ANNUAL SURVEY

March 2022

Fiscal Year 2020-21

BAWSCA

Bay Area Water Supply & Conservation Agency

Bay Area Water Supply and Conservation Agency FY 2020-21

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

MARCH 2022

BAWSCA WATER FACTS AT-A-GLANCE – FY 2020-21

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	754,019	16
Santa Clara County	117	570,360	8
Alameda County	166	518,557	2
Total	468	1,842,939	26

Supply by Source

	ccf	mgd	af	%
San Francisco RWS	68,200,448	139.76	154,998	68.0%
Groundwater	8,438,414	17.29	19,372	8.4%
Surface Water	399,740	0.82	918	0.4%
Recycled Water	3,761,165	7.71	8,633	3.8%
Other Sources	19,421,931	39.80	44,587	19.3%
Total	100,221,698	205.39	230,027	100%

Demand by Sector

	ccf	mgd	af	%
Residential	59,253,335	121.43	135,997	59.1%
Commercial/Industrial	16,764,813	34.36	38,478	16.7%
Government/Institutional/Other	5,911,749	12.12	13,568	5.9%
Dedicated Irrigation	11,216,669	22.99	25,744	11.2%
Non-Revenue Water	7,075,132	14.50	16,238	7.1%
Total	100,221,698	205.39	230,027	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

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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 754,000 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.

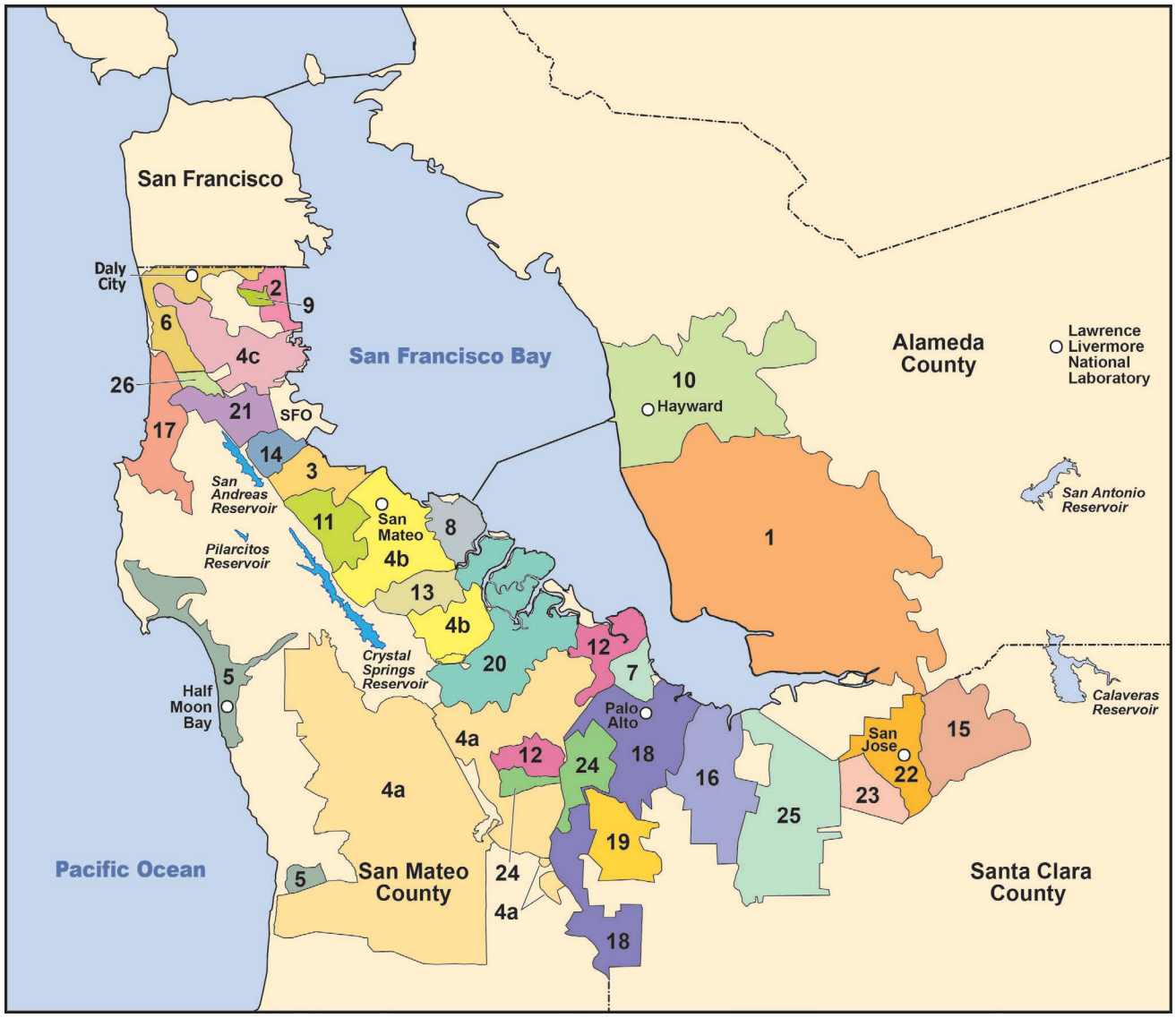
Santa Clara County

In Santa Clara County, BAWSCA and its member agencies serve a population of approximately 570,000 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 519,000 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 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:

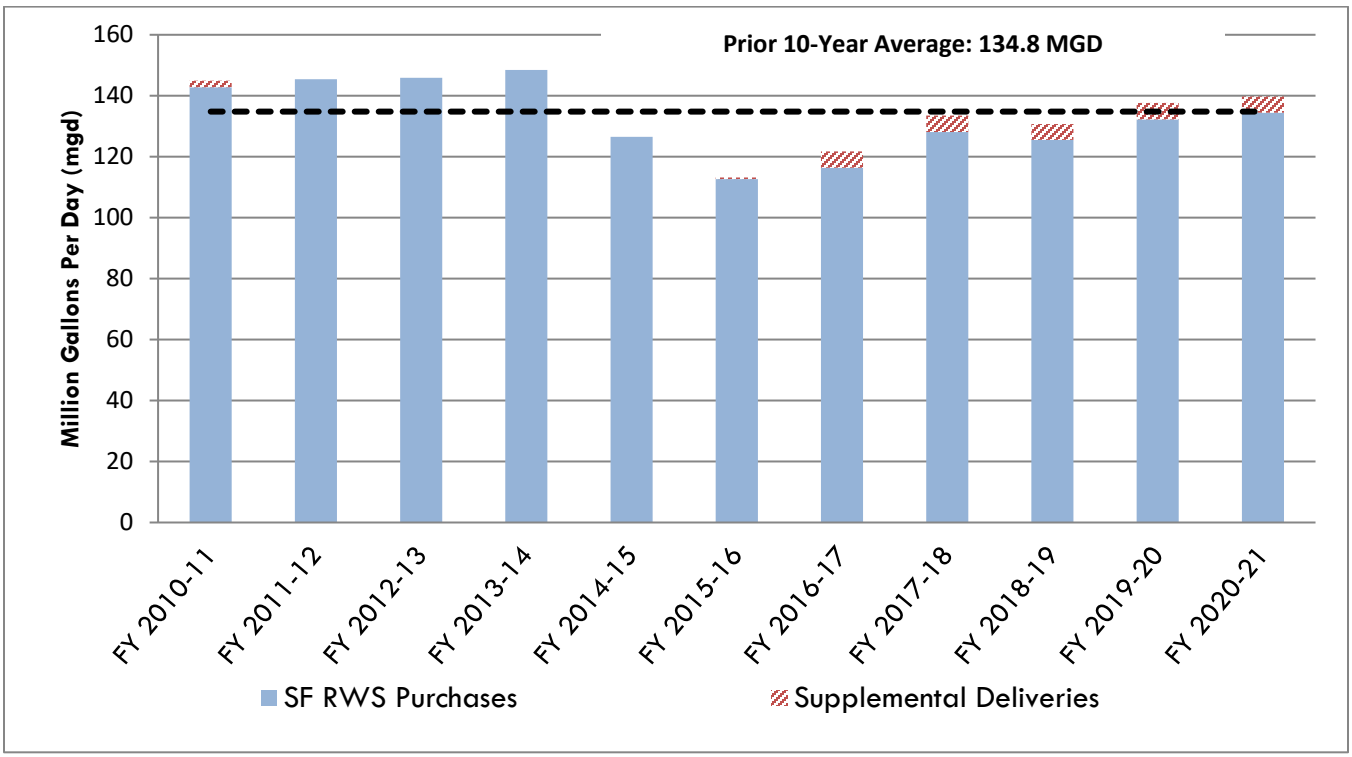
- ☐ Current water supply from each source
- ☐ Current and projected water purchases from SF RWS
- ☐ Projected water supplies and demands
- ☐ Consumption by customer class
- ☐ Current and projected population
- ☐ Per capita water use
- ☐ Single family water bills and rate structures
- ☐ BAWSCA member 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 2020-21, the BAWSCA member agencies reported SF RWS purchases of 134.5 mgd, 5% higher than the total of 132.22 mgd purchased in FY 2019-20. In addition, BAWSCA member agencies reported 5.31 mgd in supplemental purchases as part of the conjunctive use program. Compared with the prior ten-year average, total purchases in FY 2020-21, including supplemental purchases were above average by 3.60 mgd. When compared to FY 2013-14, the highest year in the prior ten-year period, FY 2020-21 purchases were lower by 10.1 mgd, a difference of about 7%.

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. In June 2020, BAWSCA notified the SFPUC that the projected BAWSCA member agency purchases in 2035-36 is projected to be about 157 mgd. In FY 2045-46, BAWSCA member agency purchases from the SF RWS are projected to reach 173 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 2020-21, 68.0% came from the SF RWS and 32.0% came from other sources. These other sources included:

- ☐ Groundwater (17.29 mgd, 8.4%);
- ☐ Local surface water, primarily from ACWD's take from Lake Del Valle (0.82 mgd, 0.4%);
- ☐ Other supplies from the Santa Clara Valley Water District, the State Water Project, and ACWD's brackish water desalination (39.80 mgd, 19.3%); and
- ☐ Recycled water (7.71 mgd, 3.8%).

Figure ES-2: FY 2020-21 Water Use by Source

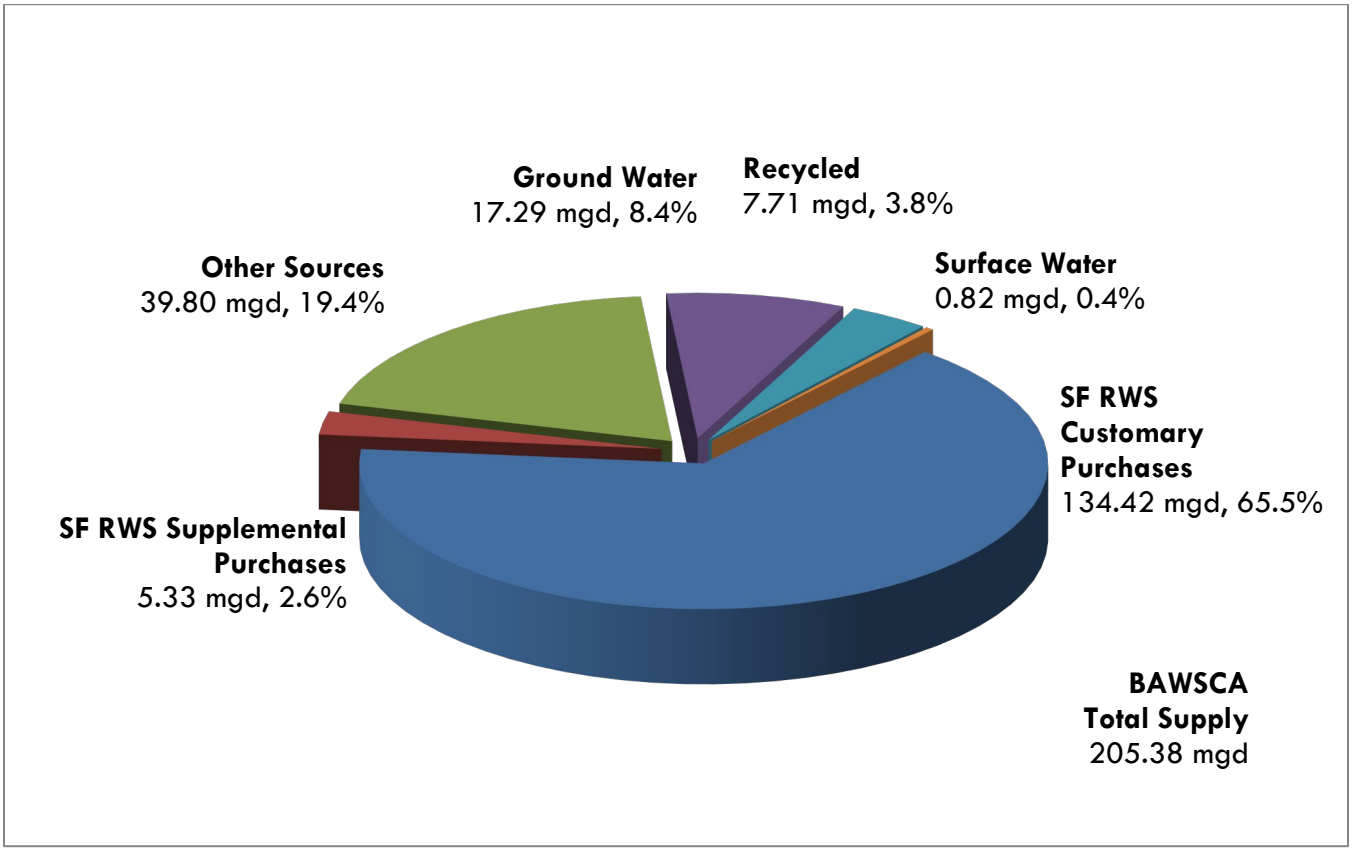
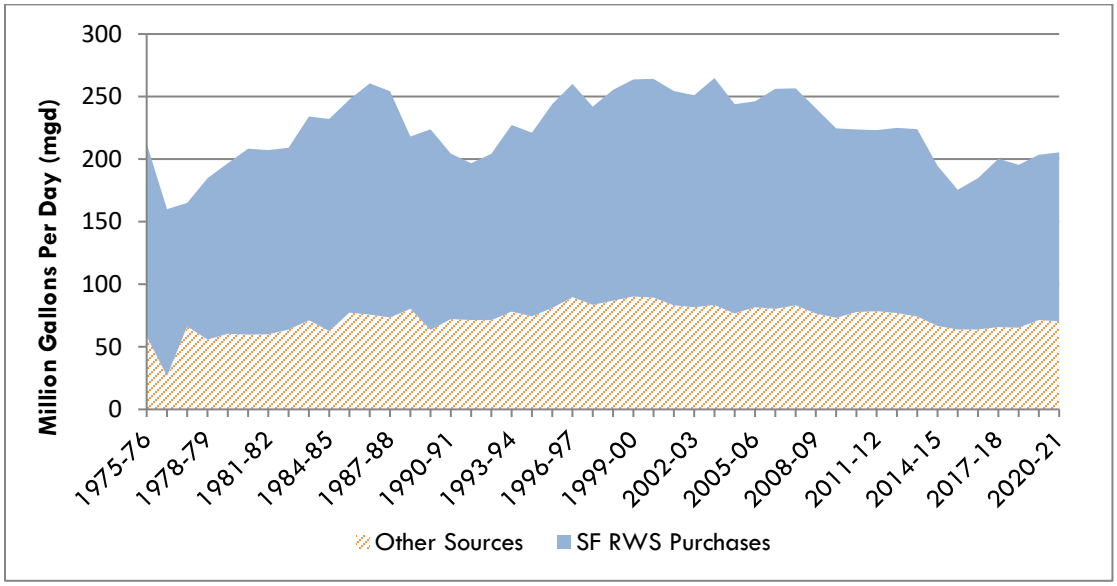


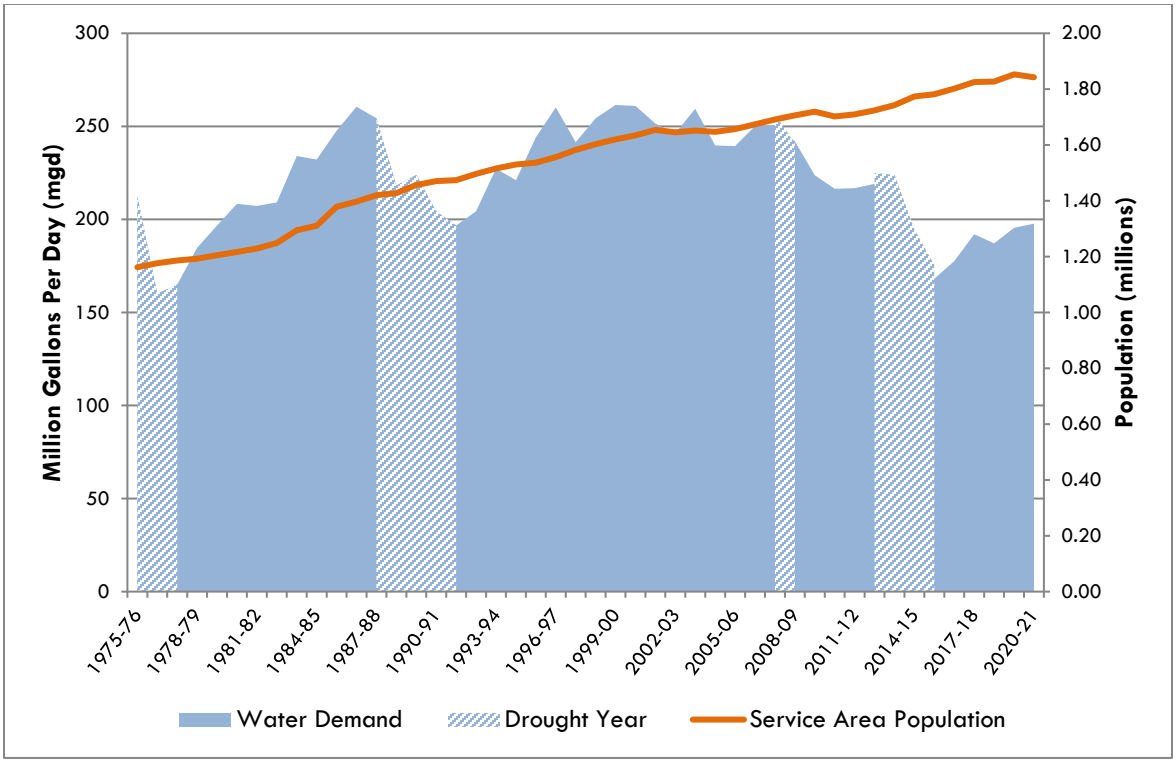
Figure ES-3: Past and Current Water Supply



Current BAWSCA-Wide Total Water Demand

For FY 2020-21, total water demand in the BAWSCA service area, including SFPUC purchases and other sources, was 205.38 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 8% less in FY 2020-21. In FY 2020-21, 21% less water was used in the service area compared to the peak year, FY 1986-87, despite a 32% 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 282.97 mgd by FY 2045-46 (Source: FY 2020-21 Annual Survey). Of the total water demand, 8.2 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 172.81 mgd in FY 2045-46. Recycled water supplies are projected to increase to 17.47 mgd by FY 2045-46.

Figure ES-5: Projected FY 2045-46 Water Use by Source

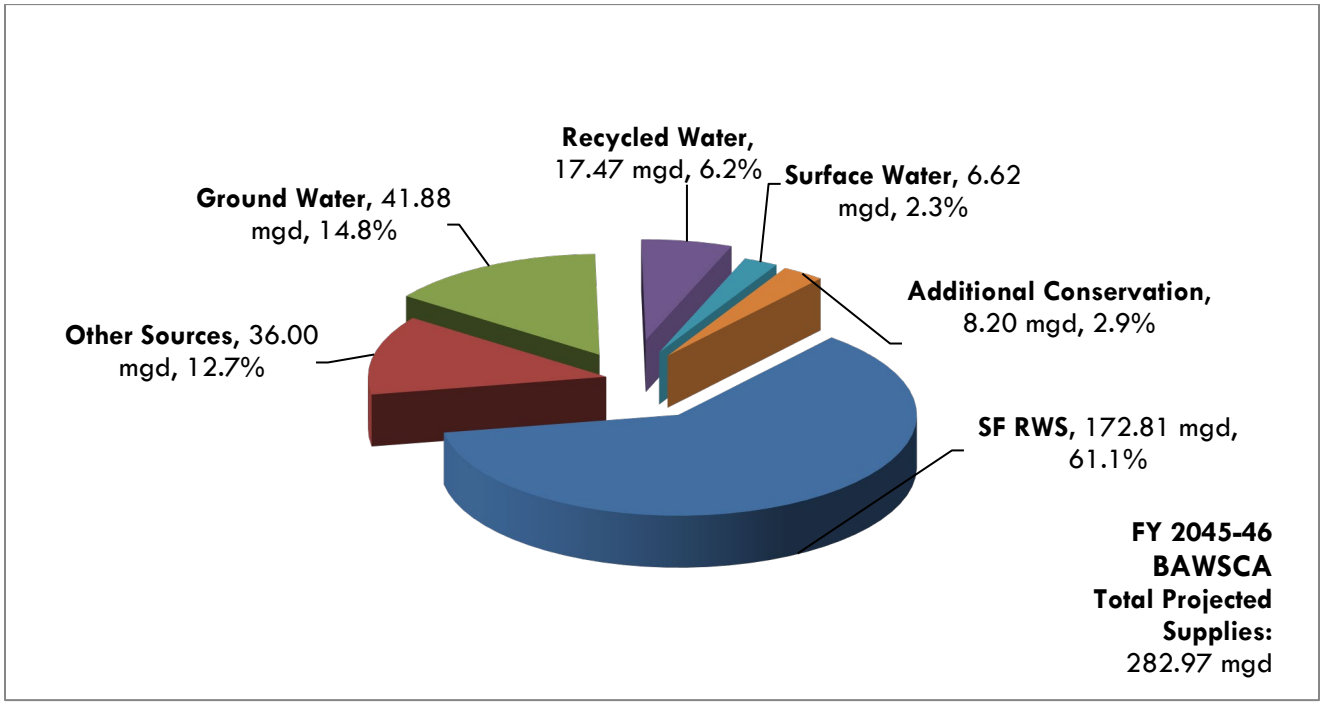
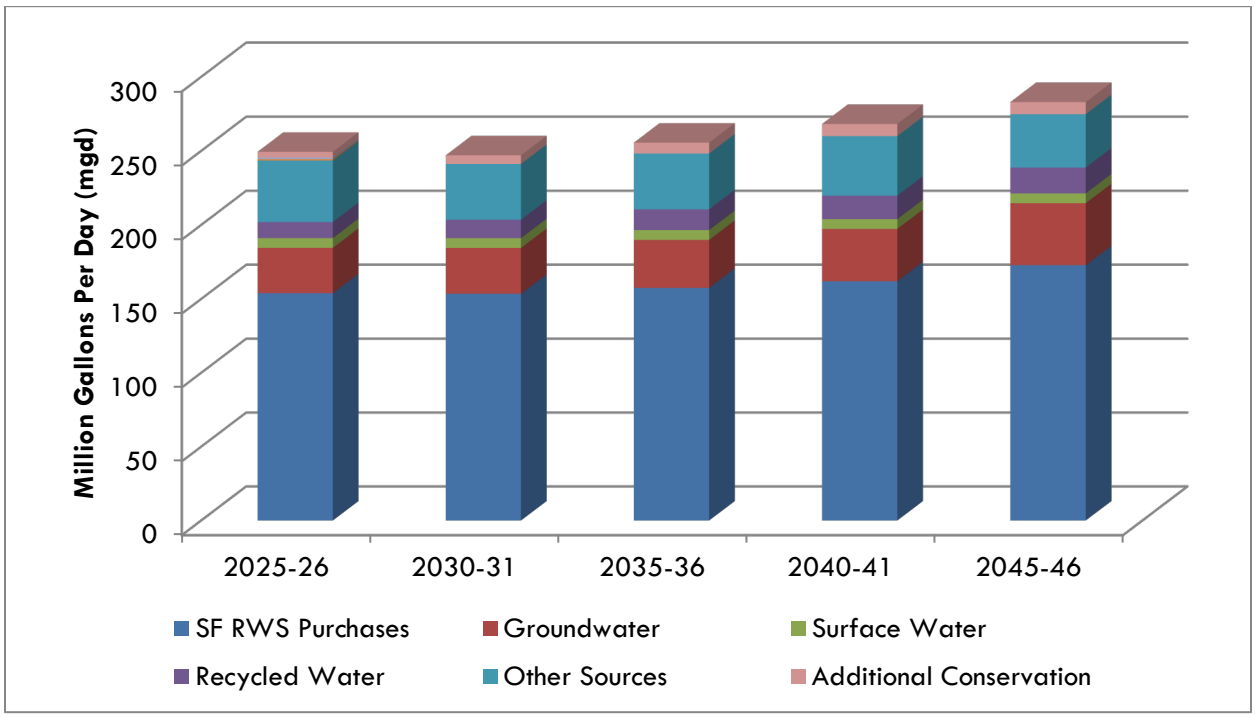


Figure ES-6: Projected Normal Year Water Supplies by Source



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 205.38 mgd consumed among BAWSCA agencies in FY 2020-21 the residential sector accounted for 59.1% (121.43 mgd); commercial and industrial customers for 16.7% (34.36 mgd); government, institutional and other customers for 5.9% (12.12 mgd); dedicated irrigation for 11.2% (22.99 mgd); and non-revenue water for 7.1% (14.35 mgd).

In FY 2020-21, there were 439,238 accounts (service connections) in the entire BAWSCA service area, 88%, or 388,171, of which were residential.

Figure ES-7: FY 2020-21 Water Use by Customer Class

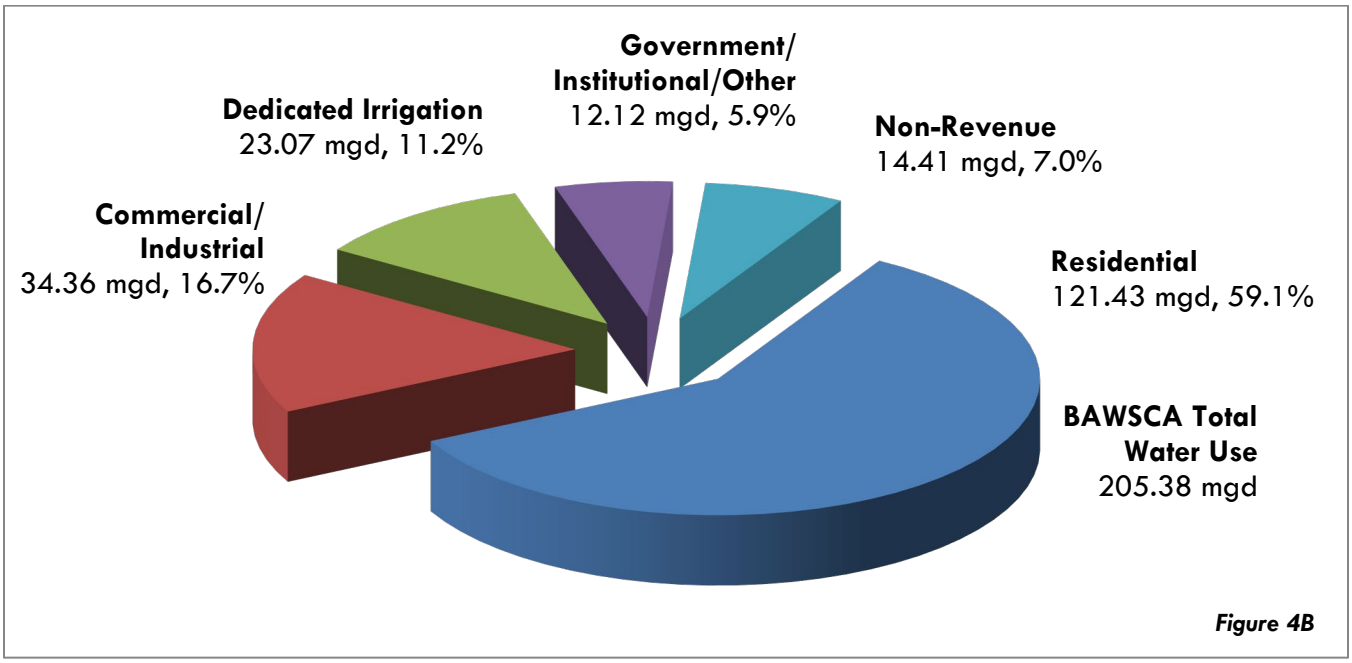


Figure 4B

CLIMATE DATA

FY 2020-21 was a very dry year, with rainfall totals recorded at 4 representative locations in the BAWSCA service area that were, on average, 68% lower than the historical average from 1906 - 2020. In FY 2018-19 and FY 2019-20, rainfall totals recorded at these locations were 17% above average and 49% below average, respectively.

Figure ES-8: Historic and Current Precipitation Levels

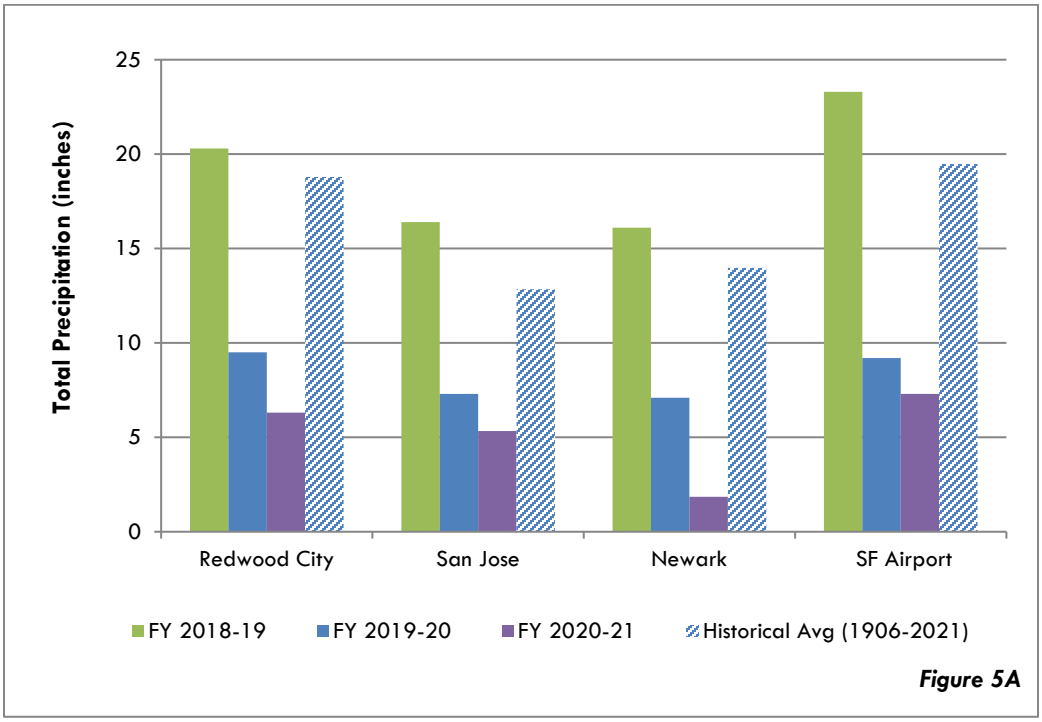


Figure 5A

POPULATION AND PER CAPITA WATER USE

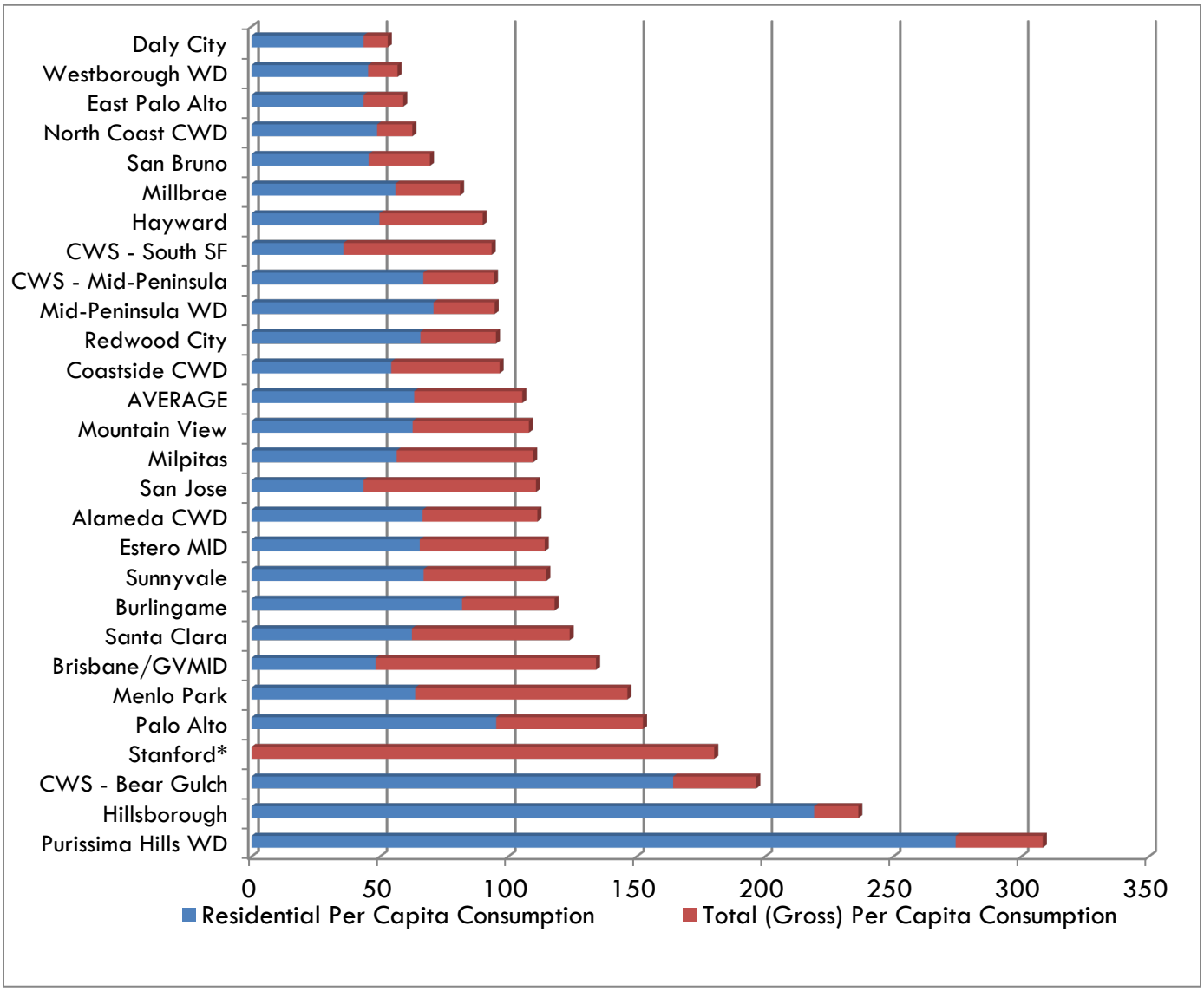
The population of the BAWSCA service area is estimated to have decreased from 1,852,927 to 1,842,939 between FY 2019-20 and FY 2020-21. The main reason for this decrease in population was due to many Stanford students living off campus in FY 2020-21. The BAWSCA service area population is projected to reach 2,434,358 by FY 2045-46.

In FY 2020-21, twelve BAWSCA member agencies had residential water use of less than 60 gallons per capita per day.

Average residential per capita consumption (excluding Stanford) in the BAWSCA service area was 65.8 gpcd in FY 2020-21, 4% more than the year before. This is 43% less than the estimated peak residential per capita consumption of 114.9 gpcd in FY 1975-76. In FY 2020-21, California Water Service – South San Francisco had the lowest residential per capita consumption at 35.8 gpcd while Purissima Hills WD had the highest at 247 gpcd.

The average gross per capita consumption in the BAWSCA service area was 107.3 gpcd in FY 2020-21, 2% higher than FY 2019-20. 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



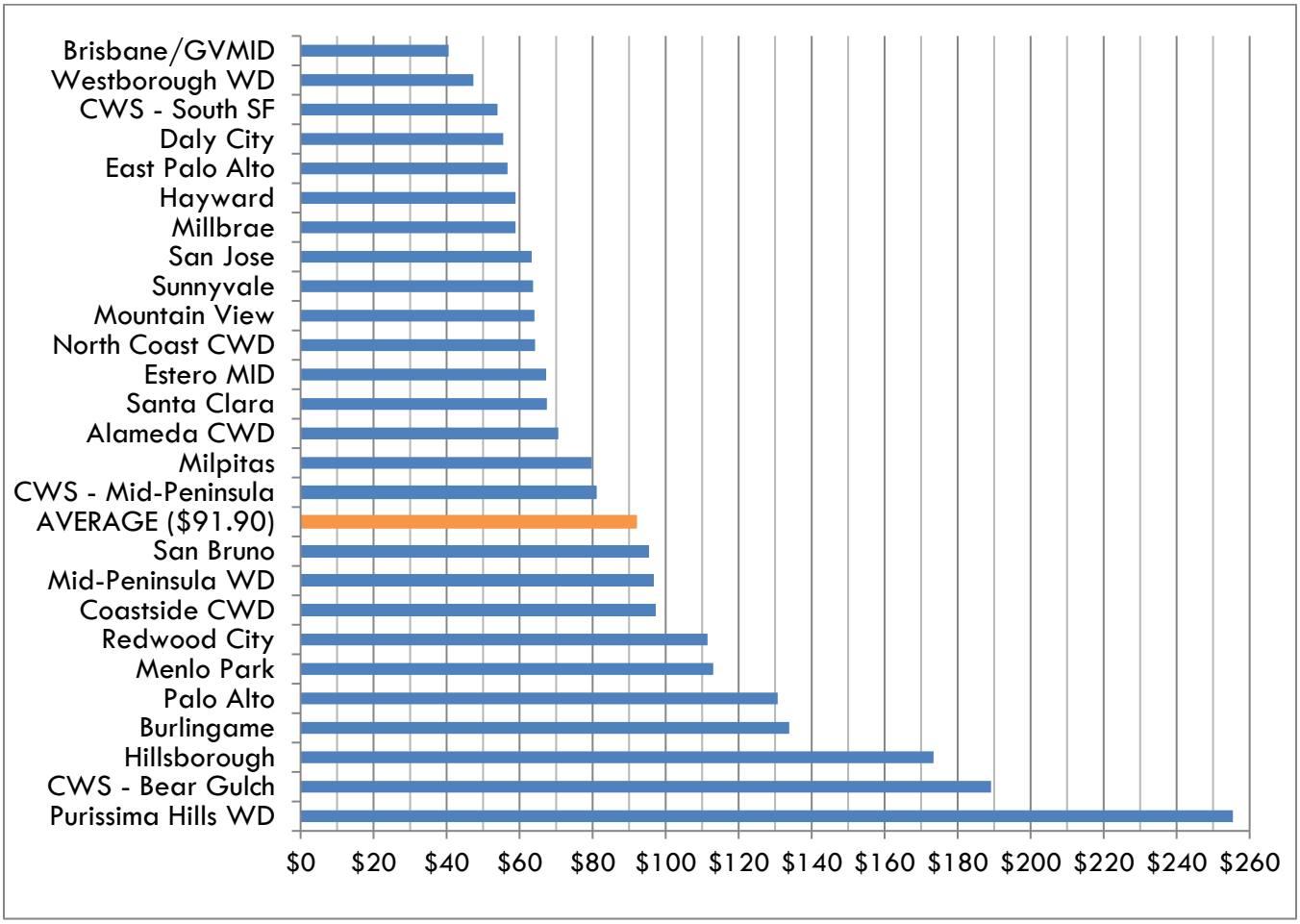
**Due to its unique service area, residential per capita consumption for Stanford is excluded. Due to COVID-19, Stanford University students and faculty remained home for much of the year, reducing population numbers significantly. **

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 $40.55 for 4.9 units in the Brisbane/GVMID service area to a high of $255.40 for 33.1 units in Purissima Hills WD. The average single-family water bill among the BAWSCA member agencies, inclusive of the service charge, was $91.90.

Seven BAWSCA member agencies (Alameda County Water District, East Palo Alto, Millbrae, Milpitas, San Jose, Santa Clara, and Westborough Water District) had a uniform rate structure in FY 2020-21, 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

155 Bovet Rd., Suite 650
San Mateo, CA 94402

Ph. (650) 349-3000 Fax: (650) 349-8395
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 4,657 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 358,000 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, 68% of all water delivered by the BAWSCA member agencies came from the SF RWS in FY 2020-21.

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 2020-21.

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 2020-21, residential per capita water use was similar to the prior year. Per capita use in the wholesale service area ranged from a low of 35 gallons per capita per day (gpcd) to a high of 247 gpcd. Average residential use is 66 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 eight. A standing Board Policy Committee, comprised of board members, advises the CEO and the full board on policy matters. The agency's FY 2020-21 budget was $4.36M, 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.

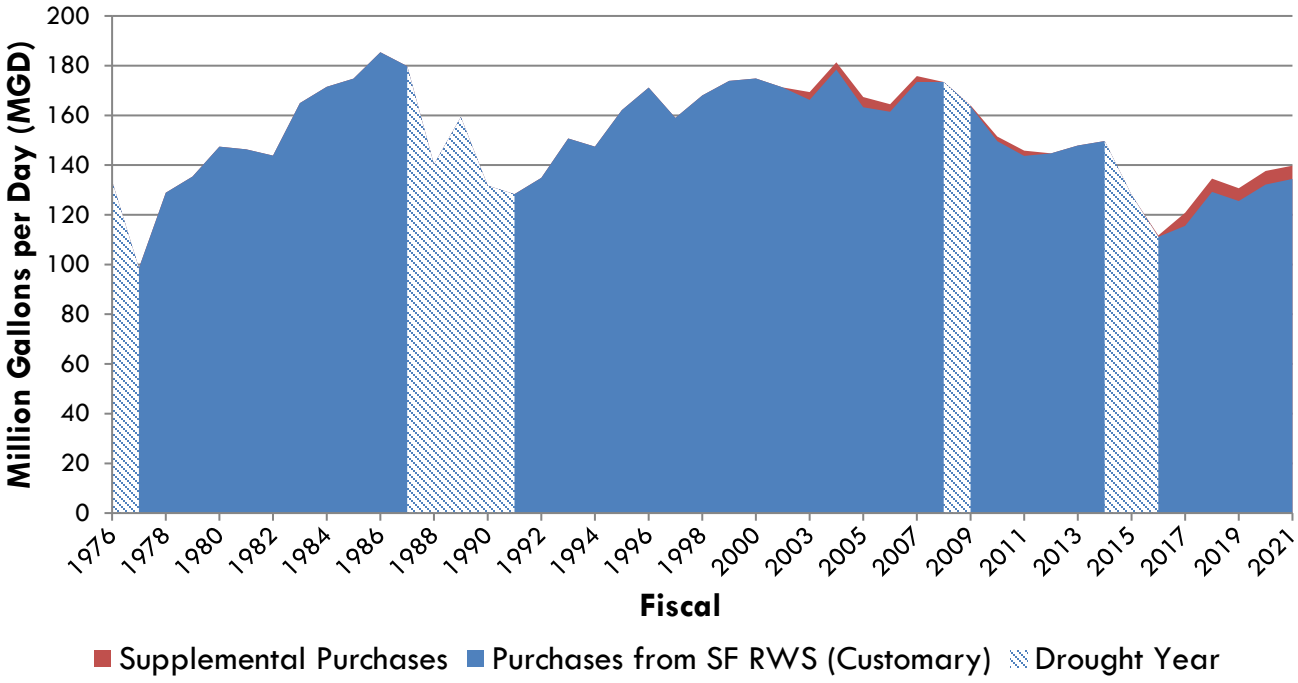
- ☐ Monitoring the SFPUC to ensure it completes its capital improvement program for rebuilding the regional water system promptly and cost-effectively with the cost fairly allocated between San Francisco retail and BAWSCA member agencies.
- ☐ Administering the 2009 water supply agreement between San 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 2020-21

	Service Population	Water Purchased / Produced (mgd) SF RWS*	Total	Communities Served (all or portions of)
San Mateo County				
City of Brisbane / Guadalupe Valley Municipal Improvement District	4,598	0.62	0.62	Brisbane, nearby unincorporated areas, and GVMID, an industrial park and small residential community within the City of Brisbane
City of Burlingame	32,407	3.29	3.39	City of Burlingame, and nearby unincorporated areas
California Water Service Company	261,620	30.87	30.87	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
CalWater-BG	60,814	11.93	11.96	
CalWater-MP	137,487	12.97	12.99	
CalWater-SSF	63,319	5.92	5.92	
Coastside County Water District	18,789	1.45	1.82	Half Moon Bay, Princeton by the Sea, Miramar, and El Granada
City of Daly City	106,638	5.90	5.90	Daly City and nearby unincorporated areas
City of East Palo Alto	25,935	1.52	1.53	City of East Palo Alto, Menlo Park, and nearby unincorporated areas
Estero Municipal Improvement District	37,687	4.31	4.31	Foster City and small parts of San Mateo
Town of Hillsborough	11,397	2.69	2.69	Hillsborough and nearby unincorporated areas
City of Menlo Park	19,297	2.83	2.83	Menlo Park west of Altschul Avenue and east of El Camino Real. Portions of Redwood City & Town of Portola Valley
Mid-Peninsula Water District	27,560	2.61	2.61	Belmont, San Carlos, and nearby unincorporated areas
City of Millbrae	22,848	1.86	1.86	Millbrae and nearby unincorporated areas
North Coast County Water District	38,331	2.40	2.45	Pacifica and nearby unincorporated areas
City of Redwood City	89,037	8.48	9.22	Redwood City, parts of San Carlos and Woodside, and nearby unincorporated areas
City of San Bruno	44,409	3.09	3.09	San Bruno and nearby unincorporated areas
Westborough Water District	13,466	0.77	0.77	South San Francisco
Subtotal	754,019	72.68	73.94	
Santa Clara County				
City of Milpitas	77,961	5.43	9.41	Milpitas
City of Mountain View	82,814	7.90	9.34	Mountain View and nearby unincorporated areas
City of Palo Alto	66,573	10.15	11.17	Palo Alto and nearby unincorporated areas
Purissima Hills Water District	6,822	1.90	1.90	Los Altos Hills, parts of Los Altos, and nearby unincorporated areas
San Jose Municipal Water District	37,991	4.18	5.19	North San Jose/Alviso and nearby unincorporated areas
City of Santa Clara	130,746	3.23	19.37	Santa Clara and nearby unincorporated areas
Stanford University	13,629	1.35	2.46	Stanford University
City of Sunnyvale	153,827	9.60	18.15	Sunnyvale and nearby unincorporated areas
Subtotal	570,363	43.74	77.00	
Alameda County				
Alameda County Water District	358,246	9.40	39.90	Union City, Newark, Fremont and nearby unincorporated areas
City of Hayward	160,311	14.55	14.55	Hayward and nearby unincorporated areas
Subtotal	518,557	23.94	54.45	
Total All Agencies	1,842,939	140.4	205.38	
*Includes supplemental deliveries				
Source: *BAWSCA FY 2020-21 Annual Survey*				
		140.4	205.4	

2. Past and Current Purchases from SF RWS

Figure 2A: Past and Current Purchases from SF RWS



Note: Some data points corrected from values shown in prior surveys.
Source: SFPUC Commercial Division Records as listed in Table 2C

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

Member	Supply Guarantee	mgd Equiv	Predrought FY 1986-87	mgd Equiv	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	Actual FY 2018-19	Actual FY 2019-20	Actual FY 2020-21	mgd Equiv	2020-21/ 2019-20 % Change	2020-21 Purchases as % of Guarantee
San Mateo County																		
* Brisbane **	224,435	0.46	171,507	0.35	275,934	280,650	287,290	302,776	280,029	257,414	294,756	334,217	323,917	310,127	303,604	0.62	-2.1	63.4
* Burlingame	2,553,753	5.23	2,531,707	5.19	1,971,599	2,012,282	1,952,965	2,001,619	1,791,539	1,505,779	1,592,044	1,695,956	1,669,182	1,696,711	1,604,743	3.29	-5.4	35.3
California Water Service *	17,320,807	35.50	17,393,987	35.65	15,668,088	16,101,764	15,212,752	16,361,264	13,839,271	11,584,178	11,851,282	13,457,975	12,894,379	14,150,396	14,394,881	29.50	1.7	83.1
Coastside CWD	1,061,453	2.18	600,257	1.23	806,110	832,099	885,896	940,214	727,298	575,225	515,655	464,037	547,861	496,627	705,680	1.45	42.1	21.8
Daly City	2,094,386	4.29	2,264,684	4.64	1,405,560	1,811,358	1,955,442	1,713,514	1,654,762	2,152,800	1,867,312	1,717,837	1,804,183	1,939,670	1,722,950	3.53	-11.2	43.1
* East Palo Alto	1,689,714	3.46	1,041,989	2.14	863,282	907,662	1,008,253	723,320	768,310	690,728	734,911	772,528	763,315	764,033	743,205	1.52	-2.7	23.0
* Estero MID	2,878,807	5.90	2,854,051	5.85	2,274,588	1,966,984	2,000,497	1,942,333	1,930,526	1,768,029	1,874,751	2,068,753	1,969,663	2,115,607	2,101,104	4.31	-0.7	44.2
* Guadalupe Valley MID	254,436	0.52	155,074	0.32	Included with Brisbane													
* Hillsborough	1,995,644	4.09	1,996,150	4.09	1,461,935	1,580,857	1,609,532	1,599,812	1,226,777	1,050,944	1,139,003	1,234,547	1,124,778	1,280,605	1,314,680	2.69	2.7	65.9
Los Trancos			34,848	0.07														
* Menlo Park	2,174,231	4.46	1,958,458	4.01	1,533,788	1,621,745	1,584,636	1,724,965	1,287,136	1,074,516	1,153,760	1,393,425	1,383,605	1,442,176	1,379,039	2.83	-4.4	63.4
* Mid-Peninsula WD	1,898,707	3.89	1,888,074	3.87	1,404,933	1,437,360	1,453,047	1,408,109	1,209,300	1,076,654	1,134,389	1,221,454	1,220,573	1,295,922	1,273,998	2.61	-1.7	67.1
* Millbrae	1,538,120	3.15	1,528,426	3.13	1,075,971	1,034,254	1,113,147	1,134,741	991,049	899,785	918,695	992,853	949,277	927,939	906,122	1.86	-2.4	58.9
* North Coast CWD	1,872,928	3.84	1,618,649	3.32	1,585,572	1,380,360	1,192,485	1,387,578	1,360,780	900,293	1,089,419	1,169,151	1,119,762	1,157,526	1,172,219	2.40	1.3	62.6
* Redwood City	5,333,115	10.93	5,253,772	10.77	4,462,944	4,420,594	4,747,255	4,407,672	3,789,370	3,508,414	3,820,098	4,130,668	3,943,761	4,276,459	4,137,728	8.48	-3.2	77.6
San Bruno	1,583,899	3.25	1,748,600	3.58	775,910	1,017,925	946,503	779,582	584,392	637,586	383,693	419,589	420,116	465,406	444,989	0.91	-4.4	28.1
Skyline			62,726	0.13														
* Westborough WD	644,172	1.32	585,151	1.20	408,487	440,796	441,233	433,980	377,034	390,753	356,722	383,996	379,833	400,616	373,994	0.77	-6.6	58.1
Subtotal	45,118,607	92.46	43,688,110	89.53	35,974,701	36,846,690	36,390,933	36,861,479	31,817,573	28,073,098	28,726,490	31,456,987	30,514,206	32,719,820	32,578,936	66.76	-0.4	72.2
Santa Clara County																		
Milpitas	4,504,533	9.23	4,370,757	8.96	2,954,096	3,060,055	3,115,000	3,194,000	2,503,640	2,215,396	2,391,431	2,538,687	2,585,031	2,886,833	2,647,856	5.43	-8.3	58.8
Mountain View	6,079,714	12.46	6,435,554	13.19	4,162,626	4,346,523	4,389,474	4,373,263	3,611,194	3,305,780	3,485,016	3,617,700	3,519,587	3,740,804	3,855,612	7.90	3.1	63.4
* Palo Alto	8,087,730	16.57	8,009,767	16.41	5,440,236	5,561,559	5,547,735	5,600,519	4,723,751	4,006,084	4,382,560	4,859,576	4,600,990	4,757,199	4,953,805	10.15	4.1	61.3
* Purissima Hills	792,832	1.62	755,077	1.55	839,360	899,221	972,733	982,100	803,313	640,369	689,261	814,270	770,703	851,999	925,721	1.90	8.7	116.8
San Jose	0	0.00	1,541,153	3.16	2,035,953	2,172,405	2,173,663	2,272,262	2,151,905	1,997,596	2,024,785	2,208,892	2,084,721	2,077,874	2,039,631	4.18	-1.8	n/a
Santa Clara	0	0.00	2,429,766	4.98	1,055,675	910,029	1,118,315	1,012,567	914,572	1,135,829	970,987	1,039,840	1,474,198	1,596,791	1,576,338	3.23	-1.3	n/a
Stanford	1,479,764	3.03	1,485,396	3.04	1,035,726	1,051,794	1,024,012	1,024,277	923,813	679,394	695,088	725,276	697,159	699,352	659,830	1.35	-5.7	44.6
Sunnyvale	6,138,122	12.58	7,228,076	14.81	4,043,548	4,436,721	4,526,510	4,046,527	3,874,640	3,894,246	4,066,178	4,435,240	4,394,289	4,552,465	4,686,275	9.60	2.9	76.3
Subtotal	27,082,695	55.50	32,255,546	66.10	21,567,221	22,438,307	22,867,442	22,505,515	19,506,828	17,874,694	18,705,306	20,239,481	20,126,678	21,163,317	21,345,068	43.74	0.9	78.8
Alameda County																		
Alameda CWD	6,714,439	13.76	6,039,273	12.38	3,825,797	4,052,940	4,371,390	5,684,760	3,770,320	3,037,166	3,081,217	3,716,845	3,798,529	3,840,640	4,585,161	9.40	19.4	68.3
* Hayward [1]	6,821,848	13.98	8,504,158	17.43	8,308,740	7,610,980	7,552,956	7,402,067	6,634,616	5,979,616	6,281,522	7,101,954	6,821,848	6,794,224	7,098,330	14.55	4.5	104.1
Residual [1]	4,048,507	8.30																
Subtotal	17,584,794	36.04	14,543,431	29.80	12,134,537	11,663,920	11,924,346	13,086,827	10,404,936	9,016,782	9,362,739	10,818,799	10,620,377	10,634,864	11,683,491	23.94	9.9	66.4
Total	89,786,096	184.00	90,487,087	185.44	69,676,459	70,948,917	71,182,721	72,453,821	61,729,337	54,964,574	56,794,535	62,515,266	61,261,261	64,518,001	65,607,495	134.45	1.7	73.1
mgd equiv	184.00		185.44		142.79	145.40	145.88	148.48	126.50	112.64	116.39	128.11	125.54	132.22	134.45		1.7	
Total w/o SC&SJ	89,786,096		86,516,168		66,584,830	67,866,483	67,890,743	69,168,992	58,662,860	51,831,149	53,798,763	59,266,535	57,702,342	60,843,336	61,991,526	127.04	1.9	69.0
mgd equiv	184.00		177.30		136.45	139.08	139.13	141.75	120.22	106.22	110.25	121.46	118.25	124.69	127.04		1.9	

* Agencies receiving 100% of their supply from the SF RWS (16 total). ** Inclusive of Guadulupe Valley *** 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.

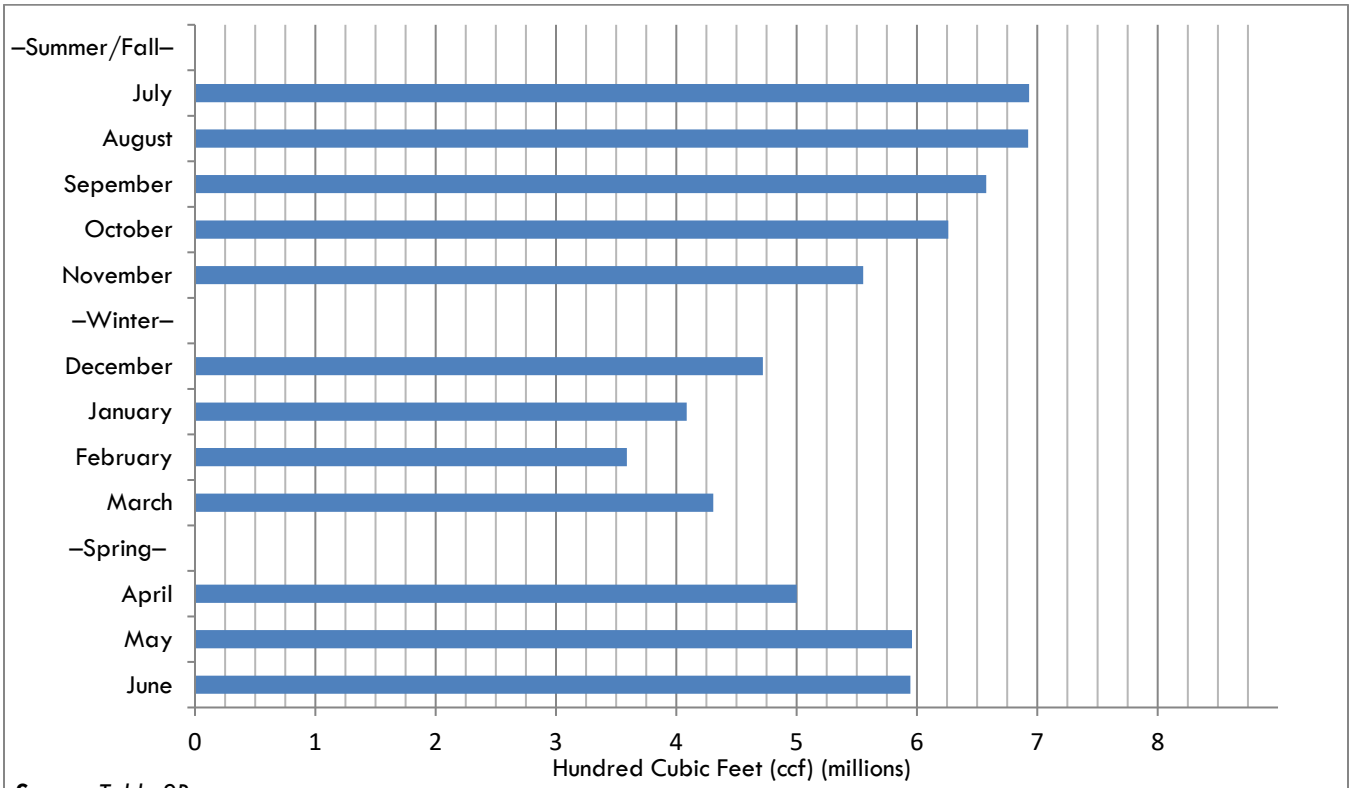
Note: Some agencies purchase SF RWS water which is then conveyed to a neighboring agency. The receiving agency is credited with this purchase; the transferring agency debited. This does not include the specific purchase of water by the City of San Bruno from North Coast County Water District.

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 Isg 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 2020-21



Source: *Table 2B*

Table 2B: Monthly/Seasonal Purchases from SF RWS Among BAWSCA Members – FY 2020-21 (in ccf) SFPUC Commercial Division Records Data

		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	385,154	371,070	309,797	287,344	369,333	**1,722,698**	324,925	263,075	231,651	579,402	**1,399,053**	614,298	455,453	447,299	**1,517,050**	4,638,801	9.51
	Brisbane	16,334	18,649	16,706	16,675	23,176	**91,540**	17,123	17,063	14,236	13,810	**62,232**	15,565	17,853	18,146	**51,564**	205,336	0.42
	Burlingame	166,595	174,243	162,616	148,569	136,376	**788,399**	128,996	100,016	88,428	106,422	**423,862**	111,737	145,102	144,760	**401,599**	1,613,860	3.31
*	CWS - Bear Gulch	665,724	734,775	657,589	636,279	469,927	**3,164,294**	332,869	232,338	214,989	302,303	**1,082,498**	407,209	582,408	585,744	**1,575,361**	5,822,153	11.93
	CWS - Mid Peninsula	699,990	651,823	633,546	630,455	503,228	**3,119,042**	471,149	413,665	363,175	390,585	**1,638,574**	441,575	583,832	573,542	**1,598,950**	6,356,566	13.03
*	CWS - South SF **2**	236,752	215,963	213,542	233,074	185,641	**1,084,972**	180,097	146,070	132,576	146,802	**605,545**	168,574	181,059	204,124	**553,757**	2,244,274	4.60
*	Coastside CWD	79,692	102,030	77,136	83,116	85,622	**427,596**	66,968	17,652	15,499	14,901	**115,020**	15,561	71,844	83,600	**171,005**	713,621	1.46
*	Daly City **2**	167,750	207,689	156,448	158,592	166,523	**857,002**	123,804	151,640	116,472	115,391	**507,307**	127,927	139,834	128,440	**396,201**	1,760,510	3.61
	East Palo Alto	96,055	0	137,880	68,209	55,481	**357,625**	52,405	54,513	44,967	48,873	**200,758**	55,461	66,210	63,150	**184,821**	743,204	1.52
	Estero MID	239,857	227,492	213,021	226,981	162,521	**1,069,872**	148,879	127,446	108,340	124,305	**508,970**	139,572	194,537	188,198	**522,307**	2,101,149	4.31
	Guadalupe Valley MID	11,784	14,096	12,683	10,989	8,685	**58,237**	5,802	5,080	4,430	4,272	**19,584**	5,061	6,984	7,778	**19,823**	97,644	0.20
	Hayward	764,150	688,786	722,523	671,516	553,116	**3,400,091**	550,133	448,833	429,167	471,508	**1,899,641**	567,473	580,129	651,016	**1,798,618**	7,098,350	14.55
	Hillsborough	177,757	163,052	163,520	152,702	114,256	**771,286**	79,741	50,506	31,390	64,608	**226,244**	70,931	124,733	132,408	**328,072**	1,325,601	2.72
	Menlo Park	240,277	158,266	148,101	144,215	105,528	**796,387**	84,003	74,572	58,884	74,169	**291,628**	96,388	124,650	130,196	**351,234**	1,439,249	2.95
	Mid-Peninsula WD	137,536	138,736	128,084	120,778	115,253	**640,387**	78,311	72,176	71,080	84,622	**306,189**	93,287	112,127	121,022	**326,436**	1,273,012	2.61
	Millbrae	96,843	99,110	91,532	80,181	70,942	**438,608**	71,642	58,969	53,603	62,390	**246,604**	62,299	78,790	79,823	**220,911**	906,123	1.86
*	Milpitas	255,795	292,274	257,253	248,785	247,750	**1,301,857**	188,715	197,059	157,590	157,831	**701,195**	183,698	217,782	213,682	**615,162**	2,618,214	5.37
*	Mountain View	391,215	438,815	376,709	356,505	359,133	**1,922,377**	273,315	268,188	221,451	219,738	**982,692**	266,458	344,005	342,153	**952,616**	3,857,685	7.91
*	North Coast CWD	112,531	121,872	112,787	100,744	101,092	**549,026**	112,760	95,467	87,961	103,075	**399,263**	99,505	111,234	111,086	**321,825**	1,270,114	2.60
	Palo Alto	538,793	490,906	472,124	458,040	359,637	**2,319,500**	306,001	287,995	236,992	288,514	**1,119,502**	379,816	487,063	479,503	**1,346,382**	4,785,384	9.81
	Purissima Hills WD	110,081	121,419	103,968	100,631	98,236	**534,335**	57,793	47,732	32,014	34,796	**172,334**	50,803	83,141	91,687	**225,632**	932,301	1.91
	Redwood City	450,666	447,052	428,476	391,024	332,255	**2,049,474**	305,710	248,482	231,048	282,087	**1,067,327**	320,750	354,344	388,433	**1,063,526**	4,180,327	8.57
*	San Bruno **2**	62,794	55,189	63,237	36,896	36,689	**254,806**	35,390	23,591	17,106	22,534	**98,622**	21,189	44,289	48,912	**114,390**	467,818	0.96
*	San Jose MWS-North	203,293	222,256	195,139	184,348	189,115	**994,151**	152,198	153,852	124,293	121,411	**551,754**	152,099	179,486	175,333	**506,918**	2,052,823	4.21
*	Santa Clara	123,526	134,675	119,938	129,094	142,498	**649,731**	126,546	141,844	119,135	116,596	**504,121**	117,724	144,121	140,387	**402,232**	1,556,084	3.19
*	Stanford University	72,906	76,446	68,879	73,120	47,806	**339,157**	41,260	38,066	33,973	41,808	**155,107**	46,686	60,248	58,632	**165,566**	659,830	1.35
*	Sunnyvale	384,364	521,801	494,598	471,589	486,555	**2,358,907**	367,712	323,938	322,357	289,179	**1,303,186**	338,363	439,204	305,506	**1,083,073**	4,745,166	9.72
	Westborough WD	43,157	34,995	37,162	39,480	26,876	**181,670**	34,525	26,748	25,531	25,095	**111,899**	30,684	27,430	30,907	**89,021**	382,590	0.78
	Totals	6,931,370	6,923,480	6,574,994	6,259,933	5,553,251	**32,243,028**	4,718,772	4,086,576	3,588,337	4,307,027	**16,700,713**	5,000,692	5,957,892	5,945,466	**16,904,050**	**65,847,791**	134.94

Seasonal Comparisons				Summer/Fall		Winter		Spring		Year	
				2009-10	39,394,295	2009-10	18,057,011	2009-10	16,469,283	73,920,589	151.49
				2010-11	38,044,328	2010-11	16,817,330	2010-11	16,303,549	71,165,207	145.84
				2011-12	34,889,999	2011-12	18,786,621	2011-12	16,953,589	70,630,209	144.74
				2012-13	35,927,152	2012-13	17,236,235	2012-13	19,027,049	72,190,436	147.94
				2013-14	36,602,803	2013-14	18,958,782	2013-14	17,488,648	73,050,233	149.70
				2014-15	31,404,179	2014-15	16,571,143	2014-15	14,502,045	62,477,367	128.04
				2015-16	25,993,686	2015-16	14,369,236	2015-16	14,124,948	54,487,870	111.66
				2016-17	28,843,372	2016-17	14,458,909	2016-17	15,679,219	58,981,500	120.87
				2017-18	32,895,226	2017-18	16,837,505	2017-18	15,914,209	65,646,941	134.53
				2018-19	31,934,491	2018-19	15,621,040	2018-19	16,008,279	63,563,810	130.26
				2019-20	32,243,028	2019-20	16,700,713	2019-20	16,904,050	65,847,791	134.94
	Since 1983-84		**Record Highs:**	2003-04	45,402,020	1987-88	21,979,000	1986-87	25,083,000	1986-87	185.31
			Record Lows:	2015-16	25,993,686	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		1980-81	72,463,235	148.5	166,353	8.9
1931-32	1,366,310	2.8	3,137	-9.7	1981-82	71,828,877	147.2	164,896	-0.9
1932-33	1,317,513	2.7	3,025	-3.6	1982-83	70,950,535	145.4	162,880	-1.2
1933-34	1,268,717	2.6	2,913	-3.7	1983-84	79,441,176	162.8	182,372	12.0
1934-35	1,171,123	2.4	2,689	-7.7	1984-85	82,759,358	169.6	189,989	4.2
1935-36	1,219,920	2.5	2,801	4.2	1985-86	83,149,733	170.4	190,886	0.5
1936-37	1,659,091	3.4	3,809	36.0	1986-87	90,176,471	184.8	207,017	8.5
1937-38	2,439,840	5.0	5,601	47.1	1987-88	88,273,396	180.9	202,648	-2.1
1938-39	3,122,995	6.4	7,169	28.0	1988-89	67,241,979	137.8	154,366	-23.8
1939-40	4,391,711	9.0	10,082	40.6	1989-90	78,221,257	160.3	179,571	16.3
1940-41	3,562,166	7.3	8,178	-18.9	1990-91	64,509,358	132.2	148,093	-17.5
1941-42	3,757,353	7.7	8,626	5.5	1991-92	61,191,176	125.4	140,476	-5.1
1942-43	4,196,524	8.6	9,634	11.7	1992-93	64,899,733	133.0	148,989	6.1
1943-44	5,562,834	11.4	12,771	32.6	1993-94	72,707,219	149.0	166,913	12.0
1944-45	8,734,625	17.9	20,052	57.0	1994-95	71,596,604	146.7	164,363	-1.5
1945-46	8,393,048	17.2	19,268	-3.9	1995-96	79,502,660	162.9	182,513	11.0
1946-47	9,076,203	18.6	20,836	8.1	1996-97	83,211,705	170.5	191,028	4.7
1947-48	9,612,968	19.7	22,068	5.9	1997-98	77,305,829	158.4	177,470	-7.1
1948-49	9,710,561	19.9	22,292	1.0	1998-99	82,214,786	168.5	188,739	6.4
1949-50	9,564,171	19.6	21,956	-1.5	1999-00	84,647,794	173.5	194,325	3.0
1950-51	11,223,262	23.0	25,765	17.3	2000-01	85,327,533	174.9	195,885	0.8
1951-52	12,784,759	26.2	29,350	13.9	2001-02	83,562,066	171.2	191,832	-2.1
1952-53	14,590,240	29.9	33,495	14.1	2002-03	82,654,243	169.4	189,748	-1.1
1953-54	17,176,470	35.2	39,432	17.7	2003-04	88,480,297	181.3	203,123	7.0
1954-55	21,763,368	44.6	49,962	26.7	2004-05	81,672,866	167.4	187,495	-7.7
1955-56	23,324,866	47.8	53,547	7.2	2005-06	80,255,145	164.5	184,240	-1.7
1956-57	25,911,095	53.1	59,484	11.1	2006-07	85,779,136	175.8	196,922	6.9
1957-58	22,690,507	46.5	52,090	-12.4	2007-08	84,618,323	173.4	194,257	-1.4
1958-59	27,814,170	57.0	63,853	22.6	2008-09	80,034,009	164.0	183,733	-5.4
1959-60	30,937,165	63.4	71,022	11.2	2009-10	73,920,589	151.5	169,698	-7.6
1960-61	32,010,694	65.6	73,486	3.5	2010-11	71,165,207	145.8	163,373	-3.7
1961-62	34,255,347	70.2	78,639	7.0	2011-12	70,630,209	144.7	162,145	-0.8
1962-63	38,256,683	78.4	87,825	11.7	2012-13	72,190,436	147.9	165,726	2.2
1963-64	44,161,095	90.5	101,380	15.4	2013-14	73,050,233	149.7	167,700	1.2
1964-65	47,430,480	97.2	108,885	7.4	2014-15	62,477,367	128.0	143,428	-14.5
1965-66	52,700,533	108.0	120,984	11.1	2015-16	54,487,870	111.7	125,087	-12.8
1966-67	54,652,405	112.0	125,465	3.7	2016-17	58,981,500	120.9	135,403	8.2
1967-68	63,972,592	131.1	146,861	17.1	2017-18	65,646,941	134.5	150,705	11.3
1968-69	61,630,346	126.3	141,484	-3.7	2018-19	63,563,810	130.3	145,922	-3.2
1969-70	67,778,741	138.9	155,599	10.0	2019-20	64,468,709	132.1	148,000	1.4
1970-71	64,753,340	132.7	148,653	-4.5	2020-21	65,847,791	134.9	151,166	2.1
1971-72	69,486,629	142.4	159,519	7.3					
1972-73	65,046,121	133.3	149,325	-6.4					
1973-74	68,705,880	140.8	157,727	5.6					
1974-75	71,145,722	145.8	163,328	3.6					
1975-76	75,147,059	154.0	172,514	5.6					
1976-77	65,143,717	133.5	149,549	-13.3					
1977-78	48,113,636	98.6	110,454	-26.1					
1978-79	62,899,064	128.9	144,396	30.7					
1979-80	66,558,824	136.4	152,798	5.8					

* 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
2018-19	668,470	1,055,309	793,401	2,517,180	5.16
2019-20	670,301	1,057,033	922,606	2,649,940	5.43
2020-21	668,470	1,040,352	883,411	2,592,233	5.31

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 2020-21 Annual Survey*

3. Total Water Supply and Demand

Table 3A: Historical Total Water Use by BAWSCA Agency (in ccf). Inclusive of non-revenue water and supplemental purchases

Member	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 2018-19	FY 2019-20	FY 2020-21	mgd
San Mateo County															
Brisbane / GVMID	182,661	179,743	123,803	275,934	280,650	287,290	302,776	280,029	257,414	294,756	334,217	323,917	310,127	303,604	0.62
Burlingame	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	1,815,582	1,750,350	1,653,540	3.39
CWS - Bear Gulch	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	5,033,422	5,566,308	5,836,065	11.96
CWS - Mid Peninsula	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	5,991,673	6,292,879	6,336,593	12.99
CWS - South SF	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	2,945,508	2,961,510	2,890,693	5.92
Coastside CWD	1,202,915	1,055,296	986,484	894,746	896,631	996,377	997,259	877,579	817,339	812,567	902,206	872,781	891,158	886,215	1.82
Cordilleras	Not BAWSCA Member														
Daly City	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	3,046,110	3,139,345	2,877,565	5.90
East Palo Alto	996,587	938,629	842,883	863,282	907,662	1,010,939	720,040	766,380	690,728	730,899	772,528	763,315	764,448	748,457	1.53
Estero MID	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	1,969,663	2,115,607	2,101,104	4.31
Guadalupe Valley MID	130,485	122,888	152,798	Included with Brisbane											
Hillsborough	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	1,124,778	1,280,605	1,314,680	2.69
Los Trancos															
Menlo Park	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	1,383,605	1,442,176	1,379,039	2.83
Mid-Peninsula WD	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	1,220,573	1,295,922	1,273,998	2.61
Millbrae	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	949,289	939,939	906,122	1.86
North Coast CWD	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	1,142,039	1,177,652	1,194,417	2.45
Redwood City	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	4,246,670	4,651,110	4,498,987	9.22
San Bruno	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	1,374,751	1,511,466	1,506,577	3.09
Skyline	76,864	Included with CWS-Bear Gulch													
Westborough WD	457,299	485,493	394,878	408,487	440,796	441,233	433,980	377,034	390,753	356,722	383,996	379,833	400,616	373,994	0.77
Subtotal	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	34,583,510	36,491,218	36,081,650	73.94
mgd	94.27	89.46	83.38	82.53	82.08	81.78	82.96	72.42	64.57	67.40	72.98	70.87	74.78	73.94	
Santa Clara County															
Milpitas	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	4,459,591	4,583,002	4,589,507	9.41
Mountain View	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	4,220,597	4,477,254	4,559,155	9.34
Palo Alto	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	4,969,831	5,137,657	5,452,454	11.17
Purissima Hills WD	1,124,922	980,987	854,854	839,360	899,221	972,733	982,100	803,313	640,369	689,261	814,270	770,703	851,999	925,721	1.90
San Jose	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	2,513,187	2,499,664	2,534,036	5.19
Santa Clara	11,782,654	10,175,656	10,139,329	10,197,067	10,695,253	10,757,568	10,757,505	9,768,682	8,817,463	9,141,873	9,957,730	9,523,015	9,617,423	9,454,016	19.37
Stanford	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	1,228,167	1,221,078	1,198,813	2.46
Sunnyvale	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	8,237,461	8,731,750	8,857,476	18.15
Subtotal	45,943,483	42,556,893	39,757,387	39,640,158	40,139,526	41,122,896	41,117,818	36,274,313	32,374,038	34,006,180	36,951,300	35,922,552	37,119,827	37,571,178	77.00
mgd	94.15	87.21	81.48	81.24	82.26	84.27	84.26	74.34	66.34	69.69	75.72	73.62	76.07	77.00	
Alameda County															
Alameda CWD	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	18,066,739	18,900,527	19,469,820	39.90
Hayward	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	6,821,848	6,794,224	7,098,330	14.55
Subtotal	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	24,888,587	25,694,751	26,568,150	54.45
mgd	68.17	64.00	59.79	59.90	58.85	58.94	56.72	47.93	44.64	47.68	51.56	51.00	52.66	54.45	
Total	125,208,913	117,440,576	109,619,067	109,143,031	108,913,138	109,791,326	109,276,050	95,000,295	85,667,579	90,165,067	97,723,725	95,394,628	99,394,628	100,220,978	205.38
mgd	256.59	240.67	224.64	223.67	223.20	225.00	223.94	194.69	175.56	184.78	200.27	195.49	203.51	205.38	
% Change	0.2	-6.2	-6.7	-0.4	-0.2	0.8	-0.5	-13.1	-9.8	5.2	8.4	-2.4	4.1	0.9	

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	273299	-7.9
2005-06	120,114,923	246.2	275,746	0.9
2006-07	125,003,151	256.2	286,968	4.1
2007-08	125,208,913	256.6	287,440	0.2
2008-09	117,440,576	240.7	269,606	-6.2
2009-10	109,619,067	224.6	251,651	-6.7
2010-11	109,143,031	223.7	250,558	-0.4
2011-12	108,913,138	223.2	250,030	-0.2
2012-13	109,791,326	225.0	252,046	0.8
2013-14	109,276,050	223.9	250,863	-0.5
2014-15	95,000,295	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
2018-19	95,394,628	195.5	218,996	-2.4
2019-20	99,305,796	203.5	227,975	4.1
2020-21	100,221,698	205.4	230,077	0.9

*Inclusive of non-revenue water and supplemental purchases (see Table 2D).

Source: *BAWUA/BAWSCA Annual Surveys*

Figure 3C: Water Use by Source of Supply – FY 2020-21

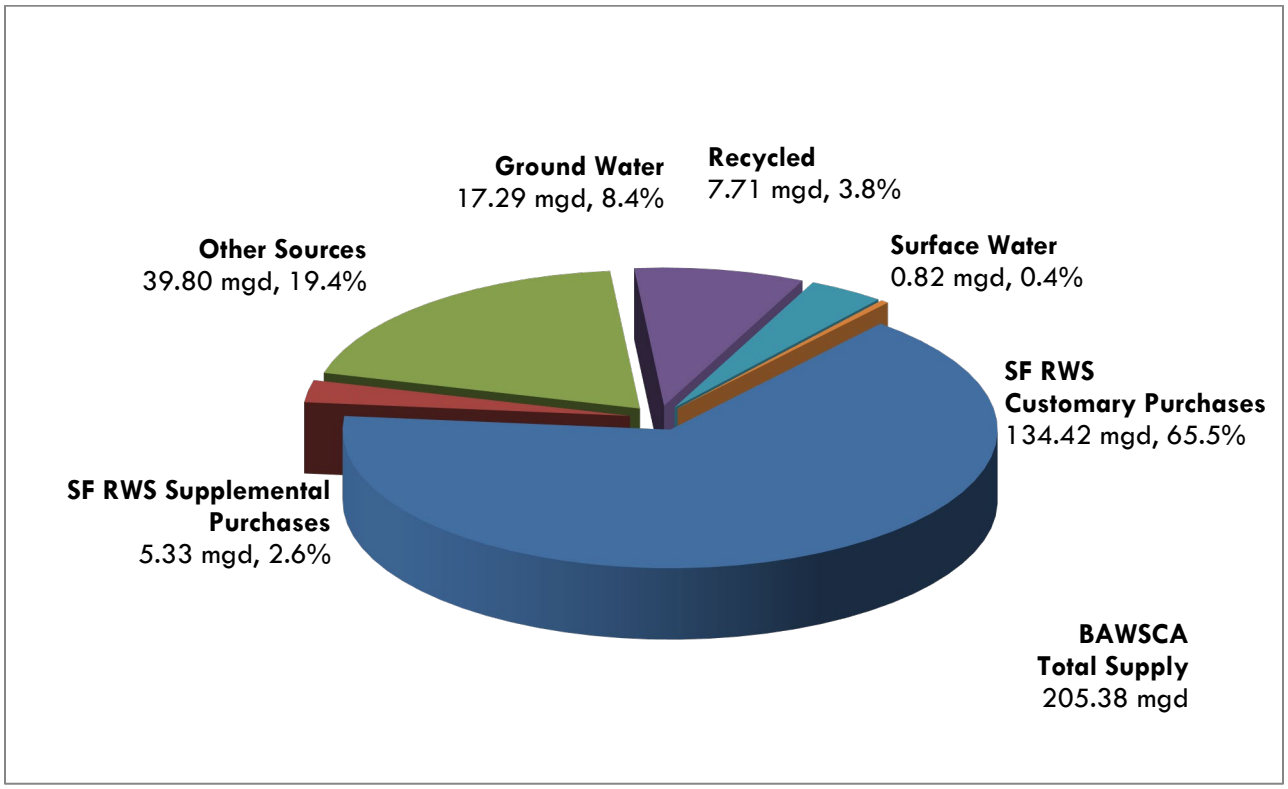


Figure 3D: Total Monthly Water Use for All BAWSCA Agencies – FY 2020-21

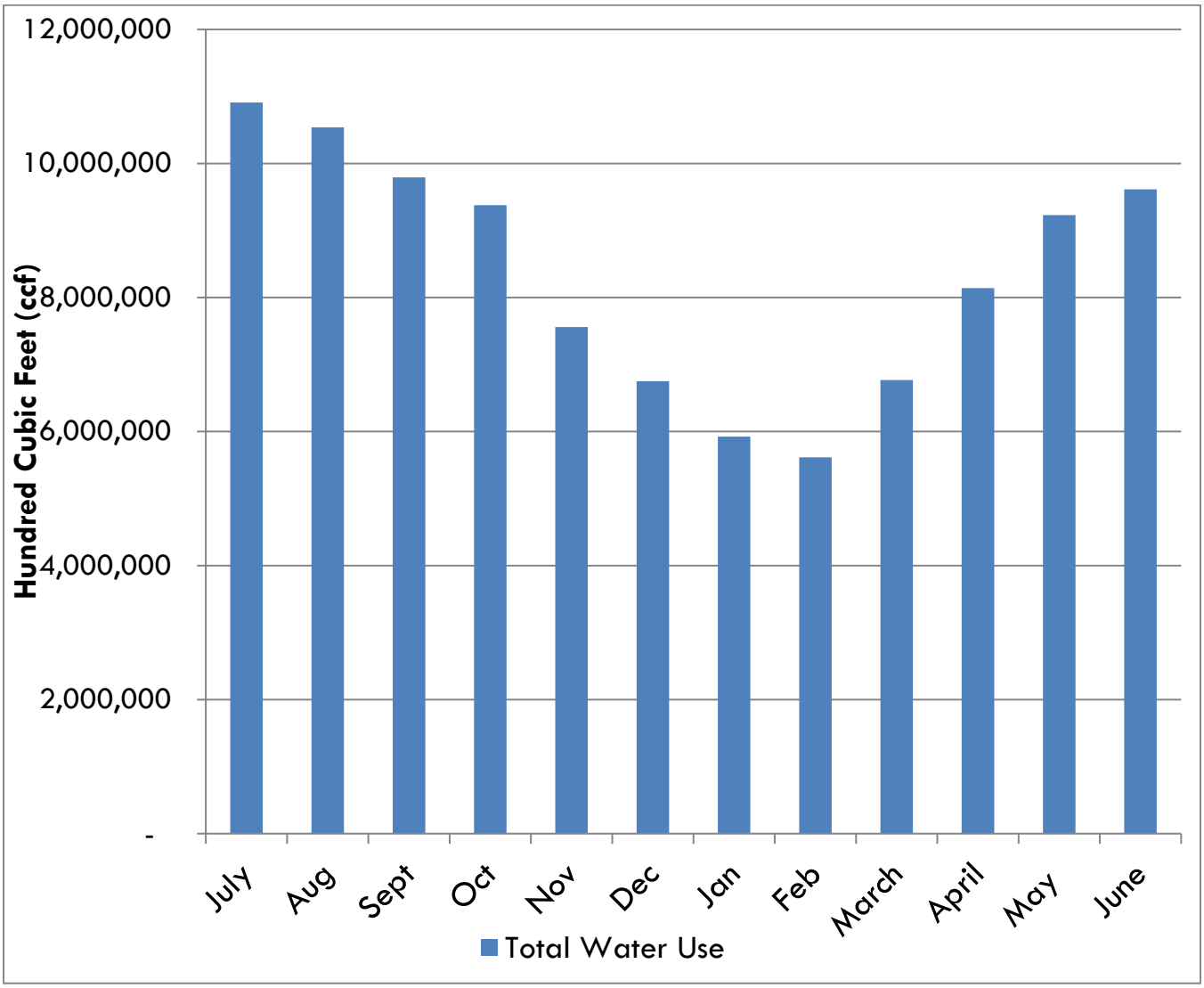


Table 3C: Water Use by Source of Supply – FY 2020-21 (in ccf)

	SF RWS Purchases			Local Sources (non-SF RWS)				Other Sources				Totals		
Member	Customary	Supplemental	% of Supply	Ground Water	% of Supply	Surface Water	% of Supply	Recycled Water	% of Supply	Other Sources	% of Supply	Total Supply	mgd Equiv	% of Total
San Mateo County														
Brisbane / GVMID	303,604	0	100.0%	0	0%	0	0%	0	0%	0	0%	303,604	0.62	0.30%
Burlingame	1,604,743	0	97.0%	0	0%	0	0%	48,797	3%	0	0%	1,653,540	3.39	1.65%
CWS - Bear Gulch	5,836,065	0	100.0%	0	0%	0	0.0%	0	0%	0	0%	5,836,065	11.96	5.82%
CWS - Mid Peninsula	6,336,593	0	100.0%	0	0%	0	0%	0	0%	0	0%	6,336,593	12.99	6.32%
CWS - South SF	2,222,223	668,470	100.0%	0	0%	0	0%	0	0%	0	0%	2,890,693	5.92	2.88%
Coastside CWD	705,680	0	79.6%	12,099	1.4%	168,436	19.0%	0	0%	0	0%	886,215	1.82	0.88%
Daly City	1,722,950 *	1,040,352	96.0%	0	0%	0	0%	114,263	4.0%	0	0%	2,877,565	5.90	2.87%
East Palo Alto**	743,205	0	99.3%	5,252	1%	0	0%	0	0%	0	0%	748,457	1.53	0.75%
Estero MID	2,101,104	0	100.0%	0	0%	0	0%	0	0%	0	0%	2,101,104	4.31	2.10%
Hillsborough	1,314,680	0	100.0%	0	0%	0	0%	0	0%	0	0%	1,314,680	2.69	1.31%
Menlo Park	1,379,039	0	100.0%	0	0%	0	0%	0	0%	0	0%	1,379,039	2.83	1.38%
Mid-Peninsula WD	1,273,998	0	100.0%	0	0%	0	0%	0	0%	0	0%	1,273,998	2.61	1.27%
Millbrae	906,122	0	100.0%	0	0%	0	0%	0	0%	0	0%	906,122	1.86	0.90%
North Coast CWD	1,172,219	0	98.1%	0	0%	0	0%	22,198	2%	0	0%	1,194,417	2.45	1.19%
Redwood City	4,137,728	0	92.0%	0	0%	0	0%	361,259	8.0%	0	0%	4,498,987	9.22	4.49%
San Bruno	444,989	883,411	88.2%	165,404	11.0%	0	0%	0	0%	12,773	0.8% †	1,506,577	3.09	1.50%
Westborough WD	373,994	0	100.0%	0	0%	0	0%	0	0%	0	0%	373,994	0.77	0.37%
Subtotal	32,578,936	2,592,233	97.5%	182,755	0.5%	168,436	0.5%	546,517	1.51%	12,773	0.0%	36,081,650	73.94	36.00%
mgd equiv	66.76	5.31		0.37		0.35		1.12		0.03		73.94		
Santa Clara County														
Milpitas	2,647,856	0	57.7%	0	0%	0	0%	415,177	9.0%	1,526,474	33.3%	4,589,507	9.41	4.58%
Mountain View	3,855,612	0	84.6%	57,895	1.3%	0	0%	191,957	4%	453,691	10.0%	4,559,155	9.34	4.55%
Palo Alto	4,953,805	0	90.9%	0	0%	0	0%	498,649	9.1%	0	0%	5,452,454	11.17	5.44%
Purissima Hills WD	925,721	0	100.0%	0	0%	0	0%	0	0%	0	0%	925,721	1.90	0.92%
San Jose	2,039,631	0	80.5%	15,197	0.6%	0	0%	479,208	18.9%	0	0%	2,534,036	5.19	2.53%
Santa Clara	1,576,338	0	16.7%	4,562,565	48.3%	0	0%	1,545,861	16.4%	1,769,252	18.7%	9,454,016	19.37	9.43%
Stanford***	659,830	0	55.0%	0	0%	0	0%	0	0%	538,983	45%	1,198,813	2.46	1.20%
Sunnyvale	4,686,275	0	52.9%	36,312	0.4%	0	0%	83,796	0.9%	4,051,093	45.7%	8,857,476	18.15	8.84%
Subtotal	21,345,068	0	56.8%	4,671,969	12.4%	0	0.0%	3,214,648	8.6%	8,339,493	22.2%	37,571,178	77.00	37.49%
mgd equiv	43.74	0.00		9.57		0.00		6.59		17.09		77.00		
Alameda County														
Alameda CWD	4,585,161	0	23.6%	3,583,690	18.4%	231,304	1.2%	0	0%	11,069,665	56.9%	19,469,820	39.90	19.4%
Hayward	7,098,330	0	100.0%	0	0%	0	0%	0	0%	0	0.0%	7,098,330	14.55	7.1%
Subtotal	11,683,491	0	44.0%	3,583,690	13.5%	231,304	0.9%	0	0%	11,069,665	41.7%	26,568,150	54.45	26.51%
mgd equiv	23.94	0.00		7.34		0.47				22.69		54.45		
Total	65,607,495	2,592,233	68.0%	8,438,414	8.4%	399,740	0.4%	3,761,165	3.8%	19,421,931	19.4%	100,220,978	205.38	100.0%
mgd equiv	134.45	5.31		17.29		0.82		7.71		39.80		205.38		

*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.

***"Other Sources" is made up of local surface water, local groundwater, and stormwater capture used for irrigation (non-potable supplies).

Source: *BAWSCA FY 2020-21 Annual Survey*

Table 3D: Total Monthly Water Use – FY 2020-21 (in ccf)

Member	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	Total	mgd
San Mateo County														
Brisbane / GVMID	32,745	29,389	27,664	31,861	22,925	22,143	18,666	18,082	20,626	24,837	25,924	28,742	303,604	0.62
Burlingame	223,040	162,616	148,570	136,376	128,996	100,016	88,428	106,422	111,737	145,105	144,759	157,475	1,653,540	3.39
CWS - Bear Gulch	663,844	736,774	632,396	589,320	412,793	303,571	244,208	221,088	324,679	495,633	584,179	627,578	5,836,062	11.96
CWS - Mid Peninsula	678,041	675,247	602,632	593,194	477,988	435,224	390,000	351,299	437,216	496,556	580,414	618,781	6,336,592	12.99
CWS - South SF	283,479	278,297	271,547	272,307	223,070	207,371	202,088	180,856	211,425	234,817	257,447	267,989	2,890,693	5.92
Coastside CWD	90,134	93,610	83,088	85,521	63,930	59,532	51,711	50,481	57,005	78,342	87,193	85,668	886,217	1.82
Daly City	296,844	242,662	249,257	260,095	213,179	245,659	198,522	207,927	221,557	229,767	272,227	239,869	2,877,565	5.90
East Palo Alto	96,056	72,355	65,525	69,516	55,914	53,109	55,034	45,472	49,473	55,905	66,495	63,605	748,457	1.53
Estero MID	239,857	227,492	213,021	226,981	162,521	148,879	127,446	108,340	124,305	139,527	194,537	188,198	2,101,104	4.31
Hillsborough	163,052	163,520	152,702	114,256	79,741	50,506	42,465	53,533	70,931	124,725	132,399	166,850	1,314,677	2.69
Menlo Park	171,989	160,728	140,393	135,069	95,721	79,836	68,795	62,358	87,082	105,205	129,726	142,137	1,379,039	2.83
Mid-Peninsula WD	137,560	133,220	122,978	121,506	93,058	82,686	75,807	71,864	87,475	104,905	121,006	121,933	1,273,998	2.61
Millbrae	96,843	99,110	91,532	80,181	70,941	71,642	58,969	53,603	62,390	62,299	78,790	79,822	906,122	1.86
North Coast CWD	121,872	120,511	100,744	107,204	96,936	82,062	77,384	92,462	87,673	101,074	102,472	104,023	1,194,417	2.45
Redwood City	501,549	480,003	432,521	365,611	329,333	258,808	234,118	293,892	342,931	370,468	429,919	459,834	4,498,986	9.22
San Bruno	144,507	149,252	126,517	125,513	124,467	114,047	97,572	113,133	122,091	125,339	134,038	130,101	1,506,577	3.09
Westborough WD	34,995	37,162	39,480	26,876	34,525	26,748	25,531	25,095	30,684	27,430	30,907	34,561	373,994	0.77
Subtotal	3,976,407	3,861,948	3,500,566	3,341,388	2,686,038	2,341,838	2,056,742	2,055,907	2,449,280	2,921,933	3,372,431	3,517,166	36,081,644	73.94
% of Annual Use	11%	11%	10%	9%	7%	6%	6%	6%	7%	8%	9%	10%		
Santa Clara County														
Milpitas	479,370	447,493	433,927	428,965	341,178	336,655	293,495	283,496	341,420	382,309	403,343	417,856	4,589,507	9.41
Mountain View	529,265	464,337	430,938	419,841	324,068	309,351	255,613	250,874	306,120	404,059	417,237	447,452	4,559,155	9.34
Palo Alto	636,291	581,199	544,435	533,754	410,119	340,378	319,612	265,871	322,391	422,712	541,851	533,841	5,452,454	11.17
Purissima Hills WD	121,419	103,968	100,631	98,236	57,793	47,732	32,014	34,796	50,803	83,141	91,687	103,501	925,721	1.90
San Jose	321,878	205,968	310,274	202,631	237,656	166,280	156,688	126,445	184,386	187,128	234,404	200,298	2,534,036	5.19
Santa Clara	897,359	1,068,791	936,289	902,415	750,092	681,160	554,302	556,500	608,709	744,525	865,855	888,019	9,454,016	19.37
Stanford	139,989	157,245	135,557	137,809	88,021	62,157	53,551	42,855	54,325	86,378	116,158	124,768	1,198,813	2.46
Sunnyvale	970,796	881,062	814,624	829,705	647,789	606,503	536,955	506,999	633,876	767,161	812,368	849,638	8,857,477	18.15
Subtotal	4,096,367	3,910,062	3,706,675	3,553,356	2,856,716	2,550,216	2,202,231	2,067,836	2,502,031	3,077,414	3,482,903	3,565,373	37,571,180	77.00
% of Annual Use	11%	10%	10%	9%	8%	7%	6%	6%	7%	8%	9%	9%		
Alameda County														
Alameda CWD	2,072,063	2,078,755	1,862,438	1,811,849	1,464,193	1,309,263	1,215,400	1,062,553	1,344,821	1,574,165	1,793,725	1,880,595	19,469,820	39.90
Hayward	764,150	688,786	722,523	671,516	553,116	550,113	448,833	429,167	471,508	567,473	580,129	651,016	7,098,330	14.55
Subtotal	2,836,213	2,767,541	2,584,961	2,483,365	2,017,309	1,859,376	1,664,233	1,491,720	1,816,329	2,141,638	2,373,854	2,531,611	26,568,150	54.45
% of Annual Use	11%	10%	10%	9%	8%	7%	6%	6%	7%	8%	9%	10%		
Total	10,908,987	10,539,551	9,792,203	9,378,109	7,560,064	6,751,430	5,923,206	5,615,463	6,767,640	8,140,984	9,229,188	9,614,150	100,220,974	205.38
% of Annual Use	11%	11%	10%	9%	8%	7%	6%	6%	7%	8%	9%	10%		

Note: Totals inclusive of supplemental purchases.

Source: *BAWSCA FY 2020-21 Annual Survey*

Table 3E-1: Demand Projections by Source (in mgd)

Purchases from SF RWS

Member	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41	FY 2045-46
San Mateo County					
Brisbane / GVMID	0.96	0.97	0.97	0.97	0.98
Burlingame	4.20	4.30	4.43	4.57	4.72
CWS - Bear Gulch	10.67	10.59	10.61	10.57	10.58
CWS - Mid-Peninsula	12.87	12.97	13.20	13.37	13.64
CWS - South SF	5.36	5.31	5.45	5.77	6.15
CWS Total	28.90	28.87	29.26	29.71	30.37
Coastside CWD	2.18	2.18	2.18	2.18	2.18
Daly City	6.38	5.75	5.74	5.77	5.81
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	3.18	3.34	3.32	3.29	3.28
Menlo Park	3.55	3.68	3.86	4.06	4.26
Mid-Peninsula WD	3.10	3.20	3.30	3.40	3.40
Millbrae	2.60	2.70	2.70	2.80	3.00
North Coast CWD	2.34	2.29	2.28	2.24	2.22
Redwood City	8.50	8.59	8.82	8.92	9.11
San Bruno	3.53	3.95	4.37	4.78	4.78
Westborough WD	0.80	0.80	0.80	0.70	0.70
Subtotal	77.80	78.22	79.69	81.12	82.56
Santa Clara County					
Milpitas	6.60	6.77	7.04	7.29	7.53
Mountain View	9.06	9.50	9.96	10.45	10.94
Palo Alto	10.08	10.19	10.35	10.60	10.64
Purissima Hills WD	2.09	2.09	2.12	2.13	2.15
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	1.68	1.87	2.07	2.27	2.47
Sunnyvale	12.10	9.60	9.90	10.70	11.40
Subtotal	50.61	49.02	50.44	52.43	54.15
Alameda County					
Alameda CWD	7.70	7.70	7.70	7.70	13.80
Hayward	17.80	18.60	19.70	20.70	22.30
Subtotal	25.50	26.30	27.40	28.40	36.10
Total	153.91	153.54	157.53	161.95	172.81
Total w/o SJ & SC	144.91	144.54	148.53	152.95	163.81

Source: *BAWSCA FY 2020-21 Annual Survey*

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

Groundwater Production

Member	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41	FY 2045-46
San Mateo County					
CWS - South SF	1.37	1.37	1.37	1.37	1.37
Coastside CWD	0.03	0.03	0.03	0.03	0.03
Daly City	0.00	0.00	0.00	0.00	0.00
East Palo Alto	0.02	0.02	0.02	0.02	0.02
San Bruno	0.15	0.15	0.25	0.45	0.65
Subtotal	1.57	1.57	1.67	1.87	2.07
Santa Clara County					
Milpitas	0.00	0.00	0.00	0.00	0.00
Mountain View	0.25	0.25	0.25	0.25	0.25
San Jose	0.20	0.62	2.00	4.68	4.89
Santa Clara	20.58	20.58	20.58	20.58	20.58
Sunnyvale	0.30	0.20	0.20	0.30	0.30
Subtotal	21.33	21.65	23.03	25.80	26.01
Alameda County					
Alameda CWD	7.70	7.70	7.70	7.70	13.80
Total	30.59	30.91	32.39	35.37	41.88

Source: *BAWSCA FY 2020-21 Annual Survey*

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

Surface Water Production

Member	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41	FY 2045-46
San Mateo County					
CWS - Bear Gulch **1**	0.75	0.75	0.75	0.75	0.75
Coastside CWD **2**	0.67	0.67	0.67	0.67	0.67
Subtotal	1.42	1.42	1.42	1.42	1.42
Alameda County					
Alameda CWD **3**	5.20	5.20	5.20	5.20	5.20
Total	6.62	6.62	6.62	6.62	6.62

1 Bear Gulch

2 Pilarcitos Creek and Denniston Creek

3 Del Valle Reservoir

Source: *BAWSCA FY 2020-21 Annual Survey*

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

Recycled Water

Member	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41	FY 2045-46
San Mateo County					
Burlingame	0.10	0.10	0.10	0.10	0.10
Daly City	0.97	1.51	1.51	1.51	1.51
Millbrae	0.01	0.01	0.01	0.01	0.01
North Coast CWD	0.02	0.02	0.02	0.02	0.02
Redwood City	1.15	1.27	1.51	1.52	1.53
Subtotal	2.25	2.91	3.15	3.16	3.17
Santa Clara County					
Milpitas	1.04	1.04	1.04	1.04	1.04
Mountain View	0.40	0.40	0.40	0.40	0.40
Palo Alto	1.01	1.01	1.01	1.01	1.01
San Jose	1.06	1.11	1.31	1.76	1.78
Santa Clara	4.08	4.90	5.88	7.06	8.47
Sunnyvale	0.80	0.90	1.00	1.10	1.30
Subtotal	8.39	9.37	10.64	12.37	14.00
Alameda County					
Hayward	0.20	0.20	0.20	0.30	0.30
Total	10.84	12.48	13.99	15.83	17.47

Source: *BAWSCA FY 2020-21 Annual Survey*

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

Other Sources

Member	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41	FY 2045-46
Santa Clara County					
Milpitas **1**	3.96	4.12	4.21	4.35	4.49
Mountain View **1**	1.05	1.05	1.05	1.05	1.05
Santa Clara **1**	4.07	4.07	4.07	4.07	4.07
Stanford 2	1.06	1.11	1.17	1.23	1.29
Sunnyvale **1**	12.10	8.40	8.40	10.60	11.30
Subtotal	22.24	18.75	18.90	21.30	22.20
Alameda County					
Alameda CWD **3**	19.30	18.90	18.80	18.90	13.80
Total	41.54	37.65	37.70	40.20	36.00

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 2020-21 Annual Survey*

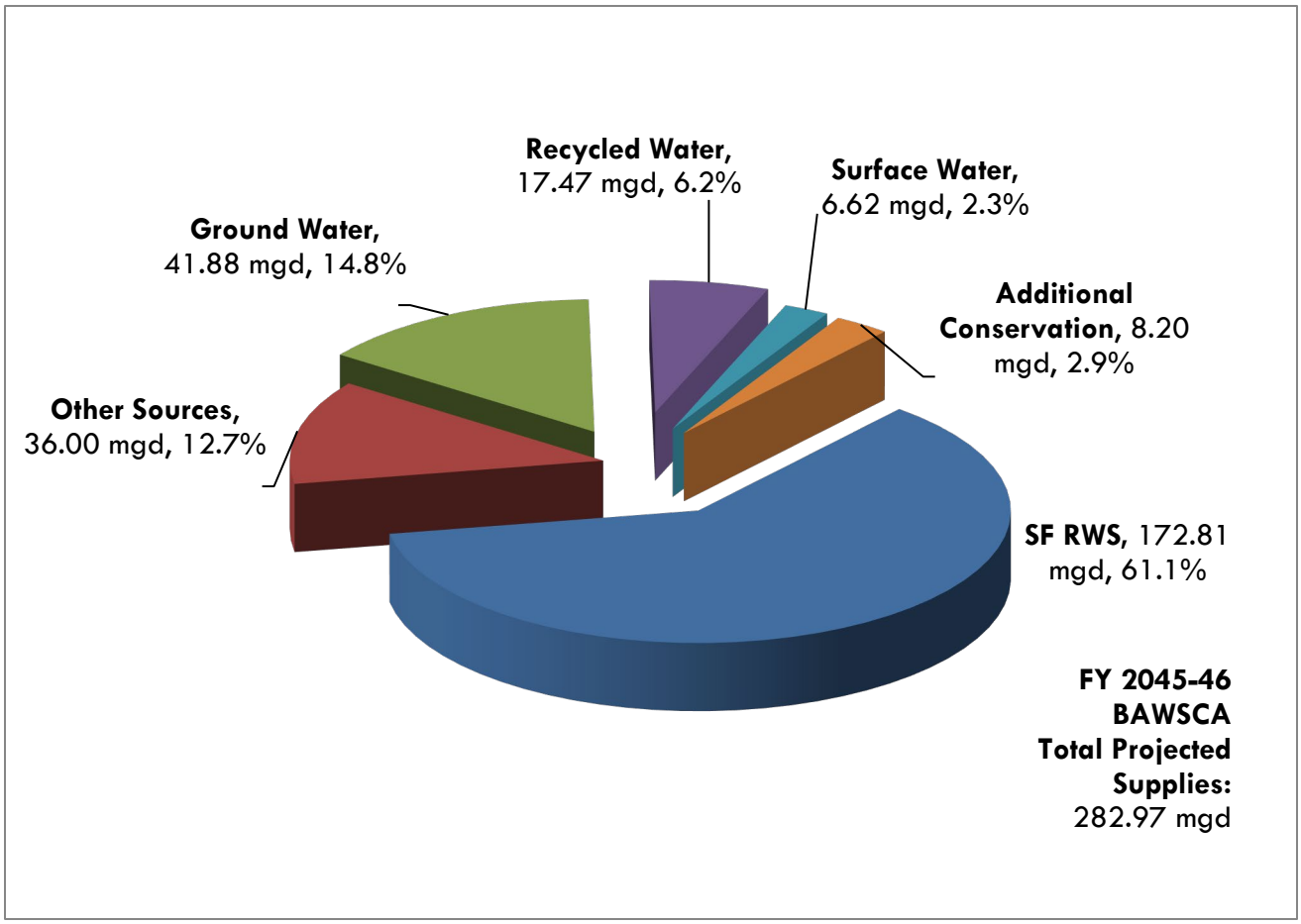
Table 3E-6: Demand Projections by Source (in mgd)

Summary

Source	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41	FY 2045-46
SF RWS	153.91	153.54	157.53	161.95	172.81
Groundwater	30.59	30.91	32.39	35.37	41.88
Surface Water	6.62	6.62	6.62	6.62	6.62
Recycled	10.84	12.48	13.99	15.83	17.47
Other	41.54	37.65	37.70	40.20	36.00
Additional Conservation	3.88	5.81	7.35	8.20	8.20
Total	247.39	247.02	255.58	268.17	282.97

Source: *BAWSCA FY 2020-21 Annual Surveys*

Figure 3E: Demand Projections by Source – FY 2045-46 (in mgd)



4. Current Water Use by Customer Class

Figure 4A: Potable Water Use by Customer Class – FY 2020-21

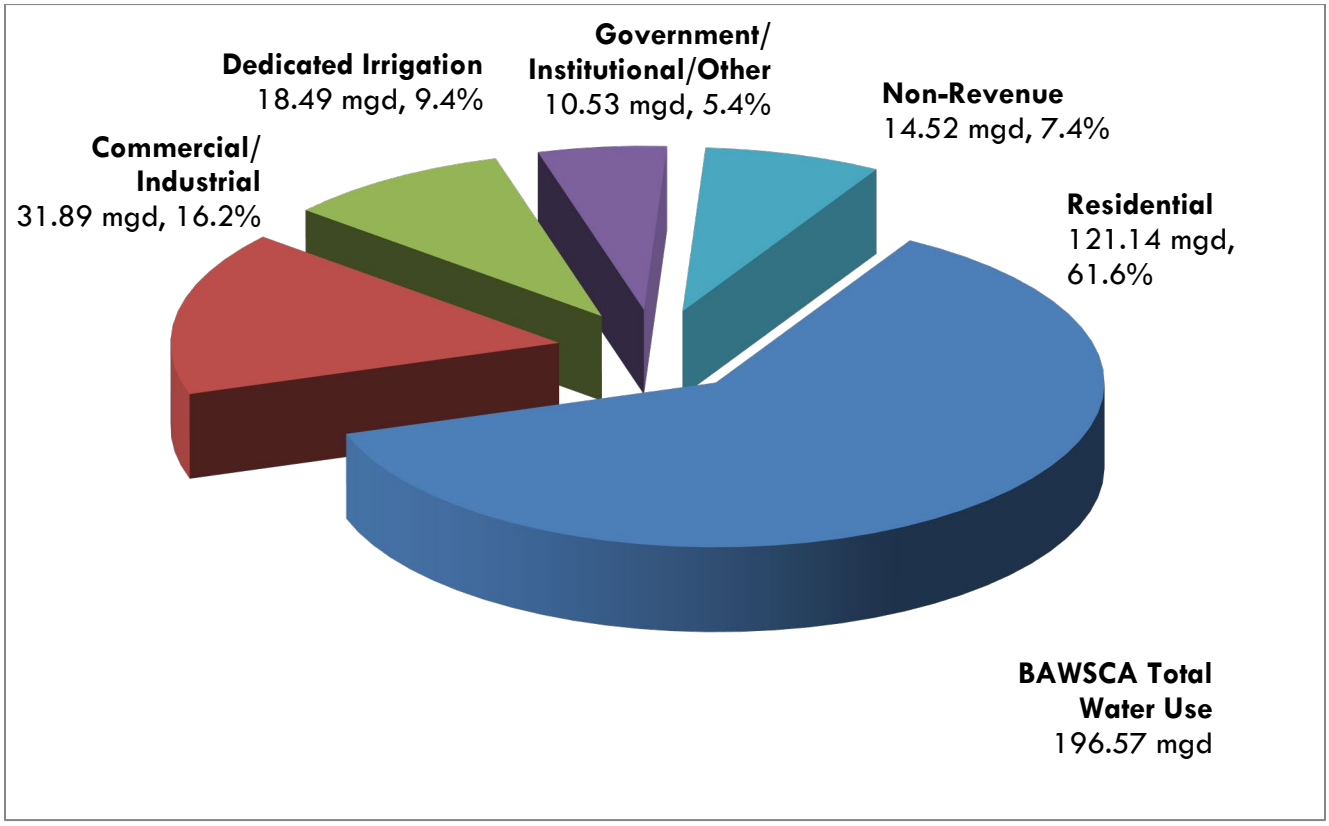


Figure 4B: Total Water Use by Customer Class – FY 2020-21

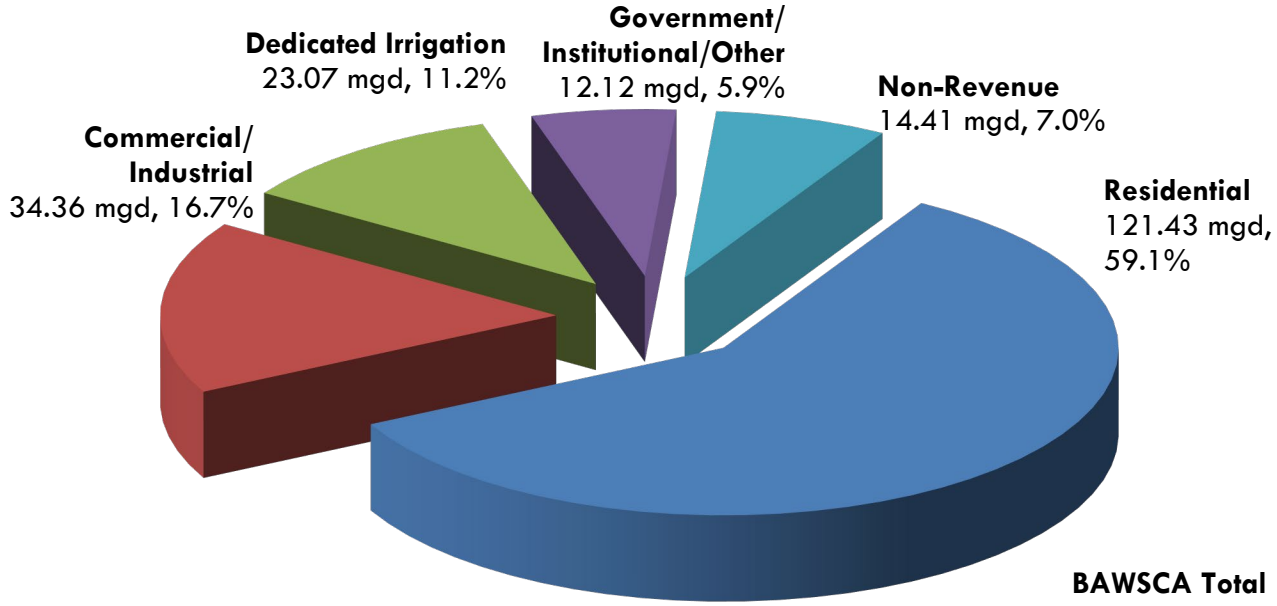
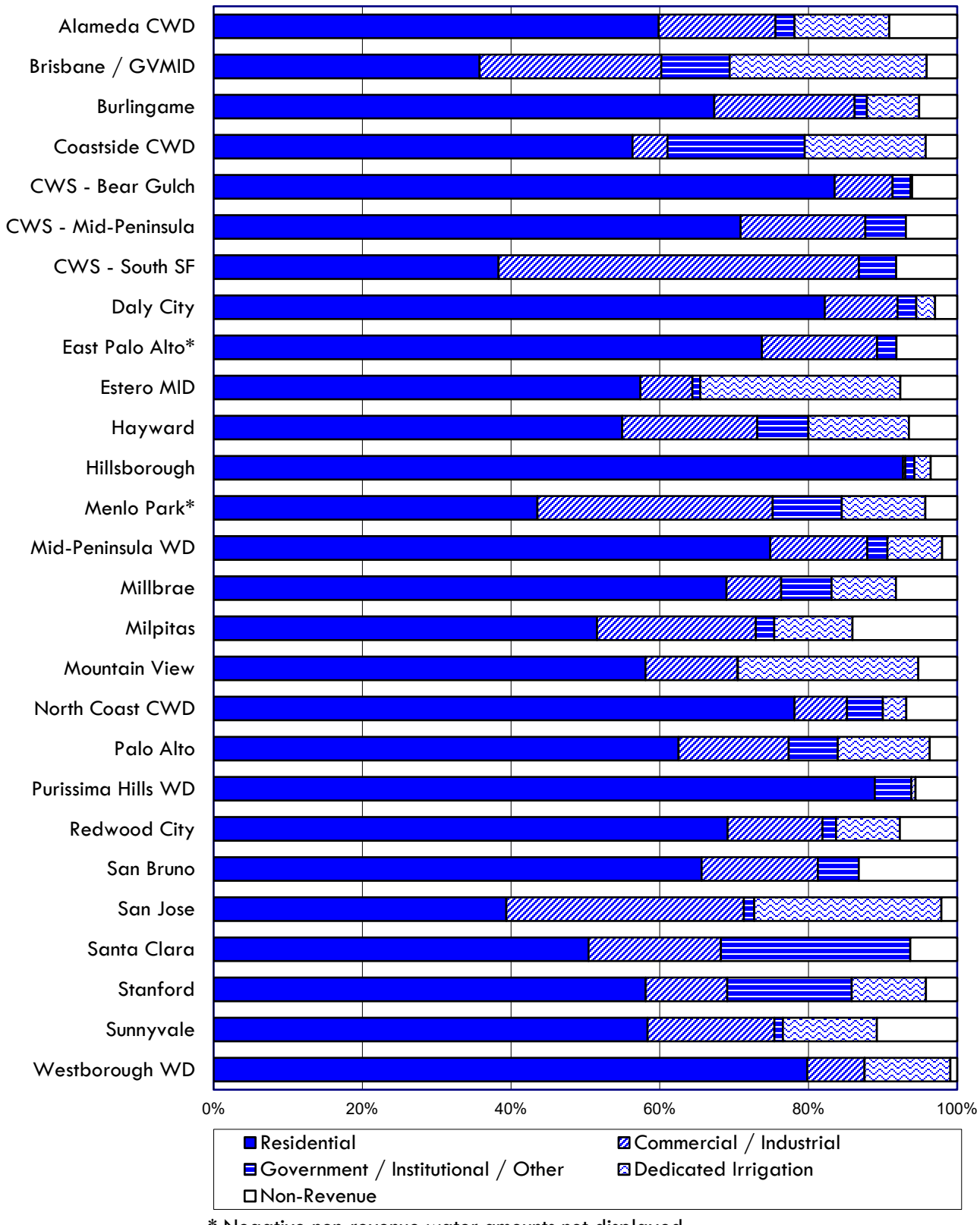


Figure 4B

Figure 4C: Potable Water Use by Sector for BAWSCA Agencies – FY 2020-21



* Negative non-revenue water amounts not displayed.

Figure 4C

Table 4A: Potable Water Use by Customer Class – FY 2020-21 (in ccf)

	Residential			Non-Residential							Total Potable Consumption	
Member	Single Family	Multiple Family	Subtotal	Commercial	Industrial	Comm'l/Ind'l Subtotal	Gov't/ Instit'l/Other	Subtotal	Dedicated Irrigation†	Non-Revenue Water‡		mgd
San Mateo County												
Brisbane / GVMID	91,396	17,186	**108,582**	74,204	0	**74,204**	27,929	**102,133**	80,437	12,452	**303,604**	**0.62**
Burlingame	771,714	308,643	**1,080,357**	169,041	134,069	**303,111**	26,508	**329,619**	112,609	82,158	**1,604,743**	**3.29**
CWS - Bear Gulch	4,754,590	119,685	**4,874,275**	453,143	1,110	**454,253**	142,077	**596,330**	11,195	354,265	**5,836,065**	**11.96**
CWS - Mid-Peninsula	3,580,791	909,756	**4,490,547**	1,050,165	13,174	**1,063,339**	345,231	**1,408,570**	0	437,476	**6,336,593**	**12.99**
CWS - South SF	938,489	169,034	**1,107,523**	1,192,583	208,542	**1,401,125**	144,881	**1,546,006**	0	237,164	**2,890,693**	**5.92**
Coastside CWD	455,670	43,572	**499,242**	41,741	0	**41,741**	163,455	**205,196**	144,202	37,575	**886,215**	**1.82**
Daly City	1,608,674	662,904	**2,271,578**	270,643	0	**270,643**	69,453	**340,096**	69,988	82,360	**2,764,022**	**5.66**
East Palo Alto*	552,003	0	**552,003**	111,439	4,449	**115,888**	19,384	**135,272**	0	61,182	**748,457**	**1.53**
Estero MID	512,324	693,438	**1,205,762**	127,744	19,188	**146,932**	22,511	**169,443**	565,250	160,649	**2,101,104**	**4.31**
Hillsborough	1,218,781	0	**1,218,781**	4,192	0	**4,192**	16,093	**20,285**	28,830	46,784	**1,314,680**	**2.69**
Menlo Park	460,035	140,439	**600,474**	253,199	183,103	**436,302**	128,222	**564,524**	155,024	59,017	**1,379,039**	**2.83**
Mid-Peninsula WD	745,864	207,743	**953,607**	127,319	39,041	**166,360**	34,503	**200,863**	93,604	25,924	**1,273,998**	**2.61**
Millbrae	466,633	158,444	**625,077**	66,538	0	**66,538**	61,424	**127,962**	78,443	74,640	**906,122**	**1.86**
North Coast CWD	749,618	166,181	**915,799**	82,723	0	**82,723**	56,474	**139,197**	36,878	80,345	**1,172,219**	**2.40**
Redwood City	2,034,409	825,636	**2,860,045**	488,208	39,416	**527,624**	76,132	**603,756**	354,451	319,476	**4,137,728**	**8.48**
San Bruno*	988,676	0	**988,676**	235,600	0	**235,600**	82,914	**318,514**	0	199,387	**1,506,577**	**3.09**
Westborough	258,595	40,010	**298,605**	28,811	0	**28,811**	9	**28,820**	43,134	3,435	**373,994**	**0.77**
Subtotal	20,188,262	4,462,671	**24,650,933**	4,777,293	642,092	**5,419,386**	1,417,200	**6,836,586**	1,774,045	2,274,289	**35,535,853**	**72.82**
mgd equiv	41.37	9.15	**50.52**	9.79	1.32	**11.11**	2.90	**14.01**	3.64	4.66	**72.82**	
Santa Clara County												
Milpitas	1,287,048	865,383	**2,152,431**	384,607	506,521	**891,128**	103,920	**995,048**	438,813	588,038	**4,174,330**	**8.55**
Mountain View	1,205,178	1,331,278	**2,536,456**	433,731	106,020	**539,751**	3,372	**543,123**	1,059,472	228,147	**4,367,198**	**8.95**
Palo Alto	2,346,175	750,892	**3,097,067**	604,640	129,385	**734,025**	327,099	**1,061,124**	612,731	182,883	**4,953,805**	**10.15**
Purissima Hills WD	823,220	0	**823,220**	0	0	**0**	45,485	**45,485**	5,088	51,928	**925,721**	**1.90**
San Jose	94,104	714,550	**808,654**	120,732	536,109	**656,841**	28,268	**685,109**	517,401	43,664	**2,054,828**	**4.21**
Santa Clara	2,074,687	1,912,111	**3,986,798**	718,369	690,214	**1,408,583**	2,014,114	**3,422,697**	0	498,660	**7,908,155**	**16.21**
Stanford	193,047	190,243	**383,290**	778	71,699	**72,477**	110,461	**182,938**	65,818	27,784	**659,830**	**1.35**
Sunnyvale	2,882,909	2,237,668	**5,120,577**	1,495,257	0	**1,495,257**	100,508	**1,595,765**	1,109,586	947,752	**8,773,680**	**17.98**
Subtotal	10,906,368	8,002,125	**18,908,493**	3,758,113	2,039,948	**5,798,061**	2,733,227	**8,531,288**	3,808,909	2,568,856	**33,817,547**	**69.30**
mgd equiv	22.35	16.40	**38.75**	7.70	4.18	**11.88**	5.60	**17.48**	7.81	5.26	**69.30**	
Alameda County												
Alameda CWD	8,221,889	3,432,903	**11,654,792**	1,920,874	1,135,016	**3,055,890**	501,310	**3,557,200**	2,478,129	1,779,699	**19,469,820**	**39.90**
Hayward	2,649,224	1,251,241	**3,900,465**	458,447	830,821	**1,289,268**	488,245	**1,777,513**	959,411	460,941	**7,098,330**	**14.55**
Subtotal	10,871,113	4,684,144	**15,555,257**	2,379,321	1,965,837	**4,345,158**	989,555	**5,334,713**	3,437,540	2,240,640	**26,568,150**	**54.45**
mgd equiv	22.28	9.60	**31.88**	4.88	4.03	**8.90**	2.03	**10.93**	7.04	4.59	**54.45**	
Total	41,965,743	17,148,940	**59,114,684**	10,914,728	4,647,877	**15,562,605**	5,139,982	**20,702,587**	9,020,494	7,083,785	**95,921,550**	**196.57**
mgd equiv	86.00	35.14	**121.14**	22.37	9.52	**31.89**	10.53	**42.43**	18.49	14.52	**196.57**	

*Single family amount includes multi-family. Percentage breakdown from prior FY was used to generate an estimated breakdown by customer class for East Palo Alto

† 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 2020-21 Annual Survey*

Table 4B: Total Water Use by Customer Class – FY 2020-21 (in ccf)

	Residential			Non-Residential							Total Consumption	
Member	Single Family	Multiple Family	Subtotal	Commercial	Industrial	Comm'l/Ind'l Subtotal	Gov't/ Instit'l/Other	Subtotal	Dedicated Irrigation†	Non-Revenue Water‡		mgd
San Mateo County												
Brisbane / GVMID	91,396	17,186	**108,582**	74,204	0	**74,204**	27,929	**102,133**	80,437	12,452	**303,604**	**0.62**
Burlingame	771,714	308,643	**1,080,357**	169,041	134,069	**303,111**	26,508	**329,619**	112,609	130,955	**1,653,540**	**3.39**
CWS - Bear Gulch	4,754,590	119,685	**4,874,275**	453,143	1,110	**454,253**	142,077	**596,330**	11,195	354,265	**5,836,065**	**11.96**
CWS - Mid-Peninsula	3,580,791	909,756	**4,490,547**	1,050,165	13,174	**1,063,339**	345,231	**1,408,570**	0	437,476	**6,336,593**	**12.99**
CWS - South SF	938,489	169,034	**1,107,523**	1,192,583	208,542	**1,401,125**	144,881	**1,546,006**	0	237,164	**2,890,693**	**5.92**
Coastside CWD	455,670	43,572	**499,242**	41,741	0	**41,741**	163,455	**205,196**	144,202	37,575	**886,215**	**1.82**
Daly City	1,608,674	662,904	**2,271,578**	270,643	0	**270,643**	69,453	**340,096**	69,988	196,623	**2,878,285**	**5.90**
East Palo Alto*	552,003	0	**552,003**	111,439	4,449	**115,888**	19,384	**135,272**	0	61,182	**748,457**	**1.53**
Estero MID	512,324	693,438	**1,205,762**	127,744	19,188	**146,932**	22,511	**169,443**	565,250	160,649	**2,101,104**	**4.31**
Hillsborough	1,218,781	0	**1,218,781**	4,192	0	**4,192**	16,093	**20,285**	28,830	46,784	**1,314,680**	**2.69**
Menlo Park	460,035	140,439	**600,474**	253,199	183,103	**436,302**	128,222	**564,524**	155,024	59,017	**1,379,039**	**2.83**
Mid-Peninsula WD	745,864	207,743	**953,607**	127,319	39,041	**166,360**	34,503	**200,863**	93,604	25,924	**1,273,998**	**2.61**
Millbrae	466,633	158,444	**625,077**	66,538	0	**66,538**	61,424	**127,962**	78,443	74,640	**906,122**	**1.86**
North Coast CWD	749,618	166,181	**915,799**	82,723	0	**82,723**	56,474	**139,197**	51,256	88,165	**1,194,417**	**2.45**
Redwood City	2,034,409	825,636	**2,860,045**	489,043	43,858	**532,901**	76,286	**609,187**	701,616	328,139	**4,498,987**	**9.22**
San Bruno*	988,676	0	**988,676**	235,600	0	**235,600**	82,914	**318,514**	0	199,387	**1,506,577**	**3.09**
Westborough	258,595	40,010	**298,605**	28,811	0	**28,811**	9	**28,820**	43,134	3,435	**373,994**	**0.77**
Subtotal	20,188,262	4,462,671	**24,650,933**	4,778,128	646,534	**5,424,663**	1,417,354	**6,842,017**	2,135,588	2,453,832	**36,082,370**	**73.94**
mgd equiv	41.37	9.15	**50.52**	9.79	1.32	**11.12**	2.90	**14.02**	4.38	5.03	**73.94**	
Santa Clara County												
Milpitas	1,287,048	865,383	**2,152,431**	384,607	506,521	**891,128**	103,920	**995,048**	753,134	688,894	**4,589,507**	**9.41**
Mountain View	1,205,178	1,331,278	**2,536,456**	434,413	106,020	**540,433**	3,392	**543,825**	1,195,722	283,152	**4,559,155**	**9.34**
Palo Alto	2,346,175	750,892	**3,097,067**	604,640	129,385	**734,025**	694,338	**1,428,363**	744,143	182,881	**5,452,454**	**11.17**
Purissima Hills WD	823,220	0	**823,220**	0	0	**0**	45,485	**45,485**	5,088	51,928	**925,721**	**1.90**
San Jose	94,104	714,550	**808,654**	120,732	714,224	**834,956**	32,500	**867,456**	715,964	141,962	**2,534,036**	**5.19**
Santa Clara	2,074,687	2,052,836	**4,127,523**	1,341,036	1,085,289	**2,426,325**	2,401,508	**4,827,833**	0	498,660	**9,454,016**	**19.37**
Stanford	193,047	190,243	**383,290**	778	71,699	**72,477**	124,358	**196,835**	579,470	39,218	**1,198,813**	**2.46**
Sunnyvale	2,882,909	2,237,668	**5,120,577**	1,495,257	0	**1,495,257**	100,508	**1,595,765**	1,689,040	452,095	**8,857,476**	**18.15**
Subtotal	10,906,368	8,142,850	**19,049,218**	4,381,462	2,613,138	**6,994,601**	3,506,009	**10,500,610**	5,682,561	2,338,789	**37,571,178**	**77.00**
mgd equiv	22.35	16.69	**39.04**	8.98	5.36	**14.33**	7.18	**21.52**	11.65	4.79	**77.00**	
Alameda County												
Alameda CWD	8,221,889	3,432,903	**11,654,792**	1,920,874	1,135,016	**3,055,890**	501,310	**3,557,200**	2,478,129	1,779,699	**19,469,820**	**39.90**
Hayward	2,649,224	1,251,241	**3,900,465**	458,447	830,821	**1,289,268**	488,245	**1,777,513**	959,411	460,941	**7,098,330**	**14.55**
Subtotal	10,871,113	4,684,144	**15,555,257**	2,379,321	1,965,837	**4,345,158**	989,555	**5,334,713**	3,437,540	2,240,640	**26,568,150**	**54.45**
mgd equiv	22.28	9.60	**31.88**	4.88	4.03	**8.90**	2.03	**10.93**	7.04	4.59	**54.45**	
Total	41,965,743	17,289,665	**59,255,409**	11,538,912	5,225,510	**16,764,421**	5,912,918	**22,677,339**	11,255,688	7,033,262	**100,221,698**	**205.39**
mgd equiv	86.00	35.43	**121.43**	23.65	10.71	**34.36**	12.12	**46.47**	23.07	14.41	**205.39**	

* 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 2020-21 Annual Survey*

Table 4C: Number of Customer Accounts – FY 2020-21

	Residential						Non-Residential			
Member	Single Family*	Multiple Family	Res Subtotal	Commercial	Industrial	Ind/Comm Subtotal	Gov't, Other	Non-Res Subtotal	Dedicated Irrigation†	Total
San Mateo County										
Brisbane / GVMID	1,539	120	**1,659**	288	0	**288**	0	**288**	93	**2,040**
Burlingame	6,853	741	**7,594**	584	263	**847**	596	**1,443**	216	**9,253**
CWS - Bear Gulch	16,959	187	**17,146**	1,249	1	**1,250**	171	**1,421**	8	**18,575**
CWS - Mid-Peninsula	31,350	759	**32,109**	3,385	91	**3,476**	364	**3,840**	0	**35,949**
CWS - SSF	14,056	183	**14,239**	1,931	51	**1,982**	233	**2,215**	0	**16,454**
Coastside CWD	5,850	110	**5,960**	316	0	**316**	1,249	**1,565**	79	**7,604**
Daly City	20,035	1,827	**21,862**	774	25	**799**	195	**994**	153	**23,009**
East Palo Alto	3,685	0	**3,685**	155	39	**194**	108	**302**	0	**3,987**
Estero MID	4,537	2,619	**7,156**	184	54	**238**	259	**497**	529	**8,182**
Hillsborough	4,191	0	**4,191**	10	0	**10**	17	**27**	83	**4,301**
Menlo Park	3,385	205	**3,590**	180	223	**403**	201	**604**	140	**4,334**
Mid-Peninsula WD	7,266	203	**7,469**	412	48	**460**	94	**554**	70	**8,093**
Millbrae	5,774	191	**5,965**	233	0	**233**	1,277	**1,510**	94	**7,569**
North Coast CWD	11,212	301	**11,513**	349	0	**349**	325	**674**	94	**12,281**
Redwood City	19,224	1,675	**20,899**	1,422	46	**1,468**	854	**2,322**	608	**23,829**
San Bruno	9,493	1,068	**10,561**	726	3	**729**	83	**812**	130	**11,503**
Westborough WD	3,741	14	**3,755**	39	0	**39**	0	**39**	91	**3,885**
Subtotal	169,150	10,203	**179,353**	12,237	844	**13,081**	6,026	**19,107**	2,388	**200,848**
Santa Clara County										
Milpitas	12,465	2,018	**14,483**	606	378	**984**	626	**1,610**	704	**16,797**
Mountain View	12,978	2,295	**15,273**	1,105	333	**1,438**	40	**1,478**	1,050	**17,801**
Palo Alto	14,929	2,132	**17,061**	1,344	58	**1,402**	984	**2,386**	435	**19,882**
Purissima Hills WD	2,070	0	**2,070**	0	0	**0**	121	**121**	10	**2,201**
San Jose	1,159	280	**1,439**	172	290	**462**	91	**553**	513	**2,505**
Santa Clara	17,144	4,901	**22,045**	2,668	345	**3,013**	534	**3,547**	0	**25,592**
Stanford	Not Applicable									
Sunnyvale	23,630	1,802	**25,432**	2,575	0	**2,575**	172	**2,747**	919	**29,098**
Subtotal	84,375	13,428	**97,803**	8,470	1,404	**9,874**	2,568	**12,442**	3,631	**113,876**
Alameda County										
Alameda CWD	74,430	4,482	**78,912**	4,033	1,197	**5,230**	1,392	**6,622**	2,325	**87,859**
Hayward	30,847	1,256	**32,103**	1,647	1,216	**2,863**	253	**3,116**	1,436	**36,655**
Subtotal	105,277	5,738	**111,015**	5,680	2,413	**8,093**	1,645	**9,738**	3,761	**124,514**
Total	358,802	29,369	**388,171**	26,387	4,661	**31,048**	10,239	**41,287**	9,780	**439,238**

*Individually metered homes, townhouses, and condos

† Dedicated Irrigation refers to separately metered irrigation usage

Source: *BAWSCA FY 2020-21 Annual Survey*

5. Climatological Data

Table 5A: Climatological Data

Rainfall				
	Precipitation (Inches)			
	Redwood City*	**San Jose**	**Newark**	**SF Airport**
Historical Avg (1906-2021)				
	18.8	12.8	14.0	19.5
Recent Past				
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 2018-19	20.3	16.4	16.1	23.3
FY 2019-20	9.5	7.3	7.1	9.2
FY 2020-21	6.3	5.3	1.9	7.3
FY 2019-20 Deviation from Historical Avg				
	-12.5	3.6	2.1	3.8
Temperature				
	Average Maximum Temperature (Degrees F)			
	Redwood City*	**San Jose**	**Newark**	**SF Airport**
Historical Avg (1948-2021)				
Annual	71.2	70.3	68.4	65.5
Summer**	81.5	80.1	77.0	72.4
Recent Past				
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
2018-19 Annual	70.1	71.3	68.2	66.0
Summer**	79.0	81.1	76.2	70.3
2019-20 Annual	71.5	72.8	68.1	68.5
Summer**	81.4	82.3	76.4	75.7
2020-21 Annual	71.7	72.9	69.9	68.6
Summer**	82.1	83.3	78.3	75.6
FY 2020-21 Deviation From Historical Avg				
Annual	0.5	2.6	1.5	3.2
Summer**	0.6	3.2	1.3	3.3

*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

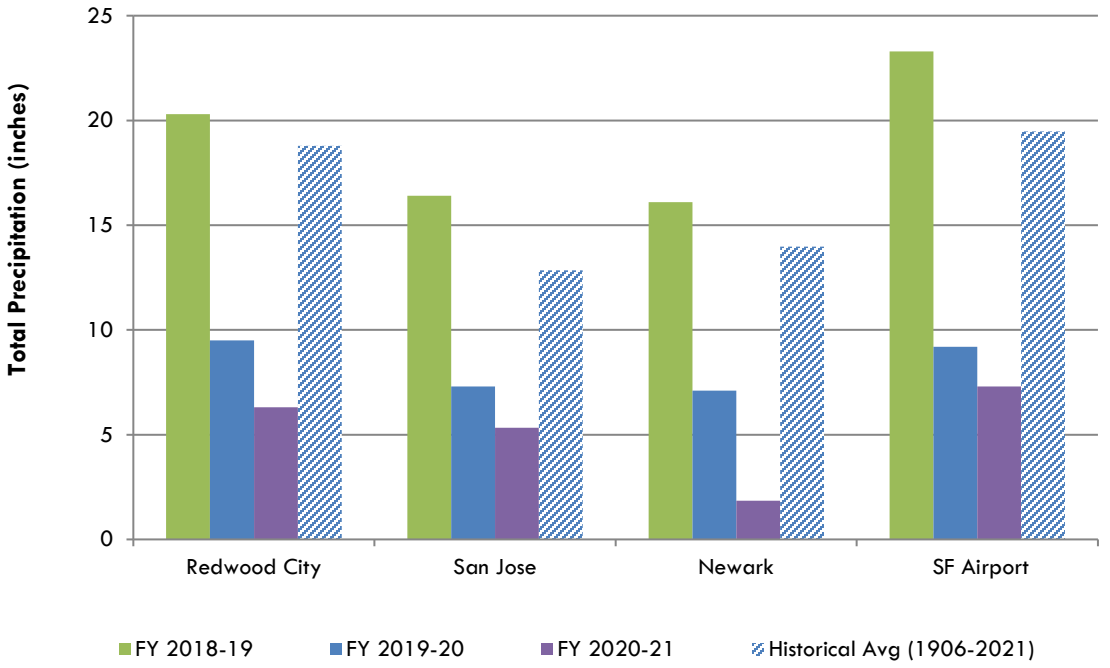


Figure 5A

Figure 5B: Average Maximum Daily Temperature

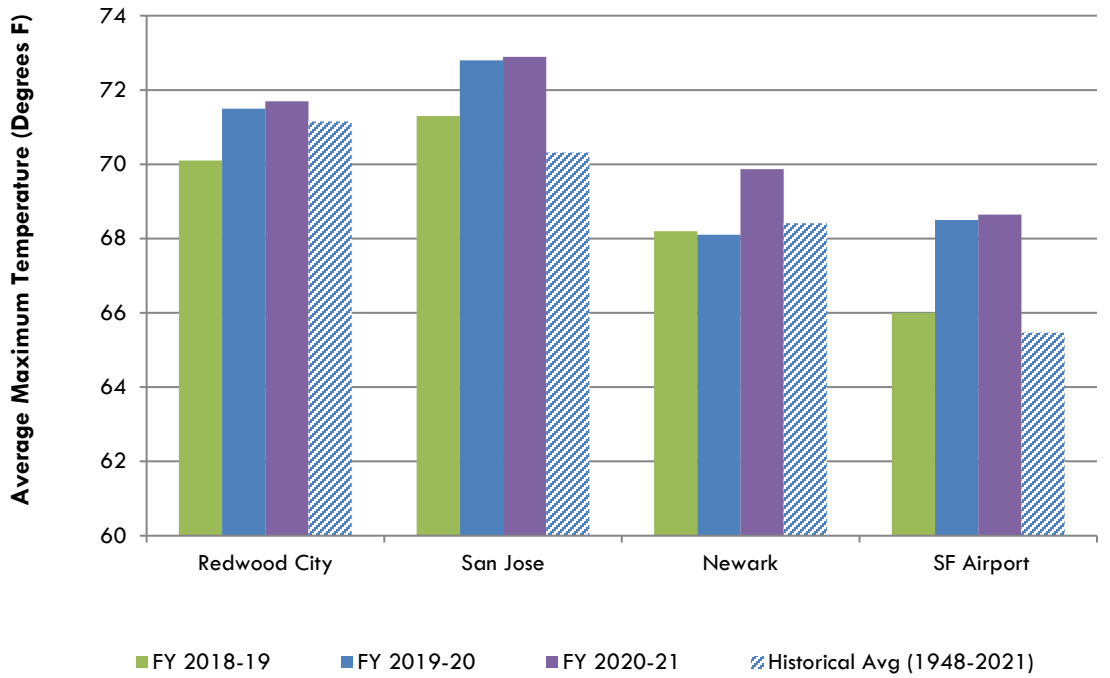


Figure 5B

6. Service Area Populations

Table 6: BAWSCA Service Area Populations

												Projections				
	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 2018-19	FY 2019-20	FY 2020-21	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41	FY 2045-46
San Mateo County																
Brisbane/GVMID	4,282	4,282	4,282	4,282	4,282	4,562	4,156	4,573	4,587	4,657	4,598	4,632	4,761	4,906	5,056	5,206
Burlingame	30,282	30,282	30,282	30,282	32,993	31,109	31,109	31,109	31,109	31,109	32,407	34,592	36,024	37,457	38,889	40,322
CWS - Bear Gulch	57,254	57,845	58,098	58,352	59,883	59,883	60,513	60,719	60,827	60,827	60,814	60,907	61,255	61,778	62,302	62,835
CWS - Mid-Peninsula	126,850	128,445	128,037	129,037	133,679	133,679	135,455	135,943	138,419	137,217	137,487	139,142	142,138	144,913	147,802	150,974
CWS - South SF	58,658	58,815	59,567	60,172	61,223	61,223	61,769	62,039	62,894	62,894	63,319	65,539	66,028	66,759	69,100	71,550
Coastside CWD	20,216	17,094	16,900	16,652	16,668	16,704	16,704	16,776	16,811	18,738	18,789	18,991	19,234	19,371	19,472	19,573
Daly City	101,920	102,043	102,820	104,462	108,510	109,139	109,139	109,139	109,139	106,638	106,638	118,000	122,700	129,700	136,900	143,900
East Palo Alto	26,181	25,215	25,927	25,927	29,143	24,424	26,181	26,181	26,181	26,181	25,935	27,315	28,589	30,062	31,646	33,230
Estero MID	36,100	36,100	36,567	37,000	37,088	37,165	37,518	37,687	37,687	37,687	37,687	37,800	38,035	38,848	40,107	41,366
Guadalupe Valley	Included with Brisbane															
Hillsborough	10,825	10,825	10,850	10,860	10,869	10,869	10,869	10,869	10,869	10,869	11,397	11,940	12,783	12,783	12,783	12,783
Menlo Park	14,198	14,198	14,198	16,066	15,342	16,066	16,066	17,071	17,648	18,224	19,297	23,383	25,166	27,675	30,184	32,693
Mid-Peninsula WD	26,130	26,270	26,270	26,270	26,730	26,730	26,924	26,924	26,924	26,924	27,560	29,711	30,008	31,010	31,961	32,912
Millbrae	21,532	21,532	21,532	21,532	21,532	22,848	22,848	22,848	23,168	22,832	22,848	22,846	26,774	26,657	27,081	27,505
North Coast CWD	40,000	40,000	39,000	39,000	40,000	40,000	40,000	40,000	40,000	38,546	38,331	38,790	39,380	39,600	40,510	41,330
Redwood City	84,557	86,647	86,647	86,427	87,059	87,023	87,023	87,023	87,023	90,518	89,037	93,765	97,128	100,614	104,247	107,947
San Bruno	41,114	41,420	41,114	43,798	43,798	44,409	44,409	44,409	44,409	44,409	44,409	45,600	48,600	51,200	53,400	55,800
Skyline	Included with CWS - Bear Gulch															
Westborough WD	13,300	13,259	13,259	13,259	13,260	14,050	14,050	12,703	12,703	12,703	13,466	13,170	13,480	13,790	14,089	14,388
Subtotal	713,399	714,272	715,350	723,378	742,060	739,883	744,733	746,013	750,398	750,973	754,019	786,123	812,083	837,123	865,529	894,314
Santa Clara County																
Milpitas	66,790	67,804	67,894	69,783	70,800	75,521	77,528	78,106	74,865	77,961	77,961	90,400	98,100	106,000	113,200	113,200
Mountain View	75,275	73,774	73,656	75,280	76,413	75,430	77,801	79,027	79,492	79,772	82,814	91,810	98,080	104,350	110,630	116,900
Palo Alto	64,403	64,538	66,368	66,642	66,152	68,020	66,930	67,320	67,709	67,082	66,573	72,297	75,445	78,593	81,741	84,600
Purissima Hills WD	6,118	6,120	6,127	6,142	6,140	6,150	6,150	6,150	6,150	6,150	6,822	6,833	6,898	7,025	7,112	7,199
San Jose**	14,624	14,658	15,178	15,286	15,948	9,059	13,733	16,084	16,032	35,468	37,991	48,082	60,695	85,043	101,637	103,960
Santa Clara	118,830	118,263	119,311	118,459	120,973	120,973	123,752	129,604	129,604	129,604	130,746	137,215	142,425	151,715	159,500	167,285
Stanford*	28,218	28,792	29,401	29,635	30,486	30,943	31,558	32,218	32,578	32,075	13,629	34,234	36,374	38,642	40,717	42,857
Sunnyvale	141,099	142,896	145,973	147,055	148,028	148,372	149,831	153,389	155,567	156,503	153,827	154,671	161,314	167,957	174,600	181,243
Subtotal	515,357	516,845	523,908	528,282	534,940	534,468	547,283	561,898	561,997	584,615	570,363	635,542	679,331	739,325	789,137	817,244
Alameda County																
Alameda CWD	327,000	331,000	336,000	340,000	344,000	348,000	350,538	356,000	356,160	356,823	358,246	362,400	371,100	379,000	387,000	442,100
Hayward	146,000	147,113	148,756	151,037	152,889	158,985	158,985	160,500	160,500	160,500	160,311	181,700	202,600	225,800	251,800	280,700
Subtotal	473,000	478,113	484,756	491,037	496,889	506,985	509,523	516,500	516,660	517,323	518,557	544,100	573,700	604,800	638,800	722,800
Total	1,701,756	1,709,230	1,724,014	1,742,697	1,773,889	1,781,336	1,801,539	1,824,411	1,829,055	1,852,911	1,842,939	1,965,765	2,065,114	2,181,248	2,293,466	2,434,358

*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.

**In FY 2019-20 San Jose engaged a consultant (Brown & Caldwell) to conduct a population study of the entire Muni Water Service Area (north and south). The methodology employed by the consultant relies on more granular data than previous population estimations. The new methodology was reviewed and approved by the Dept. of Water Resources, as this will impact UWMP/SBX7-7 reporting.

*Stanford current service year population lower than normal due to many faculty, staff, and students being off campus due to COVID-19.

Source: *BAWSCA Annual Surveys*

7. Current Water Use Per Capita

Figure 7A-1: Residential Per Capita Consumption - FY 2020-21 (in gpcd)

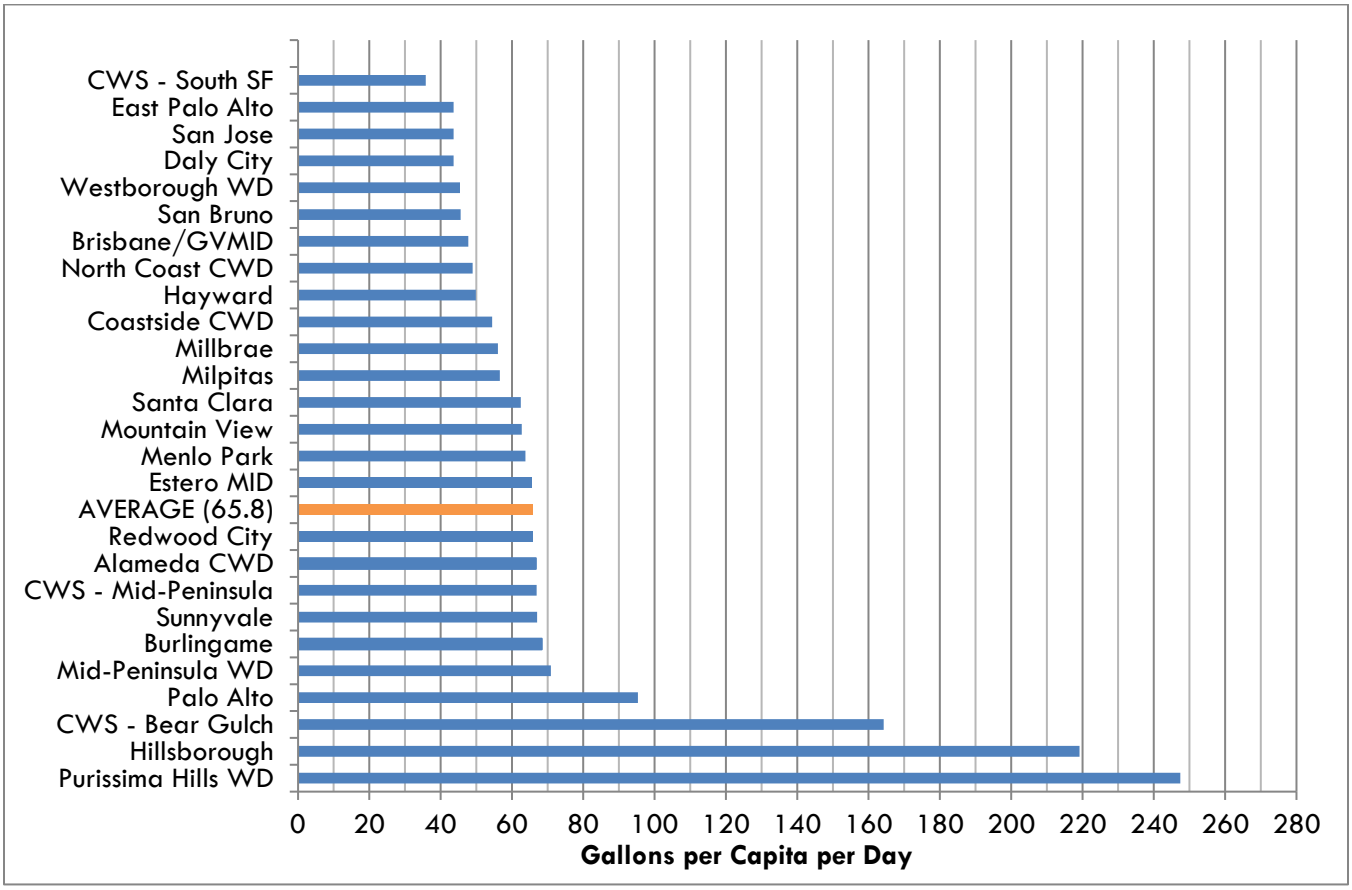


Figure 7A-2: Residential Per Capita Consumption (in gpcd) Distributed by Percentage of Population- FY 2020-21

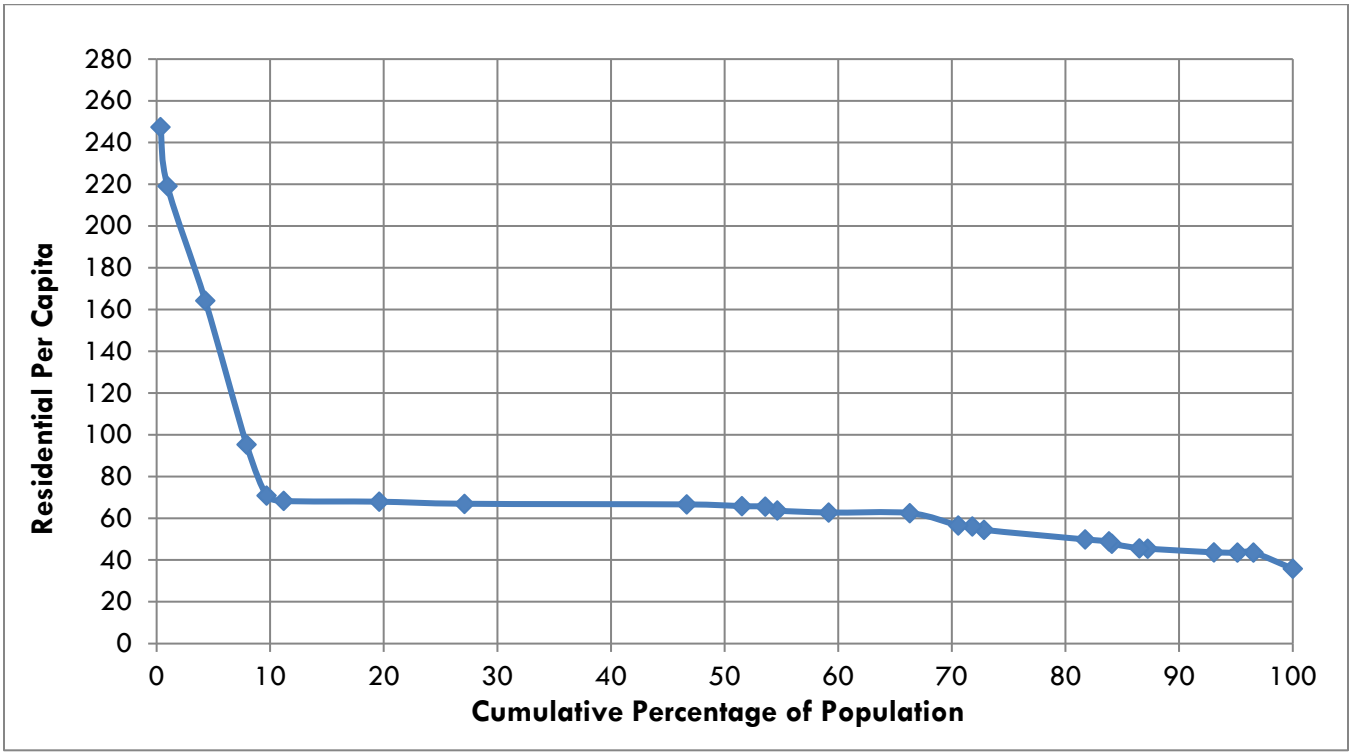


Figure 7B: Gross Per Capita Consumption(in gpcd) – FY 2020-21

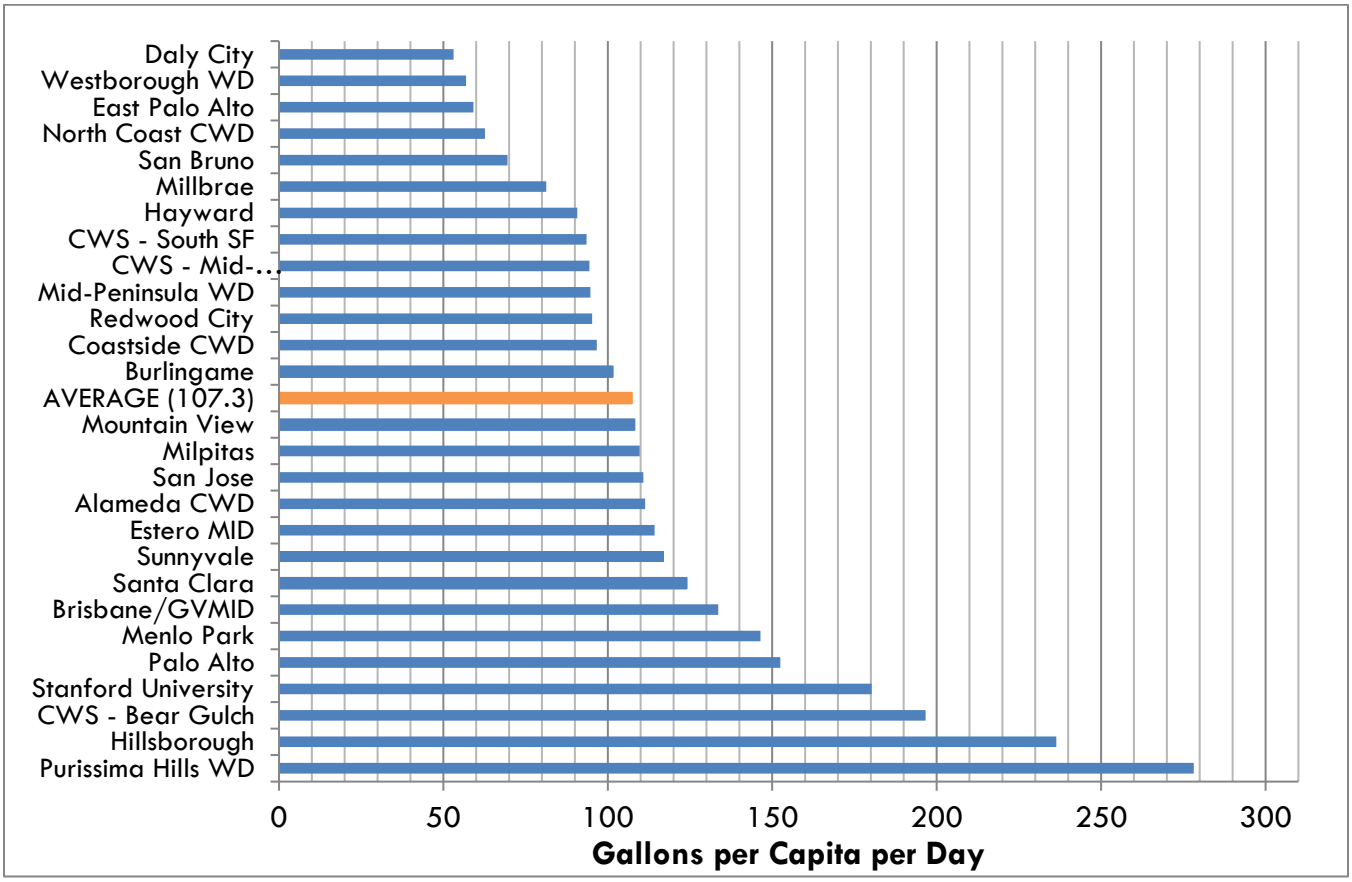


Figure 7C: Historical BAWSCA/BAWUA Per Capita Consumption (in gpcd) - 1975-96 to Present

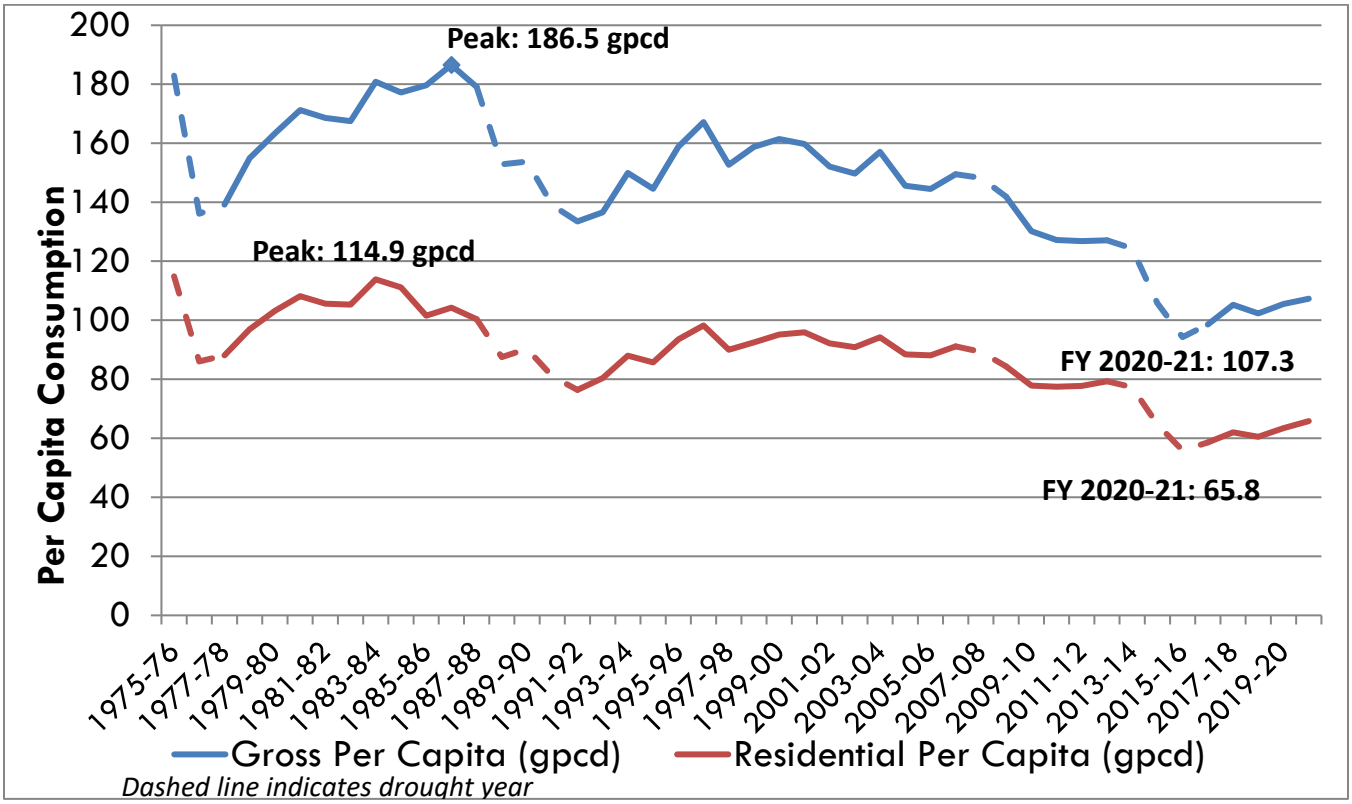


Table 7A: Residential Per Capita Consumption and Single-Family Average Monthly Use Among BAWSCA Members - FY 2020-21

Member	Service Area Population	Residential Consumption* (ccf)	*Residential Per Capita Consumption (gpcd)	**Single-Family Average Monthly Use (ccf)
CWS - South SF	63,319	1,107,523	36	5.6
East Palo Alto***	25,935	552,003	44	12.5
San Jose	37,991	808,654	44	6.8
Daly City	106,638	2,271,578	44	6.7
Westborough WD	13,466	298,605	45	5.8
San Bruno	44,409	988,676	46	8.7
Brisbane/GVMID	4,598	108,582	48	4.9
North Coast CWD	38,331	915,799	49	5.6
Hayward	160,311	3,900,465	50	7.2
Coastside CWD	18,789	499,242	54	6.5
Millbrae	22,848	625,077	56	6.7
Milpitas	77,961	2,152,431	57	8.6
Santa Clara	130,746	3,986,798	62	10.1
Mountain View	82,814	2,536,456	63	7.7
Menlo Park	19,297	600,474	64	11.3
Estero MID	37,687	1,205,762	66	9.4
Redwood City	89,037	2,860,045	66	8.8
Alameda CWD	358,246	11,654,792	67	9.2
CWS - Mid-Peninsula	137,487	4,490,547	67	9.5
Sunnyvale	153,827	5,120,577	68	10.2
Burlingame	32,407	1,080,357	68	9.4
Mid-Peninsula WD	27,560	953,607	71	8.6
Palo Alto	66,573	3,097,067	95	13.1
CWS - Bear Gulch	60,814	4,874,275	164	23.4
Hillsborough	11,397	1,218,781	219	24.2
Purissima Hills WD	6,822	823,220	247	33.1
Agency Totals	1,829,310	58,731,394		
Average Residential Per Capita Consumption			65.79	
Average Single Family Monthly Use				10.5

*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. Due to COVID-19, many Stanford University students, faculty, and staff were remote for much of the year, reducing population numbers significantly.

Source: *BAWSCA FY 2020-21 Annual Survey*

Table 7B: Gross Per Capita Consumption Among BAWSCA Members - FY 2020-21

Member	Service Area Population	*Total Consumption (ccf)	Gross Per Capita Consumption (gpcpd)
Daly City	106,638	2,764,022	53.1
Westborough WD	13,466	373,994	56.9
East Palo Alto	25,935	748,457	59.1
North Coast CWD	38,331	1,172,219	62.7
San Bruno	44,409	1,506,577	69.5
Millbrae	22,848	906,122	81.3
Hayward	160,311	7,098,330	90.7
CWS - South SF	63,319	2,890,693	93.6
CWS - Mid-Peninsula	137,487	6,336,593	94.5
Mid-Peninsula WD	27,560	1,273,998	94.7
Redwood City	89,037	4,137,728	95.2
Coastside CWD	18,789	886,215	96.7
Burlingame	32,407	1,604,743	101.5
Mountain View	82,814	4,367,198	108.1
Milpitas	77,961	4,174,330	109.7
San Jose**	37,991	2,054,828	110.8
Alameda CWD	358,246	19,469,820	111.4
Estero MID	37,687	2,101,104	114.3
Sunnyvale	153,827	8,773,680	116.9
Santa Clara	130,746	7,908,155	124.0
Brisbane/GVMID	4,598	303,604	135.3
Menlo Park	19,297	1,379,039	146.5
Palo Alto	66,573	4,953,805	152.5
Stanford University	13,629	1,198,813	180.3
CWS - Bear Gulch	60,814	5,836,065	196.7
Hillsborough	11,397	1,314,680	236.4
Purissima Hills WD	6,822	925,721	278.2
Totals	1,842,939	96,460,533	
		Average gpcpd	107.3
		Median of Agencies	108.1

*Exclusive of recycled water; inclusive of unaccounted for water.

**Service area predominantly commercial/industrial.

Source: *BAWSCA FY 2020-21 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	1,825,063	192.0	105.2	62.0
2018-19	1,827,189	187.1	102.3	60.5
2019-20	1,852,911	195.5	105.5	63.4
2020-21	1,842,939	197.7	107.3	65.8

*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 2020-21

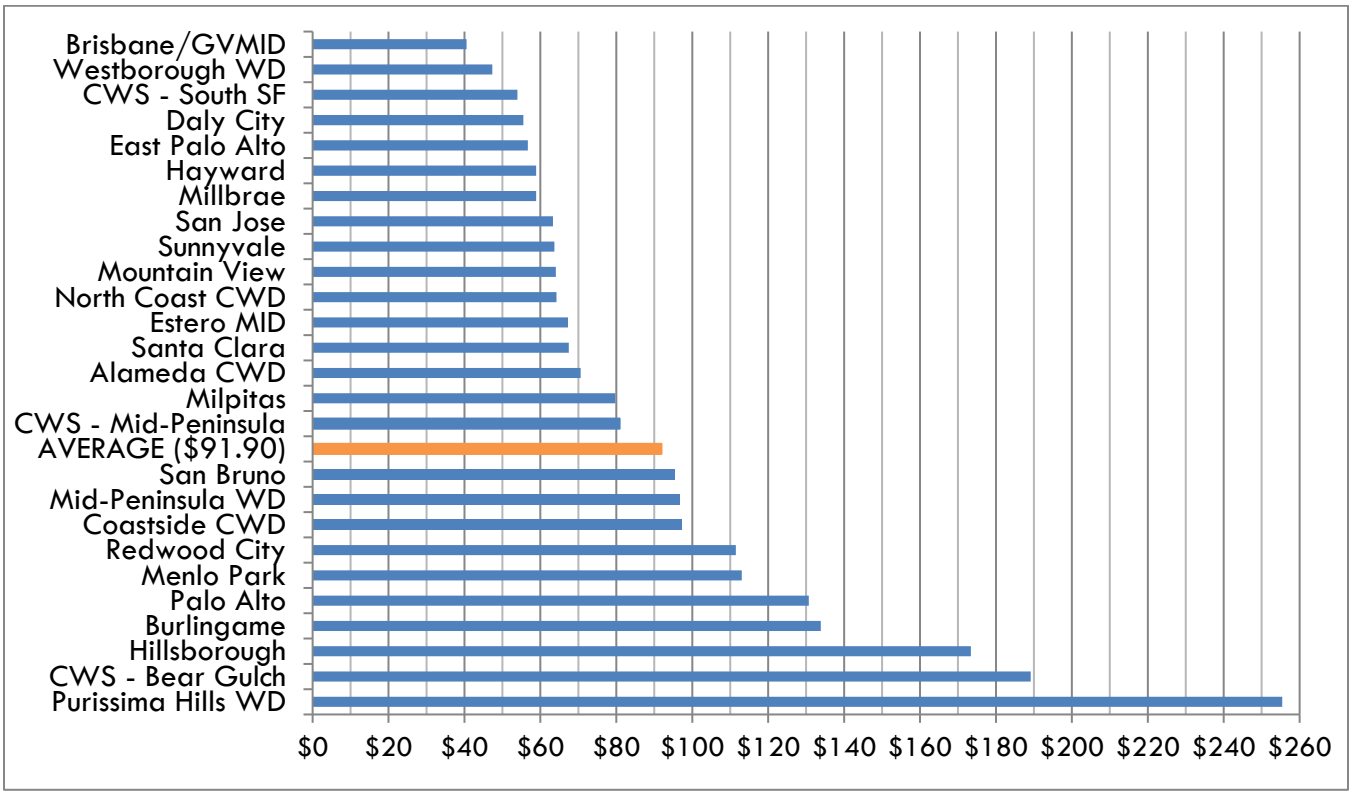


Figure 8B: Historical and Current SF RWS Wholesale Water Rates and BAWSCA Bond Surcharges FY 1985-85 to Present

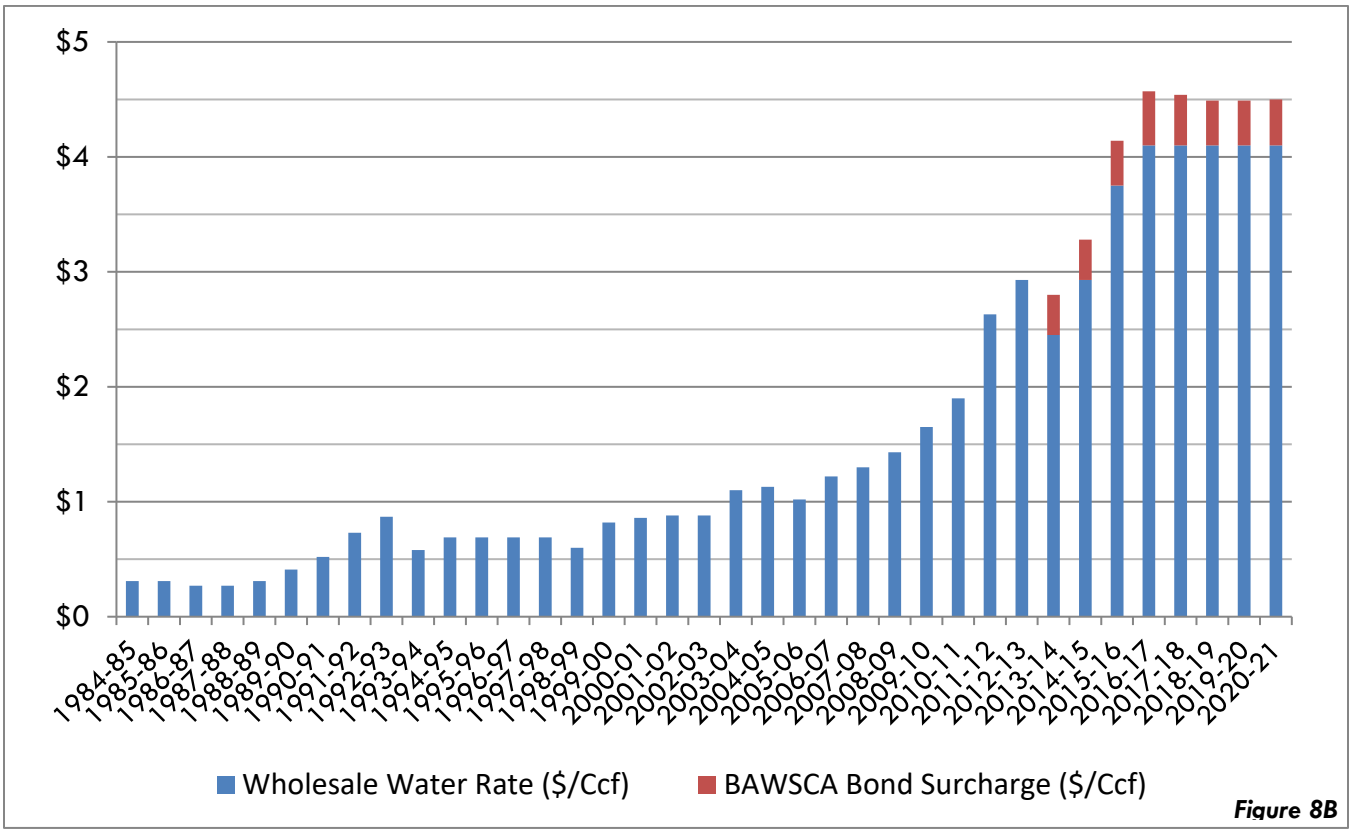


Figure 8B

Table 8A: Single Family Water Bills* Based on Average Monthly Use for 2020-21, Using Rates in Effect for FY 2020-21.
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	4.9		$40.55
Westborough WD		5.8	$47.33
CWS - South SF		5.6	$53.94
Daly City	6.7		$55.51
East Palo Alto	12.5		$56.71
Hayward	7.2		$58.87
Millbrae	6.7		$58.88
San Jose	6.8		$63.31
Sunnyvale	10.2		$63.69
Mountain View	7.7		$64.07
North Coast CWD		5.6	$64.23
Estero MID		9.4	$67.26
Santa Clara	10.1		$67.47
Alameda CWD		9.2	$70.61
Milpitas	8.6		$79.76
CWS - Mid-Peninsula		9.5	$80.87
San Bruno	8.7		$95.43
Mid-Peninsula WD		8.6	$96.68
Coastside CWD		6.5	$97.19
Redwood City	8.8		$111.49
Menlo Park	11.3		$113.06
Palo Alto	13.1		$130.70
Burlingame	9.4		$133.89
Hillsborough	24.2		$173.41
CWS - Bear Gulch		23.4	$189.15
Purissima Hills WD		33.1	$255.40
	9.8	**11.7**	**$91.90**

* 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 2020-21 Annual Survey*

Table 8B: Single Family Water Bills* Based on Average Monthly Use for FY 2019-20, Using Rates in Effect for FY 2020-21

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	Remarks	
Alameda CWD	2	$56.61	$4.60				$70.61	Effective:	3/1/2020
9.2									
Brisbane/Guadalupe Valley MID	2	$22.67	$5.19	1	-	3	$40.55	Effective:	2012-10-15
4.9	3/4" meter		$7.00	4	-	8			
			$8.69	9	-	16			
			$11.05	17	+				
Burlingame	2	$84.03	$9.79	0.0	-	4000.0	$133.89	Effective:	2019-01-01
9.4	5/8" and 3/4" meters		$10.98	4001.0	-	8000.0			
			$12.18	8001.0	-	16000.0			
			$13.38	16001.0	-	24000.0			
			$14.58	24001.0	+				
CWS - Bear Gulch	1	$28.44	$6.13	1	-	12	$189.15	Effective:	01/01/2021
23.4	5/8 x 3/4 inch meter		$7.67	13	-	29			
			$11.50	29	+				
CWS - Mid Peninsula	1	$21.26	$5.87	0	-	7	$80.87	Effective:	01/01/2021
9.5	5/8 x 3/4 inch meter		$7.34	8	-	10			
			$11.01	10	+				
CWS - South San Francisco	1	$21.26	$5.87	1	-	7	$53.94	Effective:	01/01/2021
5.6	5/8 x 3/4 inch meter		$7.34	8	-	10			
			$11.01	10	+				
Coastside CWD	1	$30.35	$9.65	1	-	4	$97.19	Effective:	2021-1-1
6.5			$14.12	5	-	8			
			$17.08	9	+				
Daly City	2	$41.44	$5.20	0	-	13	$55.51	Effective:	1/1/2021
6.7	Meter size 5/8" & 3/4"		$6.89	14	26				
			$8.68	27	+				
East Palo Alto	1	$17.79	$7.66				$56.71	Effective:	2021-1-1
12.5	ost is based on meter size								
Estero MID	2	$23.85	$5.88	0	-	20	$67.26	Effective:	1969-12-31
9.4	4" residential water meter		$6.41	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 2020-21, Using Rates in Effect for FY 2020-21

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	Remarks	
Hayward	2	$31.28	$6.04	1	-	8	$58.87	Effective:	10/1/2021
7.2	ervice charge for 5/8" meter		$7.18	9	-	18			
			$8.82	18	+				
Hillsborough	2	$137.67	$0.00	6	-	20	$173.41	Effective:	2018-01-01
24.2	ed Charge Up to 3/4" Meter		$8.44	8	-	44			
			$9.68	25	-	50			
			$11.58	50	+				
Menlo Park	1	$28.21	$5.57	1	-	6	$113.06	Effective:	2020-07-01
11.3	5/8" and 3/4"		$7.98	6	+				
Mid-Peninsula WD	1	$28.00	$5.86	0	-	2	$96.68	Effective:	2019-07-01
8.6		5/8"	$8.69	3	-	9			
			$10.60	10	-	22			
			$12.50	55	+				
Millbrae	2	$27.50	$11.60				$58.88	Effective:	2021-1-1
6.7									
Milpitas	2	$32.17	$7.40				$79.76	Effective:	2021-07-01
8.6		5/8"							
Mountain View	2	$15.55	$5.21	0	-	3	$64.07	Effective:	2020-07-01
7.7	All single-family accounts		$6.94	3	-	15			
			$11.10	15	+				
North Coast CWD	2	$53.48	$6.60	0	-	5	$64.23	Effective:	1/1/2021
5.6			$7.86	6	-	10			
			$13.53	11	-	19			
			$22.72	20	+				
Palo Alto	1	$20.25	$6.66	0	-	6	$130.70	Effective:	2019-07-01
13.1		5/8" Meter	$10.07	7	+				
Purissima Hills WD	1	$22.50	$5.64	1	-	10	$255.40	Effective:	1969-12-31
33.1		3/4" meter	$7.33	11	-	30			
			$9.52	31	-	60			
			$11.69	61	-	100			
			$13.86	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 2020-21, Using Rates in Effect for FY 2020-21

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		Remarks
Redwood City	2	$59.04	$6.13	0	-	8	$111.49	Effective:	2018-07-01
8.8			$7.35	9	-	20			
			$10.20	21	-	40			
			$13.45	41	+				
San Bruno	2	$26.66	$9.46	0	-	10	$95.43	Effective:	7/1/2021
8.7	3/4 inch meter size		$11.32	11	-	20			
			$15.05	21	+				
San Jose MWD-N	2	$57.20	$5.13	0	0	0	$63.31	Effective:	2020-07-01
6.8	5/8" and 3/4" meters.		$0.00	0	0				
Santa Clara	1	$19.81	$6.69				$67.47	Effective:	2020-07-01
10.1									Service charge is the minimum monthly charge, not added if usage is greater than the minimum
Sunnyvale	2	$28.10	$4.39	0	-	5	$9.20	Effective:	2019-07-01
10.2	5/8 x 3/4" meter		$5.36	6	-	0			
Westborough WD	2	$20.00	$6.48				$47.33	Effective:	2021-1-1
5.8									

* 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 Monthly Bill	Average Monthly Service Charge
All BAWSCA Agencies	$91.90	$22.90
Municipal Agencies Only	$87.34	$23.85
Special Districts / Private	$98.12	$21.61

** Inclusive of service charge

Source: *BAWSCA FY 2020-21 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
2018-19	$ 4.10	$ 0.39
2019-20	$ 4.10	$ 0.39
2020-21	$ 4.10	$ 0.40

*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

The Alameda County Water District (ACWD) service area includes the cities of Fremont, Newark, Union City, and southern portions of the City of Hayward. Currently, ACWD provides retail water service predominantly within the Cities of Fremont, Newark, and Union City, and a small number of parcels outside of ACWD's service area through agreements.

Profile

Area Size	104.8 sq. miles
Service Population	358,246
Number of Accounts	87,859
Number of SF RWS Connections	8
Connections to SF RWS Mains	BDPL 1, 2, 3, 4 and 5
Avg. Day Demand (mgd)	39.90
Avg. Day Purchases from SF RWS (mgd)	9.40
% Demand Met with SF RWS Supplies	23.55%
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 is currently operating one surface

water treatment plant that can treat SWP imports 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 FY 10/11 - 19/20 period, 37% 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 21% 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 42%) of the distribution system supplies.

Water Supply and Demand

Supply by Source	Actual FY 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	3,716,845	3,798,529	3,840,640	4,585,161
State Water Project	6,675,349	6,030,448	5,546,495	7,336,376
Desalinated Water	3,119,652	2,907,621	3,764,574	3,733,289
Local Groundwater	3,647,727	3,347,726	3,427,942	3,583,690
Surface Water	898,047	1,982,415	2,320,887	231,304
Recycled Water	0	0	0	0
Total	18,057,620	18,066,739	18,900,527	19,469,820
mgd equivalent	37.01	37.02	38.73	39.90

Demand by Sector				
Residential	10,708,680	10,500,526	11,131,726	11,654,792
Commercial/Industrial	3,152,692	3,067,959	3,013,144	3,055,890
Other	683,279	683,769	548,262	501,310
Dedicated Irrigation	2,018,205	1,909,035	2,358,131	2,478,129
Non-Revenue Water	1,494,764	1,905,450	1,849,275	1,779,699
Total	18,057,620	18,066,739	18,900,527	19,469,820
mgd equivalent	37.01	37.02	38.73	39.90

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	62	60	64	67
Gross	104	92	108	111

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
	70		**Total**	85.7	

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.brisbaneca.org

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*	4,598
Number of Accounts	2,040
Number of SF RWS Connections	5
Connections to SF RWS Mains	Crystal Springs Pipeline #1 and #2
Avg. Day Demand (mgd)	0.62
Avg. Day Purchases from SF RWS (mgd)	0.62
% 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 and annual estimated growth based on "Persons per Residential Connection" population method. *

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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	334,217	323,917	310,127	303,604
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	334,217	323,917	310,127	303,604
mgd equivalent	0.68	0.66	0.64	0.62

Demand by Sector				
Residential	98,769	97,494	104,373	108,582
Commercial/Industrial	115,945	103,510	98,224	74,204
Other	16,449	21,611	1,711	27,929
Dedicated Irrigation	74,357	66,422	79,980	80,437
Non-Revenue Water	28,697	34,880	25,839	12,452
Total	334,217	323,917	310,127	303,604
mgd equivalent	0.68	0.66	0.64	0.62

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	44	44	46	48
Gross	150	119	136	134

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	32,407
Number of Accounts	9,253
Number of SF RWS Connections	6
Connections to SF RWS Mains	Crystal Springs #2 and #3, Sunset Pipeline
Avg. Day Demand (mgd)	3.39
Avg. Day Purchases from SF RWS (mgd)	3.29
% Demand Met with SF RWS Supplies	97%
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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	1,695,956	1,669,182	1,696,711	1,604,743
Recycled Water	146,400	146,400	53,639	48,797
Other	0	0	0	0
Total	1,842,356	1,815,582	1,750,350	1,653,540
mgd equivalent	3.78	3.72	3.59	3.39

Demand by Sector				
Residential	1,002,137	985,397	1,036,364	1,080,357
Commercial/Industrial	471,718	464,483	415,308	303,111
Other	48,409	50,398	30,133	26,508
Dedicated Irrigation	240,638	230,919	166,580	112,609
Non-Revenue Water	79,454	84,385	101,966	130,955
Total	1,842,356	1,815,582	1,750,350	1,653,540
mgd equivalent	3.78	3.72	3.59	3.39

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	66	65	68	68
Gross	112	99	112	101

Facilities and Distribution

Storage Reservoirs

Designation	Type	Capacity (gallons)
Alcazar Tanks	Dual, Circular, Steel	100,000
Donnelly Tanks	Dual, Circular, Steel	100,000

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

Interties

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

Name	No.	Diameter (in.)
Millbrae	2	6
	3	8
	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	60,814
Number of Accounts	18,575
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)	11.96
Avg. Day Purchases from SF RWS (mgd)	11.96
% Demand Met with SF RWS Supplies	100%
Maximum Local Water Production (mgd)	6.028
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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	5,000,555	4,625,668	5,566,308	5,836,065
Local Groundwater	0	0	0	0
Surface Water	164,808	407,754	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	5,165,363	5,033,422	5,566,308	5,836,065
mgd equivalent	10.59	10.32	11.41	11.96

Demand by Sector				
Residential	4,276,795	4,133,091	4,542,847	4,874,275
Commercial/Industrial	470,128	495,877	490,604	454,253
Other	146,964	141,270	148,110	142,077
Dedicated Irrigation	12,430	11,325	11,433	11,195
Non-Revenue Water	259,046	251,859	373,314	354,265
Total	5,165,363	5,033,422	5,566,308	5,836,065
mgd equivalent	10.59	10.32	11.41	11.96

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	144	139	153	164
Gross	174	161	187	197

Facilities and Distribution

Storage Reservoirs

Designation	Type	Capacity (gallons)
Bear Gulch Reservoir*	Earth	215,000,000
Sta. 002-Tank 1	Steel	250,000
Sta. 002-Tank 2	Steel	500,000
Sta. 005-Tank 6	Fiberglass-Lined Redwood	100,000 (inactive)
Sta. 005-Tank 8	Steel	250,000
Sta. 005-Tank 9	Steel	1,000,000
Sta. 006-Tank 1	Steel	200,000
Sta. 007-Tank 5	Fiberglass-Lined Redwood	100,000
Sta. 015-Tank 1	Fiberglass-Lined Redwood	30,000
Sta. 016-Res.1	Steel	1,000,000
Sta. 017-Tank 1	Steel	250,000
Sta. 019-Tank 1	Steel	500,000
Sta. 019-Tank 2	Steel	500,000
Sta. 021-Tank 1	Steel	1,000,000
Sta. 021-Tank 2	Steel	1,000,000
Sta. 022-Tank 1	Steel	450,000
Sta. 025-Tank 1	Fiberglass-Lined Redwood	100,000
Sta. 027-Tank 4	Steel	750,000
Sta. 028-Tank 1	Steel	200,000
Sta. 029-Tank 1	Fiberglass-Lined Redwood	100,000
Sta. 029-Tank 2	Fiberglass-Lined Redwood	100,000
Sta. 029-Tank 3	Steel	150,000
Sta. 030-Tank 1	Steel	1,000,000
Sta. 031-Tank 2	Steel	165,000
Sta. 032-Tank 1	Steel	250,000
Sta. 033-Tank 1	Steel	10,000
Sta. 034-Tank 1	Steel	75,000
Sta. 036-Tank 1	Steel	125,000
Sta. 037-Tank 1	Steel	55,000
Sta. 038-Tank 1	Steel	212,000
Sta. 039-Tank 1	Steel	282,000
Sta. 041-Tank 1	Steel	189,000
Sta. 041-Tank 2	Steel	192,000
Sta. 042-Tank 1	Steel	60,000
Sta. 042-Tank 2	Steel	60,000
Sta. 047-Tank 1	Steel	80,376
Sta. 047-Tank 2	Steel	80,376
	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	137,487
Number of Accounts	35,949
Number of SF RWS Connections	8
Connections to SF RWS Mains	Bay Crossing 1and 2, BDPL 1 and 2, Crystal Springs #2, Sunset Pipeline
Avg. Day Demand (mgd)	12.99
Avg. Day Purchases from SF RWS (mgd)	12.99
% 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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	6,083,059	5,991,673	6,292,879	6,336,593
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	6,083,059	5,991,673	6,292,879	6,336,593
mgd equivalent	12.47	12.28	12.90	12.99

Demand by Sector				
Residential	4,102,976	4,037,865	4,361,377	4,490,547
Commercial/Industrial	1,180,495	1,158,540	1,169,019	1,063,339
Other	388,192	376,023	382,057	345,231
Non-Revenue Water	411,396	419,245	380,426	237,164
Total	6,083,059	5,991,673	6,292,879	6,336,593
mgd equivalent	12.47	12.28	12.90	12.99

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	62	61	65	67
Gross	92	89	94	94

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)
Sta. 025-Tank 2	Steel	250,000
Sta. 025-Tank 3	Steel	250,000

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

San Mateo Total 14,656,000

Storage Reservoirs

Designation	Type	Capacity (gallons)
San Carlos		
Sta. 103-Tank 1	Concrete	0
Sta. 106-Tank 2	Steel	0
Sta. 106-Tank 3	Steel	500,000
Sta. 109-Tank 1	Concrete	50,000
Sta. 109-Tank 2	Steel	250,000
Sta. 112-Tank 1	Steel	200,000
Sta. 112-Tank 2	Steel	500,000
Sta. 112-Tank 3	Steel	700,000
Sta. 115-Tank 1	Steel	250,000
Sta. 116-Tank 2	Fiberglass-Lined Redwood	100,000
Sta. 116-Tank 3	Fiberglass-Lined Redwood	100,000

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

San Carlos Total 5,303,000

San Mateo and San Carlos Total 19,959,000

Interties

Name	No.	Diameter (in.)
San Carlos		
Redwood City	3	8, 8, 12
Mid-Peninsula WD	3	8, 8, 8

Name	No.	Diameter (in.)
San Mateo		
Burlingame	3	4, 4, 6
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	63,319
Number of Accounts	16,454
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)	5.92
Avg. Day Purchases from SF RWS (mgd)	4.55
% Demand Met with SF RWS Supplies	76.88%
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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
SF RWS - Customary	2,374,361	2,277,038	2,91,209	2,222,223
SF RWS - Supplemental	668,470	668,470	670,301	668,470
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	3,042,831	2,945,508	2,961,510	2,890,693
mgd equivalent	6.24	6.04	6.07	5.92

Demand by Sector				
Residential	1,226,444	1,226,738	1,278,910	1,107,523
Commercial/Industrial	1,664,103	1,361,300	1,557,250	1,401,125
Other	123,328	125,602	143,993	144,881
Non-Revenue Water	28,956	231,868	-18,643	237,164
Total	3,042,831	2,945,508	2,961,510	2,890,693
mgd equivalent	6.24	6.04	6.07	5.92

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	41	40	42	36
Gross	101	89	96	94

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	Destroyed
Well 15	95	Destroyed
Well 17	200	Destroyed
Well 18	340	Inactive
Well 19	160	Active
Well 20	150	Active
Well 21	220	Active
Well 22	295	Active
Well 23	300	Active
Well 24	380	Active
Total	1,505	(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	18,789
Number of Accounts	7,604
Number of SF RWS Connections	2
Connections to SF RWS Mains	Upper Crystal Springs Intake and Pilarcitos Reservoir at Stone Dam
Avg. Day Demand (mgd)	1.82
Avg. Day Purchases from SF RWS (mgd)	1.45
% Demand Met with SF RWS Supplies	79.63%
Avg. 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 days

Summary

Coastside County Water District has four water sources; (1) Pilarcitos Reservoir at Stone Dam, (2) Upper Crystal Springs Reservoir, (3) the Pilarcitos Creek Infiltration Well Field, and (4) the Denniston (groundwater and surface water) Project. Water purchased from the SF RWS is supplied from two different raw water sources: Pilarcitos Lake at Stone Dam and Upper Crystal Springs Reservoir.

Raw water from Upper Crystal Springs Reservoir, Pilarcitos Lake at Stone Dam and the Pilarcitos Creek Infiltration Wells terminate at the Nunes Water Treatment Plant. Raw water from Denniston Creek and the Denniston Well Field terminate at the Denniston Water Treatment Plant.

Water Supply and Demand

Supply by Source	Actual FY 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	464,037	547,861	496,627	705,680
Local Groundwater	29,278	10,508	12,272	12,099
Surface Water	408,890	314,412	382,259	168,436
Recycled Water	0	0	0	0
Total	902,206	872,781	891,158	886,215
mgd equivalent	1.85	1.79	1.83	1.82

Demand by Sector				
Residential	464,899	446,167	486,477	499,242
Commercial/Industrial	46,566	48,065	46,340	41,741
Other	165,626	266,457	255,259	163,455
Dedicated Irrigation	136,865	41,335	48,645	144,202
Non-Revenue Water	88,250	70,757	54,437	37,575
Total	902,206	872,781	891,158	886,215
mgd equivalent	1.85	1.79	1.83	1.82

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	57	54	53	54
Gross	110	78	97	97

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
Total		8.00

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		Inactive
D3		Inactive
D4		Inactive
D5		Inactive
D9	45	Active
P1*	85	November 1 - March 31
P2*		Inactive
P3*	70	Active
P3A*	40	Active
P4*	80	November 1 - March 31 Standby
P4A*	240	November 1 - March 31
P5*	50	November 1 - March 31
Total	635	

*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	106,638
Number of Accounts	23,009
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)	5.90
Avg. Day Purchases from SF RWS (mgd)	5.66
% Demand Met with SF RWS Supplies	96%
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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	1,717,837	1,804,183	1,939,670	1,722,950
SF RWS Supplemental Water	1,060,963	1,055,309	1,057,033	1,040,352
Local Groundwater	0	0	0	0
Recycled Water	276,321	186,618	142,642	114,263
Total	3,055,121	3,046,110	3,139,345	2,877,565
mgd equivalent	6.26	6.24	6.43	5.90

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

Demand by Sector				
Residential	2,191,793	2,228,808	2,262,234	2,271,580
Commercial/Industrial	397,010	405,051	355,825	270,645
Other	36,395	25,502	26,541	69,456
Dedicated Irrigation	74,738	61,466	57,605	69,989
Non-Revenue Water	355,185	325,283	437,140	195,895
Total	3,055,121	3,046,110	3,139,345	2,877,565
mgd equivalent	6.26	6.24	6.43	5.90

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
Residential	41	42	43	44
Gross (Less Recycled Water)	52	51	57	53

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

Veolia North America
2415 University Avenue
East Palo Alto, CA 94303

Phone: (650) 322-2083

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	25,935
Number of Accounts	3,987
Number of SF RWS Connections	3
Connections to SF RWS Mains	BDPL 1 and 2
Avg. Day Demand (mgd)	1.53
Avg. Day Purchases from SF RWS (mgd)	1.52
% Demand Met with SF RWS Supplies	99.30%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	Gloria Way Well
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" pipeline 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, Veolia North America.

Gloria Way Well is East Palo Alto's storage facility and is certified for 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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	772,528	763,315	764,033	743,205
Resale SF RWS (Menlo Park)	0	0	0	0
Local Groundwater	0	0	415	5,252
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	772,528	763,315	764,448	748,457
mgd equivalent	1.58	1.56	1.57	1.53

Demand by Sector				
Residential	521,090	487,190	486,705	552,003
Commercial/Industrial	142,101	265,076	264,811	115,888
Other	16,082	11,049	11,038	19,386
Non-Revenue Water	93,255	0	1,894	61,180
Total	772,528	763,315	764,448	748,457
mgd equivalent	1.58	1.56	1.57	1.53

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	41	38	38	44
Gross	60	60	60	59

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	8,182
Number of SF RWS Connections	1
Connections to SF RWS Mains	Crystal Springs #2
Avg. Day Demand (mgd)	4.31
Avg. Day Purchases from SF RWS (mgd)	4.31
% 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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	2,068,753	1,969,663	2,115,607	2,101,104
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	2,068,753	1,969,663	2,115,607	2,101,104
mgd equivalent	4.24	4.04	4.34	4.31

Demand by Sector				
Residential	1,113,272	1,096,526	1,133,931	1,205,764
Commercial/Industrial	236,286	221,853	201,896	146,934
Other	28,093	28,313	28,642	22,514
Dedicated Irrigation	503,058	520,452	554,625	565,250
Non-Revenue Water	188,044	102,519	196,513	160,642
Total	2,068,753	1,969,663	2,115,607	2,101,104
mgd equivalent	4.24	4.04	4.34	4.31

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	61	59	62	66
Gross	112	101	115	114

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

Public Works & Utilities 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	160,311
Number of Accounts	36,655
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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	7,101,954	6,821,848	6,794,224	7,098,330
Local Groundwater	0	0	0	0
Recycled Water*	313,485	361,987	0	0
Total	7,415,439	7,183,835	6,794,224	7,098,330
mgd equivalent	15.20	14.72	13.92	14.55

*Recycled water delivery includes volumes of secondary treated water delivered by Russell City Energy Center (RCEC) and Skywest Golf Course

Demand by Sector				
Residential	3,708,772	3,696,052	3,726,969	3,900,465
Commercial/Industrial	1,507,655	1,647,709	1,627,967	1,289,268
Other	415,716	629,273	558,187	488,247
Dedicated Irrigation	784,722	807,220	923,004	959,411
Non-Revenue Water	685,089	41,594	-41,903	460,939
Total	7,101,954	6,821,848	6,794,224	7,098,330
mgd equivalent	14.55	13.98	13.92	14.55

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	47	47	48	49
Gross	91	82	87	89

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)
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	11,397
Number of Accounts	4,301
Number of SF RWS Connections	9 Turnouts, 12 meters
Connections to SF RWS Mains	Crystal Springs #2, Sunset Pipeline
Avg. Day Demand (mgd)	2.69
Avg. Day Purchases from SF RWS (mgd)	2.69
% 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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	1,234,547	1,124,778	1,280,605	1,314,680
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	1,234,547	1,124,778	1,280,605	1,314,680
mgd equivalent	2.53	2.31	2.62	2.69

Demand by Sector [2]				
Residential	1,119,178	1,041,123	1,144,715	1,218,782
Commercial/Industrial	5,574	5,418	19,896	4,193
Institutional/Other	17,058	13,670	15,751	16,094
Dedicated Irrigation	22,327	20,300	23,524	28,830
Non-Revenue Water	70,410	44,267	68,946	46,781
Total	1,234,547	1,124,778	1,280,605	1,314,680
mgd equivalent	2.53	2.31	2.62	2.69

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	211	196	216	219
Gross	233	204	242	236

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	19,297
Number of Accounts	4,334
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)	2.83
Avg. Day Purchases from SF RWS (mgd)	2.83
% Demand Met with SF RWS Supplies	100%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	One well for emergency purposes only
Interties with Other Agencies	CWS - Bear Gulch District, Redwood City, East Palo Alto, O'Connor 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. Menlo Park also serves a handful of customers in City of Redwood City and the Town of Portola Valley via 4 connections each. 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 and the emergency well are the primary emergency sources of water for Menlo Park.

Water Supply and Demand

Supply by Source	Actual FY 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	1,393,425	1,576,137	1,442,176	1,379,039
Resale SF RWS Purchase	0	0	0	0
Other	0	0	0	0
Total	1,393,425	1,576,137	1,442,176	1,379,039
mgd equivalent	2.86	3.23	2.96	2.83

Demand by Sector				
Residential	563,673	525,857	597,601	600,474
Commercial/Industrial	506,000	531,748	488,095	436,302
Other	80,463	83,394	114,087	128,222
Dedicated Irrigation	158,074	158,041	188,177	155,024
Non-Revenue Water	85,215	277,097	54,216	59,017
Total	1,393,425	1,576,137	1,442,176	1,379,039
mgd equivalent	2.86	3.23	2.96	2.83

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	68	61	67	64
Gross	167	150	162	146

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	8	8, 8, 10, 10, 10, 12, 12, 12
O'Connor Tract	1	6
Redwood City	1	Hydrant to hydrant

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	27,560
Number of Accounts	8,093
Number of SF RWS Connections	2
Connections to SF RWS Mains	BDPL 1 and 2, Crystal Springs Bypass Tunnel
Avg. Day Demand (mgd)	2.61
Avg. Day Purchases from SF RWS (mgd)	2.61
% Demand Met with SF RWS Supplies	100%
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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	1,221,454	1,220,573	1,295,922	1,273,998
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	1,221,454	1,220,573	1,295,922	1,273,998
mgd equivalent	2.50	2.50	2.66	2.61

Demand by Sector				
Residential	838,748	818,122	916,630	953,609
Commercial/Industrial	201,081	214,662	195,733	166,362
Other	29,635	35,620	38,161	34,506
Dedicated Irrigation	85,637	79,886	102,741	93,605
Non-Revenue Water	66,353	72,283	42,657	25,916
Total	1,221,454	1,220,573	1,295,922	1,273,998
mgd equivalent	2.50	2.50	2.66	2.61

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	64	62	70	71
Gross	93	87	98	95

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	7,569
Number of SF RWS Connections	5
Connections to SF RWS Mains	Murchison, Greenhills, Park, 195 ECR, Helen
Avg. Day Demand (mgd)	1.86
Avg. Day Purchases from SF RWS (mgd)	1.86
% 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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	992,853	949,277	927,939	906,122
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	12	12	12,000	0
Other	0	0	0	0
Total	992,865	949,289	939,939	906,122
mgd equivalent	2.03	1.95	1.93	1.86

Demand by Sector				
Residential	611,413	598,836	603,740	625,079
Commercial/Industrial	154,123	169,181	146,136	66,540
Other	37,467	37,590	27,096	61,427
Dedicated Irrigation	78,080	63,924	69,292	78,444
Non-Revenue Water	111,782	79,758	93,675	74,632
Total	992,865	949,289	939,939	906,122
mgd equivalent	2.03	1.95	1.93	1.86

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	55	53	54	56
Gross (less recycled water)	89	77	83	81

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
455 East Calaveras Boulevard
Milpitas, California 95035-5411
Phone: (408) 586-2600 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	77,961
Number of Accounts	16,797
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)	9.41
Avg. Day Purchases from SF RWS (mgd)	5.43
% Demand Met with SF RWS Supplies	57.7%
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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	2,538,687	2,585,031	2,886,833	2,647,856
Santa Clara Valley WD	1,378,578	1,385,528	1,226,711	1,526,474
Recycled Water	490,724	489,032	469,458	415,177
Other	0	0	0	0
Total	4,407,989	4,459,591	4,583,002	4,589,507
mgd equivalent	9.03	9.14	9.39	9.41

Demand by Sector				
Residential	2,103,592	1,977,850	1,946,099	2,152,431
Commercial/Industrial	1,036,680	1,060,313	846,889	891,128
Other	138,794	144,921	111,402	103,921
Dedicated Irrigation	963,856	943,171	901,527	753,134
Non-Revenue Water	165,067	333,336	777,085	688,893
Total	4,407,989	4,459,591	4,583,002	4,589,507
mgd equivalent	9.03	9.14	9.39	9.41

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	55	54	51	57
Gross (Less Recycled Water)	103	113	108	110

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	82,814
Number of Accounts	17,801
Number of SF RWS Connections	3 turnouts/ 9 meters
Connections to SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	9.34
Avg. Day Purchases from SF RWS (mgd)	7.65
% Demand Met with SF RWS Supplies	81.8%
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 4 active wells (3 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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	3,617,700	3,519587	3,740,804	3,855,612
Santa Clara Valley WD	428,455	435,348	463,239	453,691
Local Groundwater	49,973	105,363	112,912	57,895
Recycled Water	197,365	160,299	160,299	191,957
Total	4,293,493	4,220,597	4,477,254	4,559,155
mgd equivalent	8.80	8.65	9.18	9.34

Demand by Sector				
Residential	2,333,365	2,275,480	2,428,520	2,536,456
Commercial/Industrial	777,451	782,463	732,085	540,433
Other	13,672	1,446	3,190	3,392
Dedicated Irrigation	996,185	970,445	1,156,950	1,195,722
Non-Revenue Water*	172,820	190,763	156,509	283,152
Total	4,293,493	4,220,597	4,477,254	4,559,155
mgd equivalent	8.80	8.65	9.18	9.34

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	61	59	62	63
Gross	106	104	111	108

Facilities and Distribution

Storage Reservoirs

Designation	Type	Capacity (gallons)
Miramonte	Concrete	1,000,000
Miramonte	Concrete	2,300,000

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

Wells

Name	Capacity (mgd)	Status
Well 10	1.2	OOS
Well 17	0.2	OOS
Well 19	0.7	Active
Well 20	1.5	OOS

Name	Capacity (mgd)	Status
Well 21	1.1	OOS
Well 22	1.1	Active
Well 23*	1.3	Active
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	38,331
Number of Accounts	12,281
Number of SF RWS Connections	1
Connections to SF RWS Mains	San Andreas 3
Avg. Day Demand (mgd)	2.45
Avg. Day Purchases from SF RWS (mgd)	2.40
% Demand Met with SF RWS Supplies	98%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	Local Surface Water; Recycled Water
Interties with Other Agencies	San Bruno, Daly City, Westborough CWD
Local Storage (mg)	18.25
Days of Storage	5.8 days – 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 potable 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 Christen 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 31 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 5.8 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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	1,169,151	1,119,762	1,157,526	1,172,219
Recycled Water	0	22,277	28,510	22,198
Other	0	0	0	0
Total	1,169,151	1,142,039	1,186,036	1,194,417
mgd equivalent	2.40	2.34	2.43	2.45

Demand by Sector				
Residential	856,462	826,999	856,032	915,799
Commercial/Industrial	100,196	93,884	95,952	82,724
Other	68,359	58,796	54,608	56,475
Dedicated Irrigation	58,424	28,819	55,668	51,256
Non-Revenue Water	85,710	133,541	123,776	88,163
Total	1,169,151	1,142,039	1,186,036	1,194,417
mgd equivalent	2.40	2.34	2.43	2.45

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	44	42	45	49
Gross	60	53	62	63

Facilities and Distribution

Potable Storage Reservoirs

Designation	Capacity (gallons)
11 Reservoirs	18,250,000
Total	18,250,000

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, wastewater 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	66,573
Number of Accounts	19,882
Number of SF RWS Connections	5
Connections to SF RWS Mains	Palo Alto Pipeline, BDPL 3 and 4
Avg. Day Demand (mgd)	11.17
Avg. Day Purchases from SF RWS (mgd)	10.15
% Demand Met with SF RWS Supplies	90.8%
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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	4,859,576	4,600,990	4,757,199	4,953,805
Local Groundwater	0	0	0	0
Recycled Water	392,913	368,841	380,458	498,649
Other	0	0	0	0
Total	5,252,489	4,969,831	5,137,657	5,452,454
mgd equivalent	10.76	10.18	10.53	11.17

Demand by Sector				
Residential	2,850,950	2,758,658	2,946,443	3,097,067
Commercial/Industrial	894,383	866,038	837,673	734,025
Other	678,658	674,653	710,137	694,338
Dedicated Irrigation	578,817	480,699	556,858	744,143
Non-Revenue Water	249,681	189,517	86,546	182,881
Total	5,252,489	4,969,831	5,137,657	5,452,454
mgd equivalent	10.76	10.18	10.53	11.17

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	87	84	90	95
Gross (Less Recycled Water)	148	145	145	152

Facilities and Distribution

Storage Reservoirs

Designation	Type	Capacity (gallons)
Mayfield	Concrete	4,000,000
Boronda	Concrete	1,500,000
Corte Madera	Steel	1,500,000
Dahl	Steel	1,000,000
El Camino	Steel	2,500,000
Montebello	Steel	1,500,000
Park	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	6,822
Number of Accounts	2,201
Number of SF RWS Connections	2
Connections to SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	1.90
Avg. Day Purchases from SF RWS (mgd)	1.90
% 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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	814,270	770,703	851,999	925,721
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	814,270	770,703	851,999	925,721
Mgd equivalent	1.67	1.58	1.75	1.90

Demand by Sector				
Residential	715,387	672,238	746,898	823,222
Commercial/Industrial	0	0	0	2
Other	43,425	54,239	42,089	45,488
Dedicated Irrigation	4,888	4,508	4,814	5,089
Non-Revenue Water	50,570	39,718	58,198	51,920
Total	814,270	770,703	851,999	925,721
Mgd equivalent	1.67	1.58	1.75	1.90

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	283	224	249	274
Gross	271	240	284	308

Facilities and Distribution

Storage Reservoirs

Designation	Type	Capacity (gallons)
MC Tank 1	Steel	130,000
MC Tank 2	Steel	1,000,000
LC Tank 1	Steel	100,000
LC Tank 2	Cor-ten Steel	900,000
HH Tank	Concrete	3,100,000
E Tank	Steel	500,000

Designation	Type	Capacity (gallons)
A Tank 1	Redwood	200,000
A Tank 2	Cor-ten Steel	250,000
N Tank 1	Cor-ten Steel	200,000
N Tank 2	Cor-ten Steel	3,000,000
PM Tank	Cor-ten 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	89,037
Number of Accounts	23,829
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)	9.22
Avg. Day Purchases from SF RWS (mgd)	8.48
% Demand Met with SF RWS Supplies	92%
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. Seven of the turnouts are located off Bay Division Pipelines 1, 2 and 5; one turnout is off BDPL 1, 2, 3, and 5; and five turnouts are off BDPL 3 and 4.

The distribution system consists of 25 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 10 emergency interties with California Water Service Bear Gulch and Mid-Peninsula Districts, Mid-Peninsula Water District, and the City of Menlo Park.

Water Supply and Demand

Supply by Source	Actual FY 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	4,130,668	3,943,761	4,276,459	4,137,728
Recycled Water	331,757	302,909	374,651	361,259
Other	0	0	0	0
Total	4,462,425	4,246,670	4,651,110	4,498,987
mgd equivalent	9.14	8.70	9.53	9.22

Demand by Sector				
Residential	2,614,393	2,569,896	2,723,209	2,860,045
Commercial/Industrial	723,900	701,754	647,016	532,901
Other	76,353	79,627	98,527	76,287
Dedicated Irrigation	611,365	594,772	721,453	701,616
Non-Revenue Water	436,414	300,621	460,905	328,138
Total	4,462,425	4,246,670	4,651,110	4,498,987
mgd equivalent	9.14	8.70	9.53	9.22

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	62	61	62	66
Gross (Less Recycled Water)	97	91	97	95

Facilities and Distribution

Storage Reservoirs

Designation	Type	Capacity (mg)
Easter Cross	Steel	0.10
Easter Bowl	Steel	1.20
Glenloch	Steel	0.09
Wilmington South	Steel	0.25
Cambridge	Steel	0.65

Designation	Type	Capacity (mg)
Lakeview	Concrete	1.00
Main City Zone	Concrete	8.00
Main City Zone	Concrete	3.75
Redwood Shores	Steel	3.20
Redwood Shores	Concrete	3.00
Total		21.24

Interties

Name	No.	Diameter (in.)
CWS – Bear Gulch	2	6, 6
CWS – Mid-Peninsula	4	8, 8, 8, 12
CWS – Mid-Peninsula	2	Hydrant to Hydrant
Menlo Park	1	Hydrant to Hydrant
Mid-Pen WD	1	12

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 primarily an urban residential community located in San Mateo County with low density residential land uses in the west hillside areas and high density residential, commercial, and institutional land uses in the east towards San Francisco Bay.

System

Profile

Area Size	6.1 square miles
Service Population	44,409
Number of Accounts	11,503
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)	3.09
Avg. Day Purchases from SF RWS (mgd)	2.72
% Demand Met with SF RWS Supplies	88%
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 water supply comes from three different sources – surface water purchased from San Francisco Public Utilities Commission (SFPUC), surface water purchased from North Coast County Water District (NCCWD), and ground water produced from the City's wells. Historically, approximately half of the City's total water supply came from purchased surface water and remaining supply was produced from the City's groundwater wells. As of 2016, San Bruno has increased its use of surface water supplies during wet and normal years in accordance with the regional Groundwater Storage and Recovery (GSR) project. The City now receives approximately 90 percent of its supplies from surface water in wet and normal years.

The San Bruno Water system consists of 5 surface water supply turnouts, 4 active groundwater wells, 8 storage tanks, 13 pressure zones, 8 booster pump stations, 31 pressure regulating stations, most of which are equipped with pressure reducing valves that regulate water from high pressure

zones to lower pressure zones and approximately 116 miles of water mains ranging in sizes from 2 to 18 inches diameter.

Water Supply and Demand

Supply by Source	Actual FY 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
SF RWS - Customary	419,589	420,116	465,406	444,989
SF RWS - Supplemental	890,214	793,401	922,606	883,411
Local Groundwater	155,341	139,612	110,306	165,404
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other (North Coast CWD)	23,411	21,622	13,148	12,773
Total	1,488,555	1,374,751	1,511,466	1,506,577
mgd equivalent	3.05	2.82	3.10	3.09

Demand by Sector				
Residential	944,938	1,032,586	1,041,885	988,676
Commercial/Industrial	271,679	269,983	266,655	235,600
Other	67,522	72,182	90,312	82,914
Non-Revenue Water	204,416	0	112,614	199,387
Total	1,488,555	1,374,751	1,511,466	1,506,577
mgd equivalent	3.05	2.82	3.10	3.09

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	47	48	48	46
Gross	69	63	70	70

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	37,991
Number of Accounts	2,505
Number of SF RWS Connections	2
Connections to SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	5.19 Potable and Recycled
Avg. Day Purchases from SF RWS (mgd)	4.18
% Demand Met with SF RWS Supplies	80.5%
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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	2,208,892	2,084,721	2,077,874	2,039,631
Local Groundwater	0	7,335	15,871	15,197
Recycled Water	418,060	421,131	405,919	479,208
Other	0	0	0	0
Total	2,626,952	2,513,187	2,499,664	2,534,036
mgd equivalent	5.38	5.15	5.12	5.19

Demand by Sector				
Residential	820,295	808,653	793,634	808,654
Commercial/Industrial	1,057,459	985,465	880,647	834,956
Other	30,556	27,188	33,518	32,500
Dedicated Irrigation	1,169,673	717,498	745,523	715,964
Non-Revenue Water	-451,031	-25,617	46,343	141,962
Total	2,626,952	2,513,187	2,499,664	2,534,036
mgd equivalent	5.38	5.15	5.12	5.19

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	105	103	46	44
Gross (Less Recycled Water)	281	322	121	111

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	130,746
Number of Accounts	25,592
Number of SF RWS Connections	2
Connections to SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	19.37
Avg. Day Purchases from SF RWS (mgd)	3.23
% Demand Met with SF RWS Supplies	16.6%
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, Recycled Water
Interties with Other Agencies	Santa Clara Valley WD
Local Storage (mg)	28.8
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 Plan is available for landscape irrigation and certain industrial uses, distributed within Santa Clara by about 33 miles of pipeline.

Water Supply and Demand

Supply by Source	Actual FY 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	1,039,840	1,474,198	1,596,791	1,576,338
Santa Clara Valley WD	1,971,390	1,966,444	1,806,417	1,769,252
Local Groundwater	5,285,829	4,322,193	4,562,700	4,562,565
Recycled Water	1,660,829	1,760,160	1,651,515	1,545,861
Other	0	0	0	0
Total	9,957,888	9,522,995	9,617,423	9,454,016
mgd equivalent	20.41	19.52	19.71	19.37

Demand by Sector				
Residential	3,653,811	3,762,834	4,033,373	4,127,523
Commercial/Industrial	4,281,283	4,261,898	4,517,414	2,426,325
Other	986,496	1,038,369	624,105	2,401,508
Dedicated Irrigation	0	0	0	0
Non-Revenue Water	1,036,298	459,893	442,531	498,660
Total	9,957,888	9,522,995	9,617,423	9,454,016
mgd equivalent	20.41	19.52	19.71	19.37

Per Capita Use	Actual FY 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
Residential	58	58	62	62
Gross (Less Recycled Water)	131	144	126	124

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
Corporation Yard Tank	Steel	2.0
Total		28.8

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

315 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	13,629*
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)	2.46
Avg. Day Purchases from SF RWS (mgd)	1.35
% Demand Met with SF RWS Supplies	55% (100% of domestic water)
Average Day Local Water Production (mgd)	1.1
Alternative Supply Sources	Local groundwater, surface water, stormwater, construction dewatering, 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 2020-21, Stanford's population dropped significantly due to most students and faculty remaining home during the COVID-19 pandemic.

** 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 five sources of water supply: purchased potable water from the SF RWS, groundwater, non-potable surface water from the local watershed, stormwater/runoff capture, 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

historically 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. Starting in FY 2017-18 Annual Surveys, additional tracking of captured construction dewatering water for use as irrigation water is also included (other, non-potable alternative water supply). The lake water system can also be supplied as needed by SF RWS water.

Water Supply and Demand

Supply by Source	Actual FY 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	725,276	697,159	699,352	659,830
Local Groundwater	241,503	0	0	0
Surface Water	256,275	0	0	0
Other	41,684	531,006	521,726	538,983
Total	1,264,738	1,228,165	1,221,078	1,198,813
mgd equivalent	2.59	2.52	2.50	2.46

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. 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 and FY 2018-19 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	377,819	380,398	381,216	383,290
Commercial/Industrial	67,986	63,374	73,482	72,869
Other	168,057	169,600	160,343	123,189
Dedicated Irrigation	593,838	572,128	540,451	540,451
Non-Revenue Water	57,039	42,667	65,587	79,014
Total	1,264,738	1,228,167	1,221,078	1,198,813
mgd equivalent	2.59	2.52	2.50	2.46

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.
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 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	n/a	n/a	n/a	n/a
Gross	80	77	78	180

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
Reservoir 3 (Formally San Juan*)		1,500,000
Total		9,500,000

*Rehabilitated reservoir was brought into service in November 2019.

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	156,503
Number of Accounts	29,098
Number of SF RWS Connections	6
Connections to SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	18.15
Avg. Day Purchases from SF RWS (mgd)	9.60
% 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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	4,435,240	4,394,289	4,552,465	4,686,275
Santa Clara Valley WD	3,734,325	3,560,568	3,883,226	4,051,093
Local Groundwater	49,601	40,358	40,733	36,312
Surface Water	0	0	0	0
Recycled Water	114,275	242,246	255,326	83,796
Other	0	0	0	0
Total	8,333,441	8,237,461	8,731,750	8,857,476
mgd equivalent	17.08	16.08	17.89	18.15

Demand by Sector				
Residential	4,499,086	4,715,659	4,825,227	5,120,577
Commercial/Industrial	1,702,300	1,728,835	1,585,185	1,495,257
Other	376,643	142,209	98,796	100,508
Dedicated Irrigation	916,239	1,427,092	1,466,128	1,689,040
Non-Revenue Water	839,172	223,666	756,414	452,095
Total	8,333,441	8,237,461	8,731,750	8,857,476
mgd equivalent	17.08	16.88	17.89	18.15

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	60	63	63	67
Gross (Less Recycled Water)	110	107	111	115

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 Water District

2263 Westborough Boulevard
South San Francisco, California 94080-5406

Phone: (650) 589-1435 Fax: (650) 589-5167
Web: http://www.westboroughwater.org

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	13,466
Number of Accounts	3,885
Number of SF RWS Connections	1
Connections to SF RWS Mains	San Andreas 1, 2, and 3
Avg. Day Demand (mgd)	0.77
Avg. Day Purchases from SF RWS (mgd)	0.77
% 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 WWD 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 17-18 (ccf)	Actual FY 18-19 (ccf)	Actual FY 19-20 (ccf)	Actual FY 20-21 (ccf)
San Francisco Water	383,996	379,833	400,616	373,994
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	383,996	379,833	400,616	373,994
mgd equivalent	0.79	0.78	0.82	0.77

Demand by Sector				
Residential	293,705	281,152	293,470	298,605
Commercial/Industrial	27,315	34,958	33,950	28,811
Other	0	0	0	9
Dedicated Irrigation	40,529	39,384	36,286	43,134
Non-Revenue Water	22,447	24,339	36,910	3,435
Total	383,996	379,833	400,616	373,994
mgd equivalent	0.79	0.78	0.82	0.77

Per Capita Use	Actual FY 17-18 (gpcpd)	Actual FY 18-19 (gpcpd)	Actual FY 19-20 (gpcpd)	Actual FY 20-21 (gpcpd)
Residential	47	45	47	45
Gross	62	57	65	57

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