

# **APPENDIX H**

## *Water*



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Water

**Water Demand Appendix Table 1: Domestic Water Demand Calculations**

<b>Land Use Type</b>	<b>Total gsf</b>	<b>Water Demand Factor (a) (gal per sq ft per day)</b>	<b>Daily Water Use (gpd)</b>
<b>No Action (GMPA 2000)</b>			
Industrial/warehouse	469,039	0.04	19,842
Office	1,657,376	0.09	149,164
Retail	155,011	0.10	15,501
Lodging	362,040	0.27	97,751
Conference	175,424	0.18	31,576
Recreational	110,871	0.30	33,261
Cultural/Educational	576,984	0.18	103,857
Infrastructure	82,604	0.06	4,956
Military	69,949	0.06	4,197
Residential (b)	na	na	107,900
<b>Total</b>			<b>568,005</b>
<b>Final Plan</b>			
Industrial/warehouse	165,237	0.04	6,609
Office	1,815,975	0.09	163,438
Retail	186,123	0.10	18,612
Lodging	211,990	0.27	57,237
Conference	49,355	0.18	8,884
Recreational	153,797	0.30	46,139
Cultural/Educational	921,271	0.18	165,829
Infrastructure	74,754	0.06	4,485
Military	53,965	0.06	3,238
Residential (b)	na	na	245,050
<b>Total</b>			<b>719,522</b>
<b>Final Plan Variant</b>			
Industrial/warehouse	102,708	0.04	4,109
Office	1,898,987	0.09	170,909
Retail	91,154	0.10	9,115
Lodging	127,435	0.27	34,407
Conference	64,245	0.18	11,564
Recreational	161,456	0.30	48,437
Cultural/Educational	654,932	0.18	117,888
Infrastructure	97,034	0.06	5,822
Military	50,219	0.06	3,013

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<b>Land Use Type</b>	<b>Total gsf</b>	<b>Water Demand Factor (a) (gal per sq ft per day)</b>	<b>Daily Water Use (gpd)</b>
Residential (b)	na	na	170,950
<b>Total</b>			<b>576,214</b>
<b>Resource Consolidation</b>			
Industrial/warehouse	130,795	0.04	5,232
Office	2,439,052	0.09	219,515
Retail	188,383	0.10	18,838
Lodging	174,521	0.27	47,121
Conference	138,355	0.18	24,904
Recreational	115,782	0.30	34,735
Cultural/Educational	690,622	0.18	124,312
Infrastructure	49,982	0.06	2,999
Military	52,636	0.06	3,158
Residential (b)	na	na	144,950
<b>Total</b>			<b>625,763</b>
<b>Sustainable Community</b>			
Industrial/warehouse	81,936	0.04	3,277
Office	1,980,337	0.09	178,230
Retail	264,282	0.10	26,428
Lodging	174,521	0.27	47,121
Conference	118,170	0.18	21,272
Recreational	209,185	0.30	62,756
Cultural/Educational	844,032	0.18	151,926
Infrastructure	53,921	0.06	3,211
Military	52,636	0.06	3,158
Residential (b)	na	na	216,450
<b>Total</b>			<b>713,829</b>
<b>Cultural Destination</b>			
Industrial/warehouse	133,799	0.04	5,352
Office	2,046,176	0.09	184,156
Retail	203,691	0.10	20,369
Lodging	341,635	0.27	92,241
Conference	109,355	0.18	19,684
Recreational	171,562	0.30	51,469
Cultural/Educational	955,443	0.18	171,980

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<b>Land Use Type</b>	<b>Total gsf</b>	<b>Water Demand Factor (a) (gal per sq ft per day)</b>	<b>Daily Water Use (gpd)</b>
Infrastructure	53,921	0.06	3,211
Military	53,965	0.06	3,238
Residential (b)	na	na	259,350
<b>Total</b>			<b>811,050</b>
<b>Minimum Management</b>			
Industrial/warehouse	465,031	0.04	18,601
Office	2,413,101	0.09	217,179
Retail	257,362	0.10	25,736
Lodging	0	0.27	0
Conference	24,115	0.18	4,341
Recreational	103,147	0.30	30,944
Cultural/Educational	139,032	0.18	25,026
Infrastructure	58,422	0.06	3,505
Military	69,949	0.06	4,197
Residential (b)	na	na	234,000
<b>Total</b>			<b>563,529</b>

Notes:

- (a) Water demand factors are from Revised PTIP Water Project, URS, March 2002.
- (b) Daily water use for residential uses is calculated by number of occupants multiplied by 65 gallons per person per day.

# APPENDIX H

## Water

Water Demand Appendix Table 2: Irrigation Water Demand (a)

Month	No Action (GMPA 2000) <i>Irr. (gpd)</i>	Final Plan <i>Irr. (gpd)</i>	Final Plan Variant <i>Irr. (gpd)</i>	Resource Consolidation <i>Irr. (gpd)</i>	Sustainable Community <i>Irr. (gpd)</i>	Cultural Destination <i>Irr. (gpd)</i>	Minimum Management <i>Irr. (gpd)</i>
January	32,877	32,877	32,877	32,877	32,877	32,877	32,877
February	32,877	32,877	32,877	32,877	32,877	32,877	32,877
March	32,877	32,877	32,877	32,877	32,877	32,877	32,877
April	442,273	444,683	471,195	496,502	416,965	466,375	413,350
May	974,310	979,620	1,038,025	1,093,776	918,559	1,027,406	910,595
June	1,130,252	1,136,412	1,204,165	1,268,839	1,065,578	1,191,846	1,056,339
July	<b>1,205,602</b>	<b>1,212,172</b>	<b>1,284,443</b>	<b>1,353,428</b>	<b>1,136,617</b>	<b>1,271,303</b>	<b>1,126,762</b>
August	1,033,280	1,038,911	1,100,851	1,159,976	974,155	1,089,589	965,708
September	779,710	783,959	830,699	875,315	735,095	822,201	728,721
October	237,189	238,482	252,700	266,272	223,617	250,115	221,678
November	32,877	32,877	32,877	32,877	32,877	32,877	32,877
December	32,877	32,877	32,877	32,877	32,877	32,877	32,877
Average Daily Demand	497,250	499,885	528,872	556,541	469,581	523,602	465,628
Irrigated Acres (b)	367	365	387	408	346	383	343

a. Irrigation demands were calculated using the PWB which is based on data from the University of California Division of Agriculture and National Resources Leaflet 21491 – Turfgrass Evapotranspiration Map Central Cost of California.

b. Irrigated area for each alternative includes 35 acres for Crissy Field, which is in Area A but served through the Presidio system.