

9. Agency Profiles

Alameda County Water District

43885 South Grimmer Boulevard
Fremont, California 94538-6348

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

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

Service Area

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

System

Profile

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

Summary

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

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

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Storage Reservoirs

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

ACWD Engineering Report, 2011.

Water Treatment Facilities

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

Wells

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

Interties

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

*Diameter of main connected

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

City of Brisbane / Guadalupe Valley Municipal Improvement District

50 Park Lane

Brisbane, CA 94005

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

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

Service Area

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

System

Profile

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

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

Summary

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

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

Water Supply and Demand

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

Demand by Sector

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

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

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

Facilities and Distribution**Storage Reservoirs**

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

Interties

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

City of Burlingame

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

Service Area

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

System

Profile

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

Summary

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

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Interties

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

California Water Service - Bear Gulch District

3525 Alameda De Las Pulgas
Menlo Park, California 94025

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

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

Service Area

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

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

System

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

Profile

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

Summary

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

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution

Storage Reservoirs

Designation	Type	Capacity (gallons)	Designation	Type	Capacity (gallons)
Bear Gulch Reservoir*	Earth	215,000,000			
Sta. 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	Steel	75,000
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	Sta. 047-Tank 1	Steel	80,376
Sta. 028-Tank 1	Steel	200,000	Sta. 047-Tank 2	Steel	80,376
			Total		226,177,752

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

Surface Water Treatment Facilities

Designation	Capacity (mgd)
Station 2 Filter Plant	6

Interties

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

California Water Service - Mid-Peninsula District

341 North Delaware Street
 San Mateo, California 94401-1727
 Phone: (650) 558-7800 Fax: (650) 342-6865
 Web: <http://www.calwater.com>

Service Area

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

System

Profile

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

Summary

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Designation	Type	Capacity (gallons)
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

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

Summary

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Wells

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

Interties

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

Coastside County Water District

766 Main Street
 Half Moon Bay, California 94019-1995
 Phone: (650) 726-4405 Fax: (650) 726-5245
 Web: <http://www.coastsidewater.org>

Service Area

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

System

Profile

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

Summary

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

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Treated Water Storage Reservoirs**

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

Surface Water Treatment Facilities

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

Wells

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

*Capacity is dependent on stream flows

**Surface water infiltration wells

City of Daly City

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

Service Area

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

System

Profile

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

Summary

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

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

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

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

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

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

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

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

Water Supply and Demand

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

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

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Wells

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

Interties

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

City of East Palo Alto

2415 University Ave.

East Palo Alto, CA 94303

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

American Water Enterprises

2415 University Avenue, 2nd Floor

East Palo Alto, CA 94303

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

Service Area

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

System

Profile

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

Summary

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Wells**

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

Interties

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

Estero Municipal Improvement District

610 Foster City Boulevard

Foster City, California 94404-2299

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

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

Service Area

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

System

Profile

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

Summary

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

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Interties

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

City of Hayward

Utilities & Environmental Services Department
 777 B Street
 Hayward, California 94541
 Phone: (510) 583-4700 Fax: (510) 583-3610
 Web: www.hayward-ca.gov

Service Area

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

System

Profile

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

Summary

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

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution

Storage Reservoirs

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

Wells

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

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

*Out of service for rehabilitation

Interties

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

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

Town of Hillsborough

Water Department

1600 Floribunda Avenue

Hillsborough, California 94010-6498

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

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

Service Area

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

System

Profile

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

Summary

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

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

There are no wells or alternate sources within the district.

Water Supply and Demand

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

Demand by Sector ²

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

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

1 SFPUC billing is based on monthly meter readings.

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

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

Facilities and Distribution**Storage Reservoirs**

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

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

Interties

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

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

City of Menlo Park

Menlo Park Municipal Water
 701 Laurel Street
 Menlo Park, California 94025-3483
 Phone: (650) 330-6750 E-mail: water@menlopark.org
 Web: <http://www.menlopark.org/water>

Service Area

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

System

Profile

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

Summary

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Interties

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

Mid-Peninsula Water District

Three Dairy Lane

Belmont, California 94002-0129

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

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

Service Area

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

System

Profile

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

Summary

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

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Interties

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

City of Millbrae

Public Works - Engineering
 621 Magnolia Avenue
 Millbrae, California 94030

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

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

Service Area

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

System

Profile

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

Summary

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

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Interties

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

City of Milpitas

Public Works Department, Engineering Division
 455 East Calaveras Boulevard
 Milpitas, California 95035-5411
 Phone: (408) 586-3300 Fax: (408) 586-3305
 Web: <http://www.ci.milpitas.ca.gov/>

Service Area

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

System

Profile

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

Summary

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

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

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Wells

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

*Emergency use

Interties

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

*Emergency and Isolation Valves included.

City of Mountain View

Public Services Division
 231 North Whisman Road
 Mountain View, California 94043
 Phone: (650) 903-6329 Fax: (650) 962-8079
 Web: <http://www.mountainview.gov>

Service Area

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

System

Profile

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

Summary

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Wells

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

Interties

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

North Coast County Water District

2400 Francisco Boulevard
Pacifica, California 94044-6039

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

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

Service Area

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

System

Profile

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

Summary

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

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution

Potable Storage Reservoirs

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

Water Treatment Facilities:

Surface Water

Designation	Capacity (mgd)
San Pedro WTP	0.5

Recycled Water

Designation	Capacity (mgd)
Central District	0.3

Interties

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

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

City of Palo Alto

250 Hamilton Avenue

Palo Alto, California 94301-2593

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

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

Service Area

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

System

Profile

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

Summary

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

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

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution

Storage Reservoirs

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

Wells

Name	Capacity (mgd)	Status
Eleanor Pardee	1.44	New – Operational
Library	0.86	New – Operational
El Camino Park	1.44	New – Operational
Fernando	1.01	Existing – Operational
Hale	2.09	Existing – Operational
Matadero	1.01	Existing – Operational
Peers	2.45	Existing – Operational
Rinconada	4.75	Existing – Operational
Total	15.05	

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

Interties

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

Purissima Hills Water District

26375 Fremont Road

Los Altos Hills, California 94022-2699

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

Service Area

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

System

Profile

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

Summary

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Interties

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

City of Redwood City

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

Service Area

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

System

Profile

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

Summary

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

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Interties

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

City of San Bruno

Public Works - Water Division

567 El Camino Real

San Bruno, California 94066

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

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

Service Area

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

System

Profile

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

Summary

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Wells

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

Interties

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

City of San Jose

San Jose Municipal Water System - North

3025 Tuers Road

San Jose, California 95121

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

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

Service Area

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

System

Profile

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

Summary

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

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

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Wells

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

Interties

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

City of Santa Clara

1500 Warburton Avenue
 Santa Clara, California 95050-3792
 Phone: (408) 615-2000 Fax: (408) 247-0784
 Web: <http://santaclaraca.gov/waterandsewer>

Service Area

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

System

Profile

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

* Average daily demand includes recycled water

Summary

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

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

The City also operates a recycled water system, which is part of the South Bay Water Recycling system. Tertiary treated effluent from the jointly owned San Jose-Santa Clara Water Pollution Control 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 14-15 (ccf)	Actual FY 15-16 (ccf)	Actual FY 16-17 (ccf)	Actual FY 17-18 (ccf)
San Francisco Water	914,572	1,135,829	970,987	1,039,840
Santa Clara Valley WD	1,470,999	1,901,738	1,920,855	1,971,390
Local Groundwater	5,816,028	4,291,577	4,752,405	5,285,829
Recycled Water	1,567,103	1,488,319	1,497,626	1,660,829
Other	0	0	0	0
Total	9,768,702	8,817,463	9,141,873	9,957,888
mgd equivalent	20.02	18.07	18.73	20.41

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Wells

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

Interties

Name	No.	Diameter (in.)
SCVWD	1	10

Stanford University

327 Bonair Siding
 Stanford, California 94305-7272
 Phone: (650) 725-8030 Fax: (650) 723-3191
 Web: <https://suwater.stanford.edu>

Service Area

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

System

Profile

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

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

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

Summary

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

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

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

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

Water Supply and Demand

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

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

Demand by Sector

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

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

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

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

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

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

Facilities and Distribution

Storage Reservoirs

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

*Currently out of service

Wells

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

Interties

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

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

City of Sunnyvale

Environmental Services Department

P.O. Box 3707

Sunnyvale, California 94088-3707

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

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

Service Area

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

System

Profile

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

Summary

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

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

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution

Storage Reservoirs

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

Wells

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

Interties

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

Westborough County Water District

2263 Westborough Boulevard
 South San Francisco, California 94080-5406
 Phone: (650) 589-1435 Fax: (650) 589-5167
 Web: <http://www.westboroughwater.com>

Service Area

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

System

Profile

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

Summary

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

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

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

Water Supply and Demand

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

Demand by Sector

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

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

Facilities and Distribution**Storage Reservoirs**

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

Interties

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