

LAKE WHATCOM WATER AND SEWER DISTRICT



**WATER USE EFFICIENCY PLAN
2021 UPDATE**

NOVEMBER 2021

TABLE OF CONTENTS

	Page
A) WATER USE DATA COLLECTION REQUIREMENTS	1
B) WATER DEMAND FORECAST	2
C) WATER USE EFFICIENCY GOALS	6
D) WATER USE EFFICIENCY MEASURES	7
E) DISTRIBUTION SYSTEM LEAKAGE	8
F) RATE STRUCTURES	9
G) RECLAIMED WATER OPPORTUNITIES	10
H) WATER SUPPLY CHARACTERISTICS	10
APPENDIX A: WATER USE DATA TABLES	
EXHIBIT 1- LWUSD CONSUMPTION DATA BY CUSTOMER CLASS	
EXHIBIT 2- LWUSD WATER DEMAND FORECAST	
EXHIBIT 3- LWUSD MAXIMUM DAY DEMAND	
EXHIBIT 4- LWUSD DISTRIBUTION SYSTEM LEAKAGE	
EXHIBIT 5- LWUSD AVERAGE DAILY DEMAND	
APPENDIX B: CUSTOMER EDUCATION EXAMPLES	
BILL STUFFERS, CUSTOMER LEAK EDUCATION	
FACEBOOK POSTS	

LAKE WHATCOM WATER AND SEWER DISTRICT

WATER USE EFFICIENCY PLAN - 2021 UPDATE

The Washington State Water Use Efficiency (WUE) Program is designed to promote the goal of ensuring safe and reliable drinking water in our communities. In 2003, the Washington State Legislature adopted the Municipal Water Law, which addresses the increasing demand on our state's water resources and directs the state Department of Health (DOH) to adopt an enforceable WUE program. The WUE program became effective January 22, 2007, and is intended to achieve a consistently high level of stewardship among all municipal water suppliers.

The Lake Whatcom Water and Sewer District (District) is committed to providing safe, reliable water to our customers while working to ensure that state water resources remain reliable and adequate for future generations. The District actively pursues implementation of conservation and system reliability measures. This WUE Plan (Plan) summarizes progress to date and updates the goals and measures adopted by the District since the last Plan revision (2015) to ensure that all DOH requirements remain met.

A. WATER USE DATA COLLECTION REQUIREMENTS

The District currently supplies water to four distinct areas: Sudden Valley, Geneva, North Shore/Eagleridge, and North Shore Wells/Agate Heights. The total number of connections served by the District is 4,027, representing 4,031 equivalent residential units (as of 12/31/2020).

The District's service area primarily consists of residential development. The rate structure is based on Equivalent Residential Units (ERUs) with a water allowance for a base bi-monthly fee. Water use above the allowance is charged at a per cubic foot rate with an increasing two tier block rate structure. Multi-family and commercial customers are assigned a number of ERUs and charged the base rate times that number of ERUs.

The District collects water use data for each of the four areas separately. The best available water use data for 2016 through 2020 are included in Appendix A. The District does not sell wholesale water and therefore does not collect data on wholesale water sold.

The District collects customer meter use data by the listed customer classes in its billing system. The number of non-residential customers served by the District is relatively small. The water use data by customer class listed in Appendix A, Exhibit 1 is based on an assumption of equal use per ERU throughout the customer classes.

WUE data are analyzed once per year and include the following:

- Number of water services renovated/replaced
- Frequency of water conservation bill inserts
- Average Daily Demand (ADD) for each distinct area
- Maximum Daily Demand (MDD) for each distinct area
- Distribution system losses for each distinct area

B. WATER DEMAND FORECAST

The projected future populations used for the Sudden Valley and Geneva Study Areas were based on the projected growth analysis prepared by the District in conjunction with its connection fee analysis. The projected future populations for the North Shore are discussed in detail in the North Shore sections below. Water demand forecast data can be found in Appendix A, Exhibit 2. ADD and MDD were re-evaluated for each area because demand per ERU has changed in all service areas since the 2015 Plan revision. The updated ADD and MDD analysis is described below.

Sudden Valley Area

The Sudden Valley Study Area is a residential area with a golf course and a small commercial strip mall. There are no projected agricultural or industrial water needs. The Sudden Valley Community Association has its own water source for irrigation of the golf course.

A table in Exhibit 2, Appendix A, summarizes the water demand forecasting for the Sudden Valley Study Area. A low population growth projection was selected due the slowing of growth throughout the District's service area. The District holds surface water rights equivalent to 3.4 cubic feet per second (cfs) maximum instantaneous withdrawal, and an average annual withdrawal of 1,800 acre-feet (the Sudden Valley and Geneva areas are served by these water rights).

The ADD used in the 2015 Plan for Sudden Valley was 150 gallons per day per ERU (gpd/ERU). This came from analyzing the 2014 water year's data, accounting for distribution system loss (DSL) and rounding up to be conservative. The ADD since 2015 in Sudden Valley has decreased. Exhibit 1 in Appendix A shows that the annual ADD from 2016-2020 increased from 106 gpd/ERU to 109 gpd/ERU from 2016 to 2017, and then decreased to 106, 104, and 104 gpd/ERU from 2018-2020, respectively. Therefore, an ADD value of 130 gpd/ERU is used for future projections because it is closer to recent demand and accounts for DSL while remaining conservative.

The Sudden Valley MDD recommended in the 2015 Plan was 250 gpd/ERU, which was significantly lower than the value of 335 gpd/ERU used in the 2010 Plan. However, during the period from 2016-2020 the annual MDD was highest at 254 gpd/ERU in 2017, and then dropped to 197-226 gpd/ERU in 2019-2021 (see Exhibit 3). The value of 250 gpd/ERU will be used as a MDD for future planning since it is closer to the most recent data.

Water rights for Sudden Valley and Geneva are discussed below with respect to future demand.

Geneva Area

The Geneva area is primarily residential development, but has two schools and a church complex. There are no projected agricultural or industrial water needs.

A table in Exhibit 2, Appendix A, summarizes the water demand forecasting for the Geneva Study Area. As with the Sudden Valley area, a low growth projection was used in this analysis.

In the 2015 Plan revision, the Geneva area ADD was 175 gpd/ERU. This came from analyzing the 2014 water year's data, accounting for DSL and rounding up to be conservative. Similar to Sudden Valley, Geneva has seen decreased ADD since that time. Exhibit 1 shows that annual ADD from 2016-2020 decreased from 140 to 125 gpd/ERU. To remain conservative and account for DSL, an ADD of 150 gpd/ERU is used for future projections.

MDD in Geneva recommended in the 2015 Plan was 370 gpd/ERU, which was significantly lower than the value of 500 gpd/ERU used in the 2010 Plan. During 2016-2021 the annual MDD was highest at 314 gpd/ERU in 2018, then dropped to 248-283 gpd/ERU in 2019-2021 (see Exhibit 3). MDD for future projections was selected to be 315 gpd/ERU, as this value is closer to the most recent data.

The demand forecasting shown in Exhibit 2 table incorporates these reduced criteria. The third table in Exhibit 2 shows the forecast for the combined Sudden Valley and Geneva systems. It can be seen that under the combined full build-out for both systems, annual and instantaneous demands can easily be met with the existing water rights.

North Shore/Eagleridge Area

The Eagleridge Water System serves a residential area, with all water purchased from the City of Bellingham's water system through an intertie (City Connection). Unlike the Sudden Valley/Geneva areas, there are no Urban Growth Areas in the District's North Shore area. Whatcom County-designated zoning previously ranged from RR2 (rural residential—2 units/acre) to R5A (rural—1 unit/acre); however, Whatcom County has since imposed development restrictions in this area requiring that all new subdivided properties have a minimum of 5 acres. Therefore, any new development will be rural in nature.

The District serves the Eagleridge development and adjacent residences with the existing Eagleridge Water System. This currently consists of 70 developed residences, with a potential to increase to 71 developed residences. There are no projected non-residential water needs. There are no sources for non-revenue water. Eagleridge represents less than 2% of the District's connections.

The table in Exhibit 2, Appendix A, summarizes the water demand forecasting for the North Shore/Eagleridge Area. There are currently 70 connections, and there is only 1 potential future residences within the service area, unless the distribution system is extended along North Shore Road. The forecast conservatively assumes that this lot will be developed before 2026.

The ADD used in the 2015 Plan revision for the Eagleridge system was 250 gpd/ERU without conservation savings and 210 gpd/ERU with conservation savings. Average demand in this system has decreased over time, and ADD values for 2016-2020 ranged from 197 to 189 gpd/ERU (Exhibit 1) indicating Eagleridge was able to meet its 2015 Plan-defined conservation goal of 210 gpd/ERU. To remain conservative, an ADD value of 220 gpd/ERU is used for future projections (without conservation savings). Considering that there is still room for conservation savings, a projected ADD with conservation savings is 210 gpd/ERU.

The Eagleridge MDD in the 2015 Plan revision was 800 gpd/ERU without conservation savings and 600 gpd/ERU with conservation savings. This level was maintained from the 2010 Plan because of one extremely high daily reading that was 2.5 times other high readings from 2014-2015. There was no clear explanation for the high demand. A three-day average resulted in 841 gpd/ERU. Other than that anomalous demand, the typical MDD had decreased in this system, with the highest normal MDD for 2014 and 2015 being 659 gpd/ERU. However, the highest MDD during 2016-2021 was 752 gpd/ERU (in 2021). The MDD had been trending down from 749 gpd/ERU in 2017 to a low of 568 gpd/ERU in 2019. The summer of 2021 was one of the hottest on record which undoubtedly contributed to the higher MDD. The value of 750 gpd/ERU will be used for future projections without conservation. MDD with projected conservation savings remains 600 gpd/ERU.

The demand forecasting shown in the Appendix A, Exhibit 2 table incorporates the reduced criteria for the Eagleridge system. It shows the forecast for Eagleridge demand can easily be met from the existing City Connection with or without conservation savings.

Agate Heights Area

The Agate Heights (Wells) System is also rural residential in nature. The initial system was designed to supply 42 connections (with storage for 52 connections).

The table in Exhibit 2, Appendix A, summarizes the water demand forecasting for the North Shore/Agate Heights Well System Area. The Agate Heights system currently serves 45 residences. With the recent upgrade to the water treatment plant capacity, full build-out for this system is 81 ERUs. For the forecast, it was conservatively assumed that an additional 7 residences will be developed by 2027. This system may be expanded along Northshore Road to serve potential connections that include two small Group A water systems, four Group B water systems, approximately 141 ERUs associated with the failed 1995 ULID W-6, and approximately 70 properties with pending residential surface water

right applications. Many of these ERUs represent existing residences that currently draw water directly from Lake Whatcom or private wells.

The ADD used in the 2015 Plan revision for the Agate Heights system was 230 gpd/ERU without conservation savings and 200 gpd/ERU with conservation savings. Demand in this system has increased over time. ADD values for 2016-2020 increased from 166 to a maximum of 199 gpd/ERU in 2018, and then decreased to 191 gpd/ERU in 2020 (Exhibit 1). Even though there was an increase, conservation goals of 200 gpd/ERU were met. To remain conservative but more realistic, an ADD value of 200 gpd/ERU is used for future projections (without conservation savings). Considering that there is still room for conservation savings, a projected ADD with conservation savings is 190 gpd/ERU.

Agate Heights MDD in the 2015 Plan was 500 gpd/ERU without conservation savings and 420 gpd/ERU with conservation savings. However, between 2016-2021 the annual MDD increased to 603 gpd/ERU in 2016, then ranged from 446-523 gpd/ERU from 2019-2021 (Exhibit 3). MDD for future projections without conservation savings is set at 525 gpd/ERU, a value indicative of more recent trends. MDD with projected conservation savings is 420 gpd/ERU.

The Agate Heights (Wells) System is supplied by a well with a 60 gpm water right permit (G1-22681P), a 360 gpm water right permit (G1-22763P), and an 18 gpm water right certificate (G1-23449C). The G1-22763P water right permit was tied to the Agate Heights Well System through a water right transfer which was completed in 2003. The G1-23449C water right certificate was tied to the Agate Heights Well System through a water right transfer in 2010 from the Lake Whatcom Residential and Treatment Center. The number of buildout connections does not necessarily represent existing zoning for the original Agate Heights Well System service area since there is the possibility that the Agate Heights system could be expanded to include: the Eagleridge system, at least 141 ERUs associated with the failed 1995 ULID W-6, 70 residential surface water right applications, two small Group A water systems and four Group B water systems in the vicinity of Agate Heights. As can be seen from the Eagleridge and Agate Heights demands, the Agate Heights Well System easily has sufficient water rights to serve Eagleridge and many additional connections. Exhibit 2 shows calculated ERUs that could be served based on the annual and instantaneous water rights and the ADD and MDD, respectively, of the Agate Heights system. Demand for new connections would need to be assessed to determine the number of additional connections that could be served from the Agate Heights Wells System.

C. WATER USE EFFICIENCY GOALS

The District developed WUE goals in conjunction with public input. The following goals were presented for public comment before being incorporated into this Plan.

2015 Report Goals and Results:

Goal 1: Reduce Distribution System Losses in South Shore (Geneva and Sudden Valley) service areas. The goal is to reach and maintain less than 10% losses in all service areas.

Result 1: Based on Exhibit 4 presented in Appendix A, all service areas maintained a DSL less than 10%.

Goal 2: Reduce high peak residential consumption in all service areas. Goal sets target summer peak usage by service area by 2020.

Result 2: ADD per capita was used to determine if the goal was exceeded on a bimonthly basis (billing cycles). The numbers of exceedances are listed below. Sudden Valley was the only service area that met the goal (though the number of exceedances decreased in all other service areas).

Summer Peak Targets	2020 Target Summer Usage per Capita (gpd)	2016-2020 Summer Usage per ERU (gpd)	2016-2020 Number of Exceedances	2020 Number of Exceedances	Goal Met by 2020
Sudden Valley	55	148.5	6	0	Yes
Geneva	65	188.5	2	1	No
Agate Heights	75	202.5	11	2	No
Eagleridge	100	270	5	1	No

Goal 3: Reduce the 3-year average annual per capita usage in Sudden Valley and Geneva by 2% and annual per capita usage in Eagleridge and Agate Heights by 10% by 2020.

Result 3: Sudden Valley was the only system that met reduction Goal 3 by 2020, in part because the number of persons per household has increased. Conversely, the number of persons per household has decreased on the Northshore, making the per capita results for Agate Heights and Eagleridge worsen. See below for the results.

3-yr Average Annual Targets	2015 Report Annual Usage per Capita (gpd)	2020 Target Annual Usage per Capita (gpd)	2020 3-yr Annual Usage per Capita (gpd)	Goal Met by 2020
Sudden Valley	44.0	43.2	43	Yes
Geneva	47.6	46.6	48	No
Agate Heights	69.2	62.3	77	No
Eagleridge	74.5	67.0	73	No

2020 Report Goals:

1. Reduce Distribution System Losses in South Shore (Geneva and Sudden Valley) service areas. The goal is to reach and maintain less than 10% losses in all service areas.

2. Reduce high peak residential consumption in all service areas. Goal sets target summer peak usage by service area by 2025.

Summer Month Peak Targets	2025 Target Summer Month Usage per ERU (gpd)
Sudden Valley	145.5
Geneva	188
Agate Heights	202
Eagleridge	270

3. Reduce the 3-year average annual consumption per equivalent residential unit (ERU) to the targets listed in the table below.

3-yr Average Annual Targets	2020 3-yr Annual Usage per ERU (gpd)	2025 3-yr Target Annual Usage per ERU (gpd)
Sudden Valley	116.1	113.4
Geneva	139.2	135.1
Agate Heights	207.9	168.2
Eagleridge	197.1	180.9

D. WATER USE EFFICIENCY MEASURES

1. The District is required to implement the following WUE Measures:

- Install production (source) meters – *Complete*
- Install consumption (service) meters – *Complete*
- Perform Meter Calibration – *Ongoing*
- Implement a water loss control action plan to control leakage – *Plan implemented; progress is good*

- Educate customers about water use efficiency practices – *Ongoing; bimonthly bills contain water conservation information*

2. The District has identified several (additional) supply-side WUE Measures it plans to implement:

- Improve record-keeping of non-metered authorized consumption (hydrant flushing, construction, gravity sewer flushing, Fire Department training, quantify known leaks, etc.). – *Ongoing*
- Replace service meters (age, failure); track progress. – *Ongoing*
2010 – 20; 2011 – 22; 2012 – 60;
2013 – 64; 2014 – 74; 2015 – 49;
2016 – *; 2017 – 1,243; 2018 – 1,471;
2019 – 107; 2020 – 19 ; 2021 – 57 year-to-date

*Data for 2016 was not available, however, the District indicated the number was similar to the value for 2017.

- Replace malfunctioning and obsolete fire hydrants. – *Ongoing*
- Control unauthorized use of water. – *Ongoing*
- Monitor overnight tank levels for unusual drops. – *Ongoing*

3. The District is required to implement a minimum of 6 consumption-side WUE Measures. Since measures are implemented for all 4 customer classes, the WUE rule counts each as 4 measures:

- Conservation Rate Structure (+4) – Each customer class (4) counts as a measure
- Water bill showing consumption history (+4)
- Customer conservation education (see Appendix B) (newsletter, bill stuffers, social media posts) (+4)
- Customer leak education (See Appendix B) (+4)
- Participate in Regional water conservation programs and/or measures (Whatcom Water Alliance) (+1)

Total: 17 WUE Measures

E. DISTRIBUTION SYSTEM LEAKAGE

Distribution system losses have been reduced in all District service areas. A summary of the improvements are listed below. Detailed data is attached Exhibit 4 in Appendix A.

Sudden Valley Area

The Sudden Valley service area has a history of high levels of distribution system losses. The three-year average distribution system losses in 2005-2007 were 27.59%, the 2012-2014 three-year average was 12.86%, and the 2018-2020 three-year average was 7.91%, with a 2020 data point of 4.71%. The District also maintains a program to estimate and track system leaks in an effort to correlate events with fluctuations in unaccounted for water.

Geneva Area

The three-year average distribution system losses in Geneva for 2005-2007 were 10.97%. The 2012-2014 three-year average was 9.1%, and the 2018-2020 three-year average was

8.05%. In 2013 the District replaced about 13,000 feet of asbestos concrete (AC) water main and all associated service lines in Geneva. The majority of the new mains were ductile iron, with about 1,000 feet of high density polyethylene (HDPE) in challenging construction locations. This may have had a positive impact on reducing distribution system losses. There are no major non-revenue water users.

The District reports on these two service areas in a single WUE report for the South Shore Water System. The combined 2012-2014 three-year average leakage from the data used in this report is 11.61%. There is a slight discrepancy between this and the 2012-2014 average leakage reported on the annual Water Use Efficiency report (12.1%). The difference is likely due to a small difference in the time that the meters were read. The combined 2018-2020 three-year average leakage was 8%, a decrease from the previous reporting period.

North Shore/Eagleridge Area

Distribution system losses in this system increased from the 2.87% 2012-2014 three-year average to 5.5% for 2018-2020. There are several possibilities that might account for the increasing distribution system losses such as decreasing accuracy of water meters as they age, or increasing main leaks in the now 36-year old pipes.

Agate Heights Area

The distribution system losses in 2005-2007 ranged from 4.4% to 46.1%. There were several data anomalies in this system that may have been due to water testing or other un-metered use. These were corrected and/or accounted for. The 2012-2014 three-year average was 2.83% which is lower than the 2018-2020 three-year average which increased to 4.42%.

F. RATE STRUCTURES

The current rate structure for the District is an inclining block rate, as follows:

2021 Rates– Every Two Months

SERVICE	RATE
Basic Rate – Water	\$76.05
Water Usage Over 600 CF up to 2,500 (per 100 CF)	\$10.79
Water Usage Over 2,500 CF (per 100 CF)	\$13.50

The base rate of \$76.05 includes a usage allocation of 600 cu ft for two months. Any usage over 600 cu ft but less than 2,500 cu ft is billed at \$10.79 per 100 cu ft. Any usage over 2,500 cu ft is billed at \$13.50 per 100 cu ft. This is a stepped rate structure with two steps. The rate structure encourages water conservation and is considered a conservative rate structure. The District adopted this new two-tier rate structure in 2014 and implemented it in January 2015. The reduced consumption demonstrates the 2-tiered structure's effectiveness. More customers have decreased irrigation over the last few years – for example, Eagleridge is largely “brown” during the summer, whereas they used to keep lawns green throughout the summer.

G. RECLAIMED WATER OPPORTUNITIES

The District currently sends all sewerage collected to the City of Bellingham for wastewater treatment. Since the District does not have any facilities to process wastewater, and the City's treatment plant is over 8 miles from the District's service areas, there are no immediate opportunities for implementing reclaimed water projects within the District. The City currently has no plans to implement any reclaimed water projects. It is unlikely that the District will pursue any reclaimed water projects in the next six years.

The most obvious potential consumer of reclaimed water in the District service area would be the Sudden Valley Community Association (SVCA) golf course. However, SCVA holds water rights for withdrawals from Lake Louise which they use for irrigating the golf course. They do not purchase water from the District for irrigating the golf course.

H. WATER SUPPLY CHARACTERISTICS

1) Source(s) description:

The two sources of water for the District are Lake Whatcom and the Squalicum Aquifer, both located in the Lake Whatcom Watershed. The Watershed receives 45-60 inches of rain annually, which aids the recharge of both the aquifer and the lake.

2) Name and location of the source(s)

Lake Whatcom – Whatcom County, just East of Bellingham, Whatcom County
Squalicum Aquifer – Located just North of Lake Whatcom, Whatcom County

3) Production Capacity

Lake Whatcom holds roughly 250 billion gallons, and is replenished by water from the Nooksack River (via occasional diversion controlled by the City of Bellingham) and multiple streams. The District's Agate Heights well has a production capacity of 465 gpm, and water rights for 438 gpm.

4) Seasonal Variability

Seasonal weather changes do not impact the District's ability to provide water to our customers, and the sources have shown little change in capacity. However, the District strongly encourages limited outdoor water use during dry months.

5) Water Rights

The District has surface water rights and reservoir rights of 1,526 gpm instantaneous and 1,800 afy (acre-feet per year) from Lake Whatcom. The District has ground water rights of 438 gpm instantaneous and 506.9 afy (acre-feet per year) from the Squalicum Aquifer.

6) Legal Constraints

Both sources are shared with multiple parties, the most notable being the City of Bellingham. This does not limit the District's use of the water in any significant way.

For more information about Lake Whatcom, see

<http://www.lakewhatcom.whatcomcounty.org/about-the-lake>.

APPENDIX A: WATER USE DATA TABLES

(note: the Sudden Valley Water System is on a different billing cycle than the other water systems, and as such will have unique monthly cycles)

2020 WATER USE PER CUSTOMER CLASS

Total Bi-Monthly Volume in Cubic Feet (CF), assuming equal use per ERU

SUDDEN VALLEY WATER SYSTEM

CUSTOMER CLASS	Volume (CF)					
	DEC/JAN	FEB/MAR	APR/MAY	JUN/JUL	AUG/SEP	OCT/NOV
Single Family Residences	2,070,457	1,837,277	2,254,517	2,275,949	2,505,476	2,022,070
Multi-family Residences	133,588	114,446	128,039	141,803	152,369	131,056
Recreational Services (Campsites, RV Sites, Spigots)	560	1,819	474	575	2,547	493
Institutional, Commercial, or Industrial Services	44,593	35,029	20,627	34,918	37,211	33,142
Total Residential CF	2,204,045	1,951,723	2,382,556	2,417,752	2,657,845	2,153,126
Total Non-Residential CF	45,153	36,848	21,101	35,493	39,758	33,635
Total Volume (CF)	2,249,198	1,988,571	2,403,657	2,453,245	2,697,603	2,186,761

GENEVA WATER SYSTEM

CUSTOMER CLASS	Volume (CF)					
	JAN/FEB	MAR/APR	MAY/JUN	JUL/AUG	SEP/OCT	NOV/DEC
Single Family Residences	951,307	1,017,520	1,084,100	1,523,985	1,219,221	928,070
Multi-family Residences	31,982	35,199	31,410	36,085	34,729	35,916
Recreational Services (Campsites, RV Sites, Spigots)						
Outdoors						
Institutional, Commercial, or Industrial Services	23,331	17,553	13,938	53,689	26,207	15,706
Total Residential CF	983,289	1,052,719	1,115,510	1,560,070	1,253,950	963,986
Total Non-Residential CF	23,331	17,553	13,938	53,689	26,207	15,706
Total Volume (CF)	1,006,620	1,070,272	1,129,448	1,613,759	1,280,157	979,692

AGATE HEIGHTS WATER SYSTEM

CUSTOMER CLASS	Volume (CF)					
	JAN/FEB	MAR/APR	MAY/JUN	JUL/AUG	SEP/OCT	NOV/DEC
Single Family Residences	36,695	41,287	44,570	63,562	56,126	38,188
Institutional, Commercial, or Industrial Services (LWRTC)	23,264	23,535	22,703	22,872	23,823	22,032
Total Residential CF	36,695	41,287	44,570	63,562	56,126	38,188
Total Non-Residential CF	23,264	23,535	22,703	22,872	23,823	22,032
Total Volume (CF)	59,959	64,822	67,273	86,434	79,949	60,220

EAGLERIDGE WATER SYSTEM

CUSTOMER CLASS	Volume (CF)					
	JAN/FEB	MAR/APR	MAY/JUN	JUL/AUG	SEP/OCT	NOV/DEC
Single Family Residences	72,982	82,511	104,157	174,977	140,573	72,537

2020 WATER USE PER CUSTOMER CLASS
Number of Equivalent Residential Units (ERUs)

SUDDEN VALLEY WATER SYSTEM

CUSTOMER CLASS	ERU					
	DEC/JAN	FEB/MAR	APR/MAY	JUN/JUL	AUG/SEP	OCT/NOV
Single Family Residences	2,403	2,406	2,409	2,414	2,419	2,426
Multi-family Residences	245	245	245	245	245	245
Recreational Services (Campsites, RV Sites, Spigots)	6	6	6	6	6	6
Institutional, Commercial, or Industrial Services	79	79	79	79	79	79
Total Residential ERUs	2,648	2,651	2,654	2,659	2,664	2,671
Total Non-Residential ERUs	85	85	85	85	85	85
Total ERUs	2,733	2,736	2,739	2,744	2,749	2,756

GENEVA WATER SYSTEM

CUSTOMER CLASS	ERU					
	JAN/FEB	MAR/APR	MAY/JUN	JUL/AUG	SEP/OCT	NOV/DEC
Single Family Residences	1,032	1,033	1,033	1,033	1,034	1,035
Multi-family Residences	57	57	57	57	57	57
Recreational Services (Campsites, RV Sites, Spigots)	1	1	1	1	1	1
Outdoors	1	1	1	1	1	1
Institutional, Commercial, or Industrial Services	64	64	64	64	64	64
Total Residential ERUs	1,089	1,090	1,090	1,090	1,091	1,092
Total Non-Residential ERUs	66	66	66	66	66	66
Total ERUs	1,155	1,156	1,156	1,156	1,157	1,158

AGATE HEIGHTS WATER SYSTEM

CUSTOMER CLASS	ERU					
	JAN/FEB	MAR/APR	MAY/JUN	JUL/AUG	SEP/OCT	NOV/DEC
Single Family Residences	39	39	39	39	39	39
Institutional, Commercial, or Industrial Services (LWRTC)	6	6	6	6	6	6
Total Residential ERUs	39	39	39	39	39	39
Total Non-Residential ERUs	6	6	6	6	6	6
Total ERUs	45	45	45	45	45	45

EAGLERIDGE WATER SYSTEM

CUSTOMER CLASS	ERU					
	JAN/FEB	MAR/APR	MAY/JUN	JUL/AUG	SEP/OCT	NOV/DEC
Single Family Residences	70	70	70	70	70	70

2020 AVERAGE DAILY WATER USE PER SYSTEM

Gallons per day per ERU

SUDDEN VALLEY WATER SYSTEM

	GPD/ERU						
	DEC/JAN	FEB/MAR	APR/MAY	JUN/JUL	AUG/SEP	OCT/NOV	ANNUAL AVG
Average Usage/ERU	101	91	108	110	120	97	104

GENEVA WATER SYSTEM

	GPD/ERU						
	JAN/FEB	MAR/APR	MAY/JUN	JUL/AUG	SEP/OCT	NOV/DEC	ANNUAL AVG
Average Usage/ERU	109	114	120	171	136	104	125

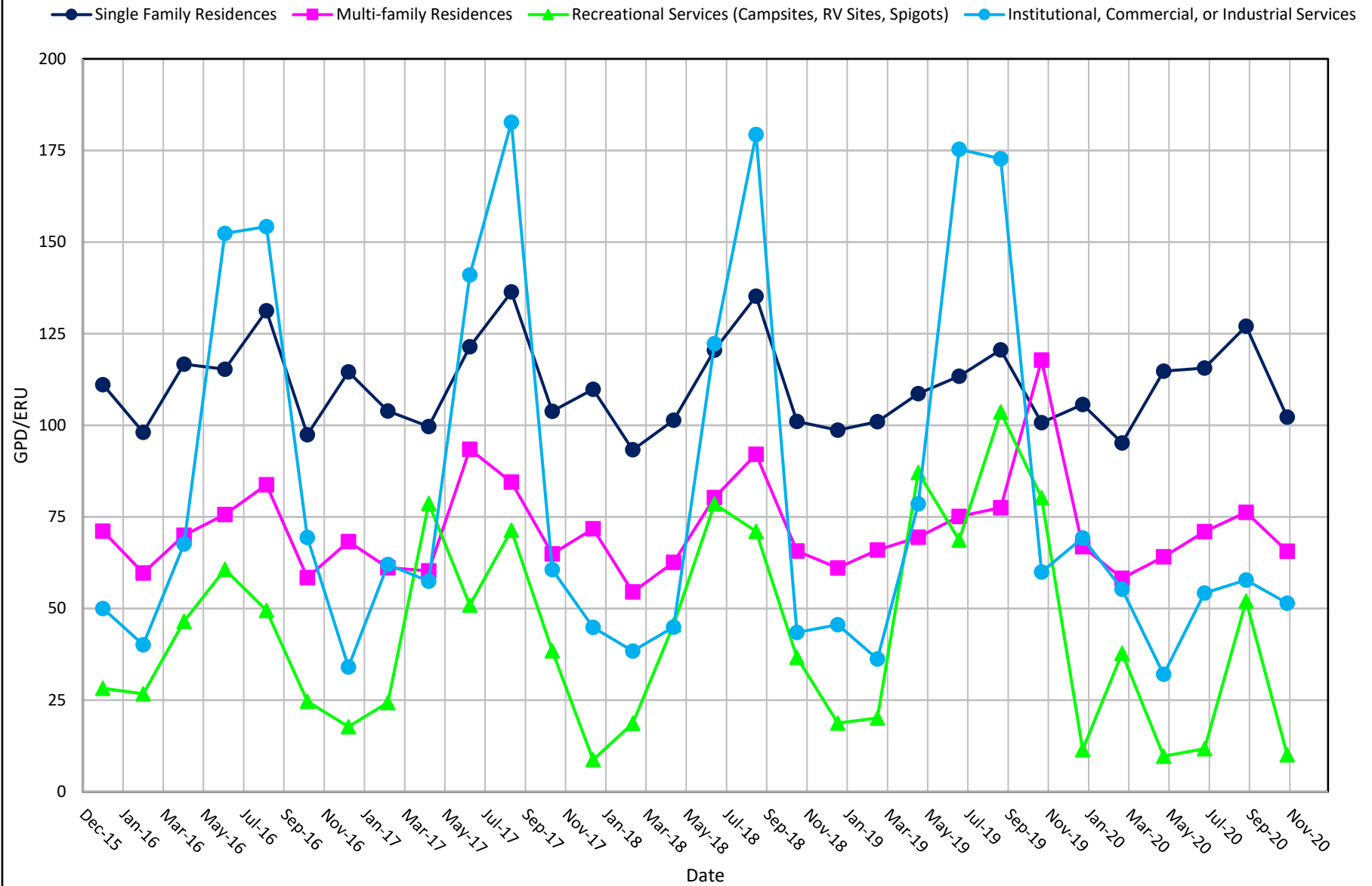
AGATE HEIGHTS WATER SYSTEM

	GPD/ERU						
	JAN/FEB	MAR/APR	MAY/JUN	JUL/AUG	SEP/OCT	NOV/DEC	ANNUAL AVG
Average Usage/ERU	166	177	183	236	218	164	191

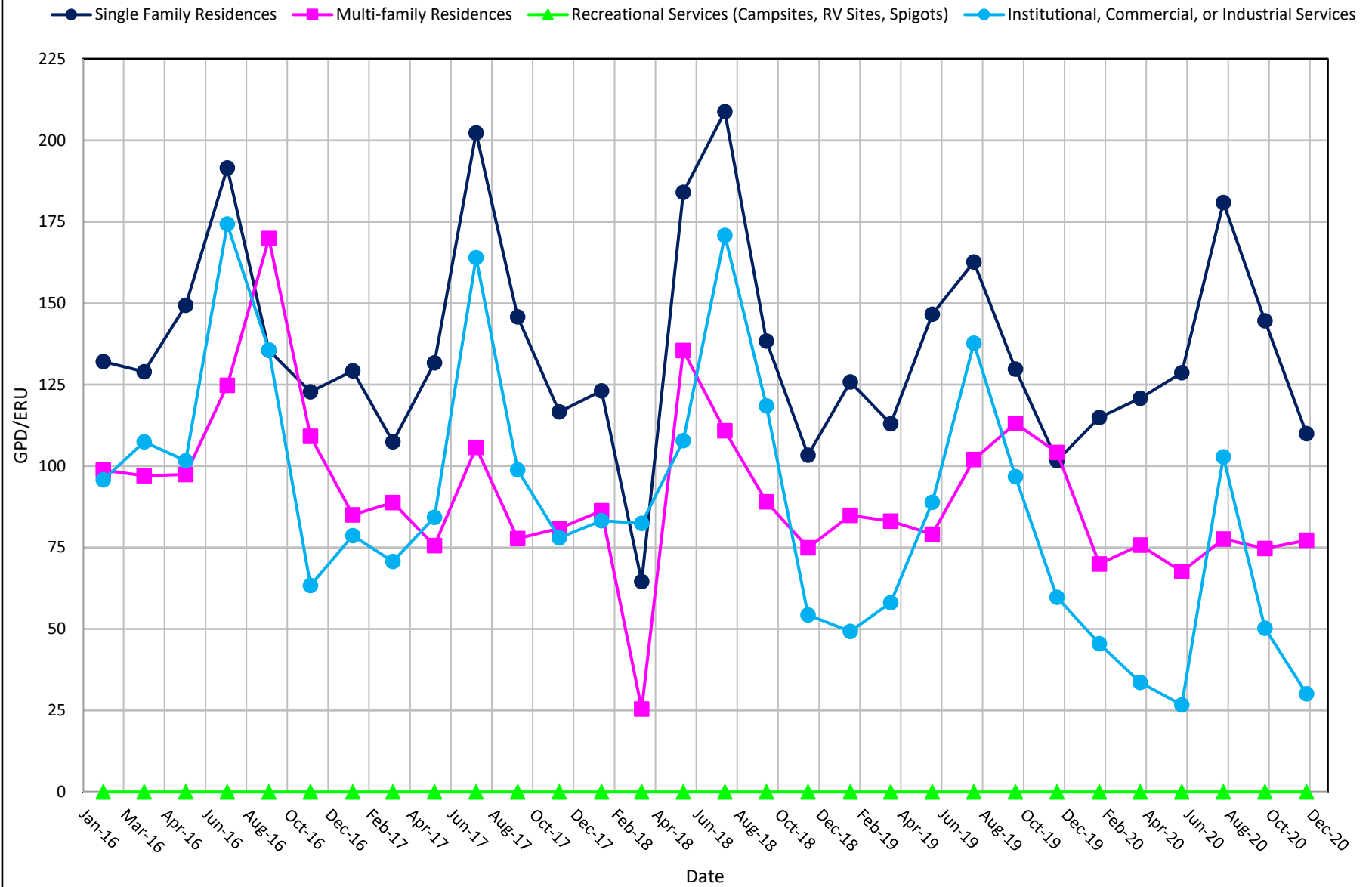
EAGLERIDGE WATER SYSTEM

	GPD/ERU						
	JAN/FEB	MAR/APR	MAY/JUN	JUL/AUG	SEP/OCT	NOV/DEC	ANNUAL AVG
Average Usage/ERU	130	145	182	307	246	127	189

2016 - 2020 Sudden Valley Consumption by Usage Class



2016 - 2020 Geneva Consumption by Usage Class



2016-2020 Bi-Monthly Average Use by Water System

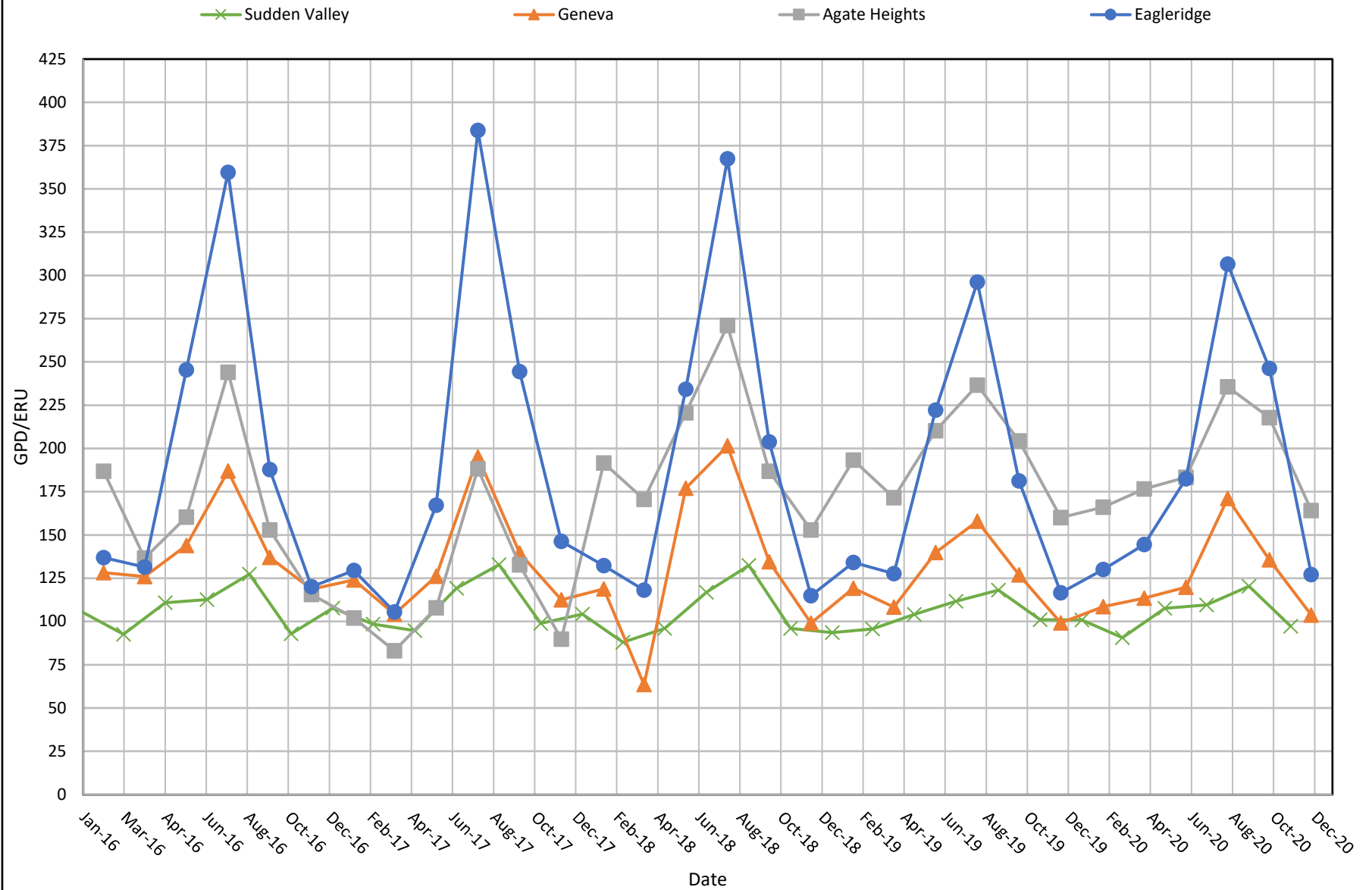


EXHIBIT 2

Water Demand Forecasting

SUDDEN VALLEY WATER SYSTEM

Water Demand Forecasting	ERUs	With Conservation Savings	
		Total Average Volume -GPD (based on ADD= 130 gpd/ERU)	Maximum Daily Volume-GPD (based on MDD= 250 gpd/ERU)
Current - 2021	2763	359,190	690,750
Six years - 2027	2817	366,210	704,250
20 years - 2041	2943	382,590	735,750
Full build-out	3287	427,310	821,750
Water Rights – Annual / Instant. (shared with Geneva)		Annual (Daily Avg) = 1,607,178 GPD Instantaneous = 2,197,472 GPD	

GENEVA WATER SYSTEM

Water Demand Forecasting	ERUs	With Conservation Savings	
		Total Average Volume -GPD (based on ADD= 150 gpd/ERU)	Maximum Daily Volume-GPD (based on MDD= 315 gpd/ERU)
Current - 2021	1160	174,000	365,400
Six years - 2027	1190	178,500	374,850
20 years - 2041	1250	187,500	393,750
Full build-out	1250	187,500	393,750
Water Rights – Annual / Instant. (shared with Sudden Valley)		Annual (Daily Avg) = 1,607,178 GPD Instantaneous = 2,197,472 GPD	

COMBINED SUDDEN VALLEY/GENEVA WATER SYSTEMS

Water Demand Forecasting	ERUs	With Conservation Savings	
		Total Average Volume (GPD)	Maximum Daily Volume (GPD)
Current - 2021	3923	533,190	1,056,150
Six years - 2027	4007	544,710	1,079,100
20 years - 2041	4193	570,090	1,129,500
Sudden Valley full build-out	3287	427,310	821,750
Geneva full build-out	1250	187,500	393,750
Combined full build-out	4537	614,810	1,215,500
Water Rights – Annual / Instant.		Annual (Daily Avg) = 1,607,178 GPD Instantaneous = 2,197,472 GPD	

* ADD and MDD values are based on source data which includes distribution system leakage.

EXHIBIT 2

Water Demand Forecasting

NORTH SHORE /EAGLERIDGE WATER SYSTEM

Water Demand Forecasting	ERUs	Without Conservation Savings	
		Total Average Volume -GPD (based on ADD= 220 gpd/ERU)	Maximum Daily Volume-GPD (based on MDD= 750 gpd/ERU)
Current - 2021	70	15,400	52,500
Six years - 2027	71	15,620	53,250
20 years - 2041	71	15,620	53,250
Full build-out**	71	15,620	53,250
City Connection – 150 gpm	288	216,000 gpd	

NORTH SHORE /EAGLERIDGE WATER SYSTEM

Water Demand Forecasting	ERUs	With Conservation Savings	
		Total Average Volume -GPD (based on ADD= 210 gpd/ERU)	Maximum Daily Volume-GPD (based on MDD= 600 gpd/ERU)
Current - 2021	70	14,700	42,000
Six years - 2027	71	14,910	42,600
20 years - 2041	71	14,910	42,600
Full build-out **	71	14,910	42,600
City Connection – 150 gpm	360	216,000 gpd	

* ADD and MDD values are based on source data which includes distribution system leakage.

** Based on including all vacant lots to determine maximum potential connections. Will require ULID for construction of additional water sytem facilities.

EXHIBIT 2

Water Demand Forecasting

NORTH SHORE /AGATE HEIGHTS WELL SYSTEM

Water Demand Forecasting	ERUs	Without Conservation Savings	
		Total Average Volume -GPD (based on ADD= 200 gpd/ERU)	Maximum Daily Volume-GPD (based on MDD= 525 gpd/ERU)
Current - 2021	45	9,000	23,625
Six years - 2027	51	10,200	26,775
20 years - 2041	65	13,000	34,125
Full build-out**	80	16,000	42,000
Water Rights – Annual	2263	Annual (Daily Avg) = 452,530 GPD	
Water Rights – Instantaneous	1201	Instantaneous = 630,720 GPD (438 GPM)	

NORTH SHORE /AGATE HEIGHTS WELL SYSTEM

Water Demand Forecasting	ERUs	With Conservation Savings	
		Total Average Volume -GPD (based on ADD= 190 gpd/ERU)	Maximum Daily Volume-GPD (based on MDD= 420 gpd/ERU)
Current - 2021	45	8,550	18,900
Six years - 2027	51	9,690	21,420
20 years - 2041	65	12,350	27,300
Full build-out**	80	15,200	33,600
Water Rights – Annual	2382	Annual (Daily Avg) = 452,530 GPD	
Water Rights – Instantaneous	1502	Instantaneous = 630,720 GPD (438 GPM)	

* ADD and MDD values are based on source data which includes distribution system leakage.

** Based on including all vacant lots to determine maximum potential connections. Will require ULID for construction of additional water sytem facilities.

EXHIBIT 3

2016-2021 MAXIMUM DAILY WATER USE PER SYSTEM

Gallons per day per ERU (includes actual DSL)

SUDDEN VALLEY WATER SYSTEM

	GPD/ERU						Max MDD
	2016	2017	2018	2019	2020	2021	
Sudden Valley	240	254	240	226	197	217	254

GENEVA WATER SYSTEM

	GPD/ERU						Max MDD
	2016	2017	2018	2019	2020	2021	
Geneva	308	312	314	248	272	283	314

AGATE HEIGHTS WATER SYSTEM

	GPD/ERU						Max MDD
	2016	2017	2018	2019	2020	2021	
Agate Heights	603	510	536	446	462	523	603

EAGLERIDGE WATER SYSTEM

	GPD/ERU						Max MDD
	2016	2017	2018	2019	2020	2021	
Eagleridge	745	749	701	568	627	752	752

2016-2021 Maximum Day Demand



EXHIBIT 4

LWWSD DISTRIBUTION SYSTEM LOSSES THREE-YEAR RUNNING AVERAGE

SUDDEN VALLEY WATER SYSTEM

Month	Gross Production (CU. FT.)	Metered Residential Consumption (CU. FT.)	Distribution System Leakage (CU. FT.)	% of Water Consumed	Net % of Distribution System Leakage
TOTAL 2018	15,902,786	13,771,694	2,131,092	86.60%	13.40%
TOTAL 2019	14,467,291	13,656,673	810,618	94.40%	5.60%
TOTAL 2020	14,593,716	13,905,864	687,852	95.29%	4.71%
3-YR AVG	14,987,931	13,778,077	1,209,854	92.09%	7.91%

GENEVA WATER SYSTEM

Month	Gross Production (CU. FT.)	Metered Residential Consumption (CU. FT.)	Distribution System Leakage (CU. FT.)	% of Water Consumed	Net % of Distribution System Leakage
TOTAL 2018	8,125,974	7,294,568	831,406	89.77%	10.23%
TOTAL 2019	7,471,145	6,962,632	508,513	93.19%	6.81%
TOTAL 2020	7,692,811	7,145,644	547,167	92.89%	7.11%
3-YR AVG	7,763,310	7,134,281	629,029	91.95%	8.05%

AGATE HEIGHTS WATER SYSTEM

Month	Gross Production (CU. FT.)	Metered Residential Consumption (CU. FT.)	Distribution System Leakage (CU. FT.)	% of Water Consumed	Net % of Distribution System Leakage
TOTAL 2018	459,887	438,432	21,455	95.33%	4.67%

TOTAL 2019	454,504	430,206	24,298	94.65%	5.35%
TOTAL 2020	432,743	418,657	14,086	96.74%	3.26%
3-YR AVG	449,045	429,098	19,946	95.58%	4.42%

EAGLERIDGE WATER SYSTEM

Month	Gross Production (CU. FT.)	Metered Residential Consumption (CU. FT.)	Distribution System Leakage (CU. FT.)	% of Water Consumed	Net % of Distribution System Leakage
TOTAL 2018	689,060	651,997	37,063	94.62%	5.38%
TOTAL 2019	650,051	614,046	36,005	94.46%	5.54%
TOTAL 2020	686,113	647,737	38,376	94.41%	5.59%
3-YR AVG	675,075	637,927	37,148	94.50%	5.50%

EXHIBIT 5**2020 AVERAGE DAILY WATER USE PER SYSTEM**
Gallons per day per ERU**SUDDEN VALLEY WATER SYSTEM**

Month	Modified Gross Production (Gal.)	Number of ERUs	% Full Time Occupancy	Average Bi-Monthly Consumption	Average Daily Consumption	Average Occupancy Per Conn. (persons)	Per Capity Average Daily Consumption
DEC/JAN20	17,242,092	2,731	100%	6313	103	2.7	38
FEB/MAR 20	16,509,118	2,734	100%	6038	101	2.7	37
APR/MAY 20	19,484,167	2,737	100%	7119	117	2.7	43
JUN/JUL 20	18,041,682	2,742	100%	6580	108	2.7	40
AUG/SEP 20	20,321,336	2,749	100%	7392	121	2.7	45
OCT/NOV	17,569,898	2,756	100%	6375	105	2.7	39
2020 AVERAGE DAILY CONSUMPTION (gpd/ERU)				6636	109	2.7	40

GENEVA WATER SYSTEM

Month	Modified Gross Production (Gal.)	Number of ERUs	% Full Time Occupancy	Average Bi-Monthly Consumption	Average Daily Consumption	Average Occupancy Per Conn. (persons)	Per Capity Average Daily Consumption
JAN/FEB 20	8,084,663	1,155	100%	7000	117	2.9	40
MAR/APR 20	8,557,430	1,157	100%	7396	121	2.9	42
MAY/JUN 20	9,142,832	1,157	100%	7902	130	2.9	45
JUL/AUG 20	12,691,446	1,157	100%	10969	180	2.9	62
SEP/OCT 20	10,935,017	1,158	100%	9443	155	2.9	53
NOV/DEC 20	8,134,685	1,159	100%	7019	115	2.9	40
2020 AVERAGE DAILY CONSUMPTION (gpd/ERU)				8288	136	2.9	47

AGATE HEIGHTS WATER SYSTEM

Month	Modified Gross Production (Gal.)	Number of ERUs	% Full Time Occupancy	Average Bi-Monthly Consumption	Average Daily Consumption	Average Occupancy Per Conn. (persons)	Per Capity Average Daily Consumption
JAN/FEB 20	467,151	44	100%	10617	177	2.7	66
MAR/APR 20	495,839	44	100%	11269	185	2.7	68
MAY/JUN 20	547,784	44	100%	12450	204	2.7	76
JUL/AUG 20	647,402	44	100%	14714	241	2.7	89
SEP/OCT 20	610,650	44	100%	13878	228	2.7	84
NOV/DEC 20	468,318	44	100%	10644	174	2.7	65
2020 AVERAGE DAILY CONSUMPTION (gpd/ERU)				12262	201	2.7	75

EAGLERIDGE WATER SYSTEM

Month	Modified Gross Production (Gal.)	Number of ERUs	% Full Time Occupancy	Average Bi-Monthly Consumption	Average Daily Consumption	Average Occupancy Per Conn. (persons)	Per Capity Average Daily Consumption
JAN/FEB 20	593,564	70	100%	8479	141	2.7	52
MAR/APR 20	659,655	70	100%	9424	154	2.7	57
MAY/JUN 20	816,790	70	100%	11668	191	2.7	71
JUL/AUG 20	1,360,751	70	100%	19439	319	2.7	118
SEP/OCT 20	1,108,935	70	100%	15842	260	2.7	96
NOV/DEC 20	592,786	70	100%	8468	139	2.7	51
2020 AVERAGE DAILY CONSUMPTION (gpd/ERU)				12220	201	2.7	74

EXHIBIT 5

2016-2020 AVERAGE DAILY WATER USE PER SYSTEM **Gallons per day per ERU**

SUDDEN VALLEY WATER SYSTEM

	GPD/ERU				
	2016	2017	2018	2019	2020
Sudden Valley	127	132	123	111	109

GENEVA WATER SYSTEM

	GPD/ERU				
	2016	2017	2018	2019	2020
Geneva	150	146	145	133	136

AGATE HEIGHTS WATER SYSTEM

	GPD/ERU				
	2016	2017	2018	2019	2020
Agate Heights	225	196	214	212	201

EAGLERIDGE WATER SYSTEM

	GPD/ERU				
	2016	2017	2018	2019	2020
Eagleridge	210	209	202	190	201

EXHIBIT 5

2016-2020 AVERAGE DAILY WATER USE PER SYSTEM

Gallons per day per Capita

SUDDEN VALLEY WATER SYSTEM

	GPD/Capita				
	2016	2017	2018	2019	2020
Sudden Valley	49	51	47	41	40

GENEVA WATER SYSTEM

	GPD/Capita				
	2016	2017	2018	2019	2020
Geneva	48	52	52	46	47

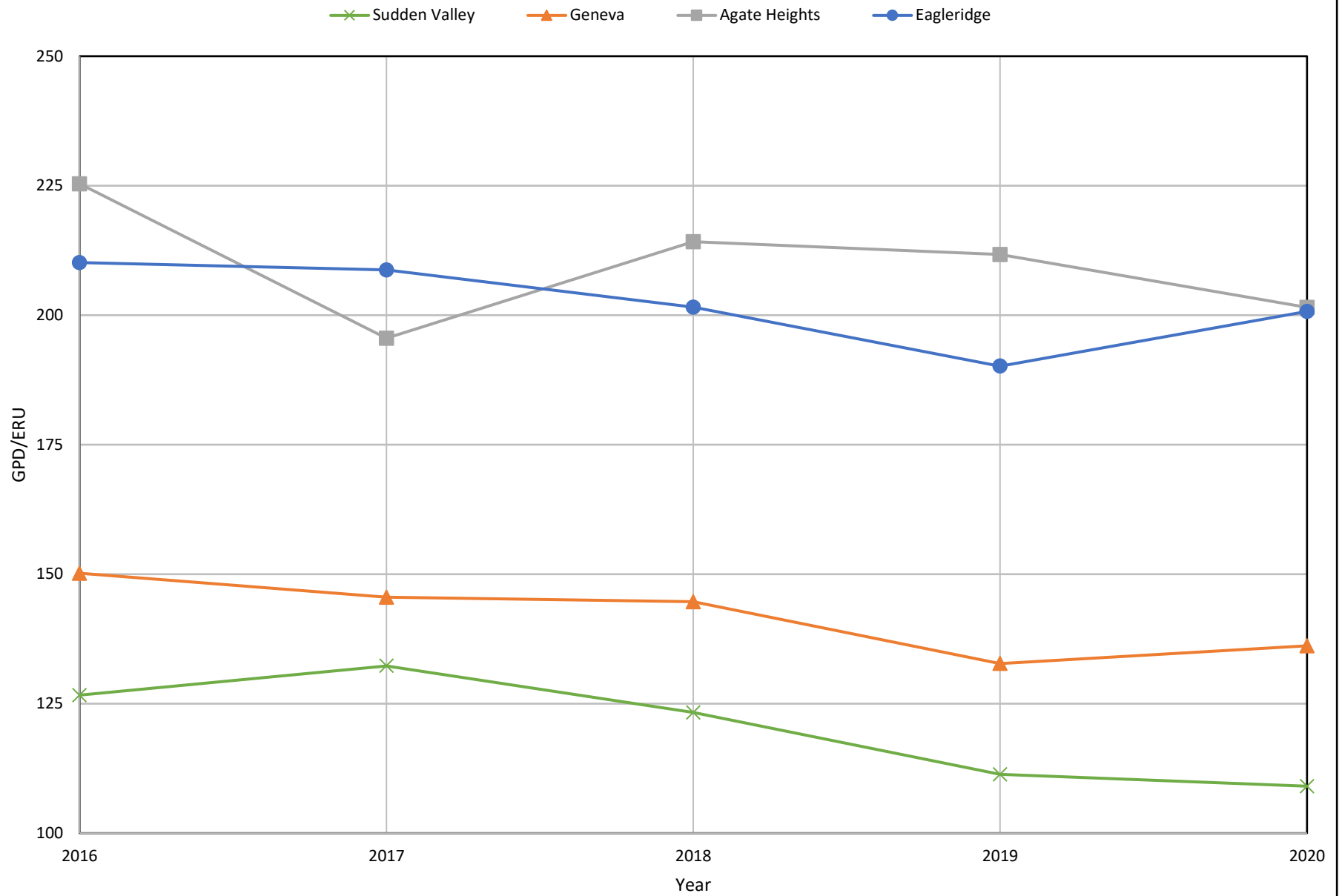
AGATE HEIGHTS WATER SYSTEM

	GPD/Capita				
	2016	2017	2018	2019	2020
Agate Heights	78	70	79	78	75

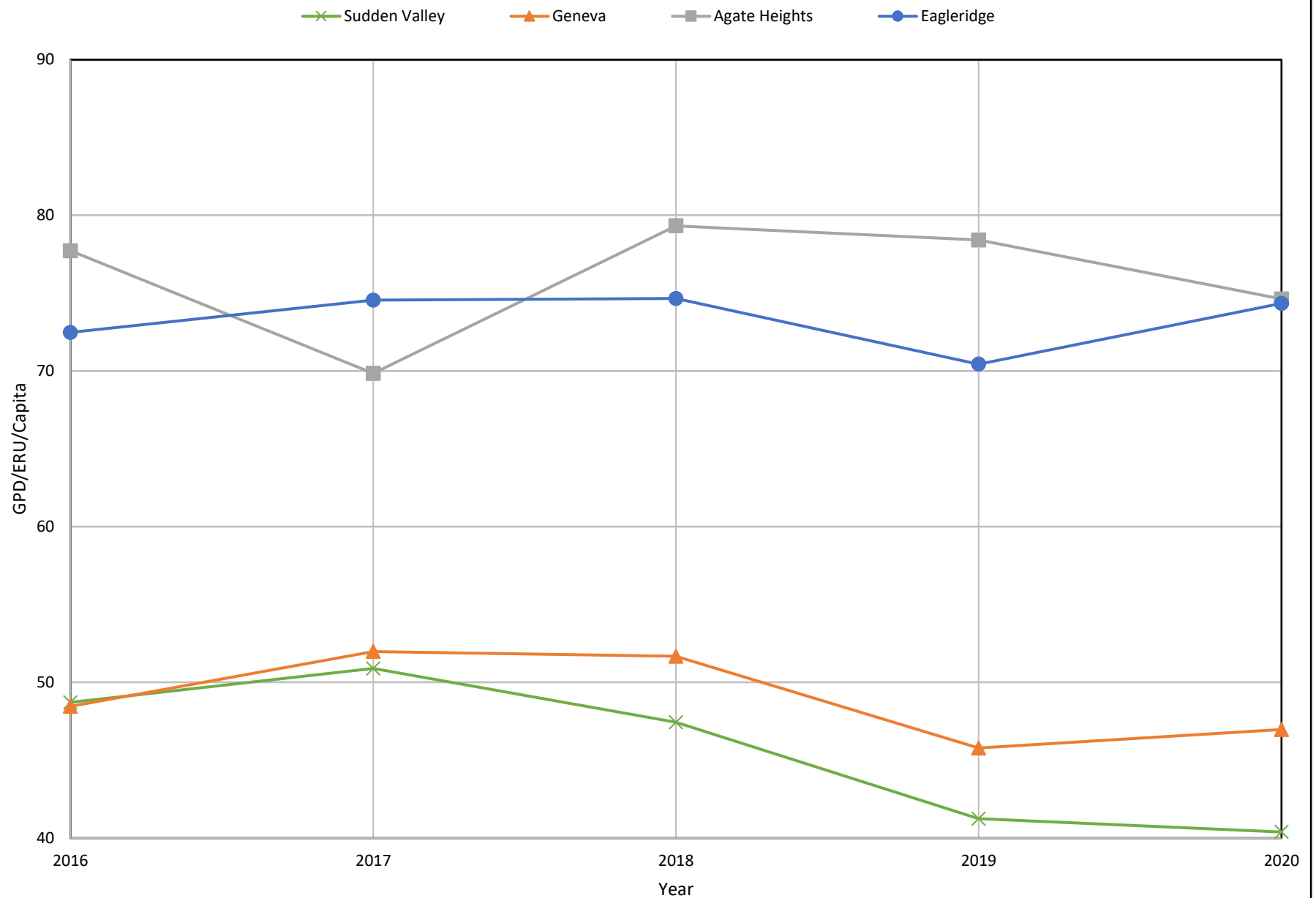
EAGLERIDGE WATER SYSTEM

	GPD/Capita				
	2016	2017	2018	2019	2020
Eagleridge	72	75	75	70	74

2016-2020 Average Day Demand



2016-2020 Average Day Demand per Capita



APPENDIX B: EXAMPLES



SAVE OUR WATER, SAVE YOUR MONEY



Summer is the perfect time to
think about water conservation!

Water Leaks Are Costly!

Leak This Size	Water Loss (in cubic feet)		Annual Loss in Dollars (@\$9.98/100 cf)
	Per Day	Per Month	
●	98	2,948	\$ 3,531
●	221	6,637	\$ 7,948
●	394	11,811	\$ 14,145
●	885	26,549	\$ 31,795
●	1,573	47,203	\$ 56,530

Leakage estimates based on 50 psi pressure

- ★ Check for dripping faucets & running toilets
- ★ Look for ways to reduce everyday usage—turning the tap off while brushing your teeth can save over 750 cubic feet every year!
- ★ Consider using a rain barrel to water flower & vegetable gardens.
- ★ Follow the voluntary watering schedule
- ★ Water deeply 2-3 times per week, rather than daily
- ★ Putting in new landscaping? Consider low-water alternatives like Eco-Lawn, Pearl's Premium grass, lawn-free landscapes, and native plants.

Voluntary Watering Schedule

**Even addresses water on Tuesdays,
Thursdays & Saturdays**

**Odd addresses water on Wednesdays,
Fridays & Sundays**

No Watering on Mondays!
Let the reservoirs replenish.

Did you know....

95% of American lawns are thirsty bluegrass. The EPA estimates that lawn watering accounts for over 30% of American's water usage.

Traditional turf lawns require a minimum of 1 inch of water per week. At an average of 10,000 ft², that's over 800 ft³ per week! Watering for 20 min/day for 7 days is equivalent to running the shower constantly for 4 days. That's enough water for the average family to take 1 year's worth of showers.



With increased time at home for most customers this year, the District has seen an increase in average water consumption. As we head into the drier months, it's the perfect time to dust off our water conservation skills!

Following these simple tips, as well as sticking to the voluntary watering schedule listed below will help save our water - and save your money!

Voluntary summer watering schedule:

Even addresses water on Tuesdays, Thursdays, and Saturdays.

Odd addresses water on Wednesdays, Fridays, and Sundays.

No watering on Mondays to let the reservoirs replenish.



TURN IT OFF

Turn off taps while brushing your teeth and doing dishes.



FIX LEAKING TAPS

A dripping tap or running toilet wastes thousands of gallons of water and your money!



SAVE OUR WATER, SAVE YOUR MONEY

*Summer is the perfect time
to think about water conservation.*



PLANT SMART

Consider low-water alternatives & native plants.



RECYCLE WATER

Re-use cooking, rain, and bath water to water plants.



Lake Whatcom Water & Sewer District

Published by Rachael Hope · September 15, 2020 ·

...

Do Earth a favor; be a water saver!

LWWSD is proud to be a sponsor of Whatcom Water Week! Things are a bit different this year, so Water Week's gone virtual. Check out the website below to pick up your virtual passport to celebrating water in all its forms right in your back yard.

Whatcom Water Week

September 12 - 19, 2020



**Virtual Tours, Online Games &
Webinars, Self-Guided Tours,
Riddles, & Photo Contests!**

***There's something for everyone, event details at
www.whatcomwaterweeks.org***

Thank you sponsors!



Whatcom Watersheds Information Network

September 14, 2020 ·

Water - it's everybody's business! Help us celebrate and learn about water here in Whatcom County during Whatcom Water Week happening all week long. For event d... See more



Lake Whatcom Water & Sewer District

Published by Rachael Hope · December 8, 2020 ·



As the days grow shorter and colder, it's time once again to think about preparing your home and pipes for winter! Here are some quick tips for winterizing. Sudden Valley residents can also tune in to 1610 am on any radio for recorded safety messages.



PLAN AHEAD TO STAY SAFE & WARM

PREPARING FOR WINTER WEATHER

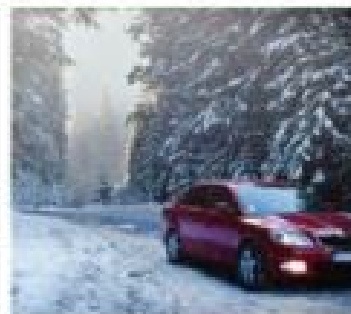
www.lwwsd.org



Cover outside hose bibs and faucets with insulated covers to prevent freezing and ice damage.



Leaving town? Shut off your water at the main valve of your home & drain pipes to prevent frozen or burst pipes.



Choose a watershed-friendly de-icing solution for your driveway. Calcium magnesium acetate (CMA) is recommended.



If you'll be gone for longer than 2 months, contact us to put your account on billing suspension.

35

People reached

5

Engagements

–

Distribution score

[Boost With Credit](#)



3



Like



Comment



Share

WINTER IS COMING

Choosing the Right De-Icer



Living in the watershed means we must be careful about outdoor chemical use. Here are some tips for choosing a watershed-friendly de-icing solution.

- Rock salt (sodium chloride) is common, but contains cyanide that is toxic to underwater life and harmful for plants.
- Magnesium chloride is considered the least toxic deicing salt, it contains less chloride.
- **Calcium magnesium acetate (CMA) is considered the best choice for safely melting ice.**
- When shopping for de-icer, look for products that are labeled as environmentally friendly and pet-safe.
- If in doubt, ask a store employee! They'll be able to help you locate the right de-icer for your needs.

Preparing for Potential Outages

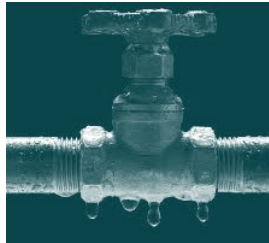
Lake Whatcom Water & Sewer District does our best to make sure all of our services are able to run continually even through power outages. Despite that, it's a good idea to prepare for outages that may affect your access to heat, power, and hot water.

- Stock up on candles, lanterns, flashlights, batteries, and matches
- Keep some non-perishable goods like energy bars, beef jerky, and bottled water on hand in case you're snowed in
- If your cell phone is your only communication device, keep portable chargers on hand and fully powered
- Have emergency numbers in a safe place in case of losing phone or internet service

COLD WEATHER TIPS



Cover outside hose bibs and faucets with insulated covers to prevent freezing and ice damage.



Leaving town? Shut off your water at the main valve of your home and drain your pipes to prevent frozen or burst pipes.



If you'll be gone for longer than 2 months, contact Lake Whatcom Water & Sewer District to put your account on billing suspension.

Sudden Valley customers can tune in to 1610 am on any radio for recorded safety messages



Summer is the perfect time to think about water conservation

Save Water the Simple Way

Outside

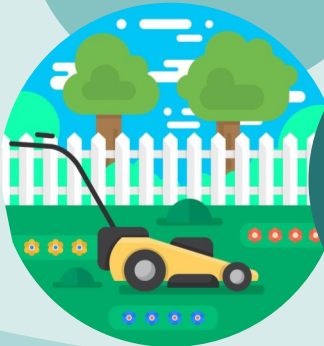
Consider using a rain barrel to water flowers and veggies

Water deeply 2-3 times per week rather than daily

Instead of using a timed sprinkler, check every day to see if watering is necessary

Consider low-water landscaping alternatives and native plants

Don't mow too short—leaving at least $\frac{1}{3}$ length allows grass to grow deeper roots



Inside

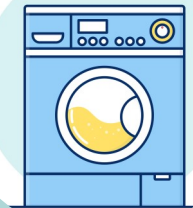


Keep an eye on dripping faucets and running toilets and repair them ASAP

Replace old showerheads with low-flow models to save gallons per minute

Use small load settings or make sure to run the washer with full loads only

Turn off the faucet when brushing teeth



**Voluntary
Watering
Schedule**

Even addresses
water on Tue,
Thu, and Sat

Odd addresses
water on Wed, Fri
& Sun

No watering on
Monday - allow res-
ervoirs to replenish

COLD WEATHER IS JUST AROUND THE BEND

Preparing for Outages

Lake Whatcom Water & Sewer District does our best to make sure all of our services run continually through power outages. Our crew is on call to man the generators and keep your water accessible. Despite that, it's smart to prepare for outages that may limit access to heat, power, and hot water.

- Stock up on candles, lanterns, flashlights, batteries, and matches
- Keep some non-perishable goods like energy bars, beef jerky, and bottled water on hand in case you're snowed in
- If your cell phone is your only communication device, keep portable chargers on hand and fully powered
- Have emergency numbers in a safe place in case of losing phone or internet service

De-Icing Your Property

Living in the watershed means we must be careful about outdoor chemical use. Here are some tips for choosing a watershed-friendly de-icing solution.

- * Avoid rock salt (sodium chloride) as it contains cyanide that is toxic to underwater life and harmful for plants.
- * **Calcium magnesium acetate (CMA) is considered the best choice for safely melting ice.**
- * Look for de-icers labeled as **environmentally friendly** and **pet-safe** or ask a store employee for assistance!

Leaving town? Cover outdoor hose bibs and faucets, and consider shutting your water off at the main valve and draining the pipes to prevent freezing or bursting.

Leaving for longer than 2 months? Contact us for information on our billing suspension program.

Don't be caught unaware...



BE PREPARED!





Lake Whatcom Water & Sewer District

Published by Rachael Hope · March 15 ·



March 15-21 is the EPA's annual Fix a Leak Week!

Household leaks account for nearly 1 trillion gallons of water waste in the U.S. annually! Not only is this water wasted, but it costs you money. 10% of homes that's leaking 90 gallons or more per day. That's 12 cubic feet, and it adds up to an extra 720 cubic feet per billing cycle!

Check out the EPA's website to become a leak detective with tons of tips on finding leaks in your home.

<https://www.epa.gov/watersense/fix-leak-week>



27

People reached

3

Engagements

—

Distribution score

[Boost With Credit](#)



1



The sun is out and summer's begun! With higher temperatures and less rain, our Sudden Valley water treatment plant is already running 30% more than it does in the wet season.

It's a great time to think about water conservation! Check out this cool graphic made by [South Florida Water Management District](#) for some ideas about how to keep water use down and make sure there's plenty to go around! From bigger steps like choosing native landscaping to smaller ones like turning off the water while you brush your teeth, there are tips for everyone.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Simple Steps to SAVE WATER

Outdoors & In



TEST WITH TRACKS

Water your lawn and landscape only when it is actually needed, such as when footprints are left where you walk across the grass.

AVOID BUZZ CUTS

Cut your grass at the highest recommended height for your turf species or the highest setting on your lawn mower. Cut no more than one-third of the grass length at one time to encourage grass roots to grow deeper.



SPRINKLE WITH CARE

Apply moderate amounts of water to create a healthy, drought- and stress-tolerant lawn. For most Florida soils, applying no more than three-quarters of an inch of water per application is enough to revitalize the grass. Use spray heads designed for planting beds. Position the sprinkler so that you water only the lawn and shrubs, not paved areas.



OUTDOORS



PLANT FLORIDA-FRIENDLY LAWNS

Plant native or drought-tolerant vegetation that thrives in the native soil and local weather conditions. Go native, and resist the urge to water it and just let it go brown during the dry season. It will come back, as nature intended, when the rains come.



FERTILIZE RESPONSIBLY

Excessive nutrients flowing into our waterways do not only come from big industry or agriculture. The use of fertilizer and pesticides on our yards results in pollutants contaminating the waterways in stormwater runoff when it rains. Residents are encouraged not to use fertilizers or pesticides during the warmer months and to use them in the correct amounts during other times of the year.

INDOORS



NOZZLE THE NOSE OF YOUR HOSE

Equip hoses with automatic shutoff nozzles for car washing, hand watering, etc.



COLOR YOUR WATER

Detect a leaking toilet by adding a few drops of food coloring to the tank. If the tank is leaking, color will appear in the bowl within 30 minutes. Replace the bad parts or consider upgrading to water-efficient toilets. Avoid flushing the toilet unnecessarily. Dispose of toxins, insects and other such waste in a trash can rather than in the toilet.



Lake Whatcom Water & Sewer District

Published by Rachael Hope · July 12 ·



Lake Whatcom Water & Sewer is proud to be a member of the Whatcom Water Alliance. Check out their Facebook page every week for tips about water conservation to help save our water, and save your money!

Also be sure to check out their brand new website full of information, tips, news, and events.

Save our water, Save your money.



Water deeply, but less frequently. Follow the voluntary watering schedule based on your house number to stay on track this summer.

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday



Whatcom Conservation District

July 8 ·

Watering deeply, but less frequently, such as every other day will save our water and save your money. Following the voluntary watering schedule, between June 1st and September 30th, based on even or odd street address number.

For more water saving tips visit:

<https://www.whatcomwateralliance.org/lawns-and-landscaping>

Always check with your local water provider for details regarding specific water use or restrictions in your area.

32

People reached

4

Engagements

–

Distribution score

Boost Unavailable



3



Lake Whatcom Water & Sewer District

Published by Rachael Hope · July 20 ·

...

Every drop counts!



Whatcom Conservation District

July 15 ·

Make every drop count! Watering early or late in the day is part of smart watering practices, as it will reduce evaporation to save our water and save your money. For more water saving tips visit: <https://www.whatcomwateralliance.org/lawns.../smart-watering>. Always check with your local water provider for details regarding specific water use or restrictions in your area.

20

People reached

0

Engagements

–

Distribution score

Boost Unavailable



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Share



Comment as Lake Whatcom Water & Sewe...





Lake Whatcom Water & Sewer District

Published by Rachael Hope · July 29 ·

...

Whatcom Water Alliance has great tips for saving our water, and saving yourself some money in the process!



**Save our water,
Save your money.**

**Water where it matters.
Water deeply and slowly to
prevent surface runoff and
allow time for the water to
penetrate.**

www.whatcomwateralliance.org

Whatcom Conservation District

July 22 ·

Get water right to the roots, watering deeply and slowly.

Use a watering wand for small areas and a drip or soaker hose placed under mulch for larger areas. Practices like this will save our water and save your money. For more water saving tips visit:

<https://www.whatcomwateralliance.org/lawns.../smart-watering>.

Always check with your local water provider for details regarding specific water use or restrictions in your area.

22

People reached

2

Engagements

—

Distribution score

Boost Unavailable

 Like

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