144,615	149,677	154,916	160,338	165,949	171,758	177,769	183,991	190,431	As Benefits
Uniforms	2,500	2,575	2,652	2,732	2,814	2,898	2,985	3,075	3,167	3,262	3,360	As Materials & Supplies
Operating Supplies	10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048	13,439	As Materials & Supplies
Fuel Consumed	7,500	7,763	8,034	8,315	8,606	8,908	9,219	9,542	9,876	10,222	10,579	As Utilities
Inventory - Meters/Pipe/Fittings	65,000	66,950	68,959	71,027	73,158	75,353	77,613	79,942	82,340	84,810	87,355	As Materials & Supplies
Small Tools & Minor Equipment	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524	6,720	As Materials & Supplies
Equipment Rental	500	520	541	562	585	608	633	658	684	712	740	As Equipment
Repairs & Maintenance - Contracted	10,000	10,400	10,816	11,249	11,699	12,167	12,653	13,159	13,686	14,233	14,802	As Equipment
Equipment Maintenance	45,000	46,800	48,672	50,619	52,644	54,749	56,939	59,217	61,586	64,049	66,611	As Equipment
Vehicle Maintenance	5,000	5,200	5,408	5,624	5,849	6,083	6,327	6,580	6,843	7,117	7,401	As Equipment
Salaries - Water/Operations	68,000	70,040	72,141	74,305	76,535	78,831	81,196	83,631	86,140	88,725	91,386	As Salary
Overtime Earnings (2)	20,000	20,600	21,218	21,855	22,510	23,185	23,881	24,597	25,335	26,095	26,878	As Salary
Benefits	36,000	37,260	38,564	39,914	41,311	42,757	44,253	45,802	47,405	49,064	50,782	As Benefits
Operating Supplies - Chemicals	70,000	72,100	74,263	76,491	78,786	81,149	83,584	86,091	88,674	91,334	94,074	As Materials & Supplies
Other Professional Services	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	19,572	20,159	As Salary
Intergovernmental Professional Services	6,500	6,760	7,030	7,312	7,604	7,908	8,225	8,554	8,896	9,252	9,622	As Equipment
Electricity	112,000	115,920	119,977	124,176	128,523	133,021	137,677	142,495	147,483	152,645	157,987	As Utilities
Repairs & Maintenance	20,000	20,800	21,632	22,497	23,397	24,333	25,306	26,319	27,371	28,466	29,605	As Equipment
ON Call Pay	7,500	7,725	7,957	8,195	8,441	8,695	8,955	9,224	9,501	9,786	10,079	As Salary
Benefits (2)	3,500	3,605	3,713	3,825	3,939	4,057	4,179	4,305	4,434	4,567	4,704	As Salary
Office Computer Supplies	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610	2,688	As Salary
Office & Operating Supplies	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610	2,688	As Materials & Supplies
Engineering	500	515	530	546	563	580	597	615	633	652	672	As Materials & Supplies
Communications	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	19,572	20,159	As Salary
Travel	500	515	530	546	563	580	597	615	633	652	672	As Salary
Utilities	7,500	7,688	7,880	8,077	8,279	8,486	8,698	8,915	9,138	9,366	9,601	As Miscellaneous
Shop Maintenance	1,000	1,035	1,071	1,109	1,148	1,188	1,229	1,272	1,317	1,363	1,411	As Utilities
Miscellaneous & Training	7,000	7,175	7,354	7,538	7,727	7,920	8,118	8,321	8,529	8,742	8,961	As Miscellaneous
Hydrant Permit Meter Deposits	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524	6,720	As Materials & Supplies
<b>Total Operations &amp; Maintenance</b>	<b>\$1,078,500</b>	<b>\$1,113,365</b>	<b>\$1,149,370</b>	<b>\$1,186,552</b>	<b>\$1,224,951</b>	<b>\$1,264,607</b>	<b>\$1,305,562</b>	<b>\$1,347,857</b>	<b>\$1,391,539</b>	<b>\$1,436,653</b>	<b>\$1,483,246</b>	

	<i>Budgeted</i>		<i>Projected</i>									<i>Notes</i>
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
<b>Rate Funded Capital</b>	<b>\$55,000</b>	<b>\$125,000</b>	<b>\$425,000</b>	<b>\$410,000</b>	<b>\$100,000</b>	<b>\$20,000</b>	<b>\$210,000</b>	<b>\$325,000</b>	<b>\$400,000</b>	<b>\$500,000</b>	<b>\$600,000</b>	Est. Depreciation = \$420,000
<b>Taxes &amp; Transfers</b>												
Accounting Service Fees	\$95,000	\$97,850	\$100,786	\$103,809	\$106,923	\$110,131	\$113,435	\$116,838	\$120,343	\$123,953	\$127,672	As Salary
GF Water Utility Tax	99,000	106,425	114,407	124,703	135,927	148,160	159,272	164,847	169,792	174,886	180,133	Rate Adjustment
Water Utility Tax - GFCF	82,500	88,688	95,339	103,920	113,272	123,467	132,727	137,372	141,493	145,738	150,110	Rate Adjustment
Trsf. To 410 Equip Rsve PW	12,000	12,480	12,979	13,498	14,038	14,600	15,184	15,791	16,423	17,080	17,763	As Equipment
Trsf. To 410 Equip Rsve - WTP Equip. Repl.	0	0	0	0	0	0	0	0	0	0	0	As Equipment
Trsf. To 410 Equip. Reserv - Meter Repl.	30,000	31,200	32,448	33,746	35,096	36,500	37,960	39,478	41,057	42,699	44,407	As Equipment
Transfer - Benefit Reserve 107	4,000	4,140	4,285	4,435	4,590	4,751	4,917	5,089	5,267	5,452	5,642	As Benefits
Transfer To Audit #115	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610	2,688	As Salary
Transfer Out To 115 - Insurance	70,000	72,100	74,263	76,491	78,786	81,149	83,584	86,091	88,674	91,334	94,074	As Insurance
Department of Revenue	90,000	86,533	88,419	90,402	92,444	94,548	96,657	98,650	100,662	102,716	104,812	Rate @ 5.029% + Misc @ 1.5%
<b>Total Taxes &amp; Transfers</b>	<b>\$484,500</b>	<b>\$501,476</b>	<b>\$525,047</b>	<b>\$553,189</b>	<b>\$583,327</b>	<b>\$615,624</b>	<b>\$646,124</b>	<b>\$666,616</b>	<b>\$686,245</b>	<b>\$706,468</b>	<b>\$727,301</b>	
<b>Debt Service</b>												
PWTF/2001	\$219,701	\$218,614	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Exhibit 5
Additional SRF Loans	0	0	0	0	0	0	0	0	0	0	0	Calculated @ 2.3% for 20 yrs
Additional Revenue Bonds	0	19,321	19,321	221,526	761,581	1,045,239	1,045,239	1,045,239	1,045,239	1,045,239	1,045,239	Calculated @ 4.5% for 20 yrs
<b>Total Debt Service</b>	<b>\$219,701</b>	<b>\$237,935</b>	<b>\$19,321</b>	<b>\$221,526</b>	<b>\$761,581</b>	<b>\$1,045,239</b>	<b>\$1,045,239</b>	<b>\$1,045,239</b>	<b>\$1,045,239</b>	<b>\$1,045,239</b>	<b>\$1,045,239</b>	
Less Other Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Net Debt Service</b>	<b>\$219,701</b>	<b>\$237,935</b>	<b>\$19,321</b>	<b>\$221,526</b>	<b>\$761,581</b>	<b>\$1,045,239</b>	<b>\$1,045,239</b>	<b>\$1,045,239</b>	<b>\$1,045,239</b>	<b>\$1,045,239</b>	<b>\$1,045,239</b>	
<b>Reserve Funding</b>	<b>\$1,068</b>	<b>\$24,946</b>	<b>\$63,306</b>	<b>\$38,349</b>	<b>(\$7,836)</b>	<b>(\$3,467)</b>	<b>\$2,736</b>	<b>(\$7,476)</b>	<b>\$14,324</b>	<b>\$16,939</b>	<b>\$25,694</b>	
<b>Total Revenue Requirement</b>	<b>\$1,838,770</b>	<b>\$2,002,722</b>	<b>\$2,182,045</b>	<b>\$2,409,617</b>	<b>\$2,662,024</b>	<b>\$2,942,003</b>	<b>\$3,209,660</b>	<b>\$3,377,237</b>	<b>\$3,537,347</b>	<b>\$3,705,298</b>	<b>\$3,881,480</b>	
Bal. / (Def.) of Funds	\$0	(\$117,583)	(\$248,864)	(\$423,487)	(\$620,568)	(\$842,678)	(\$1,053,817)	(\$1,174,310)	(\$1,287,756)	(\$1,408,023)	(\$1,535,478)	
Additional Taxes	0	(6,226)	(13,178)	(22,425)	(32,861)	(44,622)	(55,803)	(62,183)	(68,191)	(74,559)	(81,308)	
	\$0	(\$123,809)	(\$262,042)	(\$445,911)	(\$653,429)	(\$887,300)	(\$1,109,620)	(\$1,236,493)	(\$1,355,946)	(\$1,482,582)	(\$1,616,786)	
Bal as a % of Rate Adj. Req'd	0.0%	7.5%	15.6%	26.0%	37.3%	49.7%	60.9%	66.5%	71.5%	76.7%	82.0%	
<b>Proposed Rate Adjustment</b>	<b>0.0%</b>	<b>7.5%</b>	<b>7.5%</b>	<b>9.0%</b>	<b>9.0%</b>	<b>9.0%</b>	<b>7.5%</b>	<b>3.5%</b>	<b>3.0%</b>	<b>3.0%</b>	<b>3.0%</b>	
Add'l Revenue with Rate Adj.	\$0	\$123,809	\$262,042	\$445,911	\$653,429	\$887,300	\$1,109,620	\$1,236,493	\$1,355,946	\$1,482,582	\$1,616,786	
Bal. / (Def.) After Rate Adj.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Add'l Rate Adj. Req'd</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	

	Budgeted		Projected									Notes
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
<b>Average Residential Customer Bill</b>	<b>\$23.60</b>	<i>(Current rates; 3/4" meter + 6 CCF)</i>										
Customer Bill after Rate Adj. Proposed	\$23.60	\$25.37	\$27.27	\$29.73	\$32.40	\$35.32	\$37.97	\$39.30	\$40.48	\$41.69	\$42.94	
Bill Difference - Monthly		1.77	1.90	2.45	2.68	2.92	2.65	1.33	1.18	1.21	1.25	
Cumulative Bill Difference		1.77	3.67	6.13	8.80	11.72	14.37	15.70	16.88	18.09	19.34	
<b>Debt Service Coverage Ratio (all debt)</b>												
Before Rate Adjustment	2.46	2.26	27.66	2.40	0.69	0.50	0.49	0.49	0.48	0.48	0.47	
After Proposed Rate Adjustment	2.46	2.78	41.22	4.41	1.55	1.35	1.56	1.67	1.78	1.89	2.02	
<b>Reserve Funds</b>												
<b>Total Beginning Balance</b>	<b>\$1,316,000</b>	<b>\$827,259</b>	<b>\$294,023</b>	<b>\$458,905</b>	<b>\$552,563</b>	<b>\$629,886</b>	<b>\$730,199</b>	<b>\$976,785</b>	<b>\$1,228,664</b>	<b>\$1,518,020</b>	<b>\$1,826,399</b>	
<b>Fund 401 - W / S Operating Fund</b>												
<b>Beginning Balance (50%)</b>	<b>\$110,000</b>	<b>\$112,179</b>	<b>\$144,785</b>	<b>\$223,482</b>	<b>\$287,098</b>	<b>\$315,244</b>	<b>\$359,963</b>	<b>\$422,687</b>	<b>\$482,169</b>	<b>\$570,330</b>	<b>\$668,446</b>	
Plus: Revenue	1,838,770	2,008,948	2,195,223	2,432,042	2,694,885	2,986,625	3,265,463	3,439,420	3,605,538	3,779,857	3,962,788	
Interest Earnings	1,111	1,434	2,213	2,843	3,121	3,564	4,185	4,774	5,647	6,618	7,754	
Less: To Fund 408 (Debt)	(219,701)	(237,935)	(19,321)	(221,526)	(761,581)	(1,045,239)	(1,045,239)	(1,045,239)	(1,045,239)	(1,045,239)	(1,045,239)	
Less: O&M	(1,078,500)	(1,113,365)	(1,149,370)	(1,186,552)	(1,224,951)	(1,264,607)	(1,305,562)	(1,347,857)	(1,391,539)	(1,436,653)	(1,483,246)	
Less: Rate-Funded Capital	(55,000)	(125,000)	(425,000)	(410,000)	(100,000)	(20,000)	(210,000)	(325,000)	(400,000)	(500,000)	(600,000)	
Less: Taxes & Transfers	(484,500)	(501,476)	(525,047)	(553,189)	(583,327)	(615,624)	(646,124)	(666,616)	(686,245)	(706,468)	(727,301)	
<b>Ending Balance</b>	<b>\$112,179</b>	<b>\$144,785</b>	<b>\$223,482</b>	<b>\$287,098</b>	<b>\$315,244</b>	<b>\$359,963</b>	<b>\$422,687</b>	<b>\$482,169</b>	<b>\$570,330</b>	<b>\$668,446</b>	<b>\$783,203</b>	
Target Minimum - 90 days O&M	\$266,000	\$275,000	\$283,000	\$293,000	\$302,000	\$312,000	\$322,000	\$332,000	\$343,000	\$354,000	\$366,000	
<b>Fund 408 - Water System Improvement Reserve</b>												
<b>Beginning Balance</b>	<b>\$750,000</b>	<b>\$611,050</b>	<b>\$51</b>	<b>\$230,763</b>	<b>\$213,041</b>	<b>\$212,068</b>	<b>\$215,026</b>	<b>\$343,662</b>	<b>\$478,133</b>	<b>\$618,589</b>	<b>\$765,184</b>	
Plus: Hookup Fees	200,000	204,000	208,080	212,242	216,486	220,816	225,232	229,737	234,332	239,019	243,799	
Plus: Additions	219,701	237,935	39,669	221,526	761,581	1,045,239	1,045,239	1,045,239	1,045,239	1,045,239	1,045,239	
Interest Earnings	6,050	1	2,285	2,109	2,100	2,129	3,403	4,734	6,125	7,576	9,090	
Less: Debt Service	(219,701)	(237,935)	(19,321)	(221,526)	(761,581)	(1,045,239)	(1,045,239)	(1,045,239)	(1,045,239)	(1,045,239)	(1,045,239)	
Less: Capital Projects	(345,000)	(815,000)	0	(232,073)	(219,559)	(219,987)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	
<b>Ending Balance</b>	<b>\$611,050</b>	<b>\$51</b>	<b>\$230,763</b>	<b>\$213,041</b>	<b>\$212,068</b>	<b>\$215,026</b>	<b>\$343,662</b>	<b>\$478,133</b>	<b>\$618,589</b>	<b>\$765,184</b>	<b>\$918,072</b>	
Target Minimum - Depreciation Expense	\$350,000	\$360,000	\$370,000	\$380,000	\$390,000	\$400,000	\$410,000	\$420,000	\$430,000	\$440,000	\$450,000	
<b>Fund 410 - Public Works Equipment Reserve</b>												
<b>Beginning Balance (50%)</b>	<b>\$116,000</b>	<b>\$104,030</b>	<b>\$149,187</b>	<b>\$4,660</b>	<b>\$52,424</b>	<b>\$102,573</b>	<b>\$155,210</b>	<b>\$210,436</b>	<b>\$268,363</b>	<b>\$329,101</b>	<b>\$392,769</b>	
Plus: Additions	12,000	12,480	12,979	13,498	14,038	14,600	15,184	15,791	16,423	17,080	17,763	
Plus: Transfer for WTP Equipment	0	0	0	0	0	0	0	0	0	0	0	
Plus: Transfer for Meter Replacement	30,000	31,200	32,448	33,746	35,096	36,500	37,960	39,478	41,057	42,699	44,407	
Interest	1,030	1,477	46	519	1,016	1,537	2,084	2,657	3,258	3,889	4,549	
Less: Capital Project Funding	(55,000)	0	(190,000)	0	0	0	0	0	0	0	0	
<b>Ending Balance</b>	<b>\$104,030</b>	<b>\$149,187</b>	<b>\$4,660</b>	<b>\$52,424</b>	<b>\$102,573</b>	<b>\$155,210</b>	<b>\$210,436</b>	<b>\$268,363</b>	<b>\$329,101</b>	<b>\$392,769</b>	<b>\$459,489</b>	
<b>Fund 420 - Water Improvement Reserve</b>												
<b>Beginning Balance</b>	<b>\$340,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
Plus: Additions	0	0	0	0	0	0	0	0	0	0	0	
Interest	0	0	0	0	0	0	0	0	0	0	0	
Less: Capital Project Funding	(340,000)	0	0	0	0	0	0	0	0	0	0	
<b>Ending Balance</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Total Ending Balance</b>	<b>\$827,259</b>	<b>\$294,023</b>	<b>\$458,905</b>	<b>\$552,563</b>	<b>\$629,886</b>	<b>\$730,199</b>	<b>\$976,785</b>	<b>\$1,228,664</b>	<b>\$1,518,020</b>	<b>\$1,826,399</b>	<b>\$2,160,764</b>	

City of Kalama  
Water Rate Study  
Capital Improvement Plan  
Exhibit 4

Inflation	2.7%
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Capital Improvement Projects	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total	Notes
<b>Funded Projects</b>													
Lower Green Mtn. Reservoir w/Booster Station	\$600,000	\$600,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,200,000	
Robb Rd Waterline Extension	0	330,000	0	0	0	0	0	0	0	0	0	330,000	
Purchase Property for 1 MG Reservoir	0	70,000	0	0	0	0	0	0	0	0	0	70,000	
Date Street Waterline Replacement	65,000	0	0	0	0	0	0	0	0	0	0	65,000	
Vactor Truck - 2110 PD	55,000	0	0	0	0	0	0	0	0	0	0	55,000	
N. Third Waterline - Fir to Holly	0	0	50,000	0	0	0	0	0	0	0	0	50,000	
Replace Vincent Rd Waterline	0	120,000	0	0	0	0	0	0	0	0	0	120,000	
<b>Unfunded Projects</b>													
Purchase New Service Vehicle - Heavy Duty	\$0	\$0	\$85,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$85,000	
Purchase New Trackhoe w/Trailer	0	0	120,000	0	0	0	0	0	0	0	0	120,000	
Replace Central Port Waterline	0	0	0	400,000	0	0	0	0	0	0	0	400,000	
Replace Ivy Street Waterline	0	0	0	100,000	0	0	0	0	0	0	0	100,000	
Build 1 MG Reservoir	0	0	250,000	2,250,000	0	0	0	0	0	0	0	2,500,000	
Intall Add'l Filter at WTP	0	0	0	500,000	4,000,000	0	0	0	0	0	0	4,500,000	
Replace Old Pacific HWY S Waterline	0	0	0	0	750,000	750,000	0	0	0	0	0	1,500,000	
Replace Cloverdale Waterlines	0	0	0	0	1,000,000	1,000,000	0	0	0	0	0	2,000,000	
Bore New 8" Main - T-Barge to WTP	0	0	0	0	1,500,000	0	0	0	0	0	0	1,500,000	
Replace Simmons Rd Reservoir w/PS	0	0	0	0	0	1,000,000	0	0	0	0	0	1,000,000	
Replace Jaeger Rd Waterline	0	0	0	0	0	250,000	0	0	0	0	0	250,000	
Replace East Frontage Rd Waterline	0	0	0	0	0	60,000	0	0	0	0	0	60,000	
Replace Waterlines in Modrow Rd/Westview	0	0	0	0	0	600,000	0	0	0	0	0	600,000	
<b>O&amp;M Budgeted</b>													
Improvement Projects	\$65,000	\$77,025	\$79,105	\$81,241	\$83,434	\$103,562	\$88,000	\$90,376	\$92,816	\$95,322	\$107,632	\$963,514	
Equipment	10,000	10,270	10,547	10,832	11,125	11,425	11,733	12,050	12,376	12,710	13,053	126,120	
<b>Total</b>	<b>\$795,000</b>	<b>\$1,207,295</b>	<b>\$594,652</b>	<b>\$3,342,073</b>	<b>\$7,344,559</b>	<b>\$3,774,987</b>	<b>\$99,734</b>	<b>\$102,426</b>	<b>\$105,192</b>	<b>\$108,032</b>	<b>\$120,685</b>	<b>\$17,594,634</b>	
Unidentified Future Capital Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$210,266	\$322,574	\$394,808	\$491,968	\$579,315	\$1,998,931	
Transfer to Cash Reserve	\$0	\$0	\$20,348	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,348	
<b>Total Capital Improvement Projects</b>	<b>\$795,000</b>	<b>\$1,207,295</b>	<b>\$615,000</b>	<b>\$3,342,073</b>	<b>\$7,344,559</b>	<b>\$3,774,987</b>	<b>\$310,000</b>	<b>\$425,000</b>	<b>\$500,000</b>	<b>\$600,000</b>	<b>\$700,000</b>	<b>\$19,613,913</b>	
<b>Less: Outside Funding Sources</b>													
Fund 401 - W / S Operating Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Fund 408 - Water Sys Improv. Reserve	345,000	815,000	0	232,073	219,559	219,987	100,000	100,000	100,000	100,000	100,000	2,331,619	
Fund 410 - Public Works Equipment Reserve	55,000	0	190,000	0	0	0	0	0	0	0	0	245,000	
Fund 420 - Water Improvement Reserve	340,000	0	0	0	0	0	0	0	0	0	0	340,000	
Grant	0	0	0	0	0	0	0	0	0	0	0	0	
Assumed New Low Interest Loan	0	0	0	0	0	0	0	0	0	0	0	0	
Additional Revenue Bonds	0	267,295	(0)	2,700,000	7,025,000	3,535,000	0	0	0	0	0	13,527,294	
<b>Total Funding Sources</b>	<b>\$740,000</b>	<b>\$1,082,295</b>	<b>\$190,000</b>	<b>\$2,932,073</b>	<b>\$7,244,559</b>	<b>\$3,754,987</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$16,443,913</b>	
<b>Rate Funded Capital</b>	<b>\$55,000</b>	<b>\$125,000</b>	<b>\$425,000</b>	<b>\$410,000</b>	<b>\$100,000</b>	<b>\$20,000</b>	<b>\$210,000</b>	<b>\$325,000</b>	<b>\$400,000</b>	<b>\$500,000</b>	<b>\$600,000</b>	<b>\$3,170,000</b>	

City of Kalama  
 Water Rate Study  
 Debt Schedule  
 Exhibit 5

	<b>PWTF/2001</b>	<b>Total</b>
2020	\$219,701	\$219,701
2021	218,614	218,614
2022	0	0
2023	0	0
2024	0	0
2025	0	0
2026	0	0
2027	0	0
2028	0	0
2029	0	0
2030	0	0
	<b>\$218,614 \$0</b>	<b>\$218,614</b>

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City of Kalama  
 Water Rate Study  
 Revenues at Present Rates  
 Exhibit 6

		Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total
<b>Residential - Inside</b>														
<b>Fixed Charge</b>	<b>Rate</b>													
5/8"	\$10.70	629	629	629	629	629	629	629	629	629	629	629	629	629
3/4"	10.70	303	303	303	303	303	303	303	303	303	303	303	303	303
1"	10.70	13	13	13	13	13	13	13	13	13	13	13	13	13
		<b>945</b>	<b>945</b>	<b>945</b>	<b>945</b>	<b>945</b>	<b>945</b>	<b>945</b>	<b>945</b>	<b>945</b>	<b>945</b>	<b>945</b>	<b>945</b>	<b>945</b>
<b>Volume Charge</b>	<b>\$ / CCF</b>													
All Usage	\$2.15	2,653	1,917	1,533	3,157	2,797	6,083	8,433	8,773	3,469	3,333	1,845	1,696	45,691
		<b>2,653</b>	<b>1,917</b>	<b>1,533</b>	<b>3,157</b>	<b>2,797</b>	<b>6,083</b>	<b>8,433</b>	<b>8,773</b>	<b>3,469</b>	<b>3,333</b>	<b>1,845</b>	<b>1,696</b>	<b>45,691</b>
<b>Revenues</b>														
Fixed Charge		\$10,112	\$10,112	\$10,112	\$10,112	\$10,112	\$10,112	\$10,112	\$10,112	\$10,112	\$10,112	\$10,112	\$10,112	\$121,338
Volume Charge		5,705	4,122	3,297	6,788	6,014	13,079	18,132	18,861	7,458	7,166	3,966	3,647	98,235
<b>Total Residential - Inside Revenues</b>		<b>\$15,816</b>	<b>\$14,233</b>	<b>\$13,408</b>	<b>\$16,900</b>	<b>\$16,126</b>	<b>\$23,190</b>	<b>\$28,243</b>	<b>\$28,973</b>	<b>\$17,570</b>	<b>\$17,277</b>	<b>\$14,078</b>	<b>\$13,758</b>	<b>\$219,573</b>
<b>Residential - Outside</b>														
<b>Fixed Charge</b>	<b>Rate</b>													
5/8"	\$19.80	632	632	632	632	632	632	632	632	632	632	632	632	632
3/4"	19.80	224	224	224	224	224	224	224	224	224	224	224	224	224
1"	19.80	8	8	8	8	8	8	8	8	8	8	8	8	8
		<b>864</b>	<b>864</b>	<b>864</b>	<b>864</b>	<b>864</b>	<b>864</b>	<b>864</b>	<b>864</b>	<b>864</b>	<b>864</b>	<b>864</b>	<b>864</b>	<b>864</b>
<b>Volume Charge</b>	<b>\$ / CCF</b>													
All Usage	\$3.98	4,532	3,488	3,198	3,916	4,603	9,378	11,984	11,705	5,727	4,848	3,997	5,292	72,665
		<b>4,532</b>	<b>3,488</b>	<b>3,198</b>	<b>3,916</b>	<b>4,603</b>	<b>9,378</b>	<b>11,984</b>	<b>11,705</b>	<b>5,727</b>	<b>4,848</b>	<b>3,997</b>	<b>5,292</b>	<b>72,665</b>
<b>Revenues</b>														
Fixed Charge		\$17,103	\$17,103	\$17,103	\$17,103	\$17,103	\$17,103	\$17,103	\$17,103	\$17,103	\$17,103	\$17,103	\$17,103	\$205,235
Volume Charge		18,028	13,872	12,719	15,575	18,307	37,300	47,665	46,555	22,777	19,281	15,898	21,048	289,025
<b>Total Residential - Outside Revenues</b>		<b>\$35,131</b>	<b>\$30,975</b>	<b>\$29,822</b>	<b>\$32,678</b>	<b>\$35,410</b>	<b>\$54,403</b>	<b>\$64,768</b>	<b>\$63,658</b>	<b>\$39,880</b>	<b>\$36,384</b>	<b>\$33,001</b>	<b>\$38,150</b>	<b>\$494,260</b>

City of Kalama  
 Water Rate Study  
 Revenues at Present Rates  
 Exhibit 6

		Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total
<b>Low Income - Inside</b>														
<b>Fixed Charge</b>	<b>Rate</b>													
Low Income Rate	\$4.95	31	31	31	31	31	31	31	31	31	31	31	31	31
		31	31	31	31	31	31	31	31	31	31	31	31	31
<b>Volume Charge</b>	<b>\$ / CCF</b>													
All Consumption	\$2.15	2,472	2,472	2,472	2,472	2,472	2,472	2,472	2,472	2,472	2,472	2,472	2,472	29,663
		2,472	2,472	2,472	2,472	2,472	2,472	2,472	2,472	2,472	2,472	2,472	2,472	29,663
<b>Revenues</b>														
Fixed Charge		\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$1,841
Water Volume Charge		5,315	5,315	5,315	5,315	5,315	5,315	5,315	5,315	5,315	5,315	5,315	5,315	63,776
<b>Total Low Income - Inside Revenues</b>		<b>\$5,468</b>	<b>\$5,468</b>	<b>\$5,468</b>	<b>\$5,468</b>	<b>\$5,468</b>	<b>\$5,468</b>	<b>\$5,468</b>	<b>\$5,468</b>	<b>\$5,468</b>	<b>\$5,468</b>	<b>\$5,468</b>	<b>\$5,468</b>	<b>\$65,617</b>
<b>Low Income - Outside</b>														
<b>Fixed Charge</b>	<b>Rate</b>													
Low Income Rate	\$13.88	11	11	11	11	11	11	11	11	11	11	11	11	11
		11	11	11	11	11	11	11	11	11	11	11	11	11
<b>Volume Charge</b>	<b>\$ / CCF</b>													
All Consumption	\$3.98	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	13,100
		1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	13,100
<b>Revenues</b>														
Fixed Charge		\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$1,832
Volume Charge		4,342	4,342	4,342	4,342	4,342	4,342	4,342	4,342	4,342	4,342	4,342	4,342	52,104
<b>Total Low Income - Outside Revenues</b>		<b>\$4,495</b>	<b>\$4,495</b>	<b>\$4,495</b>	<b>\$4,495</b>	<b>\$4,495</b>	<b>\$4,495</b>	<b>\$4,495</b>	<b>\$4,495</b>	<b>\$4,495</b>	<b>\$4,495</b>	<b>\$4,495</b>	<b>\$4,495</b>	<b>\$53,936</b>

City of Kalama  
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 Exhibit 6

	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total	
<b>Multi-Family - Inside</b>														
<b>Fixed Charge</b>														
<i>Bi-Monthly</i>														
	<b>Rate</b>													
3/4"	\$33.80		0		0		0		0		0		0	
1"	56.30		0		0		0		0		0		0	
2"	180.10		0		0		0		0		0		0	
<i>Monthly</i>														
3/4"	\$16.90	16	16	16	16	16	16	16	16	16	16	16	16	
1"	28.15	10	10	10	10	10	10	10	10	10	10	10	10	
1 1/2"	54.00	1	1	1	1	1	1	1	1	1	1	1	1	
2"	90.05	2	2	2	2	2	2	2	2	2	2	2	2	
3"	181.25	1	1	1	1	1	1	1	1	1	1	1	1	
		30	30	30	30	30	30	30	30	30	30	30	30	
<b>Volume Charge</b>														
	<b>\$ / CCF</b>													
All Usage	\$2.15	2,000	1,426	1,436	1,576	1,232	1,571	1,642	1,663	1,222	1,195	1,115	1,271	
		2,000	1,426	1,436	1,576	1,232	1,571	1,642	1,663	1,222	1,195	1,115	1,271	
<b>Revenues</b>														
Fixed Charge		\$967	\$967	\$967	\$967	\$967	\$967	\$967	\$967	\$967	\$967	\$967	\$967	\$11,607
Water Volume Charge		4,299	3,066	3,087	3,387	2,650	3,377	3,530	3,575	2,627	2,570	2,397	2,732	37,299
<b>Total Multi-Family - Inside Revenues</b>		<b>\$5,267</b>	<b>\$4,033</b>	<b>\$4,055</b>	<b>\$4,355</b>	<b>\$3,617</b>	<b>\$4,345</b>	<b>\$4,498</b>	<b>\$4,543</b>	<b>\$3,594</b>	<b>\$3,538</b>	<b>\$3,365</b>	<b>\$3,699</b>	<b>\$48,906</b>
<b>Multi-Family - Outside</b>														
<b>Fixed Charge</b>														
	<b>Rate</b>													
3/4"	\$31.27	0		0		0		0		0		0	0	
1"	52.08	1		1		1		1		1		1	1	
2"	99.90	0		0		0		0		0		0	0	
		0	1	0	1	0	1	0	1	0	1	0	1	
<b>Volume Charge</b>														
	<b>\$ / CCF</b>													
All Usage	\$3.98													
		0	0	0	0	0	0	0	0	0	0	0	0	
<b>Revenues</b>														
Fixed Charge		\$0	\$52	\$0	\$52	\$0	\$52	\$0	\$52	\$0	\$52	\$0	\$52	\$312
Volume Charge		0	0	0	0	0	0	0	0	0	0	0	0	\$0
<b>Total Multi-Family - Outside Revenues</b>		<b>\$0</b>	<b>\$52</b>	<b>\$0</b>	<b>\$52</b>	<b>\$0</b>	<b>\$52</b>	<b>\$0</b>	<b>\$52</b>	<b>\$0</b>	<b>\$52</b>	<b>\$0</b>	<b>\$52</b>	<b>\$312</b>

City of Kalama  
 Water Rate Study  
 Revenues at Present Rates  
 Exhibit 6

		Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total
<b>Com / Ind - Inside</b>														
<b>Fixed Charge</b>	<b>Rate</b>													
<i>Bi-Monthly</i>														
3/4"	\$25.90	0		0		0		0		0		0		0
1"	32.60	0		0		0		0		0		0		0
1.5"	153.10	0		0		0		0		0		0		0
2"	258.90	0		0		0		0		0		0		0
3"	394.00	0		0		0		0		0		0		0
4"	529.10	0		0		0		0		0		0		0
6"	0.00	0		0		0		0		0		0		0
8"	0.00	0		0		0		0		0		0		0
10"	1,576.00	0		0		0		0		0		0		0
<i>Monthly</i>														
3/4"	\$12.95	65	65	65	65	65	65	65	65	65	65	65	65	65
1"	16.30	19	19	19	19	19	19	19	19	19	19	19	19	19
1.5"	76.55	5	5	5	5	5	5	5	5	5	5	5	5	5
2"	129.45	7	7	7	7	7	7	7	7	7	7	7	7	7
3"	197.00	5	5	5	5	5	5	5	5	5	5	5	5	5
4"	264.55	0	0	0	0	0	0	0	0	0	0	0	0	0
6"		0	0	0	0	0	0	0	0	0	0	0	0	0
8"		0	0	0	0	0	0	0	0	0	0	0	0	0
10"	788.00	0	0	0	0	0	0	0	0	0	0	0	0	0
		<u>101</u>	<u>101</u>	<u>101</u>	<u>101</u>	<u>101</u>	<u>101</u>	<u>101</u>	<u>101</u>	<u>101</u>	<u>101</u>	<u>101</u>	<u>101</u>	<u>101</u>
<b>Volume Charge</b>	<b>\$ / CCF</b>													
All Usage	\$2.15	2,683	1,941	2,385	2,576	4,869	7,078	6,265	7,508	4,530	3,297	2,569	2,012	47,714
		<u>2,683</u>	<u>1,941</u>	<u>2,385</u>	<u>2,576</u>	<u>4,869</u>	<u>7,078</u>	<u>6,265</u>	<u>7,508</u>	<u>4,530</u>	<u>3,297</u>	<u>2,569</u>	<u>2,012</u>	<u>47,714</u>
<b>Revenues</b>														
Fixed Charge		\$3,425	\$3,425	\$3,425	\$3,425	\$3,425	\$3,425	\$3,425	\$3,425	\$3,425	\$3,425	\$3,425	\$3,425	\$41,104
Volume Charge		5,768	4,174	5,128	5,538	10,467	15,218	13,471	16,142	9,739	7,089	5,523	4,327	102,584
<b>Total Com / Ind (Inside) Revenues</b>		<u>\$9,194</u>	<u>\$7,599</u>	<u>\$8,554</u>	<u>\$8,963</u>	<u>\$13,893</u>	<u>\$18,643</u>	<u>\$16,896</u>	<u>\$19,568</u>	<u>\$13,165</u>	<u>\$10,514</u>	<u>\$8,949</u>	<u>\$7,752</u>	<u>\$143,689</u>

City of Kalama  
 Water Rate Study  
 Revenues at Present Rates  
 Exhibit 6

		Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total
<b>Coml / Ind - Outside</b>														
<b>Fixed Charge</b>	<b>Rate</b>													
<i>Bi-Monthly</i>														
3/4"	\$38.85		0		0		0		0		0		0	0
1"	48.90		0		0		0		0		0		0	0
1.5"	229.65		0		0		0		0		0		0	0
2"	388.35		0		0		0		0		0		0	0
3"	591.00		0		0		0		0		0		0	0
4"	793.65		0		0		0		0		0		0	0
6"	0.00		0		0		0		0		0		0	0
8"	0.00		0		0		0		0		0		0	0
10"	2,364.00		0		0		0		0		0		0	0
<i>Monthly</i>														
3/4"	\$19.43	19	19	19	19	19	19	19	19	19	19	19	19	19
1"	24.45	24	24	24	24	24	24	24	24	24	24	24	24	24
1.5"	114.83	0	0	0	0	0	0	0	0	0	0	0	0	0
2"	194.18	9	9	9	9	9	9	9	9	9	9	9	9	9
3"	295.50	7	7	7	7	7	7	7	7	7	7	7	7	7
4"	396.83	2	2	2	2	2	2	2	2	2	2	2	2	2
6"	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0
8"	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0
10"	1,182.00	1	1	1	1	1	1	1	1	1	1	1	1	1
		62	62	62	62	62	62	62	62	62	62	62	62	62
<b>Volume Charge</b>	<b>\$ / CCF</b>													
All Usage	\$3.23	11,463	10,797	9,937	11,384	10,768	16,449	17,571	18,259	12,951	10,748	8,079	10,251	148,658
		11,463	10,797	9,937	11,384	10,768	16,449	17,571	18,259	12,951	10,748	8,079	10,251	148,658
<b>Revenues</b>														
Fixed Charge		\$6,748	\$6,748	\$6,748	\$6,748	\$6,748	\$6,748	\$6,748	\$6,748	\$6,748	\$6,748	\$6,748	\$6,748	\$80,971
Volume Charge		36,967	34,822	32,048	36,715	34,728	53,048	56,666	58,884	41,768	34,662	26,055	33,059	479,422
<b>Total Com / Ind (Outside) Revenues</b>		<b>\$43,715</b>	<b>\$41,569</b>	<b>\$38,795</b>	<b>\$43,462</b>	<b>\$41,475</b>	<b>\$59,796</b>	<b>\$63,414</b>	<b>\$65,631</b>	<b>\$48,516</b>	<b>\$41,409</b>	<b>\$32,803</b>	<b>\$39,807</b>	<b>\$560,393</b>

City of Kalama  
 Water Rate Study  
 Revenues at Present Rates  
 Exhibit 6

	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total
<b>Summary</b>													
<b>Number of Accounts</b>													
Residential - Inside	945	945	945	945	945	945	945	945	945	945	945	945	945
Residential - Outside	864	864	864	864	864	864	864	864	864	864	864	864	864
Low Income - Inside	31	31	31	31	31	31	31	31	31	31	31	31	31
Low Income - Outside	11	11	11	11	11	11	11	11	11	11	11	11	11
Multi-Family - Inside	30	30	30	30	30	30	30	30	30	30	30	30	30
Multi-Family - Outside	0	1	0	1	0	1	0	1	0	1	0	1	1
Com / Ind - Inside	101	101	101	101	101	101	101	101	101	101	101	101	101
Coml / Ind - Outside	62	62	62	62	62	62	62	62	62	62	62	62	62
<b>Total Number of Accounts</b>	<b>2,044</b>	<b>2,045</b>	<b>2,044</b>	<b>2,045</b>	<b>2,044</b>	<b>2,045</b>	<b>2,044</b>	<b>2,045</b>	<b>2,044</b>	<b>2,045</b>	<b>2,044</b>	<b>2,045</b>	<b>2,045</b>
<b>Consumption (CCF)</b>													
Residential - Inside	2,653	1,917	1,533	3,157	2,797	6,083	8,433	8,773	3,469	3,333	1,845	1,696	45,691
Residential - Outside	4,532	3,488	3,198	3,916	4,603	9,378	11,984	11,705	5,727	4,848	3,997	5,292	72,665
Low Income - Inside	2,472	2,472	2,472	2,472	2,472	2,472	2,472	2,472	2,472	2,472	2,472	2,472	29,663
Low Income - Outside	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	13,100
Multi-Family - Inside	2,000	1,426	1,436	1,576	1,232	1,571	1,642	1,663	1,222	1,195	1,115	1,271	17,348
Multi-Family - Outside	0	0	0	0	0	0	0	0	0	0	0	0	0
Com / Ind - Inside	2,683	1,941	2,385	2,576	4,869	7,078	6,265	7,508	4,530	3,297	2,569	2,012	47,714
Coml / Ind - Outside	11,463	10,797	9,937	11,384	10,768	16,449	17,571	18,259	12,951	10,748	8,079	10,251	148,658
<b>Total Consumption</b>	<b>26,895</b>	<b>23,133</b>	<b>22,053</b>	<b>26,172</b>	<b>27,833</b>	<b>44,123</b>	<b>49,459</b>	<b>51,470</b>	<b>31,462</b>	<b>26,984</b>	<b>21,168</b>	<b>24,086</b>	<b>374,839</b>
<b>Revenues</b>													
Residential - Inside	\$15,816	\$14,233	\$13,408	\$16,900	\$16,126	\$23,190	\$28,243	\$28,973	\$17,570	\$17,277	\$14,078	\$13,758	\$219,573
Residential - Outside	35,131	30,975	29,822	32,678	35,410	54,403	64,768	63,658	39,880	36,384	33,001	38,150	494,260
Low Income - Inside	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	65,617
Low Income - Outside	4,495	4,495	4,495	4,495	4,495	4,495	4,495	4,495	4,495	4,495	4,495	4,495	53,936
Multi-Family - Inside	5,267	4,033	4,055	4,355	3,617	4,345	4,498	4,543	3,594	3,538	3,365	3,699	48,906
Multi-Family - Outside	0	52	0	52	0	52	0	52	0	52	0	52	312
Com / Ind - Inside	9,194	7,599	8,554	8,963	13,893	18,643	16,896	19,568	13,165	10,514	8,949	7,752	143,689
Coml / Ind - Outside	43,715	41,569	38,795	43,462	41,475	59,796	63,414	65,631	48,516	41,409	32,803	39,807	560,393
<b>Total Revenues</b>	<b>\$119,085</b>	<b>\$108,425</b>	<b>\$104,597</b>	<b>\$116,372</b>	<b>\$120,483</b>	<b>\$170,392</b>	<b>\$187,782</b>	<b>\$192,387</b>	<b>\$132,687</b>	<b>\$119,137</b>	<b>\$102,158</b>	<b>\$113,182</b>	<b>\$1,586,686</b>
													<b>2018 Actual</b>
													<b>\$1,632,038</b>
													<i>Difference</i>
													<i>(\$45,352)</i>
													-2.8%
													<b>2020 Budget</b>
													<b>\$1,650,000</b>
													<i>Difference</i>
													<i>(\$63,314)</i>
													-3.8%

City of Kalama  
 Water Rate Study  
 Development of Commodity Distribution Factor  
 Exhibit 7

	Consumpt in CCF	Outside Surcharge	13.4% Unaccounted Water <sup>[1]</sup>	Net Water Delivered	Average Day Use (MGD)	% of Total	Total Outside Consumpt	% of Total Outside Consumpt
Residential - Inside	45,691	1.00	6,123	51,813	0.11	12.2%		
Residential - Outside	72,665	1.00	9,737	82,402	0.17	19.4%	72,665	31.0%
Low Income - Inside	29,663	1.00	3,975	33,638	0.07	7.9%		
Low Income - Outside	13,100	1.00	1,755	14,855	0.03	3.5%	13,100	5.6%
Multi-Family - Inside	17,348	1.00	2,325	19,673	0.04	4.6%		
Multi-Family - Outside	0	1.00	0	0	0.00	0.0%	0	0.0%
Com / Ind - Inside	47,714	1.00	6,394	54,107	0.11	12.7%		
Coml / Ind - Outside	148,658	1.00	19,920	168,578	0.35	39.7%	148,658	63.4%
<b>Total</b>	<b>374,839</b>		<b>50,228</b>	<b>425,067</b>	<b>0.87</b>	<b>100.0%</b>	<b>234,423</b>	<b>100.0%</b>
			<b>Actual Production <sup>[2]</sup></b>	<b>434,896</b>	0.89			

**Notes**

[1] - Estimated

[2] - Actual production in gallons, from 2017 DOH Water Use Efficiency Annual Performance Report

**Allocation Factor**

**(COM)**

**(DA-1)**

City of Kalama  
 Water Rate Study  
 Development of Capacity Distribution Factor  
 Exhibit 8

	Average Consumption (MGD)	Peaking Factors <sup>[1]</sup>	Peak Day Use (MGD)	% of Total
Residential - Inside	0.11	1.75	0.19	14.5%
Residential - Outside	0.17	1.85	0.31	24.3%
Low Income - Inside	0.07	0.00	0.00	0.0%
Low Income - Outside	0.03	0.00	0.00	0.0%
Multi-Family - Inside	0.04	1.40	0.06	4.4%
Multi-Family - Outside	0.00	0.00	0.00	0.0%
Com / Ind - Inside	0.11	1.90	0.21	16.4%
Coml / Ind - Outside	0.35	1.50	0.52	40.4%
Total	<b>0.87</b>		<b>1.28</b>	<b>100.0%</b>
		<b>Actual Peak Day <sup>[2]</sup></b>	<b>1.47</b>	

**Notes**

- [1] - Developed from peak month to average month  
 [2] - Based on peak factor for 2014 from Water System Plan

**Allocation Factor**

**(CAP)**



City of Kalama  
 Water Rate Study  
 Development of the Customer Distribution Factor  
 Exhibit 9

	<i>Actual Customer</i>		<i>Customer Service &amp; Accounting</i>				<i>Meters &amp; Services</i>	
	Number of Customers	% of Total	Number of Living Units	Weighting Factor	Weighted Customer	% of Total	Equivalent Meters	% of Total
Residential - Inside	945	46.2%	945	1.00	945	43.7%	959	36.9%
Residential - Outside	864	42.2%	864	1.00	864	40.0%	876	33.7%
Low Income - Inside	31	1.5%	31	1.00	31	1.4%	0	0.0%
Low Income - Outside	11	0.5%	11	1.00	11	0.5%	0	0.0%
Multi-Family - Inside	30	1.5%	147	1.00	147	6.8%	77	3.0%
Multi-Family - Outside	1	0.0%	0	1.00	0	0.0%	0	0.0%
Com / Ind - Inside	101	4.9%	101	1.00	101	4.7%	269	10.3%
Coml / Ind - Outside	62	3.0%	62	1.00	62	2.9%	421	16.2%
<b>Total</b>	<b>2,045</b>	<b>100.0%</b>	<b>2,161</b>		<b>2,161</b>	<b>100.0%</b>	<b>2,601</b>	<b>100.0%</b>
<i>Allocation Factor</i>		<i>(AC)</i>				<i>(WCA)</i>		<i>(WCMS)</i>

**Development Of Equivalent Meter Distribution Factor**

	<i>Number of Meters</i>										Total	Ave	Wt Factor
	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"				
Residential - Inside	932	11	0	0	0	0	0	0	0	0	943		
Residential - Outside	856	8	0	0	0	0	0	0	0	0	864		
Low Income - Inside	0	0	0	0	0	0	0	0	0	0	0		
Low Income - Outside	0	0	0	0	0	0	0	0	0	0	0		
Multi-Family - Inside	16	10	1	2	1	0	0	0	0	0	30		
Multi-Family - Outside	0	0	0	0	0	0	0	0	0	0	0		
Com / Ind - Inside	65	19	5	7	5	0	0	0	0	0	101		
Coml / Ind - Outside	19	24	0	9	7	2	0	0	1	1	62		
<b>Total Meters</b>	<b>1,888</b>	<b>72</b>	<b>6</b>	<b>18</b>	<b>13</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2,000</b>			
<i>AWWA Meter Equivalencies</i>	<i>1.00</i>	<i>2.50</i>	<i>5.00</i>	<i>8.00</i>	<i>15.00</i>	<i>25.00</i>	<i>50.00</i>	<i>80.00</i>	<i>115.00</i>				
	<i>Equivalent Meters</i>										Total	Ave	Wt Factor
	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"				
Residential - Inside	932	27	0	0	0	0	0	0	0	0	959	1.02	36.9%
Residential - Outside	856	20	0	0	0	0	0	0	0	0	876	1.01	33.7%
Low Income - Inside	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	0.0%
Low Income - Outside	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	0.0%
Multi-Family - Inside	16	25	5	16	15	0	0	0	0	0	77	2.57	3.0%
Multi-Family - Outside	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	0.0%
Com / Ind - Inside	65	48	25	56	75	0	0	0	0	0	269	2.66	10.3%
Coml / Ind - Outside	19	60	0	72	105	50	0	0	115	115	421	6.79	16.2%
<b>Total Equivalent Meters</b>	<b>1,888</b>	<b>179</b>	<b>30</b>	<b>144</b>	<b>195</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>115</b>	<b>2,601</b>			<b>100.0%</b>

City of Kalama  
 Water Rate Study  
 Development of the Public Fire Protection Distribution Factor  
 Exhibit 10

	Number of Units	Fire Prot. Requirements (gals/min)	Duration (minutes) <sup>[1]</sup>	Total FP Required (1,000 g/min)	% of Total
Residential - Inside	945	1,000	60	56,700	58.1%
Residential - Outside	864	0	0	0	0.0%
Low Income - Inside	31	1,000	60	1,860	1.9%
Low Income - Outside	11	0	0	0	0.0%
Multi-Family - Inside	30	1,500	60	2,700	2.8%
Multi-Family - Outside	1	0	0	0	0.0%
Com / Ind - Inside	101	3,000	120	36,360	37.2%
Coml / Ind - Outside	62	0	0	0	0.0%
<b>Total</b>	<b>2,045</b>			<b>97,620</b>	<b>100.0%</b>

**Notes**

[1] - From Water System Master Plan Update, 2015 page 3-6.

**Allocation Factor**

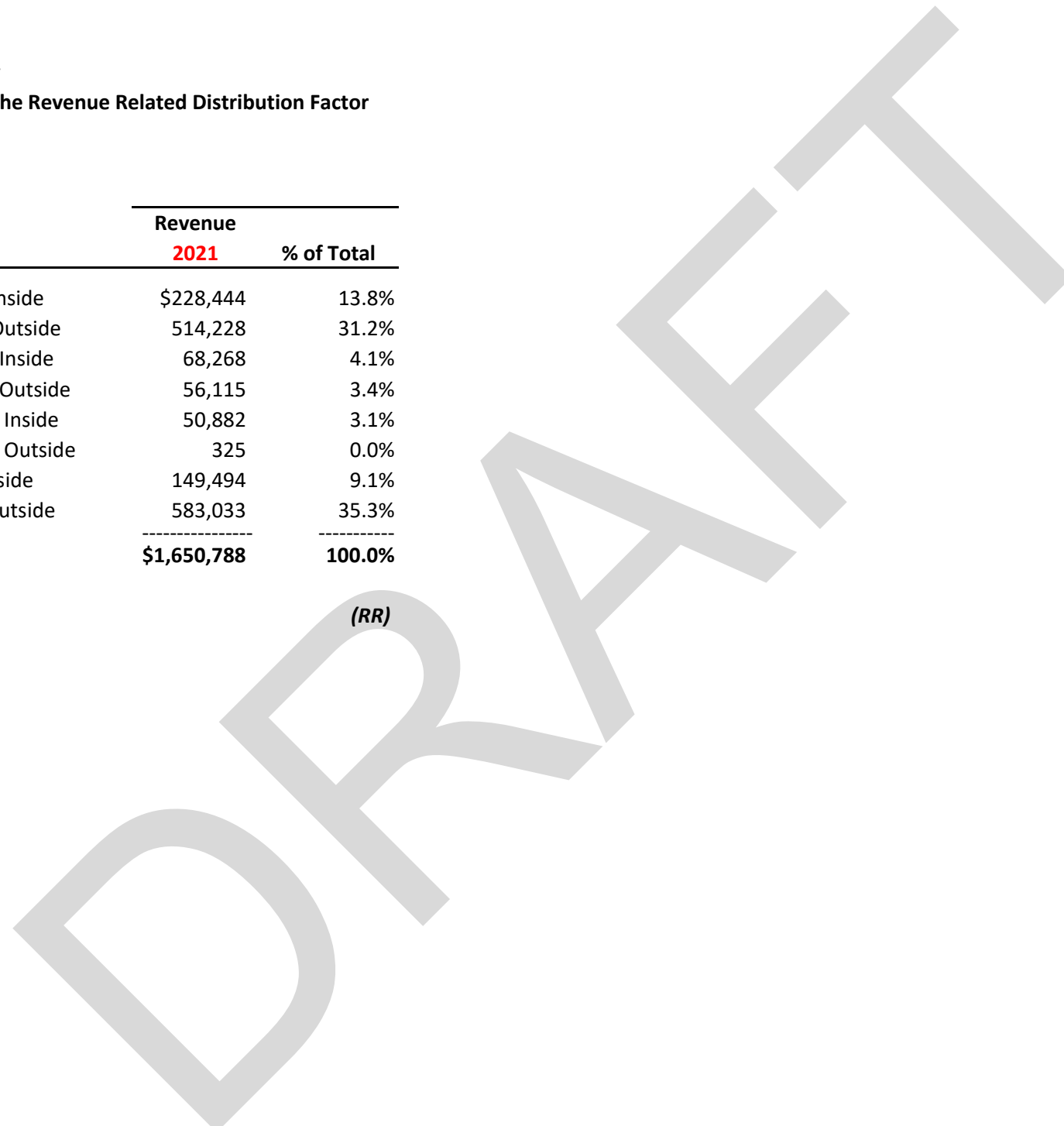
**(FP)**

City of Kalama  
 Water Rate Study  
 Development of the Revenue Related Distribution Factor  
 Exhibit 11

	Revenue	
	2021	% of Total
Residential - Inside	\$228,444	13.8%
Residential - Outside	514,228	31.2%
Low Income - Inside	68,268	4.1%
Low Income - Outside	56,115	3.4%
Multi-Family - Inside	50,882	3.1%
Multi-Family - Outside	325	0.0%
Com / Ind - Inside	149,494	9.1%
Coml / Ind - Outside	583,033	35.3%
<b>Total</b>	<b>\$1,650,788</b>	<b>100.0%</b>

**Allocation Factor**

**(RR)**



City of Kalama  
Water Rate Study  
Functionalization and Classification  
Exhibit 12.1

	Net Plant In Service 6/16/2020	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification
				Actual Customer (AC)	Cust. Acctg. (WCA)	Meters & Services (WCMS)				
<b>Treatment</b>	\$5,714,160	\$3,877,985	\$1,836,175	\$0	\$0	\$0	\$0	\$0	\$0	67.9% COMM 32.1% CAP
<b>Total Treatment</b>	\$5,714,160	\$3,877,985	\$1,836,175	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Source of Supply</b>										
Wells	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	67.9% COMM 32.1% CAP
<b>Total Source of Supply</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Storage</b>										
Reservoirs & Tanks	\$5,423,830	\$0	\$4,274,713	\$0	\$0	\$0	\$1,149,117	\$0	\$0	78.8% CAP 21.2% FP
<b>Total Storage</b>	\$5,423,830	\$0	\$4,274,713	\$0	\$0	\$0	\$1,149,117	\$0	\$0	
<b>Trans. &amp; Distr.</b>										
Estimated	\$8,686,758	\$0	\$4,343,379	\$3,040,365	\$0	\$0	\$1,303,014	\$0	\$0	50.0% CAP 35.0% AC 15% FP
<b>Total Trans. &amp; Distr.</b>	\$8,686,758	\$0	\$4,343,379	\$3,040,365	\$0	\$0	\$1,303,014	\$0	\$0	
<b>Pump Station</b>										
Pumping	\$1,739,535	\$1,180,557	\$558,978	\$0	\$0	\$0	\$0	\$0	\$0	67.9% COM 32.1% CAP
<b>Total Pump Station</b>	\$1,739,535	\$1,180,557	\$558,978	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Total Plant Before General</b>	\$21,564,283	\$5,058,542	\$11,013,245	\$3,040,365	\$0	\$0	\$2,452,130	\$0	\$0	
<b>% of Total Plant</b>	100.0%	23.5%	51.1%	14.1%	0.0%	0.0%	11.4%	0.0%	0.0%	
<b>General Plant</b>										
Equipment	\$126,520	\$29,679	\$64,616	\$17,838	\$0	\$0	\$14,387	\$0	\$0	As Total Plant Before General
<b>Total General Plant</b>	\$126,520	\$29,679	\$64,616	\$17,838	\$0	\$0	\$14,387	\$0	\$0	
<b>General Plant % of Total Plant</b>	0.6%	0.6%	0.6%	0.6%	0.0%	0.0%	0.6%	0.0%	0.0%	
<b>Net Plant In Service</b>	\$21,690,803	\$5,088,221	\$11,077,861	\$3,058,203	\$0	\$0	\$2,466,517	\$0	\$0	
<b>% of Net Plant In Service</b>	100.0%	23.5%	51.1%	14.1%	0.0%	0.0%	11.4%	0.0%	0.0%	

City of Kalama  
 Water Rate Study  
 Distribution Storage  
 Exhibit 13

<i>Fire Protection</i>			
	Capacity (Gallons)	Fire Related %	Fire Capacity (Gal)
Kingwood No. 1	0	0%	0
Kingwood No. 3	2,000,000	25%	500,000
Taylor	200,000	25%	50,000
Cemetery	10,000	0%	0
Vivian	30,000	0%	0
Simmons	6,000	0%	0
Upper Gore	10,000	0%	0
Lower Gore	30,000	0%	0
Jaeger	100,000	0%	0
Agate Mountain	70,000	0%	0
Confer	80,000	0%	0
Lower Green Mtn. [2010]	60,000	0%	0
	<b>2,596,000</b>		<b>550,000</b>

<i>Distribution Main Analysis</i>			
Main Size	Length (Feet)	Replacement Cost (\$) <sup>[1]</sup>	Total
< or =3"	45,400	\$100	\$4,540,000
4"	14,700	100	1,470,000
6"	48,400	140	6,776,000
8"	129,800	160	20,768,000
10"	7,700	180	1,386,000
12"	58,700	200	11,740,000
16"	6,700	250	1,675,000
	<b>311,400</b>		<b>\$48,355,000</b>

% Public Fire Protection 21.2%  
 % Capacity 78.8%

**Actual Customer**  
 1) Total @ 4" Equiv \$31,140,000 **64.4%**  
**Capacity**  
 2) Cost of 4" - 10" \$30,400,000  
 3) Equiv. 12" for larger \$11,772,000 **22.8%**  
**Fire Protection 12.8%**

**Notes**

[1] - Costs are from other similar utilities

City of Kalama  
 Water Rate Study  
 Functionalization and Classification  
 of the Revenue Requirement  
 Exhibit 14.1

Expenses	Commodity (COM)	Capacity (CAP)	Customer Related				Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification
			Actual Customer (AC)	Cust. Acctg. (WCA)	Meters & Services (WCMS)	Weighted for:				
2021										
<b>Expenses</b>										
<b>Operations &amp; Maintenance</b>										
Salaries - Admin. General	\$77,250	\$18,121	\$39,453	\$10,892	\$0	\$0	\$8,784	\$0	\$0	As Net Plant In Service
Benefits - Admin.	33,120	7,769	16,915	4,670	0	0	3,766	0	0	As Net Plant In Service
Supplies	2,060	483	1,052	290	0	0	234	0	0	As Net Plant In Service
Travel - Administrative	1,025	240	523	145	0	0	117	0	0	As Net Plant In Service
Equipment Maintenance - Admin	13,520	3,172	6,905	1,906	0	0	1,537	0	0	As Net Plant In Service
Miscellaneous	6,150	0	0	0	6,150	0	0	0	0	100.0% WCA
Salaries - Water / Maintenance	236,900	55,572	120,989	33,401	0	0	26,939	0	0	As Net Plant In Service
Overtime Earnings	36,050	8,457	18,411	5,083	0	0	4,099	0	0	As Net Plant In Service
Regular Benefits	139,725	32,777	71,360	19,700	0	0	15,888	0	0	As Net Plant In Service
Uniforms	2,575	604	1,315	363	0	0	293	0	0	As Net Plant In Service
Operating Supplies	10,300	2,416	5,260	1,452	0	0	1,171	0	0	As Net Plant In Service
Fuel Consumed	7,763	1,821	3,964	1,094	0	0	883	0	0	As Net Plant In Service
Inventory - Meters/Pipe/Fittings	66,950	7,853	17,096	4,720	0	33,475	3,807	0	0	50.0% WCMS 50.0% Plant
Small Tools & Minor Equipment	5,150	1,208	2,630	726	0	0	586	0	0	As Net Plant In Service
Equipment Rental	520	122	266	73	0	0	59	0	0	As Net Plant In Service
Repairs & Maintenance - Contracted	10,400	2,440	5,311	1,466	0	0	1,183	0	0	As Net Plant In Service
Equipment Maintenance	46,800	10,978	23,902	6,598	0	0	5,322	0	0	As Net Plant In Service
Vehicle Maintenance	5,200	1,220	2,656	733	0	0	591	0	0	As Net Plant In Service
Salaries - Water/Operations	70,040	16,430	35,771	9,875	0	0	7,964	0	0	As Net Plant In Service
Overtime Earnings (2)	20,600	4,832	10,521	2,904	0	0	2,342	0	0	As Net Plant In Service
Benefits	37,260	8,740	19,029	5,253	0	0	4,237	0	0	As Net Plant In Service
Operating Supplies - Chemicals	72,100	72,100	0	0	0	0	0	0	0	100.0% Comm
Other Professional Services	15,450	3,624	7,891	2,178	0	0	1,757	0	0	As Net Plant In Service
Intergovernmental Professional Services	6,760	1,586	3,452	953	0	0	769	0	0	As Net Plant In Service
Electricity	115,920	96,214	0	0	0	0	0	0	19,706	83.0% Comm 17.0% DA
Repairs & Maintenance	20,800	4,879	10,623	2,933	0	0	2,365	0	0	As Net Plant In Service
ON Call Pay	7,725	1,812	3,945	1,089	0	0	878	0	0	As Net Plant In Service
Benefits (2)	3,605	846	1,841	508	0	0	410	0	0	As Net Plant In Service
Office Computer Supplies	2,060	483	1,052	290	0	0	234	0	0	As Net Plant In Service
Office & Operating Supplies	2,060	483	1,052	290	0	0	234	0	0	As Net Plant In Service
Engineering	515	121	263	73	0	0	59	0	0	As Net Plant In Service
Communications	15,450	3,624	7,891	2,178	0	0	1,757	0	0	As Net Plant In Service
Travel	515	0	0	0	515	0	0	0	0	100.0% WCA
Utilities	7,688	1,803	3,926	1,084	0	0	874	0	0	As Net Plant In Service
Shop Maintenance	1,035	1,035	0	0	0	0	0	0	0	100.0% Comm
Miscellaneous & Training	7,175	1,683	3,664	1,012	0	0	816	0	0	As Net Plant In Service
Hydrant Permit Meter Deposits	5,150	0	0	0	0	0	5,150	0	0	100.0% FP
<b>Total Operations &amp; Maintenance</b>	<b>\$1,113,365</b>	<b>\$375,549</b>	<b>\$448,930</b>	<b>\$123,934</b>	<b>\$6,665</b>	<b>\$33,475</b>	<b>\$105,106</b>	<b>\$0</b>	<b>\$19,706</b>	
<b>Total Operations &amp; Maintenance</b>	<b>\$1,113,365</b>	<b>\$375,549</b>	<b>\$448,930</b>	<b>\$123,934</b>	<b>\$6,665</b>	<b>\$33,475</b>	<b>\$105,106</b>	<b>\$0</b>	<b>\$19,706</b>	

City of Kalama  
Water Rate Study  
Functionalization and Classification  
of the Revenue Requirement  
Exhibit 14.1

Expenses 2021	Commodity (COM)	Capacity (CAP)	Customer Related				Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification	
			Actual Customer (AC)	Weighted for:		Customer Acctg. (WCA)					
				Cust. Acctg. (WCA)	Meters & Services (WCMS)						
<b>Depreciation</b>	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	100.0%	WCA
<b>Taxes &amp; Transfers</b>											
Accounting Service Fees	\$97,850	\$0	\$0	\$0	\$97,850	\$0	\$0	\$0	\$0	100.0%	WCA
GF Water Utility Tax	106,425	0	0	0	0	0	0	106,425	0	100.0%	RR
Water Utility Tax - GFCF	88,688	0	0	0	0	0	0	88,688	0	100.0%	RR
Trsf. To 410 Equip Rsve PW	12,480	0	0	0	0	0	0	12,480	0	100.0%	RR
Trsf. To 410 Equip Rsve - WTP Equip. Repl.	0	0	0	0	0	0	0	0	0	100.0%	RR
Trsf. To 410 Equip. Reserv - Meter Repl.	31,200	0	0	0	0	0	0	31,200	0	100.0%	RR
Transfer - Benefit Reserve 107	4,140	0	0	0	0	0	0	4,140	0	100.0%	RR
Transfer To Audit #115	2,060	0	0	0	0	0	0	2,060	0	100.0%	RR
Transfer Out To 115 - Insurance	72,100	0	0	0	0	0	0	72,100	0	100.0%	RR
Department of Revenue	86,533	0	0	0	0	0	0	86,533	0	100.0%	RR
<b>Total Taxes &amp; Transfers</b>	<b>\$501,476</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$97,850</b>	<b>\$0</b>	<b>\$0</b>	<b>\$403,626</b>	<b>\$0</b>		
<b>Reserve Funding</b>	<b>\$24,946</b>	<b>\$5,852</b>	<b>\$12,740</b>	<b>\$3,517</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,837</b>	<b>\$0</b>	<b>\$0</b>		As Net Plant In Service
<b>Total Revenue Requirement</b>	<b>\$1,739,787</b>	<b>\$381,401</b>	<b>\$461,671</b>	<b>\$127,451</b>	<b>\$204,515</b>	<b>\$33,475</b>	<b>\$107,942</b>	<b>\$403,626</b>	<b>\$19,706</b>		
<b>Less: Other Revenues</b>											
Other Misc. Revenue	\$505	\$111	\$134	\$37	\$59	\$10	\$31	\$117	\$6		As Total Revenue Requirement
Water Utility Tax	195,113	42,773	51,775	14,293	22,936	3,754	12,105	45,266	2,210		As Total Revenue Requirement
Water - Other Sales Tax Collection	2,374	520	630	174	279	46	147	551	27		As Total Revenue Requirement
Hydrant Permit Meter Deposits	5,050	1,107	1,340	370	594	97	313	1,172	57		As Total Revenue Requirement
Engineering Serv - Reimbursement	505	111	134	37	59	10	31	117	6		As Total Revenue Requirement
Sale of Surplus - Scrap Metal	505	111	134	37	59	10	31	117	6		As Total Revenue Requirement
Water - Labor	10,100	2,214	2,680	740	1,187	194	627	2,343	114		As Total Revenue Requirement
Water - Parts	20,200	4,428	5,360	1,480	2,375	389	1,253	4,686	229		As Total Revenue Requirement
<b>Total Other Revenues</b>	<b>\$234,351</b>	<b>\$51,375</b>	<b>\$62,188</b>	<b>\$17,168</b>	<b>\$27,548</b>	<b>\$4,509</b>	<b>\$14,540</b>	<b>\$54,369</b>	<b>\$2,654</b>		
<b>Total Net Revenue Requirement</b>	<b>\$1,505,436</b>	<b>\$330,026</b>	<b>\$399,483</b>	<b>\$110,283</b>	<b>\$176,967</b>	<b>\$28,966</b>	<b>\$93,402</b>	<b>\$349,257</b>	<b>\$17,052</b>		



City of Kalama  
Water Rate Study  
Allocation of Rate Base  
Exhibit 15

	Net Revenue Requirement	Residential - Inside	Residential - Outside	Multi-Family - Inside	Multi-Family - Outside	Com / Ind - Inside	Coml / Ind - Outside	Basis of Allocation
Commodity	\$5,088,221	\$1,022,888	\$1,164,207	\$235,493	\$0	\$647,686	\$2,017,947	(COM)
Capacity	\$11,077,861	\$1,603,735	\$2,696,264	\$487,136	\$0	\$1,818,285	\$4,472,442	(CAP)
Actual Customer	\$3,058,203	\$1,459,563	\$1,308,522	\$44,864	\$1,495	\$151,041	\$92,718	(AC)
Cust. Acctg.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(WCA)
Meters & Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(WCMS)
Public Fire Protection	\$2,466,517	\$1,479,607	\$0	\$68,220	\$0	\$918,690	\$0	(FP)
Revenue Related	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(RR)
Direct Assign.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(DA)
<b>Net Revenue Requirement</b>	<b>\$21,690,803</b>	<b>\$5,565,793</b>	<b>\$5,168,993</b>	<b>\$835,712</b>	<b>\$1,495</b>	<b>\$3,535,702</b>	<b>\$6,583,107</b>	

City of Kalama  
Water Rate Study  
Allocation of Revenue Requirement  
Exhibit 16

	Net Revenue Requirement	Residential - Inside	Residential - Outside	Multi-Family - Inside	Multi-Family - Outside	Com / Ind - Inside	Coml / Ind - Outside	Basis of Allocation
Commodity	\$330,026	\$66,345	\$75,511	\$15,274	\$0	\$42,009	\$130,885	(COM)
Capacity	\$399,483	\$57,833	\$97,231	\$17,567	\$0	\$65,570	\$161,283	(CAP)
Actual Customer	\$110,283	\$52,634	\$47,187	\$1,618	\$54	\$5,447	\$3,344	(AC)
Cust. Acctg.	\$176,967	\$79,926	\$71,655	\$12,038	\$0	\$8,271	\$5,077	(WCA)
Meters & Services	\$28,966	\$10,676	\$9,755	\$857	\$0	\$2,990	\$4,688	(WCMS)
Public Fire Protection	\$93,402	\$56,030	\$0	\$2,583	\$0	\$34,789	\$0	(FP)
Revenue Related	\$349,257	\$62,775	\$120,667	\$10,765	\$69	\$31,628	\$123,352	(RR)
Direct Assign.	\$17,052	\$0	\$6,239	\$0	\$0	\$0	\$10,813	(DA)
<b>Net Revenue Requirement</b>	<b>\$1,505,436</b>	<b>\$386,219</b>	<b>\$428,245</b>	<b>\$60,703</b>	<b>\$123</b>	<b>\$190,704</b>	<b>\$439,442</b>	

City of Kalama  
Water Rate Study  
Summary of Cost of Service Analysis  
Exhibit 17

	2021 Expenses	Residential - Inside	Residential - Outside	Multi-Family - Inside	Multi-Family - Outside	Com / Ind - Inside	Coml / Ind - Outside	Notes
<b>Revenues at Present Rates</b>	\$1,650,788	\$296,712	\$570,343	\$50,882	\$325	\$149,494	\$583,033	
<b>Allocated Revenue Requirement</b>	\$1,505,436	\$386,219	\$428,245	\$60,703	\$123	\$190,704	\$439,442	
<b>Bal/(Def) of Funds</b>	\$145,352	(\$89,507)	\$142,098	(\$9,821)	\$202	(\$41,211)	\$143,590	
<b>Allocated Rate Base</b>	\$21,690,803	\$5,565,793	\$5,168,993	\$835,712	\$1,495	\$3,535,702	\$6,583,107	
<i>Present Return on Rate Base</i>	0.7%	-1.6%	2.7%	-1.2%	13.5%	-1.2%	2.2%	
<b>Proposed Return Component</b>	\$262,935	(\$83,141)	\$180,915	(\$12,484)	\$52	(\$52,816)	\$230,409	
Proposed Rate of Return	1.2%	-1.5%	3.5%	-1.5%	3.5%	-1.5%	3.5%	
<b>Proposed Rate Revenues</b>	\$1,768,371	\$303,078	\$609,159	\$48,219	\$175	\$137,888	\$669,851	
<b>Bal/(Def) of Funds</b>	(\$117,583)	(\$6,366)	(\$38,817)	\$2,663	\$150	\$11,605	(\$86,818)	
<b>Required % Change in Rates</b>	<b>7.1%</b>	<b>2.1%</b>	<b>6.8%</b>	<b>-5.2%</b>	<b>-46.2%</b>	<b>-7.8%</b>	<b>14.9%</b>	
[1] Rate of return equals:		6,366	38,817	(2,663)	(150)	(11,605)	86,818	
Reflects the Current Cost of Debt		19.7%	16.5%	-21.2%	-4.1%	-66.1%	-6.3%	

City of Kalama  
Water Rate Study  
Average Unit Costs  
Exhibit 18

	Total	Residential - Inside	Residential - Outside	Multi-Family - Inside	Multi-Family - Outside	Com / Ind - Inside	Coml / Ind - Outside	Notes
<b>Consumption Related</b>								
Commodity \$/CCF	\$0.88	\$0.88	\$0.88	\$0.88	\$0.00	\$0.88	\$0.88	
Capacity \$/CCF	1.07	0.77	1.13	1.01	0.00	1.37	1.08	
Fire/Revenue \$/CCF	1.18	1.58	1.41	0.77	#DIV/0!	1.39	0.83	
<b>Total - \$ / CCF</b>	<b>\$3.13</b>	<b>\$3.22</b>	<b>\$3.42</b>	<b>\$2.66</b>	<b>#DIV/0!</b>	<b>\$3.65</b>	<b>\$2.80</b>	
<b>Customer Related</b>								
<b>Total \$/Acct.</b>	<b>\$12.89</b>	<b>\$12.23</b>	<b>\$12.25</b>	<b>\$40.31</b>	<b>\$4.49</b>	<b>\$13.79</b>	<b>\$17.62</b>	
Return Component \$/CCF	\$0.70	(\$1.10)	\$2.11	(\$0.72)	#DIV/0!	(\$1.11)	\$1.55	
Average Total Cost \$/CCF	\$4.72	\$4.02	\$7.10	\$2.78	#DIV/0!	\$2.89	\$4.51	
<b>Outside Surcharge</b>			77%		#DIV/0!		56%	
<b>Average Current Costs \$/CCF</b>		\$3.94	\$6.65 69%	\$2.93	#DIV/0! #DIV/0!	\$3.13	\$3.92 25%	
<b>Basic Data:</b>								
Water Consumption (CCF)	374,839	75,354	85,765	17,348	0	47,714	148,658	
Number of Accounts	2,045	976	875	30	1	101	62	

**Residential Rates**

	<i>Present Rates</i>	<i>Proposed</i>				
		2021	2022	2023	2024	2025
<b>Fixed Charge (\$/Acct./Bi-Mo)</b>						
<i>Inside</i>						
All Sizes	\$10.70	\$11.50	\$12.36	\$13.47	\$14.68	\$16.00
<i>Outside</i>						
All Sizes	\$19.80	\$21.28	\$22.87	\$24.92	\$27.16	\$29.60
<b>Volume Charge (\$/CCF)</b>						
<i>Inside</i>						
All Usage	\$2.15	\$2.31	\$2.48	\$2.70	\$2.94	\$3.20
<i>Outside</i>						
All Usage	\$3.98	\$4.27	\$4.59	\$5.00	\$5.44	\$5.92

**Multi-Family Rates**

	<i>Present Rates</i>	<i>Proposed</i>				
		2021	2022	2023	2024	2025
<b>Meter Charge (\$/Acct./Mo)</b>						
<i>Inside</i>						
3/4"	\$16.90	\$18.17	\$19.53	\$21.29	\$23.21	\$25.30
1"	28.15	30.26	32.53	35.46	38.65	42.13
1 1/2"	54.00	58.05	62.40	68.02	74.14	80.81
2"	90.05	96.80	104.06	113.43	123.64	134.77
3"	181.25	194.84	209.45	228.30	248.85	271.25
<i>Outside</i>						
3/4"	\$31.27	\$33.61	\$36.13	\$39.39	\$42.94	\$46.81
1"	52.08	55.98	60.18	65.60	71.50	77.94
2"	99.90	179.08	192.51	209.85	228.73	249.32
<b>Volume Charge (\$/CCF)</b>						
<i>Inside</i>						
All Usage	\$2.15	\$2.31	\$2.48	\$2.70	\$2.94	\$3.20
<i>Outside</i>						
All Usage	\$3.98	\$4.27	\$4.59	\$5.00	\$5.44	\$5.92

**Commercial Rates**

<i>Present Rates</i>	<i>Proposed</i>				
	2021	2022	2023	2024	2025

**Meter Charge (\$/Acct./Mo)**

*Inside*

3/4"	\$12.95	\$13.92	\$14.96	\$16.31	\$17.78	\$19.38
1"	16.30	17.52	18.83	20.52	22.37	24.38
1.5"	76.55	82.29	88.46	96.42	105.10	114.56
2"	129.45	139.16	149.60	163.06	177.74	193.74
3"	197.00	211.77	227.65	248.14	270.47	294.81
4"	264.55	284.39	305.72	333.23	363.22	395.91
10"	788.00	847.10	910.63	992.59	1,081.92	1,179.29

*Outside*

3/4"	\$19.43	\$20.88	\$22.44	\$24.46	\$26.67	\$29.07
1"	24.45	26.28	28.25	30.78	33.56	36.57
1.5"	114.83	123.44	132.69	144.63	157.65	171.84
2"	194.18	208.74	224.40	244.59	266.61	290.61
3"	295.50	317.66	341.48	372.21	405.71	442.22
4"	396.83	426.59	458.58	499.85	544.83	593.87
10"	1,182.00	1,270.65	1,365.95	1,488.89	1,622.88	1,768.94

**Volume Charge (\$/CCF)**

*Inside*

All Usage	\$2.15	\$2.31	\$2.48	\$2.70	\$2.94	\$3.20
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*Outside*

All Usage	\$3.23	\$3.47	\$3.72	\$4.05	\$4.41	\$4.80
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