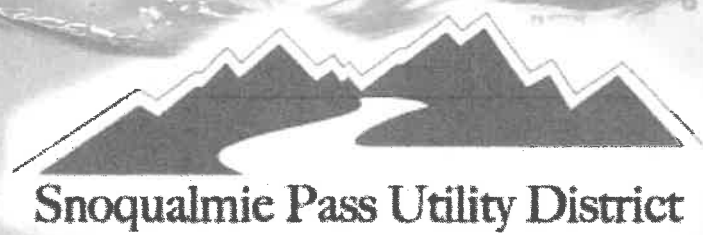


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Kittitas County CDS



# WATER SYSTEM PLAN



 **HLA**  
Engineering and Land Surveying, Inc.

**DRAFT**  
**PROJECT NO. 19162E**



### 2.4.1 Future ERUs and ADD

The projected number of water system services, ERUs, and ADD, are calculated from the water services by user category as shown in Table 2-5, and the average 2017 through 2019 demand per service for each user category, provided in Table 2-12.

The calculated future number of services, ERUs, and projected ADD for years 2027, 2032, and 2042 are presented in Table 2-13, Table 2-14, and Table 2-15 respectively. These projections are based on the number of customers doubling in approximately 20 years which equates to a 3.5% annual increase. This is below percentages during recent years which showed an increase in residential connection of 6.3% over the last 3 years, and 4.8% over the last 5 years. The projections used in this plan use a 5% increase through 2027, followed by a 3.5% increase through 2032, and a 3% increase until 2042 at which time the full 20-year projection of available development will be nearly complete.

TABLE 2-13 YEAR 2027 ERU AND ADD					
User Category	No. of Services	ERUs/Service	ADD/Service (gallons)	Total ERUs	Total ADD (gallons)
Single-Family Residential	810	1.00	54.9	810	44,469
MF Residential	13	13.42	736.4	174	9,573
Hotel/Motel (Recreational)	1	116.73	6,405.2	117	6,405
Commercial	48	15.77	865.3	757	41,534
Government	8	0.93	51.3	7	410
Ski Clubs	7	3.42	187.6	24	1,313
Snowmaking	2	60.32	3,309.9	121	6,620
Hydrants	5	35.22	1,932.5	176	9,662
Total Residential	823			984	54,042
Total Non-Residential	71			1,202	65,946
TOTAL	894			2,186	119,988
TOTAL without Snowmaking	892			2,066	113,368

**TABLE 2-14 YEAR 2032 ERU AND ADD**

User Category	No. of Services	ERUs/Service	ADD/Service (gallons)	Total ERUs	Total ADD (gallons)
Single-Family Residential	960	1.00	54.9	960	52,704
MF Residential	15	13.42	736.4	201	11,046
Hotel/Motel (Recreational)	2	116.73	6,405.2	233	12,810
Commercial	57	15.77	865.3	899	49,322
Government	9	0.93	51.3	8	462
Ski Clubs	8	3.42	187.6	27	1,501
Snowmaking	2	60.32	3,309.9	121	6,620
Hydrants	6	35.22	1,932.5	211	11,595
Total Residential	975			1,161	63,750
Total Non-Residential	84			1,500	82,310
Subtotal	1,059			2,661	146,060
10% Contingency	106			266	14,606
<b>TOTAL</b>	<b>1,165</b>			<b>2,927</b>	<b>160,666</b>
TOTAL without Snowmaking	1,163			2,806	154,046

**TABLE 2-15 YEAR 2042 ERU AND ADD**

User Category	No. of Services	ERUs/Service	ADD/Service (gallons)	Total ERUs	Total ADD (gallons)
Single-Family Residential	1,305	1.00	54.9	1,305	71,645
MF Residential	20	13.42	736.4	268	14,728
Hotel/Motel (Recreational)	2	116.73	6,405.2	233	12,810
Commercial	78	15.77	865.3	1,230	67,493
Government	12	0.93	51.3	11	616
Ski Clubs	11	3.42	187.6	38	2,064
Snowmaking	3	60.32	3,309.9	181	9,930
Hydrants	9	35.22	1,932.5	317	17,392
Total Residential	1,325			1,573	86,373
Total Non-Residential	115			2,011	110,304
Subtotal	1,440			3,584	196,677
10% Contingency	144			358	19,668
<b>TOTAL</b>	<b>1,584</b>			<b>3,942</b>	<b>216,345</b>
TOTAL without Snowmaking	1,581			3,761	206,415

