

Water Resources Planning Department

**Projection Analysis Work Sheets
for
Dixon District**

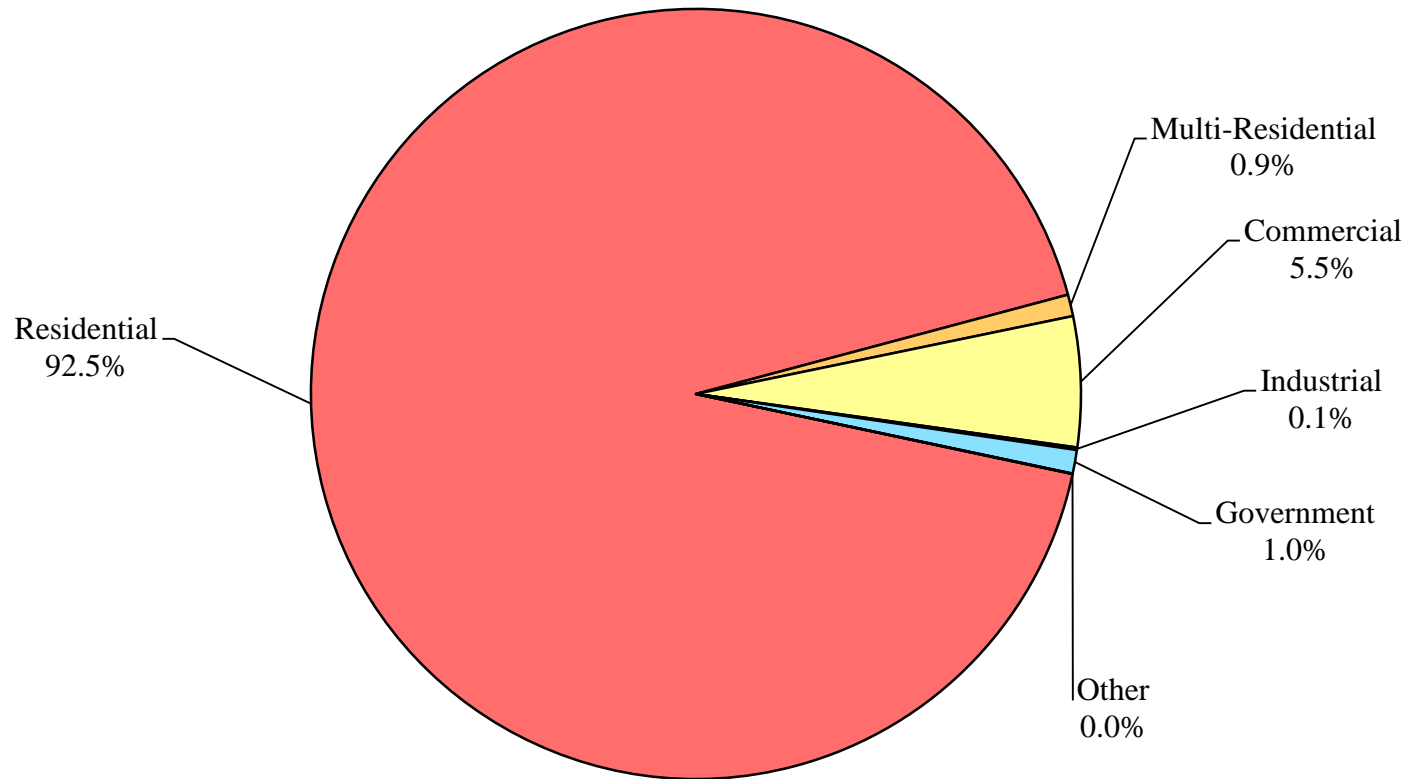
2015



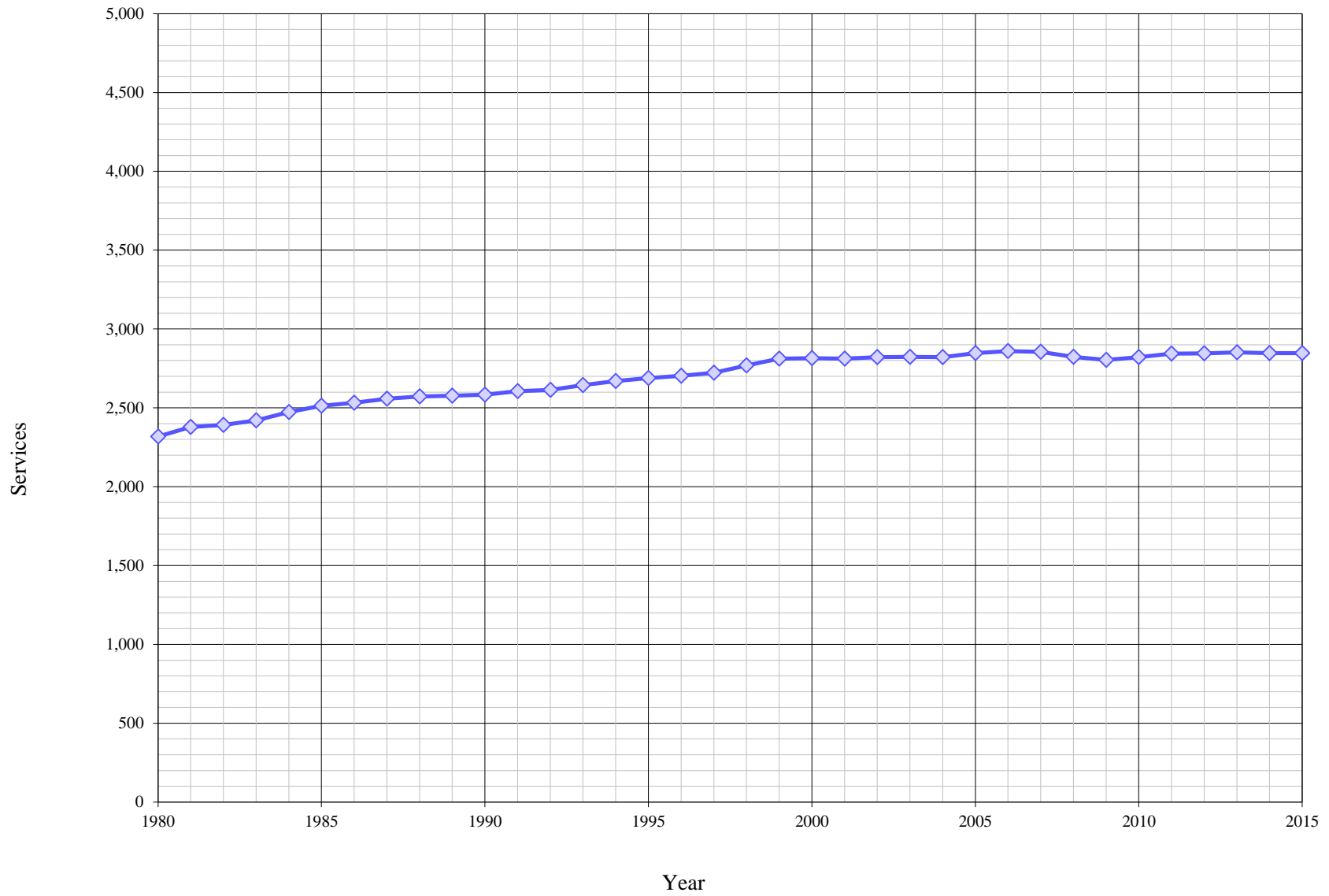
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Distribution of Services (2015)



Historical Services



California Water Service Company - Dixon District
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)	Irrigation (IRR)	Total	Annual Change
1980	2,156	3	134	4	19	2	0	2,318	
1981	2,207	8	138	4	22	1	0	2,379	62
1982	2,216	11	138	4	23	1	0	2,392	13
1983	2,241	11	140	4	23	1	0	2,420	28
1984	2,292	13	140	4	24	1	0	2,473	53
1985	2,329	14	139	4	25	2	0	2,513	39
1986	2,345	16	142	3	25	1	0	2,532	20
1987	2,370	16	142	4	25	1	0	2,558	25
1988	2,386	16	142	4	24	0	0	2,572	15
1989	2,391	16	142	4	24	0	0	2,577	5
1990	2,394	17	142	4	26	0	0	2,583	6
1991	2,420	17	139	4	26	0	0	2,605	22
1992	2,429	17	138	4	26	0	0	2,614	9
1993	2,459	17	138	4	26	0	0	2,644	30
1994	2,486	17	137	4	27	0	0	2,670	26
1995	2,505	17	137	4	27	0	0	2,689	19
1996	2,519	17	136	4	28	0	0	2,703	14
1997	2,539	17	135	4	27	0	0	2,723	19
1998	2,587	17	136	3	25	0	0	2,768	46
1999	2,628	17	138	3	25	0	0	2,812	44
2000	2,635	17	136	4	23	0	0	2,815	3
2001	2,634	17	134	4	22	0	0	2,812	-3
2002	2,640	17	136	5	24	0	0	2,821	9
2003	2,637	17	136	5	25	3	0	2,823	2
2004	2,636	17	137	5	24	1	3	2,822	25
2005	2,657	17	137	4	24	3	5	2,847	24
2006	2,667	17	136	4	25	4	7	2,860	37
2007	2,654	16	145	4	24	4	7	2,855	8
2008	2,609	20	154	4	31	3	3	2,824	-36
2009	2,589	21	153	3	36	2	1	2,804	-51
2010	2,611	15	156	3	36	0.42	1	2,821	-3
2011	2,620	22	161	3	36	0	1	2,844	40
2012	2,623	23	161	3	34	0	1	2,845	24
2013	2,632	23	162	3	30	2	1	2,852	8
2014	2,631	25	157	3	28	2	1	2,847	2
2015	2,633	26	156	3	28	0.50	1	2,847	-4
5 Yr Avg.	2,628	24	159	3	31	1	1	2,847	14
10 Yr Avg.	2,627	21	154	3	31	2	2	2,840	5
15 Yr Avg.	2,632	19	148	4	28	1	2	2,835	6
20 Yr Avg.	2,619	19	145	4	28	1	2	2,817	12

Note: Reclassification occurred between categories from 2007 to 2009

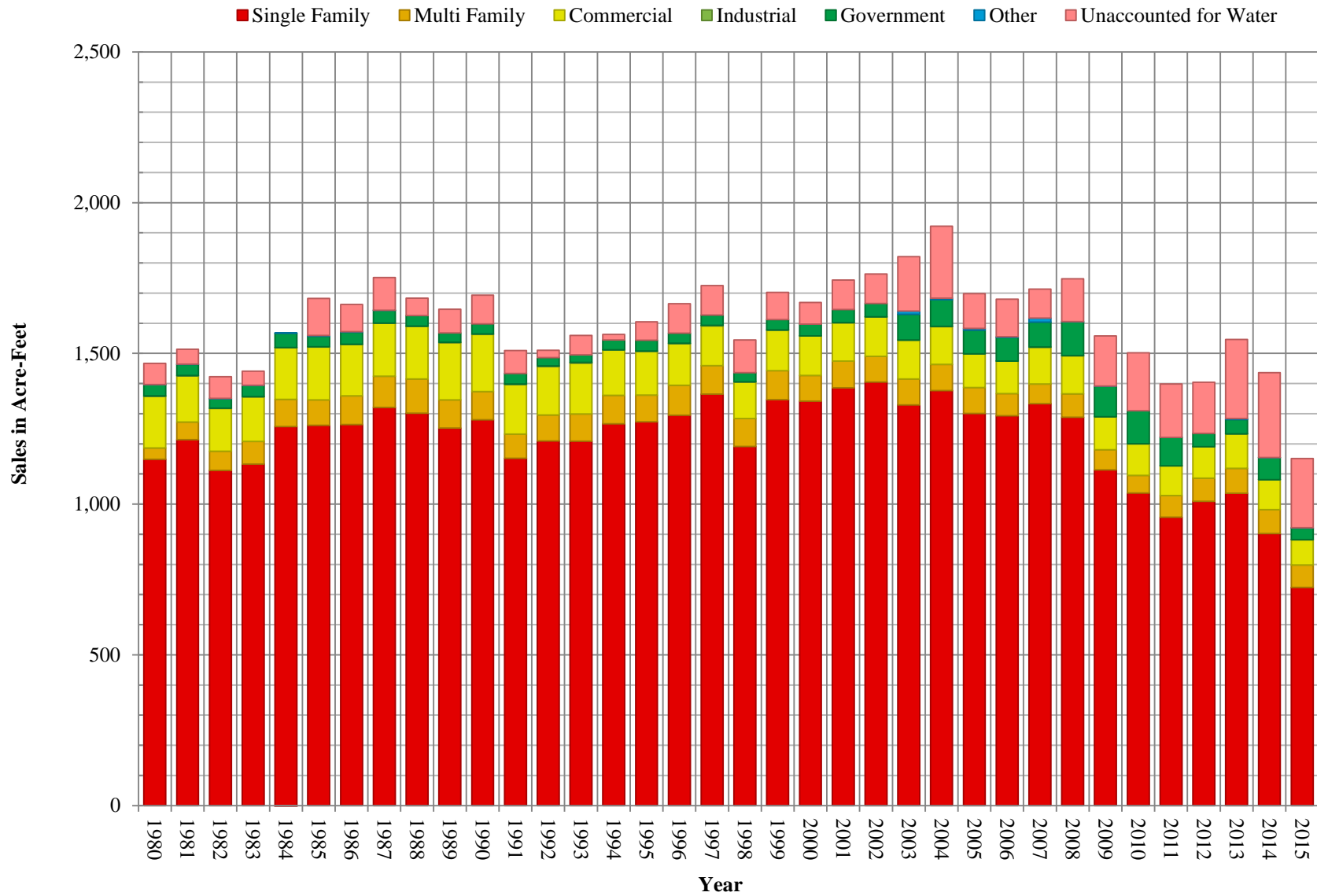
California Water Service Company - Dixon District
Water Supply and Demand Analysis and Projections
Service Growth Percentage

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Irrigation (IRR)	Total
1981	2.39%	180.56%	2.29%	0.00%	13.97%	-57.14%		2.66%
1982	0.39%	28.71%	0.30%	0.00%	4.98%	66.67%		0.55%
1983	1.16%	3.08%	1.21%	-6.25%	0.73%	6.67%		1.16%
1984	2.25%	15.67%	0.12%	-6.67%	5.43%	-18.75%		2.19%
1985	1.61%	8.39%	-0.24%	9.52%	3.09%	46.15%		1.59%
1986	0.69%	14.29%	1.97%	-13.04%	0.00%	-26.32%		0.79%
1987	1.08%	0.00%	-0.23%	20.00%	-1.00%	-14.29%		0.99%
1988	0.68%	0.00%	0.18%	0.00%	-3.03%	-100.00%		0.57%
1989	0.20%	0.00%	0.00%	0.00%	0.69%	0.00%		0.19%
1990	0.13%	5.73%	0.06%	0.00%	7.59%	0.00%		0.23%
1991	1.07%	0.49%	-2.46%	0.00%	0.00%	0.00%		0.86%
1992	0.39%	0.00%	-0.30%	0.00%	0.00%	0.00%		0.35%
1993	1.25%	0.00%	-0.36%	0.00%	0.00%	0.00%		1.14%
1994	1.07%	0.00%	-0.54%	0.00%	2.24%	0.00%		0.99%
1995	0.76%	0.00%	-0.18%	-6.25%	1.88%	0.00%		0.71%
1996	0.58%	0.00%	-0.61%	-4.44%	2.15%	0.00%		0.53%
1997	0.80%	0.00%	-0.37%	11.63%	-3.01%	0.00%		0.72%
1998	1.87%	0.00%	0.49%	-25.00%	-5.28%	0.00%		1.68%
1999	1.59%	0.00%	1.41%	13.89%	-0.33%	0.00%		1.57%
2000	0.27%	-0.49%	-1.75%	14.63%	-9.21%	0.00%		0.10%
2001	-0.05%	0.49%	-0.86%	2.13%	-2.90%	0.00%		-0.11%
2002	0.23%	0.00%	1.05%	12.50%	5.60%	0.00%		0.33%
2003	-0.12%	0.00%	0.37%	11.11%	6.01%	0.00%		0.06%
2004	-0.04%	0.00%	0.18%	0.00%	-3.33%	-63.33%		-0.02%
2005	0.81%	0.00%	-0.06%	-13.33%	1.03%	181.82%	83.33%	0.87%
2006	0.34%	0.00%	-0.37%	0.00%	2.39%	41.94%	52.73%	0.45%
2007	-0.48%	-3.92%	6.74%	-1.92%	-2.33%	9.09%	0.00%	-0.16%
2008	-1.67%	19.39%	6.31%	-11.76%	26.28%	-33.33%	-54.76%	-1.10%
2009	-0.79%	7.69%	-0.76%	-20.00%	15.14%	-43.75%	-68.42%	-0.69%
2010	0.84%	-30.56%	1.74%	0.00%	0.70%	-72.22%	0.00%	0.61%
2011	0.38%	50.86%	3.32%	0.00%	0.70%	-60.00%	0.00%	0.79%
2012	0.10%	4.55%	0.05%	0.00%	-4.40%	-100.00%	0.00%	0.06%
2013	0.33%	0.00%	0.41%	0.00%	-13.80%			0.23%
2014	-0.01%	6.52%	-2.89%	0.00%	-5.62%	15.79%	-1.79%	-0.17%
2015	0.08%	5.44%	-0.95%	0.00%	0.60%	-72.73%	-20.00%	0.02%
5 Yr. Avg.	0.18%	4.13%	-0.01%	0.00%	-4.50%	-54.11%	-0.45%	0.19%
10 Yr. Avg.	-0.09%	2.90%	1.36%	-3.37%	1.97%	-6.74%	1.23%	0.00%
15 Yr. Avg.	0.00%	1.73%	0.95%	-1.42%	1.74%	-8.86%	1.23%	0.08%
20 Yr. Avg.	0.25%	1.19%	0.67%	-0.53%	0.52%	-6.53%	1.23%	0.29%

Note: Values in red not used in averages due to reclassification.

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Historical Sales

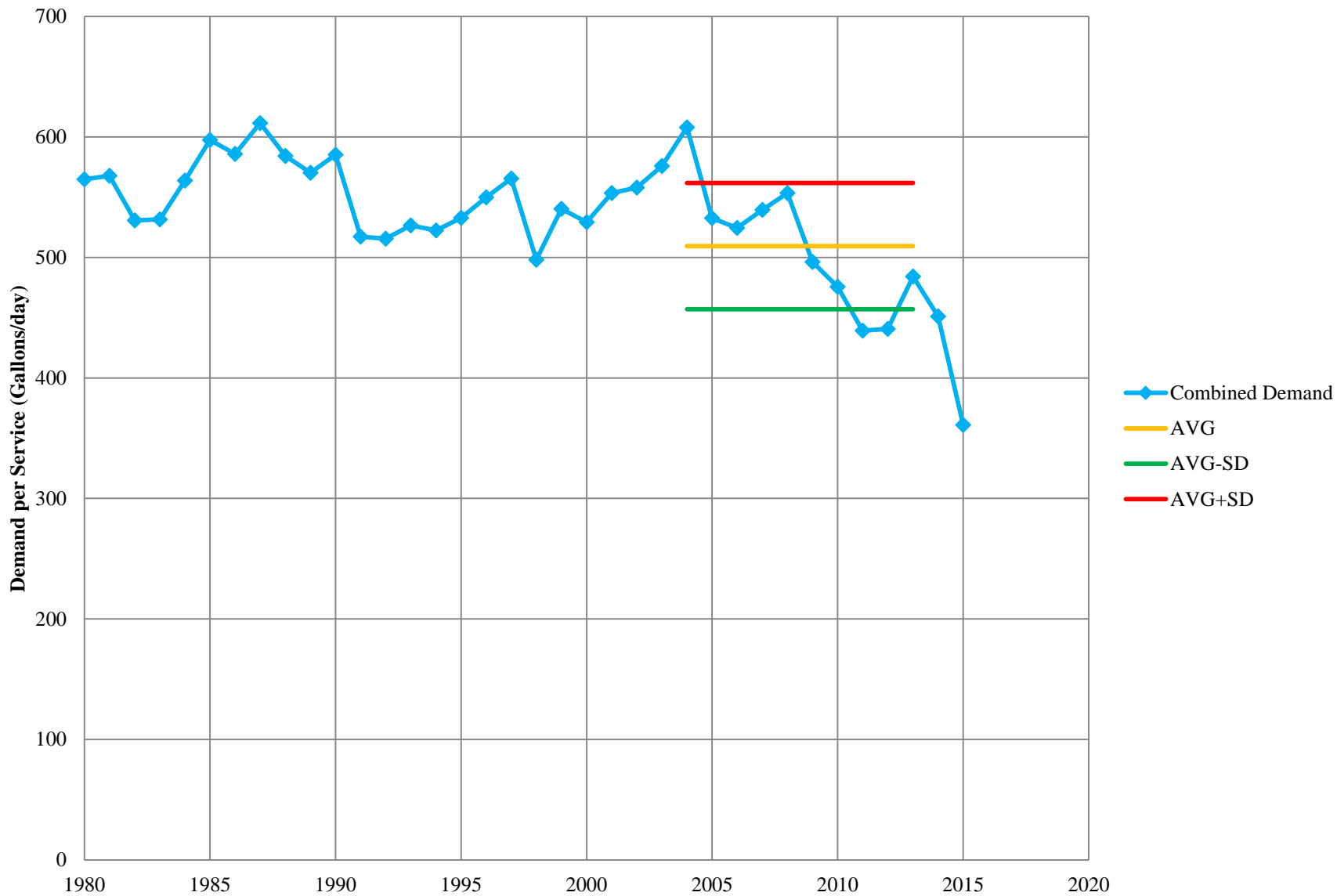


California Water Service Company - Dixon District
Water Supply and Demand Analysis and Projections
Sales (AF)

Worksheet 3

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Irrigation (IRR)	Unaccounted for Water (UAFW)	Total Sales (AF)	Total Demand (AF)	Total Demand (MGal)
1980	1,149	38	171	1.8	37	0.5	0.0	70	1,397	1,466	478
1981	1,214	58	153	1.8	36	0.9	0.0	49	1,464	1,513	493
1982	1,112	63	142	1.6	31	1.1	0.0	72	1,350	1,422	463
1983	1,133	75	148	0.9	37	0.2	0.0	47	1,394	1,441	470
1984	1,258	90	172	0.5	47	0.4	0.0	-5	1,567	1,562	509
1985	1,261	85	175	1.0	35	2.5	0.0	123	1,559	1,682	548
1986	1,264	95	170	1.0	40	1.8	0.0	90	1,572	1,662	542
1987	1,321	104	175	1.3	42	0.5	0.0	109	1,643	1,752	571
1988	1,301	114	175	1.3	34	0.0	0.0	58	1,625	1,683	548
1989	1,252	94	189	1.4	31	0.0	0.0	78	1,568	1,646	536
1990	1,280	93	189	1.8	34	0.0	0.0	95	1,598	1,693	552
1991	1,152	80	164	1.7	35	0.0	0.0	77	1,433	1,510	492
1992	1,210	86	160	2.6	27	0.0	0.0	24	1,486	1,510	492
1993	1,209	90	169	2.4	25	0.0	0.0	64	1,495	1,560	508
1994	1,267	94	150	1.1	32	0.0	0.0	18	1,544	1,563	509
1995	1,273	89	145	0.5	36	0.0	0.0	61	1,544	1,605	523
1996	1,295	100	138	1.6	33	0.0	0.0	98	1,567	1,665	543
1997	1,365	95	132	1.4	34	0.0	0.0	98	1,627	1,725	562
1998	1,191	93	121	0.7	30	0.0	0.0	109	1,436	1,545	503
1999	1,347	96	135	0.4	34	0.0	0.0	90	1,612	1,702	555
2000	1,342	85	130	0.8	39	0.0	0.0	72	1,597	1,669	544
2001	1,386	89	127	1.2	43	0.0	0.0	98	1,645	1,743	568
2002	1,405	85	130	1.0	44	0.0	0.0	98	1,665	1,763	575
2003	1,329	85	129	0.7	85	11.0	0.0	180	1,641	1,821	593
2004	1,376	87	125	1.0	88	5.1	2.4	239	1,683	1,922	626
2005	1,301	86	111	0.4	79	5.6	4.0	115	1,583	1,698	553
2006	1,293	73	108	0.6	78	2.6	10.4	125	1,555	1,680	547
2007	1,333	65	122	0.4	83	13.4	12.0	96	1,629	1,725	562
2008	1,288	78	126	0.4	112	0.9	3.7	142	1,609	1,751	570
2009	1,114	66	109	0.3	102	0.5	0.5	166	1,392	1,558	508
2010	1,036	59	104	0.2	110	0.1	1.1	192	1,311	1,503	490
2011	957	71	99	0.3	94	0.1	0.8	177	1,222	1,399	456
2012	1,009	77	104	0.4	44	0.0	0.5	169	1,235	1,405	458
2013	1,036	82	114	0.3	47	3.4	0.6	263	1,284	1,547	504
2014	903	79	99	0.3	73	0.1	2.2	282	1,157	1,438	469
2015	724	74	84	0.3	39	0.1	0.4	230	922	1,151	375

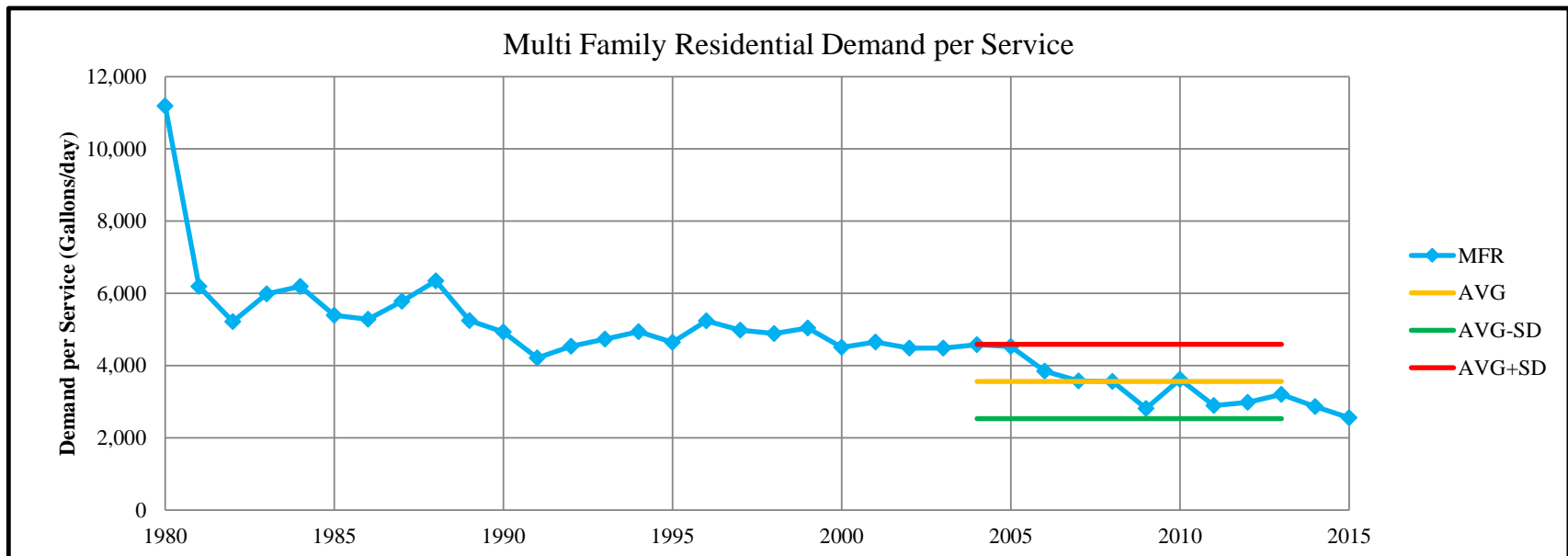
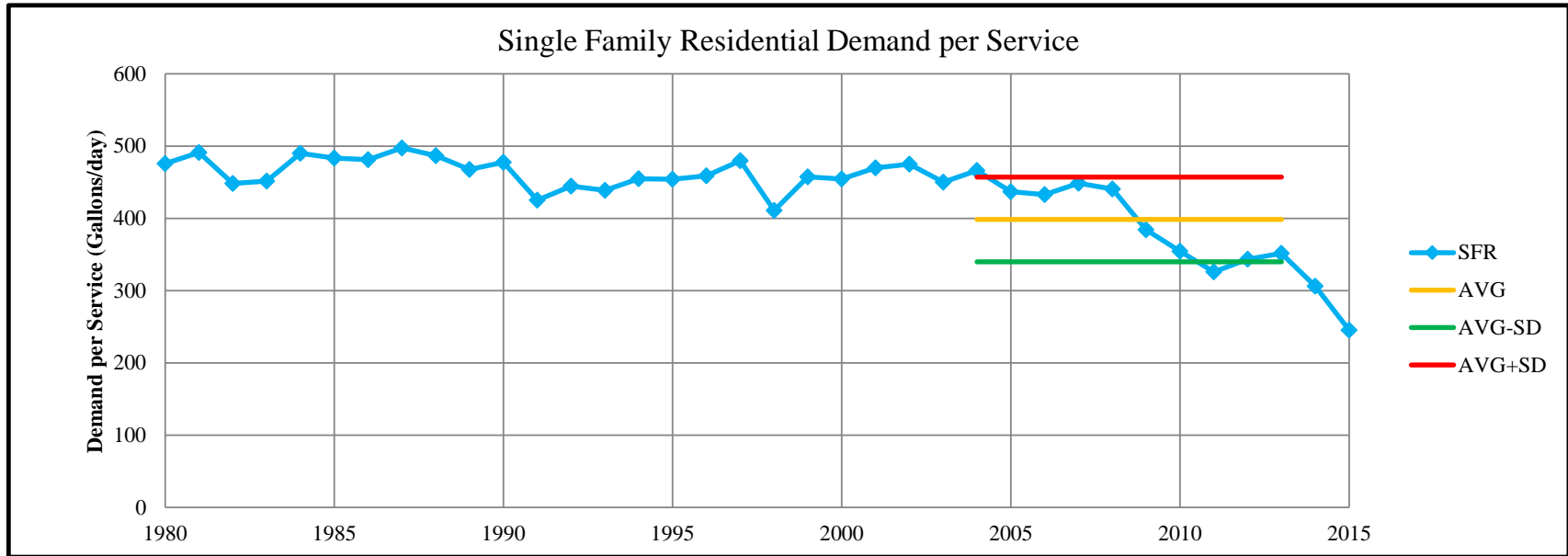
Combined Demand per Service

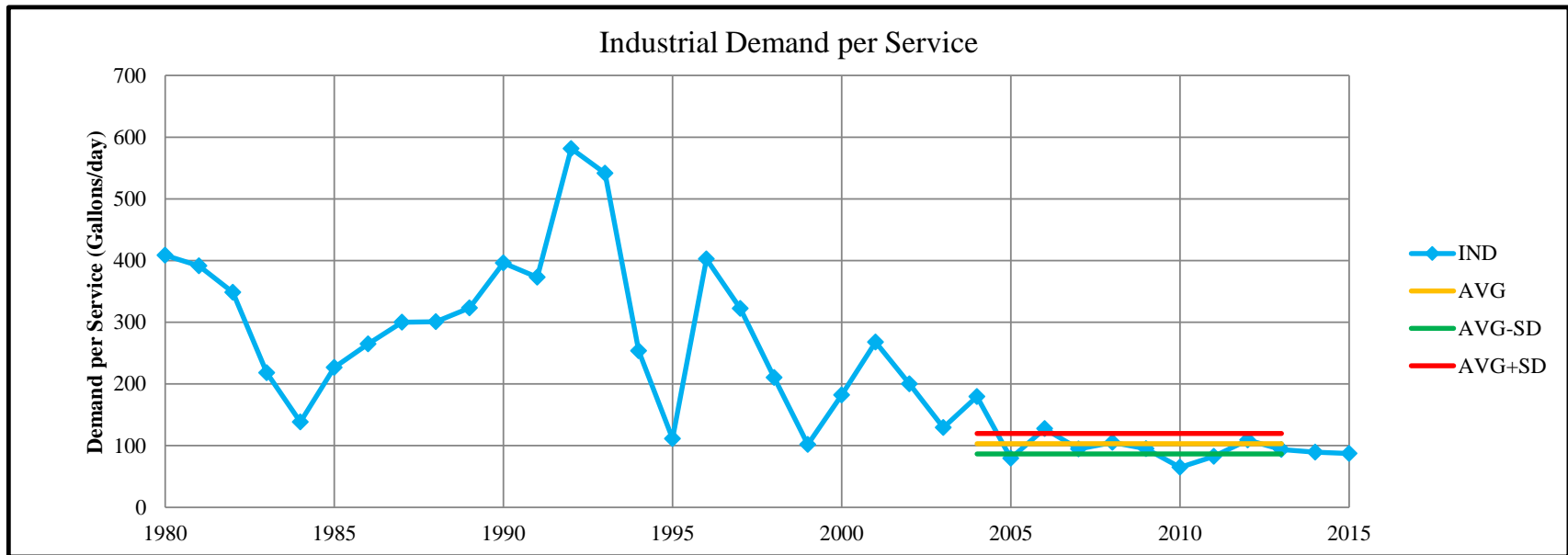
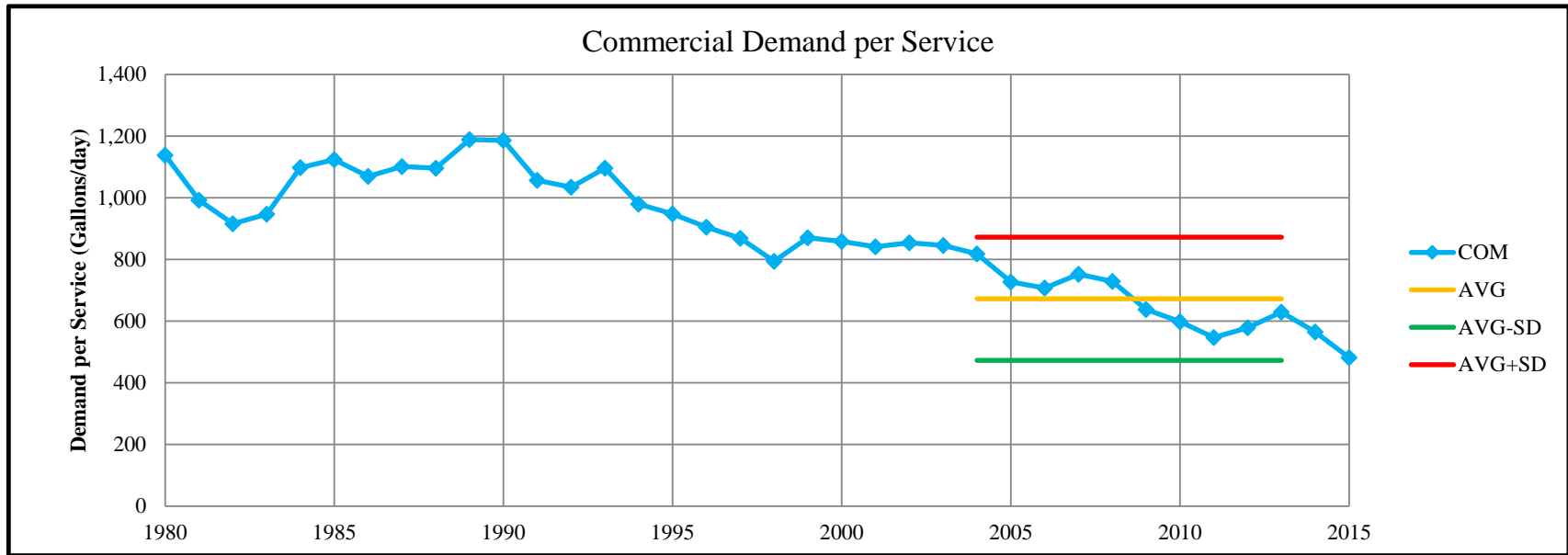


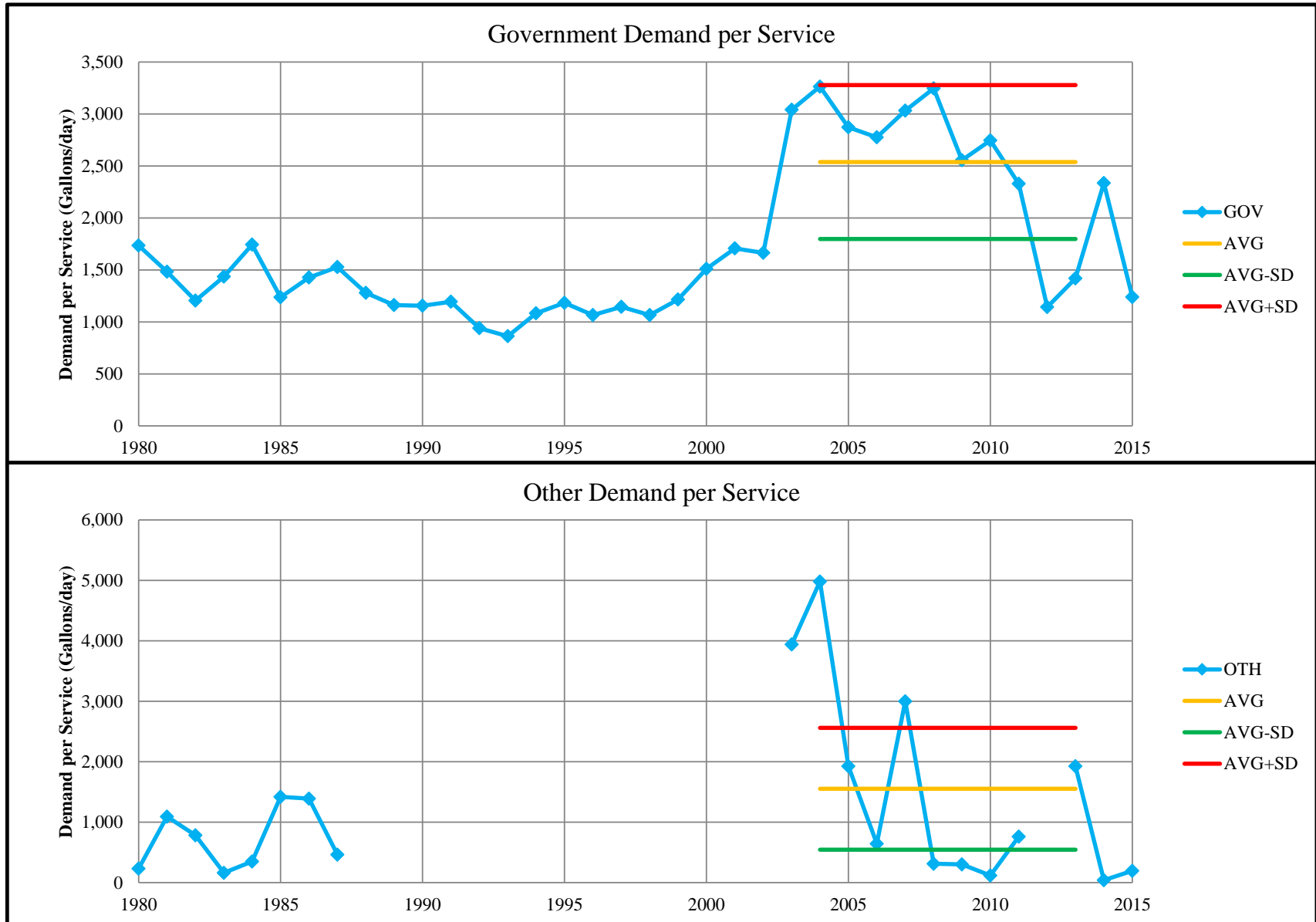
California Water Service Company - Dixon District
Water Supply and Demand Analysis and Projections
Demand per Service (Gallons per Day)

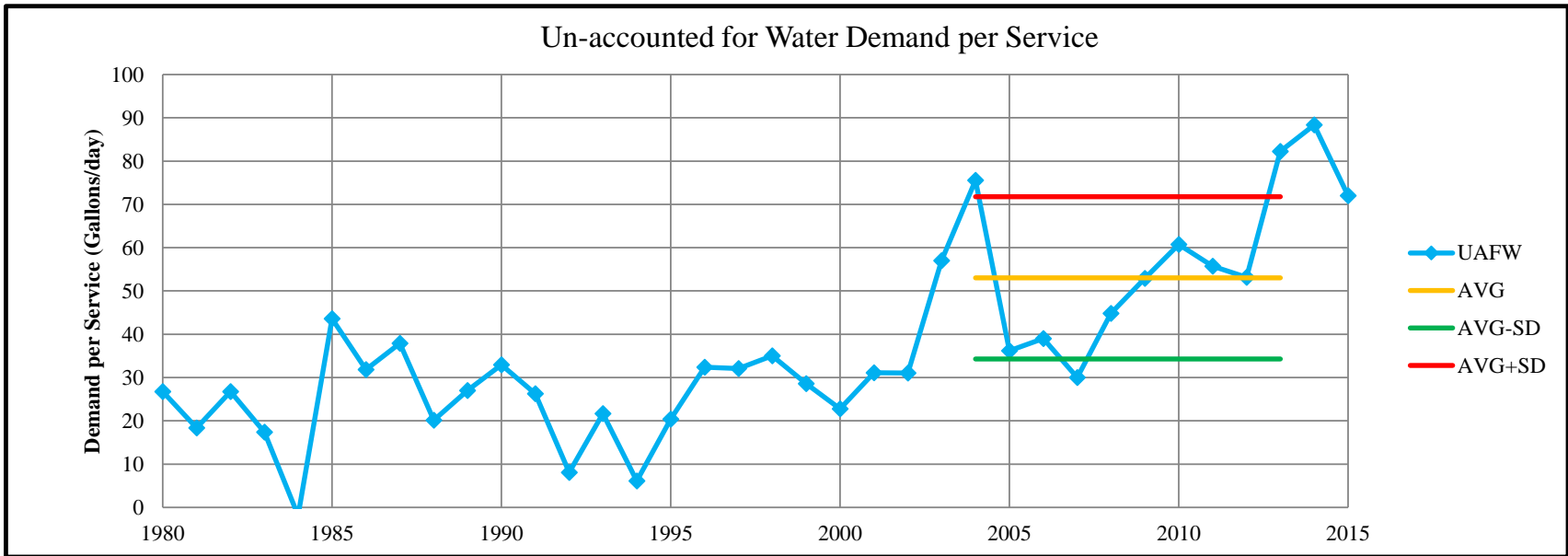
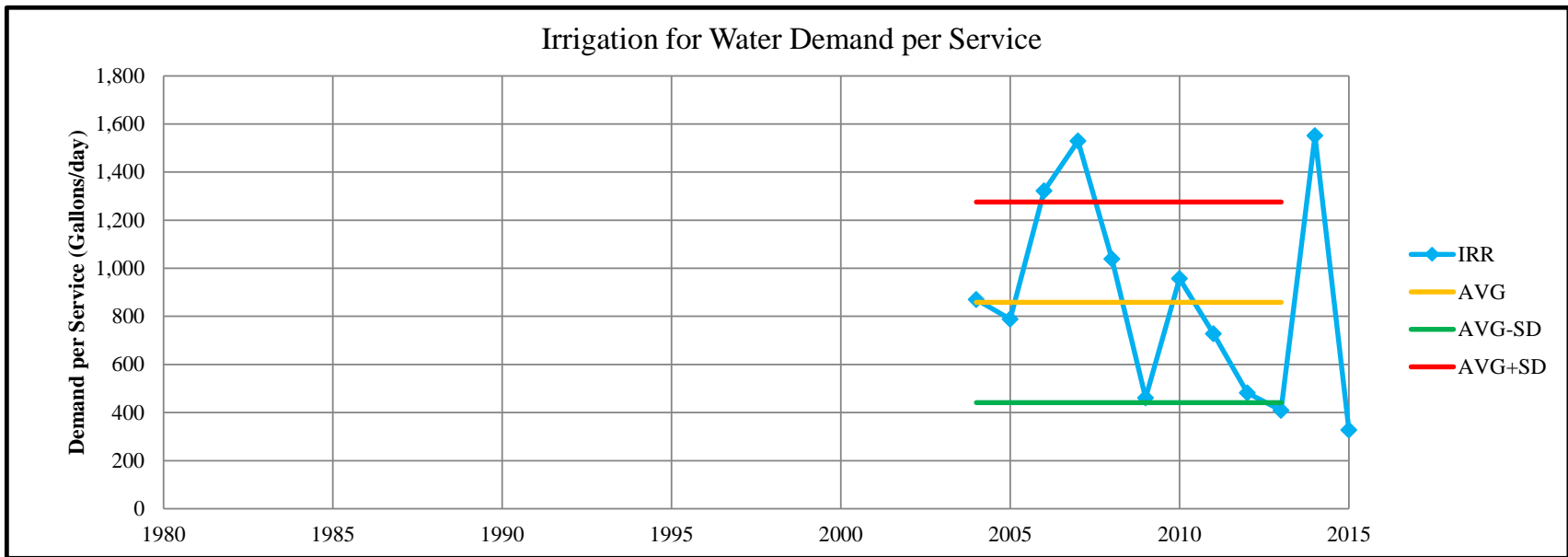
Year	SFR	MFR	COM	IND	GOV	OTH	IRR	UAFW	Combined Demand/Serv
1980	476	11,193	1,138	408	1,734	232		27	565
1981	491	6,192	992	391	1,482	1,090		18	568
1982	448	5,214	916	348	1,204	784		27	531
1983	451	5,984	947	218	1,436	163		17	532
1984	490	6,191	1,098	138	1,744	348		-2	564
1985	483	5,394	1,124	227	1,236	1,419		44	598
1986	481	5,285	1,069	265	1,427	1,390		32	586
1987	497	5,781	1,102	300	1,527	463		38	612
1988	487	6,345	1,097	301	1,279			20	584
1989	467	5,245	1,189	323	1,163			27	570
1990	477	4,933	1,186	396	1,155			33	585
1991	425	4,212	1,057	373	1,194			26	517
1992	445	4,538	1,034	582	940			8	516
1993	439	4,735	1,096	542	862			22	527
1994	455	4,940	980	254	1,082			6	522
1995	454	4,649	948	111	1,183			20	533
1996	459	5,238	905	403	1,065			32	550
1997	480	4,982	869	322	1,145			32	566
1998	411	4,889	794	210	1,066			35	498
1999	457	5,039	871	102	1,215			29	540
2000	454	4,509	858	182	1,510			23	529
2001	470	4,654	841	268	1,708			31	553
2002	475	4,487	854	200	1,664			31	558
2003	450	4,486	846	130	3,041	3,942		57	576
2004	466	4,581	818	180	3,264	4,981	870	76	608
2005	437	4,531	728	79	2,872	1,925	788	36	533
2006	433	3,849	708	128	2,777	645	1,322	39	524
2007	448	3,575	752	95	3,031	3,000	1,529	30	540
2008	441	3,560	729	105	3,246	314	1,039	45	554
2009	384	2,811	638	95	2,555	301	461	53	496
2010	354	3,619	598	65	2,746	118	957	61	476
2011	326	2,897	547	83	2,328	762	728	56	439
2012	343	2,981	578	109	1,144		482	53	441
2013	352	3,202	629	94	1,418	1,925	409	82	484
2014	306	2,866	565	89	2,336	40	1,551	88	451
2015	245	2,556	482	87	1,238	197	328	72	361
10-yr AVG	398	3,561	673	103	2,538	1,552	858	53	509
SD	59	1,029	200	17	740	1,008	417	19	52
SD Range	1980-2015	1981-2015	1980-2015	2005-2015	2005-2015	2005-2015	2008-2015	2005-2015	1980-2015

Note: 10-yr AVG based on 2004-2013 range due to 2014-2015 being drought years









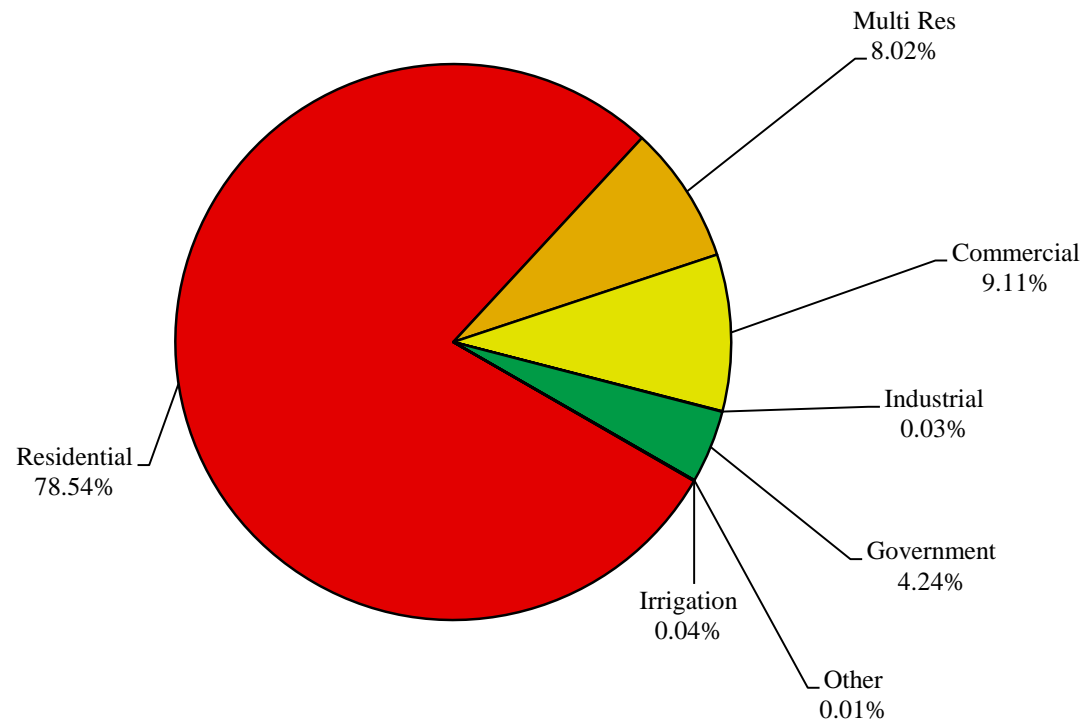
California Water Service Company - Dixon District
Water Supply and Demand Analysis and Projections
Percentage Change in Annual Demand

Worksheet 5

Year	Residential	Multi Res	Commercial	Industrial	Government	Other	Irrigation	Unaccounted	Total
1981	5.71%	55.22%	-10.81%	-4.14%	-2.61%	101.52%		-29.48%	4.82%
1982	-8.40%	8.38%	-7.38%	-10.99%	-14.68%	19.80%		46.26%	-7.77%
1983	1.88%	18.30%	4.57%	-41.32%	20.15%	-77.82%		-34.33%	3.23%
1984	10.99%	19.67%	16.09%	-40.85%	28.04%	73.58%		-111.04%	12.42%
1985	0.28%	-5.57%	2.11%	79.66%	-26.92%	495.65%		-2459.94%	-0.52%
1986	0.25%	11.98%	-2.96%	1.65%	15.41%	-27.83%		-26.40%	0.82%
1987	4.46%	9.39%	2.79%	35.96%	5.95%	-71.43%		20.27%	4.55%
1988	-1.47%	9.75%	-0.28%	0.17%	-18.80%	-100.00%		-46.54%	-1.11%
1989	-3.78%	-17.33%	8.41%	7.50%	-8.42%	0.00%		34.40%	-3.51%
1990	2.24%	-0.56%	-0.18%	22.50%	6.89%	0.00%		22.29%	1.90%
1991	-9.98%	-14.21%	-13.10%	-5.82%	3.32%	0.00%		-19.66%	-10.31%
1992	4.97%	7.75%	-2.39%	55.91%	-21.27%	0.00%		-69.08%	3.70%
1993	-0.09%	4.36%	5.60%	-6.87%	-8.24%	0.00%		171.12%	0.62%
1994	4.80%	4.31%	-11.13%	-53.17%	28.35%	0.00%		-71.44%	3.27%
1995	0.55%	-5.88%	-3.42%	-58.79%	11.32%	0.00%		235.15%	-0.05%
1996	1.67%	12.68%	-5.14%	245.10%	-8.02%	0.00%		59.59%	1.51%
1997	5.40%	-4.90%	-4.30%	-10.65%	4.27%	0.00%		-0.31%	3.85%
1998	-12.74%	-1.85%	-8.17%	-51.03%	-11.82%	0.00%		11.08%	-11.75%
1999	13.09%	3.05%	11.21%	-44.81%	13.58%	0.00%		-17.20%	12.26%
2000	-0.37%	-10.94%	-3.18%	104.71%	12.87%	0.00%		-20.12%	-0.93%
2001	3.30%	3.72%	-2.80%	50.29%	9.81%	0.00%		36.30%	3.01%
2002	1.36%	-3.60%	2.59%	-16.06%	2.86%	0.00%		0.18%	1.22%
2003	-5.37%	-0.02%	-0.58%	-28.02%	93.80%	0.00%		83.69%	-1.46%
2004	3.55%	2.13%	-3.08%	38.61%	3.74%	-53.67%		32.51%	2.59%
2005	-5.50%	-1.11%	-11.14%	-61.64%	-11.10%	8.89%	66.07%	-51.66%	-5.98%
2006	-0.60%	-15.05%	-3.08%	60.71%	-1.00%	-52.43%	156.24%	8.16%	-1.75%
2007	3.09%	-10.75%	13.40%	-27.41%	6.63%	407.37%	15.66%	-23.10%	4.78%
2008	-3.37%	18.90%	3.03%	-1.53%	35.20%	-93.03%	-69.26%	47.53%	-1.25%
2009	-13.52%	-14.98%	-13.17%	-27.98%	-9.35%	-46.08%	-85.98%	17.24%	-13.46%
2010	-6.95%	-10.59%	-4.54%	-31.65%	8.21%	-89.09%	107.56%	15.50%	-5.82%
2011	-7.69%	20.74%	-5.47%	27.37%	-14.61%	158.33%	-23.98%	-7.54%	-6.81%
2012	5.48%	7.58%	5.74%	32.23%	-53.05%	-100.00%	-33.80%	-4.47%	1.09%
2013	2.69%	7.41%	9.25%	-14.38%	6.87%	#DIV/0!	8.09%	55.01%	3.96%
2014	-12.90%	-4.63%	-12.76%	-4.38%	55.49%	-97.58%	272.44%	7.24%	-9.94%
2015	-19.81%	-5.99%	-15.64%	-2.29%	-46.66%	33.33%	-83.09%	-18.45%	-20.32%

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Percent of Total Sales by Type of Use (2015)

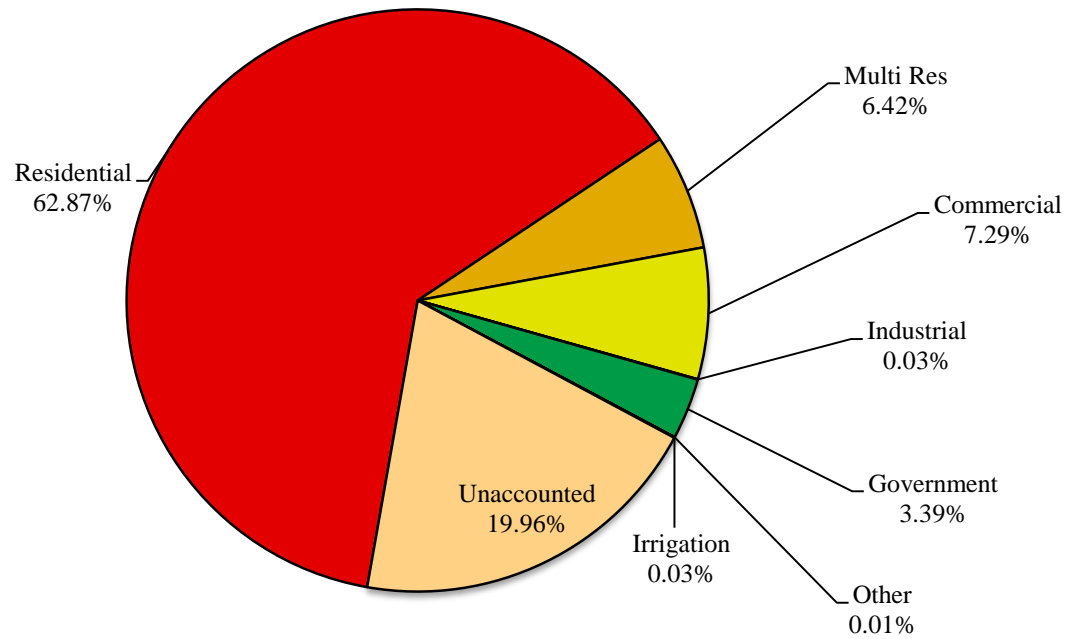


California Water Service Company - Dixon District
Water Supply and Demand Analysis and Projections
Percentage of Total Sales

Worksheet 6

Year	Residential	Multi Res	Commercial	Industrial	Government	Other	Irrigation	Percent Total
1980	82.22%	2.69%	12.27%	0.13%	2.65%	0.03%	0.00%	100.00%
1981	82.93%	3.99%	10.44%	0.12%	2.47%	0.06%	0.00%	100.00%
1982	82.35%	4.69%	10.48%	0.12%	2.28%	0.08%	0.00%	100.00%
1983	81.28%	5.37%	10.62%	0.07%	2.65%	0.02%	0.00%	100.00%
1984	80.24%	5.72%	10.96%	0.03%	3.02%	0.03%	0.00%	100.00%
1985	80.88%	5.42%	11.25%	0.06%	2.22%	0.16%	0.00%	100.00%
1986	80.42%	6.03%	10.83%	0.06%	2.54%	0.12%	0.00%	100.00%
1987	80.36%	6.30%	10.65%	0.08%	2.58%	0.03%	0.00%	100.00%
1988	80.07%	7.00%	10.74%	0.08%	2.12%	0.00%	0.00%	100.00%
1989	79.84%	6.00%	12.06%	0.09%	2.01%	0.00%	0.00%	100.00%
1990	80.11%	5.85%	11.82%	0.11%	2.11%	0.00%	0.00%	100.00%
1991	80.41%	5.60%	11.45%	0.12%	2.43%	0.00%	0.00%	100.00%
1992	81.39%	5.81%	10.78%	0.18%	1.84%	0.00%	0.00%	100.00%
1993	80.82%	6.03%	11.31%	0.16%	1.68%	0.00%	0.00%	100.00%
1994	82.01%	6.09%	9.73%	0.07%	2.09%	0.00%	0.00%	100.00%
1995	82.50%	5.74%	9.41%	0.03%	2.32%	0.00%	0.00%	100.00%
1996	82.63%	6.37%	8.79%	0.10%	2.11%	0.00%	0.00%	100.00%
1997	83.87%	5.83%	8.10%	0.09%	2.12%	0.00%	0.00%	100.00%
1998	82.93%	6.48%	8.43%	0.05%	2.11%	0.00%	0.00%	100.00%
1999	83.54%	5.95%	8.35%	0.02%	2.14%	0.00%	0.00%	100.00%
2000	84.00%	5.35%	8.16%	0.05%	2.44%	0.00%	0.00%	100.00%
2001	84.24%	5.39%	7.70%	0.07%	2.60%	0.00%	0.00%	100.00%
2002	84.37%	5.13%	7.80%	0.06%	2.64%	0.00%	0.00%	100.00%
2003	81.01%	5.21%	7.87%	0.04%	5.19%	0.67%	0.00%	100.00%
2004	81.77%	5.18%	7.44%	0.06%	5.25%	0.30%	0.14%	100.00%
2005	82.18%	5.45%	7.03%	0.02%	4.96%	0.35%	0.26%	100.00%
2006	83.14%	4.71%	6.93%	0.04%	5.00%	0.17%	0.67%	100.00%
2007	81.81%	4.01%	7.50%	0.03%	5.09%	0.82%	0.74%	100.00%
2008	80.06%	4.83%	7.83%	0.03%	6.97%	0.06%	0.23%	100.00%
2009	80.00%	4.75%	7.86%	0.02%	7.30%	0.04%	0.04%	100.00%
2010	79.04%	4.51%	7.96%	0.02%	8.39%	0.00%	0.08%	100.00%
2011	78.30%	5.84%	8.08%	0.02%	7.68%	0.01%	0.07%	100.00%
2012	81.69%	6.22%	8.45%	0.03%	3.57%	0.00%	0.04%	100.00%
2013	80.69%	6.42%	8.88%	0.02%	3.67%	0.27%	0.05%	100.00%
2014	78.04%	6.80%	8.60%	0.03%	6.33%	0.01%	0.19%	100.00%
2015	78.54%	8.02%	9.11%	0.03%	4.24%	0.01%	0.04%	100.00%

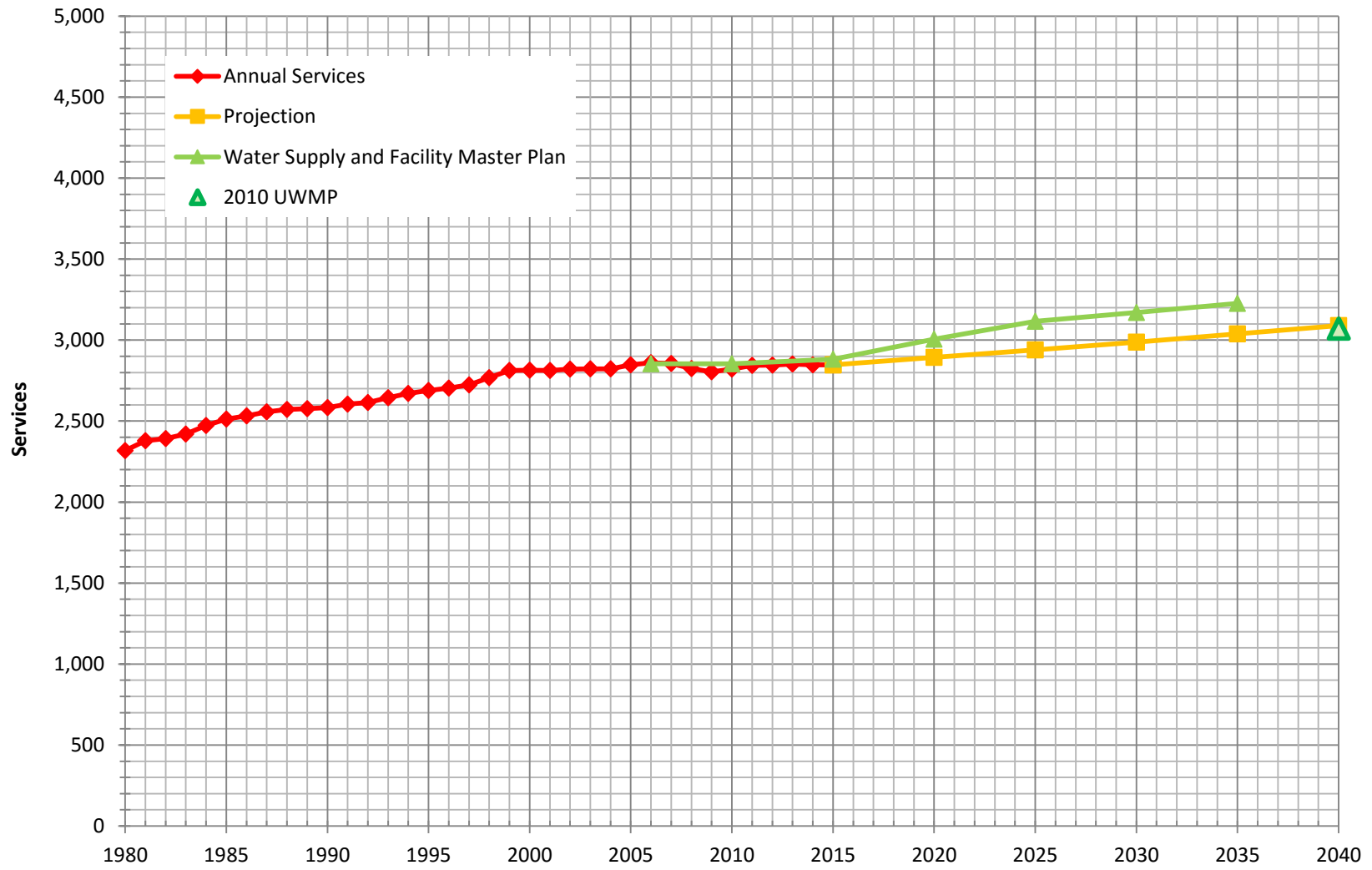
Percent of Total Demand by Type of Use (2015)



California Water Service Company - Dixon District
Water Supply and Demand Analysis and Projections
Percentage of Total Demand

Year	Residential	Multi Res	Commercial	Industrial	Government	Other	Irrigation	Unaccounted	Percent Total
1980	78.33%	2.56%	11.69%	0.12%	2.53%	0.03%	0.00%	4.74%	100.00%
1981	80.24%	3.86%	10.10%	0.12%	2.39%	0.06%	0.00%	3.24%	100.00%
1982	78.20%	4.45%	9.95%	0.11%	2.17%	0.08%	0.00%	5.04%	100.00%
1983	78.62%	5.19%	10.27%	0.06%	2.57%	0.02%	0.00%	3.27%	100.00%
1984	80.50%	5.73%	11.00%	0.03%	3.03%	0.03%	0.00%	-0.33%	100.00%
1985	74.98%	5.03%	10.43%	0.06%	2.06%	0.15%	0.00%	7.29%	100.00%
1986	76.06%	5.70%	10.24%	0.06%	2.40%	0.11%	0.00%	5.43%	100.00%
1987	75.38%	5.91%	9.99%	0.08%	2.42%	0.03%	0.00%	6.20%	100.00%
1988	77.31%	6.76%	10.37%	0.08%	2.04%	0.00%	0.00%	3.45%	100.00%
1989	76.06%	5.71%	11.49%	0.09%	1.91%	0.00%	0.00%	4.74%	100.00%
1990	75.60%	5.52%	11.15%	0.10%	1.99%	0.00%	0.00%	5.63%	100.00%
1991	76.33%	5.31%	10.87%	0.11%	2.30%	0.00%	0.00%	5.08%	100.00%
1992	80.11%	5.72%	10.61%	0.17%	1.81%	0.00%	0.00%	1.57%	100.00%
1993	77.49%	5.78%	10.85%	0.16%	1.61%	0.00%	0.00%	4.12%	100.00%
1994	81.05%	6.02%	9.62%	0.07%	2.06%	0.00%	0.00%	1.17%	100.00%
1995	79.34%	5.52%	9.05%	0.03%	2.24%	0.00%	0.00%	3.83%	100.00%
1996	77.76%	5.99%	8.27%	0.10%	1.98%	0.00%	0.00%	5.89%	100.00%
1997	79.11%	5.50%	7.64%	0.08%	2.00%	0.00%	0.00%	5.67%	100.00%
1998	77.09%	6.03%	7.84%	0.05%	1.96%	0.00%	0.00%	7.03%	100.00%
1999	79.12%	5.64%	7.91%	0.02%	2.03%	0.00%	0.00%	5.29%	100.00%
2000	80.39%	5.12%	7.81%	0.05%	2.33%	0.00%	0.00%	4.31%	100.00%
2001	79.51%	5.08%	7.27%	0.07%	2.45%	0.00%	0.00%	5.62%	100.00%
2002	79.67%	4.85%	7.37%	0.06%	2.49%	0.00%	0.00%	5.57%	100.00%
2003	72.99%	4.69%	7.09%	0.04%	4.68%	0.61%	0.00%	9.90%	100.00%
2004	71.61%	4.54%	6.51%	0.05%	4.60%	0.27%	0.13%	12.43%	100.00%
2005	76.59%	5.08%	6.55%	0.02%	4.62%	0.33%	0.24%	6.80%	100.00%
2006	76.96%	4.36%	6.42%	0.04%	4.63%	0.16%	0.62%	7.43%	100.00%
2007	77.25%	3.79%	7.09%	0.03%	4.81%	0.78%	0.69%	5.57%	100.00%
2008	73.58%	4.44%	7.20%	0.03%	6.40%	0.05%	0.21%	8.09%	100.00%
2009	71.47%	4.24%	7.02%	0.02%	6.52%	0.03%	0.03%	10.66%	100.00%
2010	68.95%	3.93%	6.95%	0.01%	7.32%	0.00%	0.07%	12.76%	100.00%
2011	68.37%	5.10%	7.05%	0.02%	6.71%	0.01%	0.06%	12.68%	100.00%
2012	71.84%	5.47%	7.43%	0.03%	3.14%	0.00%	0.04%	12.06%	100.00%
2013	66.99%	5.33%	7.37%	0.02%	3.05%	0.22%	0.04%	16.98%	100.00%
2014	62.76%	5.47%	6.92%	0.02%	5.09%	0.01%	0.15%	19.59%	100.00%
2015	62.87%	6.42%	7.29%	0.03%	3.39%	0.01%	0.03%	19.96%	100.00%

Historical & Projected Services



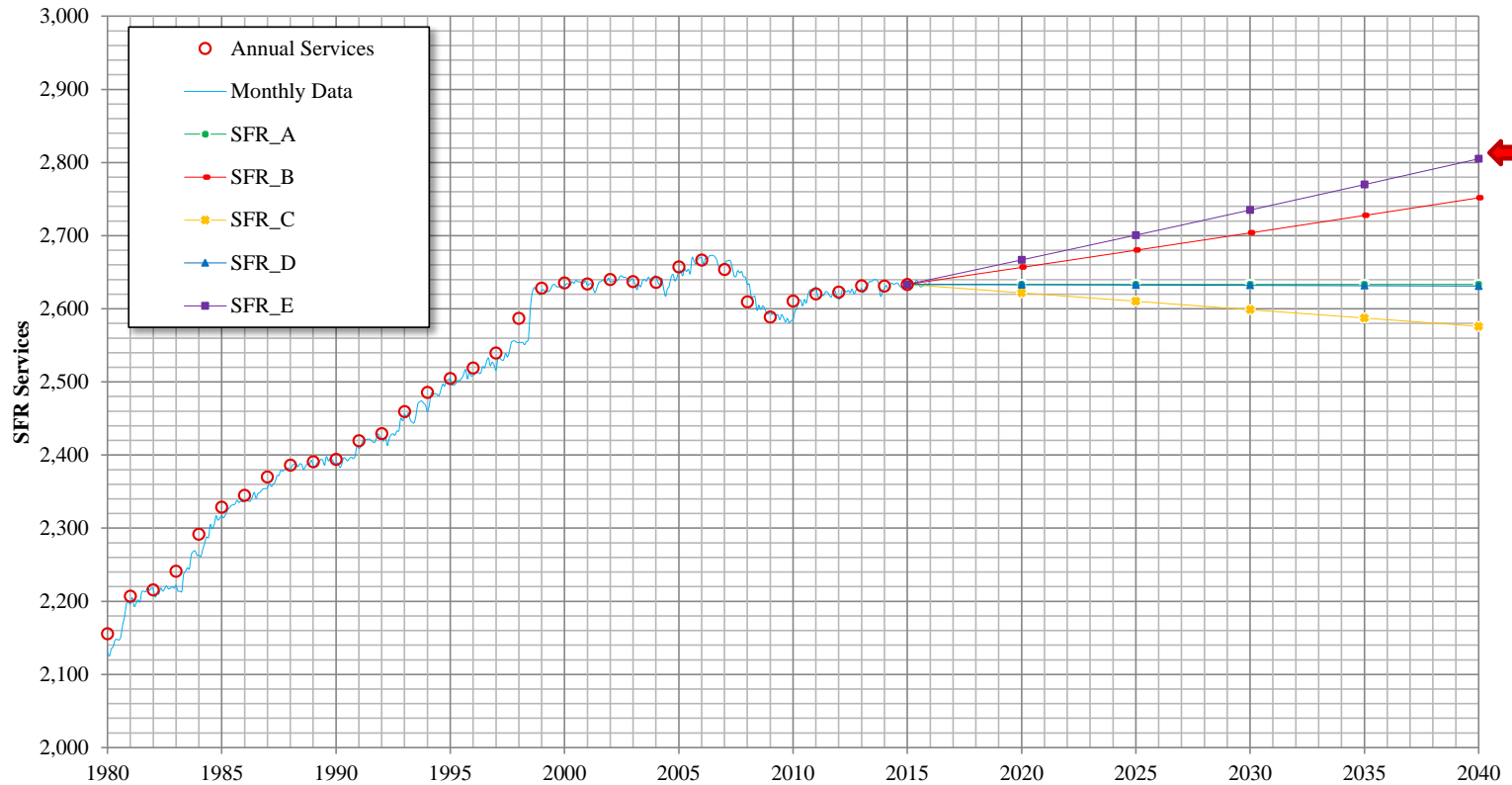
California Water Service Company - Dixon District
Water Supply and Demand Analysis and Projections

Customer Category		Selected Trend	Growth Rate	Actual Services				Projected Services					
				2000	2005	2010	Base Year 2015	2015	2020	2025	2030	2035	2040
SFR	SFR_E	20 Yr. Avg.	0.25%	2,635	2,657	2,611	2,633	2,633	2,667	2,701	2,735	2,770	2,805
MFR	MFR_C	10 Yr. Avg.	2.90%	17	17	15	26	26	30	34	40	46	53
COM	COM_E	20 Yr. Avg.	0.67%	136	137	156	156	156	161	166	172	178	184
IND	IND_A	Zero Growth Rate	0.00%	4	4	3	3	3	3	3	3	3	3
GOV	GOV_D	15 Yr. Avg.	1.74%	23	24	36	28	28	31	33	36	40	43
OTH	OTH_A	Zero Growth Rate	0.00%	0	3	0	1	1	1	1	1	1	1
IRR	IRR_A	Zero Growth Rate	0.00%	0	5	1	1	1	1	1	1	1	1
TOTAL		Average growth rate 2011-2040	0.33%	2,815	2,847	2,821	2,846	2,847	2,893	2,939	2,988	3,038	3,090

California Water Service Company - Dixon District

Water Supply and Demand Analysis and Projections

SFR Historical & Projected Services

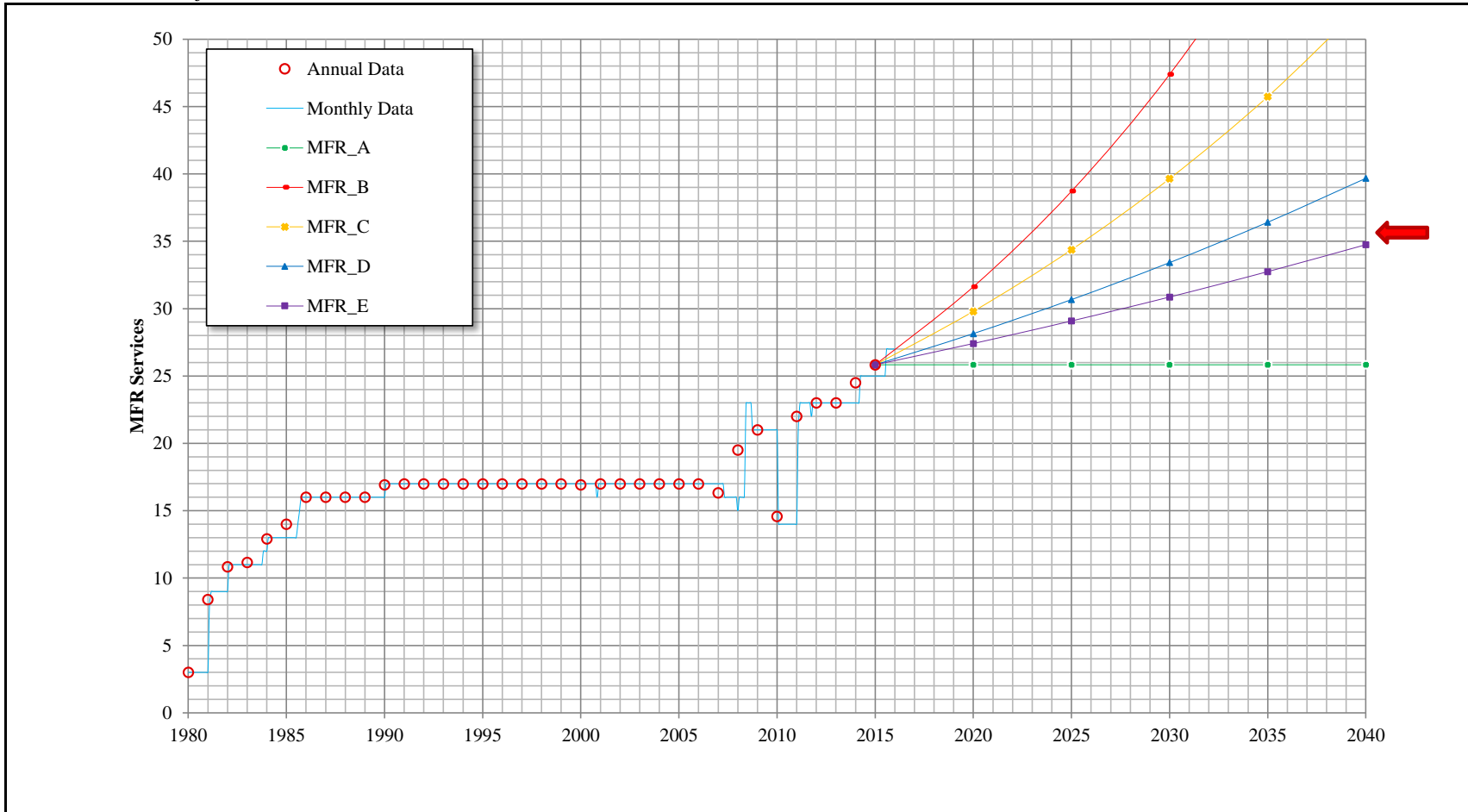


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
SFR			2,635	2,657	2,611	2,633	2,633	2,633	2,633	2,633	2,633	2,633
	SFR_A	Zero Growth Rate				2,633	2,633	2,633	2,633	2,633	2,633	2,633
	SFR_B	5 Yr. Avg.				2,633	2,633	2,657	2,680	2,704	2,728	2,752
	SFR_C	10 Yr. Avg.				2,633	2,633	2,622	2,610	2,599	2,587	2,576
	SFR_D	15 Yr. Avg.				2,633	2,633	2,633	2,632	2,632	2,632	2,631
	> SFR_E	20 Yr. Avg.				2,633	2,633	2,667	2,701	2,735	2,770	2,805

California Water Service Company - Dixon District

Water Supply and Demand Analysis and Projections

MFR Historical & Projected Services

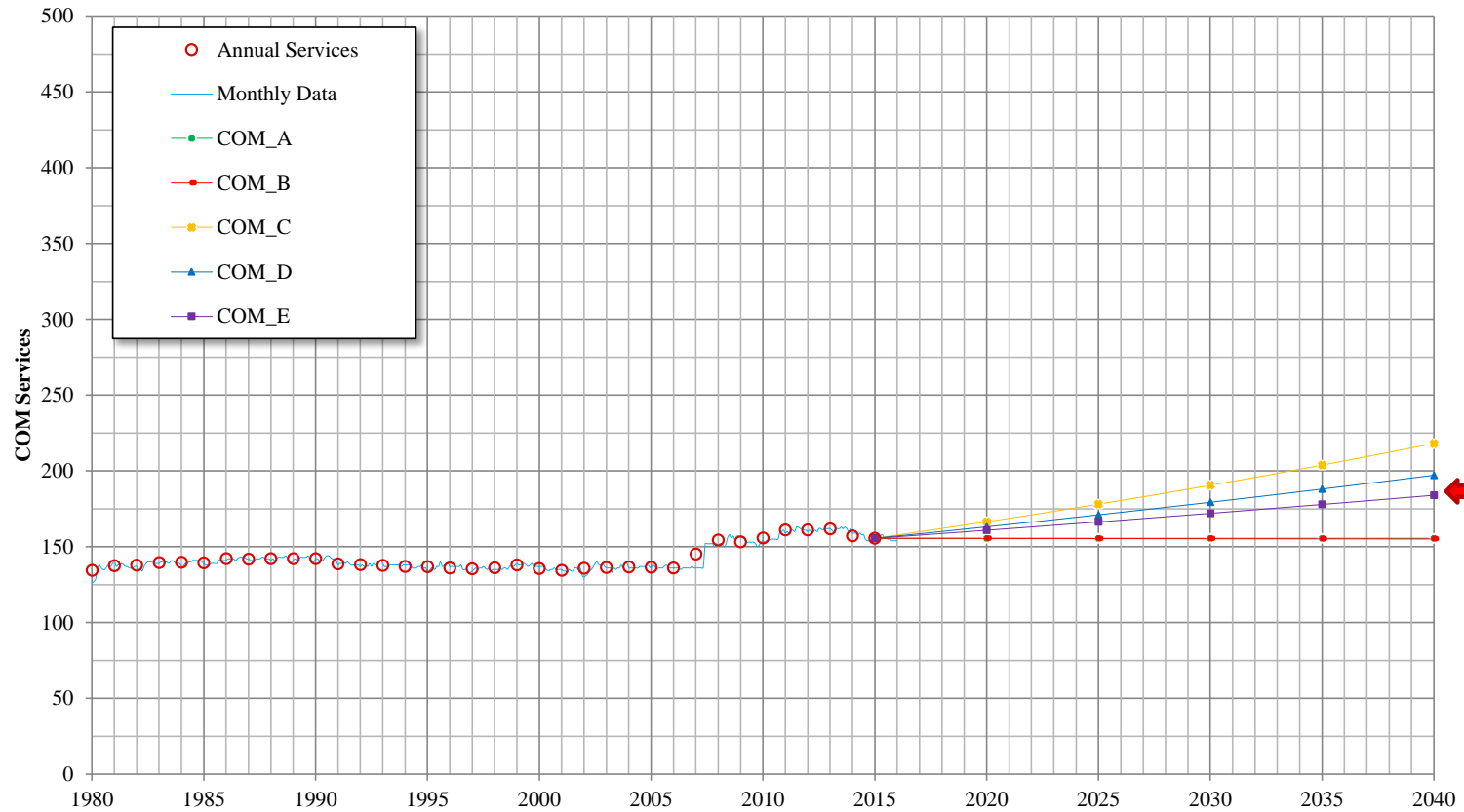


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
MFR	MFR_A	Zero Growth Rate	17	17	15	26	26	26	26	26	26	26
	MFR_B	5 Yr. Avg.				26	26	32	39	47	58	71
	MFR_C	10 Yr. Avg.				26	26	30	34	40	46	53
	MFR_D	15 Yr. Avg.				26	26	28	31	33	36	40
	MFR_E	20 Yr. Avg.				26	26	27	29	31	33	35

California Water Service Company - Dixon District

Water Supply and Demand Analysis and Projections

COM Historical & Projected Services

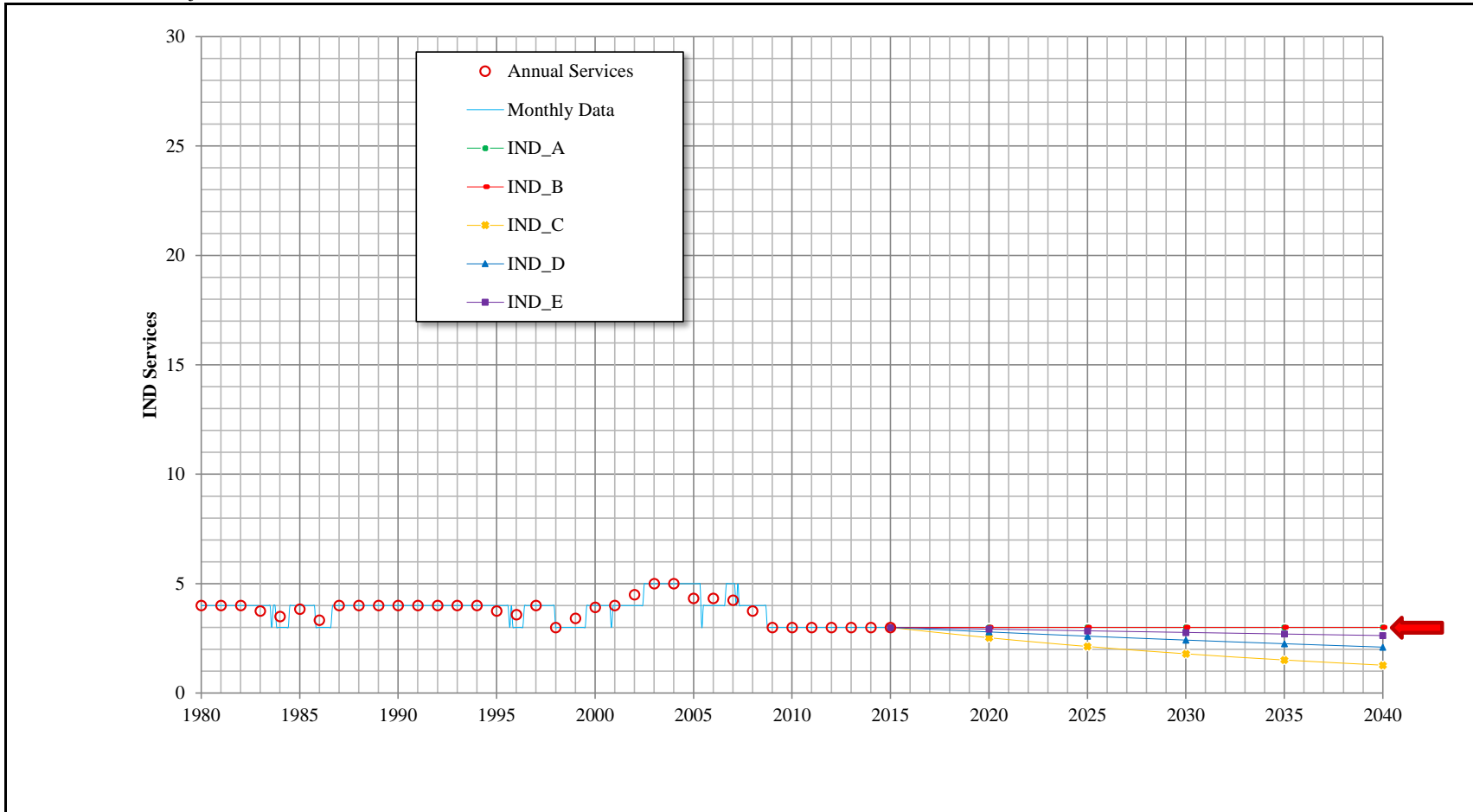


Customer Category	Trend	Growth Rate	Actual				Projected						
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040	
COM			136	137	156	156	156	156	156	156	156	156	156
	COM_A	Zero Growth Rate				156	156	156	156	156	156	156	156
	COM_B	5 Yr. Avg.				156	156	155	155	155	155	155	155
	COM_C	10 Yr. Avg.				156	156	166	178	191	204	218	
	COM_D	15 Yr. Avg.				156	156	163	171	179	188	197	
	> COM_E	20 Yr. Avg.				156	156	161	166	172	178	184	

California Water Service Company - Dixon District

Water Supply and Demand Analysis and Projections

IND Historical & Projected Services

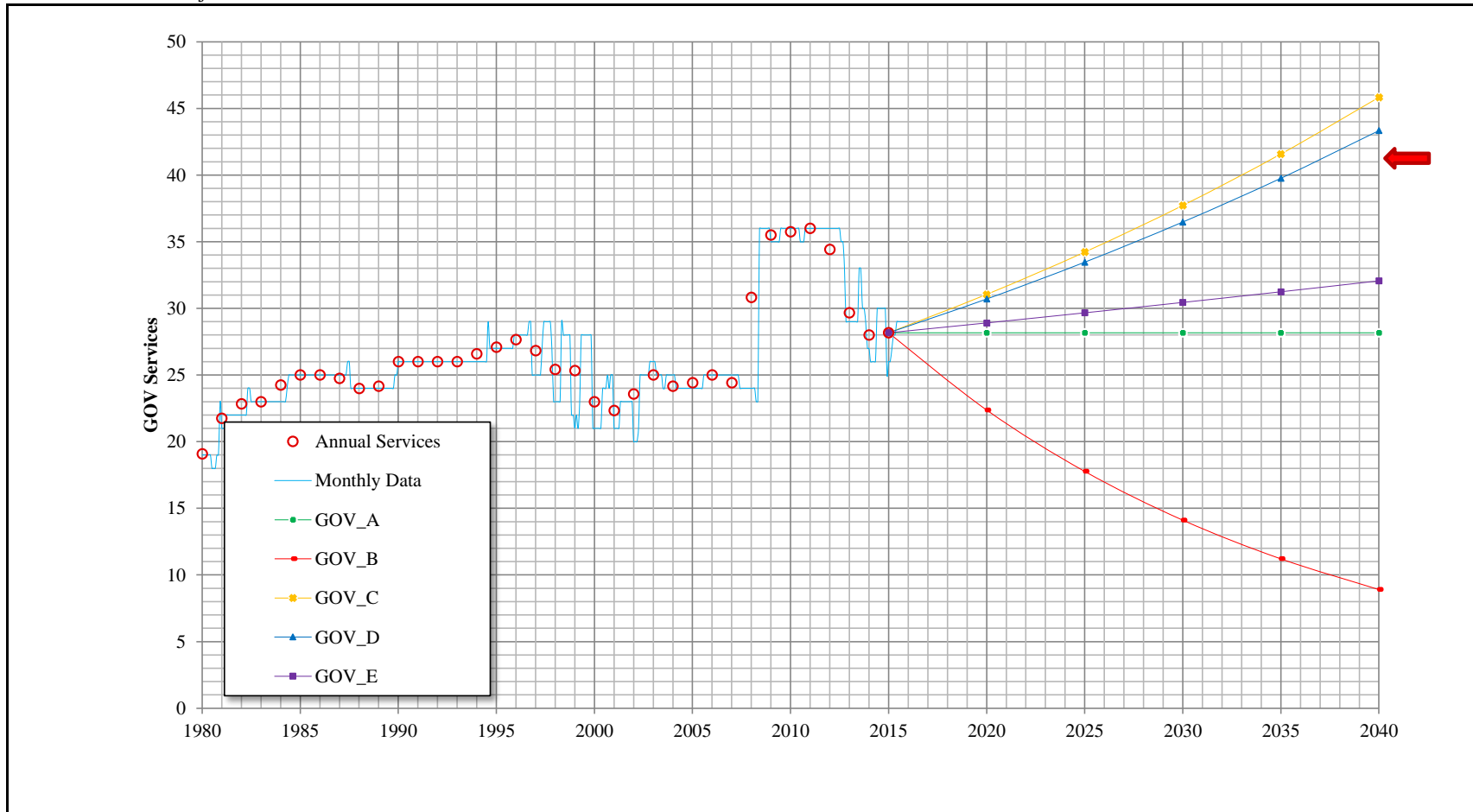


Customer Category	Trend	Growth Rate	Actual				Projected							
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040		
IND	>	IND_A	Zero Growth Rate	0.00%	4	4	3	3	3	3	3	3	3	3
		IND_B	5 Yr. Avg.	0.00%				3	3	3	3	3	3	3
		IND_C	10 Yr. Avg.	-3.37%				3	3	2	2	2	2	1
		IND_D	15 Yr. Avg.	-1.42%				3	3	3	2	2	2	2
		IND_E	20 Yr. Avg.	-0.53%				3	3	3	3	3	3	3

California Water Service Company - Dixon District

Water Supply and Demand Analysis and Projections

GOV Historical & Projected Services

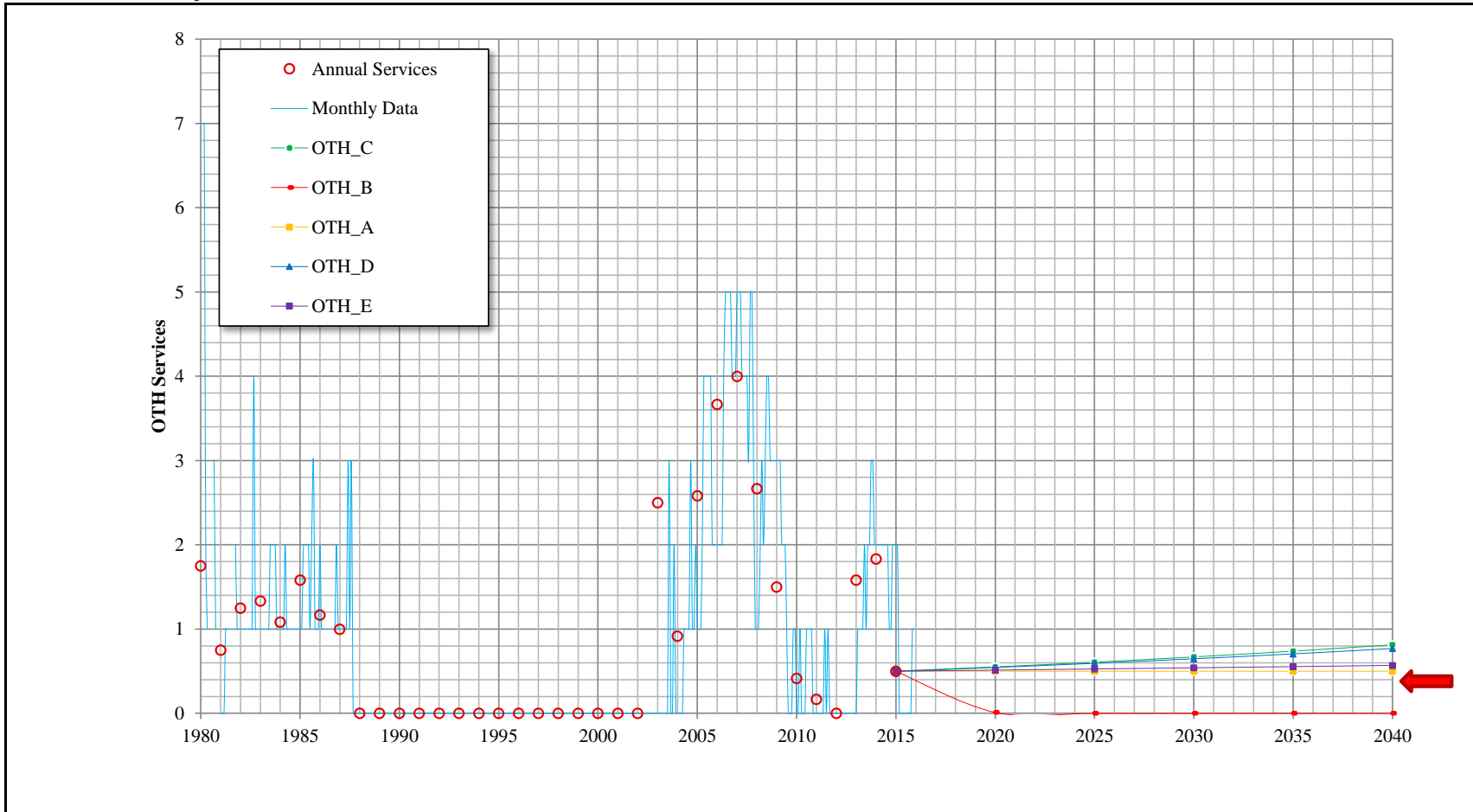


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
GOV			23	24	36	28	28	28	28	28	28	28
	GOV_A	Zero Growth Rate				28	28	28	28	28	28	28
	GOV_B	5 Yr. Avg.				28	28	22	18	14	11	9
	GOV_C	10 Yr. Avg.				28	28	31	34	38	42	46
	> GOV_D	15 Yr. Avg.				28	28	31	33	36	40	43
	GOV_E	20 Yr. Avg.				28	28	29	30	30	31	32

California Water Service Company - Dixon District

Water Supply and Demand Analysis and Projections

OTH Historical & Projected Services

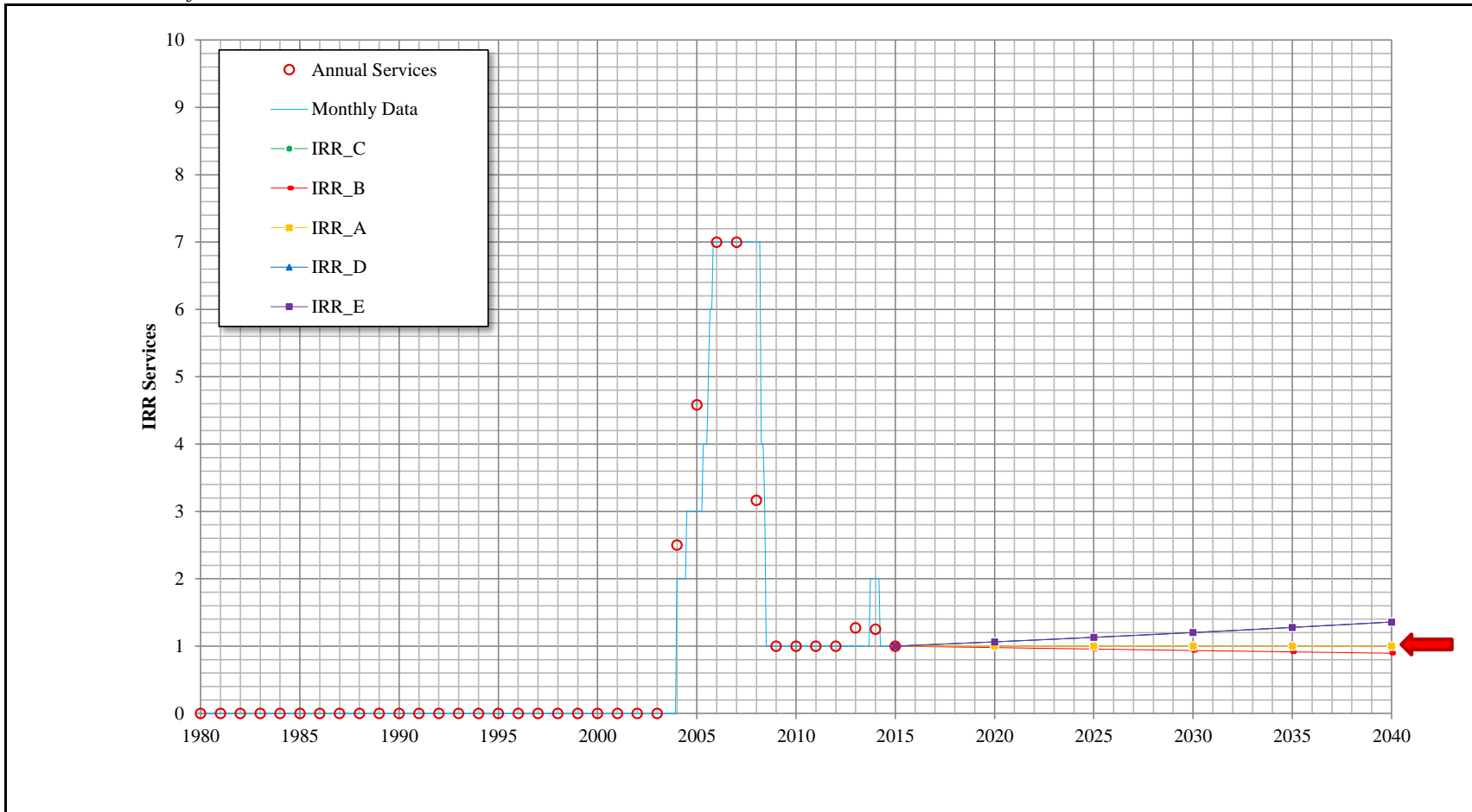


Customer Category	Trend			Growth Rate	Actual				Projected						
					2000	2005	2010	Base Year 2015	Services	Services	Services	Services	Services	Services	
									2015	2020	2025	2030	2035	2040	
OTH	>	OTH_A	Zero Growth Rate	0.00%	0	3	0	0.50	1	1	1	1	1	1	1
		OTH_B	5 Yr. Avg.	-54.1%				0.50	1	0	0	0	0	0	0
		OTH_C	10 Yr. Avg.	1.97%				0.50	1	1	1	1	1	1	1
		OTH_D	15 Yr. Avg.	1.74%				0.50	1	1	1	1	1	1	1
		OTH_E	20 Yr. Avg.	0.52%				0.50	1	1	1	1	1	1	1

California Water Service Company - Dixon District

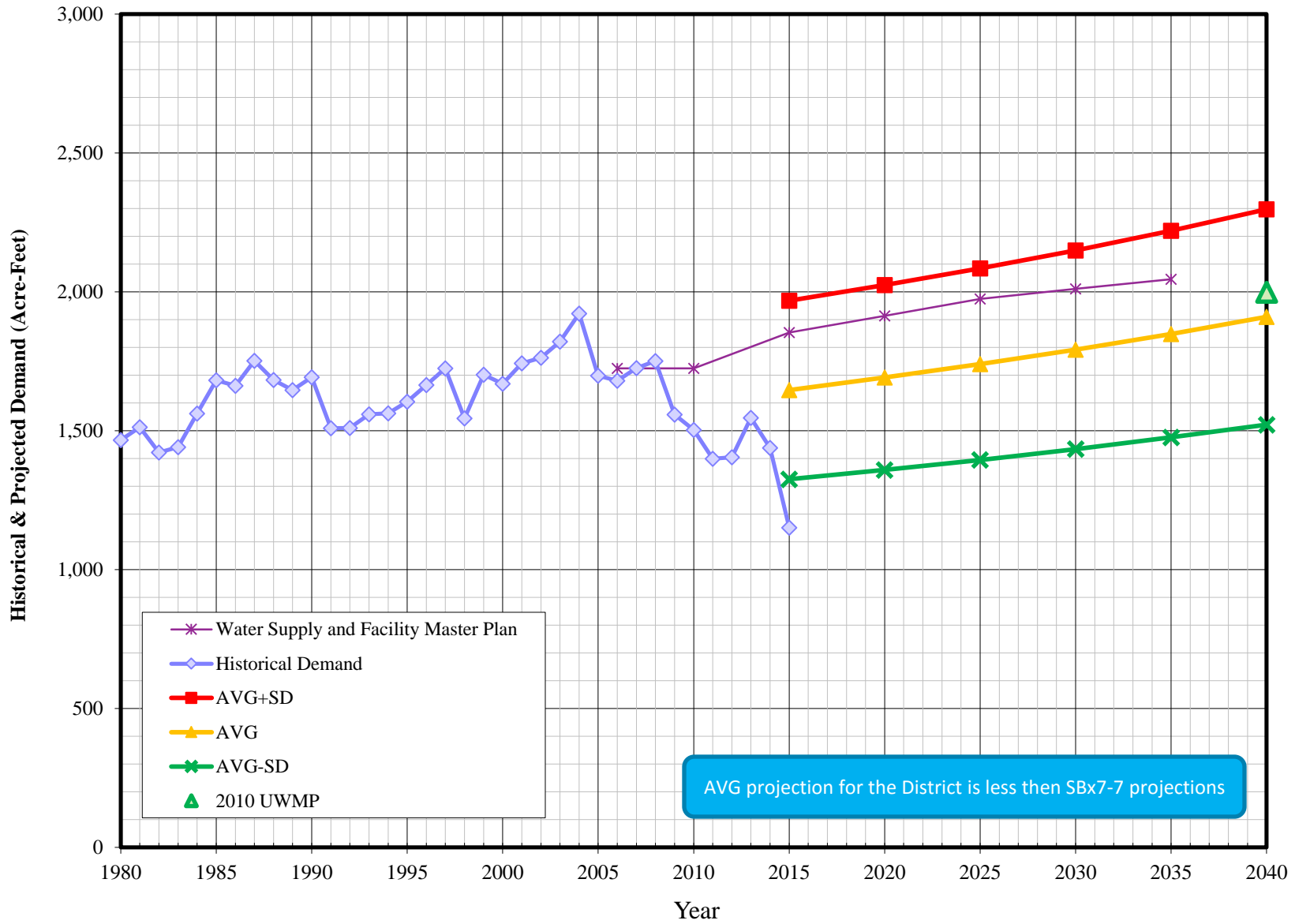
Water Supply and Demand Analysis and Projections

IRR 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	
				0	3	0	2015	1	1	1	1	1	1	
IRR	>	IRR_A	Zero Growth Rate	0.00%				1	1	1	1	1	1	1
		IRR_B	5 Yr. Avg.	-0.4%				1	1	1	1	1	1	1
		IRR_C	10 Yr. Avg.	1.2%				1	1	1	1	1	1	1
		IRR_D	15 Yr. Avg.	1.2%				1	1	1	1	1	1	1
		IRR_E	20 Yr. Avg.	1.2%				1	1	1	1	1	1	1

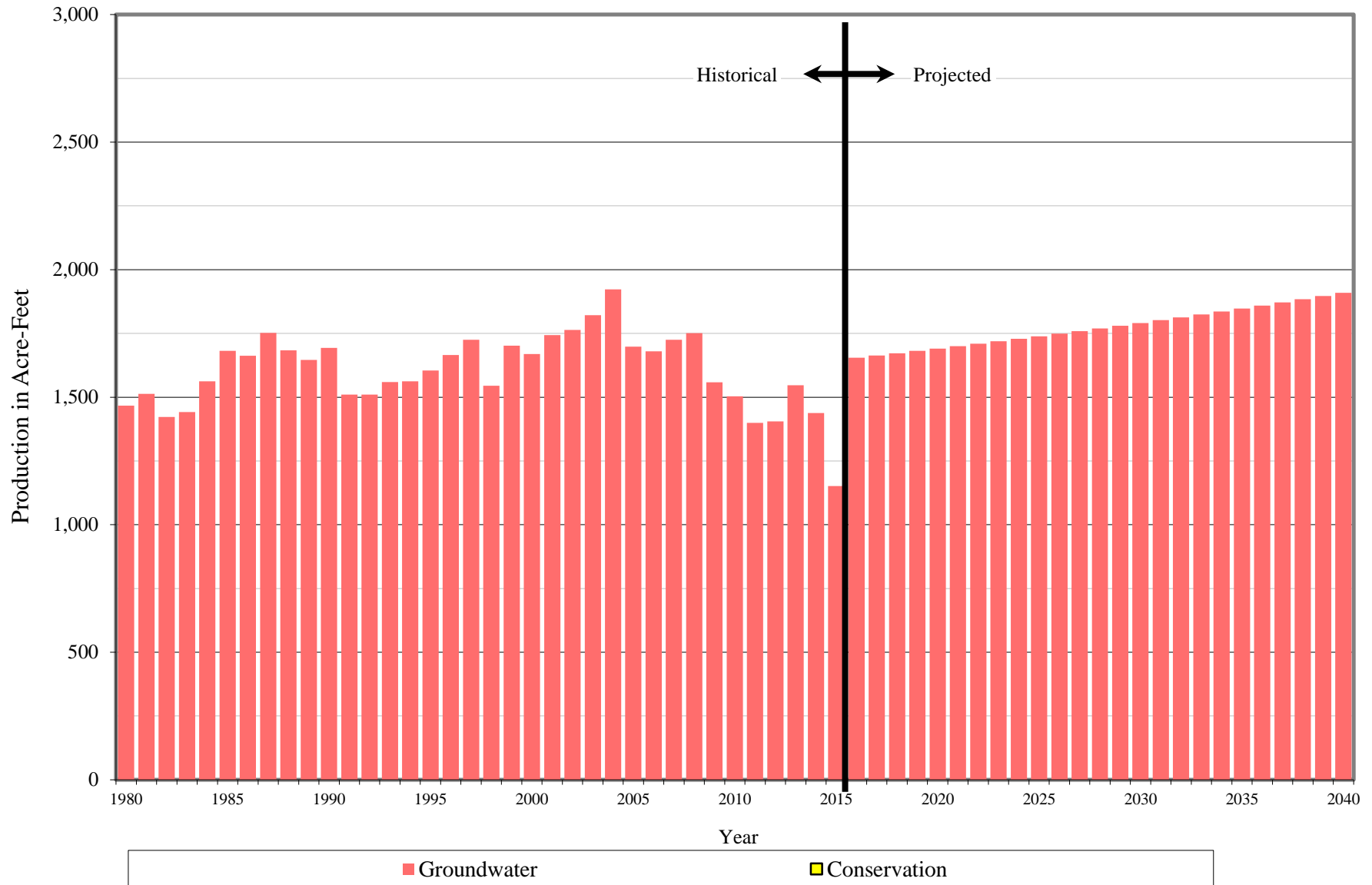
Historical & Projected Demand (DIX)



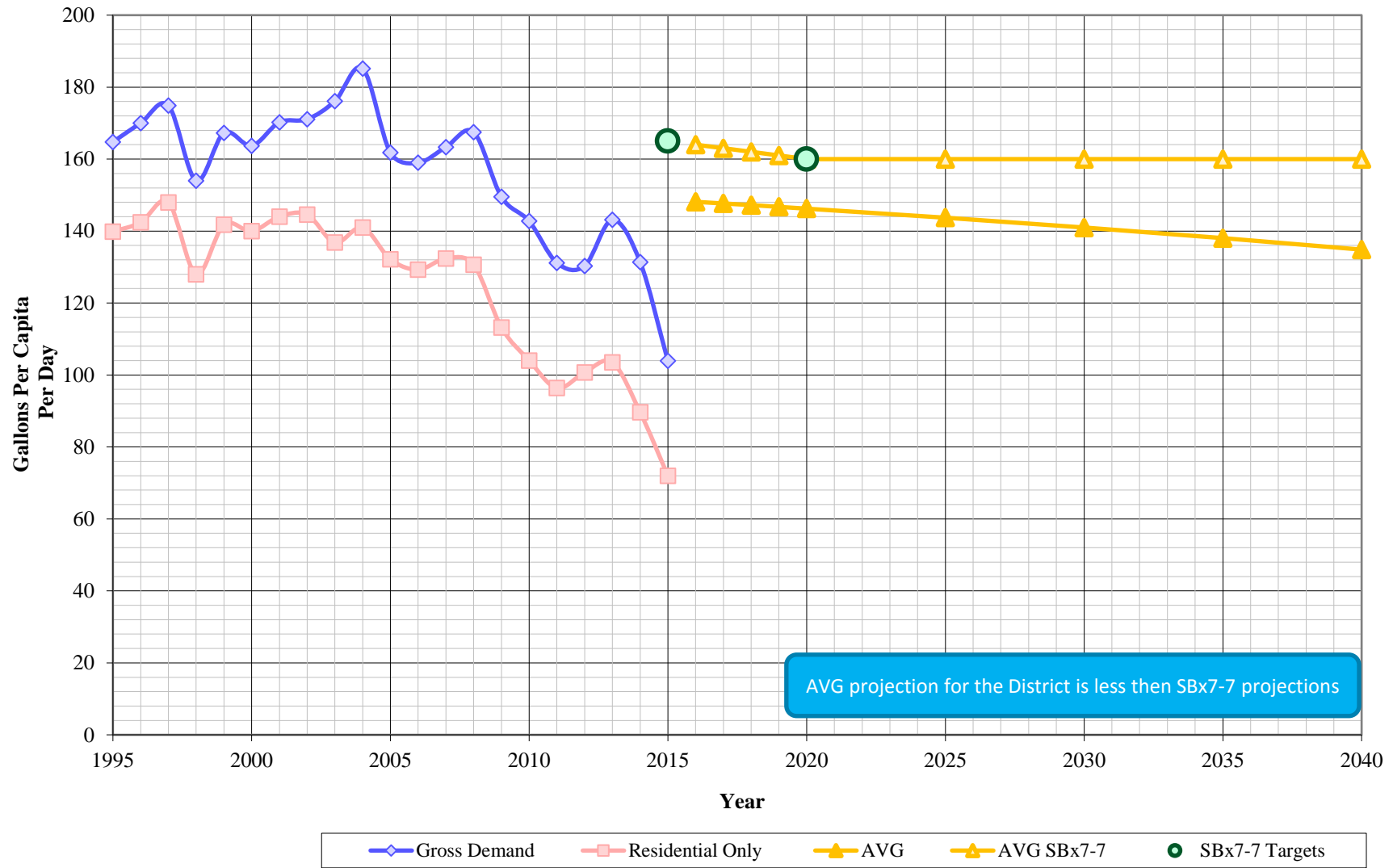
California Water Service Company - Dixon District
Water Supply and Demand Analysis and Projections

Customer Category	Actual Demand (AFY)								Projected Demand (AFY)					
	1980	1985	1990	1995	2000	2005	2010	2015	2015	2020	2025	2030	2035	2040
SFR	1,149	1,261	1,280	1,273	1,342	1,301	1,036	724	1,348	1,365	1,383	1,400	1,418	1,436
									1,175	1,190	1,205	1,221	1,236	1,252
									1,002	1,015	1,028	1,041	1,054	1,068
MFR	38	85	93	89	85	86	59	74	133	153	177	204	235	271
									103	119	137	158	182	210
									73	85	97	112	130	150
COM	171	175	189	145	130	111	104	84	152	157	163	168	174	180
									117	121	125	130	134	139
									82	85	88	91	94	97
IND	2	1	2	0	1	0	0	0	0	0	0	0	0	0
									0	0	0	0	0	0
									0	0	0	0	0	0
GOV	37	35	34	36	39	79	110	39	103	113	123	134	146	159
									80	87	95	104	113	123
									57	62	67	73	80	87
OTH	0	3	0	0	0	6	0	0	1.4	1.4	1.4	1.4	1.4	1.4
									0.9	0.9	0.9	0.9	0.9	0.9
									0.3	0.3	0.3	0.3	0.3	0.3
IRR	0.0	0.0	0.0	0.0	0.0	4.0	1.1	0.4	1.4	1.4	1.4	1.4	1.4	1.4
									1.0	1.0	1.0	1.0	1.0	1.0
									0.5	0.5	0.5	0.5	0.5	0.5
UAWF	70	123	95	61	72	115	192	230	229	233	236	240	244	248
									169	172	175	177	180	184
									109	111	113	115	117	119
TOTAL (AFY)	1,466	1,682	1,693	1,605	1,669	1,702	1,503	1,151	1,969	2,024	2,084	2,150	2,221	2,298
									1,647	1,692	1,740	1,792	1,848	1,910
									1,325	1,359	1,395	1,434	1,476	1,522
TOTAL (MGD)	1.309	1.501	1.512	1.433	1.490	1.520	1.342	1.028	1.758	1.807	1.861	1.919	1.982	2.051
									1.470	1.510	1.553	1.600	1.650	1.705
									1.183	1.213	1.245	1.280	1.318	1.359

Historical and Projected Distribution of Demand by Source



Gross Per Capita Consumption (DIX)



California Water Service Company - Dixon District
Water Supply and Demand Analysis and Projections

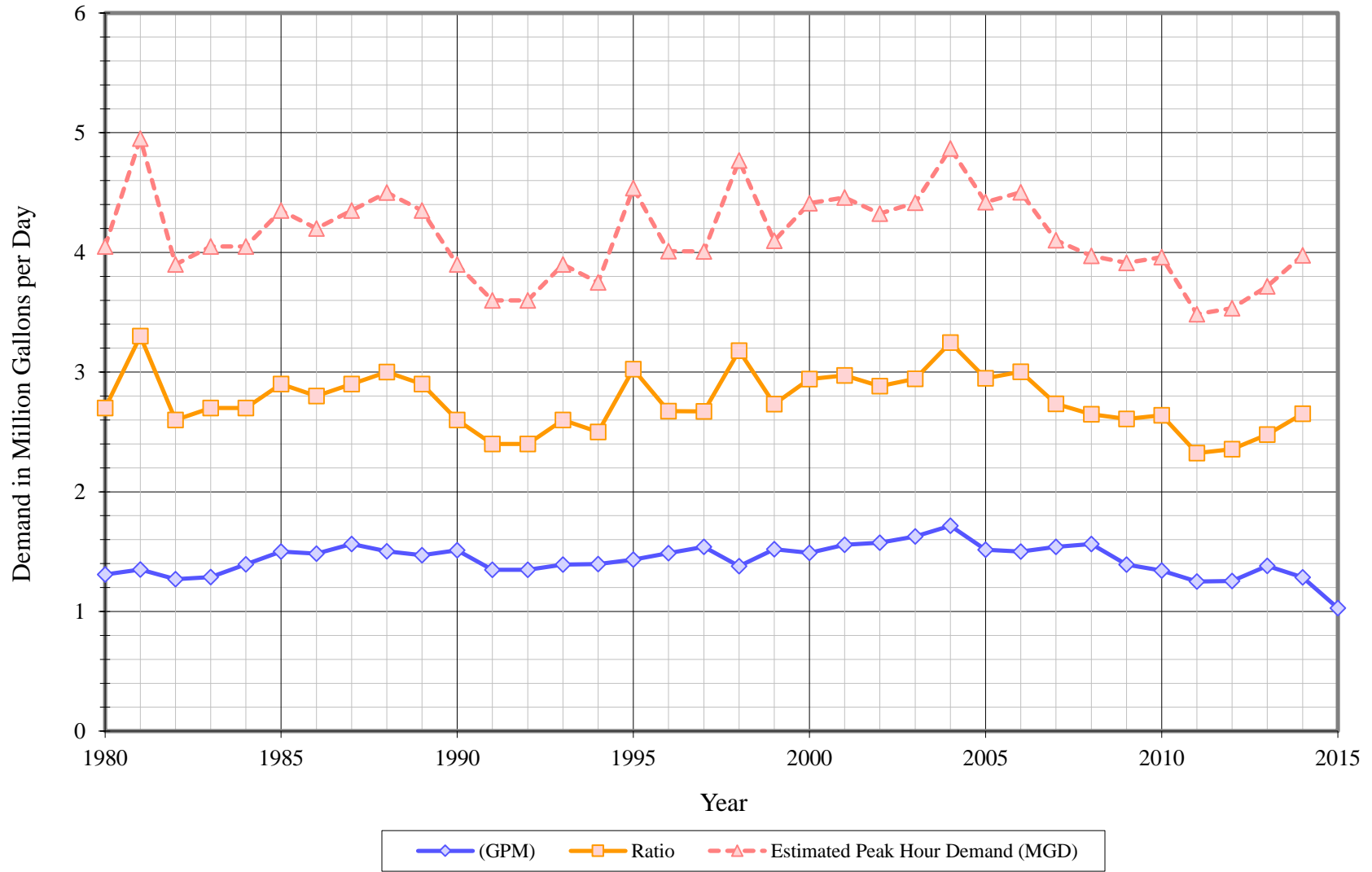
Gross Per Capita Water Demand Calculation

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	8,697	1,605	165	1,362	140				
1996	8,742	1,665	170	1,395	142				
1997	8,806	1,725	175	1,459	148				
1998	8,955	1,545	154	1,284	128				
1999	9,084	1,702	167	1,443	142				
2000	9,102	1,669	164	1,427	140				
2001	9,141	1,743	170	1,475	144				
2002	9,201	1,763	171	1,490	145				
2003	9,232	1,821	176	1,415	137				
2004	9,268	1,922	185	1,464	141				
2005	9,370	1,698	162	1,387	132				
2006	9,434	1,680	159	1,366	129				
2007	9,430	1,725	163	1,398	132				
2008	9,332	1,751	167	1,366	131				
2009	9,305	1,558	150	1,180	113				
2010	9,401	1,503	143	1,096	104				
2011	9,523	1,399	131	1,028	96				
2012	9,624	1,405	130	1,086	101				
2013	9,650	1,547	143	1,119	104				
2014	9,774	1,438	131	981	90				
2015	9,891	1,151	104	798	72				
2016	9,973					1,655	148	1,832	164
2017	10,057					1,664	148	1,836	163
2018	10,142					1,672	147	1,840	162
2019	10,230					1,681	147	1,845	161
2020	10,320					1,691	146	1,850	160
2025	10,800					1,739	144	1,936	160
2030	11,341					1,791	141	2,033	160
2035	11,950					1,847	138	2,142	160
2040	12,639					1,909	135	2,265	160

SBx7-7 Targets

2015	165
2020	160

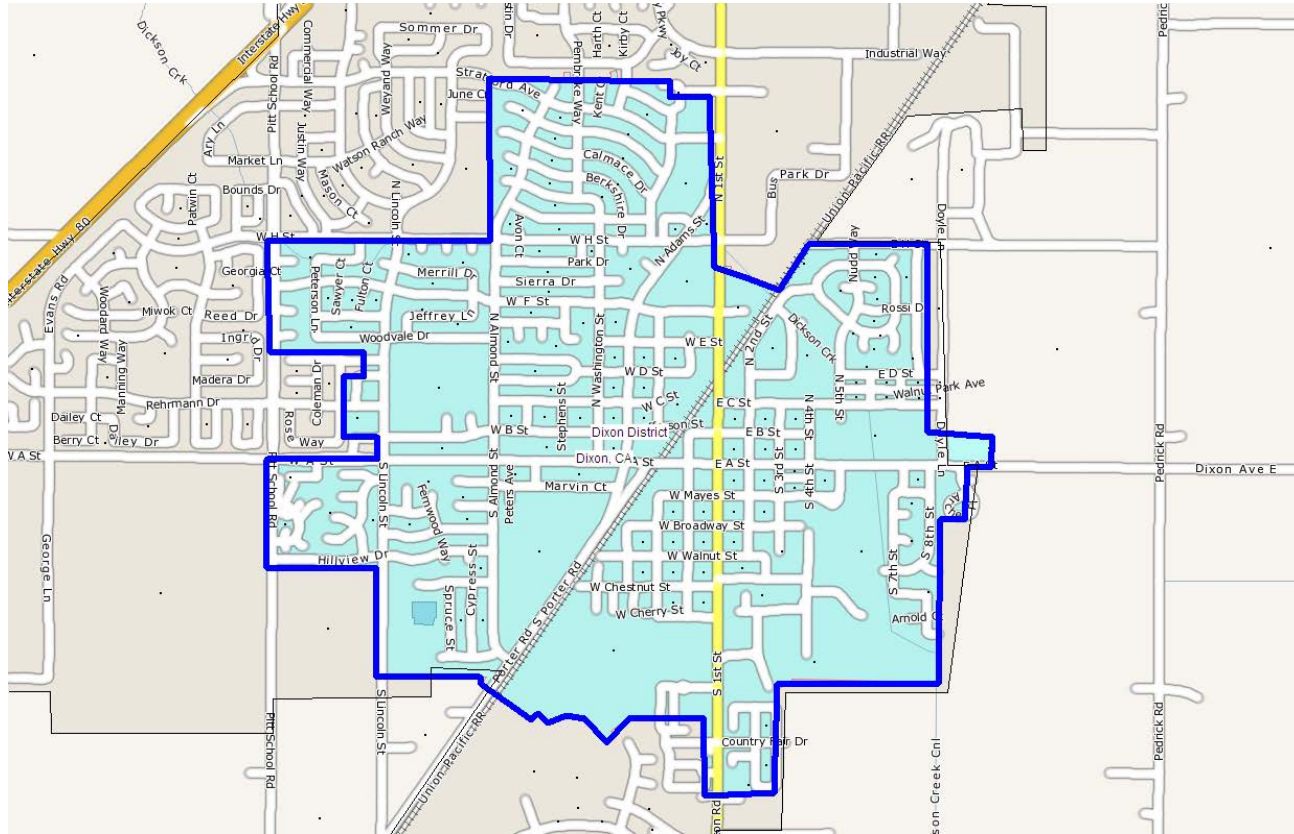
Average Day, Maximum Day, Peak Demand



California Water Service Company - Dixon 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)	(GPD)	(MGD)	(GPD)		(MGD)	(GPM)			(MGD)	(GPM)	
1980	1,466	478	1.31	565	2.70	1,165	2.06	4.05	2,813	1.50	3.09			
1981	1,513	493	1.35	568	3.30	1,387	2.44	4.95	3,438	1.50	3.66			
1982	1,422	463	1.27	531	2.60	1,087	2.05	3.90	2,708	1.50	3.07			
1983	1,441	470	1.29	532	2.70	1,116	2.10	4.05	2,813	1.50	3.15			
1984	1,562	509	1.39	564	2.70	1,092	1.94	4.05	2,813	1.50	2.90			
1985	1,682	548	1.50	598	2.90	1,154	1.93	4.35	3,021	1.50	2.90			
1986	1,662	542	1.48	586	2.80	1,106	1.89	4.20	2,917	1.50	2.83			
1987	1,752	571	1.56	612	2.90	1,134	1.85	4.35	3,021	1.50	2.78			
1988	1,683	548	1.50	584	3.00	1,166	2.00	4.50	3,125	1.50	2.99			
1989	1,646	536	1.47	570	2.90	1,125	1.97	4.35	3,021	1.50	2.96			
1990	1,693	552	1.51	585	2.60	1,007	1.72	3.90	2,708	1.50	2.58			
1991	1,510	492	1.35	517	2.40	921	1.78	3.60	2,500	1.50	2.67			
1992	1,510	492	1.35	516	2.40	918	1.78	3.60	2,500	1.50	2.67			
1993	1,560	508	1.39	527	2.60	983	1.87	3.90	2,708	1.50	2.80			
1994	1,563	509	1.40	522	2.50	936	1.79	3.75	2,604	1.50	2.69			
1995	1,605	523	1.43	533	3.03	1,125	2.11	4.54	3,151	1.50	3.17			
1996	1,665	543	1.49	550	2.67	989	1.80	4.01	2,785	1.50	2.70			
1997	1,725	562	1.54	566	2.67	981	1.74	4.01	2,783	1.50	2.60			
1998	1,545	503	1.38	498	3.18	1,148	2.30	4.77	3,310	1.50	3.46			
1999	1,702	555	1.52	540	2.73	972	1.80	4.10	2,846	1.50	2.70			
2000	1,669	544	1.49	529	2.94	1,045	1.97	4.41	3,064	1.50	2.96			
2001	1,743	568	1.56	553	2.97	1,057	1.91	4.46	3,096	1.50	2.86			
2002	1,763	575	1.57	558	2.88	1,022	1.83	4.32	3,002	1.50	2.75			
2003	1,821	593	1.63	576	2.94	1,043	1.81	4.42	3,067	1.50	2.72			
2004	1,922	626	1.72	608	3.25	1,150	1.89	4.87	3,381	1.50	2.84			
2005	1,698	553	1.52	533	2.95	1,035	1.94	4.42	3,070	1.50	2.92	3.80	2,639	1.289
2006	1,680	547	1.50	524	3.00	1,050	2.00	4.50	3,127	1.50	3.00			
2007	1,725	562	1.54	540	2.73	958	1.77	4.10	2,848	1.50	2.66			
2008	1,751	570	1.56	554	2.65	938	1.69	3.97	2,758	1.50	2.54			
2009	1,558	508	1.39	496	2.61	930	1.87	3.91	2,717	1.50	2.81			
2010	1,503	490	1.34	476	2.64	936	1.97	3.96	2,750	1.50	2.95			
2011	1,399	456	1.25	439	2.32	817	1.86	3.48	2,420	1.50	2.79			
2012	1,405	458	1.25	441	2.36	828	1.88	3.53	2,454	1.50	2.82			
2013	1,547	504	1.38	484	2.48	869	1.79	3.72	2,580	1.50	2.69			
2014	1,438	469	1.28	451	2.65	931	2.06	3.98	2,761	1.50	3.10			
2015	1,151	375	1.03	361										
10 year Average (2005-2014)			1.40	494	2.64	929	1.89	3.96	2,749	1.50	2.83			
5 year Average (2010-2014)			1.30	458	2.49	876	1.91	3.73	2,593	1.50	2.87			

California Water Service Company - Dixon District
Water Supply and Demand Analysis and Projections
MarPlot Summary

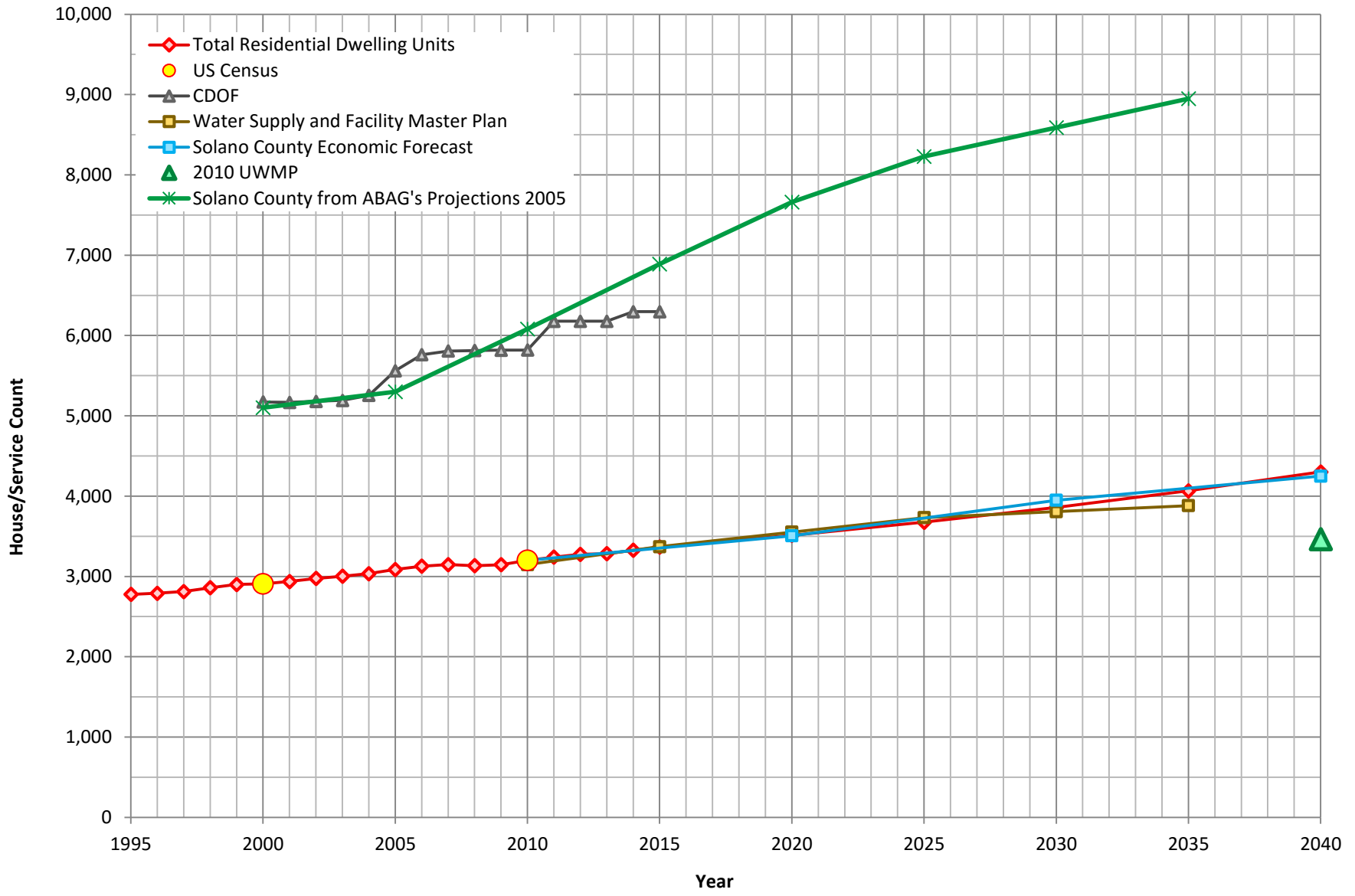


System	US Census 2000 Summary				US Census 2010 Summary				2000-2010 Change		
	Census Tract Blocks	Population	Housing Units (HU)	Density	Census Tract Blocks	Population	Housing Units (HU)	Density	Percentage Population Change	Percentage HU Change	Density Change
Dixon	118	9,102	2,906	3.13	141	9,401	3,199	2.94	3.3%	10.1%	-6.2%
	118	9,102	2,906	3.13	141	9,401	3,199	2.94	3.3%	10.1%	-6.2%

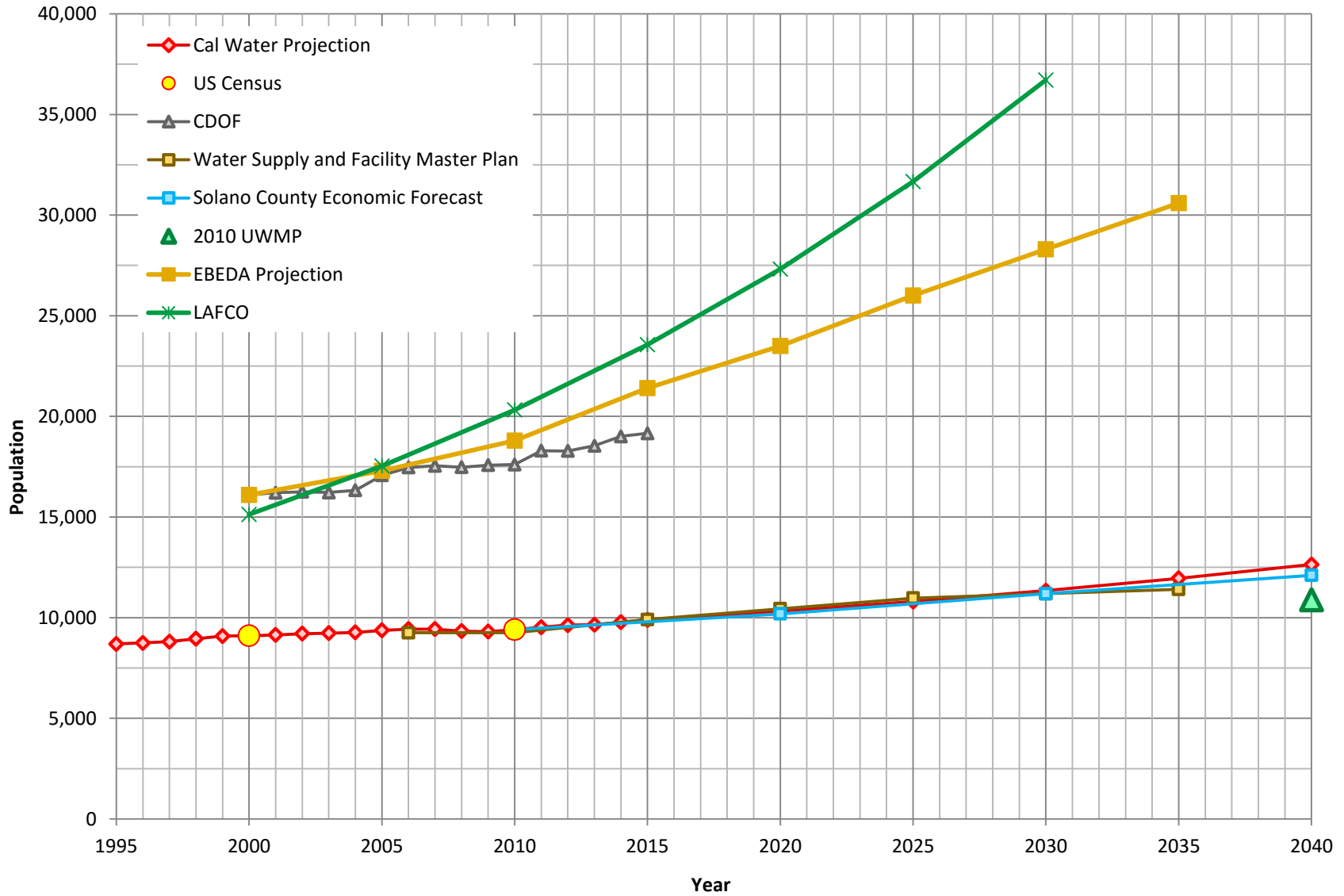
City of Dixon					231	18,364	6,177	2.97			
CWS % of City						51.2%	51.8%				

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



Population Projections



California Water Service Company - Dixon District
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	9,102	2,906	3.132	2,635	17	271	16.0	0
2010	9,401	3,199	2.939	2,611	15	589	40.4	0
	3.3%	10.1%	-6.2%	-0.9%	-13.8%	117.4%	152.2%	0.0%

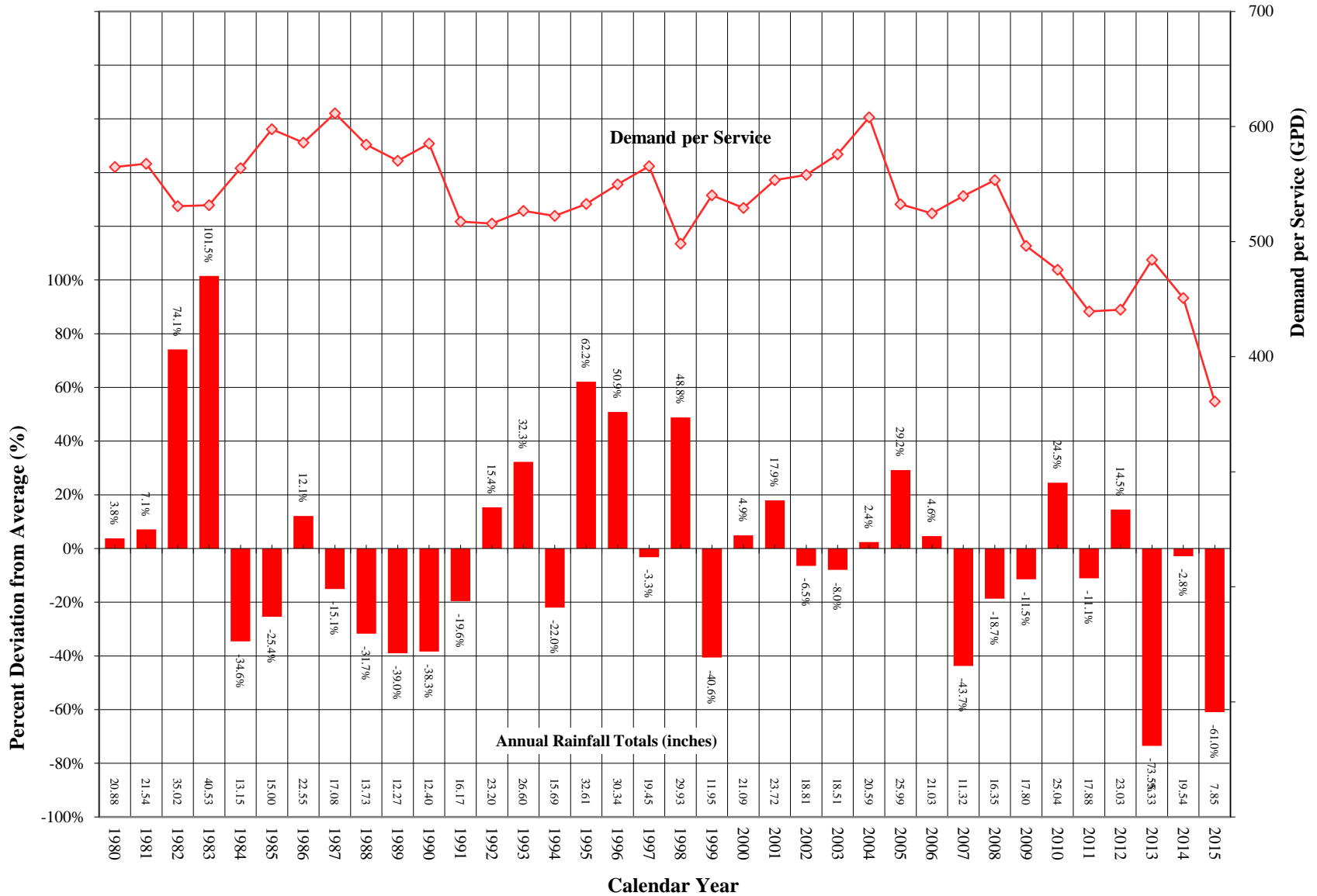
Year	Single Family Residential Services (DU)	Multi Family Residential			Flat Rate Residential Services (DU)	Total Residential Dwelling Units	Persons per Housing Unit	Estimated District Population
		Services	Residential Units (DU)	Unit Density				
1995	2,505	17	272	16.0	0	2,777	3.132	8,697
1996	2,519	17	272	16.0	0	2,791	3.132	8,742
1997	2,539	17	272	16.0	0	2,811	3.132	8,806
1998	2,587	17	272	16.0	0	2,859	3.132	8,955
1999	2,628	17	272	16.0	0	2,900	3.132	9,084
2000	2,635	17	271	16.0	0	2,906	3.132	9,102
2001	2,634	17	302	17.8	0	2,936	3.113	9,141
2002	2,640	17	334	19.7	0	2,974	3.093	9,201
2003	2,637	17	366	21.5	0	3,003	3.074	9,232
2004	2,636	17	398	23.4	0	3,034	3.055	9,268
2005	2,657	17	430	25.3	0	3,087	3.035	9,370
2006	2,667	17	461	27.1	0	3,128	3.016	9,434
2007	2,654	16	493	30.2	0	3,147	2.997	9,430
2008	2,609	20	525	26.9	0	3,134	2.977	9,332
2009	2,589	21	557	26.5	0	3,146	2.958	9,305
2010	2,611	15	589	40.4	0	3,199	2.939	9,401
2011	2,620	22	620	28.2	0	3,241	2.939	9,523
2012	2,623	23	652	28.4	0	3,275	2.939	9,624
2013	2,632	23	652	28.4	0	3,284	2.939	9,650
2014	2,631	25	695	28.4	0	3,326	2.939	9,774
2015	2,633	26	732	28.4	0	3,366	2.939	9,891
2020	2,667	30	845	28.4	0	3,512	2.939	10,320
2025	2,701	34	974	28.4	0	3,675	2.939	10,800
2030	2,735	40	1,124	28.4	0	3,859	2.939	11,341
2035	2,770	46	1,297	28.4	0	4,066	2.939	11,950
2040	2,805	53	1,496	28.4	0	4,301	2.939	12,639

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Notes: linear extrapolation used to estimated MFR-DU from 2000. Estimate extend until 2012 due to reclassification, afterwhich a constant MFR Unit Density is used.

Comparison of Annual Rainfall to Historical Average



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

Temperature & Rainfall History

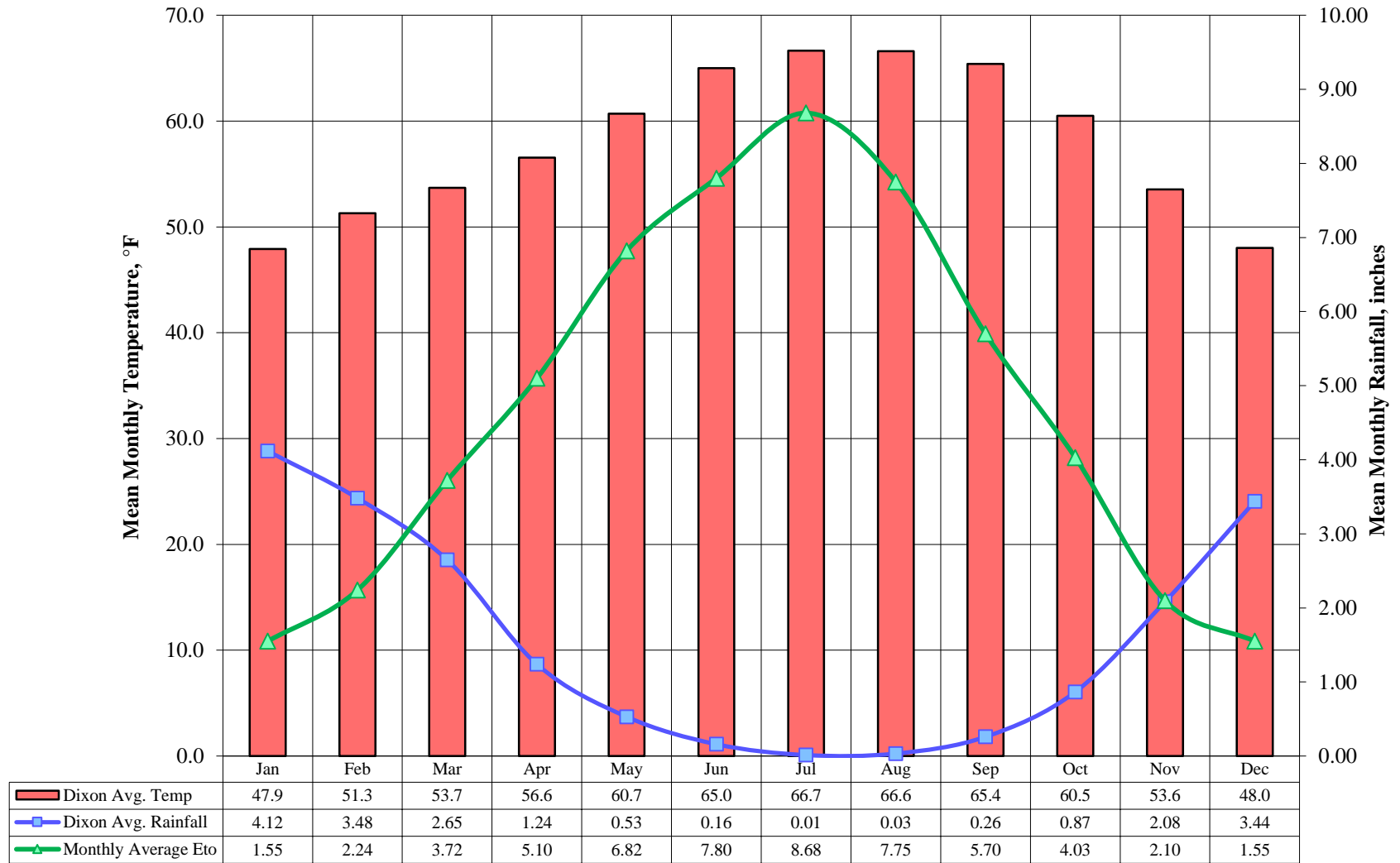
Year	Precipitation		Temperature			Demand per Service (gpd)	Percent of Average Demand
	Annual (in)	Percent Variation	Tmax (°F)	Tmin (°F)	Mean (°F)		
1980	20.88	3.8%	92.10	37.40	64.8	565	6.0%
1981	21.54	7.1%	95.00	40.30	67.7	568	6.5%
1982	35.02	74.1%	90.90	33.70	62.3	531	-0.4%
1983	40.53	101.5%	92.40	37.50	65.0	532	-0.2%
1984	13.15	-34.6%	96.20	36.10	66.2	564	5.8%
1985	15.00	-25.4%	95.40	33.40	64.4	598	12.1%
1986	22.55	12.1%	93.20	36.60	64.9	586	10.0%
1987	17.08	-15.1%	92.10	36.30	64.2	612	14.8%
1988	13.73	-31.7%	97.70	36.50	67.1	584	9.6%
1989	12.27	-39.0%	94.90	33.30	64.1	570	7.0%
1990	12.40	-38.3%	95.90	30.00	63.0	585	9.8%
1991	16.17	-19.6%	95.10	35.50	65.3	517	-2.9%
1992	23.20	15.4%	97.20	36.10	66.7	516	-3.3%
1993	26.60	32.3%	92.60	36.00	64.3	527	-1.2%
1994	15.69	-22.0%	94.60	36.50	65.6	522	-2.0%
1995	32.61	62.2%	94.10	42.30	68.2	533	0.0%
1996	30.34	50.9%	97.50	40.90	69.2	550	3.2%
1997	19.45	-3.3%	93.60	38.60	66.1	566	6.1%
1998	29.93	48.8%	95.40	33.50	64.5	498	-6.5%
1999	11.95	-40.6%	91.10	36.30	63.7	540	1.4%
2000	21.09	4.9%	92.90	38.10	65.5	529	-0.7%
2001	23.72	17.9%	93.70	35.80	64.8	553	3.8%
2002	18.81	-6.5%	95.00	37.50	66.3	558	4.7%
2003	18.51	-8.0%	97.60	39.30	68.5	576	8.1%
2004	20.59	2.4%	93.10	39.00	66.1	608	14.1%
2005	25.99	29.2%	97.90	38.90	68.4	533	-0.1%
2006	21.03	4.6%	98.10	37.00	67.6	524	-1.6%
2007	11.32	-43.7%	93.60	31.90	62.8	540	1.2%
2008	16.35	-18.7%	95.40	35.70	65.6	554	3.9%
2009	17.80	-11.5%	94.70	36.60	65.7	496	-6.9%
2010	25.04	24.5%	92.00	41.50	66.8	476	-10.7%
2011	17.88	-11.1%	91.70	33.70	62.7	439	-17.6%
2012	23.03	14.5%	94.70	35.50	65.1	441	-17.3%
2013	5.33	-73.5%	94.00	31.60	62.8	484	-9.1%
2014	19.54	-2.8%	94	36.4	65.1	451	-15.4%
2015	7.85	-61.0%	91	0.0	45.3	361	-32.3%
2016							
2017							
2018							
2019							
2020							

Precipitation (1895 - present)						Monthly Average Eto
	Mean	High	Year	Low	Year	
	in.	in.	-	in.	-	
Jan	4.12	13.77	1916	0.01	2007	1.55
Feb	3.48	12.41	1998	0.02	1953	2.24
Mar	2.65	9.17	1983	0.01	1923	3.72
Apr	1.24	5.52	1896	0.00	1909	5.10
May	0.53	2.79	1905	0.00	1903	6.82
Jun	0.16	1.86	2011	0.00	1957	7.80
Jul	0.01	0.87	1974	0.00	1957	8.68
Aug	0.03	0.83	2003	0.00	1960	7.75
Sep	0.26	4.24	1918	0.00	1899	5.70
Oct	0.87	6.52	1962	0.00	1905	4.03
Nov	2.08	6.74	1984	0.00	1929	2.10
Dec	3.44	11.91	1955	0.00	1989	1.55
Annual	18.87	40.53	1983	5.33	2013	57.00

Temperature (1895 - present)			
	Tmax	Tmin	Mean
	°F	°F	°F
Jan	57.3	38.5	47.9
Feb	61.2	41.4	51.3
Mar	64.3	43.1	53.7
Apr	68.4	44.7	56.6
May	72.9	48.5	60.7
Jun	77.4	52.6	65.0
Jul	78.4	54.9	66.7
Aug	78.5	54.7	66.6
Sep	78.2	52.6	65.4
Oct	73.0	48.0	60.5
Nov	64.4	42.7	53.6
Dec	57.8	38.2	48.0
Annual	69.3	46.7	58.0

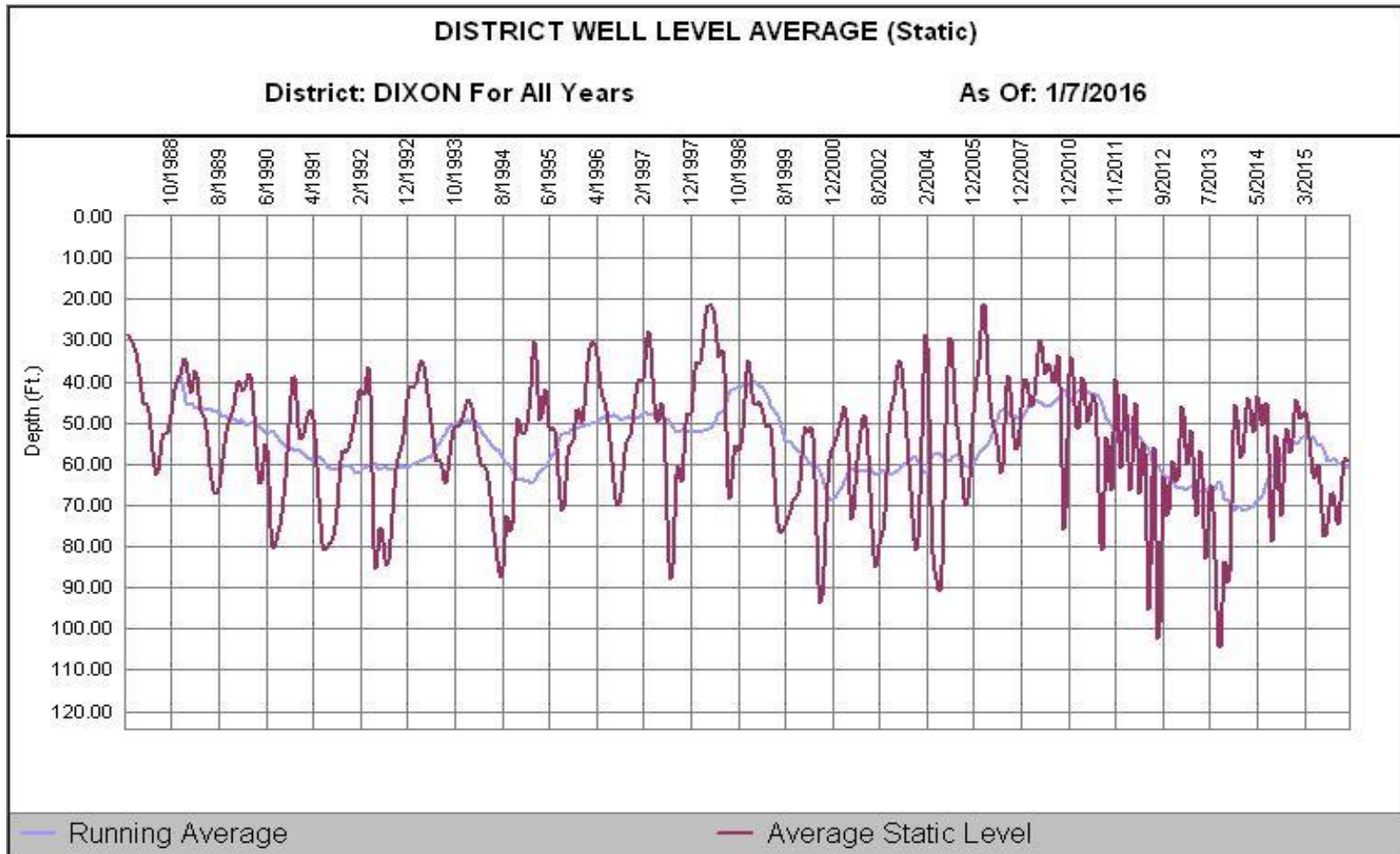
- 1) Eto values based on California Irrigation Management Information System (CIMIS), <http://www.cimis.water.ca.gov/cimis/welcome.jsp>, EvapoTranspiration (Eto) Zones Map, Zone 14
- 2) PPT, Tmax, Tmin obtained from PRISM where, PPT is total monthly rainfall, Tmax is average of maximum temperatures for given month, and Tmin is average of minimum temperatures for given month
- 3) Percent variation based on average of 1980 to present values

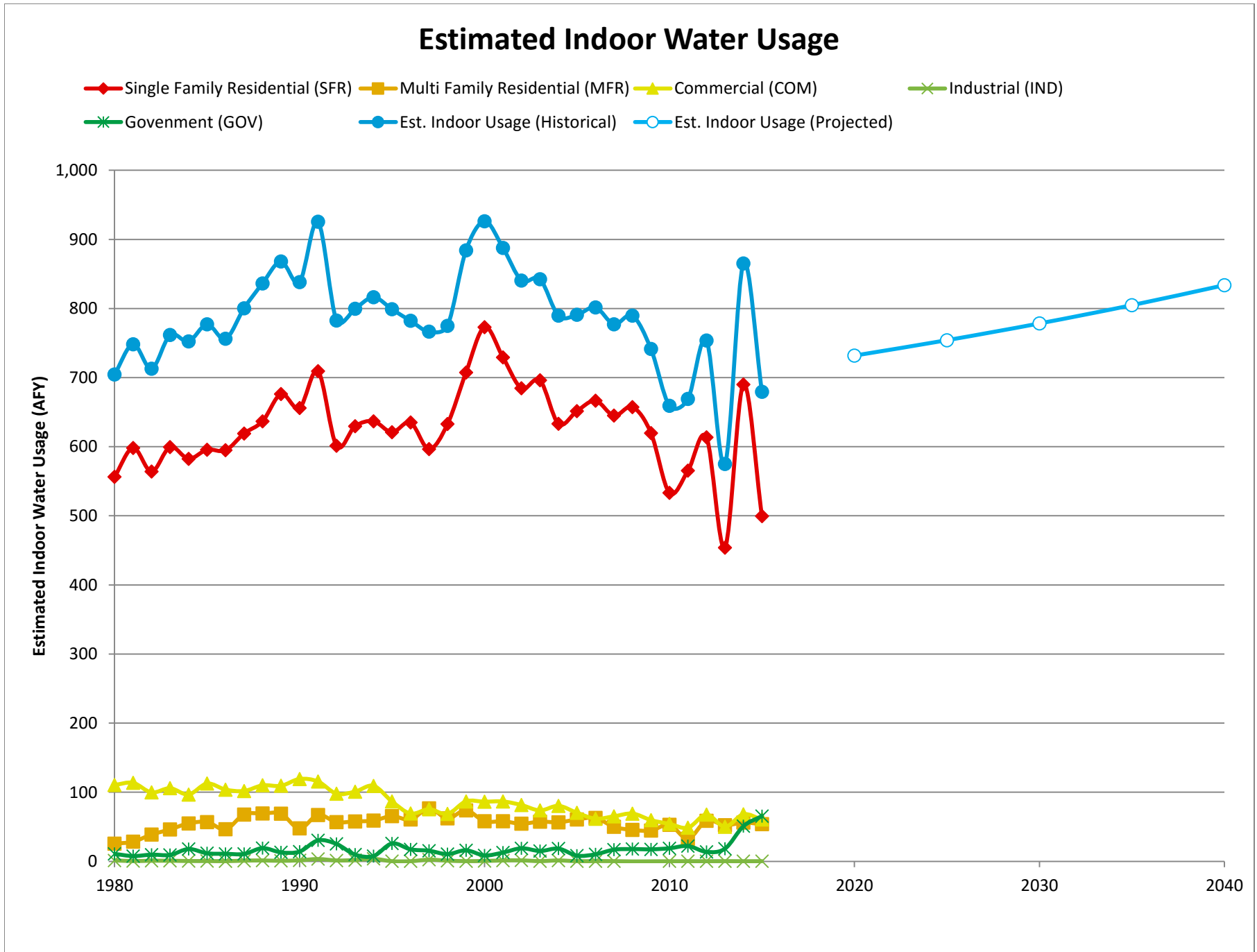
Average Monthly Temperature, Rainfall, and Monthly Eto



Water Supply and Demand Analysis and Projections

Groundwater Production Facilities





**California Water Service Company - Dixon 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 Jan Usage	MFR Indoor Use (Annualized 90% of January Total)			COM Jan Usage	COM Indoor Use (Annualized 90% of January Total)		
		JAN (CCF)	AFY	GPD/Serv		AFY	GPD/Serv	%		(CCF)	AFY	GPD/Serv		%	(CCF)	AFY
1980	22,440	556	0.258	0	556	230	48%	1,032	26	7,614	68%	4,458	111	734	65%	
1981	24,131	598	0.271	0	598	242	49%	1,144	28	3,008	49%	4,580	114	737	74%	
1982	22,745	564	0.255	0	564	227	51%	1,563	39	3,193	61%	4,022	100	645	70%	
1983	24,183	600	0.268	0	600	239	53%	1,862	46	3,691	62%	4,266	106	676	71%	
1984	23,494	582	0.254	0	582	227	46%	2,216	55	3,797	61%	3,901	97	618	56%	
1985	24,025	596	0.256	0	596	228	47%	2,291	57	3,622	67%	4,538	113	720	64%	
1986	23,989	595	0.254	0	595	226	47%	1,870	46	2,587	49%	4,186	104	652	61%	
1987	24,973	619	0.261	0	619	233	47%	2,733	68	3,781	65%	4,105	102	641	58%	
1988	25,684	637	0.267	0	637	238	49%	2,792	69	3,862	61%	4,434	110	691	63%	
1989	27,274	676	0.283	0	676	252	54%	2,775	69	3,839	73%	4,408	109	687	58%	
1990	26,454	656	0.274	0	656	245	51%	1,921	48	2,513	51%	4,805	119	748	63%	
1991	28,609	709	0.293	0	709	262	62%	2,705	67	3,522	84%	4,658	115	744	70%	
1992	24,259	601	0.248	0	601	221	50%	2,292	57	2,984	66%	3,948	98	632	61%	
1993	25,394	630	0.256	0	630	229	52%	2,329	58	3,032	64%	4,067	101	653	60%	
1994	25,686	637	0.256	0	637	229	50%	2,380	59	3,099	63%	4,406	109	712	73%	
1995	25,044	621	0.248	0	621	221	49%	2,635	65	3,431	74%	3,491	87	565	60%	
1996	25,612	635	0.252	0	635	225	49%	2,441	61	3,178	61%	2,788	69	454	50%	
1997	24,062	597	0.235	0	597	210	44%	3,096	77	4,031	81%	3,040	75	497	57%	
1998	25,521	633	0.245	0	633	218	53%	2,508	62	3,265	67%	2,769	69	450	57%	
1999	28,533	707	0.269	0	707	240	53%	2,979	74	3,879	77%	3,499	87	561	64%	
2000	31,175	773	0.293	0	773	262	58%	2,340	58	3,062	68%	3,481	86	568	66%	
2001	29,413	729	0.277	0	729	247	53%	2,338	58	3,044	65%	3,493	87	575	68%	
2002	27,605	684	0.259	0	684	231	49%	2,195	54	2,858	64%	3,285	81	535	63%	
2003	28,075	696	0.264	0	696	236	52%	2,317	57	3,017	67%	2,972	74	483	57%	
2004	25,538	633	0.240	0	633	214	46%	2,280	57	2,969	65%	3,236	80	524	64%	
2005	26,282	652	0.245	0	652	219	50%	2,442	61	3,180	70%	2,832	70	459	63%	
2006	26,885	667	0.250	0	667	223	52%	2,535	63	3,301	86%	2,487	62	405	57%	
2007	26,012	645	0.243	0	645	217	48%	2,015	50	2,731	76%	2,628	65	401	53%	
2008	26,516	657	0.252	0	657	225	51%	1,833	45	2,081	58%	2,786	69	400	55%	
2009	24,999	620	0.239	0	620	214	56%	1,798	45	1,895	67%	2,406	60	348	55%	
2010	21,504	533	0.204	0	533	182	51%	2,131	53	3,234	89%	2,181	54	310	52%	
2011	22,797	565	0.216	0	565	193	59%	1,322	33	1,330	46%	1,965	49	270	49%	
2012	24,745	614	0.234	0	614	209	61%	2,369	59	2,280	76%	2,726	68	375	65%	
2013	18,312	454	0.173	0	454	154	44%	2,112	52	2,032	63%	2,016	50	276	44%	
2014	27,834	690	0.262	0	690	234	76%	2,259	56	2,041	71%	2,742	68	386	68%	
2015	20,143	499	3.210	0	499	169	69%	2,169	54	1,858	73%	2,443	61	348	72%	
2016					567	192			57	1,908			58	331		
2017					569	192			58	1,908			58	331		
2018					570	192			60	1,908			59	331		
2019					571	192			62	1,908			59	331		
2020					573	192			64	1,908			60	331		
2025					580	192			73	1,908			62	331		
2030					588	192			85	1,908			64	331		
2035					595	192			98	1,908			66	331		
2040					603	192			113	1,908			68	331		

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

California Water Service Company - Dixon 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	%
1980	52	1.3	288	70%	434	11	503	29%
1981	17	0.4	94	24%	309	8	314	21%
1982	33	0.8	183	52%	389	10	377	31%
1983	33	0.8	195	89%	374	9	360	25%
1984	18	0.4	114	82%	718	18	655	38%
1985	17	0.4	98	43%	469	12	415	34%
1986	10	0.2	66	25%	440	11	390	27%
1987	39	1.0	216	72%	431	11	385	25%
1988	52	1.3	288	96%	769	19	709	55%
1989	30	0.7	166	51%	521	13	477	41%
1990	60	1.5	332	84%	568	14	484	42%
1991	133	3.3	736	197%	1,222	30	1,040	87%
1992	51	1.3	282	49%	1,013	25	862	92%
1993	71	1.8	393	73%	392	10	334	39%
1994	144	3.6	797	314%	309	8	257	24%
1995	7	0.2	41	37%	1,043	26	852	72%
1996	7	0.2	43	11%	699	17	559	53%
1997	97	2.4	537	167%	618	15	510	45%
1998	39	1.0	288	137%	422	10	367	34%
1999	11	0.3	71	70%	643	16	562	46%
2000	21	0.5	119	65%	346	9	333	22%
2001	51	1.3	282	105%	512	13	507	30%
2002	55	1.4	271	135%	763	19	716	43%
2003	12	0.3	53	41%	603	15	534	18%
2004	52	1.3	230	128%	741	18	679	21%
2005	8	0.2	41	51%	333	8	302	11%
2006	13	0.3	66	52%	409	10	362	13%
2007	11	0.3	57	61%	681	17	617	20%
2008	-7	-0.2	-41	-39%	715	18	513	16%
2009	-1	0.0	-7	-8%	700	17	436	17%
2010	4	0.1	30	45%	762	19	472	17%
2011	8	0.2	59	71%	894	22	550	24%
2012	7	0.2	52	47%	552	14	355	31%
2013	11	0.3	81	87%	738	18	551	39%
2014	6	0.1	44	49%	2,051	51	1,621	69%
2015	9	0.2	66	76%	2,642	66	2,076	168%
2016		0.2	60			33	1,031	
2017		0.2	60			34	1,031	
2018		0.2	60			34	1,031	
2019		0.2	60			35	1,031	
2020		0.2	60			35	1,031	
2025		0.2	60			39	1,031	
2030		0.2	60			42	1,031	
2035		0.2	60			46	1,031	
2040		0.2	60			50	1,031	

Estimated Indoor/Outdoor Usage			
Est. Indoor Usage	Est. Outdoor Usage	Est. Indoor Usage	Est. Outdoor Usage
AFY	AFY	%	%
705	762	48%	52%
748	765	49%	51%
713	709	50%	50%
762	680	53%	47%
752	810	48%	52%
777	905	46%	54%
756	906	45%	55%
800	952	46%	54%
836	847	50%	50%
868	778	53%	47%
838	855	50%	50%
925	584	61%	39%
783	727	52%	48%
800	760	51%	49%
816	746	52%	48%
799	806	50%	50%
782	883	47%	53%
766	959	44%	56%
775	770	50%	50%
884	818	52%	48%
926	743	56%	44%
888	855	51%	49%
841	923	48%	52%
842	979	46%	54%
790	1,133	41%	59%
791	907	47%	53%
802	878	48%	52%
777	948	45%	55%
790	961	45%	55%
741	817	48%	52%
659	844	44%	56%
669	730	48%	52%
754	651	54%	46%
575	972	37%	63%
865	573	60%	40%
679	472	59%	41%
715	939	43%	57%
719	944	43%	57%
723	949	43%	57%
728	954	43%	57%
732	959	43%	57%
754	985	43%	57%
778	1,013	43%	57%
805	1,043	44%	56%
834	1,075	44%	56%

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