

**Water Resources Planning Department**

**Projection Analysis Work Sheets  
for  
King City District**

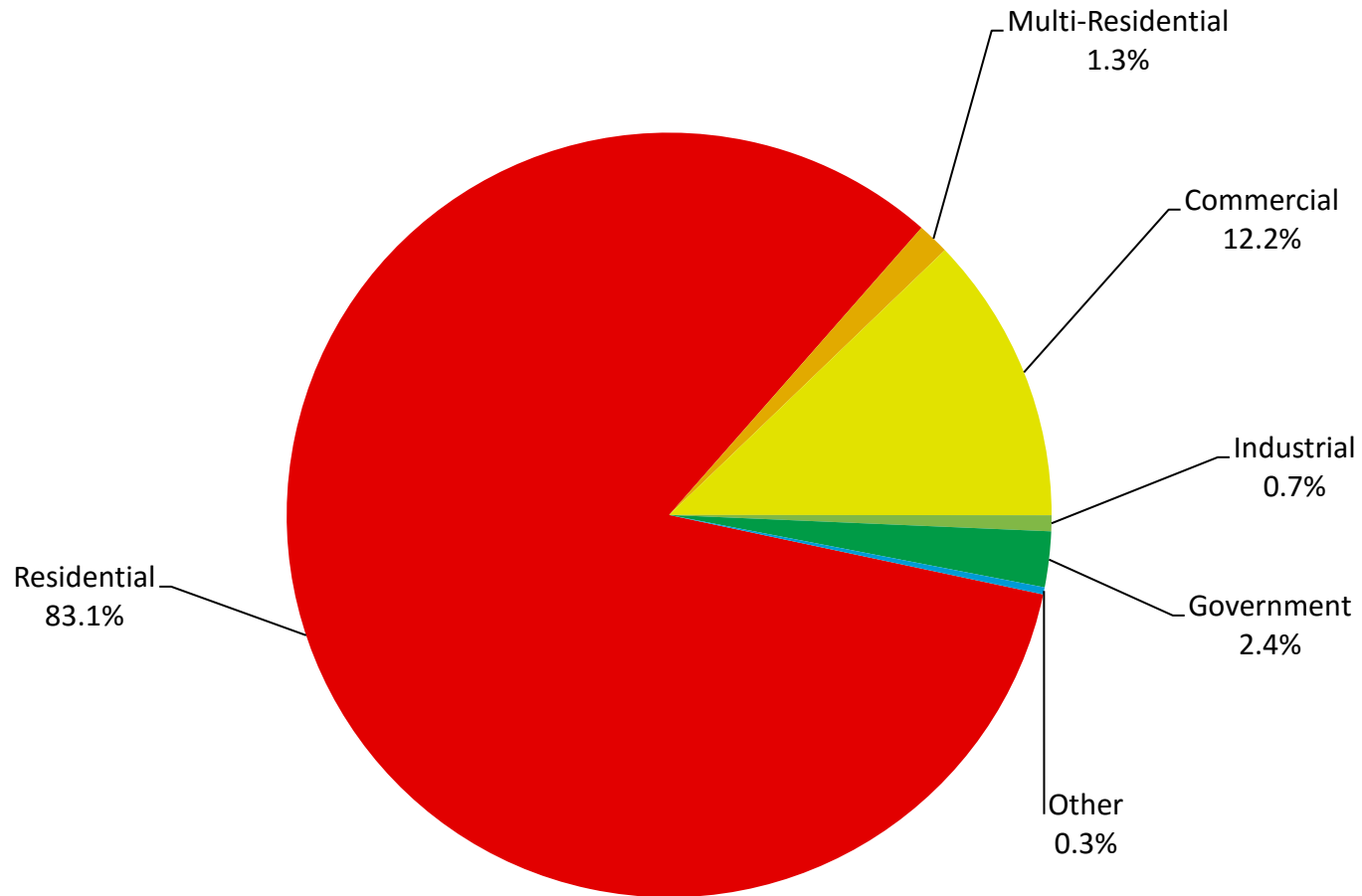
**2015**



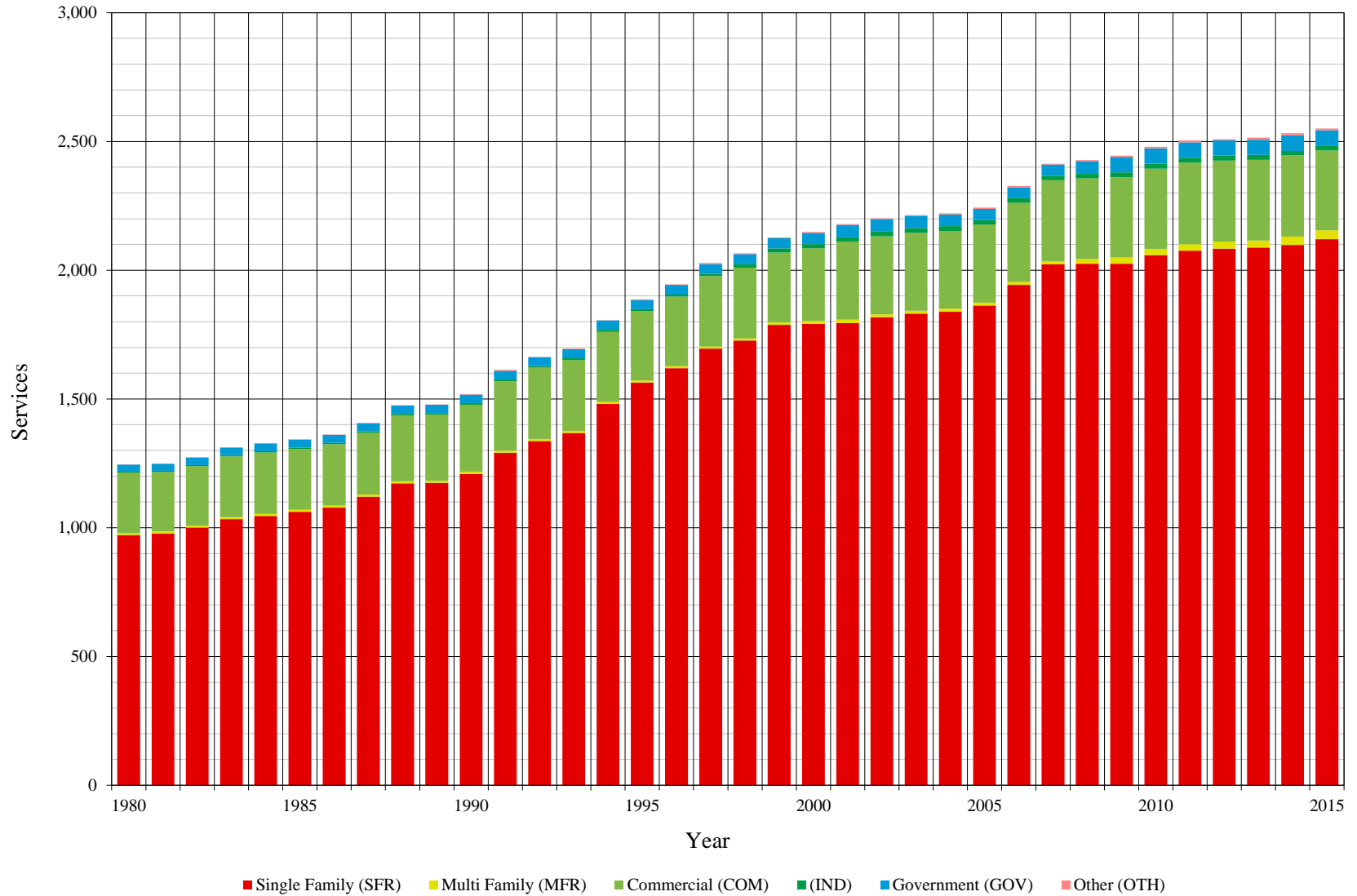
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## Distribution of Services (2015)



# Historical Services



**California Water Service Company - King City 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)	Total	Annual Change
1980	971	8	234	5	28	0	1,246	
1981	978	8	231	5	28	0	1,249	3
1982	1,000	8	231	5	29	1	1,273	24
1983	1,034	8	235	5	30	0	1,312	38
1984	1,046	8	238	5	30	1	1,328	16
1985	1,062	8	237	5	31	1	1,343	15
1986	1,078	8	239	5	31	1	1,361	18
1987	1,121	8	239	6	32	2	1,408	46
1988	1,173	8	255	6	33	0	1,475	67
1989	1,174	8	257	6	32	1	1,479	4
1990	1,209	8	261	6	34	2	1,519	40
1991	1,291	8	270	7	34	5	1,614	95
1992	1,336	8	277	7	34	1	1,663	50
1993	1,368	8	275	8	35	2	1,696	32
1994	1,481	8	272	8	36	2	1,807	111
1995	1,564	8	269	8	36	3	1,887	81
1996	1,620	8	270	8	37	2	1,945	58
1997	1,696	8	273	10	37	3	2,028	83
1998	1,727	8	274	14	39	4	2,066	38
1999	1,787	10	271	16	40	3	2,128	62
2000	1,792	11	282	16	44	4	2,149	21
2001	1,795	13	303	16	49	3	2,180	31
2002	1,817	12	303	18	49	3	2,202	22
2003	1,831	12	302	19	47	2	2,213	12
2004	1,839	12	302	19	46	4	2,221	25
2005	1,863	11	303	18	43	5	2,243	30
2006	1,943	11	307	18	43	6	2,328	107
2007	2,023	11	316	18	43	3	2,414	170
2008	2,025	18	313	18	50	4	2,428	100
2009	2,026	24	312	19	59	6	2,445	32
2010	2,059	24	312	19	60	7	2,480	52
2011	2,076	25	317	19	60	7	2,504	59
2012	2,084	27	315	19	60	4	2,509	29
2013	2,089	27	313	19	59	8	2,515	12
2014	2,099	33	315	18	60	9	2,532	23
2015	2,121	34	311	17	60	8	2,551	35
5 Yr Avg.	2,093	29	314	18	60	7	2,522	35
10 Yr Avg.	2,054	24	313	18	55	6	2,470	61
15 Yr Avg.	1,979	20	309	18	52	5	2,384	48
20 Yr Avg.	1,916	17	301	17	49	5	2,304	52

Note: Reclassification from Commercial (COM) to Multi-Family Residential (MFR) occurred between categories from 2007 to 2009

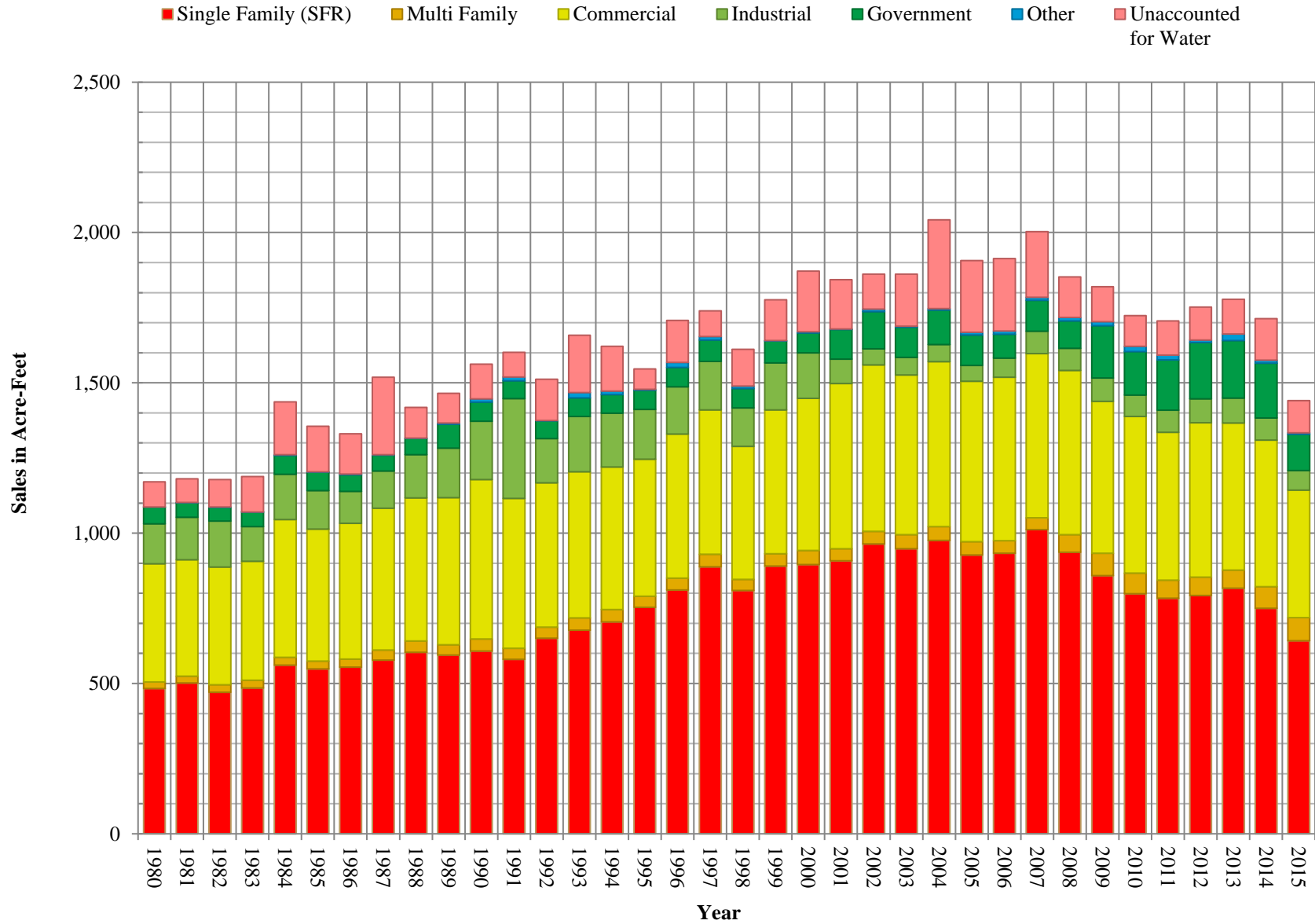
**California Water Service Company - King City District**  
**Water Supply and Demand Analysis and Projections**  
**Service Growth Percentage**

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Total
1981	0.67%	0.00%	-1.46%	0.00%	0.00%	150.00%	0.27%
1982	2.28%	0.00%	0.14%	0.00%	5.14%	60.00%	1.94%
1983	3.40%	0.00%	1.80%	0.00%	1.72%	-62.50%	3.00%
1984	1.19%	0.00%	1.31%	0.00%	1.69%	133.33%	1.23%
1985	1.49%	0.00%	-0.63%	0.00%	2.78%	85.71%	1.16%
1986	1.55%	0.00%	0.77%	0.00%	0.54%	-38.46%	1.35%
1987	3.94%	0.00%	0.24%	20.00%	4.03%	150.00%	3.40%
1988	4.65%	0.00%	6.59%	0.00%	1.81%	-80.00%	4.77%
1989	0.12%	0.00%	0.95%	0.00%	-1.27%	200.00%	0.28%
1990	2.94%	0.00%	1.49%	0.00%	3.34%	50.00%	2.70%
1991	6.85%	0.00%	3.29%	8.33%	0.00%	205.56%	6.25%
1992	3.48%	0.00%	2.66%	7.69%	1.00%	-70.91%	3.08%
1993	2.37%	0.00%	-0.72%	9.52%	2.22%	81.25%	1.93%
1994	8.24%	1.04%	-1.06%	4.35%	4.82%	-34.48%	6.55%
1995	5.62%	-1.03%	-1.16%	0.00%	-0.69%	68.42%	4.47%
1996	3.56%	0.00%	0.53%	0.00%	2.78%	-18.75%	3.06%
1997	4.72%	0.00%	1.17%	20.83%	1.13%	53.85%	4.26%
1998	1.82%	5.21%	0.30%	45.69%	3.56%	5.00%	1.87%
1999	3.50%	18.81%	-1.06%	13.61%	3.01%	-2.38%	3.01%
2000	0.24%	11.67%	3.99%	0.00%	9.60%	12.20%	0.97%
2001	0.19%	14.18%	7.50%	2.60%	11.24%	-13.04%	1.44%
2002	1.21%	-5.88%	-0.19%	11.17%	0.00%	-5.00%	1.01%
2003	0.78%	0.00%	-0.25%	5.02%	-3.08%	-36.84%	0.53%
2004	0.43%	-2.08%	-0.17%	-0.87%	-3.00%	112.50%	0.35%
2005	1.33%	-6.38%	0.41%	-3.07%	-7.10%	19.61%	0.99%
2006	4.27%	0.00%	1.51%	-2.26%	0.59%	11.48%	3.77%
2007	4.12%	0.00%	2.66%	-0.46%	0.39%	-42.65%	3.69%
2008	0.12%	67.42%	-0.95%	0.93%	15.53%	12.82%	0.59%
2009	0.01%	30.32%	-0.32%	5.07%	19.83%	52.27%	0.72%
2010	1.65%	0.35%	0.08%	-1.75%	0.84%	17.91%	1.42%
2011	0.81%	5.19%	1.68%	1.79%	0.14%	2.53%	0.96%
2012	0.42%	6.58%	-0.79%	0.00%	0.00%	-44.44%	0.19%
2013	0.21%	1.23%	-0.48%	-0.88%	-0.97%	120.00%	0.28%
2014	0.47%	19.21%	0.51%	-6.19%	0.42%	8.08%	0.66%
2015	1.05%	5.37%	-1.14%	-2.83%	0.56%	-14.95%	0.74%
5 Yr. Avg.	0.59%	7.52%	-0.04%	-1.62%	0.03%	14.24%	0.57%
10 Yr. Avg.	1.31%	4.74%	0.28%	-0.66%	0.25%	12.31%	1.30%
15 Yr. Avg.	1.14%	2.91%	0.67%	0.55%	0.00%	13.35%	1.16%
20 Yr. Avg.	1.55%	4.08%	0.75%	4.42%	1.12%	12.51%	1.53%

Note: Values in red not included in average due to reclassification.

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# Historical Sales



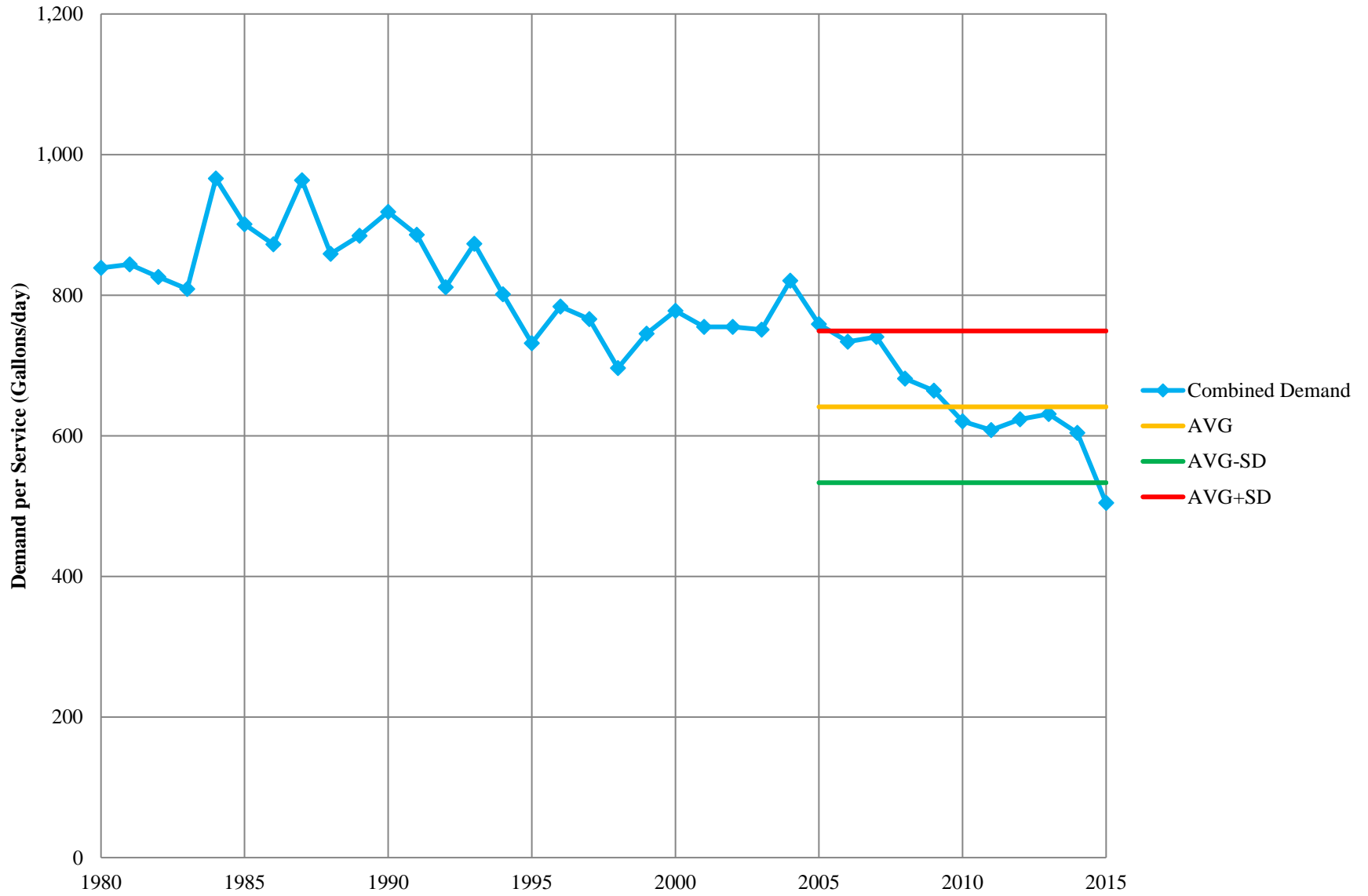


**California Water Service Company - King City District**  
**Water Supply and Demand Analysis and Projections**  
**Sales (AF)**

Worksheet 3

Year	Single Family (SFR)	Multi Family (MFR)	Commercial (COM)	Industrial (IND)	Government (GOV)	Other (OTH)	Unaccounted for Water (UAFW)	Total Sales (AF)	Total Demand (AF)	Total Demand (MGal)
1980	483	22	393	133	56	0	83	1,087	1,171	382
1981	502	23	387	142	48	1	79	1,102	1,181	385
1982	471	25	391	153	47	0	91	1,087	1,178	384
1983	485	26	395	116	49	0	118	1,071	1,188	387
1984	561	26	458	151	63	2	176	1,261	1,437	468
1985	549	26	439	128	62	1	151	1,204	1,355	442
1986	554	27	452	106	54	3	134	1,197	1,331	434
1987	577	34	472	124	53	2	258	1,261	1,519	495
1988	604	38	475	144	54	1	102	1,316	1,418	462
1989	594	34	489	165	79	4	99	1,366	1,465	477
1990	608	40	531	194	63	11	116	1,447	1,562	509
1991	580	37	499	332	59	12	82	1,520	1,601	522
1992	651	36	480	148	59	1	137	1,375	1,512	493
1993	678	40	487	184	62	17	191	1,467	1,658	540
1994	705	41	474	179	62	12	149	1,473	1,622	528
1995	753	37	456	165	64	3	68	1,478	1,547	504
1996	811	39	479	158	64	17	140	1,568	1,708	557
1997	888	41	481	161	71	12	86	1,654	1,740	567
1998	810	37	442	128	65	8	121	1,490	1,611	525
1999	891	41	478	157	72	2	136	1,641	1,776	579
2000	896	47	506	152	66	4	202	1,670	1,872	610
2001	908	40	550	81	99	1	164	1,679	1,843	600
2002	964	42	554	53	124	8	116	1,745	1,862	607
2003	948	47	531	59	100	3	174	1,688	1,862	607
2004	976	45	549	57	115	5	295	1,747	2,042	665
2005	927	44	534	52	101	9	239	1,668	1,907	621
2006	934	41	544	64	79	11	241	1,672	1,913	623
2007	1,012	39	546	75	103	10	218	1,785	2,003	653
2008	936	59	546	74	91	12	135	1,718	1,853	604
2009	859	75	504	78	174	14	116	1,703	1,820	593
2010	799	68	521	71	144	18	102	1,622	1,724	562
2011	783	61	491	74	167	16	114	1,592	1,706	556
2012	793	61	513	79	188	8	109	1,643	1,752	571
2013	817	60	490	83	192	21	116	1,662	1,778	579
2014	750	72	488	74	182	10	138	1,575	1,714	558
2015	643	76	424	65.1	120	5	107	1,334	1,441	470

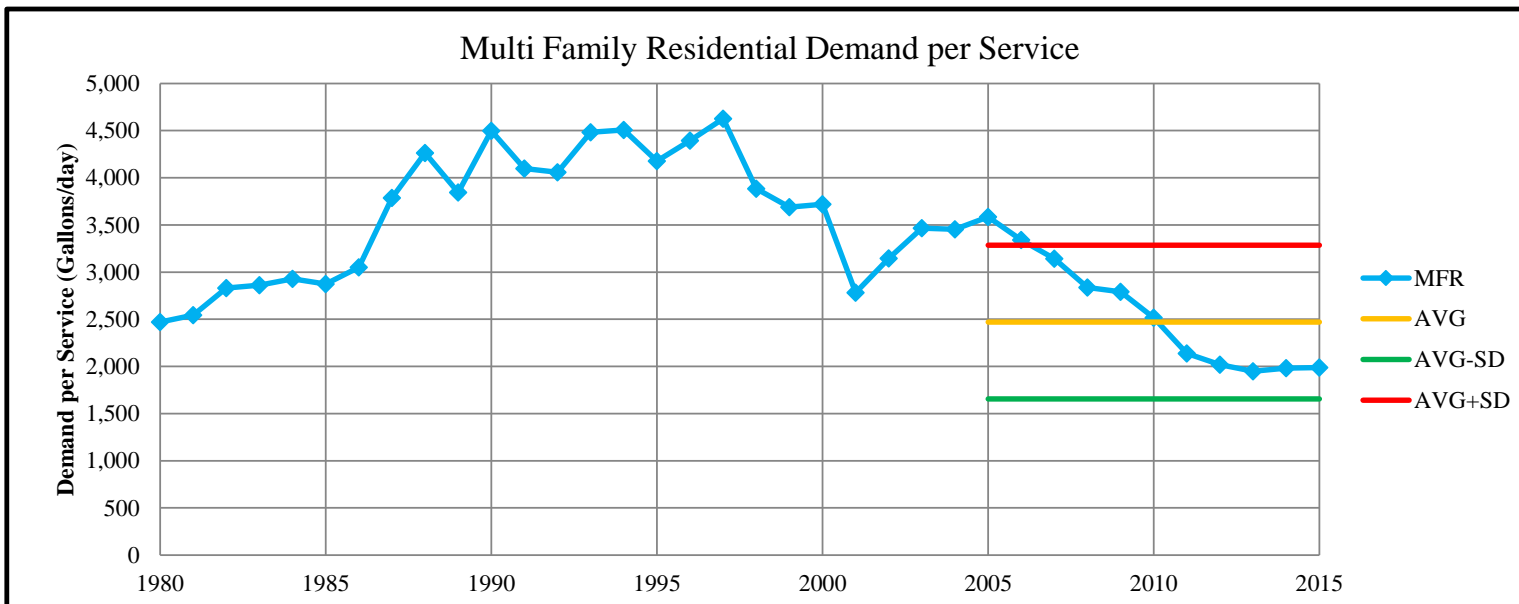
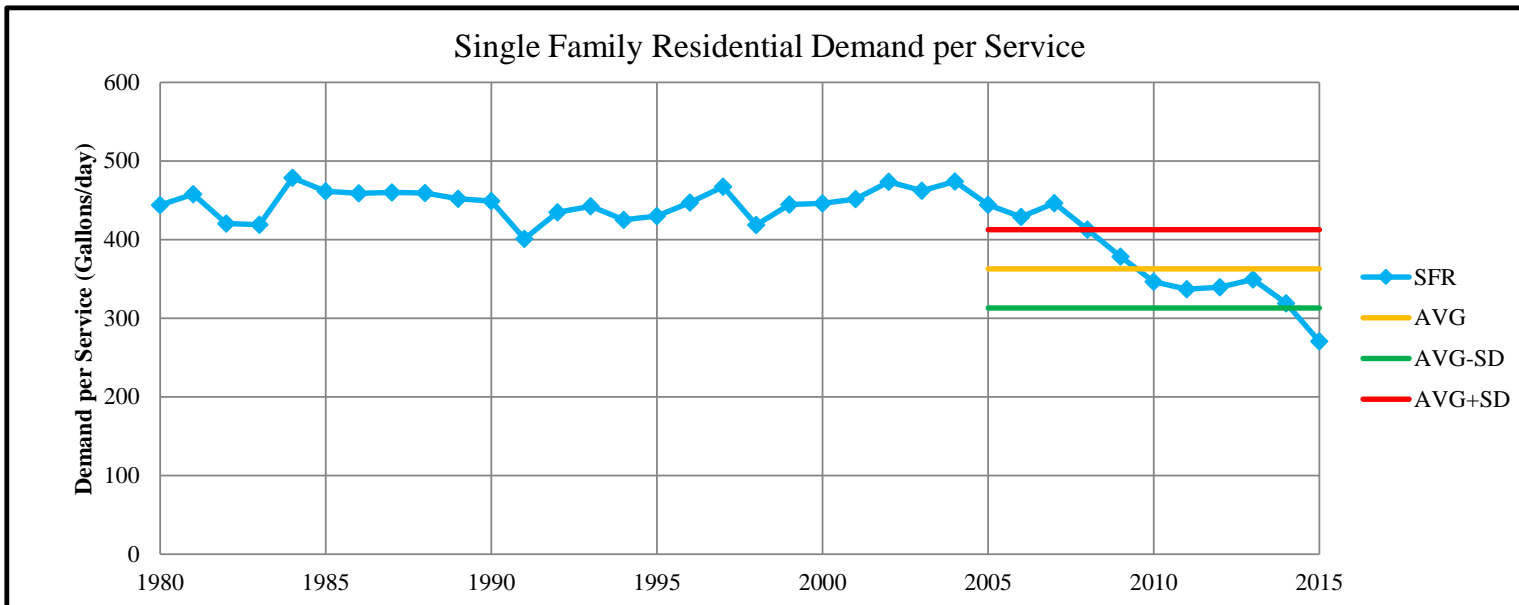
### Combined Demand per Service

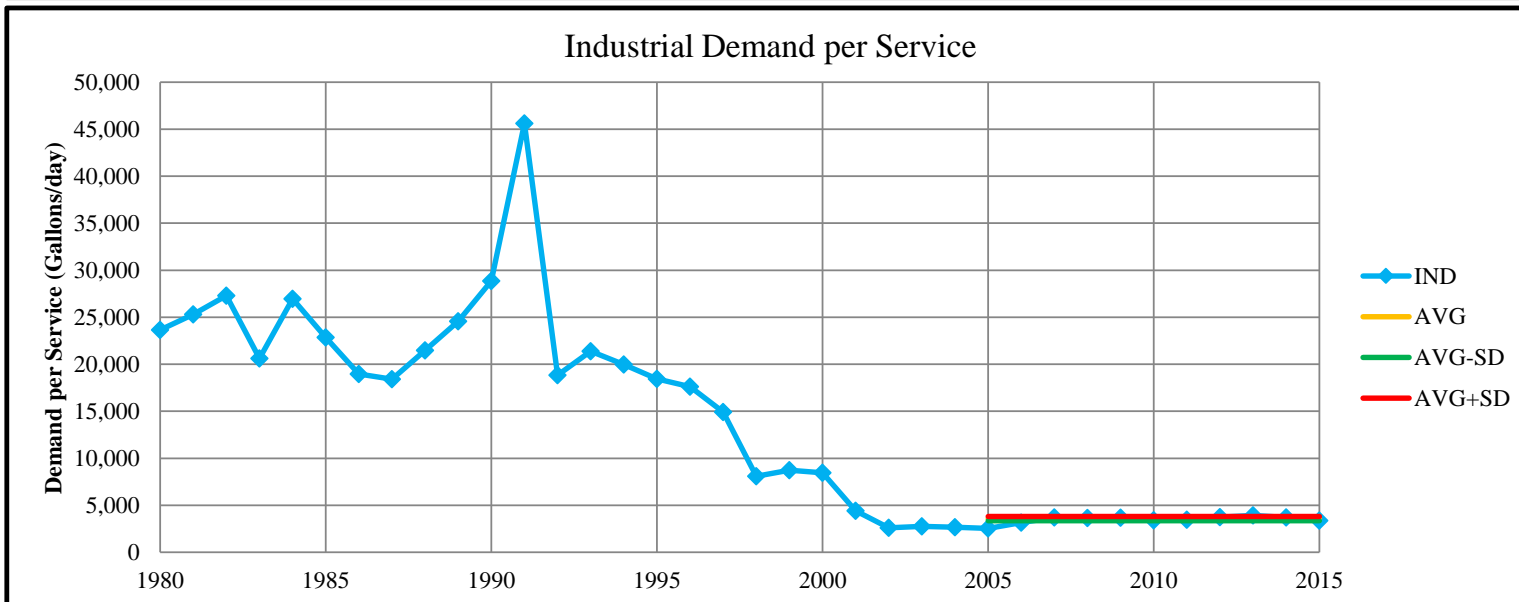
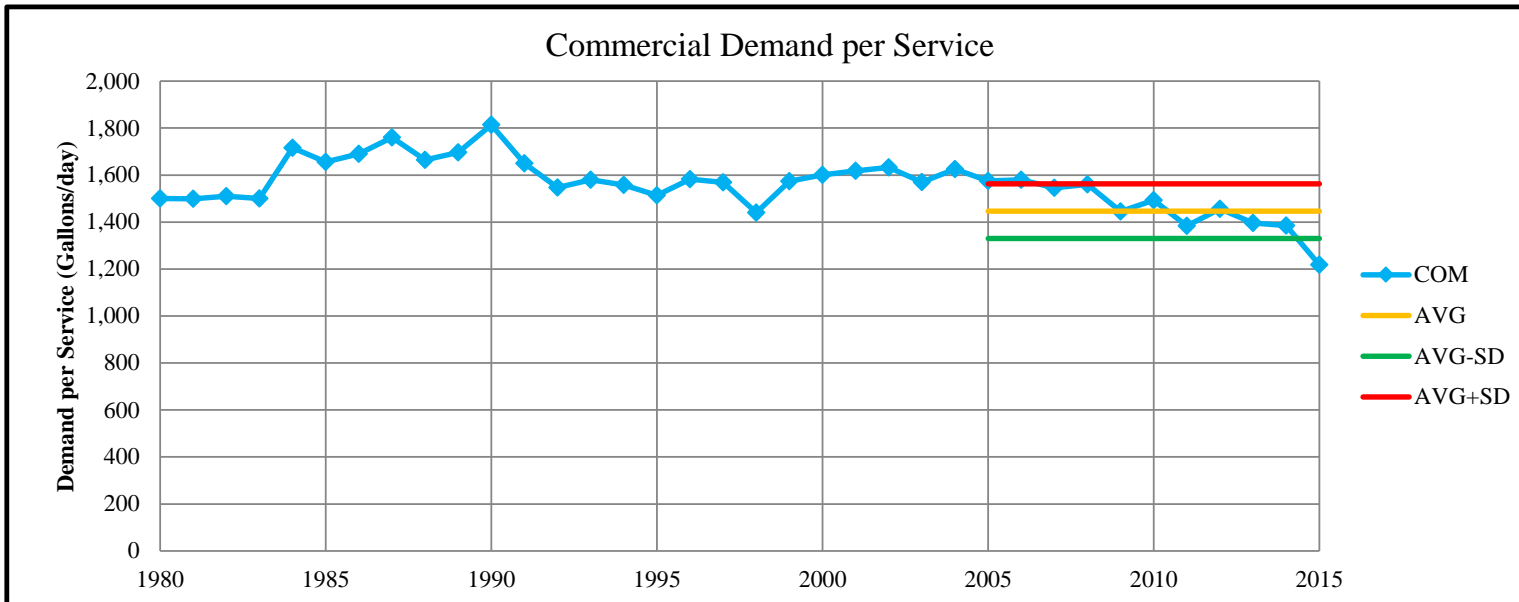


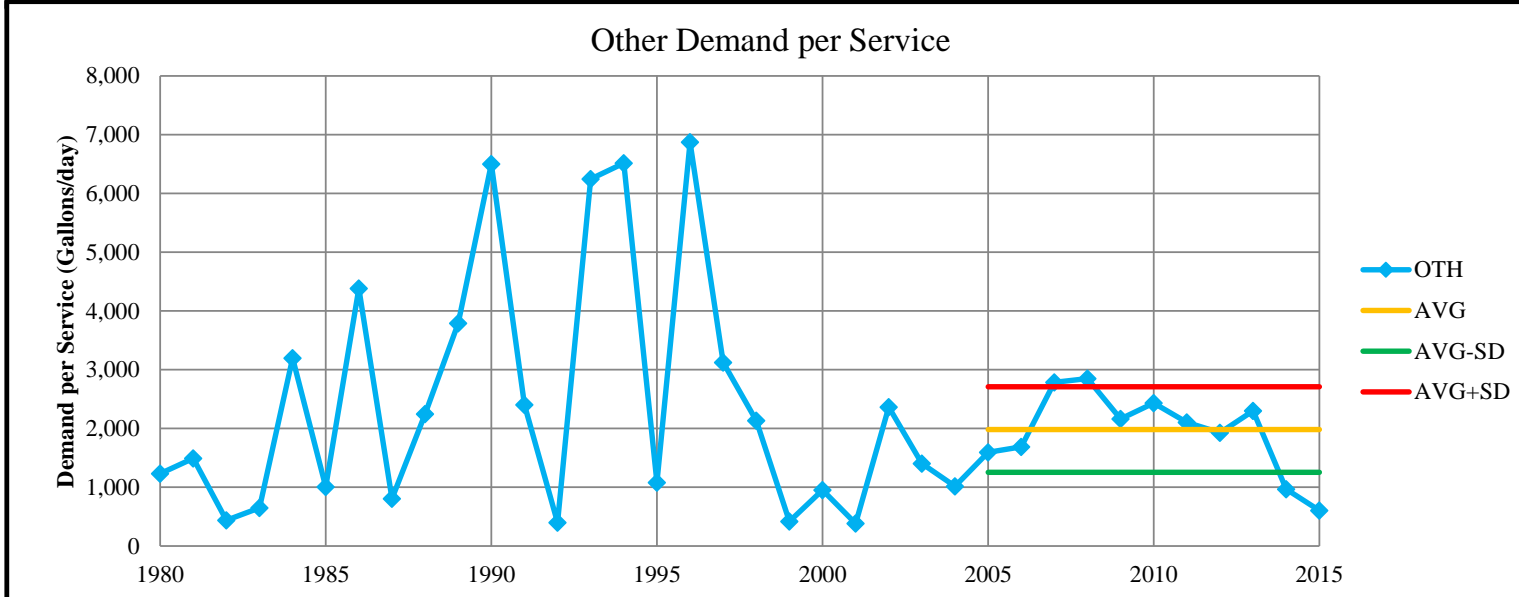
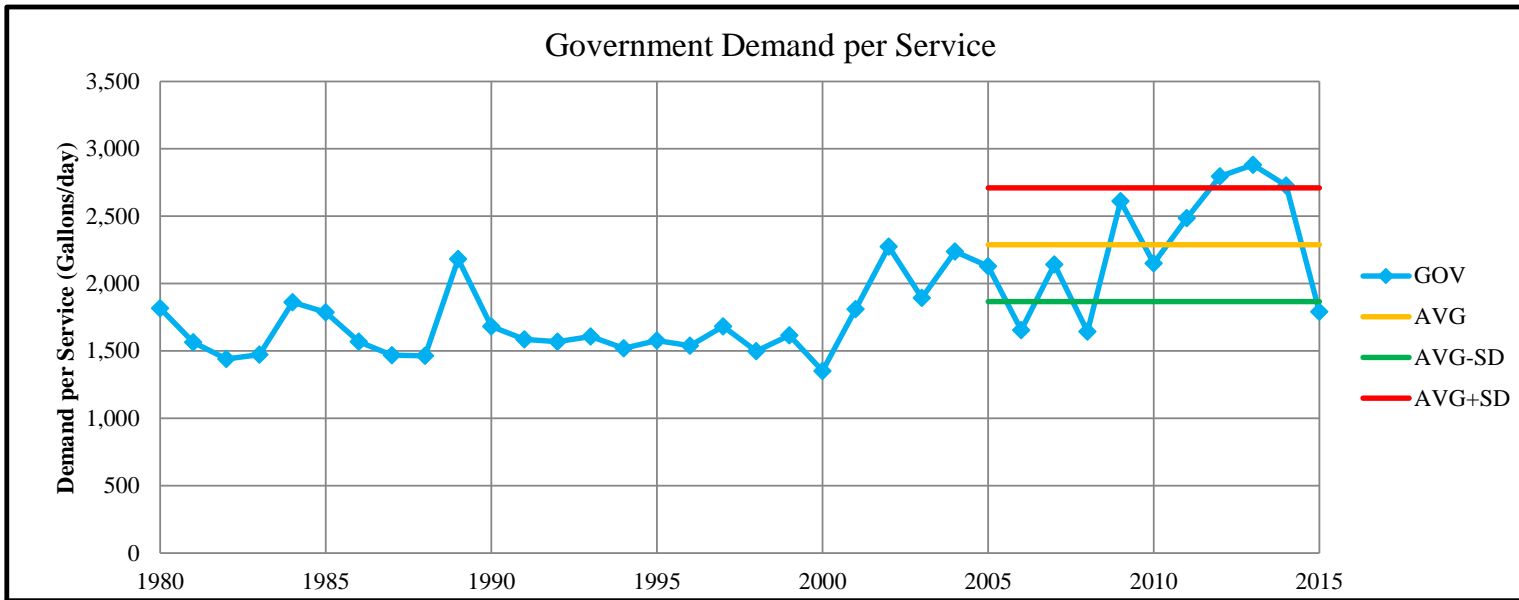
**California Water Service Company - King City District**  
**Water Supply and Demand Analysis and Projections**  
**Demand per Service (Gallons per Day)**

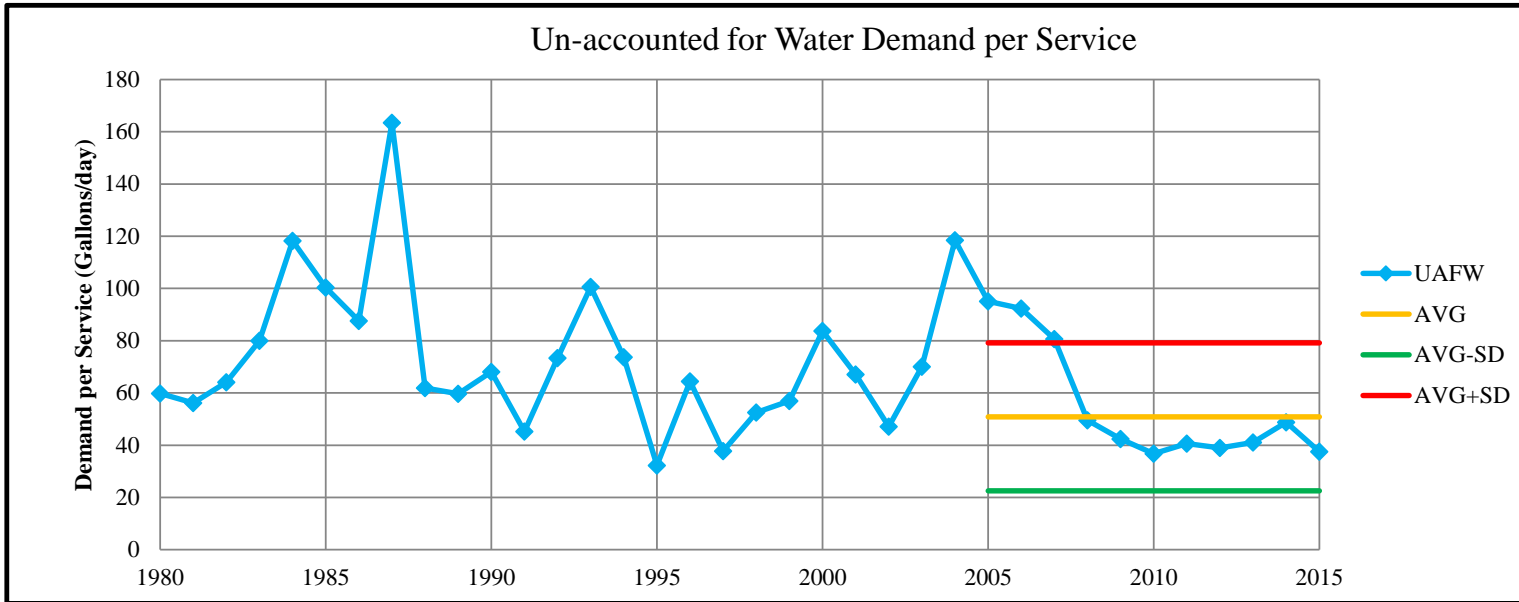
Year	SFR	MFR	COM	IND	GOV	OTH	UAFW	Combined Demand/Serv
1980	444	2,471	1,500	23,659	1,817	1,230	60	839
1981	458	2,543	1,499	25,293	1,565	1,490	56	844
1982	420	2,832	1,510	27,289	1,440	437	64	826
1983	419	2,863	1,501	20,627	1,473	648	80	809
1984	479	2,928	1,716	26,958	1,862	3,197	118	966
1985	461	2,874	1,656	22,844	1,786	1,008	100	901
1986	459	3,052	1,690	18,957	1,569	4,384	88	873
1987	460	3,787	1,760	18,405	1,469	807	163	963
1988	459	4,265	1,665	21,486	1,465	2,244	62	859
1989	452	3,846	1,697	24,559	2,183	3,789	60	885
1990	449	4,499	1,813	28,868	1,681	6,501	68	918
1991	401	4,099	1,650	45,617	1,585	2,403	45	886
1992	435	4,058	1,547	18,851	1,570	397	73	811
1993	442	4,483	1,580	21,382	1,607	6,244	101	873
1994	425	4,507	1,557	19,978	1,520	6,517	74	801
1995	430	4,177	1,513	18,438	1,577	1,081	32	732
1996	447	4,396	1,582	17,600	1,539	6,871	64	784
1997	468	4,627	1,569	14,911	1,683	3,122	38	766
1998	419	3,884	1,440	8,096	1,498	2,134	52	696
1999	445	3,688	1,573	8,738	1,616	418	57	745
2000	446	3,721	1,601	8,455	1,352	953	84	778
2001	452	2,784	1,618	4,420	1,810	382	67	755
2002	474	3,146	1,633	2,606	2,273	2,366	47	755
2003	462	3,467	1,570	2,757	1,893	1,404	70	751
2004	474	3,454	1,626	2,679	2,238	1,016	118	821
2005	444	3,586	1,574	2,538	2,129	1,595	95	759
2006	429	3,343	1,580	3,152	1,655	1,689	92	734
2007	447	3,142	1,545	3,714	2,142	2,787	81	741
2008	413	2,837	1,560	3,651	1,644	2,849	49	681
2009	378	2,792	1,445	3,669	2,613	2,164	42	664
2010	346	2,517	1,493	3,402	2,151	2,430	37	621
2011	337	2,137	1,384	3,462	2,485	2,107	41	608
2012	340	2,020	1,456	3,735	2,796	1,926	39	624
2013	349	1,949	1,397	3,921	2,881	2,298	41	631
2014	319	1,981	1,385	3,719	2,727	967	49	604
2015	271	1,987	1,218	3,384	1,790	603	38	504
10-yr AVG	363	2,471	1,446	3,581	2,288	1,982	51	641
SD	50	815	116	226	422	728	28	108

Note: Standard Deviation (SD) for Industrial (IND) & Other (OTH) limited to past 10 years.









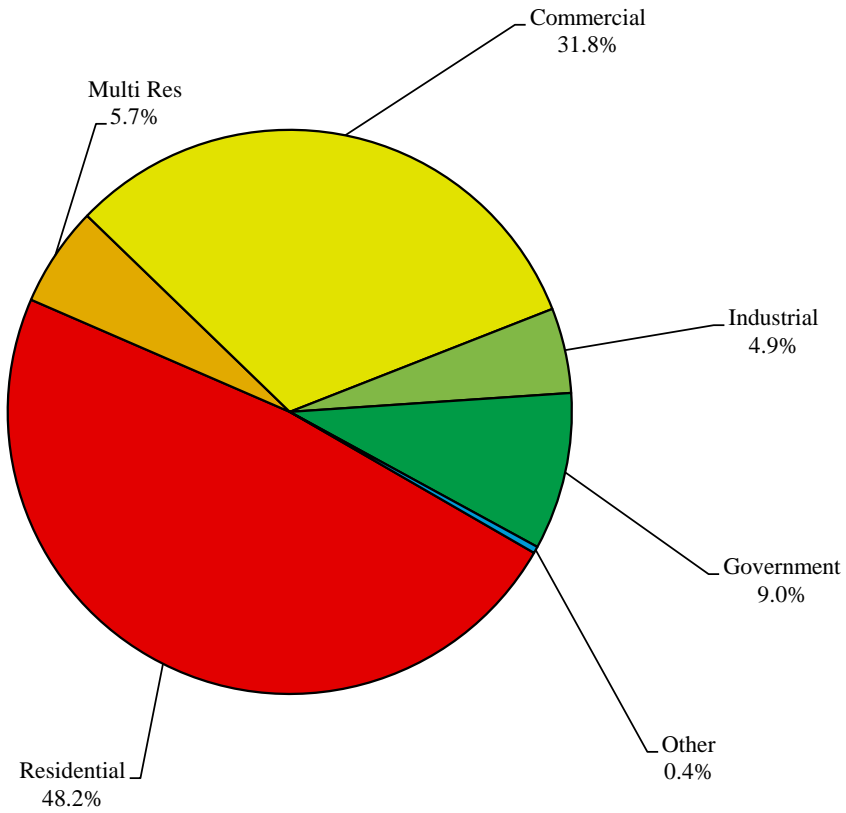
**California Water Service Company - King City District**  
**Water Supply and Demand Analysis and Projections**  
**Percentage Change in Annual Demand**

Year	Residential	Multi Res	Commercial	Industrial	Government	Other	Unaccounted	Total
1981	3.83%	2.89%	-1.58%	6.91%	-13.88%	203.00%	-5.71%	1.36%
1982	-6.11%	11.37%	0.94%	7.89%	-3.26%	-53.14%	16.33%	-1.38%
1983	3.07%	1.09%	1.15%	-24.41%	4.05%	-44.37%	28.51%	-1.51%
1984	15.57%	2.25%	15.86%	30.69%	28.56%	1051.90%	49.71%	17.75%
1985	-2.17%	-1.82%	-4.14%	-15.26%	-1.39%	-41.43%	-14.11%	-4.47%
1986	0.98%	6.19%	2.88%	-17.02%	-11.67%	167.54%	-11.62%	-0.61%
1987	4.22%	24.06%	4.40%	16.51%	-2.58%	-54.00%	93.05%	5.36%
1988	4.52%	12.62%	0.80%	16.74%	1.47%	-44.36%	-60.31%	4.36%
1989	-1.51%	-9.83%	2.89%	14.30%	47.14%	406.58%	-3.36%	3.82%
1990	2.25%	17.00%	8.47%	17.54%	-20.40%	157.33%	17.03%	5.87%
1991	-4.52%	-8.89%	-6.01%	71.19%	-5.71%	12.97%	-29.25%	5.05%
1992	12.17%	-1.00%	-3.77%	-55.50%	0.00%	-95.20%	66.98%	-9.52%
1993	4.13%	10.45%	1.43%	24.23%	4.65%	2753.88%	39.69%	6.72%
1994	4.03%	1.60%	-2.51%	-2.50%	-0.84%	-31.62%	-21.89%	0.36%
1995	6.82%	-8.30%	-3.95%	-7.71%	2.99%	-72.06%	-54.26%	0.38%
1996	7.69%	5.24%	5.10%	-4.54%	0.35%	416.28%	105.84%	6.04%
1997	9.51%	5.27%	0.34%	2.37%	10.55%	-30.09%	-38.92%	5.51%
1998	-8.86%	-11.69%	-7.96%	-20.89%	-7.81%	-28.22%	41.63%	-9.93%
1999	10.01%	12.82%	8.10%	22.61%	11.12%	-80.88%	11.70%	10.13%
2000	0.57%	12.66%	5.82%	-3.24%	-8.30%	155.67%	48.53%	1.80%
2001	1.40%	-14.59%	8.63%	-46.36%	48.92%	-65.10%	-18.73%	0.53%
2002	6.14%	6.36%	0.73%	-34.46%	25.61%	487.62%	-29.09%	3.96%
2003	-1.62%	10.21%	-4.10%	11.11%	-19.30%	-62.52%	49.44%	-3.28%
2004	2.93%	-2.46%	3.41%	-3.68%	14.66%	53.80%	69.82%	3.49%
2005	-5.00%	-2.79%	-2.75%	-8.17%	-11.60%	87.80%	-18.97%	-4.51%
2006	0.68%	-6.79%	1.88%	21.39%	-21.83%	18.02%	0.77%	0.24%
2007	8.41%	-6.00%	0.39%	17.27%	29.97%	-5.35%	-9.41%	6.72%
2008	-7.48%	51.17%	0.01%	-0.78%	-11.34%	15.34%	-38.28%	-3.73%
2009	-8.31%	28.26%	-7.66%	5.58%	90.48%	15.63%	-13.75%	-0.85%
2010	-6.94%	-9.54%	3.37%	-8.89%	-16.98%	32.43%	-12.01%	-4.80%
2011	-1.94%	-10.70%	-5.75%	3.60%	15.67%	-11.12%	11.46%	-1.82%
2012	1.21%	0.75%	4.41%	7.88%	12.52%	-49.21%	-3.87%	3.17%
2013	3.08%	-2.33%	-4.56%	4.05%	2.05%	162.54%	5.69%	1.21%
2014	-8.28%	21.17%	-0.35%	-11.02%	-4.97%	-54.51%	19.49%	-5.23%
2015	-14.28%	5.71%	-13.03%	-11.61%	-33.98%	-46.95%	-22.46%	-15.33%



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



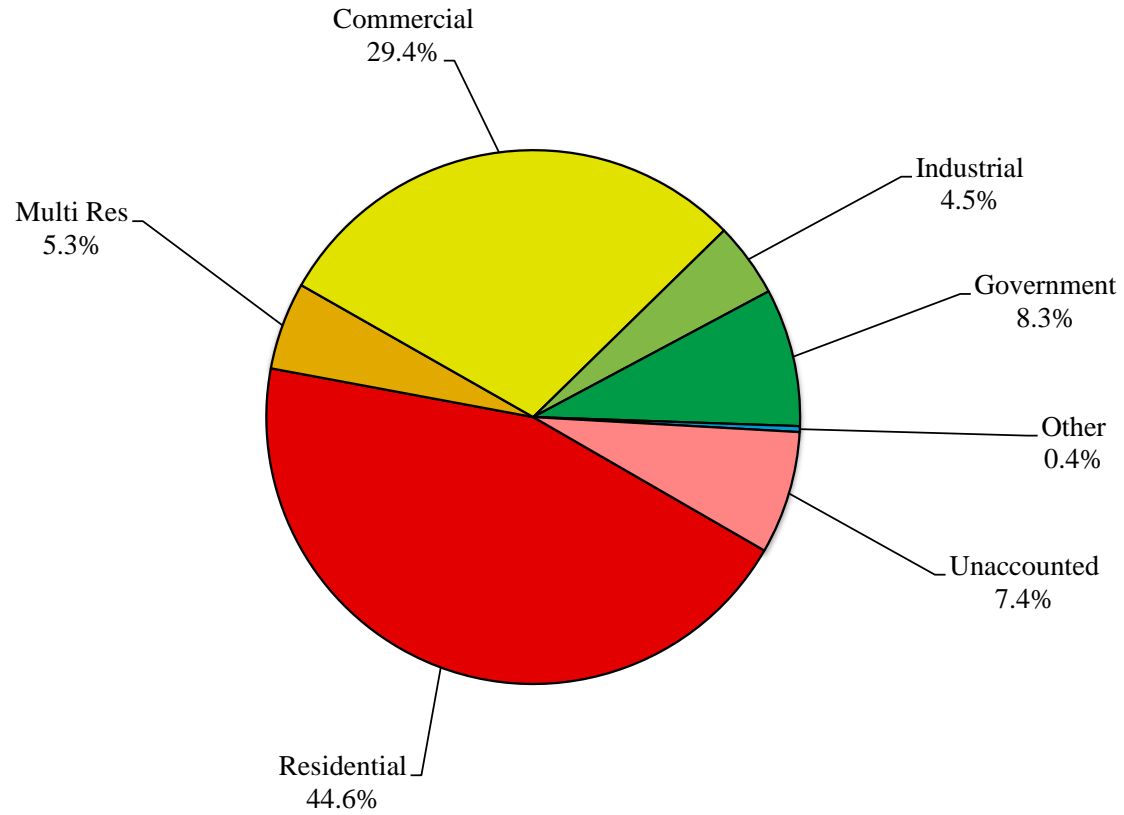
## California Water Service Company - King City District

### Water Supply and Demand Analysis and Projections

#### Percentage of Total Sales

Year	Residential	Multi Res	Commercial	Industrial	Government	Other	Percent Total
1980	44.42%	2.04%	36.18%	12.19%	5.16%	0.02%	100.00%
1981	45.50%	2.07%	35.13%	12.85%	4.39%	0.06%	100.00%
1982	43.32%	2.33%	35.96%	14.06%	4.30%	0.03%	100.00%
1983	45.33%	2.40%	36.92%	10.79%	4.55%	0.02%	100.00%
1984	44.49%	2.08%	36.33%	11.98%	4.96%	0.17%	100.00%
1985	45.56%	2.14%	36.46%	10.62%	5.12%	0.10%	100.00%
1986	46.28%	2.29%	37.74%	8.87%	4.55%	0.27%	100.00%
1987	45.78%	2.69%	37.39%	9.81%	4.21%	0.12%	100.00%
1988	45.85%	2.90%	36.12%	10.97%	4.09%	0.06%	100.00%
1989	43.50%	2.52%	35.79%	12.08%	5.80%	0.31%	100.00%
1990	42.01%	2.79%	36.67%	13.41%	4.36%	0.76%	100.00%
1991	38.19%	2.42%	32.81%	21.86%	3.91%	0.81%	100.00%
1992	47.34%	2.65%	34.90%	10.75%	4.33%	0.04%	100.00%
1993	46.19%	2.74%	33.17%	12.51%	4.24%	1.15%	100.00%
1994	47.88%	2.77%	32.22%	12.16%	4.19%	0.78%	100.00%
1995	50.95%	2.53%	30.83%	11.18%	4.30%	0.22%	100.00%
1996	51.74%	2.51%	30.55%	10.06%	4.07%	1.06%	100.00%
1997	53.71%	2.51%	29.06%	9.76%	4.26%	0.70%	100.00%
1998	54.35%	2.46%	29.69%	8.57%	4.36%	0.56%	100.00%
1999	54.29%	2.52%	29.15%	9.55%	4.40%	0.10%	100.00%
2000	53.63%	2.79%	30.30%	9.07%	3.97%	0.24%	100.00%
2001	54.09%	2.37%	32.74%	4.84%	5.88%	0.09%	100.00%
2002	55.23%	2.42%	31.72%	3.05%	7.10%	0.48%	100.00%
2003	56.17%	2.76%	31.45%	3.51%	5.92%	0.19%	100.00%
2004	55.87%	2.60%	31.43%	3.26%	6.56%	0.28%	100.00%
2005	55.59%	2.65%	32.01%	3.14%	6.08%	0.54%	100.00%
2006	55.83%	2.46%	32.53%	3.80%	4.74%	0.64%	100.00%
2007	56.71%	2.17%	30.60%	4.18%	5.77%	0.57%	100.00%
2008	54.50%	3.41%	31.79%	4.30%	5.31%	0.68%	100.00%
2009	50.40%	4.41%	29.61%	4.58%	10.21%	0.79%	100.00%
2010	49.27%	4.19%	32.15%	4.39%	8.90%	1.11%	100.00%
2011	49.21%	3.81%	30.86%	4.63%	10.49%	1.00%	100.00%
2012	48.27%	3.72%	31.23%	4.84%	11.44%	0.49%	100.00%
2013	49.17%	3.59%	29.45%	4.98%	11.54%	1.28%	100.00%
2014	47.59%	4.59%	30.97%	4.67%	11.57%	0.61%	100.00%
2015	48.18%	5.73%	31.81%	4.88%	9.02%	0.38%	100.00%

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

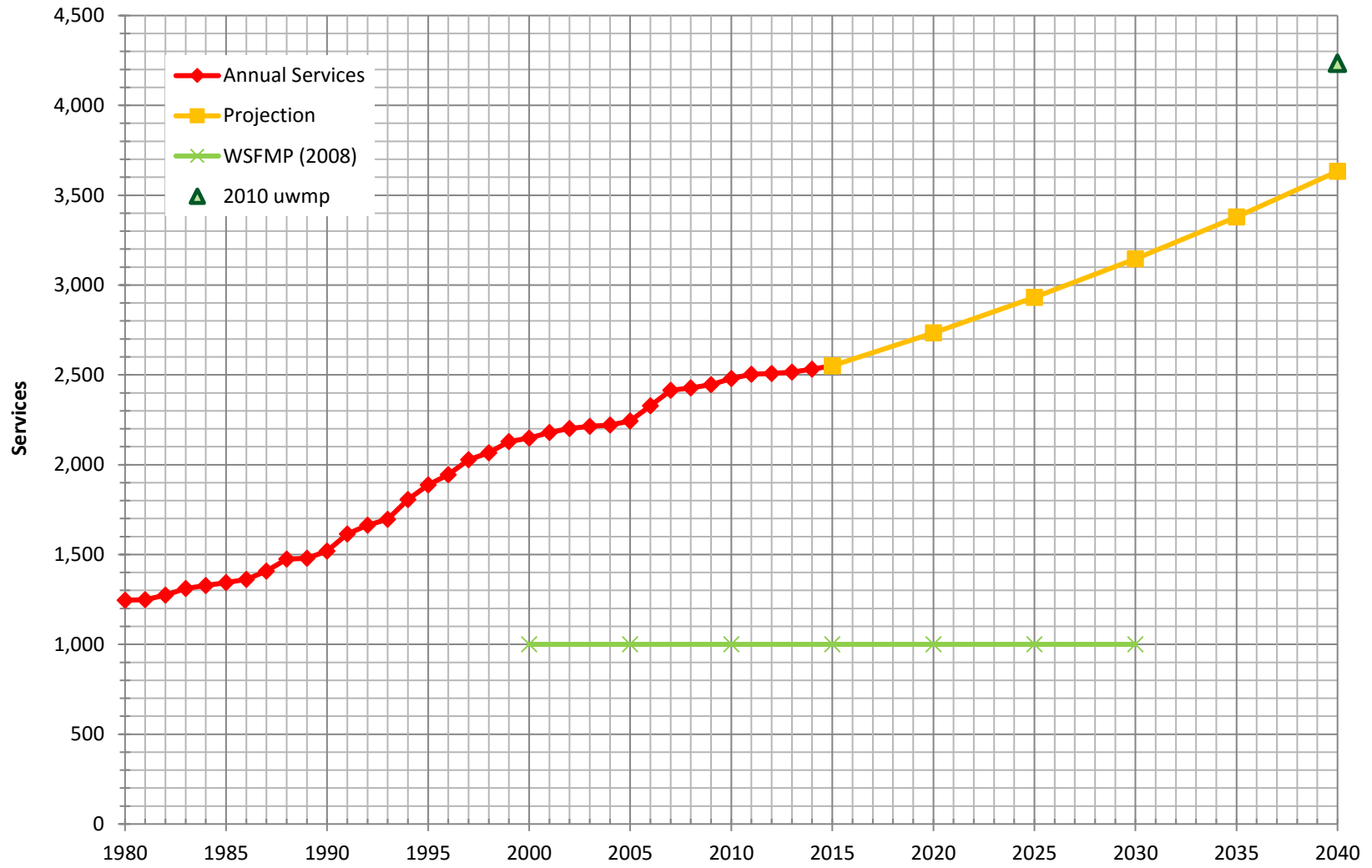


**California Water Service Company - King City District**  
**Water Supply and Demand Analysis and Projections**  
**Percentage of Total Demand**

Worksheet 7

Year	Residential	Multi Res	Commercial	Industrial	Government	Other	Unaccounted	Percent Total
1980	41.25%	1.89%	33.60%	11.32%	4.79%	0.02%	7.12%	100.00%
1981	42.47%	1.93%	32.79%	12.00%	4.09%	0.06%	6.66%	100.00%
1982	39.96%	2.15%	33.16%	12.97%	3.97%	0.03%	7.76%	100.00%
1983	40.84%	2.16%	33.27%	9.72%	4.10%	0.02%	9.89%	100.00%
1984	39.04%	1.83%	31.88%	10.51%	4.35%	0.15%	12.25%	100.00%
1985	40.48%	1.90%	32.39%	9.44%	4.55%	0.09%	11.15%	100.00%
1986	41.64%	2.06%	33.95%	7.98%	4.09%	0.25%	10.04%	100.00%
1987	38.01%	2.23%	31.04%	8.14%	3.49%	0.10%	16.97%	100.00%
1988	42.55%	2.69%	33.51%	10.18%	3.80%	0.06%	7.21%	100.00%
1989	40.56%	2.35%	33.38%	11.26%	5.41%	0.29%	6.75%	100.00%
1990	38.90%	2.58%	33.96%	12.42%	4.04%	0.70%	7.41%	100.00%
1991	36.23%	2.29%	31.14%	20.74%	3.71%	0.77%	5.11%	100.00%
1992	43.06%	2.41%	31.74%	9.78%	3.93%	0.04%	9.04%	100.00%
1993	40.87%	2.42%	29.35%	11.07%	3.75%	1.02%	11.51%	100.00%
1994	43.48%	2.52%	29.25%	11.04%	3.81%	0.71%	9.20%	100.00%
1995	48.70%	2.42%	29.47%	10.68%	4.11%	0.21%	4.41%	100.00%
1996	47.49%	2.31%	28.04%	9.23%	3.73%	0.98%	8.22%	100.00%
1997	51.06%	2.38%	27.62%	9.28%	4.05%	0.67%	4.93%	100.00%
1998	50.25%	2.27%	27.45%	7.93%	4.04%	0.52%	7.54%	100.00%
1999	50.14%	2.33%	26.92%	8.82%	4.07%	0.09%	7.64%	100.00%
2000	47.86%	2.49%	27.03%	8.10%	3.54%	0.22%	10.77%	100.00%
2001	49.28%	2.16%	29.83%	4.41%	5.35%	0.08%	8.89%	100.00%
2002	51.78%	2.27%	29.74%	2.86%	6.66%	0.45%	6.24%	100.00%
2003	50.93%	2.50%	28.52%	3.18%	5.37%	0.17%	9.32%	100.00%
2004	47.80%	2.23%	26.89%	2.79%	5.62%	0.24%	14.44%	100.00%
2005	48.62%	2.32%	28.00%	2.75%	5.31%	0.48%	12.53%	100.00%
2006	48.80%	2.15%	28.44%	3.32%	4.14%	0.56%	12.58%	100.00%
2007	50.54%	1.93%	27.27%	3.72%	5.14%	0.51%	10.89%	100.00%
2008	50.54%	3.16%	29.48%	3.99%	4.93%	0.63%	7.26%	100.00%
2009	47.18%	4.13%	27.72%	4.29%	9.56%	0.74%	6.38%	100.00%
2010	46.35%	3.94%	30.24%	4.13%	8.38%	1.04%	5.92%	100.00%
2011	45.93%	3.55%	28.80%	4.32%	9.79%	0.93%	6.67%	100.00%
2012	45.26%	3.49%	29.28%	4.54%	10.73%	0.46%	6.25%	100.00%
2013	45.97%	3.36%	27.54%	4.65%	10.79%	1.19%	6.50%	100.00%
2014	43.75%	4.22%	28.47%	4.30%	10.63%	0.56%	8.06%	100.00%
2015	44.59%	5.30%	29.45%	4.51%	8.35%	0.36%	7.44%	100.00%

### Historical & Projected Services

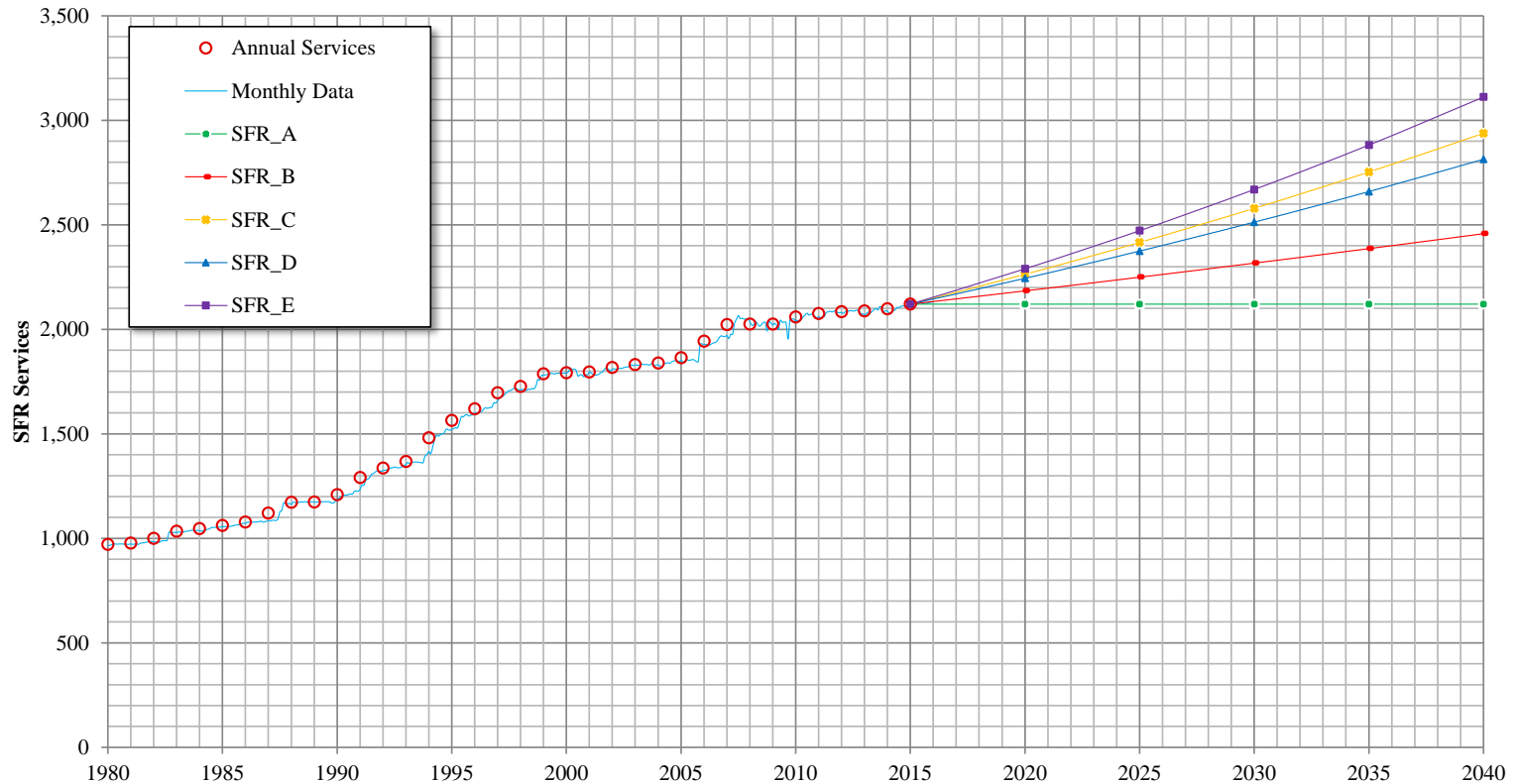


**California Water Service Company - King City District**  
**Water Supply and Demand Analysis and Projections**  
**Actual & Projected Annual Average Services**

Customer Category		Selected Trend	Growth Rate	Actual Services				Projected Services					
				2000	2005	2010	Base Year 2015	2015	2020	2025	2030	2035	2040
SFR	SFR_E	20 Yr. Avg.	1.55%	1,792	1,863	2,059	2,121	2,121	2,290	2,472	2,669	2,882	3,111
MFR	MFR_E	0.00%	4.08%	11	11	24	34	34	42	51	63	76	93
COM	COM_C	10 Yr. Avg.	0.28%	282	303	312	311	311	315	320	324	329	333
IND	IND_E	20 Yr. Avg.	1.00%	16	18	19	17	17	18	19	20	21	22
GOV	GOV_C	10 Yr. Avg.	0.25%	44	43	60	60	60	61	61	62	63	64
OTH	OTH_B	Overall 5 Yr. Avg.	0.57%	4	5	7	8	8	8	8	8	8	9
TOTAL	Average growth rate 2016-2040		1.42%	2,149	2,243	2,480	2,551	2,551	2,733	2,931	3,146	3,379	3,632

Note: Reclassification from Commercial (COM) to Multi-Family Residential (MFR) occurred between categories from 2007 to 2009

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



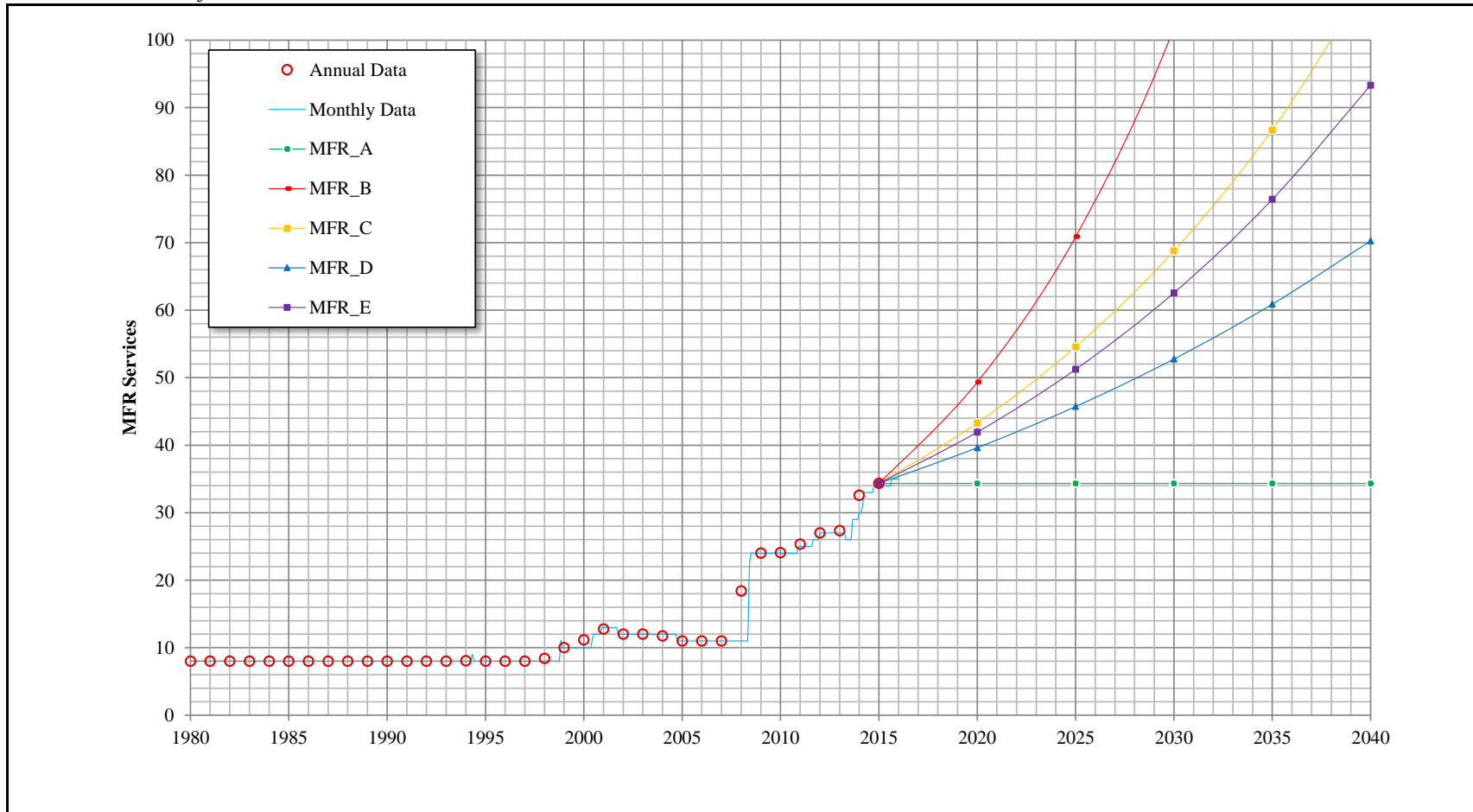
Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
SFR			1,792	1,863	2,059	2,121	2,121	2,121	2,121	2,121	2,121	2,121
	SFR_A	Zero Growth Rate				2,121	2,121	2,121	2,121	2,121	2,121	2,121
	SFR_B	5 Yr. Avg.				2,121	2,121	2,184	2,249	2,317	2,386	2,458
	SFR_C	10 Yr. Avg.				2,121	2,121	2,263	2,416	2,579	2,753	2,938
	SFR_D	15 Yr. Avg.				2,121	2,121	2,244	2,375	2,513	2,659	2,814
	> SFR_E	20 Yr. Avg.				2,121	2,121	2,290	2,472	2,669	2,882	3,111



# California Water Service Company - King City District

## Water Supply and Demand Analysis and Projections

### MFR Historical & Projected Services

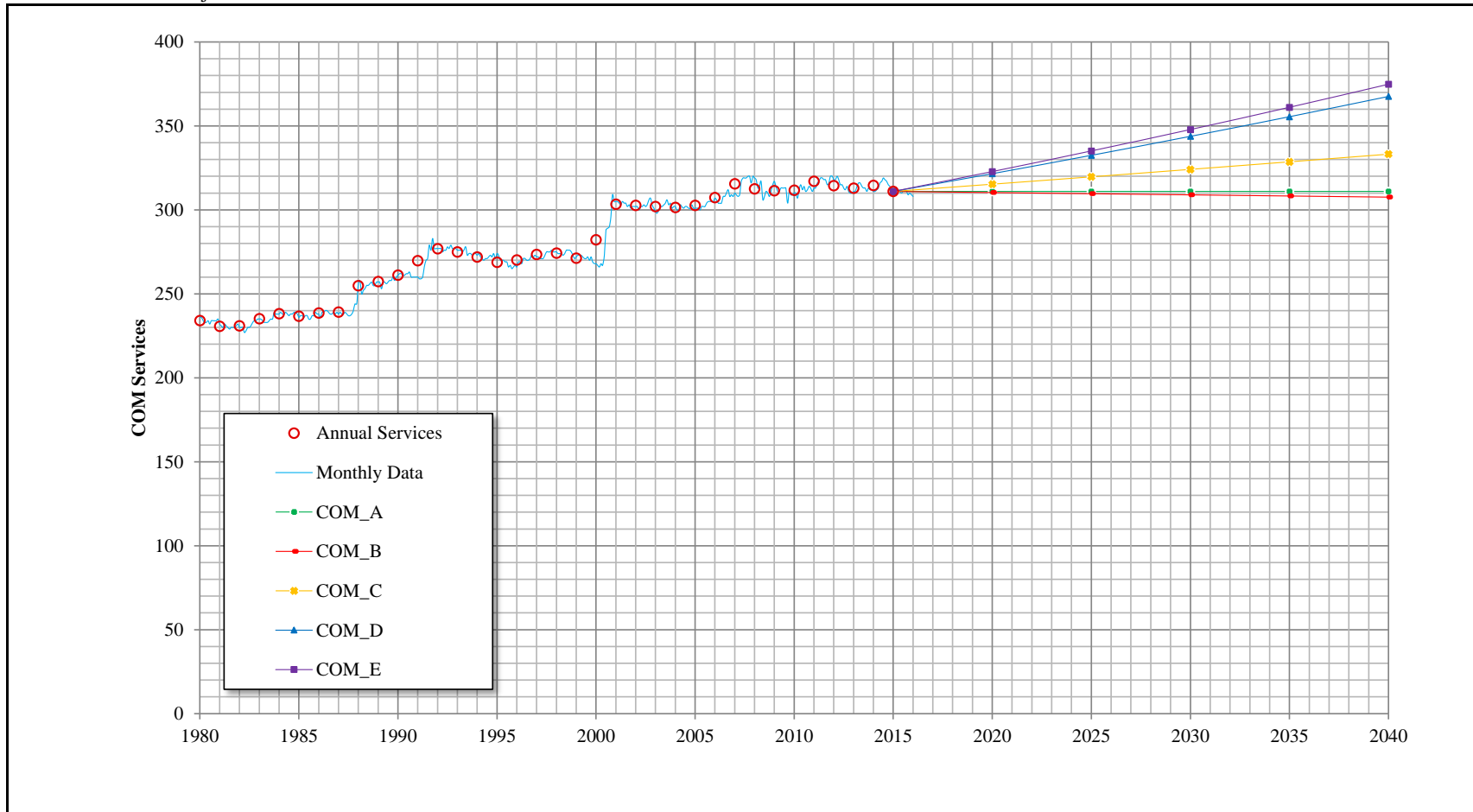


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
MFR			11	11	24	34						
	MFR_A	Zero Growth Rate				34	34	34	34	34	34	34
	MFR_B					34	34	49	71	102	146	210
	MFR_C					34	34	43	55	69	87	109
	MFR_D					34	34	40	46	53	61	70
	> MFR_E					34	34	42	51	63	76	93

### California Water Service Company - King City District

#### Water Supply and Demand Analysis and Projections

##### COM Historical & Projected Services

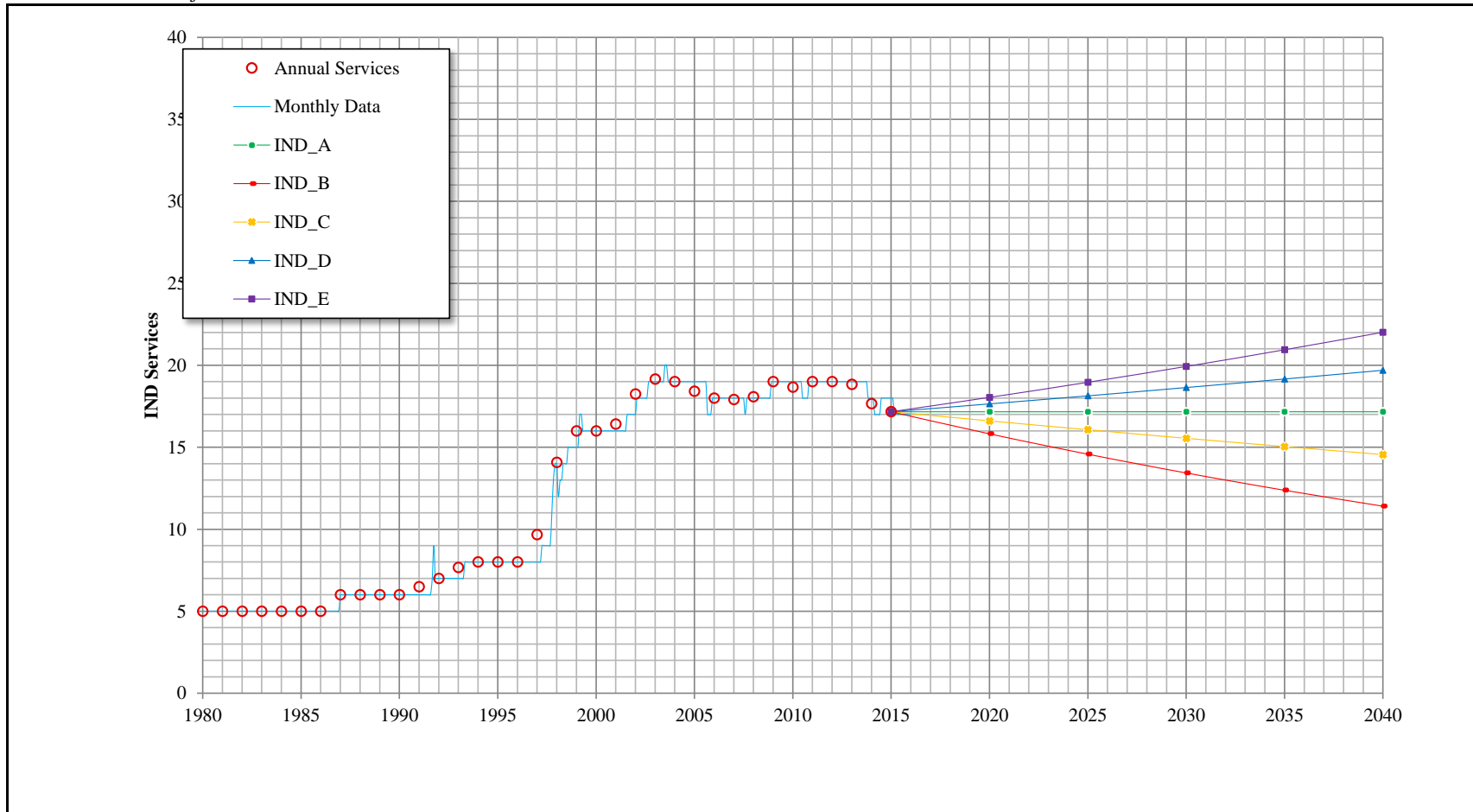


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
COM			282	303	312	311						
	COM_A	Zero Growth Rate				311						
	COM_B	5 Yr. Avg.				311	311	310	310	309	308	308
	> COM_C	10 Yr. Avg.				311	311	315	320	324	329	333
	COM_D	15 Yr. Avg.				311	311	322	332	344	355	368
	COM_E	20 Yr. Avg.				311	311	323	335	348	361	375

# California Water Service Company - King City District

## Water Supply and Demand Analysis and Projections

IND Historical & Projected Services

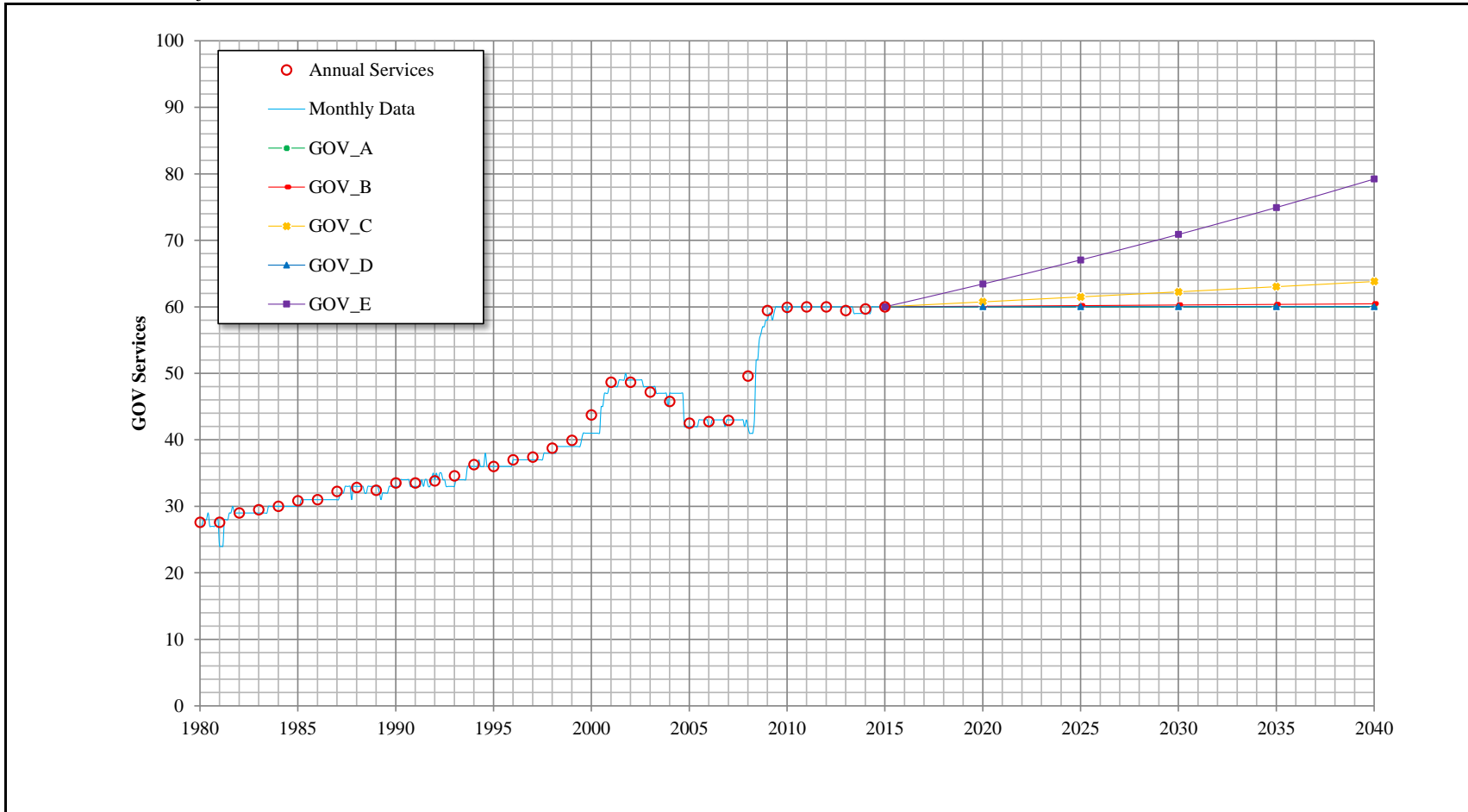


Customer Category	Trend	Growth Rate	Actual				Projected					
			2000	2005	2010	Base Year 2015	Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040
IND			16	18	19	17	17	17	17	17	17	17
	IND_A	Zero Growth Rate				17	17	17	17	17	17	17
	IND_B	5 Yr. Avg.				17	17	16	15	13	12	11
	IND_C	10 Yr. Avg.				17	17	17	16	16	15	15
	IND_D	15 Yr. Avg.				17	17	18	18	19	19	20
	> IND_E	20 Yr. Avg.				17	17	18	19	20	21	22

# California Water Service Company - King City District

## Water Supply and Demand Analysis and Projections

### GOV Historical & Projected Services

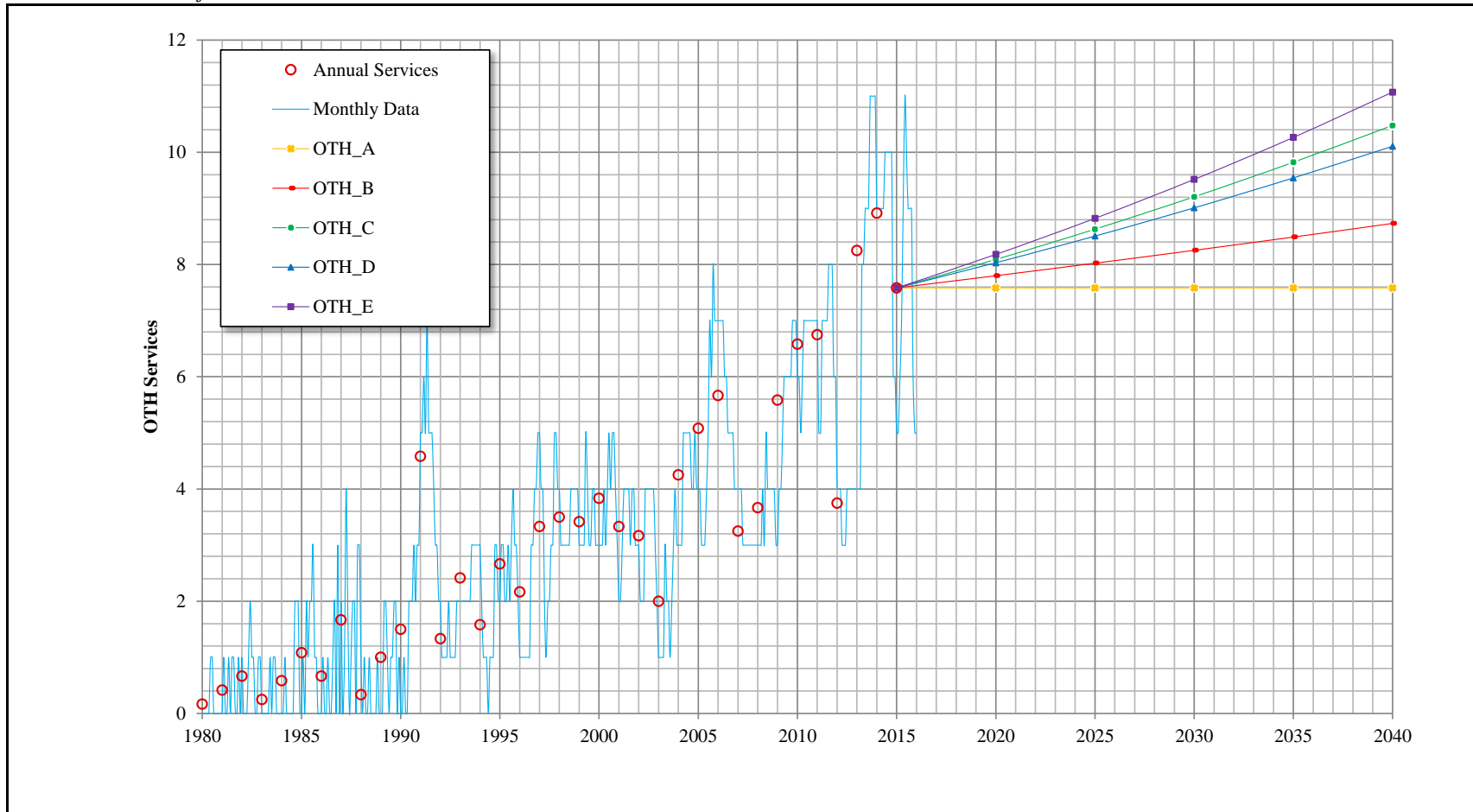


Customer Category	Trend	Growth Rate	Actual			Base Year 2015	Projected							
			2000	2005	2010		Services 2015	Services 2020	Services 2025	Services 2030	Services 2035	Services 2040		
GOV			44	43	60	60								
	GOV_A	Zero Growth Rate				60	60	60	60	60	60	60	60	60
	GOV_B	5 Yr. Avg.				60	60	60	60	60	60	60	60	60
	> GOV_C	10 Yr. Avg.				60	60	61	61	62	63	64	64	
	GOV_D	15 Yr. Avg.				60	60	60	60	60	60	60	60	
	GOV_E	20 Yr. Avg.				60	60	63	67	71	75	79		

# California Water Service Company - King City District

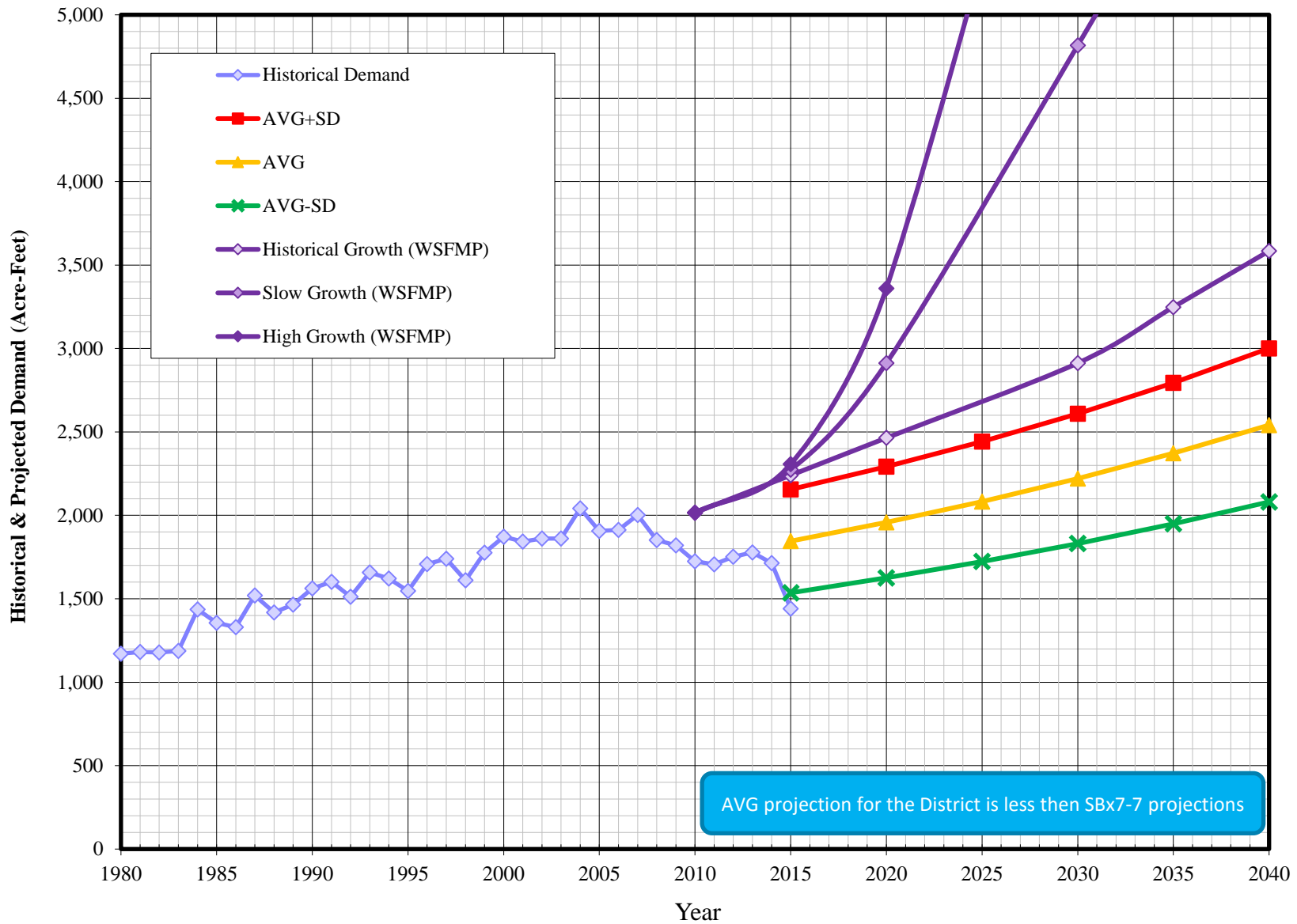
## Water Supply and Demand Analysis and Projections

### 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				4	5	7	8	8	8	8	8	8	8	8	8
	>	OTH_A	Zero Growth Rate	0.00%				8	8	8	8	8	8	8	8
		OTH_B	Overall 5 Yr. Avg.	0.57%				8	8	8	8	8	8	8	9
		OTH_C	Overall 10 Yr. Avg.	1.30%				8	8	8	9	9	10	10	10
		OTH_D	Overall 15 Yr. Avg.	1.16%				8	8	8	9	9	10	10	10
		OTH_E	Overall 20 Yr. Avg.	1.53%				8	8	8	9	10	10	10	11

# Historical & Projected Demand (KC)



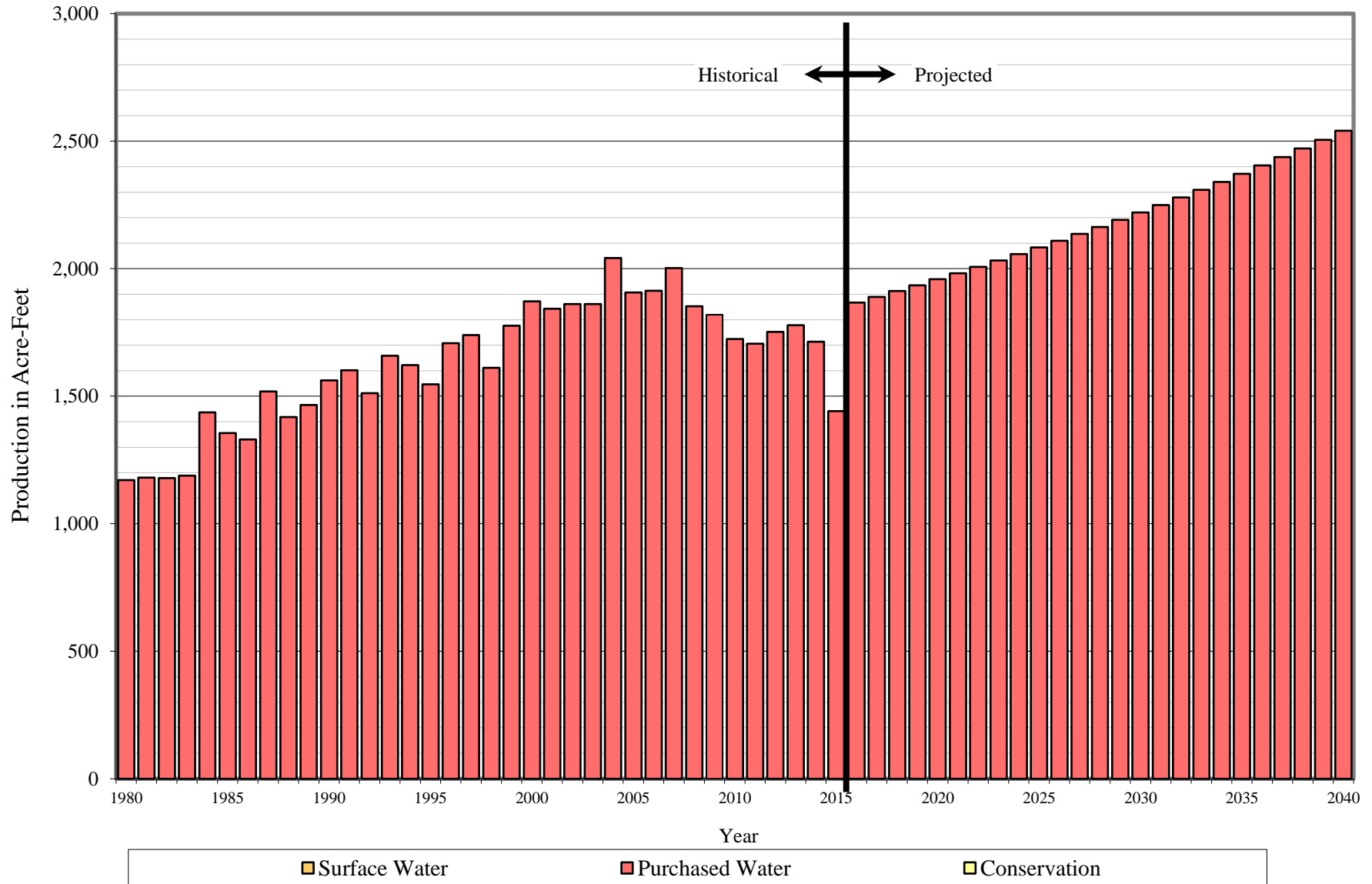
AVG projection for the District is less than SBx7-7 projections

**California Water Service Company - King City District**  
**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	2015	2015	2020	2025	2030	2035	2040
SFR	483	549	608	753	896	927	799	643	980	1,058	1,143	1,234	1,332	1,438
									862	931	1,005	1,085	1,171	1,265
									744	803	867	936	1,011	1,091
MFR	22	26	40	37	47	44	68	76	126	154	188	230	281	343
									95	116	142	173	211	258
									64	78	95	116	142	173
COM	393	439	531	456	506	534	521	424	544	552	560	567	575	583
									504	511	518	525	532	540
									463	470	476	483	490	496
IND	133	128	194	165	152	52	71	65	73	77	81	85	89	94
									69	72	76	80	84	88
									65	68	71	75	79	83
GOV	56	62	63	64	66	101	144	120	182	184	187	189	191	194
									154	156	158	160	162	164
									125	127	129	130	132	133
OTH	0	1	11	3	4	9	18	5	23	24	24	25	26	27
									17	17	18	18	19	19
									11	11	11	12	12	12
UAWF	83	151	116	68	202	239	102	107	226	242	260	279	300	322
									145	156	167	179	192	207
									64	69	74	79	85	92
TOTAL (AFY)	1,171	1,355	1,562	1,547	1,872	1,907	1,724	1,441	2,155	2,292	2,443	2,609	2,795	3,001
									1,846	1,959	2,083	2,220	2,372	2,541
									1,536	1,625	1,723	1,831	1,950	2,081
TOTAL (MGD)	1.045	1.210	1.395	1.381	1.671	1.703	1.539	1.287	1.924	2.046	2.181	2.329	2.495	2.679
									1.648	1.748	1.860	1.982	2.118	2.268
									1.371	1.451	1.538	1.635	1.741	1.858

# Historical and Projected Distribution of Demand by Source





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

Worksheet 10

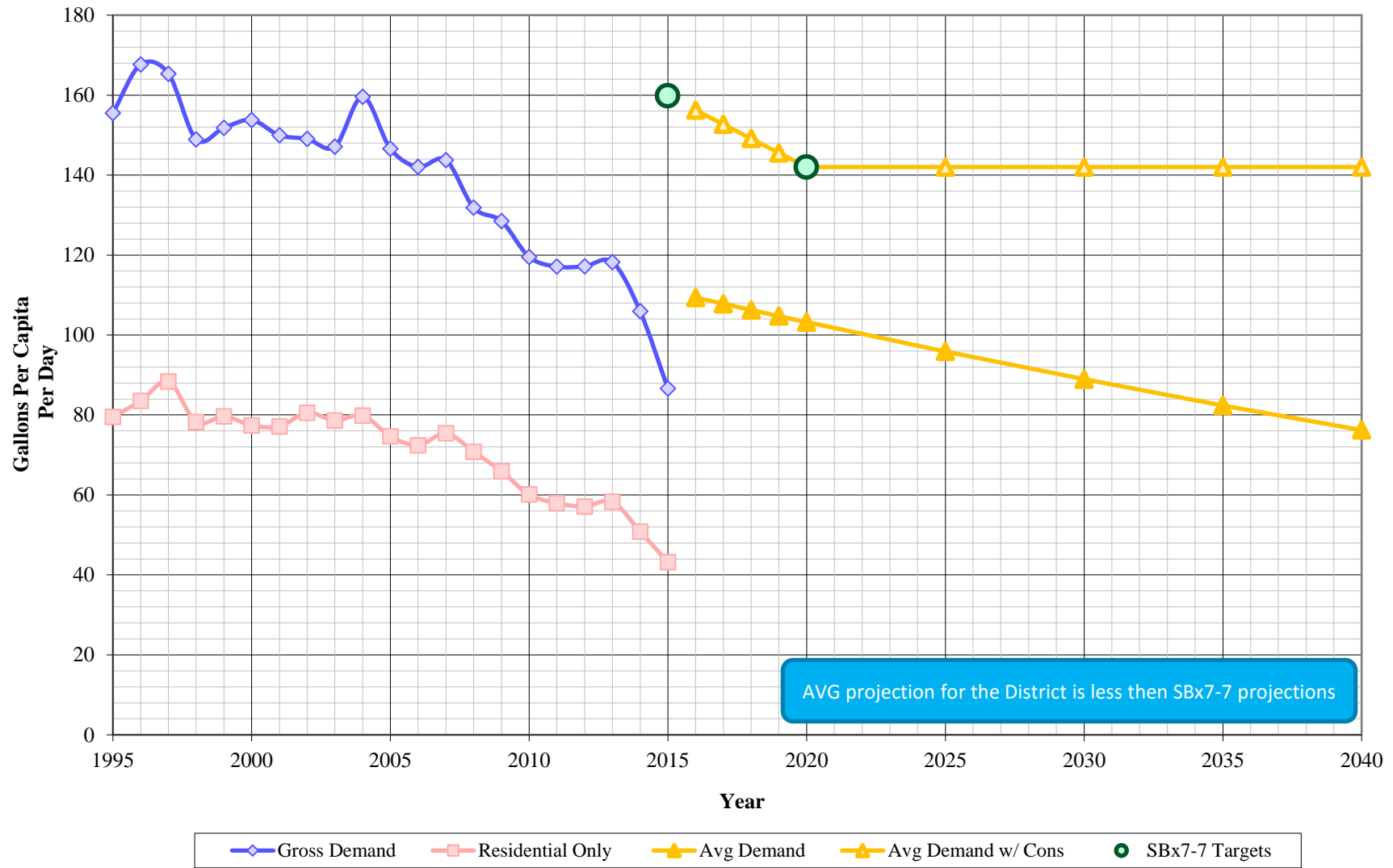
Year	Ground Water		Future Water		Conservation		Total	
	MGD	AFY	MGD	AFY	MGD	AFY	MGD	AFY
1980	1.05	1,171	0.00	0			1.05	1,171
1981	1.05	1,181	0.00	0			1.05	1,181
1982	1.05	1,178	0.00	0			1.05	1,178
1983	1.06	1,188	0.00	0			1.06	1,188
1984	1.28	1,437	0.00	0			1.28	1,437
1985	1.21	1,355	0.00	0			1.21	1,355
1986	1.19	1,331	0.00	0			1.19	1,331
1987	1.36	1,519	0.00	0			1.36	1,519
1988	1.27	1,418	0.00	0			1.27	1,418
1989	1.31	1,465	0.00	0			1.31	1,465
1990	1.39	1,562	0.00	0			1.39	1,562
1991	1.43	1,601	0.00	0			1.43	1,601
1992	1.35	1,512	0.00	0			1.35	1,512
1993	1.48	1,658	0.00	0			1.48	1,658
1994	1.45	1,622	0.00	0			1.45	1,622
1995	1.38	1,547	0.00	0			1.38	1,547
1996	1.52	1,708	0.00	0			1.52	1,708
1997	1.55	1,740	0.00	0			1.55	1,740
1998	1.44	1,611	0.00	0			1.44	1,611
1999	1.59	1,776	0.00	0			1.59	1,776
2000	1.67	1,872	0.00	0			1.67	1,872
2001	1.65	1,843	0.00	0			1.65	1,843
2002	1.66	1,862	0.00	0			1.66	1,862
2003	1.66	1,862	0.00	0			1.66	1,862
2004	1.82	2,042	0.00	0			1.82	2,042
2005	1.70	1,907	0.00	0			1.70	1,907
2006	1.71	1,913	0.00	0			1.71	1,913
2007	1.79	2,003	0.00	0			1.79	2,003
2008	1.65	1,853	0.00	0			1.65	1,853
2009	1.62	1,820	0.00	0			1.62	1,820
2010	1.54	1,724	0.00	0			1.54	1,724

Year	Ground Water		Future Water		Conservation		Total	
	MGD	AFY	MGD	AFY	MGD	AFY	MGD	AFY
2011	1.52	1,706	0.00	0	0.00	0	1.52	1,706
2012	1.56	1,752	0.00	0	0.00	0	1.56	1,752
2013	1.59	1,778	0.00	0	0.00	0	1.59	1,778
2014	1.53	1,714	0.00	0	0.00	0	1.53	1,714
2015	1.29	1,441	0.00	0	0.00	0	1.29	1,441
2016	1.67	1,867	0.00	0	0.00	0	1.67	1,867
2017	1.69	1,889	0.00	0	0.00	0	1.69	1,889
2018	1.71	1,912	0.00	0	0.00	0	1.71	1,912
2019	1.73	1,935	0.00	0	0.00	0	1.73	1,935
2020	1.75	1,959	0.00	0	0.00	0	1.75	1,959
2021	1.77	1,982	0.00	0	0.00	0	1.77	1,982
2022	1.79	2,007	0.00	0	0.00	0	1.79	2,007
2023	1.81	2,032	0.00	0	0.00	0	1.81	2,032
2024	1.84	2,057	0.00	0	0.00	0	1.84	2,057
2025	1.86	2,083	0.00	0	0.00	0	1.86	2,083
2026	1.88	2,109	0.00	0	0.00	0	1.88	2,109
2027	1.91	2,136	0.00	0	0.00	0	1.91	2,136
2028	1.93	2,164	0.00	0	0.00	0	1.93	2,164
2029	1.96	2,192	0.00	0	0.00	0	1.96	2,192
2030	1.98	2,220	0.00	0	0.00	0	1.98	2,220
2031	2.01	2,249	0.00	0	0.00	0	2.01	2,249
2032	2.03	2,279	0.00	0	0.00	0	2.03	2,279
2033	2.06	2,309	0.00	0	0.00	0	2.06	2,309
2034	2.09	2,340	0.00	0	0.00	0	2.09	2,340
2035	2.12	2,372	0.00	0	0.00	0	2.12	2,372
2036	2.15	2,404	0.00	0	0.00	0	2.15	2,404
2037	2.18	2,437	0.00	0	0.00	0	2.18	2,437
2038	2.21	2,471	0.00	0	0.00	0	2.21	2,471
2039	2.24	2,506	0.00	0	0.00	0	2.24	2,506
2040	2.27	2,541	0.00	0	0.00	0	2.27	2,541

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Projection  
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# Per Capita Consumption (KC)



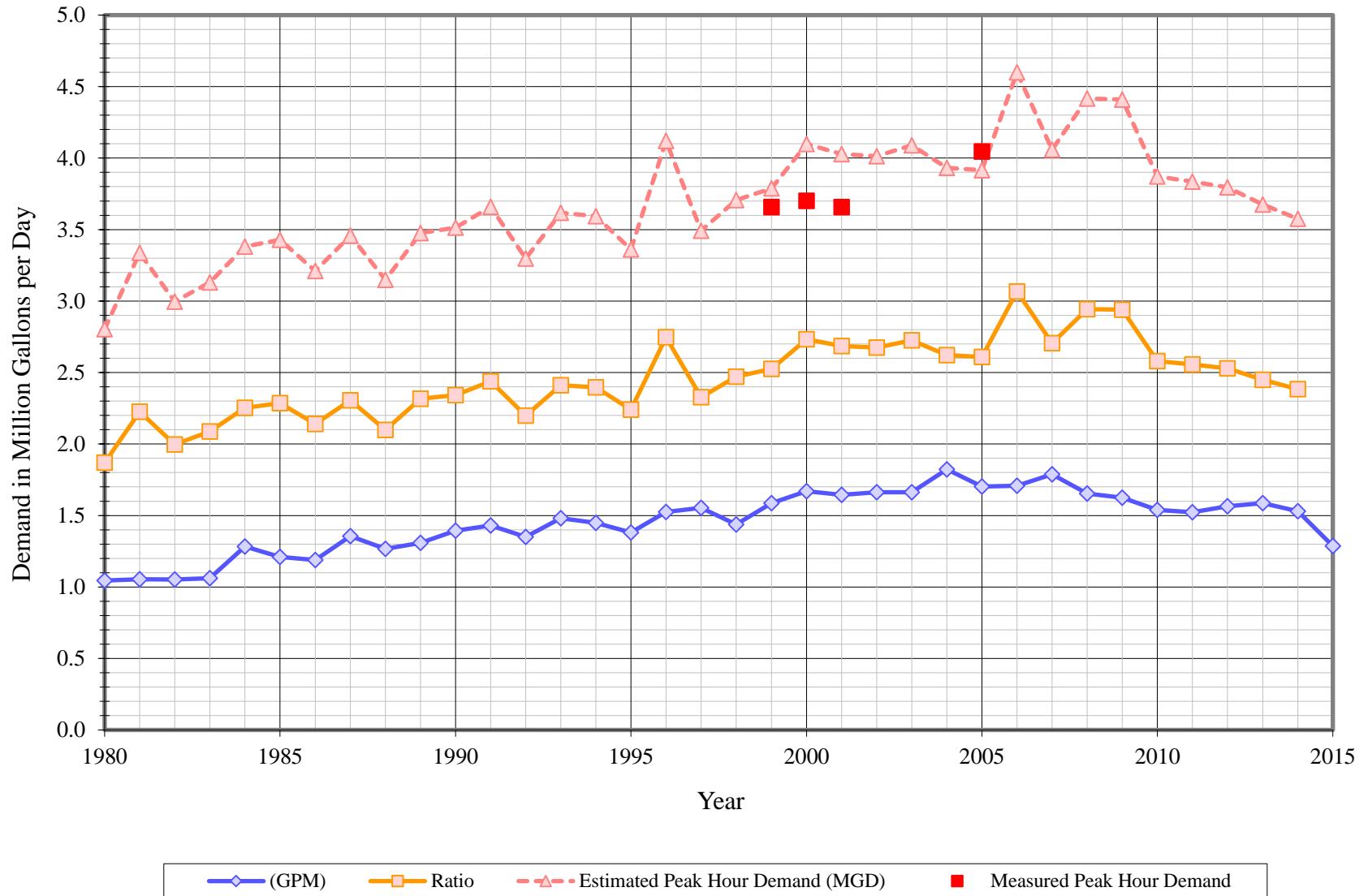
**California Water Service Company - King City District**  
**Water Supply and Demand Analysis and Projections**  
**Per Capita Water Demand Calculation**

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	8,877	1,547	156	791	80				
1996	9,094	1,708	168	850	83				
1997	9,392	1,740	165	930	88				
1998	9,657	1,611	149	846	78				
1999	10,443	1,776	152	932	80				
2000	10,866	1,872	154	942	77				
2001	10,972	1,843	150	948	77				
2002	11,149	1,862	149	1,006	81				
2003	11,298	1,862	147	995	79				
2004	11,423	2,042	160	1,022	80				
2005	11,613	1,907	147	972	75				
2006	12,023	1,913	142	975	72				
2007	12,437	2,003	144	1,051	75				
2008	12,544	1,853	132	995	71				
2009	12,642	1,820	128	934	66				
2010	12,873	1,724	120	867	60				
2011	13,004	1,706	117	844	58				
2012	13,348	1,752	117	854	57				
2013	13,427	1,778	118	877	58				
2014	14,441	1,714	106	822	51				
2015	14,854	1,441	87	719	43				
2016	15,245					1,867	109	2,668	156
2017	15,648					1,889	108	2,676	153
2018	16,065					1,912	106	2,683	149
2019	16,495					1,935	105	2,690	146
2020	16,940					1,959	103	2,694	142
2025	19,392					2,083	96	3,085	142
2030	22,284					2,220	89	3,544	142
2035	25,704					2,372	82	4,089	142
2040	29,761					2,541	76	4,734	142

<i>SBx7-7 Targets</i>	
2015	160
2020	142

## Average Day, Maximum Day, Peak Demand



**California Water Service Company - King City 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	1,171	382	1.05	839	1.87	1,500	1.79	2.80	1,947	1.50	2.68			
1981	1,181	385	1.05	844	2.23	1,781	2.11	3.34	2,318	1.50	3.17			
1982	1,178	384	1.05	826	2.00	1,568	1.90	3.00	2,080	1.50	2.85			
1983	1,188	387	1.06	809	2.09	1,591	1.97	3.13	2,174	1.50	2.95			
1984	1,437	468	1.28	966	2.25	1,698	1.76	3.38	2,348	1.50	2.64			
1985	1,355	442	1.21	901	2.29	1,702	1.89	3.43	2,381	1.50	2.83			
1986	1,331	434	1.19	873	2.14	1,572	1.80	3.21	2,229	1.50	2.70			
1987	1,519	495	1.36	963	2.31	1,637	1.70	3.46	2,401	1.50	2.55			
1988	1,418	462	1.27	859	2.10	1,423	1.66	3.15	2,186	1.50	2.49			
1989	1,465	477	1.31	885	2.32	1,567	1.77	3.48	2,414	1.50	2.66			
1990	1,562	509	1.39	918	2.34	1,542	1.68	3.51	2,440	1.50	2.52			
1991	1,601	522	1.43	886	2.44	1,511	1.71	3.66	2,541	1.50	2.56			
1992	1,512	493	1.35	811	2.20	1,321	1.63	3.30	2,290	1.50	2.44			
1993	1,658	540	1.48	873	2.41	1,422	1.63	3.62	2,511	1.50	2.44			
1994	1,622	528	1.45	801	2.40	1,326	1.65	3.59	2,496	1.50	2.48			
1995	1,547	504	1.38	732	2.24	1,187	1.62	3.36	2,334	1.50	2.43			
1996	1,708	557	1.52	784	2.75	1,412	1.80	4.12	2,861	1.50	2.70			
1997	1,740	567	1.55	766	2.33	1,148	1.50	3.49	2,425	1.50	2.25			
1998	1,611	525	1.44	696	2.47	1,196	1.72	3.71	2,574	1.50	2.58			
1999	1,776	579	1.59	745	2.53	1,187	1.59	3.79	2,631	1.50	2.39	3.7	2540.0	1.4
2000	1,872	610	1.67	778	2.73	1,272	1.64	4.10	2,847	1.50	2.45	3.7	2570.0	1.4
2001	1,843	600	1.65	755	2.69	1,232	1.63	4.03	2,797	1.50	2.45	3.7	2540.0	1.4
2002	1,862	607	1.66	755	2.68	1,215	1.61	4.01	2,786	1.50	2.41			
2003	1,862	607	1.66	751	2.73	1,232	1.64	4.09	2,840	1.50	2.46			
2004	2,042	665	1.82	821	2.62	1,180	1.44	3.93	2,730	1.50	2.16			
2005	1,907	621	1.70	759	2.61	1,164	1.53	3.92	2,719	1.50	2.30	4.0	2810.0	1.6
2006	1,913	623	1.71	734	3.07	1,318	1.80	4.60	3,195	1.50	2.69			
2007	2,003	653	1.79	741	2.71	1,121	1.51	4.06	2,819	1.50	2.27			
2008	1,853	604	1.65	681	2.94	1,213	1.78	4.42	3,067	1.50	2.67			
2009	1,820	593	1.62	664	2.94	1,202	1.81	4.41	3,061	1.50	2.71			
2010	1,724	562	1.54	621	2.58	1,041	1.68	3.87	2,689	1.50	2.52			
2011	1,706	556	1.52	608	2.56	1,021	1.68	3.84	2,664	1.50	2.52			
2012	1,752	571	1.56	624	2.53	1,009	1.62	3.80	2,635	1.50	2.43			
2013	1,778	579	1.59	631	2.45	974	1.54	3.68	2,552	1.50	2.32			
2014	1,714	558	1.53	604	2.38	942	1.56	3.58	2,483	1.50	2.34			
2015	1,441	470	1.29	504										
10 year Average (2006-2015)			1.58	641	2.68	1,093	1.66	4.03	2,796	1.50	2.50			
5 year Average (2011-2015)			1.50	594	2.48	986	1.60	3.72	2,584	1.50	2.40			

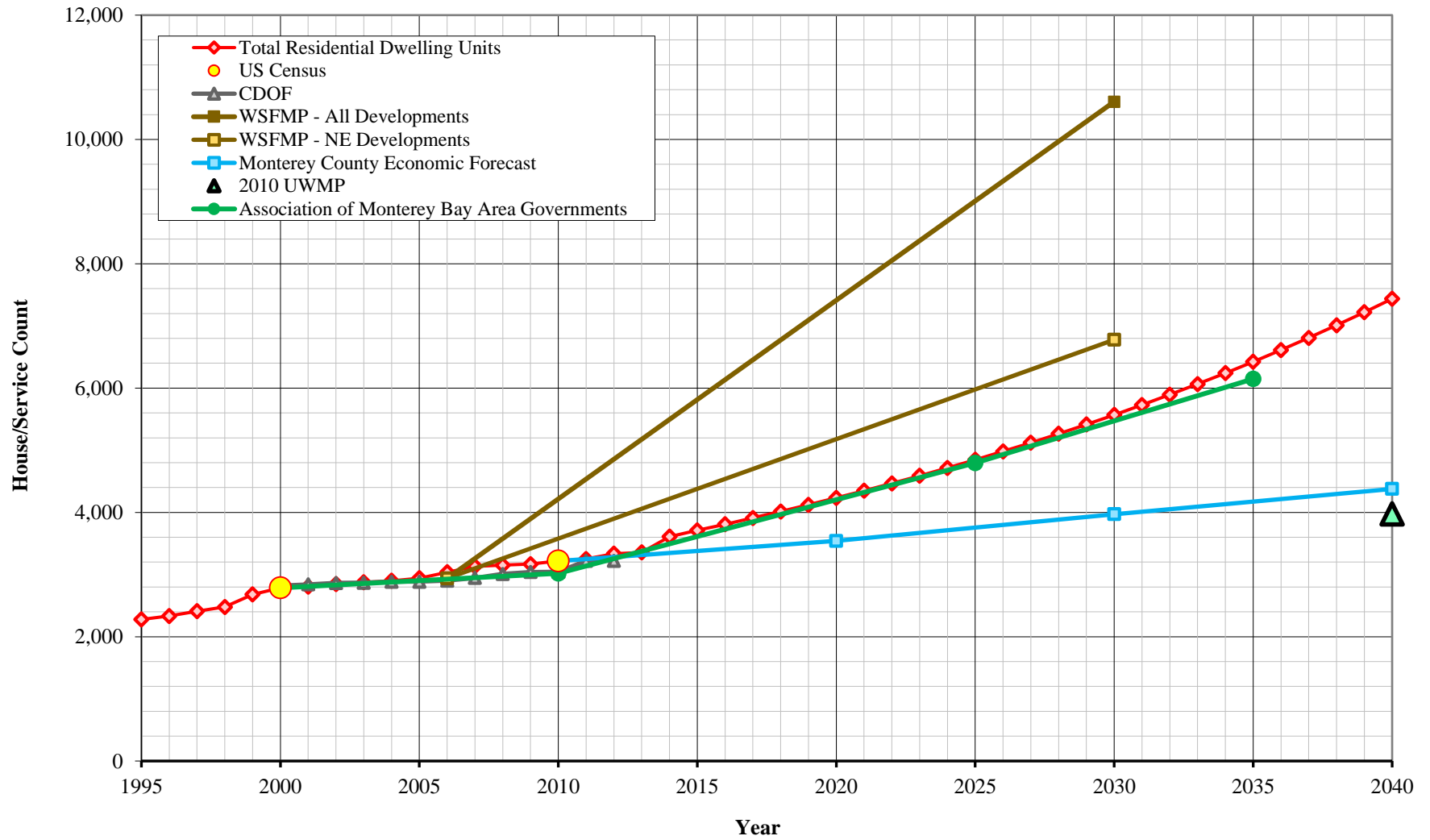
**California Water Service Company - King City District**  
**Water Supply and Demand Analysis and Projections**  
**Marplot Summary**



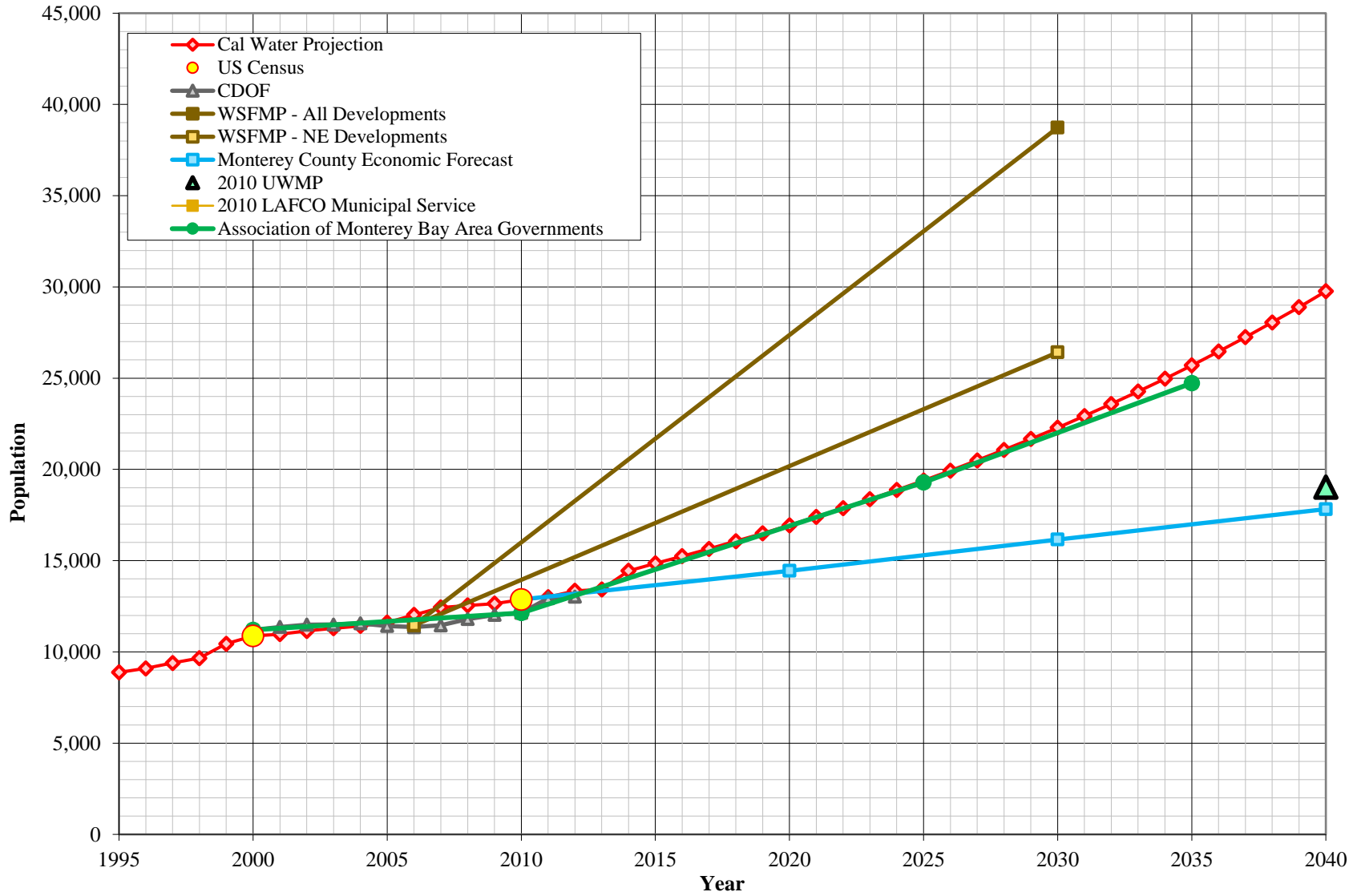
System	US Census 2000 Summary				US Census 2010 Summary				2000-2010 Change		
	Census Blocks	Population	Housing Units (HU)	Density	Census Blocks	Population	Housing Units (HU)	Density	Percentage Population Change	Percentage HU Change	Density Change
King Ciy	105	10,866	2,788	3.90	125	12,873	3,217	4.00	18.5%	15.4%	2.7%
	105	10,866	2,788	3.90	125	12,873	3,217	4.00	18.5%	15.4%	2.7%

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 - King City 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)	Unit Density	Services (DU)
2000	10,866	2,788	3.897	1,792	11	996	89.2	0
2010	12,873	3,217	4.002	2,059	24	1,158	48.1	0
	18.5%	15.4%	2.7%	14.9%	115.7%	16.2%	-46.1%	0.0%

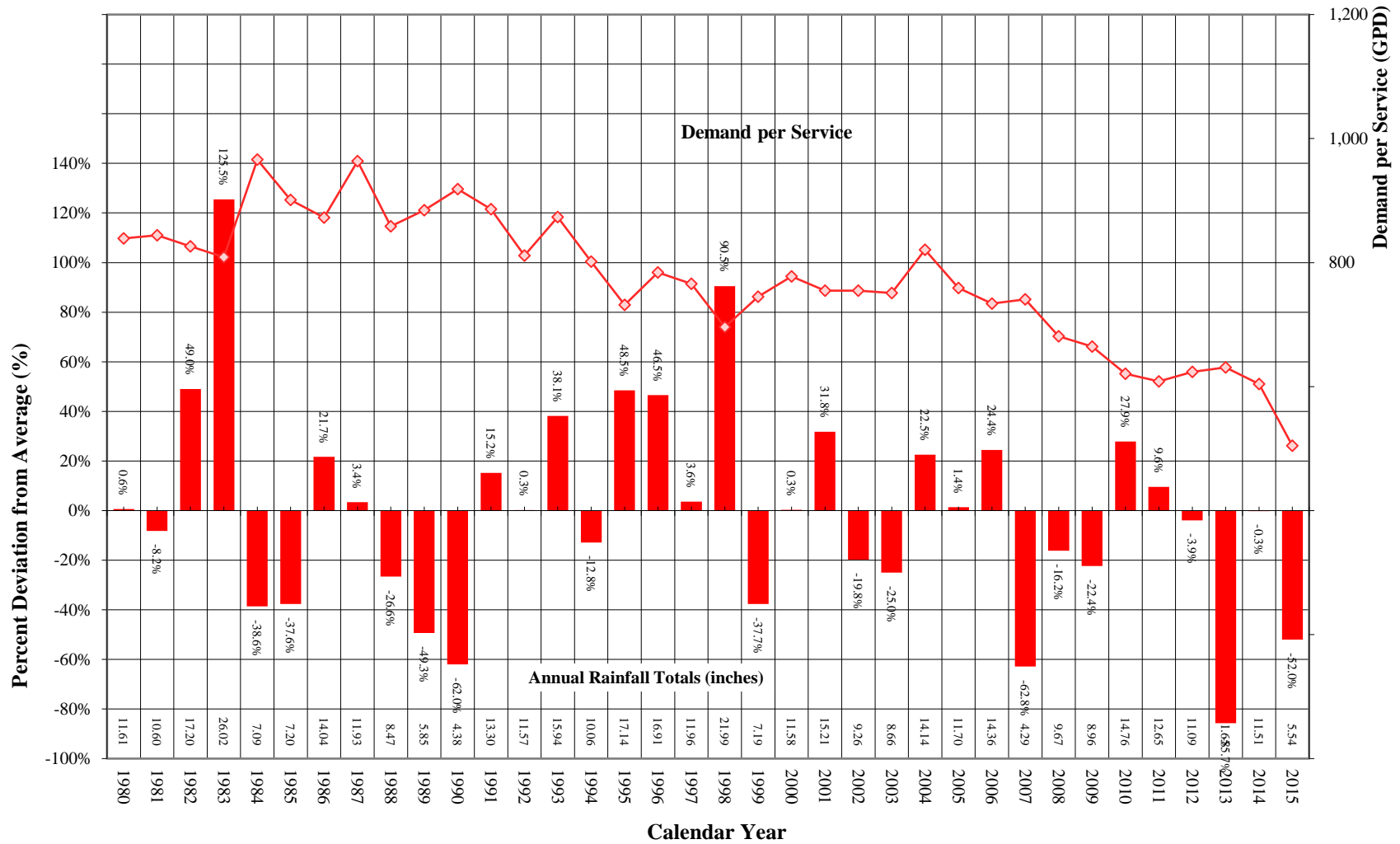
Year	Single Family Residential	Multi Family Residential			Flat Rate Residential	Total Residential	Persons per Housing Unit	Estimated District Population
	Services (DU)	Services	Residential Units (DU)	Unit Density	Services (DU)	Dwelling Units		
1995	1,564	8	714	89.2	0	2,278	3.897	8,877
1996	1,620	8	714	89.2	0	2,333	3.897	9,094
1997	1,696	8	714	89.2	0	2,410	3.897	9,392
1998	1,727	8	751	89.2	0	2,478	3.897	9,657
1999	1,787	10	892	89.2	0	2,680	3.897	10,443
2000	1,792	11	996	89.2	0	2,788	3.897	10,866
2001	1,795	13	1,012	79.4	0	2,808	3.908	10,972
2002	1,817	12	1,029	85.7	0	2,846	3.918	11,149
2003	1,831	12	1,045	87.1	0	2,876	3.929	11,298
2004	1,839	12	1,061	90.3	0	2,900	3.939	11,423
2005	1,863	11	1,077	97.9	0	2,941	3.949	11,613
2006	1,943	11	1,093	99.4	0	3,036	3.960	12,023
2007	2,023	11	1,110	100.9	0	3,132	3.970	12,437
2008	2,025	18	1,126	61.1	0	3,151	3.981	12,544
2009	2,026	24	1,142	47.6	0	3,167	3.991	12,642
2010	2,059	24	1,158	48.1	0	3,217	4.002	12,873
2011	2,076	25	1,174	46.4	0	3,250	4.002	13,004
2012	2,084	27	1,252	46.4	0	3,336	4.002	13,348
2013	2,089	27	1,267	46.4	0	3,356	4.002	13,427
2014	2,099	33	1,510	46.4	0	3,609	4.002	14,441
2015	2,121	34	1,591	46.4	0	3,712	4.002	14,854
2016	2,153	36	1,656	46.4	0	3,810	4.002	15,245
2017	2,187	37	1,724	46.4	0	3,911	4.002	15,648
2018	2,220	39	1,794	46.4	0	4,015	4.002	16,065
2019	2,255	40	1,868	46.4	0	4,122	4.002	16,495
2020	2,290	42	1,944	46.4	0	4,233	4.002	16,940
2021	2,325	44	2,023	46.4	0	4,348	4.002	17,399
2022	2,361	45	2,106	46.4	0	4,467	4.002	17,873
2023	2,397	47	2,192	46.4	0	4,589	4.002	18,363
2024	2,434	49	2,281	46.4	0	4,715	4.002	18,869
2025	2,472	51	2,374	46.4	0	4,846	4.002	19,392
2026	2,510	53	2,471	46.4	0	4,981	4.002	19,933
2027	2,549	55	2,572	46.4	0	5,121	4.002	20,491
2028	2,588	58	2,677	46.4	0	5,265	4.002	21,069
2029	2,628	60	2,786	46.4	0	5,414	4.002	21,666
2030	2,669	63	2,900	46.4	0	5,569	4.002	22,284
2031	2,710	65	3,018	46.4	0	5,728	4.002	22,923
2032	2,752	68	3,141	46.4	0	5,893	4.002	23,583
2033	2,795	71	3,270	46.4	0	6,064	4.002	24,266
2034	2,838	73	3,403	46.4	0	6,241	4.002	24,973
2035	2,882	76	3,542	46.4	0	6,424	4.002	25,704
2036	2,926	80	3,686	46.4	0	6,613	4.002	26,461
2037	2,971	83	3,837	46.4	0	6,808	4.002	27,244
2038	3,017	86	3,993	46.4	0	7,011	4.002	28,054
2039	3,064	90	4,156	46.4	0	7,220	4.002	28,893
2040	3,111	93	4,326	46.4	0	7,437	4.002	29,761

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

# Comparison of Annual Rainfall to Historical Average



California Water Service Company - King City District  
 Water Supply and Demand Analysis and Projections  
 Temperature & Rainfall History

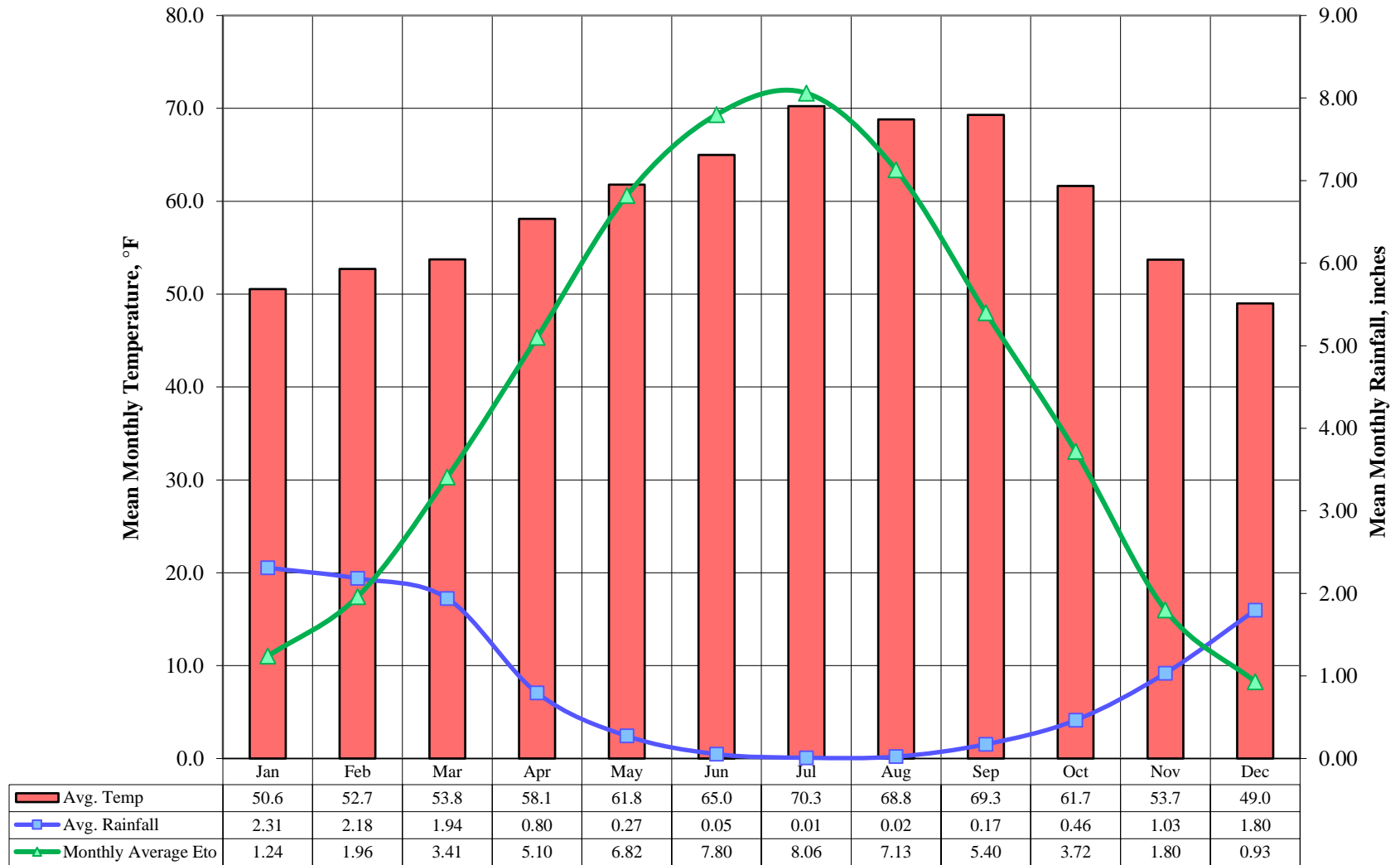
Year	Precipitation		Temperature			Demand per Service (gpd)	Percent of Average Demand
	Annual (in)	Percent Variation	Tmax (°F)	Tmin (°F)	Mean (°F)		
1980	11.61	0.6%	85.30	33.60	59.5	839	8.6%
1981	10.60	-8.2%	90.30	37.30	63.8	844	9.3%
1982	17.20	49.0%	85.80	30.60	58.2	826	7.0%
1983	26.02	125.5%	88.60	34.70	61.7	809	4.7%
1984	7.09	-38.6%	93.10	34.10	63.6	966	25.1%
1985	7.20	-37.6%	85.80	31.60	58.7	901	16.6%
1986	14.04	21.7%	82.50	36.90	59.7	873	13.0%
1987	11.93	3.4%	84.40	35.00	59.7	963	24.7%
1988	8.47	-26.6%	85.60	34.90	60.3	859	11.2%
1989	5.85	-49.3%	85.00	31.80	58.4	885	14.5%
1990	4.38	-62.0%	86.50	27.80	57.2	918	18.9%
1991	13.30	15.2%	86.50	34.50	60.5	886	14.7%
1992	11.57	0.3%	86.80	34.00	60.4	811	5.0%
1993	15.94	38.1%	86.70	34.80	60.8	873	13.0%
1994	10.06	-12.8%	84.80	34.50	59.7	801	3.8%
1995	17.14	48.5%	85.30	41.70	63.5	732	-5.3%
1996	16.91	46.5%	87.00	38.30	62.7	784	1.5%
1997	11.96	3.6%	87.60	36.10	61.9	766	-0.8%
1998	21.99	90.5%	88.20	32.00	60.1	696	-9.9%
1999	7.19	-37.7%	85.10	32.80	59.0	745	-3.5%
2000	11.58	0.3%	86.50	35.20	60.9	778	0.7%
2001	15.21	31.8%	88.00	33.90	61.0	755	-2.3%
2002	9.26	-19.8%	87.40	34.20	60.8	755	-2.3%
2003	8.66	-25.0%	89.40	38.10	63.8	751	-2.8%
2004	14.14	22.5%	87.40	36.40	61.9	821	6.3%
2005	11.70	1.4%	87.60	40.20	63.9	759	-1.7%
2006	14.36	24.4%	92.20	34.10	63.2	734	-5.0%
2007	4.29	-62.8%	86.00	30.80	58.4	741	-4.1%
2008	9.67	-16.2%	87.70	35.30	61.5	681	-11.8%
2009	8.96	-22.4%	88.70	35.70	62.2	664	-14.0%
2010	14.76	27.9%	85.40	39.60	62.5	621	-19.7%
2011	12.65	9.6%	85.30	31.50	58.4	608	-21.2%
2012	11.09	-3.9%	84.60	34.50	59.6	624	-19.3%
2013	1.65	-85.7%	84.90	30.90	57.9	631	-18.3%
2014	11.51	-0.3%	85.40	37.60	61.5	604	-21.8%
2015	5.54	-52.0%	89.10	34.90	62.0	504	-34.7%
2016							
2017							
2018							
2019							
2020							

Precipitation (1895 - present)						Monthly Average Eto
	Mean	High	Year	Low	Year	
	in.	in.	-	in.	-	
Jan	2.31	7.67	1914	0.00	1976	1.24
Feb	2.18	10.65	1998	0.00	1900	1.96
Mar	1.94	8.36	1991	0.00	1956	3.41
Apr	0.80	4.05	1958	0.00	1907	5.10
May	0.27	2.10	1998	0.00	1897	6.82
Jun	0.05	0.85	1931	0.00	1912	7.80
Jul	0.01	0.39	1980	0.00	1965	8.06
Aug	0.02	1.10	1976	0.00	1960	7.13
Sep	0.17	2.48	1904	0.00	1899	5.40
Oct	0.46	3.32	2004	0.00	1903	3.72
Nov	1.03	6.01	1965	0.00	1907	1.80
Dec	1.80	7.55	1955	0.00	1912	0.93
Annual	11.05	26.02	1983	1.65	2013	53.37

Temperature (1895 - present)			
	Tmax	Tmin	Mean
	°F	°F	°F
Jan	73.4	27.7	50.6
Feb	74.6	30.8	52.7
Mar	77.8	29.7	53.8
Apr	81.9	34.3	58.1
May	86.9	36.7	61.8
Jun	90.3	39.7	65.0
Jul	94.7	45.8	70.3
Aug	93.5	44.1	68.8
Sep	96.0	42.6	69.3
Oct	87.1	36.2	61.7
Nov	79.7	27.7	53.7
Dec	72.4	25.6	49.0
Annual	96.0	25.6	60.8

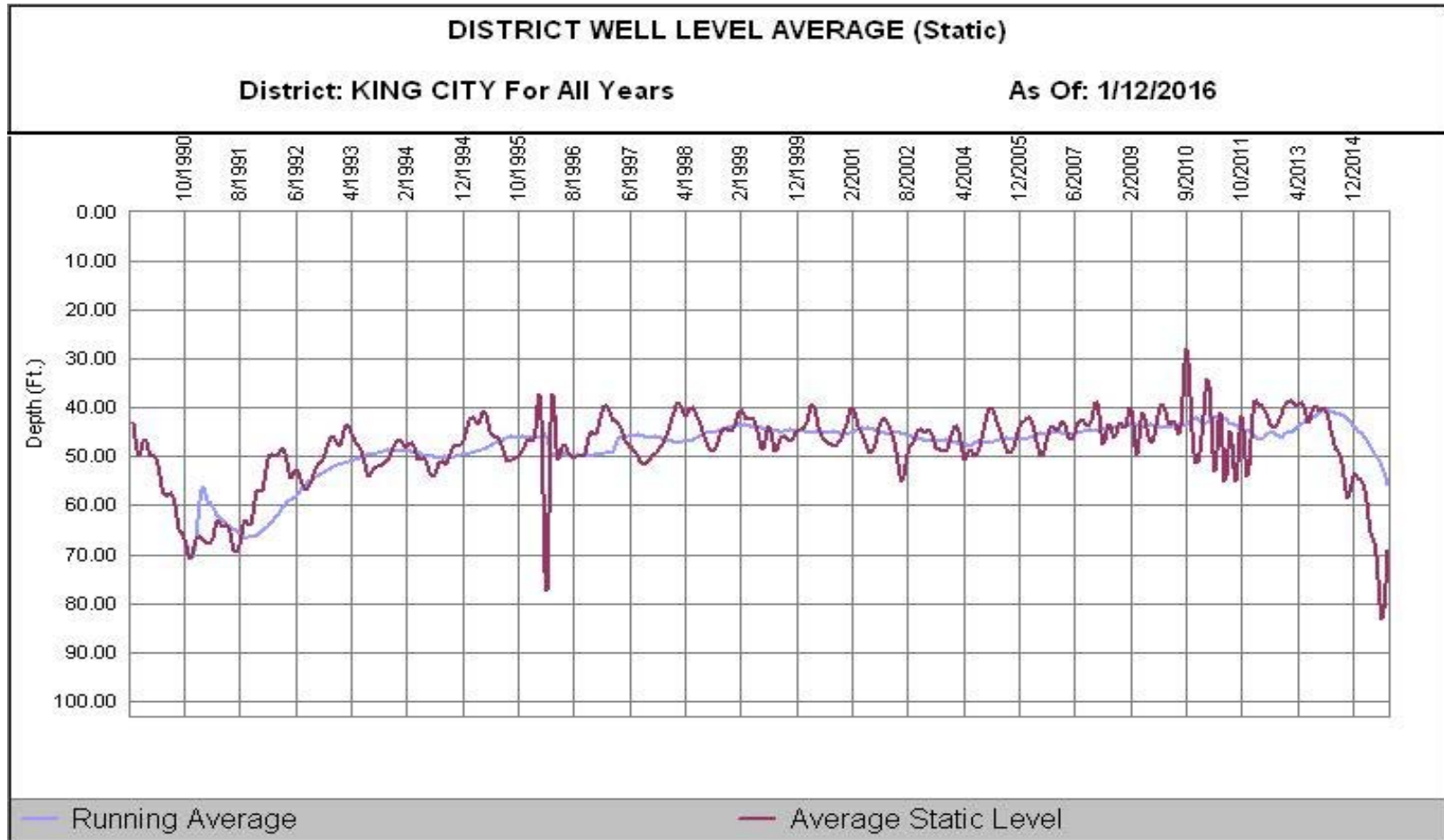
- 1) Eto values based on California Irrigation Management Information System (CIMIS), <http://www.cimis.water.ca.gov/cimis/welcome.jsp>, EvapoTranspiration (Eto) Zones Map, Zone 12  
 2) PPT, Tmax, Tmin obtained from PRISM where, PPT is total monthly rainfall, Tmax is average of maximum temperatures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

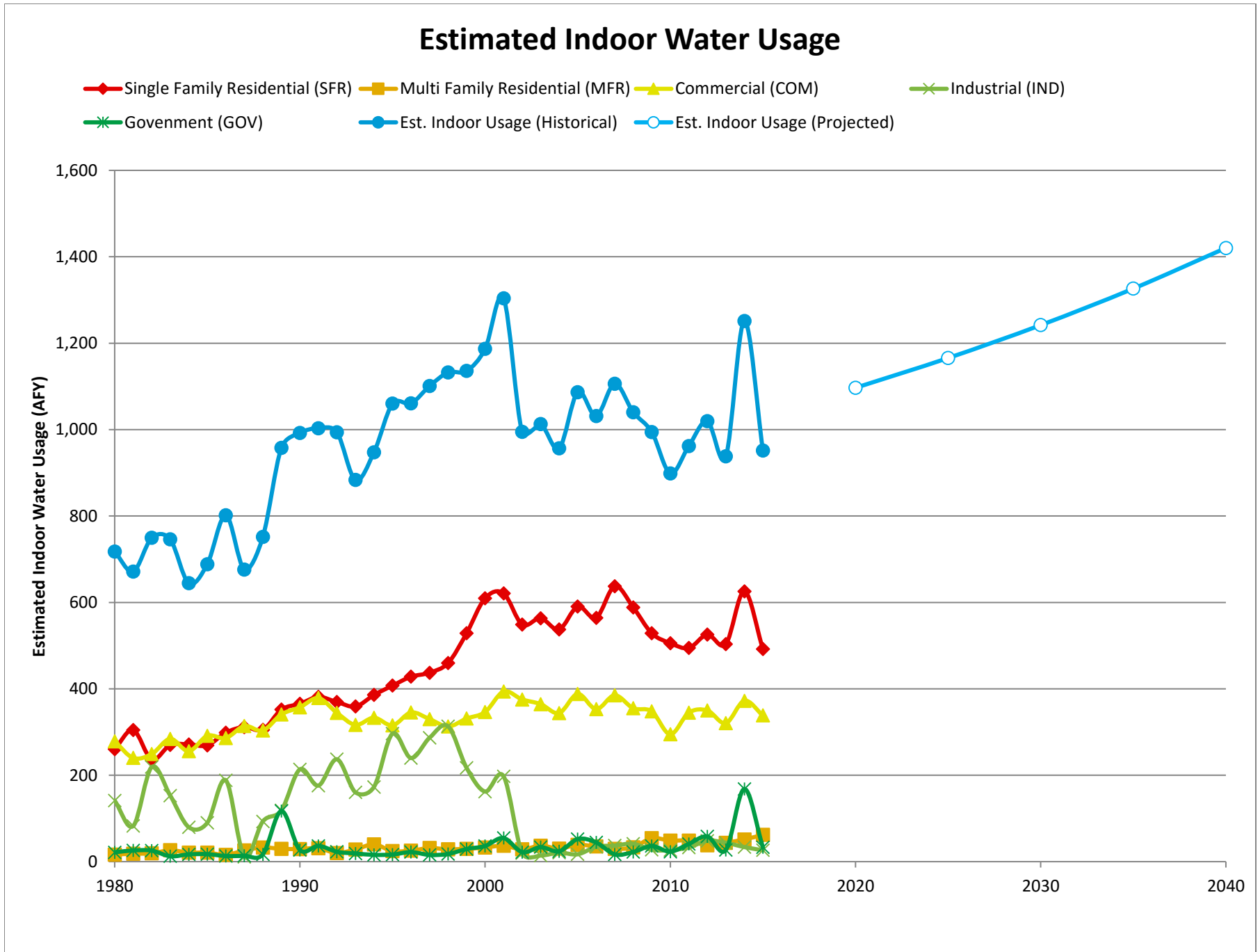
## Average Monthly Temperature, Rainfall, and Monthly Eto



# California Water Service Company - King City District Water Supply and Demand Analysis and Projections

## Groundwater Production Facilities





**California Water Service Company - King City 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	10,491	260	0.268	0	260	239	54%	664	16	1,837	74%	11,232	278	1,062	71%	
1981	12,288	305	0.312	0	305	278	61%	741	18	2,050	81%	9,683	240	929	62%	
1982	9,538	236	0.237	0	236	211	50%	772	19	2,136	75%	10,048	249	963	64%	
1983	10,887	270	0.261	0	270	233	56%	1,060	26	2,933	102%	11,463	284	1,079	72%	
1984	10,944	271	0.259	0	271	232	48%	842	21	2,330	80%	10,308	256	958	56%	
1985	10,857	269	0.254	0	269	226	49%	844	21	2,335	81%	11,749	291	1,098	66%	
1986	12,042	299	0.277	0	299	247	54%	629	16	1,740	57%	11,542	286	1,071	63%	
1987	12,564	312	0.278	0	312	248	54%	1,051	26	2,908	77%	12,659	314	1,172	67%	
1988	12,316	305	0.260	0	305	232	51%	1,320	33	3,652	86%	12,242	304	1,063	64%	
1989	14,189	352	0.300	0	352	267	59%	1,196	30	3,309	86%	13,746	341	1,182	70%	
1990	14,738	365	0.302	0	365	270	60%	1,177	29	3,256	72%	14,409	357	1,221	67%	
1991	15,373	381	0.295	0	381	264	66%	1,253	31	3,467	85%	15,269	379	1,253	76%	
1992	14,901	369	0.276	0	369	247	57%	809	20	2,238	55%	13,889	344	1,110	72%	
1993	14,486	359	0.263	0	359	234	53%	1,140	28	3,154	70%	12,765	316	1,028	65%	
1994	15,559	386	0.261	0	386	233	55%	1,610	40	4,409	98%	13,436	333	1,093	70%	
1995	16,434	407	0.261	0	407	233	54%	986	24	2,728	65%	12,722	315	1,047	69%	
1996	17,264	428	0.264	0	428	236	53%	1,027	25	2,841	65%	13,921	345	1,140	72%	
1997	17,635	437	0.258	0	437	230	49%	1,269	31	3,511	76%	13,310	330	1,077	69%	
1998	18,542	460	0.266	0	460	238	57%	1,152	29	3,030	78%	12,618	313	1,018	71%	
1999	21,318	529	0.296	0	529	264	59%	1,202	30	2,661	72%	13,358	331	1,090	69%	
2000	24,586	610	0.340	0	610	304	68%	1,319	33	2,614	70%	13,965	346	1,095	68%	
2001	25,046	621	0.346	0	621	309	68%	1,491	37	2,588	93%	15,875	394	1,158	72%	
2002	22,137	549	0.302	0	549	270	57%	1,151	29	2,123	67%	15,142	375	1,107	68%	
2003	22,725	563	0.308	0	563	275	59%	1,485	37	2,739	79%	14,707	365	1,078	69%	
2004	21,675	537	0.292	0	537	261	55%	1,222	30	2,302	67%	13,876	344	1,019	63%	
2005	23,807	590	0.317	0	590	283	64%	1,569	39	3,157	88%	15,652	388	1,144	73%	
2006	22,767	564	0.291	0	564	259	60%	1,416	35	2,849	85%	14,233	353	1,025	65%	
2007	25,705	637	0.315	0	637	281	63%	1,197	30	2,409	77%	15,529	385	1,089	70%	
2008	23,734	588	0.291	0	588	259	63%	1,337	33	1,607	57%	14,322	355	1,014	65%	
2009	21,322	529	0.261	0	529	233	62%	2,184	54	2,014	72%	14,027	348	997	69%	
2010	20,396	506	0.246	0	506	219	63%	1,963	49	1,804	72%	11,888	295	844	57%	
2011	19,944	494	0.238	0	494	213	63%	1,966	49	1,718	80%	13,906	345	971	70%	
2012	21,197	526	0.252	0	526	225	66%	1,517	38	1,244	62%	14,112	350	993	68%	
2013	20,311	504	0.241	0	504	215	62%	1,762	44	1,427	73%	12,927	321	914	65%	
2014	25,238	626	0.298	0	626	266	83%	2,076	51	1,410	71%	15,017	372	1,057	76%	
2015	19,845	492	1.582	0	492	207	77%	2,499	62	1,611	81%	13,648	338	971	80%	
2016					543	225			59	1,482			343	981		
2017					552	225			62	1,482			344	981		
2018					560	225			64	1,482			345	981		
2019					569	225			67	1,482			346	981		
2020					578	225			70	1,482			347	981		
2025					624	225			85	1,482			351	981		
2030					674	225			104	1,482			356	981		
2035					727	225			127	1,482			361	981		
2040					785	225			155	1,482			366	981		

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

**California Water Service Company - King City 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	5,692	141	25,198	107%	871	22	699	38%
1981	3,331	83	14,746	58%	1,043	26	837	53%
1982	8,839	219	39,129	143%	1,033	26	788	55%
1983	6,169	153	27,309	132%	502	12	377	26%
1984	3,216	80	14,237	53%	679	17	501	27%
1985	3,624	90	16,043	70%	698	17	501	28%
1986	7,596	188	33,626	177%	529	13	378	24%
1987	447	11	1,649	9%	547	14	375	26%
1988	3,756	93	13,856	64%	683	17	460	31%
1989	4,784	119	17,648	72%	4,718	117	3,221	148%
1990	8,615	214	31,781	110%	1,084	27	716	43%
1991	7,099	176	24,174	53%	1,472	36	973	61%
1992	9,560	237	30,229	160%	920	23	602	38%
1993	6,471	160	18,682	87%	765	19	490	30%
1994	6,977	173	19,304	97%	635	16	388	26%
1995	11,951	296	33,066	179%	664	16	408	26%
1996	9,671	240	26,757	152%	894	22	535	35%
1997	11,560	287	26,469	178%	625	15	370	22%
1998	12,636	313	19,859	245%	715	18	408	27%
1999	8,755	217	12,112	139%	1,178	29	653	40%
2000	6,541	162	9,049	107%	1,459	36	738	55%
2001	7,963	197	10,736	243%	2,204	55	1,002	55%
2002	806	20	978	38%	886	22	403	18%
2003	568	14	656	24%	1,356	34	636	34%
2004	841	21	980	37%	965	24	467	21%
2005	689	17	828	33%	2,113	52	1,100	52%
2006	1,385	34	1,703	54%	1,792	44	928	56%
2007	1,503	37	1,857	50%	677	17	349	16%
2008	1,668	41	2,042	0%	895	22	400	24%
2009	1,109	27	1,292	0%	1,466	36	546	21%
2010	1,065	26	1,263	0%	932	23	344	16%
2011	1,326	33	1,545	0%	1,657	41	611	25%
2012	1,950	48	2,272	0%	2,348	58	866	31%
2013	1,763	44	2,072	0%	1,083	27	403	14%
2014	1,361	34	1,705	0%	6,784	168	2,517	92%
2015	1,061	26	1,368	0%	1,336	33	493	28%
2016		35	1,792			66	978	
2017		35	1,792			66	978	
2018		36	1,792			66	978	
2019		36	1,792			66	978	
2020		36	1,792			67	978	
2025		38	1,792			67	978	
2030		40	1,792			68	978	
2035		42	1,792			69	978	
2040		44	1,792			70	978	

Estimated Indoor/Outdoor Usage			
Est. Indoor Usage	Est. Outdoor Usage	Est. Indoor Usage	Est. Outdoor Usage
AFY	AFY	%	%
718	453	61%	39%
672	509	57%	43%
750	429	64%	36%
746	442	63%	37%
644	792	45%	55%
689	667	51%	49%
802	529	60%	40%
676	843	45%	55%
752	667	53%	47%
958	508	65%	35%
992	570	64%	36%
1,003	598	63%	37%
994	518	66%	34%
883	775	53%	47%
948	674	58%	42%
1,060	486	69%	31%
1,061	647	62%	38%
1,101	639	63%	37%
1,132	479	70%	30%
1,136	640	64%	36%
1,187	685	63%	37%
1,304	539	71%	29%
995	867	53%	47%
1,013	849	54%	46%
957	1,085	47%	53%
1,087	820	57%	43%
1,031	882	54%	46%
1,106	897	55%	45%
1,040	812	56%	44%
994	825	55%	45%
899	825	52%	48%
962	744	56%	44%
1,020	732	58%	42%
938	840	53%	47%
1,251	462	73%	27%
952	489	66%	34%
1,046	821	56%	44%
1,058	831	56%	44%
1,071	841	56%	44%
1,084	851	56%	44%
1,097	862	56%	44%
1,166	917	56%	44%
1,242	978	56%	44%
1,326	1,046	56%	44%
1,420	1,120	56%	44%



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