

**Water Resources Planning Department**

**Projection Analysis Work Sheets  
for  
Antelope Valley District**

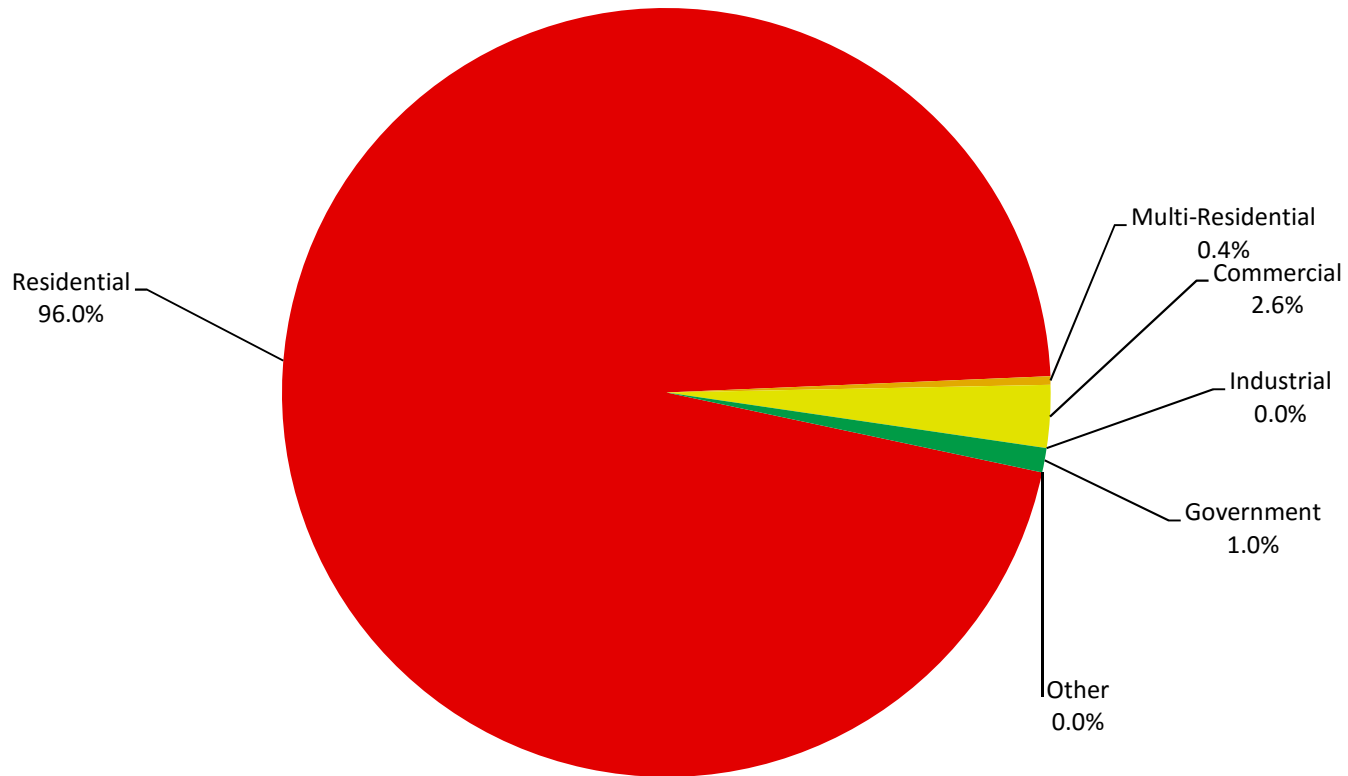
**2015**



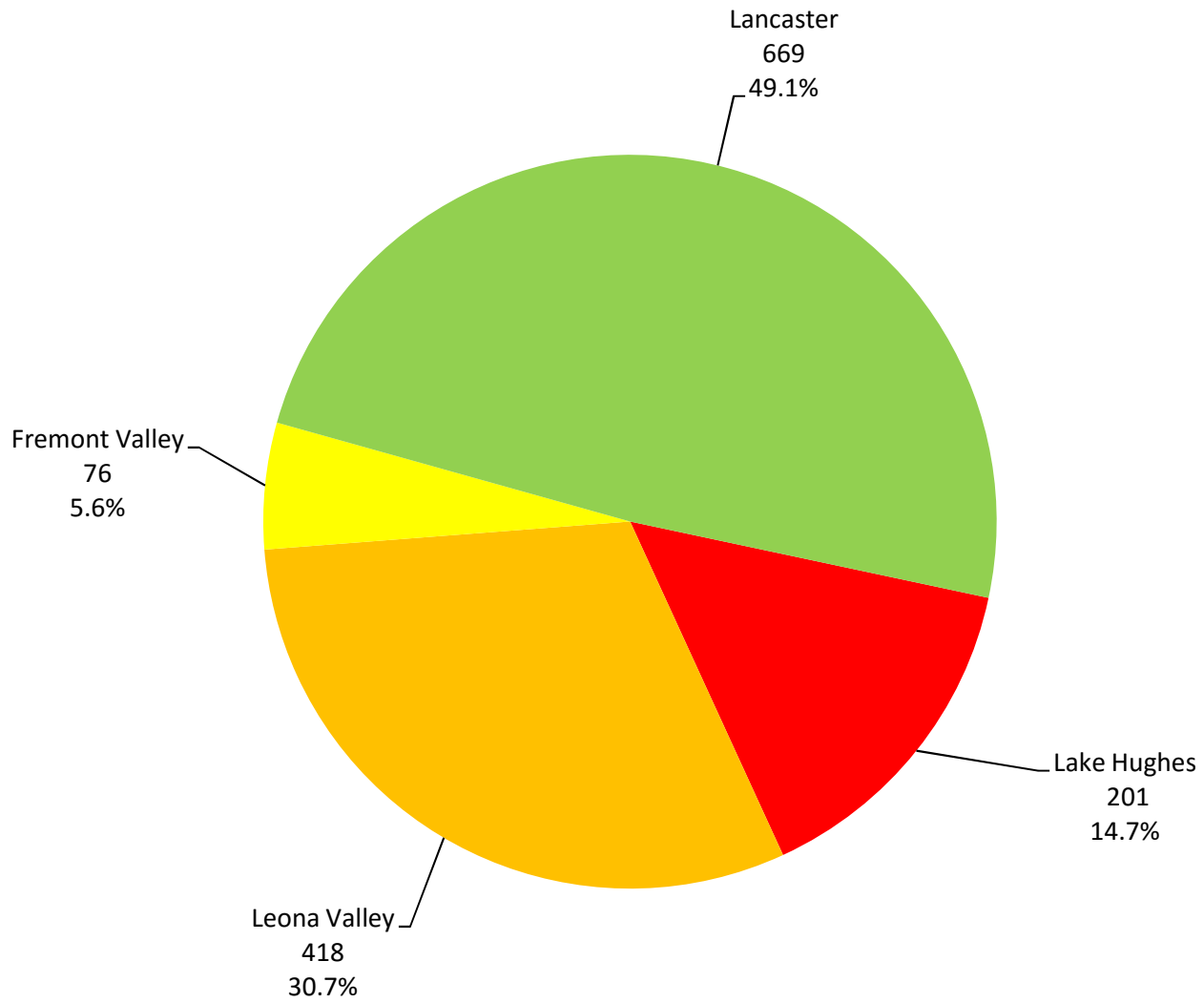
## Table of Contents for Worksheets

Worksheet	Title
1	<a href="#"><u>Annual Services</u></a>
2	<a href="#"><u>Service Growth Percentage</u></a>
3	<a href="#"><u>District Sales (AF)</u></a>
4	<a href="#"><u>Demand per Service (Gallons per Day)</u></a>
5	<a href="#"><u>Percentage Change in Annual Demand</u></a>
6	<a href="#"><u>Percentage of Total Sales</u></a>
7	<a href="#"><u>Percentage of Total Demand</u></a>
8	<a href="#"><u>Actual &amp; Projected Annual Average Services</u></a>
9	<a href="#"><u>Actual &amp; Projected Demand in Acre-Feet</u></a>
10	<a href="#"><u>Projected Annual Supply by Source</u></a>
11	<a href="#"><u>Historical and Projected Average Day, Maximum Day, and Peak Demands</u></a>
12	<a href="#"><u>Population Estimate</u></a>
13	<a href="#"><u>Temperature &amp; Rainfall History</u></a>
14	<a href="#"><u>Groundwater Facilities (if available)</u></a>
15	<a href="#"><u>Per Capita Water Demand Calculation</u></a>
16	<a href="#"><u>Indoor/Outdoor Water Usage</u></a>
17	<a href="#"><u>SB-7 Compliance Demand Worksheet</u></a>

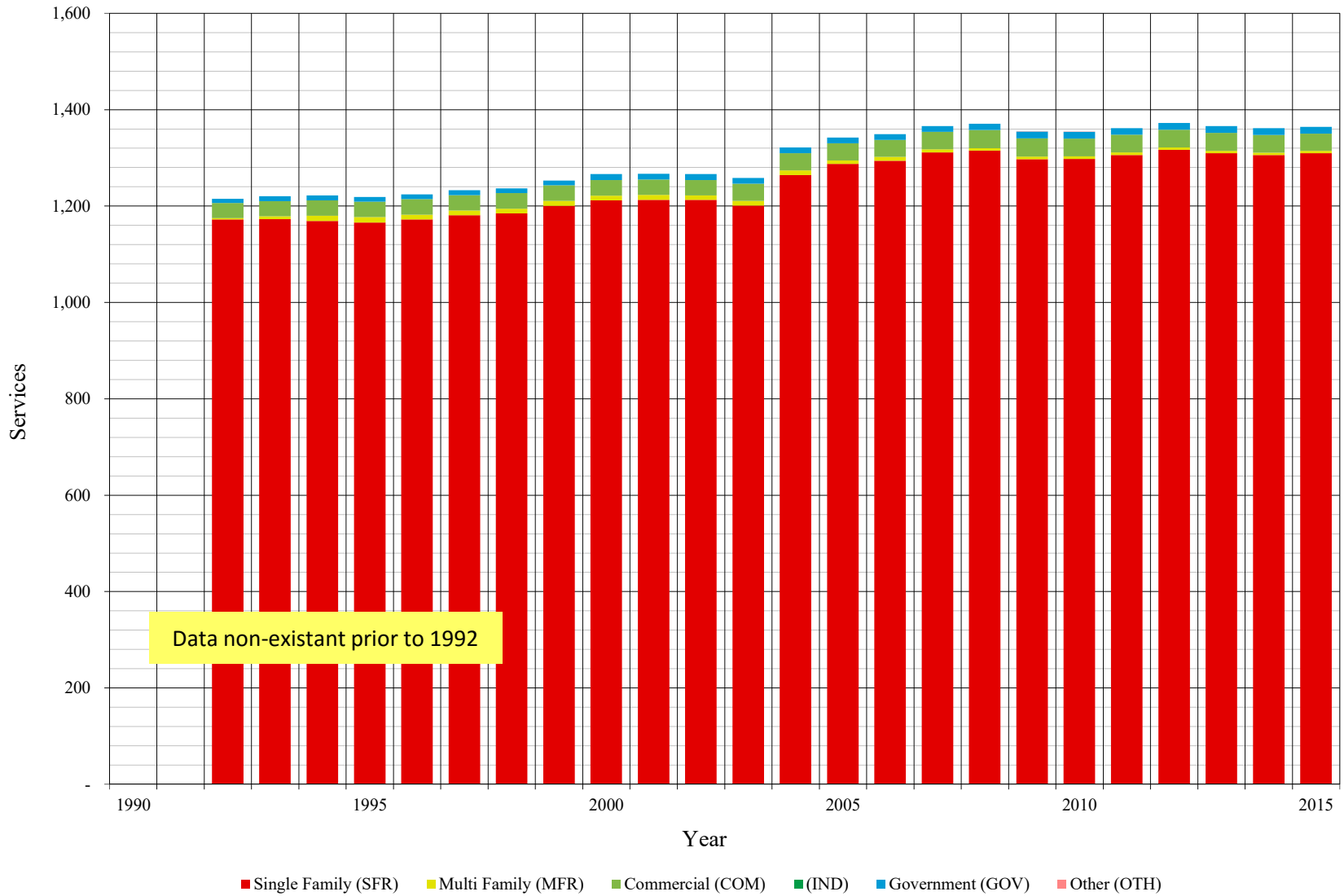
## Distribution of Services Consolidated (2015)



## Distribution of Services for AV Systems 2015



# Historical Services



**California Water Service Company - Antelope Valley District  
Water Supply and Demand Analysis and Projections  
Average Annual Services**

**Consolidated**

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Total	Annual Change
1990	-	-	-	-	-	-	-	
1991	-	-	-	-	-	-	-	
1992	1,172	3	31	-	9	-	1,215	
1993	1,173	6	31	-	10	-	1,220	5
1994	1,169	11	32	-	10	-	1,222	2
1995	1,166	11	32	-	10	-	1,219	(3)
1996	1,172	10	32	-	10	-	1,224	5
1997	1,181	10	32	-	10	-	1,233	9
1998	1,185	10	32	-	10	-	1,237	4
1999	1,200	10	33	-	10	-	1,253	16
2000	1,212	10	33	-	12	-	1,266	13
2001	1,213	10	32	-	12	-	1,267	1
2002	1,213	9	32	-	12	-	1,266	(1)
2003	1,201	10	36	-	12	-	1,258	(8)
2004	1,264	10	35	-	12	-	1,321	63
2005	1,287	7	36	-	12	-	1,342	20
2006	1,294	8	35	-	12	-	1,349	7
2007	1,311	6	36	-	12	-	1,366	17
2008	1,315	5	38	-	13	-	1,370	5
2009	1,297	6	38	-	14	0	1,355	(16)
2010	1,298	5	37	-	14	0	1,354	(1)
2011	1,306	5	37	-	14	-	1,362	8
2012	1,316	5	37	-	14	-	1,372	11
2013	1,309	5	37	-	14	-	1,366	(6)
2014	1,306	5	37	-	14	-	1,361	(5)
2015	1,309	5	36	-	14	-	1,364	3
5 Yr Avg.	1,306	5	37	0	14	0	1,363	1
10 Yr Avg.	1,289	7	36	0	13	0	1,345	11
15 Yr Avg.	1,261	8	35	0	12	0	1,316	9
20 Yr Avg.	1,238	8	34	0	12	0	1,293	8

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Service Growth Percentage**

Consolidated

Worksheet 2

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Total
1991							
1992							
1993	0.06%	100.00%	1.34%		11.11%		0.43%
1994	-0.35%	83.33%	1.86%		0.00%		0.12%
1995	-0.24%	0.00%	0.00%		0.00%		-0.23%
1996	0.53%	-9.09%	0.00%		0.00%		0.42%
1997	0.73%	0.00%	0.00%		0.00%		0.69%
1998	0.34%	0.00%	0.00%		0.00%		0.32%
1999	1.33%	0.00%	1.82%		0.00%		1.32%
2000	0.94%	-3.33%	0.51%		20.00%		1.04%
2001	0.10%	3.45%	-2.29%		0.00%		0.06%
2002	0.00%	-7.50%	0.00%		0.00%		-0.06%
2003	-0.98%	4.50%	11.93%		0.00%		-0.61%
2004	5.26%	3.45%	-0.91%		0.00%		5.02%
2005	1.83%	-27.50%	0.22%		0.00%		1.55%
2006	0.54%	5.75%	-0.42%		0.00%		0.54%
2007	1.32%	-18.48%	2.95%		0.00%		1.24%
2008	0.26%	-20.00%	3.52%		8.33%		0.33%
2009	-1.34%	15.00%	-0.44%		7.69%		-1.16%
2010	0.05%	-10.14%	-1.77%		0.00%		-0.04%
2011	0.64%	-3.23%	-0.68%		0.00%		0.56%
2012	0.79%	0.00%	0.91%		0.00%		0.78%
2013	-0.53%	5.00%	0.90%		0.00%		-0.47%
2014	-0.29%	-3.17%	-1.79%		0.00%		-0.34%
2015	0.29%	-1.64%	-2.39%		0.00%		0.21%
5 Yr. Avg.	0.18%	-0.61%	-0.61%		0.00%		0.15%
10 Yr. Avg.	0.17%	-3.09%	0.08%		1.60%		0.17%
15 Yr. Avg.	0.53%	-3.63%	0.65%		1.07%		0.51%
20 Yr. Avg.	0.59%	-3.35%	0.60%		1.80%		0.57%

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Average Annual Services**

**Lake Hughes**

Year	(SFR)	(MFR)	(COM)	(IND)	(GOV)	(OTH)	Total	Change
1990	-	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-	-
1992	189	1	8	-	5	-	203	203
1993	190	4	8	-	5	-	207	4
1994	187	9	8	-	5	-	209	2
1995	186	9	8	-	5	-	208	(1)
1996	189	8	8	-	5	-	210	2
1997	192	8	8	-	5	-	213	3
1998	194	8	8	-	5	-	215	2
1999	199	8	8	-	5	-	220	6
2000	200	8	9	-	5	-	222	1
2001	194	8	8	-	5	-	215	(7)
2002	194	7	8	-	5	-	214	(1)
2003	196	8	8	-	5	-	217	3
2004	197	8	8	-	5	-	218	1
2005	196	7	8	-	5	-	217	(1)
2006	195	8	8	-	5	-	216	(0)
2007	197	6	8	-	5	-	216	0
2008	192	5	8	-	5	-	211	(6)
2009	188	6	8	-	5	-	207	(4)
2010	184	5	8	-	5	-	203	(4)
2011	187	5	8	-	5	-	205	2
2012	195	5	8	-	5	-	213	8
2013	189	5	9	-	5	-	208	(5)
2014	182	5	8	-	5	-	200	(7)
2014	184	5	8	-	5	-	202	2



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Service Growth Percentage**

**Lake Hughes**

Worksheet 2a

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Total
1991							
1992							
1993	0.53%	300.00%	0.00%		0.00%		1.97%
1994	-1.58%	125.00%	0.00%		0.00%		0.97%
1995	-0.53%	0.00%	0.00%		0.00%		-0.48%
1996	1.61%	-11.11%	0.00%		0.00%		0.96%
1997	1.59%	0.00%	0.00%		0.00%		1.43%
1998	0.95%	0.00%	0.00%		0.00%		0.86%
1999	2.84%	0.00%	0.00%		0.00%		2.56%
2000	0.42%	-4.17%	12.50%		0.00%		0.68%
2001	-3.12%	4.35%	-11.11%		0.00%		-3.12%
2002	0.00%	-9.38%	0.00%		0.00%		-0.35%
2003	1.19%	5.75%	4.17%		0.00%		1.43%
2004	0.24%	4.35%	-2.67%		0.00%		0.27%
2005	-0.27%	-9.38%	0.46%		0.00%		-0.57%
2006	-0.41%	5.75%	0.61%		0.00%		-0.15%
2007	0.94%	-18.48%	-3.67%		0.00%		0.06%
2008	-2.53%	-20.00%	4.47%		0.00%		-2.72%
2009	-2.34%	15.00%	-3.03%		0.00%		-1.90%
2010	-1.82%	-10.14%	0.00%		0.00%		-1.94%
2011	1.22%	-3.23%	3.13%		0.00%		1.15%
2012	4.33%	0.00%	-3.03%		0.00%		3.82%
2013	-3.00%	5.00%	6.25%		0.00%		-2.39%
2014	-3.40%	-3.17%	-9.80%		0.00%		-3.57%
2015	0.94%	-1.64%	2.72%		0.00%		0.92%
5 Yr. Avg.	0.02%	-0.61%	-0.15%		0.00%		-0.01%
10 Yr. Avg.	-0.61%	-3.09%	-0.24%		0.00%		-0.67%
15 Yr. Avg.	-0.54%	-2.35%	-0.77%		0.00%		-0.60%
20 Yr. Avg.	-0.03%	-2.53%	0.05%		0.00%		-0.13%

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Average Annual Services**

**Leona Valley**

Year	(SFR)	(MFR)	(COM)	(IND)	(GOV)	(OTH)	Total	Change
1990	-	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-	-
1992	371	2	12	-	1	-	386	386
1993	368	2	12	-	2	-	384	(2)
1994	367	2	12	-	2	-	383	(1)
1995	365	2	12	-	2	-	381	(2)
1996	364	2	12	-	2	-	380	(0)
1997	368	2	12	-	2	-	384	4
1998	369	2	12	-	2	-	385	1
1999	374	2	12	-	2	-	390	5
2000	379	2	11	-	2	-	395	5
2001	383	2	11	-	2	-	398	3
2002	383	2	11	-	2	-	398	-
2003	378	2	11	-	2	-	393	(5)
2004	379	2	11	-	2	-	395	2
2005	380	-	11	-	2	-	394	(1)
2006	381	-	11	-	2	-	394	0
2007	395	-	13	-	2	-	409	16
2008	406	-	13	-	2	-	421	11
2009	399	-	13	-	2	0	414	(7)
2010	398	-	13	-	2	0	413	(1)
2011	402	-	13	-	2	-	417	4
2012	402	-	14	-	2	-	418	1
2013	402	-	14	-	2	-	418	0
2014	404	-	14	-	2	-	420	2
2014	402	-	14	-	2	-	418	(2)

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Service Growth Percentage**

**Leona Valley**

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Total
1991							
1992							
1993	-0.83%	0.00%	0.00%		100.00%		-0.54%
1994	-0.18%	0.00%	0.00%		0.00%		-0.17%
1995	-0.66%	0.00%	0.00%		0.00%		-0.63%
1996	-0.09%	0.00%	0.00%		0.00%		-0.09%
1997	1.10%	0.00%	0.00%		0.00%		1.05%
1998	0.16%	0.00%	0.00%		0.00%		0.15%
1999	1.38%	0.00%	0.00%		0.00%		1.32%
2000	1.36%	0.00%	-4.86%		0.00%		1.15%
2001	0.97%	0.00%	-3.65%		0.00%		0.82%
2002	0.00%	0.00%	0.00%		0.00%		0.00%
2003	-1.37%	0.00%	4.39%		0.00%		-1.20%
2004	0.45%	0.00%	-0.90%		0.00%		0.41%
2005	0.28%	-100.00%	-1.09%		0.00%		-0.27%
2006	0.06%		-0.29%		0.00%		0.05%
2007	3.71%		12.75%		0.00%		3.95%
2008	2.80%		3.39%		0.00%		2.80%
2009	-1.64%		-0.64%		0.00%		-1.54%
2010	-0.31%		0.00%		0.00%		-0.28%
2011	0.96%		3.21%		0.00%		0.95%
2012	0.02%		4.35%		0.00%		0.16%
2013	0.10%		-1.19%		0.00%		0.06%
2014	0.54%		1.20%		0.00%		0.56%
2015	-0.53%		-1.19%		0.00%		-0.55%
5 Yr. Avg.	0.22%	-20.00%	1.28%		0.00%		0.24%
10 Yr. Avg.	0.57%	-10.00%	2.16%		0.00%		0.62%
15 Yr. Avg.	0.40%	-7.69%	1.36%		0.00%		0.39%
20 Yr. Avg.	0.50%	-7.69%	0.77%		0.00%		0.48%

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Average Annual Services**

**Fremont Valley**

Year	(SFR)	(MFR)	(COM)	(IND)	(GOV)	(OTH)	Total	Change
1990	-	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-	-
1992	68	-	-	-	-	-	68	68
1993	69	-	-	-	-	-	69	1
1994	72	-	-	-	-	-	72	2
1995	70	-	-	-	-	-	70	(2)
1996	71	-	-	-	-	-	71	1
1997	71	-	-	-	-	-	71	0
1998	72	-	-	-	-	-	72	1
1999	72	-	-	-	-	-	72	1
2000	73	-	-	-	-	-	73	1
2001	73	-	-	-	-	-	73	0
2002	73	-	-	-	-	-	73	-
2003	68	-	-	-	-	-	68	(5)
2004	67	-	-	-	-	-	67	(1)
2005	72	-	-	-	-	-	72	5
2006	76	-	-	-	-	-	76	3
2007	76	-	-	-	-	-	76	1
2008	75	-	-	-	-	-	75	(1)
2009	72	-	-	-	-	-	72	(4)
2010	72	-	-	-	-	-	72	1
2011	73	-	-	-	-	-	73	1
2012	72	-	-	-	-	-	72	(1)
2013	72	-	-	-	-	-	72	0
2014	73	-	-	-	-	-	73	2
2014	76	-	-	-	-	-	76	2

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Service Growth Percentage**

**Fremont Valley**

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Total
1991							
1992							
1993	2.08%						2.08%
1994	3.00%						3.00%
1995	-2.33%						-2.33%
1996	1.67%						1.67%
1997	0.12%						0.12%
1998	1.06%						1.06%
1999	0.81%						0.81%
2000	1.04%						1.04%
2001	0.11%						0.11%
2002	0.00%						0.00%
2003	-6.60%						-6.60%
2004	-1.58%						-1.58%
2005	7.18%						7.18%
2006	4.73%						4.73%
2007	1.10%						1.10%
2008	-1.53%						-1.53%
2009	-4.98%						-4.98%
2010	0.82%						0.82%
2011	0.81%						0.81%
2012	-1.38%						-1.38%
2013	0.23%						0.23%
2014	2.20%						2.20%
2015	3.35%						3.35%
5 Yr. Avg.	1.04%						1.04%
10 Yr. Avg.	0.54%						0.54%
15 Yr. Avg.	0.30%						0.30%
20 Yr. Avg.	0.46%						0.46%

**California Water Service Company - Antelope Valley District  
Water Supply and Demand Analysis and Projections  
Average Annual Services**

**Lancaster**

Year	(SFR)	(MFR)	(COM)	(IND)	(GOV)	(OTH)	Total	Change
1990	-	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-	-
1992	544	-	11	-	3	-	558	558
1993	546	-	11	-	3	-	560	2
1994	543	-	12	-	3	-	558	(2)
1995	545	-	12	-	3	-	560	2
1996	548	-	12	-	3	-	563	2
1997	549	-	12	-	3	-	564	1
1998	550	-	12	-	3	-	565	1
1999	554	-	13	-	3	-	570	5
2000	559	-	12	-	5	-	576	6
2001	563	-	13	-	5	-	581	4
2002	563	-	13	-	5	-	581	-
2003	559	-	16	-	5	-	580	(1)
2004	621	-	16	-	5	-	642	62
2005	638	-	16	-	5	-	660	18
2006	642	-	16	-	5	-	663	4
2007	643	-	16	-	5	-	664	0
2008	641	-	16	-	6	-	664	0
2009	639	-	17	-	7	-	662	(2)
2010	643	-	16	-	7	-	666	4
2011	645	-	15	-	7	-	667	1
2012	648	-	15	-	7	-	670	3
2013	646	-	15	-	7	-	668	(2)
2014	645	-	15	-	7	-	667	(1)
2014	647	-	14	-	7	-	668	1

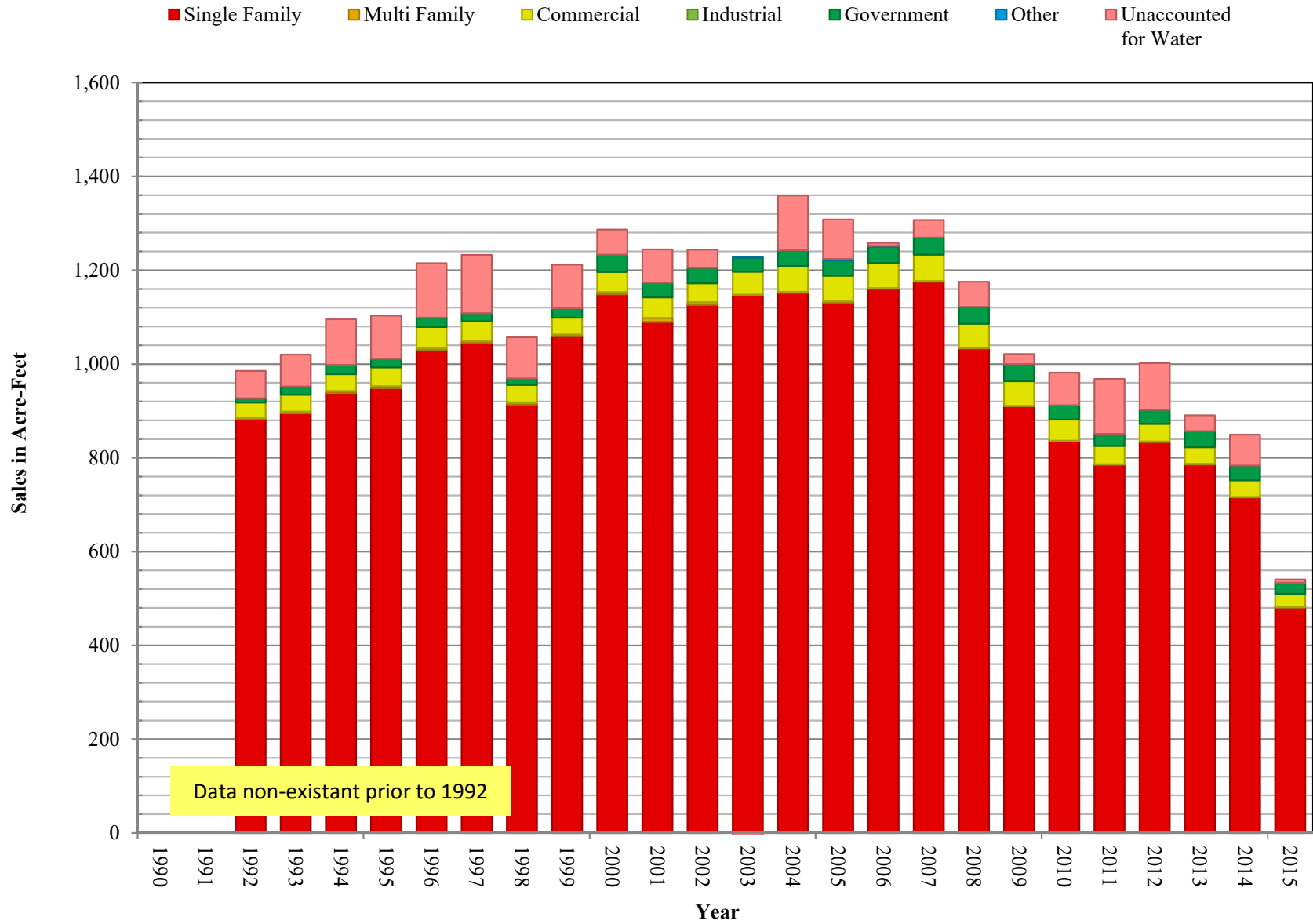
**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Service Growth Percentage**

Lancaster

Worksheet 2d

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Total
1991							
1992							
1993	0.26%		3.79%		0.00%		0.33%
1994	-0.46%		5.11%		0.00%		-0.34%
1995	0.41%		0.00%		0.00%		0.40%
1996	0.43%		0.00%		0.00%		0.42%
1997	0.26%		0.00%		0.00%		0.25%
1998	0.15%		0.00%		0.00%		0.15%
1999	0.83%		4.86%		0.00%		0.91%
2000	0.83%		-1.99%		66.67%		1.11%
2001	0.66%		5.41%		0.00%		0.75%
2002	0.00%		0.00%		0.00%		0.00%
2003	-0.74%		23.08%		0.00%		-0.20%
2004	11.12%		0.00%		0.00%		10.71%
2005	2.86%		1.04%		0.00%		2.79%
2006	0.64%		-1.03%		0.00%		0.59%
2007	0.05%		-0.52%		0.00%		0.04%
2008	-0.22%		3.14%		20.00%		0.01%
2009	-0.43%		1.02%		16.67%		-0.24%
2010	0.74%		-4.02%		0.00%		0.62%
2011	0.26%		-5.76%		0.00%		0.11%
2012	0.49%		0.00%		0.00%		0.47%
2013	-0.27%		0.00%		0.00%		-0.26%
2014	-0.17%		0.00%		0.00%		-0.16%
2015	0.28%		-6.11%		0.00%		0.13%
5 Yr. Avg.	0.12%		-2.37%		0.00%		0.06%
10 Yr. Avg.	0.14%		-1.33%		3.67%		0.13%
15 Yr. Avg.	1.02%		1.08%		2.44%		1.02%
20 Yr. Avg.	0.89%		0.96%		5.17%		0.91%

# Historical Sales





**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Sales (AF)**

**Consolidated**

Worksheet 3

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Irrigation (IRRI)	Unaccounted for Water (UAFW)	Total Sales (AF)	Total Demand (AF)	Total Demand (MGal)
1990	-	-	-	-	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-	-	-	-	-
1992	882.8	2.0	33.1	-	9.0	-	5.6	58.2	926.9	985.1	321.0
1993	894.8	3.6	36.4	-	17.6	-	4.5	67.6	952.3	1,019.9	332.3
1994	938.3	4.0	36.1	-	19.6	-	3.4	97.8	998.0	1,095.8	357.1
1995	948.1	4.6	40.2	-	18.1	-	2.7	91.8	1,011.0	1,102.8	359.4
1996	1,029.1	4.6	45.4	-	19.8	-	3.1	116.0	1,098.9	1,214.9	395.9
1997	1,045.2	4.9	41.2	-	17.3	-	2.3	123.9	1,108.6	1,232.5	401.6
1998	913.6	4.9	37.0	-	14.0	-	4.3	87.6	969.5	1,057.1	344.5
1999	1,059.3	3.8	35.4	-	20.1	-	1.4	93.1	1,118.8	1,211.8	394.9
2000	1,148.8	4.8	42.6	-	37.0	-	2.7	53.6	1,233.2	1,286.8	419.3
2001	1,089.9	8.2	44.1	-	30.7	-	1.7	71.5	1,173.0	1,244.5	405.5
2002	1,126.3	5.8	39.9	-	33.3	-	0.1	38.7	1,205.3	1,244.0	405.4
2003	1,145.7	2.2	49.0	-	30.1	0.8	-	(42.5)	1,227.7	1,185.2	386.2
2004	1,151.9	2.0	55.2	-	33.0	0.4	-	116.7	1,242.5	1,359.2	442.9
2005	1,131.2	2.3	54.8	-	32.4	3.7	-	83.8	1,224.3	1,308.1	426.2
2006	1,160.3	1.7	53.2	-	34.6	2.1	-	6.5	1,251.9	1,258.5	410.1
2007	1,175.1	2.1	55.7	-	36.4	-	-	37.6	1,269.3	1,306.9	425.8
2008	1,033.0	1.4	51.8	-	35.7	-	-	53.5	1,121.8	1,175.2	383.0
2009	909.9	1.1	52.4	-	36.3	-	-	21.6	999.7	1,021.3	332.8
2010	835.4	1.4	44.5	-	30.5	-	-	69.9	911.8	981.8	319.9
2011	784.9	1.1	39.3	-	25.6	-	-	117.2	851.1	968.2	315.5
2012	833.6	1.4	37.6	-	30.0	-	-	99.3	902.6	1,002.0	326.5
2013	785.5	1.6	35.6	-	34.2	-	-	33.5	857.0	890.5	290.2
2014	715.7	1.1	35.2	-	31.5	-	-	66.0	783.5	849.5	276.8
2015	480.6	0.9	28.3	-	23.5	-	-	7.4	533.3	540.8	176.2

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Sales (AF)**

**Lake Hughes**

Worksheet 3a

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Unaccounted for Water (UAFW)	Total Sales (AF)	Total Demand (AF)	Total Demand (MGal)
1990	-	-	-	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-	-	-
1994	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	62.6	20.4
1996	-	-	-	-	-	-	-	-	70.3	22.9
1997	-	-	-	-	-	-	-	-	73.8	24.1
1998	-	-	-	-	-	-	-	-	65.0	21.2
1999	-	-	-	-	-	-	-	-	69.9	22.8
2000	-	-	-	-	-	-	-	-	79.1	25.8
2001	-	-	-	-	-	-	-	-	85.3	27.8
2002	-	-	-	-	-	-	-	-	83.7	27.3
2003	56.5	2.2	3.0	-	1.6	-	7.6	63.3	70.9	23.1
2004	57.6	2.0	3.9	-	2.1	-	6.7	65.6	72.3	23.6
2005	52.6	2.3	3.5	-	1.7	-	2.8	60.1	63.0	20.5
2006	55.4	1.7	3.5	-	4.7	-	(7.2)	65.4	58.2	19.0
2007	55.0	2.1	2.6	-	3.2	-	(3.4)	62.8	59.4	19.4
2008	43.4	1.4	2.2	-	3.0	-	4.1	50.0	54.1	17.6
2009	36.8	1.1	2.1	-	2.5	-	9.9	42.4	52.3	17.0
2010	36.3	1.4	1.8	-	2.1	-	18.7	41.6	60.3	19.6
2011	33.4	1.1	2.8	-	2.5	-	12.3	39.8	52.2	17.0
2012	37.5	1.4	2.3	-	2.6	-	12.5	43.7	56.2	18.3
2013	34.3	1.6	2.1	-	4.5	-	14.1	42.6	56.7	18.5
2014	32.4	1.1	2.3	-	3.0	-	10.7	38.8	49.5	16.1
2015	34.0	0.9	2.6	-	3.5	-	0.3	41.0	41.3	13.5

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Sales (AF)**

**Leona Valley**

Worksheet 3b

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Unaccounted for Water (UAFW)	Total Sales (AF)	Total Demand (AF)	Total Demand (MGal)
1990	-	-	-	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-	237.6	77.4
1993	-	-	-	-	-	-	-	-	179.9	58.6
1994	-	-	-	-	-	-	-	-	207.7	67.7
1995	-	-	-	-	-	-	-	-	329.3	107.3
1996	-	-	-	-	-	-	-	-	362.4	118.1
1997	-	-	-	-	-	-	-	-	370.0	120.6
1998	-	-	-	-	-	-	-	-	307.1	100.1
1999	-	-	-	-	-	-	-	-	352.6	114.9
2000	-	-	-	-	-	-	-	-	348.6	113.6
2001	-	-	-	-	-	-	-	-	324.3	105.7
2002	-	-	-	-	-	-	-	-	350.1	114.1
2003	363.3	-	10.6	-	14.0	0.0	(82.2)	387.9	305.7	99.6
2004	407.9	-	10.6	-	10.8	-	(34.6)	429.3	394.7	128.6
2005	346.8	-	8.4	-	10.3	1.8	(30.2)	367.3	337.1	109.8
2006	371.3	-	7.4	-	9.7	2.1	(45.4)	390.5	345.0	112.4
2007	391.0	-	10.9	-	13.0	-	(36.7)	415.0	378.2	123.3
2008	343.2	-	10.9	-	13.6	-	(37.4)	367.7	330.3	107.6
2009	292.2	-	14.0	-	11.4	-	(35.9)	317.6	281.7	91.8
2010	251.2	-	9.6	-	11.7	-	(57.1)	272.5	215.4	70.2
2011	226.8	-	7.9	-	9.0	-	(67.7)	243.8	176.0	57.4
2012	247.1	-	8.1	-	9.5	-	(80.6)	264.7	184.1	60.0
2013	233.5	-	8.1	-	9.5	-	2.2	251.1	253.3	82.5
2014	216.8	-	7.7	-	10.7	-	34.1	235.1	269.2	87.7
2015	125.3	-	5.8	-	8.1	-	24.1	139.3	163.4	53.2

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Sales (AF)**

**Fremont Valley**

Worksheet 3c

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Unaccounted for Water (UAFW)	Total Sales (AF)	Total Demand (AF)	Total Demand (MGal)
1990	-	-	-	-	-	-	-			
1991	-	-	-	-	-	-	-			
1992	-	-	-	-	-	-	-			
1993	-	-	-	-	-	-	-			
1994	-	-	-	-	-	-	-			
1995	-	-	-	-	-	-	-	-	33.8	11.0
1996	-	-	-	-	-	-	-	-	35.5	11.6
1997	-	-	-	-	-	-	-	-	32.0	10.4
1998	-	-	-	-	-	-	-	-	29.8	9.7
1999	-	-	-	-	-	-	-	-	32.8	10.7
2000	-	-	-	-	-	-	-	-	31.7	10.3
2001	-	-	-	-	-	-	-	-	24.0	7.8
2002	-	-	-	-	-	-	-	-	23.2	7.6
2003	24.6	-	-	-	-	-	(1.0)	24.6	23.5	7.7
2004	22.8	-	-	-	-	-	(0.5)	22.8	22.3	7.3
2005	23.7	-	-	-	-	-	(6.8)	23.7	16.9	5.5
2006	23.0	-	-	-	-	-	(0.1)	23.0	22.9	7.5
2007	18.5	-	-	-	-	-	6.5	18.5	25.0	8.1
2008	21.1	-	-	-	-	-	1.9	21.1	23.0	7.5
2009	17.8	-	-	-	-	-	2.3	17.8	20.0	6.5
2010	17.8	-	-	-	-	-	0.9	17.8	18.7	6.1
2011	16.7	-	-	-	-	-	1.6	16.7	18.2	5.9
2012	14.8	-	-	-	-	-	2.1	14.8	16.9	5.5
2013	14.0	-	-	-	-	-	1.7	14.0	15.7	5.1
2014	13.5	-	-	-	-	-	3.2	13.5	16.7	5.4
2015	10.9	-	-	-	-	-	3.0	10.9	13.9	4.5

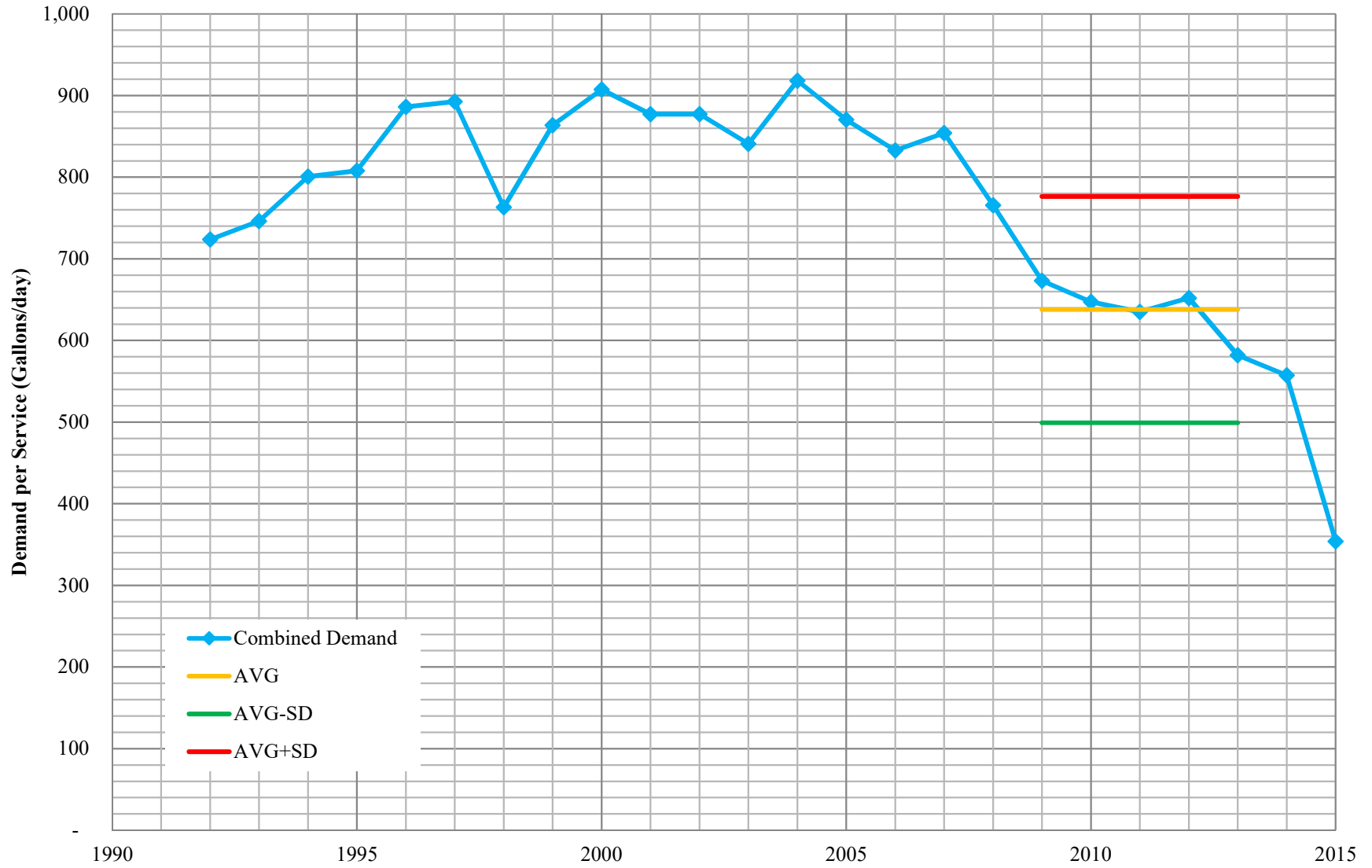
**California Water Service Company - Antelope Valley District  
Water Supply and Demand Analysis and Projections**

Lancaster

Worksheet 3d

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Unaccounted for Water (UAFW)	Total Sales (AF)	Total Demand (AF)	Total Demand (MGal)
1990	-	-	-	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-	747.4	243.6
1993	-	-	-	-	-	-	-	-	840.1	273.7
1994	-	-	-	-	-	-	-	-	888.1	289.4
1995	-	-	-	-	-	-	-	-	677.1	220.6
1996	-	-	-	-	-	-	-	-	746.8	243.3
1997	-	-	-	-	-	-	-	-	756.7	246.6
1998	-	-	-	-	-	-	-	-	655.1	213.5
1999	-	-	-	-	-	-	-	-	756.5	246.5
2000	-	-	-	-	-	-	-	-	827.4	269.6
2001	-	-	-	-	-	-	-	-	810.9	264.2
2002	-	-	-	-	-	-	-	-	787.0	256.4
2003	701.3	-	35.3	-	14.6	0.8	33.1	752.0	785.1	255.8
2004	663.6	-	40.7	-	20.1	0.4	145.2	724.7	869.9	283.4
2005	708.1	-	42.9	-	20.3	1.8	118.1	773.1	891.2	290.4
2006	710.6	-	42.3	-	20.2	-	59.3	773.0	832.3	271.2
2007	710.6	-	42.3	-	20.2	-	71.2	773.0	844.2	275.1
2008	625.2	-	38.7	-	19.1	-	84.9	683.0	767.9	250.2
2009	563.1	-	36.3	-	22.5	-	45.4	621.9	667.3	217.4
2010	530.2	-	33.2	-	16.7	-	107.3	580.0	687.3	224.0
2011	508.1	-	28.6	-	14.1	-	171.0	550.8	721.8	235.2
2012	534.2	-	27.2	-	18.0	-	165.4	579.4	744.8	242.7
2013	503.7	-	25.4	-	20.2	-	15.5	549.3	564.8	184.0
2014	453.0	-	25.2	-	17.8	-	18.1	496.1	514.1	167.5
2015	310.4	-	19.9	-	11.9	-	(20.0)	342.2	322.1	105.0

# Combined Demand per Service



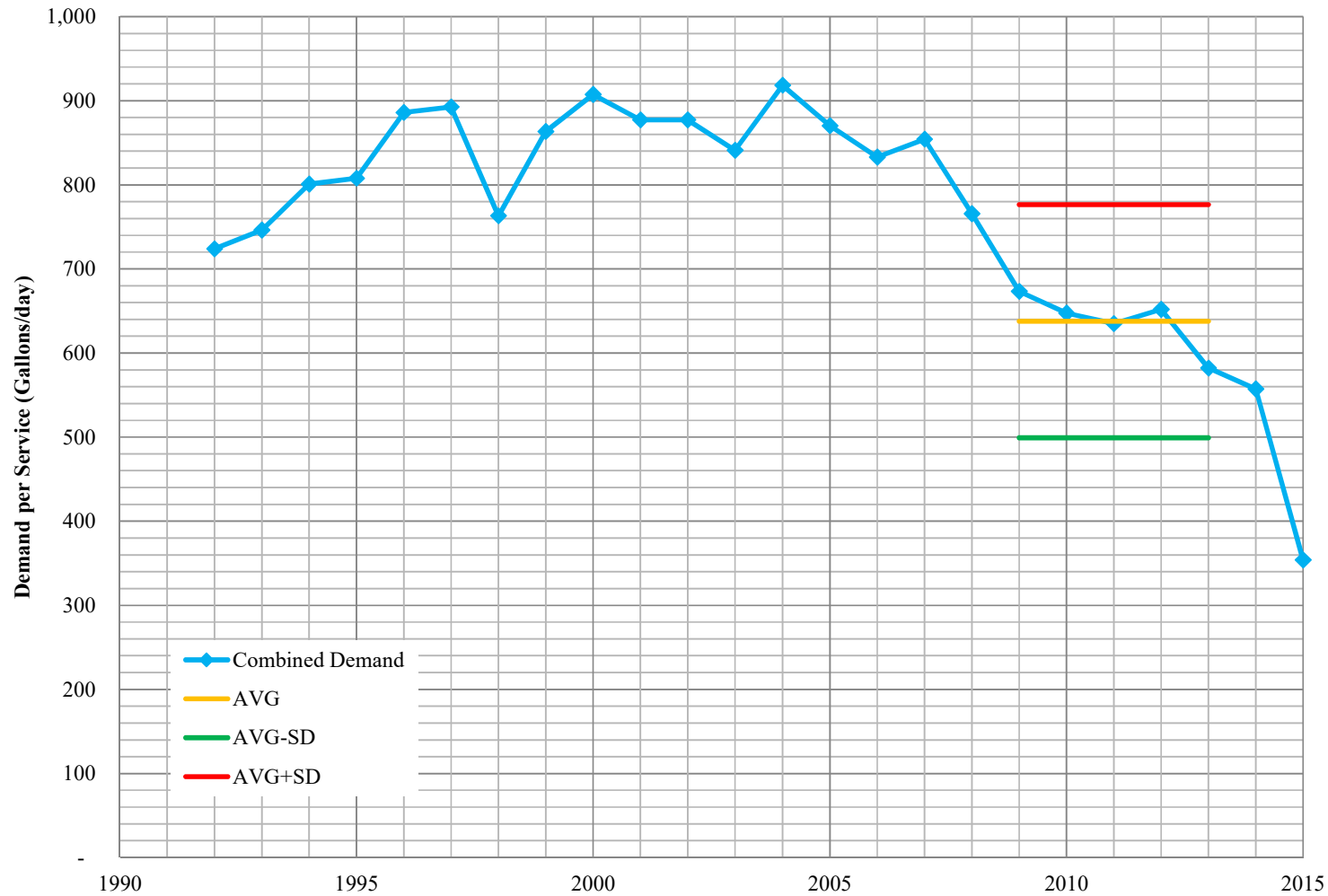
# California Water Service Company - Antelope Valley District

## Water Supply and Demand Analysis and Projections

### Demand per Service (Gallons per Day)

Consolidated

### Combined Demand per Service



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

**Consolidated**

Worksheet 4

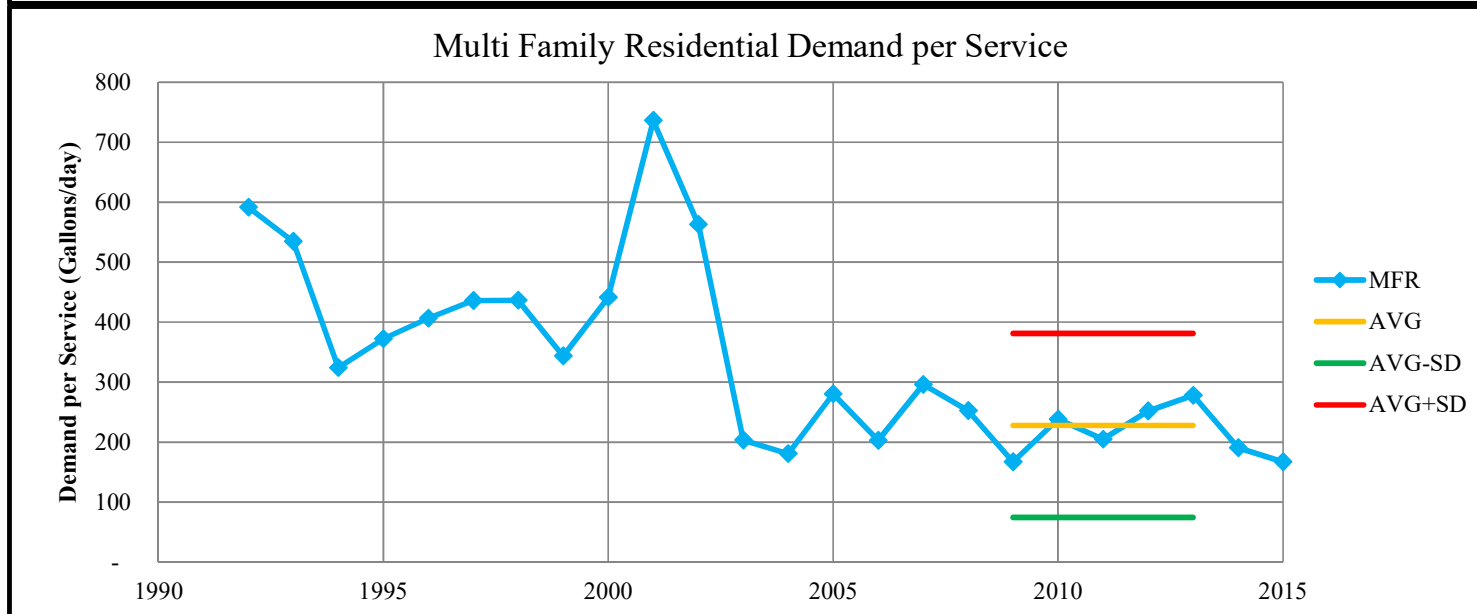
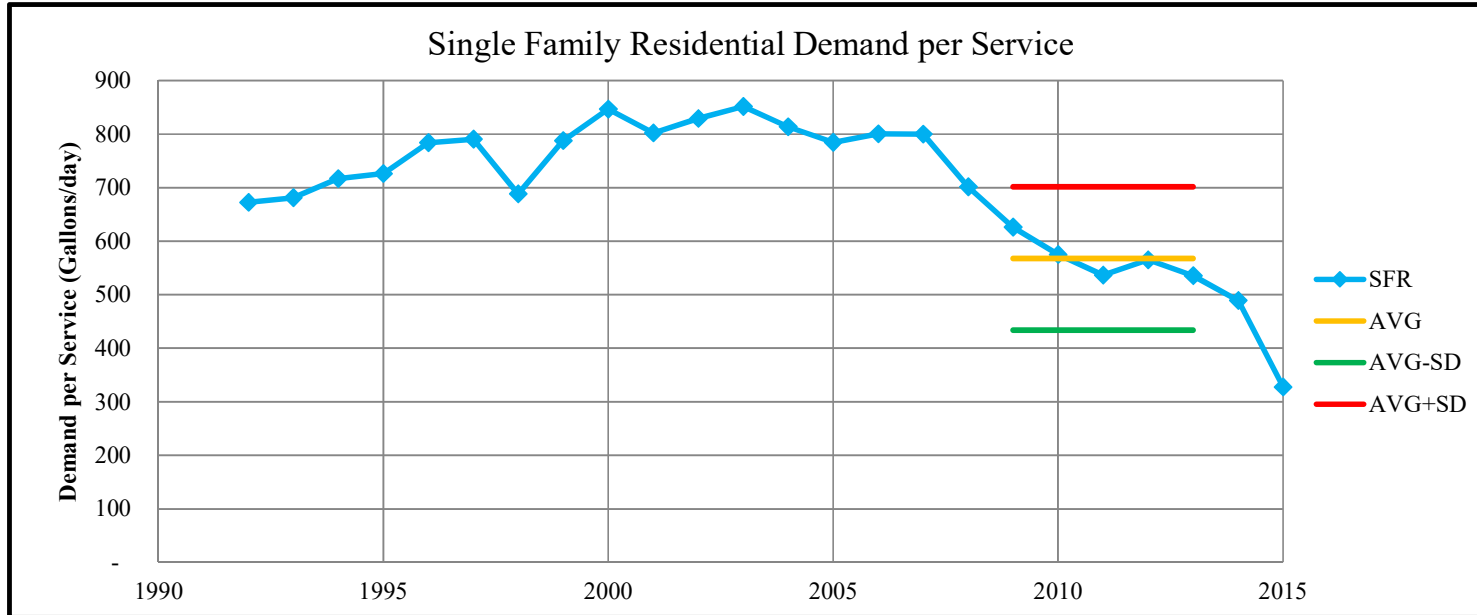
Year	SFR	MFR	COM	IND	GOV	OTH	UAFW	Combined Demand/Serv
1990								
1991								
1992	672	592	952		893		43	724
1993	681	535	1,033		1,570		49	746
1994	717	324	1,007		1,752		71	801
1995	726	372	1,122		1,616		67	808
1996	784	406	1,268		1,764		85	886
1997	790	436	1,149		1,545		90	893
1998	689	436	1,032		1,250		63	763
1999	788	344	970		1,799		66	864
2000	847	441	1,162		2,753		38	907
2001	802	736	1,232		2,285		50	877
2002	829	563	1,113		2,475		27	877
2003	852	203	1,221		2,238		(30)	841
2004	814	181	1,388		2,453		79	918
2005	785	280	1,375		2,411		56	870
2006	801	203	1,341		2,574		4	833
2007	800	296	1,364		2,710		25	854
2008	701	252	1,224		2,449		35	766
2009	626	167	1,245		2,316		14	673
2010	575	238	1,076		1,947		46	647
2011	537	205	958		1,633		77	635
2012	565	252	907		1,916		65	652
2013	536	278	851		2,181		22	582
2014	489	190	857		2,011		43	557
2015	328	167	706		1,501		5	354
AVG	568	228	1,008		1,999		45	638
SD	134	153	184		482		29	139

AVG based on 5-yr average (2009-2013)



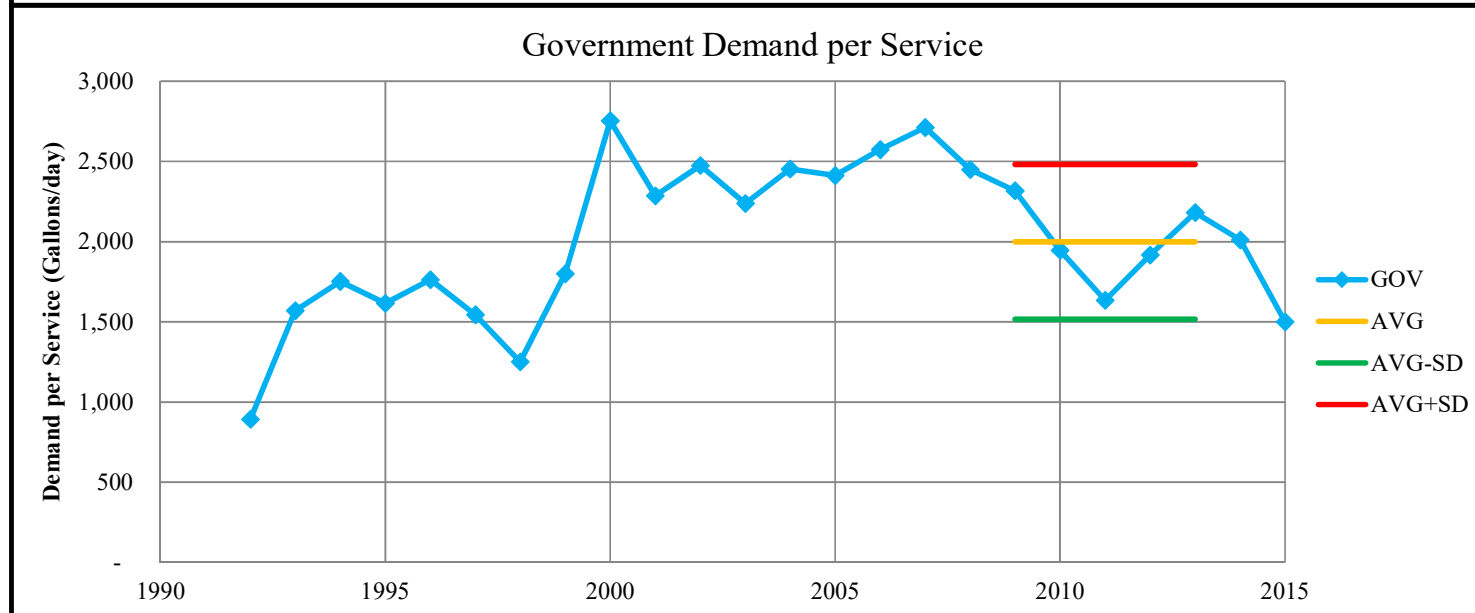
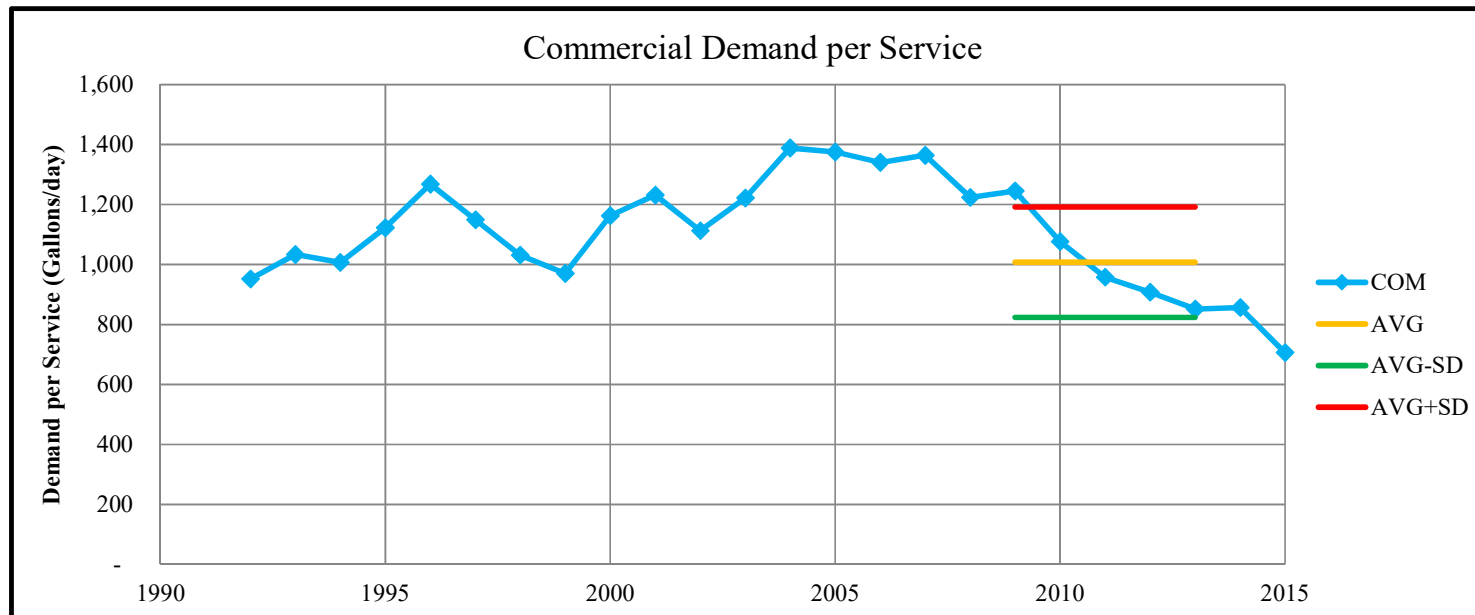
**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

**Consolidated**



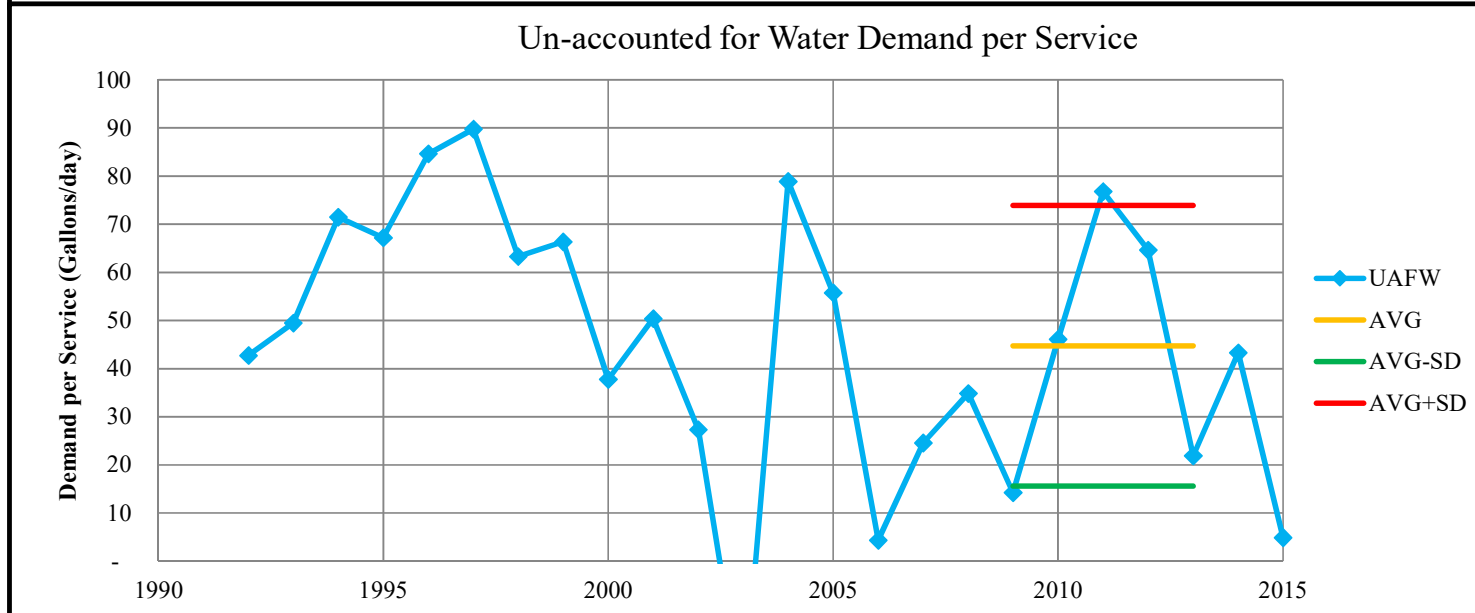
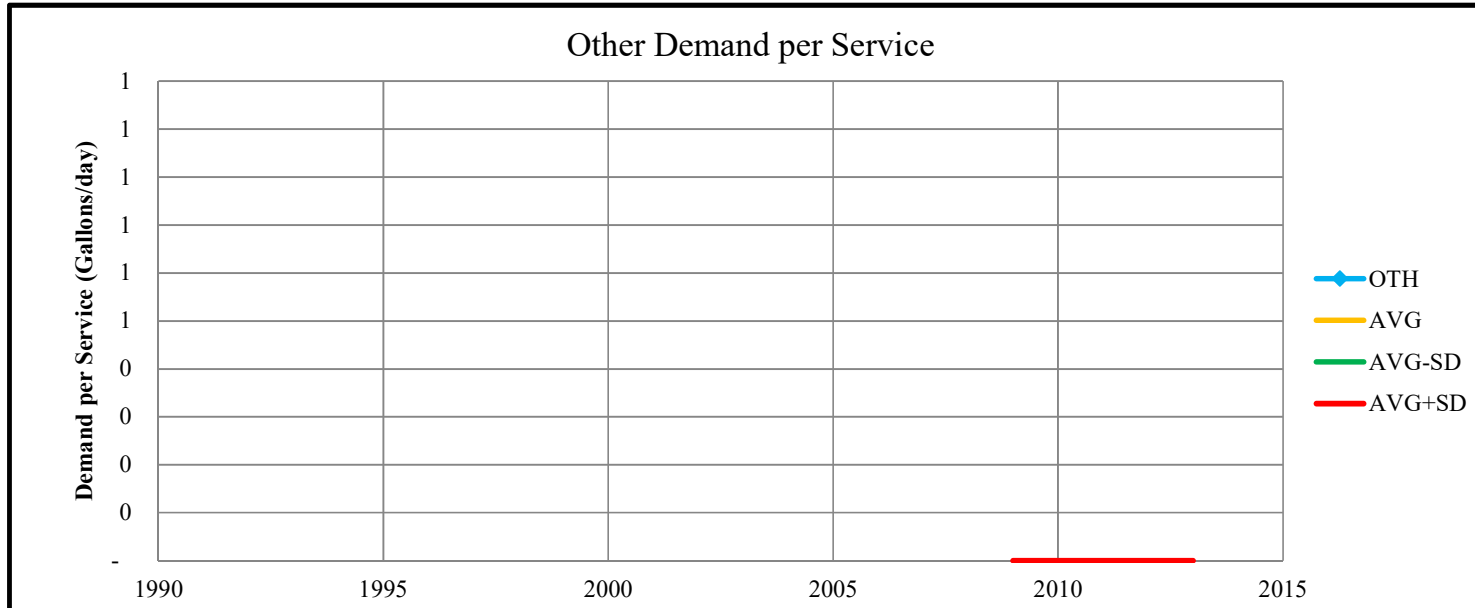
**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

**Consolidated**



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

**Consolidated**

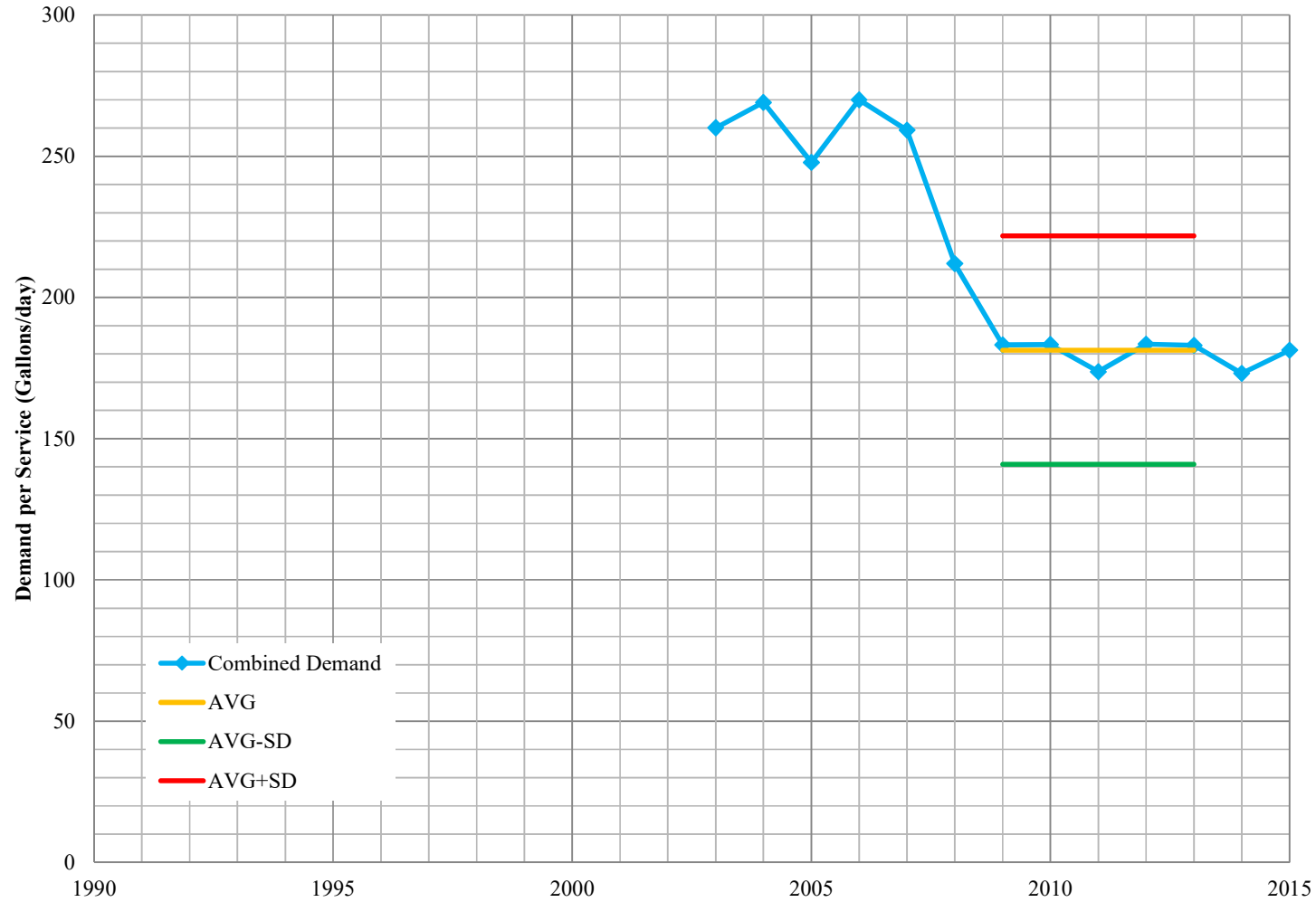


PAGE LEFT BLANK INTENTIONALLY

# California Water Service Company - Antelope Valley District Water Supply and Demand Analysis and Projections Demand per Service (Gallons per Day)

## Lake Hughes

### Combined Demand per Service



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

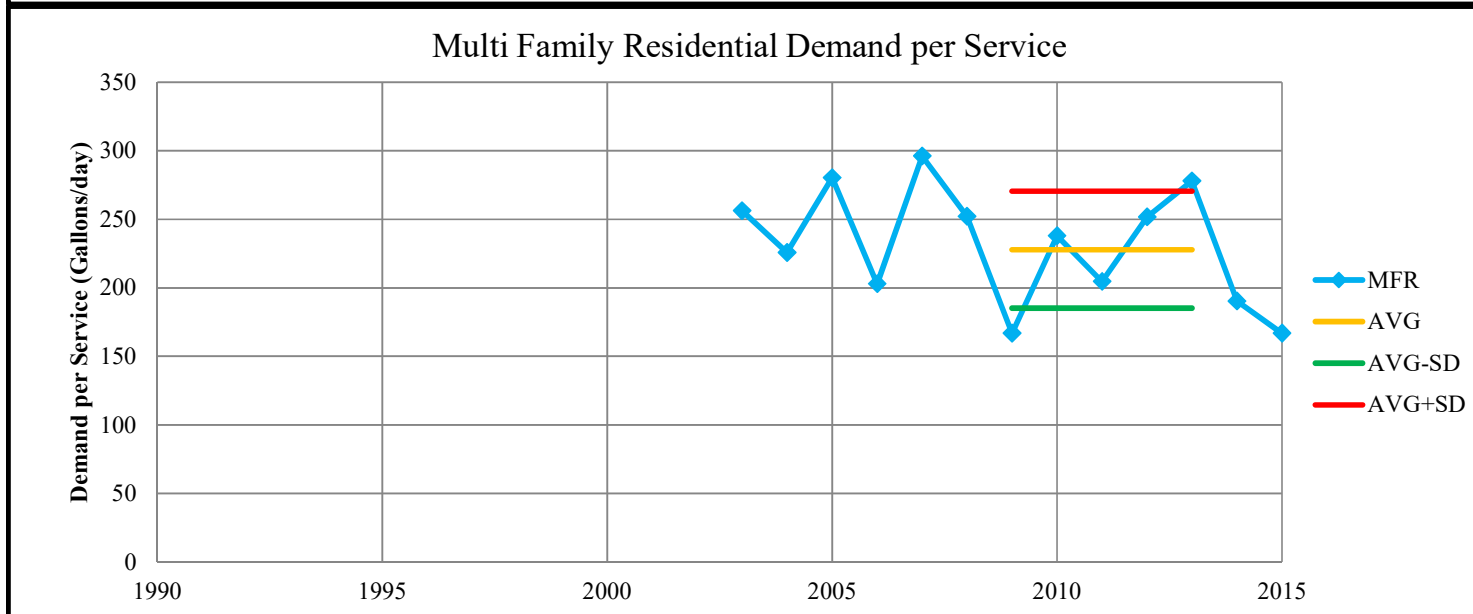
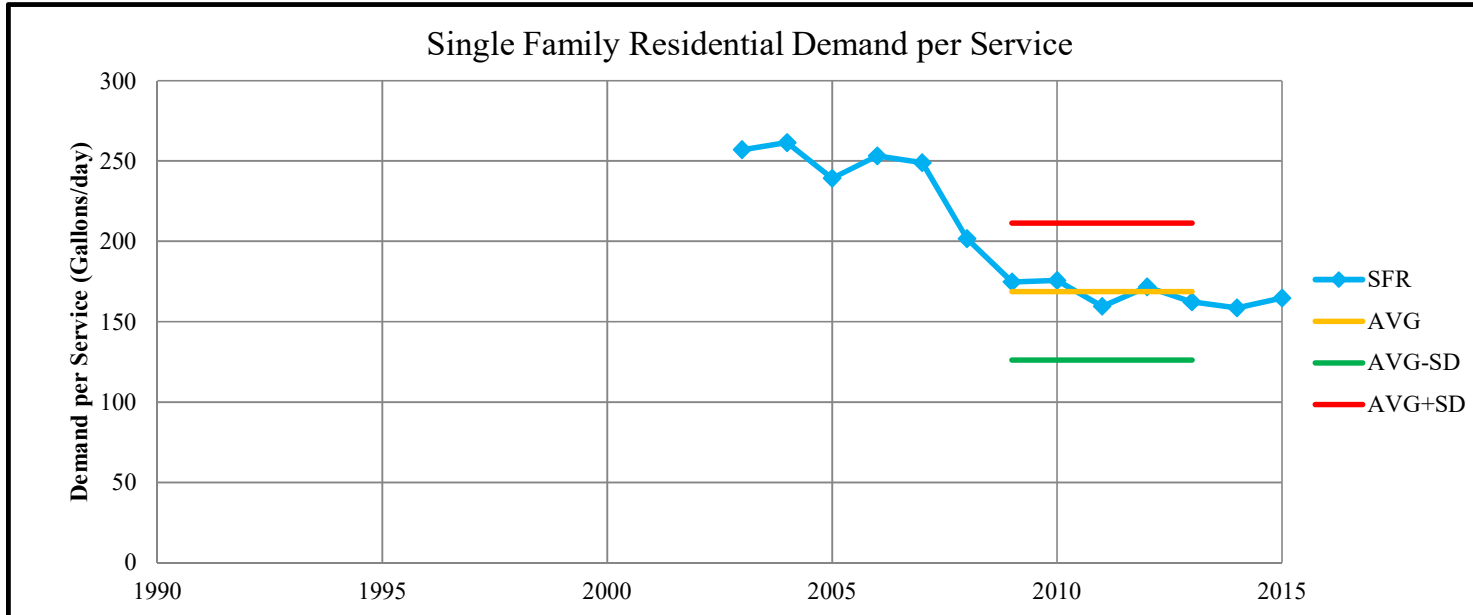
Lake Hughes

Worksheet 4a

Year	SFR	MFR	COM	IND	GOV	OTH	UAFW	Combined Demand/Serv
1990								
1991								
1992								
1993								
1994								
1995								
1996								
1997								
1998								
1999								
2000								
2001								
2002								
2003	257	256	326		277		31	260
2004	262	226	430		373		27	269
2005	239	280	387		309		12	248
2006	253	203	381		844		(30)	270
2007	249	296	292		564		(14)	259
2008	202	252	235		527		18	212
2009	175	167	232		441		43	183
2010	176	238	198		383		83	183
2011	160	205	305		452		54	174
2012	172	252	254		460		52	183
2013	162	278	223		801		61	183
2014	159	190	265		544		48	173
2015	165	167	296		628		1	181
AVG	169	228	242		507		58	181
SD	43	43	71		172		32	40

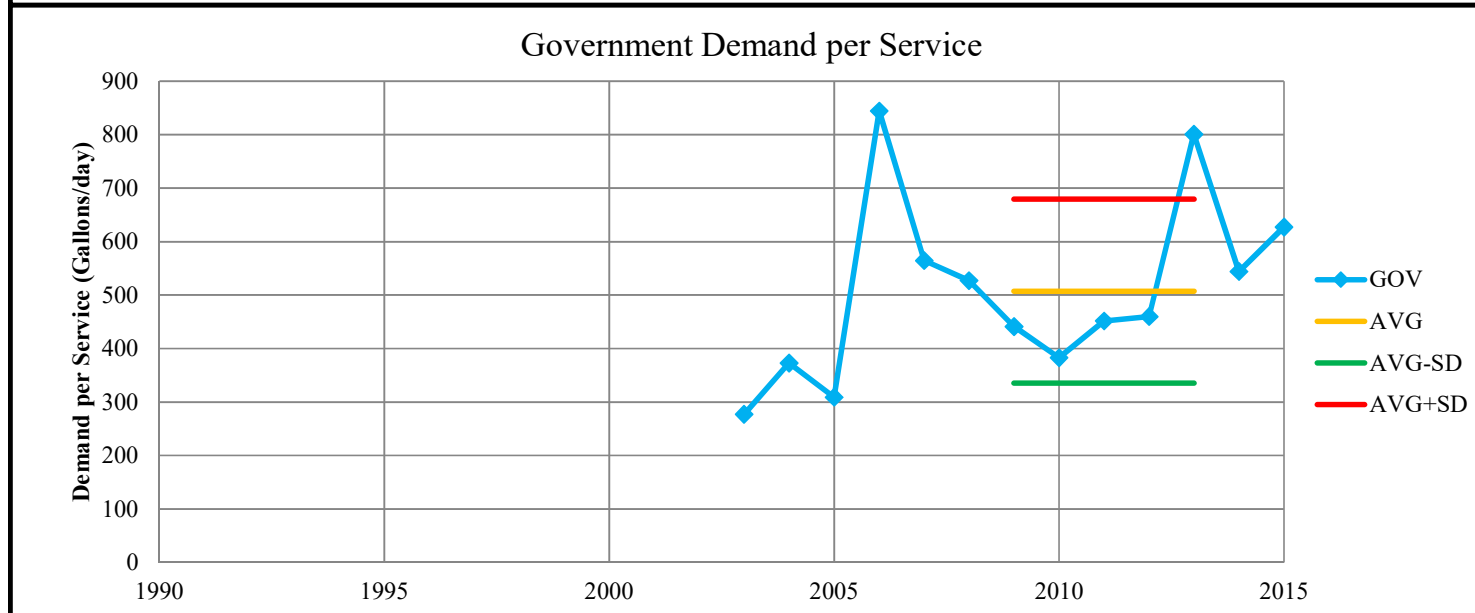
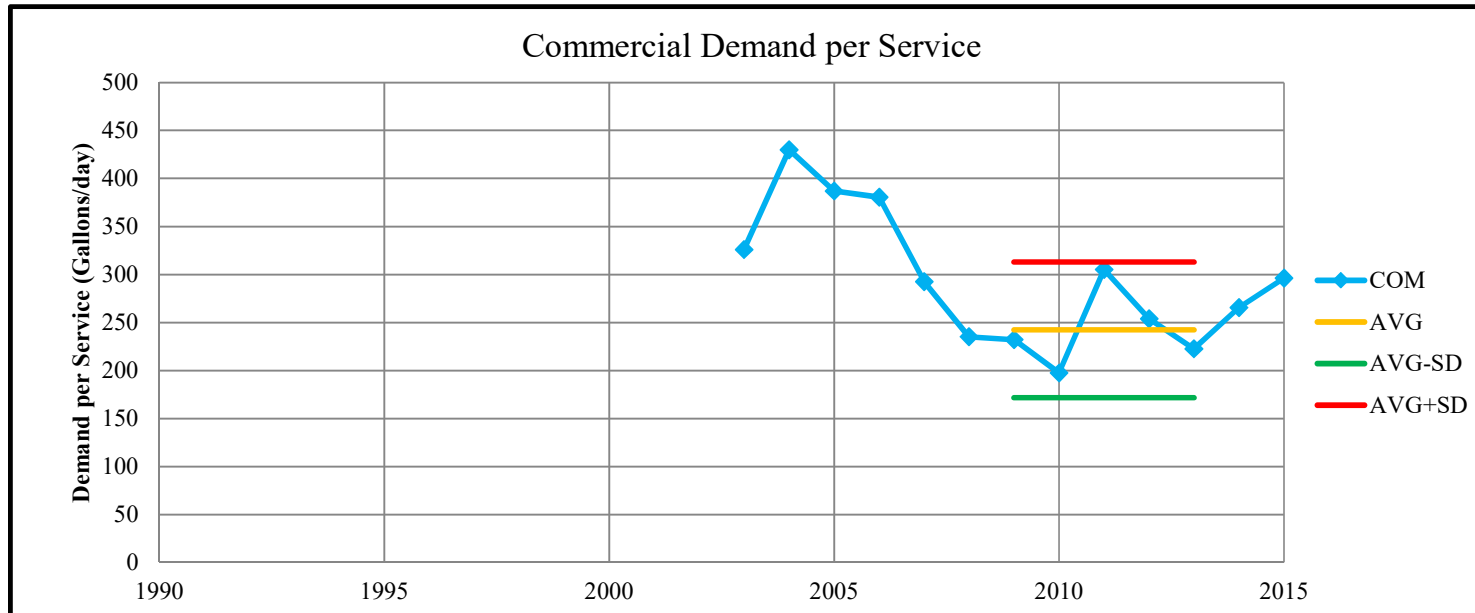
**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

**Lake Hughes**



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

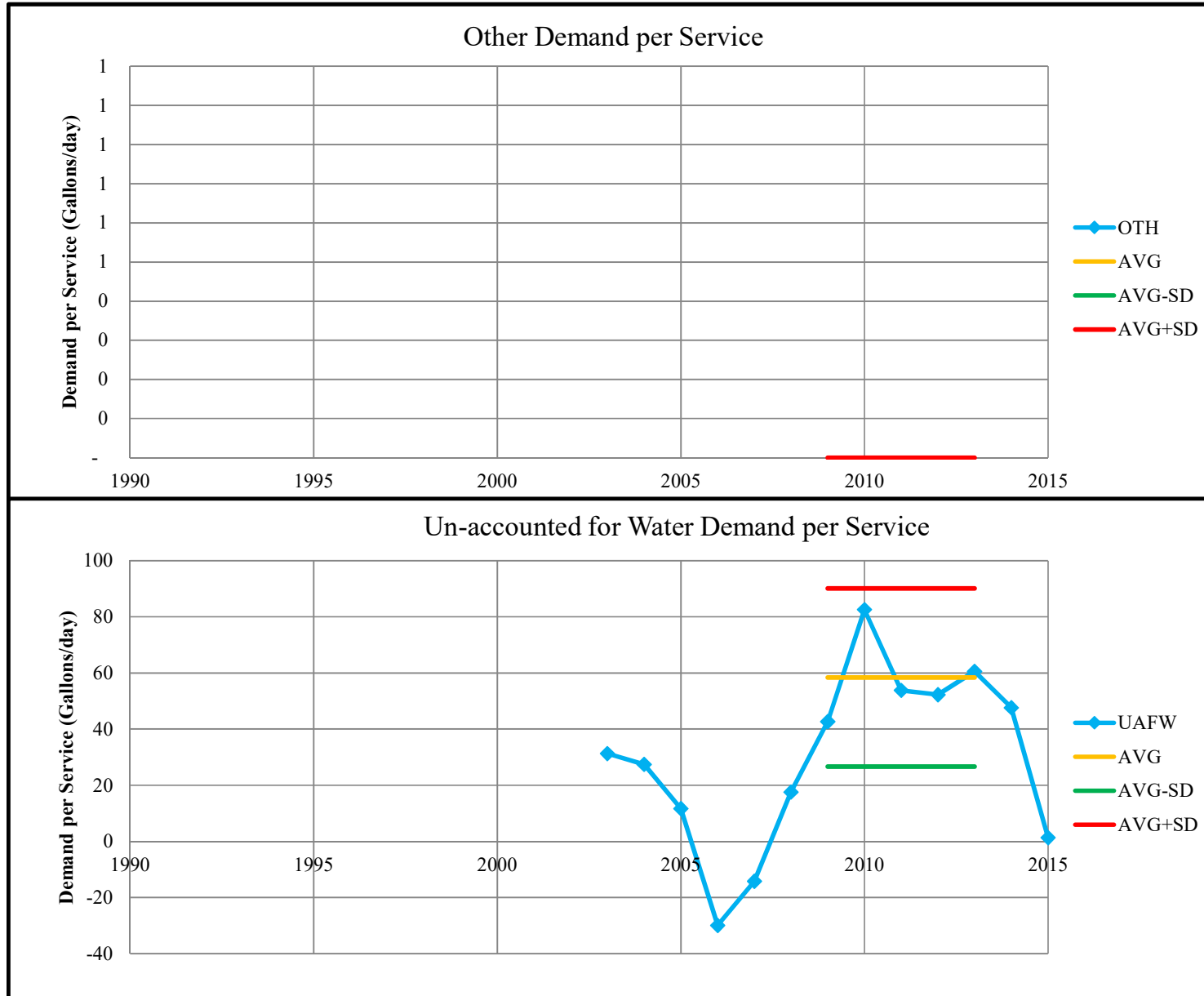
**Lake Hughes**





**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

**Lake Hughes**

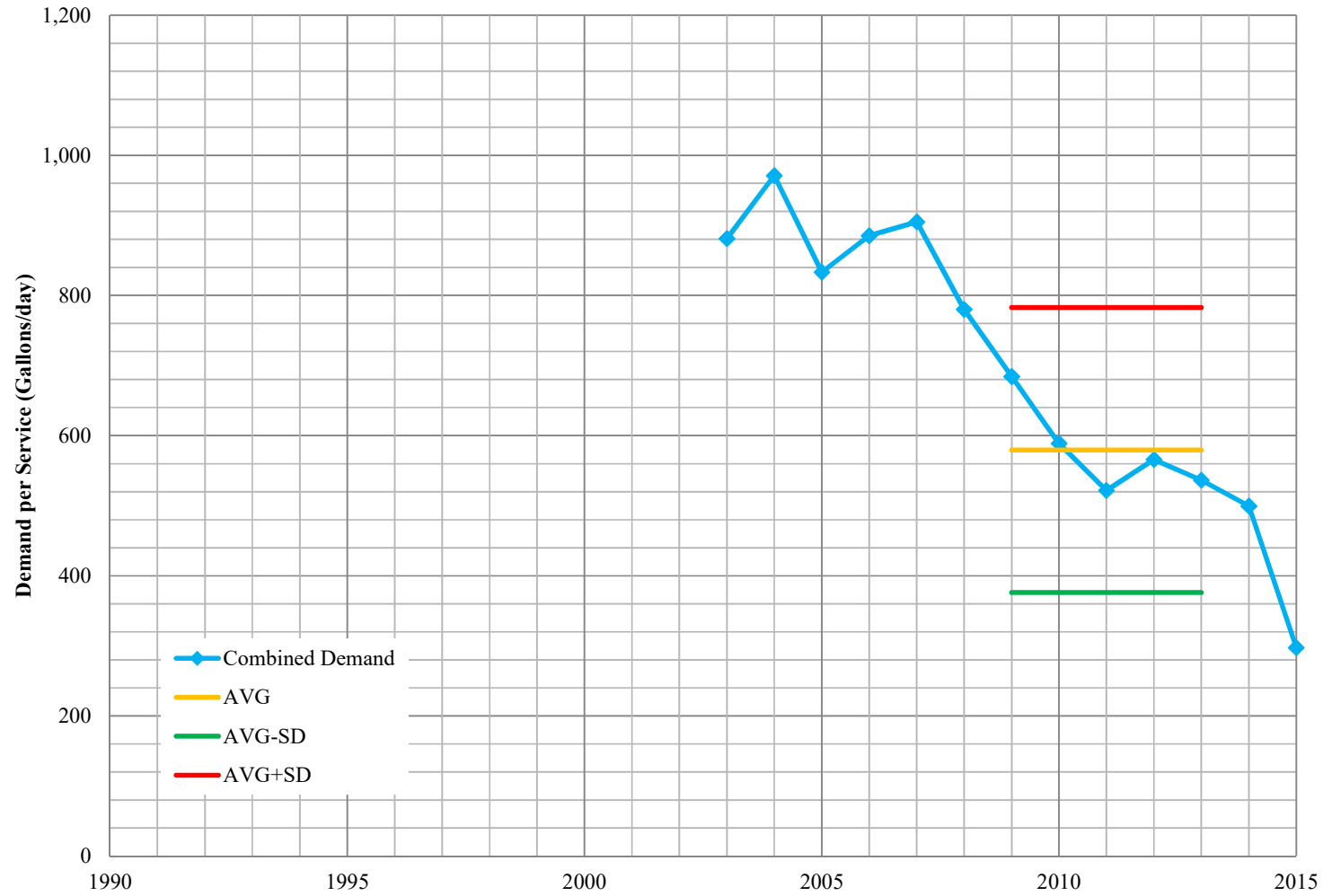


PAGE LEFT BLANK INTENTIONALLY

# California Water Service Company - Antelope Valley District Water Supply and Demand Analysis and Projections Demand per Service (Gallons per Day)

## Leona Valley

### Combined Demand per Service



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

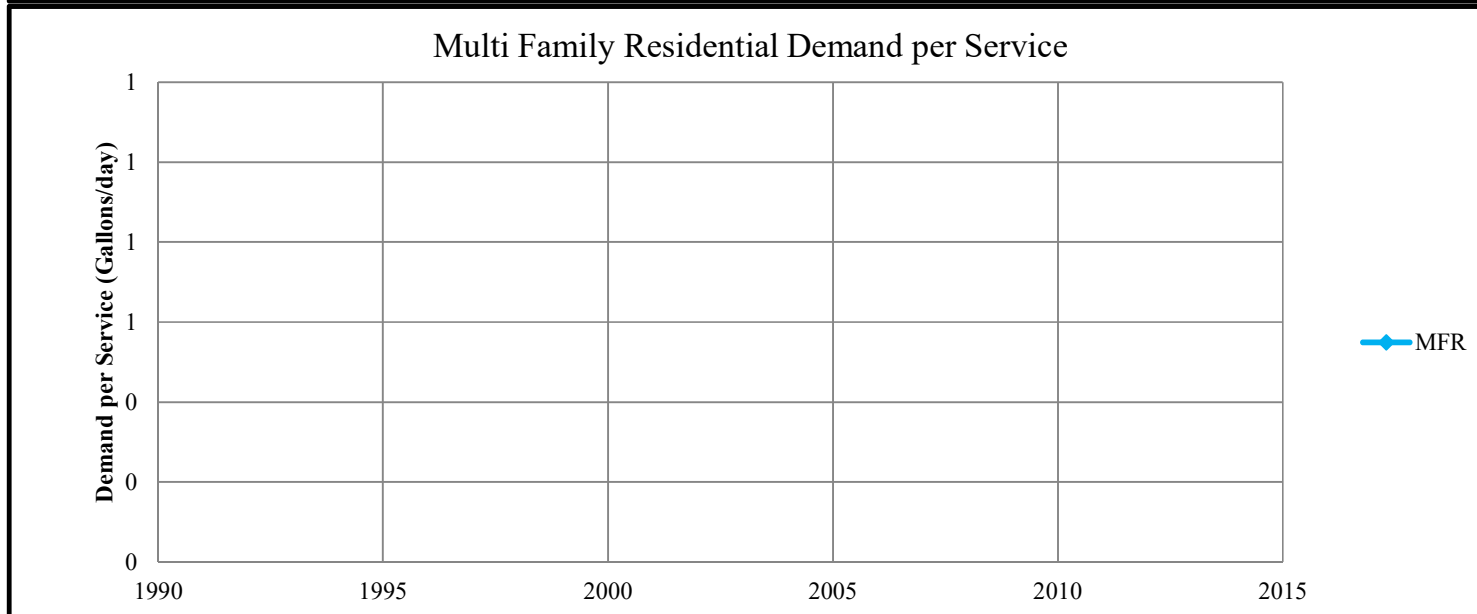
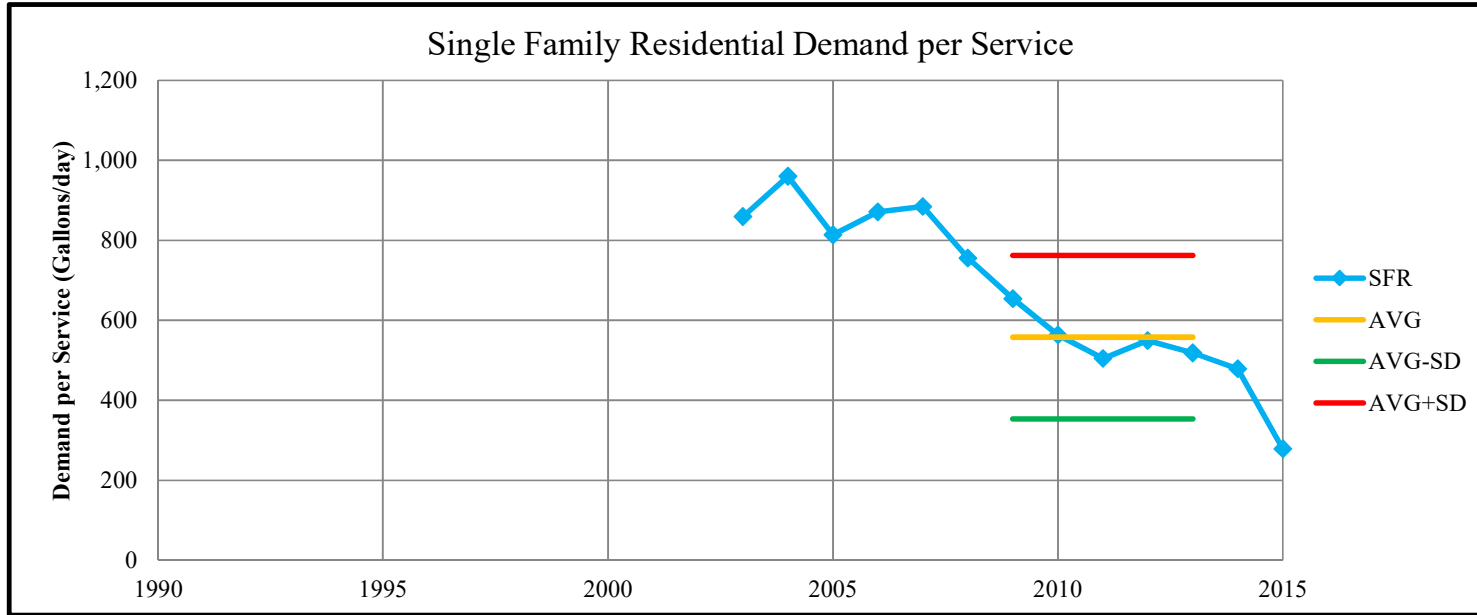
**Leona Valley**

Worksheet 4b

Year	SFR	MFR	COM	IND	GOV	OTH	UAFW	Combined Demand/Serv
1990								
1991								
1992								
1993								
1994								
1995								
1996								
1997								
1998								
1999								
2000								
2001								
2002								
2003	859		825		6,229		(187)	881
2004	960		834		4,835		(78)	971
2005	814		664		4,615		(69)	833
2006	871		592		4,309		(103)	885
2007	884		768		5,825		(80)	905
2008	755		743		6,080		(79)	780
2009	654		962		5,073		(77)	684
2010	564		657		5,237		(123)	589
2011	504		526		4,029		(145)	522
2012	549		520		4,231		(172)	566
2013	518		524		4,240		5	536
2014	479		490		4,769		72	499
2015	278		376		3,622		51	297
AVG	558		638		4,562		(103)	579
SD	204		168		809		79	203

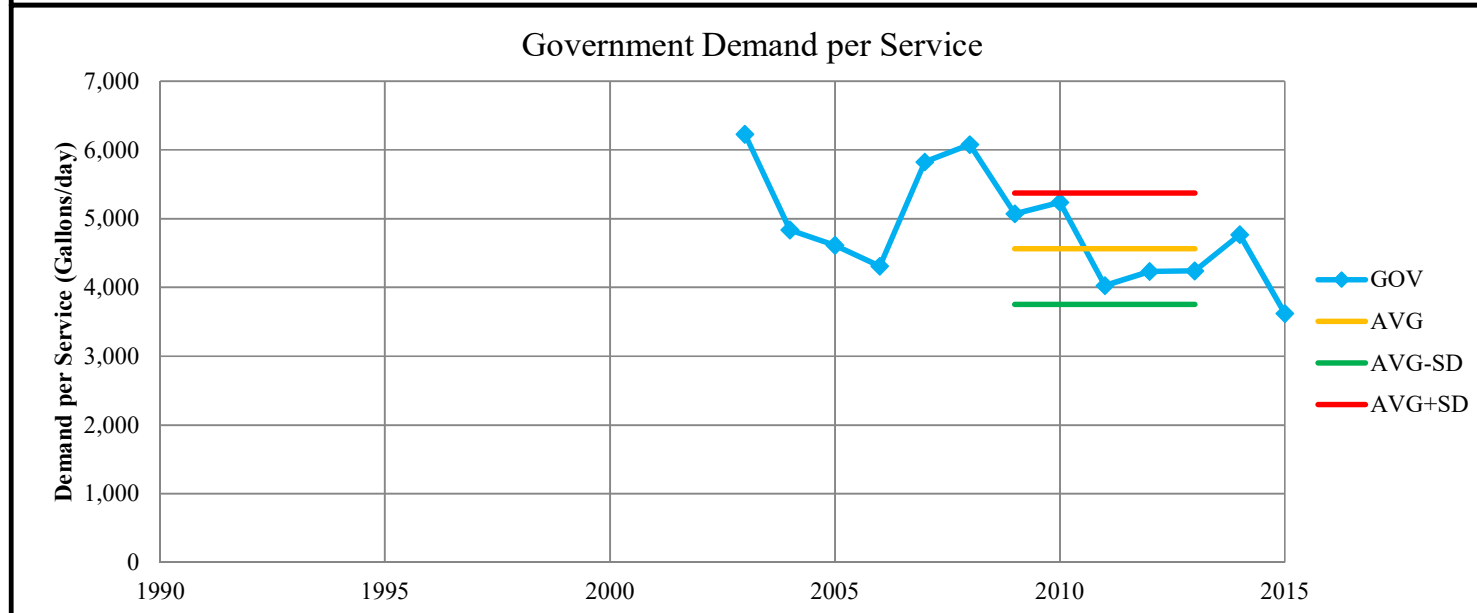
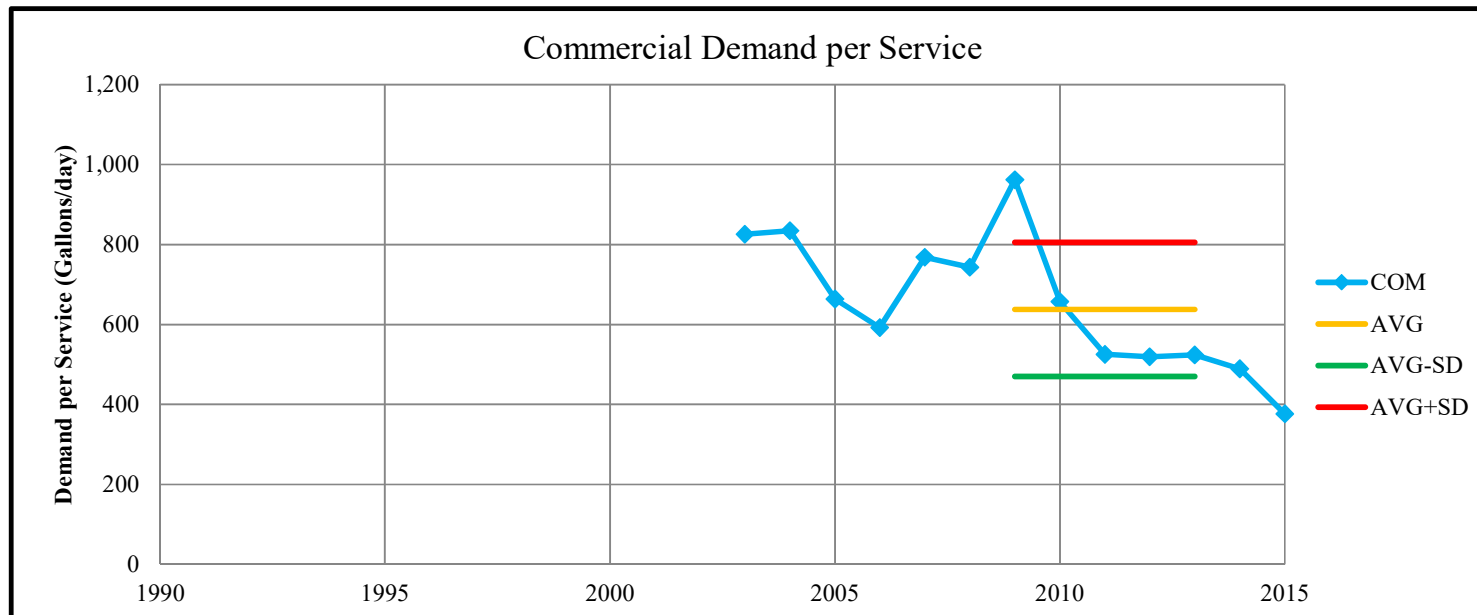
**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

**Leona Valley**



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

**Leona Valley**



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

**Leona Valley**



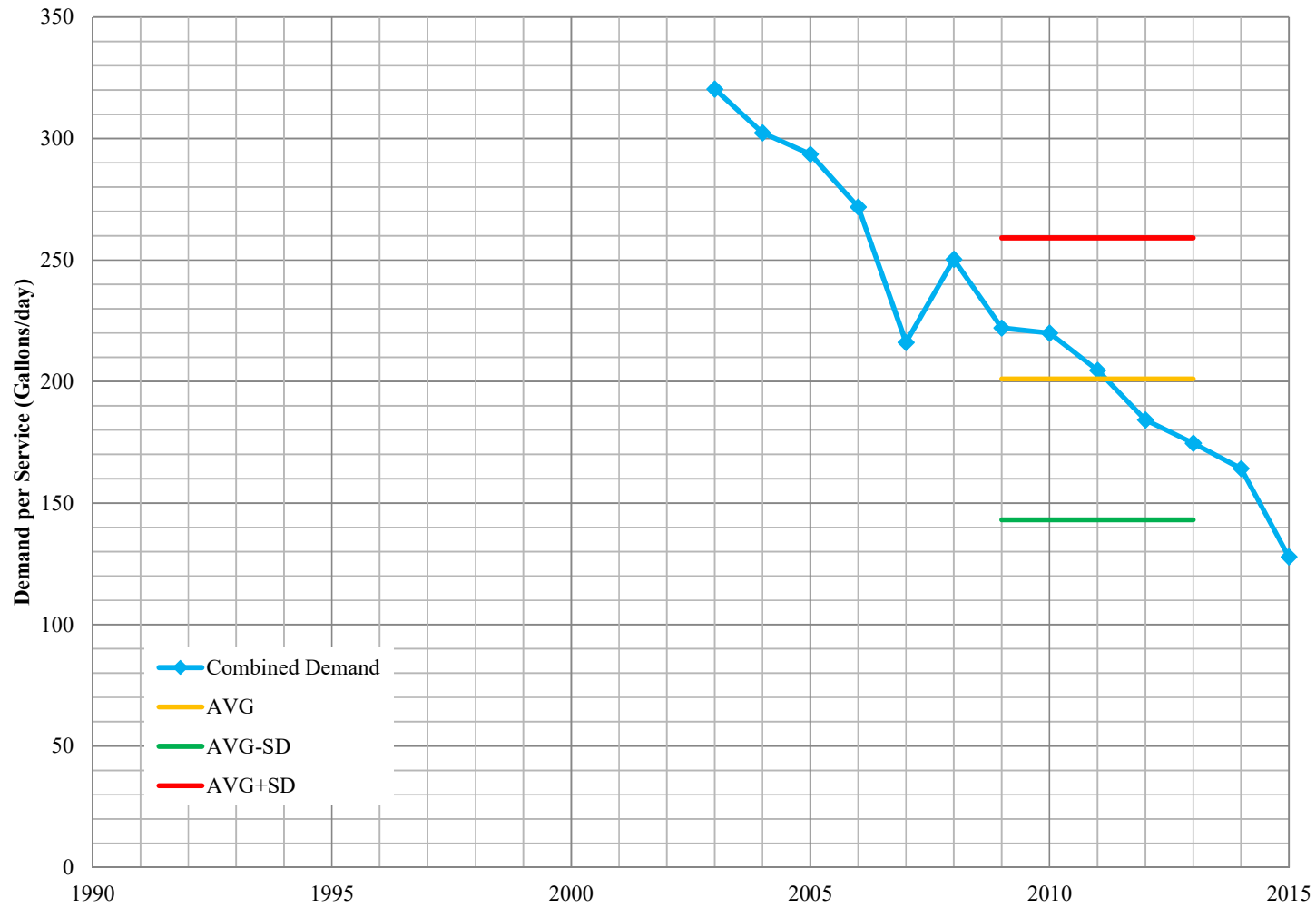
PAGE LEFT BLANK INTENTIONALLY



# California Water Service Company - Antelope Valley District Water Supply and Demand Analysis and Projections Demand per Service (Gallons per Day)

## Fremont Valley

### Combined Demand per Service



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

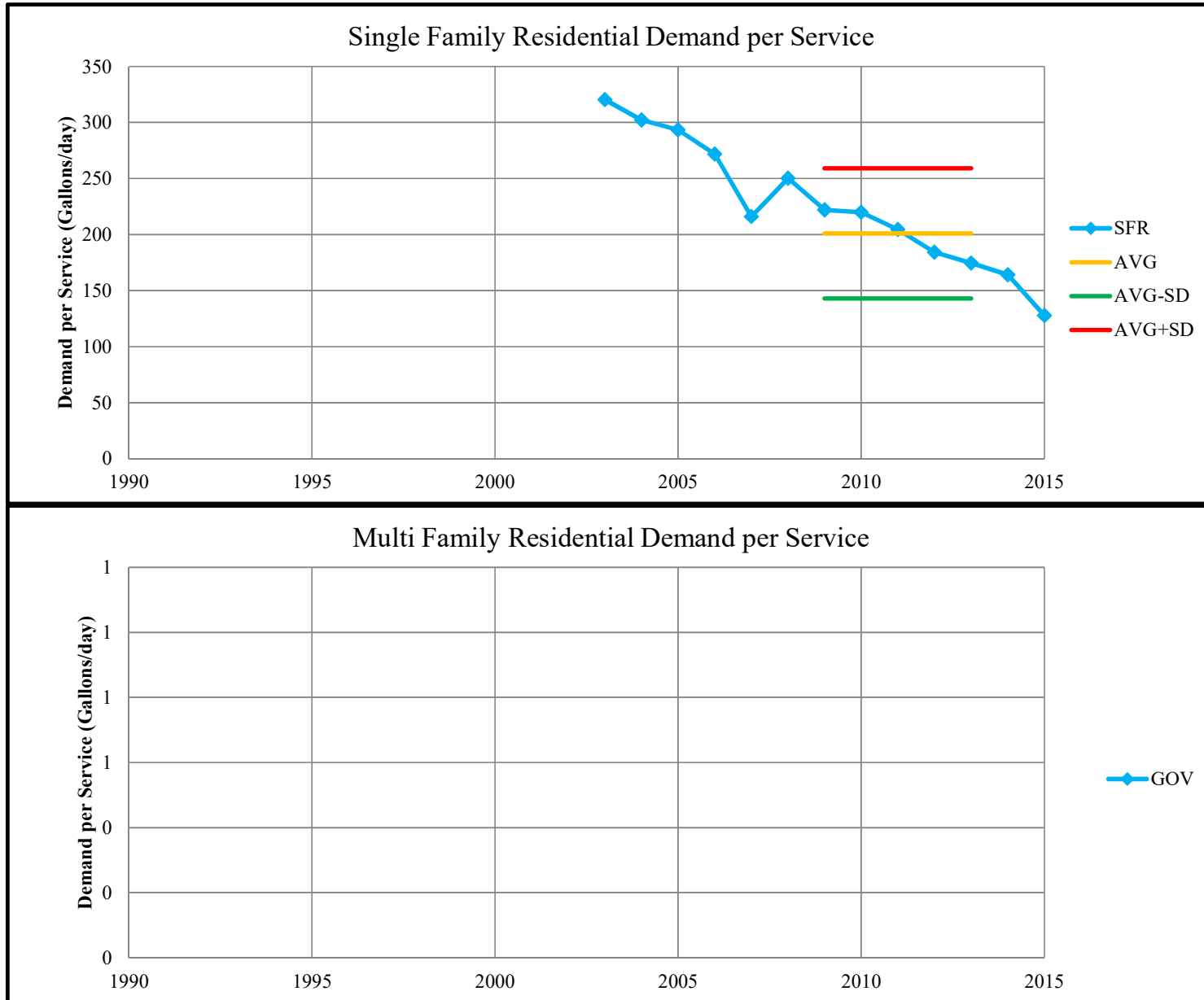
Fremont Valley

Worksheet 4c

Year	SFR	MFR	COM	IND	GOV	OTH	UAFW	Combined Demand/Serv
1990								
1991								
1992								
1993								
1994								
1995								
1996								
1997								
1998								
1999								
2000								
2001								
2002								
2003	320						(14)	320
2004	302						(7)	302
2005	294						(85)	294
2006	272						(1)	272
2007	216						76	216
2008	250						22	250
2009	222						28	222
2010	220						12	220
2011	205						19	205
2012	184						26	184
2013	175						21	175
2014	164						38	164
2015	128						36	128
AVG	201						21	201
SD	58						19	58

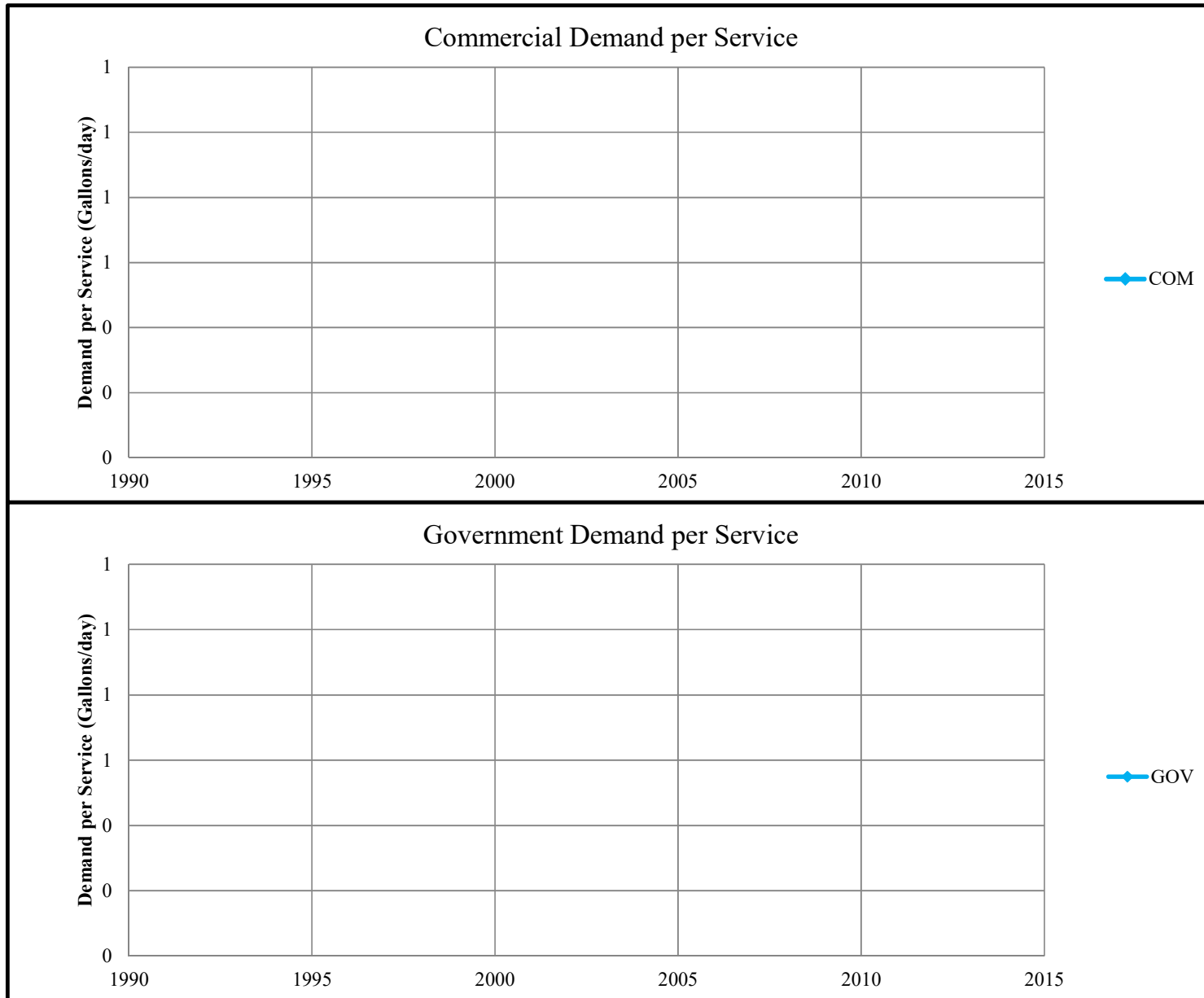
**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

**Fremont Valley**



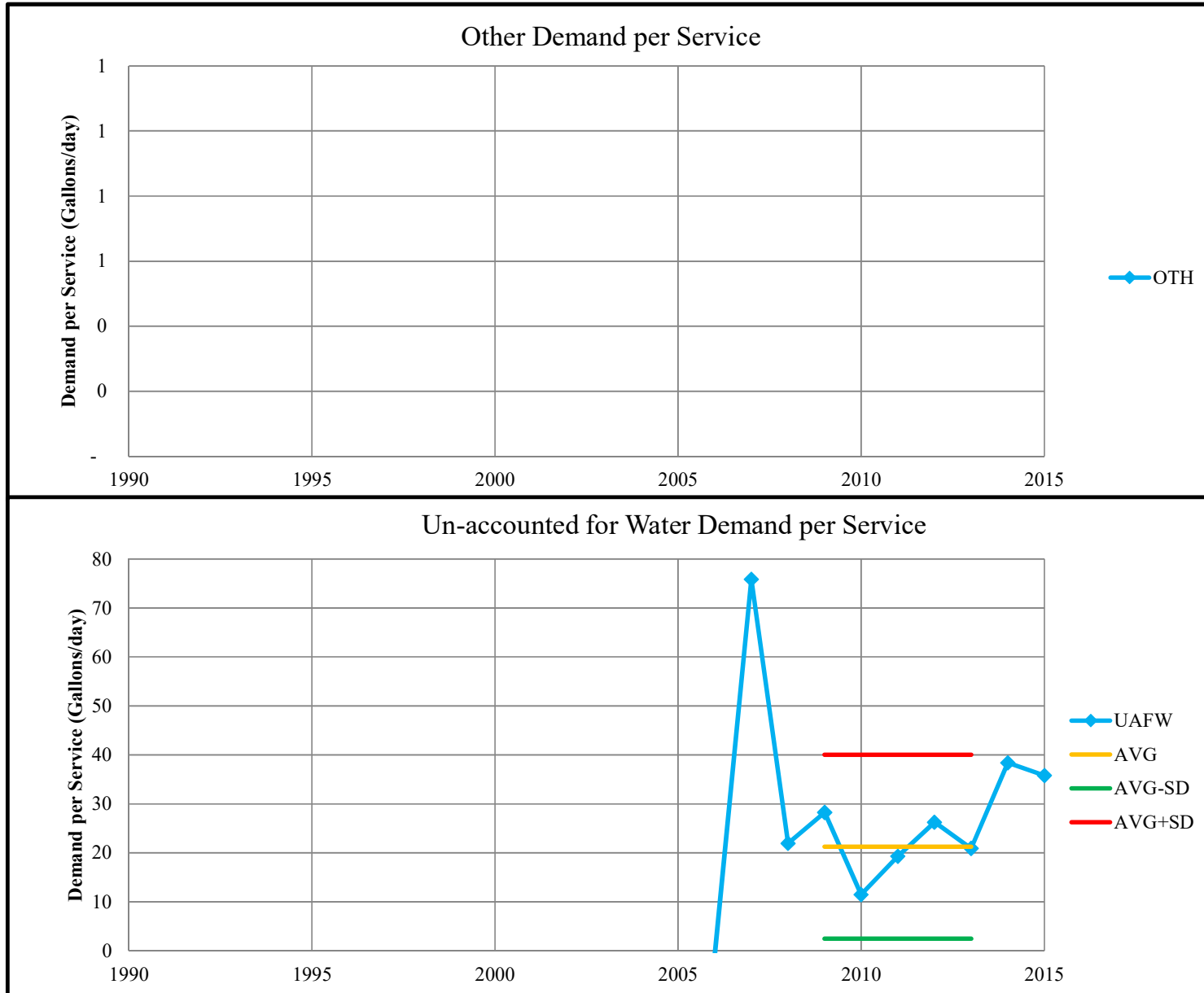
**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

**Fremont Valley**



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

**Fremont Valley**

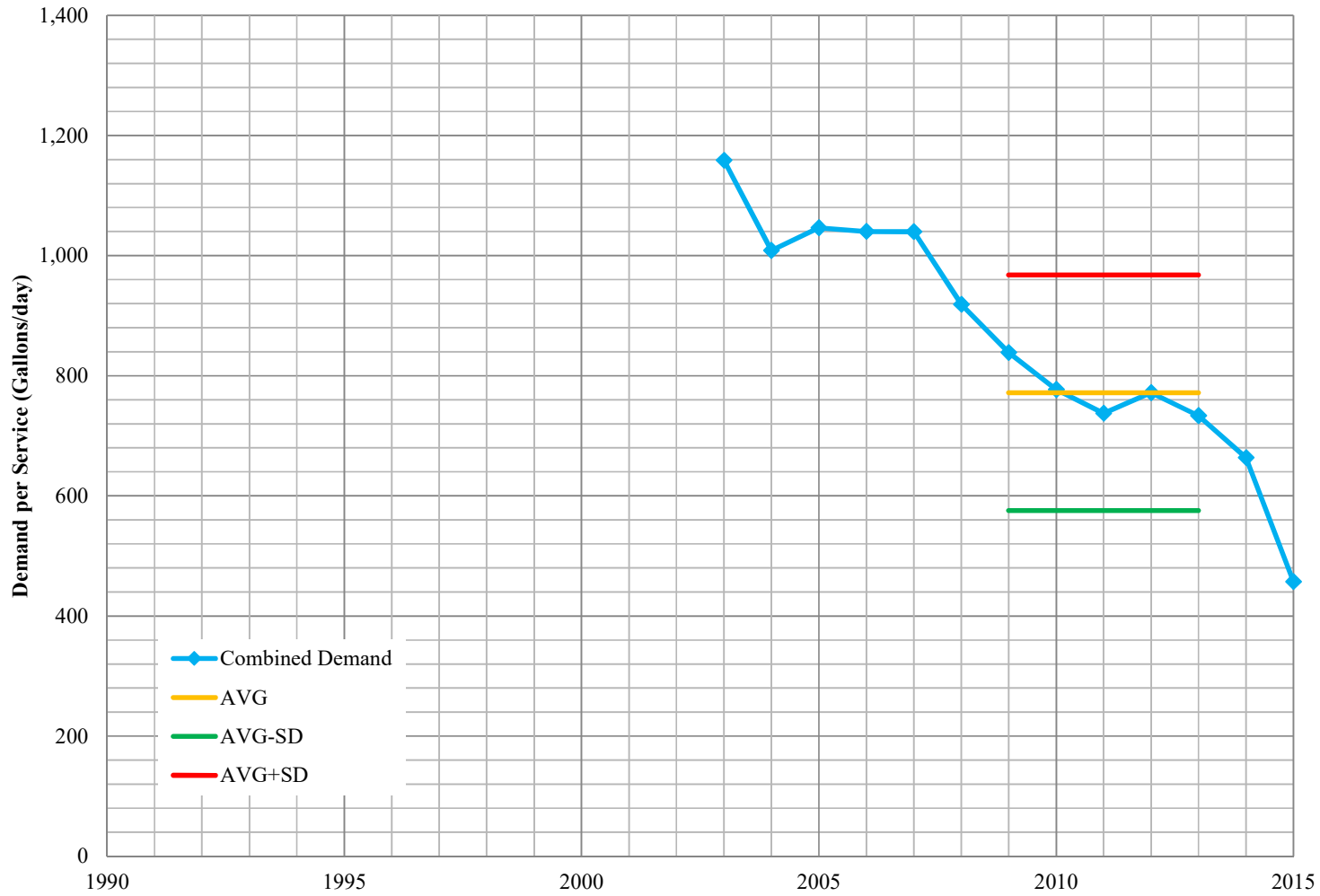


PAGE LEFT BLANK INTENTIONALLY

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

**Lancaster**

Combined Demand per Service



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

Lancaster

Worksheet 4d

Year	SFR	MFR	COM	IND	GOV	OTH	UAFW	Combined Demand/Serv
1990								
1991								
1992								
1993								
1994								
1995								
1996								
1997								
1998								
1999								
2000								
2001								
2002								
2003	1,121		1,972		2,602		51	1,158
2004	955		2,268		3,581		202	1,008
2005	990		2,368		3,632		160	1,047
2006	987		2,358		3,611		80	1,040
2007	987		2,370		3,611		96	1,040
2008	870		2,104		2,841		114	919
2009	787		1,956		2,867		61	838
2010	736		1,861		2,124		144	777
2011	703		1,704		1,793		229	737
2012	736		1,618		2,295		220	772
2013	696		1,509		2,579		21	734
2014	627		1,502		2,270		24	664
2015	428		1,259		1,519		(27)	457
AVG	732		1,730		2,331		135	772
SD	190		374		723		81	196

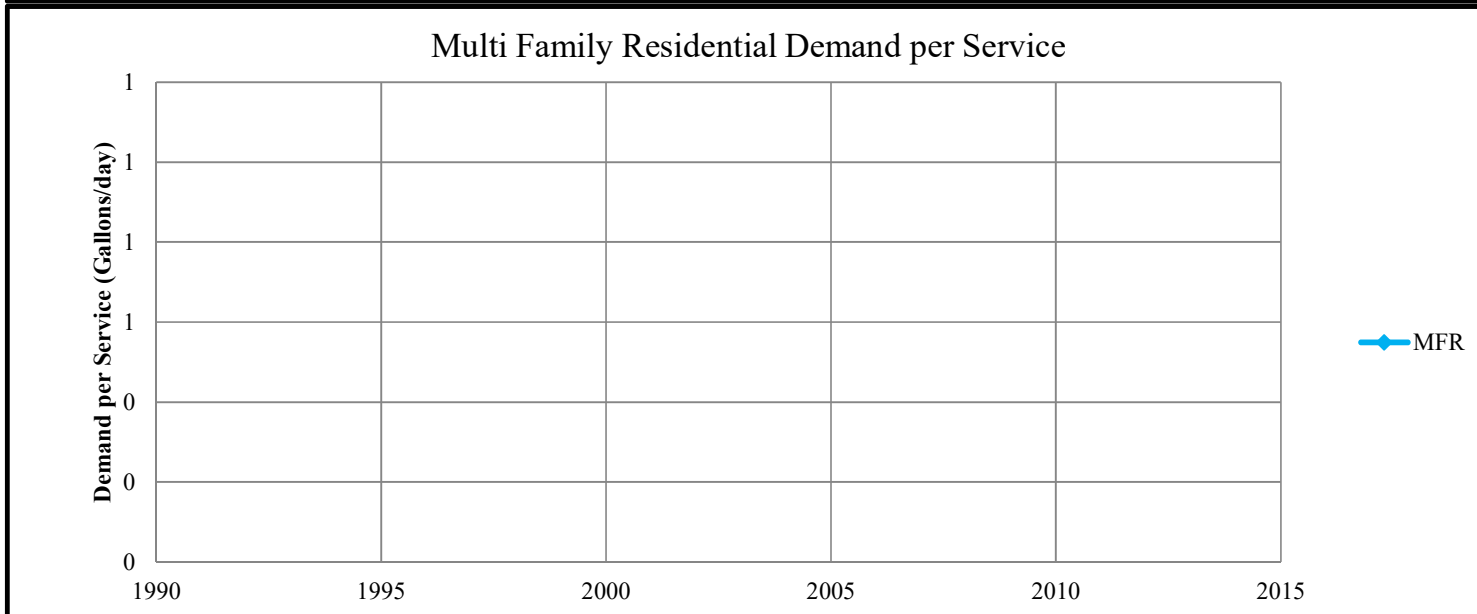
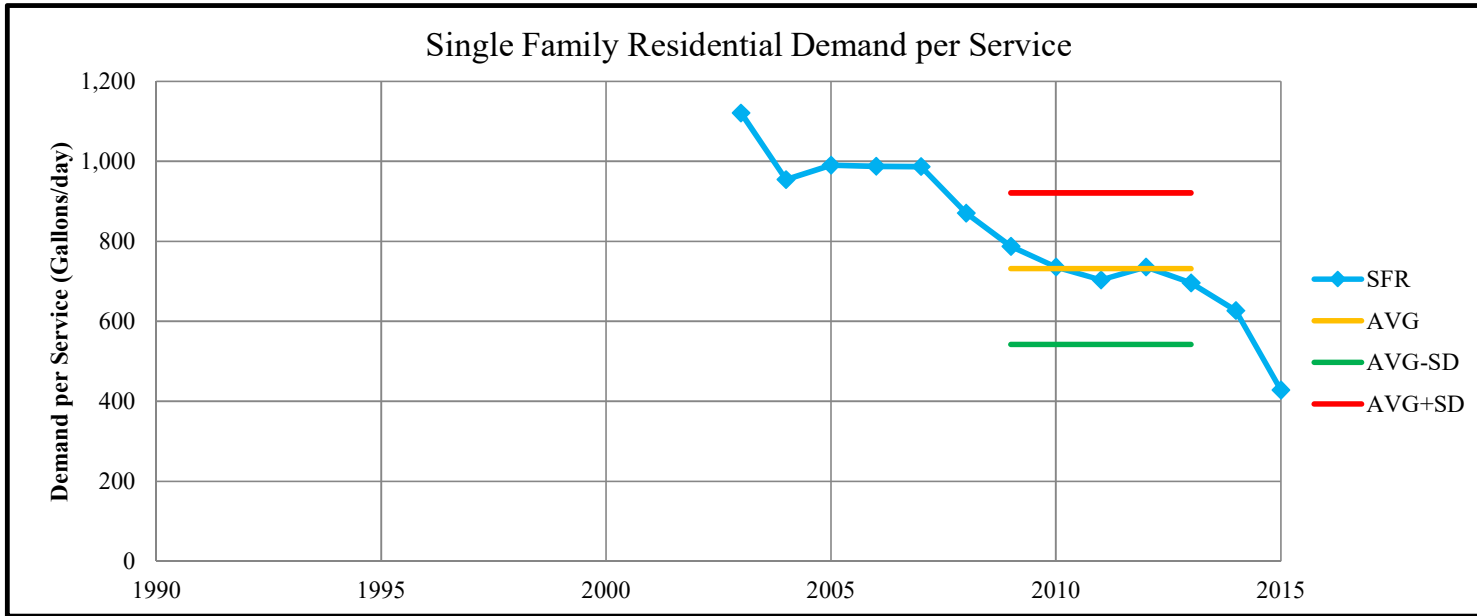


# California Water Service Company - Antelope Valley District

## Water Supply and Demand Analysis and Projections

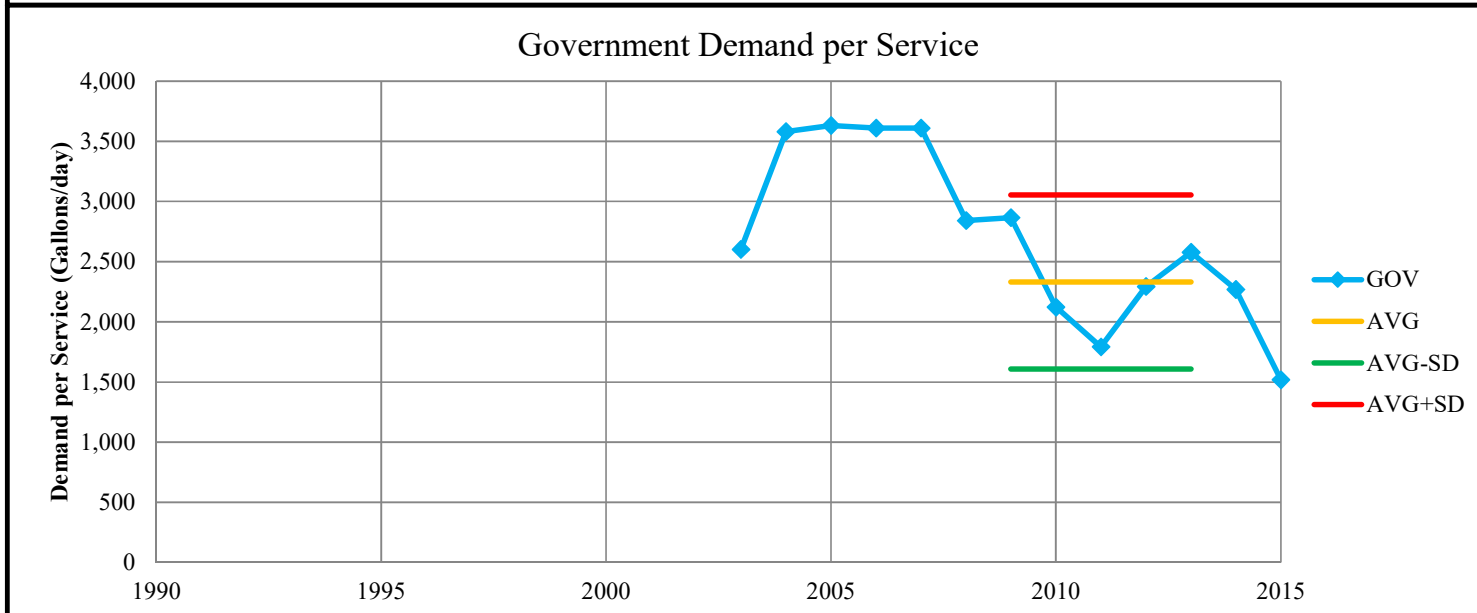
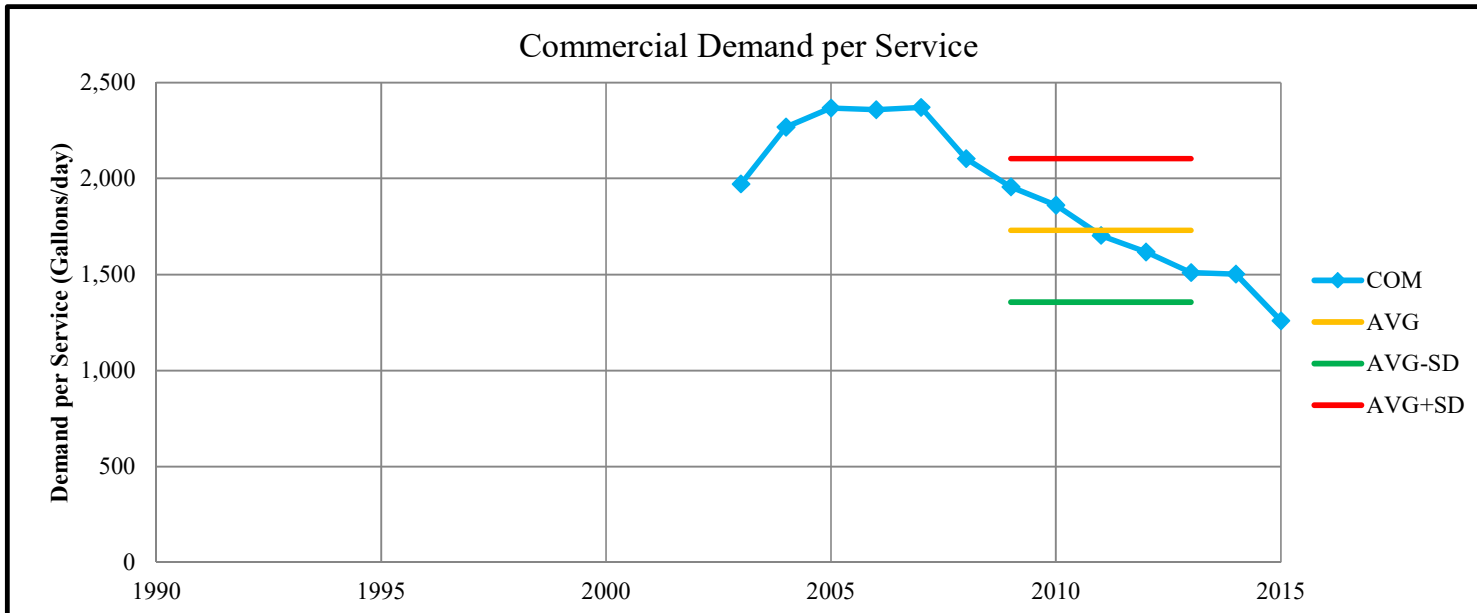
### Demand per Service (Gallons per Day)

Lancaster



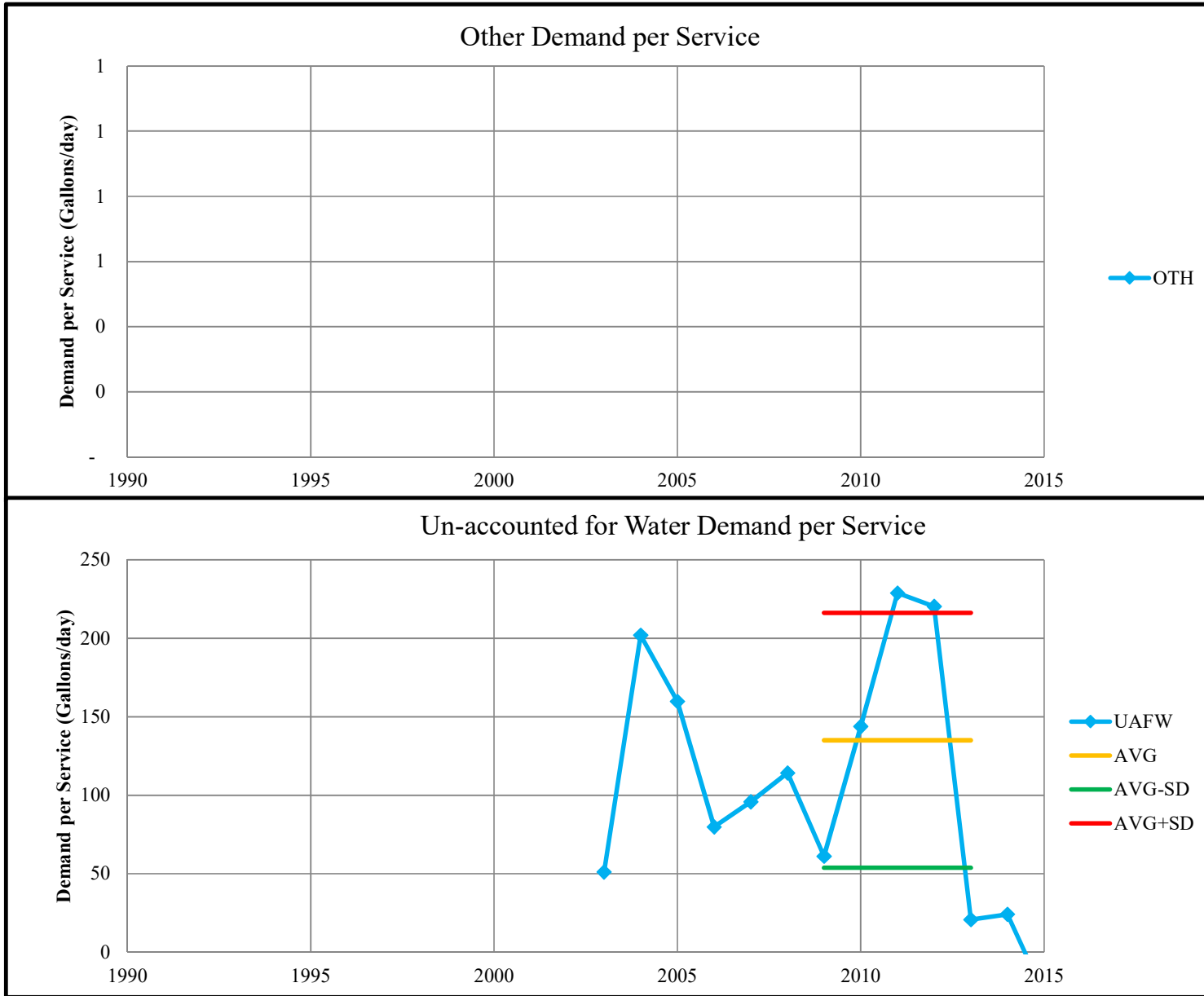
**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

**Lancaster**



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

**Lancaster**

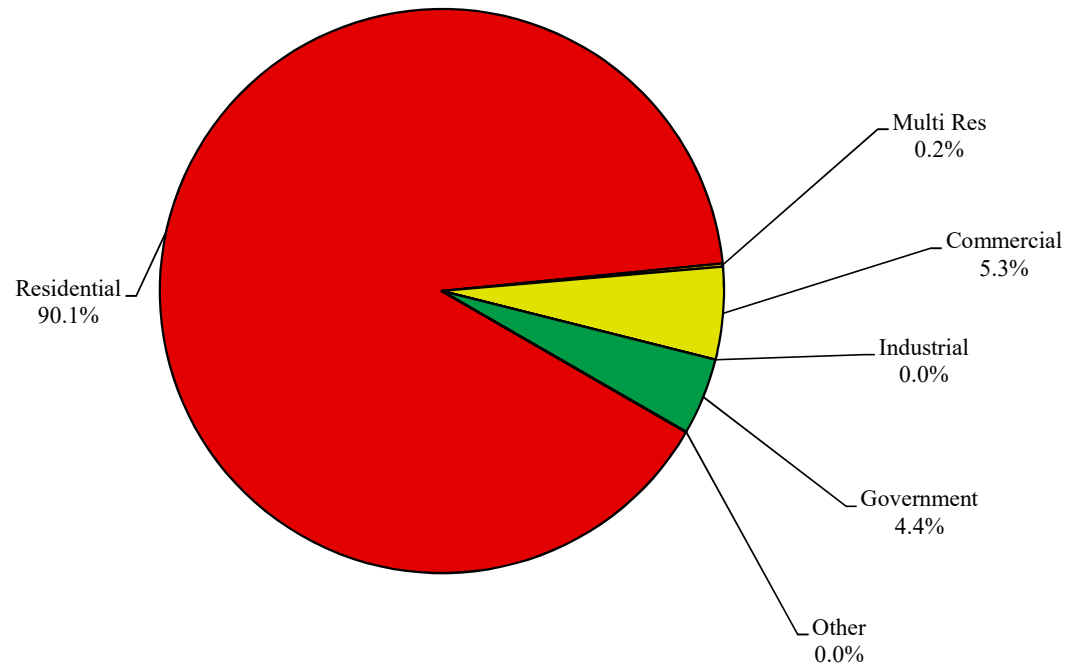


PAGE LEFT BLANK INTENTIONALLY

**California Water Service Company - Antelope Valley District  
Water Supply and Demand Analysis and Projections  
Percentage Change in Annual Demand**

Year	Residential	Multi Res	Commercial	Industrial	Government	Other	Unaccounted	Total
1981								
1982								
1983								
1984								
1985								
1986								
1987								
1988								
1989								
1990								
1991								
1992								
1993	1.4%	80.7%	10.0%	0.0%	95.4%	0.0%	16.2%	2.8%
1994	4.9%	11.1%	-0.7%	0.0%	11.6%	0.0%	44.7%	4.8%
1995	1.1%	14.8%	11.5%	0.0%	-7.8%	0.0%	-6.2%	1.3%
1996	8.6%	-0.8%	13.0%	0.0%	9.2%	0.0%	26.4%	8.7%
1997	1.6%	7.3%	-9.4%	0.0%	-12.4%	0.0%	6.8%	0.9%
1998	-12.6%	0.1%	-10.2%	0.0%	-19.1%	0.0%	-29.3%	-12.6%
1999	16.0%	-21.2%	-4.2%	0.0%	43.9%	0.0%	6.2%	15.4%
2000	8.5%	24.2%	20.4%	0.0%	83.6%	0.0%	-42.4%	10.2%
2001	-5.1%	72.5%	3.5%	0.0%	-17.0%	0.0%	33.5%	-4.9%
2002	3.3%	-29.2%	-9.6%	0.0%	8.3%	0.0%	-45.9%	2.8%
2003	1.7%	-62.3%	22.8%	0.0%	-9.6%	0.0%	-209.8%	1.9%
2004	0.5%	-8.0%	12.6%	0.0%	9.6%	0.0%	-374.5%	1.2%
2005	-1.8%	12.5%	-0.8%	0.0%	-1.7%	0.0%	-28.2%	-1.5%
2006	2.6%	-23.4%	-2.9%	0.0%	6.8%	0.0%	-92.2%	2.3%
2007	1.3%	19.0%	4.8%	0.0%	5.3%	0.0%	473.8%	1.4%
2008	-12.1%	-31.9%	-7.1%	0.0%	-2.1%	0.0%	42.3%	-11.6%
2009	-11.9%	-23.9%	1.3%	0.0%	1.8%	0.0%	-59.6%	-10.9%
2010	-8.2%	28.2%	-15.1%	0.0%	-16.0%	0.0%	223.7%	-8.8%
2011	-6.0%	-16.8%	-11.6%	0.0%	-16.1%	0.0%	67.5%	-6.7%
2012	6.2%	23.1%	-4.4%	0.0%	17.3%	0.0%	-15.2%	6.1%
2013	-5.8%	16.0%	-5.3%	0.0%	13.8%	0.0%	-66.3%	-5.1%
2014	-8.89%	-33.71%	-1.15%	0.00%	-7.81%	0.00%	97.09%	-8.57%
2015	-32.85%	-13.77%	-19.58%	0.00%	-25.36%	0.00%	-88.75%	-31.93%

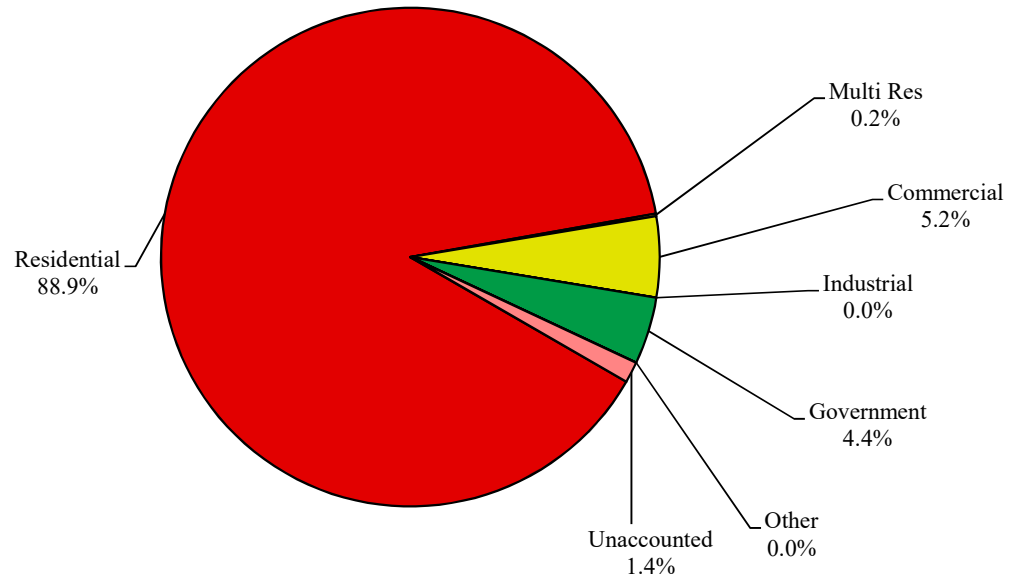
## Percent of Total Sales by Type of Use (2015)



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Percentage of Total Sales**

Year	Residential	Multi Res	Commercial	Industrial	Government	Other	Percent Total
1980							
1981							
1982							
1983							
1984							
1985							
1986							
1987							
1988							
1989							
1990							
1991							
1992	95.25%	0.21%	3.57%	0.00%	0.97%	0.00%	100.00%
1993	93.96%	0.38%	3.82%	0.00%	1.85%	0.00%	100.00%
1994	94.02%	0.40%	3.62%	0.00%	1.97%	0.00%	100.00%
1995	93.78%	0.45%	3.98%	0.00%	1.79%	0.00%	100.00%
1996	93.65%	0.41%	4.14%	0.00%	1.80%	0.00%	100.00%
1997	94.28%	0.44%	3.72%	0.00%	1.56%	0.00%	100.00%
1998	94.24%	0.50%	3.81%	0.00%	1.44%	0.00%	100.00%
1999	94.69%	0.34%	3.17%	0.00%	1.80%	0.00%	100.00%
2000	93.15%	0.39%	3.46%	0.00%	3.00%	0.00%	100.00%
2001	92.92%	0.70%	3.76%	0.00%	2.62%	0.00%	100.00%
2002	93.45%	0.48%	3.31%	0.00%	2.76%	0.00%	100.00%
2003	93.32%	0.18%	3.99%	0.00%	2.45%	0.06%	100.00%
2004	92.71%	0.16%	4.44%	0.00%	2.65%	0.03%	100.00%
2005	92.39%	0.19%	4.47%	0.00%	2.65%	0.30%	100.00%
2006	92.68%	0.14%	4.25%	0.00%	2.76%	0.16%	100.00%
2007	92.58%	0.16%	4.39%	0.00%	2.87%	0.00%	100.00%
2008	92.08%	0.13%	4.61%	0.00%	3.18%	0.00%	100.00%
2009	91.02%	0.11%	5.24%	0.00%	3.63%	0.00%	100.00%
2010	91.62%	0.15%	4.88%	0.00%	3.35%	0.00%	100.00%
2011	92.23%	0.13%	4.62%	0.00%	3.01%	0.00%	100.00%
2012	92.35%	0.16%	4.17%	0.00%	3.33%	0.00%	100.00%
2013	91.66%	0.19%	4.15%	0.00%	3.99%	0.00%	100.00%
2014	91.35%	0.14%	4.49%	0.00%	4.02%	0.00%	100.00%
2015	90.11%	0.18%	5.31%	0.00%	4.41%	0.00%	100.00%

## Percent of Total Demand by Type of Use (2015)

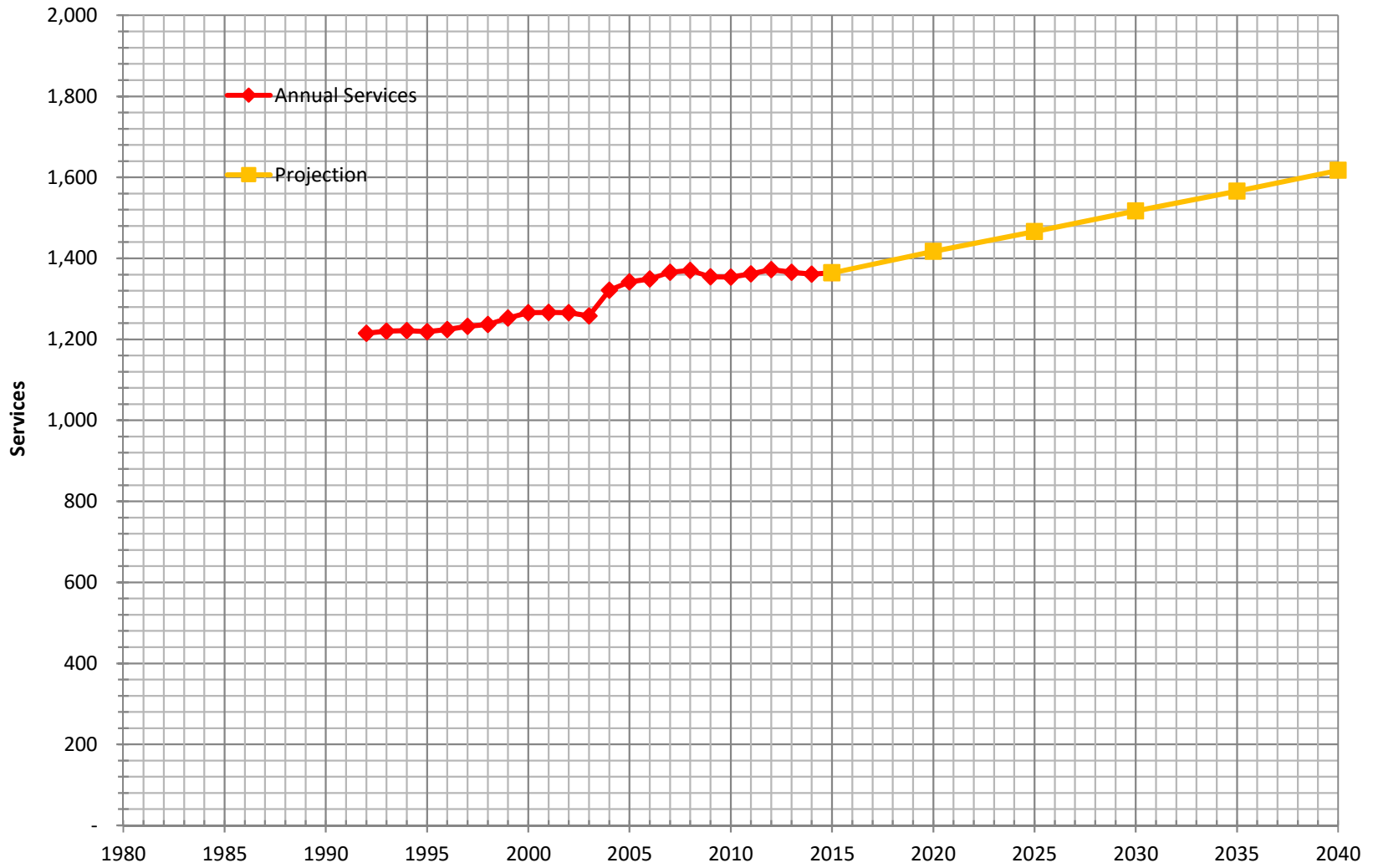




**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Percentage of Total Demand**

Year	Residential	Multi Res	Commercial	Industrial	Government	Other	Unaccounted	Percent Total
1980								
1981								
1982								
1983								
1984								
1985								
1986								
1987								
1988								
1989								
1990								
1991								
1992	89.62%	0.20%	3.36%	0.00%	0.91%	0.00%	5.91%	100.00%
1993	87.73%	0.35%	3.56%	0.00%	1.72%	0.00%	6.63%	100.00%
1994	85.62%	0.36%	3.29%	0.00%	1.79%	0.00%	8.93%	100.00%
1995	85.97%	0.42%	3.65%	0.00%	1.64%	0.00%	8.32%	100.00%
1996	84.71%	0.37%	3.74%	0.00%	1.63%	0.00%	9.55%	100.00%
1997	84.80%	0.40%	3.34%	0.00%	1.40%	0.00%	10.05%	100.00%
1998	86.43%	0.46%	3.50%	0.00%	1.32%	0.00%	8.29%	100.00%
1999	87.42%	0.32%	2.92%	0.00%	1.66%	0.00%	7.68%	100.00%
2000	89.28%	0.37%	3.31%	0.00%	2.88%	0.00%	4.16%	100.00%
2001	87.58%	0.66%	3.55%	0.00%	2.47%	0.00%	5.75%	100.00%
2002	90.54%	0.47%	3.21%	0.00%	2.67%	0.00%	3.11%	100.00%
2003	96.67%	0.19%	4.13%	0.00%	2.54%	0.06%	-3.59%	100.00%
2004	84.75%	0.15%	4.06%	0.00%	2.43%	0.03%	8.59%	100.00%
2005	86.47%	0.17%	4.19%	0.00%	2.48%	0.28%	6.41%	100.00%
2006	92.20%	0.14%	4.23%	0.00%	2.75%	0.16%	0.52%	100.00%
2007	89.91%	0.16%	4.26%	0.00%	2.79%	0.00%	2.87%	100.00%
2008	87.89%	0.12%	4.40%	0.00%	3.03%	0.00%	4.55%	100.00%
2009	89.09%	0.11%	5.13%	0.00%	3.56%	0.00%	2.12%	100.00%
2010	85.09%	0.14%	4.53%	0.00%	3.11%	0.00%	7.12%	100.00%
2011	81.07%	0.12%	4.06%	0.00%	2.65%	0.00%	12.10%	100.00%
2012	83.19%	0.14%	3.75%	0.00%	3.00%	0.00%	9.91%	100.00%
2013	88.22%	0.18%	4.00%	0.00%	3.84%	0.00%	3.76%	100.00%
2014	84.25%	0.13%	4.14%	0.00%	3.71%	0.00%	7.77%	100.00%
2015	88.87%	0.17%	5.23%	0.00%	4.35%	0.00%	1.37%	100.00%

### Historical & Projected Services



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Actual & Projected Annual Average Services**

**Consolidated**

Customer Category	Selected Trend	Growth Rate	Actual Services				Projected Services					
			2000	2005	2010	Base Year 2015	2015	2020	2025	2030	2035	2040
SFR		0.64%	1,212	1,287	1,298	1,309	1,309	1,354	1,399	1,444	1,489	1,534
MFR		0.00%	10	7	5	5	5	5	5	5	5	5
COM		1.89%	33	36	37	36	36	41	44	49	52	57
IND		0.00%	0	0	0	0	0	0	0	0	0	0
GOV		1.73%	12	12	14	14	14	17	18	19	20	21
OTH		0.00%	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	Average growth rate 2011-2040	0.68%	1,266	1,342	1,354	1,364	1,364	1,417	1,466	1,517	1,566	1,617

Notes:

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Actual & Projected Annual Average Services**

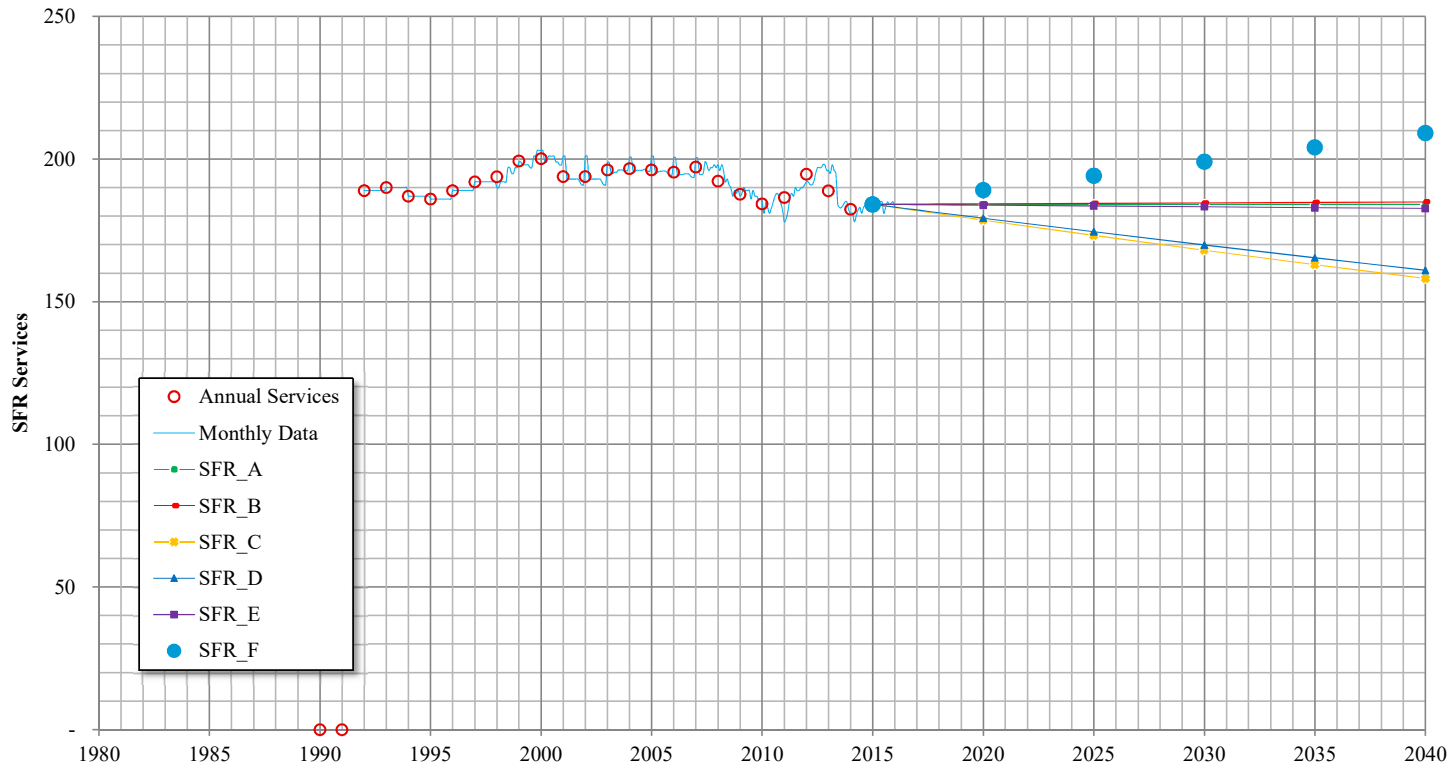
**Lake Hughes**

Customer Category	Selected Trend		Growth Rate	Actual Services				Projected Services					
				2000	2005	2010	Base Year 2015	2015	2020	2025	2030	2035	2040
SFR	SFR_F	WSFMP	0.51%	200	196	184	184	184	189	194	199	204	209
WSFMP estimated a service growth of 1 per year as projected growth													
MFR	MFR_A	Zero Growth	0.00%	8	7	5	5	5	5	5	5	5	5
COM	COM_F	WSFMP	1.36%	9	8	8	8	8	9	9	10	10	11
WSFMP estimated a service growth of 1 per 5 years as projected growth													
IND	IND_A	Zero Growth Rate	0.00%	0	0	0	0	0	0	0	0	0	0
GOV	GOV_F	WSFMP	0.80%	5	5	5	5	5	6	6	6	6	6
WSFMP estimated a service growth of 1 additional service in 2020													
OTH	OTH_A	Zero Growth Rate	0.00%	0	0	0	0	0	0	0	0	0	0
TOTAL	Average growth rate 2011-2040		0.54%	222	217	203	202	202	209	214	220	225	231

Notes:

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
 SFR Historical & Projected Services

**Lake Hughes**

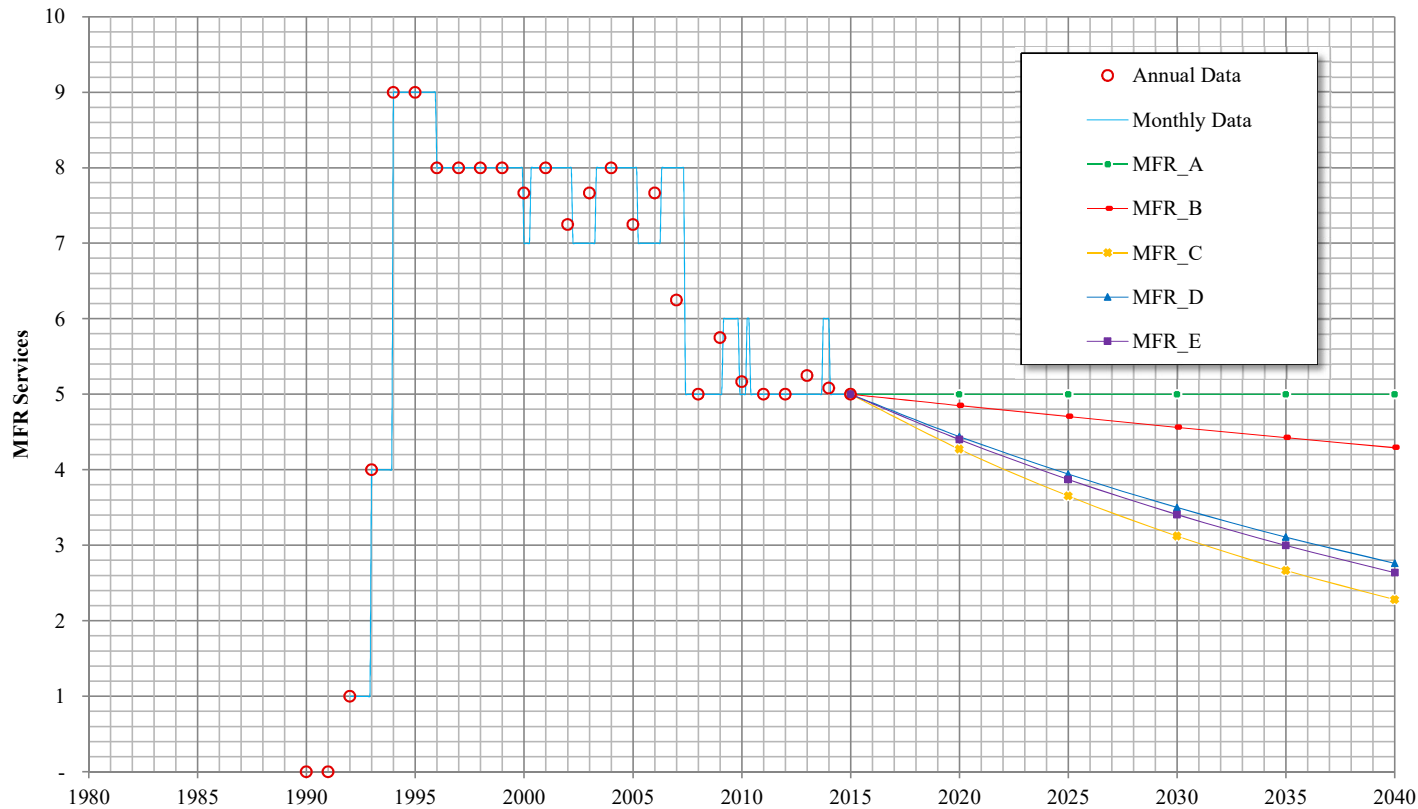


Customer Category	Trend	Growth Rate	Actual				Projected							
			2000	2005	2010	Base Year		Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040	
						2015	2015							
SFR			200	196	184	184	184	184	184	184	184	184	184	184
	SFR_A	Zero Growth				184	184	184	184	184	184	184	184	184
	SFR_B	5 Yr. Avg.				184	184	184	184	184	185	185	185	185
	SFR_C	10 Yr. Avg.				184	184	179	173	168	163	158	158	158
	SFR_D	15 Yr. Avg.				184	184	179	175	170	165	161	161	161
	SFR_E	20 Yr. Avg.				184	184	184	184	183	183	183	183	183
	> SFR_F	WSFMP				184	184	189	194	199	204	209	209	209

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**

**Lake Hughes**

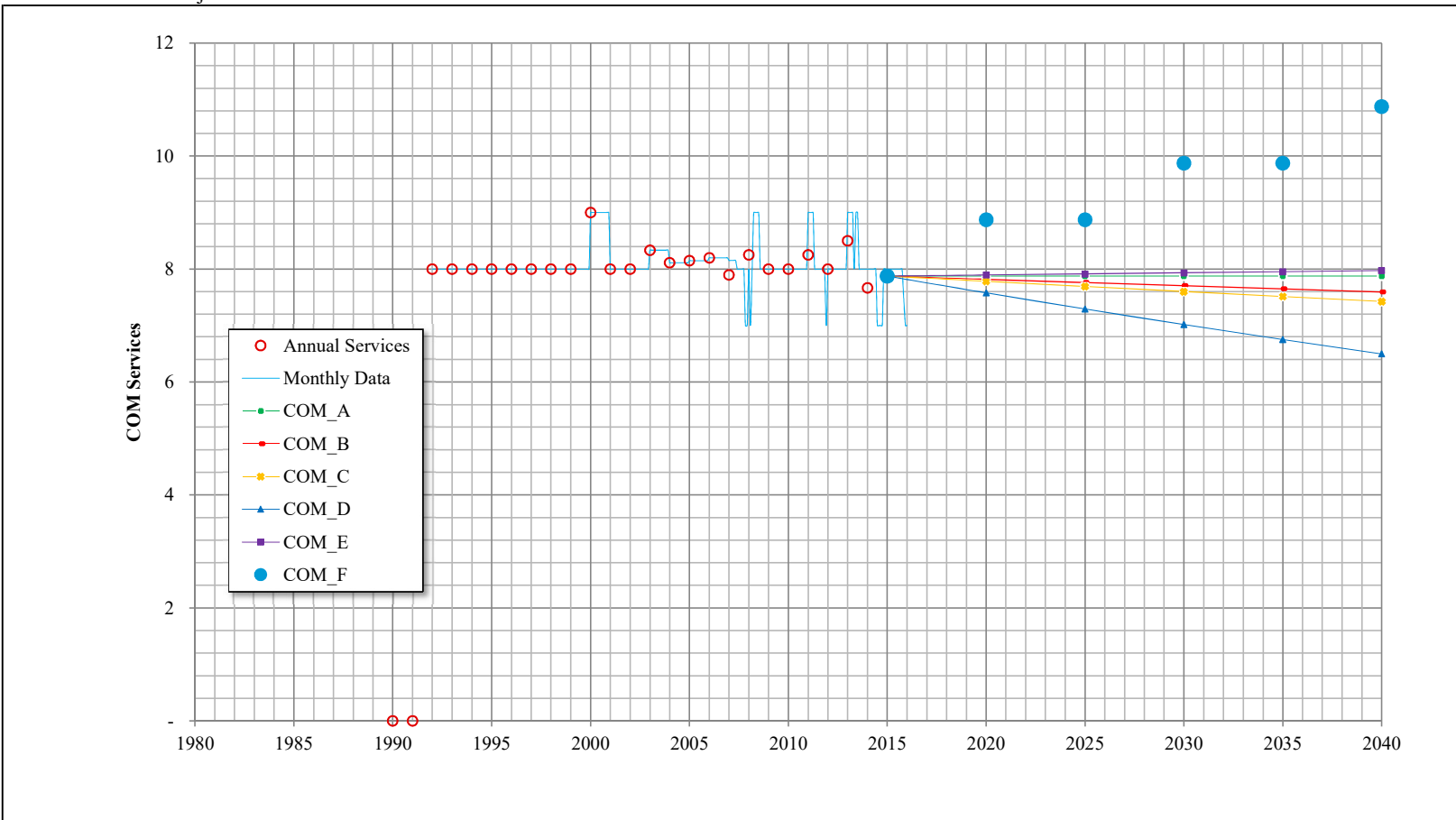
MFR Historical & Projected Services



Customer Category	Trend	Growth Rate	Actual				Projected							
			2000	2005	2010	Base Year		Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040	
						2015	2015							
MFR			8	7	5	5	5	5	5	5	5	5	5	5
	> MFR_A	Zero Growth				5	5	5	5	5	5	5	5	5
	MFR_B	5 Yr. Avg.				5	5	5	5	5	5	4	4	4
	MFR_C	10 Yr. Avg.				5	5	4	4	4	3	3	2	2
	MFR_D	15 Yr. Avg.				5	5	4	4	4	4	3	3	3
	MFR_E	20 Yr. Avg.				5	5	4	4	4	3	3	3	3

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
 COM Historical & Projected Services

**Lake Hughes**

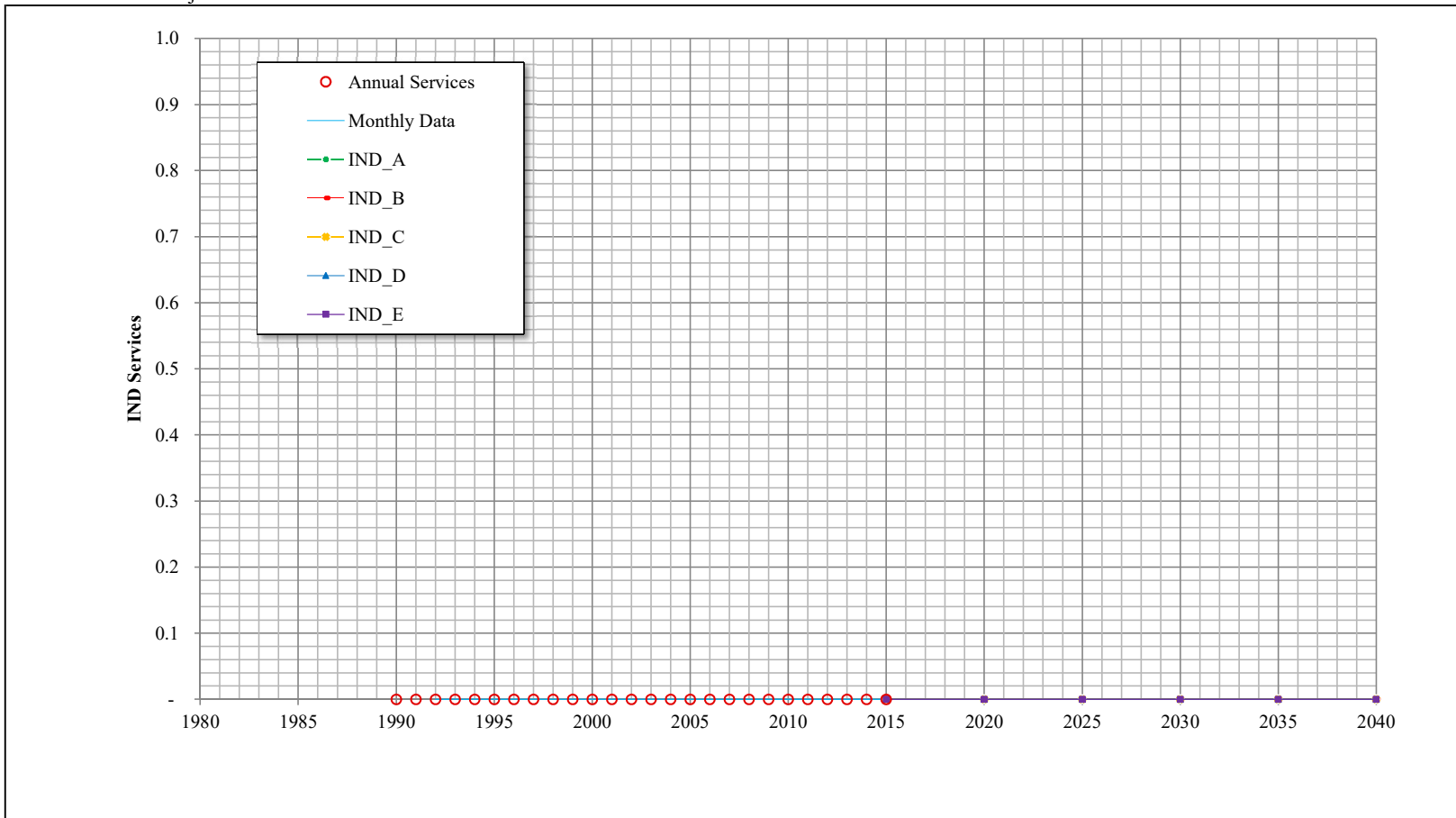


Customer Category	Trend	Growth Rate	Actual				Projected								
			2000	2005	2010	Base Year		Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040		
						2015	2015								
COM			9	8	8	8	8	8	8	8	8	8	8	8	8
	COM_A	Zero Growth				8	8	8	8	8	8	8	8	8	8
	COM_B	5 Yr. Avg.				8	8	8	8	8	8	8	8	8	8
	COM_C	10 Yr. Avg.				8	8	8	8	8	8	8	8	8	7
	COM_D	15 Yr. Avg.				8	8	8	7	7	7	7	7	6	
	COM_E	20 Yr. Avg.				8	8	8	8	8	8	8	8	8	
	> COM_F	WSFMP				8	8	9	9	10	10	10	11		

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**

**Lake Hughes**

IND Historical & Projected Services



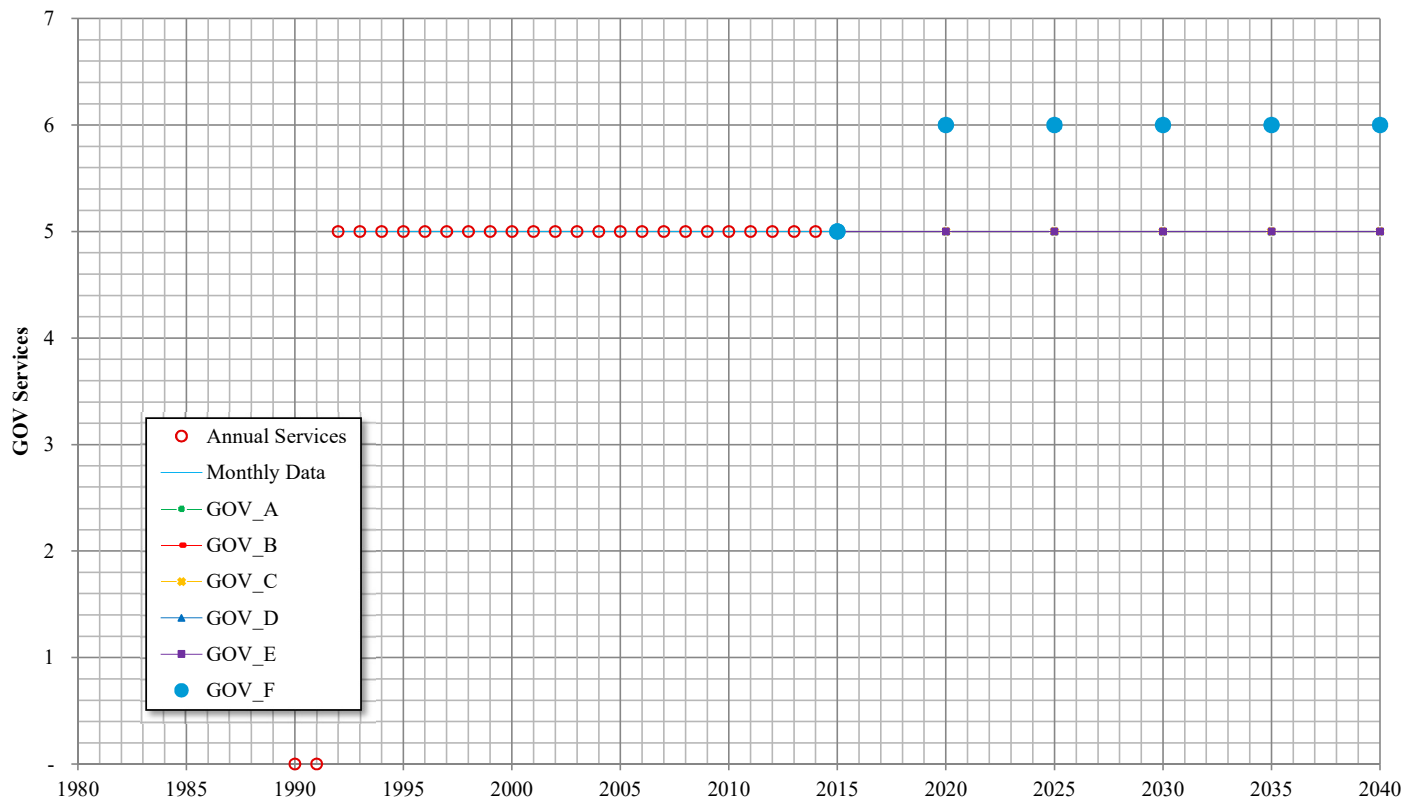
Customer Category	Trend	Growth Rate	Actual			Base Year	Projected							
			2000	2005	2010		2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040	
			IND	>	IND_A Zero Growth Rate	0.00%	0	0	0	0	0	0	0	0
		IND_B 5 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0	0
		IND_C 10 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0	0
		IND_D 15 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0	0
		IND_E 20 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0	0



**California Water Service Company - Antelope Valley District  
Water Supply and Demand Analysis and Projections**

**Lake Hughes**

GOV Historical & Projected Services

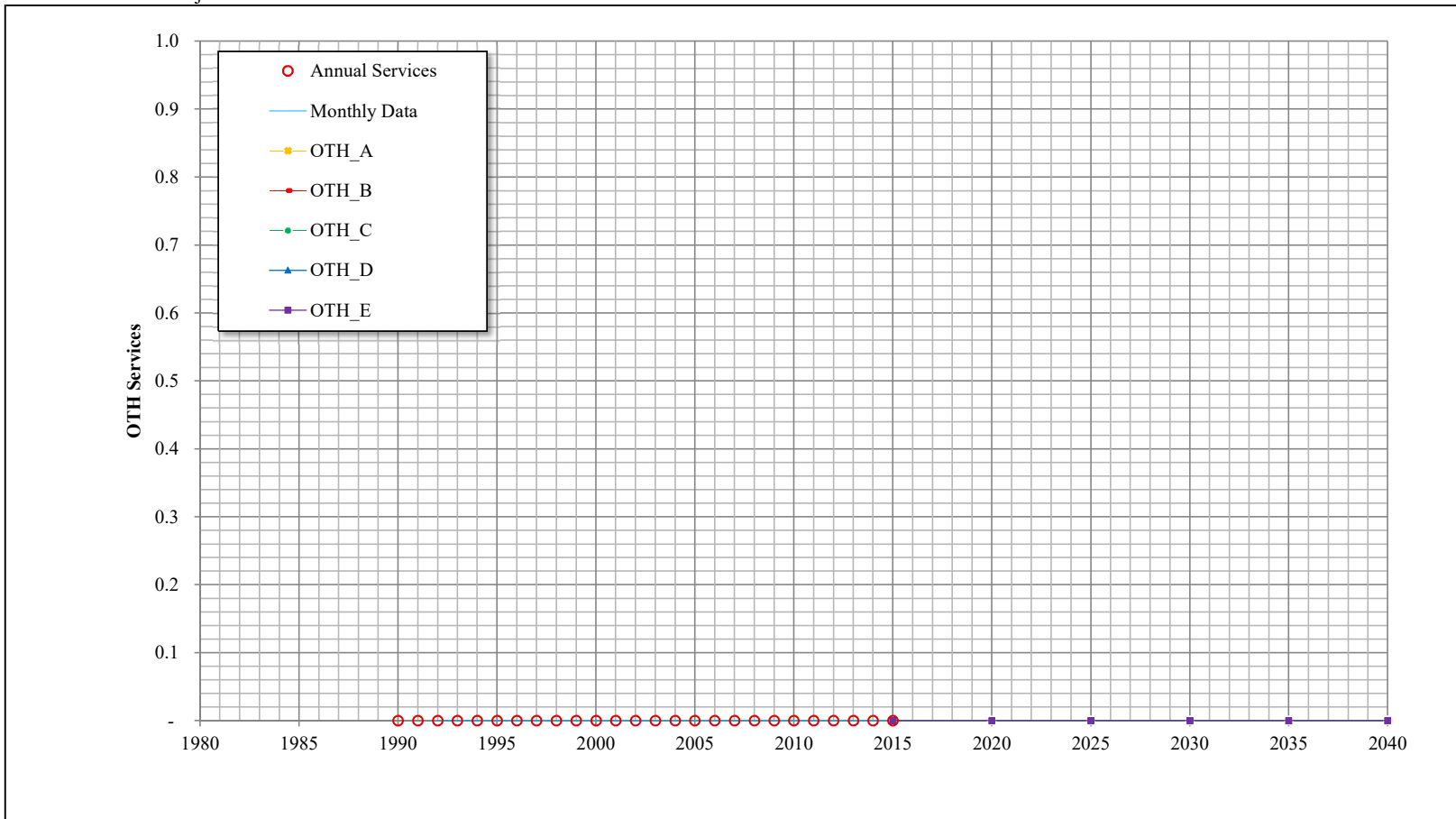


Customer Category	Trend	Growth Rate	Actual			Base Year 2015	Projected					
			2000	2005	2010		Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
GOV			5	5	5	5	5	5	5	5	5	5
	GOV_A	Zero Growth Rate	0.00%			5	5	5	5	5	5	5
	GOV_B	5 Yr. Avg.	0.00%			5	5	5	5	5	5	5
	GOV_C	10 Yr. Avg.	0.00%			5	5	5	5	5	5	5
	GOV_D	15 Yr. Avg.	0.00%			5	5	5	5	5	5	5
	GOV_E	20 Yr. Avg.	0.00%			5	5	5	5	5	5	5
	> GOV_F	WSFMP	0.80%			5	5	6	6	6	6	6

**California Water Service Company - Antelope Valley District  
Water Supply and Demand Analysis and Projections**

**Lake Hughes**

OTH Historical & Projected Services



Customer Category	Trend	Growth Rate	Actual			Projected								
			2000	2005	2010	Base Year		Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040	
						2015	2015							
OTH			0	0	0	0	0	0	0	0	0	0	0	0
>	OTH_A	Zero Growth Rate	0.00%	0	0	0	0	0	0	0	0	0	0	0
	OTH_B	5 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0	0
	OTH_C	10 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0	0
	OTH_D	15 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0	0
	OTH_E	20 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0	0

PAGE LEFT BLANK INTENTIONALLY

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Actual & Projected Annual Average Services**

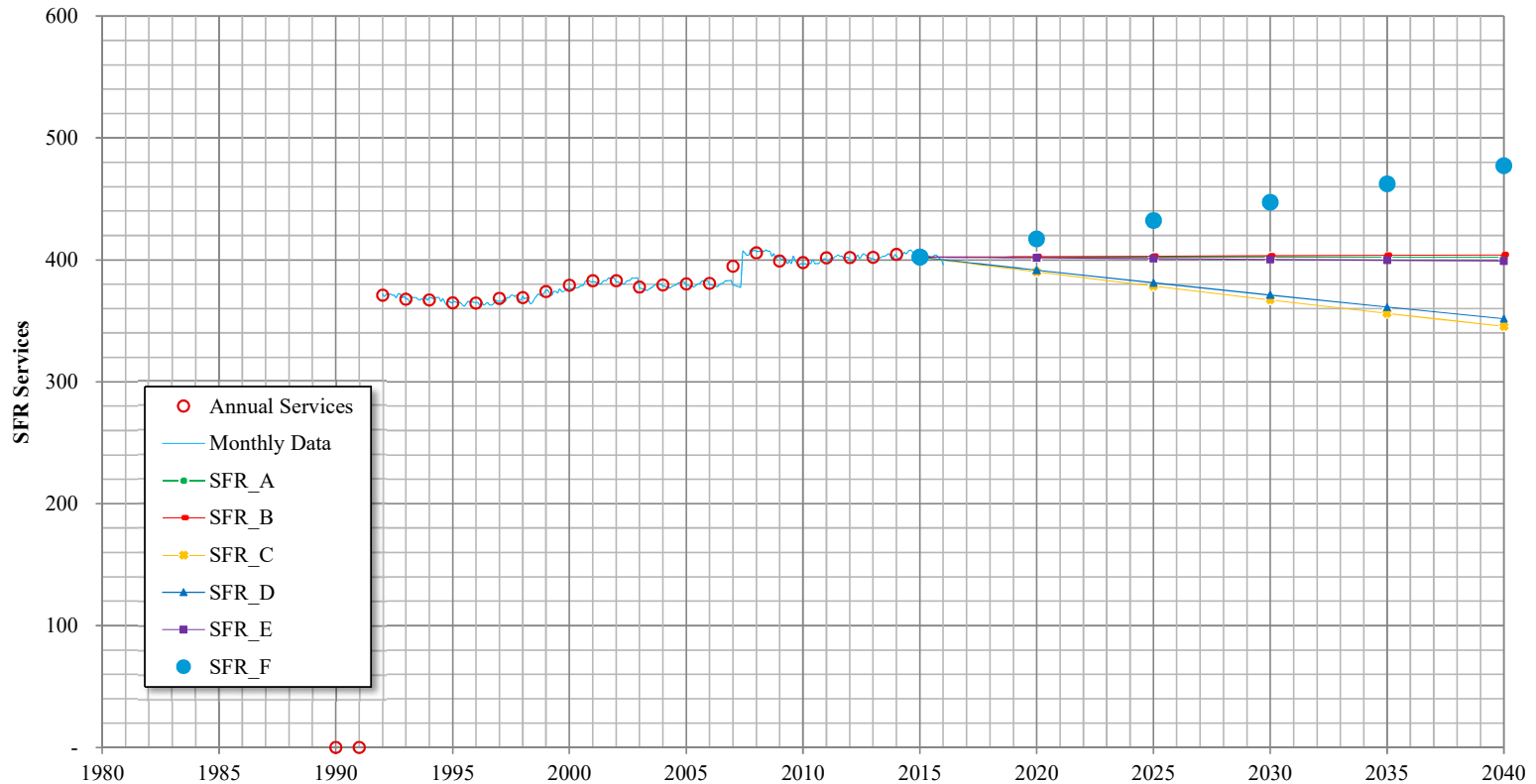
**Leona Valley**

Customer Category	Selected Trend		Growth Rate	Actual Services				Projected Services						
				2000	2005	2010	Base Year 2015	2015	2020	2025	2030	2035	2040	
SFR	SFR_F	WSFMP	0.69%	379	380	398	402	402	417	432	447	462	477	WSFMP estimated a service growth of 3 per year as projected growth
MFR	MFR_A	Zero Growth	0.00%	2	0	0	0	0	0	0	0	0	0	
COM	COM_F	WSFMP	1.27%	11	11	13	14	14	15	16	17	18	19	WSFMP est. a service growth of 1 per 5 years as projected growth
IND	IND_A	Zero Growth Rate	0.00%	0	0	0	0	0	0	0	0	0	0	
GOV	GOV_F	WSFMP	2.00%	2	2	2	2	2	3	3	3	3	3	WSFMP estimated a service growth of 1 additional service in 2020
OTH	OTH_A	Zero Growth Rate	0.00%	0	0	0	0	0	0	0	0	0	0	
TOTAL	Average growth rate 2011-2040		0.71%	395	394	413	418	418	435	451	467	483	499	

Notes:

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
 SFR Historical & Projected Services

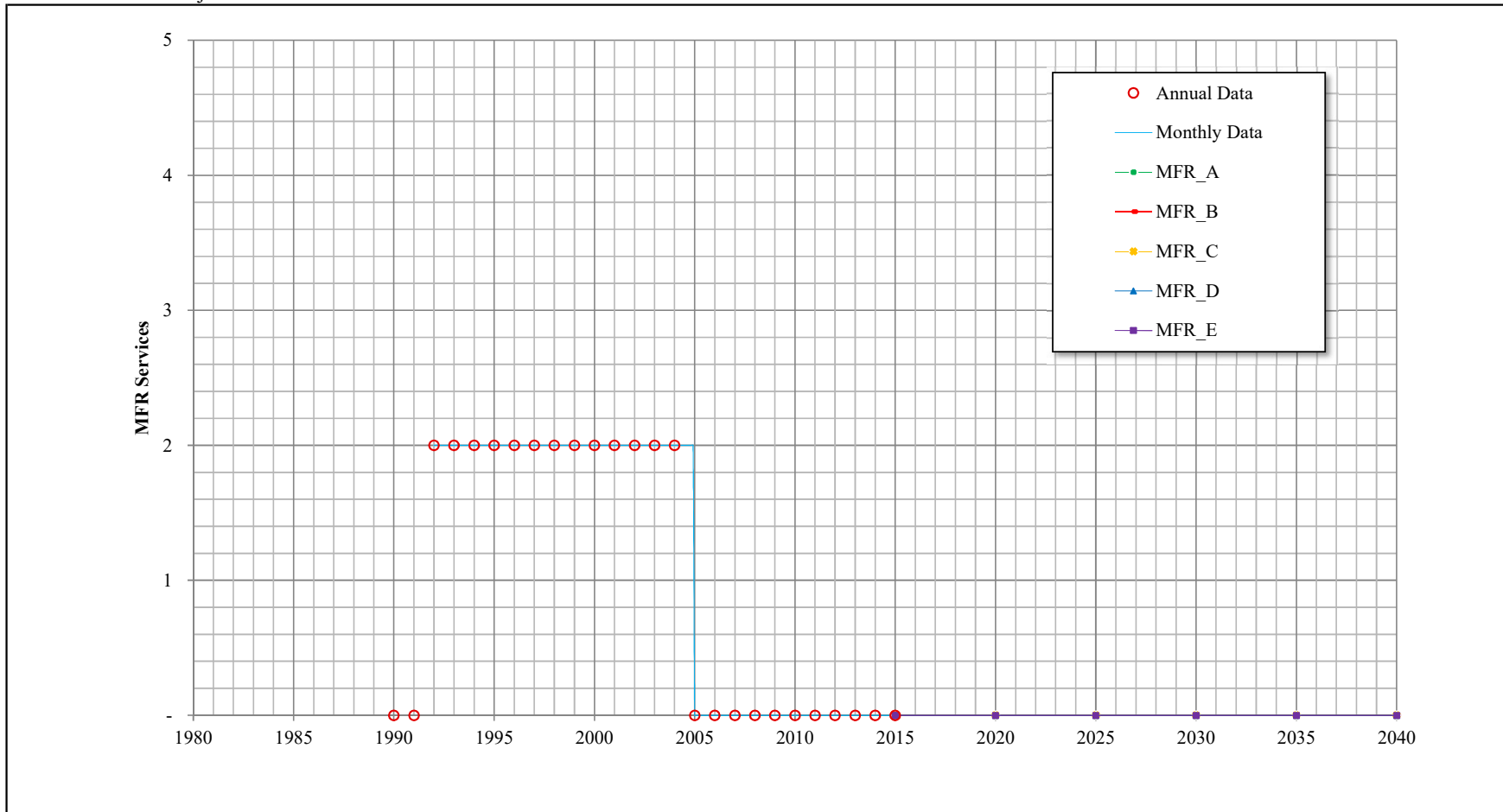
**Leona Valley**



Customer Category	Trend	Growth Rate	Actual				Projected						
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040	
SFR			379	380	398	402	402	402	402	402	402	402	402
	SFR_A	Zero Growth				402	402	402	402	402	402	402	402
	SFR_B	5 Yr. Avg.				402	402	403	403	403	403	404	404
	SFR_C	10 Yr. Avg.				402	402	390	378	367	356	345	
	SFR_D	15 Yr. Avg.				402	402	392	381	371	361	352	
	SFR_E	20 Yr. Avg.				402	402	402	401	400	400	399	
	> SFR_F	WSFMP				402	402	417	432	447	462	477	

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
 MFR Historical & Projected Services

**Leona Valley**

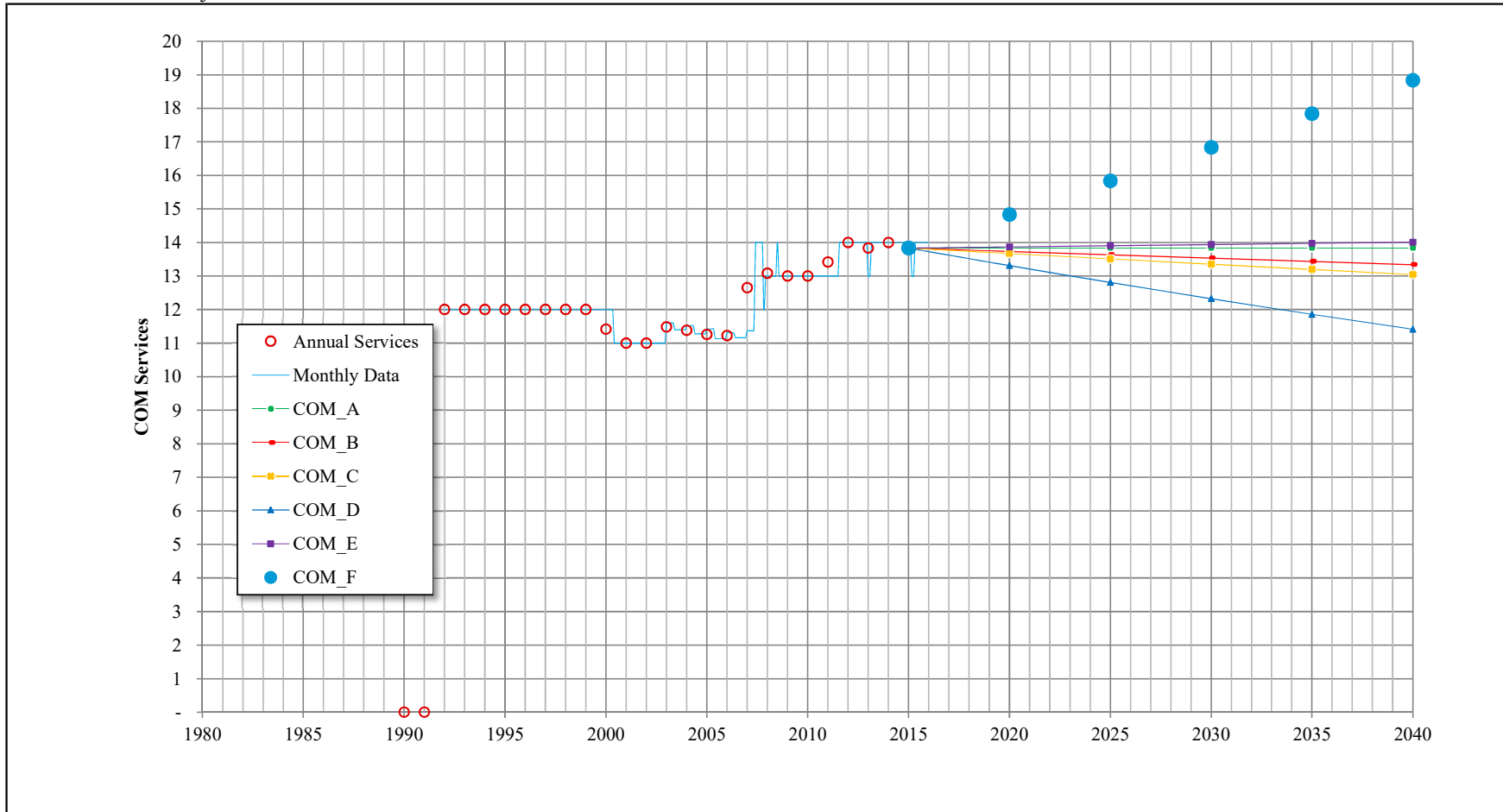


Customer Category	Trend		Growth Rate	Actual				Projected							
				2000	2005	2010	Base Year 2015	Services	Services	Services	Services	Services	Services		
								2015	2020	2025	2030	2035	2040		
MFR	>	MFR_A	Zero Growth	0.00%	2	0	0	0	0	0	0	0	0	0	0
		MFR_B	5 Yr. Avg.	-0.61%				0	0	0	0	0	0	0	0
		MFR_C	10 Yr. Avg.	-3.09%				0	0	0	0	0	0	0	0
		MFR_D	15 Yr. Avg.	-2.35%				0	0	0	0	0	0	0	0
		MFR_E	20 Yr. Avg.	-2.53%				0	0	0	0	0	0	0	0

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**

**Leona Valley**

COM Historical & Projected Services

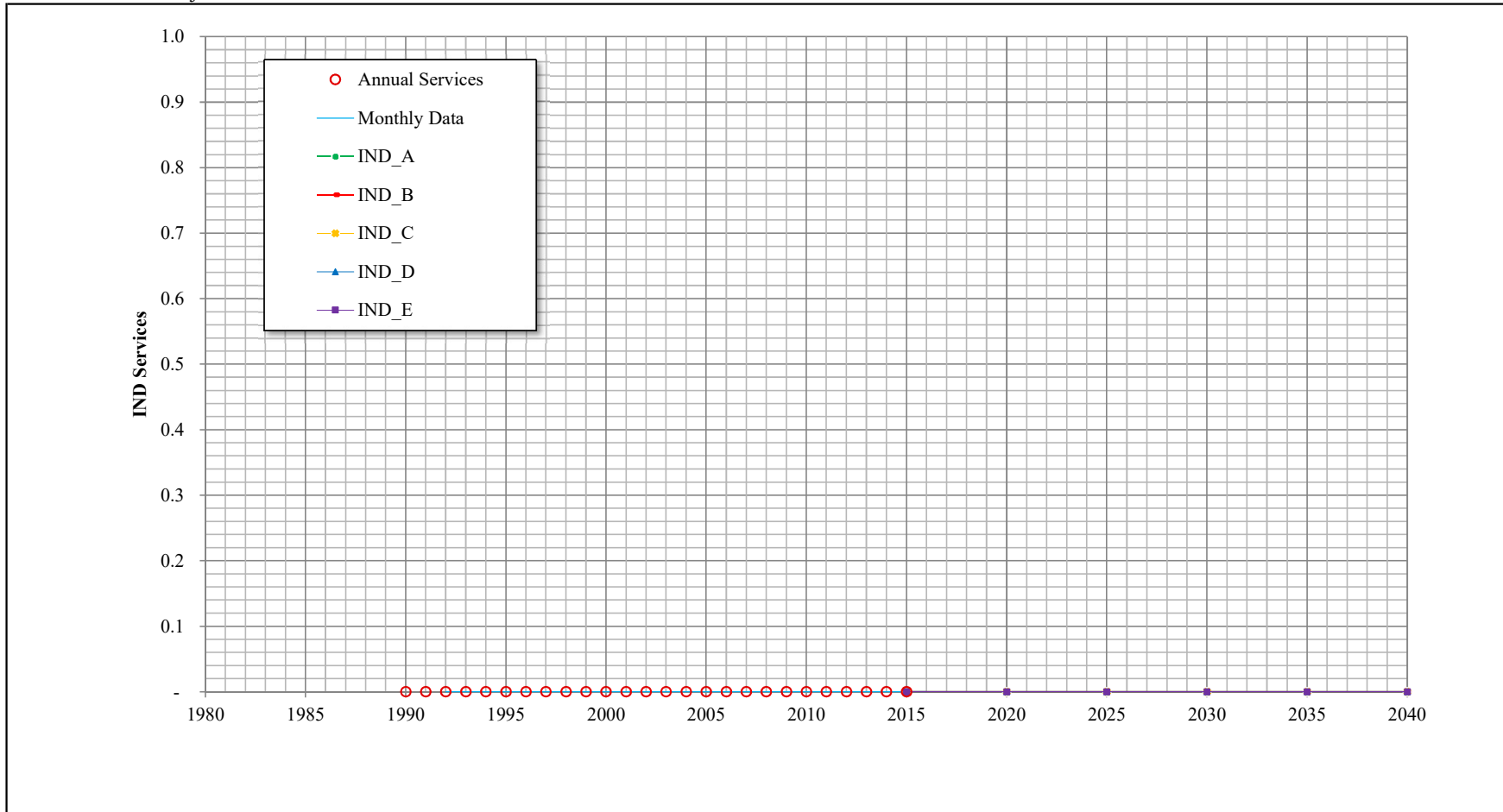


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
COM			11	11	13	14	14	14	14	14	14	14
	COM_A	Zero Growth				14	14	14	14	14	14	14
	COM_B	5 Yr. Avg.				14	14	14	14	14	13	13
	COM_C	10 Yr. Avg.				14	14	14	13	13	13	13
	COM_D	15 Yr. Avg.				14	14	13	13	12	12	11
	COM_E	20 Yr. Avg.				14	14	14	14	14	14	14
	> COM_F	WSFMP				14	14	15	16	17	18	19

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**

**Leona Valley**

IND Historical & Projected Services

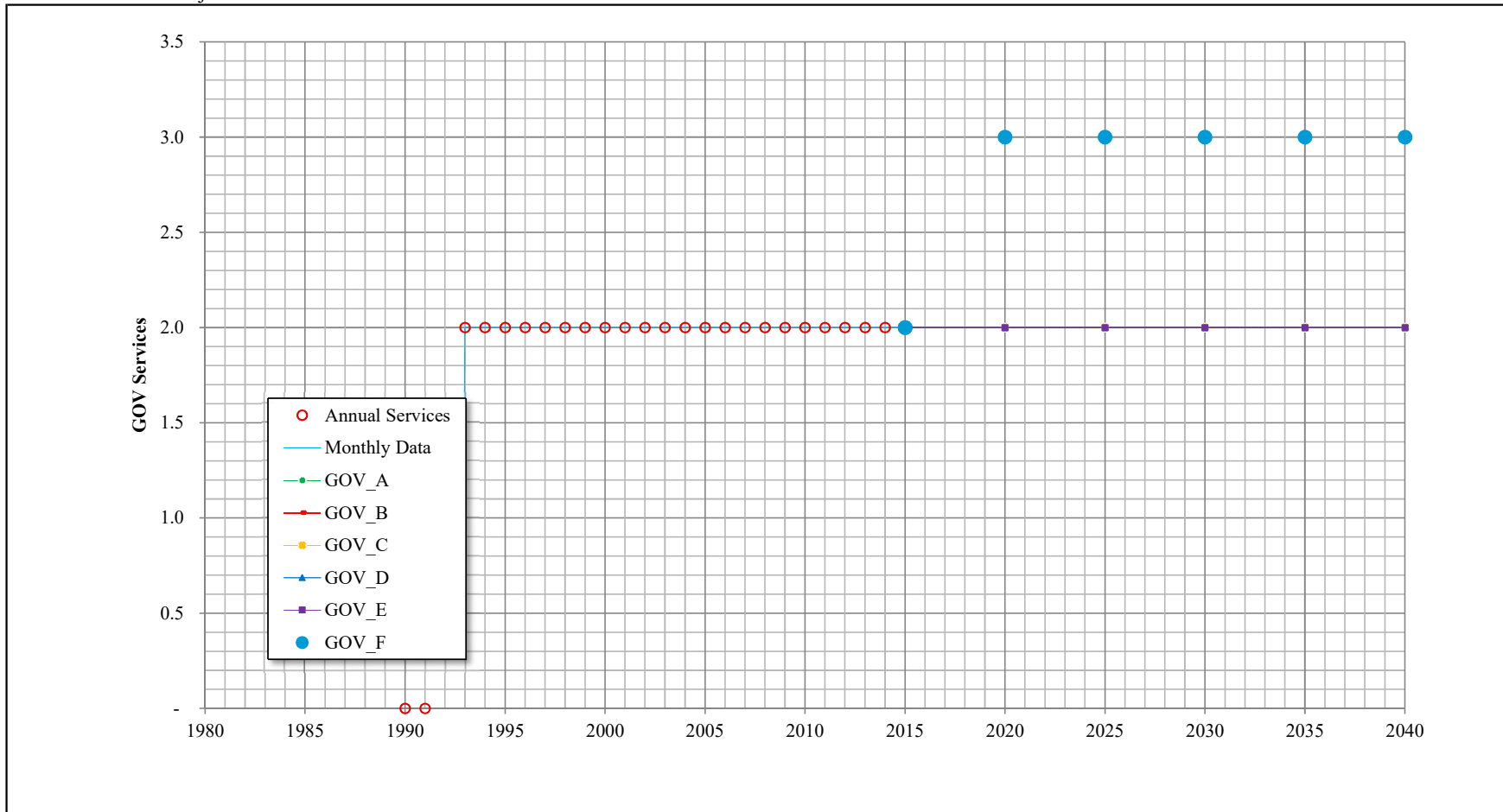


Customer Category	Trend		Growth Rate	Actual				Projected						
				2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040	
IND	>	IND_A	Zero Growth Rate	0	0	0	0	0	0	0	0	0	0	0
		IND_B	5 Yr. Avg.				0	0	0	0	0	0	0	0
		IND_C	10 Yr. Avg.				0	0	0	0	0	0	0	0
		IND_D	15 Yr. Avg.				0	0	0	0	0	0	0	0
		IND_E	20 Yr. Avg.				0	0	0	0	0	0	0	0



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
 GOV Historical & Projected Services

**Leona Valley**

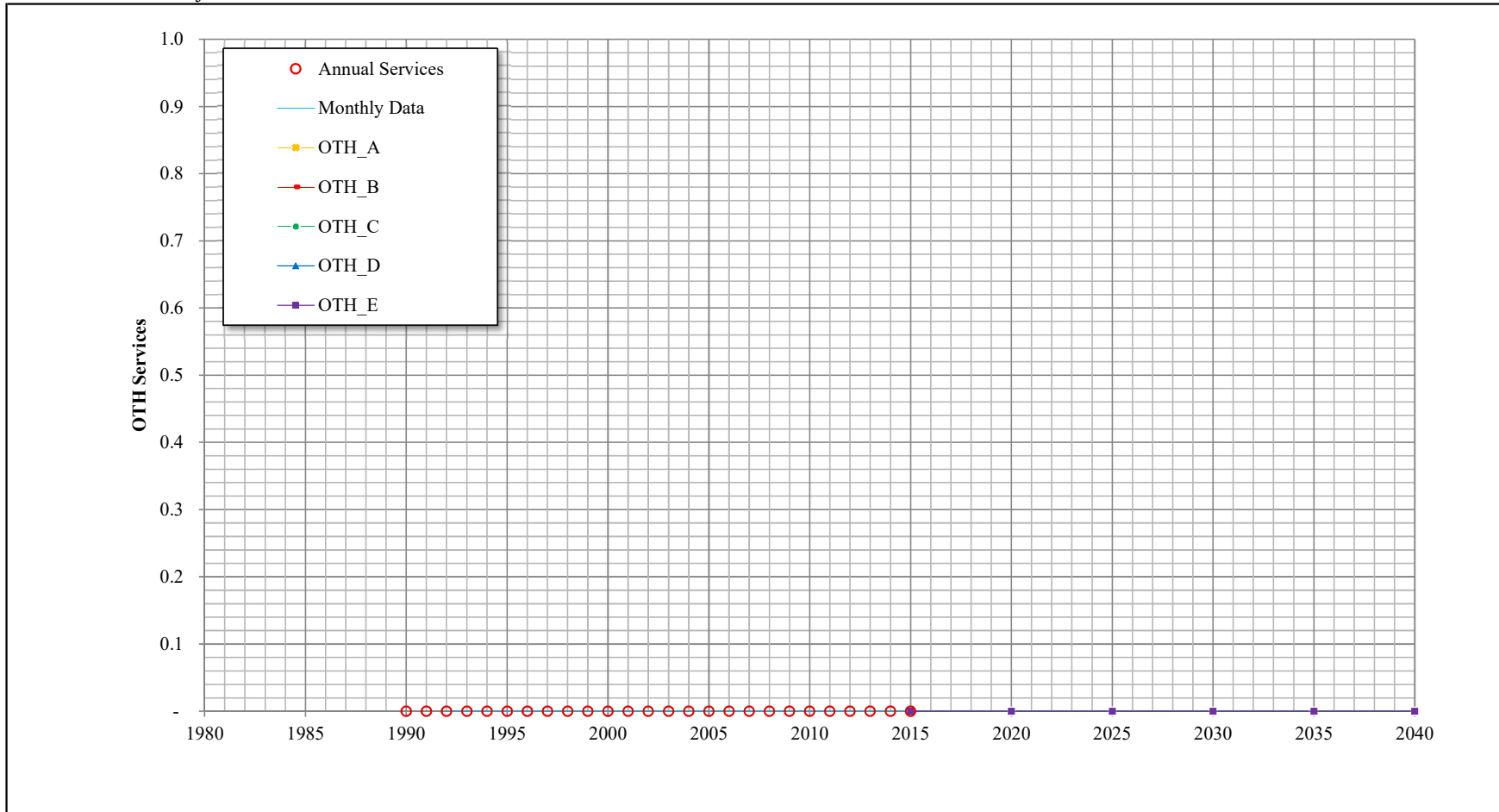


Customer Category	Trend	Growth Rate	Actual				Projected						
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040	
GOV			2	2	2	2	2	2	2	2	2	2	2
	GOV_A	Zero Growth Rate					2	2	2	2	2	2	2
	GOV_B	5 Yr. Avg.					2	2	2	2	2	2	2
	GOV_C	10 Yr. Avg.					2	2	2	2	2	2	2
	GOV_D	15 Yr. Avg.					2	2	2	2	2	2	2
	GOV_E	20 Yr. Avg.					2	2	2	2	2	2	2
	> GOV_F	WSFMP					2	2	3	3	3	3	3

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**

**Leona Valley**

OTH Historical & Projected Services



Customer Category	Trend	Growth Rate	Actual				Projected							
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040		
OTH	>	OTH_A	Zero Growth Rate	0.00%	0	0	0	0	0	0	0	0	0	0
		OTH_B	5 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0
		OTH_C	10 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0
		OTH_D	15 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0
		OTH_E	20 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0

PAGE LEFT BLANK INTENTIONALLY

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Actual & Projected Annual Average Services**

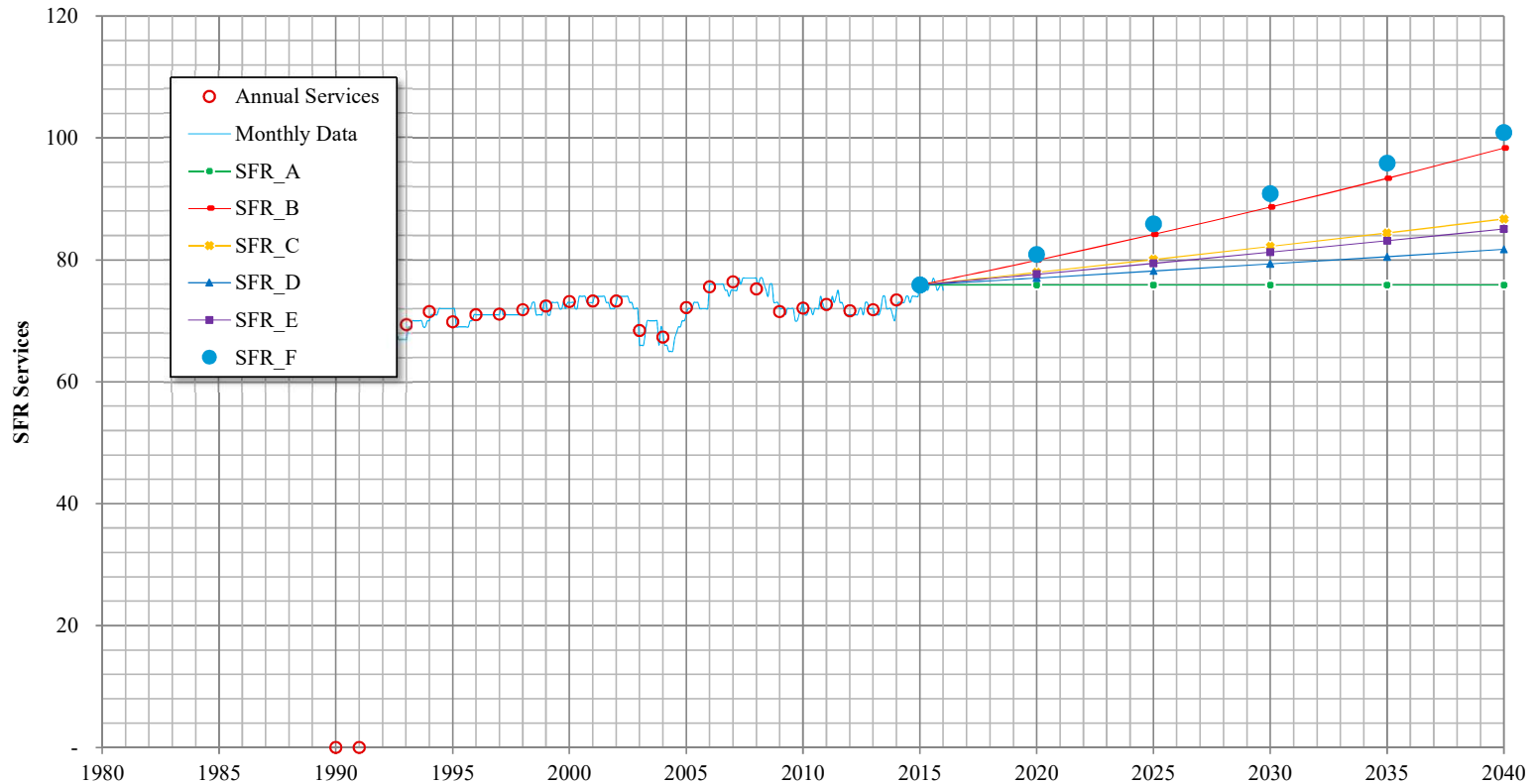
**Fremont Valley**

Customer Category	Selected Trend		Growth Rate	Actual Services				Projected Services					
				2000	2005	2010	Base Year 2015	2015	2020	2025	2030	2035	2040
SFR	SFR_F	WSFMP	1.15%	73	72	72	76	76	81	86	91	96	101
								WSFMP estimated a service growth of 1 per year as projected growth					
MFR	MFR_A	Zero Growth	0.00%	0	0	0	0	0	0	0	0	0	0
COM	COM_A	Combined	0.00%	0	0	0	0	0	0	0	0	0	0
IND	IND_A	Zero Growth Rate	0.00%	0	0	0	0	0	0	0	0	0	0
GOV	GOV_A	Combined	0.00%	0	0	0	0	0	0	0	0	0	0
OTH	OTH_A	Combined	0.00%	0	0	0	0	0	0	0	0	0	0
TOTAL	Average growth rate 2011-2040		1.15%	73	72	72	76	76	81	86	91	96	101

Notes:

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
 SFR Historical & Projected Services

**Fremont Valley**

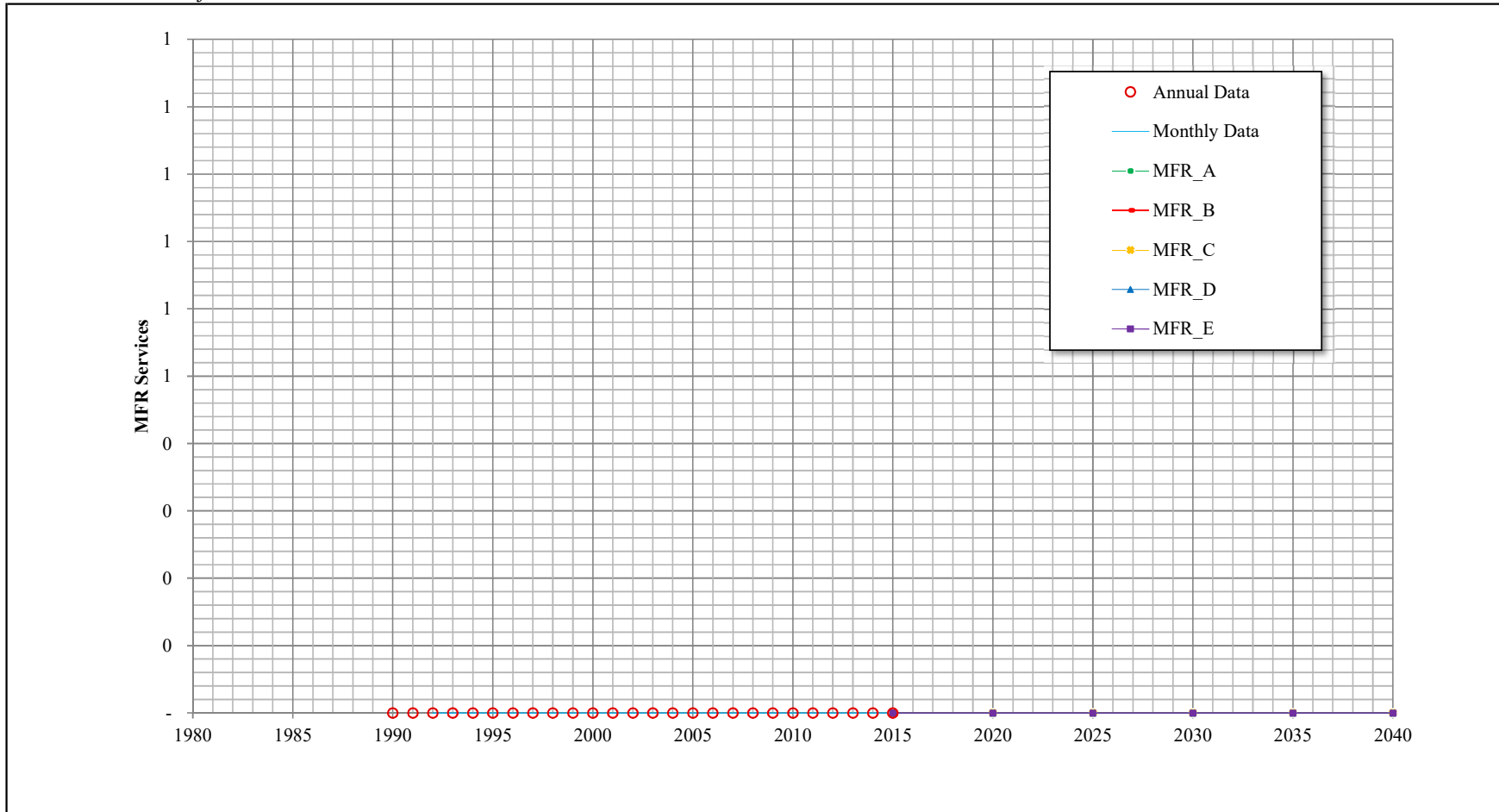


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
SFR			73	72	72	76	76	76	76	76	76	76
	SFR_A	Zero Growth				76	76	76	76	76	76	76
	SFR_B	5 Yr. Avg.				76	76	80	84	89	93	98
	SFR_C	10 Yr. Avg.				76	76	78	80	82	84	87
	SFR_D	15 Yr. Avg.				76	76	77	78	79	81	82
	SFR_E	20 Yr. Avg.				76	76	78	79	81	83	85
	> SFR_F	WSFMP				76	76	81	86	91	96	101

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**

**Fremont Valley**

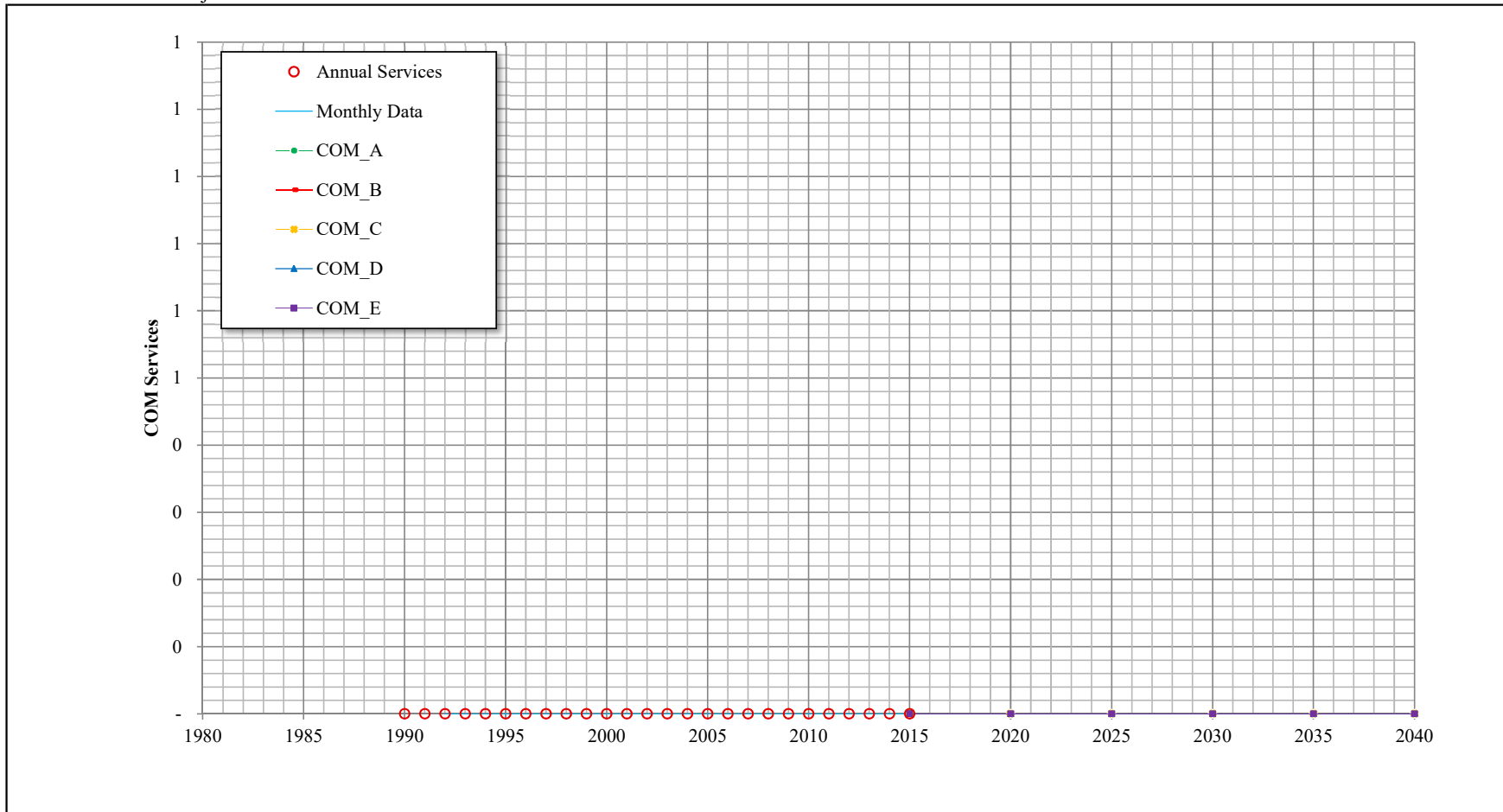
MFR Historical & Projected Services



Customer Category	Trend	Growth Rate	Actual				Projected							
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040		
MFR	>	MFR_A Zero Growth 0.00%	0	0	0	0	0	0	0	0	0	0	0	0
		MFR_B 5 Yr. Avg.	0	0	0	0	0	0	0	0	0	0	0	0
		MFR_C 10 Yr. Avg.	0	0	0	0	0	0	0	0	0	0	0	0
		MFR_D 15 Yr. Avg.	0	0	0	0	0	0	0	0	0	0	0	0
		MFR_E 20 Yr. Avg.	0	0	0	0	0	0	0	0	0	0	0	0

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
 COM Historical & Projected Services

**Fremont Valley**

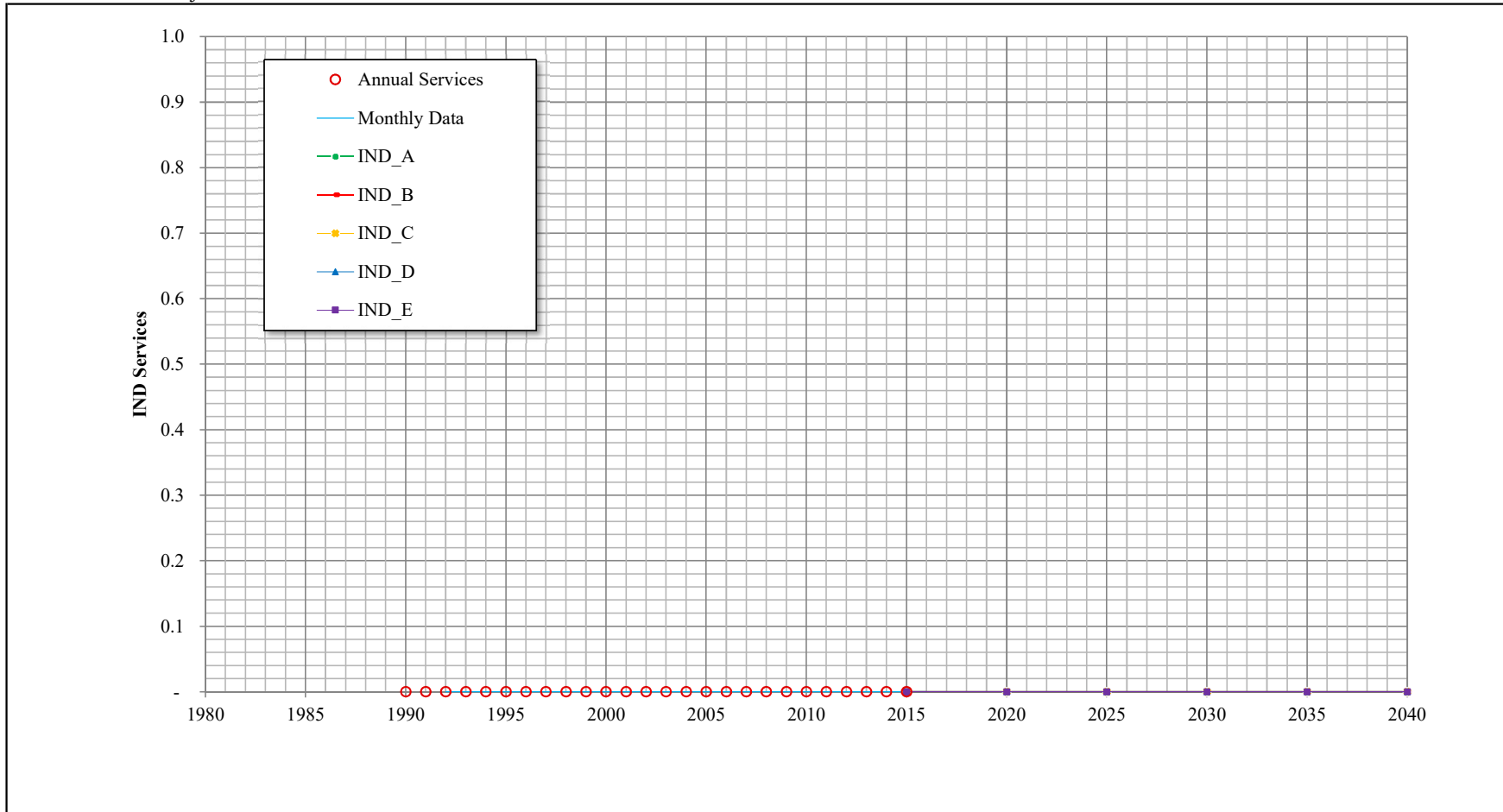


Customer Category	Trend	Growth Rate	Actual				Projected						
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040	
COM	>	COM_A Combined	0	0	0	0	0	0	0	0	0	0	0
		COM_B Lake Hughes					0	0	0	0	0	0	0
		COM_C Leona Valley					0	0	0	0	0	0	0
		COM_D Fremont Valley					0	0	0	0	0	0	0
		COM_E Lancaster					0	0	0	0	0	0	0

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**

**Fremont Valley**

IND Historical & Projected Services



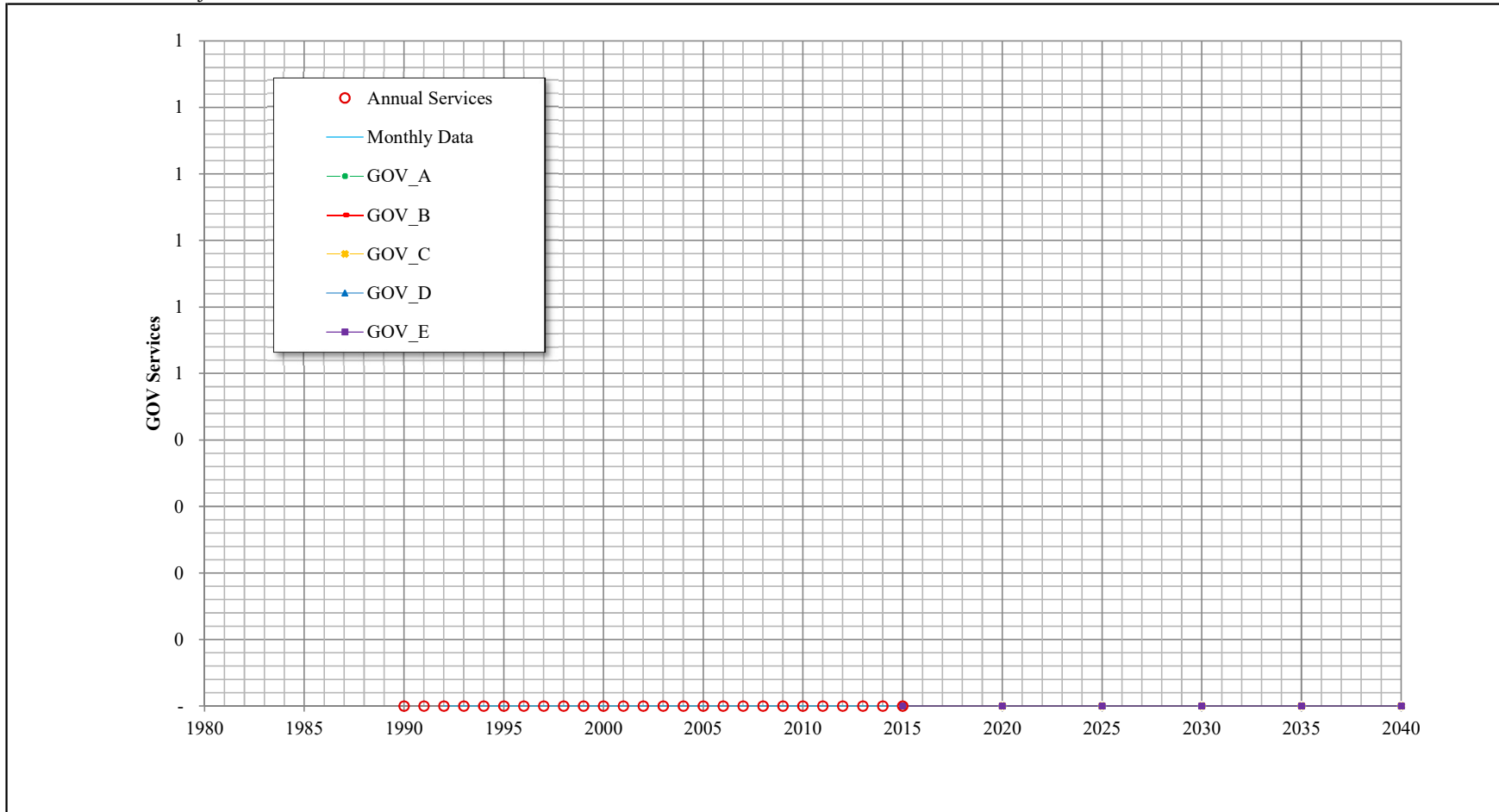
Customer Category	Trend		Growth Rate	Actual				Projected						
				2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040	
IND	>	IND_A	Zero Growth Rate	0	0	0	0	0	0	0	0	0	0	0
		IND_B	5 Yr. Avg.					0	0	0	0	0	0	0
		IND_C	10 Yr. Avg.					0	0	0	0	0	0	0
		IND_D	15 Yr. Avg.					0	0	0	0	0	0	0
		IND_E	20 Yr. Avg.					0	0	0	0	0	0	0



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**

**Fremont Valley**

GOV Historical & Projected Services

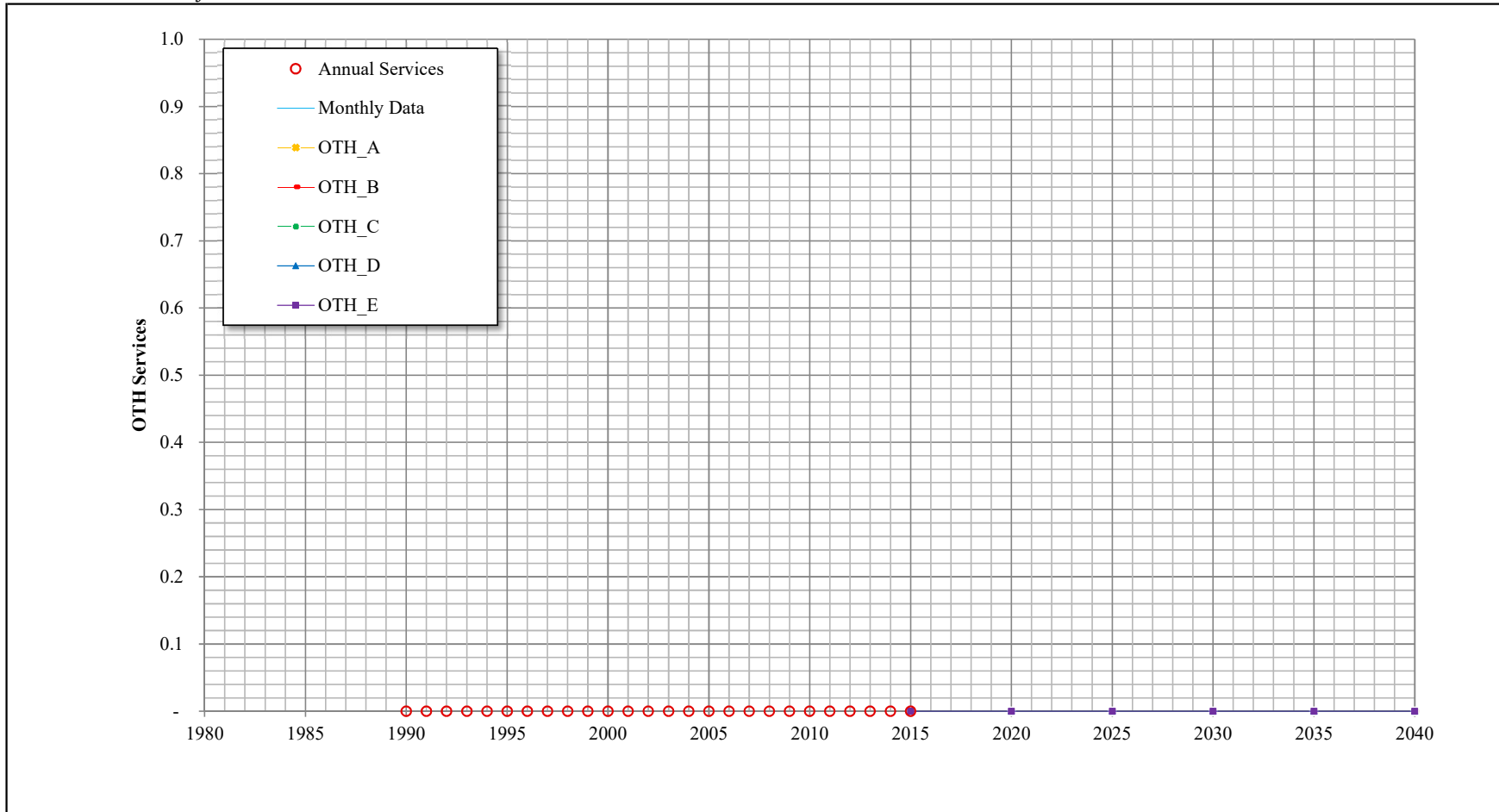


Customer Category	Trend	Growth Rate	Actual				Projected						
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040	
GOV	>	GOV_A Combined	0	0	0	0	0	0	0	0	0	0	0
		GOV_B 5 Yr. Avg.					0	0	0	0	0	0	0
		GOV_C 10 Yr. Avg.					0	0	0	0	0	0	0
		GOV_D 15 Yr. Avg.					0	0	0	0	0	0	0
		GOV_E 20 Yr. Avg.					0	0	0	0	0	0	0

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**

**Fremont Valley**

OTH Historical & Projected Services



Customer Category	Trend	Growth Rate	Actual				Projected						
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040	
OTH	>	OTH_A Combined	0	0	0	0	0	0	0	0	0	0	0
		OTH_B 5 Yr. Avg.					0	0	0	0	0	0	0
		OTH_C 10 Yr. Avg.					0	0	0	0	0	0	0
		OTH_D 15 Yr. Avg.					0	0	0	0	0	0	0
		OTH_E 20 Yr. Avg.					0	0	0	0	0	0	0

PAGE LEFT BLANK INTENTIONALLY

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Actual & Projected Annual Average Services**

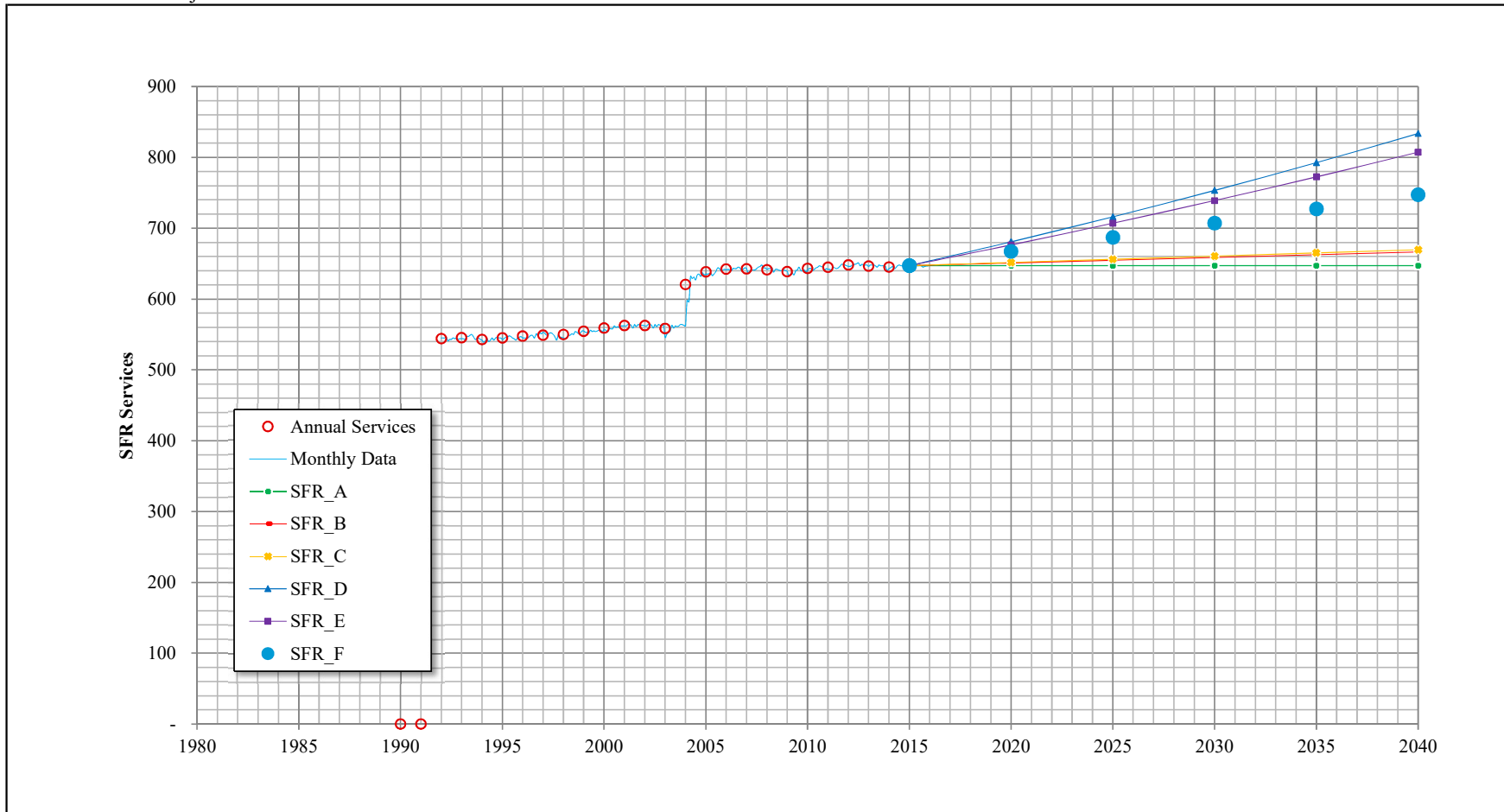
**Lancaster**

Customer Category	Selected Trend	Growth Rate	Actual Services				Projected Services						
			2000	2005	2010	Base Year 2015	2015	2020	2025	2030	2035	2040	
SFR	SFR_F WSFMP	0.58%	559	638	643	647	647	667	687	707	727	747	WSFMP estimated a service growth of 4 per year as projected growth
MFR	MFR_A Zero Growth	0.00%	0	0	0	0	0	0	0	0	0	0	
COM	COM_F WSFMP	2.69%	12	16	16	14	14	17	19	22	24	27	WSFMP estimated a service growth of 1 per 2 years as projected growth
IND	IND_A Zero Growth Rate	0.00%	0	0	0	0	0	0	0	0	0	0	
GOV	GOV_F WSFMP	2.28%	5	5	7	7	7	8	9	10	11	12	WSFMP estimated a service growth of 1 per 5 years as projected growth
OTH	OTH_A Zero Growth Rate	0.00%	0	0	0	0	0	0	0	0	0	0	
TOTAL	Average growth rate 2011-2040	0.65%	576	660	666	668	668	692	715	739	762	786	

Notes:

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
 SFR Historical & Projected Services

**Lancaster**

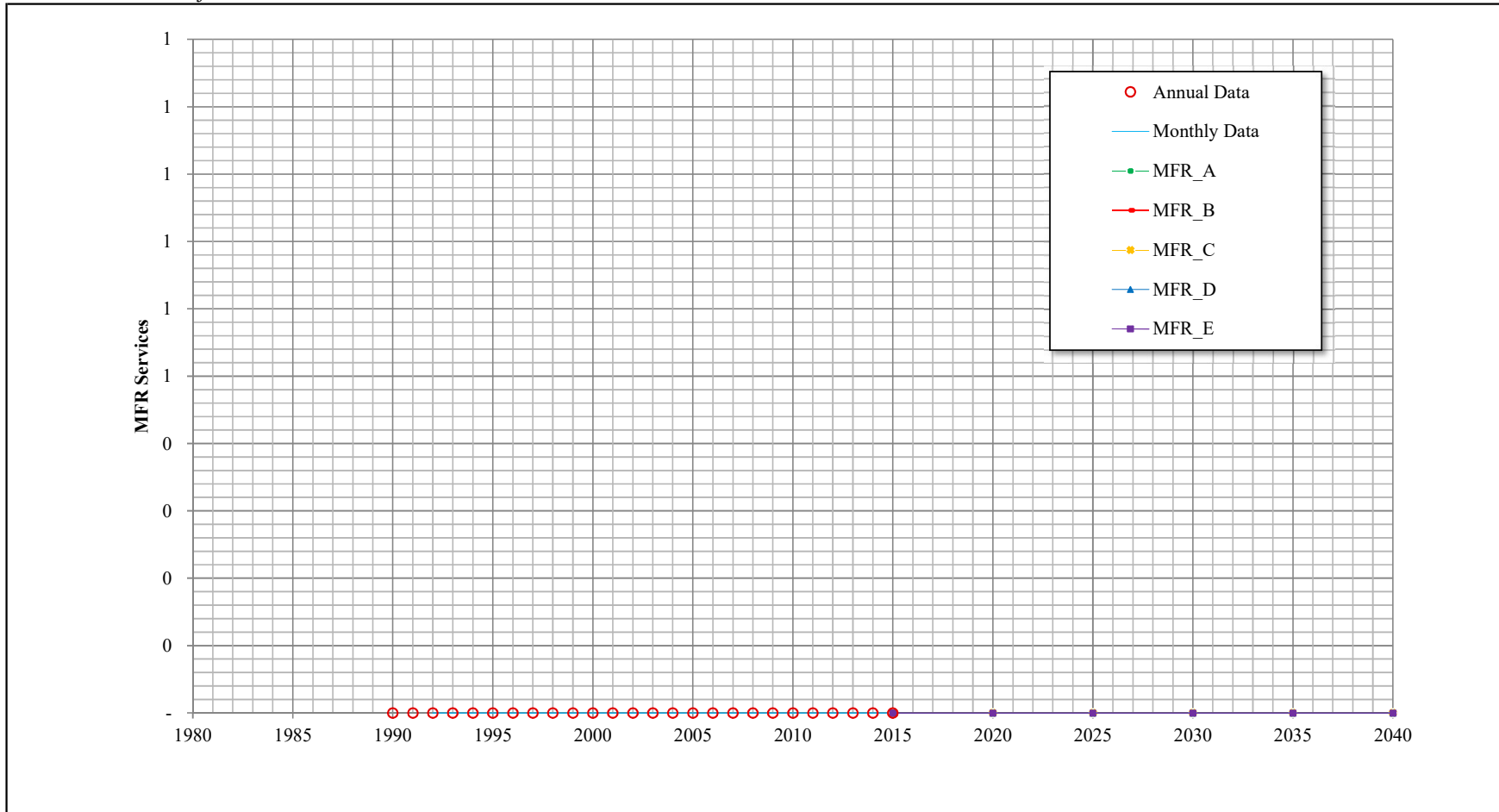


Customer Category	Trend	Growth Rate	Actual				Projected						
			2000	2005	2010	Base Year	Services	Services	Services	Services	Services	Services	
						2015	2015	2020	2025	2030	2035	2040	
SFR			559	638	643	647	647	647	647	647	647	647	647
	SFR_A	Zero Growth				647	647	647	647	647	647	647	647
	SFR_B	5 Yr. Avg.				647	647	651	655	659	663	666	666
	SFR_C	10 Yr. Avg.				647	647	652	656	661	665	670	670
	SFR_D	15 Yr. Avg.				647	647	681	716	753	792	834	834
	SFR_E	20 Yr. Avg.				647	647	676	707	739	772	807	807
	> SFR_F	WSFMP				647	647	667	687	707	727	747	747

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**

**Lancaster**

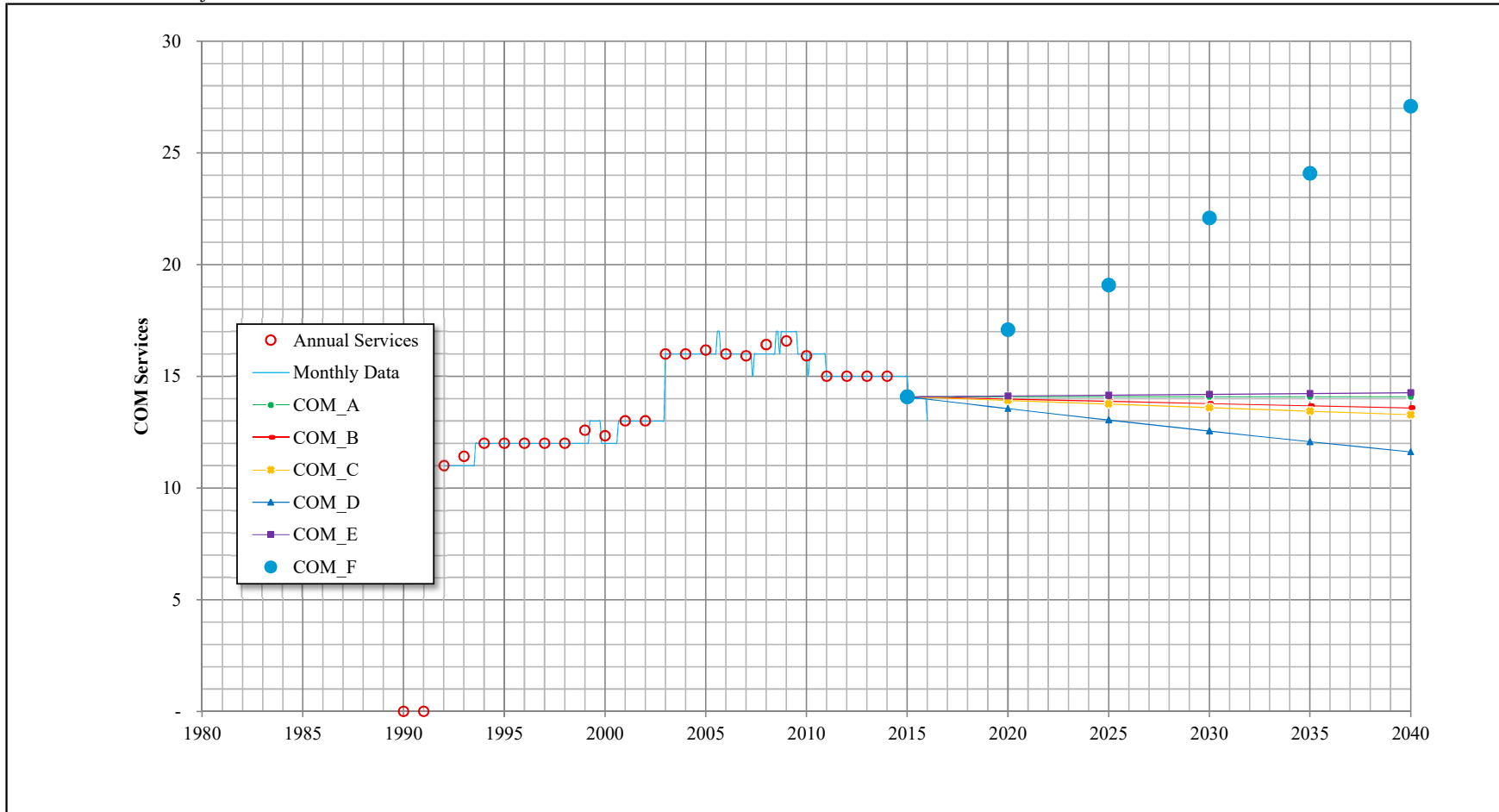
MFR Historical & Projected Services



Customer Category	Trend	Growth Rate	Actual				Projected							
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040		
MFR	>	MFR_A	Zero Growth	0.00%	0	0	0	0	0	0	0	0	0	0
		MFR_B	5 Yr. Avg.	-0.61%	0	0	0	0	0	0	0	0	0	0
		MFR_C	10 Yr. Avg.	-3.09%	0	0	0	0	0	0	0	0	0	0
		MFR_D	15 Yr. Avg.	-2.35%	0	0	0	0	0	0	0	0	0	0
		MFR_E	20 Yr. Avg.	-2.53%	0	0	0	0	0	0	0	0	0	0

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
 COM Historical & Projected Services

**Lancaster**

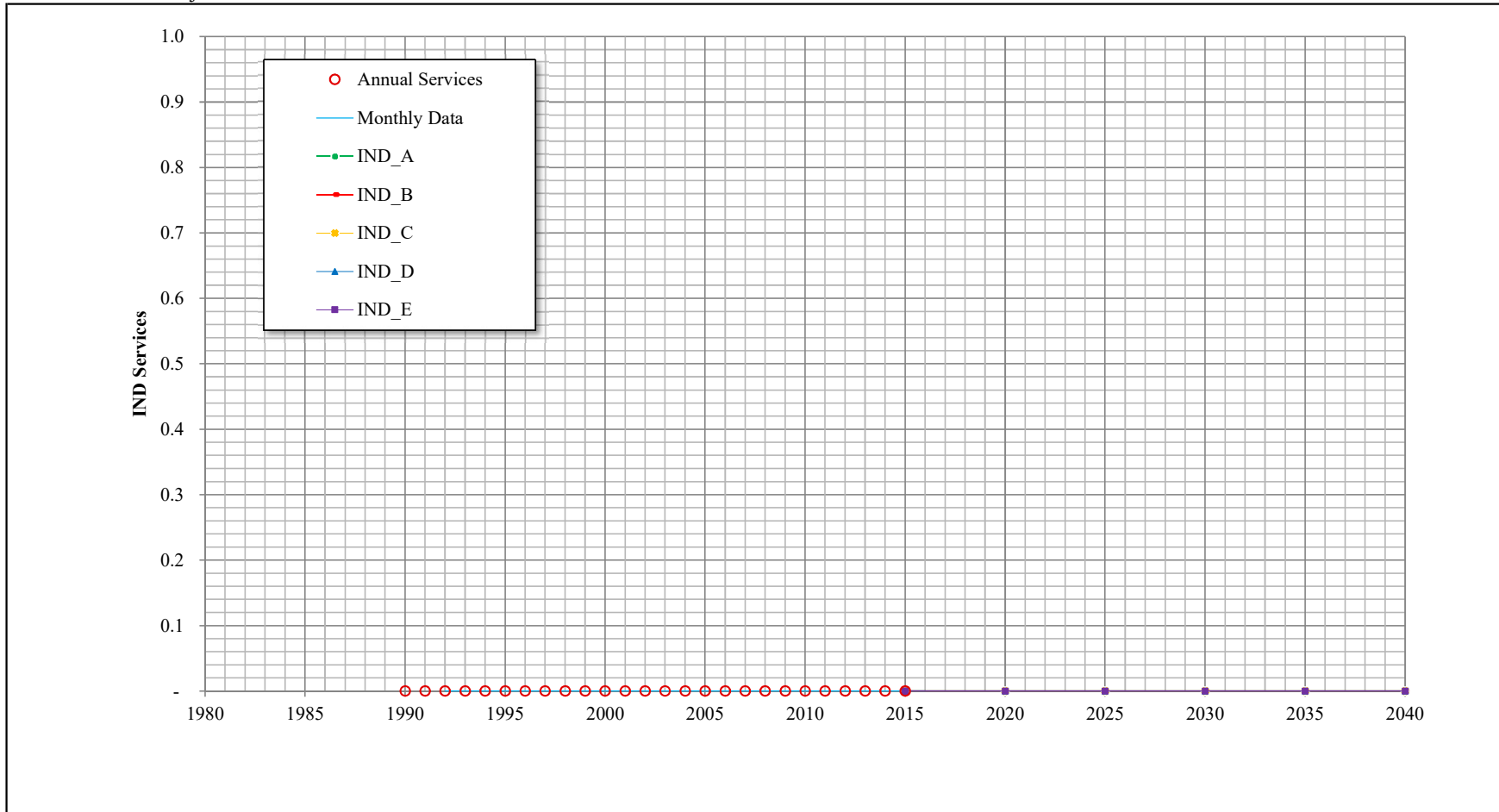


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
COM			12	16	16	14	14	14	14	14	14	14
	COM_A	Zero Growth				14	14	14	14	14	14	14
	COM_B	5 Yr. Avg.				14	14	14	14	14	14	14
	COM_C	10 Yr. Avg.				14	14	14	14	13	13	13
	COM_D	15 Yr. Avg.				14	14	14	13	13	12	12
	COM_E	20 Yr. Avg.				14	14	14	14	14	14	14
	> COM_F	WSFMP				14	14	17	19	22	24	27

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**

**Lancaster**

IND Historical & Projected Services

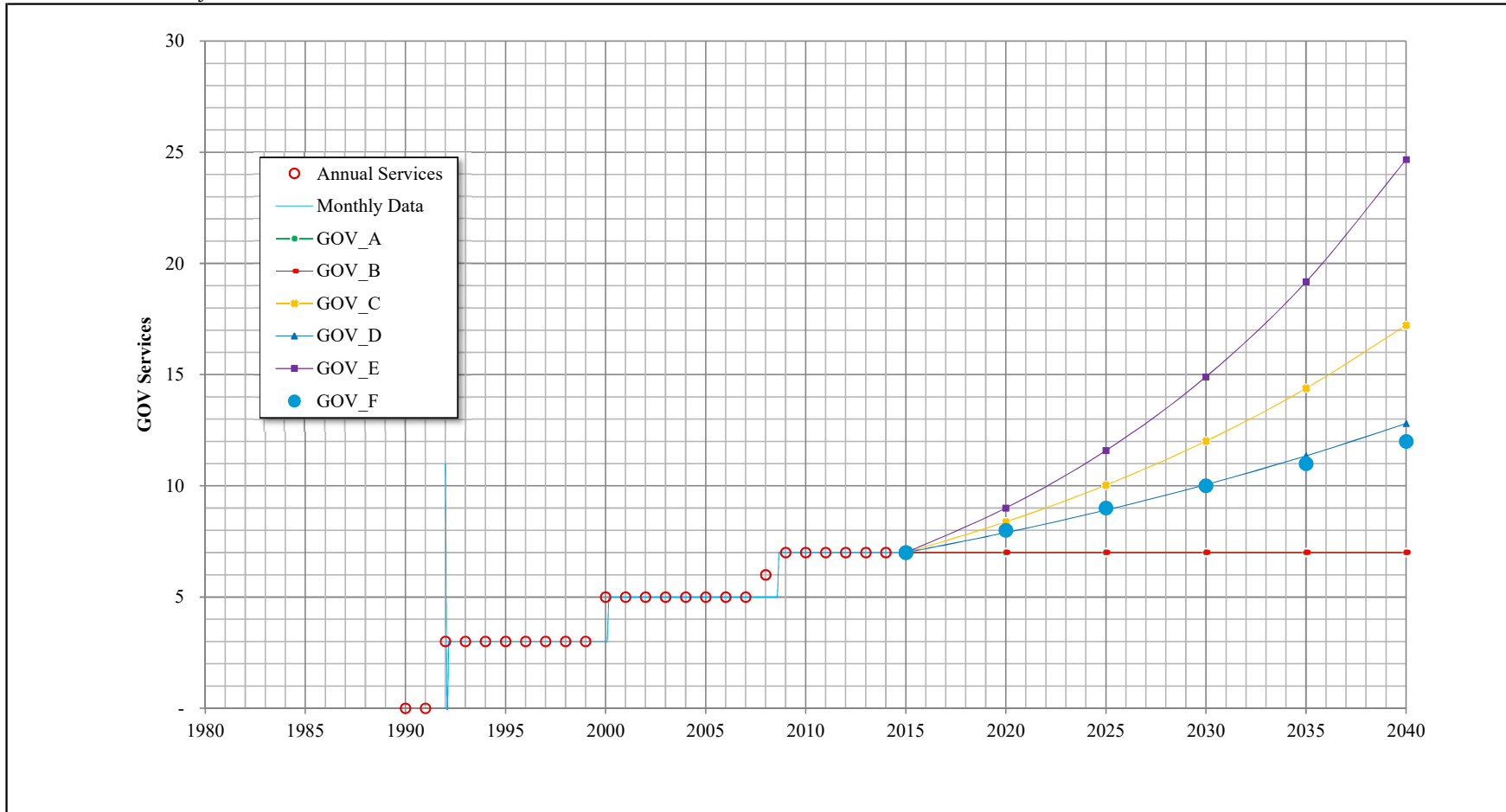


Customer Category	Trend		Growth Rate	Actual				Projected						
				2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040	
IND	>	IND_A	Zero Growth Rate	0	0	0	0	0	0	0	0	0	0	0
		IND_B	5 Yr. Avg.					0	0	0	0	0	0	0
		IND_C	10 Yr. Avg.					0	0	0	0	0	0	0
		IND_D	15 Yr. Avg.					0	0	0	0	0	0	0
		IND_E	20 Yr. Avg.					0	0	0	0	0	0	0



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
 GOV Historical & Projected Services

**Lancaster**

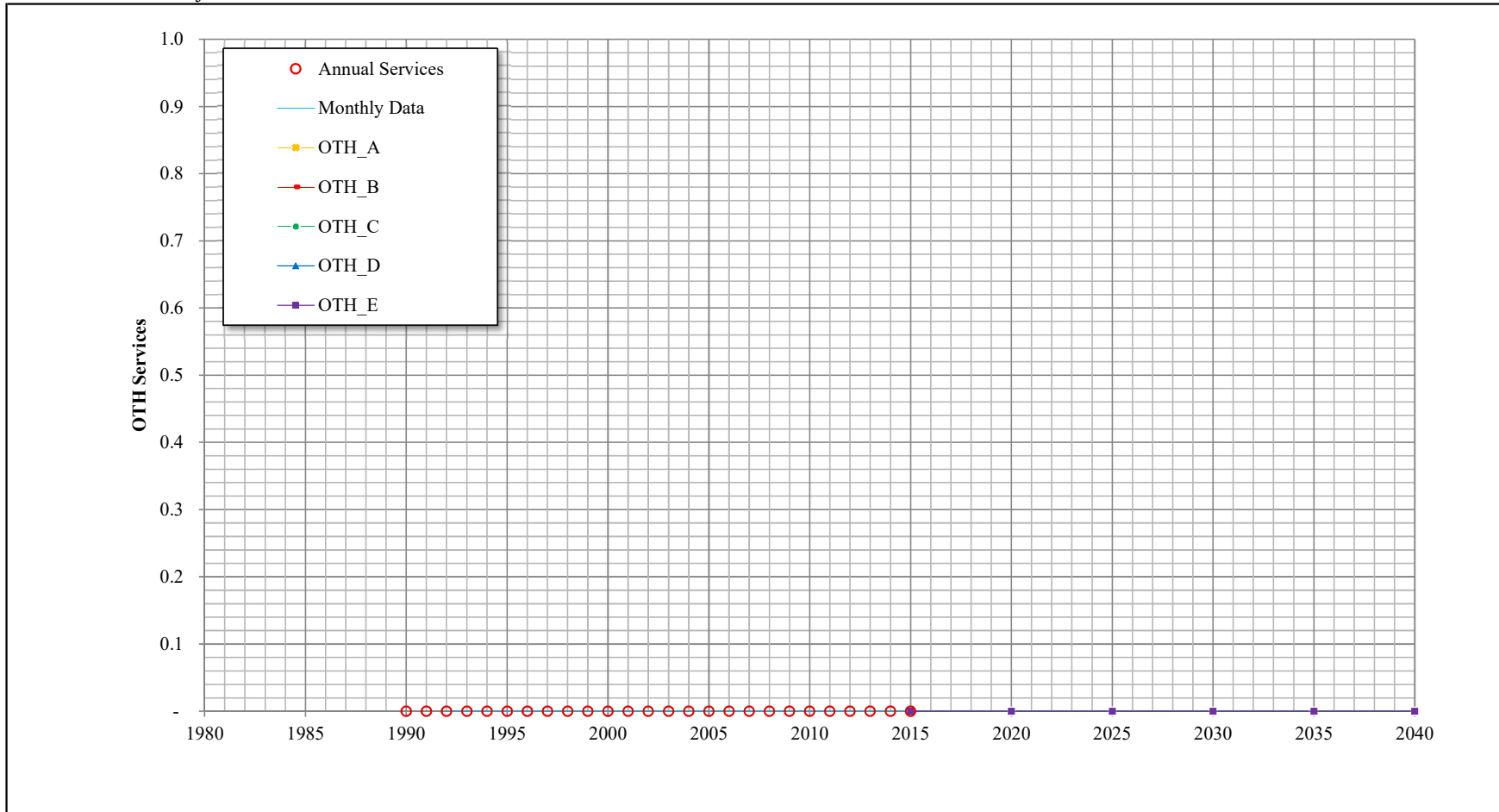


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
GOV			5	5	7	7	7	7	7	7	7	7
	GOV_A	Zero Growth Rate				7	7	7	7	7	7	7
	GOV_B	5 Yr. Avg.				7	7	7	7	7	7	7
	GOV_C	10 Yr. Avg.				7	7	8	10	12	14	17
	GOV_D	15 Yr. Avg.				7	7	8	9	10	11	13
	GOV_E	20 Yr. Avg.				7	7	9	12	15	19	25
	> GOV_F	WSFMP				7	7	8	9	10	11	12

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**

**Lancaster**

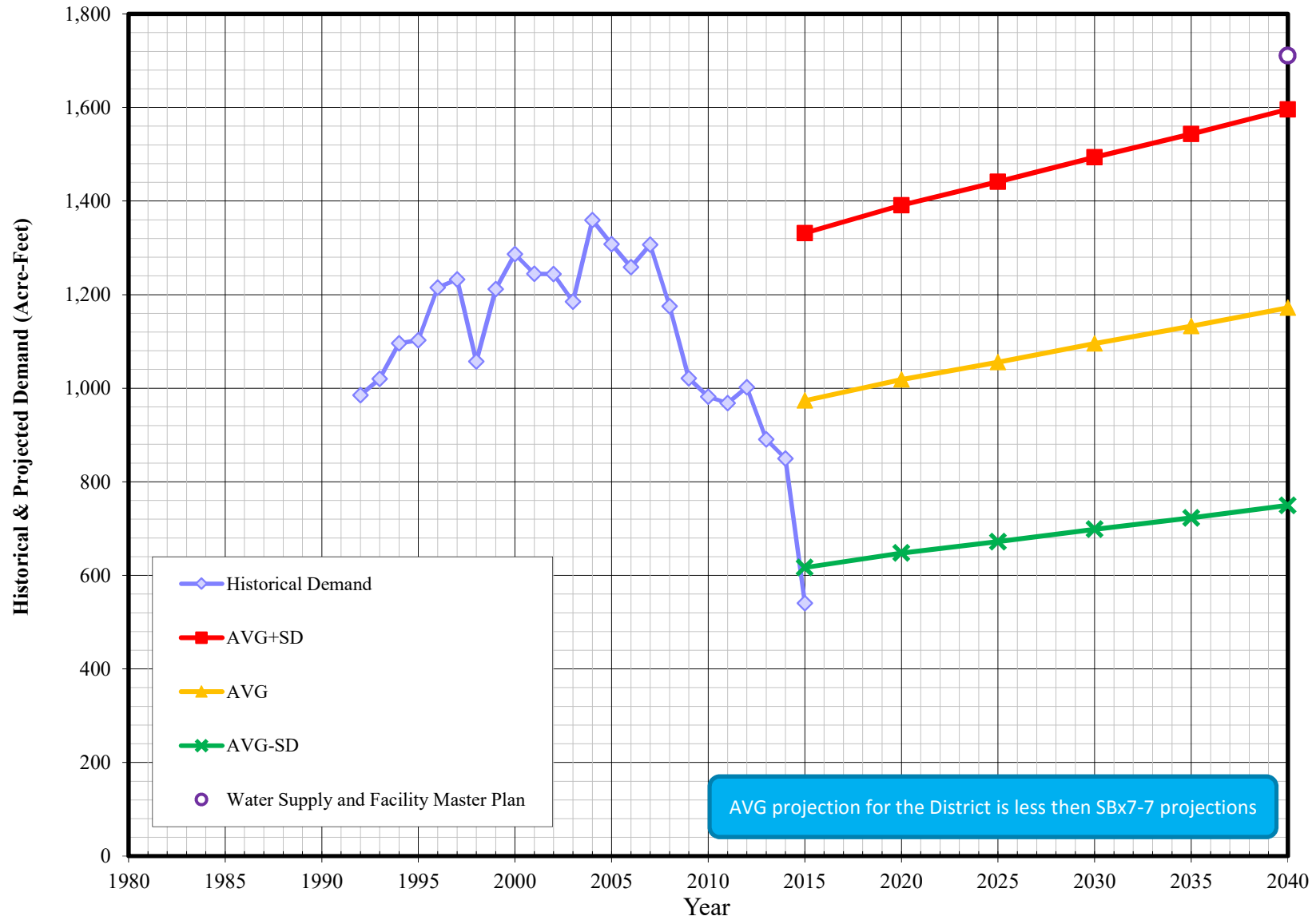
OTH Historical & Projected Services



Customer Category	Trend		Growth Rate	Actual				Projected							
				2000	2005	2010	Base Year 2015	Services	Services	Services	Services	Services	Services		
								2015	2020	2025	2030	2035	2040		
OTH	>	OTH_A	Zero Growth Rate	0.00%	0	0	0	0	0	0	0	0	0	0	0
		OTH_B	5 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0	0
		OTH_C	10 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0	0
		OTH_D	15 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0	0
		OTH_E	20 Yr. Avg.	0.00%	0	0	0	0	0	0	0	0	0	0	0

PAGE LEFT BLANK INTENTIONALLY

# Historical & Projected Demand (AV) Consolidated



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Actual & Projected Demand in Acre-Feet**

**Consolidated**

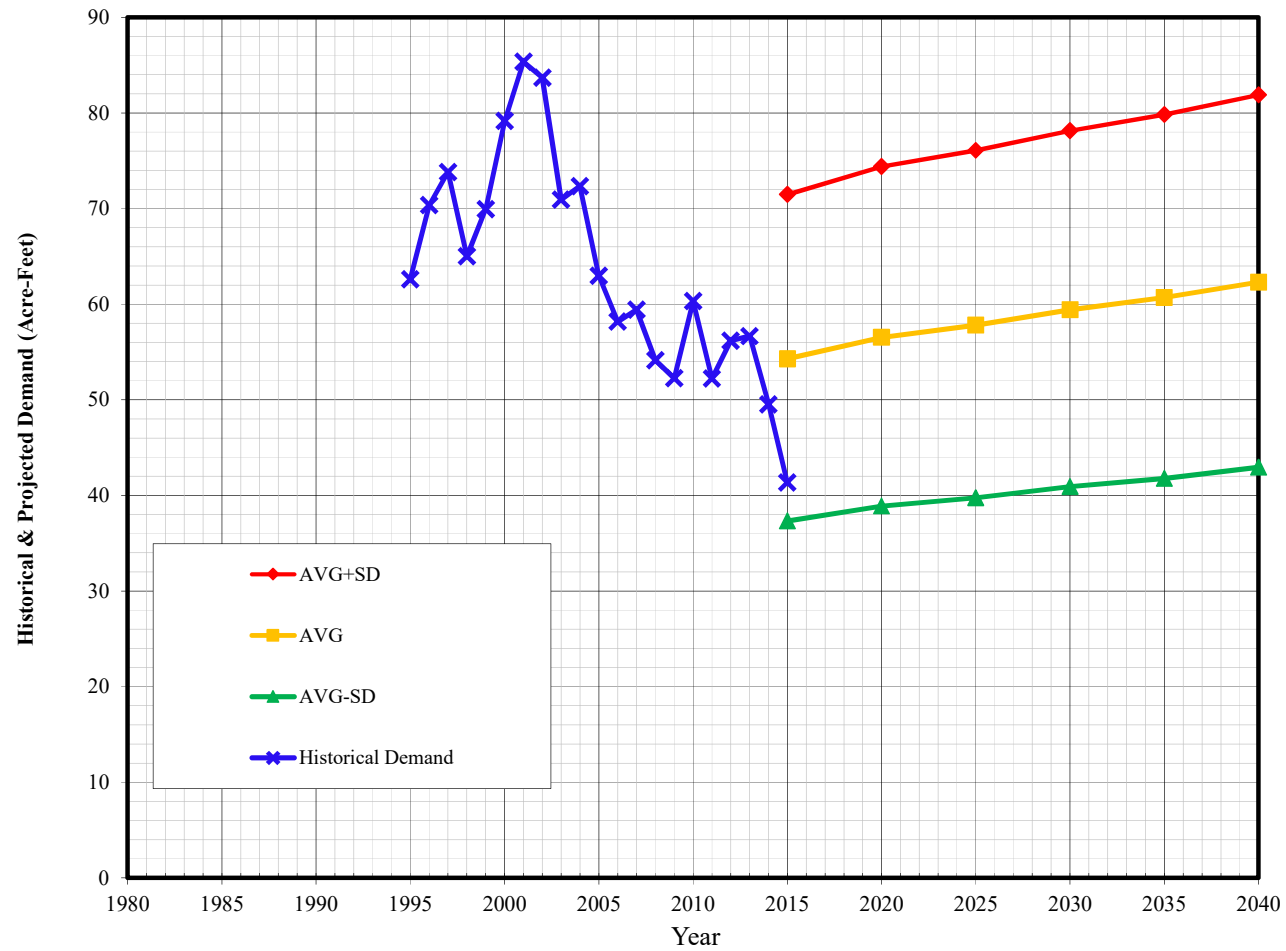
Worksheet 9

Customer Category	Actual Demand (AFY)								Projected Demand (AFY)					
	1980	1985	1990	1995	2000	2005	2010	2015	2015	2020	2025	2030	2035	2040
SFR	0	0	0	0	0	1,131	835	481	1,077	1,113	1,149	1,185	1,221	1,257
									833	861	889	917	945	973
									592	611	631	651	670	690
MFR	0	0	0	0	0	2	1	1	2	2	2	2	2	2
									1	1	1	1	1	1
									1	1	1	1	1	1
COM	0	0	0	0	0	55	45	31	39	46	51	57	62	69
									39	46	51	57	62	69
									39	46	51	57	62	69
IND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
GOV	0	0	0	0	0	32	31	25	40	50	53	57	60	64
									31	40	42	45	47	50
									23	29	31	33	35	36
OTH	0	0	0	0	0	4	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
UAFW	0	0	0	0	0	84	70	7	174	181	187	193	199	205
									68	70	72	75	77	79
									-38	-40	-42	-43	-45	-47
TOTAL (AFY)	0	0	0	0	0	1,308	982	544	1,332	1,391	1,441	1,493	1,543	1,596
									973	1,019	1,056	1,095	1,132	1,172
									617	648	672	699	723	750
TOTAL (MGD)	0.00	0.00	0.00	0.00	0.00	1.17	0.88	0.49	1.19	1.24	1.29	1.33	1.38	1.42
									0.87	0.91	0.94	0.98	1.01	1.05
									0.55	0.58	0.60	0.62	0.65	0.67

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
Actual & Projected Demand in Acre-Feet

**Lake Hughes**

Historical & Projected Demand



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Actual & Projected Demand in Acre-Feet**

**Lake Hughes**

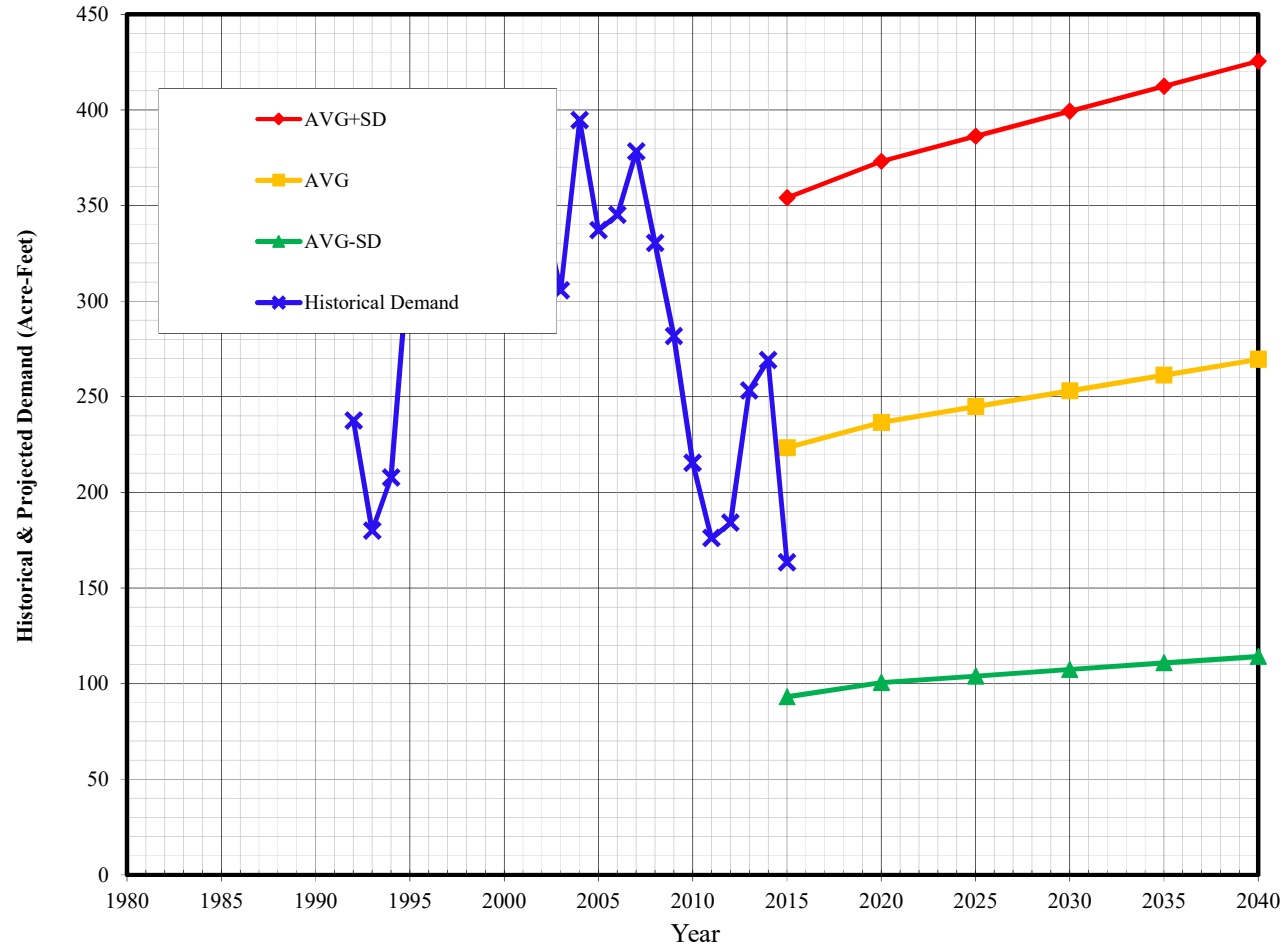
Worksheet 9

Customer Category	Actual Demand (AFY)								Projected Demand (AFY)					
	1980	1985	1990	1995	2000	2005	2010	2015	2015	2020	2025	2030	2035	2040
SFR	0	0	0	0	0	53	36	34	44	45	46	47	48	50
									35	36	37	38	39	40
									26	27	28	28	29	30
MFR	0	0	0	0	0	2	1	1	2	2	2	2	2	2
									1	1	1	1	1	1
									1	1	1	1	1	1
COM	0	0	0	0	0	4	2	3	2	2	2	3	3	3
									2	2	2	3	3	3
									2	2	2	3	3	3
IND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
GOV	0	0	0	0	0	2	2	4	4	5	5	5	5	5
									3	3	3	3	3	3
									2	2	2	2	2	2
OTH	0	0	0	0	0	0	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
UAFW	0	0	0	0	0	3	19	0	20	21	22	22	23	23
									13	14	14	14	15	15
									6	6	6	7	7	7
TOTAL (AFY)	0	0	0	0	0	63	60	41	71	74	76	78	80	82
									54	57	58	59	61	62
									37	39	40	41	42	43
TOTAL (MGD)	0.00	0.00	0.00	0.00	0.00	0.06	0.05	0.04	0.06	0.07	0.07	0.07	0.07	0.07
									0.05	0.05	0.05	0.05	0.05	0.06
									0.03	0.03	0.04	0.04	0.04	0.04

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
 Actual & Projected Demand in Acre-Feet

**Leona Valley**

**Historical & Projected Demand**





**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Actual & Projected Demand in Acre-Feet**

**Leona Valley**

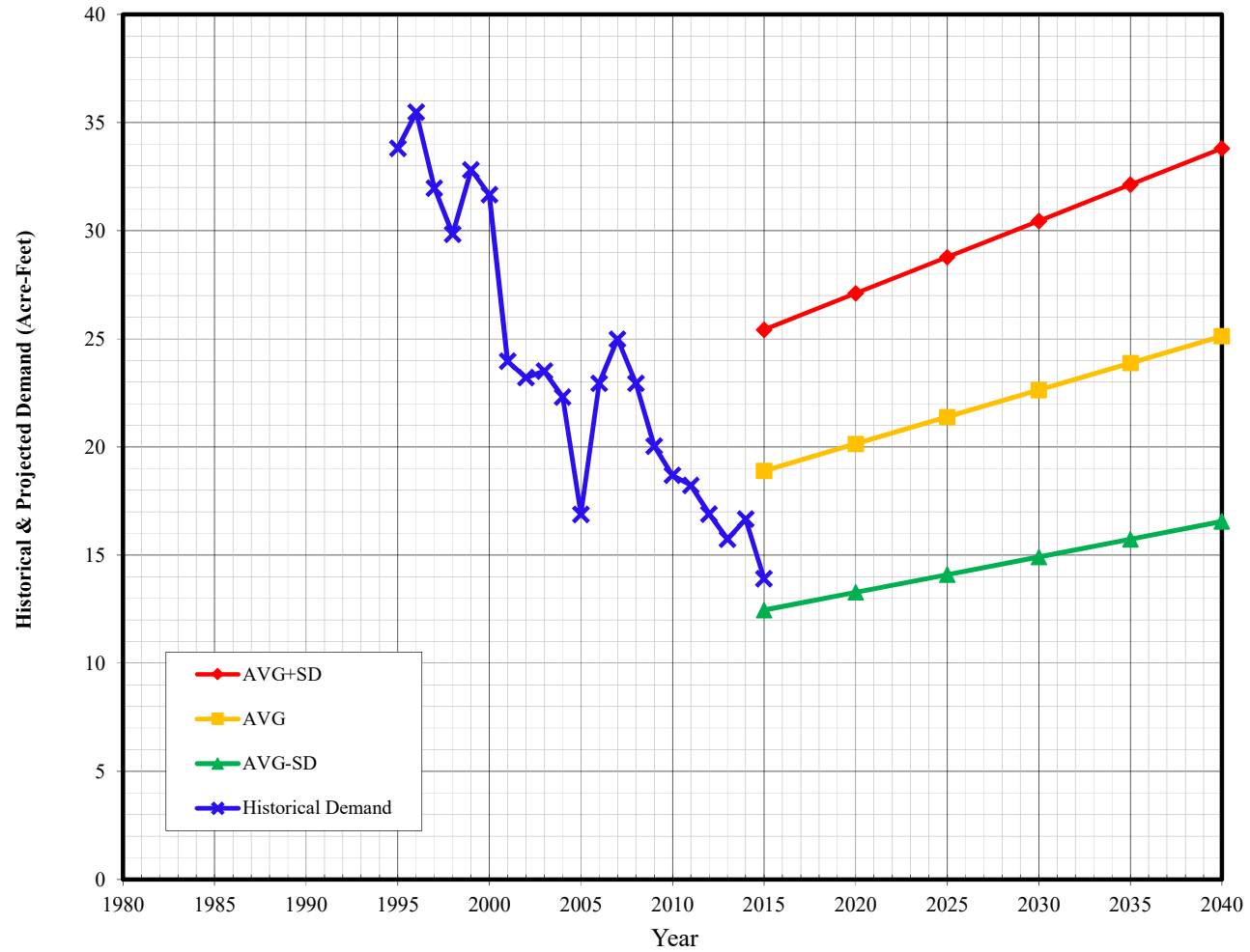
Worksheet 9

Customer Category	Actual Demand (AFY)								Projected Demand (AFY)					
	1980	1985	1990	1995	2000	2005	2010	2015	2015	2020	2025	2030	2035	2040
SFR	0	0	0	0	0	347	251	125	343	356	369	382	395	407
									251	261	270	279	289	298
									160	166	172	178	184	189
MFR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
COM	0	0	0	0	0	8	10	8	10	11	11	12	13	13
									10	11	11	12	13	13
									10	11	11	12	13	13
IND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
GOV	0	0	0	0	0	10	12	9	12	18	18	18	18	18
									10	15	15	15	15	15
									8	13	13	13	13	13
OTH	0	0	0	0	0	2	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
UAFW	0	0	0	0	0	-30	-57	24	-11	-12	-12	-13	-13	-13
									-48	-50	-52	-54	-56	-57
									-85	-88	-92	-95	-98	-101
TOTAL (AFY)	0	0	0	0	0	337	215	167	354	373	386	399	412	425
									223	237	245	253	261	270
									93	101	104	107	111	114
TOTAL (MGD)	0.00	0.00	0.00	0.00	0.00	0.30	0.19	0.15	0.32	0.33	0.34	0.36	0.37	0.38
									0.20	0.21	0.22	0.23	0.23	0.24
									0.08	0.09	0.09	0.10	0.10	0.10

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
 Actual & Projected Demand in Acre-Feet

**Fremont Valley**

**Historical & Projected Demand**



**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Actual & Projected Demand in Acre-Feet**

**Fremont Valley**

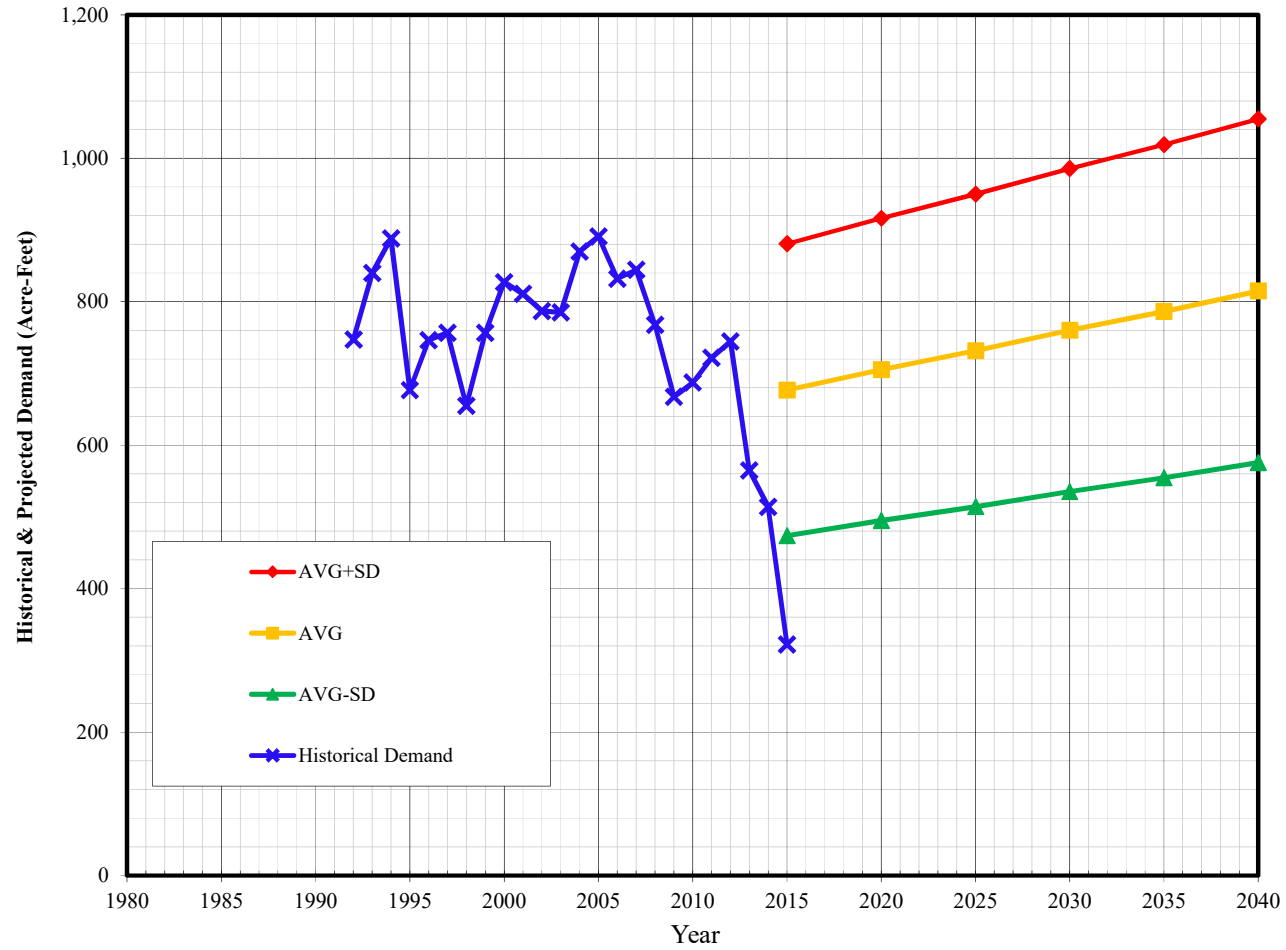
Customer Category	Actual Demand (AFY)								Projected Demand (AFY)					
	1980	1985	1990	1995	2000	2005	2010	2015	2015	2020	2025	2030	2035	2040
SFR	0	0	0	0	0	24	18	11	22	23	25	26	28	29
									17	18	19	20	22	23
									12	13	14	15	15	16
MFR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
COM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
GOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
OTH	0	0	0	0	0	0	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
UAFW	0	0	0	0	0	-7	1	3	3	4	4	4	4	5
									2	2	2	2	2	2
									0	0	0	0	0	0
TOTAL (AFY)	0	0	0	0	0	17	19	14	25	27	29	30	32	34
									19	20	21	23	24	25
									12	13	14	15	16	17
TOTAL (MGD)	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.02	0.02	0.03	0.03	0.03	0.03
									0.02	0.02	0.02	0.02	0.02	0.02
									0.01	0.01	0.01	0.01	0.01	0.01

**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
Actual & Projected Demand in Acre-Feet

**Lancaster**

Worksheet 9

### Historical & Projected Demand



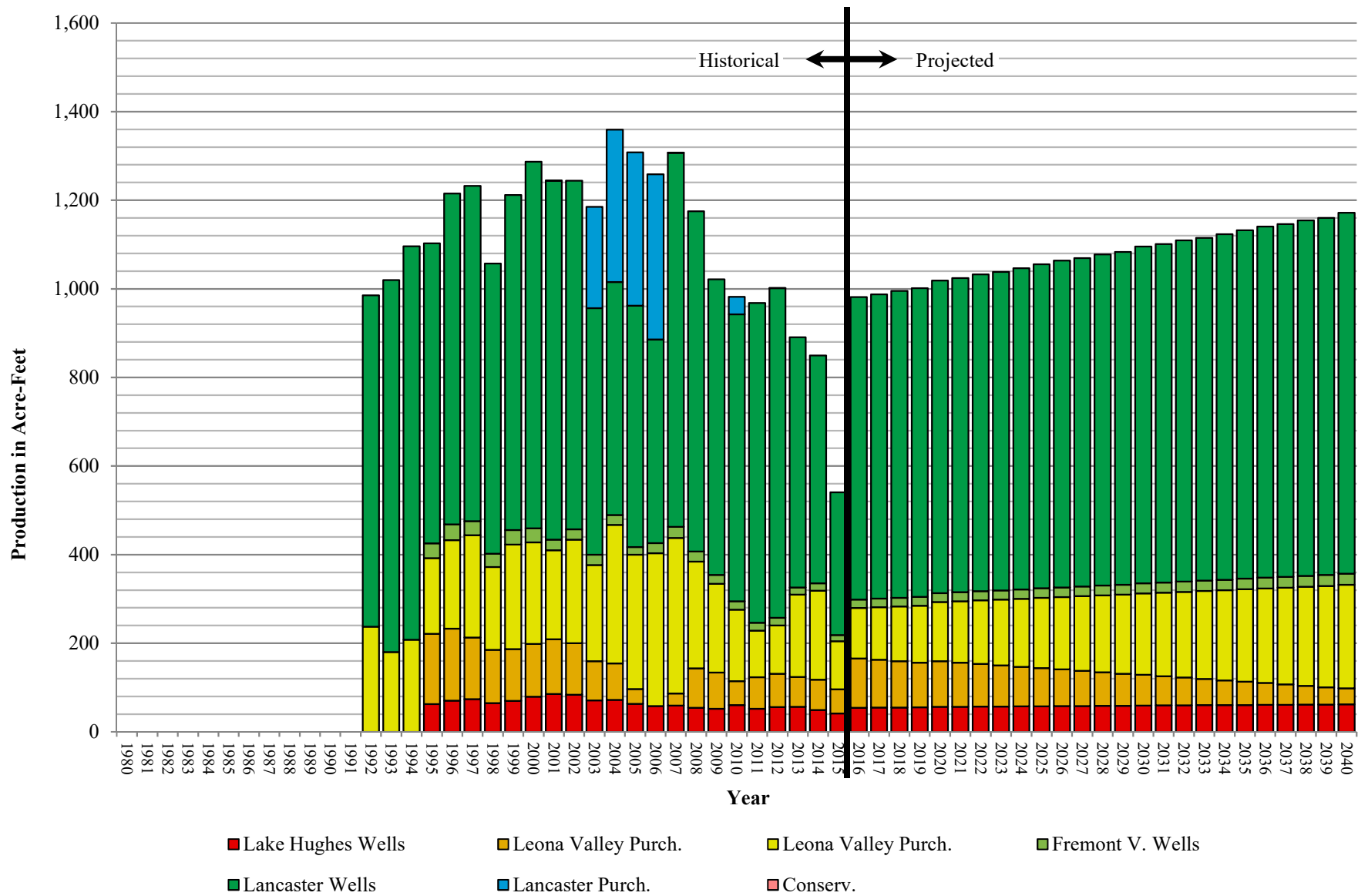
**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Actual & Projected Demand in Acre-Feet**

Lancaster

Worksheet 9

Customer Category	Actual Demand (AFY)								Projected Demand (AFY)					
	1980	1985	1990	1995	2000	2005	2010	2015	2015	2020	2025	2030	2035	2040
SFR	0	0	0	0	0	708	530	310	668	688	709	730	750	771
									530	547	563	579	596	612
									394	406	418	430	442	454
MFR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
COM	0	0	0	0	0	43	33	20	27	33	37	43	47	52
									27	33	37	43	47	52
									27	33	37	43	47	52
IND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
GOV	0	0	0	0	0	20	17	12	24	27	31	34	38	41
									18	21	24	26	29	31
									13	14	16	18	20	22
OTH	0	0	0	0	0	2	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
UAFW	0	0	0	0	0	118	107	-20	162	168	173	179	185	190
									101	105	108	112	115	119
									40	42	43	45	46	47
TOTAL (AFY)	0	0	0	0	0	891	687	322	881	916	950	986	1,019	1,055
									677	705	732	760	786	815
									474	495	514	535	555	576
TOTAL (MGD)	0.00	0.00	0.00	0.00	0.00	0.80	0.61	0.29	0.79	0.82	0.85	0.88	0.91	0.94
									0.60	0.63	0.65	0.68	0.70	0.73
									0.42	0.44	0.46	0.48	0.50	0.51

# Historical and Projected Distribution of Demand by Source



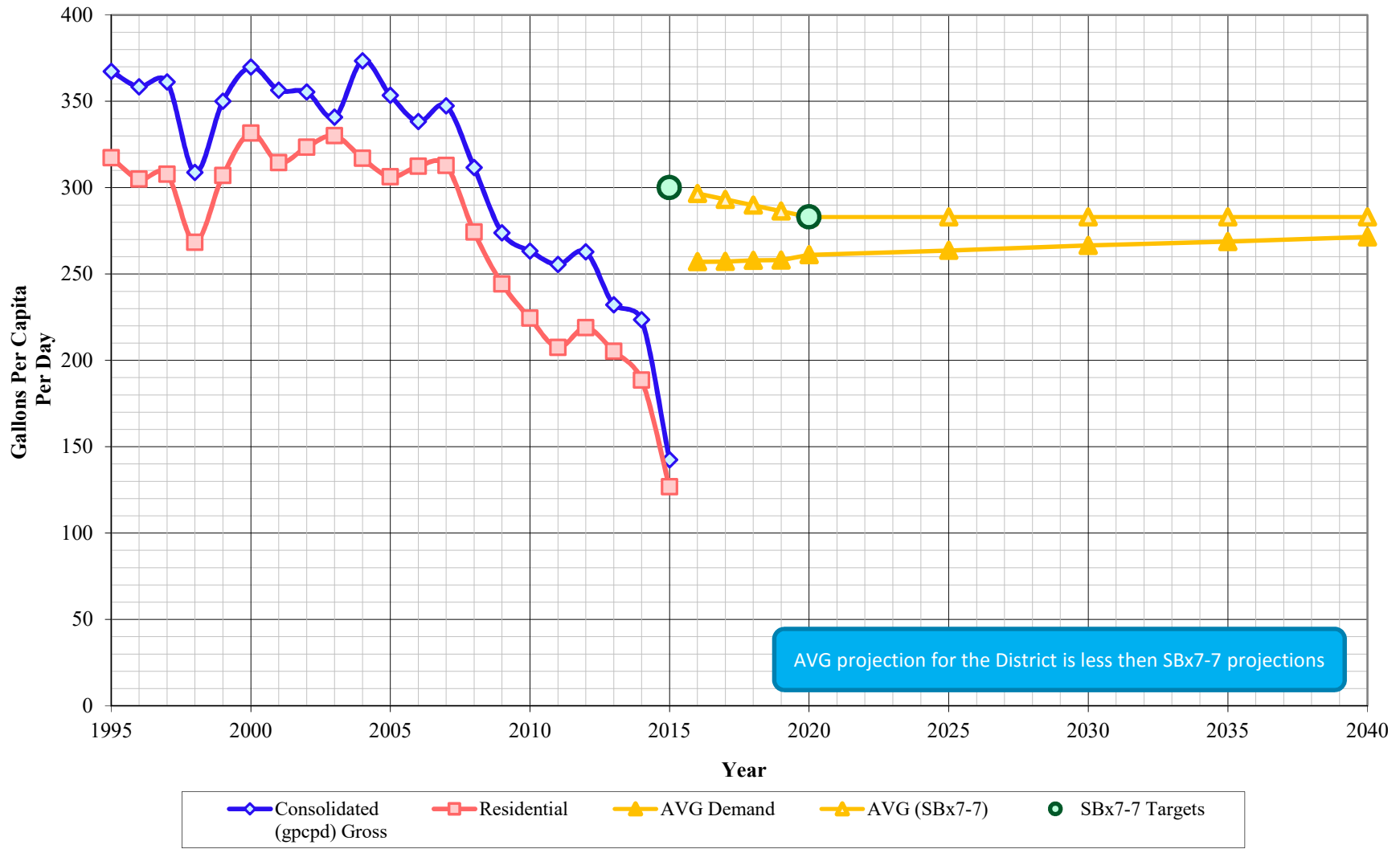
**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Historical and Projected Distribution of Demand by Source**

Worksheet 10

Year	Lake Hughes	Leona Valley		Fremont V.	Lancaster		Conserv.	Total
	Wells	Wells	Purch.	Wells	Wells	Purch.		
	AFY	AFY	AFY	AFY	AFY	AFY		
1980	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-
1983	-	-	-	-	-	-	-	-
1984	-	-	-	-	-	-	-	-
1985	-	-	-	-	-	-	-	-
1986	-	-	-	-	-	-	-	-
1987	-	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	-	-
1989	-	-	-	-	-	-	-	-
1990	-	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-	-
1992	-	-	237.6	-	747.4	-	-	985.1
1993	-	-	179.9	-	840.1	-	-	1,019.9
1994	-	-	207.7	-	888.1	-	-	1,095.8
1995	62.6	158.5	170.8	33.8	677.1	-	-	1,102.8
1996	70.3	162.5	199.9	35.5	746.8	-	-	1,214.9
1997	73.8	139.0	231.0	32.0	756.7	-	-	1,232.5
1998	65.0	119.9	187.3	29.8	655.1	-	-	1,057.1
1999	69.9	116.9	235.7	32.8	756.5	-	-	1,211.8
2000	79.1	119.3	229.3	31.7	827.4	-	-	1,286.8
2001	85.3	123.7	200.7	24.0	810.5	0.4	-	1,244.5
2002	83.7	116.3	233.8	23.2	787.0	-	-	1,244.0
2003	70.9	88.6	217.1	23.5	556.4	228.7	-	1,185.2
2004	72.3	82.4	312.3	22.3	526.1	343.7	-	1,359.2
2005	63.0	33.6	303.5	16.9	545.2	345.9	-	1,308.1
2006	58.2	-	345.0	22.9	459.5	372.8	-	1,258.5
2007	59.4	27.2	351.0	25.0	844.2	0.0	-	1,306.9
2008	54.1	89.3	241.0	23.0	767.9	-	-	1,175.2
2009	52.3	81.7	200.1	20.0	667.3	-	-	1,021.3
2010	60.3	54.1	161.4	18.7	648.0	39.3	-	981.8

Year	Lake Hughes	Leona Valley		Fremont V.	Lancaster		Conserv.	Total
	Wells	Wells	Purch.	Wells	Wells	Purch.		
	AFY	AFY	AFY	AFY	AFY	AFY		
2011	52.2	71.2	104.9	18.2	721.8	-	-	968.2
2012	56.2	75.0	109.1	16.9	744.2	0.5	-	1,002.0
2013	56.7	67.1	186.2	15.7	564.8	-	-	890.5
2014	49.5	68.2	201.0	16.7	514.1	-	-	849.5
2015	41.3	54.8	108.5	13.9	322.1	-	-	540.8
2016	54.5	111.3	113.5	19.1	682.8	-	-	981.4
2017	54.8	107.9	118.5	19.4	686.7	-	-	987.3
2018	55.0	104.4	123.5	19.6	692.7	-	-	995.3
2019	55.3	100.9	128.5	19.9	696.6	-	-	1,001.2
2020	56.5	103.0	133.5	20.1	705.3	-	-	1,018.5
2021	56.8	99.6	138.5	20.4	709.2	-	-	1,024.5
2022	57.0	96.1	143.5	20.6	715.1	-	-	1,032.5
2023	57.3	92.6	148.5	20.9	719.0	-	-	1,038.4
2024	57.5	89.2	153.5	21.1	725.0	-	-	1,046.4
2025	57.8	86.3	158.5	21.4	731.6	-	-	1,055.7
2026	58.1	82.8	163.5	21.6	737.6	-	-	1,063.7
2027	58.3	79.3	168.5	21.9	741.5	-	-	1,069.6
2028	58.6	75.9	173.5	22.1	747.5	-	-	1,077.6
2029	58.8	72.4	178.5	22.4	751.4	-	-	1,083.5
2030	59.4	69.5	183.5	22.6	760.1	-	-	1,095.2
2031	59.7	66.1	188.5	22.9	764.0	-	-	1,101.1
2032	59.9	62.6	193.5	23.1	769.9	-	-	1,109.1
2033	60.2	59.1	198.5	23.4	773.8	-	-	1,115.0
2034	60.4	55.6	203.5	23.6	779.8	-	-	1,123.0
2035	60.7	52.8	208.5	23.9	786.4	-	-	1,132.3
2036	60.9	49.3	213.5	24.1	792.4	-	-	1,140.3
2037	61.2	45.8	218.5	24.4	796.3	-	-	1,146.2
2038	61.4	42.4	223.5	24.6	802.3	-	-	1,154.2
2039	61.7	38.9	228.5	24.9	806.1	-	-	1,160.2
2040	62.3	36.0	233.5	25.1	814.9	-	-	1,171.9

# Per Capita Consumption (AV)





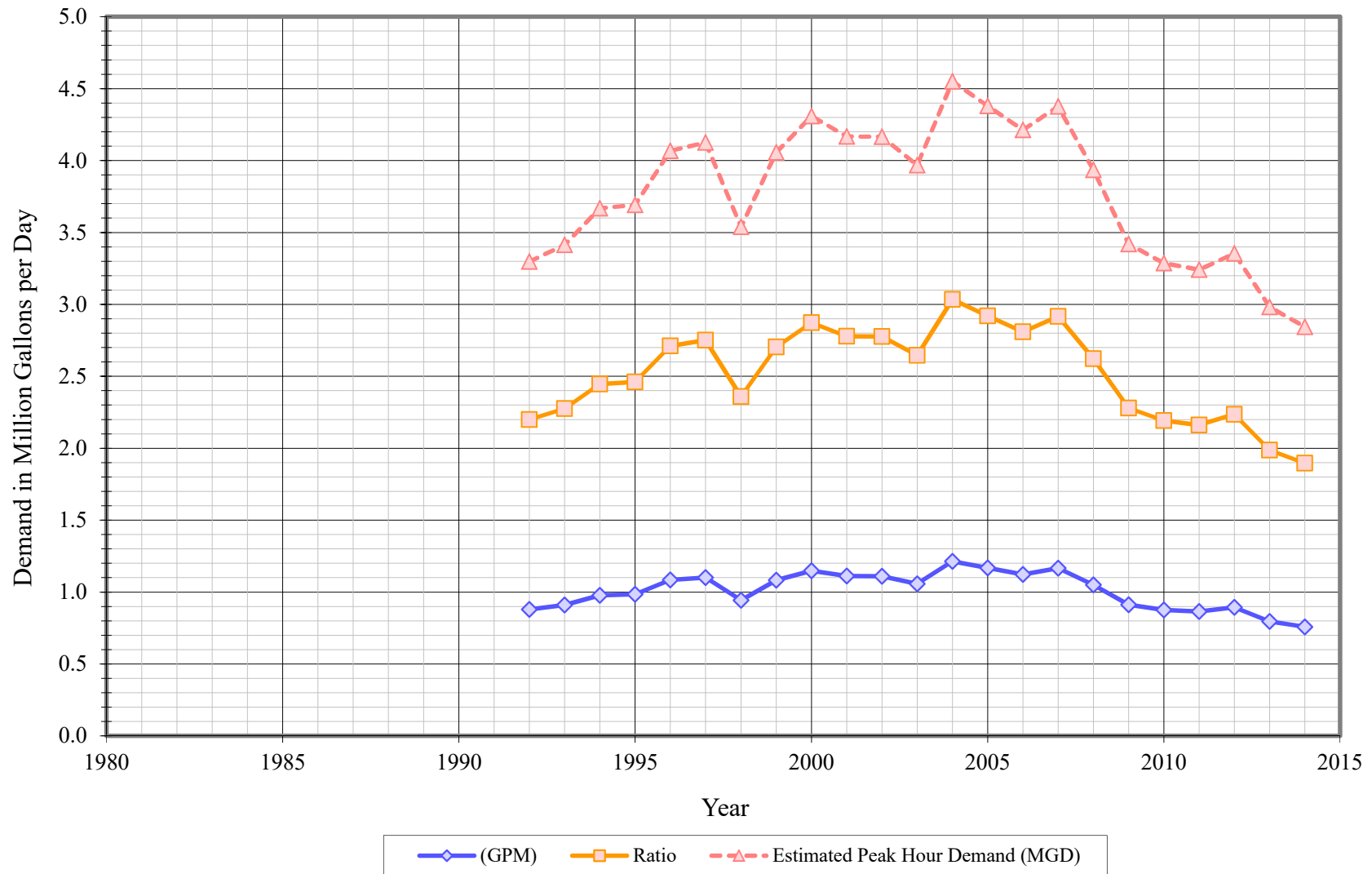
**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Per Capita Water Demand Calculation**

<i>SBx7-7 Targets</i>	
2015	300
2020	283

Worksheet 15

Year	POP	Historical										Projected			
		Consolidated (gpcpd)		Lake Hughes (gpcpd)		Leona Valley (gpcpd)		Fremont Valley (gpcpd)		Lancaster (gpcpd)		Avg Demand		Avg Demand w/ Cons	
		Gross	Residential	Gross	Resident	Gross	Resident	Gross	Resident	Gross	Resident	Demand (AFY)	Per Capita (GPCPD)	Demand (AFY)	Per Capita (GPCPD)
1995	2,680	367	317												
1996	3,026	358	305												
1997	3,046	361	308												
1998	3,055	309	268												
1999	3,091	350	307												
2000	3,106	370	332												
2001	3,117	356	315												
2002	3,124	355	323												
2003	3,104	341	330												
2004	3,250	373	317												
2005	3,304	353	306												
2006	3,321	338	312												
2007	3,359	347	313												
2008	3,367	312	274												
2009	3,329	274	244												
2010	3,329	263	224	209	130	159	186	153	145	349	270				
2011	3,383	256	207	179	118	128	165	147	135	361	254				
2012	3,404	263	219	184	127	134	179	138	121	371	266				
2013	3,424	232	205	192	122	182	168	128	114	279	249				
2014	3,393	223	189	174	118	194	156	133	108	257	226				
2015	3,390	142	127	144	121	119	91	108	85	161	155				
2016	3,408											981	257	1,132	297
2017	3,427											987	257	1,125	293
2018	3,445											995	258	1,118	290
2019	3,464											1,001	258	1,111	286
2020	3,483											1,019	261	1,104	283
2025	3,575											1,056	264	1,133	283
2030	3,668											1,095	267	1,163	283
2035	3,761											1,132	269	1,192	283
2040	3,854											1,172	271	1,222	283

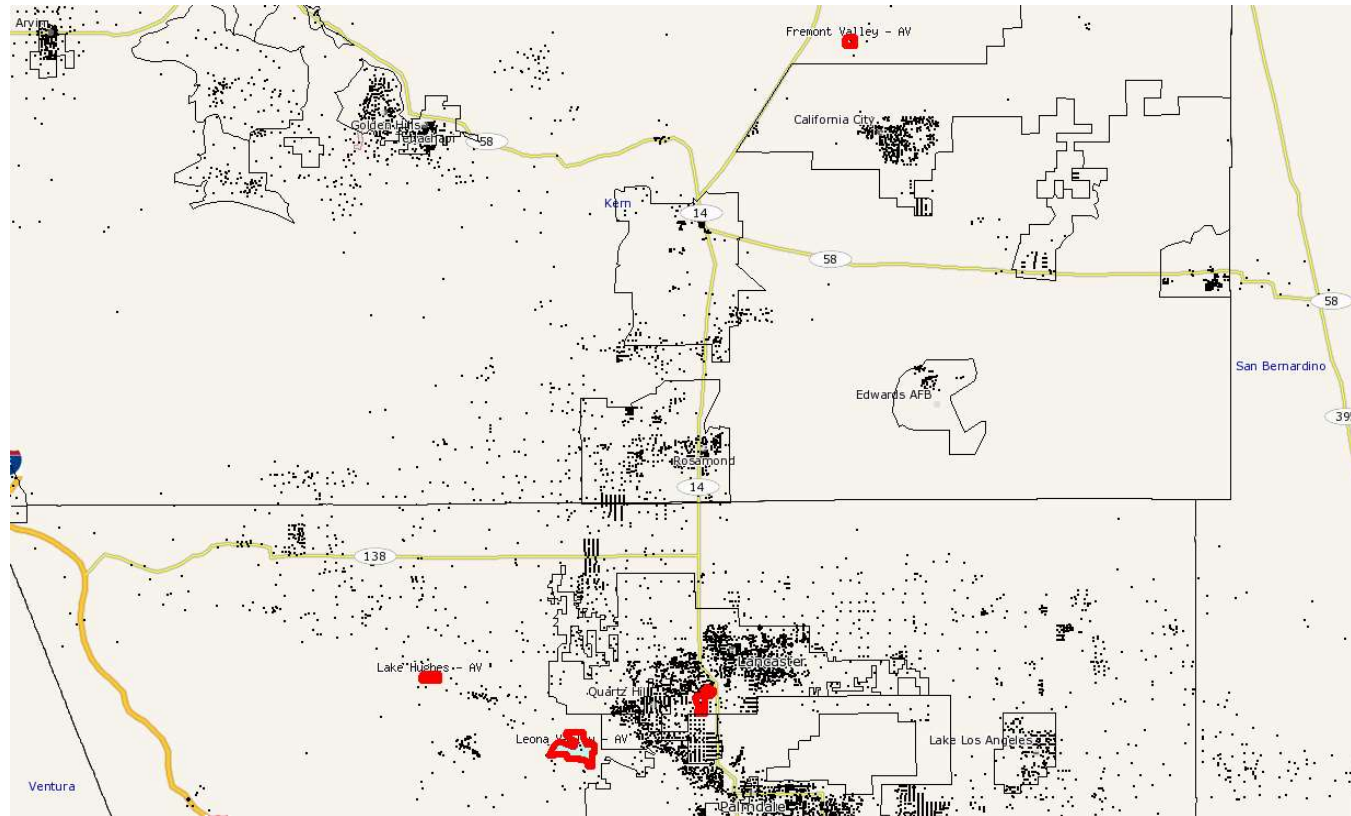
# Average Day, Maximum Day, Peak Demand



**California Water Service Company - Antelope Valley District  
Water Supply and Demand Analysis and Projections  
Historical and Projected Average Day, Maximum Day, and Peak Demand**

Year	Historical Annual Demand		Average Day Demand		Maximum Day Demand		MDD ADD Ratio	Estimated Peak Hour Demand		PHD MDD Ratio	PHD ADD Ratio	Measured Peak Hour Demand		PHD MDD Ratio
	(AFY)	(MGY)	(MGD)	Per Service (GPD)	(MGD)	Per Service (GPD)		(MGD)	(GPM)			(MGD)	(GPM)	
1980														
1981														
1982														
1983														
1984														
1985														
1986														
1987														
1988														
1989														
1990														
1991														
1992	985	321	0.88	724	2.20	1,810	2.50	3.30	2,290	1.50	3.75			
1993	1,020	332	0.91	746	2.28	1,866	2.50	3.41	2,371	1.50	3.75			
1994	1,096	357	0.98	801	2.45	2,002	2.50	3.67	2,548	1.50	3.75			
1995	1,103	359	0.98	808	2.46	2,019	2.50	3.69	2,564	1.50	3.75			
1996	1,215	396	1.08	886	2.71	2,215	2.50	4.07	2,824	1.50	3.75			
1997	1,232	402	1.10	893	2.75	2,232	2.50	4.13	2,865	1.50	3.75			
1998	1,057	344	0.94	763	2.36	1,908	2.50	3.54	2,458	1.50	3.75			
1999	1,212	395	1.08	864	2.70	2,159	2.50	4.06	2,817	1.50	3.75			
2000	1,287	419	1.15	907	2.87	2,269	2.50	4.31	2,992	1.50	3.75			
2001	1,245	406	1.11	877	2.78	2,193	2.50	4.17	2,893	1.50	3.75			
2002	1,244	405	1.11	877	2.78	2,193	2.50	4.16	2,892	1.50	3.75			
2003	1,185	386	1.06	841	2.65	2,102	2.50	3.97	2,755	1.50	3.75			
2004	1,359	443	1.21	918	3.03	2,296	2.50	4.55	3,160	1.50	3.75			
2005	1,308	426	1.17	870	2.92	2,176	2.50	4.38	3,041	1.50	3.75			
2006	1,258	410	1.12	833	2.81	2,082	2.50	4.21	2,926	1.50	3.75			
2007	1,307	426	1.17	854	2.92	2,136	2.50	4.38	3,038	1.50	3.75			
2008	1,175	383	1.05	766	2.62	1,914	2.50	3.93	2,732	1.50	3.75			
2009	1,021	333	0.91	673	2.28	1,683	2.50	3.42	2,374	1.50	3.75			
2010	982	320	0.88	647	2.19	1,618	2.50	3.29	2,282	1.50	3.75			
2011	968	315	0.86	635	2.16	1,587	2.50	3.24	2,251	1.50	3.75			
2012	1,002	326	0.89	652	2.24	1,630	2.50	3.35	2,329	1.50	3.75			
2013	890	290	0.79	582	1.99	1,455	2.50	2.98	2,070	1.50	3.75			
2014	850	277	0.76	557	1.90	1,393	2.50	2.84	1,975	1.50	3.75			
2015														
10 year Average			0.96	707	2.40	1,767	2.50	3.60	2,502	1.50	3.75			
5 year Average			0.84	615	2.09	1,537	2.50	3.14	2,182	1.50	3.75			

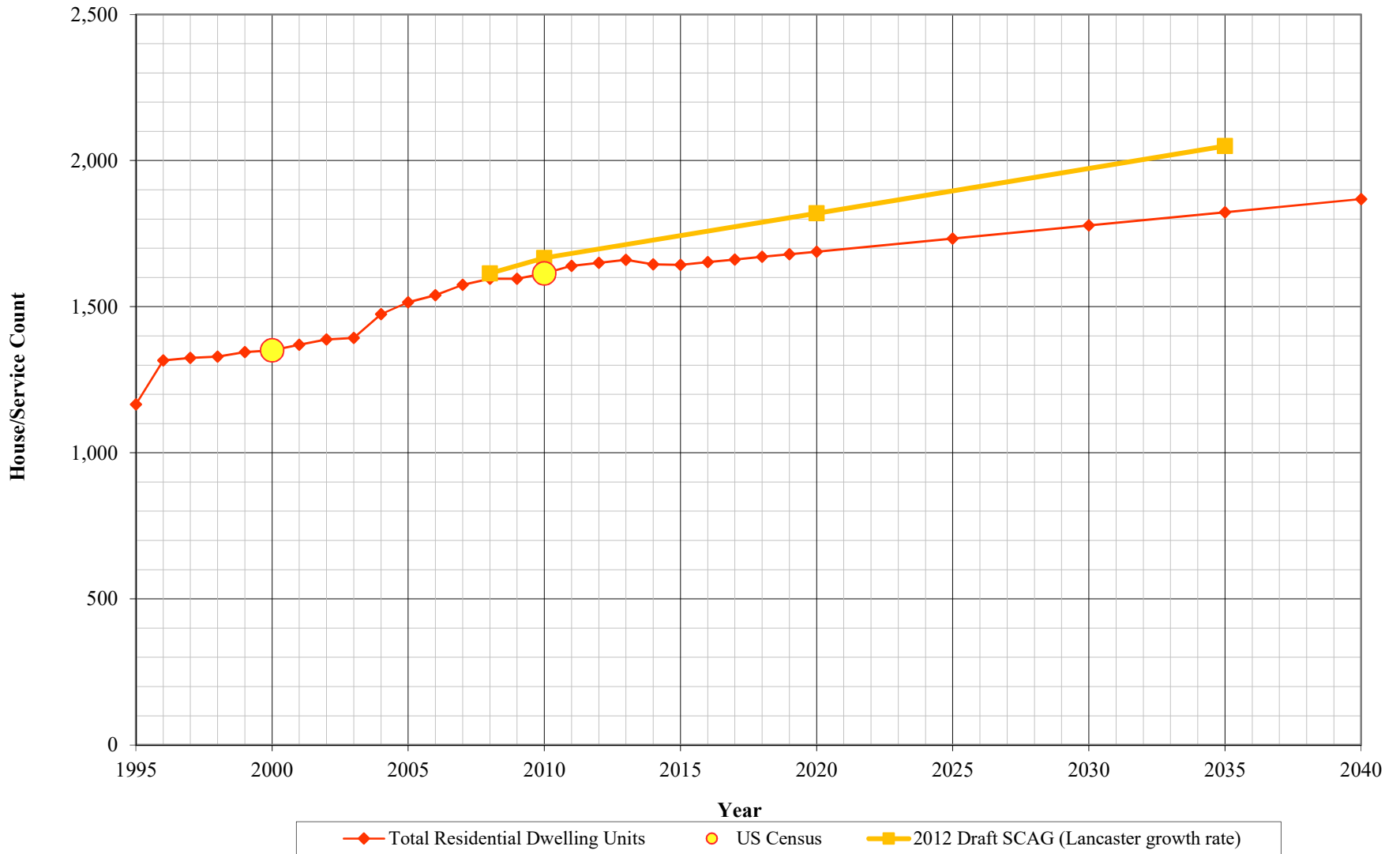
# California Water Service Company - Antelope Valley District Water Supply and Demand Analysis and Projections



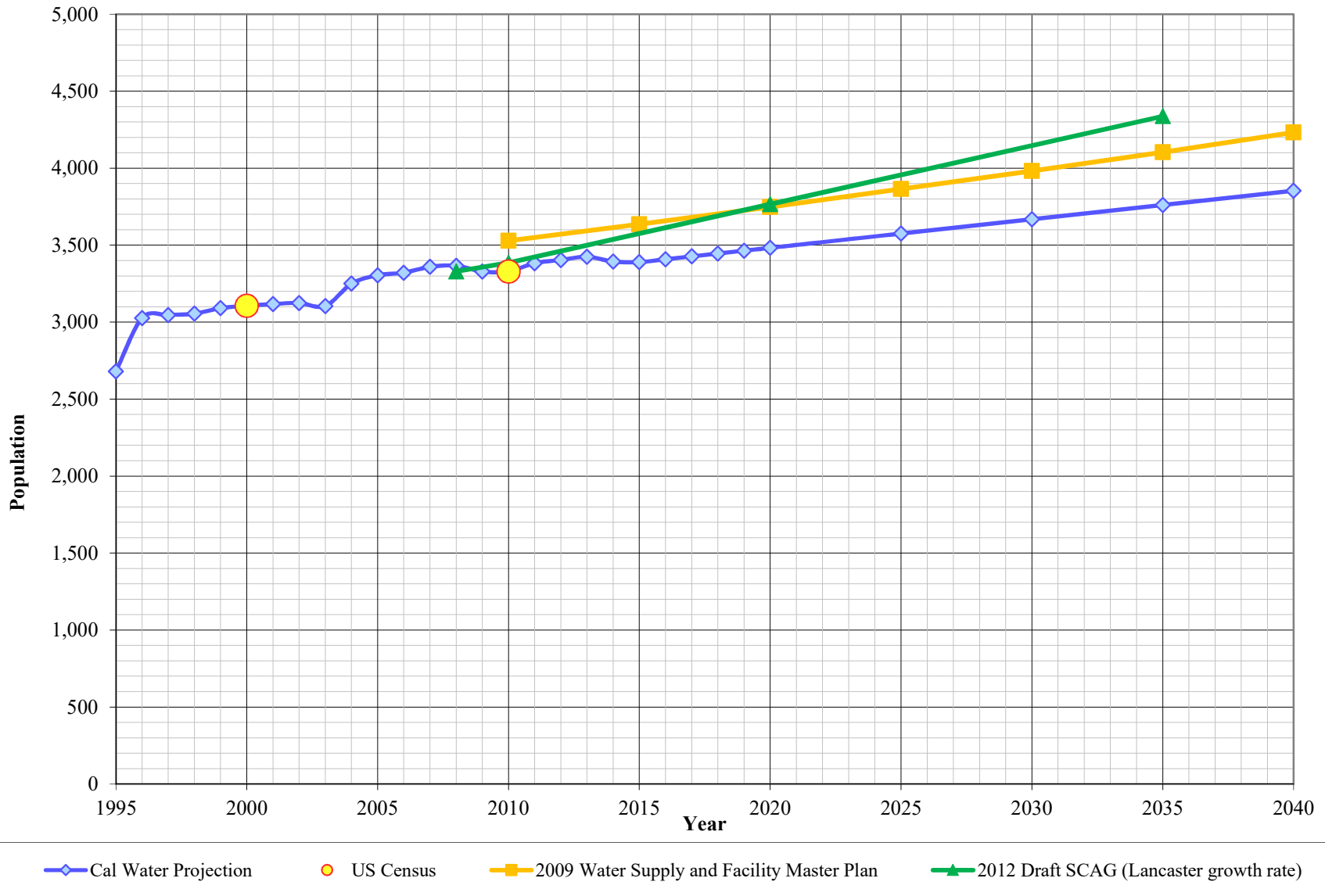
System	US Census 2000 Summary				US Census 2010 Summary				2000-2010 Change		
	Census Blocks	Population	Housing Units (HU)	Density	Census Blocks	Population	Housing Units (HU)	Density	Percentage Population Change	Percentage HU Change	Density Change
Lake Hughes	18	159	113	1.41	14	258	178	1.45	62.3%	57.5%	3.0%
Leona Valley	9	1,103	423	2.61	13	1,206	508	2.37	9.3%	20.1%	-9.0%
Fremont Valley	15	129	72	1.79	12	109	80	1.36	-15.5%	11.1%	-24.0%
Lancaster	35	1,715	743	2.31	27	1,756	848	2.07	2.4%	14.1%	-10.3%
	77	3,106	1,351	2.30	66	3,329	1,614	2.06	58.5%	102.9%	-40.2%

MARPLLOT disclaimer: The population and housing number given above are only rough estimates. They are based on the US Census Blocks. Although Census Blocks are polygons, MARPLLOT uses the centroid, or center point, rather than the entire polygon. If a Census Block centroid is within any of the MARPLLOT selected objects, the population and housing numbers for that block are tallied, even if only part of the block is within the selected object. It is possible for a block not be counted if its centroid is not within selected objects, even though part of the block is within the selected objects.

# Housing Projections



# Population Projections



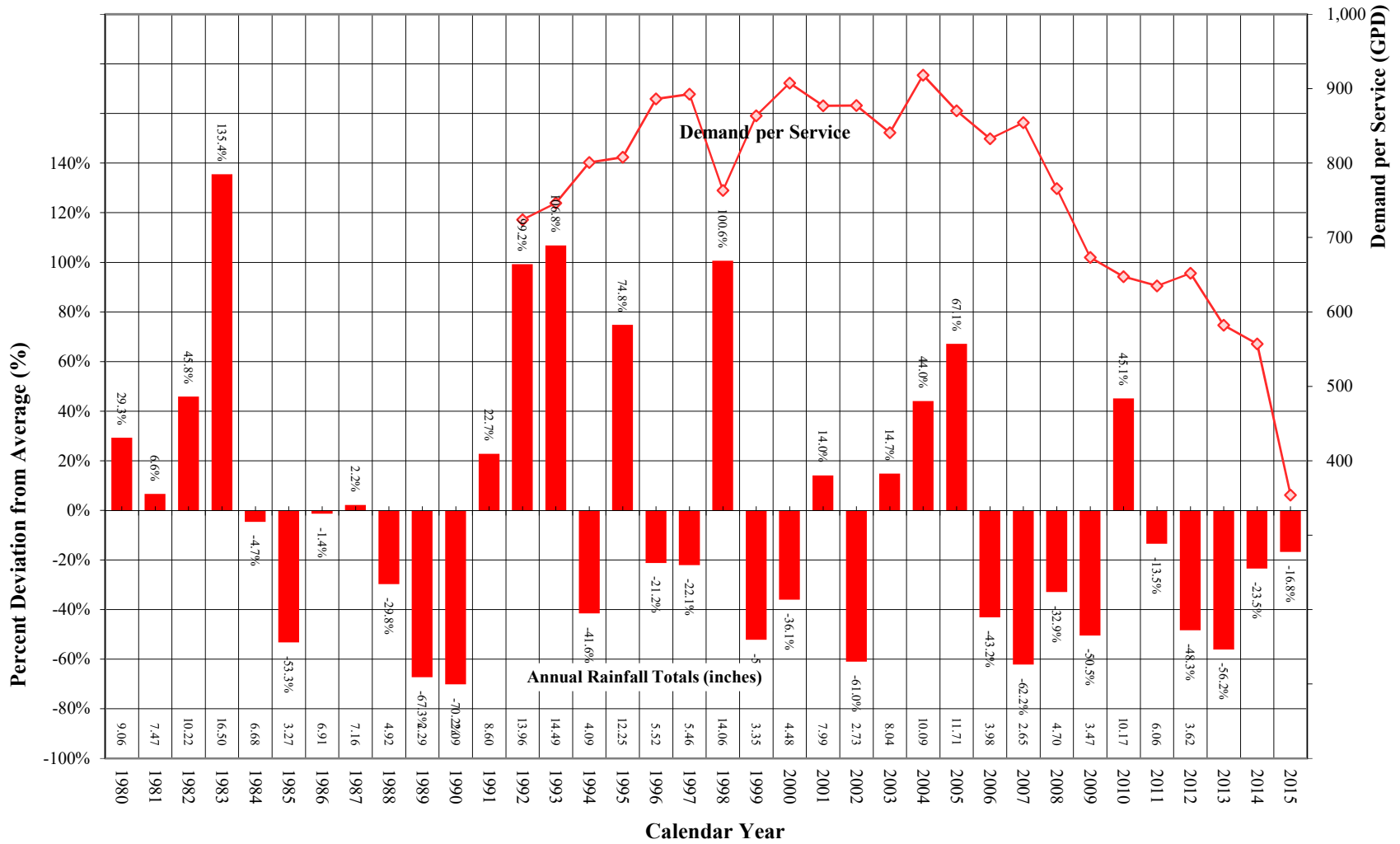
**California Water Service Company - Antelope Valley District**  
**Water Supply and Demand Analysis and Projections**  
**Population Estimate**

Year	US Census		Persons per Housing Unit	Single Family	Multi Family Residential			Flat Rate
	Population	Housing Units		Residential	Services	Residential	Unit	Residential
				Services (DU)		Units (DU)	Density	Services (DU)
2000	3,106	1,351	2.299	1,212	10	140	14.4	0
2010	3,329	1,614	2.063	1,298	5	316	61.2	0
	7.2%	19.5%	-10.3%	7.1%	-46.6%	126.8%	324.4%	0.0%

Year	Single Family Residential Services (DU)	Multi Family Residential			Flat Rate Residential Services (DU)	Total Residential Dwelling Units	Persons per Housing Unit	Estimated District Population
	Services	Residential Units (DU)	Unit Density					
1995	1,166	0	0	14.4	0	1,166	2.299	2,680
1996	1,172	10	144	14.4	0	1,316	2.299	3,026
1997	1,181	10	144	14.4	0	1,325	2.299	3,046
1998	1,185	10	144	14.4	0	1,329	2.299	3,055
1999	1,200	10	144	14.4	0	1,345	2.299	3,091
2000	1,212	10	140	14.4	0	1,351	2.299	3,106
2001	1,213	10	157	15.7	0	1,370	2.275	3,117
2002	1,213	9	175	18.9	0	1,388	2.252	3,124
2003	1,201	10	193	19.9	0	1,393	2.228	3,104
2004	1,264	10	210	21.0	0	1,474	2.204	3,250
2005	1,287	7	228	31.4	0	1,515	2.181	3,304
2006	1,294	8	246	32.0	0	1,540	2.157	3,321
2007	1,311	6	263	42.1	0	1,574	2.134	3,359
2008	1,315	5	281	56.2	0	1,596	2.110	3,367
2009	1,297	6	299	52.0	0	1,596	2.086	3,329
2010	1,298	5	316	61.2	0	1,614	2.063	3,329
2011	1,306	5	334	66.8	0	1,640	2.063	3,383
2012	1,316	5	334	66.8	0	1,650	2.063	3,404
2013	1,309	5	351	66.8	0	1,660	2.063	3,424
2014	1,306	5	340	66.8	0	1,645	2.063	3,393
2015	1,309	5	334	66.8	0	1,643	2.063	3,390
2016	1,318	5	334	66.8		1,652	2.063	3,408
2017	1,327	5	334	66.8		1,661	2.063	3,427
2018	1,336	5	334	66.8		1,670	2.063	3,445
2019	1,345	5	334	66.8		1,679	2.063	3,464
2020	1,354	5	334	66.8		1,688	2.063	3,483
2025	1,399	5	334	66.8		1,733	2.063	3,575
2030	1,444	5	334	66.8		1,778	2.063	3,668
2035	1,489	5	334	66.8		1,823	2.063	3,761
2040	1,534	5	334	66.8		1,868	2.063	3,854

Notes: linear extrapolation used to estimated MFR-DU from 2000. Estimate extend until 2011 due to reclassification, afterwards a constant MFR Unit Density is used.

# Comparison of Annual Rainfall to Historical Average





**California Water Service Company - Antelope Valley District  
Water Supply and Demand Analysis and Projections**

**Temperature & Rainfall History**

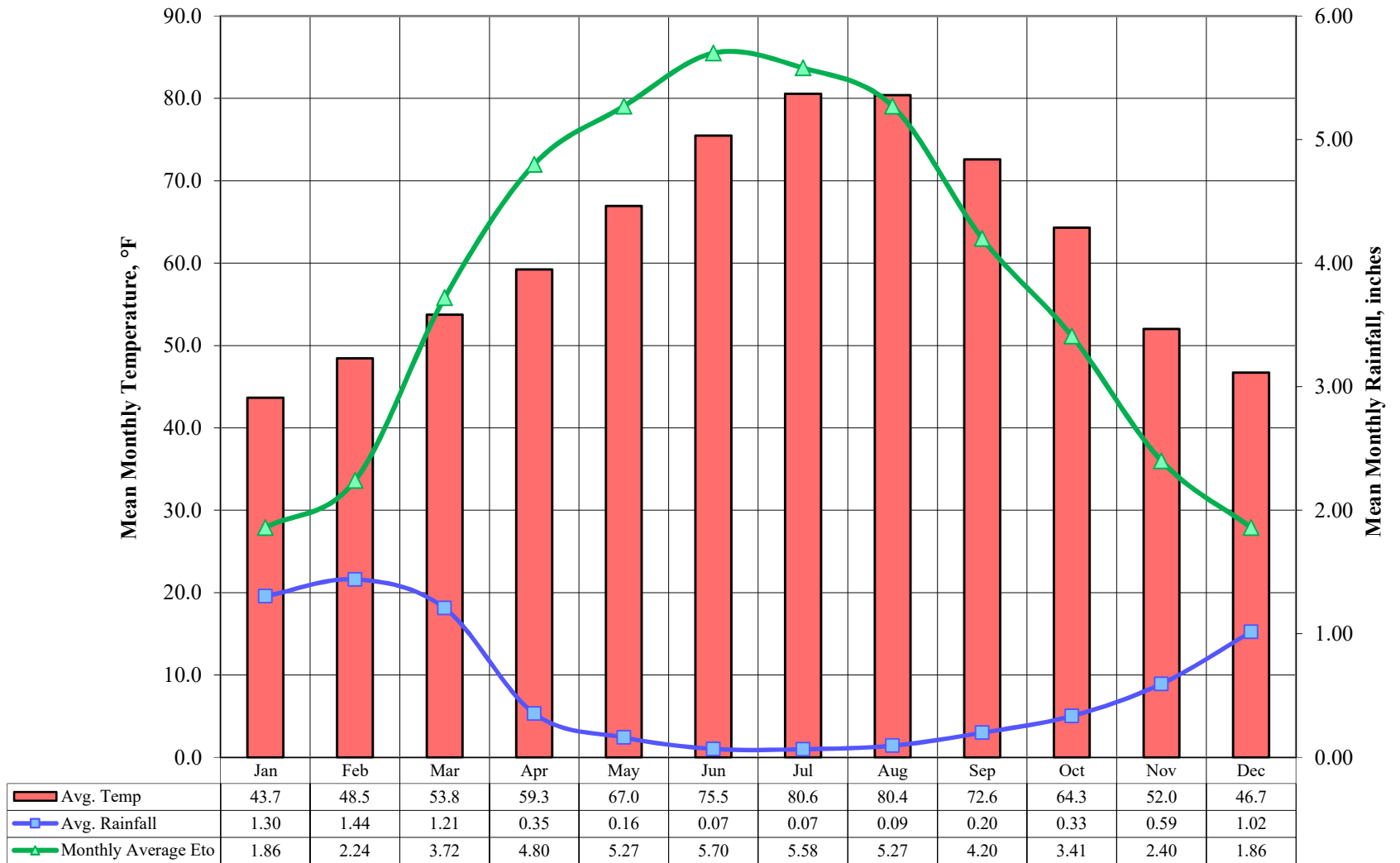
Year	Precipitation		Temperature			Demand per Service (gpd)	Percent of Average Demand
	Annual (in)	Percent Variation	Tmax (°F)	Tmin (°F)	Mean (°F)		
1980	9.06	29.3%	97.70	35.00	66.4		
1981	7.47	6.6%	99.90	34.80	67.4		
1982	10.22	45.8%	96.00	31.20	63.6		
1983	16.50	135.4%	92.70	33.00	62.9		
1984	6.68	-4.7%	97.70	30.20	64.0		
1985	3.27	-53.3%	98.70	30.90	64.8		
1986	6.91	-1.4%	100.00	30.50	65.3		
1987	7.16	2.2%	96.60	28.70	62.7		
1988	4.92	-29.8%	99.30	32.20	65.8		
1989	2.29	-67.3%	99.00	29.30	64.2		
1990	2.09	-70.2%	98.10	26.10	62.1		
1991	8.60	22.7%	96.60	32.20	64.4		
1992	13.96	99.2%	97.90	30.40	64.2	724	-5.2%
1993	14.49	106.8%	94.90	31.20	63.1	746	-2.3%
1994	4.09	-41.6%	100.00	32.00	66.0	801	4.9%
1995	12.25	74.8%	98.60	35.30	67.0	808	5.8%
1996	5.52	-21.2%	100.50	35.60	68.1	886	16.0%
1997	5.46	-22.1%	97.40	30.90	64.2	893	16.9%
1998	14.06	100.6%	99.80	29.10	64.5	763	-0.1%
1999	3.35	-52.2%	95.40	30.10	62.8	864	13.1%
2000	4.48	-36.1%	97.60	34.40	66.0	907	18.8%
2001	7.99	14.0%	99.70	32.40	66.1	877	14.9%
2002	2.73	-61.0%	100.90	30.40	65.7	877	14.9%
2003	8.04	14.7%	101.70	33.40	67.6	841	10.1%
2004	10.09	44.0%	98.10	31.60	64.9	918	20.2%
2005	11.71	67.1%	101.10	33.80	67.5	870	14.0%
2006	3.98	-43.2%	101.70	28.90	65.3	833	9.1%
2007	2.65	-62.2%	100.20	26.60	63.4	854	11.9%
2008	4.70	-32.9%	99.60	31.70	65.7	766	0.3%
2009	3.47	-50.5%	101.40	30.80	66.1	673	-11.9%
2010	10.17	45.1%	98.60	33.00	65.8	647	-15.2%
2011	6.06	-13.5%	98.80	28.30	63.6	635	-16.9%
2012	3.62	-48.3%	101.40	31.70	66.6	652	-14.6%
2013	3.07	-56.2%	100.10	28.70	64.4	582	-23.8%
2014	5.36	-23.5%	98.10	34.60	66.4	557	-27.0%
2015	5.83	-16.8%	99.40	30.20	64.8	354	-53.7%
2016							
2017							
2018							
2019							
2020							

Precipitation (1895 - present)						Monthly Average Eto
	Mean	High	Year	Low	Year	
	in.	in.	-	in.	-	
Jan	1.30	6.73	1995	0.00	1948	1.86
Feb	1.44	6.80	1998	0.00	1912	2.24
Mar	1.21	6.74	1983	0.00	1921	3.72
Apr	0.35	2.83	1926	0.00	1896	4.80
May	0.16	1.86	1921	0.00	1896	5.27
Jun	0.07	0.95	1993	0.00	1912	5.70
Jul	0.07	1.25	2015	0.00	1957	5.58
Aug	0.09	1.46	1977	0.00	1960	5.27
Sep	0.20	2.59	1976	0.00	1899	4.20
Oct	0.33	3.32	2004	0.00	1900	3.41
Nov	0.59	3.75	1965	0.00	1897	2.40
Dec	1.02	5.12	1943	0.00	1900	1.86
Annual	6.84	16.50	1983	2.09	1990	46.31

Temperature (1895 - present)			
	Tmax	Tmin	Mean
	°F	°F	°F
Jan	66.5	20.8	43.7
Feb	70.1	26.8	48.5
Mar	76.1	31.4	53.8
Apr	82.2	36.3	59.3
May	90.8	43.1	67.0
Jun	98.8	52.2	75.5
Jul	103.1	58.0	80.6
Aug	103.9	56.9	80.4
Sep	97.9	47.3	72.6
Oct	89.4	39.2	64.3
Nov	75.8	28.2	52.0
Dec	68.0	25.4	46.7
Annual	103.9	20.8	62.4

- 1) Eto values based on California Irrigation Management Information System (CIMIS), <http://www.cimis.water.ca.gov/cimis/welcome.jsp>, EvapoTranspiration (Eto) Zones Map, Zone 12
- 2) PPT, Tmax, Tmin obtained from PRISM where, PPT is total montly rainfall, Tmax is average of maximum temperatures for given month, and Tmin is average of minimum temperatures for given month
- 3) Percent variaion based on average of 1980 to present values

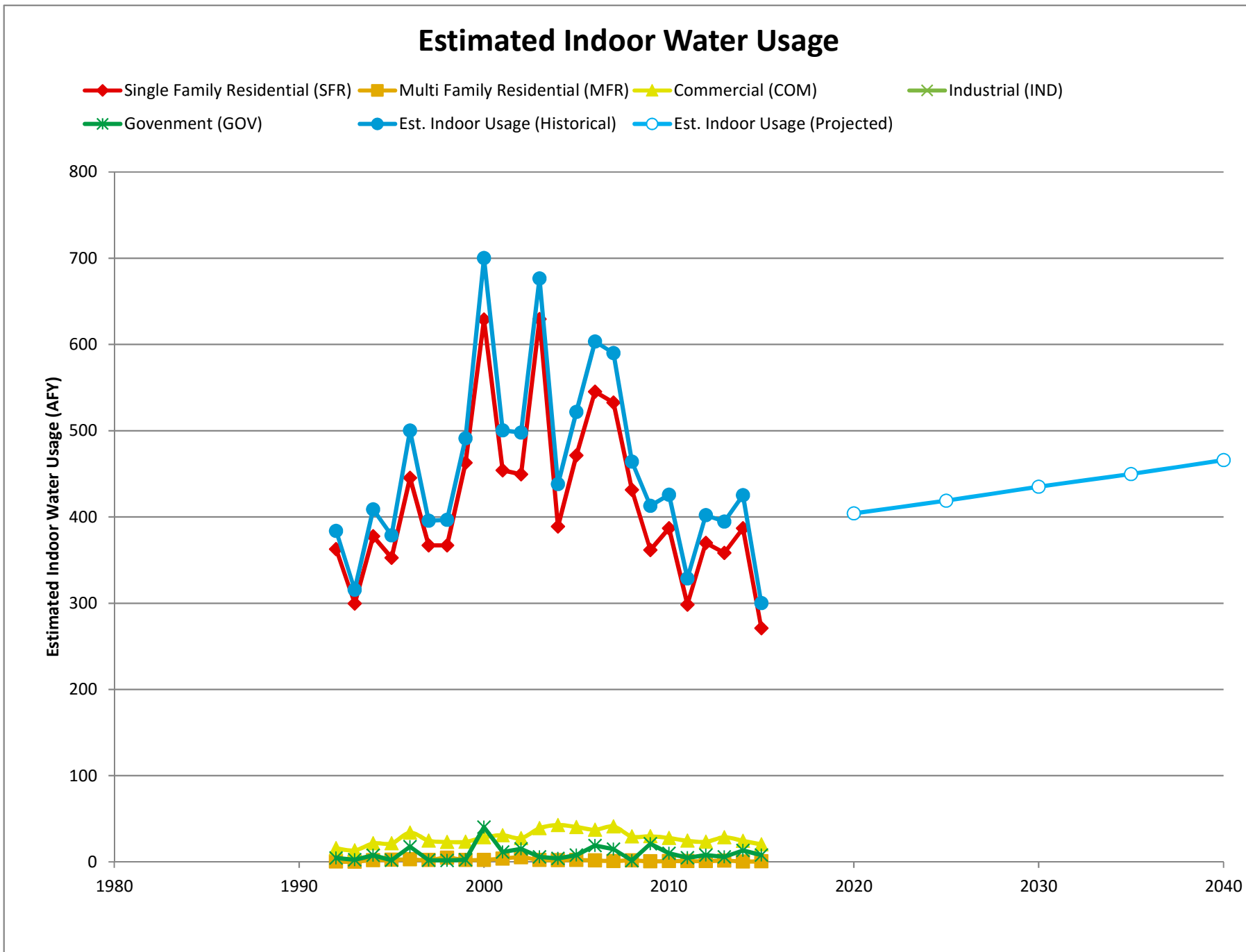
## Average Monthly Temperature, Rainfall, and Monthly Eto



**California Water Service Company - Antelope Valley District  
Water Supply and Demand Analysis and Projections**

**Groundwater Production Facilities**

**No ground water level records**



**California Water Service Company - Antelope Valley District  
Water Supply and Demand Analysis and Projections**

**Estimated Indoor/Outdoor Water Usage**

Year	Single Family Residential (SFR)							Multi Family Residential (MFR)				Commercial (COM)					
	SFR Jan Usage	Metered SFR Indoor Use (Annualized 90% of January Total)		Indoor Flat Rate Usage (AFY)	Total SFR Indoor Usage			MFR Average of Jan+Feb Usage (CCF)	MFR Indoor Use (Annualized 90% of Jan+Feb Total)			COM Jan Usage (CCF)	COM Indoor Use (Annualized 90% of January Total)				
	JAN (CCF)	AFY	GPD/Serv		AFY	GPD/Serv	%		AFY	GPD/Serv	%		AFY	GPD/Serv	%		
1980																	
1981																	
1982																	
1983																	
1984																	
1985																	
1986																	
1987																	
1988																	
1989																	
1990																	
1991																	
1992	14,632	363	0.310	0	362.8	276	41%	20	0.50	148	25%	642	15.9	458	48%		
1993	12,080	300	0.255	0	299.5	228	33%	13	0.32	48	9%	542	13.4	382	37%		
1994	15,228	378	0.323	0	377.6	288	40%	82	2.03	165	51%	866	21.5	599	59%		
1995	14,226	353	0.303	0	352.7	270	37%	99	2.45	199	54%	868	21.5	600	54%		
1996	17,964	445	0.380	0	445.4	339	43%	121	2.99	267	66%	1,367	33.9	946	75%		
1997	14,801	367	0.311	0	367.0	278	35%	88	2.17	194	44%	997	24.7	690	60%		
1998	14,804	367	0.310	0	367.0	277	40%	193	4.79	427	98%	935	23.2	647	63%		
1999	18,668	463	0.386	0	462.8	344	44%	97	2.39	214	62%	939	23.3	638	66%		
2000	25,366	629	0.519	0	628.9	463	55%	95	2.36	218	49%	1,149	28.5	777	67%		
2001	18,313	454	0.374	0	454.0	334	42%	158	3.90	349	47%	1,247	30.9	863	70%		
2002	18,126	449	0.371	0	449.4	331	40%	222	5.50	531	94%	1,115	27.6	771	69%		
2003	25,381	629	0.524	0	629.3	468	55%	93	2.29	212	104%	1,574	39.0	973	80%		
2004	15,692	389	0.308	0	389.1	275	34%	84	2.08	186	103%	1,726	42.8	1,076	78%		
2005	19,012	471	0.366	0	471.4	327	42%	90	2.23	275	98%	1,632	40.5	1,016	74%		
2006	21,992	545	0.421	0	545.3	376	47%	68	1.69	196	97%	1,507	37.4	942	70%		
2007	21,485	533	0.406	0	532.7	363	45%	44	1.09	156	53%	1,658	41.1	1,006	74%		
2008	17,397	431	0.328	0	431.3	293	42%	70	1.74	310	123%	1,189	29.5	697	57%		
2009	14,585	362	0.279	0	361.6	249	40%	25	0.62	96	58%	1,199	29.7	706	57%		
2010	15,605	387	0.298	0	386.9	266	46%	44	1.09	188	79%	1,122	27.8	673	62%		
2011	12,033	298	0.228	0	298.3	204	38%	36	0.89	159	78%	991	24.6	598	62%		
2012	14,919	370	0.281	0	369.9	251	44%	36	0.89	159	63%	943	23.4	564	62%		
2013	14,453	358	0.274	0	358.3	244	46%	66	1.64	278	100%	1,152	28.6	683	80%		
2014	15,608	387	0.296	0	387.0	265	54%	25	0.61	107	56%	986	24.4	595	69%		
2015	10,935	271	7.575	0	271.1		56%	26	0.64		69%	819	20.3			72%	
2016					355.8	241			0.99	176			25.1	610			
2017					358.2	241			0.99	176			25.1	610			
2018					360.7	241			0.99	176			25.8	610			
2019					363.1	241			0.99	176			25.8	610			
2020					365.5	241			0.99	176			27.9	610			
2025					377.7	241			0.99	176			29.9	610			
2030					389.8	241			0.99	176			33.3	610			
2035					402.0	241			0.99	176			35.4	610			
2040					414.1	241			0.99	176			38.8	610			

Note: GPD/Service is estimated as the average of the last 5 years for given customer class.

### California Water Service Company - Antelope Valley District Water Supply and Demand Analysis and Projections

#### Estimated Indoor/Outdoor Water Usage

Year	Industrial (IND)				Government (GOV)			
	IND Jan Usage	IND Indoor Use (Annualized 90% of January Total)			GOV Jan Usage	GOV Indoor Use (Annualized 90% of January Total)		
	(CCF)	AFY	GPD/Serv	%	(CCF)	AFY	GPD/Serv	%
	* District does not have IND category							
1992					183	4.5	450	50%
1993					98	2.4	217	14%
1994					313	7.8	693	40%
1995					83	2.1	184	11%
1996					718	17.8	1,589	90%
1997					77	1.9	170	11%
1998					69	1.7	153	12%
1999					105	2.6	232	13%
2000					1,629	40.4	3,005	109%
2001					465	11.5	858	38%
2002					613	15.2	1,131	46%
2003					241	6.0	445	20%
2004					164	4.1	302	12%
2005					316	7.8	583	24%
2006					766	19.0	1,413	55%
2007					605	15.0	1,116	41%
2008					63	1.6	107	4%
2009					846	21.0	1,338	58%
2010					406	10.1	642	33%
2011					200	5.0	316	19%
2012					320	7.9	506	26%
2013					241	6.0	381	17%
2014					534	13.2	844	42%
2015					325	8.1		34%
2016						8.0	512	
2017						8.0	512	
2018						8.0	512	
2019						8.0	512	
2020						9.7	512	
2025						10.3	512	
2030						10.9	512	
2035						11.5	512	
2040						12.0	512	

Estimated Indoor/Outdoor Usage			
Est. Indoor Usage	Est. Outdoor Usage	Est. Indoor Usage	Est. Outdoor Usage
AFY	AFY	%	%
384	601	39%	61%
316	704	31%	69%
409	687	37%	63%
379	724	34%	66%
500	715	41%	59%
396	837	32%	68%
397	660	38%	62%
491	721	41%	59%
700	587	54%	46%
500	744	40%	60%
498	746	40%	60%
677	509	57%	43%
438	921	32%	68%
522	786	40%	60%
603	655	48%	52%
590	717	45%	55%
464	711	39%	61%
413	608	40%	60%
426	556	43%	57%
329	639	34%	66%
402	600	40%	60%
395	496	44%	56%
425	424	50%	50%
300	241	56%	44%
390	591	40%	60%
392	595	40%	60%
396	600	40%	60%
398	603	40%	60%
404	614	40%	60%
419	637	40%	60%
435	660	40%	60%
450	683	40%	60%
466	706	40%	60%

PAGE LEFT BLANK INTENTIONALLY