ANNUAL SURVEY

March 2017

Fiscal Year 2015-16

BAWSCA
Bay Area Water Supply & Conservation Agency

Bay Area Water Supply and Conservation Agency FY 2015-16

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

MARCH 2017

BAWSCA WATER FACTS AT-A-GLANCE – FY 2015-16

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	740,077	16
Santa Clara County	117	534,468	8
Alameda County	166	506,985	2
Total	468	1,781,530	26

Supply by Source

	ccf	mgd	af	%
San Francisco RWS	54,964,574	112.64	126,181	64.5%
Groundwater	9,044,835	18.54	20,764	10.6%
Surface Water	3,068,399	6.29	7,044	3.6%
Recycled Water	3,659,246	7.50	8,400	4.3%
Other Sources	14,661,078	30.05	33,657	17.1%
Total	85,667,579	175.56	196,666	100.0%

Demand by Sector

	ccf	mgd	af	%
Residential	48,160,783	98.70	110,562	56.2%
Commercial/Industrial	19,901,137	40.78	45,687	23.2%
Government/Institutional/Other	4,517,299	9.26	10,370	5.3%
Dedicated Irrigation	6,838,078	12.81	14,349	7.3%
Unaccounted for	6,666,808	14.01	15,698	8.0%
Total	85,667,579	175.26	196,666	100.0%

Water Measurements

af = acre-foot; 1 af = 435.6 ccf or 325,851 gallons
ccf = 100 cubic feet; approximately 748 gallons
gpcd = gallons per capita per day
mgd = million gallons per day

Cover photo: Calaveras Reservoir Intake/Outlet Tower, January 11, 2016. Image Courtesy of SFPUC Photographer Robin Scheswohl.

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Annual Survey

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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 provider that provide water to over 1.78 million people and 41,000 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 an equal 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 740,000 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.

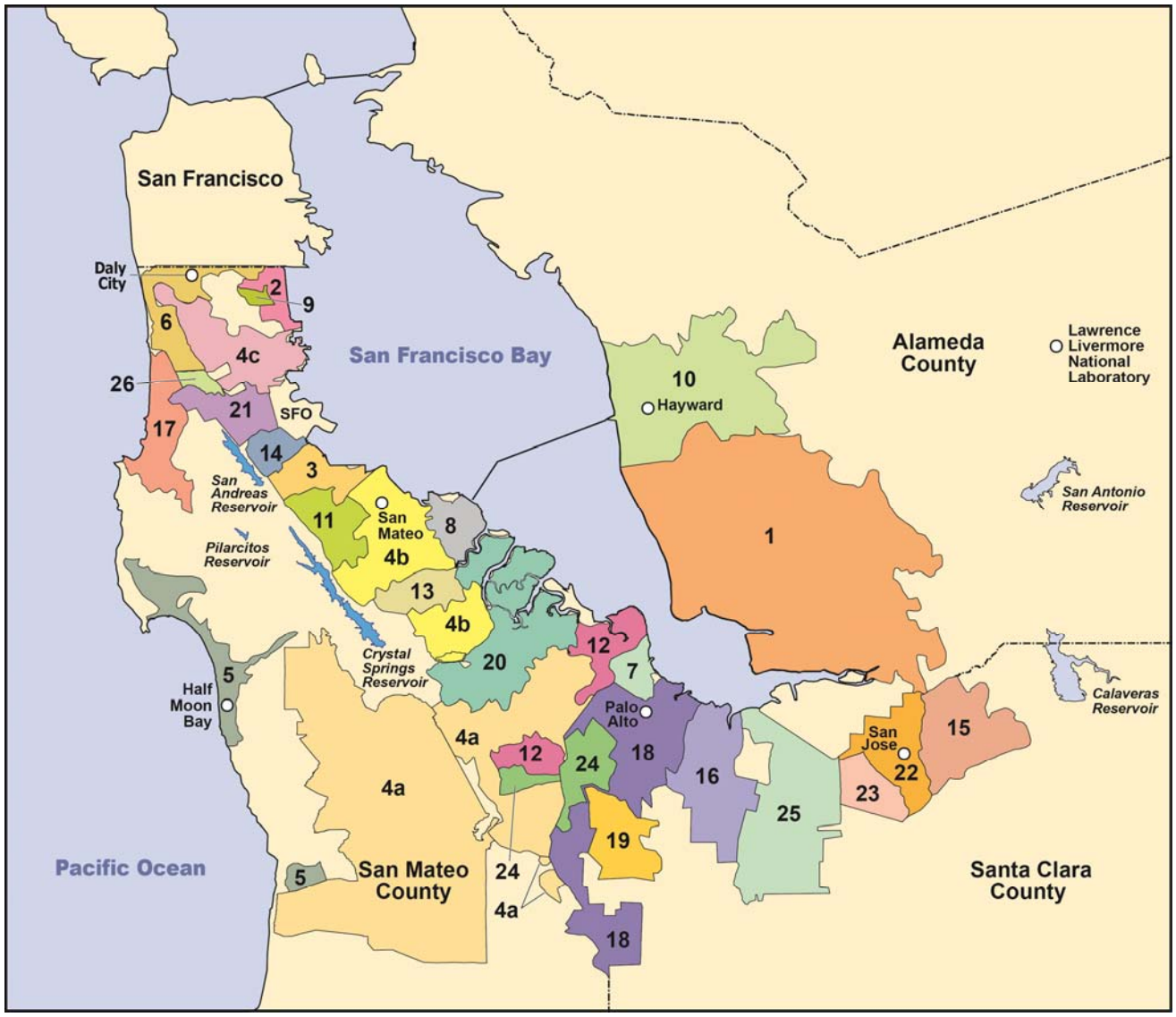
Santa Clara County

In Santa Clara County, BAWSCA and its member agencies serve a population of approximately 534,000 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 507,000 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
2 City of Brisbane
3 City of Burlingame
4a CWS – Bear Gulch
4b CWS – Mid-Peninsula
4c CWS – South San Francisco
5 Coastside County Water District
6 City of Daly City
7 City of East Palo Alto
8 Estero Municipal Improvement District
9 Guadalupe Valley MID
10 City of Hayward
11 Town of Hillsborough
12 City of Menlo Park
13 Mid-Peninsula Water District
14 City of Millbrae
15 City of Milpitas
16 City of Mountain View
17 North Coast County Water District
18 City of Palo Alto
19 Purissima Hills Water District
20 City of Redwood City
21 City of San Bruno
22 San Jose Municipal Water System
23 City of Santa Clara
24 Stanford University
25 City of Sunnyvale
26 Westborough Water District

Sources: BAWSCA, San Mateo County General Plan

ANNUAL SURVEY OVERVIEW

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

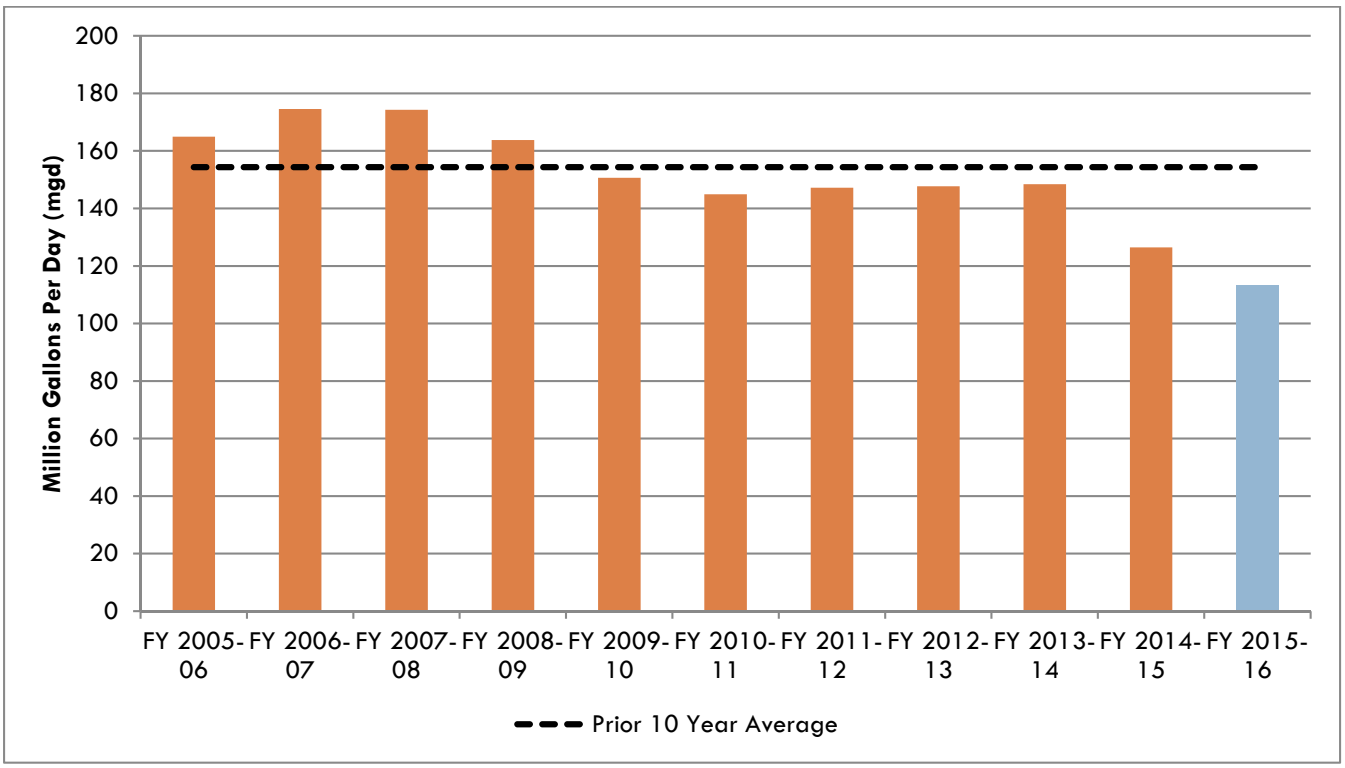
- ☐ Current water supply from each source
- ☐ Current and projected water purchases from SF RWS
- ☐ Projected water supplies and demands
- ☐ Consumption by customer class
- ☐ Current and projected population
- ☐ Per capita water use
- ☐ Single family water bills and rate structures
- ☐ BAWSCA member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

PURCHASES FROM SF RWS

Current Water Purchases from SF RWS

The San Francisco Public Utilities Commission (SFPUC) operates the SF RWS, which is the major source of supply for BAWSCA member agencies. In FY 2015-16, the BAWSCA member agencies reported SF RWS purchases of 112.6 mgd, 11% lower than the total of 126.5 mgd purchased in FY 2014-15. In addition, BAWSCA member agencies reported 0.55 mgd in supplemental purchases as part of the conjunctive use program. Compared with the prior ten-year average, total purchases in FY 2015-16 were below average by 41.7 mgd. When compared to FY 2006-07, the highest year in the prior ten-year period, FY 2015-16 purchases were lower by 61.7 mgd, a difference of about 35%.

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



Projected Water Purchases from SFPUC

As part of SFPUC's action on the Program Environmental Impact Report (PEIR) for its Water System Improvement Program (WSIP), it made the decision to limit wholesale customer purchases from the SF RWS to 184 mgd and retail customer purchases from the SF RWS to 81 mgd through 2018. In June 2016, BAWSCA notified the SFPUC that the projected BAWSCA member agency purchases in 2018 are expected to be 145 mgd. In FY 2040-41, BAWSCA member agency purchases from the SF RWS are projected to reach 174 mgd.

Water Use Reductions in Response to Statewide Drought

On January 17, 2014, Governor Brown proclaimed a State of Emergency and directed state officials to take all necessary actions to prepare for drought conditions. On January 31, 2014, SFPUC asked all customers of the SF RWS to voluntarily curtail water consumption. The goal was to reduce system-wide usage by 10%, from 157.4 mgd projected BAWSCA member agency calendar year 2014 water purchases to 141.7 mgd. This request was extended through calendar year 2016. Consistent with its Urban Water Management Plan, the SFPUC implements rationing in early years of a drought to provide for sufficient supplies should a multiple year drought occur. The BAWSCA member agencies exceeded the 10% target and achieved a total water savings of 29% (45.7 mgd) in FY 2015-16 (Source: SFPUC Commercial Division Records).

On April 1, 2015, Governor Brown issued an executive order directing the State Water Resources Control Board (SWRCB) to implement mandatory water reductions across California to reduce water usage by 25 percent. In accordance with the Executive Order, the SWRCB adopted an emergency regulation for statewide water conservation in May 2015. The regulation established mandatory water use reduction targets, referred to as "conservation standards", for each urban water supplier in California, in order to achieve a statewide 25% reduction in potable water use. Individual water suppliers' conservation standards were established based on summer 2014 residential per capita water use. These standards ranged from 8 percent to 36 percent, and the weighted average standard for the BAWSCA service area was 15 percent. Through the compliance period of June 2015 to May 2016, BAWSCA agencies reduced total potable water use by 27% as compared to the same months in 2013.

As the compliance period for the SWRCB mandatory reductions period differs from the fiscal year period for which data is provided in this report, water use reduction totals cited in this section may not match other portions of the report. The BAWSCA Drought Report, which will be published in mid-2017, will provide the detailed information on drought actions and monthly water use reductions for the BAWSCA member agencies.

TOTAL WATER SUPPLY AND DEMAND

Current Water Supply by Source

The sources of supply used by BAWSCA member agencies are very consistent, typically varying by less than 2% from one year to the next. Of the total amount of water used by BAWSCA agencies in FY 2015-16, 64.5% came from the SF RWS and 35.5% came from other sources. These other sources included:

- ☐ Groundwater (18.54 mgd, 10.6%);
- ☐ Local surface water, primarily from ACWD's take from Lake Del Valle (6.29 mgd, 3.6%);
- ☐ Other supplies from the Santa Clara Valley Water District, the State Water Project, and ACWD's brackish water desalination (30.05 mgd, 17.1%); and
- ☐ Recycled water (7.50 mgd, 4.3%).

Figure ES-2: FY 2015-16 Water Use by Source

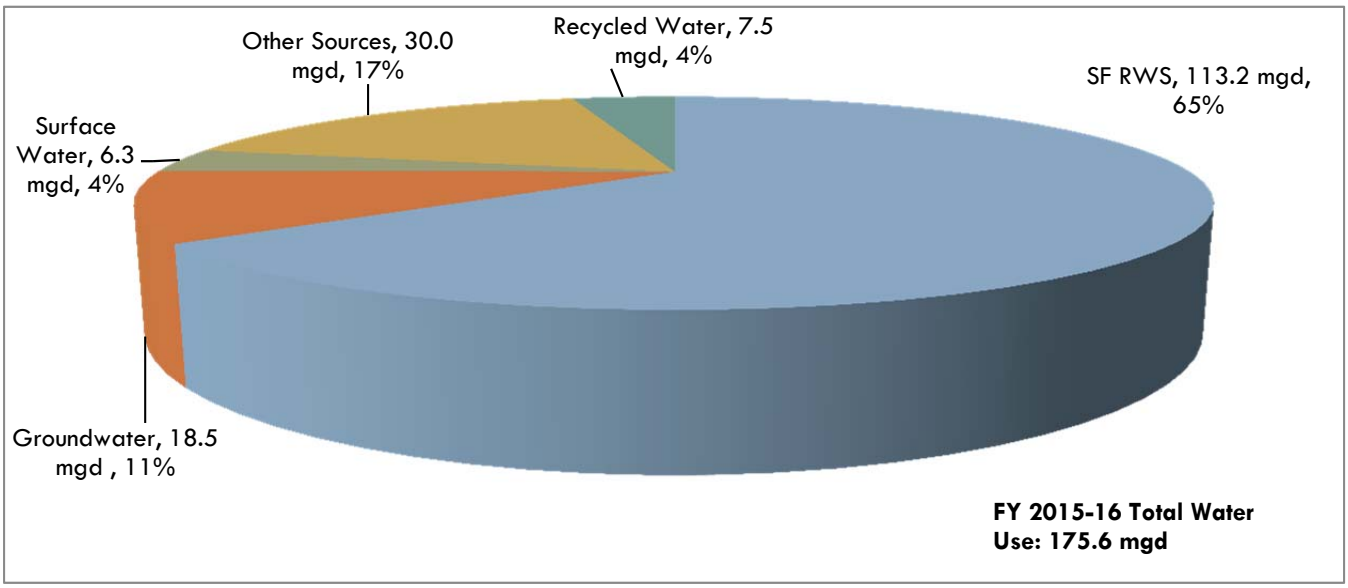
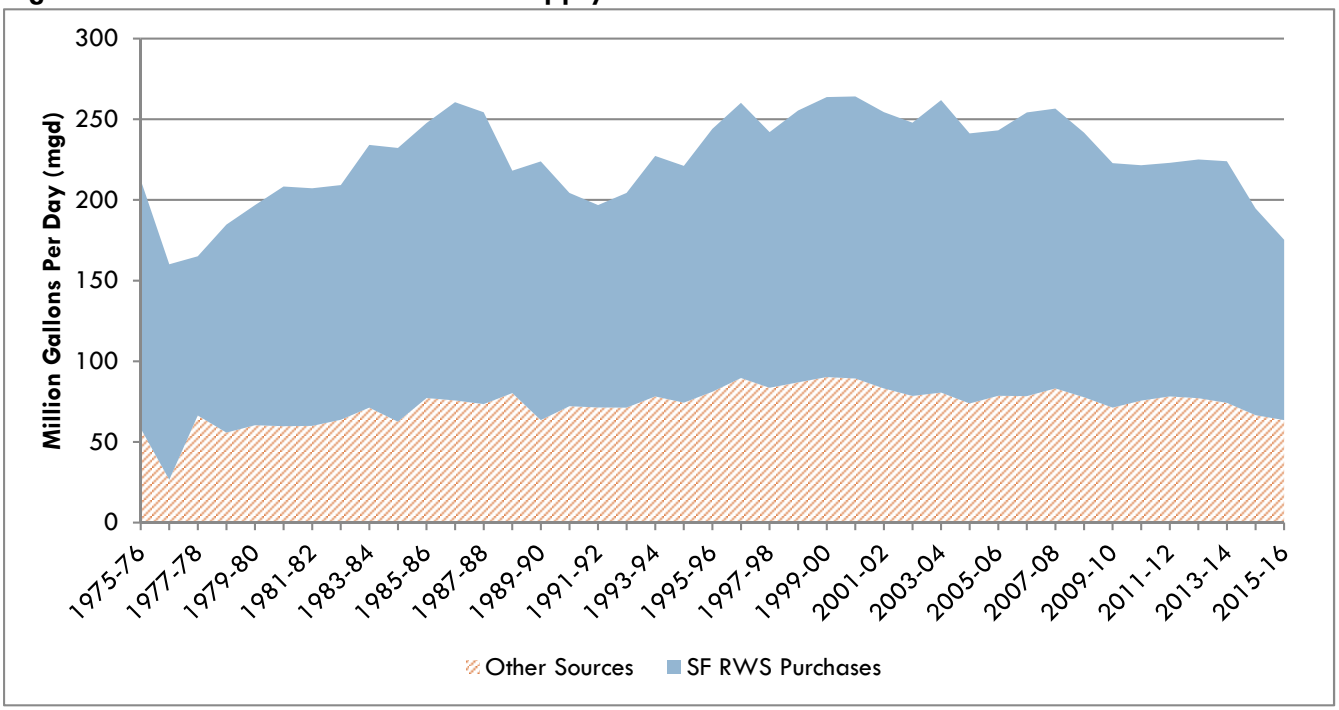


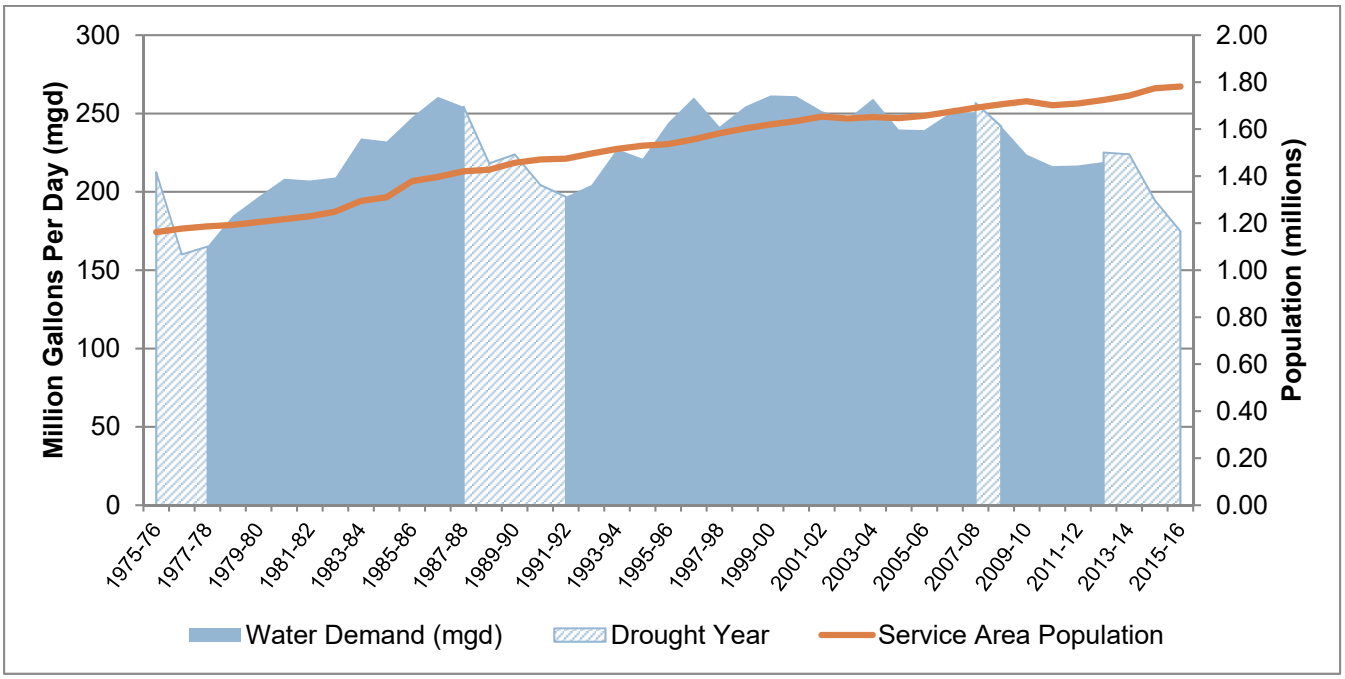
Figure ES-3: Past and Current Water Supply



Current BAWSCA-Wide Total Water Demand

For FY 2015-16, total water demand in the BAWSCA service area, including SFPUC purchases and other sources, was 175.6 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 Governor's drought proclamation, water used in the BAWSCA service area was 22% less in FY 2015-16. In FY 2015-16, 33% less water was used in the service area compared to the peak year, FY 1986-87, despite a 28% 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 293.3 mgd by FY 2040-41 (Source: FY 2015-16 Annual Survey). Of the total water demand, 5.3 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 174.4 mgd in FY 2040-41. Recycled water supplies are projected to increase by 208% to 23.1 MGD by FY 2040-41.

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

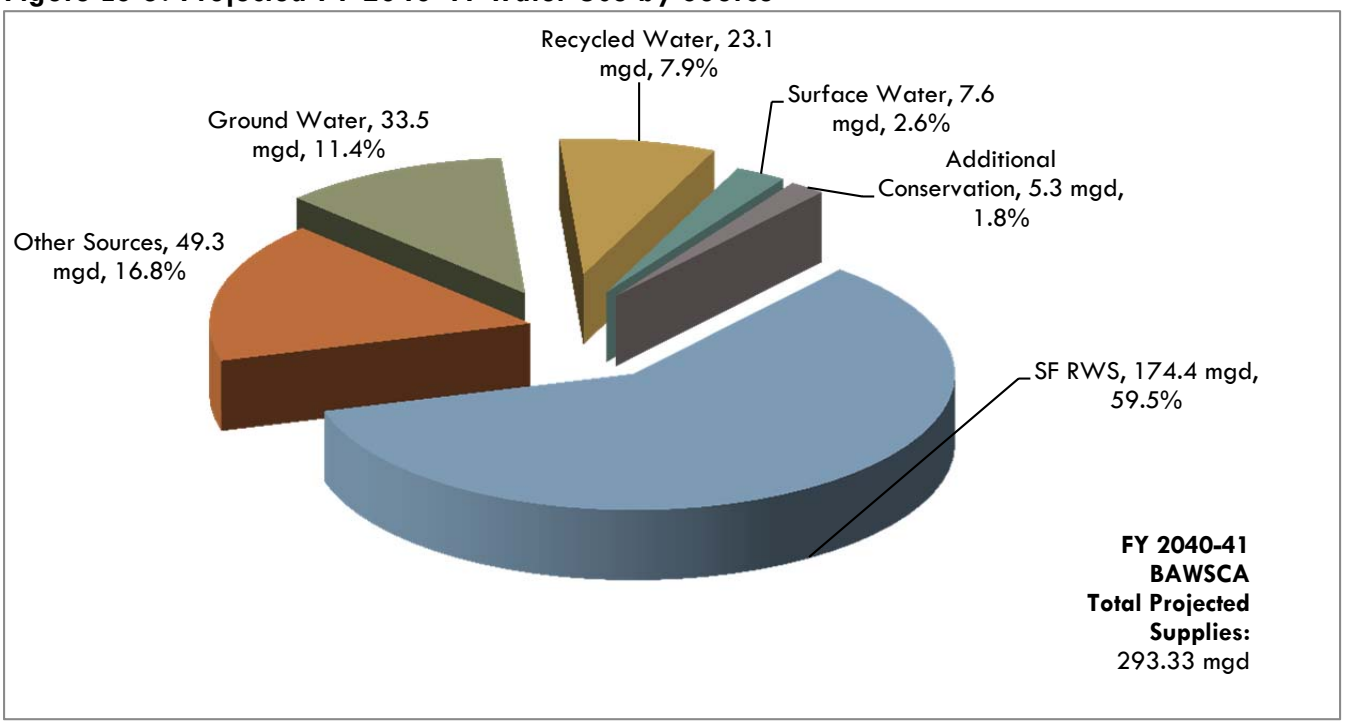
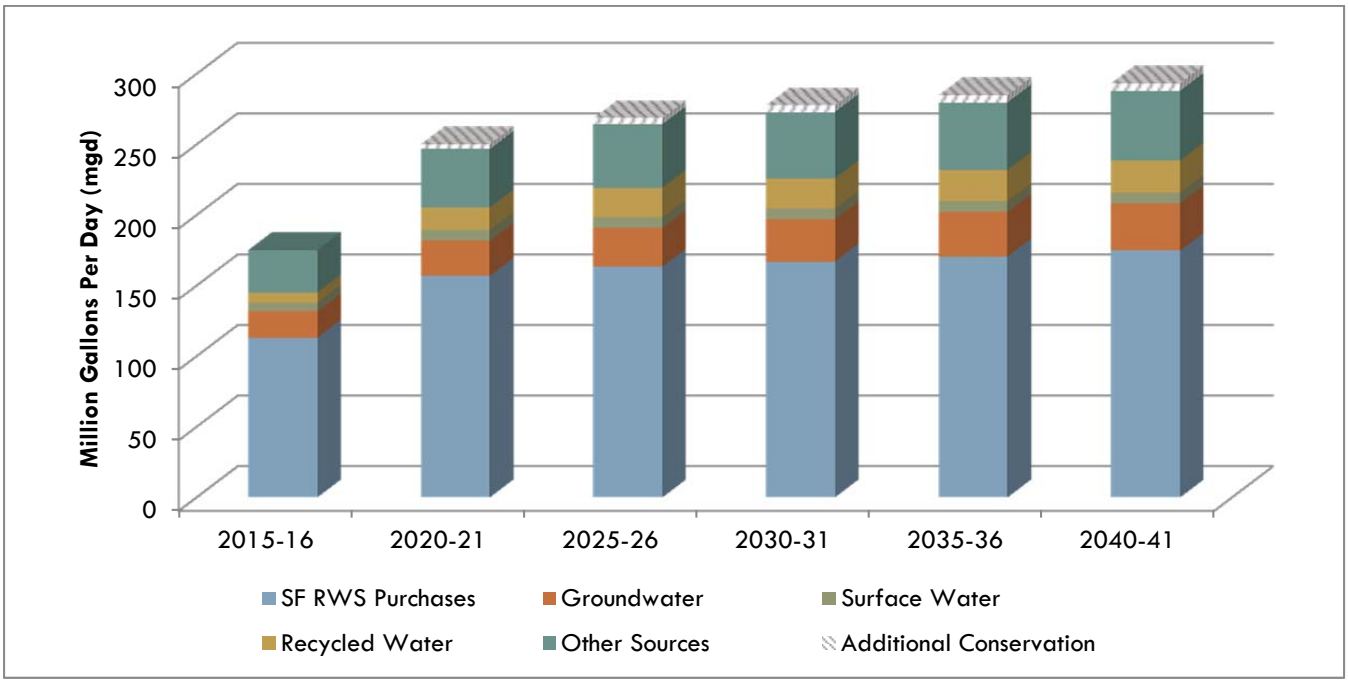


Figure ES-6: Projected Normal Year Water Supplies by Source



Meeting Projected Dry Year Water Demands

BAWSCA's recently completed Long-Term Reliable Water Supply Strategy Phase II Final Report (Strategy) 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.

BAWSCA's Long Term Reliable Water Supply Strategy identifies water supply options to meet potential dry year supply shortfalls of up to 43 mgd.

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.

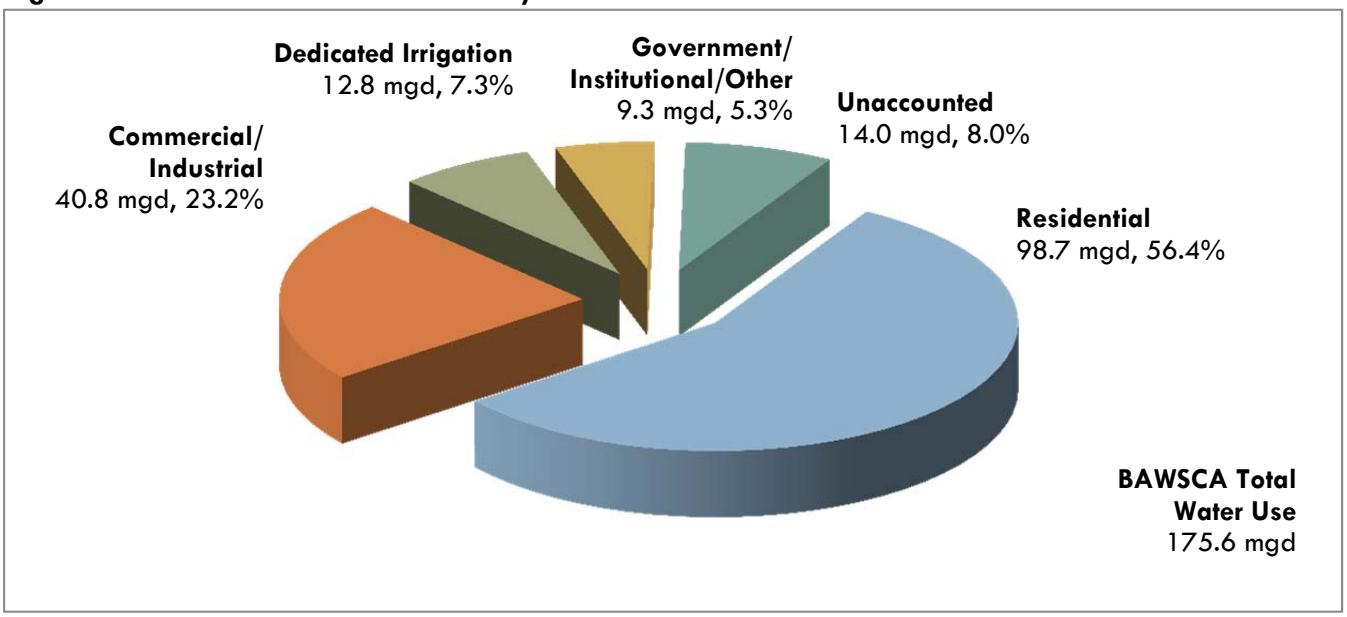
CURRENT WATER USE BY CLASS OF CUSTOMER

As with the source of supply, BAWSCA's demand by customer class is relatively consistent over time. Of the 175.6 mgd consumed among BAWSCA agencies in FY 2015-16, the residential sector accounted for 56.2% (98.7 mgd); commercial and industrial customers for 23.2% (40.8 mgd); government, institutional and other

customers for 5.3% (9.3 mgd); dedicated irrigation for 7.3% (12.8 mgd); and non-revenue water for 8.0% (14.0 mgd).

In FY 2015-16, there were 441,842 accounts (service connections) in the entire BAWSCA service area, 87%, or 382,749, of which were residential.

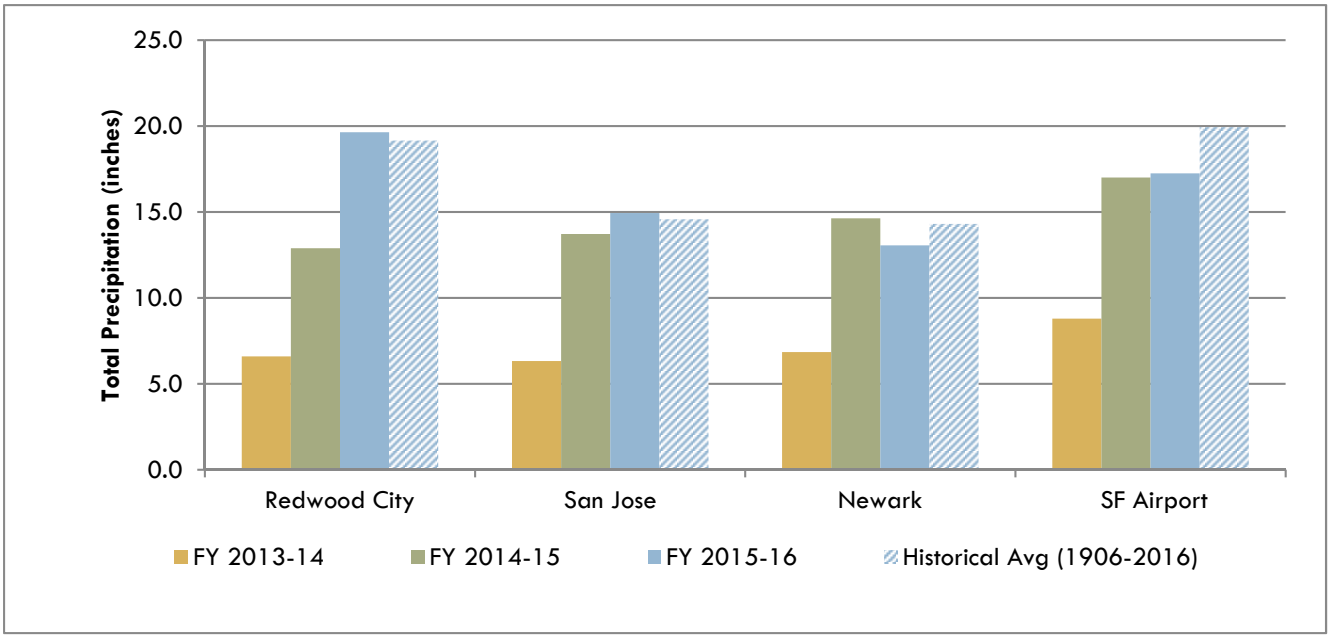
Figure ES-7: FY 2015-16 Water Use by Customer Class



CLIMATE DATA

In FY 2015-16, rainfall totals recorded at 4 representative locations in the BAWSCA service area were, on average, 5% lower than the historical average from 1948 - 2014. In FY 2013-14 and FY 2014-15 rainfall totals recorded at these locations were also below average by 58% and 14% respectively.

Figure ES-8: Historic and Current Precipitation Levels



POPULATION AND PER CAPITA WATER USE

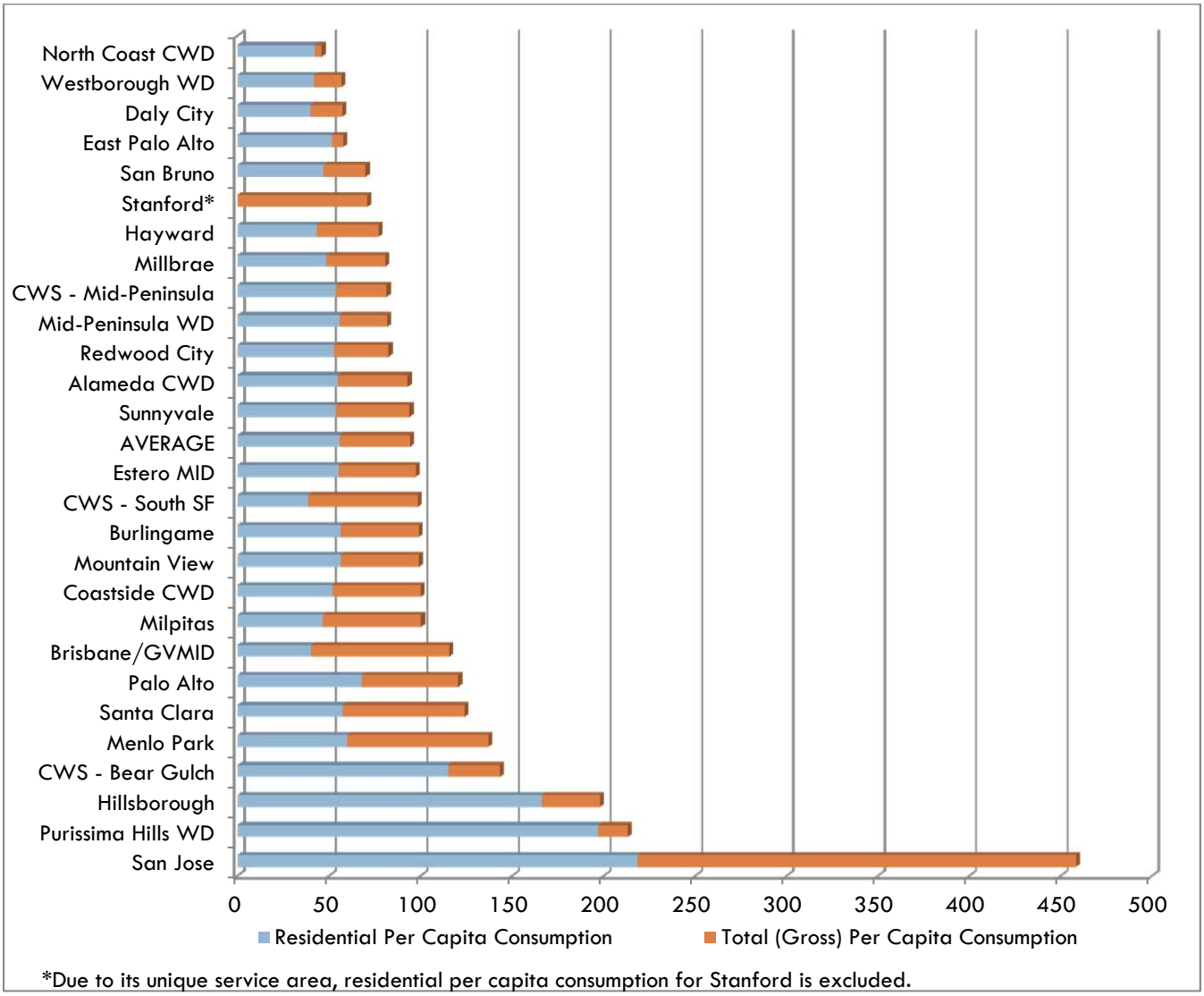
The population of the BAWSCA service area is estimated to have increased from 1,773,889 to 1,781,530 between FY 2014-15 and FY 2015-16. The BAWSCA service area population is projected to reach 2,216,362 by FY 2040-41.

In FY 2015-16, fifteen BAWSCA member agencies had residential water use of less than 55 gallons per capita per day.

Average residential per capita consumption (excluding Stanford) in the BAWSCA service area was 55.9 gpcd in FY 2015-16, 14% less than the year before. This is 51% less than the estimated peak residential per capita consumption of 114.9 gpcd in FY 1975-76. In FY 2015-16, CWS - South SF had the lowest residential per capita consumption at 38.8 gpcd while San Jose had the highest at 218.7 gpcd.

The average gross per capita consumption in the BAWSCA service area was 94.3 gpcd in FY 2015-16, 11% lower than FY 2015-16. 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



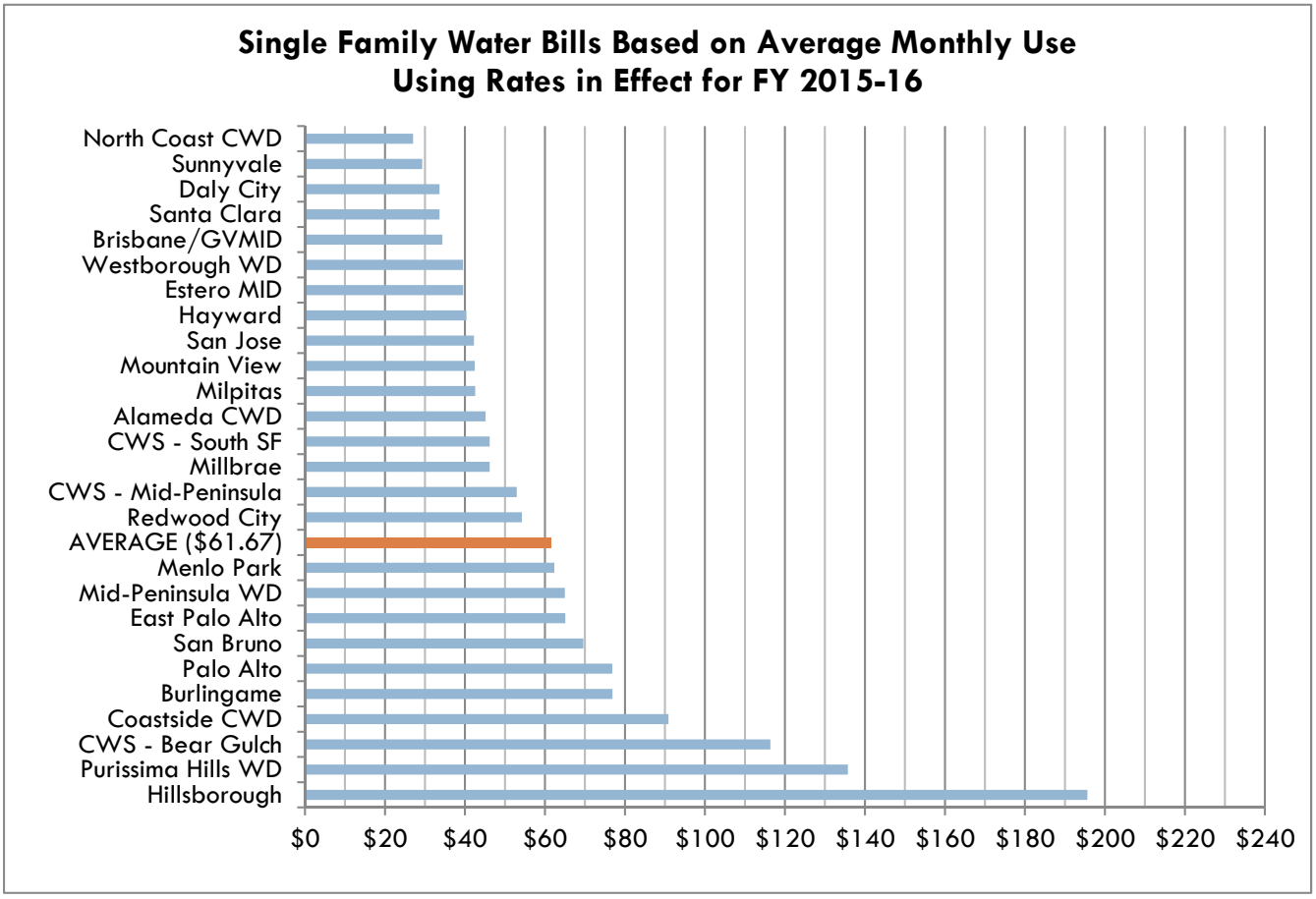
*Due to its unique service area, residential per capita consumption for Stanford is excluded.

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 $27.00 for 5.0 units in the North Coast CWD service area to a high of $195.59 for 17.6 units in Hillsborough. The average single family water bill among the BAWSCA member agencies, inclusive of the service charge, was $61.67.

Five BAWSCA member agencies (Alameda County Water District, East Palo Alto, Millbrae, Santa Clara, and Westborough Water District) had a uniform rate structure in FY 2015-16, 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, and 2 private water providers that provide water to over 1.78 million people and 41,000 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 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 roughly 4,562 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 348,000 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, 64% of all water delivered by the BAWSCA member agencies came from the SF RWS in FY 2015-16.

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 56% of total demand in FY 2015-16.

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 2015-16, residential per capita water use was lower than the prior year due to water use reductions in response to the drought. Per capita use in the wholesale service area ranged from a low of 39 gallons per capita per day (gpcd) to a high of 211 gpcd. Average residential use is 56 gpcd (See Table 7A).

Governance

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

Organization and Budget

Day-to-day leadership is provided by the Chief Executive Officer/General Manager, Nicole Sandkulla, who is supported by a staff of seven. A standing Board Policy Committee, comprised of board members, advises the CEO and the full board on policy matters. The agency's FY 2015-16 budget was $3.2M, 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.

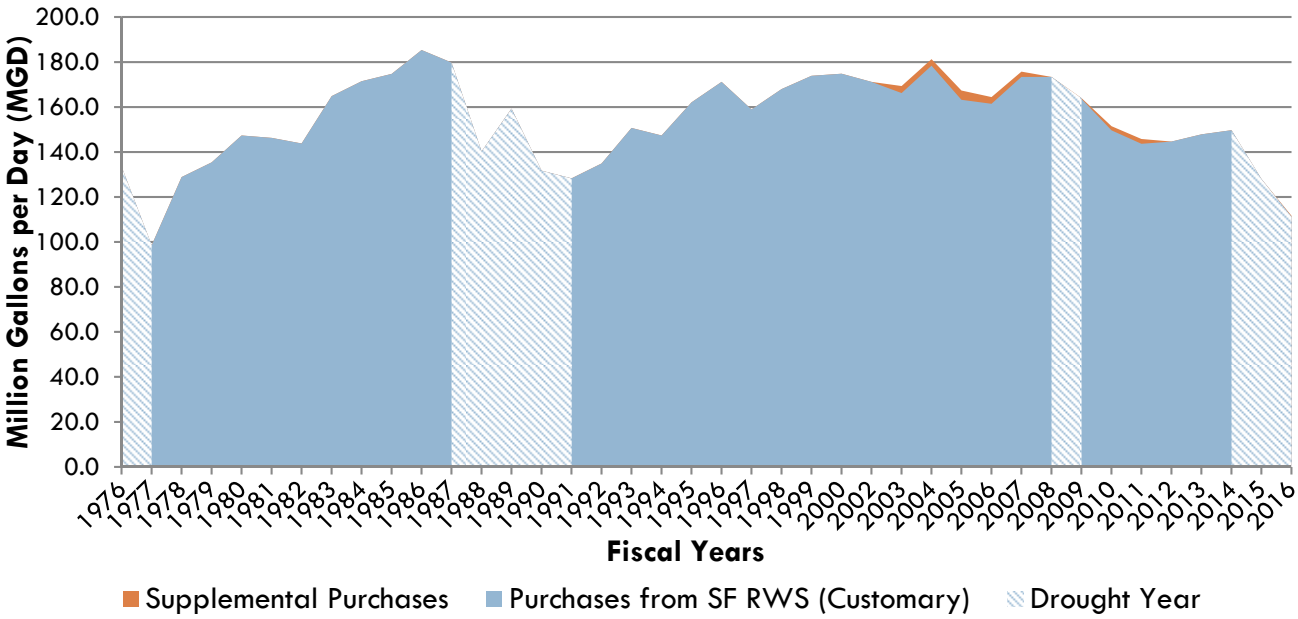
Table 1: BAWSCA Members Summary – FY 2015-16

	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	4,562	0.53	0.53	Brisbane, nearby unincorporated areas, and GVMID, and an industrial park within the City of Brisbane
City of Burlingame	31,109	3.09	3.39	City of Burlingame, and nearby unincorporated areas
California Water Service Company Bear Gulch District, Mid-Peninsula District, South San Francisco District	254,785	23.74	25.54	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
Coastside County Water District	16,704	1.18	1.67	Half Moon Bay, Princeton by the Sea, Miramar, and El Granada
City of Daly City	109,139	4.41	6.44	Daly City and nearby unincorporated areas
City of East Palo Alto	24,424	1.42	1.42	City of East Palo Alto, Menlo Park, and nearby unincorporated areas
Estero Municipal Improvement District	37,165	3.62	3.62	Foster City and small parts of San Mateo
Town of Hillsborough	10,869	2.15	2.15	Hillsborough and nearby unincorporated areas
City of Menlo Park	16,066	2.20	2.20	Menlo Park west of Altschul Avenue and east of El Camino Real
Mid-Peninsula Water District	26,924	2.21	2.21	Belmont, San Carlos, and nearby unincorporated areas
City of Millbrae	22,848	1.84	1.84	Millbrae and nearby unincorporated areas
North Coast County Water District	40,000	1.84	1.87	Pacifica and nearby unincorporated areas
City of Redwood City	87,023	7.19	7.77	Redwood City, parts of San Carlos and Woodside, and nearby unincorporated areas
City of San Bruno	44,409	1.31	3.11	San Bruno and nearby unincorporated areas
Westborough Water District	14,050	0.80	0.80	Parts of South San Francisco, Daly City, and nearby unincorporated areas
Subtotal	740,077	57.53	64.57	
Santa Clara County				
City of Milpitas	75,521	4.54	8.26	Milpitas and portions of San Jose
City of Mountain View	75,430	6.77	7.90	Mountain View and nearby unincorporated areas
City of Palo Alto	68,020	8.21	8.93	Palo Alto and nearby unincorporated areas
Purissima Hills Water District	6,150	1.31	1.31	Los Altos Hills, parts of Los Altos, and nearby unincorporated areas
San Jose Municipal Water District	9,059	4.09	4.90	North San Jose/Alviso and nearby unincorporated areas
City of Santa Clara	120,973	2.33	18.07	Santa Clara and nearby unincorporated areas
Stanford University	30,943	1.39	2.20	Stanford University
City of Sunnyvale	148,372	7.98	14.77	Sunnyvale and nearby unincorporated areas
Subtotal	534,468	36.63	66.34	
Alameda County				
Alameda County Water District	348,000	6.22	32.39	Union City, Newark, Fremont and nearby unincorporated areas
City of Hayward	158,985	12.25	12.25	Hayward and nearby unincorporated areas
Subtotal	506,985	18.48	44.64	
Total All Agencies	1,781,530	112.64	175.56	

Source: *BAWSCA FY 2015-16 Annual Survey*

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 2005-06	Actual FY 2006-07	Actual FY 2007-08	Actual FY 2008-09	Actual FY 2009-10	Actual FY 2010-11	Actual FY 2011-12	Actual FY 2012-13	Actual FY 2013-14	Actual FY 2014-15	Actual FY 2015-16	mgd Equiv	2015-16/ 2014-15 % Change	2015-16 Purchases as % of Guarantee
San Mateo County																		
* Brisbane **	224,435	0.46	171,507	0.35	191,963	148,937	182,661	179,743	123,803	275,934	280,650	287,290	302,776	280,029	257,414	0.53	-8.1	53.8
* Burlingame	2,553,753	5.23	2,531,707	5.19	2,121,360	2,209,757	2,195,474	2,086,616	1,920,815	1,971,599	2,012,282	1,952,965	2,001,619	1,791,539	1,505,779	3.09	-16.0	59.0
California Water Service ***	17,320,807	35.50	17,393,987	35.65	17,030,914	18,279,882	18,414,636	17,561,079	15,815,998	15,668,088	16,101,764	15,212,752	16,361,264	13,839,271	11,584,178	23.74	-16.3	66.9
Coastside CWD	1,061,453	2.18	600,257	1.23	899,064	1,006,844	1,014,105	977,849	887,675	806,110	832,099	885,896	940,214	727,298	575,225	1.18	-20.9	54.2
Daly City	2,094,386	4.29	2,264,684	4.64	1,519,263	1,747,221	2,187,273	2,113,320	1,542,719	1,405,560	1,811,358	1,955,442	1,713,514	1,654,762	2,152,800	4.41	30.1	102.8
* East Palo Alto	957,813	1.96	1,041,989	2.14	927,742	976,874	996,587	938,045	842,883	863,282	907,662	1,008,253	723,320	768,310	690,728	1.42	-10.1	72.1
* Estero MID	2,878,807	5.90	2,854,051	5.85	2,531,846	2,747,662	2,691,080	2,509,929	2,392,839	2,274,588	1,966,984	2,000,497	1,942,333	1,930,526	1,768,029	3.62	-8.4	61.4
* Guadalupe Valley MID	254,436	0.52	155,074	0.32	130,538	115,901	130,485	122,888	152,798	Included with Brisbane								
* Hillsborough	1,995,644	4.09	1,996,150	4.09	1,665,884	1,786,177	1,893,039	1,743,929	1,470,409	1,461,935	1,580,857	1,609,532	1,599,812	1,226,777	1,050,944	2.15	-14.3	52.7
Los Trancos			34,848	0.07	Included with CWS-Bear Gulch													
* Menlo Park	2,174,231	4.46	1,958,458	4.01	1,688,803	1,735,075	1,857,088	1,628,275	1,556,801	1,533,788	1,621,745	1,584,636	1,724,965	1,287,136	1,074,516	2.20	-16.5	49.4
* Mid-Peninsula WD	1,898,707	3.89	1,888,074	3.87	1,434,648	1,652,208	1,583,791	1,533,876	1,390,831	1,404,933	1,437,360	1,453,047	1,408,109	1,209,300	1,076,654	2.21	-11.0	56.7
* Millbrae	1,538,120	3.15	1,528,426	3.13	1,291,729	1,194,450	1,199,327	1,168,008	1,094,867	1,075,971	1,034,254	1,113,147	1,134,741	991,049	899,785	1.84	-9.2	58.5
* North Coast CWD	1,872,928	3.84	1,618,649	3.32	1,579,110	1,418,174	1,582,423	1,632,364	1,471,838	1,585,572	1,380,360	1,192,485	1,387,578	1,360,780	900,293	1.84	-33.8	48.1
* Redwood City	5,333,115	10.93	5,253,772	10.77	5,308,460	5,694,374	5,711,397	5,048,309	4,689,257	4,462,944	4,420,594	4,747,255	4,407,672	3,789,370	3,508,414	7.19	-7.4	65.8
San Bruno	1,583,899	3.25	1,748,600	3.58	1,010,659	906,722	968,953	925,521	735,442	775,910	1,017,925	946,503	779,582	584,392	637,586	1.31	9.1	40.3
Skyline			62,726	0.13	76,938	80,966	76,864	Included with CWS-Bear Gulch										
* Westborough WD	644,172	1.32	585,151	1.20	459,831	532,529	457,299	485,493	394,878	408,487	440,796	441,233	433,980	377,034	390,753	0.80	3.6	60.7
Subtotal	44,386,706	90.96	43,688,110	89.53	39,868,752	42,233,753	43,142,482	40,655,244	36,483,853	35,974,701	36,846,690	36,390,933	36,861,479	31,817,573	28,073,098	57.53	-11.8	63.2
Santa Clara County																		
Milpitas	4,504,533	9.23	4,370,757	8.96	3,246,783	3,363,685	3,346,012	3,373,223	3,044,020	2,954,096	3,060,055	3,115,000	3,194,000	2,503,640	2,215,396	4.54	-11.5	49.2
Mountain View	6,567,648	13.46	6,435,554	13.19	5,040,013	5,349,361	5,074,103	4,788,905	4,332,561	4,162,626	4,346,523	4,389,474	4,373,263	3,611,194	3,305,780	6.77	-8.5	50.3
* Palo Alto	8,331,697	17.07	8,009,767	16.41	5,802,911	6,361,100	6,205,790	5,677,018	5,362,816	5,440,236	5,561,559	5,547,735	5,600,519	4,723,751	4,006,084	8.21	-15.2	48.1
* Purissima Hills	792,832	1.62	755,077	1.55	964,747	1,112,291	1,124,922	980,987	854,854	839,360	899,221	972,733	982,100	803,313	640,369	1.31	-20.3	80.8
San Jose	0	0.00	1,541,153	3.16	2,146,284	2,321,769	2,394,495	2,185,349	1,998,932	2,035,953	2,172,405	2,173,663	2,272,262	2,151,905	1,997,596	4.09	-7.2	n/a
Santa Clara	0	0.00	2,429,766	4.98	2,237,932	2,106,452	1,618,029	1,307,380	1,105,658	1,055,675	910,029	1,118,315	1,012,567	914,572	1,135,829	2.33	24.2	n/a
Stanford	1,479,764	3.03	1,485,396	3.04	1,085,236	1,112,857	1,125,377	1,045,886	1,043,864	1,035,726	1,051,794	1,029,129	1,024,277	923,813	679,394	1.39	-26.5	45.9
Sunnyvale	6,138,122	12.58	7,228,076	14.81	4,766,132	4,505,138	5,072,437	5,181,026	4,771,741	4,043,548	4,436,721	4,526,510	4,046,527	3,874,640	3,894,246	7.98	0.5	63.4
Subtotal	27,814,596	57.00	32,255,546	66.10	25,290,038	26,232,653	25,961,165	24,539,774	22,514,446	21,567,221	22,438,307	22,872,559	22,505,515	19,506,828	17,874,694	36.63	-8.4	64.3
Alameda County																		
Alameda CWD	6,714,439	13.76	6,039,273	12.38	5,115,909	6,667,959	6,534,358	5,477,714	5,102,005	3,825,797	4,052,940	4,371,390	5,684,760	3,770,320	3,037,166	6.22	-19.4	45.2
* Hayward [1]	5,979,616	12.25	8,504,158	17.43	8,761,512	8,901,286	9,434,134	9,105,654	8,511,066	8,308,740	7,610,980	7,552,956	7,402,067	6,634,616	5,979,616	12.25	-9.9	100.0
Residual [1]	4,890,739	10.02																
Subtotal	17,584,794	36.04	14,543,431	29.80	13,877,421	15,569,245	15,968,492	14,583,368	13,613,071	12,134,537	11,663,920	11,924,346	13,086,827	10,404,936	9,016,782	18.48	-13.3	51.3
Total	89,786,096	184.00	90,487,087	185.44	79,036,211	84,035,651	85,072,140	79,778,386	72,611,370	69,676,459	70,948,917	71,187,838	72,453,821	61,729,337	54,964,574	112.64	-11.0	61.2
mgd equiv	184.00		185.44		161.97	172.22	174.34	163.49	148.80	142.79	145.40	145.89	148.48	126.50	112.64			
Total w/o SC&SJ	89,786,096		86,516,168		74,651,995	79,607,430	81,059,616	76,285,657	69,506,780	66,584,830	67,866,483	67,895,860	69,168,992	58,662,860	51,831,149	106.22	-11.6	57.7
mgd equiv	184.00		177.30		152.99	163.14	166.12	156.33	142.44	136.45	139.08	139.14	141.75	120.22	106.22			

* Agencies receiving 100% of their supply from the SF RWS. ** Inclusive of Guadulupe Valley MID beginning in FY 2010-11. *** Inclusive of Bear Gulch, Mid-Peninsula, and South San Francisco districts.

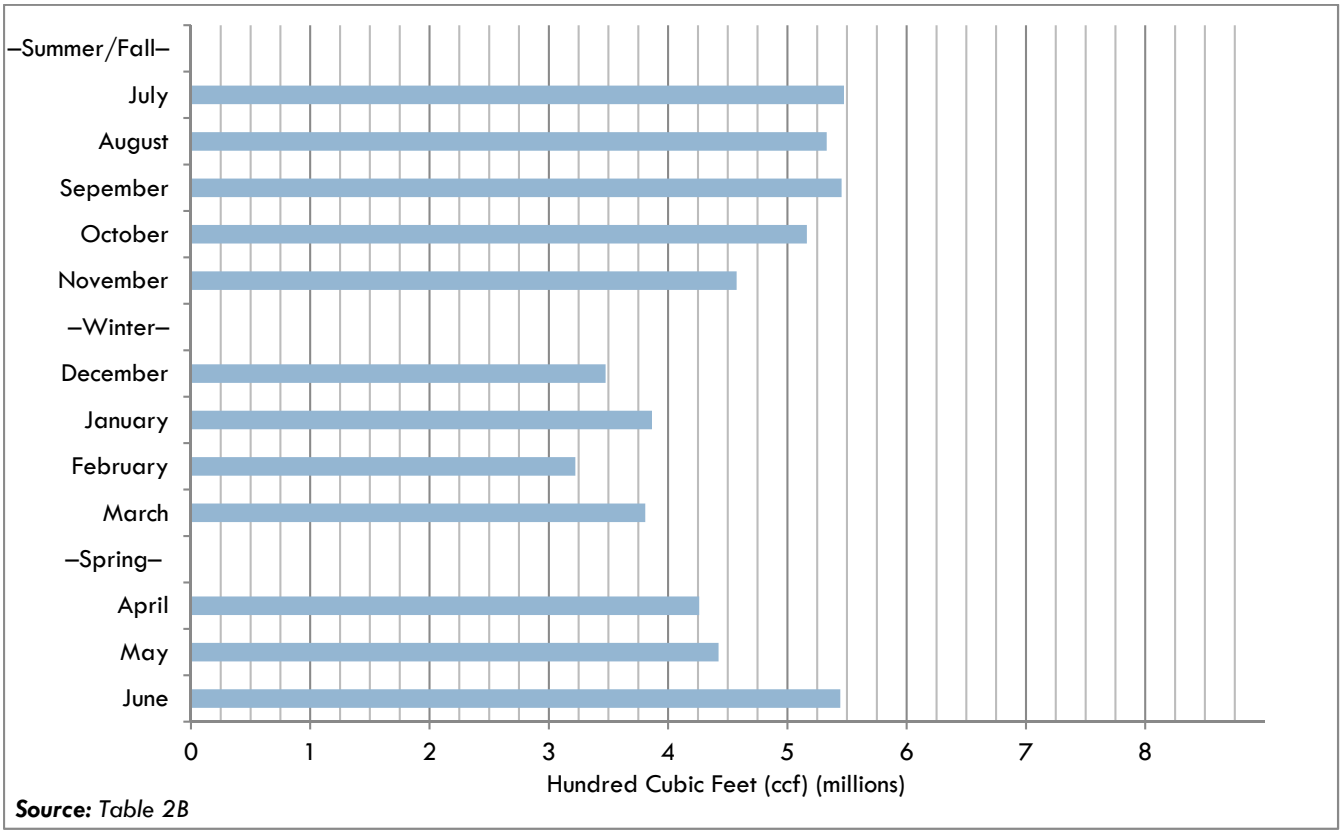
1 Hayward has a unique contract that does not place quantified limits on their purchases from SF RWS. For reporting purposes here, the "supply guarantee" shown for Hayward is their current year purchase (FY 2014-15). The "Residual" total is a calculated number to bring the total to 184 mgd.

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

Note: Beginning in 2002, Daly City, CWS-South San Francisco, and San Bruno began participating in a pilot conjunctive use program whereby surplus surface water was purchased in lieu of groundwater pumping. Additional surface water supplies are utilized in lieu of groundwater pumping when available. Values shown above exclude supplemental water purchases.

Source: *BAWSCA Annual Surveys*

Figure 2B: Monthly/Seasonal Purchases from SF RWS among BAWSCA Members – FY 2015-16



Source: *Table 2B*

Table 2B: Monthly/Seasonal Purchases from SF RWS Among BAWSCA Members – FY 2015-16 (in ccf)
SFPUC Commercial Division Records Data[1]

		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	199,808	163,600	175,980	147,110	147,123	**833,621**	118,548	131,335	207,386	531,013	**988,282**	535,613	286,739	279,874	**1,102,226**	2,924,129	5.99
	Brisbane	10,294	17,490	14,410	13,554	14,102	**69,850**	9,217	11,351	9,479	9,712	**39,759**	10,948	14,143	11,411	**36,502**	146,111	0.30
	Burlingame	142,006	151,298	143,900	133,582	132,198	**702,984**	96,730	116,764	89,114	103,766	**406,374**	115,454	120,608	149,032	**385,094**	1,494,452	3.06
*	CWS - Bear Gulch	485,553	521,560	491,200	477,731	311,376	**2,287,420**	199,227	192,575	146,899	122,402	**661,103**	195,396	248,868	443,450	**887,714**	3,836,237	7.86
	CWS - Mid Peninsula	560,905	488,087	506,088	472,264	468,090	**2,495,434**	367,725	369,149	309,747	359,260	**1,405,881**	392,310	420,176	523,834	**1,336,320**	5,237,635	10.73
*	CWS - South SF **2**	244,081	203,553	195,670	255,116	198,126	**1,096,546**	184,845	197,505	159,413	161,563	**703,326**	188,888	189,515	229,306	**607,709**	2,407,581	4.93
*	Coastside CWD	75,361	79,281	95,492	69,715	67,237	**387,086**	46,608	21,048	11,958	16,424	**96,038**	21,019	19,141	48,190	**88,350**	571,474	1.17
*	Daly City **2**	156,344	203,913	202,321	205,308	214,486	**982,372**	171,151	183,472	138,801	153,963	**647,387**	166,439	176,348	211,835	**554,622**	2,184,381	4.48
	East Palo Alto	63,517	67,903	60,586	66,763	53,531	**312,300**	48,958	53,037	48,413	49,176	**199,584**	59,207	54,650	64,981	**178,838**	690,722	1.42
	Estero MID	197,098	175,320	184,273	167,019	146,823	**870,533**	108,628	104,193	96,166	107,403	**416,390**	125,766	147,168	196,096	**469,030**	1,755,953	3.60
	Guadalupe Valley MID	10,317	9,267	10,474	10,226	9,360	**49,644**	6,547	7,064	6,237	6,844	**26,692**	7,250	8,934	10,437	**26,621**	102,957	0.21
	Hayward	604,915	477,831	730,532	521,419	438,860	**2,773,557**	464,979	418,410	384,068	434,072	**1,701,529**	433,166	454,194	617,170	**1,504,530**	5,979,616	12.25
	Hillsborough	126,177	121,473	130,925	114,709	96,302	**589,586**	50,649	40,145	33,594	41,563	**165,951**	52,492	77,209	133,372	**263,073**	1,018,610	2.09
	Menlo Park	129,258	115,102	108,802	115,449	77,735	**546,346**	62,339	58,350	56,333	59,955	**236,977**	80,412	92,219	116,393	**289,024**	1,072,347	2.20
	Mid-Peninsula WD	107,500	111,886	106,150	99,282	90,403	**515,221**	66,764	71,357	63,246	75,745	**277,112**	74,516	96,624	101,644	**272,784**	1,065,117	2.18
	Millbrae	86,309	91,705	86,883	77,145	77,729	**419,771**	64,649	69,432	55,863	62,450	**252,394**	69,452	69,680	88,488	**227,620**	899,785	1.84
*	Milpitas	204,777	231,432	197,967	212,434	216,096	**1,062,706**	150,298	172,429	140,533	143,833	**607,093**	159,208	167,876	202,766	**529,850**	2,199,649	4.51
*	Mountain View	320,238	367,542	328,286	332,338	311,925	**1,660,329**	205,845	235,731	181,095	210,099	**832,770**	235,410	258,583	298,075	**792,068**	3,285,167	6.73
*	North Coast CWD	105,477	70,204	78,069	78,504	70,946	**403,200**	75,559	51,247	63,704	73,349	**263,859**	76,092	83,734	95,786	**255,612**	922,671	1.89
	Palo Alto	443,787	402,135	410,143	388,423	310,287	**1,954,775**	223,850	270,719	230,700	246,669	**971,938**	317,192	340,393	421,786	**1,079,371**	4,006,084	8.21
	Purissima Hills WD	76,310	43,304	77,227	78,587	72,786	**348,214**	31,119	25,613	17,951	24,862	**99,545**	25,946	47,047	68,907	**141,900**	589,659	1.21
	Redwood City	345,673	347,146	341,737	331,104	294,140	**1,659,800**	147,924	305,131	209,920	251,408	**914,383**	252,414	320,720	337,571	**910,705**	3,484,888	7.14
*	San Bruno **2**	40,960	63,121	48,974	48,101	42,442	**243,598**	45,089	43,160	35,172	41,129	**164,550**	40,754	52,869	77,318	**170,941**	579,089	1.19
*	San Jose MWS-North	185,666	204,655	181,950	193,173	194,968	**960,412**	127,598	133,751	130,595	134,121	**526,065**	148,343	176,062	179,554	**503,959**	1,990,436	4.08
*	Santa Clara	110,541	111,739	89,380	88,902	93,364	**493,926**	88,703	102,449	83,668	89,622	**364,442**	97,495	97,413	94,231	**289,139**	1,147,507	2.35
*	Stanford University	69,961	76,601	65,827	76,653	49,677	**338,719**	42,943	35,890	39,658	44,623	**163,114**	52,855	54,068	70,638	**177,561**	679,394	1.39
*	Sunnyvale	333,405	366,651	345,460	354,707	347,438	**1,747,661**	241,788	397,894	246,700	230,436	**1,116,818**	293,361	320,156	338,234	**951,751**	3,816,230	7.82
	Westborough WD	37,971	44,979	45,688	33,038	26,399	**188,075**	27,091	45,083	25,251	22,455	**119,880**	32,166	27,676	32,192	**92,034**	399,989	0.82
	Totals	5,474,209	5,328,778	5,454,394	5,162,356	4,573,949	**25,993,686**	3,475,371	3,864,284	3,221,664	3,807,917	**14,369,236**	4,259,564	4,422,813	5,442,571	**14,124,948**	54,487,870	111.66

Seasonal Comparisons				Summer/Fall		Winter		Spring		Year	
				2005-06	43,420,410	2005-06	19,016,132	2005-06	17,818,603	80,255,145	164.47
				2006-07	43,945,621	2006-07	19,334,891	2006-07	22,498,624	85,779,136	175.79
				2007-08	41,833,467	2007-08	19,711,571	2007-08	23,073,285	84,618,323	173.41
				2008-09	42,129,812	2008-09	18,732,019	2008-09	19,172,178	80,034,009	164.01
				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
	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:	1991-92	30,326,000	1983-84	13,429,000	1990-91	13,464,000	1991-92	126.79

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

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

* Agency has other sources besides SF RWS.

Source: *SFPUC Commercial Division Records*

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

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

* 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
2014-14	0	0	0	0	0.00
2015-16	38,981	146,803	83,663	269,447	0.55

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 2015-16 Annual Survey*

3. Total Water Supply and Demand

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

Member	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	mgd
San Mateo County														
Brisbane / GVMID	192,518	175,335	191,963	200,437	182,661	179,743	123,803	275,934	280,650	287,290	302,776	280,029	257,414	0.53
Burlingame	2,335,235	2,205,818	2,121,360	2,209,757	2,195,474	2,086,616	1,920,815	2,117,999	2,158,682	2,099,365	2,148,019	1,937,939	1,652,167	3.39
CWS - Bear Gulch	6,612,291	5,783,871	5,925,540	6,673,025	6,867,205	6,413,044	5,762,738	5,794,705	6,004,849	6,116,162	6,259,793	5,267,634	4,194,432	8.60
CWS - Mid Peninsula	8,471,101	7,738,445	7,945,376	8,085,040	7,813,188	7,621,387	7,062,049	6,956,546	6,905,680	6,046,107	6,956,723	6,016,058	5,325,284	10.91
CWS - South SF	4,231,905	4,234,118	3,886,698	4,052,652	4,035,772	3,927,339	3,689,071	3,731,044	3,682,415	3,620,826	3,616,258	3,270,666	2,944,723	6.03
Coastside CWD	1,344,791	1,171,523	1,111,523	1,263,875	1,202,915	1,055,296	986,484	894,746	896,631	996,377	997,259	877,579	817,339	1.67
Cordilleras							Not BAWSCA Member							
Daly City	3,891,202	3,697,158	3,331,582	3,490,594	3,731,419	3,553,600	3,270,878	3,093,734	3,364,817	3,512,566	3,349,433	2,895,051	3,141,794	6.44
East Palo Alto	1,009,447	751,516	927,742	976,874	996,587	938,629	842,883	863,282	907,662	1,010,939	720,040	766,380	690,728	1.42
Estero MID	2,729,471	2,542,371	2,531,846	2,747,662	2,691,080	2,538,289	2,392,839	2,274,588	1,966,984	2,000,497	1,942,333	1,930,526	1,768,029	3.62
Guadalupe Valley MID	162,079	151,270	130,538	115,901	130,485	122,888	152,798			Included with Brisbane				
Hillsborough	1,736,371	1,657,074	1,936,854	1,630,593	1,665,884	1,786,177	1,893,039	1,743,929	1,470,409	1,609,532	1,599,812	1,226,777	1,050,944	2.15
Los Trancos	60,617						Included with CWS-Bear Gulch							
Menlo Park	1,943,081	1,713,701	1,688,803	1,735,075	1,857,088	1,628,275	1,556,801	1,533,788	1,621,745	1,584,636	1,729,399	1,287,136	1,074,516	2.20
Mid-Peninsula WD	1,710,726	1,602,472	1,434,648	1,652,208	1,583,791	1,533,876	1,390,831	1,404,933	1,437,360	1,453,047	1,408,109	1,209,300	1,076,654	2.21
Millbrae	1,260,900	1,191,005	1,291,729	1,194,450	1,199,327	1,179,720	1,101,551	1,087,971	1,046,254	1,125,147	1,146,741	1,003,049	899,785	1.84
North Coast CWD	1,755,460	1,652,192	1,579,110	1,538,215	1,582,423	1,632,364	1,471,838	1,585,572	1,380,360	1,192,485	1,392,872	1,364,900	914,081	1.87
Redwood City	5,961,864	5,436,566	5,315,929	5,701,245	5,823,781	5,091,014	4,891,124	4,734,338	4,719,085	5,057,308	4,730,885	4,099,699	3,790,431	7.77
San Bruno	1,985,804	1,171,626	1,868,846	1,821,102	1,908,564	1,877,662	1,780,704	1,771,040	1,770,007	1,752,095	1,747,722	1,529,900	1,519,903	3.11
Skyline	90,672	71,748	76,938	80,966	76,864				Included with CWS-Bear Gulch					
Westborough WD	493,973	531,903	459,831	532,529	457,299	485,493	394,878	408,487	440,796	441,233	433,980	377,034	390,753	0.80
Subtotal	47,979,509	43,479,713	43,756,856	45,702,200	46,001,808	43,651,411	40,685,124	40,272,636	40,054,386	39,905,612	40,482,154	35,339,657	31,508,977	64.57
mgd	98.33	89.10	89.67	93.66	94.27	89.46	83.38	82.53	82.08	81.78	82.96	72.42	64.57	
Santa Clara County														
Milpitas	5,812,917	5,320,838	5,400,800	5,505,034	5,548,937	5,470,765	4,878,858	4,835,475	4,937,407	4,975,000	4,908,500	4,462,023	4,030,280	8.26
Mountain View	5,994,040	5,730,268	5,750,554	6,116,445	5,774,334	5,547,956	5,080,734	5,025,675	5,232,110	5,234,742	5,263,373	4,435,583	3,854,816	7.90
Palo Alto	6,860,978	6,236,965	6,180,611	6,778,100	6,620,815	6,001,341	5,715,348	5,811,182	5,948,461	5,750,761	5,981,585	5,091,582	4,356,931	8.93
Purissima Hills WD	1,128,457	980,472	964,747	1,112,291	1,124,922	980,987	854,854	839,360	899,221	972,733	982,100	803,313	640,369	1.31
San Jose	2,658,255	2,360,722	2,362,632	2,569,248	2,674,031	2,437,246	2,187,918	2,239,892	2,356,648	2,354,211	2,676,663	2,521,675	2,391,807	4.90
Santa Clara	11,705,256	11,278,162	11,540,998	12,007,298	11,782,654	10,852,916	10,139,329	10,197,067	10,575,495	10,798,039	10,757,505	9,768,702	8,817,463	18.07
Stanford	1,718,295	1,571,164	1,446,902	1,576,978	1,722,672	1,573,920	1,545,411	1,558,914	1,604,702	1,624,555	1,553,272	1,396,374	1,073,556	2.20
Sunnyvale	11,140,997	10,609,500	10,673,793	10,887,010	10,695,118	10,369,022	9,354,936	9,132,594	8,465,724	9,453,326	8,994,820	7,795,081	7,208,816	14.77
Subtotal	47,019,195	44,088,091	44,321,037	46,552,404	45,943,483	43,234,153	39,757,387	39,640,158	40,019,768	41,163,367	41,117,818	36,274,333	32,374,038	66.34
mgd	96.36	90.35	90.83	95.40	94.15	88.60	81.48	81.24	82.01	84.36	84.26	74.34	66.34	
Alameda County														
Alameda CWD	24,636,132	22,450,662	23,112,968	24,048,399	23,829,489	22,126,618	20,665,490	20,921,497	21,108,246	21,209,862	20,274,011	16,751,709	15,804,948	32.39
Hayward	9,587,525	9,030,652	8,924,063	8,901,286	9,434,134	9,105,654	8,511,066	8,308,740	7,610,980	7,552,956	7,402,067	6,634,616	5,979,616	12.25
Subtotal	34,223,657	31,481,314	32,037,031	32,949,685	33,263,623	31,232,272	29,176,556	29,230,237	28,719,226	28,762,818	27,676,078	23,386,325	21,784,564	44.64
mgd	70.14	64.52	65.65	67.52	68.17	64.00	59.79	59.90	58.85	58.94	56.72	47.93	44.64	
Total	129,222,361	119,049,118	120,114,923	125,204,289	125,208,913	118,117,836	109,619,067	109,143,031	108,793,380	109,831,797	109,276,050	95,000,315	85,667,579	175.56
mgd	264.82	243.97	246.15	256.58	256.59	242.06	224.64	223.67	222.95	225.08	223.94	194.69	175.56	
% Change	3.7	-7.9	0.9	4.2	0.0	-5.7	-7.2	-0.4	-0.3	1.0	-0.5	-13.1	-9.8	

Note: Totals inclusive of supplemental purchases.

Source: *BAWSCA Annual Surveys*

Table 3B: Historical Total Water Use among BAWUA/BAWSCA Agencies*

1975-76 to Present

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

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

Source: *BAWUA/BAWSCA Annual Surveys*

Figure 3C: Water Use by Source of Supply – FY 2015-16

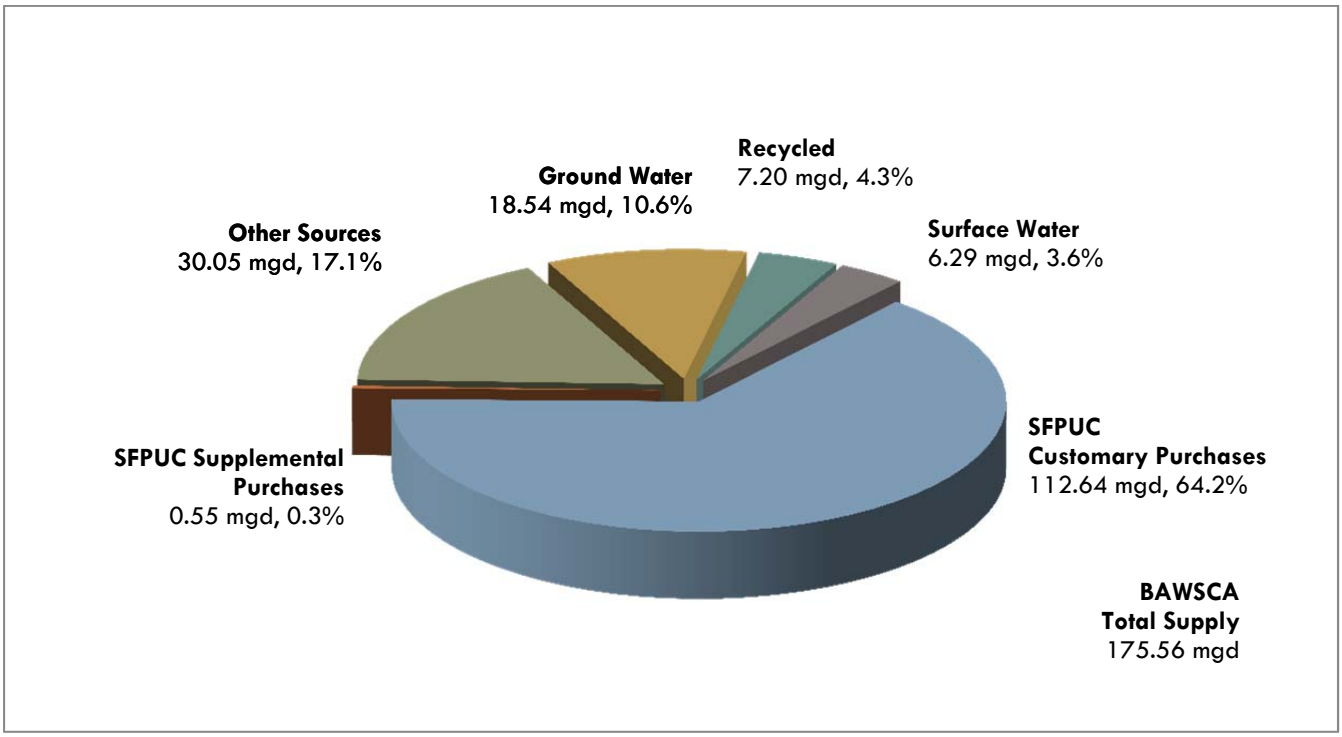


Figure 3D: Total Monthly Water Use for All BAWSCA Agencies – FY 2015-16

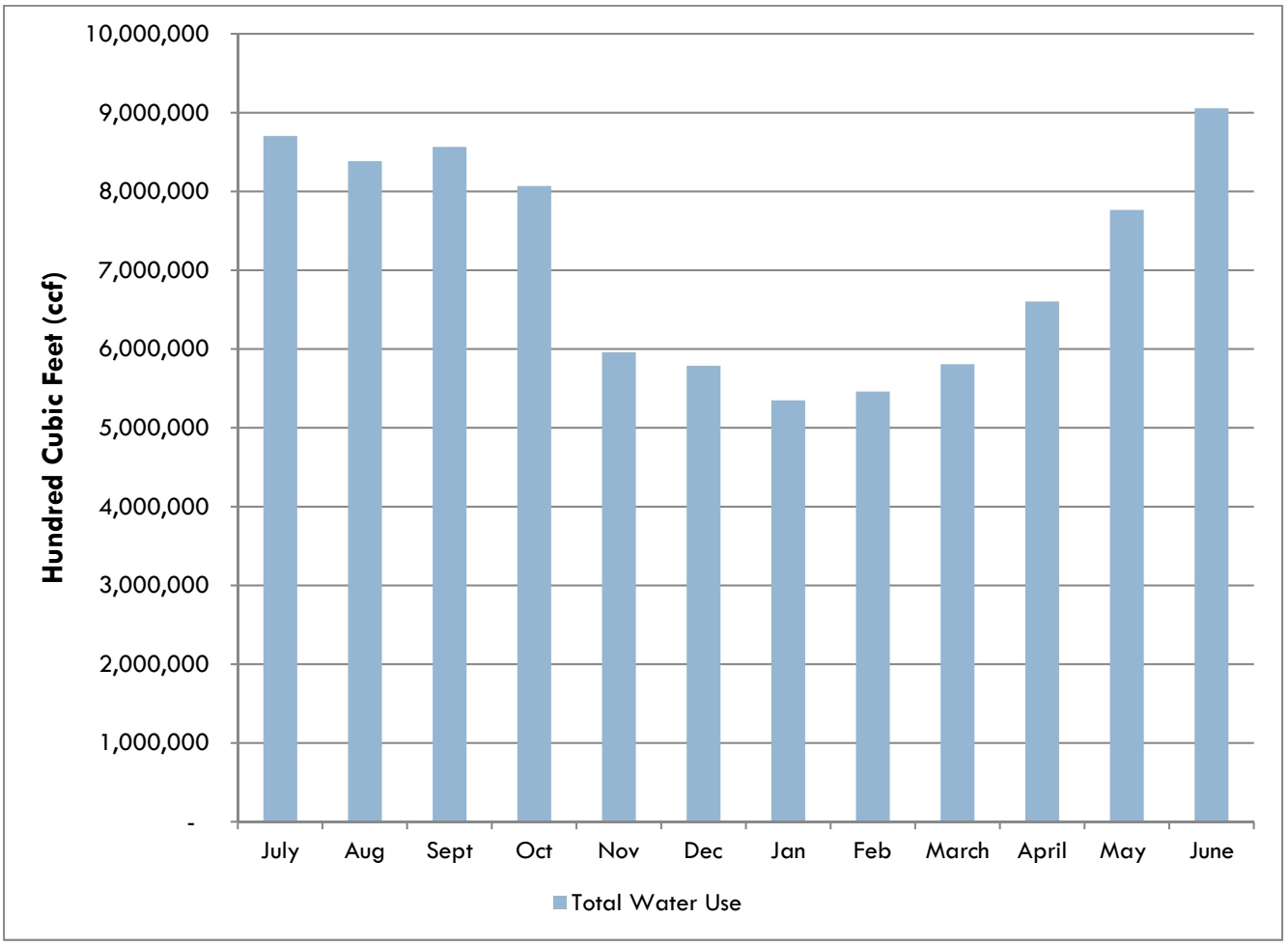


Table 3C: Water Use by Source of Supply – FY 2015-16 (in ccf)

	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	257,414	0	100.0%	0	0%	0	0%	0	0%	0	0.0%	257,414	0.53	0.30%
Burlingame	1,505,779	0	91.1%	0	0%	0	0%	146,388	9%	0	0%	1,652,167	3.39	1.93%
CWS - Bear Gulch	3,864,869	0	92.1%	0	0%	329,563	7.9%	0	0%	0	0.0%	4,194,432	8.60	4.90%
CWS - Mid Peninsula	5,325,284	0	100.0%	0	0%	0	0.0%	0	0%	0	0%	5,325,284	10.91	6.22%
CWS - South SF	2,394,025	38,981	81.3%	511,717	17.4%	0	0%	0	0%	0	0%	2,944,723	6.03	3.44%
Coastside CWD	575,225	0	70.4%	2,006	0.2%	240,108	29.4%	0	0%	0	0.0%	817,339	1.67	0.95%
Daly City	2,152,800 *	146,803	68.5%	750,309	23.9%	0	0%	91,882	2.9%	0	0.00%	3,141,794	6.44	3.67%
East Palo Alto	690,728	0	100.0%	0	0.00%	0	0%	0	0%	0	0%	690,728	1.42	0.81%
Estero MID	1,768,029	0	100.0%	0	0%	0	0%	0	0%	0	0%	1,768,029	3.62	2.06%
Hillsborough	1,050,944	0	100.0%	0	0%	0	0%	0	0%	0	0%	1,050,944	2.15	1.23%
Menlo Park	1,074,516	0	100.0%	0	0%	0	0%	0	0%	0	0.0%	1,074,516	2.20	1.25%
Mid-Peninsula WD	1,076,654	0	100.0%	0	0%	0	0%	0	0%	0	0%	1,076,654	2.21	1.26%
Millbrae	899,785	0	100.0%	0	0%	0	0%	0	0%	0	0%	899,785	1.84	1.05%
North Coast CWD	900,293	0	98.5%	0	0%	0	0%	13,788	2%	0	0%	914,081	1.87	1.07%
Redwood City	3,508,414	0	92.6%	0	0%	0	0%	282,017	7.4%	0	0%	3,790,431	7.77	4.42%
San Bruno	637,586	83,663	41.9%	777,032	51.1%	0	0%	0	0%	21,622	1.4% †	1,519,903	3.11	1.77%
Westborough WD	390,753	0	100.0%	0	0%	0	0%	0	0%	0	0%	390,753	0.80	0.46%
Subtotal	28,073,098	269,447	90.0%	2,041,064	6.5%	569,671	1.8%	534,075	1.69%	21,622	0.1%	31,508,977	64.57	36.78%
mgd equiv	57.53	0.55		4.18		1.17		1.09		0.04		64.57		
Santa Clara County														
Milpitas	2,215,396	0	55.0%	0	0%	0	0%	329,206	8.2%	1,485,678	36.9%	4,030,280	8.26	4.70%
Mountain View	3,305,780	0	85.8%	48,897	1.3%	0	0%	201,357	5%	298,782	7.8%	3,854,816	7.90	4.50%
Palo Alto	4,006,084	0	91.9%	0	0%	0	0%	350,847	8.1%	0	0%	4,356,931	8.93	5.09%
Purissima Hills WD	640,369	0	100.0%	0	0%	0	0%	0	0%	0	0%	640,369	1.31	0.75%
San Jose	1,997,596	0	83.5%	29,465	1.2%	0	0%	364,746	15.2%	0	0%	2,391,807	4.90	2.79%
Santa Clara	1,135,829	0	12.9%	4,291,577	48.7%	0	0%	1,488,319	16.9%	1,901,738	21.6%	8,817,463	18.07	10.29%
Stanford	679,394	0	63.3%	300,686	28.0%	93,476	8.7%	0	0%	0	0%	1,073,556	2.20	1.25%
Sunnyvale	3,894,246	0	54.0%	65,632	0.9%	0	0%	390,696	5.4%	2,858,242	39.6%	7,208,816	14.77	8.41%
Subtotal	17,874,694	0	55.2%	4,736,257	14.6%	93,476	0.3%	3,125,171	9.7%	6,544,440	20.2%	32,374,038	66.34	37.79%
mgd equiv	36.63	0.00		9.71		0.19		6.40		13.41		66.34		
Alameda County														
Alameda CWD	3,037,166	0	19.2%	2,267,514	14.3%	2,405,252	15.2%	0	0%	8,095,016	51.2%	15,804,948	32.39	18.4%
Hayward	5,979,616	0	100.0%	0	0%	0	0%	0	0%	0	0.0%	5,979,616	12.25	7.0%
Subtotal	9,016,782	0	41.4%	2,267,514	10.4%	2,405,252	11.0%	0	0%	8,095,016	37.2%	21,784,564	44.64	25.43%
mgd equiv	18.48	0.00		4.65		4.93				16.59		44.64		
Total	54,964,574	269,447	64.5%	9,044,835	10.6%	3,068,399	3.6%	3,659,246	4.3%	14,661,078	17.1%	85,667,579	175.56	100.0%
mgd equiv	112.64	0.55		18.54		6.29		7.50		30.05		175.56		

*The total recycled water noted here is the portion that actually replaces a potable supply.

† Purchase of SF RWS supply from NCCWD.

Source: *BAWSCA FY 2015-16 Annual Survey*

Table 3D: Total Monthly Water Use – FY 2015-16 (in ccf)

Member	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	Total	mgd
San Mateo County														
Brisbane / GVMID	26,757	24,884	23,780	23,462	15,764	18,415	15,716	16,556	18,198	23,077	21,848	28,957	257,414	0.53
Burlingame	157,297	160,141	152,291	147,473	118,290	119,061	114,773	110,296	120,298	129,703	158,110	164,434	1,652,167	3.39
CWS - Bear Gulch	496,817	506,945	481,924	437,896	242,960	188,794	176,444	186,659	198,063	295,772	431,656	550,502	4,194,432	8.60
CWS - Mid Peninsula	532,174	530,546	506,108	485,049	383,421	352,420	341,728	341,092	361,487	418,798	508,914	563,547	5,325,284	10.91
CWS - South SF	276,560	274,114	267,510	272,157	228,975	215,527	213,200	207,039	220,789	235,559	260,909	272,384	2,944,723	6.03
Coastside CWD	76,644	82,888	78,971	75,668	59,505	52,981	50,722	53,142	52,406	58,262	86,270	89,880	817,339	1.67
Daly City	276,196	271,141	276,353	275,658	249,880	261,415	234,122	250,100	256,610	257,885	256,916	275,518	3,141,794	6.44
East Palo Alto	63,517	67,903	60,586	66,769	53,531	48,958	53,037	48,413	49,176	59,207	54,650	64,981	690,728	1.42
Estero MID	175,320	184,273	167,019	146,823	108,628	104,193	96,166	107,403	125,766	147,168	196,096	209,174	1,768,029	3.62
Hillsborough	121,473	130,925	114,709	96,302	50,649	40,145	33,594	41,563	52,492	77,209	133,372	158,511	1,050,944	2.15
Menlo Park	129,565	115,760	109,267	115,897	78,026	62,339	58,350	56,333	59,955	80,412	92,219	116,393	1,074,516	2.20
Mid-Peninsula WD	105,639	106,832	105,459	98,345	77,733	70,423	69,741	71,345	71,219	82,916	101,955	115,047	1,076,654	2.21
Millbrae	86,309	91,705	86,883	77,145	77,729	64,649	69,432	55,863	62,450	69,452	69,680	88,488	899,785	1.84
North Coast CWD	68,654	81,071	76,804	72,667	75,084	52,680	63,664	73,335	75,817	82,897	93,326	98,082	914,081	1.87
Redwood City	387,677	385,111	372,404	325,726	160,522	308,243	211,271	258,613	257,533	340,994	369,241	413,096	3,790,431	7.77
San Bruno	156,159	139,214	136,384	135,425	106,307	125,103	106,642	111,358	113,723	119,816	142,219	127,553	1,519,903	3.11
Westborough WD	44,979	45,688	33,038	26,399	27,091	45,083	25,251	22,455	32,166	27,676	32,192	28,735	390,753	0.80
Subtotal	3,181,737	3,199,141	3,049,490	2,878,861	2,114,095	2,130,429	1,933,853	2,011,565	2,128,148	2,506,803	3,009,573	3,365,282	31,508,977	64.57
% of Annual Use	10%	10%	10%	9%	7%	7%	6%	6%	7%	8%	10%	11%		
Santa Clara County														
Milpitas	428,624	361,008	421,992	372,591	338,607	296,347	275,102	251,617	290,107	286,816	342,627	364,842	4,030,280	8.26
Mountain View	440,499	378,611	375,983	361,269	238,634	258,514	199,878	239,483	265,169	305,516	365,662	425,598	3,854,816	7.90
Palo Alto	478,270	437,103	442,790	418,309	332,261	245,638	291,976	253,775	270,091	346,143	377,084	463,491	4,356,931	8.93
Purissima Hills WD	85,151	77,227	78,587	72,786	31,119	25,613	17,951	24,862	25,946	47,047	68,907	85,173	640,369	1.31
San Jose	218,377	185,843	286,511	302,990	135,207	148,940	181,654	146,237	151,171	178,374	217,711	238,792	2,391,807	4.90
Santa Clara	883,690	908,021	863,636	908,021	596,791	644,652	497,995	612,177	586,799	655,201	730,933	929,546	8,817,463	18.07
Stanford	133,092	127,621	121,436	126,608	77,766	53,891	42,116	46,311	55,478	72,807	84,707	131,723	1,073,556	2.20
Sunnyvale	722,922	694,109	695,765	682,763	489,200	458,659	424,873	450,205	501,152	603,870	692,237	793,061	7,208,816	14.77
Subtotal	3,390,625	3,169,543	3,286,700	3,245,337	2,239,585	2,132,254	1,931,545	2,024,667	2,145,913	2,495,774	2,879,868	3,432,226	32,374,038	66.34
% of Annual Use	10%	10%	10%	10%	7%	7%	6%	6%	7%	8%	9%	11%		
Alameda County														
Alameda CWD	1,540,375	1,552,273	1,511,897	1,436,497	1,159,091	1,092,781	1,077,139	1,052,674	1,113,102	1,181,150	1,434,091	1,653,878	15,804,948	32.39
Hayward	604,915	477,831	730,532	521,419	458,860	444,979	418,410	384,068	434,072	433,166	454,194	617,170	5,979,616	12.25
Subtotal	2,145,290	2,030,104	2,242,429	1,957,916	1,617,951	1,537,760	1,495,549	1,436,742	1,547,174	1,614,316	1,888,285	2,271,048	21,784,564	44.64
% of Annual Use	10%	9%	10%	9%	7%	7%	7%	7%	7%	7%	9%	10%		
Total	8,717,652	8,398,788	8,578,619	8,082,115	5,971,631	5,800,444	5,360,947	5,472,974	5,821,235	6,616,894	7,777,725	9,068,555	85,667,579	175.56
% of Annual Use	10%	10%	10%	9%	7%	7%	6%	6%	7%	8%	9%	11%		

Note: Totals inclusive of supplemental purchases.

Source: *BAWSCA FY 2015-16 Annual Survey*

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

Purchases from SF RWS

Member	FY 2020-21	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41
San Mateo County					
Brisbane / GVMID	0.78	0.95	0.95	0.95	0.95
Burlingame	4.79	4.91	5.04	5.19	5.23
CWS - Bear Gulch	11.70	11.71	11.82	11.95	12.10
CWS - Mid-Peninsula	15.44	15.46	15.61	15.83	16.12
CWS - South SF	6.27	6.29	6.36	6.46	6.58
CWS Total	33.42	33.46	33.79	34.24	34.79
Coastside CWD	1.30	1.30	1.30	1.30	1.30
Daly City	4.30	4.30	4.30	4.30	4.30
East Palo Alto	3.00	4.00	4.00	4.00	4.00
Estero MID	4.22	4.21	4.18	4.19	4.20
Hillsborough	3.09	3.05	3.02	3.00	2.99
Menlo Park	3.67	3.84	4.02	4.22	4.42
Mid-Peninsula WD	3.18	3.22	3.23	3.27	3.30
Millbrae	2.60	2.70	2.70	2.80	3.00
North Coast CWD	3.20	3.20	3.20	3.20	3.20
Redwood City	9.97	10.25	10.36	10.54	10.79
San Bruno	2.38	2.69	3.03	3.25	3.25
Westborough WD	0.83	0.82	0.80	0.80	0.80
Subtotal	80.73	82.91	83.92	85.25	86.52
Santa Clara County					
Milpitas	5.00	6.07	7.15	8.21	9.27
Mountain View	8.52	8.67	8.90	9.16	9.47
Palo Alto	10.60	10.20	9.90	9.70	9.50
Purissima Hills WD	1.78	1.75	1.72	1.71	1.71
San Jose	4.50	4.50	4.50	4.50	4.50
Santa Clara	4.50	4.50	4.50	4.50	4.50
Stanford	2.00	2.15	2.29	2.44	2.59
Sunnyvale	9.93	10.95	10.95	10.95	10.95
Subtotal	46.83	48.79	49.91	51.17	52.49
Alameda County					
Alameda CWD	7.68	8.90	9.64	9.89	10.06
Hayward	21.51	22.79	23.56	24.16	25.37
Subtotal	29.19	31.69	33.20	34.05	35.43
Total	156.74	163.39	167.03	170.47	174.44
Total w/o SJ & SC	147.74	154.39	158.03	161.47	165.44

Source: *BAWSCA FY 2015-16 Annual Survey*

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

Groundwater Production

Member	FY 2020-21	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41
San Mateo County					
CWS - South SF	1.37	1.37	1.37	1.37	1.37
Coastside CWD	0.01	0.01	0.01	0.01	0.01
Daly City	3.40	3.40	3.40	3.40	3.40
East Palo Alto	0.10	0.20	0.20	0.20	0.20
San Bruno	1.50	1.50	1.50	1.67	2.02
Subtotal	6.38	6.48	6.48	6.65	7.00
Santa Clara County					
Milpitas	0.60	0.73	2.15	2.46	2.78
Mountain View	0.51	0.51	0.52	0.54	0.55
San Jose	0.85	1.71	2.61	3.56	4.55
Santa Clara	9.10	9.60	9.60	9.90	10.40
Sunnyvale	0.40	0.30	0.30	0.30	0.30
Subtotal	11.46	12.85	15.18	16.76	18.58
Alameda County					
Alameda CWD	7.13	8.02	8.07	7.97	7.91
Total	24.97	27.35	29.73	31.38	33.49

Source: *BAWSCA FY 2015-16 Annual Survey*

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

Surface Water Production

Member	FY 2020-21	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41
San Mateo County					
CWS - Bear Gulch **1**	1.13	1.13	1.13	1.13	1.13
Coastside CWD **2**	0.50	0.50	0.50	0.50	0.50
Subtotal	1.63	1.63	1.63	1.63	1.63
Alameda County					
Alameda CWD **3**	5.82	5.92	5.96	5.98	5.99
Total	7.45	7.55	7.59	7.61	7.62

1 Bear Gulch
2 Pilarcitos/Crystal Springs
3 Del Valle Reservoir

Source: *BAWSCA FY 2015-16 Annual Survey*

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

Recycled Water

Member	FY 2020-21	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41
San Mateo County					
Burlingame	0.30	0.30	0.30	0.30	0.30
Daly City	2.80	6.40	6.40	6.40	6.40
Millbrae	0.01	0.01	0.01	0.01	0.01
North Coast CWD	0.20	0.20	0.20	0.20	0.20
Redwood City	0.80	0.96	1.12	1.28	1.44
Subtotal	4.11	7.87	8.03	8.19	8.35
Santa Clara County					
Milpitas	1.03	1.78	1.97	2.21	2.40
Mountain View	0.89	0.97	0.97	0.97	0.97
Palo Alto	0.80	0.80	0.80	0.80	0.80
San Jose	1.04	1.20	1.38	1.56	1.76
Santa Clara	4.60	4.60	4.60	4.60	4.60
Sunnyvale	1.30	1.40	1.50	1.50	1.50
Subtotal	9.66	10.75	11.22	11.64	12.03
Alameda County					
Hayward	2.74	2.74	2.74	2.74	2.74
Total	16.51	21.36	21.99	22.56	23.12

Source: *BAWSCA FY 2015-16 Annual Survey*

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

Other Sources

Member	FY 2020-21	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41
Santa Clara County					
Milpitas **1**	4.40	5.34	5.01	5.75	6.49
Mountain View **1**	1.07	1.07	1.07	1.07	1.07
Santa Clara **1**	4.08	4.08	4.08	4.08	4.7
Stanford 2	1.27	1.29	1.32	1.35	1.38
Sunnyvale **1**	8.93	9.84	11.36	11.36	11.36
Subtotal	19.75	21.62	22.84	23.61	25.00
Alameda County					
Alameda CWD **3**	21.50	23.16	23.85	24.09	24.33
Total	41.25	44.78	46.69	47.70	49.33

1 Purchases from SCVWD

2 Non-potable surface water and groundwater

3 Purchases from State Water Project and desalination

Source: *BAWSCA FY 2015-16 Annual Survey*

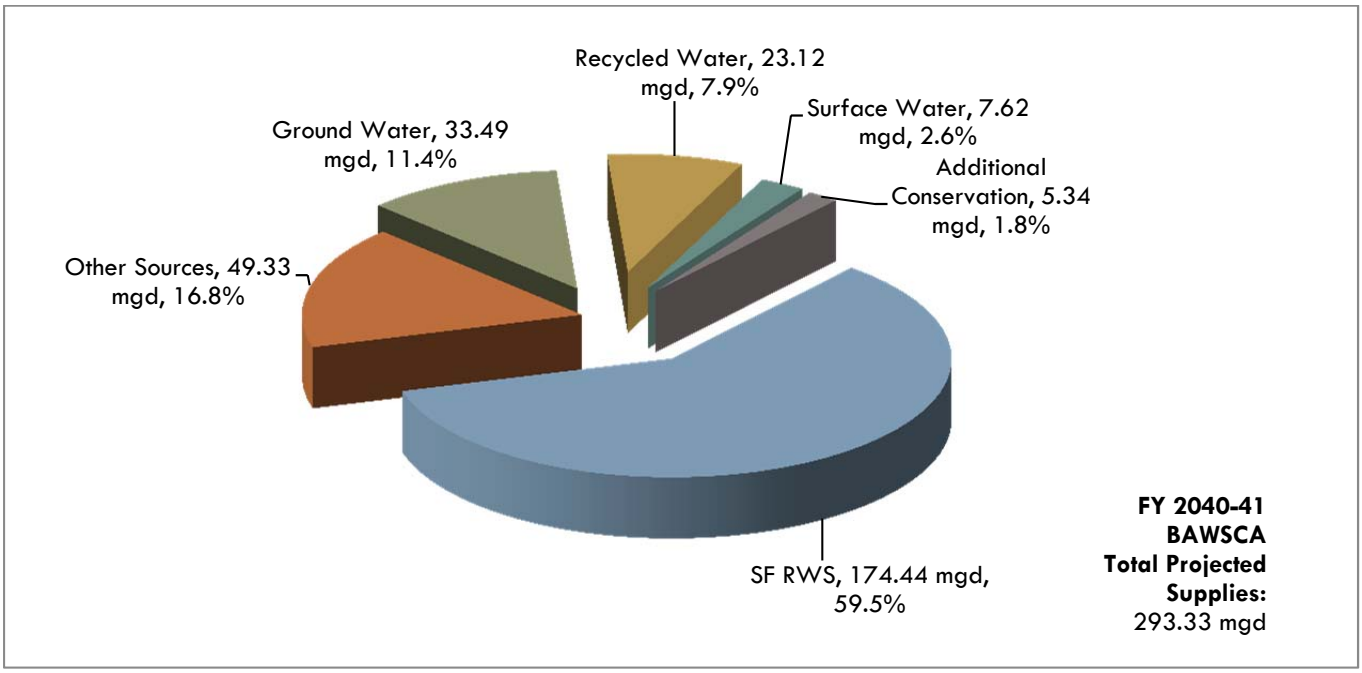
Table 3E-6: Demand Projections by Source (in mgd)

Summary

Source	FY 2020-21	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41
SF RWS	156.74	163.39	167.03	170.47	174.44
Groundwater	24.97	27.35	29.73	31.38	33.49
Surface Water	7.45	7.55	7.59	7.61	7.62
Recycled	16.51	21.36	21.99	22.56	23.12
Other	41.25	44.78	46.69	47.70	49.33
Additional Conservation	3.47	4.31	4.68	5.06	5.34
Total	250.38	268.73	277.69	284.78	293.33

Source: *BAWSCA FY 2015-16 Annual Surveys*

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



4. Current Water Use by Customer Class

Figure 4A: Water Use by Customer Class – FY 2015-16

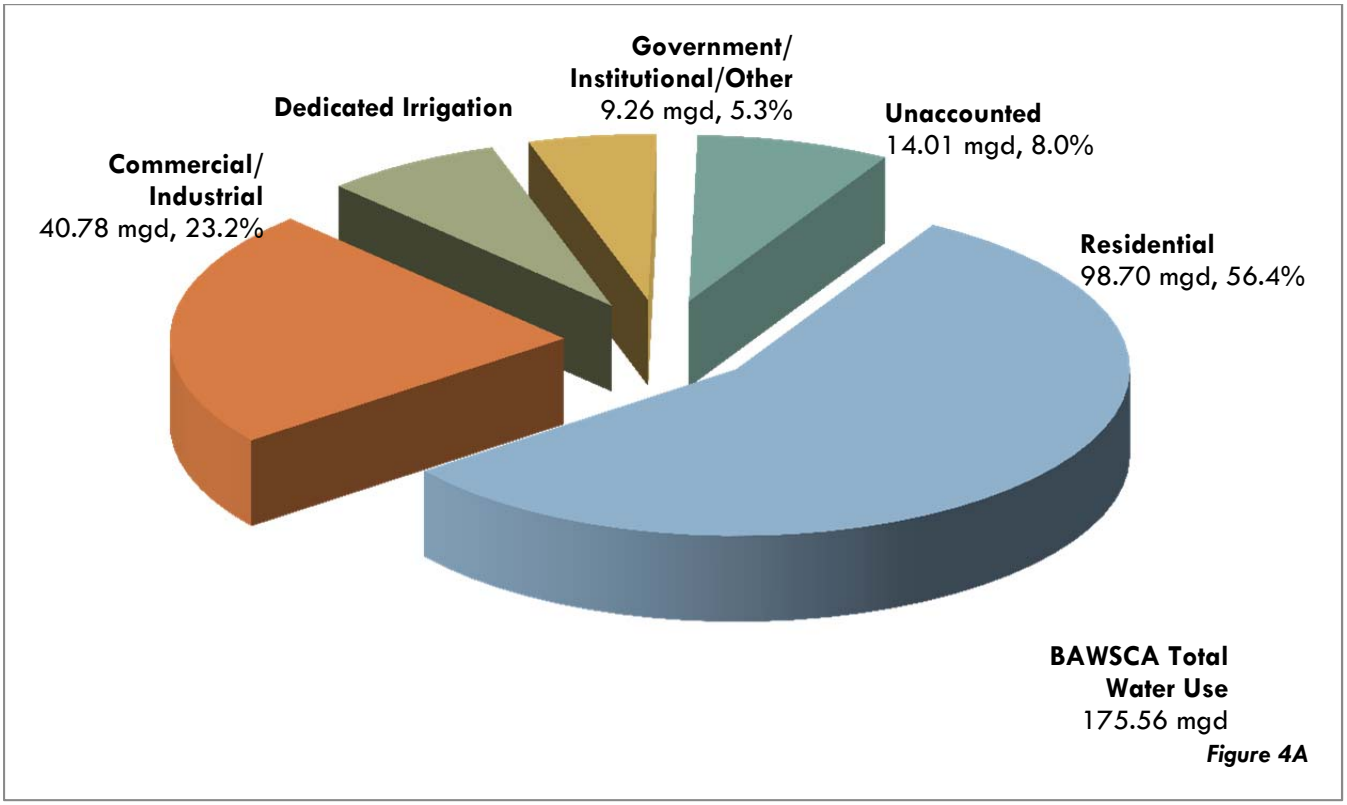


Figure 4B: Water Use by Sector for BAWSCA Agencies – FY 2015-16

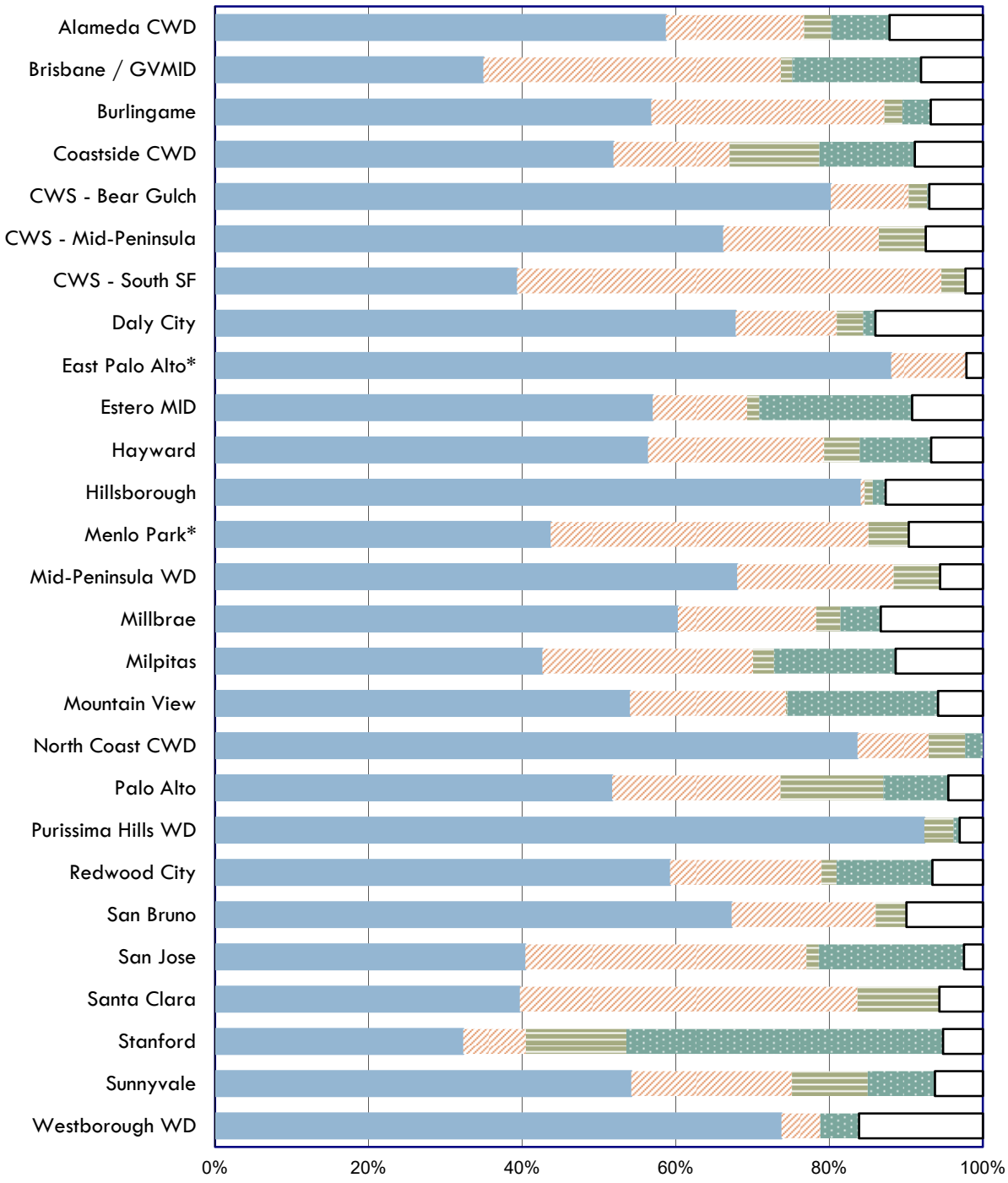


Figure 4B

Table 4A: Water Use by Customer Class – FY 2015-16 (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†	Unaccounted		mgd
San Mateo County												
Brisbane / GVMID	74,160	15,780	**89,940**	99,719	0	**99,719**	3,825	**103,544**	43,195	20,735	**257,414**	**0.53**
Burlingame	566,212	289,230	**855,442**	244,116	213,150	**457,266**	35,083	**492,349**	55,755	248,621	**1,652,167**	**3.39**
CWS - Bear Gulch	3,255,563	107,586	**3,363,149**	425,390	628	**426,018**	101,350	**527,368**	10,648	293,267	**4,194,432**	**8.60**
CWS - Mid-Peninsula	2,733,873	789,374	**3,523,247**	1,059,736	20,479	**1,080,215**	324,881	**1,405,096**	0	396,941	**5,325,284**	**10.91**
CWS - South SF	1,010,991	146,915	**1,157,906**	1,349,549	277,884	**1,627,433**	92,474	**1,719,907**	0	66,910	**2,944,723**	**6.03**
Coastside CWD	384,416	39,582	**423,998**	123,773	0	**123,773**	95,609	**219,382**	101,460	72,499	**817,339**	**1.67**
Daly City	1,419,385	710,580	**2,129,965**	414,045	184	**414,229**	107,583	**521,812**	49,839	440,178	**3,141,794**	**6.44**
East Palo Alto*	615,001	0	**615,001**	67,549	0	**67,549**	58	**67,607**	0	8,120	**690,728**	**1.42**
Estero MID	391,472	616,190	**1,007,662**	181,215	36,309	**217,524**	27,954	**245,478**	351,772	163,117	**1,768,029**	**3.62**
Hillsborough	883,507	0	**883,507**	5,637	0	**5,637**	10,992	**16,629**	17,607	133,201	**1,050,944**	**2.15**
Menlo Park	349,623	119,933	**469,556**	212,147	232,846	**444,993**	55,167	**500,160**	1,011	103,789	**1,074,516**	**2.20**
Mid-Peninsula WD	548,056	184,001	**732,057**	192,792	26,765	**219,557**	64,982	**284,539**	0	60,058	**1,076,654**	**2.21**
Millbrae	393,854	148,539	**542,393**	162,215	0	**162,215**	28,293	**190,508**	47,125	119,759	**899,785**	**1.84**
North Coast CWD	669,810	158,312	**828,122**	91,672	0	**91,672**	47,161	**138,833**	22,785	-75,659	**914,081**	**1.87**
Redwood City	1,555,405	690,550	**2,245,955**	686,959	61,339	**748,298**	73,591	**821,889**	473,004	249,583	**3,790,431**	**7.77**
San Bruno*	1,022,388	0	**1,022,388**	285,374	0	**285,374**	60,761	**346,135**	0	151,380	**1,519,903**	**3.11**
Westborough	251,348	36,928	**288,276**	19,729	0	**19,729**	0	**19,729**	19,690	63,058	**390,753**	**0.80**
Subtotal	16,125,064	4,053,500	**20,178,564**	5,621,617	869,584	**6,491,201**	1,129,764	**7,620,965**	1,193,891	2,515,557	**31,508,977**	**64.57**
mgd equiv	33.05	8.31	**41.35**	11.52	1.78	**13.30**	2.32	**15.62**	2.45	5.16	**64.57**	
Santa Clara County												
Milpitas	1,049,972	668,319	**1,718,291**	548,191	557,899	**1,106,090**	109,428	**1,215,518**	637,919	458,552	**4,030,280**	**8.26**
Mountain View	877,829	1,205,123	**2,082,952**	617,985	165,066	**783,051**	7,066	**790,117**	756,193	225,554	**3,854,816**	**7.90**
Palo Alto	1,634,366	618,947	**2,253,313**	818,348	136,613	**954,961**	583,581	**1,538,542**	368,711	196,365	**4,356,931**	**8.93**
Purissima Hills WD	591,604	0	**591,604**	0	0	**0**	24,255	**24,255**	5,061	19,449	**640,369**	**1.31**
San Jose**	99,212	831,352	**930,564**	138,857	736,650	**875,508**	38,774	**914,281**	456,091	90,871	**2,391,807**	**4.90**
Santa Clara	1,678,222	1,822,098	**3,500,320**	2,738,122	1,138,338	**3,876,460**	941,284	**4,817,744**	0	499,399	**8,817,463**	**18.07**
Stanford	132,788	214,270	**347,058**	497	87,001	**87,498**	140,481	**227,979**	442,795	55,724	**1,073,556**	**2.20**
Sunnyvale	2,051,609	1,855,631	**3,907,240**	1,508,808	0	**1,508,808**	712,423	**2,221,230**	629,772	450,574	**7,208,816**	**14.77**
Subtotal	8,115,602	7,215,740	**15,331,342**	6,370,808	2,821,567	**9,192,375**	2,557,292	**11,749,667**	3,296,542	1,996,487	**32,374,038**	**66.34**
mgd equiv	16.63	14.79	**31.42**	13.06	5.78	**18.84**	5.24	**24.08**	6.76	4.09	**66.34**	
Alameda County												
Alameda CWD	6,269,376	3,009,333	**9,278,709**	1,924,848	921,402	**2,846,250**	553,225	**3,399,475**	1,203,688	1,923,076	**15,804,948**	**32.39**
Hayward	2,105,871	1,266,297	**3,372,168**	506,219	865,092	**1,371,311**	277,018	**1,648,329**	556,161	402,958	**5,979,616**	**12.25**
Subtotal	8,375,247	4,275,630	**12,650,877**	2,431,067	1,786,494	**4,217,561**	830,243	**5,047,804**	1,759,849	2,326,034	**21,784,564**	**44.64**
mgd equiv	17.16	8.76	**25.93**	4.98	3.66	**8.64**	1.70	**10.34**	3.61	4.77	**44.64**	
Total	32,615,913	15,544,870	**48,160,783**	14,423,492	5,477,645	**19,901,137**	4,517,299	**24,418,436**	6,250,282	6,838,078	**85,667,579**	**175.56**
mgd equiv	66.84	31.86	**98.70**	29.56	11.23	**40.78**	9.26	**50.04**	12.81	14.01	**175.56**	

* Single family amount includes multi-family

† Dedicated Irrigation refers to separately metered irrigation usage

** Consumption by customer class estimated using percentage of use for each customer class from FY 2014-15 Annual Survey.

Source: *BAWSCA FY 2015-16 Annual Survey*

Table 4B: Number of Customer Accounts – FY 2015-16

	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	1,522	116	**1,638**	282	0	**282**	0	**282**	86	**2,006**
Burlingame	6,840	740	**7,580**	610	262	**872**	542	**1,414**	200	**9,194**
CWS - Bear Gulch	16,967	157	**17,124**	1,289	1	**1,290**	142	**1,432**	8	**18,564**
CWS - Mid-Peninsula	31,222	732	**31,954**	3,348	93	**3,441**	368	**3,809**	0	**35,763**
CWS - SSF	13,963	170	**14,133**	1,882	54	**1,936**	239	**2,175**	0	**16,308**
Coastside CWD	5,799	132	**5,931**	318	0	**318**	1,121	**1,439**	77	**7,447**
Daly City	18,789	2,876	**21,665**	731	5	**736**	577	**1,313**	121	**23,099**
East Palo Alto	5,500	0	**5,500**	400	85	**485**	190	**675**	0	**6,175**
Estero MID	4,536	2,602	**7,138**	183	56	**239**	244	**483**	527	**8,148**
Hillsborough	4,182	0	**4,182**	13	0	**13**	15	**28**	57	**4,267**
Menlo Park	3,394	212	**3,606**	172	246	**418**	65	**483**	135	**4,224**
Mid-Peninsula WD	7,145	204	**7,349**	482	52	**534**	97	**631**	7,980	**15,960**
Millbrae	5,739	276	**6,015**	296	0	**296**	138	**434**	95	**6,544**
North Coast CWD	11,156	304	**11,460**	345	0	**345**	99	**444**	89	**11,993**
Redwood City	19,134	1,675	**20,809**	1,447	49	**1,496**	815	**2,311**	423	**23,543**
San Bruno	9,535	1,098	**10,633**	623	3	**626**	132	**758**	128	**11,519**
Westborough WD	3,730	14	**3,744**	46	0	**46**	0	**46**	92	**3,882**
Subtotal	169,153	11,308	**180,461**	12,467	906	**13,373**	4,784	**18,157**	10,018	**208,636**
Santa Clara County										
Milpitas	12,391	1,862	**14,253**	605	327	**932**	631	**1,563**	779	**16,595**
Mountain View	12,400	2,495	**14,895**	1,423	585	**2,008**	33	**2,041**	1,031	**17,967**
Palo Alto	15,116	1,927	**17,043**	1,514	82	**1,596**	967	**2,563**	388	**19,994**
Purissima Hills WD	2,070	0	**2,070**	0	0	**0**	121	**121**	10	**2,201**
San Jose	1,147	209	**1,356**	129	243	**372**	56	**428**	354	**2,138**
Santa Clara	17,296	4,876	**22,172**	2,654	368	**3,022**	522	**3,544**	0	**25,716**
Stanford	Not Applicable									
Sunnyvale	23,731	1,770	**25,501**	3,128	0	**3,128**	191	**3,319**	880	**29,700**
Subtotal	84,151	13,139	**97,290**	9,453	1,605	**11,058**	2,521	**13,579**	3,442	**114,311**
Alameda County										
Alameda CWD	72,307	2,747	**75,054**	3,885	1,186	**5,071**	1,044	**6,115**	2,383	**83,552**
Hayward	28,513	1,431	**29,944**	1,866	1,752	**3,618**	437	**4,055**	1,344	**35,343**
Subtotal	100,820	4,178	**104,998**	5,751	2,938	**8,689**	1,481	**10,170**	3,727	**118,895**
Total	354,124	28,625	**382,749**	27,671	5,449	**33,120**	8,786	**41,906**	17,187	**441,842**

*Individually metered homes, townhouses, and condos

† Dedicated Irrigation refers to separately metered irrigation usage

Source: *BAWSCA FY 2015-16 Annual Survey*

5. Climatological Data

Table 5A: Climatological Data

Rainfall				
	Precipitation (Inches)			
	Redwood City*	**San Jose**	**Newark**	**SF Airport**
Historical Avg (1906-2016)				
	19.2	14.6	14.3	19.9
Recent Past				
FY 2011-12	15.5	7.1	8.5	13.3
FY 2012-13	13.9	9.4	12.2	12.9
FY 2013-14	6.6	6.3	6.9	8.8
FY 2014-15	12.9	13.7	14.6	17.0
FY 2015-16	19.6	14.9	13.1	17.3
FY 2015-16 Deviation from Historical Avg				
	0.5	0.4	-1.3	-2.7
Temperature				
	Average Maximum Temperature (Degrees F)			
	Redwood City*	**San Jose**	**Newark**	**SF Airport**
Historical Avg (1948-2016)				
Annual	71.0	70.8	68.2	65.2
Summer**	81.5	81.2	77.0	72.3
Recent Past				
2011-12 Annual	70.6	71.3	68.5	65.0
Summer**	79.8	80.9	76.7	71.3
2012-13 Annual	70.9	71.4	68.2	65.4
Summer**	78.1	79.1	74.9	69.1
2013-14 Annual	72.1	72.2	69.7	67.8
Summer**	79.5	79.4	75.9	72.0
2014-15 Annual	72.9	72.1	70.5	69.0
Summer**	81.3	79.6	77.5	74.9
2015-16 Annual	72.2	67.6	70.5	69.0
Summer**	82.5	75.3	77.5	74.9
FY 2015-16 Deviation From Historical Avg				
Annual	1.2	-3.2	2.3	3.8
Summer**	1.0	-5.8	0.5	2.6

*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

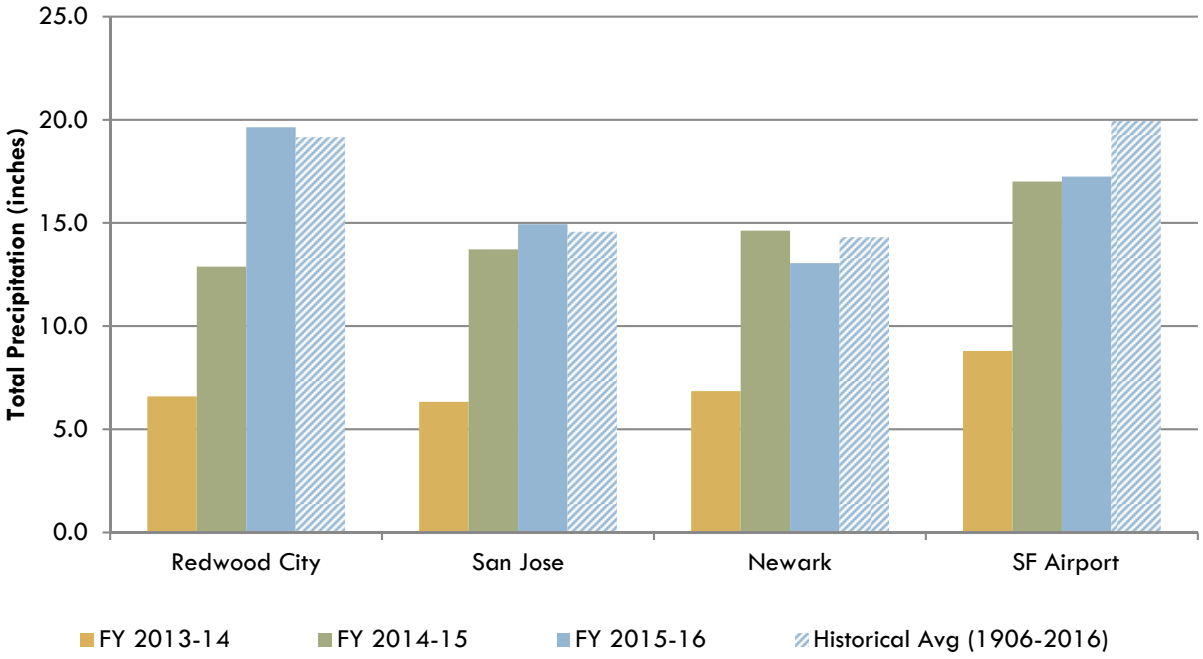


Figure 5A

Figure 5B: Average Maximum Daily Temperature

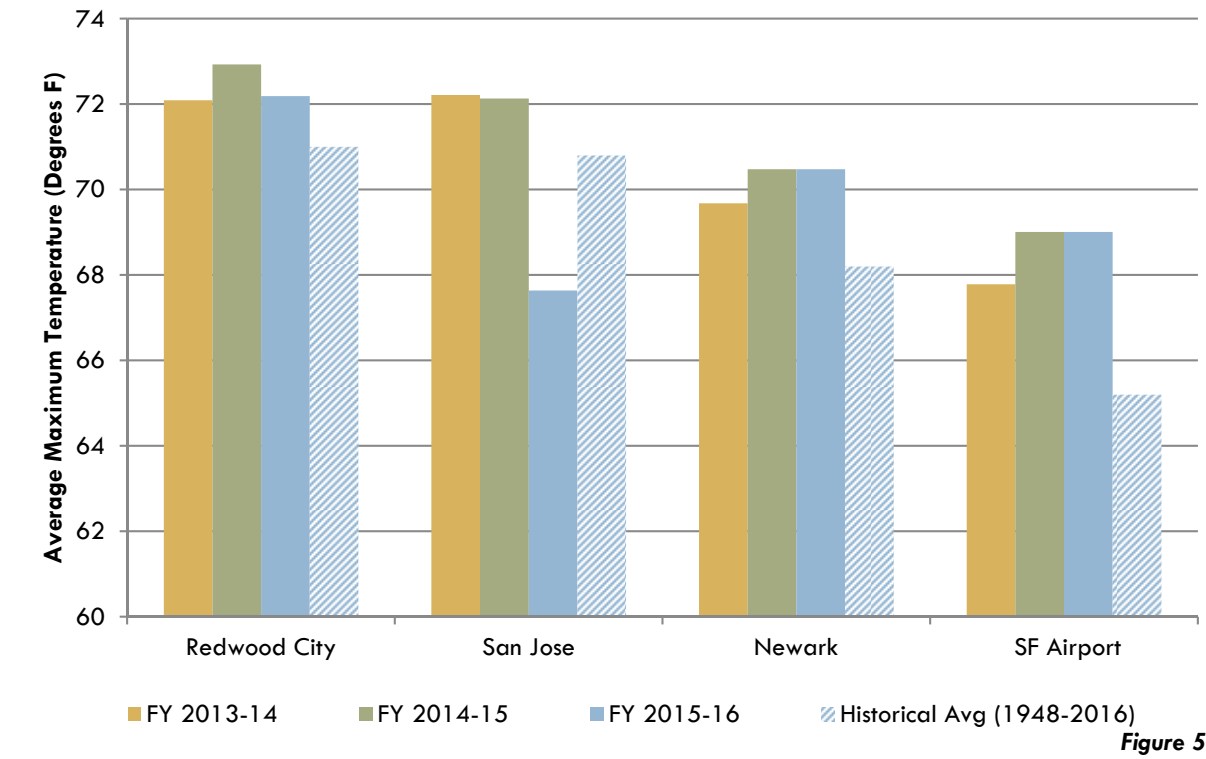


Figure 5B

6. Service Area Populations

Table 6: BAWSCA Service Area Populations

												Projections				
	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2020-21	FY 2025-26	FY 2030-31	FY 2035-36	FY 2040-41
San Mateo County																
Brisbane/GVMID	3,159	3,159	3,159	3,159	3,993	4,282	4,282	4,282	4,282	4,282	4,562	4,509	4,632	4,761	4,906	5,056
Burlingame	28,000	28,100	28,100	28,867	30,493	30,282	30,282	30,282	30,282	32,993	31,109	32,793	34,477	36,162	37,846	39,530
CWS - Bear Gulch	55,820	55,501	55,501	57,078	55,810	57,254	57,845	58,098	58,352	59,883	59,883	61,202	62,555	63,944	65,369	66,831
CWS - Mid-Peninsula	123,890	124,279	124,279	123,260	120,350	126,850	128,445	128,037	129,037	133,679	133,679	139,645	146,132	153,190	160,871	169,235
CWS - South SF	56,900	57,370	57,370	56,210	56,010	58,658	58,815	59,567	60,172	61,223	61,223	63,430	65,732	68,133	70,639	73,254
Coastside CWD	17,372	17,923	18,887	19,221	20,216	20,216	17,094	16,900	16,652	16,668	16,704	16,848	16,873	16,886	18,363	19,840
Daly City	104,661	106,160	106,361	107,099	107,773	101,920	102,043	102,820	104,462	108,510	109,139	109,685	110,223	110,784	111,338	111,895
East Palo Alto	25,696	29,690	29,690	29,690	29,690	26,181	25,215	25,927	25,927	29,143	24,424	25,935	27,215	28,589	30,062	31,646
Estero MID	34,385	34,385	36,000	36,100	36,100	36,100	36,100	36,567	37,000	37,088	37,165	38,035	38,661	39,079	39,440	39,840
Guadalupe Valley	438	438	438	438	Included with Brisbane											
Hillsborough	10,965	10,965	10,825	10,844	11,982	10,825	10,825	10,850	10,860	10,869	10,869	10,913	10,956	11,000	11,000	11,000
Los Trancos	Included with CWS - Bear Gulch															
Menlo Park	10,213	10,261	10,308	14,139	14,139	14,198	14,198	14,198	16,066	15,342	16,066	18,224	21,214	24,204	27,194	30,184
Mid-Peninsula WD	26,050	26,050	26,050	26,050	26,130	26,130	26,270	26,270	26,270	26,730	26,924	27,560	28,259	28,793	29,438	30,203
Millbrae	20,718	20,718	21,387	21,387	21,387	21,532	21,532	21,532	21,532	21,532	22,848	24,192	25,571	27,076	28,657	30,294
North Coast CWD	40,000	40,000	40,000	40,000	40,401	40,000	40,000	39,000	39,000	40,000	40,000	40,600	41,400	42,000	42,400	42,600
Redwood City	83,492	83,895	83,895	83,895	85,098	84,557	86,647	86,647	86,427	87,059	87,023	90,518	93,765	97,128	100,614	104,247
San Bruno	40,165	40,165	40,165	40,165	41,114	41,114	41,420	41,114	43,798	43,798	44,409	48,600	51,200	53,400	55,800	58,200
Skyline	1,812	1,812	1,658	Included with CWS - Bear Gulch												
Westborough WD	12,000	12,000	12,000	12,000	12,690	13,300	13,259	13,259	13,259	13,260	14,050	14,060	14,040	14,020	14,020	14,020
Subtotal	695,736	702,871	706,073	709,602	713,376	713,399	714,272	715,350	723,378	742,060	740,077	766,749	792,905	819,149	847,957	877,875
Santa Clara County																
Milpitas	64,998	64,998	69,419	70,817	70,817	66,790	67,804	67,894	69,783	70,800	75,521	82,300	90,400	98,100	106,000	109,100
Mountain View	72,033	73,262	73,932	74,762	75,787	75,275	73,774	73,656	75,280	76,413	75,430	79,010	82,590	86,170	89,750	93,330
Palo Alto	62,148	62,148	63,467	63,400	65,408	64,403	64,538	66,368	66,642	66,152	68,020	70,500	73,700	77,100	80,800	84,600
Purissima Hills WD	6,000	6,050	6,050	6,050	6,060	6,118	6,120	6,127	6,142	6,140	6,150	6,165	6,180	6,195	6,220	6,240
San Jose*	12,400	13,600	14,800	16,900	14,645	14,624	14,658	15,178	15,286	15,948	9,059	20,785	32,712	45,536	59,059	73,167
Santa Clara	110,771	114,238	114,238	117,200	118,830	118,830	118,263	119,311	118,459	120,973	120,973	131,732	136,660	141,587	146,917	152,247
Stanford	27,715	27,715	29,026	27,397	27,491	28,218	28,792	29,401	29,635	30,486	30,943	32,605	34,652	36,817	39,111	41,133
Sunnyvale	133,544	133,721	133,721	137,538	138,826	141,099	142,896	145,973	147,055	148,028	148,372	154,646	161,264	167,882	174,500	174,500
Subtotal	489,609	495,732	504,653	514,064	517,864	515,357	516,845	523,908	528,282	534,940	534,468	577,743	618,158	659,387	702,357	734,317
Alameda County																
Alameda CWD	324,800	327,652	330,786	331,293	332,000	327,000	331,000	336,000	340,000	344,000	348,000	355,000	369,000	384,000	400,000	416,000
Hayward	146,398	147,845	149,205	150,878	153,104	146,000	147,113	148,756	151,037	152,889	158,985	157,655	164,617	171,979	179,916	188,170
Subtotal	471,198	475,497	479,991	482,171	485,104	473,000	478,113	484,756	491,037	496,889	506,985	512,655	533,617	555,979	579,916	604,170
Total	1,656,543	1,674,100	1,690,717	1,705,837	1,716,344	1,701,756	1,709,230	1,724,014	1,742,697	1,773,889	1,781,530	1,857,147	1,944,680	2,034,515	2,130,230	2,216,362

*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.

Source: *BAWSCA Annual Surveys*

7. Current Water Use Per Capita

Figure 7A-1: Residential Per Capita Consumption - FY 2015-16 (in gpcd)

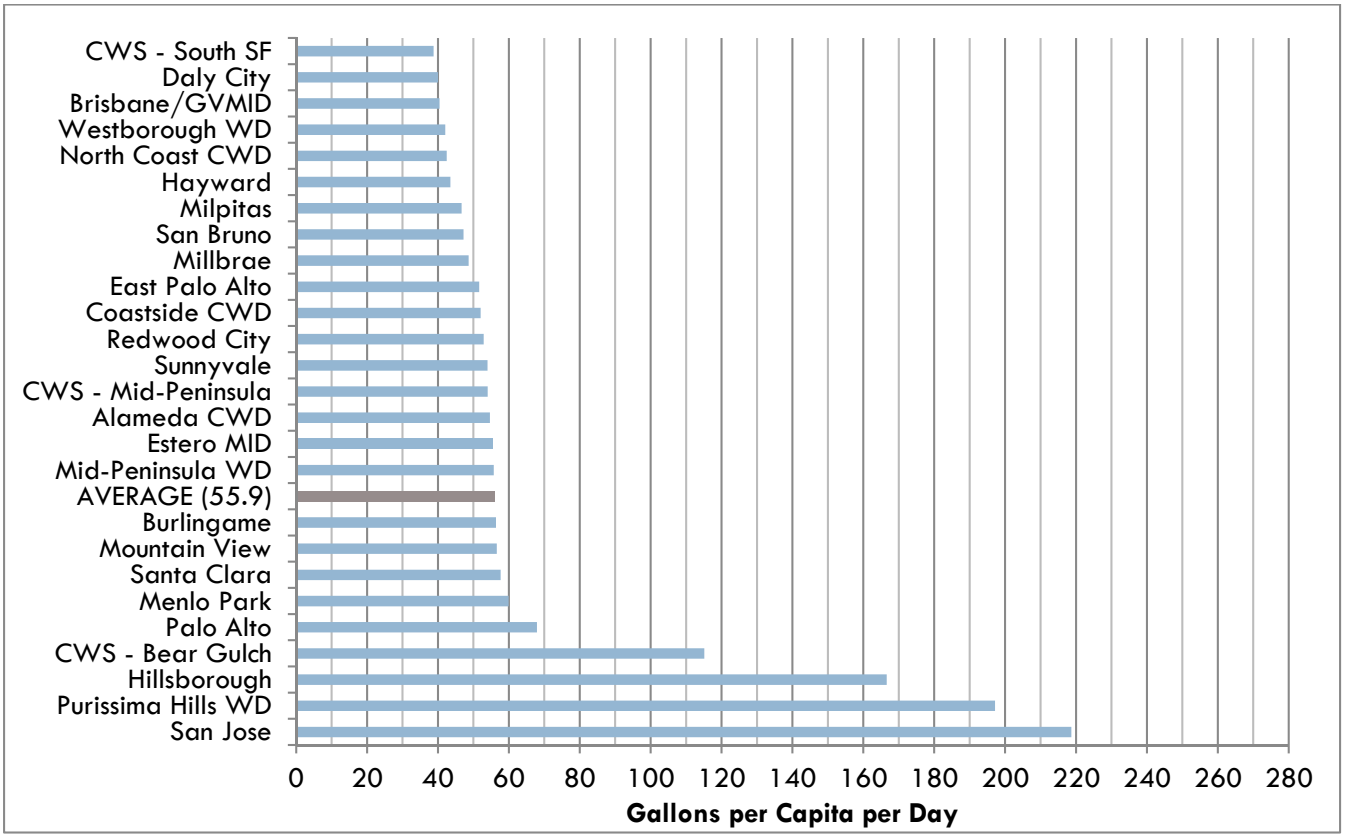


Figure 7A-2: Residential Per Capita Consumption (in gpcd) Distributed by Percentage of Population- FY 2015-16

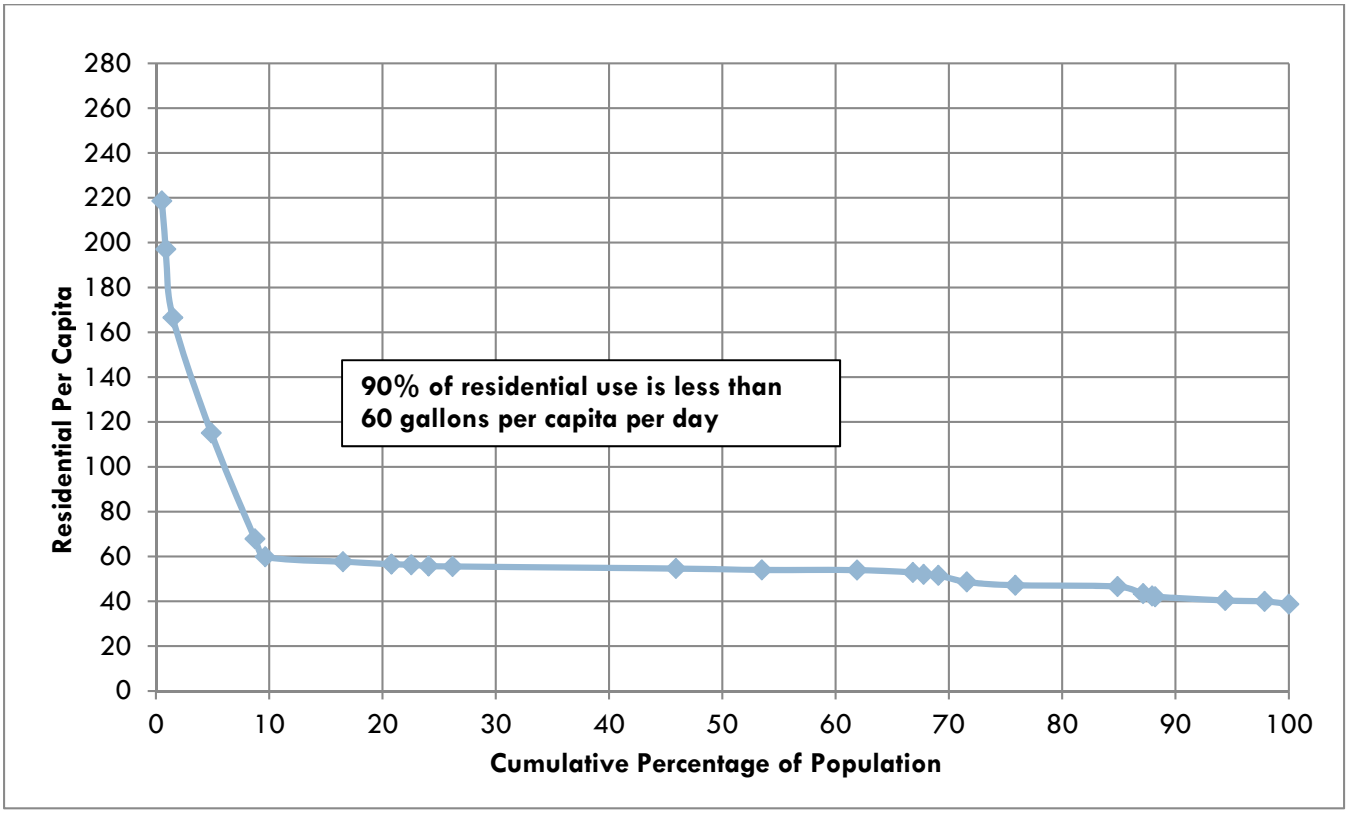


Figure 7B: Gross Per Capita Consumption(in gpcd) – FY 2015-16

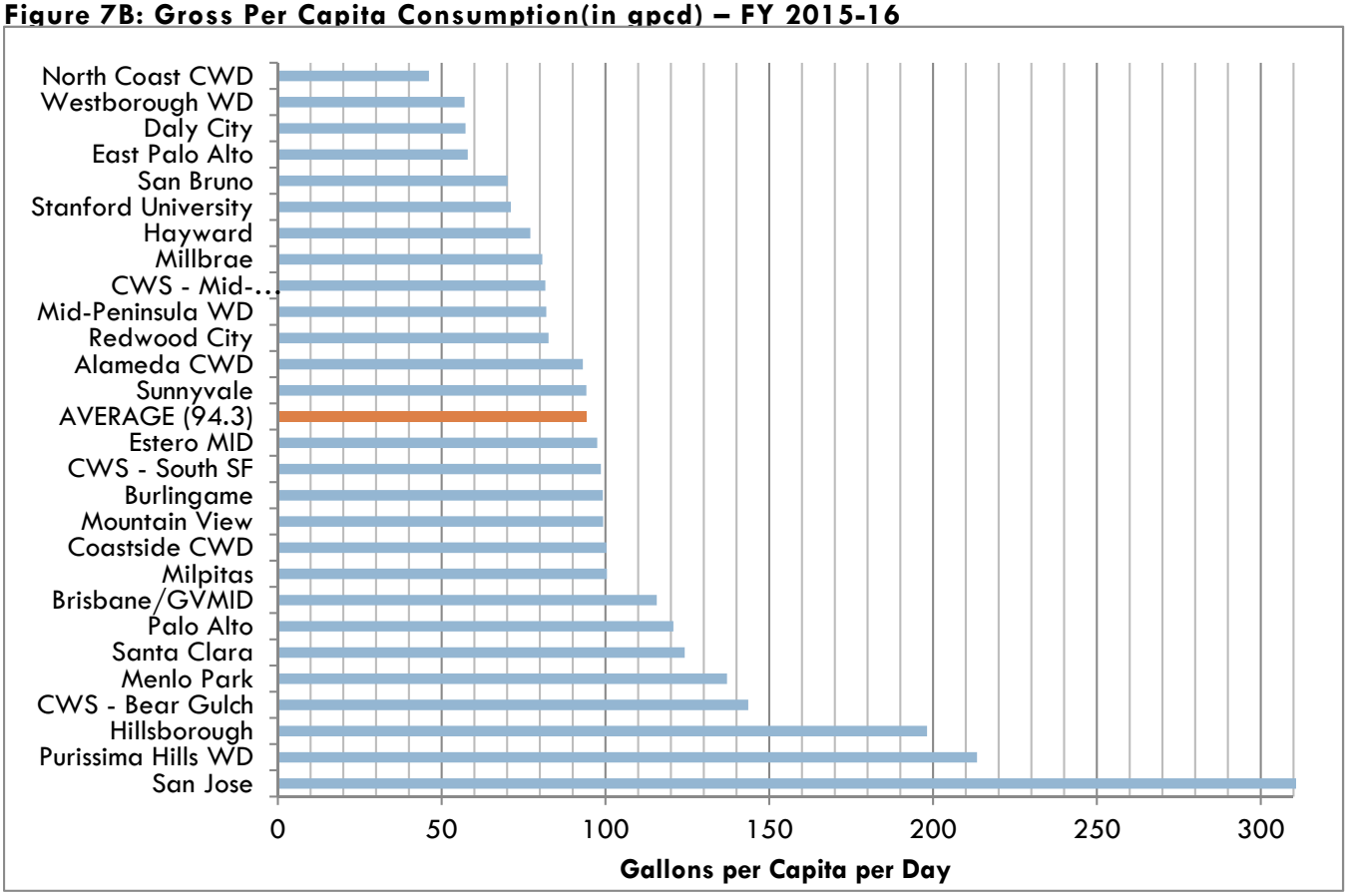


Figure 7C: Historical BAWSCA/BAWUA Per Capita Consumption (in gpcd) - 1975-96 to Present

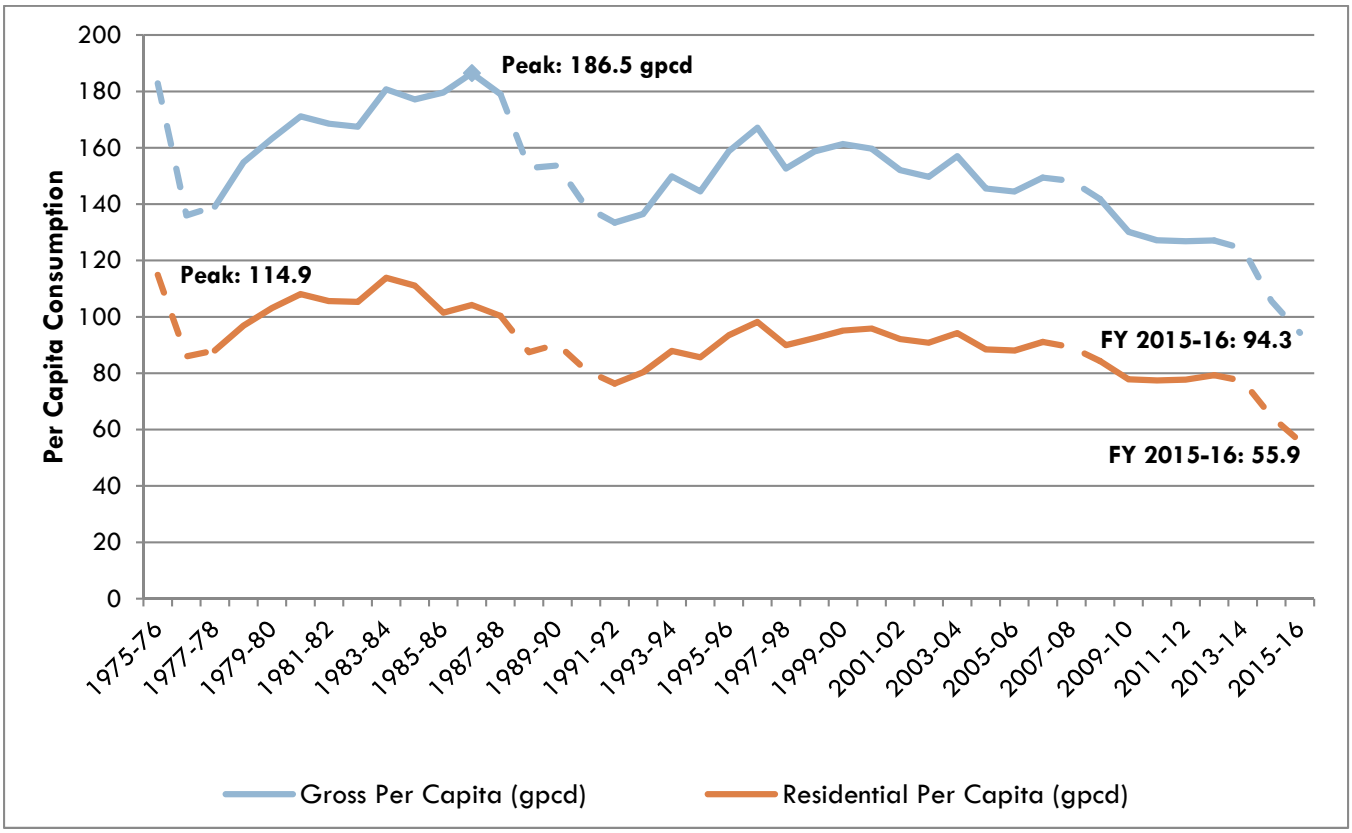


Table 7A: Residential Per Capita Consumption and Single-Family Average Monthly Use Among BAWSCA Members - FY 2015-16

Member	Service Area Population	Residential Consumption* (ccf)	*Residential Per Capita Consumption (gpcd)	**Single-Family Average Monthly Use (ccf)
CWS - South SF	61,223	1,157,906	38.8	6.0
Daly City	109,139	2,129,965	40.0	6.3
Brisbane/GVMID	4,562	89,940	40.4	4.1
Westborough WD	14,050	288,276	42.1	5.6
North Coast CWD	40,000	828,122	42.4	5.0
Hayward	158,985	3,372,168	43.5	6.2
Milpitas	75,521	1,718,291	46.6	7.1
San Bruno	44,409	1,022,388	47.2	8.9
Millbrae	22,848	542,393	48.7	5.7
East Palo Alto	24,424	615,001	51.6	9.3
Coastside CWD	16,704	423,998	52.0	5.5
Redwood City	87,023	2,245,955	52.9	6.8
Sunnyvale	148,372	3,907,240	54.0	7.2
CWS - Mid-Peninsula	133,679	3,523,247	54.0	7.3
Alameda CWD	348,000	9,278,709	54.6	7.2
Estero MID	37,165	1,007,662	55.6	7.2
Mid-Peninsula WD	26,924	732,057	55.7	6.4
Burlingame	31,109	855,442	56.4	6.9
Mountain View	75,430	2,082,952	56.6	5.9
Santa Clara	120,973	3,404,123	57.7	8.1
Menlo Park	16,066	469,556	59.9	8.6
Palo Alto	68,020	2,253,313	67.9	9.0
CWS - Bear Gulch	59,883	3,363,149	115.1	16.0
Hillsborough	10,869	883,507	166.6	17.6
Purissima Hills WD	6,150	591,604	197.1	23.8
San Jose	9,059	966,478	218.7	7.4
Average Residential Per Capita Consumption			55.9	
Average Single Family Monthly Use				8.3

*Includes multi-family and single family accounts. Excludes recycled water.

**Individually metered single family homes, townhouses, and condos.

***East Palo Alto reports multi-family with single family use.

Notes: Due to its unique service area, Stanford is excluded.

Source: *BAWSCA FY 2015-16 Annual Survey*

Table 7B: Gross Per Capita Consumption and Single-Family Average Monthly Use Among BAWSCA Members - FY 2015-16

Member	Service Area Population	*Total Consumption (ccf)	Gross Per Capita Consumption (gpcpd)
North Coast CWD	40,000	900,293	46.1
Westborough WD	14,050	390,753	57.0
Daly City	109,139	3,049,912	57.3
East Palo Alto	24,424	690,728	58.0
San Bruno	44,409	1,519,903	70.1
Stanford University	30,943	1,073,556	71.1
Hayward	158,985	5,979,616	77.1
Millbrae	22,848	899,785	80.7
CWS - Mid-Peninsula	133,679	5,325,284	81.6
Mid-Peninsula WD	26,924	1,076,654	81.9
Redwood City	87,023	3,508,414	82.6
Alameda CWD	348,000	15,804,948	93.1
Sunnyvale	148,372	6,818,120	94.2
Estero MID	37,165	1,768,029	97.5
CWS - South SF	61,223	2,944,723	98.6
Burlingame	31,109	1,505,779	99.2
Mountain View	75,430	3,653,459	99.3
Coastside CWD	16,704	817,339	100.3
Milpitas	75,521	3,701,074	100.4
Brisbane/GVMID	4,562	257,414	115.6
Palo Alto	68,020	4,006,084	120.7
Santa Clara	120,973	7,329,144	124.2
Menlo Park	16,066	1,074,516	137.1
CWS - Bear Gulch	59,883	4,194,432	143.5
Hillsborough	10,869	1,050,944	198.2
Purissima Hills WD	6,150	640,369	213.4
San Jose**	9,059	2,027,061	458.6
Totals	1,781,530	82,008,333	
		Average gpcpd	94.3
		Median of Agencies	97.5

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

**Service area predominantly commercial/industrial.

Source: *BAWSCA FY 2015-16 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

*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 2015-16

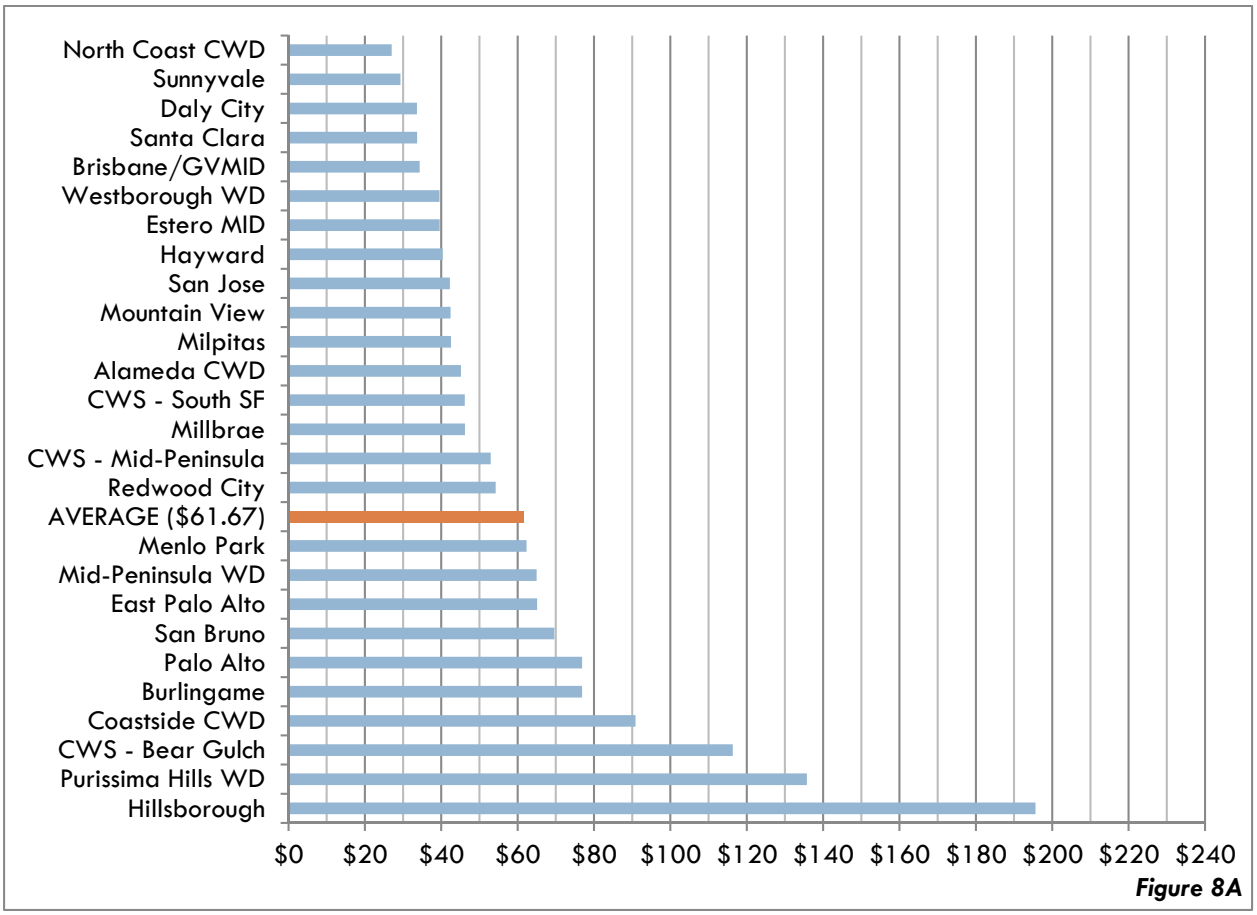


Figure 8A

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

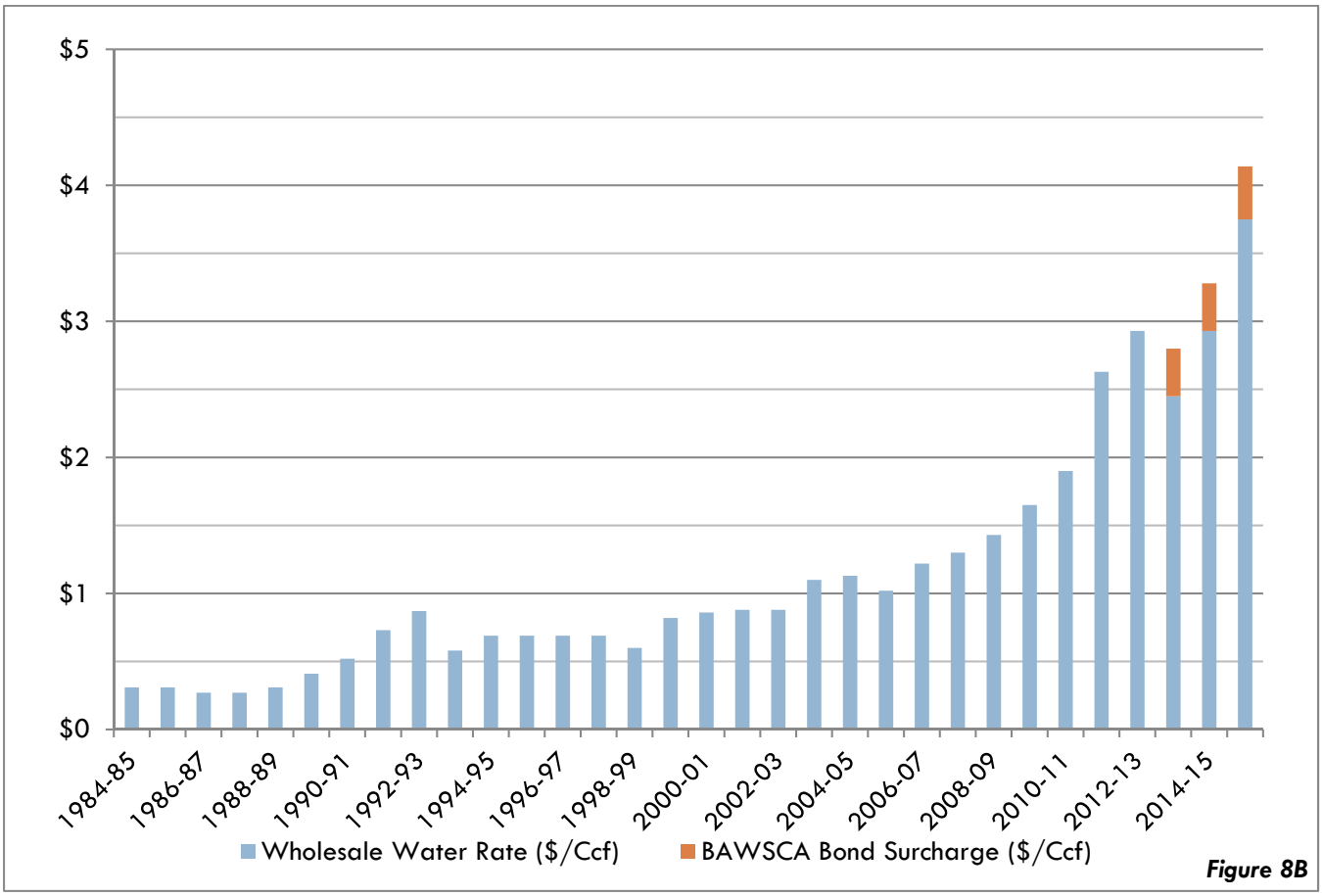


Figure 8B

Table 8A: Single Family Water Bills* Based on Average Monthly Use for FY 2015-16, Using Rates in Effect for FY 2015-16

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
North Coast CWD		5.0	$27.00
Sunnyvale	7.2		$29.28
Daly City	6.3		$33.62
Santa Clara	8.1		$33.64
Brisbane/GVMID	4.1		$34.33
Westborough WD		5.6	$39.54
Estero MID		7.2	$39.55
Hayward	6.2		$40.36
San Jose	7.2		$42.25
Mountain View	5.9		$42.42
Milpitas	7.1		$42.54
Alameda CWD		7.2	$45.14
CWS - South SF		6.0	$46.16
Millbrae	5.7		$46.17
CWS - Mid-Peninsula		7.3	$52.93
Redwood City	6.8		$54.23
Menlo Park	8.6		$62.33
Mid-Peninsula WD		6.4	$64.94
East Palo Alto	9.3		$65.07
San Bruno	8.9		$69.61
Palo Alto	9.0		$76.83
Burlingame	6.9		$76.87
Coastside CWD		5.5	$90.86
CWS - Bear Gulch		16.0	$116.34
Purissima Hills WD		23.8	$135.73
Hillsborough	17.6		$195.59
Total Averages	**7.8**	**9.0**	**$61.67**

* 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 2015-16 Annual Survey*

Table 8B: Single Family Water Bills* Based on Average Monthly Use for FY 2014-15, Using Rates in Effect for FY 2015-16
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	Bimonthly	$41.54	$3.37				$45.14	Effective:	05/01/2015
7.2									Does not include
									drought surcharge
Brisbane/Guadalupe Valley MID	Bimonthly	$22.67	$5.19	1	-	3	$34.33	Effective:	10/15/2012
4.1	3/4-inch meter		$7.00	4	-	8			
			$8.69	9	-	16			
			$11.05	17	+				
Burlingame	Bimonthly	$83.60	$0.00	0.0	-	2.7	$76.87	Effective:	01/01/2015
6.9	Up to 3/4- inch meter		$6.31	2.7	-	12.1			First 2,000 gallons per
			$6.66	12.1	-	24.1			billing period included in
			$7.69	24.1	-	40.1			bimonthly service charge
			$9.05	40.1	+				
CWS - Bear Gulch	Monthly	$19.61	$5.91	1	-	10	$116.34	Effective:	07/01/2015
16.0	5/8 x 3/4 inch meter		$6.28	11	-	35			
			$7.51	35	+				
CWS - Mid Peninsula	Monthly	$14.70	$5.21	0	-	7	$52.93	Effective:	09/17/2015
7.3	5/8 x 3/4 inch meter		$5.84	8	-	12			
			$7.22	13	+				
CWS - South San Francisco	Monthly	$14.70	$5.21	1	-	7	$46.16	Effective:	09/17/2015
6.0	5/8 x 3/4 inch meter		$5.84	8	-	12			
			$7.22	13	+				
Coastside CWD	Bimonthly	$47.45	$8.35	1	-	4	$90.86	Effective:	07/01/2015
5.5	5/8-inch meter		$9.33	5	-	16			
			$12.03	17	-	30			
			$15.94	31	+				
Daly City	Bimonthly	$28.20	$3.10	0	-	14	$33.62	Effective:	01/01/2016
6.3	Up to 3/4- inch meter		$7.10	15	+				
East Palo Alto	Bimonthly	$15.34	$6.16				$65.07	Effective:	07/01/2015
9.3	5/8 inch meter								
Estero MID	Bimonthly	$17.25	$4.30	0	-	20	$39.55	Effective:	07/01/2015
7.2			$4.64	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 2015-16, Using Rates in Effect for FY 2015-16
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	Bimonthly	$14.00	$5.42	1 - 8	$40.36	Effective:	10/01/2015
6.2	5/8-inch meter		$6.58	9 - 25			
			$7.75	26 +			
Hillsborough	Monthly	$60.00	$7.14	0 - 10	$195.59	Effective:	02/11/2016
17.6	Up to 1-inch meter		$8.44	10 - 25			
			$9.68	25 - 50			
			$11.58	50 - 100			
			$14.18	100 +			
Menlo Park	Monthly	$20.08	$4.75	0 - 6	$62.33	Effective:	07/01/2016
8.6	0 inch meter		$5.32	6 +			
Mid-Peninsula WD	Monthly	$22.00	$5.00	0 - 2	$64.94	Effective:	07/01/2015
6.4	5/8-inch meter		$7.50	3 - 9			
			$9.00	10 - 22			
			$10.50	55 +			
Millbrae	Bimonthly	$30.00	$5.45		$46.17	Effective:	07/01/2015
5.7							
Milpitas	Bimonthly	$18.00	$4.75		$42.54	Effective:	01/14/2016
7.1	5/8-inch meter						
Mountain View	Bimonthly	$12.70	$4.33	0 - 3	$42.42	Effective:	07/01/2015
5.9	Single-family accounts		$5.77	3 - 15			
			$9.23	15 +			
North Coast CWD	Bimonthly	$26.76	$2.72	0 - 5	$27.00	Effective:	01/1/2014
5.0			$6.03	6 - 16			
			$8.63	17 - 28			
			$15.83	29 +			
Palo Alto	Monthly	$16.03	$5.93	0 - 6	$76.83	Effective:	09/01/2015
9.0	5/8-inch meter		$8.38	7 +			
Purissima Hills WD	Monthly	$15.00	$4.64	1 - 10	$135.73	Effective:	07/01/2015
23.8	3/4-inch meter		$5.38	11 - 30			
			$7.06	31 - 60			
			$8.74	61 - 100			
			$10.42	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 2015-16, Using Rates in Effect for FY 2015-16
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	Bimonthly	$56.98	$3.80	0 - 10	$54.23	Effective:	07/01/2015
6.8			$4.82	11 - 25			
			$7.88	26 - 50			
			$11.11	51 +			
San Bruno	Bimonthly	$19.49	$6.70	0 - 10	$69.61	Effective:	07/01/2016
8.9	3/4 inch meter		$8.04	11 - 20			
			$10.72	21+ +			
San Jose MWD-N	Bimonthly	$32.02	$3.64	1 - 14	$42.25	Effective:	07/01/2015
7.2	5/8-inch meter		$4.19	15 +			
Santa Clara	Monthly	$4.16	$4.16		$33.64	Effective:	07/01/2015
8.1							Service charge is the minimum monthly charge, not added if usage is greater than the minimum charge.
Sunnyvale	Bimonthly	$18.80	$2.76	0 - 8	$29.28	Effective:	07/01/2015
7.2	5/8 x 3/4 inch meter		$4.87	9 - 30			
			$7.02	31 - 90			
			$9.13	91 +			
Westborough WD	Bimonthly	$12.70	$5.91		$39.54	Effective:	07/01/2015
5.6							

* 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.

Summary Billing Information

	**Average Monthly Bill	Average Monthly Service Charge
All BAWSCA Agencies	$61.67	$15.01
Municipal Agencies Only	$58.67	$15.65
Special Districts / Private	$65.75	$14.14

** Inclusive of service charge

Source: *BAWSCA FY 2015-16 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

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

9. Agency Profiles

Alameda County Water District

43885 South Grimmer Boulevard
Fremont, California 94538-6348

Phone: (510) 668-4200 Fax: (510) 656-3426
Web: http://www.acwd.org

Service Area

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

System

Profile

Area Size	104.8 sq. miles
Service Population	348,000
Number of Accounts	83,552
Number of SF RWS Connections	8
Connections To SF RWS Mains	BDPL 1, 2, 3, 4 and 5
Avg. Day Demand (mgd)	32.39
Avg. Day Purchases From SF RWS (mgd)	6.22
% Demand Met With SF RWS Supplies	19.2%
Maximum Local Water Production (mgd)	65.852 (7/16/10, Production facilities + direct SF RWS TOs + NUMMI)
Alternative Supply Sources	SF RWS, State Water Project (SWP), Local Groundwater
Interties With Other Agencies	Milpitas, Hayward
Local Storage (mg)	85.8 maximum capacity – volume in storage is typically 60 to 80% based on seasonal operating conditions
Days of Storage	1.8 – based on maximum capacity storage and average daily demand 42 mg of new treated water storage planned available by 2014

Summary

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

Before being supplied to ACWD's customers, the source water supplies are treated to meet and surpass all state and federal drinking water standards. ACWD operates two surface water treatment plants that treat SWP and local surface water from Del Valle Reservoir. The Newark Desalination Facility treats brackish groundwater to remove salts and other impurities, and the Blending Facility blends high quality San Francisco water with local fresh groundwater (with higher hardness) to provide a blended supply with lower overall hardness.

Over the 2000-2010 period, 36% 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 25% 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 39%) of the distribution system supplies.

Water Supply and Demand

Supply by Source	Actual FY 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	4,371,390	5,684,760	3,770,320	3,037,166
State Water Project	7,278,440	7,267,115	6,304,438	4,766,540
Desalinated Water	3,516,711	3,666,714	3,554,812	3,328,476
Local Groundwater	3,886,230	3,625,801	2,591,578	2,267,514
Surface Water	2,157,091	29,621	530,561	2,405,252
Recycled Water	0	0	0	0
Total	21,209,862	20,274,011	16,751,709	15,804,948
mgd equivalent	43.47	41.55	34.31	32.39

Demand by Sector				
Residential	13,656,723	13,250,738	10,337,623	9,278,709
Commercial/Industrial	3,265,490	3,282,861	2,983,057	2,846,250
Other	931,510	873,524	658,676	553,225
Dedicated Irrigation	2,506,906	2,354,869	1,590,737	1,203,688
Unaccounted for	849,233	512,019	1,181,616	1,923,076
Total	21,209,862	20,274,011	16,751,709	15,804,948
mgd equivalent	43.47	41.55	34.31	32.39

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	83	80	62	55
Gross	129	122	100	93

Storage Reservoirs

Designation	Capacity (gallons)	Designation	Capacity (gallons)
Alameda	16,250,000	Mayhew	4,450,000
Appian	780,000	Middlefield	7,230,000
Avalon	2,750,000	Ohlone	1,500,000
Canyon Heights	500,000	Patterson	14,400,000
Decoto	14,800,000	Vineyard Heights	500,000
Hidden Valley	2,000,000	Whitfield	20,000,000
		Total	85,160,000

ACWD Engineering Report, 1995. (Mayhew and Canyon Heights updated to reflect changed conditions)

Water Treatment Facilities

Design ation	Capacity (mgd)	Status	Designation	Capacity (mgd)	Status
WTP #2	22	Active	Mission San Jose WTP	4	Active
Blending Facility	48	Active	Newark Desalination Facility	12.5	Active
			Total	86.5	

Wells

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

Interties

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

*Diameter of main connected

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

City of Brisbane / Guadalupe Valley Municipal Improvement District

50 Park Lane
Brisbane, CA 94005

Phone: (415) 508-2130 Fax: (415) 467-5547
Web: http://www.ci.brisbane.ca.us/html/cityDept/pw/water.asp

Service Area

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

System

Profile

Area Size	3.4 square miles
Service Population*	4,562
Number of Accounts	2,006
Number of SF RWS Connections	5
Connections To SF RWS Mains	Crystal Springs Pipeline #1 and #2
Avg. Day Demand (mgd)	0.53
Avg. Day Purchases From SF RWS (mgd)	0.53
% Demand Met With SF RWS Supplies	100.0%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	CWS South San Francisco, Daly City
Local Storage (mg)	2.9
Days of Storage	3 – Combined storage. All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity.

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

Summary

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

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

Water Supply and Demand

Supply by Source	Actual FY 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	287,290	302,776	280,029	257,414
Guadalupe Valley - SF RWS	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	287,290	302,776	280,029	257,414
mgd equivalent	0.57	0.62	0.57	0.53

Demand by Sector				
Residential	104,478	102,695	93,420	89,940
Commercial/Industrial	74,985	77,363	85,018	99,719
Other	6,998	13,488	4,795	3,825
Dedicated Irrigation	89,170	89,577	76,522	43,195
Unaccounted for	11,659	19,653	20,274	20,735
Total	287,290	302,776	280,029	257,414
mgd equivalent	0.59	0.62	0.57	0.53

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	50	49	45	40
Gross	137	145	134	116

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

Facilities and Distribution

Storage Reservoirs

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

Interties

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

City of Burlingame

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

Service Area

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

System

Profile

Area Size	5.5 square miles
Service Population	31,109
Number of Accounts	9,194
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)	3.09
% Demand Met With SF RWS Supplies	91.1%
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 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	1,952,965	2,001,619	1,791,539	1,505,779
Recycled Water	146,400	146,400	146,400	146,388
Other	0	0	0	0
Total	2,099,365	2,001,619	1,937,939	1,652,167
mgd equivalent	4.30	4.40	3.97	3.39

Demand by Sector				
Residential	1,178,972	1,179,652	1,000,212	855,442
Commercial/Industrial	496,130	426,610	436,073	457,266
Other	152,075	135,455	36,765	35,083
Dedicated Irrigation	125,393	103,322	83,796	55,755
Unaccounted for	146,795	302,980	381,093	55,755
Total	2,099,365	2,001,619	1,937,939	1,652,167
mgd equivalent	4.30	4.40	3.97	3.39

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	80	80	62	56
Gross	132	135	111	99

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	59,883
Number of Accounts	18,564
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)	8.60
Avg. Day Purchases From SF RWS (mgd)	7.92
% Demand Met With SF RWS Supplies	92.1%
Maximum Local Water Production (mgd)	6.028 (0.028)
Alternative Supply Sources	Local Surface Water, Local Groundwater-(Skyline system only)
Interties With Other Agencies	Redwood City, Menlo Park, (None)
Local Storage (mg)	11.3 Treated, 215 Untreated
Days of Storage	0.92 – Length of storage based on loss of all sources of supply. All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity. Could increase use of Bear Gulch reservoir in an emergency to meet partial demand.

Summary

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

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

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

Water Supply and Demand

Supply by Source	Actual FY 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	5,814,767	6,259,793	5,077,292	3,864,869
Local Groundwater	0	0	0	0
Surface Water	301,395	0	190,342	329,563
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	6,116,162	6,259,793	5,267,634	4,194,432
mgd equivalent	12.53	12.83	10.80	8.60

Demand by Sector				
Residential	5,099,148	5,213,264	4,547,592	3,363,149
Commercial/Industrial	579,757	553,536	514,882	426,018
Other	156,803	166,553	123,349	101,350
Dedicated Irrigation	12,328	9,578	11,584	10,648
Unaccounted for	268,126	316,862	70,287	293,267
Total	6,116,162	6,259,793	5,267,634	4,194,432
mgd equivalent	12.53	12.83	10.80	8.60

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	180	183	156	115
Gross	216	220	180	144

Facilities and Distribution

Storage Reservoirs

Designation	Type	Capacity (gallons)	Designation	Type	Capacity (gallons)
Bear Gulch Reservoir*	Earth	215,000,000	Sta. 028-Tank 1	Steel	200,000
Sta. 002-Tank 1	Steel	250,000	Sta. 029-Tank 1	Fiberglass -Lined Redwood	100,000
Sta. 002-Tank 2	Steel	500,000	Sta. 029-Tank 2	Fiberglass -Lined Redwood	100,000
Sta. 005-Tank 6	Fiberglass -Lined Redwood	100,000 (inactive)	Sta. 029-Tank 3	Steel	150,000
Sta. 005-Tank 8	Steel	250,000	Sta. 030-Tank 1	Steel	1,000,000
Sta. 005-Tank 9	Steel	1,000,000	Sta. 031-Tank 2	Steel	165,000
Sta. 006-Tank 1	Steel	200,000	Sta. 032-Tank 1	Steel	250,000
Sta. 007-Tank 5	Fiberglass -Lined Redwood	100,000	Sta. 033-Tank 1	Steel	10,000
Sta. 015-Tank 1	Fiberglass -Lined Redwood	30,000	Sta. 034-Tank 1	Concrete	50,000
Sta. 016-Res.1	Steel	1,000,000	Sta. 036-Tank 1	Steel	125,000
Sta. 017-Tank 1	Steel	250,000	Sta. 037-Tank 1	Steel	55,000
Sta. 019-Tank 1	Steel	500,000	Sta. 038-Tank 1	Steel	212,000
Sta. 019-Tank 2	Steel	500,000	Sta. 039-Tank 1	Steel	282,000
Sta. 021-Tank 1	Steel	1,000,000	Sta. 041-Tank 1	Steel	189,000
Sta. 021-Tank 2	Steel	1,000,000	Sta. 041-Tank 2	Steel	192,000
Sta. 022-Tank 1	Steel	450,000	Sta. 042-Tank 1	Steel	60,000
Sta. 025-Tank 1	Fiberglass -Lined Redwood	100,000	Sta. 042-Tank 2	Steel	60,000
Sta. 027-Tank 4	Steel	750,000			
				Total	226,192,000

* 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	133,679
Number of Accounts	35,763
Number of SF RWS Connections	6
Connections To SF RWS Mains	Bay Crossing 1and 2, BDPL 1 and 2, Crystal Springs #2, Sunset Pipeline
Avg. Day Demand (mgd)	10.91
Avg. Day Purchases From SF RWS (mgd)	10.91
% Demand Met With SF RWS Supplies	100.0%
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 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	6,046,107	6,956,723	6,016,058	5,325,284
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	6,046,107	6,956,723	6,016,058	5,325,284
mgd equivalent	12.39	14.26	12.33	10.91

Demand by Sector				
Residential	4,922,016	4,843,897	4,153,923	3,523,247
Commercial/Industrial	1,274,219	1,295,186	1,195,269	1,080,215
Other	401,387	442,095	374,940	324,881
Unaccounted for	-551,515	375,545	291,926	396,941
Total	6,046,107	6,956,723	6,016,058	5,325,284
mgd equivalent	12.39	14.26	12.33	10.91

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	79	77	64	54
Gross	97	110	92	82

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	61,223
Number of Accounts	16,308
Number of SF RWS Connections	11
Connections To SF RWS Mains	Crystal Springs #2, San Andreas 1, 2, and 3, Sunset Pipeline
Avg. Day Demand (mgd)	6.03
Avg. Day Purchases From SF RWS (mgd)	4.91
% Demand Met With SF RWS Supplies	81.3%
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. Cal Water had been participating in a Conjunctive Use Pilot Program during which the South San Francisco District had received 100% of its supply from the SF RWS. However, in 2007 Cal Water began operating its well again. 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 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
SF RWS - Customary	3,351,878	3,144,748	2,745,921	2,394,025
SF RWS - Supplemental	0	0		38,981
Local Groundwater	268,948	471,510	524,745	511,717
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	3,620,826	3,616,258	3,270,666	2,944,723
mgd equivalent	7.42	7.41	6.70	6.03

Demand by Sector

Residential	1,478,039	1,432,239	1,271,240	1,157,906
Commercial/Industrial	1,895,035	1,912,861	1,784,482	1,627,433
Other	167,479	178,111	131,918	92,474
Unaccounted for	80,273	93,047	83,026	66,910
Total	3,620,826	3,616,258	3,270,666	2,944,723
mgd equivalent	7.42	7.41	6.70	6.03

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd))	Actual FY 15-16 (gpcpd)
Residential	51	49	43	39
Gross	125	123	109	99

Facilities and Distribution

Storage Reservoirs

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

Wells

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

Interties

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

Coastside County Water District

766 Main Street
Half Moon Bay, California 94019-1995

Phone: (650) 726-4405 Fax: (650) 726-5245
Web: http://www.coastsidewater.org

Service Area

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

System

Profile

Area Size	14 square miles
Service Population	16,704
Number of Accounts	7,447
Number of SF RWS Connections	2
Connections To SF RWS Mains	Crystal Springs Intake and Stone Dam (Pilarcitos Lake)
Avg. Day Demand (mgd)	1.67
Avg. Day Purchases From SF RWS (mgd)	1.18
% Demand Met With SF RWS Supplies	70.4%
Maximum Local Water Production (mgd)	0.5
Alternative Supply Sources	During a drought, local production is extremely low due to dependency on surface stream flows and a small watershed.
Interties With Other Agencies	None
Local Storage (mg)	8.0
Days of Storage	Approximately 3.0 days

Summary

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

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

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

Water Supply and Demand

Supply by Source	Actual FY 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	885,895	940,214	940,214	575,225
Local Groundwater	896	2,674	2,674	2,006
Surface Water	109,586	54,372	54,372	240,108
Recycled Water	0	0	0	0
Total	996,377	997,260	997,260	817,339
mgd equivalent	2.04	2.04	2.04	1.67

Demand by Sector

Residential	554,030	552,572	552,572	423,998
Commercial/Industrial	211,793	136,934	136,934	123,773
Other	35,408	110,274	110,274	95,609
Dedicated Irrigation	111,778	122,219	122,219	101,460
Non-Revenue Water	83,368	75,260	75,260	72,499
Total	996,377	997,259	997,259	817,339
mgd equivalent	2.04	2.04	2.04	1.67

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	67	68	68	52
Gross	121	123	123	100

Facilities and Distribution

Treated Water Storage Reservoirs

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

Surface Water Treatment Facilities

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

Wells

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

*Capacity is dependent on stream flows

City of Daly City

Department of Water and Wastewater
153 Lake Merced Boulevard
Daly City, California 94015-1097

Phone: (650) 991-8203 Fax: (650) 991-8220

Websites:
Water Department: http://www.dalycity.org/city_services/depts/wwr/water.htm
Conservation Info: http://www.ci.daly-city.ca.us/city_services/depts/wwr/water_conserve.html

Service Area

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

System

Profile

Area Size	7.4 square miles
Service Population	109,139
Number of Accounts	23,099
Number of SF RWS Connections	11
Connections To SF RWS Mains	Crystal Springs #1 and #2, San Andreas #2, and the Sunset Pipeline
Avg. Day Demand (mgd)	6.44
Avg. Day Purchases From SF RWS (mgd)	4.41
% Demand Met With SF RWS Supplies	68.5%
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 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf))	Actual FY 15-16 (ccf)
San Francisco Water	1,955,442	1,713,514	1,654,762	2,152,800
SF RWS Supplemental Water	0	0	0	146,803
Local Groundwater	1,557,057	1,494,788	1,231,086	750,309
Recycled Water	67	141,131	9,203	91,882
Total	3,512,566	3,349,433	2,895,051	3,141,794
mgd equivalent	7.20	6.86	5.93	6.44

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

Demand by Sector				
Residential	2,450,378	2,401,406	2,229,036	2,129,965
Commercial/Industrial	366,905	381,955	381,225	414,229
Other	133,174	123,297	148,036	107,583
Dedicated Irrigation	179,064	238,144	76,081	49,839
Unaccounted for	383,045	204,631	60,673	440,178
Total	3,512,566	3,346,447	2,895,051	3,141,794
mgd equivalent	7.20	6.86	5.93	6.44

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	49	47	42	40
Gross (Less Recycled Water)	70	63	55	57

Facilities and Distribution

Storage Reservoirs

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

Wells

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

Interties

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

City of East Palo Alto

2415 University Ave.
East Palo Alto, CA 94303

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

American Water Enterprises
2415 University Avenue, 2nd Floor
East Palo Alto, CA 94303

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

Service Area

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

System

Profile

Area Size	2.5 square miles
Service Population	24,424
Number of Accounts	6,175
Number of SF RWS Connections	3
Connections To SF RWS Mains	BDPL 1 and 2
Avg. Day Demand (mgd)	1.42
Avg. Day Purchases From SF RWS (mgd)	1.42
% Demand Met With SF RWS Supplies	100.0%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	Palo Alto, Menlo Park, O'Connor Tract Water Coop, Palo Alto Park Mutual - only to 2 Mutual companies and not in EPA's direction
Local Storage (mg)	0
Days of Storage	0 – No storage: cannot sustain a loss of water independent of its interties. 3.6 mg of storage identified but approval/funding has yet to be secured.

Summary

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

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

Water Supply and Demand

Supply by Source	Actual FY 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf	Actual FY 15-16 (ccf)
San Francisco Water	1,012,810	723,320	768,310	690728
Resale SF RWS (Menlo Park)	-4,557	-4,280	-2,536	0
Local Groundwater	2,686	1,000	0	0
Recycled Water	0	0	0	0
Other	0	0	607	0
Total	1,010,939	720,040	768,916	690,728
mgd equivalent	2.07	1.48	1.58	1.42

Demand by Sector				
Residential	653,028	645,589	514,992	615,001
Commercial/Industrial	153,188	141,482	277,171	67,549
Other	19,402	24,366	31,276	58
Unaccounted for	185,321	-91,397	-54,523	8,120
Total	1,010,939	811,437	768,916	690,728
mgd equivalent	2.07	1.48	1.58	1.42

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	52	51	36	52
Gross	80	57	54	58

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	37,165
Number of Accounts	8,148
Number of SF RWS Connections	1
Connections To SF RWS Mains	Crystal Springs #2
Avg. Day Demand (mgd)	3.62
Avg. Day Purchases From SF RWS (mgd)	3.62
% Demand Met With SF RWS Supplies	100.0%
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 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	2,000,497	1,942,333	1,930,526	1,768,029
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	2,000,497	1,942,333	1,930,526	1,768,029
mgd equivalent	4.10	3.98	3.96	3.62

Demand by Sector				
Residential	1,372,204	1,306,850	1,158,140	1,007,662
Commercial/Industrial	241,330	238,343	225,280	217,524
Other	51,058	56,839	35,024	27,954
Dedicated Irrigation	518,825	545,676	469,617	351,772
Unaccounted for	-182,920	-205,375	42,465	163,117
Total	2,000,497	1,942,333	1,930,526	1,768,029
mgd equivalent	4.10	3.98	3.96	3.62

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	77	72	64	56
Gross	112	108	107	97

Facilities and Distribution

Storage Reservoirs

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

Interties

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

City of Hayward

Utilities & Environmental Services Department
777 B Street
Hayward, California 94541

Phone: (510) 583-4700 Fax: (510) 583-3610
Web: www.hayward-ca.gov

Service Area

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

System

Profile

Area Size	62.5 square miles
Service Population	158,985
Number of Accounts	35,343
Number of SF RWS Connections	4 (two at each turnout)
Connections To SF RWS Mains	BDPL 1 and 2
Avg. Day Demand (mgd)	12.25
Avg. Day Purchases From SF RWS (mgd)	12.25
% Demand Met With SF RWS Supplies	100.0%
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 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	7,552,956	7,402,067	6,634,616	5,979,616
Local Groundwater	0	0	0	0
Recycled Water	0	0	0	0
Total	7,552,956	7,402,067	6,634,616	5,979,616
mgd equivalent	15.48	15.17	13.60	12.25

Demand by Sector				
Residential	4,213,609	4,157,114	3,609,950	3,372,168
Commercial/Industrial	1,491,773	1,630,978	1,452,978	1,371,311
Other	475,964	383,686	306,320	277,018
Dedicated Irrigation	997,089	1,012,601	744,222	556,161
Unaccounted for	374,521	217,688	521,146	402,958
Total	7,552,956	7,402,067	6,634,616	5,979,616
mgd equivalent	15.48	15.17	13.60	12.25

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	58	56	48	43
Gross	104	100	89	77

Facilities and Distribution

Storage Reservoirs

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

Wells

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

Name	Capacity (mgd)	Status
Well C	4.6	Standby (Emergency)
Well D	1.4	Standby (Emergency)
Well E	3.0	Standby (Emergency)
Total	13.6	

*Out of service for rehabilitation

Interties

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

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

Town of Hillsborough

Water Department
1600 Floribunda Avenue
Hillsborough, California 94010-6498

Phone: (650) 375-7402 Fax: (650) 375-7444
Web: http://www.hillsborough.net/depts/pw/water/default.asp

Service Area

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

System

Profile

Area Size	6.25 square miles
Service Population	10,869
Number of Accounts	4,267
Number of SF RWS Connections	9 Turnouts, 12 meters
Connections To SF RWS Mains	Crystal Springs #2, Sunset Pipeline
Avg. Day Demand (mgd)	2.15
Avg. Day Purchases From SF RWS (mgd)	2.15
% Demand Met With SF RWS Supplies	100.0%
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 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	1,609,532	1,599,812	1,226,777	1,050,944
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	1,609,532	1,599,812	1,226,777	1,050,944
mgd equivalent	3.30	3.28	2.51	2.15

Demand by Sector [2]				
Residential	1,417,783	1,459,092	1,176,162	883,507
Commercial/Industrial	7,000	0	4,826	5,637
Institutional/Other	13,517	23,485	13,090	10,992
Dedicated Irrigation	5,563	22,319	23,941	17,607
Unaccounted for	155,669	94,916	8,758	133,201
Total	1,6-9,532	1,599,812	1,226,777	1,050,944
mgd equivalent	3.30	3.28	2.51	2.15

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	268	275	222	167
Gross	304	302	231	198

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 Department
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	16,066
Number of Accounts	4,224
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)	2.20
Avg. Day Purchases From SF RWS (mgd)	2.20
% Demand Met With SF RWS Supplies	100.0%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	CWS - Bear Gulch District, Redwood City, East Palo Alto, O'Conner Tract Water Coop, Palo Alto Park Mutual Water Co.
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, and the remainder from East Palo Alto, whose source is also SF RWS. One SF RWS turnout serves the Sharon Heights area along Sand Hill Road and Highway 280, and four turnouts serve portions of the City north and east of El Camino Real near Highway 101 and Willow Road. The distribution system includes one pump station, two storage reservoirs, and 63 miles of mains.

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

Water Supply and Demand

Supply by Source	Actual FY 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	1,580,278	1,724,965	1,287,136	1,074,516
Resale SF RWS Purchase	4,358	4,434	0	0
Other	0	0	0	0
Total	1,584,636	1,729,399	1,287,136	1,074,516
mgd equivalent	3.25	3.54	2.64	2.20

Demand by Sector				
Residential	687,547	669,505	566,933	469,556
Commercial/Industrial	511,026	605,384	517,551	444,993
Other	81,601	82,272	67,003	55,167
Dedicated Irrigation	181,100	221,816	148,509	1,011
Unaccounted for	123,362	150,422	-12,860	103,789
Total	1,584,636	1,729,399	1,287,136	1,074,516
mgd equivalent	3.25	3.54	2.64	2.20

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	99	85	76	60
Gross	229	221	172	137

Facilities and Distribution

Storage Reservoirs

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

Interties

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

Mid-Peninsula Water District

Three Dairy Lane
Belmont, California 94002-0129

Phone: (650) 591-8941 Fax: (650) 591-4998
Web: http://www.midpeninsulawater.org

Service Area

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

System

Profile

Area Size	5 square miles
Service Population	26,924
Number of Accounts	15,960
Number of SF RWS Connections	2
Connections To SF RWS Mains	BDPL 1 and 2, Crystal Springs Bypass Tunnel
Avg. Day Demand (mgd)	2.21
Avg. Day Purchases From SF RWS (mgd)	2.21
% Demand Met With SF RWS Supplies	100.0%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	Estero MID, Redwood City, CWS - San Mateo, CWS - San Carlos
Local Storage (mg)	12.5
Days of Storage	3.6 - All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity.

Summary

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

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

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

Water Supply and Demand

Supply by Source	Actual FY 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	1,453,047	1,408,109	1,209,300	1,076,654
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	1,453,047	1,408,109	1,209,300	1,076,654
mgd equivalent	2.98	2.89	2.48	2.21

Demand by Sector				
Residential	1,004,087	993,343	834,024	732,057
Commercial/Industrial	259,889	258,172	234,417	219,557
Other	86,613	83,953	71,882	64,982
Unaccounted for	102,458	72,641	68,977	60,058
Total	1,453,047	1,408,109	1,209,300	1,076,654
mgd equivalent	2.98	2.89	2.48	2.21

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	78	77	64	56
Gross	113	110	93	82

Facilities and Distribution

Storage Reservoirs

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

Interties

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

City of Millbrae

Public Works - Engineering
621 Magnolia Avenue
Millbrae, California 94030

Phone: (650) 259-2339 Fax: (650) 697-8158
Web: http://www.ci.millbrae.ca.us

Service Area

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

System

Profile

Area Size	3.2 square miles
Service Population	22,848
Number of Accounts	6,544
Number of SF RWS Connections	5
Connections To SF RWS Mains	Murchison, Greenhills, Park, 195 ECR, Helen
Avg. Day Demand (mgd)	1.84
Avg. Day Purchases From SF RWS (mgd)	1.84
% Demand Met With SF RWS Supplies	100.0%
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 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	1,113,147	1,134,741	991,049	899,785
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	12,000	12,000	12,000	0
Other	0	0	0	0
Total	1,125,147	1,146,741	1,003,049	899,785
mgd equivalent	2.31	2.35	2.06	1.84

Demand by Sector				
Residential	737,836	731,183	627,450	542,393
Commercial/Industrial	160,643	154,759	161,459	162,215
Other	54,788	65,130	71,796	28,293
Dedicated Irrigation	88,356	84,344	72,645	47,125
Unaccounted for	83,524	111,325	69,699	119,759
Total	1,125,147	1,146,741	1,003,049	899,785
mgd equivalent	2.31	2.35	2.06	1.84

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd))	Actual FY 15-16 (gpcpd)
Residential	70	70	60	49
Gross (less recycled water)	106	108	94	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, Engineering Division
455 East Calaveras Boulevard
Milpitas, California 95035-5411

Phone: (408) 586-3300 Fax: (408) 586-3305
Web: http://www.ci.milpitas.ca.gov/

Service Area

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

System

Profile

Area Size	13.6 square miles
Service Population	75,521
Number of Accounts	16,595
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)	8.26
Avg. Day Purchases From SF RWS (mgd)	4.54
% Demand Met With SF RWS Supplies	55.0%
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 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	3,115,000	3,194,000	2,503,640	2,215,396
Santa Clara Valley WD	1,443,000	1,335,500	1,548,876	1,485,678
Recycled Water	417,000	379,000	409,507	329,206
Other	0	0	0	0
Total	4,975,000	4,908,500	4,462,023	4,030,280
mgd equivalent	10.20	9.19	9.14	8.26

Demand by Sector				
Residential	2,173,280	2,103,513	1,943,194	1,718,291
Commercial/Industrial	1,329,861	1,166,300	1,200,415	1,106,090
Other	150,055	131,419	538,925	109,428
Dedicated Irrigation	1,034,743	558,749	581,420	637,919
Unaccounted for	287,061	526,843	198,069	458,552
Total	4,975,000	4,908,028	4,462,023	4,030,280
mgd equivalent	10.20	9.19	9.14	8.26

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	66	62	56	47
Gross (Less Recycled Water)	138	133	117	100

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	75,430
Number of Accounts	17,967
Number of SF RWS Connections	2 turnouts/ 6 meters
Connections To SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	7.90
Avg. Day Purchases From SF RWS (mgd)	6.77
% Demand Met With SF RWS Supplies	85.8%
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 3 active wells (4 currently out of service). The wells influence each other, resulting in varied maximum and simultaneous flows. They are not currently operated at their maximum capacity due to various maintenance and operational issues.

Water Supply and Demand

Supply by Source	Actual FY 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	4,389,474	4,373,263	3,611,194	3,305,780
Santa Clara Valley WD	546,917	529,137	400,146	298,782
Local Groundwater	134,195	209,370	245,464	48,897
Recycled Water	164,156	151,603	178,779	201,357
Total	5,234,742	5,263,373	4,435,583	3,854,816
mgd equivalent	10.73	10.79	9.09	7.90
Demand by Sector				
Residential	2,715,045	2,752,779	2,331,572	2,082,952
Commercial/Industrial	948,869	901,854	836,989	783,051
Other	6,156	7,445	7,947	7,066
Dedicated Irrigation	1,295,694	1,256,417	1,030,128	756,193
Unaccounted for*	268,978	344,878	228,947	225,554
Total	5,234,742	5,263,373	4,435,583	3,854,816
mgd equivalent	10.73	10.79	9.09	7.90

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	74	75	63	57
Gross	140	139	114	99

Facilities and Distribution

Storage Reservoirs

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

Wells

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

Interties

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

North Coast County Water District

2400 Francisco Boulevard
Pacifica, California 94044-6039

Phone: (650) 355-3462 Fax: (650) 355-0735
Web: http://www.nccwd.com

Service Area

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

System

Profile

Area Size	13.6 square miles
Service Population	40,000
Number of Accounts	12,361
Number of SF RWS Connections	1
Connections To SF RWS Mains	San Andreas 3
Avg. Day Demand (mgd)	1.87
Avg. Day Purchases From SF RWS (mgd)	1.84
% Demand Met With SF RWS Supplies	98.5%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	Local Surface Water
Interties With Other Agencies	San Bruno, Daly City, Westborough CWD
Local Storage (mg)	23.35
Days of Storage	7.12 – Length of storage based on loss of all sources of supply. All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity. San Pedro Creek could meet limited demand in an emergency.

Summary

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

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

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

Water Supply and Demand

Supply by Source	Actual FY 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	1,192,485	1,387,578	1,360,780	900,293
Westborough CWD (SF RWS)	0	0	0	0
Recycled Water	0	5,294	4,120	13,788
Other	0	0	0	0
Total	1,192,485	1,392,872	1,364,900	914,081
mgd equivalent	2.44	2.85	2.80	1.87

Demand by Sector				
Residential	1,226,220	1,031,692	911,508	828,122
Commercial/Industrial	113,605	96,158	99,795	91,672
Other	9,344	82,973	62,064	47,161
Dedicated Irrigation	45,037	35,833	24,484	22,785
Unaccounted for	-201,721	146,216	267,049	-75,659
Total	1,192,485	1,380,360	1,364,900	914,081
mgd equivalent	2.44	2.85	2.80	1.87

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	64	54	47	42
Gross	63	73	70	46

Facilities and Distribution

Potable Storage Reservoirs

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

Water Treatment Facilities:

Surface Water

Designation	Capacity (mgd)
San Pedro WTP	0.5

Recycled Water

Designation	Capacity (mgd)
Central District	0.3

Interties

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

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

City of Palo Alto

250 Hamilton Avenue
Palo Alto, California 94301-2593

Phone: (650) 329-2119 Fax: (650) 326-1507
Web: http://www.cityofpaloalto.org

Service Area

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

System

Profile

Area Size	26 square miles
Service Population	68,020
Number of Accounts	19,994
Number of SF RWS Connections	5
Connections To SF RWS Mains	Palo Alto Pipeline, BDPL 3 and 4
Avg. Day Demand (mgd)	8.93
Avg. Day Purchases From SF RWS (mgd)	8.21
% Demand Met With SF RWS Supplies	91.9%
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 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	5,547,735	5,600,519	4,723,751	4,006,084
Local Groundwater	0	0	0	0
Recycled Water	203,026	381,066	367,831	350,847
Other	0	0	0	0
Total	5,750,761	5,981,585	5,091,582	4,356,931
mgd equivalent	11.79	12.26	10.43	8.93

Demand by Sector				
Residential	3,183,737	3,146,731	2,649,876	2,253,313
Commercial/Industrial	1,077,104	1,023,362	998,760	954,961
Other	315,539	538,971	645,761	583,581
Dedicated Irrigation	540,230	718,281	506,450	368,711
Unaccounted for	634,151	554,240	290,735	196,365
Total	5,750,761	5,981,585	5,091,582	4,356,931
mgd equivalent	11.79	12.26	10.43	8.93

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	98	97	82	68
Gross (Less Recycled Water)	171	172	146	121

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	6,150
Number of Accounts	2,201
Number of SF RWS Connections	2
Connections To SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	1.31
Avg. Day Purchases From SF RWS (mgd)	1.31
% Demand Met With SF RWS Supplies	100.0%
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 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	972,733	982,100	803,313	640,369
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	972,733	982,100	803,313	640,369
Mgd equivalent	1.84	2.01	1.65	1.31

Demand by Sector				
Residential	868,180	885,184	732,811	591,604
Commercial/Industrial	0	0	0	0
Other	71,493	59,871	44,713	24,255
Dedicated Irrigation	4,629	5,339	4,305	5,061
Unaccounted for	28,431	31,706	21,484	19,449
Total	972,733	982,100	803,313	640,369
Mgd equivalent	1.84	2.01	1.65	1.31

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	290	295	245	197
Gross	325	328	268	213

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

Community Development Department
1400 Broadway
Redwood City, California 94063-2505

Phone: (650) 780-7464 Fax: (650) 780-7445
Web: http://www.redwoodcity.org/departments/public-works/water

Service Area

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

System

Profile

Area Size	35 square miles
Service Population	87,023
Number of Accounts	23,543
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)	7.77
Avg. Day Purchases From SF RWS (mgd)	7.19
% Demand Met With SF RWS Supplies	92.6%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	Recycled water for landscape irrigation, industrial, and dual pumped uses
Interties With Other Agencies	CWS -Bear Gulch, CWS - Mid- Peninsula, Mid-Peninsula WD, Menlo Park
Local Storage (mg)	21.24
Days of Storage	2.2 days storage. – 4 of 14 pressure zones have no storage facilities. The 4 zones without storage have emergency interties with other water agencies.

Summary

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

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

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

Water Supply and Demand

Supply by Source	Actual FY 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	4,747,255	4,407,672	3,789,370	3,508,414
Recycled Water	310,053	323,213	310,329	282,017
Other	0	0	0	0
Total	5,057,308	4,730,885	4,099,699	3,790,431
mgd equivalent	10.36	9.70	8.40	

Demand by Sector				
Residential	3,078,065	3,092,119	2,666,567	2,245,955
Commercial/Industrial	816,841	824,233	766,108	748,298
Other	82,373	86,470	82,618	73,591
Dedicated Irrigation	601,418	681,737	579,350	473,004
Unaccounted for	478,611	46,326	5,056	249,583
Total	5,057,308	4,730,885	4,099,699	3,790,431
mgd equivalent	10.36	9.70	8.40	7.77

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	73	73	63	53
Gross (Less Recycled Water)	112	105	89	83

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	Steel	1.00
Main City Zone	Steel	8.00
Main City Zone	Steel	3.75
Redwood Shores	Steel	3.20
Redwood Shores	Steel	3.00
Total		21.24

Interties

Name	No.	Diameter (in.)
BCWD	1	12
BCWD and CWS	1	12
Oakwood / El Camino	1	6
MPW	1	6
Alameda / Edgewood	1	Fire Hose

Name	No.	Diameter (in.)
Douglas / Fairoaks	1	6
CWS – Bear Gulch	2	6
Bransten / Industrial	1	8
San Carlos	2	6, Fire Hose
Eaton	1	Fire Hose

City of San Bruno

Public Works - Water Division
567 El Camino Real
San Bruno, California 94066

Phone: (650) 616-7065 Fax: (650) 794-1443
Web: http://www.sanbruno.ca.gov/city_services/public_works/utilities/water.html

Service Area

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

System

Profile

Area Size	6.1 square miles
Service Population	44,409
Number of Accounts	11,519
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)	3.11
Avg. Day Purchases From SF RWS (mgd)	1.31
% Demand Met With SF RWS Supplies	41.9%
Maximum Local Water Production (mgd)	1.90
Alternative Supply Sources	Local Groundwater
Interties With Other Agencies	North Coast CWD, CWS - South San Francisco
Local Storage (mg)	8.3
Days of Storage	2.5 – Length of storage based on loss of all sources of supply. All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity. Well water could meet partial demand in an emergency.

Summary

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

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

Water Supply and Demand

Supply by Source	Actual FY 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
SF RWS - Customary	946,503	779,582	584,392	637,586
SF RWS - Supplemental	0	0	0	83,663
Local Groundwater	782,464	948,253	922,147	777,032
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other (North Coast CWD)	23,128	19,887	23,361	21,622
Total	1,752,095	1,747,722	1,529,900	1,519,903
mgd equivalent	3.59	3.58	3.14	3.11

Demand by Sector				
Residential	1,220,423	1,169,527	1,041,912	1,022,388
Commercial/Industrial	359,328	325,988	304,363	285,374
Other	81,418	98,441	61,674	60,761
Unaccounted for	90,926	153,766	121,951	151,380
Total	1,752,095	1,747,722	1,529,900	1,519,903
mgd equivalent	3.59	3.58	3.14	3.11

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	61	55	49	47
Gross	87	82	72	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	9,059
Number of Accounts	2,138
Number of SF RWS Connections	2
Connections To SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	4.90 Potable and Recycled
Avg. Day Purchases From SF RWS (mgd)	4.09
% Demand Met With SF RWS Supplies	83.5%
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 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	2,173,663	2,272,262	2,151,905	1,997,596
Local Groundwater	0	0	16,913	29,465
Recycled Water	180,548	404,401	352,857	364,746
Other	0	0	0	0
Total	2,354,211	2,676,663	2,521,675	2,391,807
mgd equivalent	4.82	5.49	5.17	4.90

Demand by Sector				
Residential	537,869	686,611	1,018,955	930,564
Commercial/Industrial	976,696	1,168,458	923,177	875,508
Other	68,588	56,133	40,372	38,774
Dedicated Irrigation	738,567	777,405	476,737	456,091
Unaccounted for	32,491	-11,944	62,434	90,871
Total	2,354,211	2,676,663	2,521,675	2,391,807
mgd equivalent	4.82	5.49	5.17	4.90

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	73	92	131	211
Gross (Less Recycled Water)	293	305	279	459

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	120,973
Number of Accounts	25,716
Number of SF RWS Connections	2
Connections To SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	18.07
Avg. Day Purchases From SF RWS (mgd)	2.33
% Demand Met With SF RWS Supplies	12.9%
Maximum Local Water Production (mgd)	23.3 – This volume is historically sustainable for 1 month, but may not be sustainable for longer periods.
Alternative Supply Sources	Local Groundwater
Interties With Other Agencies	Santa Clara Valley WD
Local Storage (mg)	26.8
Days of Storage	1 – Length of storage based on loss of all sources of supply. All zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity. Well water, normally used supplementally, could supply peak demand in an emergency.

* Average daily demand includes recycled water

Summary

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

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

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

Water Supply and Demand

Supply by Source	Actual FY 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	1,085,829	1,012,567	914,572	1,135,829
Santa Clara Valley WD	1,864,441	1,870,035	1,470,999	1,901,738
Local Groundwater	6,340,376	6,287,164	5,816,028	4,291,577
Recycled Water	1,404,586	1,587,740	1,567,103	1,488,319
Other	0	0	0	0
Total	10,695,232	10,757,506	9,768,702	8,817,463
mgd equivalent	21.92	22.05	20.02	18.07

Demand by Sector				
Residential	4,782,059	4,730,865	4,076,317	3,500,320
Commercial/Industrial	4,272,833	4,377,915	4,151,499	3,876,460
Other	1,065,318	1,156,381	1,043,433	941,284
Dedicated Irrigation	0	0	0	0
Unaccounted for	575,022	492,344	497,453	499,399
Total	10,695,232	10,757,943	9,768,702	8,817,463
mgd equivalent	21.92	22.05	20.02	18.07

Per Capita Use	Actual FY 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
Residential	82	82	67	58
Gross (Less Recycled Water)	160	159	139	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
Total		26.8

Wells

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

Interties

Name	No.	Diameter (in.)
SCVWD	1	10

Stanford University

327 Bonair Siding
Stanford, California 94305-7272
Phone: (650) 723-9747 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	30,943*
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)	2.20
Avg. Day Purchases From SF RWS (mgd)	1.39 **
% Demand Met With SF RWS Supplies	63.3% (100% of domestic water)
Average Day Local Water Production (mgd)	0.81
Alternative Supply Sources	Local groundwater, surface water, recycled water**
Interties With Other Agencies	Palo Alto
Local Storage (mg)	8
Days of Storage	2.5 to 4 – All 3 zones can meet the 8 hr criteria either separately or by pumping from zones with excess capacity. Wells can supply an additional 3.7 mgd in an emergency.

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

** In FY-08-09, Stanford completed a recycled water plant that treats wastewater from the former Cogeneration Facility cooling tower blow-down for reuse for toilet and urinal flushing in new buildings. The plant was decommissioned in 201 with the construction of the Stanford Energy System Innovations (SESI) Central Energy Facility. Source water for the recycled water system was lost but the infrastructure remains and can resume using recycled water once another source is established.

Summary

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

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

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

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

Water Supply and Demand

Supply by Source	Actual FY 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	1,029,129	1,024,277	923,813	679,394
Local Groundwater	135,286	497,660	313,982	300,686
Surface Water	460,140	31,335	158,579	93,476
Other	0	0	0	0
Total	1,624,555	1,553,272	1,396,374	1,073,556
mgd equivalent	3.33	3.18	2.86	2.20

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

Demand by Sector

Residential	417,190	421,060	360,634	347,058
Commercial/Industrial	223,325	259,044	239,727	87,498
Other	281,363	276,377	263,966	140,481
Dedicated Irrigation	683,873	596,791	532,045	442,795
Unaccounted for	18,804	0	2	55,724
Total	1,624,555	1,553,272	1,396,374	1,073,556
mgd equivalent	3.33	3.18	2.86	2.20

Notes: The new SESI Central Energy Facility uses 705 less water than the former Cogeneration Facility, which caused the commercial/industrial demand to decrease beginning in April 2015.

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

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

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	n/a	n/a	n/a	n/a
Gross	113	107	94	71

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

Facilities and Distribution

Storage Reservoirs

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

*Currently out of service

Wells

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

Interties

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

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

City of Sunnyvale

Environmental Services Department
P.O. Box 3707
Sunnyvale, California 94088-3707

Phone: (408) 730-7510 Fax: (408) 736-1611
Web: http://sunnyvale.ca.gov/Departments/EnvironmentalServices/Water.aspx

Service Area

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

System

Profile

Area Size	24 square miles
Service Population	148,372
Number of Accounts	29,700
Number of SF RWS Connections	6
Connections To SF RWS Mains	BDPL 3 and 4
Avg. Day Demand (mgd)	14.77
Avg. Day Purchases From SF RWS (mgd)	7.98
% Demand Met With SF RWS Supplies	54.0%
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 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	4,526,510	4,046,527	3,874,640	3,894,246
Santa Clara Valley WD	4,879,185	4,495,704	3,276,953	2,858,242
Local Groundwater	47,631	452,589	506,472	65,632
Surface Water	0	0	0	0
Recycled Water	0	0	137,016	390,696
Other	0	0	0	0
Total	9,453,326	8,994,820	7,795,081	7,208,816
mgd equivalent	19.37	18.43	15.97	14.77

Demand by Sector				
Residential	5,924,513	5,729,468	4,885,613	3,907,240
Commercial/Industrial	1,771,618	1,859,237	1,710,519	1,508,808
Other	159,311	132,172	1,821,591	2,221,230
Dedicated Irrigation	1,514,208	1,705,099	857,993	629,772
Unaccounted for	83,676	-431,156	229,884	450,574
Total	9,453,326	8,994,820	7,795,081	7,208,816
mgd equivalent	19.37	18.43	15.97	14.77

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	83	80	68	54
Gross (Less Recycled Water)	133	125	106	94

Facilities and Distribution

Storage Reservoirs

Designation	Type	Capacity (gallons)
Wolfe-Evelyn	Steel	5,000,000
Mary-Carson 1	Steel	5,000,000
Mary-Carson 2	Steel	5,000,000
Wright Avenue 1	Steel	5,000,000
Wright Avenue 2	Steel	5,000,000

Designation	Type	Capacity (gallons)
Central 1	Steel	500,000
Central 2	Steel	500,000
Hamilton 1	Steel	500,000
Hamilton 2	Steel	500,000
Hamilton 3	Steel	500,000
Total		27,500,000

Wells

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

Interties

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

Westborough County Water District

2263 Westborough Boulevard
South San Francisco, California 94080-5406

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

Service Area

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

System

Profile

Area Size	1 square mile
Service Population	14,050
Number of Accounts	3,882
Number of SF RWS Connections	1
Connections To SF RWS Mains	San Andreas 1, 2, and 3
Avg. Day Demand (mgd)	0.80
Avg. Day Purchases From SF RWS (mgd)	0.80
% Demand Met With SF RWS Supplies	100.0%
Maximum Local Water Production (mgd)	0
Alternative Supply Sources	None
Interties With Other Agencies	North Coast CWD, Daly City
Local Storage (mg)	6.5
Days of Storage	6.5 – All zones can meet the required 8 hr. coverage.. During emergencies, District also has access to an additional 3.5 mg in storage owned by North Coast WD.

Summary

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

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

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

Water Supply and Demand

Supply by Source	Actual FY 12-13 (ccf)	Actual FY 13-14 (ccf)	Actual FY 14-15 (ccf)	Actual FY 15-16 (ccf)
San Francisco Water	441,233	433,980	377,034	390,753
Local Groundwater	0	0	0	0
Surface Water	0	0	0	0
Recycled Water	0	0	0	0
Other	0	0	0	0
Total	441,233	433,980	377,034	390,753
mgd equivalent	0.90	0.89	0.77	0.80

Demand by Sector				
Residential	320,606	313,148	302,544	288,276
Commercial/Industrial	28,504	26,092	21,572	19,729
Other	0	0	0	0
Dedicated Irrigation	53,498	54,316	35,974	19,690
Unaccounted for	38,625	40,424	16,944	63,058
Total	441,233	433,980	377,034	390,753
mgd equivalent	0.90	0.89	0.77	0.80

Per Capita Use	Actual FY 12-13 (gpcpd)	Actual FY 13-14 (gpcpd)	Actual FY 14-15 (gpcpd)	Actual FY 15-16 (gpcpd)
Residential	50	48	47	42
Gross	68	67	58	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