

Water Resources Planning Department

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

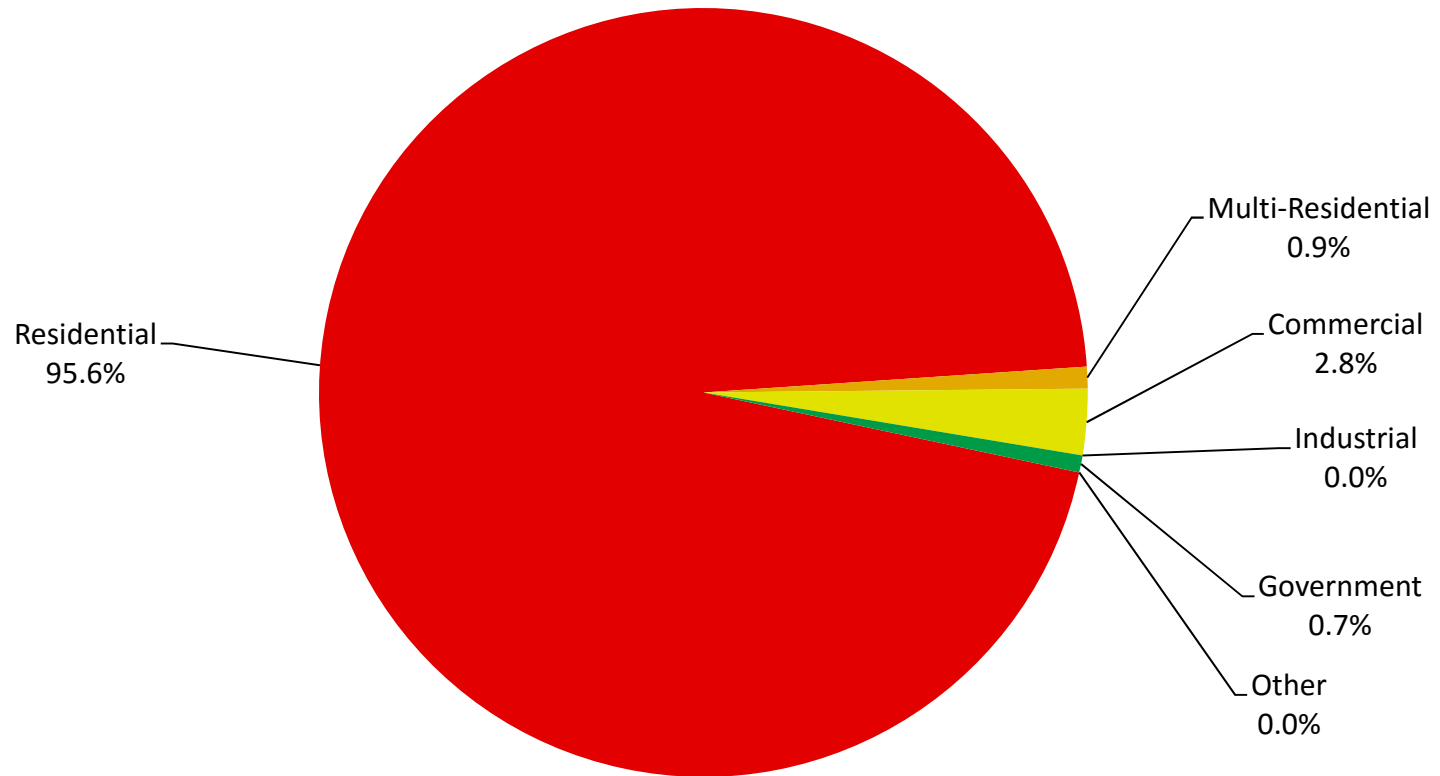
2015



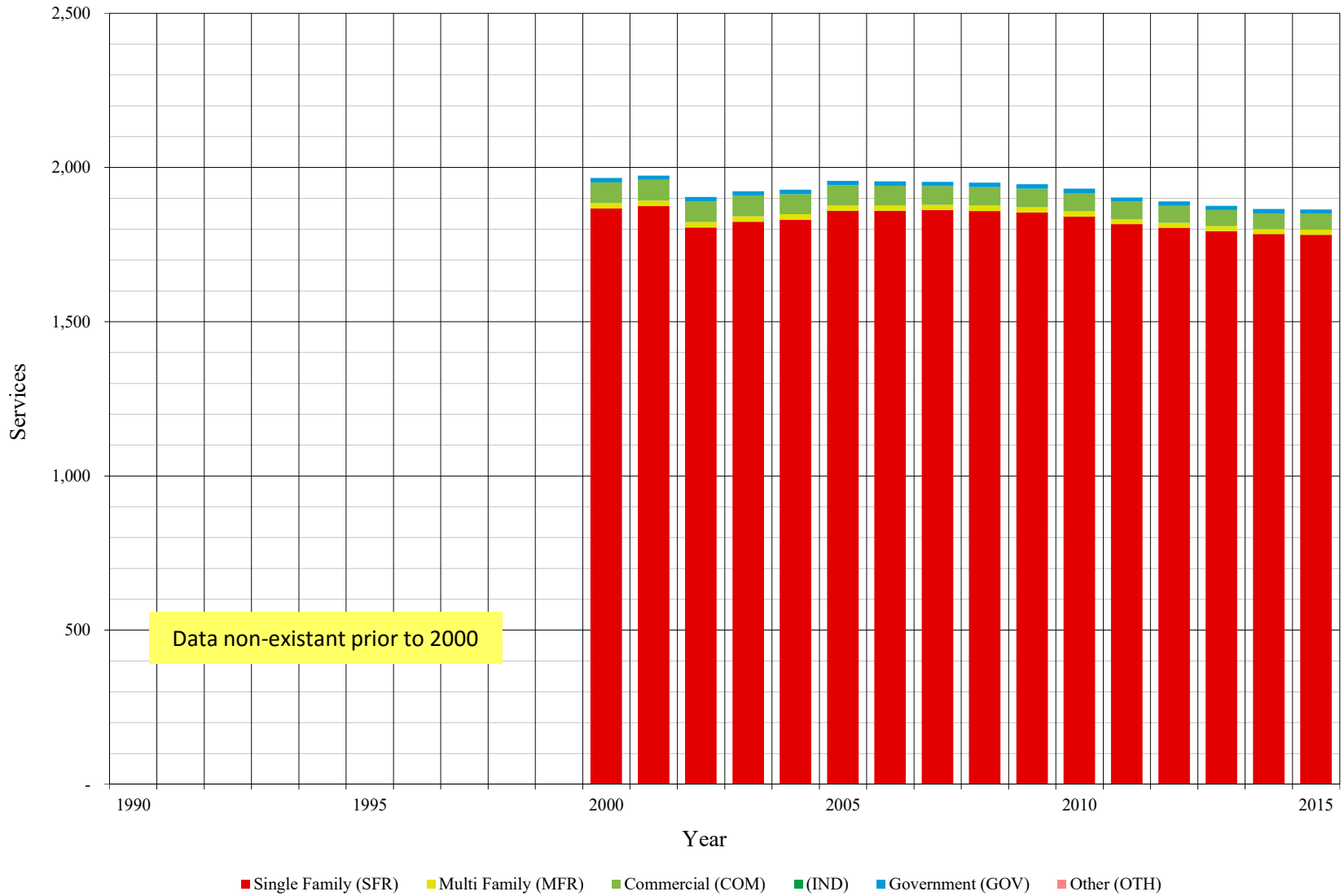
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Distribution of Services (2014)



Historical Services



California Water Service Company - Redwood Valley District (consolidated)
Water Supply and Demand Analysis and Projections
Average Annual Services

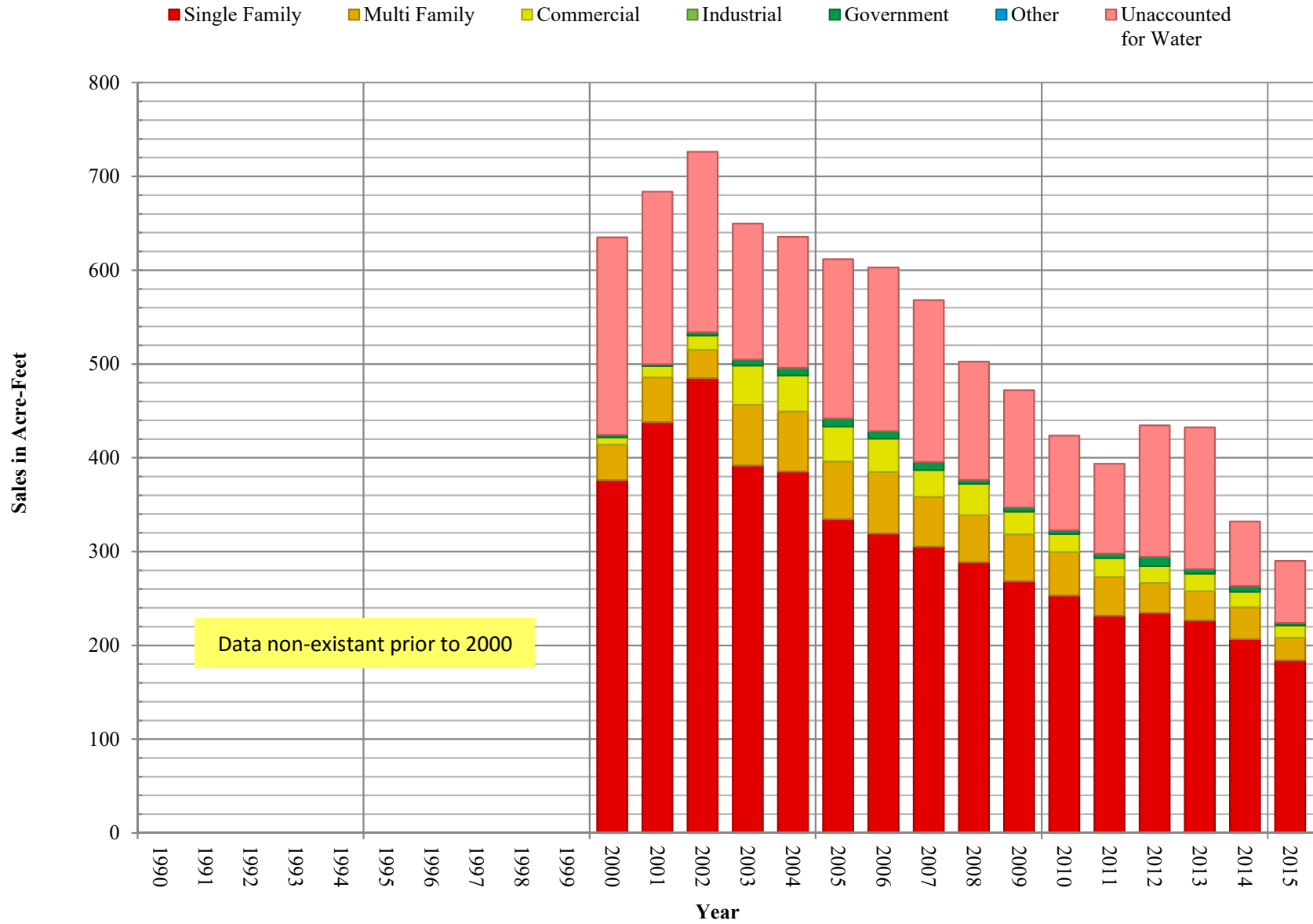
Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Total	Annual Change
1990	-	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-
1994	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	-	-	-
1998	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-
2000	1,867	18	67	-	14	-	1,966	1,966
2001	1,875	18	67	-	14	-	1,974	8
2002	1,805	18	67	-	14	-	1,904	(70)
2003	1,824	18	67	-	14	-	1,923	19
2004	1,830	18	65	-	14	-	1,928	5
2005	1,860	17	65	-	15	-	1,957	29
2006	1,859	17	64	-	14	-	1,955	(2)
2007	1,861	17	61	-	14	-	1,953	(1)
2008	1,859	17	61	-	14	-	1,951	(3)
2009	1,854	17	60	-	14	-	1,945	(5)
2010	1,841	17	59	-	14	-	1,931	(14)
2011	1,816	17	56	-	14	-	1,902	(28)
2012	1,804	16	55	-	14	-	1,890	(13)
2013	1,794	16	52	-	14	-	1,876	(14)
2014	1,784	16	51	-	14	-	1,865	(11)
2015	1,782	17	52	-	13	-	1,864	(1)
3 Yr. Avg.	1,786	16	52	-	14	-	1,868	-9
5 Yr. Avg.	1,796	16	53	-	14	-	1,879	-13
7 Yr. Avg.	1,811	17	55	-	14	-	1,896	-12
10 Yr. Avg.	1,825	17	57	-	14	-	1,913	-9

Note: Reclassification occurred between categories from 2007 to 2009

California Water Service Company - Redwood Valley District (consolidated)
Water Supply and Demand Analysis and Projections
Service Growth Percentage

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Total
1991							
1992							
1993							
1994							
1995							
1996							
1997							
1998							
1999							
2000							
2001	0.43%	0.00%	0.00%		0.00%		0.41%
2002	-3.71%	0.00%	0.00%		0.00%		-3.52%
2003	1.03%	0.00%	0.25%		0.00%		0.98%
2004	0.37%	0.00%	-3.35%		1.19%		0.25%
2005	1.59%	-5.09%	0.64%		4.12%		1.52%
2006	-0.01%	-0.98%	-2.42%		-2.26%		-0.11%
2007	0.11%	0.49%	-4.31%		-2.89%		-0.06%
2008	-0.14%	0.00%	-0.41%		0.00%		-0.15%
2009	-0.25%	0.00%	-1.23%		0.00%		-0.27%
2010	-0.74%	0.00%	-1.11%		0.00%		-0.74%
2011	-1.34%	-1.96%	-5.90%		0.00%		-1.47%
2012	-0.64%	-1.50%	-1.94%		0.00%		-0.68%
2013	-0.60%	-4.06%	-4.26%		0.00%		-0.73%
2014	-0.54%	2.12%	-2.38%		0.00%		-0.56%
2015	-0.12%	5.70%	1.30%		-4.76%		-0.07%
3 Yr. Avg.	-0.42%	1.25%	-1.78%		-1.59%		-0.45%
5 Yr. Avg.	-0.65%	0.06%	-2.64%		-0.95%		-0.70%
7 Yr. Avg.	-0.60%	0.04%	-2.22%		-0.68%		-0.65%
10 Yr. Avg.	-0.43%	-0.02%	-2.27%		-0.99%		-0.48%

Historical Sales



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
5	California Water Service Company - Redwood Valley District (consolidated)													Worksheet 3
6	Water Supply and Demand Analysis and Projections													
7	Sales (AF)													
8		Single Family	Multi Family	Commercial	Industrial	Government	Other	Unaccounted						
9	Year	(SFR)	(MFR)	(COM)	(IND)	(GOV)	(OTH)	for Water		Total Sales	Total Demand	Total		
10								(UAFW)		(AF)	(AF)	Demand		
11												(MGal)		
20	1990													
21	1991													
22	1992													
23	1993													
24	1994													
25	1995													
26	1996													
27	1997													
28	1998													
29	1999													
30	2000	376.3	37.7	7.7	0.0	2.7	0.0	210.6		424.3	634.9	206.9		
31	2001	438.0	47.8	12.0	0.0	1.8	0.0	184.1		499.6	683.7	222.8		
32	2002	484.8	30.3	15.3	0.0	3.4	0.0	192.5		533.7	726.2	236.6		
33	2003	391.9	64.6	42.0	0.0	6.3	0.0	145.1		504.7	649.8	211.7		
34	2004	385.2	64.1	38.6	0.0	8.0	0.0	139.7		495.9	635.6	207.1		
35	2005	334.6	61.6	37.2	0.0	8.3	0.0	170.1		441.7	611.8	199.4		
36	2006	319.2	65.6	35.6	0.0	8.1	0.0	174.3		428.5	602.9	196.4		
37	2007	305.3	53.0	28.8	0.0	8.6	0.0	172.6		395.6	568.2	185.1		
38	2008	288.7	50.2	33.3	0.0	4.5	0.0	126.0		376.6	502.6	163.8		
39	2009	268.4	50.2	23.9	0.0	4.6	0.0	124.9		347.0	472.0	153.8		
40	2010	253.0	46.4	19.1	0.0	4.1	0.0	100.9		322.6	423.6	138.0		
41	2011	231.6	41.4	20.1	0.0	4.6	0.0	96.0		297.7	393.7	128.3		
42	2012	234.8	31.9	17.8	0.0	10.0	0.0	140.1		294.4	434.5	141.6		
43	2013	226.7	30.9	18.8	0.0	5.0	0.0	151.1		281.3	432.5	140.9		
44	2014	206.6	34.0	16.5	0.0	6.2	0.0	68.6		263.3	332.0	108.2		
45	2015	184	24	13	0.0	3	0	66		224	290	94		

	O	P	Q	R	S	T	U	V	W	X	Y	Z
5	California Water Service Company - Redwood Valley District						RWV-Consolidated					
6	Water Supply and Demand Analysis and Projections											
7	Sales (AF)											
8		Single Family	Multi Family	Commercial	Industrial	Government	Other	Unaccounted for Water	Total Sales	Total Demand	Total Demand	
9	Year	(SFR)	(MFR)	(COM)	(IND)	(GOV)	(OTH)	(UAFW)	(AF)	(AF)	(MGal)	
20	1990											
21	1991											
22	1992											
23	1993											
24	1994											
25	1995											
26	1996											
27	1997											
28	1998											
29	1999											
30	2000	376.3	37.7	7.7	0.0	2.7	0.0	210.6	424.3	634.9	206.9	
31	2001	438.0	47.8	12.0	0.0	1.8	0.0	184.1	499.6	683.7	222.8	
32	2002	484.8	30.3	15.3	0.0	3.4	0.0	192.5	533.7	726.2	236.6	
33	2003	391.9	64.6	42.0	0.0	6.3	0.0	145.0	504.7	649.8	211.7	
34	2004	385.2	64.1	38.6	0.0	8.0	0.0	139.7	495.9	635.6	207.1	
35	2005	334.6	61.6	37.2	0.0	8.3	0.0	170.1	441.7	611.8	199.4	
36	2006	319.2	65.6	35.6	0.0	8.1	0.0	174.3	428.5	602.9	196.4	
37	2007	305.3	53.0	28.8	0.0	8.6	0.0	172.5	395.6	568.2	185.1	
38	2008	288.7	50.2	33.3	0.0	4.5	0.0	126.0	376.6	502.6	163.8	
39	2009	268.4	50.2	23.9	0.0	4.6	0.0	124.9	347.1	472.0	153.8	
40	2010	253.0	46.4	19.1	0.0	4.1	0.0	100.9	322.7	423.6	138.0	
41	2011	231.6	41.4	20.1	0.0	4.6	0.0	95.9	297.7	393.7	128.3	
42	2012	234.8	31.9	17.8	0.0	10.0	0.0	140.1	294.5	434.5	141.6	
43	2013	226.7	30.9	18.8	0.0	5.0	0.0	151.1	281.3	432.5	140.9	
44	2014	206.6	34.0	16.5	0.0	6.2	0.0	68.6	263.4	332.0	108.2	
45	2015	184	24	13	0.0	3	0	66	224	290	94	

	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK
5	California Water Service Company - Redwood Valley District					RWV-ARM Armstrong Valley					
6	Water Supply and Demand Analysis and Projections										
7	Sales (AF)										
8	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)
9	Year	(SFR)	(MFR)	(COM)	(IND)	(GOV)	(OTH)	(UAFW)	(AF)	(AF)	(MGal)
20	1990										
21	1991										
22	1992										
23	1993										
24	1994										
25	1995										
26	1996										
27	1997										
28	1998										
29	1999										
30	2000	376.3	37.7	7.7	0.0	2.7	0.0	-337.7	424.3	86.6	0.0
31	2001	438.0	47.8	12.0	0.0	1.8	0.0	-405.8	499.6	93.8	0.0
32	2002	484.8	30.3	15.3	0.0	3.4	0.0	-423.8	533.7	110.0	0.0
33	2003	77.2	7.3	5.7	0.0	1.7	0.0	16.8	91.9	108.7	0.0
34	2004	73.2	6.5	6.0	0.0	2.0	0.0	22.2	87.7	109.9	0.0
35	2005	61.6	5.5	3.6	0.0	1.5	0.0	27.3	72.3	99.6	0.0
36	2006	58.1	5.5	3.1	0.0	1.7	0.0	44.6	68.4	113.0	0.0
37	2007	55.5	5.7	3.5	0.0	1.2	0.0	12.4	65.9	78.3	0.0
38	2008	52.9	5.8	3.5	0.0	1.1	0.0	7.5	63.3	70.8	0.0
39	2009	46.7	6.5	3.7	0.0	1.1	0.0	8.2	58.1	66.3	0.0
40	2010	44.2	5.8	3.0	0.0	0.9	0.0	9.3	53.9	63.2	0.0
41	2011	41.9	4.8	3.9	0.0	1.0	0.0	6.1	51.6	57.7	0.0
42	2012	44.2	4.9	3.9	0.0	0.6	0.0	9.7	53.6	63.3	0.0
43	2013	44.5	5.2	5.3	0.0	1.1	0.0	12.1	56.1	68.2	0.0
44	2014	40.4	4.5	4.8	0.0	1.0	0.0	5.3	50.8	56.1	0.0
45	2015	36	4	3	0.0	1	0	11	44	54	0

	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV
5	California Water Service Company - Redwood Valley District					RWV-CSP Coast Springs Water					
6	Water Supply and Demand Analysis and Projections										
7	Sales (AF)										
8	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)
20	1990										
21	1991										
22	1992										
23	1993										
24	1994										
25	1995										
26	1996										
27	1997										
28	1998										
29	1999										
30	2000	0.0	0.0	0.0	0.0	0.0	0.0	25.1	0.0	25.1	0.0
31	2001	0.0	0.0	0.0	0.0	0.0	0.0	21.5	0.0	21.5	0.0
32	2002	0.0	0.0	0.0	0.0	0.0	0.0	23.7	0.0	23.7	0.0
33	2003	18.4	0.0	2.1	0.0	0.1	0.0	4.9	20.6	25.5	0.0
34	2004	18.0	0.0	2.5	0.0	0.0	0.0	4.6	20.5	25.1	0.0
35	2005	17.6	0.0	2.7	0.0	0.0	0.0	4.2	20.3	24.5	0.0
36	2006	17.6	0.0	1.9	0.0	0.0	0.0	3.9	19.6	23.5	0.0
37	2007	16.3	0.0	1.8	0.0	0.0	0.0	5.8	18.2	23.9	0.0
38	2008	17.2	0.0	1.6	0.0	0.0	0.0	4.6	18.9	23.4	0.0
39	2009	16.4	0.0	1.5	0.0	0.0	0.0	6.0	17.9	23.9	0.0
40	2010	15.5	0.0	1.6	0.0	0.0	0.0	10.7	17.1	27.9	0.0
41	2011	14.7	0.0	1.4	0.0	0.0	0.0	13.8	16.2	29.9	0.0
42	2012	13.6	0.0	1.4	0.0	0.0	0.0	12.4	15.0	27.4	0.0
43	2013	13.7	0.0	1.6	0.0	0.0	0.0	14.9	15.2	30.2	0.0
44	2014	13.6	0.0	1.7	0.0	0.0	0.0	10.9	15.4	26.2	0.0
45	2015	13	0	2	0.0	0	0	5	15	20	0

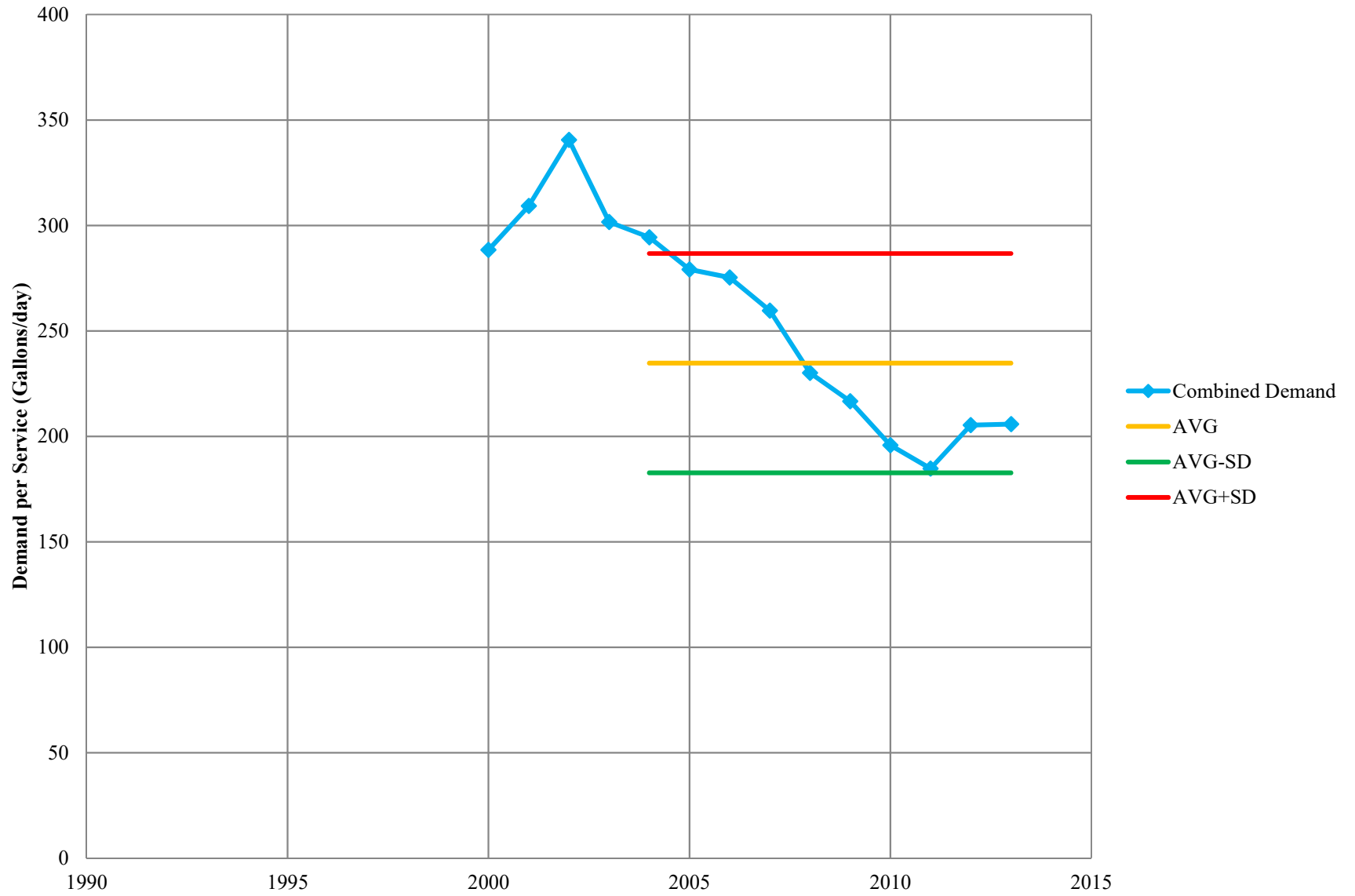
	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG
5	California Water Service Company - Redwood Valley District					RWV-HKN Hawkins Water					
6	Water Supply and Demand Analysis and Projections										
7	Sales (AF)										
8		Single Family	Multi Family	Commercial	Industrial	Government	Other	Unaccounted for Water	Total Sales	Total Demand	Total Demand
9	Year	(SFR)	(MFR)	(COM)	(IND)	(GOV)	(OTH)	(UAFW)	(AF)	(AF)	(MGal)
20	1990										
21	1991										
22	1992										
23	1993										
24	1994										
25	1995										
26	1996										
27	1997										
28	1998										
29	1999										
30	2000	0.0	0.0	0.0	0.0	0.0	0.0	18.9	0.0	18.9	0.0
31	2001	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	22.0	0.0
32	2002	0.0	0.0	0.0	0.0	0.0	0.0	20.8	0.0	20.8	0.0
33	2003	13.7	0.0	0.0	0.0	0.1	0.0	1.2	13.8	15.0	0.0
34	2004	14.8	0.0	0.0	0.0	0.0	0.0	1.5	14.8	16.4	0.0
35	2005	12.2	0.0	0.0	0.0	0.0	0.0	1.7	12.3	13.9	0.0
36	2006	12.2	0.0	0.0	0.0	0.0	0.0	2.3	12.2	14.5	0.0
37	2007	11.4	0.0	0.0	0.0	0.0	0.0	3.3	11.4	14.7	0.0
38	2008	11.1	0.0	0.0	0.0	0.0	0.0	3.5	11.2	14.7	0.0
39	2009	9.6	0.0	0.0	0.0	0.0	0.0	2.2	9.7	11.9	0.0
40	2010	8.8	0.0	0.0	0.0	0.0	0.0	2.6	8.8	11.4	0.0
41	2011	9.1	0.0	0.0	0.0	0.0	0.0	1.3	9.1	10.4	0.0
42	2012	9.0	0.0	0.0	0.0	0.0	0.0	0.7	9.0	9.7	0.0
43	2013	9.0	0.0	0.0	0.0	0.0	0.0	1.0	9.0	10.0	0.0
44	2014	7.4	0.0	0.0	0.0	0.0	0.0	1.2	7.5	8.7	0.0
45	2015	7	0	0	0.0	0	0	1	7	8	0

	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR
5	California Water Service Company - Redwood Valley District					RWV-LUC Lucerne Water					
6	Water Supply and Demand Analysis and Projections										
7	Sales (AF)										
8	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)
9	Year	(SFR)	(MFR)	(COM)	(IND)	(GOV)	(OTH)	(UAFW)	(AF)	(AF)	(MGal)
20	1990										
21	1991										
22	1992										
23	1993										
24	1994										
25	1995										
26	1996										
27	1997										
28	1998										
29	1999										
30	2000	0.0	0.0	0.0	0.0	0.0	0.0	489.4	0.0	489.4	159.5
31	2001	0.0	0.0	0.0	0.0	0.0	0.0	532.0	0.0	532.0	173.4
32	2002	0.0	0.0	0.0	0.0	0.0	0.0	553.7	0.0	553.7	180.4
33	2003	267.0	57.3	34.2	0.0	4.5	0.0	120.5	362.9	483.4	157.5
34	2004	263.9	57.7	30.1	0.0	6.0	0.0	110.6	357.6	468.2	152.6
35	2005	231.5	56.0	30.9	0.0	6.7	0.0	131.9	325.2	457.1	148.9
36	2006	218.8	60.1	30.6	0.0	6.4	0.0	120.5	315.9	436.3	142.2
37	2007	208.8	47.3	23.4	0.0	7.4	0.0	149.8	287.0	436.8	142.3
38	2008	194.5	44.4	28.1	0.0	3.3	0.0	108.8	270.3	379.1	123.5
39	2009	184.0	43.7	18.7	0.0	3.4	0.0	106.5	249.8	356.3	116.1
40	2010	174.1	40.6	14.5	0.0	3.1	0.0	74.6	232.4	307.0	100.0
41	2011	155.7	36.6	14.7	0.0	3.6	0.0	70.9	210.6	281.5	91.7
42	2012	157.4	26.9	12.5	0.0	9.4	0.0	113.5	206.3	319.8	104.2
43	2013	149.4	25.7	11.9	0.0	3.9	0.0	119.9	190.8	310.7	101.2
44	2014	135.4	29.5	10.0	0.0	5.2	0.0	48.7	180.1	228.8	74.6
45	2015	119	20	8	0.0	2	0	46	150	196	64

	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC
5	California Water Service Company - Redwood Valley District					RWV-NOH Noel Heights					
6	Water Supply and Demand Analysis and Projections										
7	Sales (AF)										
8		Single Family	Multi Family	Commercial	Industrial	Government	Other	Unaccounted for Water	Total Sales	Total Demand	Total Demand
9	Year	(SFR)	(MFR)	(COM)	(IND)	(GOV)	(OTH)	(UAFW)	(AF)	(AF)	(MGal)
20	1990										
21	1991										
22	1992										
23	1993										
24	1994										
25	1995										
26	1996										
27	1997										
28	1998										
29	1999										
30	2000	0.0	0.0	0.0	0.0	0.0	0.0	7.4	0.0	7.4	0.0
31	2001	0.0	0.0	0.0	0.0	0.0	0.0	6.1	0.0	6.1	0.0
32	2002	0.0	0.0	0.0	0.0	0.0	0.0	8.5	0.0	8.5	0.0
33	2003	7.2	0.0	0.0	0.0	0.0	0.0	1.4	7.2	8.6	0.0
34	2004	7.7	0.0	0.0	0.0	0.0	0.0	1.5	7.7	9.2	0.0
35	2005	6.2	0.0	0.0	0.0	0.0	0.0	4.7	6.2	10.9	0.0
36	2006	6.5	0.0	0.0	0.0	0.0	0.0	1.9	6.5	8.4	0.0
37	2007	6.6	0.0	0.0	0.0	0.0	0.0	1.6	6.6	8.2	0.0
38	2008	6.8	0.0	0.0	0.0	0.0	0.0	1.6	6.8	8.4	0.0
39	2009	6.2	0.0	0.0	0.0	0.0	0.0	1.8	6.2	8.0	0.0
40	2010	5.5	0.0	0.0	0.0	0.0	0.0	2.9	5.5	8.4	0.0
41	2011	5.7	0.0	0.0	0.0	0.0	0.0	2.8	5.7	8.5	0.0
42	2012	5.7	0.0	0.0	0.0	0.0	0.0	1.7	5.7	7.3	0.0
43	2013	5.3	0.0	0.0	0.0	0.0	0.0	2.0	5.3	7.3	0.0
44	2014	5.1	0.0	0.0	0.0	0.0	0.0	1.0	5.1	6.1	0.0
45	2015	4	0	0	0.0	0	0	3	4	7	0

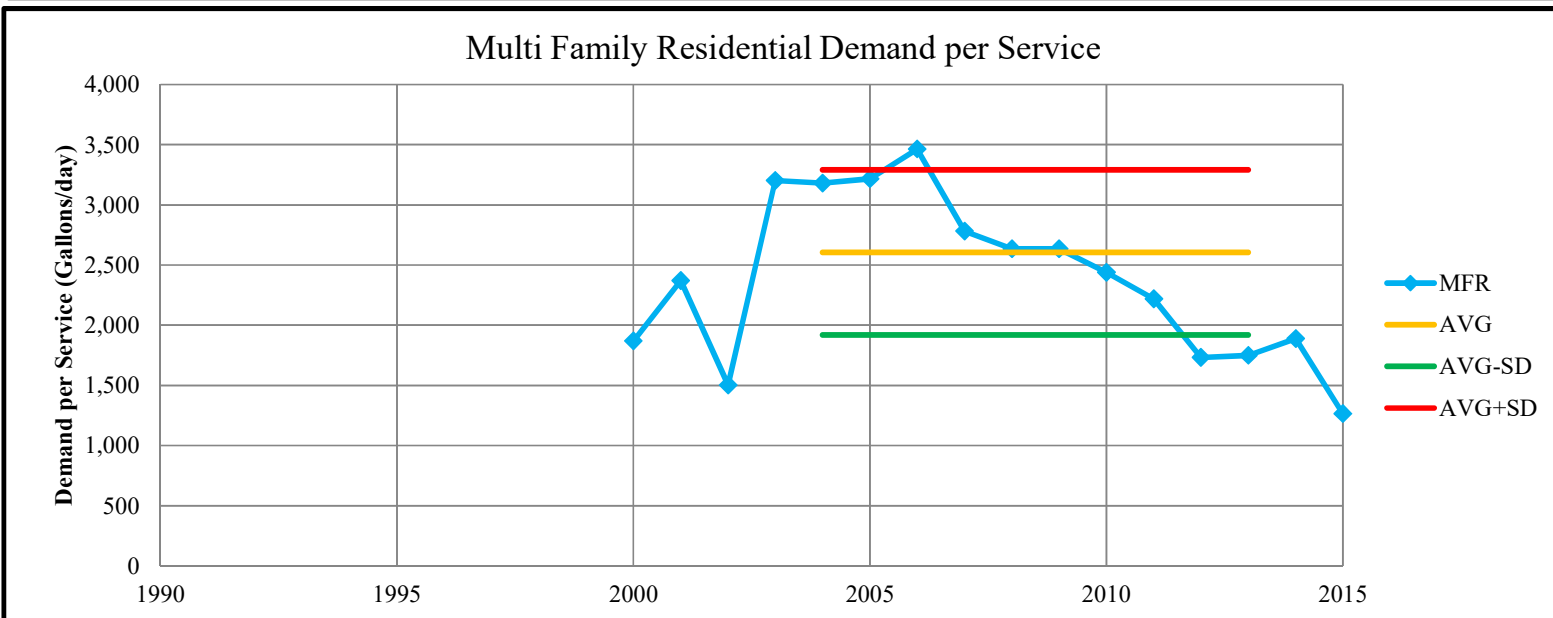
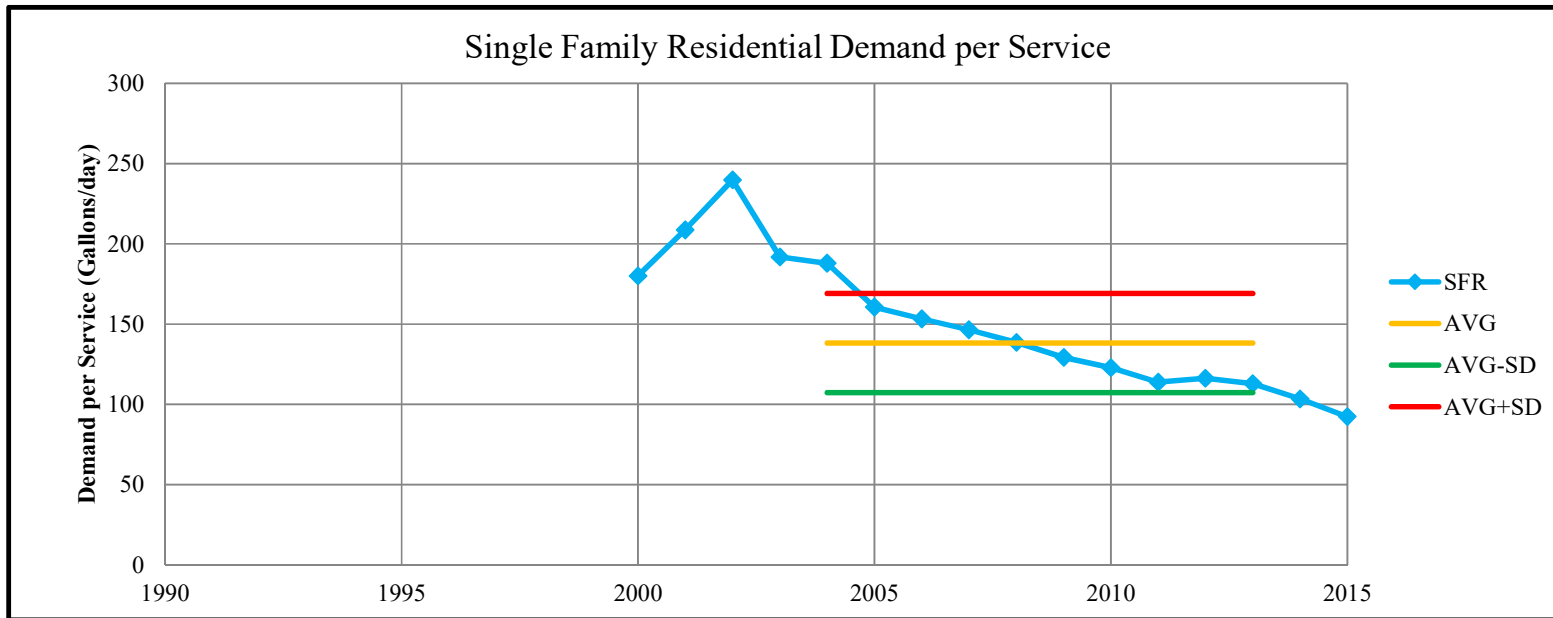
	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN
5	California Water Service Company - Redwood Valley District					RWV-RPD Rancho del Paradiso					
6	Water Supply and Demand Analysis and Projections										
7	Sales (AF)										
8	Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Unaccounted for Water (UAFW)	Total Sales (AF)	Total Demand (AF)	Total Demand (MGal)
9	Year	(SFR)	(MFR)	(COM)	(IND)	(GOV)	(OTH)	(UAFW)	(AF)	(AF)	(MGal)
20	1990										
21	1991										
22	1992										
23	1993										
24	1994										
25	1995										
26	1996										
27	1997										
28	1998										
29	1999										
30	2000	0.0	0.0	0.0	0.0	0.0	0.0	7.6	0.0	7.6	0.0
31	2001	0.0	0.0	0.0	0.0	0.0	0.0	8.2	0.0	8.2	0.0
32	2002	0.0	0.0	0.0	0.0	0.0	0.0	9.5	0.0	9.5	0.0
33	2003	8.3	0.0	0.0	0.0	0.0	0.0	0.2	8.3	8.5	0.0
34	2004	7.6	0.0	0.0	0.0	0.0	0.0	-0.7	7.6	6.9	0.0
35	2005	5.6	0.0	0.0	0.0	0.0	0.0	0.2	5.6	5.8	0.0
36	2006	6.0	0.0	0.0	0.0	0.0	0.0	1.2	6.0	7.1	0.0
37	2007	6.6	0.0	0.0	0.0	0.0	0.0	-0.4	6.6	6.2	0.0
38	2008	6.2	0.0	0.0	0.0	0.0	0.0	0.0	6.2	6.2	0.0
39	2009	5.4	0.0	0.0	0.0	0.0	0.0	0.2	5.4	5.6	0.0
40	2010	5.0	0.0	0.0	0.0	0.0	0.0	0.7	5.0	5.7	0.0
41	2011	4.6	0.0	0.0	0.0	0.0	0.0	1.1	4.6	5.7	0.0
42	2012	4.9	0.0	0.0	0.0	0.0	0.0	2.1	4.9	7.0	0.0
43	2013	5.0	0.0	0.0	0.0	0.0	0.0	1.1	5.0	6.1	0.0
44	2014	4.6	0.0	0.0	0.0	0.0	0.0	1.5	4.6	6.1	0.0
45	2015	4	0	0	0.0	0	0	1	4	5	0

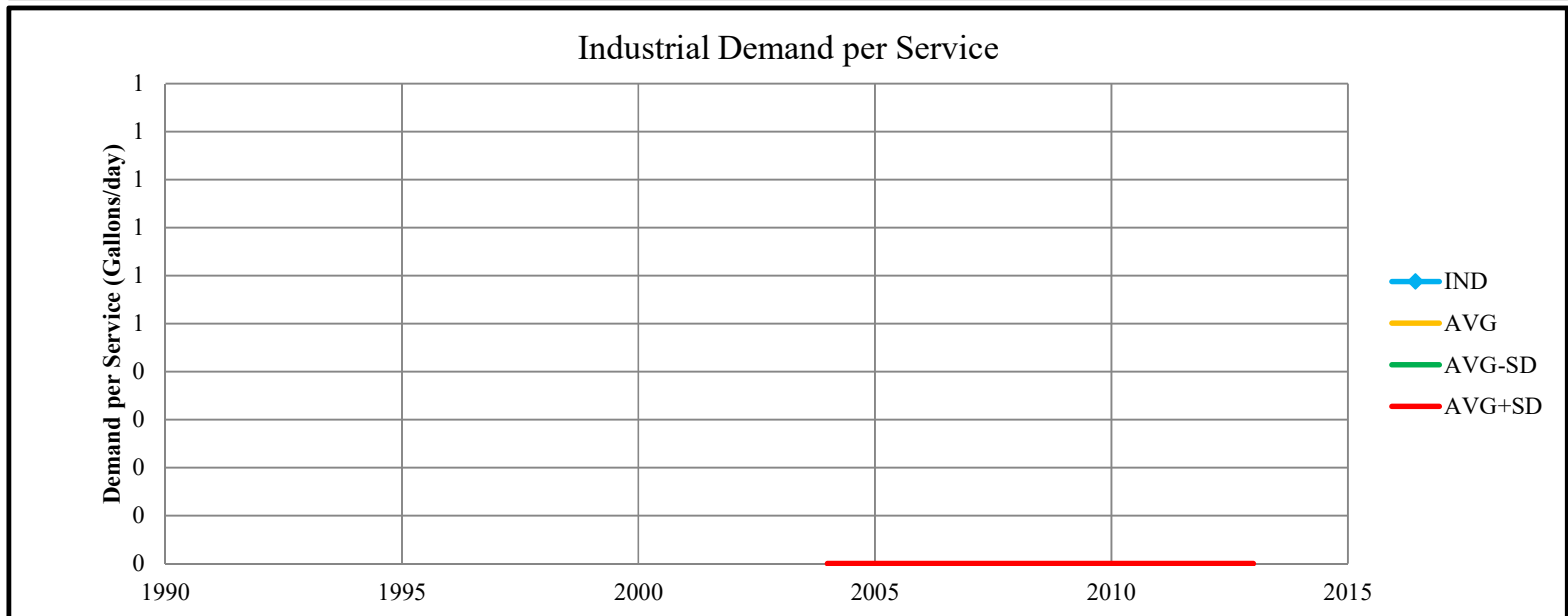
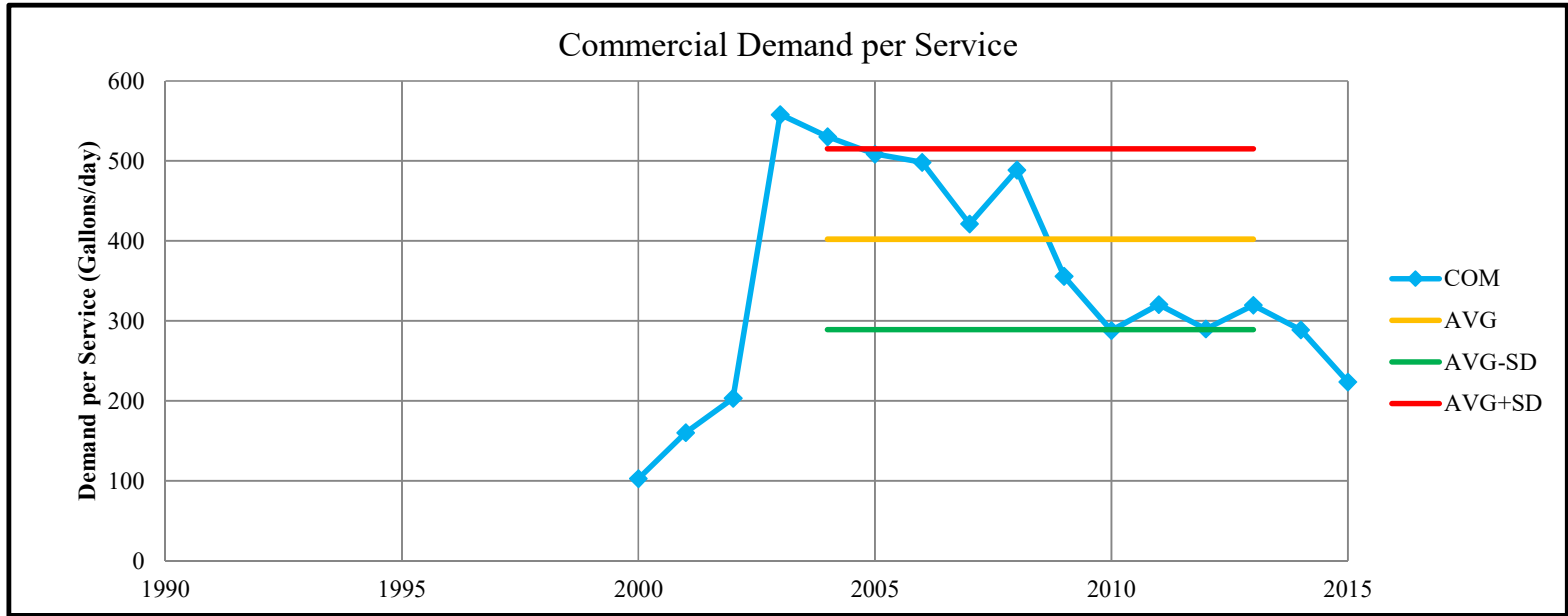
Combined Demand per Service

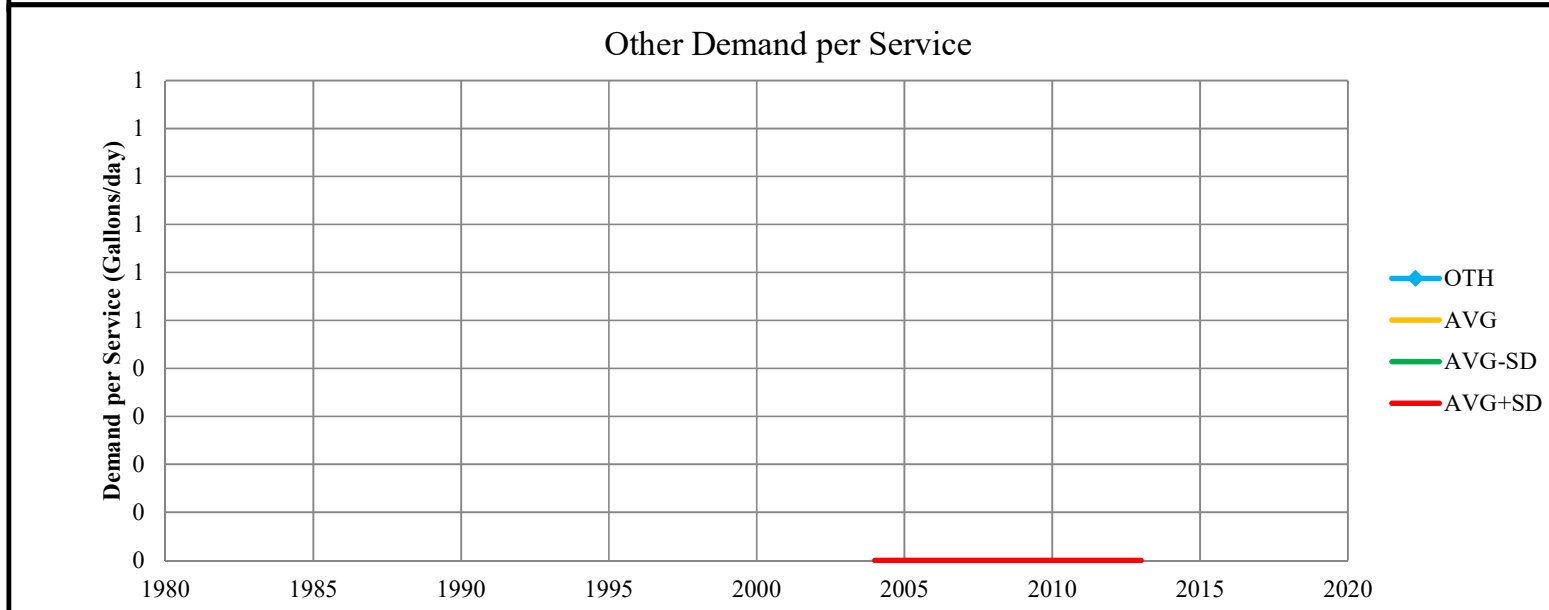
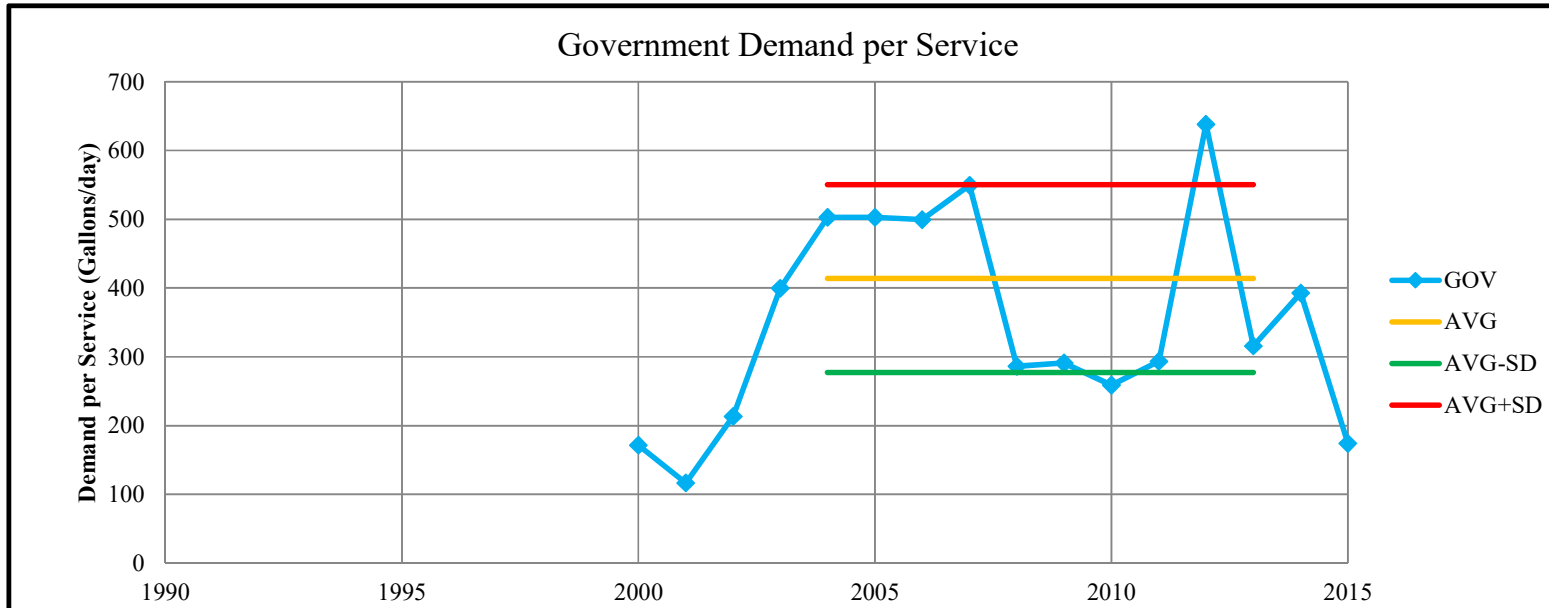


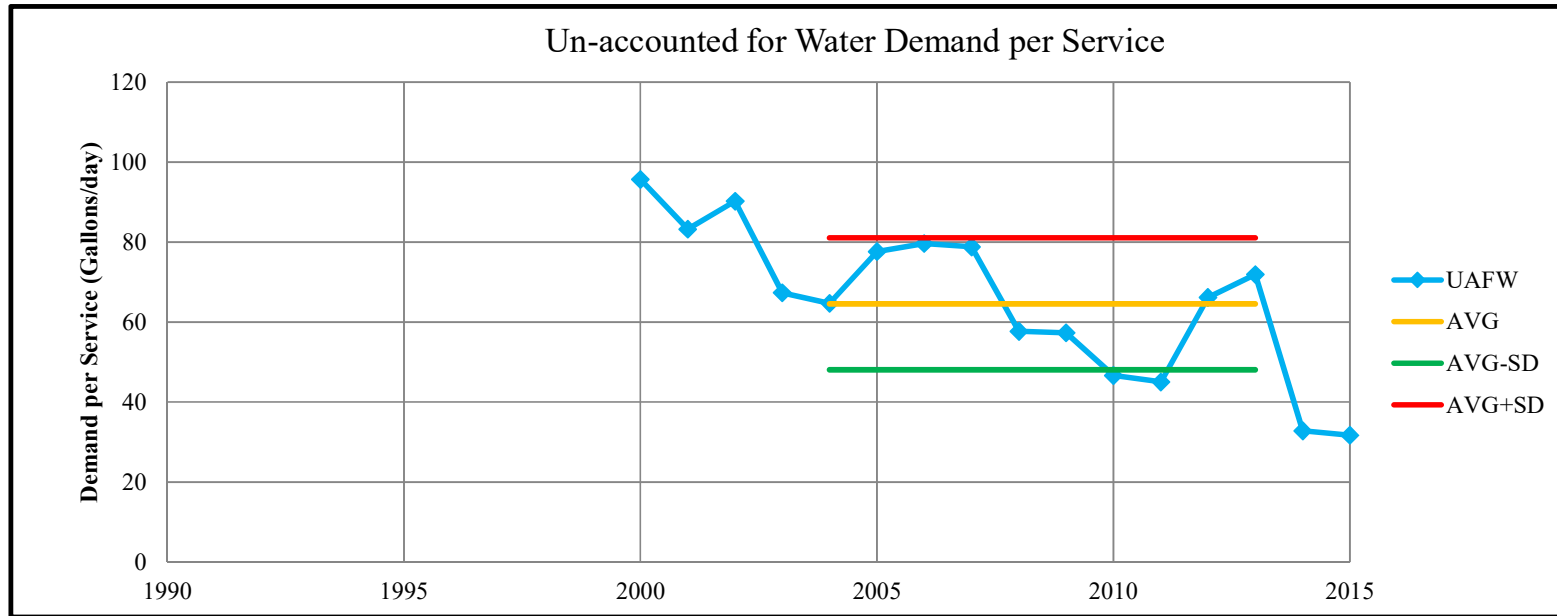
California Water Service Company - Redwood Valley District (consolidated)
Water Supply and Demand Analysis and Projections
Demand per Service (Gallons per Day)

Year	SFR	MFR	COM	IND	GOV	OTH	UAFW	Combined Demand/Serv
1990								
1991								
1992								
1993								
1994								
1995								
1996								
1997								
1998								
1999								
2000	180	1,869	103		172		96	288
2001	209	2,370	160		117		83	309
2002	240	1,503	203		214		90	341
2003	192	3,202	558		400		67	302
2004	188	3,181	530		503		65	294
2005	161	3,217	509		503		78	279
2006	153	3,463	498		499		80	275
2007	146	2,781	421		550		79	260
2008	139	2,634	489		286		58	230
2009	129	2,635	356		291		57	217
2010	123	2,438	288		259		47	196
2011	114	2,220	321		293		45	185
2012	116	1,732	290		638		66	205
2013	113	1,750	320		316		72	206
2014	103	1,889	289		393		33	159
2015	92	1,265	224		174		32	139
AVG	138	2,605	402		414		65	235
SD	31	686	113		137		16	52







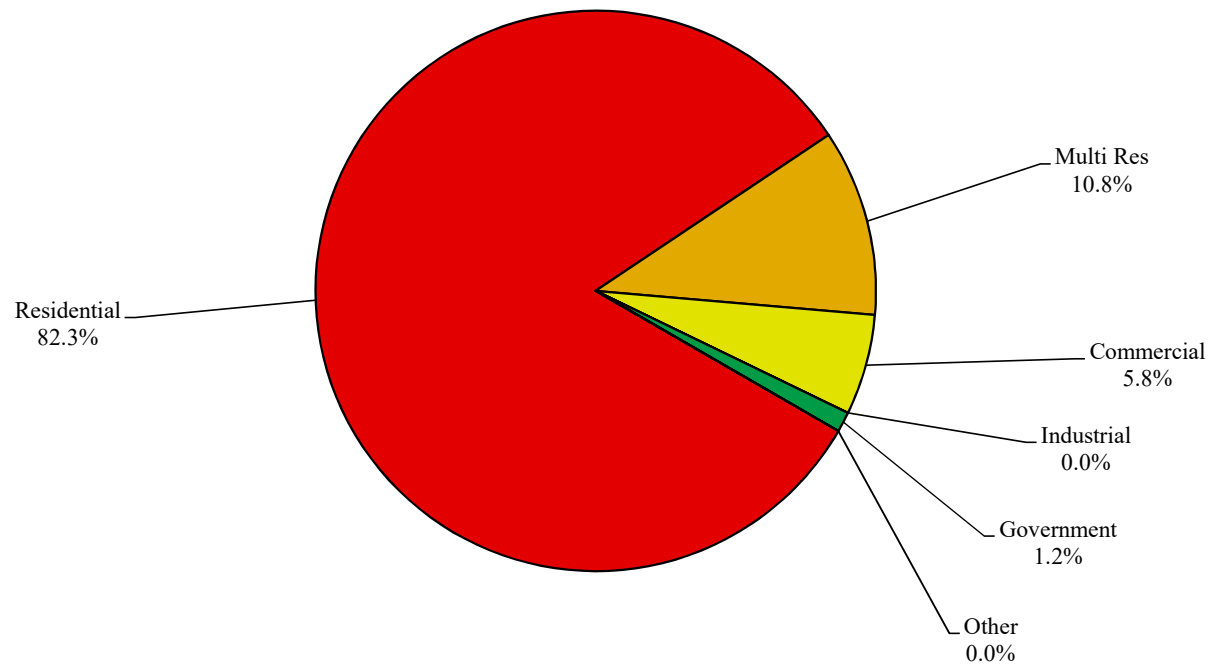


California Water Service Company - Redwood Valley District (consolidated)
Water Supply and Demand Analysis and Projections
Percentage Change in Annual Demand

Year	Residential	Multi Res	Commercial	Industrial	Government	Other	Unaccounted	Total
1991								
1992								
1993								
1994								
1995								
1996								
1997								
1998								
1999								
2000								
2001	16.41%	26.77%	56.04%		-32.00%		-12.61%	17.75%
2002	10.68%	-36.56%	27.05%		83.19%		4.58%	6.83%
2003	-19.17%	113.03%	175.00%		87.12%		-24.63%	-5.44%
2004	-1.69%	-0.66%	-8.17%		27.27%		-3.71%	-1.74%
2005	-13.14%	-4.02%	-3.45%		4.08%		21.80%	-10.93%
2006	-4.59%	6.59%	-4.40%		-2.93%		2.46%	-2.98%
2007	-4.38%	-19.29%	-19.14%		6.86%		-1.02%	-7.68%
2008	-5.43%	-5.30%	15.56%		-47.90%		-26.96%	-4.81%
2009	-7.04%	0.06%	-28.09%		1.64%		-0.87%	-7.85%
2010	-5.72%	-7.49%	-19.96%		-10.97%		-19.22%	-7.03%
2011	-8.46%	-10.74%	4.75%		13.22%		-4.91%	-7.73%
2012	1.37%	-23.14%	-11.34%		117.56%		45.98%	-1.10%
2013	-3.45%	-3.06%	5.60%		-50.50%		7.89%	-4.46%
2014	-8.87%	10.21%	-11.86%		24.37%		-54.59%	-6.39%
2015	-10.84%	-29.24%	-21.52%		-57.82%		-3.63%	-14.99%

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Percent of Total Sales by Type of Use (2015)



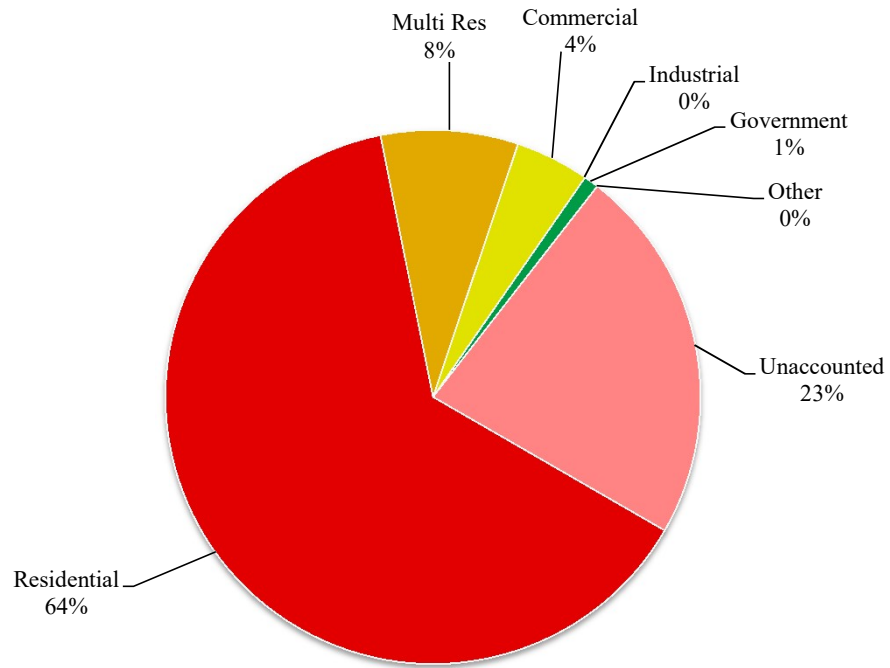
California Water Service Company - Redwood Valley District (consolidated)

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							
1993							
1994							
1995							
1996							
1997							
1998							
1999							
2000	88.67%	8.88%	1.82%	0.00%	0.63%	0.00%	100.00%
2001	87.67%	9.56%	2.41%	0.00%	0.37%	0.00%	100.00%
2002	90.83%	5.68%	2.86%	0.00%	0.63%	0.00%	100.00%
2003	77.64%	12.79%	8.32%	0.00%	1.24%	0.00%	100.00%
2004	77.68%	12.93%	7.77%	0.00%	1.61%	0.00%	100.00%
2005	75.75%	13.94%	8.43%	0.00%	1.88%	0.00%	100.00%
2006	74.50%	15.31%	8.31%	0.00%	1.88%	0.00%	100.00%
2007	77.16%	13.39%	7.27%	0.00%	2.18%	0.00%	100.00%
2008	76.66%	13.32%	8.83%	0.00%	1.19%	0.00%	100.00%
2009	77.33%	14.46%	6.89%	0.00%	1.32%	0.00%	100.00%
2010	78.42%	14.39%	5.93%	0.00%	1.26%	0.00%	100.00%
2011	77.80%	13.92%	6.73%	0.00%	1.55%	0.00%	100.00%
2012	79.75%	10.82%	6.04%	0.00%	3.40%	0.00%	100.00%
2013	80.59%	10.98%	6.67%	0.00%	1.76%	0.00%	100.00%
2014	78.45%	12.92%	6.28%	0.00%	2.34%	0.00%	100.00%
2015	82.28%	10.76%	5.80%	0.00%	1.16%	0.00%	100.00%

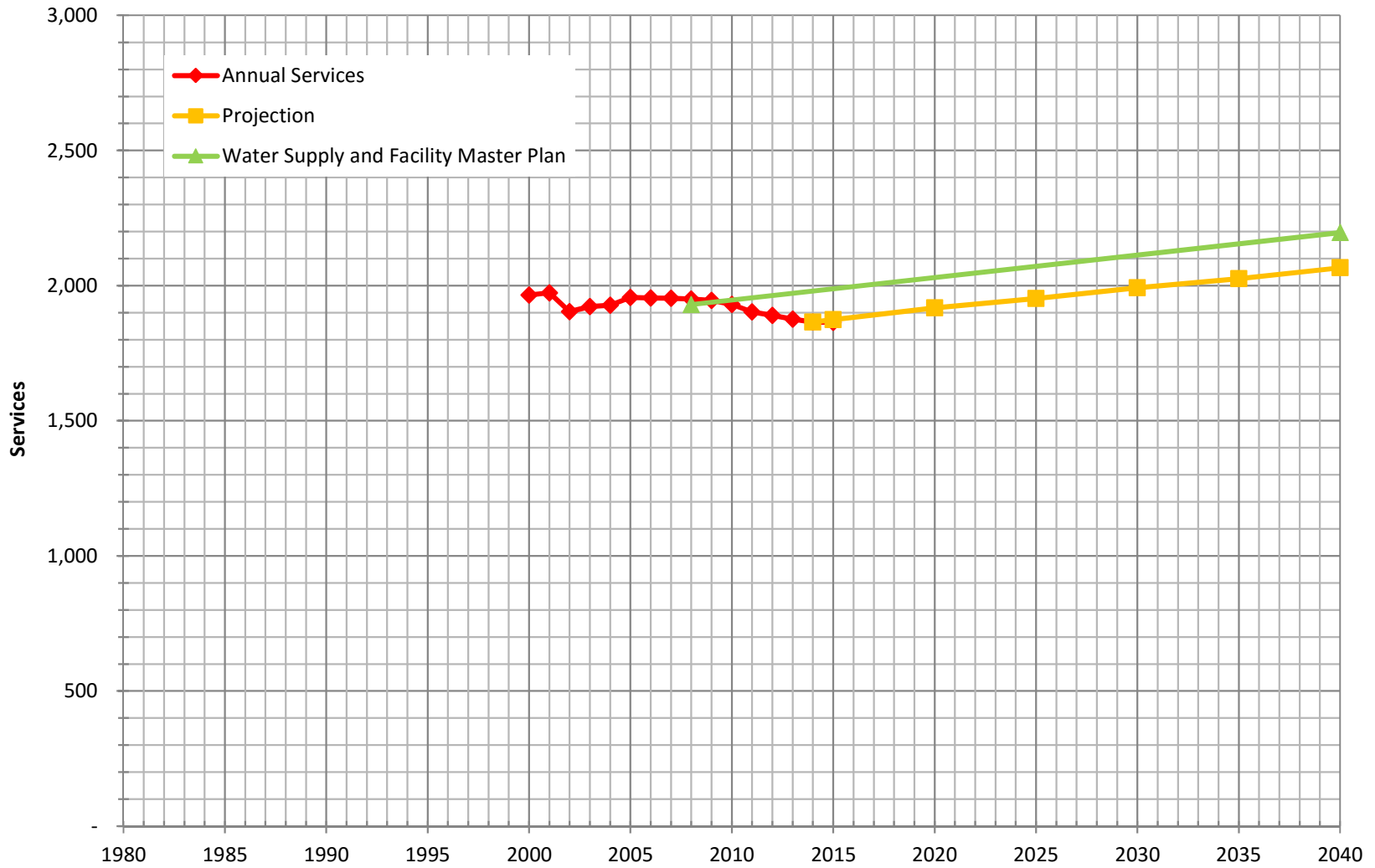
Percent of Total Demand by Type of Use (2015)



California Water Service Company - Redwood Valley District (consolidated)
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								
1993								
1994								
1995								
1996								
1997								
1998								
1999								
2000	59.26%	5.94%	1.21%	0.00%	0.42%	0.00%	33.17%	100.00%
2001	64.07%	6.99%	1.76%	0.00%	0.27%	0.00%	26.92%	100.00%
2002	66.76%	4.17%	2.10%	0.00%	0.46%	0.00%	26.51%	100.00%
2003	60.31%	9.94%	6.46%	0.00%	0.97%	0.00%	22.33%	100.00%
2004	60.61%	10.09%	6.07%	0.00%	1.26%	0.00%	21.98%	100.00%
2005	54.69%	10.06%	6.08%	0.00%	1.36%	0.00%	27.81%	100.00%
2006	52.96%	10.88%	5.90%	0.00%	1.34%	0.00%	28.92%	100.00%
2007	53.73%	9.32%	5.07%	0.00%	1.52%	0.00%	30.37%	100.00%
2008	57.44%	9.98%	6.62%	0.00%	0.89%	0.00%	25.07%	100.00%
2009	56.86%	10.63%	5.07%	0.00%	0.97%	0.00%	26.47%	100.00%
2010	59.73%	10.96%	4.52%	0.00%	0.96%	0.00%	23.83%	100.00%
2011	58.84%	10.53%	5.09%	0.00%	1.17%	0.00%	24.38%	100.00%
2012	54.04%	7.33%	4.09%	0.00%	2.30%	0.00%	32.24%	100.00%
2013	52.43%	7.14%	4.34%	0.00%	1.15%	0.00%	34.95%	100.00%
2014	62.23%	10.25%	4.98%	0.00%	1.86%	0.00%	20.68%	100.00%
2015	63.51%	8.30%	4.48%	0.00%	0.90%	0.00%	22.81%	100.00%

Historical & Projected Services

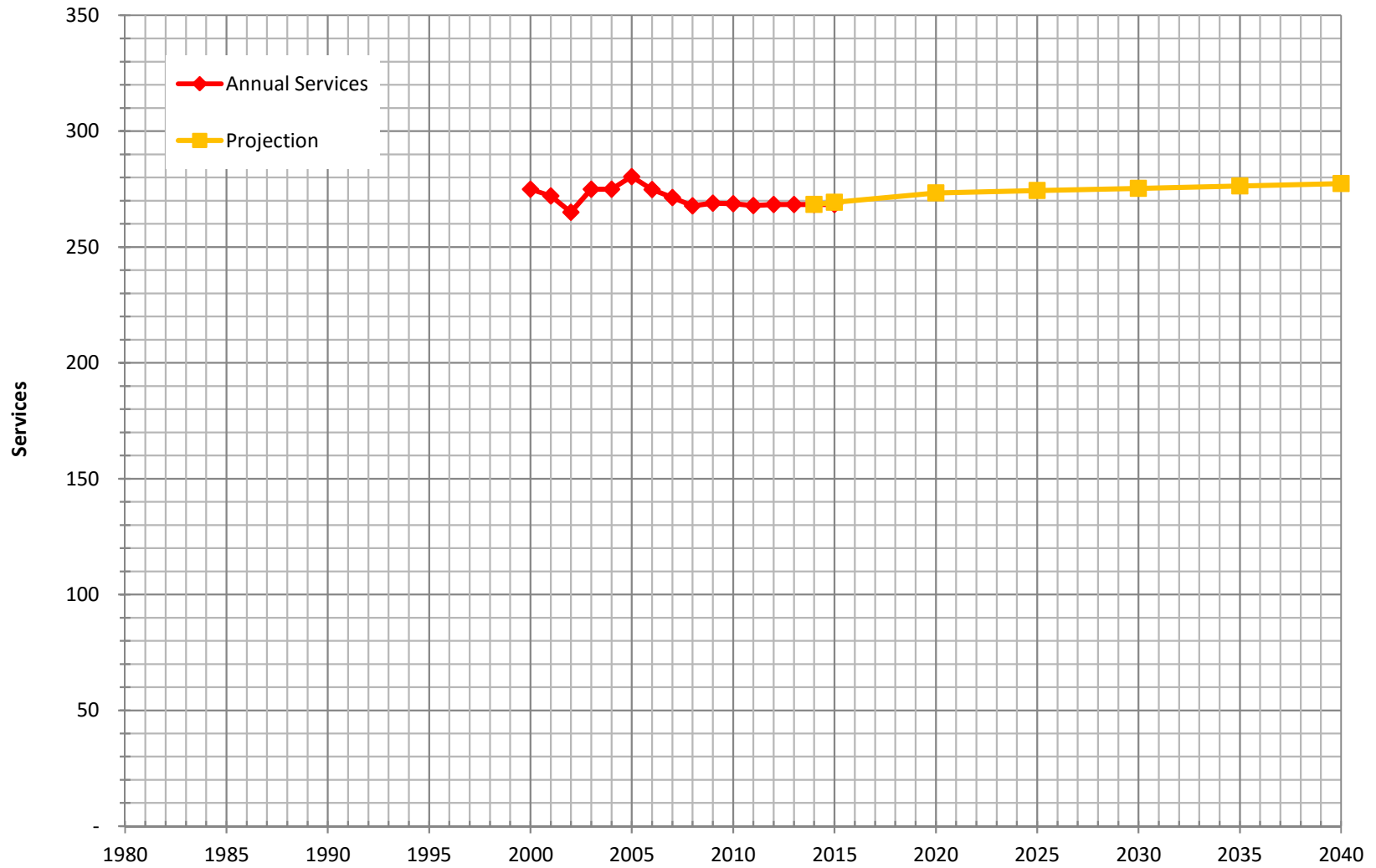


California Water Service Company - Redwood Valley District (consolidated)
Water Supply and Demand Analysis and Projections
Actual & Projected Annual Average Services

Customer Category	Selected Trend	Growth Rate	Actual Services				Projected Services					
			2000	2005	2010	Base Year 2014	2015	2020	2025	2030	2035	2040
SFR	SFR	0.36%	1,867	1,860	1,841	1,784	1,793	1,827	1,860	1,894	1,927	1,961
MFR	MFR	0.89%	18	17	17	16	16	18	18	19	19	20
COM	COM	0.91%	67	65	59	51	51	56	56	60	60	64
IND	IND		0	0	0	0	0	0	0	0	0	0
GOV	GOV	1.62%	14	15	14	14	14	17	18	19	20	21
OTH	OTH		0	0	0	0	0	0	0	0	0	0
TOTAL	Average growth rate 2011-2040	0.39%	1,966	1,957	1,931	1,865	1,874	1,918	1,952	1,992	2,026	2,066

Notes:

Historical & Projected Services (Armstrong System)



California Water Service Company - Redwood Valley District (Armstrong System)
Water Supply and Demand Analysis and Projections

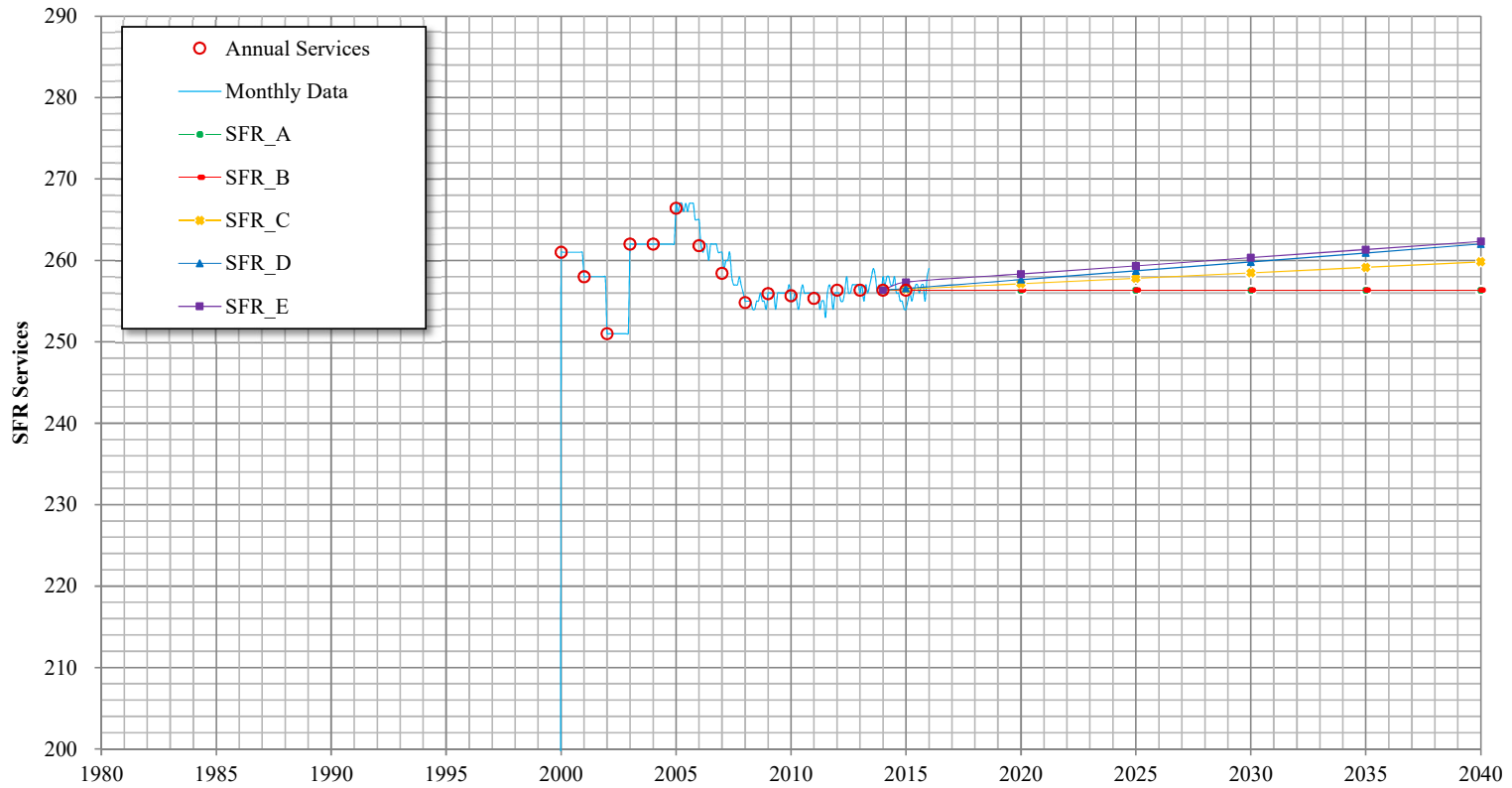
Customer Category	Selected Trend		Growth Rate	Actual Services				Projected Services					
				2000	2005	2010	Base Year 2014	2015	2020	2025	2030	2035	2040
SFR	SFR_E	WSFMP	0.09%	261	266	256	256	257	258	259	260	261	262
MFR	MFR_E	WSFMP	1.28%	3	3	3	3	3	4	4	4	4	4
COM	COM_E	WSFMP	0.64%	8	8	7	6	6	7	7	7	7	7
IND													
GOV	GOV_E	WSFMP	1.28%	3	3	3	3	3	4	4	4	4	4
OTH													
TOTAL	Average growth rate 2012-2040		0.13%	275	280	269	268	269	273	274	275	276	277

Notes:

California Water Service Company - Redwood Valley District (Armstrong System)

Water Supply and Demand Analysis and Projections

SFR Historical & Projected Services

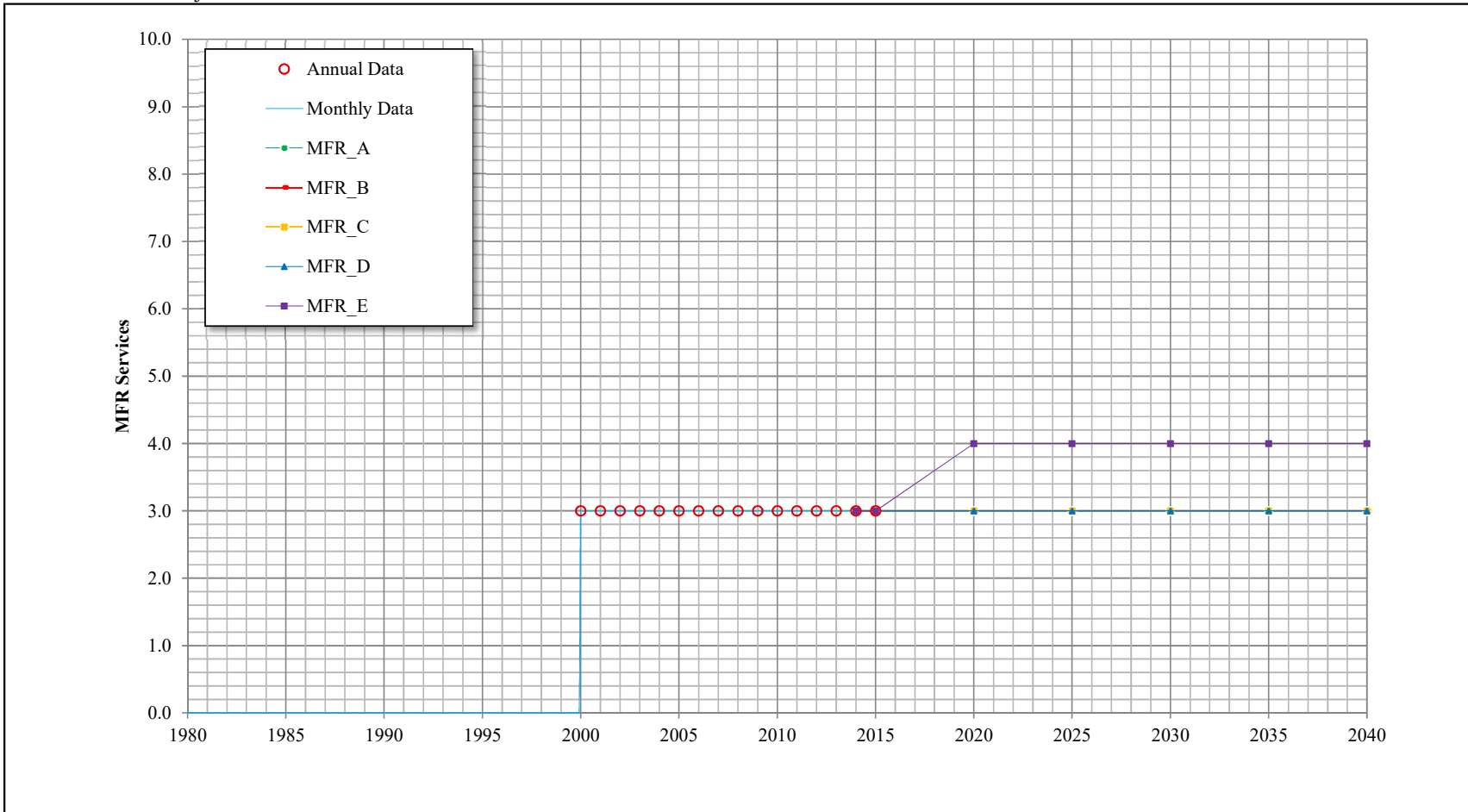


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2014	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
SFR	SFR_A	Zero Growth Rate	261	266	256	256	256	256	256	256	256	256
	SFR_B	3 Yr. Avg.	Avg. Serv. per 5 year:		0.0	256	256	256	256	256	256	256
	SFR_C	5 Yr. Avg.	Avg. Serv. per 5 year:		0.7	256	256	257	258	258	259	260
	SFR_D	7 Yr. Avg.	Avg. Serv. per 5 year:		1.1	256	257	258	259	260	261	262
	> SFR_E	WSFMP	Avg. Serv. per 5 year:		1.2	256	257	258	259	260	261	262

California Water Service Company - Redwood Valley District (Armstrong System)

Water Supply and Demand Analysis and Projections

MFR Historical & Projected Services

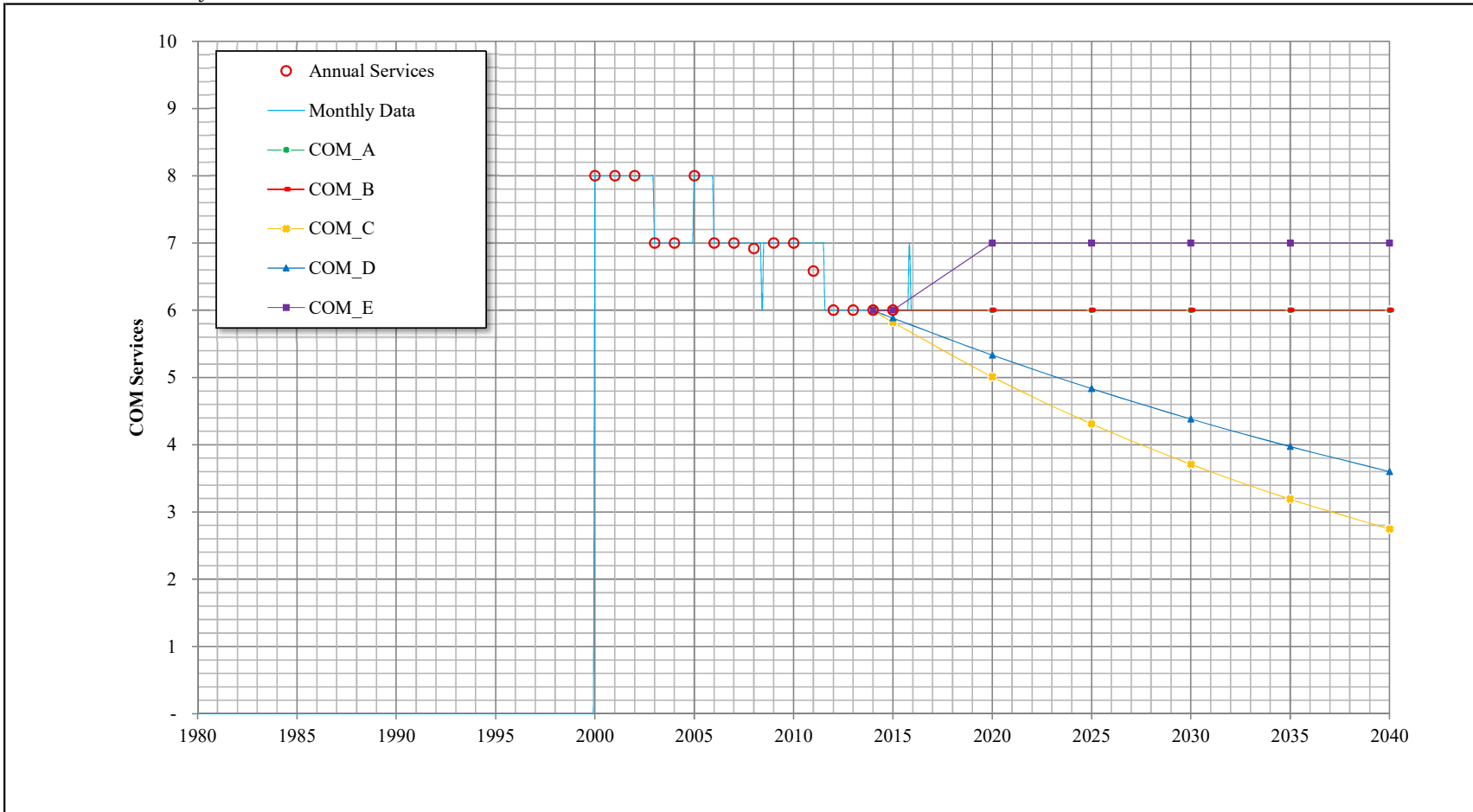


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2014	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
MFR	MFR_A	Zero Growth Rate	3	3	3	3	3	3	3	3	3	3
	MFR_B	3 Yr. Avg.	Avg. Serv. per 5 year:		0.0	3	3	3	3	3	3	3
	MFR_C	5 Yr. Avg.	Avg. Serv. per 5 year:		0.0	3	3	3	3	3	3	3
	MFR_D	7 Yr. Avg.	Avg. Serv. per 5 year:		0.0	3	3	3	3	3	3	3
	> MFR_E	WSFMP	Avg. Serv. per 5 year:		0.2	3	4	4	4	4	4	4

California Water Service Company - Redwood Valley District (Armstrong System)

Water Supply and Demand Analysis and Projections

COM Historical & Projected Services

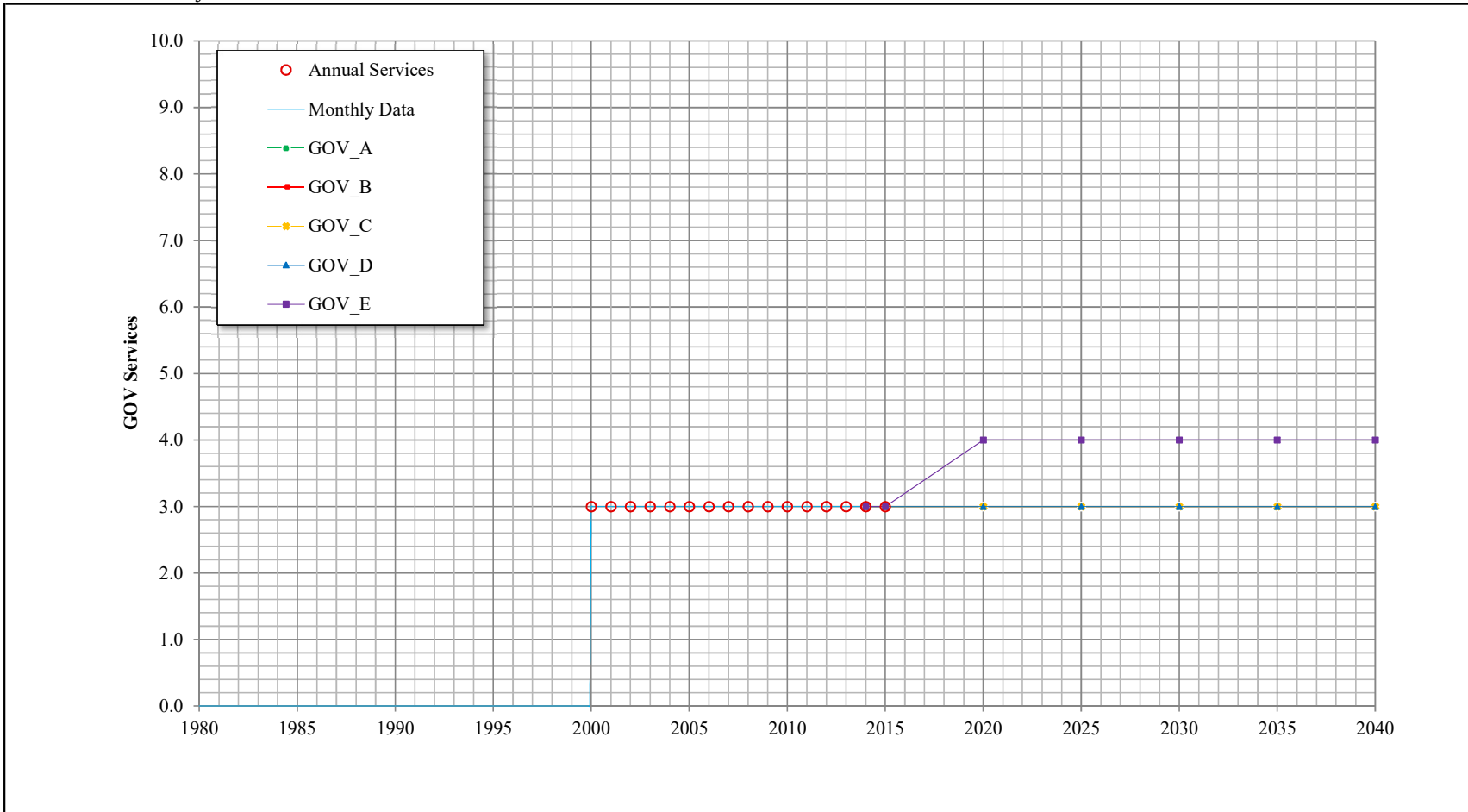


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2014	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
COM			8	8	7	6	6	6	6	6	6	6
	COM_A	Zero Growth Rate	0.00%	Avg. Serv. per 5 year: 0.0		6	6	6	6	6	6	6
	COM_B	3 Yr. Avg.	0.00%	Avg. Serv. per 5 year: -0.6		6	6	5	4	4	3	3
	COM_C	5 Yr. Avg.	-2.96%	Avg. Serv. per 5 year: -0.5		6	6	5	5	4	4	4
	COM_D	7 Yr. Avg.	-1.94%	Avg. Serv. per 5 year: 0.2		6	6	7	7	7	7	7
	> COM_E	WSFMP	0.64%			6	6	7	7	7	7	7

California Water Service Company - Redwood Valley District (Armstrong System)

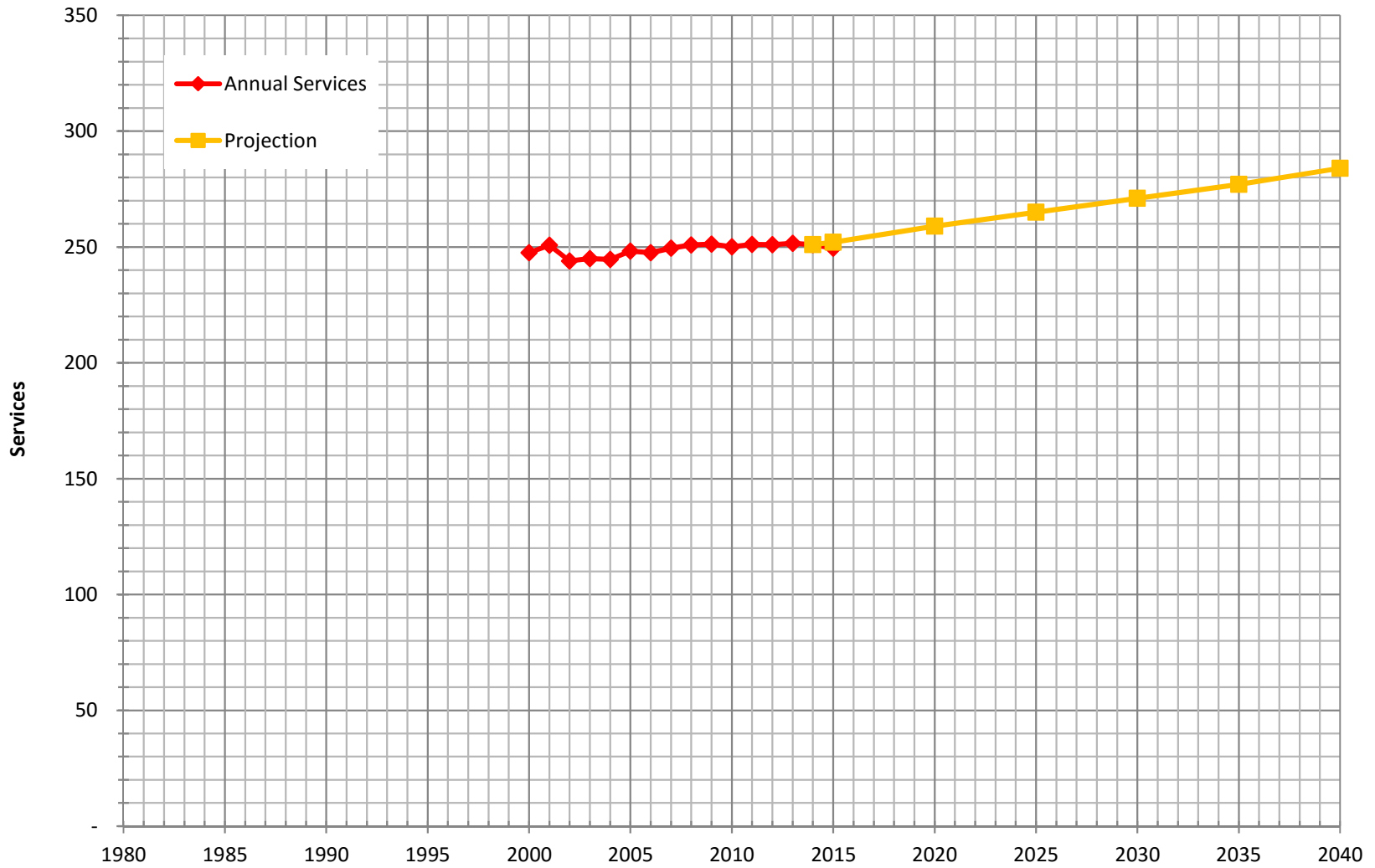
Water Supply and Demand Analysis and Projections

GOV Historical & Projected Services



Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2014	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
GOV			3	3	3	3	3	3	3	3	3	3
	GOV_A	Zero Growth Rate	0.00%			0.0	3	3	3	3	3	3
	GOV_B	3 Yr. Avg.	0.00%	Avg. Serv. per 5 year:		0.0	3	3	3	3	3	3
	GOV_C	5 Yr. Avg.	0.00%	Avg. Serv. per 5 year:		0.0	3	3	3	3	3	3
	GOV_D	7 Yr. Avg.	0.00%	Avg. Serv. per 5 year:		0.0	3	3	3	3	3	3
	> GOV_E	WSFMP	1.28%	Avg. Serv. per 5 year:		0.2	3	4	4	4	4	4

Historical & Projected Services (Coast Springs Water System)



California Water Service Company - Redwood Valley District (Coast Springs Water System)
Water Supply and Demand Analysis and Projections

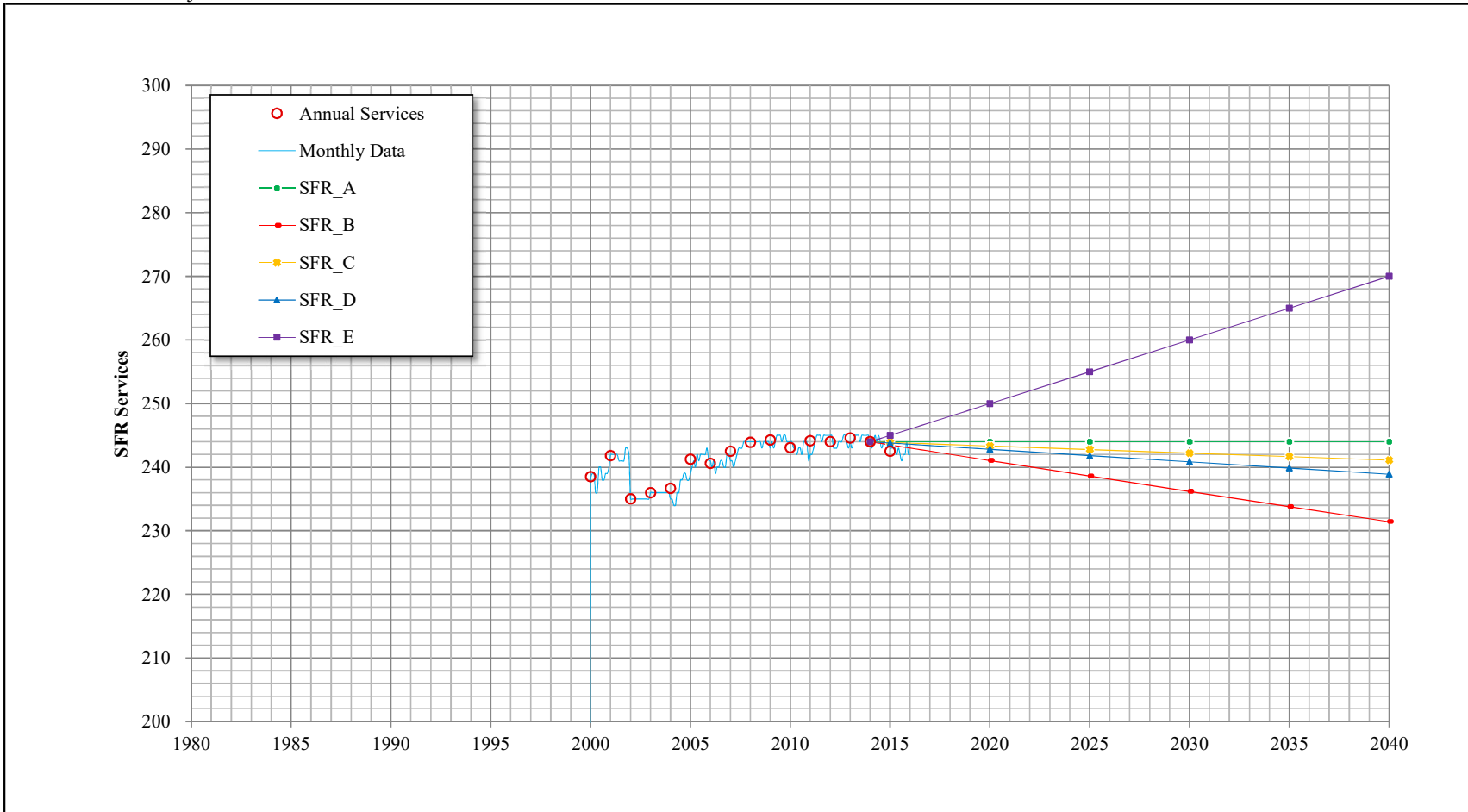
Customer Category	Selected Trend		Growth Rate	Actual Services				Projected Services					
				2000	2005	2010	Base Year 2014	2015	2020	2025	2030	2035	2040
SFR	SFR_E	WSFMP	0.39%	239	241	243	244	245	250	255	260	265	270
MFR													
COM	COM_E	WSFMP	1.96%	7	5	5	5	5	6	6	7	7	8
IND													
GOV	GOV_E	WSFMP	4.94%	2	2	2	2	2	3	4	4	5	6
OTH													
TOTAL	Average growth rate 2012-2040		0.48%	248	248	250	251	252	259	265	271	277	284

Notes:

California Water Service Company - Redwood Valley District (Coast Springs Water System)

Water Supply and Demand Analysis and Projections

SFR Historical & Projected Services

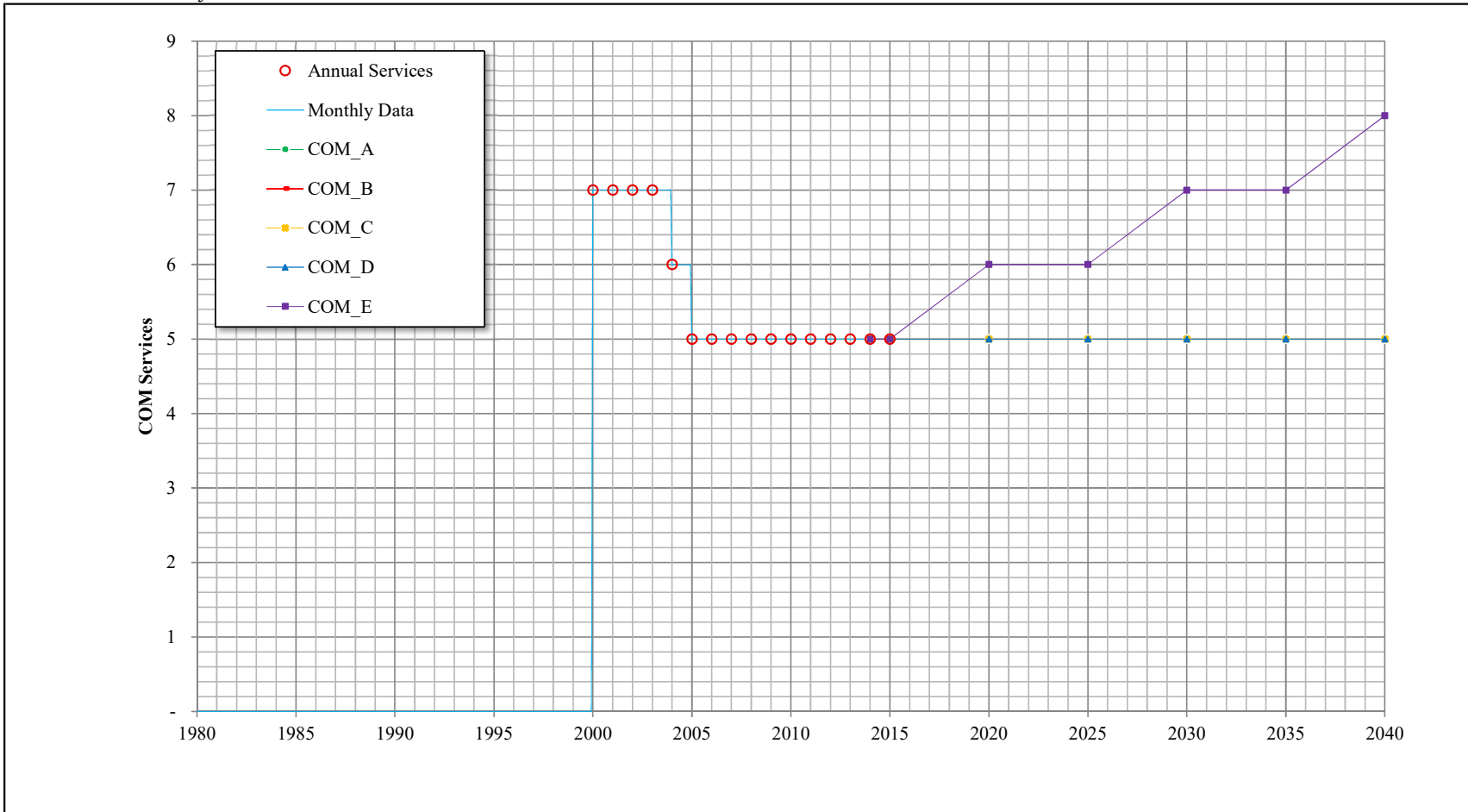


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2014	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
SFR	SFR_A	Zero Growth Rate	239	241	243	244	244	244	244	244	244	244
	SFR_B	3 Yr. Avg.	Avg. Serv. per year: -0.5		244	244	241	239	236	234	231	
	SFR_C	5 Yr. Avg.	Avg. Serv. per year: -0.1		244	244	243	243	242	242	241	
	SFR_D	7 Yr. Avg.	Avg. Serv. per year: -0.2		244	244	243	242	241	240	239	
	> SFR_E	WSFMP	0.39%	Avg. Serv. per year: 1.0		244	245	250	255	260	265	270

California Water Service Company - Redwood Valley District (Coast Springs Water System)

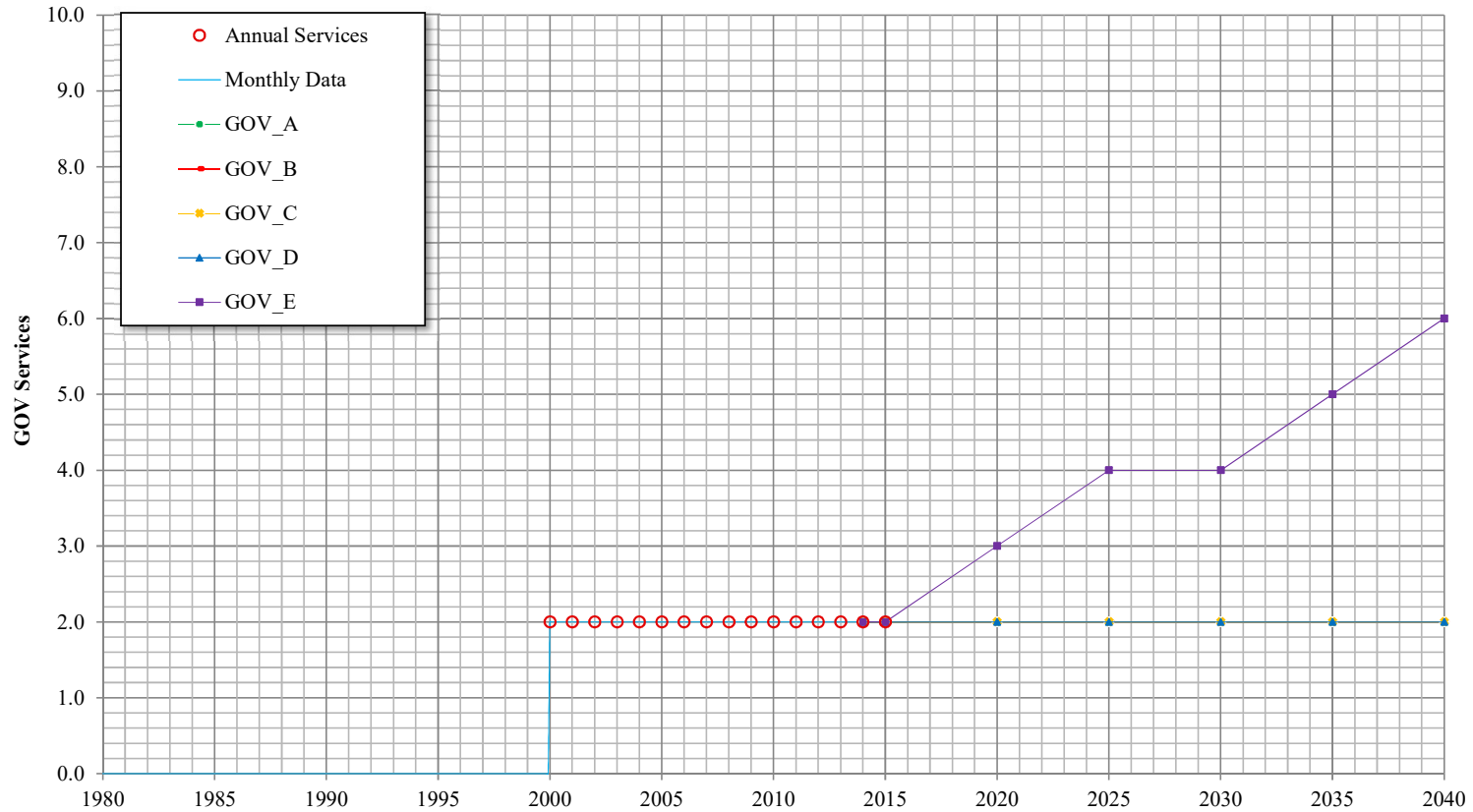
Water Supply and Demand Analysis and Projections

COM Historical & Projected Services



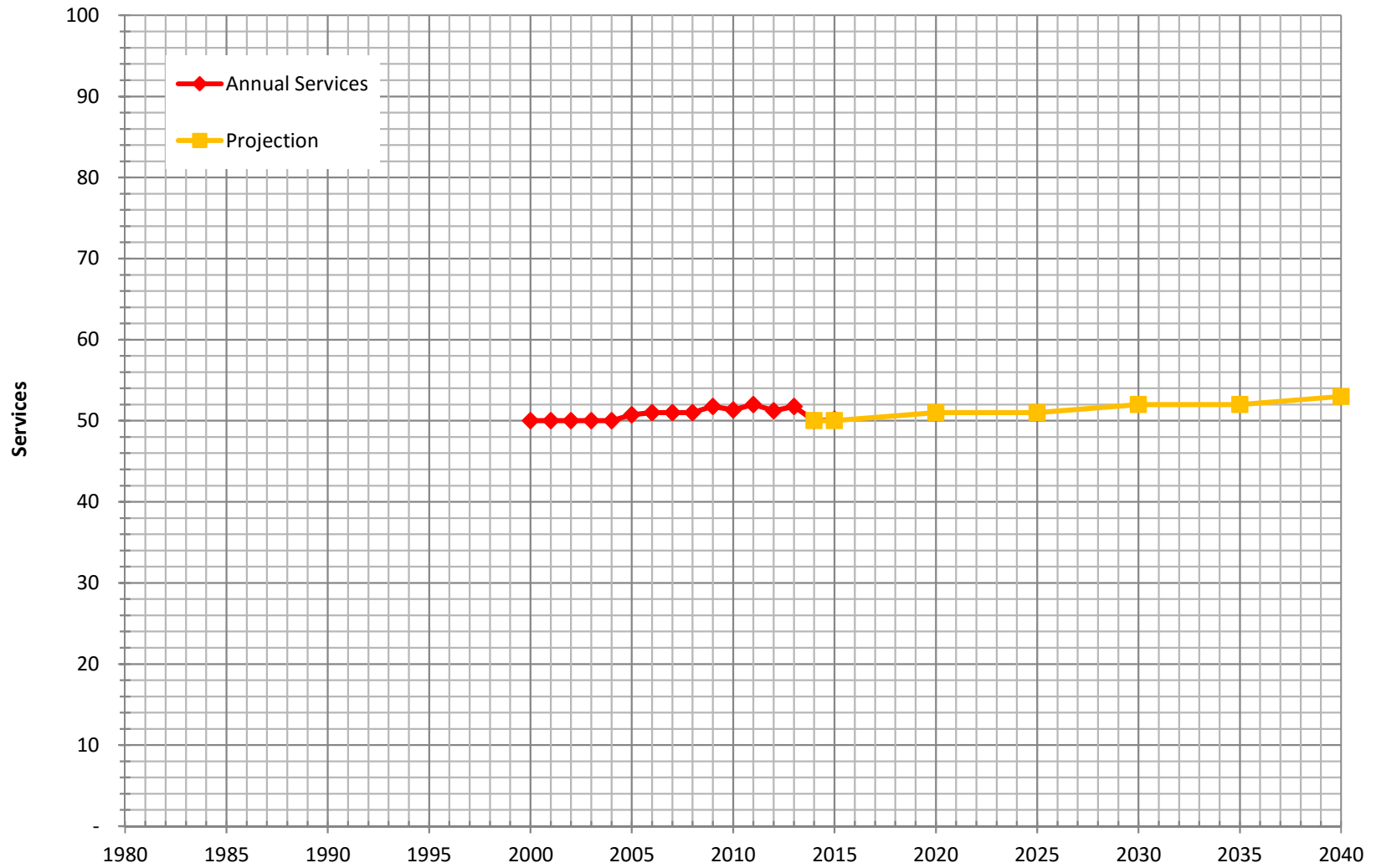
Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2014	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
COM			7	5	5	5	5	5	5	5	5	5
	COM_A	Zero Growth Rate					5	5	5	5	5	5
	COM_B	3 Yr. Avg.					5	5	5	5	5	5
	COM_C	5 Yr. Avg.					5	5	5	5	5	5
	COM_D	7 Yr. Avg.					5	5	5	5	5	5
	> COM_E	WSFMP					5	6	6	7	7	8

California Water Service Company - Redwood Valley District (Coast Springs Water System)
Water Supply and Demand Analysis and Projections
 GOV Historical & Projected Services



Customer Category	Trend	Growth Rate	Actual				Projected						
			2000	2005	2010	Base Year 2014	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	0.00%	Avg. Serv. per 10 year:		0.0	2	2	2	2	2	2	2
	GOV_B	3 Yr. Avg.	0.00%	Avg. Serv. per 10 year:		0.0	2	2	2	2	2	2	2
	GOV_C	5 Yr. Avg.	0.00%	Avg. Serv. per 10 year:		0.0	2	2	2	2	2	2	2
	GOV_D	7 Yr. Avg.	0.00%	Avg. Serv. per 10 year:		0.0	2	2	2	2	2	2	2
	> GOV_E	WSFMP	4.94%	Avg. Serv. per 10 year:		1.5	2	3	4	4	5	6	

Historical & Projected Services (Hawkins Water System)



California Water Service Company - Redwood Valley District (Hawkins Water System)
Water Supply and Demand Analysis and Projections

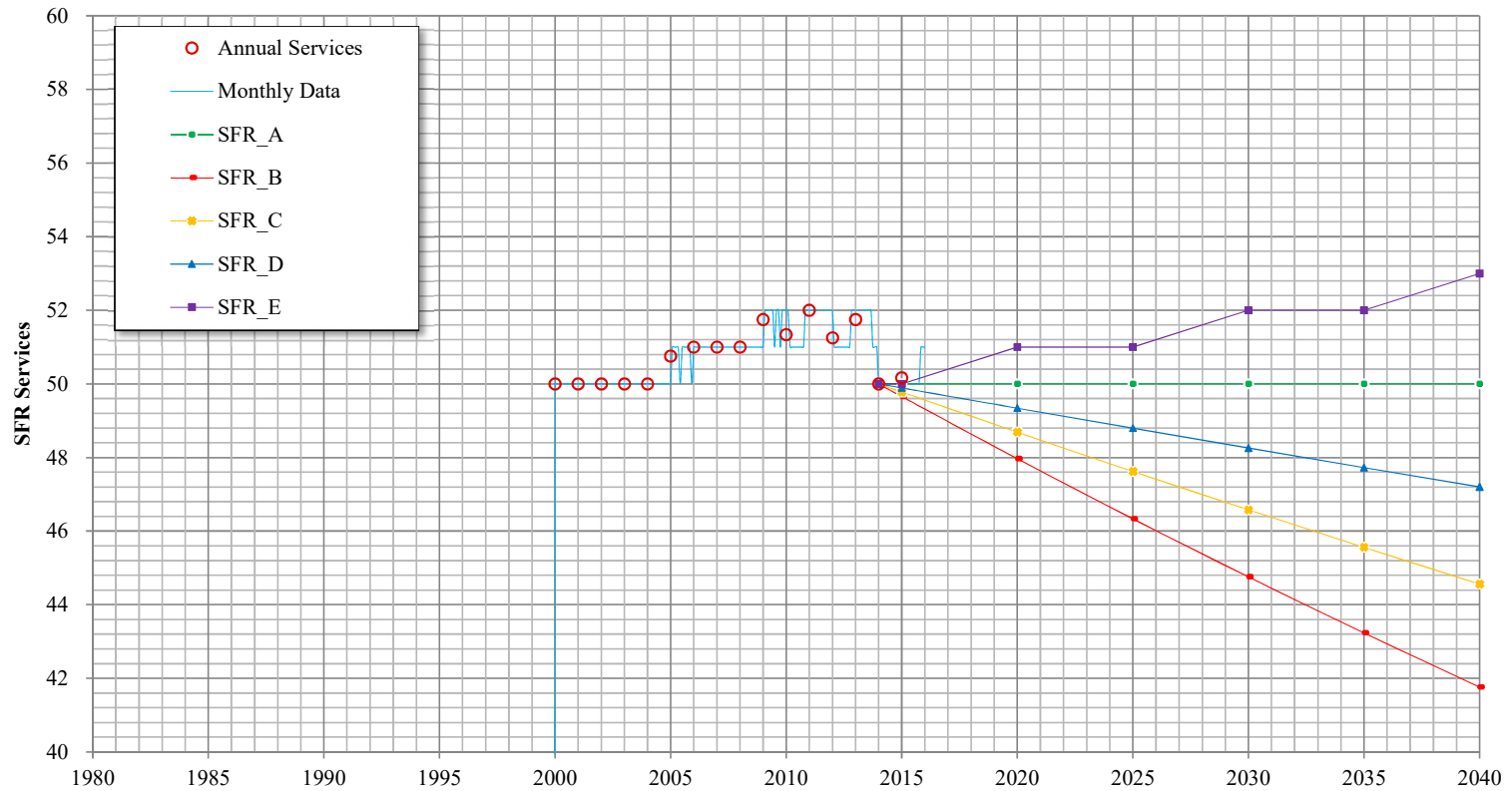
Customer Category	Selected Trend		Growth Rate	Actual Services				Projected Services					
				2000	2005	2010	Base Year 2014	2015	2020	2025	2030	2035	2040
SFR	SFR_E	WSFMP	0.23%	50	51	51	50	50	51	51	52	52	53
MFR	0	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0
COM	0	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0
IND	0	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0
GOV	0	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0
OTH	0	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0
TOTAL	Average growth rate 2012-2040		0.23%	50	51	51	50	50	51	51	52	52	53

Notes:

California Water Service Company - Redwood Valley District (Hawkins Water System)

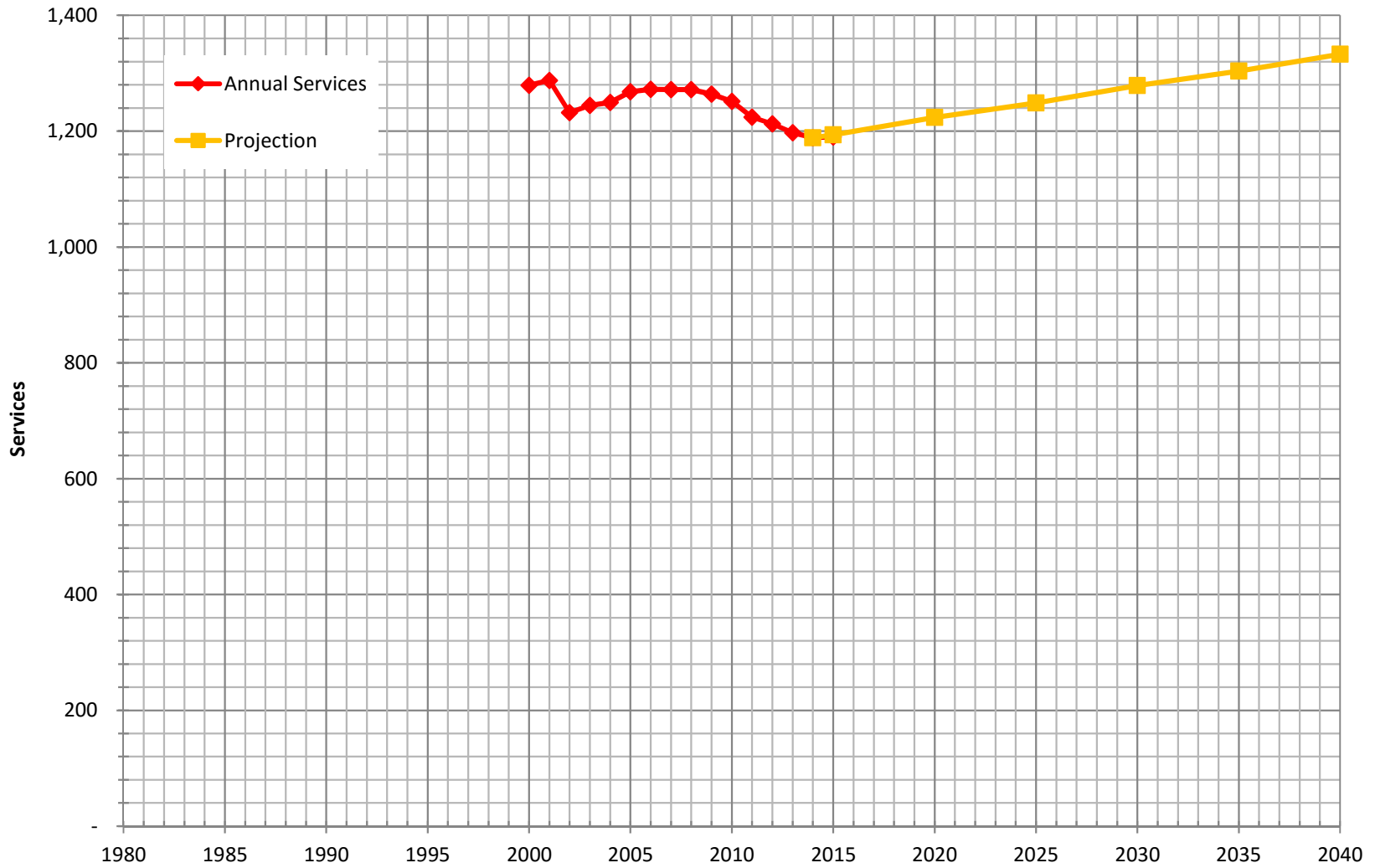
Water Supply and Demand Analysis and Projections

SFR Historical & Projected Services



Customer Category	Trend	Growth Rate	Actual			Base Year 2014	Projected					
			2000	2005	2010		Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
SFR			50	51	51	50	50	50	50	50	50	50
	SFR_A	Zero Growth Rate	0.00%	Avg. Serv. per 10 year: -3.2		50	50	50	50	50	50	50
	SFR_B	3 Yr. Avg.	-0.69%	Avg. Serv. per 10 year: -2.1		50	50	48	46	45	43	42
	SFR_C	5 Yr. Avg.	-0.44%	Avg. Serv. per 10 year: -1.1		50	50	49	48	47	46	45
	SFR_D	7 Yr. Avg.	-0.22%	Avg. Serv. per 10 year: 1.2		50	50	49	49	48	48	47
	> SFR_E	WSFMP	0.23%			50	50	51	51	52	52	53

Historical & Projected Services (Lucerne Water System)



California Water Service Company - Redwood Valley District (Lucerne Water System)
Water Supply and Demand Analysis and Projections

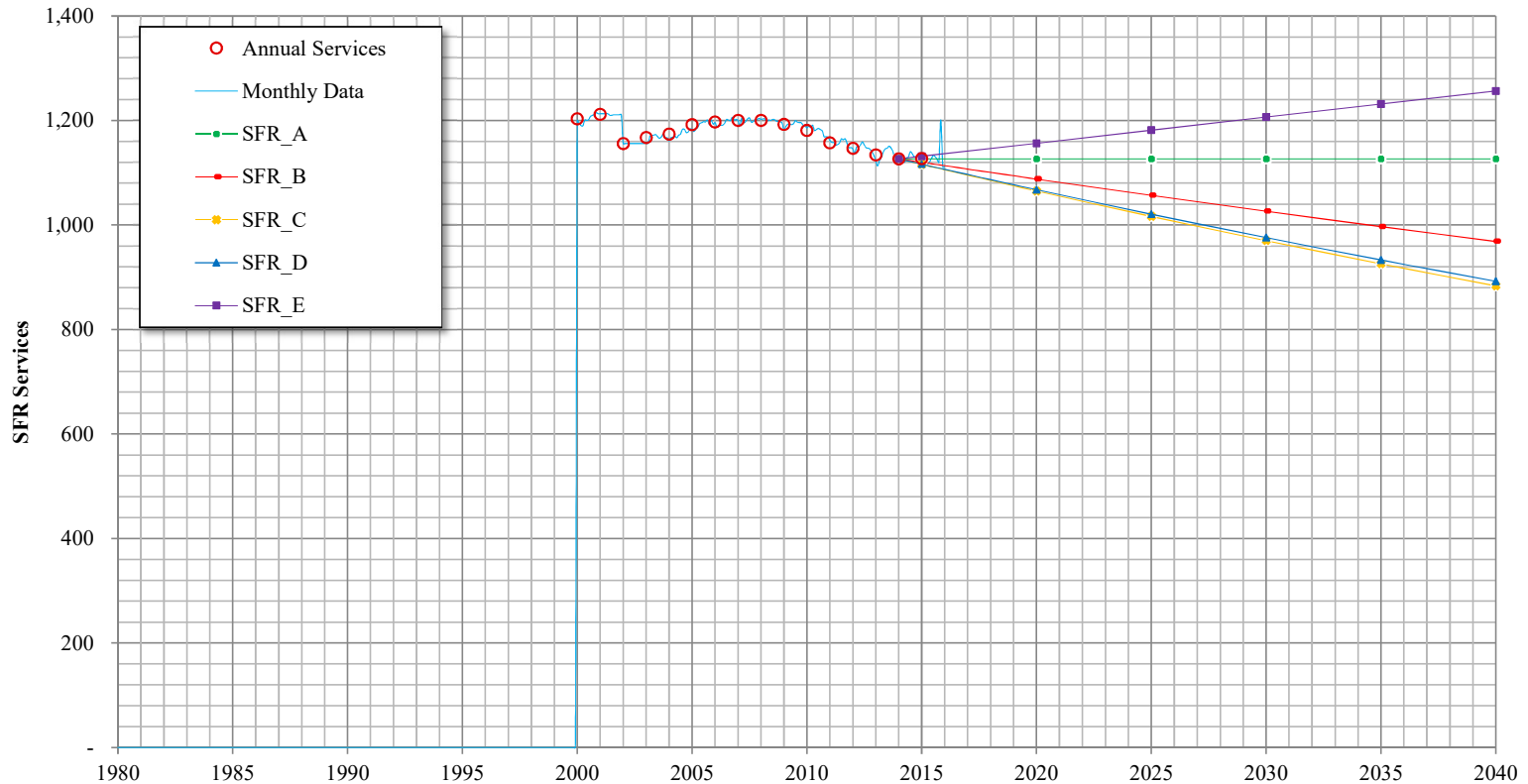
Customer Category	Selected Trend		Growth Rate	Actual Services				Projected Services					
				2000	2005	2010	Base Year 2014	2015	2020	2025	2030	2035	2040
SFR	SFR_E	WSFMP	-0.56%	1,203	1,192	1,181	1,127	1,132	1,157	1,182	1,207	1,232	1,257
MFR	MFR_E	WSFMP	0.82%	15	14	14	13	13	14	14	15	15	16
COM	COM_E	10 Yr. Avg.	-2.44%	52	52	47	40	40	43	43	46	46	49
IND													
GOV	GOV_E	10 Yr. Avg.	0.81%	9	10	9	9	9	10	10	11	11	11
OTH													
TOTAL	Average growth rate 2012-2040		0.44%	1,279	1,268	1,251	1,189	1,194	1,224	1,249	1,279	1,304	1,333

Notes:

California Water Service Company - Redwood Valley District (Lucerne Water System)

Water Supply and Demand Analysis and Projections

SFR Historical & Projected Services

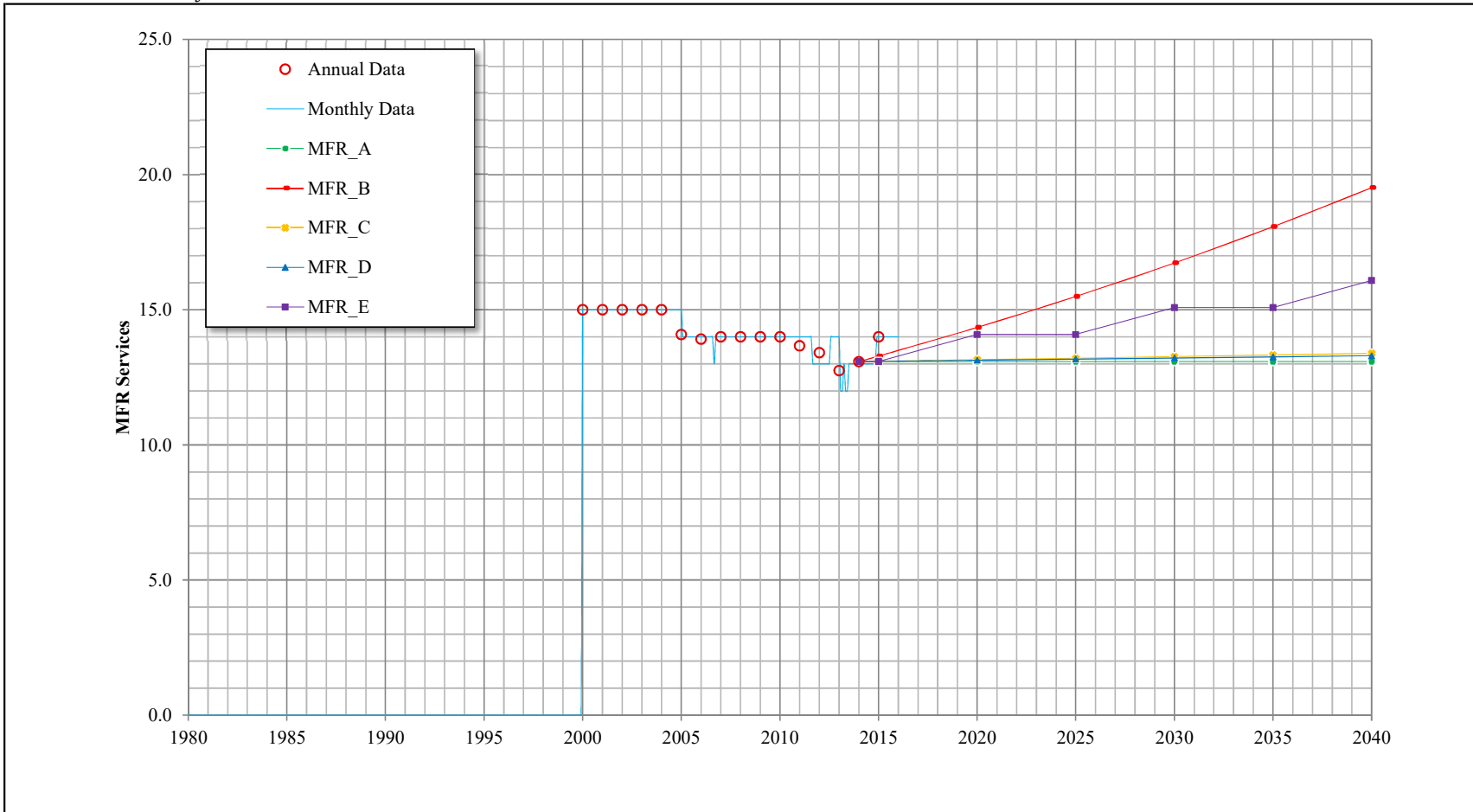


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2014	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
SFR	SFR_A	Zero Growth Rate	1,203	1,192	1,181	1,127	1,127	1,127	1,127	1,127	1,127	1,127
	SFR_B	3 Yr. Avg.	Avg. Serv. per year: -6.1		1,127	1,127	1,127	1,088	1,057	1,026	997	968
	SFR_C	5 Yr. Avg.	Avg. Serv. per year: -9.3		1,127	1,127	1,116	1,065	1,016	970	926	884
	SFR_D	7 Yr. Avg.	Avg. Serv. per year: -9.0		1,127	1,127	1,116	1,067	1,021	976	933	892
	> SFR_E	WSFMP	Avg. Serv. per year: 5.0		1,127	1,127	1,132	1,157	1,182	1,207	1,232	1,257

California Water Service Company - Redwood Valley District (Lucerne Water System)

Water Supply and Demand Analysis and Projections

MFR Historical & Projected Services

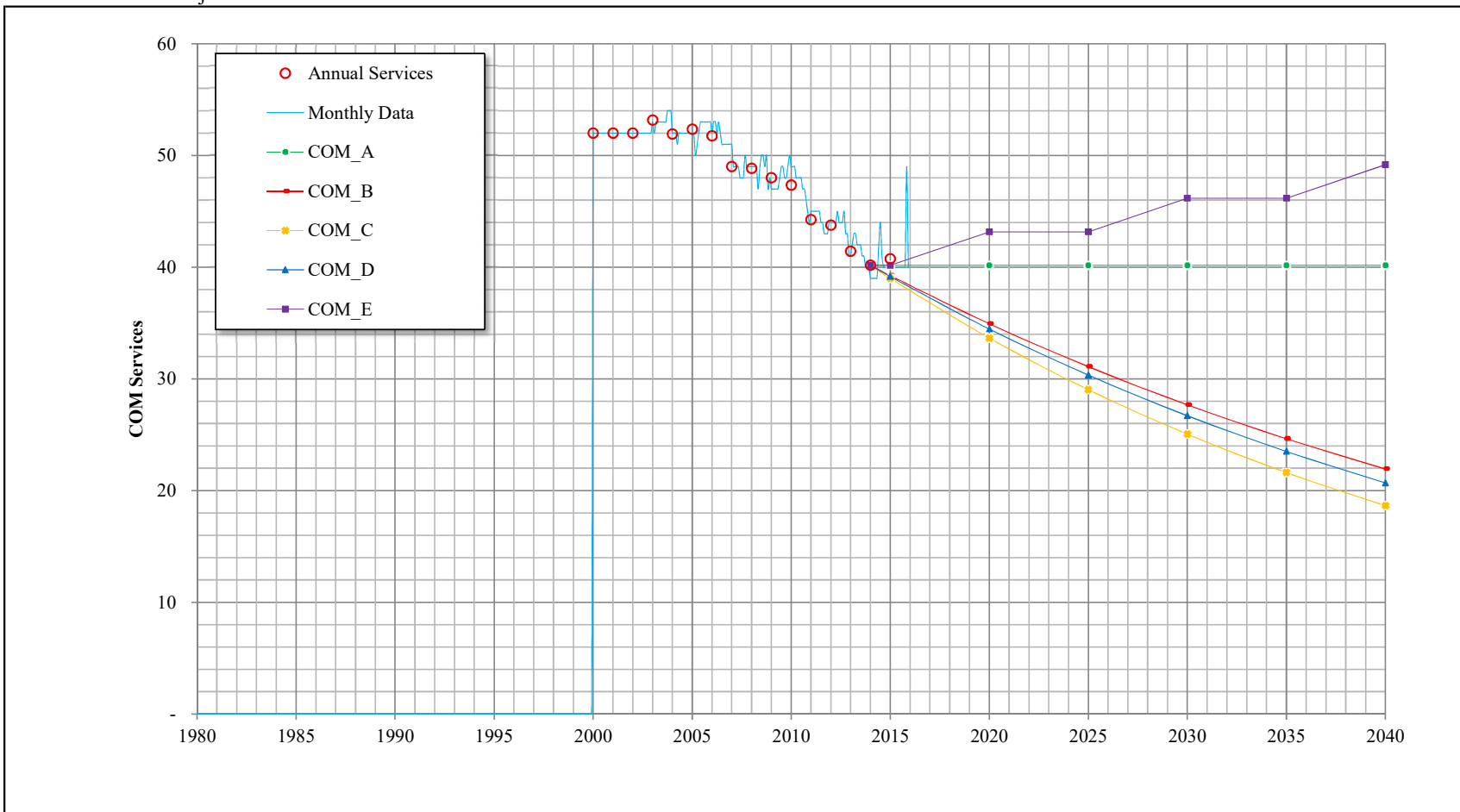


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2014	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
MFR	MFR_A	Zero Growth Rate	15	14	14	13	13	13	13	13	13	13
	MFR_B	3 Yr. Avg.	Avg. Serv. per 10 year:		2.5	13	13	14	15	17	18	20
	MFR_C	5 Yr. Avg.	Avg. Serv. per 10 year:		0.1	13	13	13	13	13	13	13
	MFR_D	7 Yr. Avg.	Avg. Serv. per 10 year:		0.1	13	13	13	13	13	13	13
	> MFR_E	WSFMP	Avg. Serv. per 10 year:		1.2	13	13	14	14	15	15	16

California Water Service Company - Redwood Valley District (Lucerne Water System)

Water Supply and Demand Analysis and Projections

COM Historical & Projected Services

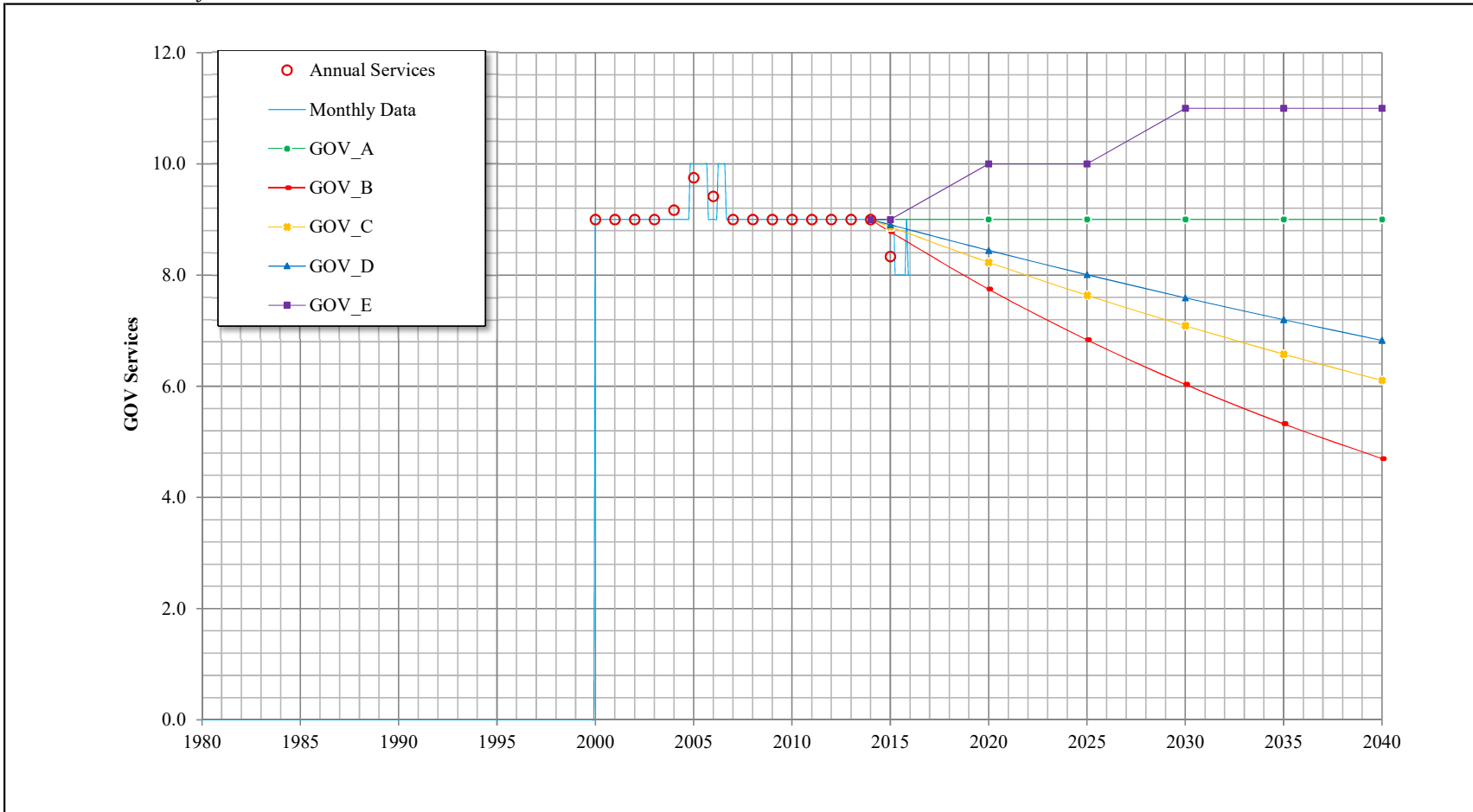


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2014	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
COM			52	52	47	40	40	40	40	40	40	40
	COM_A	Zero Growth Rate	0.00%	Avg. Serv. per 10 year:		-7.0	40	40	40	40	40	40
	COM_B	3 Yr. Avg.	-2.30%	Avg. Serv. per 10 year:		-8.3	40	39	35	31	28	25
	COM_C	5 Yr. Avg.	-2.91%	Avg. Serv. per 10 year:		-7.5	40	39	34	29	25	22
	COM_D	7 Yr. Avg.	-2.52%	Avg. Serv. per 10 year:		3.5	40	39	34	30	27	24
	> COM_E	10 Yr. Avg.	-2.44%	Avg. Serv. per 10 year:			40	40	43	43	46	46

California Water Service Company - Redwood Valley District (Lucerne Water System)

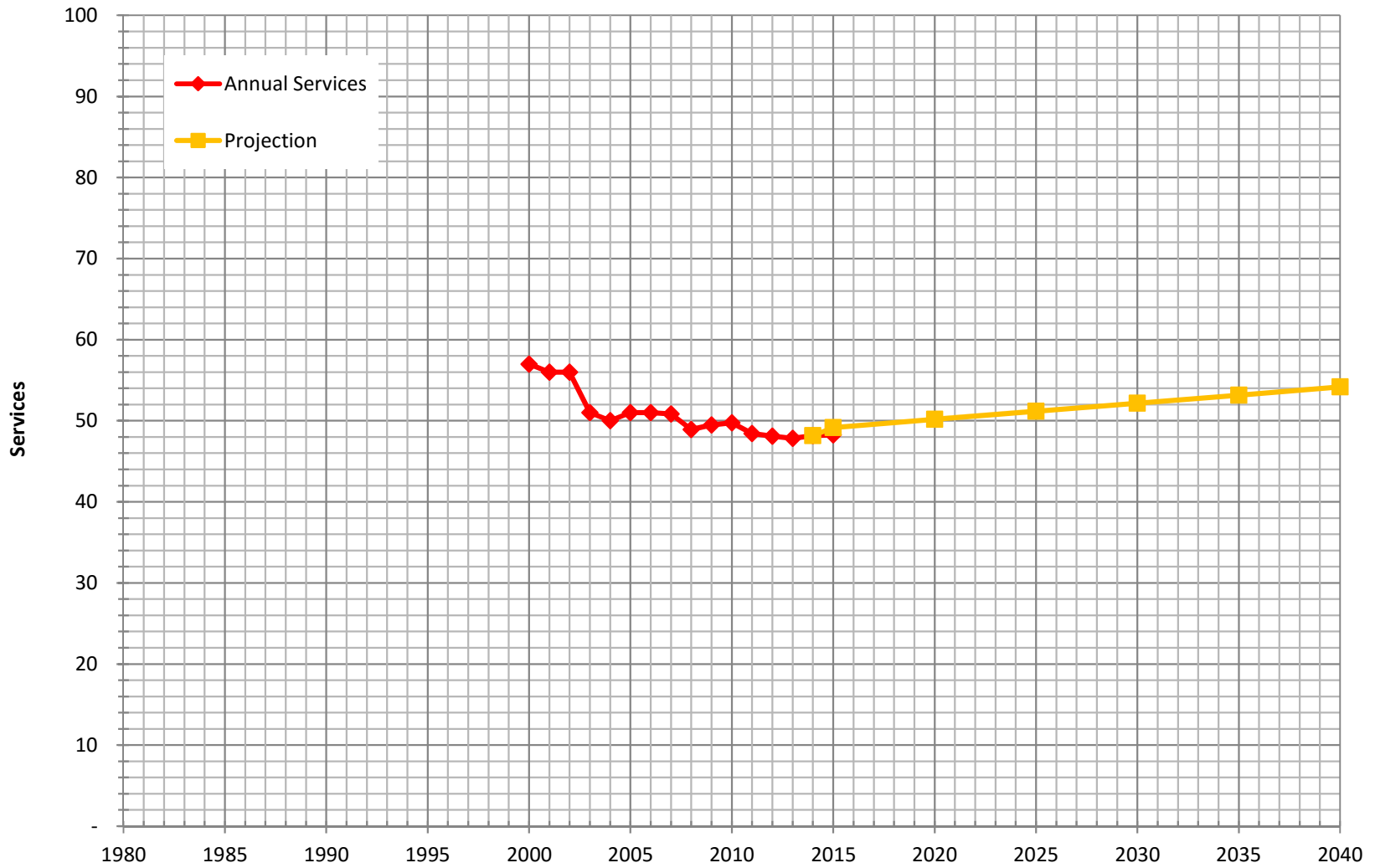
Water Supply and Demand Analysis and Projections

GOV Historical & Projected Services



Customer Category	Trend	Growth Rate	Actual				Projected						
			2000	2005	2010	Base Year 2014	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040	
GOV			9	10	9	9	9	9	9	9	9	9	
	GOV_A	Zero Growth Rate	0.00%	Avg. Serv. per 15 year:		-2.5	9	9	9	7	6	5	5
	GOV_B	3 Yr. Avg.	-2.47%	Avg. Serv. per 15 year:		-1.7	9	9	8	8	7	7	6
	GOV_C	5 Yr. Avg.	-1.48%	Avg. Serv. per 15 year:		-1.3	9	9	8	8	8	7	7
	GOV_D	7 Yr. Avg.	-1.06%	Avg. Serv. per 15 year:		1.2	9	9	8	8	8	7	7
	> GOV_E	10 Yr. Avg.	0.81%	Avg. Serv. per 15 year:		1.2	9	9	10	10	11	11	11

Historical & Projected Services (Hoel Heights Water System)



California Water Service Company - Redwood Valley District (Noel Heights Water System)
Water Supply and Demand Analysis and Projections

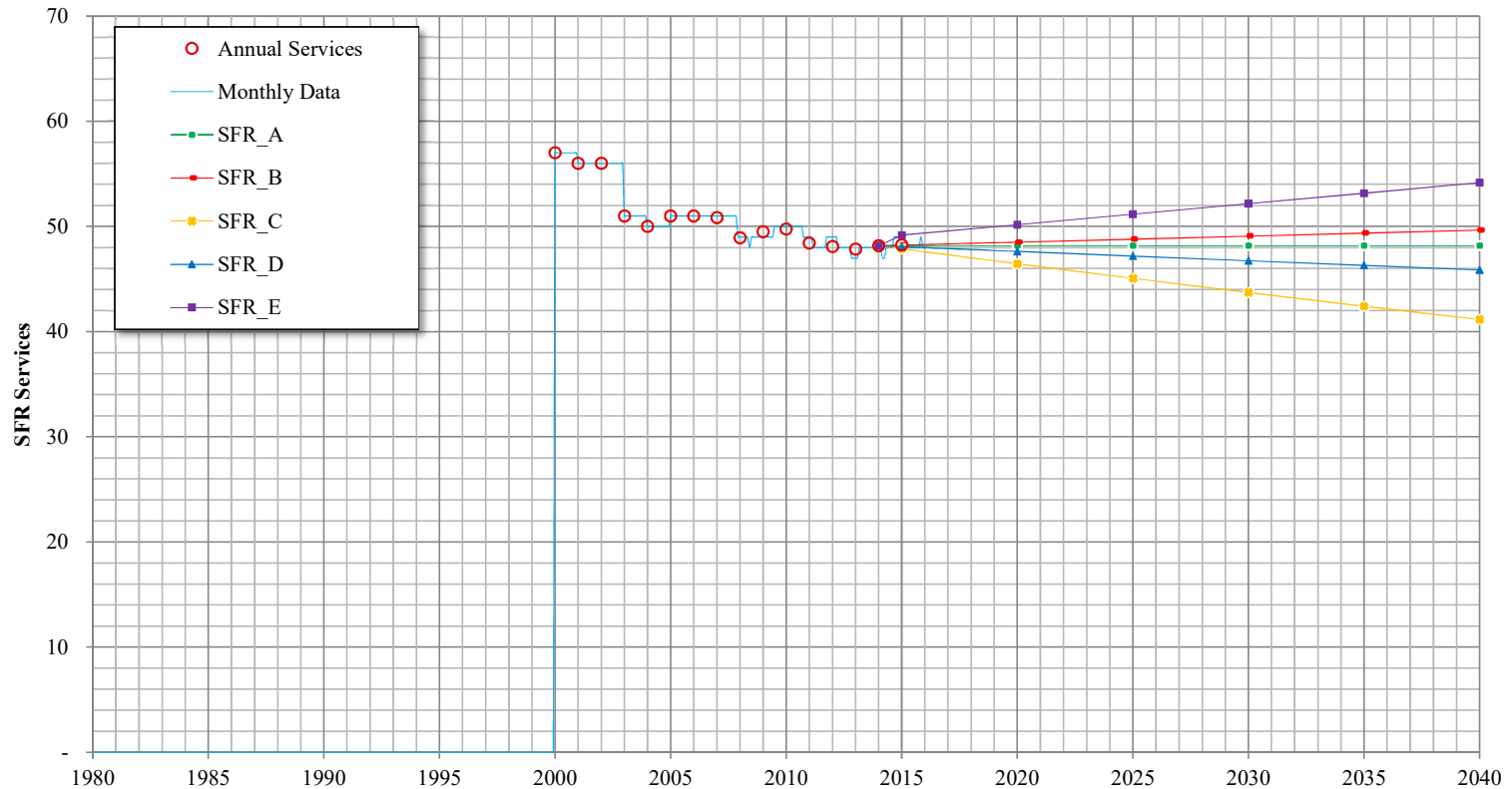
Customer Category	Selected Trend		Growth Rate	Actual Services				Projected Services					
				2000	2005	2010	Base Year 2014	2015	2020	2025	2030	2035	2040
SFR	SFR_E	WSFMP	-0.54%	57	51	50	48	49	50	51	52	53	54
MFR													
COM													
IND													
GOV													
OTH													
TOTAL	Average growth rate 2012-2040		0.46%	57	51	50	48	49	50	51	52	53	54

Notes:

California Water Service Company - Redwood Valley District (Noel Heights Water System)

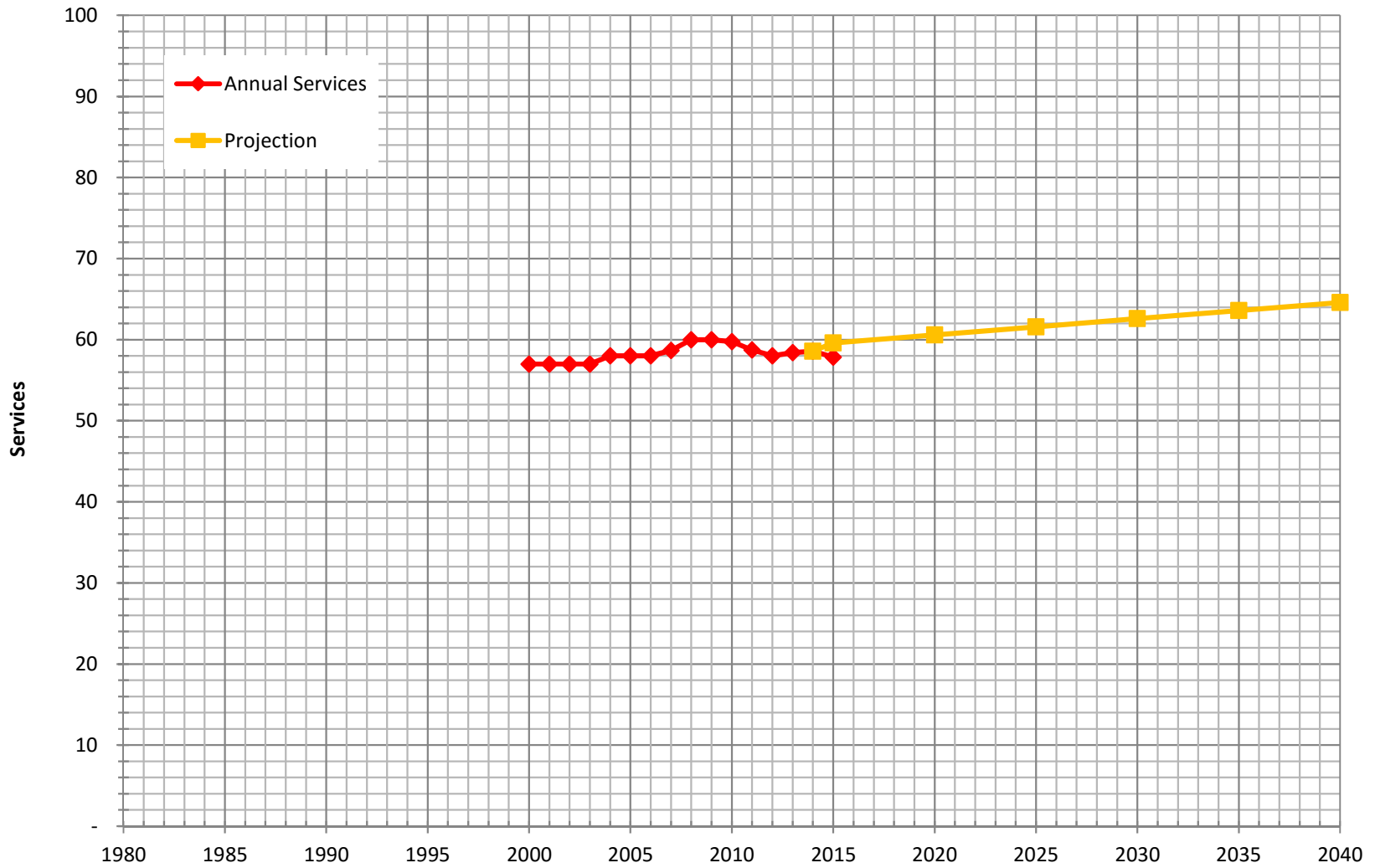
Water Supply and Demand Analysis and Projections

SFR Historical & Projected Services



Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2014	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
SFR			57	51	50	48	48	48	48	48	48	48
	SFR_A	Zero Growth Rate	0.00%			48	48	48	48	48	48	48
	SFR_B	3 Yr. Avg.	0.12%	Avg. Serv. per 5 year: 0.3		48	48	49	49	49	49	50
	SFR_C	5 Yr. Avg.	-0.60%	Avg. Serv. per 5 year: -1.3		48	48	46	45	44	42	41
	SFR_D	7 Yr. Avg.	-0.19%	Avg. Serv. per 5 year: -0.4		48	48	48	47	47	46	46
	> SFR_E	WSFMP	-0.54%	Avg. Serv. per 5 year: 1.2		48	49	50	51	52	53	54

Historical & Projected Services (Rancho Del Paradiso Water System)



California Water Service Company - Redwood Valley District (Rancho Del Paradiso Water System)
Water Supply and Demand Analysis and Projections

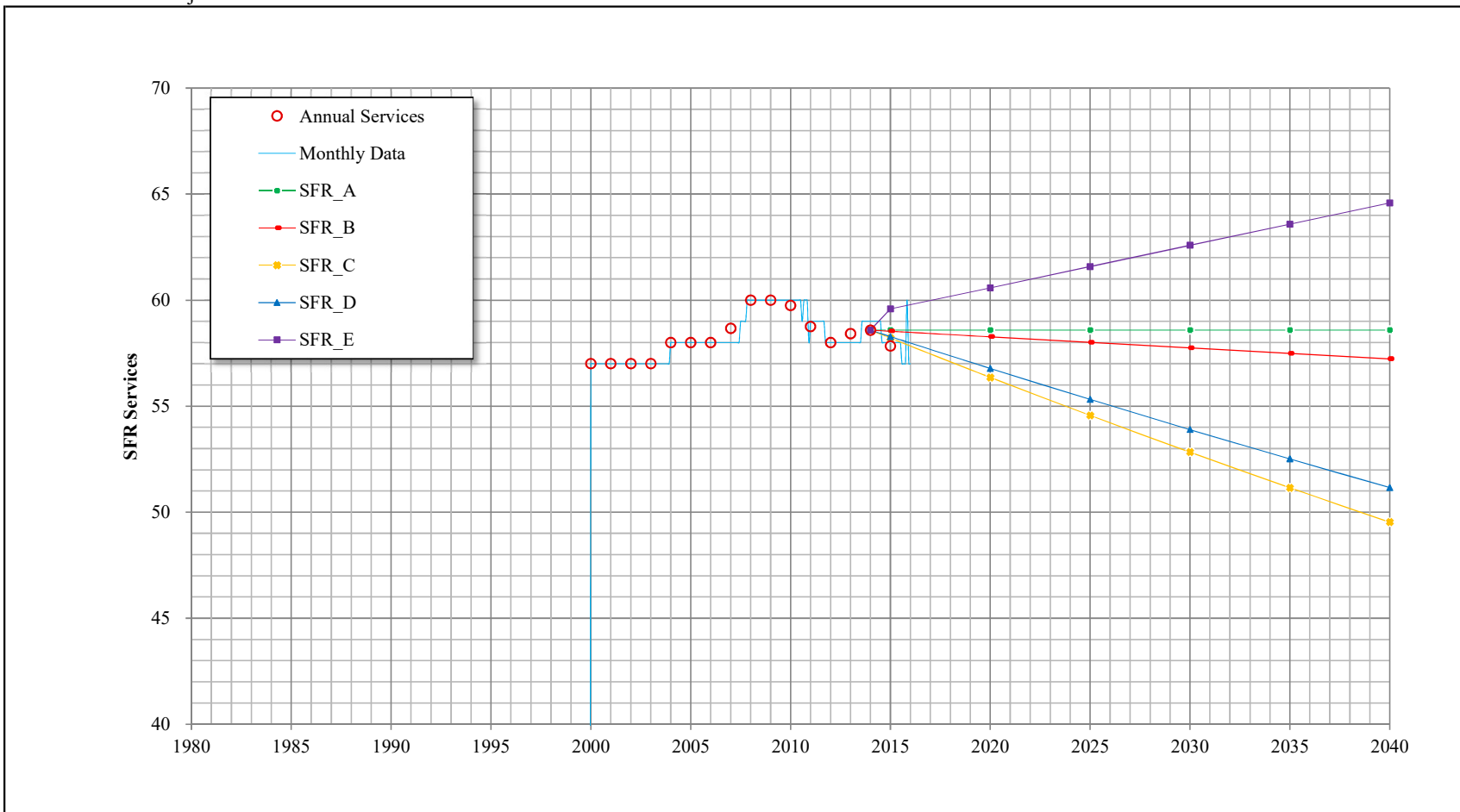
Customer Category	Selected Trend		Growth Rate	Actual Services				Projected Services					
				2000	2005	2010	Base Year 2014	2015	2020	2025	2030	2035	2040
SFR	SFR_E	WSFMP	-0.02%	57	58	60	59	60	61	62	63	64	65
MFR													
COM													
IND													
GOV													
OTH													
TOTAL	Average growth rate 2012-2040		#DIV/0!	57	58	60	59	60	61	62	63	64	65

Notes:

California Water Service Company - Redwood Valley District (Rancho Del Paradiso Water System)

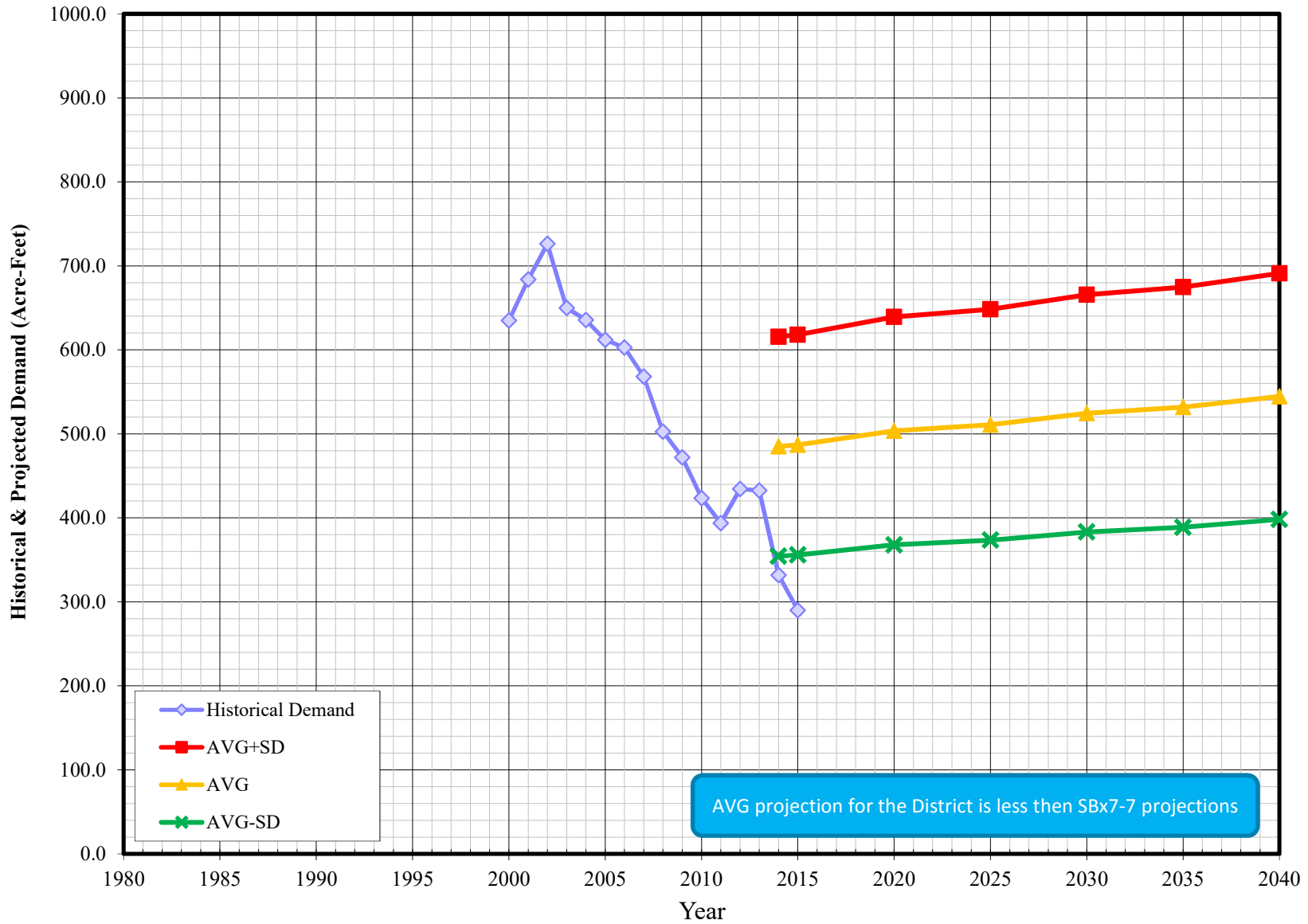
Water Supply and Demand Analysis and Projections

SFR Historical & Projected Services



Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2014	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
SFR			57	58	60	59	59	59	59	59	59	59
	SFR_A	Zero Growth Rate	0.00%	Avg. Serv. per 5 year: -0.3		59	59	59	59	59	59	59
	SFR_B	3 Yr. Avg.	-0.09%	Avg. Serv. per 5 year: -1.7		59	59	58	58	58	57	57
	SFR_C	5 Yr. Avg.	-0.64%	Avg. Serv. per 5 year: -1.4		59	58	56	55	53	51	50
	SFR_D	7 Yr. Avg.	-0.52%	Avg. Serv. per 5 year: 1.2		59	58	57	55	54	53	51
	> SFR_E	WSFMP	-0.02%			59	60	61	62	63	64	65

Historical & Projected Demand (RDV)

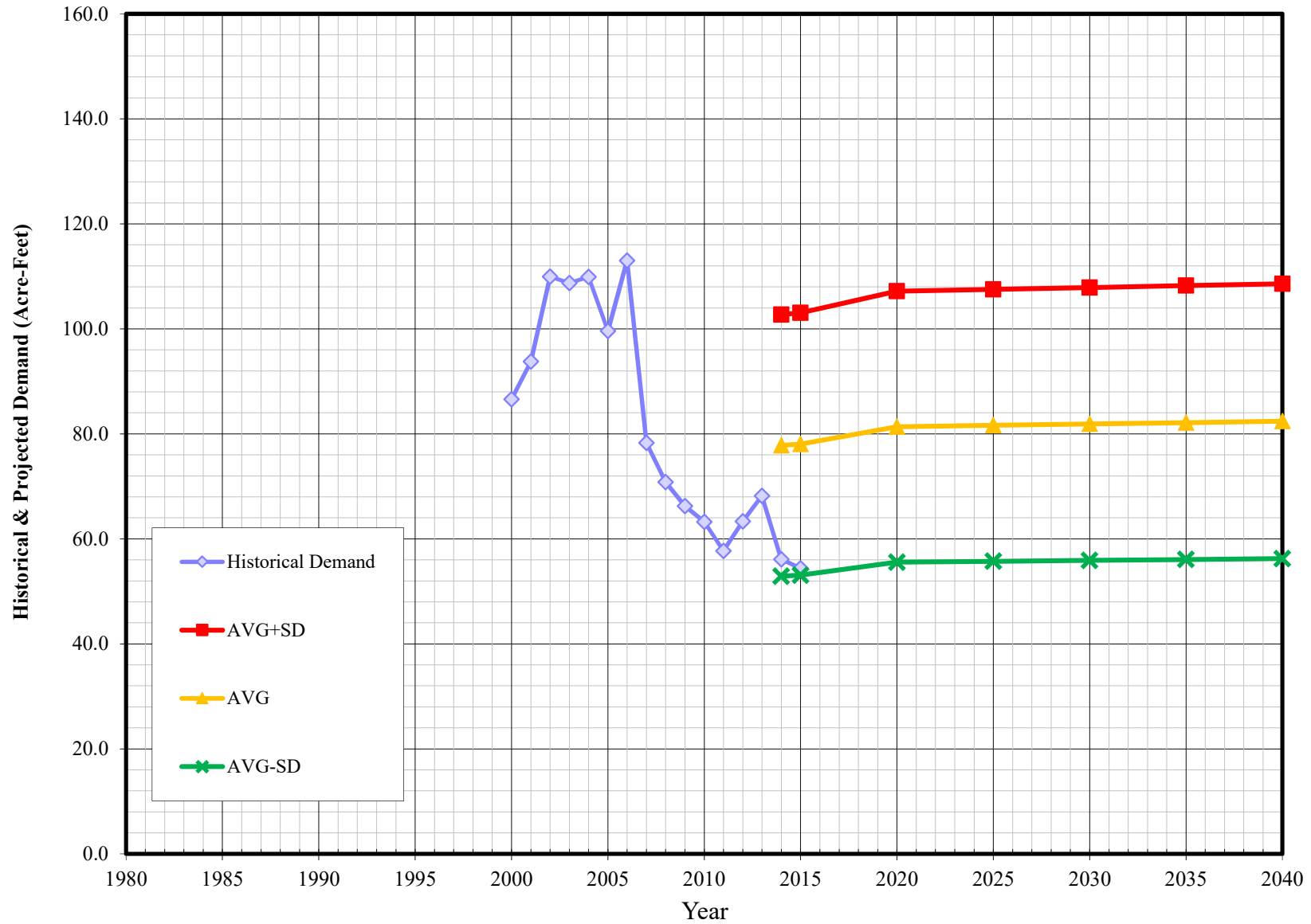


California Water Service Company - Redwood Valley District (consolidated)
Water Supply and Demand Analysis and Projections
Actual & Projected Demand in Acre-Feet

Worksheet 9

Customer Category	Actual Demand (AFY)								Projected Demand (AFY)						
	1980	1985	1990	1995	2000	2005	2010	2013	2014	2015	2020	2025	2030	2035	2040
SFR	0	0	0	0	376	335	253	227	336	338	344	350	356	362	368
									275	276	281	286	291	296	301
									213	214	218	222	226	230	234
MFR	0	0	0	0	38	62	46	31	59	59	65	65	69	69	73
									47	47	52	52	55	55	58
									34	34	38	38	40	40	43
COM	0	0	0	0	8	37	19	19	31	31	34	34	36	36	38
									23	23	25	25	27	27	29
									15	15	17	17	18	18	19
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	0	0	0
GOV	0	0	0	0	3	8	4	5	9	9	10	10	11	11	11
									6	6	7	7	8	8	8
									4	4	5	5	5	5	5
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	0	0	0
UAWF	0	0	0	0	211	170	101	151	181	182	186	189	193	196	200
									134	135	138	140	143	146	149
									88	88	90	92	94	96	98
TOTAL (AFY)	0	0	0	0	635	612	424	432	616	618	639	648	666	675	691
									485	487	504	511	524	532	545
									354	356	368	373	383	389	398
TOTAL (MGD)	0.000	0.000	0.000	0.000	0.567	0.546	0.378	0.386	0.550	0.552	0.571	0.579	0.594	0.602	0.617
									0.433	0.435	0.450	0.456	0.468	0.475	0.486
									0.316	0.318	0.328	0.333	0.342	0.347	0.355

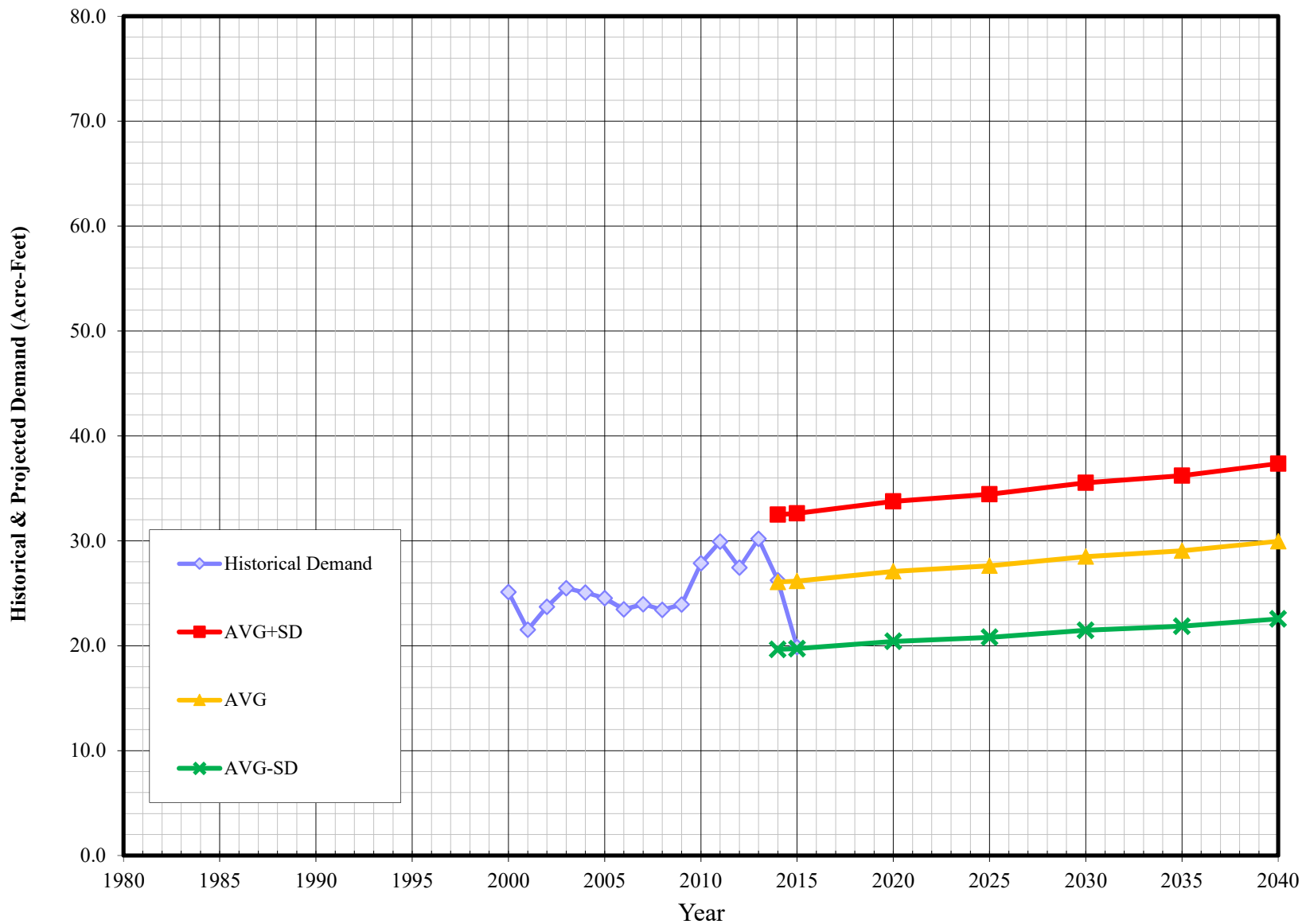
Historical & Projected Demand (Armstrong)



California Water Service Company - Redwood Valley District (Armstrong)
Water Supply and Demand Analysis and Projections
Actual & Projected Demand in Acre-Feet

Customer Category	Actual Demand (AFY)								Projected Demand (AFY)						
	1980	1985	1990	1995	2000	2005	2010	2013	2014	2015	2020	2025	2030	2035	2040
SFR	0	0	0	0	376	62	44	44	64	64	64	64	65	65	65
									52	52	52	52	53	53	53
									40	40	40	40	40	41	41
MFR	0	0	0	0	38	6	6	5	7	7	9	9	9	9	9
									6	6	7	7	7	7	7
									5	5	6	6	6	6	6
COM	0	0	0	0	8	4	3	5	5	5	5	5	5	5	5
									4	4	4	4	4	4	4
									3	3	3	3	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	0	0	0
GOV	0	0	0	0	3	2	1	1	2	2	2	2	2	2	2
									1	1	2	2	2	2	2
									1	1	1	1	1	1	1
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	0	0	0
UAWF	0	0	0	0	-338	27	9	12	26	26	27	27	27	27	27
									16	16	16	16	16	16	16
									5	5	5	5	5	5	5
TOTAL (AFY)	0	0	0	0	87	100	63	68	103	103	107	108	108	108	109
									78	78	81	82	82	82	82
									53	53	56	56	56	56	56
TOTAL (MGD)	0.000	0.000	0.000	0.000	0.077	0.089	0.056	0.061	0.092	0.092	0.096	0.096	0.096	0.097	0.097
									0.069	0.070	0.073	0.073	0.073	0.073	0.074
									0.047	0.047	0.050	0.050	0.050	0.050	0.050

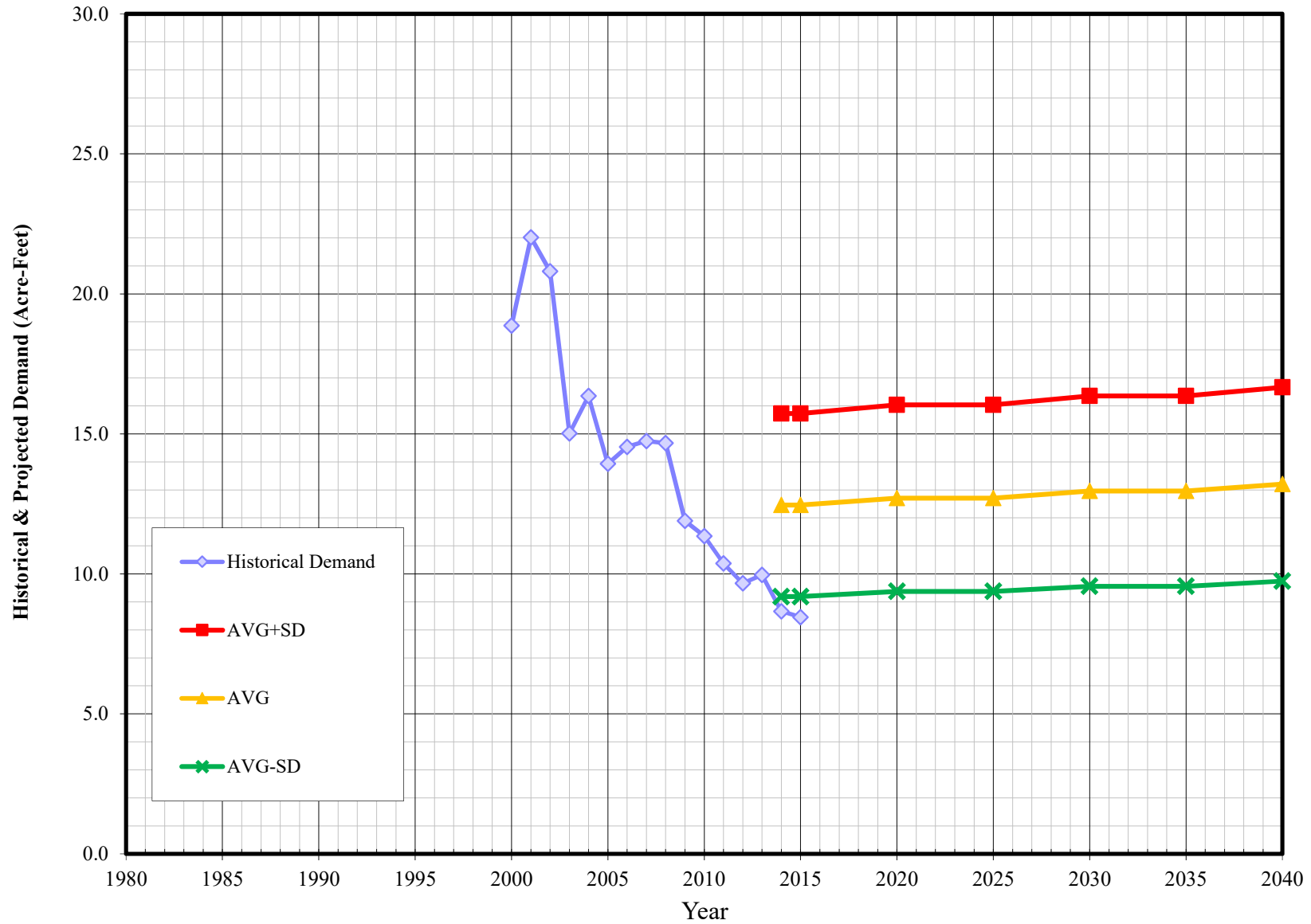
Historical & Projected Demand (Coast Springs)



California Water Service Company - Redwood Valley District (Coast Springs)
Water Supply and Demand Analysis and Projections
Actual & Projected Demand in Acre-Feet

Customer Category	Actual Demand (AFY)								Projected Demand (AFY)						
	1980	1985	1990	1995	2000	2005	2010	2013	2014	2015	2020	2025	2030	2035	2040
SFR	0	0	0	0	0	18	16	14	18	18	19	19	19	20	20
									16	16	17	17	17	18	18
									14	14	15	15	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	0	0	0
COM	0	0	0	0	0	3	2	2	2	2	3	3	3	3	3
									2	2	2	2	2	2	3
									1	1	2	2	2	2	2
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	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	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	0	0	0
UAWF	0	0	0	0	25	4	11	15	12	12	13	13	13	13	14
									8	8	8	9	9	9	9
									4	4	4	4	4	4	5
TOTAL (AFY)	0	0	0	0	25	25	28	30	32	33	34	34	36	36	37
									26	26	27	28	29	29	30
									20	20	20	21	21	22	23
TOTAL (MGD)	0.000	0.000	0.000	0.000	0.022	0.022	0.025	0.027	0.029	0.029	0.030	0.031	0.032	0.032	0.033
									0.023	0.023	0.024	0.025	0.025	0.026	0.027
									0.018	0.018	0.018	0.019	0.019	0.020	0.020

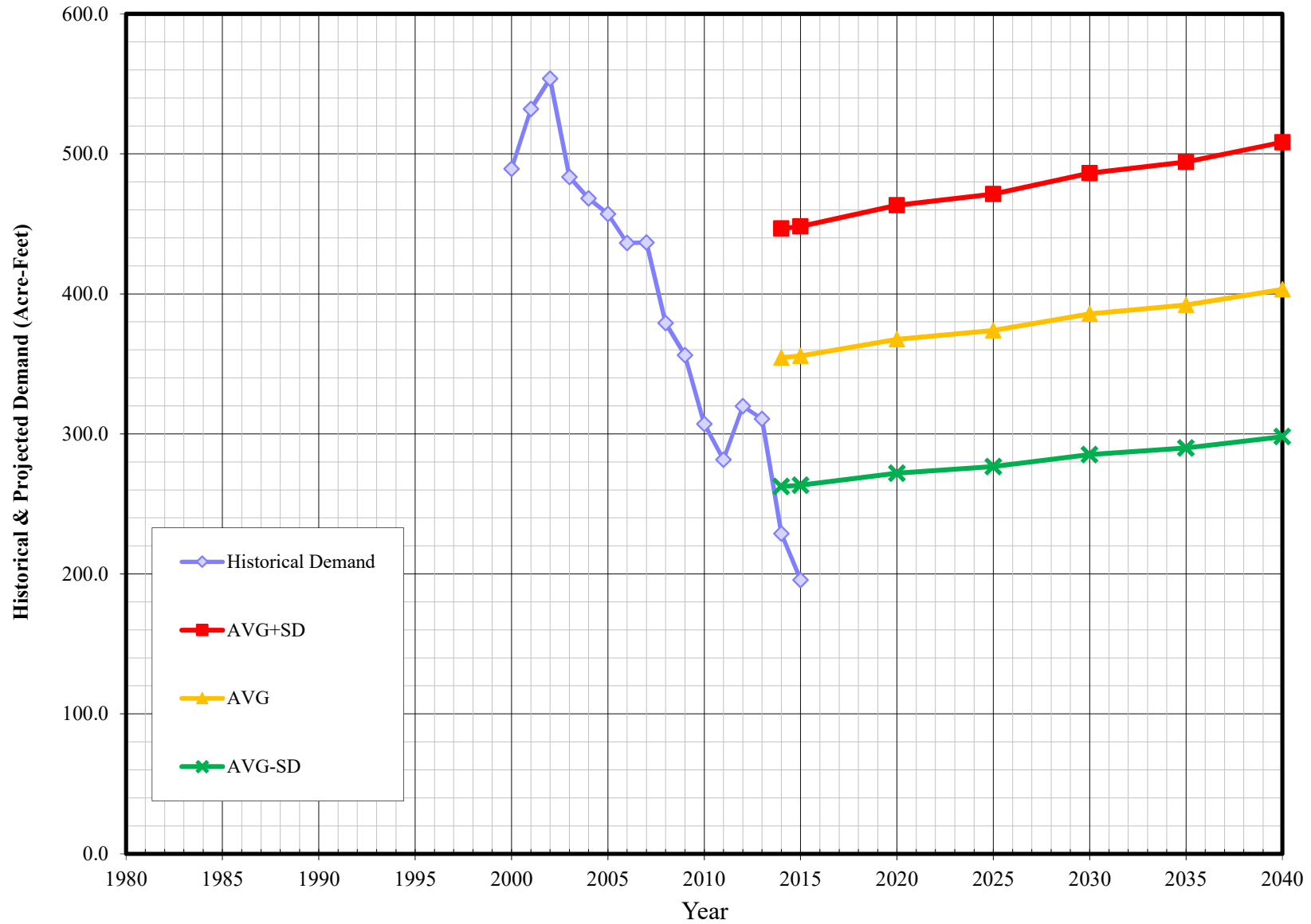
Historical & Projected Demand (Hawkins)



California Water Service Company - Redwood Valley District (Hawkins)
Water Supply and Demand Analysis and Projections
Actual & Projected Demand in Acre-Feet

Customer Category	Actual Demand (AFY)								Projected Demand (AFY)						
	1980	1985	1990	1995	2000	2005	2010	2013	2014	2015	2020	2025	2030	2035	2040
SFR	0	0	0	0	0	12	9	9	13 10 8	13 10 8	13 11 8	13 11 8	13 11 8	13 11 8	14 11 9
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	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	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	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	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	0 0 0
UAWF	0	0	0	0	19	2	3	1	3 2 1	3 2 1	3 2 1	3 2 1	3 2 1	3 2 1	3 2 1
TOTAL (AFY)	0	0	0	0	19	14	11	10	16 12 9	16 12 9	16 13 9	16 13 9	16 13 10	16 13 10	17 13 10
TOTAL (MGD)	0.000	0.000	0.000	0.000	0.017	0.012	0.010	0.009	0.014 0.011 0.008	0.014 0.011 0.008	0.014 0.011 0.008	0.014 0.011 0.008	0.015 0.012 0.009	0.015 0.012 0.009	0.015 0.012 0.009

Historical & Projected Demand (Lucerne)

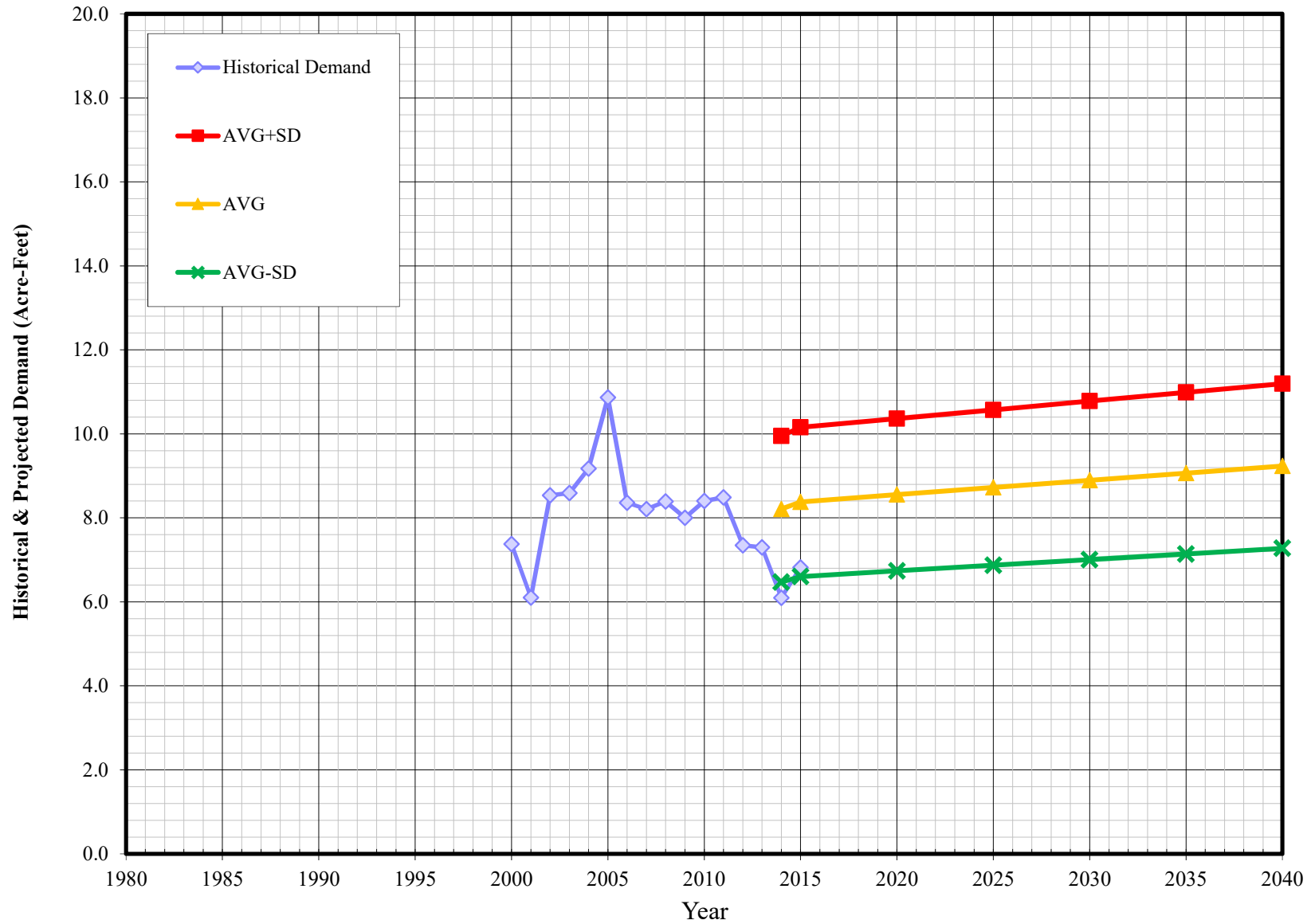


California Water Service Company - Redwood Valley District (Lucerne)
Water Supply and Demand Analysis and Projections
Actual & Projected Demand in Acre-Feet

Worksheet 9

Customer Category	Actual Demand (AFY)								Projected Demand (AFY)						
	1980	1985	1990	1995	2000	2005	2010	2013	2014	2015	2020	2025	2030	2035	2040
SFR	0	0	0	0	0	232	174	149	228	229	234	239	244	249	254
									185	186	190	194	198	202	206
									142	143	146	149	152	155	159
MFR	0	0	0	0	0	56	41	26	53	53	57	57	61	61	65
									41	41	44	44	47	47	51
									30	30	32	32	34	34	36
COM	0	0	0	0	0	31	15	12	24	24	26	26	28	28	29
									18	18	19	19	20	20	22
									11	11	12	12	13	13	14
IND	0	0	0	0	0	232	174	149	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	232	174	149	7	7	8	8	9	9	9
									5	5	6	6	6	6	6
									3	3	4	4	4	4	4
OTH	0	0	0	0	0	232	174	149	0	0	0	0	0	0	0
									0	0	0	0	0	0	0
									0	0	0	0	0	0	0
UAWF	0	0	0	0	0	232	174	149	135	135	139	141	145	148	151
									105	106	108	111	113	116	118
									76	76	78	80	82	83	85
TOTAL (AFY)	0	0	0	0	0	1,244	926	784	447	448	463	471	486	494	508
									354	356	368	374	386	392	403
									262	263	272	277	285	290	298
TOTAL (MGD)	0.000	0.000	0.000	0.000	0.000	1.111	0.827	0.700	0.399	0.400	0.414	0.421	0.434	0.441	0.454
									0.316	0.318	0.328	0.334	0.344	0.350	0.360
									0.234	0.235	0.243	0.247	0.255	0.259	0.266

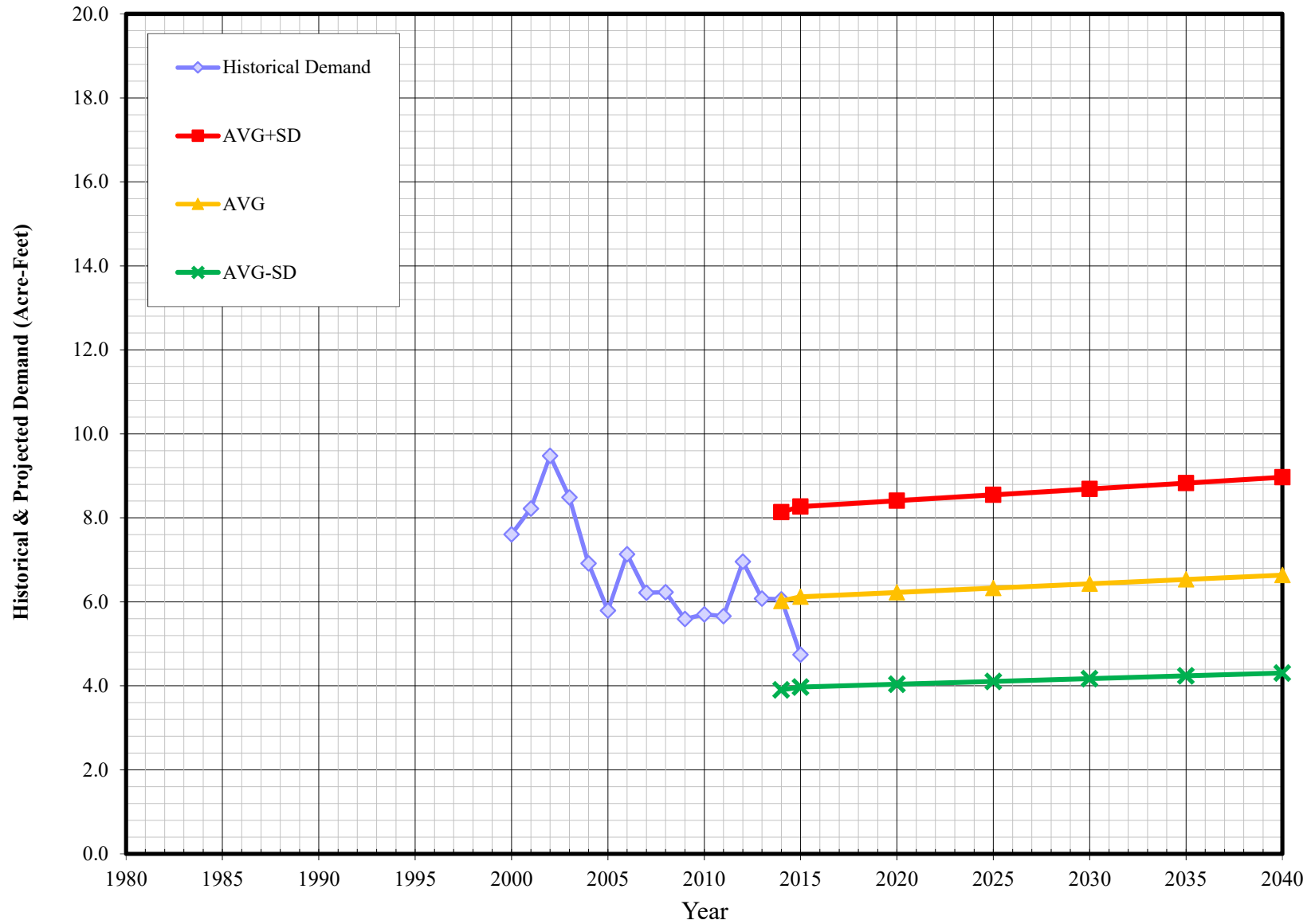
Historical & Projected Demand (Noel Heights)



California Water Service Company - Redwood Valley District (Noel Heights)
Water Supply and Demand Analysis and Projections
Actual & Projected Demand in Acre-Feet

Customer Category	Actual Demand (AFY)								Projected Demand (AFY)						
	1980	1985	1990	1995	2000	2005	2010	2013	2014	2015	2020	2025	2030	2035	2040
SFR	0	0	0	0	0	6	5	5	7 6 5	7 6 5	7 6 5	7 6 6	7 7 6	8 7 6	8 7 6
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	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	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	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	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	0 0 0
UAWF	0	0	0	0	7	5	3	2	3 2 1	3 2 1	3 2 1	3 2 1	3 2 1	3 2 1	3 2 1
TOTAL (AFY)	0	0	0	0	7	10	8	7	10 8 6	10 8 7	10 9 7	11 9 7	11 9 7	11 9 7	11 9 7
TOTAL (MGD)	0.000	0.000	0.000	0.000	0.007	0.009	0.007	0.006	0.009 0.007 0.006	0.009 0.007 0.006	0.009 0.008 0.006	0.009 0.008 0.006	0.010 0.008 0.006	0.010 0.008 0.006	0.010 0.008 0.006

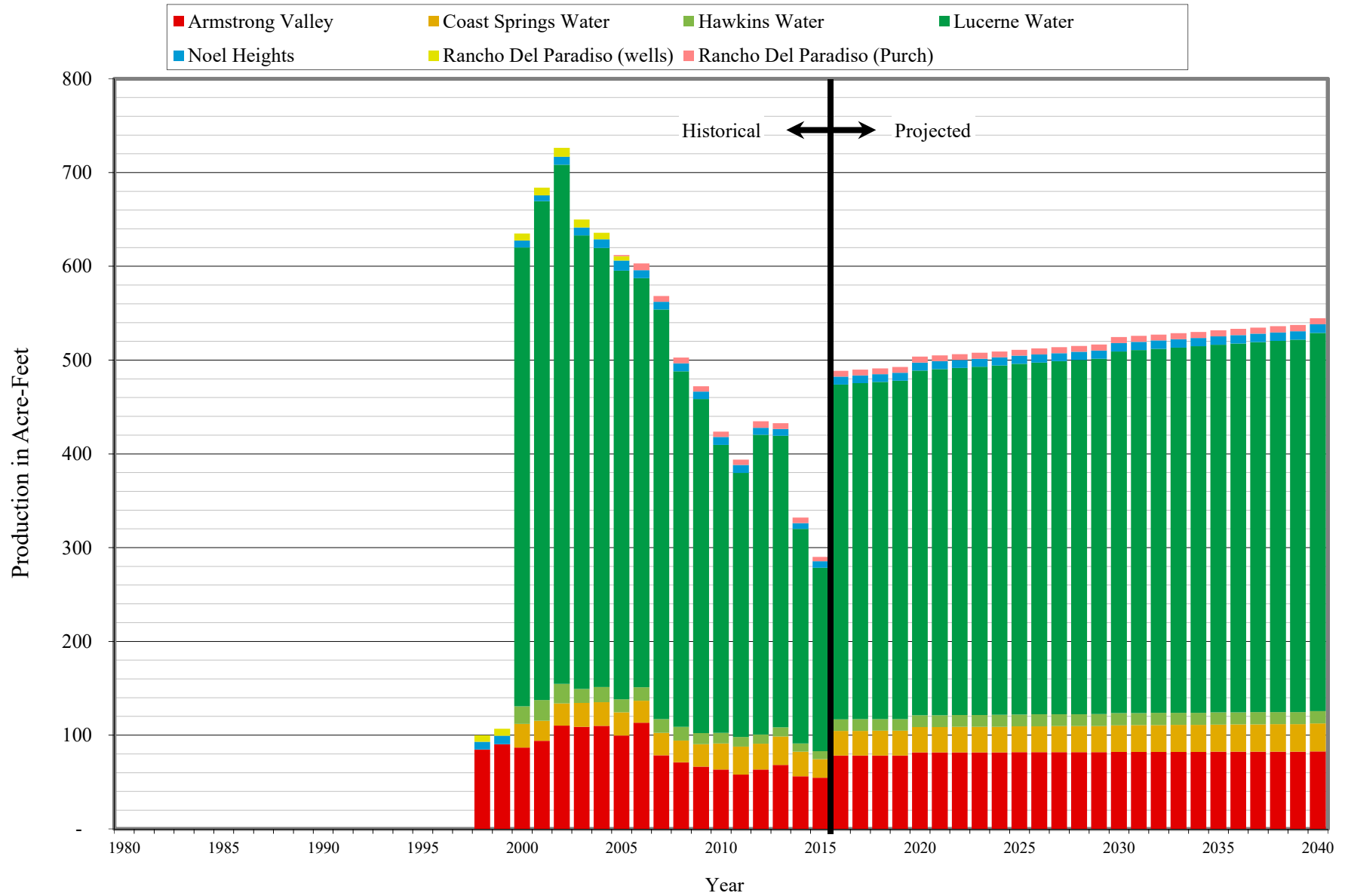
Historical & Projected Demand (Rancho del Paradiso)



California Water Service Company - Redwood Valley District (Rancho del Paradiso)
Water Supply and Demand Analysis and Projections
Actual & Projected Demand in Acre-Feet

Customer Category	Actual Demand (AFY)								Projected Demand (AFY)						
	1980	1985	1990	1995	2000	2005	2010	2013	2014	2015	2020	2025	2030	2035	2040
SFR	0	0	0	0	0	6	5	5	7	7	7	7	7	7	7
									5	5	5	5	6	6	6
									4	4	4	4	4	4	4
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	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	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	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	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	0	0	0
UAWF	0	0	0	0	7	5	3	2	2	2	2	2	2	2	2
									1	1	1	1	1	1	1
									0	0	0	0	0	0	0
TOTAL (AFY)	0	0	0	0	7	10	8	7	8	8	8	9	9	9	9
									6	6	6	6	6	7	7
									4	4	4	4	4	4	4
TOTAL (MGD)	0.000	0.000	0.000	0.000	0.007	0.009	0.007	0.006	0.007	0.007	0.008	0.008	0.008	0.008	0.008
									0.005	0.005	0.006	0.006	0.006	0.006	0.006
									0.003	0.004	0.004	0.004	0.004	0.004	0.004

Historical and Projected Distribution of Demand by Source

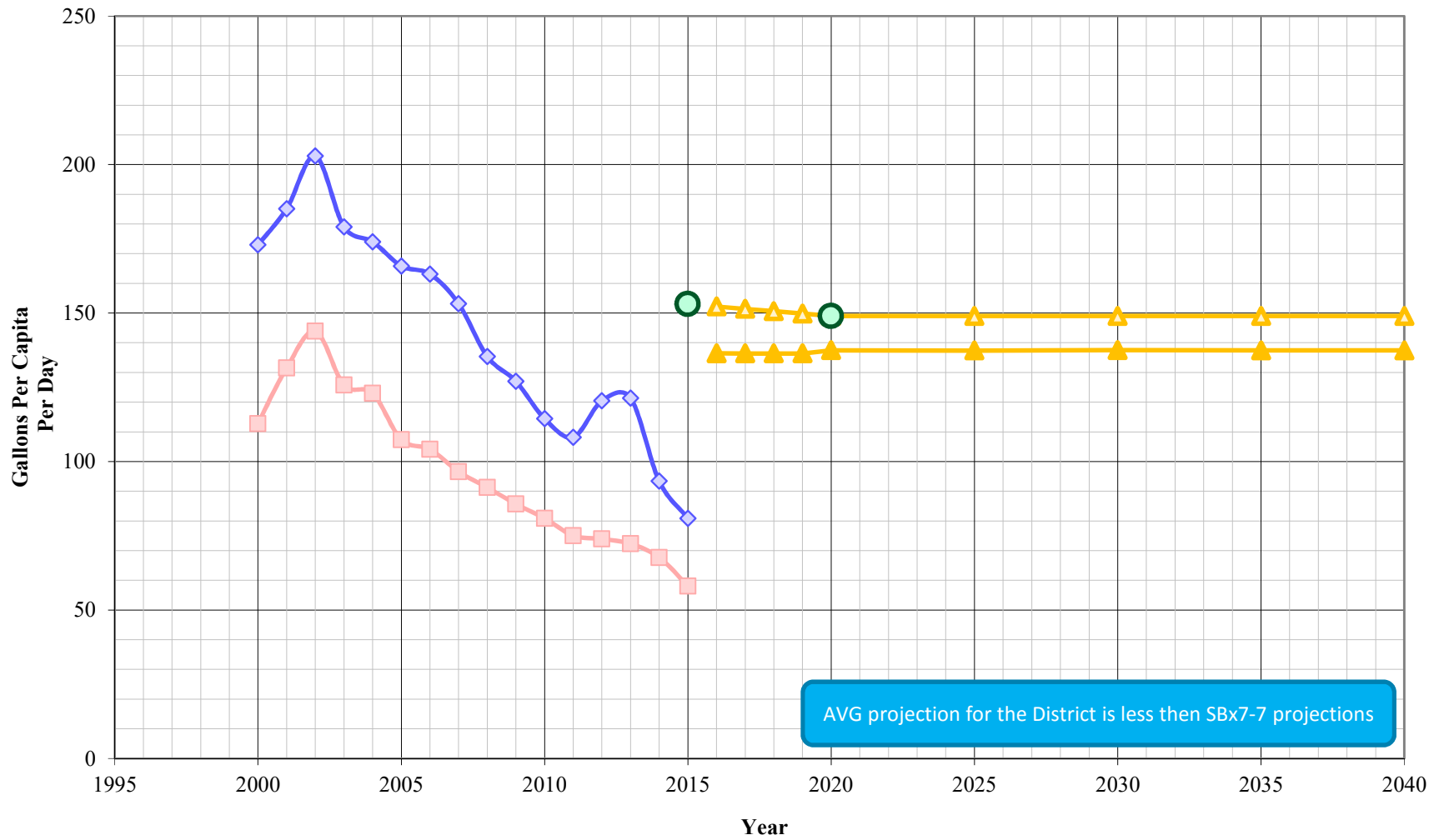


California Water Service Company - Redwood Valley District (consolidated)
Water Supply and Demand Analysis and Projections
Historical and Projected Distribution of Demand by Source

Worksheet 10

Year	Armstrong Valley	Coast Springs Water	Hawkins Water	Lucerne Water	Noel Heights	Rancho del Paradiso		Conservation	Total	Year	Armstrong Valley	Coast Springs Water	Hawkins Water	Lucerne Water	Noel Heights	Rancho del Paradiso		Conservation	Total
	Wells	Wells	Wells	Surface	Wells	Wells	Purch	AFY	AFY		Wells	Wells	Wells	Surface	Wells	Wells	Purch	AFY	AFY
	AFY	AFY	AFY	AFY	AFY	AFY	AFY				AFY	AFY	AFY	AFY	AFY	AFY	AFY		
1980	-	-	-	-	-	-	-	-	-	2011	57.7	29.9	10.4	281.5	8.5	0.0	5.7	0.0	393.7
1981	-	-	-	-	-	-	-	-	-	2012	63.3	27.4	9.7	319.8	7.3	0.0	7.0	0.0	434.5
1982	-	-	-	-	-	-	-	-	-	2013	68.2	30.2	10.0	310.7	7.3	0.0	6.1	0.0	432.5
1983	-	-	-	-	-	-	-	-	-	2014	56.1	26.2	8.7	228.8	6.1	0.0	6.1	0.0	332.0
1984	-	-	-	-	-	-	-	-	-	2015	54.4	19.9	8.5	195.7	6.8	0.0	4.7	0.0	290.0
1985	-	-	-	-	-	-	-	-	-	2016	78.1	26.3	12.5	357.0	8.4	0.0	6.1	0.0	488.3
1986	-	-	-	-	-	-	-	-	-	2017	78.1	26.4	12.5	358.3	8.4	0.0	6.1	0.0	489.7
1987	-	-	-	-	-	-	-	-	-	2018	78.1	26.5	12.5	359.6	8.4	0.0	6.1	0.0	491.1
1988	-	-	-	-	-	-	-	-	-	2019	78.1	26.6	12.5	360.8	8.4	0.0	6.1	0.0	492.5
1989	-	-	-	-	-	-	-	-	-	2020	81.4	27.1	12.7	367.6	8.6	0.0	6.2	0.0	503.5
1990	-	-	-	-	-	-	-	-	-	2021	81.4	27.2	12.7	368.8	8.6	0.0	6.2	0.0	504.9
1991	-	-	-	-	-	-	-	-	-	2022	81.4	27.3	12.7	370.1	8.6	0.0	6.2	0.0	506.2
1992	-	-	-	-	-	-	-	-	-	2023	81.4	27.4	12.7	371.4	8.6	0.0	6.2	0.0	507.6
1993	-	-	-	-	-	-	-	-	-	2024	81.4	27.5	12.7	372.6	8.6	0.0	6.2	0.0	509.0
1994	-	-	-	-	-	-	-	-	-	2025	81.6	27.6	12.7	373.9	8.7	0.0	6.3	0.0	510.9
1995	-	-	-	-	-	-	-	-	-	2026	81.6	27.7	12.7	375.2	8.7	0.0	6.3	0.0	512.3
1996	-	-	-	-	-	-	-	-	-	2027	81.6	27.8	12.7	376.4	8.7	0.0	6.3	0.0	513.6
1997	-	-	-	-	-	-	-	-	-	2028	81.6	27.9	12.7	377.7	8.7	0.0	6.3	0.0	515.0
1998	84.5	-	-	-	8.4	6.8	-	-	-	2029	81.6	28.0	12.7	379.0	8.7	0.0	6.3	0.0	516.4
1999	90.3	-	-	-	9.0	7.4	-	-	-	2030	81.9	28.5	13.0	385.7	8.9	0.0	6.4	0.0	524.4
2000	86.6	25.1	18.9	489.4	7.4	7.6	-	-	634.9	2031	81.9	28.6	13.0	387.0	8.9	0.0	6.4	0.0	525.8
2001	93.8	21.5	22.0	532.0	6.1	8.2	-	-	683.7	2032	81.9	28.7	13.0	388.2	8.9	0.0	6.4	0.0	527.2
2002	110.0	23.7	20.8	553.7	8.5	9.5	-	-	726.2	2033	81.9	28.8	13.0	389.5	8.9	0.0	6.4	0.0	528.5
2003	108.7	25.5	15.0	483.4	8.6	8.5	-	-	649.8	2034	81.9	28.9	13.0	390.8	8.9	0.0	6.4	0.0	529.9
2004	109.9	25.1	16.4	468.2	9.2	6.9	-	-	635.6	2035	82.1	29.0	13.0	392.0	9.1	0.0	6.5	0.0	531.8
2005	99.6	24.5	13.9	457.1	10.9	4.7	1.1	-	611.8	2036	82.1	29.1	13.0	393.3	9.1	0.0	6.5	0.0	533.1
2006	113.0	23.5	14.5	436.3	8.4	-	7.1	-	602.9	2037	82.1	29.3	13.0	394.6	9.1	0.0	6.5	0.0	534.5
2007	78.3	23.9	14.7	436.8	8.2	-	6.2	-	568.2	2038	82.1	29.4	13.0	395.8	9.1	0.0	6.5	0.0	535.9
2008	70.8	23.4	14.7	379.1	8.4	-	6.2	-	502.6	2039	82.1	29.5	13.0	397.1	9.1	0.0	6.5	0.0	537.3
2009	66.3	23.9	11.9	356.3	8.0	-	5.6	-	472.0	2040	82.4	30.0	13.2	403.2	9.2	0.0	6.6	0.0	544.6
2010	63.2	27.9	11.4	307.0	8.4	-	5.7	-	423.6										

Per Capita Consumption (RDV)



AVG projection for the District is less then SBx7-7 projections



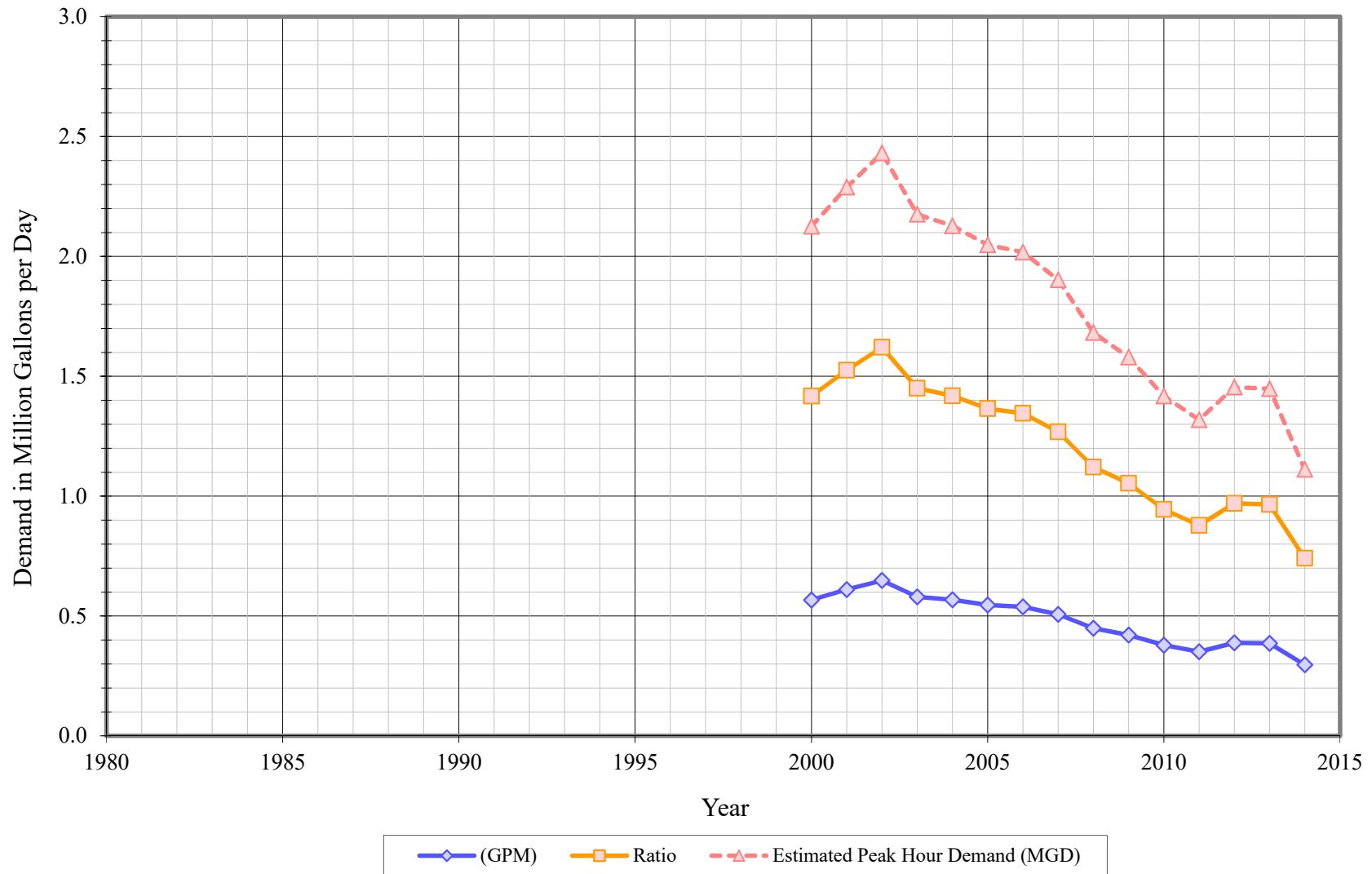
California Water Service Company - Redwood Valley District (consolidated)
Water Supply and Demand Analysis and Projections
Per Capita Water Demand Calculation

Worksheet 15

Year	POP	Historical				Projected			
		Gross Demand		Residential Only		Avg Demand		Avg Demand w/ Cons	
		Usage (AFY)	Per Capita (GPCPD)	Usage (AFY)	Per Capita (GPCPD)	Demand (AFY)	Per Capita (GPCPD)	Demand (AFY)	Per Capita (GPCPD)
1995									
1996									
1997									
1998									
1999									
2000	3,277	635	173	414	113				
2001	3,297	684	185	486	132				
2002	3,196	726	203	515	144				
2003	3,240	650	179	456	126				
2004	3,261	636	174	449	123				
2005	3,294	612	166	396	107				
2006	3,299	603	163	385	104				
2007	3,312	568	153	358	97				
2008	3,315	503	135	339	91				
2009	3,318	472	127	319	86				
2010	3,305	424	114	299	81				
2011	3,248	394	108	273	75				
2012	3,221	435	120	267	74				
2013	3,180	432	121	258	72				
2014	3,174	332	93	241	68				
2015	3,201	290	81	208	58				
2016	3,196					488	136	545	152
2017	3,205					490	136	544	151
2018	3,215					491	136	542	151
2019	3,224					492	136	541	150
2020	3,270					504	137	546	149
2025	3,321					511	137	554	149
2030	3,404					524	138	568	149
2035	3,455					532	137	577	149
2040	3,539					545	137	591	149

<i>SBx7-7 Targets</i>	
2015	153
2020	149

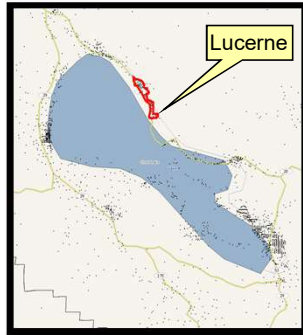
Average Day, Maximum Day, Peak Demand



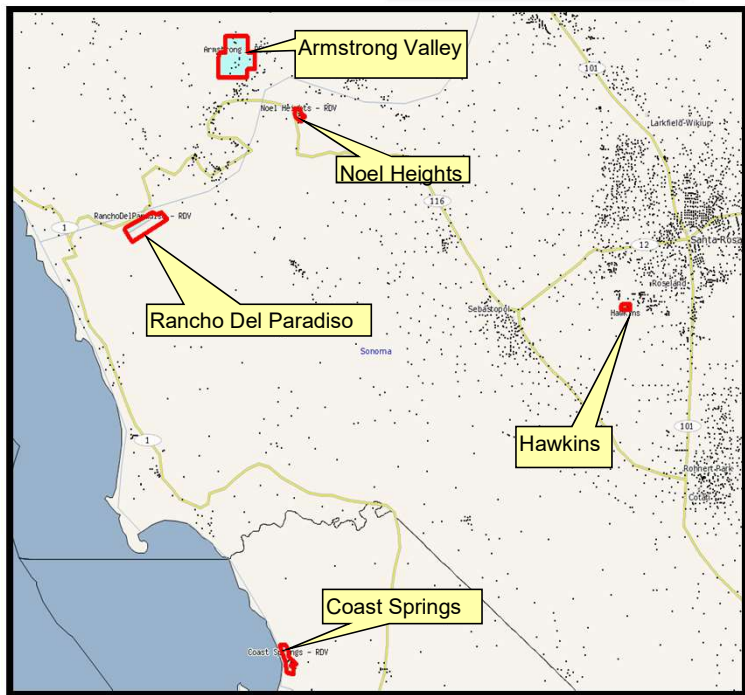
California Water Service Company - Redwood Valley District (consolidated)
Water Supply and Demand Analysis and Projections
Historical and Projected Average Day, Maximum Day, and Peak Demand

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)	(GPD)	(MGD)	(GPD)		(MGD)	(GPM)			(MGD)	(GPM)	
1980														
1981														
1982														
1983														
1984														
1985														
1986														
1987														
1988														
1989														
1990														
1991														
1992														
1993														
1994														
1995														
1996														
1997														
1998														
1999														
2000	635	207	0.57	288	1.42	721	2.50	2.13	1,476	1.50	3.75			
2001	684	223	0.61	309	1.53	773	2.50	2.29	1,589	1.50	3.75			
2002	726	237	0.65	341	1.62	851	2.50	2.43	1,688	1.50	3.75			
2003	650	212	0.58	302	1.45	754	2.50	2.18	1,511	1.50	3.75			
2004	636	207	0.57	294	1.42	736	2.50	2.13	1,478	1.50	3.75			
2005	612	199	0.55	279	1.37	698	2.50	2.05	1,422	1.50	3.75			
2006	603	196	0.54	275	1.35	688	2.50	2.02	1,402	1.50	3.75			
2007	568	185	0.51	260	1.27	649	2.50	1.90	1,321	1.50	3.75			
2008	503	164	0.45	230	1.12	575	2.50	1.68	1,169	1.50	3.75			
2009	472	154	0.42	217	1.05	542	2.50	1.58	1,097	1.50	3.75			
2010	424	138	0.38	196	0.95	490	2.50	1.42	985	1.50	3.75			
2011	394	128	0.35	185	0.88	462	2.50	1.32	915	1.50	3.75			
2012	435	142	0.39	205	0.97	513	2.50	1.45	1,010	1.50	3.75			
2013	432	141	0.39	206	0.97	515	2.50	1.45	1,005	1.50	3.75			
2014	332	108	0.30	159	0.74	397	2.50	1.11	772	1.50	3.75			
2015														
10 year Average (2001-2010)			0.52	270	1.31	676	2.50	1.97	1,195	1.50	3.75			
5 year Average (2006-2010)			0.46	236	1.15	589	2.50	1.72	1,366	1.50	3.75			

California Water Service Company - Redwood Valley District (consolidated)
Water Supply and Demand Analysis and Projections
 US Census 2010 Tract Map Summary



System	US Census 2000 Summary				US Census 2010 Summary			
	Census Blocks	Population	Housing Units (HU)	Density	Census Tract Blocks	Population	Housing Units (HU)	Density
Armstrong Valley	12	374	190	1.97	13	912	556	1.64
Rancho Del Paradiso	1	79	63	1.25	1	61	62	0.98
Noel Heights	1	47	35	1.34	2	40	31	1.29
Coast Springs	8	238	336	0.71	6	60	132	0.45
Hawkins	2	126	47	2.68	4	133	53	2.51
Lucerne	70	2,289	1,385	1.65	74	2,462	1,433	1.72
	94	3,153	2,056	1.53	100	3,668	2,267	1.62

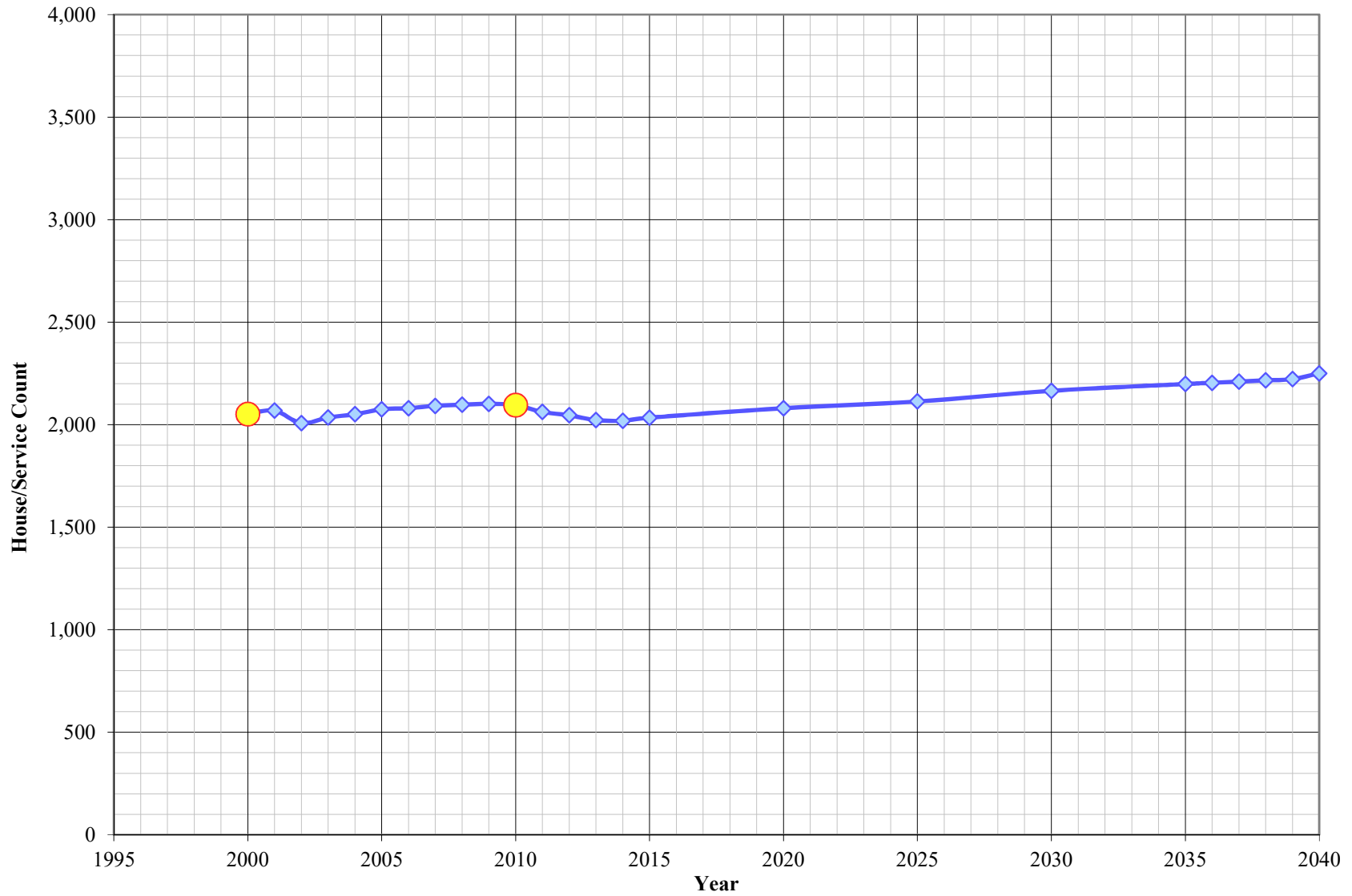


System	Note	Population	Housing Units (HU)	Density		Population	Housing Units (HU)	Density
Armstrong Valley	1	520	264	1.97		424	259	1.64
Rancho Del Paradiso	1	71	57	1.25		59	60	0.98
Noel Heights	1	77	57	1.34		64	50	1.29
Coast Springs	2	186	239	0.78		167	243	0.69
Hawkins	1	134	50	2.68		129	51	2.51
Lucerne	3	2,289	1,385	1.65		2,462	1,433	1.72
		3,277	2,052	1.60		3,305	2,096	1.58

- 1) US Census density and active service count used to estimate population.
- 2) CDOF used to estimate population.
- 3) US Census used.

MARPLOT 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, MARPLOT uses the centroid, or center point, rather than the entire polygon. If a Census Block centroid is within any of the MARPLOT 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.

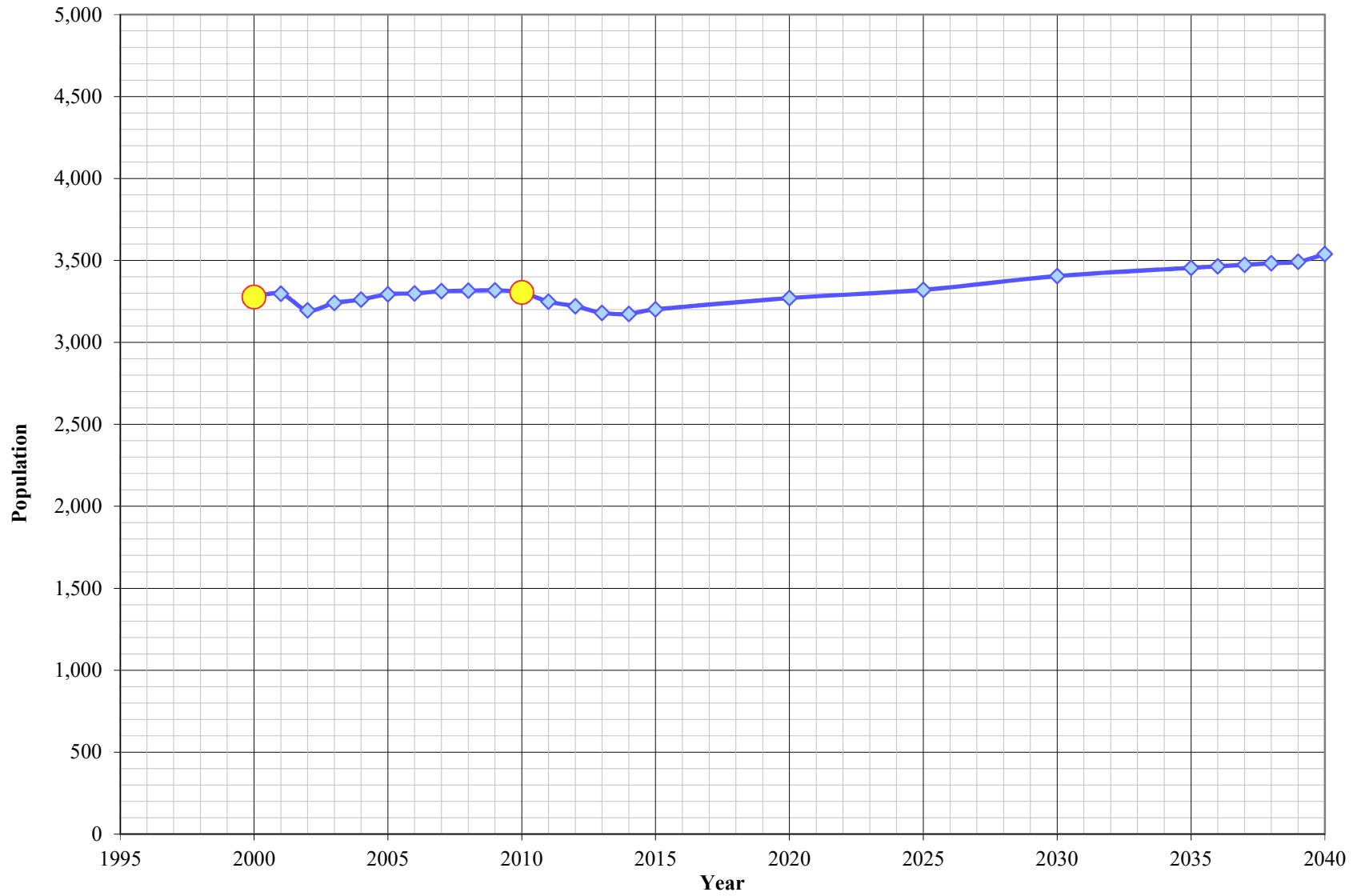
Housing Projections



◆ Total Residential Dwelling Units

● US Census

Population Projections



California Water Service Company - Redwood Valley District (consolidated)
Water Supply and Demand Analysis and Projections
Population Estimate

Year	US Census		Persons per Housing Unit	Single Family Residential	Multi Family Residential			Flat Rate Residential
	Population	Housing Units		Services (DU)	Services	Residential Units (DU)	Unit Density	Services (DU)
2000	3,277	2,052	1.597	1,867	18	185	10.3	0
2010	3,305	2,096	1.577	1,841	17	255	15.0	0
	0.9%	2.1%	-1.3%	-1.4%	-5.6%	37.9%	46.0%	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								
1996								
1997								
1998								
1999								
2000	1,867	18.0	182	10.1	0	2,052	1.597	3,277
2001	1,875	18.0	191	10.6	0	2,068	1.594	3,297
2002	1,805	18.0	200	11.1	0	2,008	1.592	3,196
2003	1,824	18.0	208	11.6	0	2,035	1.592	3,240
2004	1,830	18.0	217	12.1	0	2,051	1.590	3,261
2005	1,860	17.1	212	12.4	0	2,075	1.588	3,294
2006	1,859	16.9	218	12.9	0	2,080	1.586	3,299
2007	1,861	17.0	227	13.4	0	2,092	1.583	3,312
2008	1,859	17.0	236	13.9	0	2,097	1.581	3,315
2009	1,854	17.0	244	14.3	0	2,101	1.579	3,318
2010	1,841	17.0	252	14.8	0	2,096	1.577	3,305
2011	1,816	16.7	246	14.8	0	2,062	1.575	3,248
2012	1,804	16.4	242	14.7	0	2,046	1.574	3,221
2013	1,793	15.8	230	14.6	0	2,023	1.572	3,180
2014	1,784	16.1	236	14.6	0	2,019	1.572	3,174
2015	1,782	17.0	252	14.8	0	2,034	1.574	3,201
2020	1,827	18.1	254	14.0	0	2,080	1.572	3,270
2025	1,860	18.1	254	14.0	0	2,113	1.571	3,321
2030	1,894	19.1	272	14.2	0	2,165	1.572	3,404
2035	1,927	19.1	272	14.2	0	2,198	1.572	3,455
2036	1,933	19.1	272	14.2	0	2,204	1.572	3,464
2037	1,939	19.1	272	14.2	0	2,210	1.572	3,473
2038	1,945	19.1	272	14.2	0	2,216	1.571	3,483
2039	1,951	19.1	272	14.2	0	2,222	1.571	3,492
2040	1,961	20.1	290	14.4	0	2,250	1.573	3,539

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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.

RWV-ARM Armstrong Valley
Water Supply and Demand Analysis and Projections
Population Estimate

Year	US Census		Persons per Housing Unit	Single Family Residential	Multi Family Residential		Flat Rate Residential
	Population	Housing Units		Services (DU)	Services	Units (DU)	Unit Density
2000	520	264	1.968				
2010	424	259	1.640				
	-18.4%	-2.0%	-16.7%				

Year	Single Family Residential	Multi Family Residential		Flat Rate Residential	Total Residential	Persons per Housing Unit	Estimated District Population
	Services (DU)	Services	Residential Units (DU)	Unit Density	Services (DU) Dwelling Unit	Unit	
1995							
1996							
1997							
1998							
1999							
2000	261	3			264	1.968	520
2001	258	3			261	1.936	505
2002	251	3			254	1.903	483
2003	262	3			265	1.870	496
2004	262	3			265	1.837	487
2005	266	3			269	1.804	486
2006	262	3			265	1.772	469
2007	258	3			261	1.739	455
2008	255	3			258	1.706	440
2009	256	3			259	1.673	433
2010	256	3			259	1.640	424
2011	255	3			255	1.640	419
2012	256	3			256	1.640	420
2013	256	3			256	1.640	420
2014	256	3			256	1.640	420
2015	256	3			256	1.640	420
2020	258	4			258	1.640	424
2025	259	4			259	1.640	425
2030	260	4			260	1.640	427
2035	261	4			261	1.640	429
2036	261	4			261	1.640	429
2037	261	4			261	1.640	429
2038	261	4			261	1.640	429
2039	261	4			261	1.640	429
2040	262	4			262	1.640	430

2000	1.968
2010	1.640

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RWV-CSP Coast Springs Water
Water Supply and Demand Analysis and Projections
Population Estimate

Year	US Census		Persons per Housing Unit	Single Family Residential	Multi Family Residential			Flat Rate Residential
	Population	Housing Units		Services (DU)	Services	Units (DU)	Unit Density	Services (DU)
2000	186	239	0.780	239				
2010	167	243	0.687	243				
	-10.2%	1.9%	-11.9%	1.9%				

Year	Single Family Residential	Multi Family Residential			Flat Rate Residential	Total Residential	Persons per Housing Unit	Estimated District Population
	Services (DU)	Services	Residential Units (DU)	Unit Density	Services (DU)	Dwelling Unit		
1995								
1996								
1997								
1998								
1999								
2000	239	0				239	0.780	186
2001	242	0				242	0.771	186
2002	235	0				235	0.761	179
2003	236	0				236	0.752	177
2004	237	0				237	0.743	176
2005	241	0				241	0.733	177
2006	241	0				241	0.724	174
2007	243	0				243	0.715	173
2008	244	0				244	0.706	172
2009	244	0				244	0.696	170
2010	243	0				243	0.687	167
2011	244	0				244	0.687	168
2012	244	0				244	0.687	168
2012	245	0				245	0.687	168
2014	244	0				244	0.687	168
2015	243	0				243	0.687	167
2020	250					250	0.687	172
2025	255					255	0.687	175
2030	260					260	0.687	179
2035	265					265	0.687	182
2036	266					266	0.687	183
2037	267					267	0.687	183
2038	268					268	0.687	184
2039	269					269	0.687	185
2040	270					270	0.687	185

2000	0.780
2010	0.687

RWV-HKN Hawkins Water
Water Supply and Demand Analysis and Projections
Population Estimate

Year	US Census		Persons per Housing Unit	Single Family Residential	Multi Family Residential			Flat Rate Residential
	Population	Housing Units		Services (DU)	Services	Units (DU)	Density	Services (DU)
2000	134	50	2.681					
2010	129	51	2.509					
	-3.9%	2.7%	-6.4%					

Year	Single Family Residential	Multi Family Residential			Flat Rate Residential	Total Residential	Persons per Housing	Estimated District
	Services (DU)	Services	Residential Units (DU)	Unit Density	Services (DU)	Dwelling Unit	Unit	Population
1995								
1996								
1997								
1998								
1999								
2000	50	0				50	2.681	134
2001	50	0				50	2.664	133
2002	50	0				50	2.647	132
2003	50	0				50	2.629	131
2004	50	0				50	2.612	131
2005	51	0				51	2.595	132
2006	51	0				51	2.578	131
2007	51	0				51	2.561	131
2008	51	0				51	2.544	130
2009	52	0				52	2.527	131
2010	51	0				51	2.509	129
2011	52	0				52	2.509	130
2012	51	0				51	2.509	129
2012	52	0				52	2.509	130
2014	50	0				50	2.509	125
2015	50	0				50	2.509	126
2020	51					51	2.509	128
2025	51					51	2.509	128
2030	52					52	2.509	130
2035	52					52	2.509	130
2036	52					52	2.509	130
2037	52					52	2.509	130
2038	52					52	2.509	130
2039	52					52	2.509	130
2040	53					53	2.509	133

2000	2.681
2010	2.509

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RWV-LUC Lucerne Water
Water Supply and Demand Analysis and Projections
Population Estimate

Year	US Census		Persons per Housing Unit	Single Family Residential	Multi Family Residential			Flat Rate Residential
	Population	Housing Units		Services (DU)	Services	Units (DU)	Unit Density	Services (DU)
2000	2,289	1,385	1.653					
2010	2,462	1,433	1.718					
	7.6%	3.5%	4.0%					

Year	Single Family Residential	Multi Family Residential			Flat Rate Residential	Total Residential	Persons per Housing Unit	Estimated District Population
	Services (DU)	Services	Residential Units (DU)	Unit Density	Services (DU)	Dwelling Unit	Unit	Population
1995								
1996								
1997								
1998								
1999								
2000	1,203	15	182	12.1		1,385	1.653	2,289
2001	1,212	15	191	12.7		1,402	1.659	2,327
2002	1,156	15	200	13.3		1,356	1.666	2,258
2003	1,168	15	208	13.9		1,376	1.672	2,301
2004	1,174	15	217	14.5		1,391	1.679	2,335
2005	1,192	14	212	15.1		1,404	1.685	2,367
2006	1,197	14	218	15.7		1,415	1.692	2,394
2007	1,200	14	227	16.2		1,427	1.698	2,424
2008	1,200	14	236	16.8		1,436	1.705	2,448
2009	1,193	14	244	17.4		1,437	1.712	2,459
2010	1,181	14	252	18.0		1,433	1.718	2,462
2011	1,157	14	246	18.0		1,403	1.718	2,411
2012	1,147	13	242	18.0		1,388	1.718	2,385
2012	1,134	13	230	18.0		1,364	1.718	2,343
2014	1,127	13	236	18.0		1,362	1.718	2,340
2015	1,127	14	252	18.0		1,379	1.718	2,369
2020	1,157	14	254	18.0		1,410	1.718	2,423
2025	1,182	14	254	18.0		1,435	1.718	2,466
2030	1,207	15	272	18.0		1,478	1.718	2,539
2035	1,232	15	272	18.0		1,503	1.718	2,582
2036	1,237	15	272	18.0		1,508	1.718	2,591
2037	1,242	15	272	18.0		1,513	1.718	2,600
2038	1,247	15	272	18.0		1,518	1.718	2,608
2039	1,252	15	272	18.0		1,523	1.718	2,617
2040	1,257	16	290	18.0		1,546	1.718	2,656

2000	1.653
2010	1.718
2000	12.133
2010	18.006

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RWV-NOH Noel Heights

Water Supply and Demand Analysis and Projections

Population Estimate

Year	US Census		Persons per Housing Unit	Single Family Residential	Multi Family Residential		Flat Rate Residential
	Population	Housing Units		Services (DU)	Services	Units (DU)	Density
2000	77	57	1.343				
2010	64	50	1.290				
	-16.1%	-12.7%	-3.9%				

Year	Single Family Residential	Multi Family Residential			Flat Rate Residential	Total Residential	Persons per Housing Unit	Estimated District Population
	Services (DU)	Services	Residential Units (DU)	Unit Density	Services (DU)	Dwelling Unit	Unit	Population
1995								
1996								
1997								
1998								
1999								
2000	57					57	1.343	77
2001	56					56	1.338	75
2002	56					56	1.332	75
2003	51					51	1.327	68
2004	50					50	1.322	66
2005	51					51	1.317	67
2006	51					51	1.311	67
2007	51					51	1.306	66
2008	49					49	1.301	64
2009	50					50	1.296	64
2010	50					50	1.290	64
2011	48					48	1.290	62
2012	48					48	1.290	62
2012	48					48	1.290	62
2014	48					48	1.290	62
2015	48					48	1.290	62
2020	50					50	1.290	65
2025	51					51	1.290	66
2030	52					52	1.290	67
2035	53					53	1.290	69
2036	53					53	1.290	69
2037	53					53	1.290	69
2038	53					53	1.290	69
2039	53					53	1.290	69
2040	54					54	1.290	70

2000	1.343
2010	1.290

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RWV-RPD Rancho del Paradiso

Water Supply and Demand Analysis and Projections

Population Estimate

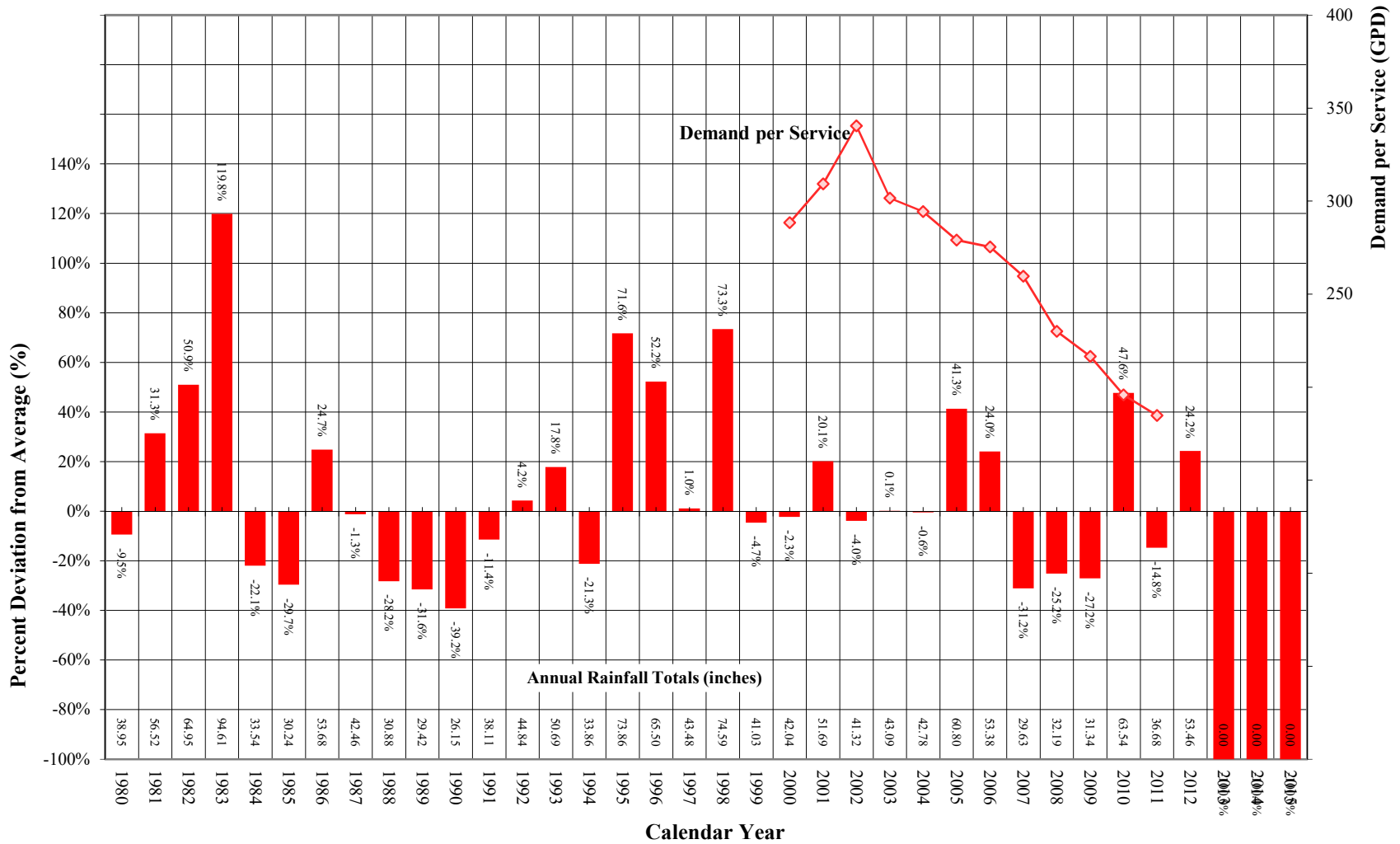
Year	US Census		Persons per Housing Unit	Single Family Residential	Multi Family Residential		Flat Rate Residential
	Population	Housing Units		Services (DU)	Services	Units (DU)	Density
2000	71	57	1.254				
2010	59	60	0.984				
	-17.8%	4.8%	-21.5%				

Year	Single Family Residential	Multi Family Residential		Flat Rate Residential	Total Residential	Persons per Housing Unit	Estimated District Population
	Services (DU)	Services	Residential Units (DU)	Services (DU)	Dwelling Unit	Unit	
1995							
1996							
1997							
1998							
1999							
2000	57	0			57	1.254	71
2001	57	0			57	1.227	70
2002	57	0			57	1.200	68
2003	57	0			57	1.173	67
2004	58	0			58	1.146	66
2005	58	0			58	1.119	65
2006	58	0			58	1.092	63
2007	59	0			59	1.065	62
2008	60	0			60	1.038	62
2009	60	0			60	1.011	61
2010	60	0			60	0.984	59
2011	59	0			59	0.984	58
2012	58	0			58	0.984	57
2012	58	0			58	0.984	57
2014	59	0			59	0.984	58
2015	58	0			58	0.984	57
2020	61				61	0.984	60
2025	62				62	0.984	61
2030	63				63	0.984	62
2035	64				64	0.984	63
2036	64				64	0.984	63
2037	64				64	0.984	63
2038	64				64	0.984	63
2039	64				64	0.984	63
2040	65				65	0.984	64

2000	1.254
2010	0.984

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Comparison of Annual Rainfall to Historical Average



California Water Service Company - Redwood Valley District (consolidated)
Water Supply and Demand Analysis and Projections

Temperature & Rainfall History

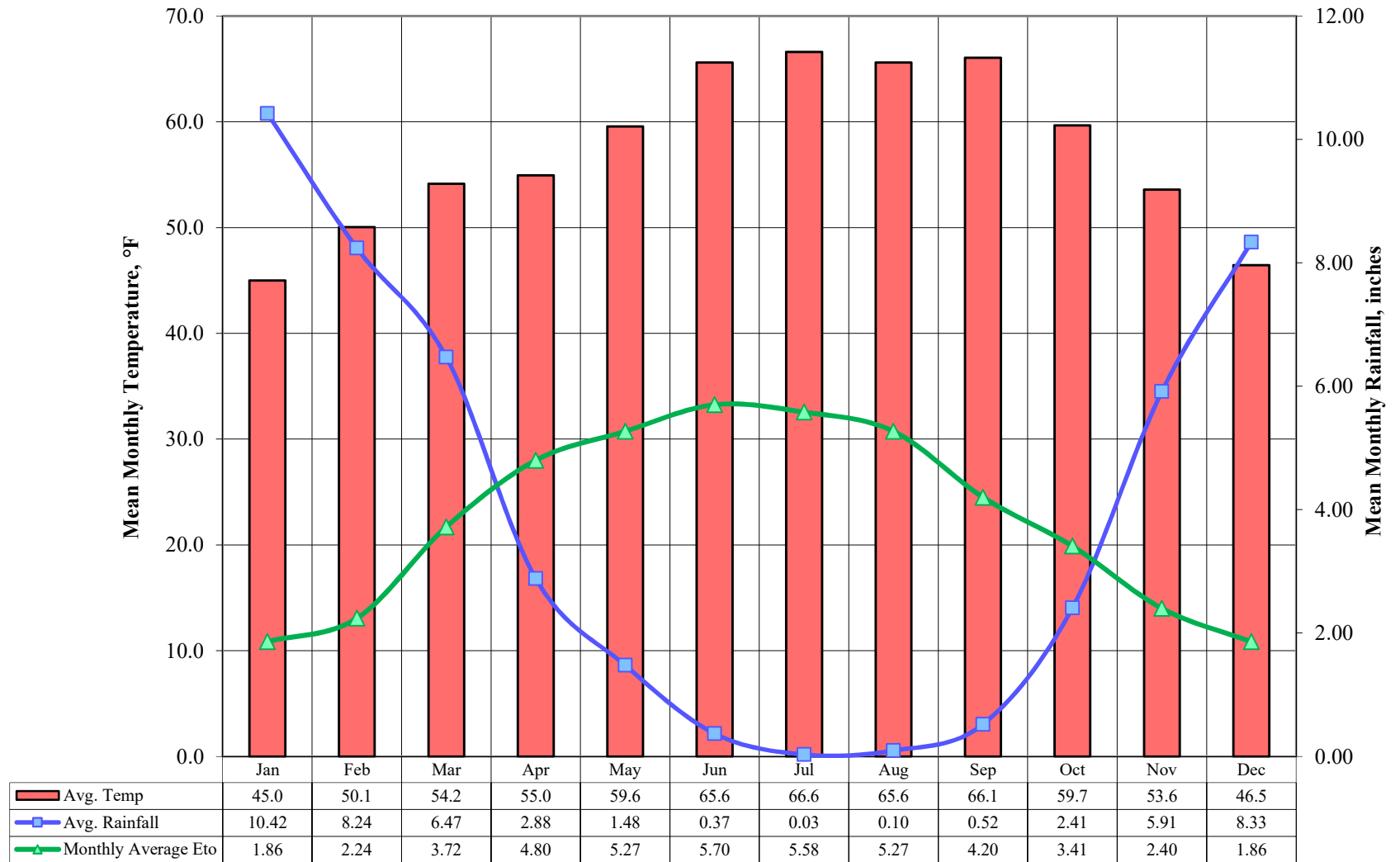
Year	Precipitation		Temperature			Demand per Service (gpd)	Percent of Average Demand
	Annual (in)	Percent Variation	Tmax (°F)	Tmin (°F)	Mean (°F)		
1980	38.95	-9.5%	82.00	37.60	59.8		
1981	56.52	31.3%	87.40	40.50	64.0		
1982	64.95	50.9%	83.10	33.80	58.5		
1983	94.61	119.8%	84.10	37.70	60.9		
1984	33.54	-22.1%	87.80	35.60	61.7		
1985	30.24	-29.7%	83.00	34.00	58.5		
1986	53.68	24.7%	80.10	36.90	58.5		
1987	42.46	-1.3%	78.30	35.80	57.1		
1988	30.88	-28.2%	85.60	36.10	60.9		
1989	29.42	-31.6%	85.10	33.50	59.3		
1990	26.15	-39.2%	82.10	29.30	55.7		
1991	38.11	-11.4%	79.10	35.10	57.1		
1992	44.84	4.2%	82.00	36.10	59.1		
1993	50.69	17.8%	82.60	36.20	59.4		
1994	33.86	-21.3%	83.30	36.10	59.7		
1995	73.86	71.6%	82.80	43.10	63.0		
1996	65.50	52.2%	83.00	40.60	61.8		
1997	43.48	1.0%	82.20	37.90	60.1		
1998	74.59	73.3%	84.20	34.20	59.2		
1999	41.03	-4.7%	79.60	36.00	57.8		
2000	42.04	-2.3%	80.60	38.30	59.5	288	9.0%
2001	51.69	20.1%	82.80	35.00	58.9	309	16.9%
2002	41.32	-4.0%	82.40	37.10	59.8	341	28.7%
2003	43.09	0.1%	84.50	39.00	61.8	302	14.0%
2004	42.78	-0.6%	85.00	40.00	62.5	294	11.2%
2005	60.80	41.3%	83.20	38.50	60.9	279	5.5%
2006	53.38	24.0%	86.20	37.40	61.8	275	4.1%
2007	29.63	-31.2%	83.10	33.50	58.3	260	-1.9%
2008	32.19	-25.2%	84.10	35.20	59.7	230	-13.1%
2009	31.34	-27.2%	83.90	37.20	60.6	217	-18.1%
2010	63.54	47.6%	83.20	39.70	61.5	196	-26.0%
2011	36.68	-14.8%	82.40	35.30	58.9	185	-30.2%
2012	53.46	24.2%	81.40	36.20	58.8		
2013	0.00	-100.0%					
2014	0.00	-100.0%					
2015	0.00	-100.0%					
2016							
2017							
2018							
2019							
2020							

Precipitation (1895 - present)						Monthly Average Eto
	Mean	High	Year	Low	Year	
	in.	in.	-	in.	-	
Jan	10.42	39.85	1909	0.51	1976	1.86
Feb	8.24	27.12	1902	0.14	1953	2.24
Mar	6.47	26.12	1904	0.09	1923	3.72
Apr	2.88	10.21	1948	0.00	1909	4.80
May	1.48	9.77	1915	0.00	1909	5.27
Jun	0.37	2.54	1967	0.00	1902	5.70
Jul	0.03	1.94	1974	0.00	1957	5.58
Aug	0.10	2.36	1954	0.00	1960	5.27
Sep	0.52	4.03	1904	0.00	1902	4.20
Oct	2.41	11.18	1962	0.00	1906	3.41
Nov	5.91	19.06	1973	0.00	1929	2.40
Dec	8.33	26.20	1955	0.00	1989	1.86
Annual	47.17	94.61	1983	16.58	1976	46.31

Temperature (1895 - present)			
	Tmax	Tmin	Mean
	°F	°F	°F
Jan	61.6	28.4	45.0
Feb	67.1	33.0	50.1
Mar	73.3	35.0	54.2
Apr	73.2	36.7	55.0
May	79.4	39.7	59.6
Jun	87.4	43.8	65.6
Jul	87.1	46.1	66.6
Aug	86.4	44.8	65.6
Sep	87.8	44.3	66.1
Oct	80.8	38.5	59.7
Nov	72.9	34.3	53.6
Dec	63.6	29.3	46.5
Annual	87.8	28.4	58.1

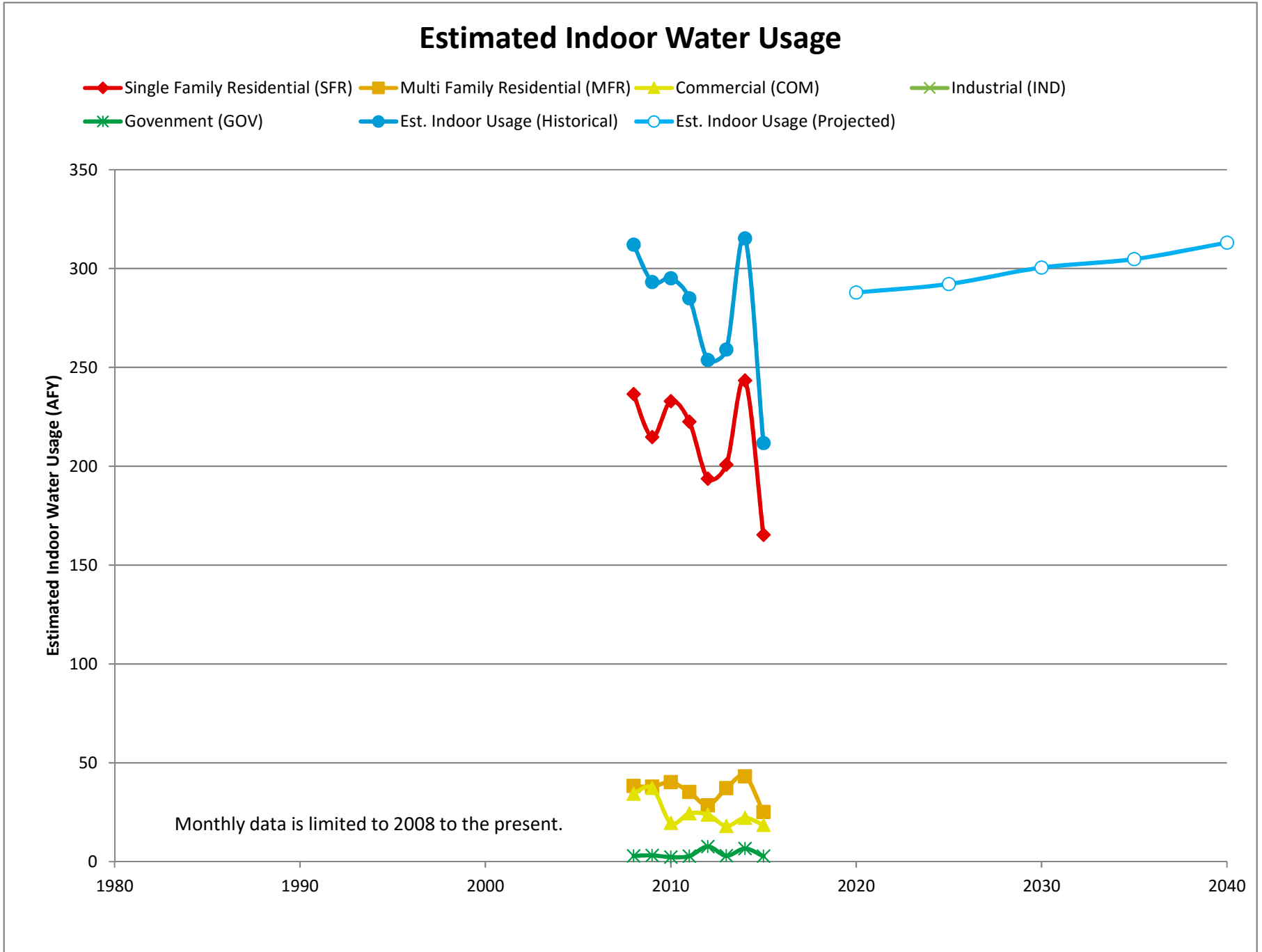
- 1) Eto values based on California Irrigation Management Information System (CIMIS), <http://www.cimis.water.ca.gov/cimis/welcome.jsp>, EvapoTranspiration (Eto) Zones Map, Zone 12
- 2) PPT, Tmax, Tmin obtained from PRISM where, PPT is total monthly rainfall, Tmax is average of maximum temperatures for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

Average Monthly Temperature, Rainfall, and Monthly Eto



**California Water Service Company - Redwood Valley District (consolidated)
Water Supply and Demand Analysis and Projections**

Groundwater Production Facilities



California Water Service Company - Redwood Valley District (consolidated)
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 Jan Usage	MFR Indoor Use (Annualized 90% of January Total)			COM Jan Usage	COM Indoor Use (Annualized 90% of January Total)			
		JAN (CCF)	AFY		AF/Serv	AFY	GPD/Serv		%	(CCF)	AFY		GPD/Serv	%	(CCF)	AFY
1980																
1981																
1982																
1983																
1984																
1985																
1986																
1987																
1988																
1989																
1990																
1991																
1992																
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2006																
2007																
2008	9,540	237	0.127		237	114	82%	1,545	38	2,012	76%	1,384	34	504	103%	
2009	8,663	215	0.116		215	103	80%	1,531	38	1,993	76%	1,504	37	555	156%	
2010	9,394	233	0.127		233	113	92%	1,621	40	2,111	87%	791	20	295	102%	
2011	8,975	223	0.123		223	109	96%	1,420	35	1,886	85%	984	24	390	122%	
2012	7,812	194	0.107		194	96	82%	1,151	29	1,552	90%	960	24	388	134%	
2013	8,101	201	0.112		201	100	89%	1,498	37	2,105	120%	727	18	307	96%	
2014	9,815	243	0.136		243	122	118%	1,740	43	2,395	127%	894	22	387	134%	
2015	6,667	165			165			1,013	25			749	19			
2016					215	107			36	1,984			21	368		
2017					216	107			36	1,984			21	368		
2018					216	107			36	1,984			21	368		
2019					217	107			36	1,984			21	368		
2020					218	107			40	1,984			23	368		
2025					222	107			40	1,984			23	368		
2030					226	107			42	1,984			25	368		
2035					230	107			42	1,984			25	368		
2040					234	107			45	1,984			26	368		

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

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