

APPENDIX B

Preliminary Calculations Related to SBx7-7 Compliance

**City of Tracy
20 x 2020 Compliance**

Method 1: 80% of Baseline Per Capita Daily Water Use

10608.20 (b)(1) Eighty percent of the urban retail water supplier's baseline per capita daily water use.

Year	Estimated Population			Historical Water Demand				Per Capita Water Use				15-Year Average Gross Water Use ending between 2004 and 2010 (only applicable if RW use is greater than 10% of total water use in 2008) (per Section 10608.12 (b) (2))	Check Compliance with Section 10608.22		
	City of Tracy (Dept of Finance Report E-4)	Total Service Area Population	Potable Water Demand, afa	Recycled Water Demand, afa	Total Demand, afa	Percent of Total Demand Met With Recycled Water	Calculated Per Capita Potable Water Use, gpcd	Calculated Per Capita Total Water Use, gpcd	10-Year Average Gross Water Use ending between 2004 and 2010 (per Section 10608.12 (b) (1))	80% of Baseline Per Capita Water Use	5-Year Average Gross Water Use ending between 2007 and 2010 (per Section 10608.12 (b) (3))		Minimum Per Capita Water Use Reduction (5% of 5-Year Average gpcd), gpcd		
1990	32,450	32,450	10,804		10,804	0%	297	297		180					
1991	35,871	35,871	9,809		9,809	0%	244	244		180					
1992	38,006	38,006	11,024		11,024	0%	259	259		180					
1993	40,455	40,455	11,696		11,696	0%	258	258		180					
1994	42,111	42,111	12,451		12,451	0%	264	264		180					
1995	44,546	44,546	12,487		12,487	0%	250	250		180					
1996	45,949	45,949	13,098		13,098	0%	254	254		180					
1997	47,428	47,428	13,083		13,083	0%	246	246		180					
1998	48,962	48,962	10,787		10,787	0%	197	197		180					
1999	51,959	51,959	12,754		12,754	0%	219	219		180					
2000	56,070	56,070	13,469		13,469	0%	214	214	Not applicable--no recycled water use in 2008	180					
2001	61,112	61,112	15,042		15,042	0%	220	220		180					
2002	66,022	66,022	15,680		15,680	0%	212	212		180					
2003	70,037	70,037	16,965		16,965	0%	216	216		180					
2004	74,656	74,656	18,363		18,363	0%	220	220		225	180				
2005	78,157	78,157	17,892		17,892	0%	204	204		220	180				
2006	80,063	80,063	18,000		18,000	0%	201	201		215	180				
2007	80,455	80,455	19,176		19,176	0%	213	213		212	180	211	11		
2008	81,143	81,143	17,118		17,118	0%	188	188		211	180	205	10		
2009	81,714	81,714	16,693		16,693	0%	182	182		207	180	198	10		
2010												-			

Baseline gpcd = Maximum 10-Year Average Gross Water Use ending between 2004 and 2010 **225 gpcd**
2015 Interim Target = 90% of Baseline gpcd **202 gpcd**
2020 Target = 80% of Baseline gpcd **180 gpcd**

Minimum Per Capita Water Use Reduction

Section 10608.22. Notwithstanding the method adopted by an urban retail water supplier pursuant to Section 10608.20, an urban retail water supplier's per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use as defined in paragraph (3) of subdivision (b) of Section 10608.12.

Baseline (2003-2007), gpcd **211 gpcd**
gpcd target cannot exceed 95% of Baseline (2003-2007) **200 gpcd**

**City of Tracy
20 x 2020 Compliance**

Method 2: Indoor and Outdoor Water Use and Commercial, Industrial and Institutional Water Use

Part A: Indoor Residential Water Use

Indoor Residential Water Use (provisional standard per Section 10608.20 (b)(2)(A))

55 gpcd

Part B: Irrigated Landscapes

For landscape irrigated through dedicated or residential meters or connections, water efficiency equivalent to the standards of the Model Water Efficient Landscape Ordinance per Section 10608.20 (b)(2)(B)

	Landscaped Area, sf	Special Landscape Area, sf (Edible plants, areas irrigated with RW, parks, sports fields, golf courses and where turf provides a playing surface)	Eto (Tracy), inches/yr	Plant Factor	Hydrozone Area, sf	Irrigation Efficiency	Maximum Applied Water Allowance (MAWA), gal/yr	Estimated Total Water Use (ETWU), gal/yr	Landscape Water Use = ETWU up to the MAWA, gal/yr	2008 Population	Landscape Water Use Target, gpcd
Residential Landscapes	21,702,000	-	48.5	0.5	21,702,000	0.71	456,805,398	459,562,775	456,805,398		
Large Landscapes (dedicated meters)	22,402,286	-	48.5	0.5	22,402,286	0.71	471,545,712	474,392,064	471,545,712		
	44,104,286	-					928,351,110	933,954,839	928,351,110	81,143	31
	1,012.50 acres	- acres					2,849.20	2,866.40	2,849.20	af/yr	
Number of Single Family (as of 06/30/09)					21,702	accounts					
Estimated average landscaped area per single family account (guessimate)					1,000	sf					
Total estimated residential landscaped area					498	af	21,702,000	sf			
Potable Water Use Landscape Accounts (2008 Data) (1,800 af/3.5 af/ac)					514	acres	22,402,286	sf			
Recycled water use areas					-	acres	-	sf			

Part C: Commercial, Industrial and Institutional (CII) Water Use

10% reduction in water use from baseline commercial, industrial and institutional water use by 2020 per Section 10608.20 (b)(2)(C)

Assume 15% of total water demand

Year	Population	Commercial, af/yr	Industrial, af/yr	Institutional, af/yr	Total CII Water Use, af/yr	Per Capita CII Water Use, gpcd	10-Year Rolling Average gpcd
1990	32,450				1,621	45	
1991	35,871				1,471	37	
1992	38,006				1,654	39	
1993	40,455				1,754	39	
1994	42,111				1,868	40	
1995	44,546				1,873	38	
1996	45,949				1,965	38	
1997	47,428				1,962	37	
1998	48,962				1,618	30	
1999	51,959				1,913	33	
2000	56,070				2,020	32	
2001	61,112				2,256	33	
2002	66,022				2,352	32	
2003	70,037				2,545	32	
2004	74,656				2,754	33	34
2005	78,157				2,684	31	33
2006	80,063				2,700	30	32
2007	80,455				2,876	32	32
2008	81,143				2,568	28	32
2009	81,714				2,504	27	
2010	-				-		
					Baseline = Max 10-Year Rolling Average		34 gpcd
					10% Reduction in CII Baseline		(3) gpcd
					CII 2020 Target		30 gpcd

Summary

Part A: Indoor Residential Water Use	55 gpcd
Part B: Irrigated Landscapes	31 gpcd
Part C: Commercial, Industrial and Institutional (CII) Water Use	30 gpcd
Per Capita Daily Water Use Target	117 gpcd

City of Tracy

20 x 2020 Compliance

Method 3: 95% of State Hydrologic Region Target (based on Draft 20 x 2020 Water Conservation Plan dated April 30, 2009)

10608.20 (b)(3) *Ninety-five percent of the applicable state hydrologic region target, as set forth in the state's draft 20x2020 Water Conservation Plan (dated April 30, 2009).*

City of Tracy is located within DWR Hydrologic Region No. 6 (San Joaquin)

DWR Hydrologic Region Number	1	2	3	4	5	6	7	8	9	10
DWR Hydrologic Region Name	North Coast	San Francisco Bay	Central Coast	South Coast	Sacramento River	San Joaquin	Tulare Lake	North Lahonton	South Lahontan	Colorado River
Baseline (1995-2005), gpcd	165	157	154	180	253	248	285	243	237	346
Interim Targets (2015), gpcd	151	144	139	165	215	211	237	208	204	278
Targets (2020), gpcd	137	131	123	149	176	174	188	173	170	211
95% of Interim Targets (2015), gpcd	143	137	132	157	204	200	225	198	194	264
95% of Targets (2020), gpcd	130	124	117	142	167	165	179	164	162	200

City of Tracy Per Capita Water Demand (20 x 2020 Method 1: 80% of Baseline Per Capita Water Use)

