

ANNUAL SURVEY



March
2019

Fiscal Year 2017-18

BAWSCA
Bay Area Water Supply & Conservation Agency

Bay Area Water Supply and Conservation Agency FY 2017-18

- EXECUTIVE SUMMARY
- BAWSCA OVERVIEW
- PAST AND CURRENT PURCHASES FROM SFPUC
- TOTAL WATER SUPPLY AND DEMAND
- CURRENT WATER USE BY CUSTOMER CLASS
- CLIMATOLOGICAL DATA
- SERVICE AREA POPULATIONS
- CURRENT WATER USE PER CAPITA
- CURRENT RESIDENTIAL WATER BILLS
- AGENCY PROFILES

MARCH 2019

BAWSCA WATER FACTS AT-A-GLANCE – FY 2017-18

BAWSCA Member Agencies

San Mateo County - City of Brisbane / Guadalupe Valley Municipal Improvement District, City of Burlingame, California Water Service Company (Bear Gulch District, Mid-Peninsula District, South San Francisco District), Coastside County Water District, City of Daly City, City of East Palo Alto, Estero Municipal Improvement District, Town of Hillsborough, City of Menlo Park, Mid-Peninsula Water District, City of Millbrae, North Coast County Water District, City of Redwood City, City of San Bruno, and Westborough Water District

Santa Clara County - City of Milpitas, City of Mountain View, City of Palo Alto, Purissima Hills Water District, San Jose Municipal Water System – North, City of Santa Clara, Stanford University, and City of Sunnyvale

Alameda County - Alameda County Water District, City of Hayward

Service Areas

	Size (sq. mi.)	Population	Number of Agencies
San Mateo County	185	746,013	16
Santa Clara County	117	561,898	8
Alameda County	166	516,500	2
Total	468	1,824,411	26

Supply by Source

	ccf	mgd	af	%
San Francisco RWS	65,134,913	133.48	149,529	66.7%
Groundwater	9,459,252	19.38	21,715	9.7%
Surface Water	1,728,020	3.54	3,967	1.8%
Recycled Water	4,028,656	8.26	9,249	4.1%
Other Sources	17,372,885	35.60	39,883	17.8%
Total	97,723,725	200.27	224,343	100%

Demand by Sector

	ccf	mgd	af	%
Residential	54,612,442	111.92	125,373	55.9%
Commercial/Industrial	21,192,110	43.43	48,650	21.7%
Government/Institutional/Other	4,983,127	10.21	11,440	5.1%
Dedicated Irrigation	10,021,509	20.54	23,006	10.3%
Non-Revenue Water	6,914,537	14.17	15,873	7.1%
Total	97,723,725	200.27	224,343	100%

Water Measurements

af = acre-foot; 1 af = 435.6 ccf or 325,851 gallons

ccf = 100 cubic feet; approximately 748 gallons

gpcd = gallons per capita per day

mgd = million gallons per day

Cover photo: Calaveras Dam Embankment Construction, April 25, 2018. Image Courtesy of Adrienne Carr, BAWSCA.

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Annual Survey

FISCAL YEAR 2017-18

ABOUT BAWSCA

The Bay Area Water Supply and Conservation Agency (BAWSCA) is a special district that provides regional water supply planning, resource development, and conservation program services to enhance the reliability of the 16 cities, 8 water districts, 1 university, and 1 private water company that provide water to over 1.8 million people and 40,000 commercial, industrial and institutional accounts in Alameda, Santa Clara and San Mateo Counties. BAWSCA was enabled by a special act of the California Legislature and was formed by its member agencies in 2003.

BAWSCA's water management objective is to ensure a reliable supply of high quality water at a fair price to protect the health, safety, and economic well-being of the people, businesses, and community organizations within its service area.

BAWSCA is the only entity authorized under state law to directly represent the interests of its member agencies in matters related to the San Francisco Regional Water System (SF RWS). BAWSCA enables the customers of the SF RWS to work with the San Francisco Public Utilities Commission (SFPUC) on a united basis to ensure that the system is maintained, and to collectively and efficiently meet local responsibilities.

BAWSCA MEMBER AGENCIES

San Mateo County

In San Mateo County, BAWSCA and its member agencies serve a population of approximately 746,000 within a service area of approximately 185 square miles. BAWSCA member agencies that serve San Mateo County include: City of Brisbane, City of Burlingame, California Water Service (CWS) – Bear Gulch, CWS – Mid-Peninsula, CWS – South San Francisco, Coastside County Water District, City of Daly City, City of East Palo Alto, Estero Municipal Improvement District, Guadalupe Valley Municipal Improvement District (GVMID), Town of Hillsborough, City of Menlo Park, Mid-Peninsula Water District, City of Millbrae, North Coast County Water District, City of Redwood City, City of San Bruno, and Westborough Water District.

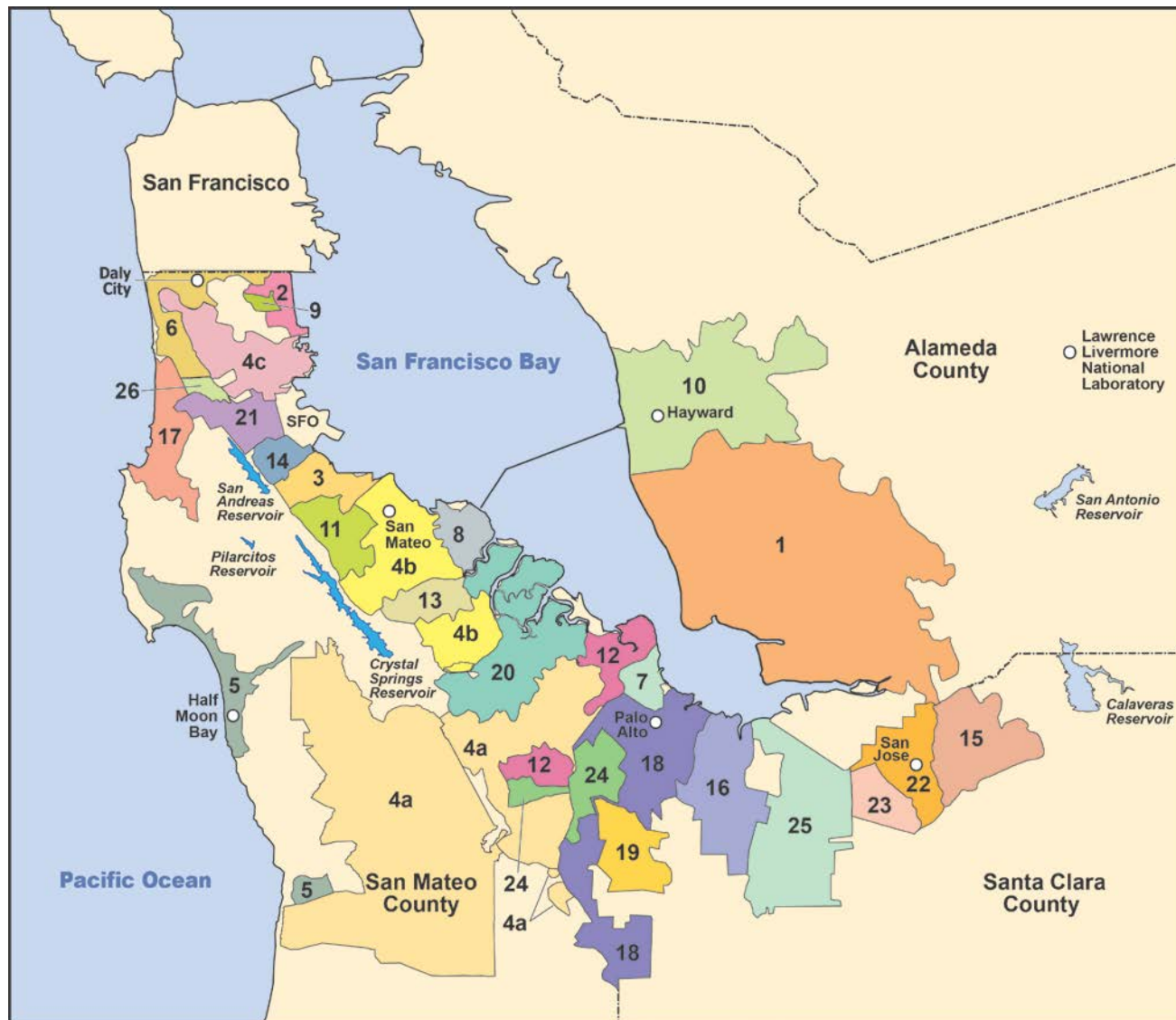
Santa Clara County

In Santa Clara County, BAWSCA and its member agencies serve a population of approximately 562,000 within a service area of approximately 117 square miles. BAWSCA member agencies that serve Santa Clara County include: City of Milpitas, City of Mountain View, City of Palo Alto, Purissima Hills Water District, San Jose Municipal Water System, City of Santa Clara, City of Sunnyvale, and Stanford University.

Alameda County

In Alameda County, BAWSCA and its member agencies serve a population of approximately 517,000 within a service area of approximately 166 square miles. BAWSCA member agencies that serve Alameda County include Alameda County Water District and the City of Hayward.

BAWSCA Members Map



Legend

- | | |
|---|--------------------------------------|
| 1 Alameda County Water District | 13 Mid-Peninsula Water District |
| 2 City of Brisbane | 14 City of Millbrae |
| 3 City of Burlingame | 15 City of Milpitas |
| 4a CWS – Bear Gulch | 16 City of Mountain View |
| 4b CWS – Mid-Peninsula | 17 North Coast County Water District |
| 4c CWS – South San Francisco | 18 City of Palo Alto |
| 5 Coastside County Water District | 19 Purissima Hills Water District |
| 6 City of Daly City | 20 City of Redwood City |
| 7 City of East Palo Alto | 21 City of San Bruno |
| 8 Estero Municipal Improvement District | 22 San Jose Municipal Water System |
| 9 Guadalupe Valley MID | 23 City of Santa Clara |
| 10 City of Hayward | 24 Stanford University |
| 11 Town of Hillsborough | 25 City of Sunnyvale |
| 12 City of Menlo Park | 26 Westborough Water District |

Sources: BAWSCA, San Mateo County General Plan

ANNUAL SURVEY OVERVIEW

Since 1996, BAWSCA and its predecessor organization, the Bay Area Water Users Association, has conducted an annual survey of its member agencies in order to update key BAWSCA service area information including projections of wholesale customer water demands and population. This document presents the results of the latest annual survey process, including:

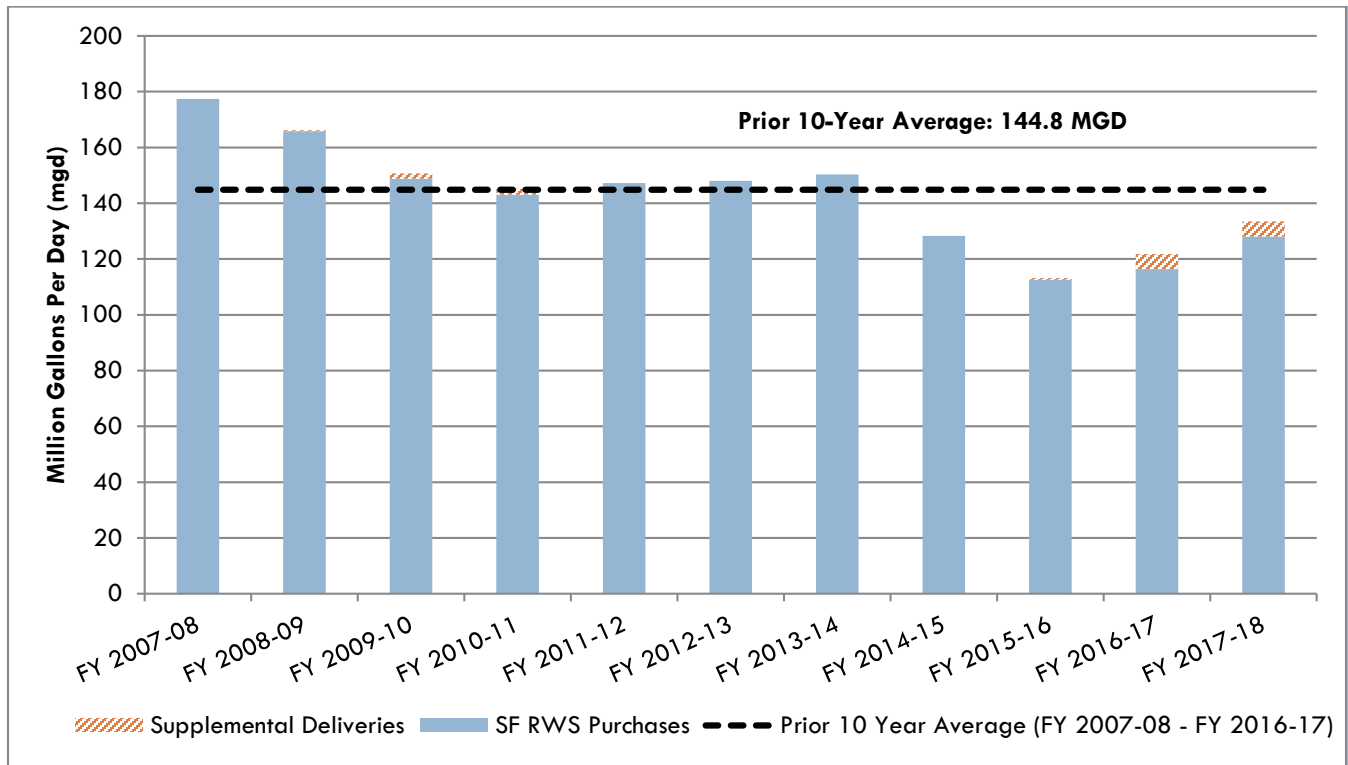
- ☐ Current water supply from each source
- ☐ Current and projected water purchases from SF RWS
- ☐ Projected water supplies and demands
- ☐ Consumption by customer class
- ☐ Current and projected population
- ☐ Per capita water use
- ☐ Single family water bills and rate structures
- ☐ BAWSCA member agency profiles

PURCHASES FROM SF RWS

Current Water Purchases from SF RWS

The San Francisco Public Utilities Commission (SFPUC) operates the SF RWS, which is the major source of supply for BAWSCA member agencies. In FY 2017-18, the BAWSCA member agencies reported SF RWS purchases of 128.1 mgd, 10% higher than the total of 116.4 mgd purchased in FY 2016-17. In addition, BAWSCA member agencies reported 5.4 mgd in supplemental purchases as part of the conjunctive use program. Compared with the prior ten-year average, total purchases in FY 2017-18, including supplemental purchases were below average by 11.36 mgd. When compared to FY 2007-08, the highest year in the prior ten-year period, FY 2017-18 purchases were lower by 43.9 mgd, a difference of about 25%.

Figure ES-1: Past and Current SF RWS Purchases, Including Supplemental Purchases



Projected Water Purchases from SFPUC

As part of SFPUC's action on the Program Environmental Impact Report (PEIR) for its Water System Improvement Program (WSIP), it made the decision to limit wholesale customer purchases from the SF RWS to 184 mgd and retail customer purchases from the SF RWS to 81 mgd through 2018. In June 2017, BAWSCA notified the SFPUC that the projected BAWSCA member agency purchases in 2018 were expected to be 139 mgd. In FY 2040-41, BAWSCA member agency purchases from the SF RWS are projected to reach 174 mgd.

TOTAL WATER SUPPLY AND DEMAND

Current Water Supply by Source

The sources of supply used by BAWSCA member agencies are very consistent, with supply breakdown by source typically varying by less than 2% from one year to the next. Of the total amount of water used by BAWSCA agencies in FY 2017-18, 66.7% came from the SF RWS and 33.3% came from other sources. These other sources included:

- ☐ Groundwater (19.4 mgd, 9.7%);
- ☐ Local surface water, primarily from ACWD's take from Lake Del Valle (3.5 mgd, 1.8%);
- ☐ Other supplies from the Santa Clara Valley Water District, the State Water Project, and ACWD's brackish water desalination (35.6 mgd, 17.8%); and
- ☐ Recycled water (8.3 mgd, 4.1%).

Figure ES-2: FY 2017-18 Water Use by Source

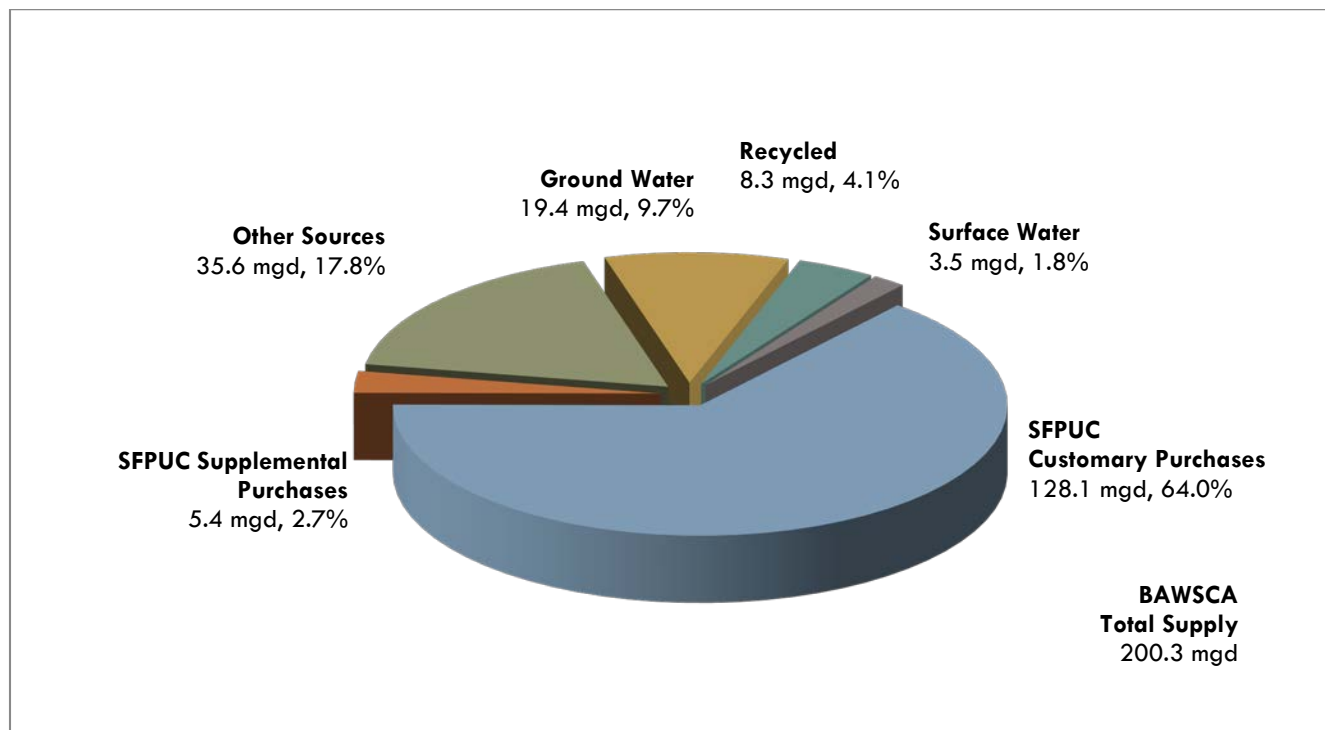
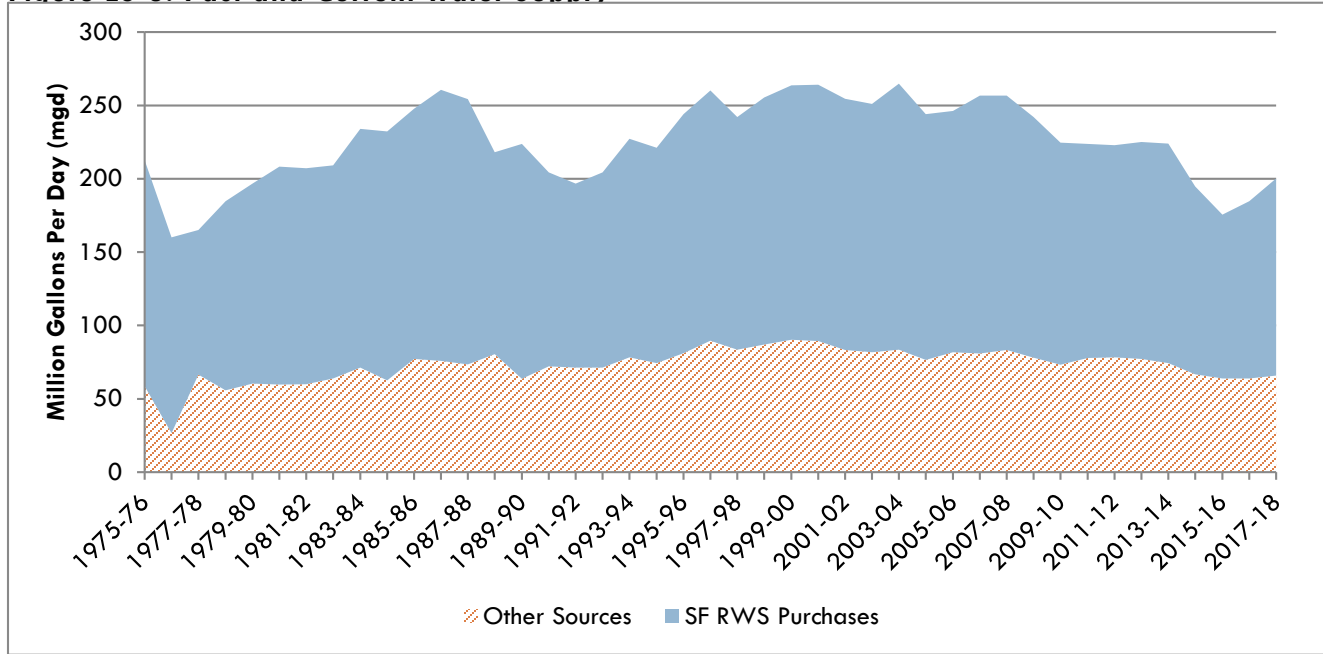
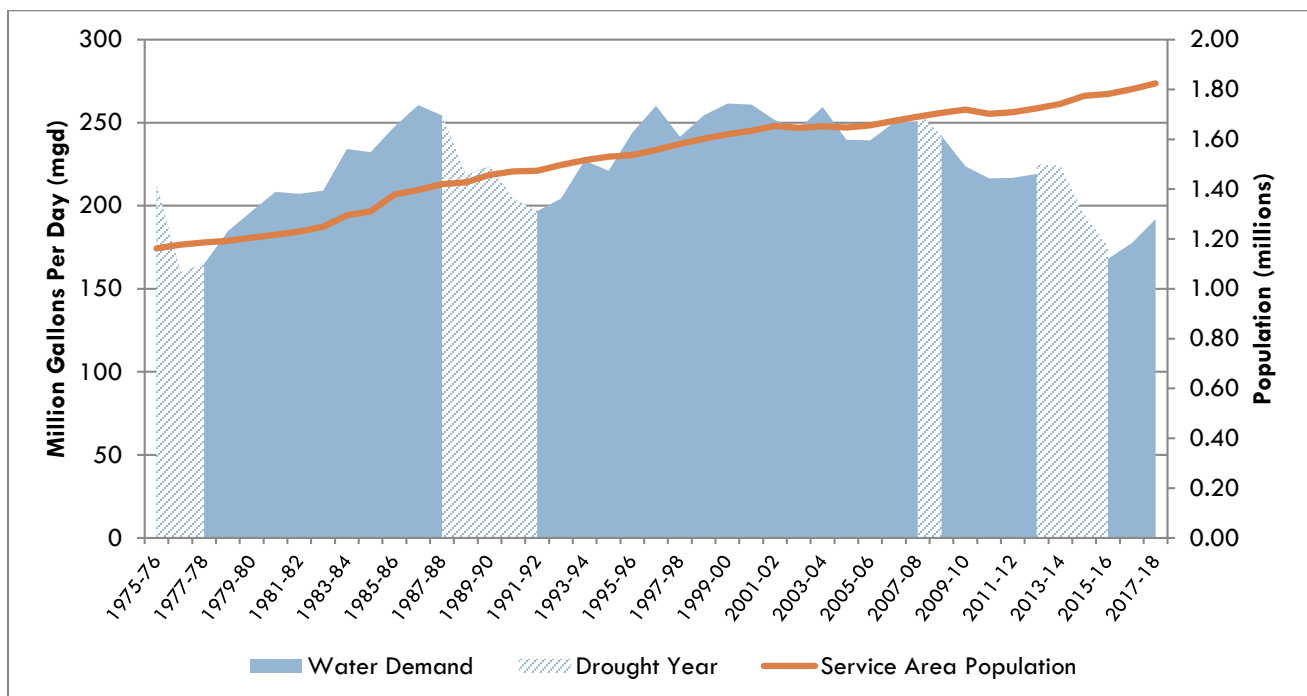


Figure ES-3: Past and Current Water Supply

Current BAWSCA-Wide Total Water Demand

For FY 2017-18, total water demand in the BAWSCA service area, including SFPUC purchases and other sources, was 200.3 mgd. In comparison, in FY 1996-97, BAWSCA-wide demand reached 260 mgd. When compared to FY 2012-13, the fiscal year immediately preceding the most recent statewide drought declaration, water used in the BAWSCA service area was 11% less in FY 2017-18. In FY 2017-18, 23% less water was used in the service area compared to the peak year, FY 1986-87, despite a 31% population increase.

Figure ES-4: Past and Current Population and Water Demand

Projected Water Supplies and Demands

The total normal year water demands of the BAWSCA member agencies are projected to reach 303.8 mgd by FY 2040-41 (Source: FY 2017-18 Annual Survey). Of the total water demand, 17.5 mgd is projected to be met through additional active conservation beyond that already achieved within the BAWSCA service area. SF RWS purchases are anticipated to be 173.8 mgd in FY 2040-41. Recycled water supplies are projected to increase to 23.2 mgd by FY 2040-41.

Figure ES-5: Projected FY 2040-41 Water Use by Source

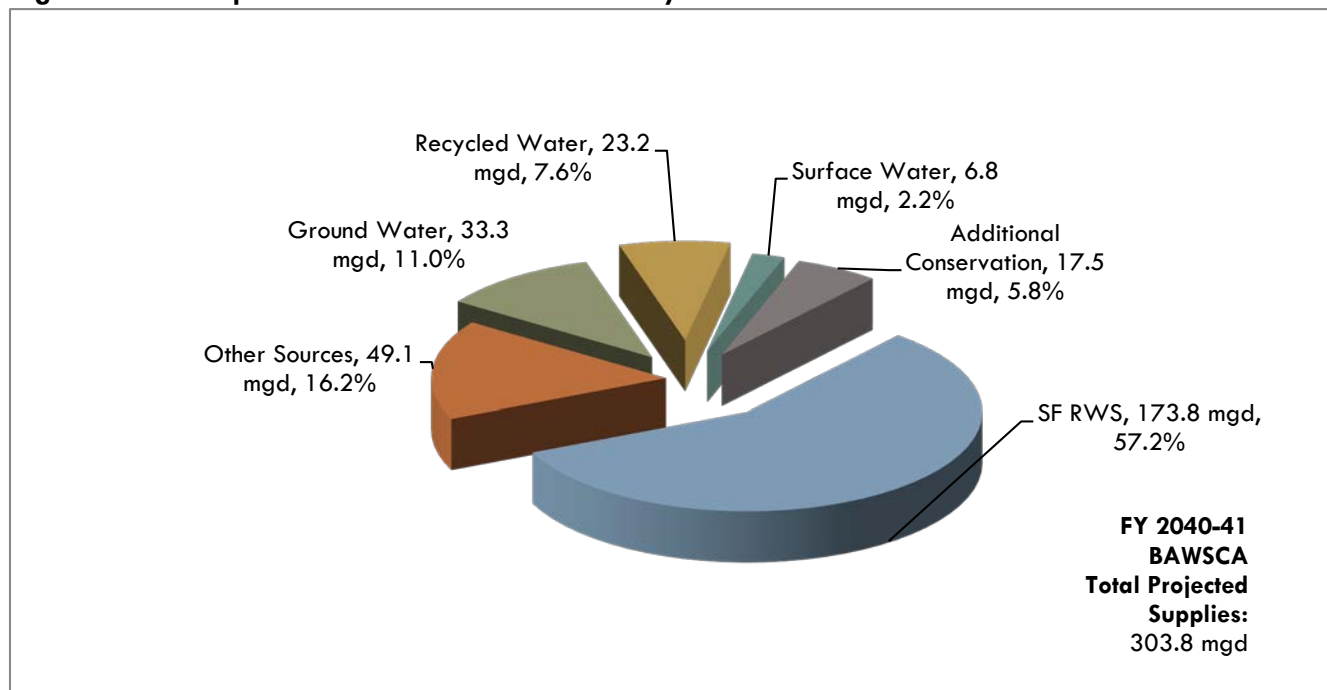
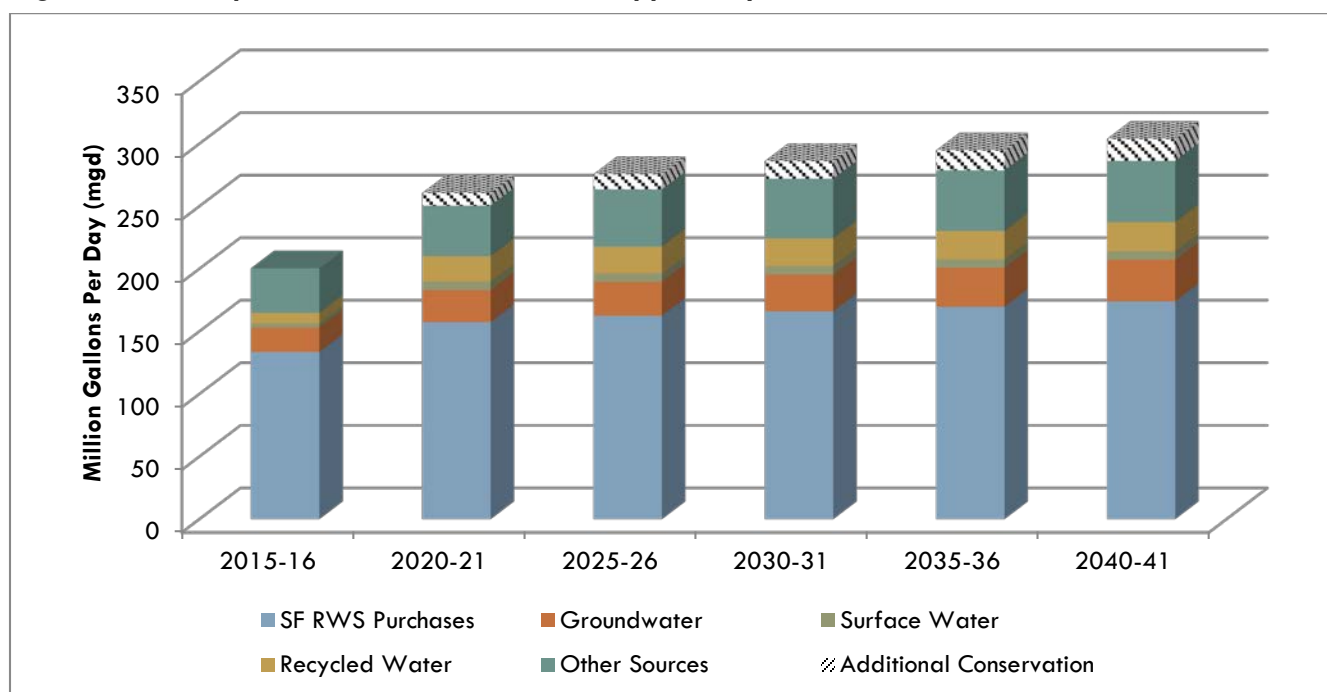


Figure ES-6: Projected Normal Year Water Supplies by Source



Meeting Projected Dry Year Water Demands

BAWSCA's Long-Term Reliable Water Supply Strategy Phase II Final Report (Strategy), completed in 2015, does not project a regional need for additional water supplies to meet normal year demands through 2040. However, the Strategy identifies reliability shortfalls on the SF RWS of up to 43 mgd in dry years during the same planning period, resulting in system-wide SF RWS supply cutbacks of up to 20%. The Strategy identifies nine specific projects in five categories, which, if all projects were successfully implemented, would effectively meet the 43 mgd dry year supply need.

The Strategy identifies recommended actions to maximize the likelihood that BAWSCA and its member agencies can provide water when and where it is needed. These actions include:

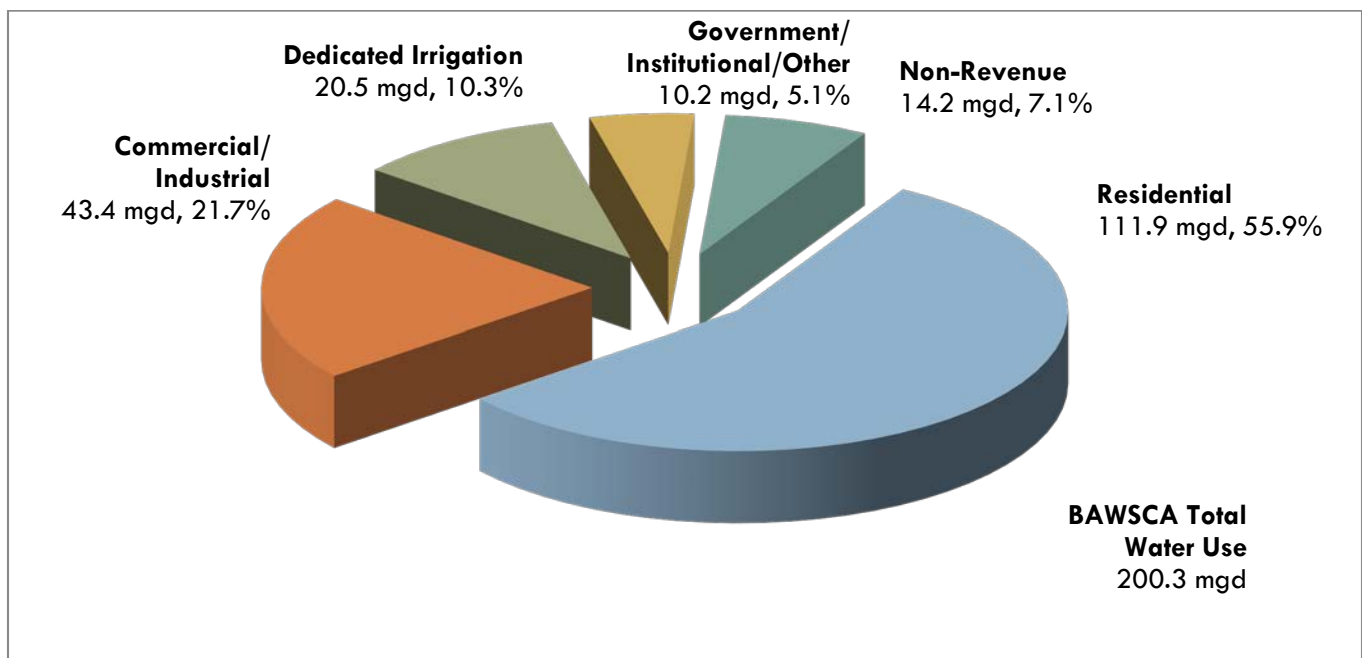
- ☐ Lead water transfer development and implementation including identifying and evaluating water storage options;
- ☐ Facilitate desalination and advanced treatment supply project partnerships and pursue outside funding for related studies;
- ☐ Support member agency-identified projects (i.e. recycled water and groundwater) and local capture and reuse;
- ☐ Participate in regional planning studies in cooperation with others; and
- ☐ Continue monitoring regional water supply investments and policies.

CURRENT WATER USE BY CLASS OF CUSTOMER

As with the source of supply, BAWSCA's demand by customer class is relatively consistent over time. Of the 200.3 mgd consumed among BAWSCA agencies in FY 2017-18 the residential sector accounted for 55.9% (111.9 mgd); commercial and industrial customers for 21.7% (43.4 mgd); government, institutional and other customers for 5.1% (10.2 mgd); dedicated irrigation for 10.3% (20.5 mgd); and non-revenue water for 7.1% (14.2 mgd).

In FY 2017-18, there were 432,438 accounts (service connections) in the entire BAWSCA service area, 88%, or 382,581, of which were residential.

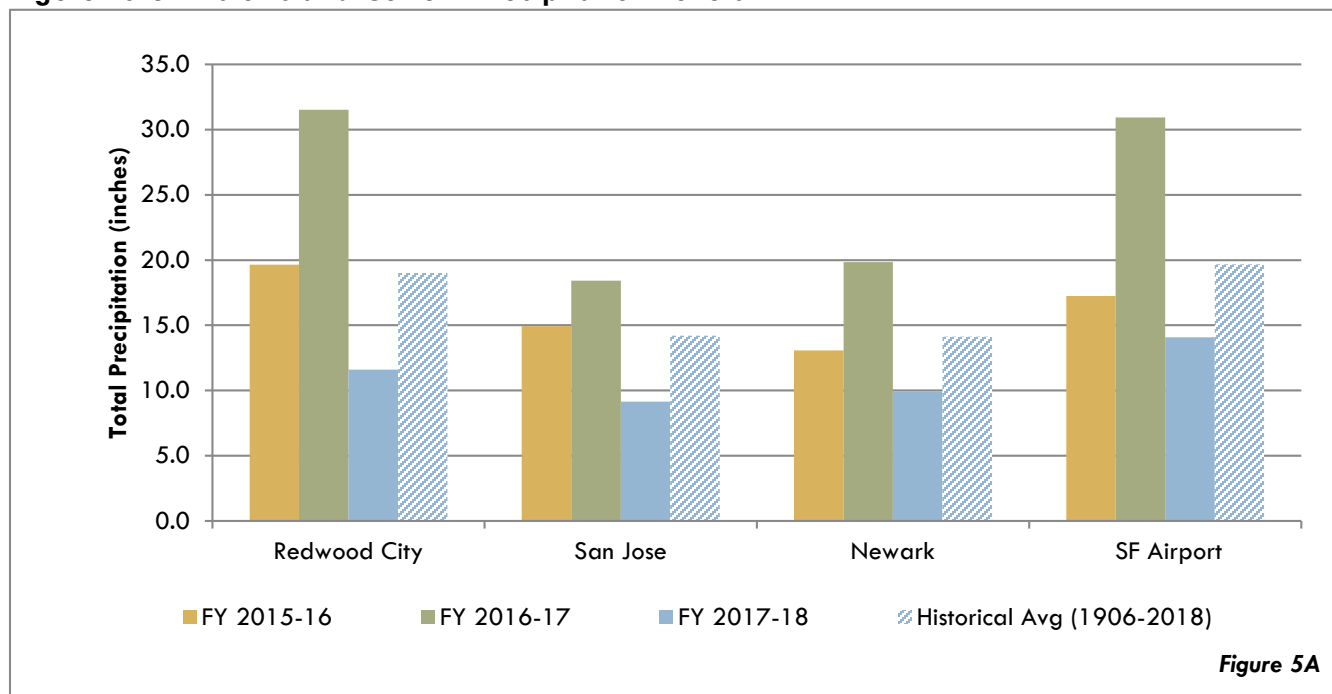
Figure ES-7: FY 2015-16 Water Use by Customer Class



CLIMATE DATA

FY 2017-18 was a moderately dry year, with rainfall totals recorded at 4 representative locations in the BAWSCA service area that were, on average, 33% lower than the historical average from 1948 - 2018. In FY 2015-16 and FY 2016-17, rainfall totals recorded at these locations were 3% below average and 50% above average respectively.

Figure ES-8: Historic and Current Precipitation Levels



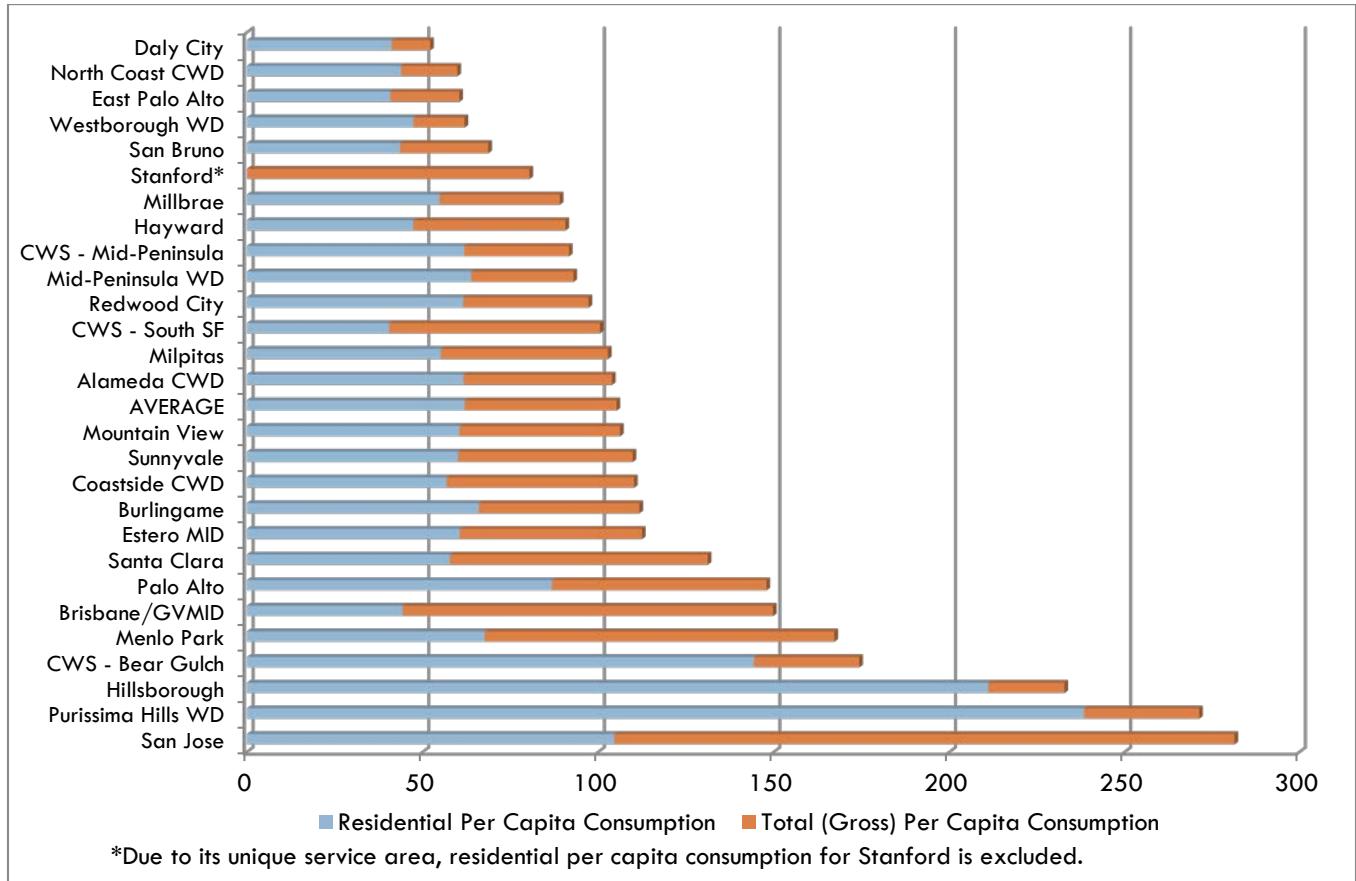
POPULATION AND PER CAPITA WATER USE

The population of the BAWSCA service area is estimated to have increased from 1,801,539 to 1,824,411 between FY 2016-17 and FY 2017-18. The BAWSCA service area population is projected to reach 2,247,688 by FY 2040-41.

Average residential per capita consumption (excluding Stanford) in the BAWSCA service area was 62.0 gpcd in FY 2017-18, 6% more than the year before. This is 46% less than the estimated peak residential per capita consumption of 114.9 gpcd in FY 1975-76. In FY 2017-18, CWS - South SF had the lowest residential per capita consumption at 40.5 gpcd while Purissima Hills WD had the highest at 238.4 gpcd.

In FY 2017-18, twelve BAWSCA member agencies had residential water use of less than 60 gallons per capita per day.

The average gross per capita consumption in the BAWSCA service area was 105.2 gpcd in FY 2017-18, 7% higher than FY 2016-17. At the peak in FY 1986-87, gross per capita consumption was 186.5 gpcd.

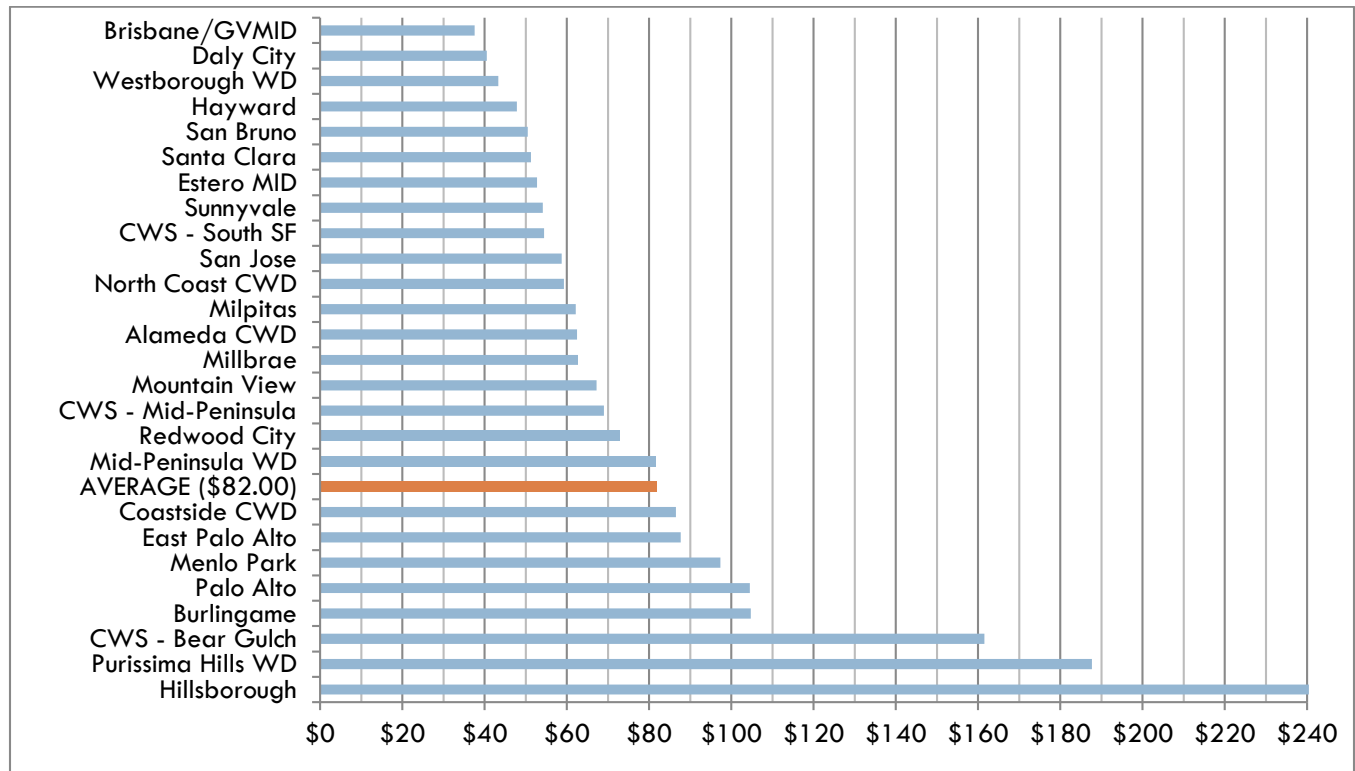
Figure ES-9: BAWSCA Member Agency Per Capita Water Use

SINGLE FAMILY WATER AND RATE STRUCTURES

Water bill data has been calculated using each agency's single family average monthly use. Among the BAWSCA agencies, the average bill ranged from a low of \$37.61 for 4.5 units in the Brisbane/GVMID service area to a high of \$273.82 for 22.2 units in Hillsborough. The average single family water bill among the BAWSCA member agencies, inclusive of the service charge, was \$82.00.

Five BAWSCA member agencies (Alameda County Water District, East Palo Alto, Millbrae, Santa Clara, and Westborough Water District) had a uniform rate structure in FY 2017-18, defined as a single rate per unit of water for all volumes used. The other agencies have an inclining block rate structure in which the rate per unit increases as the water use increases.

Figure ES-10: Average Single Family Monthly Water Bill



1. BAWSCA Overview

BAY AREA WATER SUPPLY AND CONSERVATION AGENCY

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E-Mail: BAWSCA@BAWSCA.org

Goals

To ensure a reliable supply of high quality water at a fair price.

Composition

BAWSCA is a special district that provides regional water supply planning, resource development, and conservation program services to enhance the reliability of the 16 cities, 8 water districts, 1 university, and 1 private water company that provide water to over 1.8 million people and 40,000 commercial, industrial and institutional accounts in Alameda, Santa Clara and San Mateo Counties.

BAWSCA was enabled by a special act of the California Legislature (AB 1823) and formed by its member agencies to protect the health, safety, and economic well-being of the people, businesses, and community organizations within its service area. BAWSCA's water management objective is to ensure a reliable supply of high quality water at a fair price.

Additionally, BAWSCA is the only entity having authority under state law to directly represent the interests of its member agencies with San Francisco and its agent, the San Francisco Public Utilities Commission (SFPUC), in matters related to the San Francisco Regional Water System (SF RWS). BAWSCA provides the ability for the customers of the SF RWS to work with San Francisco on an equal basis to ensure that the agencies and their customers pay only their fair and correct share of SF RWS costs, to see that the system gets fixed through successful implementation of the Water System Improvement Program (WSIP), and to collectively and efficiently meet local water supply responsibilities.

There is considerable variety among the BAWSCA member agencies. Beyond having different institutional charters (e.g., cities, districts, investor-owned utility, etc.), they vary on at least the following measures:

■ Size

BAWSCA member agencies range from very small (e.g., the City of Brisbane and Guadalupe Valley Municipal Improvement District, with a combined service area population of 4,573 and a service area of approximately 3 square miles) to quite large (e.g., Alameda County Water District, with a service area population of approximately 356,000 and a service area of 105 square miles).

■ Reliance on the San Francisco Regional Water System

Several of the BAWSCA member agencies are entirely dependent on the SF RWS for water supply. This is particularly the case in San Mateo County, which has limited groundwater or other water supply resources. However, several BAWSCA member agencies have developed, or are developing, their own local sources, or have access to water from the Santa Clara Valley Water District (SCVWD) or from the State Water Project. Coastside County Water District is the only BAWSCA member agency that receives untreated SF RWS water. All of the other BAWSCA member agencies receive treated water from the SF RWS. Collectively, 67% of all water delivered by the BAWSCA member agencies came from the SF RWS in FY 2017-18.

■ Customer Mix

Most BAWSCA member agencies serve a mix of single family residential, multi-family residential, commercial, and industrial customers, in varying proportions. Several of the BAWSCA member agencies serve largely or entirely residential communities (e.g., Hillsborough, Purissima Hills Water District, and North Coast County Water District). One, Guadalupe Valley Municipal Improvement District, serves primarily an industrial area and a small residential community. Nearly 90% of all service connections in the BAWSCA service area are residential, with residential use comprising 59% of total potable demand in FY 2017-18.

■ Climate

The BAWSCA member agencies located on the northern and coastal portions of San Mateo County have the cool temperatures and summer fog characteristics similar to San Francisco. Others in southern San Mateo County, northern Santa Clara County, and southern Alameda County have summer temperatures typically 20 degrees higher than those in San Francisco.

■ Land Use

None of the BAWSCA member agencies have a population density comparable to that of San Francisco (about 17,000 persons per square mile). But some (e.g., Daly City and South San Francisco) do have residential housing stock similar to that of the Sunset and Richmond Districts in western San Francisco. Others have much larger lots (with far more green space per residence) and consequently, significantly higher outdoor irrigation demands.

■ Water Use

Residential per capita water use correlates with land use, lot size, climate, and household income. In FY 2017-18, residential per capita water use was higher than the prior year, likely due to the removal of drought-specific water use restrictions for the majority of the service area. Per capita use in the wholesale service area ranged from a low of 41 gallons per capita per day (gpcd) to a high of 238 gpcd. Average residential use is 62 gpcd (See Table 7A).

Governance

BAWSCA is governed by a 26-member Board of Directors comprised of respected community leaders. Each of the 24 cities and water districts that are member agencies of BAWSCA appoint a director to the board. In addition, the Santa Clara County Board of Supervisors appoints a director for Stanford University and the San Mateo County Board of Supervisors appoints a director for the California Water Service Company.

Organization and Budget

Day-to-day leadership is provided by the Chief Executive Officer/General Manager, Nicole Sandkulla, who is supported by a staff of seven. A standing Board Policy Committee, comprised of board members, advises the CEO and the full board on policy matters. The agency's FY 2017-18 budget was \$3.70M, funded through individual agency assessments. In addition, BAWSCA plans and administers water conservation programs throughout the region funded by the agencies that choose to participate.

Organizational Challenges

BAWSCA's strategic challenges include:

- ☐ Developing and implementing the long-term reliable water supply strategy to ensure that water supply needs for the BAWSCA members will be adequately met in times of drought and in the future.

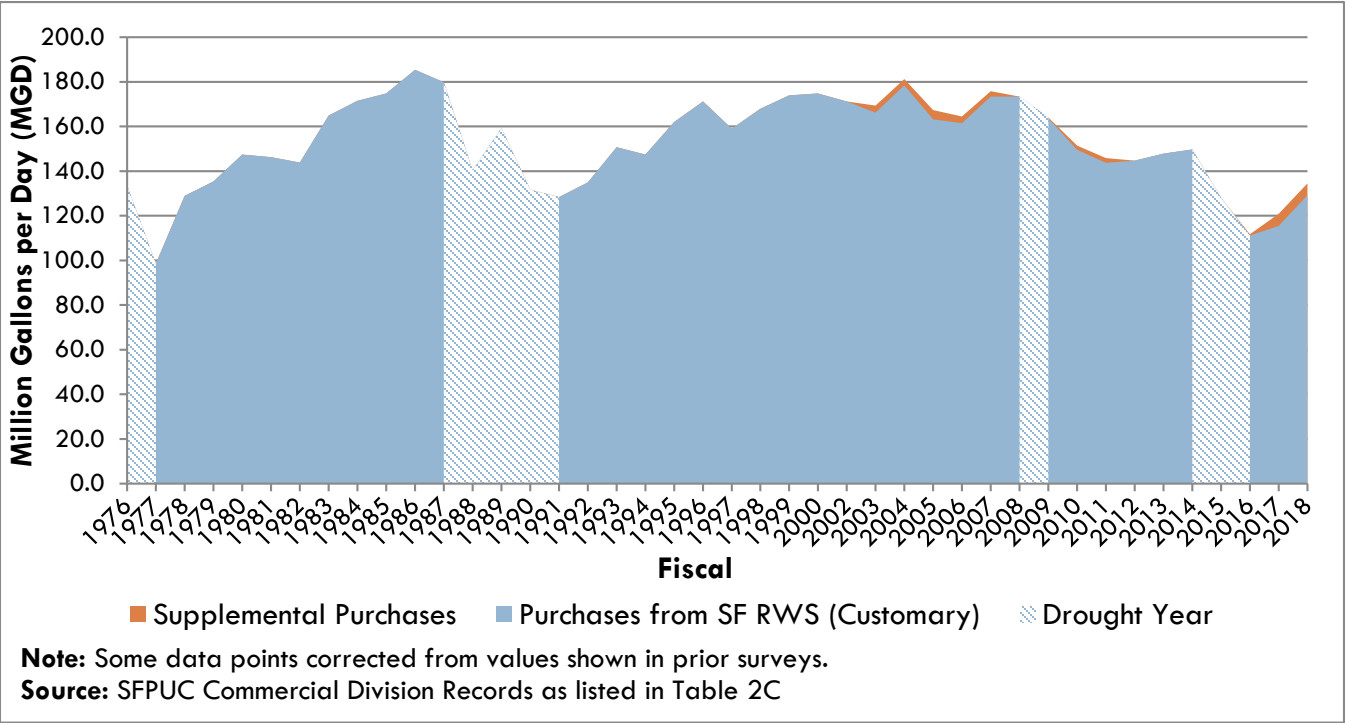
- ☐ Monitoring the SFPUC to ensure it completes its capital improvement program for rebuilding the regional water system promptly and cost-effectively with the cost fairly allocated between San Francisco retail and BAWSCA member agencies.
- ☐ Administering the 2009 water supply agreement between San Francisco and its Wholesale Customers.
- ☐ Encouraging and assisting implementation of cost-effective water conservation and wastewater recycling programs.
- ☐ Encouraging communities to prepare for long-term water outages.
- ☐ Maintaining support from BAWSCA's political, community, and private allies.

Table 1: BAWSCA Members Summary – FY 2017-18

	Service	Water Purchased / Produced (mgd)		Communities Served (all or portions of)
	Population	SF RWS*	Total	
San Mateo County				
City of Brisbane / Guadalupe Valley Municipal Improvement District	4,573	0.68	0.68	Brisbane, nearby unincorporated areas, and GVMID, an industrial park and small residential community within the City of Brisbane
City of Burlingame	31,109	3.48	3.78	City of Burlingame, and nearby unincorporated areas
California Water Service Company				Atherton, Colma, Daly City, Los Altos, Menlo Park, Portola Valley, parts of unincorporated Redwood City, San Carlos, San Mateo, South San Francisco, Woodside and nearby unincorporated areas
Bear Gulch District, Mid-Peninsula District, South San Francisco District	258,701	28.95	29.29	Half Moon Bay, Princeton by the Sea, Miramar, and El Granada
Coastside County Water District	16,776	0.95	1.85	Daly City and nearby unincorporated areas
City of Daly City	109,139	5.69	6.26	City of East Palo Alto, Menlo Park, and nearby unincorporated areas
City of East Palo Alto	26,181	1.58	1.58	Foster City and small parts of San Mateo
Estero Municipal Improvement District	37,687	4.24	4.24	Hillsborough and nearby unincorporated areas
Town of Hillsborough	10,869	2.53	2.53	Menlo Park west of Altschul Avenue and east of El Camino Real
City of Menlo Park	17,071	2.86	2.86	Belmont, San Carlos, and nearby unincorporated areas
Mid-Peninsula Water District	26,924	2.50	2.50	Millbrae and nearby unincorporated areas
City of Millbrae	22,848	2.03	2.03	Pacifica and nearby unincorporated areas
North Coast County Water District	40,000	2.40	2.40	Redwood City, parts of San Carlos and Woodside, and nearby unincorporated areas
City of Redwood City	87,023	8.47	9.14	San Bruno and nearby unincorporated areas
City of San Bruno	44,409	2.68	3.05	Parts of South San Francisco, Daly City, and nearby unincorporated areas
Westborough Water District	12,703	0.79	0.79	
Subtotal	746,013	69.83	72.98	
Santa Clara County				
City of Milpitas	78,106	5.20	9.03	Milpitas and portions of San Jose
City of Mountain View	79,027	7.41	8.80	Mountain View and nearby unincorporated areas
City of Palo Alto	67,320	9.96	10.76	Palo Alto and nearby unincorporated areas
Purissima Hills Water District	6,150	1.67	1.67	Los Altos Hills, parts of Los Altos, and nearby unincorporated areas
San Jose Municipal Water District	16,084	4.53	5.38	North San Jose/Alviso and nearby unincorporated areas
City of Santa Clara	129,604	2.13	20.41	Santa Clara and nearby unincorporated areas
Stanford University	32,218	1.49	2.59	Stanford University
City of Sunnyvale	153,389	9.09	17.08	Sunnyvale and nearby unincorporated areas
Subtotal	561,898	41.48	75.72	
Alameda County				
Alameda County Water District	356,000	7.62	37.01	Union City, Newark, Fremont and nearby unincorporated areas
City of Hayward	160,500	14.55	14.55	Hayward and nearby unincorporated areas
Subtotal	516,500	22.17	51.56	
Total All Agencies	1,824,411	133.48	200.27	
*Includes supplemental deliveries				
Source: BAWSCA FY 2017-18 Annual Survey				

2. Past and Current Purchases from SF RWS

Figure 2A: Past and Current Purchases from SF RWS



**Table 2A: Past and Current Purchases from SF RWS and Relationship to Supply Guarantee (in ccf)
(Excluding Supplemental Purchases)**

																		2017-18		
		Supply	mgd															2017-18/ 2016-17		
Member		Guarantee	Equiv															Purchases as % of Guarantee		
				Predrought FY 1986-87	mgd Equiv	Actual FY 2007-08	Actual FY 2008-09	Actual FY 2009-10	Actual FY 2010-11	Actual FY 2011-12	Actual FY 2012-13	Actual FY 2013-14	Actual FY 2014-15	Actual FY 2015-16	Actual FY 2016-17	Actual FY 2017-18	mgd Equiv	% Change		
San Mateo County																				
* Brisbane **		224,435	0.46	171,507	0.35	182,661	179,743	123,803	275,934	280,650	287,290	302,776	280,029	257,414	294,756	334,217	0.68	13.4		
* Burlingame		2,553,753	5.23	2,531,707	5.19	2,195,474	2,086,616	1,920,815	1,971,599	2,012,282	1,952,965	2,001,619	1,791,539	1,505,779	1,592,044	1,695,956	3.48	6.5		
California Water Service ***		17,320,807	35.50	17,393,987	35.65	18,414,636	17,561,079	15,815,998	15,668,088	16,101,764	15,212,752	16,361,264	13,839,271	11,584,178	11,851,282	13,457,975	27.58	13.6		
Coastside CWD		1,061,453	2.18	600,257	1.23	1,014,105	977,849	887,675	806,110	832,099	885,896	940,214	727,298	575,225	515,655	464,037	0.95	-10.0		
Daly City		2,094,386	4.29	2,264,684	4.64	2,187,273	2,113,320	1,542,719	1,405,560	1,811,358	1,955,442	1,713,514	1,654,762	2,152,800	1,867,312	1,717,837	3.52	-8.0		
* East Palo Alto		1,689,714	3.46	1,041,989	2.14	996,587	938,045	842,883	863,282	907,662	1,008,253	723,320	768,310	690,728	734,911	772,528	1.58	5.1		
* Estero MID		2,878,807	5.90	2,854,051	5.85	2,691,080	2,509,929	2,392,839	2,274,588	1,966,984	2,000,497	1,942,333	1,930,526	1,768,029	1,874,751	2,068,753	4.24	10.3		
* Guadalupe Valley MID		254,436	0.52	155,074	0.32	130,485	122,888	152,798	Included with Brisbane											
* Hillsborough		1,995,644	4.09	1,996,150	4.09	1,893,039	1,743,929	1,470,409	1,461,935	1,580,857	1,609,532	1,599,812	1,226,777	1,050,944	1,139,003	1,234,547	2.53	8.4		
Los Trancos				34,848	0.07	Included with CWS-Bear Gulch														
* Menlo Park		2,174,231	4.46	1,958,458	4.01	1,857,088	1,628,275	1,556,801	1,533,788	1,621,745	1,584,636	1,724,965	1,287,136	1,074,516	1,153,760	1,393,425	2.86	20.8		
* Mid-Peninsula WD		1,898,707	3.89	1,888,074	3.87	1,583,791	1,533,876	1,390,831	1,404,933	1,437,360	1,453,047	1,408,109	1,209,300	1,076,654	1,134,389	1,221,454	2.50	7.7		
* Millbrae		1,538,120	3.15	1,528,426	3.13	1,199,327	1,168,008	1,094,867	1,075,971	1,034,254	1,113,147	1,134,741	991,049	899,785	918,695	992,853	2.03	8.1		
* North Coast CWD		1,872,928	3.84	1,618,649	3.32	1,582,423	1,632,364	1,471,838	1,585,572	1,380,360	1,192,485	1,387,578	1,360,780	900,293	1,089,419	1,169,151	2.40	7.3		
* Redwood City		5,333,115	10.93	5,253,772	10.77	5,711,397	5,048,309	4,689,257	4,462,944	4,420,594	4,747,255	4,407,672	3,789,370	3,508,414	3,820,098	4,130,668	8.47	8.1		
San Bruno		1,583,899	3.25	1,748,600	3.58	968,953	925,521	735,442	775,910	1,017,925	946,503	779,582	584,392	637,586	383,693	419,589	0.86	9.4		
Skyline				62,726	0.13	76,864	Included with CWS-Bear Gulch													
* Westborough WD		644,172	1.32	585,151	1.20	457,299	485,493	394,878	408,487	440,796	441,233	433,980	377,034	390,753	356,722	383,996	0.79	7.6		
Subtotal		45,118,607	92.46	43,688,110	89.53	43,142,482	40,655,244	36,483,853	35,974,701	36,846,690	36,390,933	36,861,479	31,817,573	28,073,098	28,726,490	31,456,987	64.47	9.5		
Santa Clara County																				
Milpitas		4,504,533	9.23	4,370,757	8.96	3,346,012	3,373,223	3,044,020	2,954,096	3,060,055	3,115,000	3,194,000	2,503,640	2,215,396	2,391,431	2,538,687	5.20	6.2		
Mountain View		6,079,714	12.46	6,435,554	13.19	5,074,103	4,788,905	4,332,561	4,162,626	4,346,523	4,389,474	4,373,263	3,611,194	3,305,780	3,485,016	3,617,700	7.41	3.8		
* Palo Alto		8,087,730	16.57	8,009,767	16.41	6,205,790	5,677,018	5,362,816	5,440,236	5,561,559	5,547,735	5,600,519	4,723,751	4,006,084	4,382,560	4,859,576	9.96	10.9		
* Purissima Hills		792,832	1.62	755,077	1.55	1,124,922	980,987	854,854	839,360	899,221	972,733	982,100	803,313	640,369	689,261	814,270	1.67	18.1		
San Jose		0	0.00	1,541,153	3.16	2,394,495	2,185,349	1,998,932	2,035,953	2,172,405	2,173,663	2,272,262	2,151,905	1,997,596	2,024,785	2,208,892	4.53	9.1		
Santa Clara		0	0.00	2,429,766	4.98	1,618,029	1,307,380	1,105,658	1,055,675	910,029	1,118,315	1,012,567	914,572	1,135,829	970,987	1,039,840	2.13	7.1		
Stanford		1,479,764	3.03	1,485,396	3.04	1,125,377	1,045,886	1,043,864	1,035,726	1,051,794	1,024,012	1,024,277	923,813	679,394	695,088	725,276	1.49	4.3		
Sunnyvale		6,138,122	12.58	7,228,076	14.81	5,072,437	5,181,026	4,771,741	4,043,548	4,436,721	4,526,510	4,046,527	3,874,640	3,894,246	4,066,178	4,435,240	9.09	9.1		
Subtotal		27,082,695	55.50	32,255,546	66.10	25,961,165	24,539,774	22,514,446	21,567,221	22,438,307	22,867,442	22,505,515	19,506,828	17,874,694	18,705,306	20,239,481	41.48	8.2		
Alameda County																				
Alameda CWD		6,714,439	13.76	6,039,273	12.38	6,534,358	5,477,714	5,102,005	3,825,797	4,052,940	4,371,390	5,684,760	3,770,320	3,037,166	3,081,217	3,716,845	7.62	20.6		
* Hayward	1	7,101,954	14.55	8,504,158	17.43	9,434,134	9,105,654	8,511,066	8,308,740	7,610,980	7,552,956	7,402,067	6,634,616	5,979,616	6,281,522	7,101,954	14.55	13.1		
Residual	1	3,768,401	7.72																	
Subtotal		17,584,794	36.04	14,543,431	29.80	15,968,492	14,583,368	13,613,071	12,134,537	11,663,920	11,924,346	13,086,827	10,404,936	9,016,782	9,362,739	10,818,799	22.17	15.6		
Total		89,786,096	184.00	90,487,087	185.44	85,072,140	79,778,386	72,611,370	69,676,459	70,948,917	71,182,721	72,453,821	61,729,337	54,964,574	56,794,535	62,515,266	128.11	10.1		
mgd equiv		184.00		185.44		174.34	163.49	148.80	142.79	145.40	145.88	148.48	126.50	112.64	116.39	128.11				
Total w/o SC&SJ		89,786,096		86,516,168		81,059,616	76,285,657	69,506,780	66,584,830	67,866,483	67,890,743	69,168,992	58,662,860	51,831,149	53,798,763	59,266,535	121.46	10.2		
mgd equiv		184.00		177.30		166.12	156.33	142.44	136.45	139.08	139.13	141.75	120.22	106.22	110.25	121.46				
* Agencies receiving 100% of their supply from the SF RWS (16 total). ** Inclusive of Guadalupe Valley MID beginning in FY 2010-11. *** Inclusive of Bear Gulch, Mid-Peninsula, and South San Francisco districts.																				
1 Hayward has a unique contract that does not place quantified limits on their purchases from SF RWS. For reporting purposes here, the "supply guarantee" shown for Hayward is their current year purchase (FY 2017-18). The "Residual" total is a calculated number to bring the total to 184 mgd.																				
Note: Some agencies purchase SF RWS water which is then conveyed to a neighboring agency. The receiving agency is credited with this purchase; the transferring agency debited. This does not include the specific purchase of water by the City of San Bruno from North Coast County Water District or the specific purchase of water by the City of Menlo Park from the City of East Palo Alto.																				
Note: Beginning in 2002, Daly City, CWS-South San Francisco, and San Bruno began participating in a pilot conjunctive use program whereby surplus surface water was purchased in lieu of groundwater pumping. Additional surface water supplies are utilized in lieu of groundwater pumping when available. Values shown above exclude supplemental water purchases.																				
Note: In June 2017, Mountain View transferred 1 mgd of Supply Guarantee to East Palo Alto. In July 2018, Palo Alto transferred 0.5 mgd of lsg to East Palo Alto. The Supply Guarantee in the above table reflects these transfers.																				
Source: BAWSCA Annual Surveys																				

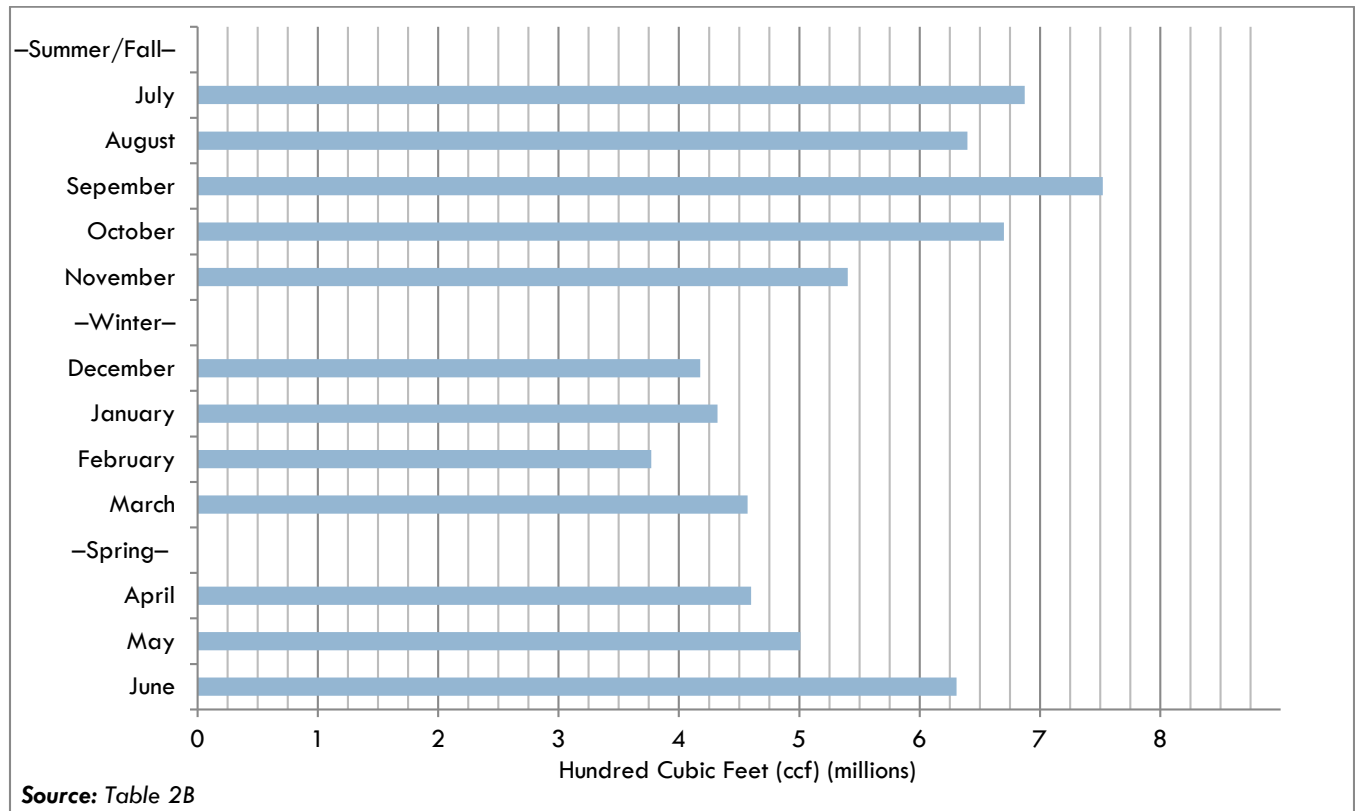
Figure 2B: Monthly/Seasonal Purchases from SF RWS among BAWSCA Members – FY 2017-18

Table 2B: Monthly/Seasonal Purchases from SF RWS Among BAWSCA Members – FY 2017-18 (in ccf)
SFPUC Commercial Division Records Data¹

	Summer/Fall						Winter					Spring				Year		
Member	July	Aug	Sept	Oct	Nov	Total	Dec	Jan	Feb	March	Total	April	May	June	Total	Total	mgd	
* Alameda CWD	345,111	329,476	482,798	364,104	252,774	1,774,262	145,681	171,148	165,789	510,111	992,728	470,142	363,775	274,762	1,108,679	3,875,669	7.94	
Brisbane	23,215	17,860	21,474	21,767	18,507	102,823	15,229	14,300	15,637	15,126	60,292	17,335	16,137	18,345	51,817	214,932	0.44	
Burlingame	184,864	173,599	191,347	152,499	111,461	813,770	97,490	103,288	85,757	176,986	463,521	116,930	99,525	180,857	397,312	1,674,603	3.43	
* CWS - Bear Gulch	632,856	529,269	794,544	571,216	393,496	2,921,381	177,954	207,459	194,697	242,452	822,562	257,242	414,119	613,777	1,285,138	5,029,081	10.31	
CWS - Mid Peninsula	604,134	599,226	674,967	567,876	422,922	2,869,125	496,707	406,349	368,369	435,661	1,707,086	379,589	435,617	625,908	1,441,114	6,017,325	12.33	
* CWS - South SF 2	297,402	261,606	330,024	277,922	317,669	1,484,624	237,662	227,251	213,696	215,213	893,822	222,283	218,947	288,940	730,171	3,108,618	6.37	
* Coastside CWD	62,115	10,044	6,013	153,094	60,710	291,976	16,429	12,225	14,660	21,011	64,325	22,008	43,562	46,348	111,918	468,219	0.96	
* Daly City 2	282,042	211,878	253,295	253,678	235,597	1,236,490	243,613	222,501	218,466	200,806	885,386	234,200	217,123	260,631	711,953	2,833,829	5.81	
East Palo Alto	69,946	66,900	82,127	68,901	59,579	347,453	57,728	62,257	51,502	58,125	229,612	56,080	62,033	77,351	195,464	772,530	1.58	
Estero MID	214,241	218,937	244,268	216,739	158,664	1,052,849	123,417	134,740	112,206	140,992	511,355	124,275	157,997	218,191	500,463	2,064,667	4.23	
Guadalupe Valley MID	15,305	11,581	14,861	12,318	10,998	65,063	8,102	7,523	7,161	8,281	31,067	7,958	8,093	12,690	28,741	124,871	0.26	
Hayward	651,966	680,802	808,687	668,745	580,438	3,390,638	476,264	560,455	452,490	468,250	1,957,459	461,268	615,595	676,994	1,753,857	7,101,954	14.55	
Hillsborough	171,650	163,662	181,818	151,660	108,267	777,056	55,510	56,978	40,006	58,827	211,321	44,193	75,734	141,023	260,950	1,249,328	2.56	
Menlo Park	148,673	147,061	176,245	140,402	99,749	712,130	77,391	76,208	71,556	79,510	304,665	88,274	122,765	165,591	376,630	1,393,425	2.86	
Mid-Peninsula WD	129,949	118,443	134,581	132,830	98,269	614,072	74,630	88,106	69,087	80,122	311,945	81,165	95,256	120,051	296,472	1,222,489	2.51	
Millbrae	98,590	102,958	117,292	98,069	75,666	492,575	65,737	72,653	60,799	64,589	263,778	68,053	69,721	98,726	236,501	992,854	2.03	
* Milpitas	250,694	281,900	246,190	265,656	219,990	1,264,430	176,773	172,346	159,597	158,868	667,584	224,990	167,401	220,551	612,942	2,544,956	5.22	
* Mountain View	451,141	346,782	394,324	386,575	327,652	1,906,474	241,722	231,551	216,175	228,966	918,414	243,090	258,881	353,056	855,027	3,679,915	7.54	
* North Coast CWD	118,142	107,676	111,923	111,541	92,078	541,360	85,412	96,123	88,257	100,970	370,762	81,668	87,875	104,523	274,066	1,186,188	2.43	
Palo Alto	549,923	495,860	598,421	481,926	368,215	2,494,345	290,508	286,178	269,908	292,955	1,139,549	296,509	402,981	526,192	1,225,682	4,859,576	9.96	
Purissima Hills WD	95,575	109,159	104,665	104,988	85,167	499,554	39,390	40,483	25,548	38,859	144,280	30,678	48,216	84,728	163,622	807,455	1.65	
Redwood City	424,878	415,933	440,659	439,271	313,756	2,034,497	251,942	287,138	234,102	284,322	1,057,503	292,261	324,816	400,917	1,017,994	4,109,993	8.42	
* San Bruno 2	142,647	113,342	135,352	130,261	181,856	703,458	97,616	105,668	91,872	87,626	382,782	93,886	92,934	122,593	309,413	1,395,653	2.86	
* San Jose MWS-North	200,037	219,462	243,137	232,113	194,649	1,089,398	156,640	149,629	142,488	146,382	595,139	162,569	158,939	192,102	513,610	2,198,147	4.50	
* Santa Clara	91,229	52,996	96,538	104,781	94,033	439,577	78,705	82,506	74,429	81,327	316,967	96,646	63,196	85,345	245,187	1,001,731	2.05	
* Stanford University	74,783	81,827	82,722	73,215	59,409	371,956	43,825	41,229	45,262	42,299	172,615	45,296	59,480	75,929	180,705	725,276	1.49	
* Sunnyvale	511,571	497,437	517,573	484,666	427,328	2,438,575	312,574	371,429	254,264	310,353	1,248,620	343,181	301,644	283,467	928,292	4,615,487	9.46	
Westborough WD	29,972	31,001	37,347	34,160	32,835	165,315	31,185	32,780	26,417	21,983	112,365	37,294	26,610	36,586	100,490	378,170	0.77	
Totals	6,872,651	6,396,676	7,523,193	6,700,973	5,401,734	32,895,226	4,175,835	4,320,500	3,770,198	4,570,972	16,837,505	4,599,063	5,008,972	6,306,175	15,914,209	65,646,941	134.53	
Seasonal Comparisons						Summer/Fall	Winter					Spring				Year		
						2007-08				2007-08	19,711,571				2007-08	23,073,285	84,618,323	173.41
						2008-09				2008-09	18,732,019				2008-09	19,172,178	80,034,009	164.01
						2009-10				2009-10	18,057,011				2009-10	16,469,283	73,920,589	151.49
						2010-11				2010-11	16,817,330				2010-11	16,303,549	71,165,207	145.84
						2011-12				2011-12	18,786,621				2011-12	16,953,589	70,630,209	144.74
						2012-13				2012-13	17,236,235				2012-13	19,027,049	72,190,436	147.94
						2013-14				2013-14	18,958,782				2013-14	17,488,648	73,050,233	149.70
						2014-15				2014-15	16,571,143				2014-15	14,502,045	62,477,367	128.04
						2015-16				2015-16	14,369,236				2015-16	14,124,948	54,487,870	111.66
						2016-17				2016-17	14,458,909				2016-17	15,679,219	58,981,500	120.87
						2017-18				2017-18	16,837,505				2017-18	15,914,209	65,646,941	134.53
Since 1983-84						2003-04				1987-88	21,979,000				1986-87	25,083,000	1986-87	185.31
						Record Low:	2015-16			1983-84	13,429,000				1990-91	13,464,000	2015-16	111.66

¹ Data in this table is derived from SFPUC sales records, and since local agency customer meters are read throughout the month, figures reported here may not match agency purchase numbers shown in other parts of the survey or represent actual monthly use for the month shown (i.e., June figures could include partial May purchases depending on when meters are read).

² Beginning in FY 2002-03, these agencies began participating in a conjunctive use study with the SFPUC. Additional surface water supplies are utilized in lieu of groundwater pumping when available. Impacts to the groundwater basin are being monitored. Totals shown include supplemental purchases for Daly City, CWS - South SF, and San Bruno. See Table 2D.

* Agency has other sources besides SF RWS.

Source: SFPUC Commercial Division Records

**Table 2C: Historical SF RWS Wholesale Water Purchases by BAWUA/BAWSCA Agencies*
FY 1930-31 to Present**

Year	ccf	mgd	acre feet	% Change	Year	ccf	mgd	acre feet	% Change
1930-31	1,512,700	3.1	3,473		1970-71	64,753,340	132.7	148,653	-4.5
1931-32	1,366,310	2.8	3,137	-9.7	1971-72	69,486,629	142.4	159,519	7.3
1932-33	1,317,513	2.7	3,025	-3.6	1972-73	65,046,121	133.3	149,325	-6.4
1933-34	1,268,717	2.6	2,913	-3.7	1973-74	68,705,880	140.8	157,727	5.6
1934-35	1,171,123	2.4	2,689	-7.7	1974-75	71,145,722	145.8	163,328	3.6
1935-36	1,219,920	2.5	2,801	4.2	1975-76	75,147,059	154.0	172,514	5.6
1936-37	1,659,091	3.4	3,809	36.0	1976-77	65,143,717	133.5	149,549	-13.3
1937-38	2,439,840	5.0	5,601	47.1	1977-78	48,113,636	98.6	110,454	-26.1
1938-39	3,122,995	6.4	7,169	28.0	1978-79	62,899,064	128.9	144,396	30.7
1939-40	4,391,711	9.0	10,082	40.6	1979-80	66,558,824	136.4	152,798	5.8
1940-41	3,562,166	7.3	8,178	-18.9	1980-81	72,463,235	148.5	166,353	8.9
1941-42	3,757,353	7.7	8,626	5.5	1981-82	71,828,877	147.2	164,896	-0.9
1942-43	4,196,524	8.6	9,634	11.7	1982-83	70,950,535	145.4	162,880	-1.2
1943-44	5,562,834	11.4	12,771	32.6	1983-84	79,441,176	162.8	182,372	12.0
1944-45	8,734,625	17.9	20,052	57.0	1984-85	82,759,358	169.6	189,989	4.2
1945-46	8,393,048	17.2	19,268	-3.9	1985-86	83,149,733	170.4	190,886	0.5
1946-47	9,076,203	18.6	20,836	8.1	1986-87	90,176,471	184.8	207,017	8.5
1947-48	9,612,968	19.7	22,068	5.9	1987-88	88,273,396	180.9	202,648	-2.1
1948-49	9,710,561	19.9	22,292	1.0	1988-89	67,241,979	137.8	154,366	-23.8
1949-50	9,564,171	19.6	21,956	-1.5	1989-90	78,221,257	160.3	179,571	16.3
1950-51	11,223,262	23.0	25,765	17.3	1990-91	64,509,358	132.2	148,093	-17.5
1951-52	12,784,759	26.2	29,350	13.9	1991-92	61,191,176	125.4	140,476	-5.1
1952-53	14,590,240	29.9	33,495	14.1	1992-93	64,899,733	133.0	148,989	6.1
1953-54	17,176,470	35.2	39,432	17.7	1993-94	72,707,219	149.0	166,913	12.0
1954-55	21,763,368	44.6	49,962	26.7	1994-95	71,596,604	146.7	164,363	-1.5
1955-56	23,324,866	47.8	53,547	7.2	1995-96	79,502,660	162.9	182,513	11.0
1956-57	25,911,095	53.1	59,484	11.1	1996-97	83,211,705	170.5	191,028	4.7
1957-58	22,690,507	46.5	52,090	-12.4	1997-98	77,305,829	158.4	177,470	-7.1
1958-59	27,814,170	57.0	63,853	22.6	1998-99	82,214,786	168.5	188,739	6.4
1959-60	30,937,165	63.4	71,022	11.2	1999-00	84,647,794	173.5	194,325	3.0
1960-61	32,010,694	65.6	73,486	3.5	2000-01	85,327,533	174.9	195,885	0.8
1961-62	34,255,347	70.2	78,639	7.0	2001-02	83,562,066	171.2	191,832	-2.1
1962-63	38,256,683	78.4	87,825	11.7	2002-03	82,654,243	169.4	189,748	-1.1
1963-64	44,161,095	90.5	101,380	15.4	2003-04	88,480,297	181.3	203,123	7.0
1964-65	47,430,480	97.2	108,885	7.4	2004-05	81,672,866	167.4	187,495	-7.7
1965-66	52,700,533	108.0	120,984	11.1	2005-06	80,255,145	164.5	184,240	-1.7
1966-67	54,652,405	112.0	125,465	3.7	2006-07	85,779,136	175.8	196,922	6.9
1967-68	63,972,592	131.1	146,861	17.1	2007-08	84,618,323	173.4	194,257	-1.4
1968-69	61,630,346	126.3	141,484	-3.7	2008-09	80,034,009	164.0	183,733	-5.4
1969-70	67,778,741	138.9	155,599	10.0	2009-10	73,920,589	151.5	169,698	-7.6
					2010-11	71,165,207	145.8	163,373	-3.7
					2011-12	70,630,209	144.7	162,145	-0.8
					2012-13	72,190,436	147.9	165,726	2.2
					2013-14	73,050,233	149.7	167,700	1.2
					2014-15	62,477,367	128.0	143,428	-14.5
					2015-16	54,487,870	111.7	125,087	-12.8
					2016-17	58,981,500	120.9	135,403	8.2
					2017-18	65,646,941	134.5	150,705	11.3

* These totals may differ slightly from other totals found in the survey due to source/rounding variables.

Note: The above totals are inclusive of supplemental water purchases. See Table 2D.

Source: SFPUC Commercial Division Records

Table 2D: Supplemental SF RWS Water Purchases by Participating BAWSCA Agencies (in ccf)

Year	CWS-South San Francisco	Daly City	San Bruno	Total ccf	Total mgd
2002-03	144,508	933,975	459,969	1,538,452	3.15
2003-04	167,334	774,615	482,564	1,424,513	2.92
2004-05	0	1,348,045	674,241	2,022,286	4.14
2005-06	0	1,479,323	0	1,479,323	3.03
2006-07	0	1,160,313	0	1,160,313	2.38
2007-08	0	0	0	0	0.00
2008-09	0	165,750	0	165,750	0.34
2009-10	0	904,856	0	904,856	1.85
2010-11	0	1,061,951	0	1,061,951	2.18
2011-12	0	0	0	0	0.00
2012-13	0	0	0	0	0.00
2013-14	0	0	0	0	0.00
2014-15	0	0	0	0	0.00
2015-16	38,981	146,803	83,663	269,447	0.55
2016-17	668,470	1,041,345	895,413	2,605,228	5.34
2017-18	668,470	1,060,963	890,214	2,619,647	5.37

Starting in FY 2002-03, Cal Water (South San Francisco), Daly City, and San Bruno participated in a pilot conjunctive use program whereby surplus SF RWS water was purchased (at a reduced rate) in lieu of pumping that same amount of water from the groundwater basin.

This program increases storage levels in the groundwater basin during times surplus water is available thereby making groundwater available to the regional system during dry periods when SF RWS water may be in short supply. As shown above, in FY 2007-08 and FY 2008-09 Daly City made little or no supplemental purchases, indicative of relatively dry years. Daly City's supplemental purchases increased in FY 2010-11, indicative of a wetter year. No supplemental purchases were made in FY 2011-12, FY 2012-13, FY 2013-14, or FY 2014-15 due to dry conditions.

Source: BAWSCA FY 2017-18 Annual Survey

3. Total Water Supply and Demand

**Table 3A: Historical Total Water Use by BAWSCA Agency (in ccf)
Inclusive of unaccounted for water and supplemental purchases**

Member	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	mgd
San Mateo County														
Brisbane / GVMID	191,963	200,437	182,661	179,743	123,803	275,934	280,650	287,290	302,776	280,029	257,414	294,756	334,217	0.68
Burlingame	2,121,360	2,209,757	2,195,474	2,086,616	1,920,815	2,117,999	2,158,682	2,099,365	2,148,019	1,937,939	1,652,167	1,738,444	1,842,356	3.78
CWS - Bear Gulch	5,925,540	6,673,025	6,867,205	6,413,044	5,762,738	5,794,705	6,004,849	6,116,162	6,259,793	5,267,634	4,194,432	4,506,722	5,165,363	10.59
CWS - Mid Peninsula	7,945,376	8,085,040	7,813,188	7,621,387	7,062,049	6,956,546	6,905,680	6,046,107	6,956,723	6,016,058	5,325,284	5,539,001	6,083,059	12.47
CWS - South SF	3,886,698	4,052,652	4,035,772	3,927,339	3,689,071	3,731,044	3,682,415	3,620,826	3,616,258	3,270,666	2,944,723	2,862,074	3,042,831	6.24
Coastside CWD	1,111,523	1,263,875	1,202,915	1,055,296	986,484	894,746	896,631	996,377	997,259	877,579	817,339	812,567	902,206	1.85
Cordilleras							Not BAWSCA Member							
Daly City	3,331,582	3,490,594	3,731,419	3,553,600	3,270,878	3,093,734	3,364,817	3,512,566	3,349,433	2,895,051	3,141,794	3,167,719	3,055,121	6.26
East Palo Alto	927,742	976,874	996,587	938,629	842,883	863,282	907,662	1,010,939	720,040	766,380	690,728	730,899	772,528	1.58
Estero MID	2,531,846	2,747,662	2,691,080	2,538,289	2,392,839	2,274,588	1,966,984	2,000,497	1,942,333	1,930,526	1,768,029	1,874,751	2,068,753	4.24
Guadalupe Valley MID	130,538	115,901	130,485	122,888	152,798				Included with Brisbane					
Hillsborough	1,936,854	1,630,593	1,665,884	1,786,177	1,893,039	1,743,929	1,470,409	1,609,532	1,599,812	1,226,777	1,050,944	1,139,003	1,234,547	2.53
Los Trancos							Included with CWS-Bear Gulch							
Menlo Park	1,688,803	1,735,075	1,857,088	1,628,275	1,556,801	1,533,788	1,621,745	1,584,636	1,729,399	1,287,136	1,074,516	1,153,760	1,393,425	2.86
Mid-Peninsula WD	1,434,648	1,652,208	1,583,791	1,533,876	1,390,831	1,404,933	1,437,360	1,453,047	1,408,109	1,209,300	1,076,654	1,134,389	1,221,454	2.50
Millbrae	1,291,729	1,194,450	1,199,327	1,179,720	1,101,551	1,087,971	1,046,254	1,125,147	1,146,741	1,003,049	899,785	930,695	992,865	2.03
North Coast CWD	1,579,110	1,538,215	1,582,423	1,632,364	1,471,838	1,585,572	1,380,360	1,192,485	1,392,872	1,364,900	914,081	1,105,206	1,169,151	2.40
Redwood City	5,315,929	5,701,245	5,823,781	5,091,014	4,891,124	4,734,338	4,719,085	5,057,308	4,730,885	4,099,699	3,790,431	4,114,869	4,462,425	9.14
San Bruno	1,868,846	1,821,102	1,908,564	1,877,662	1,780,704	1,771,040	1,770,007	1,752,095	1,747,722	1,529,900	1,519,903	1,429,544	1,488,555	3.05
Skyline	76,938	80,966	76,864					Included with CWS-Bear Gulch						
Westborough WD	459,831	532,529	457,299	485,493	394,878	408,487	440,796	441,233	433,980	377,034	390,753	356,722	383,996	0.79
Subtotal	43,756,856	45,702,200	46,001,808	43,651,411	40,685,124	40,272,636	40,054,386	39,905,612	40,482,154	35,339,657	31,508,977	32,891,121	35,612,852	72.98
mgd	89.67	93.66	94.27	89.46	83.38	82.53	82.08	81.78	82.96	72.42	64.57	67.40	72.98	
Santa Clara County														
Milpitas	5,400,800	5,505,034	5,548,937	5,470,765	4,878,858	4,835,475	4,937,407	4,975,000	4,908,500	4,462,023	4,030,280	4,159,187	4,407,989	9.03
Mountain View	5,750,554	6,116,445	5,774,334	5,547,956	5,080,734	5,025,675	5,232,110	5,234,742	5,263,373	4,435,583	3,854,816	4,125,019	4,293,493	8.80
Palo Alto	6,180,611	6,778,100	6,620,815	6,001,341	5,715,348	5,811,182	5,948,461	5,750,761	5,981,585	5,091,582	4,356,931	4,672,228	5,252,489	10.76
Purissima Hills WD	964,747	1,112,291	1,124,922	980,987	854,854	839,360	899,221	972,733	982,100	803,313	640,369	689,261	814,270	1.67
San Jose	2,362,632	2,569,248	2,674,031	2,437,246	2,187,918	2,239,892	2,356,648	2,354,211	2,676,663	2,521,675	2,391,807	2,325,602	2,626,952	5.38
Santa Clara	11,540,998	12,007,298	11,782,654	10,852,916	10,139,329	10,197,067	10,575,495	10,798,039	10,757,505	9,768,702	8,817,463	9,141,873	9,957,888	20.41
Stanford	1,446,902	1,576,978	1,722,672	1,573,920	1,545,411	1,558,914	1,604,702	1,624,555	1,553,272	1,396,374	1,073,556	1,148,562	1,264,778	2.59
Sunnyvale	10,673,793	10,887,010	10,695,118	10,369,022	9,354,936	9,132,594	8,465,724	9,453,326	8,994,820	7,795,081	7,208,816	7,744,448	8,333,441	17.08
Subtotal	44,321,037	46,552,404	45,943,483	43,234,153	39,757,387	39,640,158	40,019,768	41,163,367	41,117,818	36,274,333	32,374,038	34,006,180	36,951,300	75.72
mgd	90.83	95.40	94.15	88.60	81.48	81.24	82.01	84.36	84.26	74.34	66.34	69.69	75.72	
Alameda County														
Alameda CWD	23,112,968	24,048,399	23,829,489	22,126,618	20,665,490	20,921,497	21,108,246	21,209,862	20,274,011	16,751,709	15,804,948	16,986,244	18,057,620	37.01
Hayward	8,924,063	8,901,286	9,434,134	9,105,654	8,511,066	8,308,740	7,610,980	7,552,956	7,402,067	6,634,616	5,979,616	6,281,522	7,101,954	14.55
Subtotal	32,037,031	32,949,685	33,263,623	31,232,272	29,176,556	29,230,237	28,719,226	28,762,818	27,676,078	23,386,325	21,784,564	23,267,766	25,159,574	51.56
mgd	65.65	67.52	68.17	64.00	59.79	59.90	58.85	58.94	56.72	47.93	44.64	47.68	51.56	
Total	120,114,923	125,204,289	125,208,913	118,117,836	109,619,067	109,143,031	108,793,380	109,831,797	109,276,050	95,000,315	85,667,579	90,165,067	97,723,725	200.27
mgd	246.15	256.58	256.59	242.06	224.64	223.67	222.95	225.08	223.94	194.69	175.56	184.78	200.27	
% Change	-3.6	4.2	0.0	-5.7	-7.2	-0.4	-0.3	1.0	-0.5	-13.1	-9.8	5.2	8.4	
Note: Totals inclusive of supplemental purchases.														
Source: BAWSCA Annual Surveys														

**Table 3B: Historical Total Water Use among
BAWUA/BAWSCA Agencies*
1975-76 to Present**

Year	ccf	mgd	acre feet	% Change
1975-76	103,703,209	212.5	238,070	
1976-77	78,114,973	160.1	179,327	-24.7
1977-78	80,544,118	165.1	184,904	3.1
1978-79	90,148,396	184.7	206,952	11.9
1979-80	96,016,043	196.8	220,423	6.5
1980-81	101,655,080	208.3	233,368	5.9
1981-82	101,114,973	207.2	232,128	-0.5
1982-83	102,072,193	209.2	234,326	0.9
1983-84	114,223,262	234.1	262,221	11.9
1984-85	113,288,770	232.2	260,075	-0.8
1985-86	120,854,314	247.7	277,443	6.7
1986-87	127,159,730	260.6	291,919	5.2
1987-88	124,103,553	254.3	284,903	-2.4
1988-89	106,443,629	218.1	244,361	-14.2
1989-90	109,228,602	223.8	250,754	2.6
1990-91	99,723,401	204.4	228,933	-8.7
1991-92	96,016,663	196.8	220,424	-3.7
1992-93	99,696,012	204.3	228,871	3.8
1993-94	110,889,985	227.2	254,568	11.2
1994-95	107,889,859	221.1	247,681	-2.7
1995-96	119,077,619	244.0	273,365	10.4
1996-97	126,956,796	260.2	291,453	6.6
1997-98	118,081,751	242.0	271,078	-7.0
1998-99	124,630,030	255.4	286,111	5.5
1999-00	128,677,573	263.7	295,403	3.2
2000-01	128,905,099	264.2	295,925	0.2
2001-02	124,144,929	254.4	284,998	-3.7
2002-03	122,510,157	251.1	281,245	-1.3
2003-04	129,222,361	264.8	296,654	5.5
2004-05	119,049,118	244.0	273,299	-7.9
2005-06	120,114,923	246.2	275,746	0.9
2006-07	125,204,289	256.6	287,429	4.2
2007-08	125,208,913	256.6	287,440	0.0
2008-09	118,117,836	242.1	271,161	-5.7
2009-10	109,619,067	224.6	251,651	-7.2
2010-11	109,143,031	223.7	250,558	-0.4
2011-12	108,793,380	223.0	249,755	-0.3
2012-13	109,831,797	225.1	252,139	1.0
2013-14	109,276,050	223.9	250,863	-0.5
2014-15	95,000,315	194.7	218,091	-13.1
2015-16	85,667,579	175.6	196,666	-9.8
2016-17	90,165,067	184.8	206,991	5.2
2017-18	97,723,725	200.3	224,343	8.4

*Inclusive of unaccounted for water and supplemental purchases (see Table 2D).

Source: BAWUA/BAWSCA Annual Surveys

Figure 3C: Water Use by Source of Supply – FY 2017-18

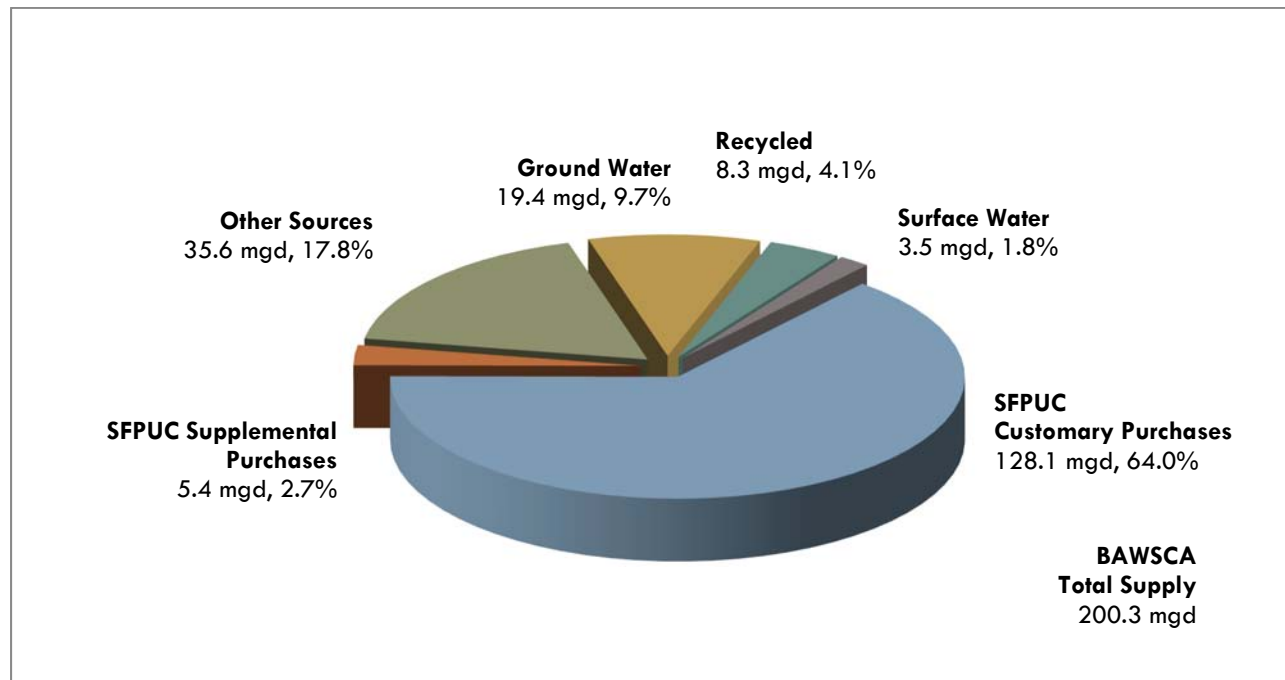


Figure 3D: Total Monthly Water Use for All BAWSCA Agencies – FY 2017-18

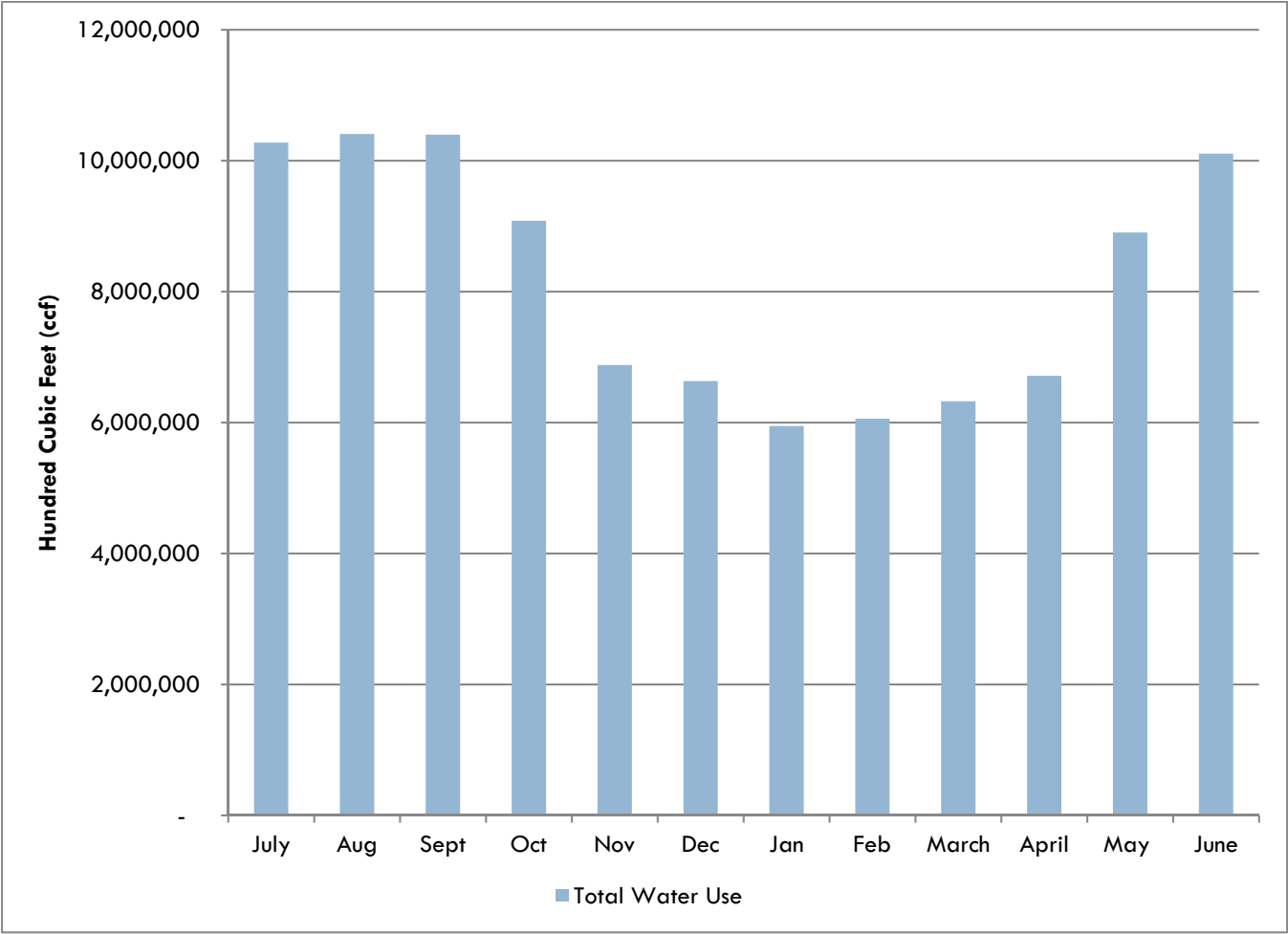


Table 3C: Water Use by Source of Supply – FY 2017-18 (in ccf)

	SF RWS Purchases			Local Sources (non-SF RWS)				Other Sources				Totals		
			% of	Ground	% of	Surface	% of	Recycled	% of	Other	% of	Total	mgd	% of
Member	Customary	Supplemental	Supply	Water	Supply	Water	Supply	Water	Supply	Sources	Supply	Supply	Equiv	Total
San Mateo County														
Brisbane / GVMID	334,217	0	100.0%	0	0%	0	0%	0	0%	0	0.0%	334,217	0.68	0.34%
Burlingame	1,695,956	0	92.1%	0	0%	0	0%	146,400	8%	0	0%	1,842,356	3.78	1.89%
CWS - Bear Gulch	5,000,555	0	96.8%	0	0%	164,808	3.2%	0	0%	0	0.0%	5,165,363	10.59	5.29%
CWS - Mid Peninsula	6,083,059	0	100.0%	0	0%	0	0.0%	0	0%	0	0%	6,083,059	12.47	6.22%
CWS - South SF	2,374,361	668,470	100.0%	0	0.0%	0	0%	0	0%	0	0%	3,042,831	6.24	3.11%
Coastside CWD	464,037	0	51.4%	29,278	3.2%	408,890	45.3%	0	0%	0	0.0%	902,206	1.85	0.92%
Daly City	1,717,837 *	1,060,963	91.0%	0	0.0%	0	0%	276,321	9.0%	0	0.00%	3,055,121	6.26	3.13%
East Palo Alto**	772,528	0	100.0%	0	0.00%	0	0%	0	0%	0	0%	772,528	1.58	0.79%
Estero MID	2,068,753	0	100.0%	0	0%	0	0%	0	0%	0	0%	2,068,753	4.24	2.12%
Hillsborough	1,234,547	0	100.0%	0	0%	0	0%	0	0%	0	0%	1,234,547	2.53	1.26%
Menlo Park	1,393,425	0	100.0%	0	0%	0	0%	0	0%	0	0.0%	1,393,425	2.86	1.43%
Mid-Peninsula WD	1,221,454	0	100.0%	0	0%	0	0%	0	0%	0	0%	1,221,454	2.50	1.25%
Millbrae	992,853	0	100.0%	0	0%	0	0%	12	0%	0	0%	992,865	2.03	1.02%
North Coast CWD	1,169,151	0	100.0%	0	0%	0	0%	0	0%	0	0%	1,169,151	2.40	1.20%
Redwood City	4,130,668	0	92.6%	0	0%	0	0%	331,757	7.4%	0	0%	4,462,425	9.14	4.57%
San Bruno	419,589	890,214	88.0%	155,341	10.4%	0	0%	0	0%	23,411	1.6% †	1,488,555	3.05	1.52%
Westborough WD	383,996	0	100.0%	0	0%	0	0%	0	0%	0	0%	383,996	0.79	0.39%
Subtotal	31,456,987	2,619,647	95.7%	184,619	0.5%	573,698	1.6%	754,490	2.12%	23,411	0.1%	35,612,852	72.98	36.44%
mgd equiv	64.47	5.37		0.38		1.18		1.55		0.05		72.98		
Santa Clara County														
Milpitas	2,538,687	0	57.6%	0	0%	0	0%	490,724	11.1%	1,378,578	31.3%	4,407,989	9.03	4.51%
Mountain View	3,617,700	0	84.3%	49,973	1.2%	0	0%	197,365	5%	428,455	10.0%	4,293,493	8.80	4.39%
Palo Alto	4,859,576	0	92.5%	0	0%	0	0%	392,913	7.5%	0	0%	5,252,489	10.76	5.37%
Purissima Hills WD	814,270	0	100.0%	0	0%	0	0%	0	0%	0	0%	814,270	1.67	0.83%
San Jose	2,208,892	0	84.1%	0	0.0%	0	0%	418,060	15.9%	0	0%	2,626,952	5.38	2.69%
Santa Clara	1,039,840	0	10.4%	5,285,829	53.1%	0	0%	1,660,829	16.7%	1,971,390	19.8%	9,957,888	20.41	10.19%
Stanford***	725,276	0	57.3%	241,503	19.1%	256,275	20.3%	0	0%	41,724	3%	1,264,778	2.59	1.29%
Sunnyvale	4,435,240	0	53.2%	49,601	0.6%	0	0%	114,275	1.4%	3,734,325	44.8%	8,333,441	17.08	8.53%
Subtotal	20,239,481	0	54.8%	5,626,906	15.2%	256,275	0.7%	3,274,166	8.9%	7,554,473	20.4%	36,951,300	75.72	37.81%
mgd equiv	41.48	0.00		11.53		0.53		6.71		15.48		75.72		
Alameda County														
Alameda CWD	3,716,845	0	20.6%	3,647,727	20.2%	898,047	5.0%	0	0%	9,795,001	54.2%	18,057,620	37.01	18.5%
Hayward	7,101,954	0	100.0%	0	0%	0	0%	0	0%	0	0.0%	7,101,954	14.55	7.3%
Subtotal	10,818,799	0	43.0%	3,647,727	14.5%	898,047	3.6%	0	0%	9,795,001	38.9%	25,159,574	51.56	25.75%
mgd equiv	22.17	0.00		7.48		1.84				20.07		51.56		
Total	62,515,266	2,619,647	66.7%	9,459,252	9.7%	1,728,020	1.8%	4,028,656	4.1%	17,372,885	17.8%	97,723,725	200.27	100.0%
mgd equiv	128.11	5.37		19.38		3.54		8.26		35.60		200.27		
*The total recycled water noted here is the portion that actually replaces a potable supply.											† Purchase of SF RWS supply from NCCWD.			
**Excludes resale SFPUC supply sold.														
***Groundwater and surface water are non-potable supply for irrigation. The "other source" is captured construction dewatering water.														

Table 3D: Total Monthly Water Use – FY 2017-18 (in ccf)

Member	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	Total	mgd
San Mateo County														
Brisbane / GVMID	29,441	36,232	34,085	29,505	23,331	21,823	22,798	23,407	25,293	24,230	31,035	33,037	334,217	0.68
Burlingame	195,470	193,640	172,634	172,720	136,595	127,923	124,588	117,926	127,087	134,334	163,114	176,325	1,842,356	3.78
CWS - Bear Gulch	666,369	641,329	600,916	543,707	297,995	269,345	216,609	269,398	220,590	305,953	508,499	624,655	5,165,363	10.59
CWS - Mid Peninsula	659,910	635,861	601,606	576,617	418,652	417,522	389,648	393,383	396,853	427,086	561,171	604,750	6,083,059	12.47
CWS - South SF	300,454	296,402	285,679	282,510	228,700	227,558	212,758	209,427	226,813	224,245	268,027	280,258	3,042,831	6.24
Coastside CWD	97,152	93,676	81,297	90,241	76,484	62,099	51,324	58,556	70,321	59,880	78,890	82,286	902,206	1.85
Daly City	260,300	283,575	278,945	262,829	257,610	232,487	215,297	212,650	236,325	229,529	306,660	278,914	3,055,121	6.26
East Palo Alto	69,946	66,900	82,127	68,901	59,579	57,728	62,257	51,502	58,125	56,080	62,032	77,351	772,528	1.58
Estero MID	218,937	244,268	216,739	158,664	123,417	134,740	112,206	140,992	124,275	157,997	218,191	218,327	2,068,753	4.24
Hillsborough	163,661	181,820	151,658	108,267	55,563	56,977	40,005	58,826	44,192	75,734	141,023	156,821	1,234,547	2.53
Menlo Park	148,673	147,061	176,245	140,402	99,749	77,391	76,208	71,556	79,510	88,274	122,765	165,591	1,393,425	2.86
Mid-Peninsula WD	132,165	130,327	119,512	120,864	85,066	80,589	74,736	77,983	77,308	84,883	112,094	125,927	1,221,454	2.50
Millbrae	98,591	102,959	117,293	98,070	75,667	65,738	72,654	60,800	64,590	68,054	69,722	98,727	992,865	2.03
North Coast CWD	104,226	109,818	109,446	89,088	84,469	95,938	88,257	100,870	81,668	87,280	102,008	116,083	1,169,151	2.40
Redwood City	454,986	501,217	482,045	348,095	268,709	293,650	239,026	295,010	301,018	340,640	435,949	502,080	4,462,425	9.14
San Bruno	128,315	150,476	145,326	124,650	111,340	121,130	102,571	103,747	108,783	109,093	138,048	145,076	1,488,555	3.05
Westborough WD	31,001	37,347	34,160	32,835	31,185	32,780	26,417	21,983	37,294	26,610	36,586	35,798	383,996	0.79
Subtotal	3,759,597	3,852,908	3,689,713	3,247,965	2,434,111	2,375,418	2,127,358	2,268,016	2,280,044	2,499,901	3,355,815	3,722,006	35,612,852	72.98
% of Annual Use	11%	11%	10%	9%	7%	7%	6%	6%	6%	7%	9%	10%		
Santa Clara County														
Milpitas	414,405	381,657	560,932	355,540	282,572	428,799	258,796	255,863	392,593	284,595	349,145	443,092	4,407,989	9.03
Mountain View	440,614	478,808	461,664	396,988	278,294	268,972	243,656	265,658	273,563	302,756	420,353	462,167	4,293,493	8.80
Palo Alto	578,993	544,210	640,101	516,573	393,477	315,773	307,739	298,988	320,265	326,237	441,051	569,082	5,252,489	10.76
Purissima Hills WD	109,159	104,665	104,987	85,167	39,390	40,483	25,548	38,859	30,678	48,216	84,728	102,390	814,270	1.67
San Jose	304,578	262,723	333,024	202,216	222,836	163,049	155,972	152,412	186,386	164,567	254,219	224,970	2,626,952	5.38
Santa Clara	1,029,545	1,088,904	997,193	951,872	706,818	757,086	581,952	648,930	626,203	745,187	810,829	1,013,369	9,957,888	20.41
Stanford	152,385	190,064	157,363	135,618	90,998	52,685	55,436	55,744	59,112	54,891	100,334	160,148	1,264,778	2.59
Sunnyvale	883,087	891,862	835,163	772,258	570,833	541,326	488,386	521,972	537,776	602,696	807,881	880,201	8,333,441	17.08
Subtotal	3,912,767	3,942,893	4,090,426	3,416,232	2,585,218	2,568,173	2,117,485	2,238,427	2,426,577	2,529,145	3,268,539	3,855,419	36,951,300	75.72
% of Annual Use	11%	11%	11%	9%	7%	7%	6%	6%	7%	7%	9%	10%		
Alameda County														
Alameda CWD	1,952,139	1,929,144	1,807,754	1,748,129	1,279,144	1,212,567	1,141,979	1,099,599	1,149,999	1,221,659	1,662,968	1,852,539	18,057,620	37.01
Hayward	651,966	680,802	808,687	668,745	580,438	476,264	560,455	452,490	468,250	461,268	615,595	676,994	7,101,954	14.55
Subtotal	2,604,105	2,609,946	2,616,441	2,416,874	1,859,582	1,688,831	1,702,434	1,552,089	1,618,249	1,682,927	2,278,563	2,529,533	25,159,574	51.56
% of Annual Use	10%	10%	10%	10%	7%	7%	7%	6%	6%	7%	9%	10%		
Total	10,276,469	10,405,747	10,396,580	9,081,070	6,878,911	6,632,421	5,947,278	6,058,532	6,324,870	6,711,974	8,902,917	10,106,958	97,723,725	200.27
% of Annual Use	11%	11%	11%	9%	7%	7%	6%	6%	6%	7%	9%	10%		
Note: Totals inclusive of supplemental purchases.														
Source: BAWSCA FY 2017-18 Annual Survey														

Table 3E-1: Demand Projections by Source (in mgd)**Purchases from SF RWS**

Member	FY 2020-21	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41
San Mateo County					
Brisbane / GVMID	0.69	0.97	0.97	0.97	0.97
Burlingame	4.79	4.91	5.04	5.19	5.23
CWS - Bear Gulch	11.70	11.71	11.82	11.95	12.10
CWS - Mid-Peninsula	15.44	15.46	15.61	15.83	16.12
CWS - South SF	6.27	6.29	6.36	6.46	6.58
CWS Total	33.41	33.46	33.79	34.24	34.80
Coastside CWD	1.30	1.30	1.30	1.30	1.30
Daly City	4.29	4.29	4.29	4.29	4.29
East Palo Alto	3.46	3.46	3.46	3.46	3.46
Estero MID	4.12	4.14	4.21	4.27	4.31
Hillsborough	3.09	3.05	3.02	3.00	2.99
Menlo Park	4.47	4.47	4.47	4.47	4.47
Mid-Peninsula WD	3.06	3.10	3.12	3.15	3.20
Millbrae	2.60	2.70	2.70	2.80	3.00
North Coast CWD	3.20	3.20	3.20	3.20	3.20
Redwood City	9.97	10.25	10.36	10.54	10.79
San Bruno	2.38	2.69	3.03	3.25	3.25
Westborough WD	0.83	0.82	0.80	0.80	0.80
Subtotal	81.66	82.80	83.76	84.92	86.05
Santa Clara County					
Milpitas	5.00	6.07	7.15	8.21	9.27
Mountain View	8.52	8.67	8.90	9.16	9.47
Palo Alto	10.60	10.20	9.90	9.70	9.50
Purissima Hills WD	1.78	1.75	1.72	1.71	1.71
San Jose	4.50	4.50	4.50	4.50	4.50
Santa Clara	4.50	4.50	4.50	4.50	4.50
Stanford	1.60	1.90	2.10	2.30	2.50
Sunnyvale	9.93	10.95	10.95	10.95	10.95
Subtotal	46.43	48.54	49.72	51.03	52.40
Alameda County					
Alameda CWD	7.68	8.26	8.84	9.42	10.00
Hayward	21.52	22.80	23.58	24.18	25.38
Subtotal	29.20	31.06	32.42	33.60	35.38
Total	157.28	162.40	165.90	169.55	173.83
Total w/o SJ & SC	148.28	153.40	156.90	160.55	164.83
Source: BAWSCA FY 2017-18 Annual Survey					

Table 3E-2: Demand Projections by Source (in mgd)**Groundwater Production**

Member	FY 2020-21	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41
San Mateo County					
CWS - South SF	1.37	1.37	1.37	1.37	1.37
Coastside CWD	0.01	0.01	0.01	0.01	0.01
Daly City	2.20	2.20	2.20	2.20	2.20
East Palo Alto	0.02	0.02	0.02	0.02	0.02
San Bruno	1.50	1.50	1.50	1.67	2.02
Subtotal	5.10	5.10	5.10	5.27	5.62
Santa Clara County					
Milpitas	0.60	0.73	2.15	2.46	2.78
Mountain View	0.51	0.51	0.52	0.54	0.55
San Jose	0.85	1.71	2.61	3.56	4.55
Santa Clara	9.10	9.60	9.60	9.90	10.40
Sunnyvale	0.40	0.30	0.30	0.30	0.30
Subtotal	11.46	12.85	15.18	16.76	18.58
Alameda County					
Alameda CWD	9.10	9.10	9.10	9.10	9.10
Total	25.66	27.05	29.38	31.13	33.30
<i>Source: BAWSCA FY 2017-18 Annual Survey</i>					

Table 3E-3: Demand Projections by Source (in mgd)**Surface Water Production**

Member	FY 2020-21	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41
San Mateo County					
CWS - Bear Gulch ¹	1.13	1.13	1.13	1.13	1.13
Coastside CWD ²	0.50	0.50	0.50	0.50	0.50
Subtotal	1.63	1.63	1.63	1.63	1.63
Alameda County					
Alameda CWD ³	5.20	5.20	5.20	5.20	5.20
Total	6.83	6.83	6.83	6.83	6.83
¹ Bear Gulch					
² Pilarcitos Creek and Denniston Creek					
³ Del Valle Reservoir					
<i>Source: BAWSCA FY 2017-18 Annual Survey</i>					

Table 3E-4: Demand Projections by Source (in mgd)**Recycled Water**

Member	FY 2020-21	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41
San Mateo County					
Burlingame	0.30	0.30	0.30	0.30	0.30
Daly City	6.16	6.16	6.16	6.16	6.16
Millbrae	0.01	0.01	0.01	0.01	0.01
North Coast CWD	0.20	0.20	0.20	0.20	0.20
Redwood City	0.80	0.96	1.12	1.28	1.44
Subtotal	7.47	7.63	7.79	7.95	8.11
Santa Clara County					
Milpitas	1.03	1.78	1.97	2.21	2.40
Mountain View	0.89	0.97	0.97	0.97	0.97
Palo Alto	0.76	0.76	0.76	0.76	0.76
San Jose	1.04	1.20	1.38	1.57	1.76
Santa Clara	4.60	4.60	4.60	4.60	4.60
Sunnyvale	1.30	1.40	1.50	1.50	1.50
Subtotal	9.62	10.71	11.18	11.61	11.99
Alameda County					
Hayward	3.10	3.10	3.10	3.10	3.10
Total	20.18	21.44	22.07	22.65	23.20

Source: BAWSCA FY 2017-18 Annual Survey

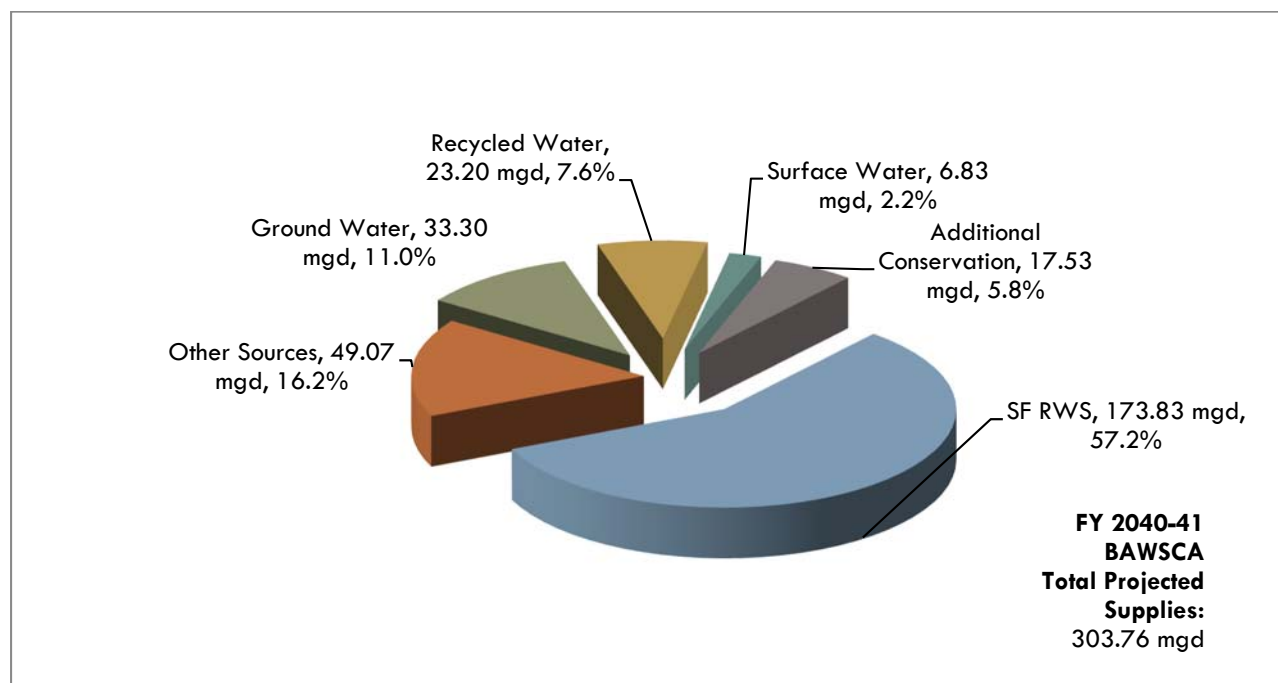
Table 3E-5: Demand Projections by Source (in mgd)**Other Sources**

Member	FY 2020-21	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41
San Mateo County					
San Bruno 4	0.05	0.05	0.05	0.05	0.05
Santa Clara County					
Milpitas 1	4.40	5.34	5.01	5.75	6.49
Mountain View 1	1.07	1.07	1.07	1.07	1.07
Santa Clara 1	4.70	4.70	4.70	4.70	4.7
Stanford 2	1.20	1.25	1.30	1.35	1.40
Sunnyvale 1	8.93	9.84	11.36	11.36	11.36
Subtotal	20.30	22.20	23.44	24.23	25.02
Alameda County					
Alameda CWD 3	20.12	23.44	24.36	24.18	24
Total	40.47	45.69	47.85	48.46	49.07
1 Purchases from SCVWD					
2 Non-potable surface water and groundwater					
3 Purchases from State Water Project and desalination					
4 Purchases from North Coast CWD					

Source: BAWSCA FY 2017-18 Annual Survey

Table 3E-6: Demand Projections by Source (in mgd)**Summary**

Source	FY 2020-21	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41
SF RWS	157.28	162.40	165.90	169.55	173.83
Groundwater	25.66	27.05	29.38	31.13	33.30
Surface Water	6.83	6.83	6.83	6.83	6.83
Recycled	20.18	21.44	22.07	22.65	23.20
Other	40.47	45.69	47.85	48.46	49.07
Additional Conservation	10.06	12.09	13.96	15.94	17.53
Total	260.49	275.50	285.98	294.57	303.76
Source: BAWSCA FY 2017-18 Annual Surveys					

Figure 3E: Demand Projections by Source – FY 2040-41 (in mgd)

SS

4. Current Water Use by Customer Class

Figure 4A: Potable Water Use by Customer Class – FY 2017-18

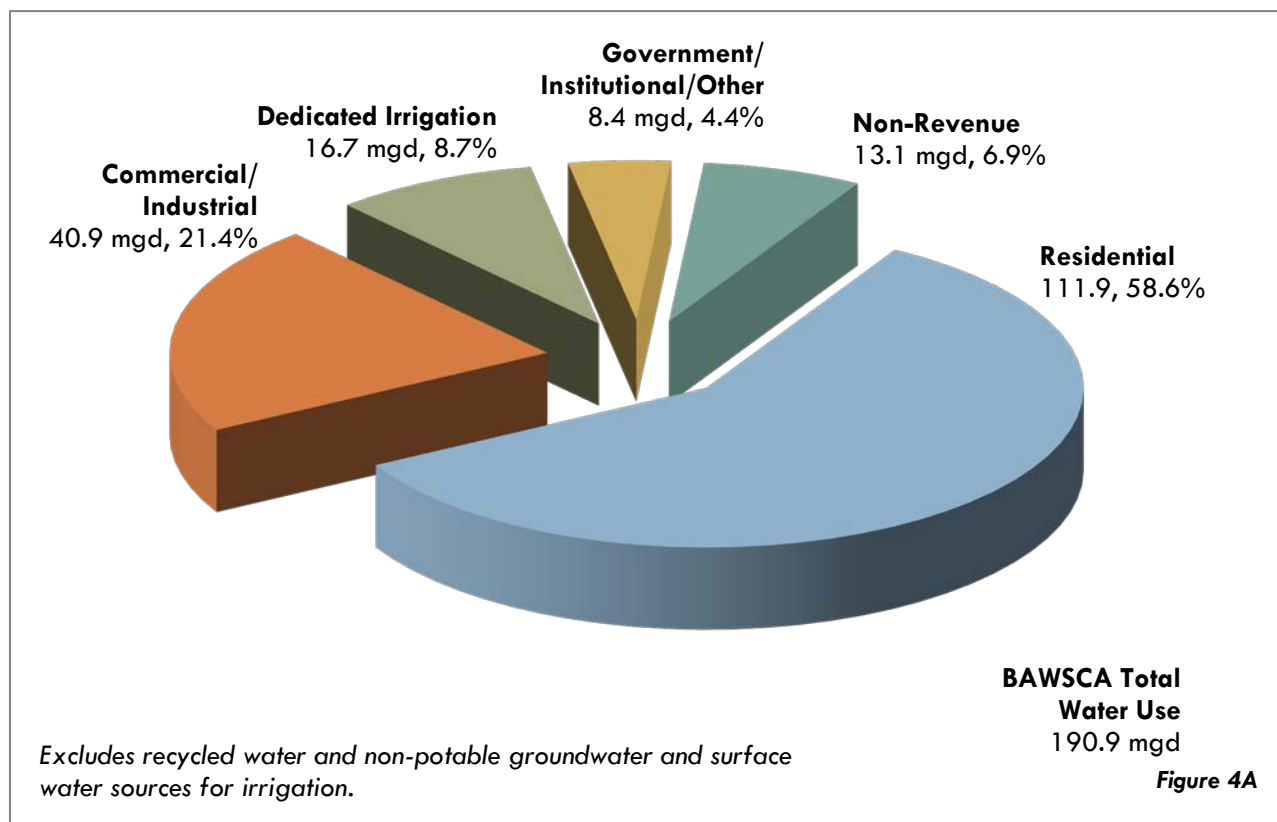


Figure 4B: Total Water Use by Customer Class – FY 2017-18

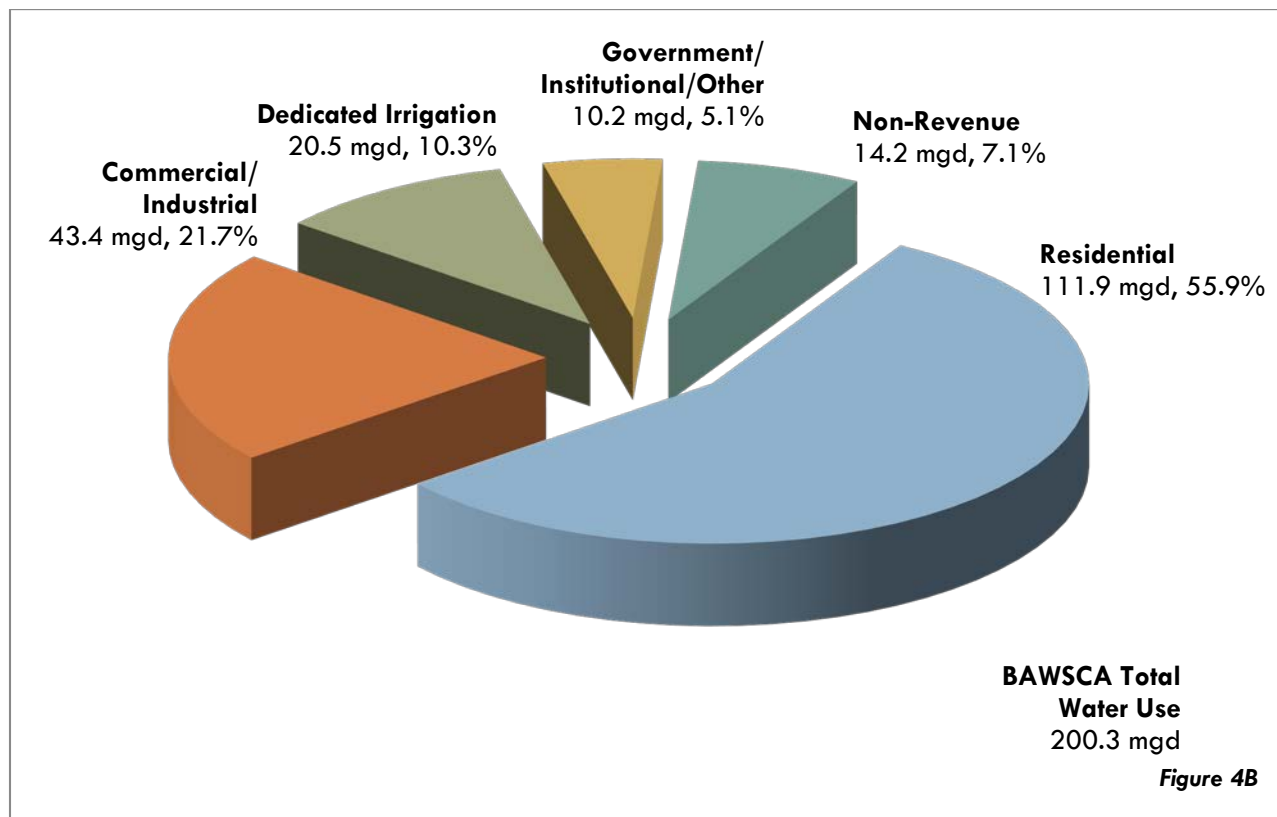


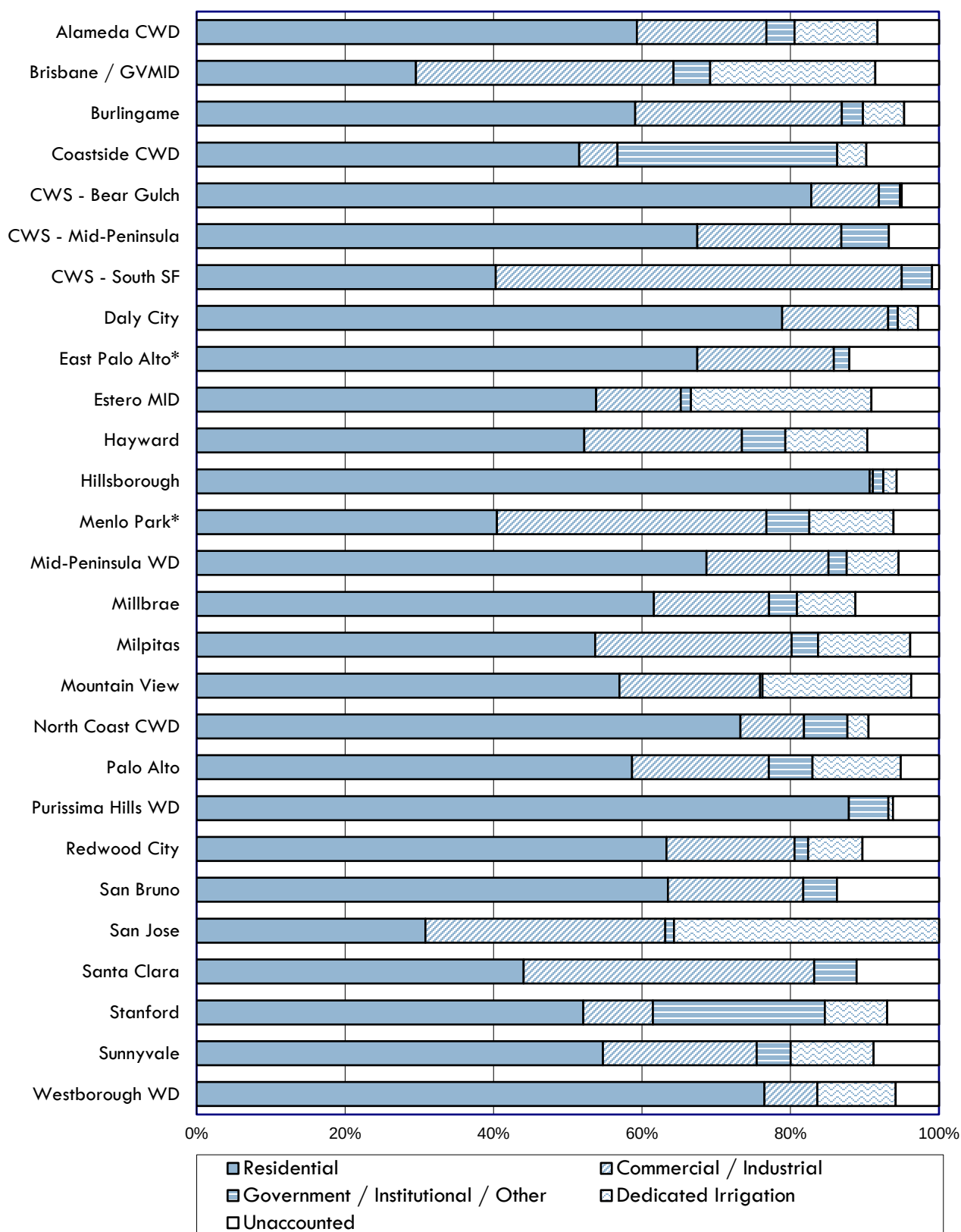
Figure 4C: Potable Water Use by Sector for BAWSCA Agencies – FY 2017-18**Figure 4B**

Table 4A: Potable Water Use by Customer Class – FY 2017-18 (in ccf)

Potable Water Use by Customer Class - FY 2017-18 (in ccf)												
	Residential			Non-Residential							Total Potable Consumption	
	Single	Multiple				Comm'l/Ind'l	Gov't/		Dedicated			
Member	Family	Family	Subtotal	Commercial	Industrial	Subtotal	Instit'l/Other	Subtotal	Irrigation†	Unaccounted		mgd
San Mateo County												
Brisbane / GVMID	83,048	15,721	98,769	115,945	0	115,945	16,449	132,394	74,357	28,697	334,217	0.68
Burlingame	697,815	304,322	1,002,137	245,541	226,177	471,718	48,409	520,127	94,238	79,454	1,695,956	3.48
CWS - Bear Gulch	4,159,649	117,146	4,276,795	469,157	971	470,128	146,964	617,092	12,430	259,046	5,165,363	10.59
CWS - Mid-Peninsula	3,250,645	852,331	4,102,976	1,159,913	20,582	1,180,495	388,192	1,568,687	0	411,396	6,083,059	12.47
CWS - South SF	1,082,828	143,616	1,226,444	1,400,443	263,660	1,664,103	123,328	1,787,431	0	28,956	3,042,831	6.24
Coastside CWD	420,235	44,664	464,899	46,566	0	46,566	165,626	212,192	136,865	88,250	902,206	1.85
Daly City	1,510,205	681,588	2,191,793	396,832	178	397,010	36,395	433,405	74,738	1,139,827	3,839,763	7.87
East Palo Alto*	521,090	0	521,090	134,845	7,256	142,101	16,082	158,183	0	93,255	772,528	1.58
Estero MID	463,622	649,650	1,113,272	201,308	34,978	236,286	28,093	264,379	503,058	188,044	2,068,753	4.24
Hillsborough	1,119,178	0	1,119,178	5,574	0	5,574	17,058	22,632	22,327	70,410	1,234,547	2.53
Menlo Park	420,782	142,891	563,673	239,458	266,542	506,000	80,463	586,463	158,074	85,215	1,393,425	2.86
Mid-Peninsula WD	660,924	177,824	838,748	155,393	45,688	201,081	29,635	230,716	85,637	66,353	1,221,454	2.50
Millbrae	454,703	156,710	611,413	154,123	0	154,123	37,467	191,590	78,080	111,770	992,853	2.03
North Coast CWD	704,069	152,393	856,462	100,196	0	100,196	68,359	168,555	33,007	111,127	1,169,151	2.40
Redwood City	1,838,864	775,529	2,614,393	661,712	50,556	712,268	76,353	788,621	302,042	425,612	4,130,668	8.47
San Bruno*	629,983	314,955	944,938	271,679	0	271,679	67,522	339,201	0	204,416	1,488,555	3.05
Westborough	255,461	38,244	293,705	27,315	0	27,315	0	27,315	40,529	22,447	383,996	0.79
Subtotal	18,273,101	4,567,584	22,840,685	5,786,000	916,588	6,702,588	1,346,395	8,048,983	1,615,382	3,414,274	35,919,324	73.61
mgd equiv	37.45	9.36	46.81	11.86	1.88	13.74	2.76	16.49	3.31	7.00	73.61	
Santa Clara County												
Milpitas	1,241,535	862,057	2,103,592	565,093	471,355	1,036,448	138,794	1,175,242	486,286	152,145	3,917,265	8.03
Mountain View	1,047,359	1,286,006	2,333,365	611,606	163,775	775,381	13,672	789,053	820,432	153,278	4,096,128	8.39
Palo Alto	2,020,184	830,766	2,850,950	758,044	136,339	894,383	286,059	1,180,442	578,501	249,683	4,859,576	9.96
Purissima Hills WD	715,387	0	715,387	0	0	0	43,425	43,425	4,888	50,570	814,270	1.67
San Jose**	92,801	727,493	820,295	184,772	674,753	859,525	30,556	890,081	949,964	-451,447	2,208,892	4.53
Santa Clara	1,869,713	1,784,098	3,653,811	2,515,354	733,486	3,248,840	473,068	3,721,908	0	921,340	8,297,059	17.00
Stanford	169,462	208,355	377,817	453	67,535	67,988	168,057	236,045	60,905	50,509	725,276	1.49
Sunnyvale	2,494,210	2,004,876	4,499,086	1,702,300	0	1,702,300	376,643	2,078,944	916,239	724,897	8,219,166	16.84
Subtotal	9,650,652	7,703,652	17,354,303	6,337,623	2,247,243	8,584,866	1,530,274	10,115,139	3,817,215	1,850,975	33,137,632	67.91
mgd equiv	19.78	15.79	35.56	12.99	4.61	17.59	3.14	20.73	7.82	3.79	67.91	
Alameda County												
Alameda CWD	7,511,684	3,196,996	10,708,680	2,148,082	1,004,610	3,152,692	683,279	3,835,971	2,018,205	1,494,764	18,057,620	37.01
Hayward	2,354,184	1,354,588	3,708,772	563,082	944,573	1,507,655	415,716	1,923,371	784,722	685,089	7,101,954	14.55
Subtotal	9,865,868	4,551,584	14,417,452	2,711,164	1,949,183	4,660,347	1,098,995	5,759,342	2,802,927	2,179,853	25,159,574	51.56
mgd equiv	20.22	9.33	29.55	5.56	3.99	9.55	2.25	11.80	5.74	4.47	51.56	
Total	37,789,621	16,822,820	54,612,440	14,834,787	5,113,014	19,947,801	3,975,664	23,923,464	8,235,524	7,445,102	94,216,531	193.08
mgd equiv	77.44	34.48	111.92	30.40	10.48	40.88	8.15	49.03	16.88	15.26	193.08	
* Single family amount includes multi-family				† Dedicated Irrigation refers to separately metered irrigation usage and includes agriculture								
Source: BAWSCA FY 2017-18 Annual Survey												

Table 4B: Total Water Use by Customer Class – FY 2017-18 (in ccf)

	Residential			Non-Residential							Total Consumption	
	Single	Multiple				Comm'l/Ind'l	Gov't/		Dedicated	Non-Revenue		
Member	Family	Family	Subtotal	Commercial	Industrial	Subtotal	Instit'l/Other	Subtotal	Irrigation†	Water‡		mgd
San Mateo County												
Brisbane / GVMID	83,048	15,721	98,769	115,945	0	115,945	16,449	132,394	74,357	28,697	334,217	0.68
Burlingame	697,815	304,322	1,002,137	245,541	226,177	471,718	48,409	520,127	240,638	79,454	1,842,356	3.78
CWS - Bear Gulch	4,159,649	117,146	4,276,795	469,157	971	470,128	146,964	617,092	12,430	259,046	5,165,363	10.59
CWS - Mid-Peninsula	3,250,645	852,331	4,102,976	1,159,913	20,582	1,180,495	388,192	1,568,687	0	411,396	6,083,059	12.47
CWS - South SF	1,082,828	143,616	1,226,444	1,400,443	263,660	1,664,103	123,328	1,787,431	0	28,956	3,042,831	6.24
Coastside CWD	420,235	44,664	464,899	46,566	0	46,566	267,062	313,628	35,429	88,250	902,206	1.85
Daly City	1,510,205	681,588	2,191,793	396,832	178	397,010	36,395	433,405	74,738	355,185	3,055,121	6.26
East Palo Alto*	521,090	0	521,090	134,845	7,256	142,101	16,082	158,183	0	93,255	772,528	1.58
Estero MID	463,622	649,650	1,113,272	201,308	34,978	236,286	28,093	264,379	503,058	188,044	2,068,753	4.24
Hillsborough	1,119,178	0	1,119,178	5,574	0	5,574	17,058	22,632	22,327	70,410	1,234,547	2.53
Menlo Park	420,782	142,891	563,673	239,458	266,542	506,000	80,463	586,463	158,074	85,215	1,393,425	2.86
Mid-Peninsula WD	660,924	177,824	838,748	155,393	45,688	201,081	29,635	230,716	85,637	66,353	1,221,454	2.50
Millbrae	454,703	156,710	611,413	154,123	0	154,123	37,467	191,590	78,080	111,782	992,865	2.03
North Coast CWD	704,069	152,393	856,462	100,196	0	100,196	68,359	168,555	58,424	85,710	1,169,151	2.40
Redwood City	1,838,864	775,529	2,614,393	661,975	61,925	723,900	76,353	800,253	611,365	436,414	4,462,425	9.14
San Bruno*	629,983	314,955	944,938	271,679	0	271,679	67,522	339,201	0	204,416	1,488,555	3.05
Westborough	255,461	38,244	293,705	27,315	0	27,315	0	27,315	40,529	22,447	383,996	0.79
Subtotal	18,273,101	4,567,584	22,840,685	5,786,263	927,957	6,714,220	1,447,831	8,162,051	1,995,086	2,615,030	35,612,852	72.98
mgd equiv	37.45	9.36	46.81	11.86	1.90	13.76	2.97	16.73	4.09	5.36	72.98	
Santa Clara County												
Milpitas	1,241,535	862,057	2,103,592	565,093	471,587	1,036,680	138,794	1,175,474	963,856	165,067	4,407,989	9.03
Mountain View	1,047,359	1,286,006	2,333,365	613,676	163,775	777,451	13,672	791,123	996,185	172,820	4,293,493	8.80
Palo Alto	2,020,184	830,766	2,850,950	758,044	136,339	894,383	678,658	1,573,041	578,817	249,681	5,252,489	10.76
Purissima Hills WD	715,387	0	715,387	0	0	0	43,425	43,425	4,888	50,570	814,270	1.67
San Jose**	92,801	727,493	820,295	184,772	872,687	1,057,459	30,556	1,088,015	1,169,673	-451,031	2,626,952	5.38
Santa Clara	1,869,713	1,784,098	3,653,811	3,180,442	1,100,841	4,281,283	986,496	5,267,779	0	1,036,298	9,957,888	20.41
Stanford	169,463	208,356	377,819	451	67,535	67,986	168,057	236,043	593,838	57,078	1,264,778	2.59
Sunnyvale	2,494,210	2,004,876	4,499,086	1,702,300	0	1,702,300	376,643	2,078,944	916,239	839,172	8,333,441	17.08
Subtotal	9,650,653	7,703,653	17,354,305	7,004,779	2,812,764	9,817,543	2,436,301	12,253,843	5,223,496	2,119,655	36,951,300	75.72
mgd equiv	19.78	15.79	35.56	14.35	5.76	20.12	4.99	25.11	10.70	4.34	75.72	
Alameda County												
Alameda CWD	7,511,684	3,196,996	10,708,680	2,148,082	1,004,610	3,152,692	683,279	3,835,971	2,018,205	1,494,764	18,057,620	37.01
Hayward	2,354,184	1,354,588	3,708,772	563,082	944,573	1,507,655	415,716	1,923,371	784,722	685,089	7,101,954	14.55
Subtotal	9,865,868	4,551,584	14,417,452	2,711,164	1,949,183	4,660,347	1,098,995	5,759,342	2,802,927	2,179,853	25,159,574	51.56
mgd equiv	20.22	9.33	29.55	5.56	3.99	9.55	2.25	11.80	5.74	4.47	51.56	
Total	37,789,622	16,822,821	54,612,442	15,502,206	5,689,904	21,192,110	4,983,127	26,175,236	10,021,509	6,914,537	97,723,725	200.27
mgd equiv	77.44	34.48	111.92	31.77	11.66	43.43	10.21	53.64	20.54	14.17	200.27	
* Single family amount includes multi-family				† Dedicated Irrigation refers to separately metered irrigation usage and includes agriculture								
				‡ Non-Revenue water calculated as difference between total production and total consumption.								
Source: BAWSCA FY 2017-18 Annual Survey												

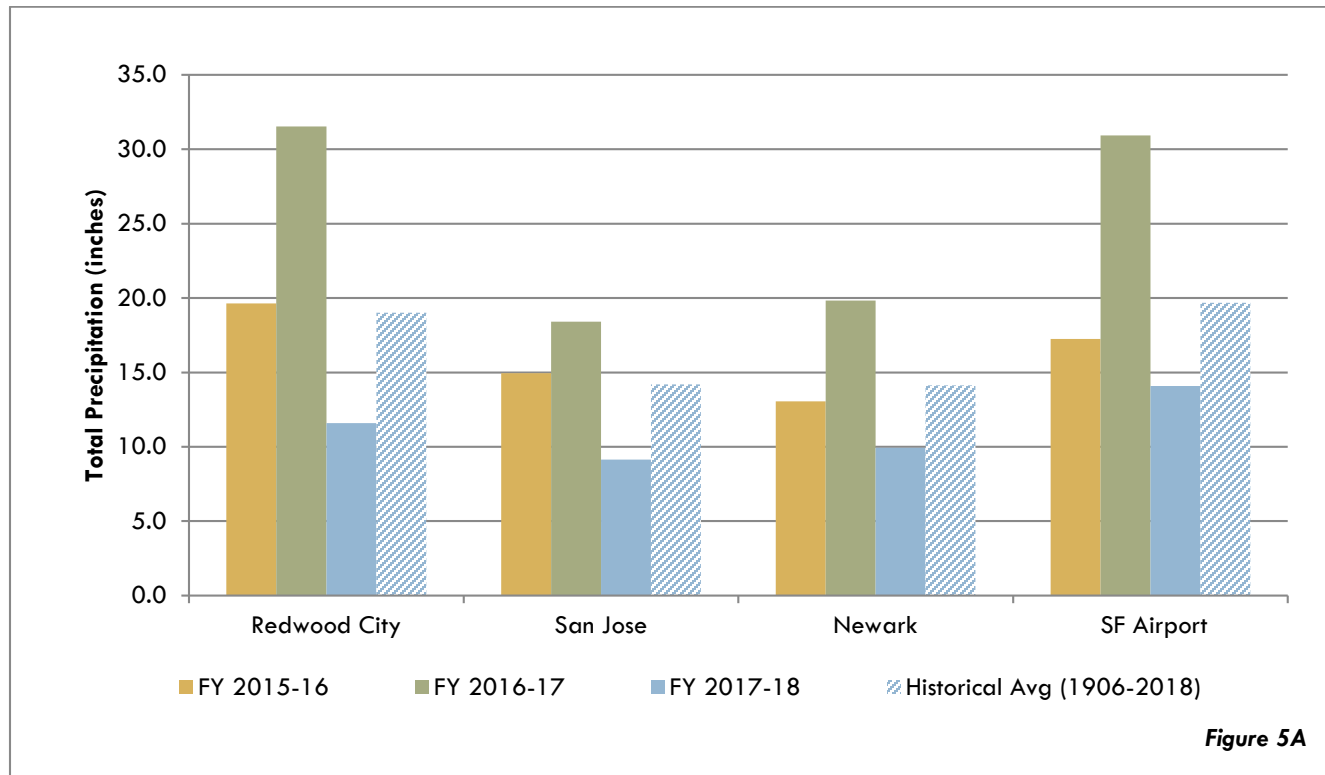
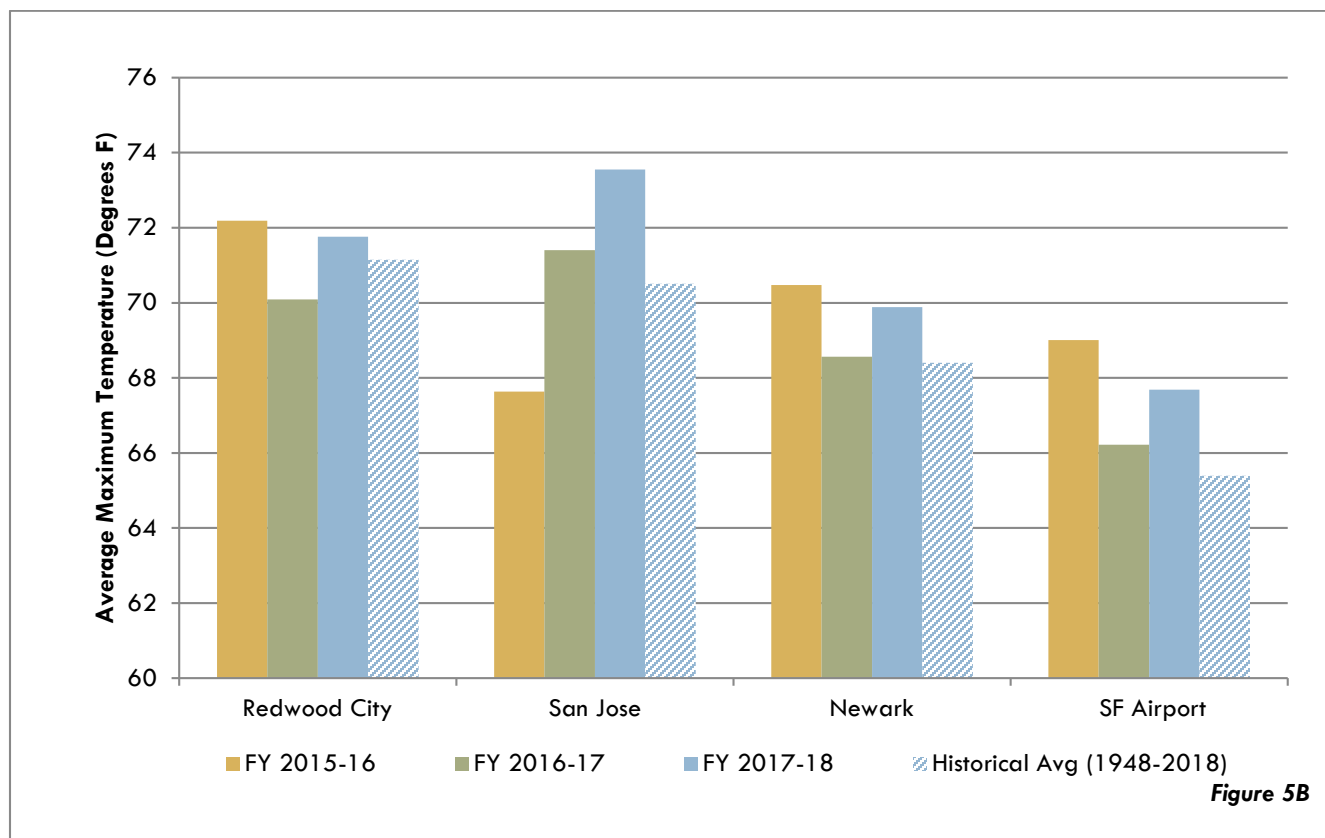
Table 4C: Number of Customer Accounts – FY 2017-18

	Residential						Non-Residential			
	Single	Multiple	Res			Ind/Comm	Gov't,	Non-Res	Dedicated	
Member	Family*	Family	Subtotal	Commercial	Industrial	Subtotal	Other	Subtotal	Irrigation†	Total
San Mateo County										
Brisbane / GVMID	1,528	118	1,646	293	0	293	0	293	92	2,031
Burlingame	6,844	738	7,582	608	263	871	543	1,414	202	9,198
CWS - Bear Gulch	16,961	187	17,148	1,259	1	1,260	153	1,413	8	18,569
CWS - Mid-Peninsula	31,276	745	32,021	3,361	93	3,454	372	3,826	0	35,847
CWS - SSF	14,024	175	14,199	1,886	53	1,939	241	2,180	0	16,379
Coastside CWD	5,814	134	5,948	317	0	317	1,212	1,529	66	7,543
Daly City	18,938	2,913	21,851	760	5	765	252	1,017	220	23,088
East Palo Alto	3,698	0	3,698	143	41	184	103	287	0	3,985
Estero MID	4,535	2,596	7,131	196	55	251	253	504	528	8,163
Hillsborough	4,197	0	4,197	11	0	11	18	29	84	4,310
Menlo Park	3,388	218	3,606	171	244	415	208	623	139	4,368
Mid-Peninsula WD	7,213	202	7,415	436	48	484	30	514	52	7,981
Millbrae	5,752	279	6,031	294	0	294	147	441	98	6,570
North Coast CWD	11,149	302	11,451	342	0	342	643	985	90	12,526
Redwood City	19,178	1,677	20,855	1,437	48	1,485	833	2,318	435	23,608
San Bruno	9,490	1,065	10,555	722	3	725	83	808	130	11,493
Westborough WD	3,727	14	3,741	47	0	47	0	47	94	3,882
Subtotal	167,712	11,363	179,075	12,283	854	13,137	5,091	18,228	2,238	199,541
Santa Clara County										
Milpitas	12,519	1,891	14,410	605	305	910	617	1,527	774	16,711
Mountain View	12,524	2,334	14,858	1,101	358	1,459	24	1,483	1,008	17,349
Palo Alto	15,018	2,214	17,232	1,320	73	1,393	967	2,360	408	20,000
Purissima Hills WD	2,070	0	2,070	0	0	0	121	121	10	2,201
San Jose	1,157	287	1,444	161	831	992	88	1,080	793	3,317
Santa Clara	17,287	4,863	22,150	2,639	355	2,994	526	3,520	0	25,670
Stanford				Not Applicable						
Sunnyvale	23,624	1,663	25,287	2,594	0	2,594	187	2,781	919	28,987
Subtotal	84,199	13,252	97,451	8,420	1,922	10,342	2,530	12,872	3,912	114,235
Alameda County										
Alameda CWD	73,266	3,506	76,772	3,930	1,186	5,116	1,092	6,208	2,453	85,433
Hayward	30032	1722	31,754	2,239	2,371	4,610	852	5,462	1,362	38,578
Subtotal	103,298	5,228	108,526	6,169	3,557	9,726	1,944	11,670	3,815	124,011
Total	355,209	29,843	385,052	26,872	6,333	33,205	9,565	42,770	9,965	437,787
*Individually metered homes, townhouses, and condos				† Dedicated Irrigation refers to separately metered irrigation usage						
Source: BAWSCA FY 2017-18 Annual Survey										

5. Climatological Data

Table 5A: Climatological Data

Rainfall				
	Precipitation (Inches)			
	Redwood City*	San Jose	Newark	SF Airport
Historical Avg (1906-2018)				
	19.0	14.2	14.1	19.7
Recent Past				
FY 2013-14	6.6	6.3	6.9	8.8
FY 2014-15	12.9	13.7	14.6	17.0
FY 2015-16	19.6	14.9	13.1	17.3
FY 2016-17	31.5	18.4	19.8	30.9
FY 2017-18	11.6	9.2	9.9	14.1
FY 2017-18 Deviation from Historical Avg				
	-7.4	-5.1	-4.2	-5.6
Temperature				
	Average Maximum Temperature (Degrees F)			
	Redwood City*	San Jose	Newark	SF Airport
Historical Avg (1948-2018)				
Annual	71.2	70.5	68.4	65.4
Summer**	81.5	81.2	77.0	72.3
Recent Past				
2013-14 Annual	72.1	72.2	69.7	67.8
Summer**	79.5	79.4	75.9	72.0
2014-15 Annual	72.9	72.1	70.5	69.0
Summer**	81.3	79.6	77.5	74.9
2015-16 Annual	72.2	67.6	70.5	69.0
Summer**	82.5	75.3	77.5	74.9
2016-17 Annual	70.1	71.4	68.6	66.2
Summer**	79.1	81.0	76.3	71.8
2017-18 Annual	71.8	73.5	69.9	67.7
Summer**	82.1	83.9	79.1	75.0
FY 2017-18 Deviation From Historical Avg				
Annual	0.6	3.0	1.5	2.3
Summer**	0.5	2.7	2.1	2.7
*Values for Palo Alto were sometimes used in cases where Redwood City values were absent or incomplete.				
** July, August, September				
Source: Western Regional Climate Center				

Figure 5A: Total Annual Precipitation**Figure 5B: Average Maximum Daily Temperature**

6. Service Area Populations

Table 6: BAWSCA Service Area Populations

												Projections				
	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2020-21	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41
San Mateo County																
Brisbane /GV MID	3,159	3,159	3,993	4,282	4,282	4,282	4,282	4,282	4,562	4,156	4,573	4,590	4,632	4,761	4,906	5,056
Burlingame	28,100	28,867	30,493	30,282	30,282	30,282	30,282	32,993	31,109	31,109	31,109	32,793	34,477	36,162	37,846	39,530
CWS - Bear Gulch	55,501	57,078	55,810	57,254	57,845	58,098	58,352	59,883	59,883	60,513	60,719	61,202	62,555	63,944	65,369	66,831
CWS - Mid-Peninsula	124,279	123,260	120,350	126,850	128,445	128,037	129,037	133,679	133,679	135,455	135,943	139,642	146,125	153,178	160,856	169,216
CWS - South SF	57,370	56,210	56,010	58,658	58,815	59,567	60,172	61,223	61,223	61,769	62,039	63,430	65,732	68,133	70,639	73,254
Coastside CWD	18,887	19,221	20,216	20,216	17,094	16,900	16,652	16,668	16,704	16,704	16,776	16,848	16,873	16,886	18,363	19,840
Daly City	106,361	107,099	107,773	101,920	102,043	102,820	104,462	108,510	109,139	109,139	109,139	118,000	122,700	129,700	136,900	143,900
East Palo Alto	29,690	29,690	29,690	26,181	25,215	25,927	25,927	29,143	24,424	26,181	26,181	27,490	28,865	30,308	31,823	33,414
Estero MID	36,000	36,100	36,100	36,100	36,100	36,567	37,000	37,088	37,165	37,518	37,687	37,200	38,035	38,661	39,079	39,440
Guadalupe Valley	438	438					Included with Brisbane									
Hillsborough	10,825	10,844	11,982	10,825	10,825	10,850	10,860	10,869	10,869	10,869	10,869	10,869	10,913	10,956	11,000	11,000
Los Trancos							Included with CWS - Bear Gulch									
Menlo Park	10,308	14,139	14,139	14,198	14,198	14,198	16,066	15,342	16,066	16,066	17,071	18,224	21,214	24,204	27,194	30,184
Mid-Peninsula WD	26,050	26,050	26,130	26,130	26,270	26,270	26,270	26,730	26,730	26,924	26,924	26,924	27,560	28,259	28,793	29,438
Millbrae	21,387	21,387	21,387	21,532	21,532	21,532	21,532	21,532	22,848	22,848	22,848	22,848	24,192	25,571	27,076	28,657
North Coast CWD	40,000	40,000	40,401	40,000	40,000	39,000	39,000	40,000	40,000	40,000	40,000	39,800	40,600	41,400	42,000	42,400
Redwood City	83,895	83,895	85,098	84,557	86,647	86,647	86,427	87,059	87,023	87,023	87,023	90,518	93,765	97,128	100,614	104,247
San Bruno	40,165	40,165	41,114	41,114	41,420	41,114	43,798	43,798	44,409	44,409	44,409	45,600	48,600	51,200	53,400	55,800
Skyline	1,658						Included with CWS - Bear Gulch									
Westborough WD	12,000	12,000	12,690	13,300	13,259	13,259	13,259	13,260	14,050	14,050	12,703	12,791	13,101	13,411	13,721	14,020
Subtotal	706,073	709,602	713,376	713,399	714,272	715,350	723,378	742,060	739,883	744,733	746,013	768,769	799,939	833,862	869,579	906,227
Santa Clara County																
Milpitas	69,419	70,817	70,817	66,790	67,804	67,894	69,783	70,800	75,521	77,528	78,106	82,300	90,400	98,100	106,000	109,100
Mountain View	73,932	74,762	75,787	75,275	73,774	73,656	75,280	76,413	75,430	77,801	79,027	79,010	82,590	86,170	89,750	93,330
Palo Alto	63,467	63,400	65,408	64,403	64,538	66,368	66,642	66,152	68,020	66,930	67,320	68,020	70,500	73,700	77,100	84,600
Purissima Hills WD	6,050	6,050	6,060	6,118	6,120	6,127	6,142	6,140	6,150	6,150	6,150	6,150	6,165	6,180	6,195	6,220
San Jose*	14,800	16,900	14,645	14,624	14,658	15,178	15,286	15,948	9,059	13,733	16,084	20,785	32,712	45,536	59,059	73,167
Santa Clara	114,238	117,200	118,830	118,830	118,263	119,311	118,459	120,973	120,973	123,752	129,604	128,691	135,012	141,726	148,951	156,482
Stanford	29,026	27,397	27,491	28,218	28,792	29,401	29,635	30,486	30,943	31,558	32,218	33,094	35,173	37,373	39,560	41,766
Sunnyvale	133,721	137,538	138,826	141,099	142,896	145,973	147,055	148,028	148,372	149,831	153,389	154,671	161,314	167,957	174,600	181,243
Subtotal	504,653	514,064	517,864	515,357	516,845	523,908	528,282	534,940	534,468	547,283	561,898	572,721	613,866	656,742	701,215	745,908
Alameda County																
Alameda CWD	330,786	331,293	332,000	327,000	331,000	336,000	340,000	344,000	348,000	350,538	356,000	353,300	367,600	382,511	398,723	415,637
Hayward	149,205	150,878	153,104	146,000	147,113	148,756	151,037	152,889	158,985	158,985	160,500	150,919	157,655	164,617	171,979	179,916
Subtotal	479,991	482,171	485,104	473,000	478,113	484,756	491,037	496,889	506,985	509,523	516,500	504,219	525,255	547,128	570,702	595,553
Total	1,690,717	1,705,837	1,716,344	1,701,756	1,709,230	1,724,014	1,742,697	1,773,889	1,781,336	1,801,539	1,824,411	1,845,709	1,939,060	2,037,732	2,141,496	2,247,688
*San Jose population adjusted in FY 2015-16 based on State methodology required for calculating service area population for the 2015 Urban Water Management Plan. Population listed may not represent an accurate population estimate for the North San Jose sub-area of the San Jose Municipal Water System and does not include recent new multi-family development.																

7. Current Water Use Per Capita

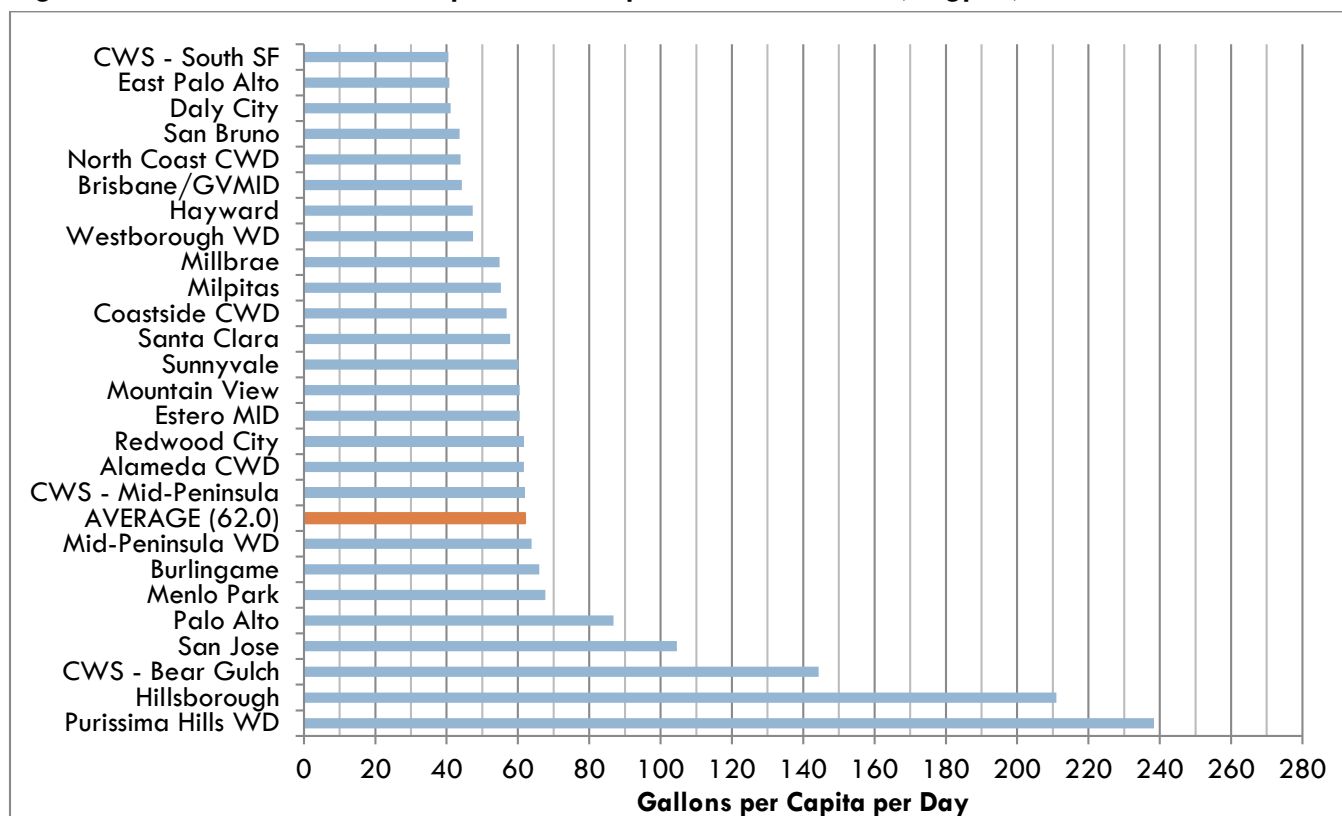
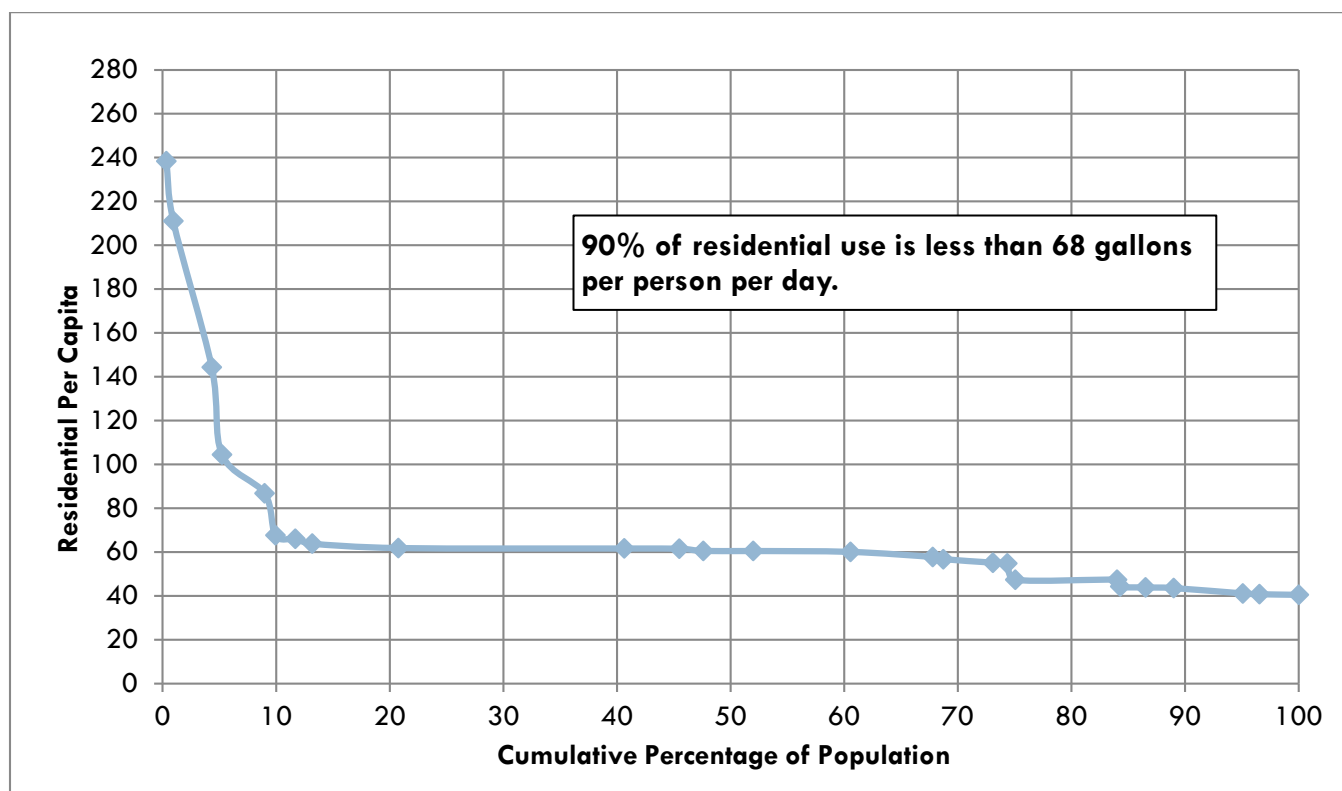
Figure 7A-1: Residential Per Capita Consumption - FY 2017-18 (in gpcd)**Figure 7A-2: Residential Per Capita Consumption (in gpcd) Distributed by Percentage of Population- FY 2017-18**

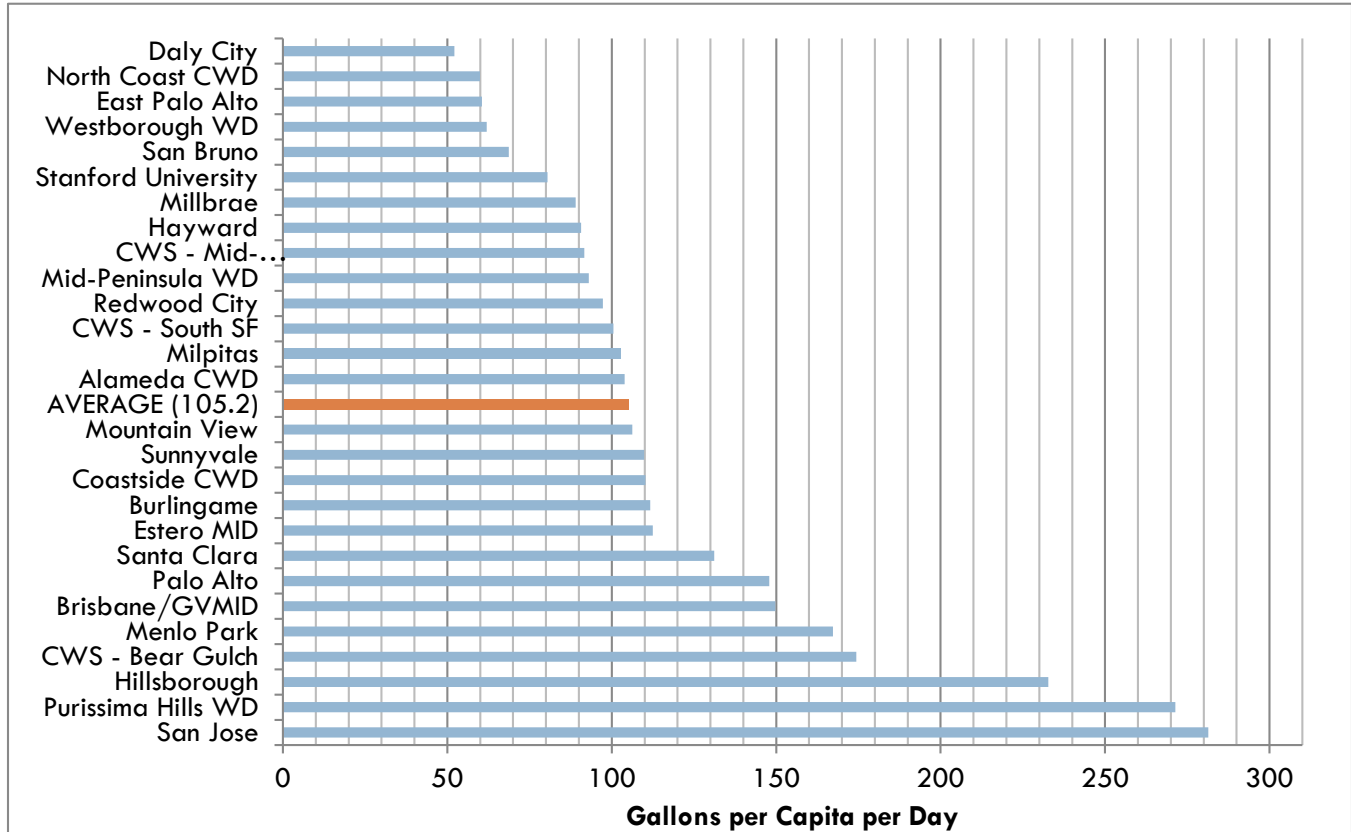
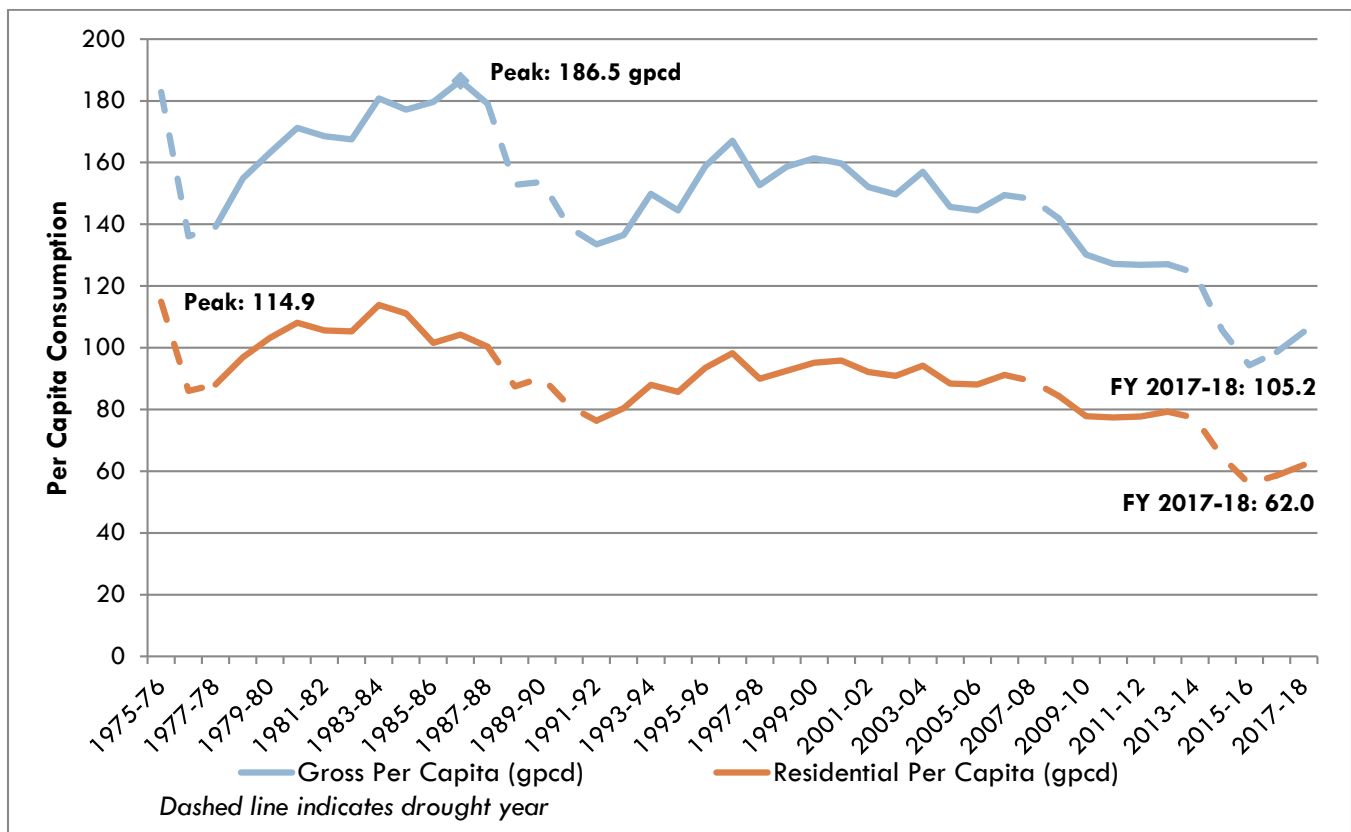
Figure 7B: Gross Per Capita Consumption(in gpcd) – FY 2017-18**Figure 7C: Historical BAWSCA/BAWUA Per Capita Consumption (in gpcd) - 1975-96 to Present**

Table 7A: Residential Per Capita Consumption and Single-Family Average Monthly Use Among BAWSCA Members - FY 2017-18

			*Residential	**Single-Family
	Service	Residential	Per Capita	Average
	Area	Consumption*	Consumption	Monthly Use
Member	Population	(ccf)	(gpcd)	(ccf)
CWS - South SF	62,039	1,226,444	40.5	6.4
East Palo Alto***	26,181	521,090	40.8	11.7
Daly City	109,139	2,191,793	41.2	6.6
San Bruno	44,409	944,938	43.6	5.5
North Coast CWD	40,000	856,462	43.9	5.3
Brisbane/GVMID	4,573	98,769	44.3	4.5
Hayward	160,500	3,708,772	47.4	6.5
Westborough WD	12,703	293,705	47.4	5.7
Millbrae	22,848	611,413	54.8	6.6
Milpitas	78,106	2,103,592	55.2	8.3
Coastside CWD	16,776	464,899	56.8	6.0
Santa Clara	129,604	3,653,811	57.8	9.0
Sunnyvale	153,389	4,499,086	60.1	8.8
Mountain View	79,027	2,333,365	60.5	7.0
Estero MID	37,687	1,113,272	60.5	8.5
Redwood City	87,023	2,614,393	61.6	8.0
Alameda CWD	356,000	10,708,680	61.6	8.5
CWS - Mid-Peninsula	135,943	4,102,976	61.9	8.7
Mid-Peninsula WD	26,924	838,748	63.8	7.6
Burlingame	31,109	1,002,137	66.0	8.5
Menlo Park	17,071	563,673	67.7	10.3
Palo Alto	67,320	2,850,950	86.8	11.2
San Jose	16,084	820,295	104.5	6.7
CWS - Bear Gulch	60,719	4,276,795	144.4	20.4
Hillsborough	10,869	1,119,178	211.0	22.2
Purissima Hills WD	6,150	715,387	238.4	28.8
Average Residential Per Capita Consumption			62.0	
Average Single Family Monthly Use				9.5
*Includes multi-family and single family accounts. Excludes recycled water.				
**Individually metered single family homes, townhouses, and condos.				
***East Palo Alto reports multi-family with single family use.				
Notes: Due to its unique service area, Stanford is excluded.				
Source: BAWSCA FY 2017-18 Annual Survey				

Table 7B: Gross Per Capita Consumption and Single-Family Average Monthly Use Among BAWSCA Members - FY 2017-18

			Gross
	Service	*Total	Per Capita
	Area	Consumption	Consumption
Member	Population	(ccf)	(gpcpd)
Daly City	109,139	2,778,800	52.2
North Coast CWD	40,000	1,169,151	59.9
East Palo Alto	26,181	772,528	60.5
Westborough WD	12,703	383,996	61.9
San Bruno	44,409	1,488,555	68.7
Stanford University	32,218	1,264,778	80.4
Millbrae	22,848	992,853	89.1
Hayward	160,500	7,101,954	90.7
CWS - Mid-Peninsula	135,943	6,083,059	91.7
Mid-Peninsula WD	26,924	1,221,454	93.0
Redwood City	87,023	4,130,668	97.3
CWS - South SF	62,039	3,042,831	100.5
Milpitas	78,106	3,917,265	102.8
Alameda CWD	356,000	18,057,620	103.9
Mountain View	79,027	4,096,128	106.2
Sunnyvale	153,389	8,219,166	109.8
Coastside CWD	16,776	902,206	110.2
Burlingame	31,109	1,695,956	111.7
Estero MID	37,687	2,068,753	112.5
Santa Clara	129,604	8,297,059	131.2
Palo Alto	67,320	4,859,576	147.9
Brisbane/GVMID	4,573	334,217	149.8
Menlo Park	17,071	1,393,425	167.3
CWS - Bear Gulch	60,719	5,165,363	174.3
Hillsborough	10,869	1,234,547	232.8
Purissima Hills WD	6,150	814,270	271.3
San Jose**	16,084	2,208,892	281.4
Totals	1,824,411	93,695,070	
		Average gpcpd	105.2
		Median of Agencies	103.9
*Exclusive of recycled water; inclusive of unaccounted for water.			
**Service area predominantly commercial/industrial.			
Source: BAWSCA FY 2017-18 Annual Survey			

Table 7C: Historical BAWUA/BAWSCA Per Capita Data (1975-76 to Present)

Year	Service Area Population*	Water Usage** (mgd)	Gross Per Capita (gpcd)	Residential Per Capita (gpcd)
1975-76	1,162,143	212.5	182.9	114.9
1976-77	1,176,655	160.1	136.0	86.0
1977-78	1,186,121	165.1	139.2	88.1
1978-79	1,192,776	184.7	154.9	96.9
1979-80	1,205,079	196.8	163.3	103.2
1980-81	1,216,827	208.3	171.2	108.1
1981-82	1,229,452	207.2	168.5	105.6
1982-83	1,248,928	209.2	167.5	105.3
1983-84	1,294,730	234.1	180.8	113.9
1984-85	1,310,389	232.2	177.2	111.1
1985-86	1,378,899	247.7	179.6	101.5
1986-87	1,397,010	260.6	186.5	104.3
1987-88	1,420,326	254.3	179.1	100.4
1988-89	1,427,372	218.1	152.8	87.5
1989-90	1,456,522	224.0	153.8	90.3
1990-91	1,470,633	204.4	139.0	81.0
1991-92	1,474,042	196.8	133.5	76.4
1992-93	1,496,205	204.3	136.6	80.4
1993-94	1,516,040	227.2	149.9	88.0
1994-95	1,529,829	221.1	144.5	85.7
1995-96	1,536,586	244.0	158.8	93.5
1996-97	1,556,641	260.2	167.1	98.2
1997-98	1,581,970	241.5	152.7	90.0
1998-99	1,602,708	254.4	158.7	92.5
1999-00	1,620,307	261.5	161.4	95.2
2000-01	1,634,308	261.0	159.7	95.9
2001-02	1,653,618	251.5	152.1	92.2
2002-03	1,645,338	246.3	149.7	90.8
2003-04	1,651,678	259.4	157.1	94.2
2004-05	1,646,804	239.7	145.6	88.4
2005-06	1,656,543	239.4	144.5	88.1
2006-07	1,674,100	250.2	149.4	91.1
2007-08	1,690,931	250.7	148.2	89.3
2008-09	1,705,837	242.0	141.9	84.4
2009-10	1,719,028	223.8	130.2	77.8
2010-11	1,701,756	216.4	127.2	77.4
2011-12	1,709,230	216.8	126.8	77.7
2012-13	1,724,014	219.1	127.1	79.3
2013-14	1,742,697	216.7	124.3	77.3
2014-15	1,773,889	187.5	105.7	64.7
2015-16	1,781,530	168.1	94.3	55.9
2016-17	1,801,539	177.6	98.6	58.6
2017-18	1,824,411	192.0	105.2	62.0

*All BAWUA/BAWSCA agencies reporting, including Stanford.

**Water usage totals include unaccounted for water; exclude recycled water.

Note: Population figures shown above may not always match those figures shown in past annual surveys due to corrected data. Also, to conform with standardized reporting of gross per capita use, recycled water use has been removed from total water usage data starting in FY 1997-98.

Source: BAWUA/BAWSCA Annual Surveys / Historical Data Files

8. Current Residential Water Bills

Figure 8A: Single Family Water Bills Based on Average Monthly Use Using Rates in Effect for FY 2017-18

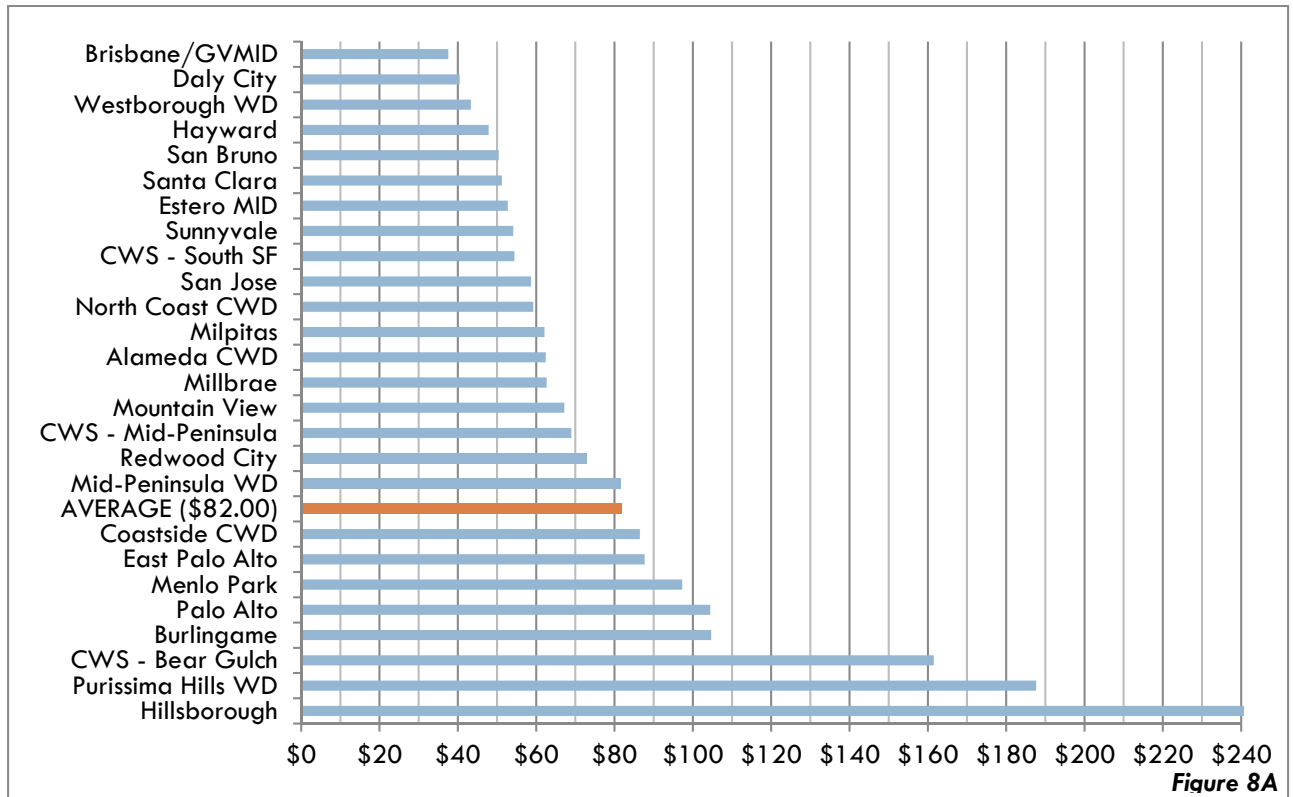


Figure 8B: Historical and Current SF RWS Wholesale Water Rates and BAWSCA Bond Surcharges FY 1985-85 to Present

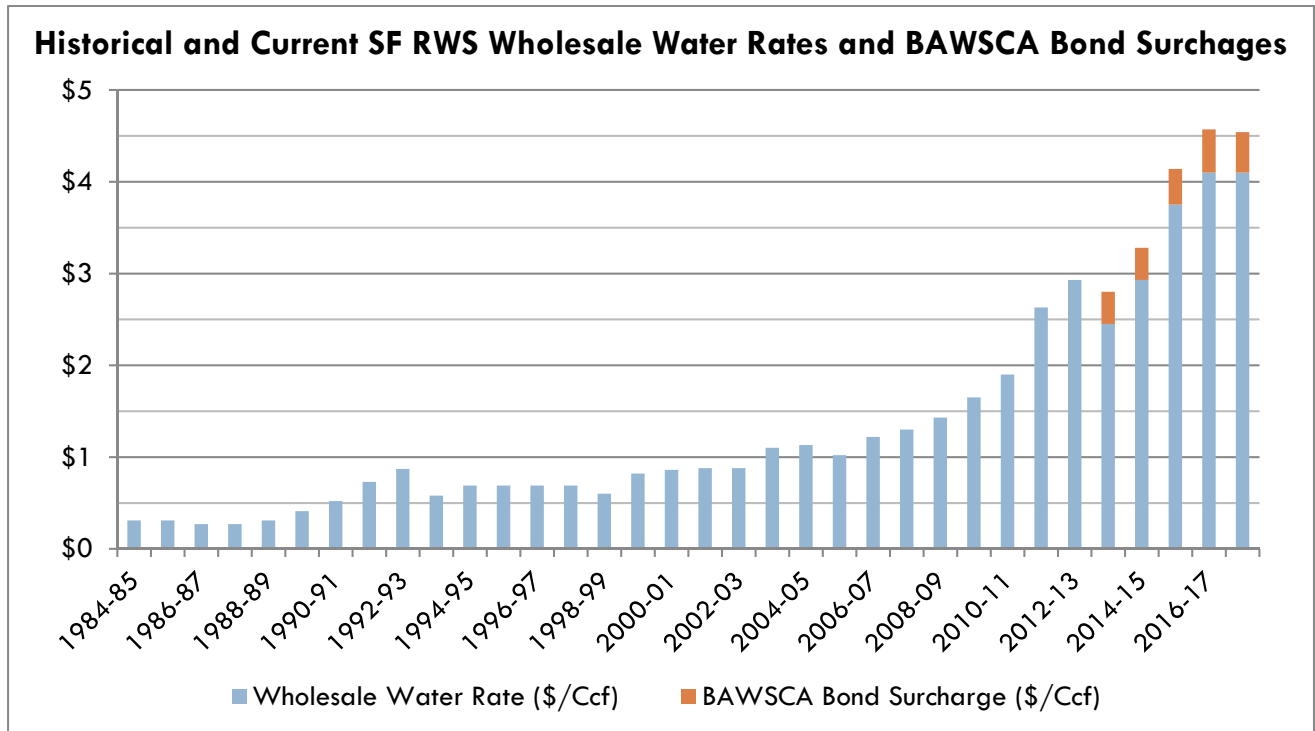


Table 8A: Single Family Water Bills* Based on Average Monthly Use for 2017-18, Using Rates in Effect for FY 2017-18

Inclusive of all BAWSCA agencies except Stanford; California Water Service is separated into its three service areas.

Member	Municipalities Average Monthly Use (ccf)	Special Districts Average Monthly Use (ccf)	All Agencies Average Monthly Bill
Brisbane/GVMID	4.5		\$37.61
Daly City	6.6		\$40.51
Westborough WD		5.7	\$43.36
Hayward	6.5		\$47.89
San Bruno	5.5		\$50.46
Santa Clara	9.0		\$51.28
Esterro MID		8.5	\$52.78
Sunnyvale	8.8		\$54.17
CWS - South SF		6.4	\$54.46
San Jose	6.7		\$58.72
North Coast CWD		5.3	\$59.28
Milpitas	8.3		\$62.14
Alameda CWD		8.5	\$62.47
Millbrae	6.6		\$62.70
Mountain View	7.0		\$67.19
CWS - Mid-Peninsula		8.7	\$69.01
Redwood City	8.0		\$72.77
Mid-Peninsula WD		7.6	\$81.57
Coastside CWD		6.0	\$86.49
East Palo Alto	11.7		\$87.70
Menlo Park	10.3		\$97.33
Palo Alto	11.2		\$104.47
Burlingame	8.5		\$104.70
CWS - Bear Gulch		20.4	\$161.54
Purissima Hills WD		28.8	\$187.67
Hillsborough	22.2		\$273.82
	8.8	10.6	\$82.00
* Inclusive of any service charge.			
Note: Differences in average monthly bills may reflect local capital improvements or maintenance expenditures, the size of the rate base, the extent to which revenue is generated through connections, and other factors.			
Source: BAWSCA FY 2017-18 Annual Survey			

Table 8B: Single Family Water Bills* Based on Average Monthly Use for FY 2017-18, Using Rates in Effect for FY 2017-18**Inclusive of Service Charge (1 of 3)**

Member/ Average Monthly Use (Units)	Billing Cycle	Service Charge	Rate per ccf	Rate Blocks (ccf)	Total Monthly Bill	Effective:	Remarks
Alameda CWD 8.5	Bimonthly	\$52.33	\$4.25		\$62.47	Effective:	3/1/2018
Brisbane/Guadalupe Valley MID 4.5	Bimonthly	\$22.67	\$5.19	1 - 3	\$37.61	Effective:	12/31/2016
	3/4-inch meter		\$7.00	4 - 8			
			\$8.69	9 - 16			
			\$11.05	17 +			
Burlingame 8.5	Bimonthly	\$78.71	\$6.81	0.0 - 5.4	\$104.70	Effective:	1/1/2018
	Up to 3/4- inch meter		\$7.64	5.4 - 10.7			
			\$8.48	10.7 - 21.4			
			\$9.31	21.4 - 32.1			
			\$10.14	32.1 +			
CWS - Bear Gulch 20.4	Monthly	\$19.61	\$6.73	1 - 10	\$161.54	Effective:	7/15/2016
	5/8 x 3/4 inch meter		\$7.15	11 - 35			
			\$8.56	35 +			
CWS - Mid Peninsula 8.7	Monthly	\$14.70	\$6.18	0 - 7	\$69.01	Effective:	1/1/2017
	5/8 x 3/4 inch meter		\$6.65	8 - 12			
			\$8.24	13 +			
CWS - South San Francisco 6.4	Monthly	\$14.70	\$6.18	1 - 7	\$54.46	Effective:	1/1/2017
	5/8 x 3/4 inch meter		\$6.65	8 - 12			
			\$8.24	13 +			
Coastside CWD 6.0	Bimonthly	\$52.20	\$9.65	0 - 4	\$86.49	Effective:	7/1/2017
	5/8-inch meter		\$10.77	5 - 16			
			\$13.89	17 - 30			
			\$18.41	31 +			
Daly City 6.6	Bimonthly	\$32.90	\$3.62	0 - 14	\$40.51	Effective:	7/1/2017
	Up to 3/4- inch meter		\$8.28	15 +			
East Palo Alto 11.7	Bimonthly	\$30.74	\$6.16		\$87.70	Effective:	7/1/2017
	5/8 inch meter						
Estero MID 8.5	Bimonthly	\$19.85	\$5.03	0 - 20	\$52.78	Effective:	7/1/2017
			\$6.06	20 +			

* Average single family use among BAWSCA agencies varies from 4.3 to 29.5 units per month. 1 unit = 1 ccf. Includes individually metered single family homes, townhouses, and condos. It is calculated by dividing single family water use (Table 4A) by the number of single family accounts (Table 4B); divided by 12.

Table 8B: Single Family Water Bills* Based on Average Monthly Use for FY 2017-18, Using Rates in Effect for FY 2017-18**Inclusive of Service Charge (2 of 3)**

Member/ Average Monthly Use (Units)	Billing Cycle	Service Charge	Rate per ccf	Rate Blocks (ccf)	Total Monthly Bill	Effective:	Remarks
Hayward	Bimonthly	\$20.00	\$5.80	1 - 8	\$47.89	Effective:	10/1/2017
6.5	5/8-inch meter		\$7.14	9 - 25			
			\$8.41	26 +			
Hillsborough	Bimonthly	\$137.36	\$5.98	0 - 20	\$273.82	Effective:	1/1/2018
22.2	Up to 3/4- inch meter		\$7.59	20 - 44			
			\$10.43	44 - 70			
			\$15.92	70 +			
Menlo Park	Monthly	\$25.19	\$5.28	0 - 0	\$97.33	Effective:	7/1/2018
10.3	0 inch meter		\$6.97	0 +			
Mid-Peninsula WD	Monthly	\$24.00	\$5.62	0 - 2	\$81.57	Effective:	7/1/2017
7.6	5/8-inch meter		\$8.22	3 - 9			
			\$9.82	10 - 22			
			\$11.42	55 +			
Millbrae	Bimonthly	\$20.00	\$8.00		\$62.70	Effective:	7/1/2017
6.6							
Milpitas	Bimonthly	\$18.00	\$6.43		\$62.14	Effective:	4/1/2016
8.3	5/8-inch meter						
Mountain View	Bimonthly	\$30.00	\$5.10	0 - 6	\$67.19	Effective:	7/1/2017
7.0	Single-family accounts		\$6.80	6 - 30			
			\$10.88	30 +			
North Coast CWD	Bimonthly	\$48.50	\$6.60	1 - 5	\$59.28	Effective:	7/1/2018
5.3			\$7.74	6 - 10			
			\$12.88	11 - 19			
			\$21.22	20 +			
Palo Alto	Monthly	\$16.77	\$6.66	0 - 6	\$104.47	Effective:	7/1/2018
11.2	5/8-inch meter		\$9.18	7 +			
Purissima Hills WD	Monthly	\$15.00	\$5.01	1 - 10	\$187.67	Effective:	12/31/2016
28.8	3/4-inch meter		\$6.52	11 - 30			
			\$8.46	31 - 60			
			\$10.39	61 - 100			
			\$12.33	101 +			

* Average single family use among BAWSCA agencies varies from 4.1 to 23.8 units per month. 1 unit = 1 ccf. Includes individually metered single family homes, townhouses, and condos. It is calculated by dividing single family water use (Table 4A) by the number of single family accounts (Table 4B); divided by 12.

Table 8B: Single Family Water Bills* Based on Average Monthly Use for FY 2017-18, Using Rates in Effect for FY 2017-18**Inclusive of Service Charge (3 of 3)**

Member/ Average Monthly Use (Units)	Billing Cycle	Service Charge	Rate per ccf	Rate Blocks (ccf)	Total Monthly Bill	Effective:	Remarks
Redwood City	Bimonthly	\$54.76	\$5.68	0 - 8	\$72.77	Effective:	7/1/2017
8.0			\$6.82	9 - 20			
			\$9.46	21 - 40			
			\$12.47	41 +			
San Bruno	Bimonthly	\$19.49	\$7.36	0 - 10	\$50.46	Effective:	7/1/2017
5.5	3/4 inch meter		\$8.83	11 - 20			
			\$11.78	21 +			
San Jose MWD-N	Bimonthly	\$53.40	\$4.79	0 0 0	\$58.72	Effective:	7/1/2017
6.7	5/8-inch meter		\$0.00	0 0			
Santa Clara	Monthly	\$5.69	\$5.69		\$51.28	Effective:	7/1/2017
9.0							Service charge is the minimum monthly charge, not added if usage is greater than the minimum charge.
Sunnyvale	Bimonthly	\$27.02	\$4.22	0 - 5	\$8.86	Effective:	7/1/2017
8.8	5/8 x 3/4 inch meter		\$5.15	6 - 0			
Westborough WD	Bimonthly	\$12.70	\$6.48		\$43.36	Effective:	7/1/2017
5.7							

* Average single family use among BAWSCA agencies varies from 4.5 to 28.8 units per month. 1 unit = 1 ccf. Includes individually metered single family homes, townhouses, and condos. It is calculated by dividing single family water use (Table 4A) by the number of single family accounts (Table 4B); divided by 12.

Summary Billing Information							
		Average					
	**Average	Monthly					
	Monthly	Service					
	Bill	Charge					
All BAWSCA Agencies	\$82.00	\$18.90					
Municipal Agencies Only	\$79.05	\$20.48					
Special Districts / Private	\$86.03	\$16.74					
** Inclusive of service charge							
Source: BAWSCA FY 2017-18 Annual Survey							

**Table 8C: SF RWS Wholesale Water Rates and BAWSCA Bond Surcharges
FY 1984-85 to Present**

Year	Wholesale Water Rate (\$/Ccf)	BAWSCA Bond Surcharge (\$/Ccf)
1984-85	\$ 0.31	\$ -
1985-86	\$ 0.31	\$ -
1986-87	\$ 0.27	\$ -
1987-88	\$ 0.27	\$ -
1988-89	\$ 0.31	\$ -
1989-90	\$ 0.41	\$ -
1990-91	\$ 0.52	\$ -
1991-92	\$ 0.73	\$ -
1992-93	\$ 0.87	\$ -
1993-94	\$ 0.58	\$ -
1994-95	\$ 0.69	\$ -
1995-96	\$ 0.69	\$ -
1996-97	\$ 0.69	\$ -
1997-98	\$ 0.69	\$ -
1998-99	\$ 0.60	\$ -
1999-00	\$ 0.82	\$ -
2000-01	\$ 0.86	\$ -
2001-02	\$ 0.88	\$ -
2002-03	\$ 0.88	\$ -
2003-04	\$ 1.10	\$ -
2004-05	\$ 1.13	\$ -
2005-06	\$ 1.02	\$ -
2006-07	\$ 1.22	\$ -
2007-08	\$ 1.30	\$ -
2008-09	\$ 1.43	\$ -
2009-10	\$ 1.65	\$ -
2010-11	\$ 1.90	\$ -
2011-12	\$ 2.63	\$ -
2012-13	\$ 2.93	\$ -
2013-14	\$ 2.45	\$ 0.35
2014-15	\$ 2.93	\$ 0.35
2015-16	\$ 3.75	\$ 0.39
2016-17	\$ 4.10	\$ 0.47
2017-18	\$ 4.10	\$ 0.44

*In 2013, BAWSCA issued Revenue Bonds (Series 2013A and 2013B) to prepay the remaining capital cost recovery payments that the BAWSCA member agencies owed the the SFPUC as of June 30, 2013. Beginning in FY 2013-14, BAWSCA began collecting a fixed bond surcharge from each member agency, as a separate item on the monthly water bills from the SFPUC, to make debt service payments on the revenue bonds, reimburse bond administration expenses, and, as necessary, replenish a stabilization fund set up to limit the volatility in annual changes in the payments.

9. Agency Profiles

Alameda County Water District

43885 South Grimmer Boulevard
Fremont, California 94538-6348

Phone: (510) 668-4200 Fax: (510) 656-3426

Web: <http://www.acwd.org>

Service Area

Alameda County Water District (ACWD) supplies water to the cities of Fremont, Newark, and Union City.

System

Profile

Area Size	104.8 sq. miles
Service Population	356,000
Number of Accounts	85,433
Number of SF RWS Connections	8
Connections To SF RWS Mains	BDPL 1, 2, 3, 4 and 5
Avg. Day Demand (mgd)	37.01
Avg. Day Purchases From SF RWS (mgd)	7.62
% Demand Met With SF RWS Supplies	21%
Maximum Local Water Production (mgd)	86.5 mgd (Source: ACWD Engineering Report 2011, and includes WTP2, Blending Facility, Desal, and Direct Takeoffs from SFPUC)
Alternative Supply Sources	SF RWS, State Water Project (SWP), Local Groundwater
Interties With Other Agencies	Milpitas, Hayward
Local Storage (mg)	85.0 maximum capacity – volume in storage is typically 60 to 80% based on seasonal operating conditions
Days of Storage	1.7 – based on maximum capacity storage and average daily demand

Summary

ACWD currently has three primary sources of water supply: (1) the State Water Project (SWP), (2) San Francisco's Regional Water System and (3) local supplies. The SWP and San Francisco Regional Water Supplies are imported into the District service area through the South Bay Aqueduct and Hetch-Hetchy Aqueduct, respectively. Local supplies include fresh groundwater from the Niles Cone Groundwater Basin (underlying the District service area), desalinated brackish groundwater from portions of the groundwater basin previously impacted by seawater intrusion, and surface water from the Del Valle Reservoir. The primary source of recharge for the Niles Cone Groundwater Basin is from percolation of runoff from the Alameda Creek watershed. To a lesser degree, a portion of ACWD's SWP supplies are also used for local groundwater percolation. Infiltration of rainfall and applied water also contribute to local groundwater recharge.

Before being supplied to ACWD's customers, the source water supplies are treated to meet and surpass all state and federal drinking water standards. ACWD operates two surface water

treatment plants that treat SWP and local surface water from Del Valle Reservoir. The Newark Desalination Facility treats brackish groundwater to remove salts and other impurities, and the Blending Facility blends high quality San Francisco water with local fresh groundwater (with higher hardness) to provide a blended supply with lower overall hardness.

Over the 2000-2015 period, 39% of the District's distribution system water supply was from the State Water Project. This water was either purified at one of ACWD's two water treatment plants or used to recharge local aquifers. Water from the San Francisco Regional System provided approximately 24% of the distribution system water supply and local supplies from Del Valle Reservoir and groundwater (recharged from runoff from the Alameda Creek Watershed and infiltration of rainfall and applied water) accounted for the balance (about 38%) of the distribution system supplies. (Percentage values do not add up to 100% due to rounding).

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	3,770,321	3,037,166	3,081,217	3,716,845
State Water Project	6,304,439	4,766,541	3,644,398	6,675,349
Desalinated Water	3,554,813	3,328,476	3,428,770	3,119,652
Local Groundwater	2,591,578	2,267,513	2,908,717	3,647,727
Surface Water	520,561	2,405,251	3,923,142	898,047
Recycled Water	0	0	0	0
Total	16,751,711	15,804,947	16,986,243	18,057,620
mgd equivalent	34.33	32.39	34.81	37.01

Demand by Sector

Residential	10,337,623	9,278,709	10,686,198	10,708,680
Commercial/Industrial	2,983,057	2,846,250	2,999,503	3,152,692
Other	658,676	553,225	647,774	683,279
Dedicated Irrigation	1,590,737	1,203,688	1,545,155	2,018,205
Non-Revenue Water	1,181,616	1,923,075	1,107,614	1,494,764
Total	16,751,711	15,804,947	16,986,243	18,057,620
mgd equivalent	34.31	32.39	34.81	37.01

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 16-17 (gpcpd)
Residential	62	55	62	62
Gross	100	93	99	104

Storage Reservoirs

Designation	Capacity (gallons)	Designation	Capacity (gallons)
Alameda	16,250,000	Mayhew	4,300,000
Appian	780,000	Middlefield	7,230,000
Avalon	2,700,000	Ohlone	1,500,000
Canyon Heights	510,000	Patterson	14,210,000
Decoto	14,550,000	Vineyard Heights	540,000
Hidden Valley	2,000,000	Whitfield	20,400,000
		Total	84,970,000

ACWD Engineering Report, 2011.

Water Treatment Facilities

Designation	Capacity (mgd)	Status	Designation	Capacity (mgd)	Status
WTP #2	22	Active	Mission San Jose WTP	3.2	Inactive
Blending Facility	48	Active	Newark Desalination Facility	12.5	Active
			Total	86.5	

Wells

Name	Capacity (mgd)	Status	Name	Capacity (mgd)	Status
Mowry 1	1.4	Active	PT 1	3.4	Active
Mowry 2	3.2	Active	PT 2	3.4	Active
Mowry 3	3.2	Active	PT 3	3.4	Active
Mowry 4	3.0	Active	PT 4	3.4	Active
Mowry 6	3.3	Active	PT 5	3.4	Active
Mowry 7	3.3	Active	PT 6	3.4	Active
Mowry 8	3.0	Active	PT 7	3.4	Active
Mowry 9	3.3	Active	PT 8	3.4	Active
			Total	50.9	

Interties

Name	No.	Diameter* (in.)
Hayward	1	12
Hayward	2	**
Milpitas	1	8
Milpitas	2	8

*Diameter of main connected

**3.6 mgd connection to
Hayward's SF RWS Line

City of Brisbane / Guadalupe Valley Municipal Improvement District

50 Park Lane

Brisbane, CA 94005

Phone: (415) 508-2130 Fax: (415) 467-5547

Web: <http://www.ci.brisbane.ca.us/html/cityDept/pw/water.asp>

Service Area

The City of Brisbane, located in north San Mateo County, operates both the City of Brisbane Water District and the Guadalupe Valley Municipal Improvement District (GVMID), an area within the Brisbane city limits composed of an industrial park development and a small residential enclave.

System

Profile

Area Size	3.4 square miles
Service Population*	4,573
Number of Accounts	2,031
Number of SF RWS Connections	5
Connections To SF RWS Mains	Crystal Springs Pipeline #1 and #2
Avg. Day Demand (mgd)	0.68
Avg. Day Purchases From SF RWS (mgd)	0.68
% Demand Met With SF RWS Supplies	100%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	CWS South San Francisco, Daly City
Local Storage (mg)	2.9
Days of Storage	3 – Combined storage. All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity.

*Service population is based on the 2010 U.S. Census data for the City of Brisbane.

Summary

The City of Brisbane's only source of potable water is supplied through 3 turnouts off the Crystal Springs #1 and #2 Pipelines. The Brisbane distribution system is comprised of 4 pressure zones, and is operated as a combined system with GVMID Water District.

The GVMID's only source of potable water is supplied through 2 turnouts off the Crystal Springs #1 and #2 Pipelines. The GVMID distribution system is comprised of 4 pressure zones, and is operated as a combined system with the City of Brisbane Water District.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	280,029	257,414	294,756	334,217
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	280,029	257,414	294,756	334,217
mgd equivalent	0.57	0.53	0.60	0.68

Demand by Sector

Residential	93,420	89,940	97,425	98,769
Commercial/Industrial	85,018	99,719	110,718	115,945
Other	4,795	3,825	10,803	16,449
Dedicated Irrigation	76,522	43,195	48,045	74,357
Non-Revenue Water	20,274	20,735	27,765	28,697
Total	280,029	257,414	294,756	334,217
mgd equivalent	0.57	0.53	0.60	0.68

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	45	40	48	44
Gross	134	116	145	150

Note: Beginning in FY 2009-10, Brisbane and GVMID source, demand, and per capita use data is reported together as a combined Brisbane/GVMID District.

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (gallons)
Glen Park Tank 1 (Brisbane)	Steel	200,000
Glen Park Tank 2 (Brisbane)	Steel	200,000
Guadalupe Tank (Brisbane)	Steel	1,000,000
Crocket Tank (GVMID)	Steel	500,000
Margaret Tank (GVMID)	Steel	500,000
Total		2,900,000

Interties

Name	No.	Diameter (in.)
CWS - South San Francisco	1	16
Daly City	2	6, 12
GVMID	3	12, 12, 12

City of Burlingame

501 Primrose Road
 Burlingame, California 94010-3997
 Phone: (650) 558-7230 Fax (650) 685-9310
 Web: <http://www.burlingame.org/>

Service Area

The City of Burlingame is located in central San Mateo County. Burlingame's water system serves the entire area within its city limits, portions of the unincorporated Burlingame Hills area, and a few properties in San Mateo and Hillsborough.

System

Profile

Area Size	5.5 square miles
Service Population	31,109
Number of Accounts	9,198
Number of SF RWS Connections	6
Connections To SF RWS Mains	Crystal Springs #2 and #3, Sunset Pipeline
Avg. Day Demand (mgd)	3.78
Avg. Day Purchases From SF RWS (mgd)	3.48
% Demand Met With SF RWS Supplies	92%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	California Water Service Company (CWS) – City of San Mateo, Town of Hillsborough, City of Millbrae
Local Storage (mg)	2,941
Days of Storage	1.2 days in six out of eight zones on maximum day, the remaining two zones have 0.2 days.

Summary

The City of Burlingame receives all of its water supply from six SF RWS turnouts located along El Camino Real. Water is pumped from the turnouts to five storage tanks and to two reservoirs located at higher elevations in the City's distribution system.

Burlingame's water system is divided into two sections. Water for the hills area is supplied by water pumped into tanks and reservoirs; and water for the lower elevation area is supplied directly from the SF RWS turnouts.

For emergency water supply, Burlingame has connections to California Water Service Company, which serves the City of San Mateo, and connections to the Town of Hillsborough and the City of Millbrae water systems.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	1,791,539	1,505,779	1,592,044	1,695,956
Recycled Water	146,400	146,388	146,400	146,400
Other	0	0	0	0
Total	1,937,939	1,652,167	1,738,444	1,842,356
mgd equivalent	3.97	3.39	3.56	3.78

Demand by Sector

Residential	1,000,212	855,442	915,404	1,002,137
Commercial/Industrial	436,073	457,266	433,018	471,718
Other	36,765	35,083	39,480	48,409
Dedicated Irrigation	83,796	55,755	213,269	240,638
Non-Revenue Water	381,093	55,755	137,273	79,454
Total	1,937,939	1,652,167	1,738,444	1,842,356
mgd equivalent	3.97	3.39	3.56	3.78

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	62	56	60	66
Gross	111	99	105	112

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (gallons)	Designation	Type	Capacity (gallons)
Alcazar Tanks	Dual, Circular, Steel	100,000	Hillside Reservoir	Rectangular, Concrete	1,500,000
Donnelly Tanks	Dual, Circular, Steel	100,000	Mills Tank	Circular, Prestressed Concrete	1,071,000
			Skyview Reservoir	Rectangular, Concrete	170,000
Total					2,941,000

Interties

Name	No.	Diameter (in.)	Name	No.	Diameter (in.)
CWS – City of San Mateo	2	6	Millbrae	2	6
	1	8		3	8
Hillsborough	4	6		1	10
				2	12

California Water Service - Bear Gulch District

3525 Alameda De Las Pulgas
Menlo Park, California 94025

Phone: (650) 561-9709 Fax (650) 561-9723

Web: <http://www.calwater.com>

Service Area

The Bear Gulch District is located in southern San Mateo County, and serves the communities of Atherton, Portola Valley, Woodside, parts of Menlo Park, parts of unincorporated Redwood City, and adjacent unincorporated portions of San Mateo County including: West Menlo Park, Ladera, North Fair Oaks, and Menlo Oaks.

Cal Water acquired the Los Trancos County Water District in 2005, and acquired both Skyline County Water District and Woodside Mutual Water Company in 2009, incorporating them into the Bear Gulch District. These systems serve rural communities along Highway 35 between Page Mill Road and Highway 92.

System

Note: Skyline system totals are included in the Profile and Summary numbers. Skyline's portion of the total is shown in parentheses.

Profile

Area Size	45.3 square miles
Service Population	60,719
Number of Accounts	18,569
Number of SF RWS Connections	8
Connections To SF RWS Mains	BDPL 1 and 2, BDPL 3 and 4, Palo Alto Pipeline, (Bay Crossing 1 and 2)
Avg. Day Demand (mgd)	10.59
Avg. Day Purchases From SF RWS (mgd)	10.25
% Demand Met With SF RWS Supplies	97%
Maximum Local Water Production (mgd)	6.028 (0.028)
Alternative Supply Sources	Local Surface Water, Local Groundwater-(Skyline system only)
Interties With Other Agencies	Redwood City, Menlo Park, (None)
Local Storage (mg)	11.3 Treated, 215 Untreated
Days of Storage	0.92 – Length of storage based on loss of all sources of supply. All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity. Could increase use of Bear Gulch reservoir in an emergency to meet partial demand.

Summary

The Bear Gulch District receives 85% to 95% of its daily supply from the SF RWS, with the balance supplied by surface water runoff from California Water Service Company's own watershed. The water is stored in the 215 million gallon Bear Gulch Reservoir, and treated at the 6 mgd Station 2 Filter Plant before distribution. The Skyline system is not hydraulically connected

to the Bear Gulch system and receives 100% of its supply from the SF RWS. The Woodside Mutual system has been connected to the main Bear Gulch system for several years and has been served by Cal Water since this time.

The distribution systems consist of 57 pressure zones, 77 booster pumps, 35 storage tanks and reservoirs, 2,278 hydrants, and 289 miles of main. District water tanks provide storage for slightly more than 11 mg of potable water.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	5,077,292	3,864,869	4,118,677	5,000,555
Local Groundwater	0	0	0	0
Surface Water	190,342	329,563	388,045	164,808
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	5,267,634	4,194,432	4,506,722	5,165,363
mgd equivalent	10.80	8.60	9.24	10.59

Demand by Sector

Residential	4,547,592	3,363,149	3,683,770	4,276,795
Commercial/Industrial	514,882	426,018	431,082	470,128
Other	123,349	101,350	118,413	146,964
Dedicated Irrigation	11,584	10,648	10,355	12,430
Non-Revenue Water	70,287	293,267	263,102	259,046
Total	5,267,634	4,194,432	4,506,722	5,165,363
mgd equivalent	10.80	8.60	9.24	10.59

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	156	115	108	144
Gross	180	144	132	174

Facilities and Distribution

Storage Reservoirs

Designation	Type	Capacity (gallons)	Designation	Type	Capacity (gallons)
Bear Gulch Reservoir*	Earth	215,000,000			
			Sta. 029-Tank 1	Fiberglass -Lined Redwood	100,000
Sta. 002-Tank 1	Steel	250,000	Sta. 029-Tank 2	Fiberglass -Lined Redwood	100,000
Sta. 002-Tank 2	Steel	500,000	Sta. 029-Tank 3	Steel	150,000
Sta. 005-Tank 6	Fiberglass -Lined Redwood	100,000 (inactive)	Sta. 030-Tank 1	Steel	1,000,000
Sta. 005-Tank 8	Steel	250,000	Sta. 031-Tank 2	Steel	165,000
Sta. 005-Tank 9	Steel	1,000,000	Sta. 032-Tank 1	Steel	250,000
Sta. 006-Tank 1	Steel	200,000	Sta. 033-Tank 1	Steel	10,000
Sta. 007-Tank 5	Fiberglass -Lined Redwood	100,000	Sta. 034-Tank 1	Steel	75,000
Sta. 015-Tank 1	Fiberglass -Lined Redwood	30,000	Sta. 036-Tank 1	Steel	125,000
Sta. 016-Res.1	Steel	1,000,000	Sta. 037-Tank 1	Steel	55,000
Sta. 017-Tank 1	Steel	250,000	Sta. 038-Tank 1	Steel	212,000
Sta. 019-Tank 1	Steel	500,000	Sta. 039-Tank 1	Steel	282,000
Sta. 019-Tank 2	Steel	500,000	Sta. 041-Tank 1	Steel	189,000
Sta. 021-Tank 1	Steel	1,000,000	Sta. 041-Tank 2	Steel	192,000
Sta. 021-Tank 2	Steel	1,000,000	Sta. 042-Tank 1	Steel	60,000
Sta. 022-Tank 1	Steel	450,000	Sta. 042-Tank 2	Steel	60,000
Sta. 025-Tank 1	Fiberglass -Lined Redwood	100,000	Sta. 047-Tank 1	Steel	80,376
Sta. 027-Tank 4	Steel	750,000	Sta. 047-Tank 2	Steel	80,376
Sta. 028-Tank 1	Steel	200,000			
			Total		226,177,752

* Reservoir storage capacity has been reduced by 6 feet in compliance with DSOD requirements.

Surface Water Treatment Facilities

Designation	Capacity (mgd)
Station 2 Filter Plant	6

Interties

Name	No.	Diameter (in.)
Redwood City	2	6
Menlo Park	3	6

California Water Service - Mid-Peninsula District

341 North Delaware Street

San Mateo, California 94401-1727

Phone: (650) 558-7800 Fax: (650) 342-6865

Web: <http://www.calwater.com>

Service Area

California Water Service's Mid-Peninsula District is located in central San Mateo County and serves the communities of San Carlos, San Mateo, parts of unincorporated Redwood City, and adjacent unincorporated portions of San Mateo County, including The Highlands and Palomar Park.

System

Profile

Area Size	17 square miles
Service Population	135,943
Number of Accounts	35,847
Number of SF RWS Connections	8
Connections To SF RWS Mains	Bay Crossing 1 and 2, BDPL 1 and 2, Crystal Springs #2, Sunset Pipeline
Avg. Day Demand (mgd)	12.47
Avg. Day Purchases From SF RWS (mgd)	12.47
% Demand Met With SF RWS Supplies	100%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	Mid-Peninsula WD, Redwood City, Belmont, Burlingame, Hillsborough, and Estero MID
Local Storage (mg)	19.9
Days of Storage	1.44 - All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity.

Summary

The Mid-Peninsula District receives all of its water from the SF RWS. Water is delivered to the San Carlos area via 3 SF RWS turnouts located off BDPL 1 and 2. San Mateo is supplied from 5 turnouts located off the Crystal Springs Pipeline #2 and Sunset Supply Lines. The distribution system includes 22 pressure zones in San Carlos, 18 in San Mateo, 62 booster pumps, 38 storage tanks, 2,832 hydrants, and 363 miles of main.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	6,016,058	5,325,284	5,539,001	6,083,059
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	6,016,058	5,325,284	5,539,001	6,083,059
mgd equivalent	12.33	10.91	11.35	12.47

Demand by Sector

Residential	4,153,923	3,523,247	3,693,419	4,102,976
Commercial/Industrial	1,195,269	1,080,215	1,069,940	1,180,495
Other	374,940	324,881	355,830	388,192
Non-Revenue Water	291,926	396,941	419,812	411,396
Total	6,016,058	5,325,284	5,539,001	6,083,059
mgd equivalent	12.33	10.91	11.35	12.47

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	64	54	56	62
Gross	92	82	84	92

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (gallons)	Designation	Type	Capacity (gallons)
San Mateo			San Mateo		
Sta. 006-Res. 1	Brick	2,290,000	Sta. 027-Tank 1	Steel	2,500,000
Sta. 017-Tank 1	Steel	500,000	Sta. 027-Tank 2	Steel	2,500,000
Sta. 017-Tank 2	Steel	500,000	Sta. 029-Tank 1	Steel	1,000,000
Sta. 017-Tank 3	Steel	500,000	Sta. 030-Tank 1	Steel	500,000
Sta. 023-Tank 1	Steel	1,000,000	Sta. 031-Tank 1	Steel	216,000
Sta. 024-Tank 1	Steel	500,000	Sta. 032-Tank 1	Steel	250,000
Sta. 024-Tank 2	Steel	500,000	Sta. 032-Tank 2	Steel	500,000
Sta. 025-Tank 1	Fiberglass-Lined Redwood	100,000	Sta. 033-Tank 1	Steel	300,000

Designation	Type	Capacity (gallons)	Designation	Type	Capacity (gallons)
Sta. 025-Tank 2	Steel	250,000	Sta. 033-Tank 2	Steel	500,000
Sta. 025-Tank 3	Steel	250,000			

I

Storage Reservoirs**San Mateo Total** 14,656,000

Designation	Type	Capacity (gallons)	Designation	Type	Capacity (gallons)
San Carlos			San Carlos		
Sta. 103-Tank 1	Concrete	0	Sta. 118-Tank 1	Steel	200,000
Sta. 106-Tank 2	Steel	0	Sta. 118-Tank 2	Steel	750,000
Sta. 106-Tank 3	Steel	500,000	Sta. 119-Tank 1	Steel	400,000
Sta. 109-Tank 1	Concrete	50,000	Sta. 120-Tank 1	Steel	500,000
Sta. 109-Tank 2	Steel	250,000	Sta. 122-Tank 1	Fiberglass-Lined Redwood	0
Sta. 112-Tank 1	Steel	200,000	Sta. 122-Tank 2	Fiberglass-Lined Redwood	0
Sta. 112-Tank 2	Steel	500,000	Sta. 123-Tank 3	Steel	250,000
Sta. 112-Tank 3	Steel	700,000	Sta. 123-Tank 4	Steel	425,000
Sta. 115-Tank 1	Steel	250,000	Sta. 124-Tank 1	Steel	78,000
Sta. 116-Tank 2	Fiberglass-Lined Redwood	100,000	Sta. 125-Tank 1	Fiberglass-Lined Redwood	50,000
Sta. 116-Tank 3	Fiberglass-Lined Redwood	100,000			

San Carlos Total 5,303,000**San Mateo and San Carlos Total** 19,959,000**Interties**

Name	No.	Diameter (in.)	Name	No.	Diameter (in.)
San Carlos			San Mateo		
Redwood City	3	8, 8, 12	Burlingame	3	4, 4, 6
Mid-Peninsula WD	3	8, 8, 8	Hillsborough WD	2	6, 6, 6
			Mid-Peninsula WD	2	6, 6, 6
			Estero MID	1	12

California Water Service - South San Francisco District

341 North Delaware Street

San Mateo, California 94401-1727

Phone: (650) 588-7800 Fax: (650) 588-1341

Web: <http://www.calwater.com>

Service Area

The South San Francisco District, located in north San Mateo County, serves South San Francisco, Colma, a small portion of Daly City, and Broadmoor, an unincorporated area located between Colma and Daly City.

System

Profile

Area Size	11.2 square miles
Service Population	62,039
Number of Accounts	16,379
Number of SF RWS Connections	11
Connections To SF RWS Mains	Crystal Springs #2, San Andreas 1, 2, and 3, Sunset Pipeline
Avg. Day Demand (mgd)	6.24
Avg. Day Purchases From SF RWS (mgd)	4.87
% Demand Met With SF RWS Supplies	78%
Maximum Local Water Production (mgd)	1.37
Alternative Supply Sources	Ground Water Wells
Interties With Other Agencies	Brisbane, San Bruno, Daly City, San Francisco
Local Storage (mg)	8.125
Days of Storage	1.08 - Length of storage based on loss of all sources of supply. All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity. Could increase well output in an emergency to meet partial demand.

Summary

The South San Francisco District normally receives over 80% of its water from the SF RWS from 11 turnouts off the San Andreas and Crystal Spring pipelines, with the remaining water pumped from 8 local district wells. Currently, Cal Water's wells are offline due to participation in the SFPUC in lieu program. Approximately 20% of the demand can be met by groundwater pumping when SFPUC RWS surface supply is limited. The distribution system includes 15 pressure zones, 8 wells, 25 booster pumps, 14 storage reservoirs, 1,436 hydrants, and 160 miles of main.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
SF RWS - Customary	2,745,921	2,394,025	2,193,604	2,374,361
SF RWS - Supplemental	0	38,981	668,470	668,470
Local Groundwater	524,745	511,717	0	0
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	3,270,666	2,944,723	2,862,074	3,042,831
mgd equivalent	6.70	6.03	5.87	6.24

Demand by Sector

Residential	1,271,240	1,157,906	1,182,800	1,226,444
Commercial/Industrial	1,784,482	1,627,433	1,555,853	1,664,103
Other	131,918	92,474	92,621	123,328
Non-Revenue Water	83,026	66,910	30,800	28,956
Total	3,270,666	2,944,723	2,862,074	3,042,831
mgd equivalent	6.70	6.03	5.87	6.24

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	43	39	39	41
Gross	109	99	95	101

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (gallons)	Designation	Type	Capacity (gallons)
Sta. 001-Tank 1	Steel	500,000	Sta. 013-Res.10, Tank 1	Steel	500,000
Sta. 001-Tank 2	Steel	75,000	Sta. 011-Res. 7, Tank 1	Steel	250,000
Sta. 005-Res. 2	Concrete	1,500,000	Sta. 011-Res. 7, Tank 2	Steel	500,000
Sta. 008-Res. 1	Concrete	1,500,000	Sta. 012-Res. 9, Tank 1	Steel	500,000
Sta. 004-Res. 4, Tank 3	Steel	250,000	Sta. 014-Res. 11, Tank 1	Steel	1,000,000
Sta. 004-Res. 4, Tank 4	Steel	250,000	Sta. 015-Res. 12, Tank 1	Steel	1,000,000
Sta. 009-Tank 3	Redwood	50,000	Sta. 101-Tank 1	Steel	250,000
			Total		8,125,000

Wells

Name	Capacity (gpm)	Status*
Well 02	60	Inactive
Well 14	90	Inactive
Well 15	95	Active
Well 17	200	Inactive
Well 18	340	Inactive
Well 19	160	Active
Well 20	150	Active
Well 21	220	Active
Well 22	295	Active
Well 23	300	Active
Total	1,220	(Active wells only)

Interties

Name	No.	Diameter (in.)
Brisbane	1	16
San Bruno	1	6
Daly City	5	2, 4, 4, 8, 10

Coastside County Water District

766 Main Street

Half Moon Bay, California 94019-1995

Phone: (650) 726-4405 Fax: (650) 726-5245

Web: <http://www.coastsidewater.org>

Service Area

Coastside County Water District provides water to the City of Half Moon Bay and several unincorporated coastal communities in San Mateo County, including El Granada, Miramar, and Princeton by the Sea (Pillar Point Harbor).

System

Profile

Area Size	14 square miles
Service Population	16,776
Number of Accounts	7,543
Number of SF RWS Connections	2
Connections To SF RWS Mains	Crystal Springs Intake and Stone Dam (Pilarcitos Lake)
Avg. Day Demand (mgd)	1.85
Avg. Day Purchases From SF RWS (mgd)	0.95
% Demand Met With SF RWS Supplies	51%
Maximum Local Water Production (mgd)	0.5
Alternative Supply Sources	During a drought, local production is extremely low due to dependency on surface stream flows and a small watershed.
Interties With Other Agencies	None
Local Storage (mg)	8.0
Days of Storage	Approximately 3.0 days

Summary

Coastside County Water District has four water sources: Pilarcitos Lake, Crystal Springs Reservoir, Pilarcitos Well Field, and the Denniston (well and surface water) Project. Water purchased from the SF RWS is supplied from two different sources: Pilarcitos Lake and Upper Crystal Springs Reservoir.

The Crystal Springs Water Supply Project, completed in 1994, consists of an intake tunnel under the reservoir, a pump station, and an eight-mile pipeline terminating at the Nunes Water Treatment Plant. Water is taken from Upper Crystal Springs Reservoir, when not available from Pilarcitos Lake or demand is greater than Pilarcitos Lake can supply. Deliveries taken from Upper Crystal Springs Reservoir and Pilarcitos Lake are limited by the capacity of the Nunes Treatment Plant, in addition to the design and capacity of the conveyance system.

The District maintains a distribution system that includes 7 pressure zones, 6 pump stations, 2 water treatment plants, 11 treated storage tanks, 637 hydrants, 10 miles of transmission (supply) pipeline, and 80 miles of distribution pipeline.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	940,214	575,225	515,655	464,037
Local Groundwater	2,674	2,006	10,227	29,278
Surface Water	54,372	240,108	286,685	408,890
Recycled Water	0	0	0	0
Total	997,260	817,339	812,567	902,206
mgd equivalent	2.04	1.67	1.67	1.85

Demand by Sector

Residential	552,572	423,998	427,958	464,899
Commercial/Industrial	136,934	123,773	44,685	46,566
Other	110,274	95,609	90,426	165,626
Dedicated Irrigation	122,219	101,460	175,193	136,865
Non-Revenue Water	75,260	72,499	74,305	88,250
Total	997,259	817,339	812,567	902,206
mgd equivalent	2.04	1.67	1.67	1.85

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	68	52	53	57
Gross	123	100	100	110

Facilities and Distribution**Treated Water Storage Reservoirs**

Designation	Type	Capacity (mg)
Denniston	Steel	1.50
El Granada 1	Steel	0.20
El Granada 2	Steel	0.15
El Granada 3	Steel	0.25
Miramar	Steel	1.00
Carter Hill	Steel	0.40
Carter Hill	Steel	0.60
Carter Hill	Steel	1.50
Miramontes	Steel	0.40
Alves	Steel	2.00
Hazen's	Redwood	0.05
Total		8.05

Surface Water Treatment Facilities

Designation	Capacity (mgd)
Nunes WTP	4.5
Denniston WTP	1.0
Total	5.5

Wells

Name	Capacity (gpm)*	Status
D1	25	Active
D2		Standby
D3	37	Active
D4	35	Active
D5	35	Active
D9	45	Active
P1**	40	November 1 - March 31
P2**		Standby
P3**		Standby
P3A**		Standby
P4**	100	November 1 - March 31 Standby
P4A**	200	November 1 - March 31
P5**	65	November 1 - March 31
Total	582	

*Capacity is dependent on stream flows

**Surface water infiltration wells

City of Daly City

Department of Water and Wastewater Resources
 153 Lake Merced Boulevard
 Daly City, California 94015-1097
 Phone: (650) 991-8200 Fax: (650) 991-8220
 Website: <http://www.dalycity.org/>

Service Area

The City of Daly City Department of Water and Wastewater serves the City of Daly City and some unincorporated portions of San Mateo County.

System

Profile

Area Size	7.4 square miles
Service Population	109,139
Number of Accounts	23,088
Number of SF RWS Connections	11
Connections To SF RWS Mains	Crystal Springs #1 and #2, San Andreas #2, and the Sunset Pipeline
Avg. Day Demand (mgd)	6.26
Avg. Day Purchases From SF RWS (mgd)	3.52
% Demand Met With SF RWS Supplies	56%
Maximum Local Water Production (mgd)	3.43
Alternative Supply Sources	Local Groundwater, Recycled Water
Interties With Other Agencies	GVMID, Brisbane, Cal Water, North Coast CWD, and Westborough CWD
Local Storage (mg)	24.58
Days of Storage	3.37 – Length of storage based on loss of all sources of supply. Can meet the 8 hr criteria either separately or by pumping from zones with excess capacity. Well water, normally used as a supplemental supply, could meet partial demands in an emergency.

Summary

The City of Daly City is supplied by two sources of water: surface water from the SF RWS regional water system, local groundwater from five municipal wells in active operation, and a third source, recycled water produced by the North San Mateo County Sanitation District, a subsidiary of the City of Daly City, that provides turf irrigation to three local golf courses, an athletic field and landscape medians.

Daly City is connected to the SF RWS with eleven turnouts off the Crystal Springs #1 and #2, San Andreas #2 and Sunset Pipelines. Additionally, Daly City has emergency intertie supply connections with Guadalupe Valley Municipal Improvement District, Brisbane Water, California Water Service, North Coast County Water District and Westborough County Water District.

Blending of the SF RWS supply and local groundwater is required because a small portion of the well water exceeds the nitrate MCL. Blending the two supply sources reduces the overall nitrate concentration below the MCL while the well water acts as a buffer for corrosion control.

Daly City entered into a pilot conjunctive use aquifer recharge program in October 2002 with the SFPUC to promote the goal of enhancing regional water resource management. Daly City agreed to accept an increased amount of surplus SF RWS system water at a reduced rate and not pump groundwater from the Westside Basin. This action provided the opportunity to observe the response of the basin from recharge that takes place as a result of the reduction in groundwater pumping.

The Phase One demonstration project continued until November 2003 and assessed the feasibility of a proposed program to increase groundwater levels in the Westside Basin, reduce the potential for seawater intrusion, develop increased SF RWS system yield from the overall surface and groundwater system, and potentially improve conditions at Lake Merced. Initial results from the project showed that groundwater levels increased within the basin. The second phase of the aquifer recharge study began in March 2004 and continued until May 2007. A third phase began May 15, 2009 and ended in March 2011. Currently Daly City and the SFPUC are developing an agreement to implement a long term conjunctive use program based on the analysis of the pilot program.

The City's distribution system includes 12 storage reservoirs, one of which is owned by a private entity, with a combined capacity of 24.58 million gallons that could, in an emergency, supply the annual average daily demand for just over 3.37 days. All reservoirs contain a mixture of SF RWS and groundwater, with the exception of Reservoirs #8 and #5 which are supplied solely by SF RWS connections. During this fiscal year, a two million gallon storage tank was constructed in the Bayshore Area to replace an undersized reservoir to enhance fire flows to the area. The system also contains 18 pumping stations, 23 pressure zones, 2 regulating control valves, 41 pressure-reducing valves, 21 pressure relief valves, 185 miles of main and 1,468 fire hydrants.

Daly City's Tertiary Recycled Water Facility (through its subsidiary, the North San Mateo County Sanitation District) began delivering full Title 22 compliant public contact irrigation water in August 2004 to the Olympic Club. Soon after, water deliveries included the Lake Merced Golf Club and Daly City's Westlake Park. During the 2005 irrigation season, deliveries included the San Francisco Golf Club. A study was conducted to examine the feasibility of adding service to Harding Park Golf Course. The study indicated the project was feasible, and construction is currently underway and is anticipated to be complete by the fall of 2012.

Since its initiation, some 2,386,590 ccf have been delivered for irrigation use, lessening the demand on local groundwater, and to a small degree, offsetting SF RWS system water with the conversion of potable water to recycled water at Harding Park.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	1,654,762	2,152,800	1,867,312	1,717,837
SF RWS Supplemental Water	0	146,803	1,041,345	1,060,963
Local Groundwater	1,231,086	750,309	0	0
Recycled Water	9,203	91,882	259,062	276,321
Total	2,895,051	3,141,794	3,167,719	3,055,121
mgd equivalent	5.93	6.44	6.49	6.26

Recycled water reflected in this table shows the amount of recycled water that offsets SF RWS water.

Demand by Sector

Residential	2,229,036	2,129,965	2,170,365	2,191,793
Commercial/Industrial	381,225	414,229	403,779	397,010
Other	148,036	107,583	69,008	36,395
Dedicated Irrigation	76,081	49,839	294,993	74,738
Non-Revenue Water	60,673	440,178	229,574	355,185
Total	2,895,051	3,141,794	3,167,719	3,055,121
mgd equivalent	5.93	6.44	6.49	6.26

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 16-17 (gpcpd)
Residential	42	40	41	41
Gross (Less Recycled Water)	55	57	55	52

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (gallons)	Designation	Type	Capacity (gallons)
Reservoir 1	Concrete	703,000	Reservoir 5B	Concrete	10,400,000
Reservoir 2	Concrete	2,303,000	Reservoir 6	Concrete	1,495,000
Reservoir 2B	Concrete	2,000,000	Reservoir 6B	Concrete	1,451,000
Reservoir 3	Concrete	978,000	Reservoir 7	Steel	1,487,000
Reservoir 4	Concrete	1,370,000	Reservoir 8	Steel	630,000
Reservoir 5	Concrete	1,481,000	F Bay (Private)	Steel	285,000
			Total		24,583,000

Wells

Name	Capacity (gpm)	Status
Westlake	410	Active
Well 4	426	Active
Jeff Well	340	Active
Vale	693	Active
A St.	524	Inactive
JS Well	550	Active
Total	2,943	

Interties

Name	No.	Diameter (in.)
GVMID	1	12
Brisbane	2	8, 8
CWS	5	2, 4, 4, 8, 10
North Coast	2	6, 8
Westborough	1	12

City of East Palo Alto

2415 University Ave.

East Palo Alto, CA 94303

Web: <http://www.ci.east-palo-alto.ca.us>

American Water Enterprises

2415 University Avenue, 2nd Floor

East Palo Alto, CA 94303

Phone: (650) 322-2083 Fax: (650) 325-5038

Service Area

Located in southeast San Mateo County, the City of East Palo Alto is a residential community with some commercial and industrial development.

System

Profile

Area Size	2.5 square miles
Service Population	26,181
Number of Accounts	3,985
Number of SF RWS Connections	3
Connections To SF RWS Mains	BDPL 1 and 2
Avg. Day Demand (mgd)	1.58
Avg. Day Purchases From SF RWS (mgd)	1.58
% Demand Met With SF RWS Supplies	100%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	Palo Alto, Menlo Park, O'Connor Tract Water Coop, Palo Alto Park Mutual - only to 2 Mutual companies and not in EPA's direction
Local Storage (mg)	0
Days of Storage	0 – No storage: cannot sustain a loss of water independent of its interties. 3.6 mg of storage identified but approval/funding has yet to be secured.

Summary

The City of East Palo Alto receives all of its potable water supply from three SF RWS turnouts off BDPL 1 and 2. The third 72" pipe line is also in place, but not hooked up. All three turnouts are located in the northern portion of the district, and water is distributed directly to all of the customers within the district's one pressure zone. The City's water utility is operated and managed by a private contractor, American Water Enterprises. East Palo Alto sells a small amount of (SF RWS-supplied) water to Menlo Park under an existing agreement. Recently, Menlo Park is isolating its Distribution lines from that of East Palo Alto by cutting off and capping lines from the existing system.

There are no storage facilities or alternate potable water supply sources within the City. The City has one emergency well currently not certified for potable use.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	768,310	690,728	734,911	772,528
Resale SF RWS (Menlo Park)	-2,536	0	0	0
Local Groundwater	0	0	0	0
Recycled Water	0	0	0	0
Other	607	0	0	0
Total	768,916	690,728	734,911	772,528
mgd equivalent	1.58	1.42	1.51	1.58

Demand by Sector

Residential	514,992	615,001	523,703	521,090
Commercial/Industrial	277,171	67,549	125,874	142,101
Other	31,276	58	12,304	16,082
Non-Revenue Water	-54,523	8,120	73,030	93,255
Total	768,916	690,728	734,911	772,528
mgd equivalent	1.58	1.42	1.51	1.58

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	36	52	41	41
Gross	54	58	58	60

Facilities and Distribution**Wells**

Name	Capacity (gpm)	Status
EPACWD Well	0.2	Standby
Total	0.2	

Interties

Name	No.	Diameter (in.)
Palo Alto	1	6
O'Connor	1	6
Menlo Park	> 1	6

Estero Municipal Improvement District

610 Foster City Boulevard

Foster City, California 94404-2299

Phone (650) 286-3270 Fax (650) 345-4626

Web: <http://www.fostercity.org/Services/water/index.cfm>

Service Area

Estero Municipal Improvement District is located in central San Mateo County immediately adjacent to the Bay, and serves the City of Foster City and a part of the City of San Mateo, an area predominantly residential with a broad cross-section of commercial and light industrial development.

System

Profile

Area Size	4 square miles
Service Population	37,687
Number of Accounts	8,163
Number of SF RWS Connections	1
Connections To SF RWS Mains	Crystal Springs #2
Avg. Day Demand (mgd)	4.24
Avg. Day Purchases From SF RWS (mgd)	4.24
% Demand Met With SF RWS Supplies	100%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	CWS - San Mateo, Mid-Peninsula Water District
Local Storage (mg)	20
Days of Storage	2.0 - EMID can meet the 8 hr. criteria on maximum day

Summary

Estero Municipal Improvement District's sole source of supply is SF RWS through a turnout located on Crystal Springs Road in the City of San Mateo. Water from the turnout fills storage tanks located in the northwest corner of the district.

The distribution system consists of 2 water pressure reducing stations, 4 storage tanks, 1 pump station, and 1 pressure zone.

EMID has connections in the southern half of the district to CWS - San Mateo and the Mid-Peninsula Water District for emergency water supply.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	1,930,526	1,768,029	1,874,751	2,068,753
Local Groundwater	0	0	0	
Surface Water	0	0	0	
Recycled Water	0	0	0	
Other	0	0	0	
Total	1,930,526	1,768,029	1,874,751	2,068,753
mgd equivalent	3.96	3.62	3.84	4.24

Demand by Sector

Residential	1,158,140	1,007,662	1,045,227	1,113,272
Commercial/Industrial	225,280	217,524	213,328	236,286
Other	35,024	27,954	27,720	28,093
Dedicated Irrigation	469,617	351,772	381,425	503,058
Non-Revenue Water	42,465	163,117	207,051	188,044
Total	1,930,526	1,768,029	1,874,751	2,068,753
mgd equivalent	3.96	3.62	3.84	4.24

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	64	56	57	61
Gross	107	97	102	112

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (mg)
Storage Tank 1	Steel	4
Storage Tank 2	Steel	4
Storage Tank 3	Steel	4
Storage Tank 4	Conc.	8
Total		20

Interties

Name	No.	Diameter (in.)
CWS - San Mateo	1	12
Mid-Peninsula	1	12

City of Hayward

Utilities & Environmental Services Department

777 B Street

Hayward, California 94541

Phone: (510) 583-4700 Fax: (510) 583-3610

Web: www.hayward-ca.gov

Service Area

The City of Hayward is located in south Alameda County on the eastern shore of the San Francisco Bay.

System

Profile

Area Size	62.5 square miles
Service Population	160,500
Number of Accounts	38,578
Number of SF RWS Connections	4 (two at each turnout)
Connections To SF RWS Mains	BDPL 1 and 2
Avg. Day Demand (mgd)	14.55
Avg. Day Purchases From SF RWS (mgd)	14.55
% Demand Met With SF RWS Supplies	100%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	Local Groundwater (Emergency Use Only)
Interties With Other Agencies	ACWD, EBMUD
Local Storage (mg)	29.4
Days of Storage	1.7 – All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity. Well water could be used in an emergency.

Summary

The City of Hayward obtains its entire water supply from the SF RWS at two turnouts, one at the Irvington Portal and one at the Newark valve lot. The distribution system consists of 6 main pressure zones, 14 water storage tanks, and 7 pump stations delivering water to upper pressure zones. The transmission system attached to the Hetch Hetchy aqueduct is complemented by two booster pump stations: the Decoto pump station, located along the Mission Boulevard 24" transmission main, and the Hesperian pump station, located along the Hesperian Boulevard 42" transmission main. Multiple pressure reducing stations interface between the transmission and distribution systems. Five water wells, permitted for short term, emergency use, can be brought online in the event of a transmission system failure.

There is at least one storage tank located within each pressure zone, with pump stations to deliver water to the higher elevation zones. Water is delivered to the 250 pressure zone from SF RWS with sufficient pressure under most conditions. Storage is located in the eastern portion of the City, east of Mission Blvd. The Decoto and/or Hesperian pump stations boost pressure in the 250 zone

when necessary. All five emergency wells are located west of Mission Blvd., as are three of the City's four emergency interties.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	6,634,616	5,979,616	6,281,522	7,101,954
Local Groundwater	0	0	0	0
Recycled Water	0	0	0	0
Total	6,634,616	5,979,616	6,281,522	7,101,954
mgd equivalent	13.60	12.25	12.87	14.55

Demand by Sector

Residential	3,609,950	3,372,168	3,486,839	3,708,772
Commercial/Industrial	1,452,978	1,371,311	1,291,502	1,507,655
Other	306,320	277,018	305,097	415,716
Dedicated Irrigation	744,222	556,161	540,224	784,722
Non-Revenue Water	521,146	402,958	657,860	685,089
Total	6,634,616	5,979,616	6,281,522	7,101,954
mgd equivalent	13.60	12.25	12.87	14.55

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	48	43	45	47
Gross	89	77	81	91

Facilities and Distribution

Storage Reservoirs

Designation	Type	Capacity (gallons)	Designation	Type	Capacity (gallons)
Treeview	Concrete	3,000,000	250 East	Concrete	500,000
Maitland	Concrete	1,000,000	250 West	Concrete	500,000
North Walpert	Concrete	1,500,000	Highland 500	Concrete	3,000,000
South Walpert	Steel	5,300,000	Highland 750	Steel	4,400,000
D Street	Concrete	1,000,000	Highland 1000	Steel	2,200,000
High School	Concrete	1,000,000	Highland 1285	Steel	1,800,000
Garin Hills	Steel	1,250,000	Highland 1530	Steel	2,900,000
Total			29,350,000		

Wells

Name	Capacity (mgd)	Status
Well A	1.7	Standby (Emergency)
Well B*	2.9	Standby (Emergency)

Name	Capacity (mgd)	Status
Well C	4.6	Standby (Emergency)
Well D	1.4	Standby (Emergency)
Well E	3.0	Standby (Emergency)

Total 13.6

*Out of service for rehabilitation

Interties

Name	No.	Diameter (in.)
EBMUD*	2	10, 12
ACWD	2	12, 12

*Also capable of hydrant-to-hydrant interconnection with EBMUD for firefighting purposes during emergencies.

Town of Hillsborough

Water Department

1600 Floribunda Avenue

Hillsborough, California 94010-6498

Phone: (650) 375-7402 Fax: (650) 375-7444

Web: <http://www.hillsborough.net/depts/pw/water/default.asp>

Service Area

The Town of Hillsborough, located in central San Mateo County, is a single family residential community zoned for residential estates. The Town's service area includes the Town of Hillsborough and portions of unincorporated San Mateo County.

System

Profile

Area Size	6.25 square miles
Service Population	10,869
Number of Accounts	4,310
Number of SF RWS Connections	9 Turnouts, 12 meters
Connections To SF RWS Mains	Crystal Springs #2, Sunset Pipeline
Avg. Day Demand (mgd)	2.53
Avg. Day Purchases From SF RWS (mgd)	2.53
% Demand Met With SF RWS Supplies	100%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	Burlingame, CWS - San Mateo
Local Storage (mg)	8.29 (max capacity)
Days of Storage	2.2 - All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity.

Summary

The Town of Hillsborough purchases all of its water from the SF RWS via 12 meters in 9 turnouts located off San Francisco's Sunset and Crystal Springs #2 supply lines, which provide potable water to customers in 5 pressure zones.

The Town owns and operates its own water utility. The distribution system consists of 16 pressure zones, 14 pump stations, 18 storage tanks, and 107 miles of mains.

There are no wells or alternate sources within the district.

Water Supply and Demand

Supply by Source ¹	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	1,226,777	1,050,944	1,139,003	1,234,547
Resale SF RWS (CWS)	0	0	0	0
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	1,226,777	1,050,944	1,139,003	1,234,547
mgd equivalent	2.51	2.15	2.33	2.53

Demand by Sector ²

Residential	1,176,162	883,507	975,463	1,119,178
Commercial/Industrial	4,826	5,637	4,567	5,574
Institutional/Other	13,090	10,992	12,364	17,058
Dedicated Irrigation	23,941	17,607	16,965	22,327
Non-Revenue Water	8,758	133,201	129,644	70,410
Total	1,226,777	1,050,944	1,139,003	1,234,547
mgd equivalent	2.51	2.15	2.33	2.53

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	222	167	184	211
Gross	231	198	215	233

1 SFPUC billing is based on monthly meter readings.

2 Hillsborough retail sales are based on bi-monthly reading of customers' meters.

Note: Some minor population and water supply errors were discovered in FYs 08-10, and have not been corrected here. These errors are not significant, and corrected data can be provided by the Town of Hillsborough on request.

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (gallons)
Forest View Tank 1	Steel	280,000
Forest View Tank 2	Steel	675,000
Skyfarm II Tank 1	Steel	65,000
Skyfarm II Tank 2	Steel	65,000
Skyfarm III Tank 1	Steel	700,000
Skyfarm III Tank 2	Steel	700,000
Darrell Tank 1	Steel	500,000
Darrell Tank 2	Steel	500,000
Darrell Tank 3	Steel	1,000,000

Designation	Type	Capacity (gallons)
El Arroyo Tank 1	Steel	516,000
El Arroyo Tank 2	Steel	516,000
Major Hayes Tank	Steel	250,000
Vista Tank	Steel	350,000
Marlborough Tank 1	Steel	250,000
Marlborough Tank 2	Steel	350,000
Tournament Tank 1	Steel	600,000
Tournament Tank 2	Steel	600,000
Total		7,917,000

Interties

Name	No.	Diameter (in.)
CWS -San Mateo	4	2*, 6, 6, 8
Burlingame	3	6, 8, 10

*2-inch galvanized steel pipe is considered non-functional as an intertie.

City of Menlo Park

Menlo Park Municipal Water

701 Laurel Street

Menlo Park, California 94025-3483

Phone: (650) 330-6750 E-mail: water@menlopark.org

Web: <http://www.menlopark.org/water>

Service Area

The City of Menlo Park, a balanced mix of residential, commercial and industrial users, is located in southern San Mateo County.

System

Profile

Area Size	4 square miles
Service Population	17,071
Number of Accounts	4,368
Number of SF RWS Connections	5
Connections To SF RWS Mains	3 connections to BDPL 1 and 2 via Ivy Drive at Hill, Chilco and Madera; 1 connection to BDPL 4 via Sharon Park Drive at Lassen; 1 connection to the Palo Alto Pipeline
Avg. Day Demand (mgd)	2.86
Avg. Day Purchases From SF RWS (mgd)	2.86
% Demand Met With SF RWS Supplies	100%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	CWS - Bear Gulch District, Redwood City, East Palo Alto, O'Conner Tract Water Coop
Local Storage (mg)	5.5 mg
Days of Storage	0.65

Summary

The City of Menlo Park purchases all of its water directly from the SF RWS. One SF RWS turnout serves the Sharon Heights area along Sand Hill Road and Highway 280, and four turnouts serve portions of the City north and east of El Camino Real near Highway 101 and Willow Road. The distribution system includes one pump station, two storage reservoirs, and 63 miles of mains.

The two reservoirs supply the Sharon Heights area. No storage exists in the areas supplied north and east of El Camino Real. However, this area has emergency interties with California Water Service (CWS), Redwood City, O'Connor Tract Water Coop, and East Palo Alto. CWS is the primary emergency source of water for Menlo Park.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	1,287,136	1,074,516	1,153,760	1,393,425
Resale SF RWS Purchase	0	0	0	0
Other	0	0	0	0
Total	1,287,136	1,074,516	1,153,760	1,393,425
mgd equivalent	2.64	2.20	2.36	2.86

Demand by Sector

Residential	566,933	469,556	509,673	563,673
Commercial/Industrial	517,551	444,993	541,163	506,000
Other	67,003	55,167	63,640	80,463
Dedicated Irrigation	148,509	1,011	133,276	158,074
Non-Revenue Water	-12,860	103,789	-93,992	85,215
Total	1,287,136	1,074,516	1,153,760	1,393,425
mgd equivalent	2.64	2.20	2.36	2.86

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	76	60	65	68
Gross	172	137	147	167

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (mg)
Reservoir 1	Storage	2.0
Reservoir 2	Storage	3.5
Total		5.5

Interties

Name	No.	Diameter (in.)
CWS – Bear Gulch	3	6, 8, 10
East Palo Alto	1	12
O'Conner Tract	1	6
Redwood City	1	6

Mid-Peninsula Water District

Three Dairy Lane

Belmont, California 94002-0129

Phone: (650) 591-8941 Fax: (650) 591-4998

Web: <http://www.midpeninsulawater.org>

Service Area

The Mid-Peninsula Water District, located in central San Mateo County, serves the city of Belmont, portions of San Carlos, and unincorporated county areas. The predominant land use is residential.

System

Profile

Area Size	5 square miles
Service Population	26,924
Number of Accounts	7,981
Number of SF RWS Connections	2
Connections To SF RWS Mains	BDPL 1 and 2, Crystal Springs Bypass Tunnel
Avg. Day Demand (mgd)	2.50
Avg. Day Purchases From SF RWS (mgd)	2.50
% Demand Met With SF RWS Supplies	100.0%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	Estero MID, Redwood City, CWS - San Mateo, CWS - San Carlos
Local Storage (mg)	12.5
Days of Storage	3.6 - All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity.

Summary

The District's sole source of potable water is delivered via two SF RWS turnouts. Local water storage is not feasible, and groundwater of adequate quantity and quality is not available.

The system contains 9 pressure zones. The easternmost zone, east of El Camino Real, is gravity fed from the SF RWS connection. Water is pumped to storage reservoirs at higher elevations to feed the remaining pressure zones. The District operates and maintains a complex distribution system that includes 20 pumps, 11 water tanks, 13 regulating valves, 813 hydrants, and 105 miles of water mains.

The District also has redundancy built into the entire distribution system, enabling either of the two SF RWS transmission mains to supply water to all customers of the District. The District has the ability to transfer water between pressure zones in either a pump-up or flow-down mode in emergency conditions.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	1,209,300	1,076,654	1,134,389	1,221,454
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	1,209,300	1,076,654	1,134,389	1,221,454
mgd equivalent	2.48	2.21	2.32	2.50

Demand by Sector

Residential	834,024	732,057	769,601	838,748
Commercial/Industrial	234,417	219,557	222,735	201,081
Other	71,882	64,982	61,447	29,635
Dedicated Irrigation	0	0	1,200	85,637
Non-Revenue Water	68,977	60,058	79,406	66,353
Total	1,209,300	1,076,654	1,134,389	1,221,454
mgd equivalent	2.48	2.21	2.32	2.50

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	64	56	59	64
Gross	93	82	86	93

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (mg)	Designation	Type	Capacity (mg)
Storage Tank 1	Steel	2.50	Storage Tank 7	Steel	0.79
Storage Tank 2	Steel	2.50	Storage Tank 8	Steel	0.79
Storage Tank 3	Steel	1.00	Storage Tank 9	Steel	0.10
Storage Tank 4	Steel	1.50	Storage Tank 10	Steel	0.10
Storage Tank 5	Steel	1.00	Storage Tank 11	Steel	1.50
Storage Tank 6	Steel	0.72			
			Total		12.50

Interties

Name	No.	Diameter (in.)	Name	No.	Diameter (in.)
Estero	1	12	CWS - San Carlos	2	8
Redwood City	1	12	CWS - San Mateo	3	8

City of Millbrae

Public Works - Engineering

621 Magnolia Avenue

Millbrae, California 94030

Phone: (650) 259-2339 Fax: (650) 697-8158

Web: <http://www.ci.millbrae.ca.us>

Service Area

The City of Millbrae is a residential community with a small commercial business sector located in north San Mateo County. Millbrae owns and operates its water utility, with a service area that includes Capuchino High School in San Bruno.

System

Profile

Area Size	3.2 square miles
Service Population	22,848
Number of Accounts	6,570
Number of SF RWS Connections	5
Connections To SF RWS Mains	Murchison, Greenhills, Park, 195 ECR, Helen
Avg. Day Demand (mgd)	2.03
Avg. Day Purchases From SF RWS (mgd)	2.03
% Demand Met With SF RWS Supplies	100%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	Burlingame
Local Storage (mg)	2.36
Days of Storage	0.8 – 3 of 4 (Zones 1- 3) zones receive water from Harry Tracy Plant. Meets 8 hr. coverage for City's 3 upper zones. Planned projects will provide interties among zones to provide storage to Zone 4. These projects are pending completion of a Master Plan.

Summary

The City of Millbrae's only source of water is the SF RWS, delivered through 5 turnouts. Hetch Hetchy water purchased from the SF RWS meets all drinking water standards and is treated with fluoride.

Four storage tanks near the Harry Tracy WTP are filled early in the morning and are slowly drawn throughout the day to satisfy customer demand. Water filtered by the Harry Tracy Treatment Plant (San Andreas Reservoir) supplies water in the higher elevations, while the Crystal Springs #2 and #3 deliver water to the lower elevations.

The distribution system includes 11 pressure zones, 6 pumps (3 each at 2 stations), 5 storage tanks (only 4 are in operation), 568 hydrants, and 69.7 miles of water mains.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	991,049	899,785	918,695	992,853
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	12,000	0	12,000	12
Other	0	0	0	0
Total	1,003,049	899,785	930,695	992,865
mgd equivalent	2.06	1.84	1.91	2.03

Demand by Sector

Residential	627,450	542,393	570,181	611,413
Commercial/Industrial	161,459	162,215	158,303	154,123
Other	71,796	28,293	29,353	37,467
Dedicated Irrigation	72,645	47,125	52,420	78,080
Non-Revenue Water	69,699	119,759	120,438	111,782
Total	1,003,049	899,785	930,695	992,865
mgd equivalent	2.06	1.84	1.91	2.03

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	60	49	51	55
Gross (less recycled water)	94	81	82	89

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (mg)
Storage Tank 1	Steel	1.00
Storage Tank 2	Steel	0.50
Storage Tank 3	Steel	0.50
Storage Tank 4	Steel	0.11
Storage Tank 5	Steel	0.25
Total		2.36

Interties

Name	No.	Diameter (in.)
Burlingame	8	6, 8, 10, 12

City of Milpitas

Public Works Department, Engineering Division

455 East Calaveras Boulevard

Milpitas, California 95035-5411

Phone: (408) 586-3300 Fax: (408) 586-3305

Web: <http://www.ci.milpitas.ca.gov/>

Service Area

The City of Milpitas is located in northeastern Santa Clara County.

System

Profile

Area Size	13.6 square miles
Service Population	78,106
Number of Accounts	16,711
Number of SF RWS Connections	4 – Sunnyhills (Washington), Calaveras, Main (Hammond), and Gibraltar Tank (intertie).
Connections To SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	9.03
Avg. Day Purchases From SF RWS (mgd)	5.20
% Demand Met With SF RWS Supplies	58%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	Santa Clara Valley Water District (SCVWD), South Bay Water Recycling (SBWR), Pinewood Well
Interties With Other Agencies	Alameda County Water District (ACWD), San Jose Water Company (SJWC)
Local Storage (mg)	16.3
Days of Storage	1.4 – All 6 zones can meet the 8 hr criteria, ranging from 9 hours to 31 hours at maximum day.

Summary

The City of Milpitas owns and operates its own water utility. The northern and eastern areas are supplied primarily by the SF RWS, while the remaining areas are supplied by SCVWD. With some exceptions, residents receive SF RWS water, while industrial and commercial areas receive SCVWD water. The City does not blend SF RWS and SCVWD waters under normal operations, but they can be blended during emergency situations.

The City's distribution system consists of 5 turnouts, 9 pressure regulator valves, 4 emergency pressure regulator valves, 5 pumping stations, 5 storage tanks, and 1 well.

The City has emergency interties with ACWD to the north and SJWC to the south. The City has one well, Pinewood Well, which can provide water to one SF RWS-supplied zone during emergencies. Another well is under construction to supplement water supply during emergencies.

Since 1997, the City has been receiving non-potable recycled water from South Bay Water Recycling (SBWR) Program.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	2,503,640	2,215,396	2,391,431	2,538,687
Santa Clara Valley WD	1,548,876	1,485,678	1,406,074	1,378,578
Recycled Water	409,507	329,206	361,682	490,724
Other	0	0	0	0
Total	4,462,023	4,030,280	4,159,187	4,407,989
mgd equivalent	9.14	8.26	8.52	9.03

Demand by Sector

Residential	1,943,194	1,718,291	1,797,145	2,103,592
Commercial/Industrial	1,200,415	1,106,090	1,036,659	1,036,680
Other	538,925	109,428	128,539	138,794
Dedicated Irrigation	581,420	637,919	730,235	963,856
Non-Revenue Water	198,069	458,552	466,609	165,067
Total	4,462,023	4,030,280	4,159,187	4,407,989
mgd equivalent	9.14	8.26	8.52	9.03

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	56	47	48	55
Gross (Less Recycled Water)	117	100	100	103

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (mg)
SFPUC – Gibraltar	Prestressed Concrete	5.00
SFPUC – Ayer	Prestressed Concrete	5.60
SFPUC – Tularcitos	Steel	0.31
SFPUC – Minnis	Steel	0.35
SCVWD – Gibraltar	Prestressed Concrete	5.00
Total		16.26

Wells

Name	Capacity (mgd)	Status
Pinewood*	1.7	Active
Total	1.7	

*Emergency use

Interties

Name	No.	Diameter (in.)
SCVWD*	41	6 - 24
SJWC	1	6
ACWD	2	8

*Emergency and Isolation Valves included.

City of Mountain View

Public Services Division

231 North Whisman Road

Mountain View, California 94043

Phone: (650) 903-6329 Fax: (650) 962-8079

Web: <http://www.mountainview.gov>

Service Area

The City of Mountain View is located in north Santa Clara County on the Peninsula, between the cities of Sunnyvale and Palo Alto.

System

Profile

Area Size	12 square miles
Service Population	79,027
Number of Accounts	17,349
Number of SF RWS Connections	3 turnouts/ 9 meters
Connections To SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	8.80
Avg. Day Purchases From SF RWS (mgd)	7.41
% Demand Met With SF RWS Supplies	84%
Maximum Local Water Production (mgd)	2.4
Alternative Supply Sources	Local Groundwater, SCVWD, Recycled
Interties With Other Agencies	Palo Alto, Sunnyvale, SCVWD, CWS
Local Storage (mg)	17.0
Days of Storage	Note: With loss of SF RWS supply only, City can utilize wells, SCVWD or storage within zones or excess capacity from other zones to meet 8-hour outage or Minimum Winter Demand.

Summary

The City of Mountain View's primary water supplier is the SF RWS. The Santa Clara Valley Water District supplies treated water and Mountain View supplies groundwater. California Water Service also provides water to a small part of Mountain View. Mountain View's system distributes water to three pressure zones via 176 miles of main, with inter-zonal connections that allow water to flow from adjacent zones. Mountain View has four water storage facilities.

Mountain View has 3 active wells (4 currently out of service). The wells influence each other, resulting in varied maximum and simultaneous flows. They are not currently operated at their maximum capacity due to various maintenance and operational issues.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	3,611,194	3,305,780	3,485,016	3,617,700
Santa Clara Valley WD	400,146	298,782	391,915	428,455
Local Groundwater	245,464	48,897	54,628	49,973
Recycled Water	178,779	201,357	193,460	197,365
Total	4,435,583	3,854,816	4,125,019	4,293,493
mgd equivalent	9.09	7.90	8.45	8.80

Demand by Sector

Residential	2,331,572	2,082,952	2,175,622	2,333,365
Commercial/Industrial	836,989	783,051	755,605	777,451
Other	7,947	7,066	9,904	13,672
Dedicated Irrigation	1,030,128	756,193	773,367	996,185
Non-Revenue Water*	228,947	225,554	410,521	172,820
Total	4,435,583	3,854,816	4,125,019	4,293,493
mgd equivalent	9.09	7.90	8.45	8.80

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	63	57	57	61
Gross	114	99	104	106

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (gallons)	Designation	Type	Capacity (gallons)
Miramonte	Concrete	1,000,000	Whisman	Concrete	6,000,000
Miramonte	Concrete	2,300,000	Graham	Concrete	8,000,000
Total					17,300,000

Wells

Name	Capacity (mgd)	Status	Name	Capacity (mgd)	Status
Well 10	1.2	OOS	Well 21	1.1	OOS
Well 17	0.2	OOS	Well 22	1.1	Active
Well 19	0.7	Active	Well 23*	1.3	Active
Well 20	1.5	OOS	Total	7.1	

Interties

Name	No.	Diameter (in.)
Palo Alto	3	6
Sunnyvale	4	6, 8, 8, 8
SCVWD	1	24

North Coast County Water District

2400 Francisco Boulevard
Pacifica, California 94044-6039

Phone: (650) 355-3462 Fax: (650) 355-0735

Web: <http://www.nccwd.com>

Service Area

The North Coast County Water District serves the northern coastal areas of San Mateo County. The District's boundaries are nearly the same as those of the City of Pacifica.

System

Profile

Area Size	13.6 square miles
Service Population	40,000
Number of Accounts	12,526
Number of SF RWS Connections	1
Connections To SF RWS Mains	San Andreas 3
Avg. Day Demand (mgd)	2.40
Avg. Day Purchases From SF RWS (mgd)	2.40
% Demand Met With SF RWS Supplies	100%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	Local Surface Water
Interties With Other Agencies	San Bruno, Daly City, Westborough CWD
Local Storage (mg)	23.35
Days of Storage	7.12 – Length of storage based on loss of all sources of supply. All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity. San Pedro Creek could meet limited demand in an emergency.

Summary

100% of NCCWD water comes from one SF RWS connection at San Andreas. There is a main pump station located on the site of the Harry Tracy WTP, which pumps all the water through a 4 mile pipeline into the Milagra Ridge storage tank located in the Central District area.

The northern portion of the system is supplied by pumping water from the Milagra Ridge Tank site to the Christian Hill tank, then distributing it to the customers via gravity. The southern District's distribution hub, at Royce Tank Site, is supplied via gravity by the Milagra Ridge Tank. Overall, the system is divided into 34 pressure zones, each separated by pressure reducing valves. At average daily demands, there is enough storage to supply the District with water for up to 7.2 days at typical demands and storage. A small amount of water is conveyed to San Bruno annually as a public customer.

The District's only other water source is the San Pedro Creek. Water rights to the creek are limited to 500 gpm between December 1 and April 30, and to 210 gpm during May. This water requires filtering and minimal treatment at the San Pedro WTP adjacent to the creek before distribution. The San Pedro facility is on line and filters creek water, as allowed by the District's water rights, for non-potable uses.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	1,360,780	900,293	1,089,419	1,169,151
Westborough CWD (SF RWS)	0	0	0	0
Recycled Water	4,120	13,788	15,787	0
Other	0	0	0	0
Total	1,364,900	914,081	1,105,206	1,169,151
mgd equivalent	2.80	1.87	2.26	2.40

Demand by Sector

Residential	911,508	828,122	813,927	856,462
Commercial/Industrial	99,795	91,672	91,672	100,196
Other	62,064	47,161	56,333	68,359
Dedicated Irrigation	24,484	22,785	23,205	58,424
Non-Revenue Water	267,049	-75,659	120,069	85,710
Total	1,364,900	914,081	1,105,206	1,169,151
mgd equivalent	2.80	1.87	2.26	2.40

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	47	42	42	44
Gross	70	46	56	60

Facilities and Distribution**Potable Storage Reservoirs**

Designation	Capacity (gallons)
13 Reservoirs	23,550,000
Total	23,550,000

Water Treatment Facilities:**Surface Water**

Designation	Capacity (mgd)
San Pedro WTP	0.5

Recycled Water

Designation	Capacity (mgd)
Central District	0.3

Interties

Name	No.	Diameter (in.)
San Bruno	2	10
Daly City	2	6, 8

Name	No.	Diameter (in.)
Westborough	3	8, 10, 10

City of Palo Alto

250 Hamilton Avenue

Palo Alto, California 94301-2593

Phone: (650) 329-2119 Fax: (650) 326-1507

Web: <http://www.cityofpaloalto.org>

Service Area

Located in north Santa Clara County, Palo Alto is the only municipality in California that operates six utilities - electric and fiber, water, gas, waste water collection and treatment, storm drainage and refuse. The utility's service area includes approximately 40 residential accounts (about 100 people) outside of the City's boundaries (in Los Altos Hills and Portola Valley).

System

Profile

Area Size	26 square miles
Service Population	67,320
Number of Accounts	20,000
Number of SF RWS Connections	5
Connections To SF RWS Mains	Palo Alto Pipeline, BDPL 3 and 4
Avg. Day Demand (mgd)	10.76
Avg. Day Purchases From SF RWS (mgd)	9.96
% Demand Met With SF RWS Supplies	93%
Maximum Local Water Production (mgd)	15.05 – 8 emergency wells
Alternative Supply Sources	Recycled Water, Local Groundwater
Interties With Other Agencies	East Palo Alto CWD, Mountain View, Purissima Hills WD, Stanford University
Local Storage (mg)	13
Days of Storage	1.13 – Currently, Palo Alto water system can independently supply 8 hr under maximum day demands for emergency use

Summary

The City of Palo Alto's primary source of water is the SF RWS, via 5 turnouts, 3 off the Palo Alto Pipeline and 2 off BDPLs 3 and 4, that in most years provide 100% of Palo Alto's potable water supply. Palo Alto has 9 pressure zones, 7 storage tanks, 5 booster pump stations in the Foothills which pump water to the higher elevation pressure zones, and 2 booster pump stations to support pressure zones 1 and 2.

To improve the capacity of the local water distribution system to provide water during an emergency event, Palo Alto initiated the Emergency Water Supply and Storage Project. The Project included the rehabilitation of 5 existing wells, construction of 3 new wells, and construction of a new 2.5 million gallon emergency water storage reservoir. Palo Alto now has adequate storage and pumping capacity to provide emergency back up during an interruption of SF RWS service. The wells may also be available to meet limited dry year requirements.

Palo Alto replaces potable water with recycled water to irrigate a golf course and a city park, to fill a duck pond, and some uses at the water quality control plant. Recycled water use that does

not replace potable water includes the Emily Renzel Marsh enhancement project and additional process uses at the water quality control plant.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	4,723,751	4,006,084	4,382,560	4,859,576
Local Groundwater	0	0	0	0
Recycled Water	367,831	350,847	289,668	392,913
Other	0	0	0	0
Total	5,091,582	4,356,931	4,672,228	5,252,489
mgd equivalent	10.43	8.93	9.57	10.76

Demand by Sector

Residential	2,649,876	2,253,313	2,444,032	2,850,950
Commercial/Industrial	998,760	954,961	980,450	894,383
Other	645,761	583,581	543,728	678,658
Dedicated Irrigation	506,450	368,711	416,340	578,817
Non-Revenue Water	290,735	196,365	287,678	249,681
Total	5,091,582	4,356,931	4,672,228	5,252,489
mgd equivalent	10.43	8.93	9.57	10.76

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	82	68	75	87
Gross (Less Recycled Water)	146	121	134	148

Facilities and Distribution

Storage Reservoirs

Designation	Type	Capacity (gallons)	Designation	Type	Capacity (gallons)
Mayfield	Concrete	4,000,000	El Camino	Steel	2,500,000
Boronda	Concrete	1,500,000	Montebello	Steel	1,500,000
Corte Madera	Steel	1,500,000	Park	Steel	1,000,000
Dahl	Steel	1,000,000	Total		13,000,000

Wells

Name	Capacity (mgd)	Status
Eleanor Pardee	1.44	New – Operational
Library	0.86	New – Operational
El Camino Park	1.44	New – Operational
Fernando	1.01	Existing – Operational
Hale	2.09	Existing – Operational
Matadero	1.01	Existing – Operational
Peers	2.45	Existing – Operational
Rinconada	4.75	Existing – Operational

Total 15.05

Note: All wells are designated Emergency/Standby at this time.

Interties

Name	No.	Diameter (in.)
East Palo Alto	1	6
Mountain View	2	6, 6
Stanford	2	8, 8
Purissima Hills WD	2	8, 12

Purissima Hills Water District

26375 Fremont Road

Los Altos Hills, California 94022-2699

Phone: (650) 948-1217 Fax: (650) 948-0961

Service Area

The Purissima Hills Water District provides service to two-thirds of the Town of Los Altos Hills, a rural community adjacent to the City of Palo Alto, and unincorporated county land on the southern boundary. The District serves predominantly single-family homes on minimum one-acre lots. The largest customer is Foothill College.

System

Profile

Area Size	4,600 acres
Service Population	6,150
Number of Accounts	2,201
Number of SF RWS Connections	2
Connections To SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	1.67
Avg. Day Purchases From SF RWS (mgd)	1.67
% Demand Met With SF RWS Supplies	100%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	CWS - Los Altos, City of Palo Alto
Local Storage (mg)	9.88
Days of Storage	All 4 distribution zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity

Summary

Purissima Hills Water District receives 100% of its water supply from two San Francisco/Hetch Hetchy turnouts located along the Foothill Expressway on the northern edge of the District. The SF RWS supply is gravity-fed through 18" transmission mains to the Deer Creek Pump Station and McCann Tanks at 250 feet above sea level.

All services within the District are gravity fed from tanks in the respective zones. The distribution system consists of 4 pressure zones, 11 tanks, 5 pumping stations, 15 pumps, and 80 miles of pipe.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	803,313	640,369	689,261	814,270
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	803,313	640,369	689,261	814,270
Mgd equivalent	1.65	1.31	1.41	1.67

Demand by Sector

Residential	732,811	591,604	627,686	715,387
Commercial/Industrial	0	0	0	0
Other	44,713	24,255	37,137	43,425
Dedicated Irrigation	4,305	5,061	0	4,888
Non-Revenue Water	21,484	19,449	24,438	50,570
Total	803,313	640,369	689,261	814,270
Mgd equivalent	1.65	1.31	1.41	1.67

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	245	197	209	283
Gross	268	213	230	271

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (gallons)	Designation	Type	Capacity (gallons)
MC Tank 1	Steel	130,000	A Tank 1	Redwood	200,000
MC Tank 2	Steel	1,000,000	A Tank 2	Cor-ten Steel	250,000
LC Tank 1	Steel	100,000	N Tank 1	Cor-ten Steel	200,000
LC Tank 2	Cor-ten Steel	900,000	N Tank 2	Cor-ten Steel	3,000,000
HH Tank	Concrete	3,100,000	PM Tank	Cor-ten Steel	500,000
E Tank	Steel	500,000	Total		9,880,000

Interties

Name	No.	Diameter (in.)
CWS - Los Altos	2	8, 12
City of Palo Alto	2	12, 12

City of Redwood City

Public Works Services Department
 1400 Broadway
 Redwood City, California 94063-2505
 Phone: (650) 780-7464 Fax: (650) 780-7445
 Web: <http://www.redwoodcity.org/water>

Service Area

Redwood City is located in south San Mateo County. The City of Redwood City owns and operates its own water utility, and supplies water beyond its City limits, to portions of the Town of Woodside, the City of San Carlos, and unincorporated areas of the County.

System

Profile

Area Size	35 square miles
Service Population	87,023
Number of Accounts	23,608
Number of SF RWS Connections	13
Connections To SF RWS Mains	Bay Crossing 1 and 2, BDPL 1, 2, and 5, BDPL 3 and 4
Avg. Day Demand (mgd)	9.14
Avg. Day Purchases From SF RWS (mgd)	8.47
% Demand Met With SF RWS Supplies	93%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	Recycled water for landscape irrigation, industrial, and dual pumped uses
Interties With Other Agencies	CWS -Bear Gulch, CWS - Mid- Peninsula, Mid-Peninsula WD, Menlo Park
Local Storage (mg)	21.24
Days of Storage	2.2 days storage. – 4 of 14 pressure zones have no storage facilities. The 4 zones without storage have emergency interties with other water agencies.

Summary

The City of Redwood City purchases all of its potable water from the SF RWS via 13 active meter connections. 7 of the turnouts are located off Bay Division Pipelines 1 and 2, 1 turnout is off BDPL 1, 2, and 3, and 5 turnouts are off BDPL 3 and 4.

The distribution system consists of 14 separate pressure zones, 10 pump stations and 264.5 miles of water mains. Pumps are located at 7 of the 11 storage sites. In addition, there are permanent generators at the Glenloch, Peninsula 1, and Peninsula 2 tanks, and 2 portable generators on stand-by.

The City has a total of 11 emergency interties with California Water Service of San Carlos, Mid-Peninsula Water District, and the City of Menlo Park.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	3,789,370	3,508,414	3,820,098	4,130,668
Recycled Water	310,329	282,017	294,771	331,757
Other	0	0	0	0
Total	4,099,699	3,790,431	4,114,869	4,462,425
mgd equivalent	8.40	7.77	8.43	9.14

Demand by Sector

Residential	2,666,567	2,245,955	2,399,189	2,614,393
Commercial/Industrial	766,108	748,298	703,482	723,900
Other	82,618	73,591	72,007	76,353
Dedicated Irrigation	579,350	473,004	502,184	611,365
Non-Revenue Water	5,056	249,583	438,007	436,414
Total	4,099,699	3,790,431	4,114,869	4,462,425
mgd equivalent	8.40	7.77	8.43	9.14

Per Capita Use	Actual FY 15-16 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	63	53	57	62
Gross (Less Recycled Water)	89	83	90	97

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (mg)	Designation	Type	Capacity (mg)
Easter Cross	Steel	0.10	Lakeview	Steel	1.00
Easter Bowl	Steel	1.20	Main City Zone	Steel	8.00
Glenloch	Steel	0.09	Main City Zone	Steel	3.75
Wilmington South	Steel	0.25	Redwood Shores	Steel	3.20
Cambridge	Steel	0.65	Redwood Shores	Steel	3.00
			Total		21.24

Interties

Name	No.	Diameter (in.)	Name	No.	Diameter (in.)
BCWD	1	12	Douglas / Fair Oaks	1	6
BCWD and CWS	1	12	CWS – Bear Gulch	2	6
Oakwood / El Camino	1	6	Bransten / Industrial	1	8
MPW	1	6	San Carlos	2	6, Fire Hose
Alameda / Edgewood	1	Fire Hose	Eaton	1	Fire Hose

City of San Bruno

Public Works - Water Division

567 El Camino Real

San Bruno, California 94066

Phone: (650) 616-7065 Fax: (650) 794-1443

Web: http://www.sanbruno.ca.gov/city_services/public_works/utilities/water.html

Service Area

The City of San Bruno is located in north San Mateo County. San Bruno is a residential community with regional commercial and light industrial development. The Public Works Water Division's service area includes the City of San Bruno and unincorporated areas of the County.

System

Profile

Area Size	6.1 square miles
Service Population	44,409
Number of Accounts	11,493
Number of SF RWS Connections	5
Connections To SF RWS Mains	Crystal Springs # 2 and #3, San Andreas 1, 2, and 3, Sunset Pipeline
Avg. Day Demand (mgd)	3.05
Avg. Day Purchases From SF RWS (mgd)	0.86
% Demand Met With SF RWS Supplies	28%
Maximum Local Water Production (mgd)	1.90
Alternative Supply Sources	Local Groundwater
Interties With Other Agencies	North Coast CWD, CWS - South San Francisco
Local Storage (mg)	8.3
Days of Storage	2.5 – Length of storage based on loss of all sources of supply. All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity. Well water could meet partial demand in an emergency.

Summary

The City of San Bruno receives its water through 5 San Francisco Public Utilities Commission turnouts and from 5 deep-water wells. The City also purchases water from the North Coast County Water District. The Public Works Water Division maintains a distribution system that includes 13 pressure zones, 21 pumps, 8 water tanks, 900 hydrants, and 100 miles of mains.

SF RWS water is filtered by the Harry Tracy plant (San Andreas Reservoir) and supplied to upper elevation areas of the community. Crystal Springs Supply Lines #2 or #3 deliver to the lower elevations. The groundwater is blended with water from SF RWS; the combined water supply meets all MCLs.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
SF RWS - Customary	584,392	637,586	383,693	419,589
SF RWS - Supplemental	0	83,663	895,413	890,214
Local Groundwater	922,147	777,032	129,317	155,341
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other (North Coast CWD)	23,361	21,622	21,121	23,411
Total	1,529,900	1,519,903	1,429,544	1,488,555
mgd equivalent	3.14	3.11	2.93	3.05

Demand by Sector

Residential	1,041,912	1,022,388	974,044	944,938
Commercial/Industrial	304,363	285,374	55,469	271,679
Other	61,674	60,761	58,938	67,522
Non-Revenue Water	121,951	151,380	341,093	204,416
Total	1,529,900	1,519,903	1,429,544	1,488,555
mgd equivalent	3.14	3.11	2.93	3.05

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	49	47	45	47
Gross	72	70	66	69

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (gallons)
Storage Tank 1	Steel	2,500,000
Storage Tank 3	Concrete	2,000,000
Storage Tank 4	Steel	1,000,000
Storage Tank 6	Steel	400,000
Storage Tank 6A	Steel	1,000,000
Storage Tank 7	Steel	400,000
Storage Tank 9	Steel	500,000
Storage Tank 10	Steel	500,000
Total		8,300,000

Wells

Name	Capacity (mgd)	Status
Well 15**	0.26	Active
Well 16**	0.72	Active
Well 17*	0.40	Active
Well 18**	0.29	Active
Well 20**	0.85	Active
Total	2.52	

Interties

Name	No.	Diameter (in.)
North Coast	2	21
CWS	1	8

City of San Jose

San Jose Municipal Water System - North

3025 Tuers Road

San Jose, California 95121

Phone: (408) 277-4218 Fax: (408) 277-4954

Web: <http://www.sjmuniwater.com>

Service Area

Located in north central Santa Clara County, the North San Jose/Alviso service area is predominantly industrial with some residential and commercial land use.

System

Profile

Area Size	5.3 square miles
Service Population	16,084
Number of Accounts	3,317
Number of SF RWS Connections	2
Connections To SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	5.38 Potable and Recycled
Avg. Day Purchases From SF RWS (mgd)	4.53
% Demand Met With SF RWS Supplies	84%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	Ground Water and Recycled Water
Interties With Other Agencies	City of Santa Clara
Local Storage (mg)	6.0
Days of Storage	1.3 – Length of storage based on loss of all sources of supply. Can meet the required 8 hr. coverage with storage alone. Well water, normally used supplementally, could supply peak demand in an emergency

Summary

The North San Jose/Alviso water service area in the City of San Jose is supplied primarily by the SF RWS through two turnouts off the Bay Division Pipelines 3 and 4.

The SF RWS turnouts are equipped with emergency connections for a portable chlorinator.

The North San Jose/Alviso service area has two storage tanks and four wells capable of meeting average and peak flow demands that supplement the SF RWS supply during high flow periods. An intertie with the City of Santa Clara can be activated within 2 hours.

Other communities in the San Jose Municipal Water System are supplied primarily by water purchased from the Santa Clara Valley Water District, with supplemental supplies coming from local groundwater.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	2,151,905	1,997,596	2,024,785	2,208,892
Local Groundwater	16,913	29,465	0	0
Recycled Water	352,857	364,746	0	418,060
Other	0	0	300,817	0
Total	2,521,675	2,391,807	2,325,602	2,626,952
mgd equivalent	5.17	4.90	4.77	5.38

Demand by Sector

Residential	1,018,955	930,564	773,467	820,295
Commercial/Industrial	923,177	875,508	885,644	1,057,459
Other	40,372	38,774	35,895	30,556
Dedicated Irrigation	476,737	456,091	549,254	1,169,673
Non-Revenue Water	62,434	90,871	81,342	-451,031
Total	2,521,675	2,391,807	2,325,602	2,626,952
mgd equivalent	5.17	4.90	4.77	5.38

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	131	211	115	105
Gross (Less Recycled Water)	279	459	302	281

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (mg)
Storage Tank 1	Steel	3
Storage Tank 2	Steel	3
Total		6

Wells

Name	Capacity (mgd)	Status	Name	Capacity (mgd)	Status
Well 1	2.0	Standby	Well 3	2.0	Standby
Well 2	2.0	Active	Well 4	2.0	Active
Total	8.0				

Interties

Name	No.	Diameter (in.)
Santa Clara	1	8

City of Santa Clara

1500 Warburton Avenue

Santa Clara, California 95050-3792

Phone: (408) 615-2000 Fax: (408) 247-0784

Web: <http://santaclaraca.gov/waterandsewer>

Service Area

The City of Santa Clara is located at the south end of the San Francisco Bay in Santa Clara County. The northern area of the City is predominantly commercial/industrial, while the southern part is primarily residential.

System

Profile

Area Size	19.3 square miles
Service Population	129,604
Number of Accounts	25,670
Number of SF RWS Connections	2
Connections To SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	20.41
Avg. Day Purchases From SF RWS (mgd)	2.13
% Demand Met With SF RWS Supplies	10%
Maximum Local Water Production (mgd)	23.3 – This volume is historically sustainable for 1 month, but may not be sustainable for longer periods.
Alternative Supply Sources	Local Groundwater
Interties With Other Agencies	Santa Clara Valley WD
Local Storage (mg)	26.8
Days of Storage	1 – Length of storage based on loss of all sources of supply. All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity. Well water, normally used supplementally, could supply peak demand in an emergency.

* Average daily demand includes recycled water

Summary

The City of Santa Clara purchases water from SF RWS and SCVWD. Two SF RWS turnouts off BDPL 3 and 4 supply the Northside tank and booster station, which distributes water to the northernmost pressure zone of the City. Water from SCVWD is delivered to the southwest portion of the City through the Santa Clara Distributary.

Water from 26 active wells meet current drinking water standards without treatment, and produce over half of the City's water supply.

The City also operates a recycled water system, which is part of the South Bay Water Recycling system. Tertiary treated effluent from the jointly owned San Jose-Santa Clara Water Pollution Control Plant is available for landscape irrigation and certain industrial uses, distributed within Santa Clara by about 20 miles of pipeline.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	914,572	1,135,829	970,987	1,039,840
Santa Clara Valley WD	1,470,999	1,901,738	1,920,855	1,971,390
Local Groundwater	5,816,028	4,291,577	4,752,405	5,285,829
Recycled Water	1,567,103	1,488,319	1,497,626	1,660,829
Other	0	0	0	0
Total	9,768,702	8,817,463	9,141,873	9,957,888
mgd equivalent	20.02	18.07	18.73	20.41

Demand by Sector

Residential	4,076,317	3,500,320	3,452,426	3,653,811
Commercial/Industrial	4,151,499	3,876,460	3,247,531	4,281,283
Other	1,043,433	941,284	423,860	986,496
Dedicated Irrigation	0	0	0	0
Non-Revenue Water	497,453	499,399	2,018,056	1,036,298
Total	9,768,702	8,817,463	9,141,873	9,957,888
mgd equivalent	20.02	18.07	18.73	20.41

Per Capita Use	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
Residential	67	58	57	58
Gross (Less Recycled Water)	139	124	127	131

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (mg)
Northside Tank 1	Steel	4.7
Northside Tank 2	Steel	4.7
Serra	Steel	13.2
Downtown	Steel	4.2
Total		26.8

Wells

Name	Capacity (mgd)	Status	Name	Capacity (mgd)	Status
Well 2-02	2.7	Active	Well 16-02	1.6	Active
Well 3-02	2.6	Active	Well 17-02	2.9	Active
Well 4	1.4	Active	Well 18-02	1.9	Active
Well 5-02	2.3	Active	Well 21	2.6	Active
Well 7	1.7	Active	Well 22-02	1.7	Active
Well 8	1.6	Active	Well 23	2.6	Active
Well 9-02	1.5	Active	Well 24	2.2	Active
Well 10	2.4	Active	Well 25	1.3	Active
Well 11	2.5	Active	Well 26	1.4	Active
Well 12	2.1	Active	Well 28	2.8	Active
Well 13-02	2.4	Active	Well 29	2.7	Active
Well 14	1.6	Active	Well 30	2.0	Active
Well 15	1.2	Active	Well 34	1.4	Active
			Total	55.5	

Interties

Name	No.	Diameter (in.)
SCVWD	1	10

Stanford University

327 Bonair Siding

Stanford, California 94305-7272

Phone: (650) 725-8030 Fax: (650) 723-3191

Web: <https://suwater.stanford.edu>

Service Area

The Stanford Sustainability & Energy Management Department supplies water to the campus area and nearby Stanford unincorporated lands.

System

Profile

Area Size	3.1 square miles
Service Population	32,218*
Number of Accounts	n/a
Number of SF RWS Connections	3
Connections To SF RWS Mains	BDPL 3 and 4, 1 turnout off Palo Alto pipeline
Avg. Day Demand (mgd)	2.59
Avg. Day Purchases From SF RWS (mgd)	1.49
% Demand Met With SF RWS Supplies	57% (100% of domestic water)
Average Day Local Water Production (mgd)	1.1
Alternative Supply Sources	Local groundwater, surface water, recycled water**
Interties With Other Agencies	Palo Alto
Local Storage (mg)	8
Days of Storage	2.5 to 4 – All 3 zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity. Wells can supply an additional 3.7 mgd in an emergency.

*Average daytime population is used for current and future projections.

** In FY-08-09, Stanford completed a recycled water plant that treats wastewater from the former Cogeneration Facility cooling tower blow-down for reuse for toilet and urinal flushing in new buildings. The plant was decommissioned in 2015 with the construction of the Stanford Energy System Innovations (SESI) Central Energy Facility. Source water for the recycled water system was lost but the infrastructure remains and can resume using recycled water once another source is established.

Summary

Stanford has four sources of water supply: purchased potable water from the SF RWS, groundwater, non-potable surface water from the local watershed, and recycled water.

SF RWS water is delivered through two turnouts off BDPL 3 and 4 and one turnout off the Palo Alto pipeline. There are four wells located on Stanford property that could be used in an emergency. Three of the wells are in compliance with all drinking water standards, while the fourth well is “standby”, since its manganese levels exceed current standards.

Stanford also has a non-potable (irrigation) water system that supplies more than 80% of its irrigation needs, significantly reducing Stanford’s use of potable water for irrigation. This system is typically supplied by Stanford’s surface water diversions, and supplemented by ground water. The extent of ground water use depends on the amount of rainfall and resulting surface water

supply availability. The lake water system can also be supplied as needed by SF RWS water.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	923,813	679,394	695,088	725,276
Local Groundwater	313,982	300,686	198,507	241,503
Surface Water	158,579	93,476	254,967	256,275
Other	0	0	0	41,684
Total	1,396,374	1,073,556	1,148,562	1,264,738
mgd equivalent	2.86	2.20	2.35	2.59

Note: The sources of water contributing to the non-potable irrigation water system have been tracked through various methods in order to fit within the format of the Annual Survey. Prior to the 2014-2015 Annual Survey, the volume entering storage was subtracted from total surface water diverted and water used from storage. In the 2014-2015 Annual Survey, water added to storage was subtracted from the metered groundwater or surface water source to better account for the source contributing to storage. Prior to the 2015-2016 Annual Survey, all water coming from storage was assumed to be surface water. In order to better reflect the sources of water used in the non-potable irrigation system, beginning in the 2015-2016 Annual Survey the source of stored water is being accounted for by tracking the volume of groundwater that enters and is used from storage. Assumptions for this new method include a starting point of zero groundwater in the non-potable irrigation system storage as of July 2013, surface water entering storage first, and groundwater used from storage first. In the FY 2017-18 Annual Survey, additional tracking of captured construction dewatering water for use as irrigation water is also included (other, non-potable alternative water supply).

Demand by Sector

Residential	360,634	347,058	353,241	377,819
Commercial/Industrial	239,727	87,498	66,036	67,986
Other	263,966	140,481	157,835	168,057
Dedicated Irrigation	532,045	442,795	498,566	593,838
Non-Revenue Water	2	55,724	72,884	57,039
Total	1,396,374	1,073,556	1,148,562	1,264,738
mgd equivalent	2.86	2.20	2.35	2.59

Notes: The new SESI Central Energy Facility uses 70% less water than the former Cogeneration Facility, which caused the commercial/industrial demand to decrease beginning in April 2015.

In 2014-2015 Annual Survey the Multi-Family Residential consumption was under reported due to metering issues at 1 MFR complex.

Due to the differing bill period schedules of SFPUC and Stanford, reporting for the Annual Surveys between 2011 and 2015 included the difference between Production and total Consumption within the customer categories. The difference between Production and Consumption totals includes both the different bill period schedules of SFPUC and Stanford, and actual unaccounted for water. Beginning in the 2015-2016 Annual Survey the full difference is reported in the "Non-Revenue Water" category.

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	n/a	n/a	n/a	n/a
Gross	94	71	75	80

Note: Due to its unique service area, Stanford's residential per capita numbers are excluded.

Facilities and Distribution

Storage Reservoirs

Designation	Type	Capacity (gallons)
Foothill 1		2,000,000
Foothill 2		6,000,000
San Juan*		0
Total		8,000,000

*Currently out of service

Wells

Name	Capacity (gpm)	Status
Well 1	500	Active
Well 2	500	Active
Well 3R	1200	Active
Well 4R	400	Inactive
Well 5	500	Standby
Total	3100**	

Interties

Name	No.	Diameter (in.)
Roth Way	1	8
Sandhill	1	8

**Actual total well capacity will be less than total indicated. Simultaneous pumping of wells will affect the individual well pumping rates. Wells are periodically taken out of service for maintenance

City of Sunnyvale

Environmental Services Department

P.O. Box 3707

Sunnyvale, California 94088-3707

Phone: (408) 730-7510 Fax: (408) 736-1611

Web: <http://sunnyvale.ca.gov/Departments/EnvironmentalServices/Water.aspx>

Service Area

The City of Sunnyvale is an urban industrial and residential community located at the south end of the Peninsula in Santa Clara County, with a service area for the water utility contiguous with its city limits. California Water Service also serves several small areas within the City.

System

Profile

Area Size	24 square miles
Service Population	153,389
Number of Accounts	28,987
Number of SF RWS Connections	6
Connections To SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	17.08
Avg. Day Purchases From SF RWS (mgd)	9.09
% Demand Met With SF RWS Supplies	53%
Maximum Local Water Production (mgd)	1.13
Alternative Supply Sources	Local Groundwater
Interties With Other Agencies	CWS, SCVWD, Mountain View, Cupertino
Local Storage (mg)	27.5
Days of Storage	More Than 1 Day – Length of storage based on loss of all sources of supply. With loss of SF RWS supply only, City can utilize wells, SCVWD or excess capacity from other zones to meet 8 hour outage.

Summary

Sunnyvale's water utility receives water supplied from SF RWS via 6 turnouts off BDPL 3 and 4 in the northern section of the City. The SCVWD connections are located in the far southwest corner of the City. Water from SCVWD is primarily served from the District's Rinconada WTP. A few formerly unincorporated County of Santa Clara pockets are currently served by CWS, backed up by interties with the City.

Groundwater is provided by 7 active wells, with 1 well on stand-by status. Water from these wells meets all current drinking water standards without treatment. The wells are used to meet peaking requirements and to supply water for fire and other emergencies. Due to the overall cost of producing well water, including pump tax, power, operation and maintenance expenses, and amortization, it is cost-effective for the City to maximize use of water from SF RWS and SCVWD.

The City has 10 ground storage tanks, with a minimum of 1 storage tank in every zone, and additional tanks located at water plants in the City.

The potable distribution system is completely interconnected and includes 3 pressure zones, 21 booster pumps, 3,310 fire hydrants, more than 10,000 manual and automatic valves, and 280 miles of mains. Recycled non-potable water is used for irrigation services.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	3,874,640	3,894,246	4,066,178	4,435,240
Santa Clara Valley WD	3,276,953	2,858,242	3,458,667	3,734,325
Local Groundwater	506,472	65,632	61,977	49,601
Surface Water	0	0	0	0
Recycled Water	137,016	390,696	157,626	114,275
Other	0	0	0	0
Total	7,795,081	7,208,816	7,744,448	8,333,441
mgd equivalent	15.97	14.77	15.87	17.08

Demand by Sector

Residential	4,885,613	3,907,240	4,135,875	4,499,086
Commercial/Industrial	1,710,519	1,508,808	1,576,363	1,702,300
Other	1,821,591	2,221,230	371,966	376,643
Dedicated Irrigation	857,993	629,772	1,100,904	916,239
Non-Revenue Water	229,884	450,574	559,340	839,172
Total	7,795,081	7,208,816	7,744,448	8,333,441
mgd equivalent	15.97	14.77	15.87	17.08

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	68	54	57	60
Gross (Less Recycled Water)	106	94	104	110

Facilities and Distribution

Storage Reservoirs

Designation	Type	Capacity (gallons)	Designation	Type	Capacity (gallons)
Wolfe-Evelyn	Steel	5,000,000	Central 1	Steel	500,000
Mary-Carson 1	Steel	5,000,000	Central 2	Steel	500,000
Mary-Carson 2	Steel	5,000,000	Hamilton 1	Steel	500,000
Wright Avenue 1	Steel	5,000,000	Hamilton 2	Steel	500,000
Wright Avenue 2	Steel	5,000,000	Hamilton 3	Steel	500,000
Total			27,500,000		

Wells

Name	Capacity (mgd)	Status
Westmoor	0.8	Active
Serra	0.9	Active
Ortega	2.0	Active
Raynor	2.7	Active
Hamilton (1).	2.0	Active
Hamilton (2).	2.0	Active
Losse		Standby
Central	0.7	Inactive
Schroeder		Destroyed
Total	11.1	

Interties

Name	No.	Diameter (in.)
SCVWD	2	30, 12
Santa Clara	3	10
	2	12
	1	8
CWS	5	6
	1	8
Cupertino	1	12
Mountain View	2	8
	1	6

Westborough County Water District

2263 Westborough Boulevard

South San Francisco, California 94080-5406

Phone: (650) 589-1435 Fax: (650) 589-5167

Web: <http://www.westboroughwater.com>

Service Area

The Westborough Water District is located within the City of South San Francisco in north San Mateo County. The District provides both water and sewer service, and has an agreement with the North San Mateo County Sanitation District for sewage disposal and facility maintenance.

System

Profile

Area Size	1 square mile
Service Population	12,703
Number of Accounts	3,882
Number of SF RWS Connections	1
Connections To SF RWS Mains	San Andreas 1, 2, and 3
Avg. Day Demand (mgd)	0.79
Avg. Day Purchases From SF RWS (mgd)	0.79
% Demand Met With SF RWS Supplies	100%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	North Coast CWD, Daly City
Local Storage (mg)	6.5
Days of Storage	6.5 – All zones can meet the required 8 hr. coverage.. During emergencies, District also has access to an additional 3.5 mg in storage owned by North Coast WD.

Summary

The Westborough Water District receives its entire water supply from the San Francisco Public Utilities Commission through a single 6" turnout located on Westborough Boulevard. This water is distributed to 3 Skyline storage tanks located at the north end of the district, from which the Skyline Pump Station pumps water to the Christen Hill Reservoir for gravity distribution to Zone 3, and the Main Water Pump Station pumps water to Zones 1 and 2.

The Christen Hill Reservoir is shared with the North Coast County Water District.

The WCWD distribution system includes 3 storage tanks, 2 pumping stations, 5 pumps, and 24 miles of mains. In addition to the Christen Hill Reservoir intertie with NCCWD, the district has an intertie with Daly City.

Water Supply and Demand

Supply by Source	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	377,034	390,753	356,722	383,996
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	377,034	390,753	356,722	383,996
mgd equivalent	0.77	0.80	0.73	0.79

Demand by Sector

Residential	302,544	288,276	284,986	293,705
Commercial/Industrial	21,572	19,729	26,058	27,315
Other	0	0	0	0
Dedicated Irrigation	35,974	19,690	22,214	40,529
Non-Revenue Water	16,944	63,058	23,464	22,447
Total	377,034	390,753	356,722	383,996
mgd equivalent	0.77	0.80	0.73	0.79

Per Capita Use	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)	Actual FY 16-17 (gpcpd)	Actual FY 17-18 (gpcpd)
Residential	47	42	42	47
Gross	58	57	52	62

Facilities and Distribution**Storage Reservoirs**

Designation	Type	Capacity (mg)
SS Tank 1	Steel	1.5
SS Tank 2	Steel	2.5
SS Tank 3	Steel	2.0
CH Reservoir	Steel	0.5
Total		6.5

Interties

Name	No.	Diameter (in.)
North Coast	1	8
Daly City	1	12