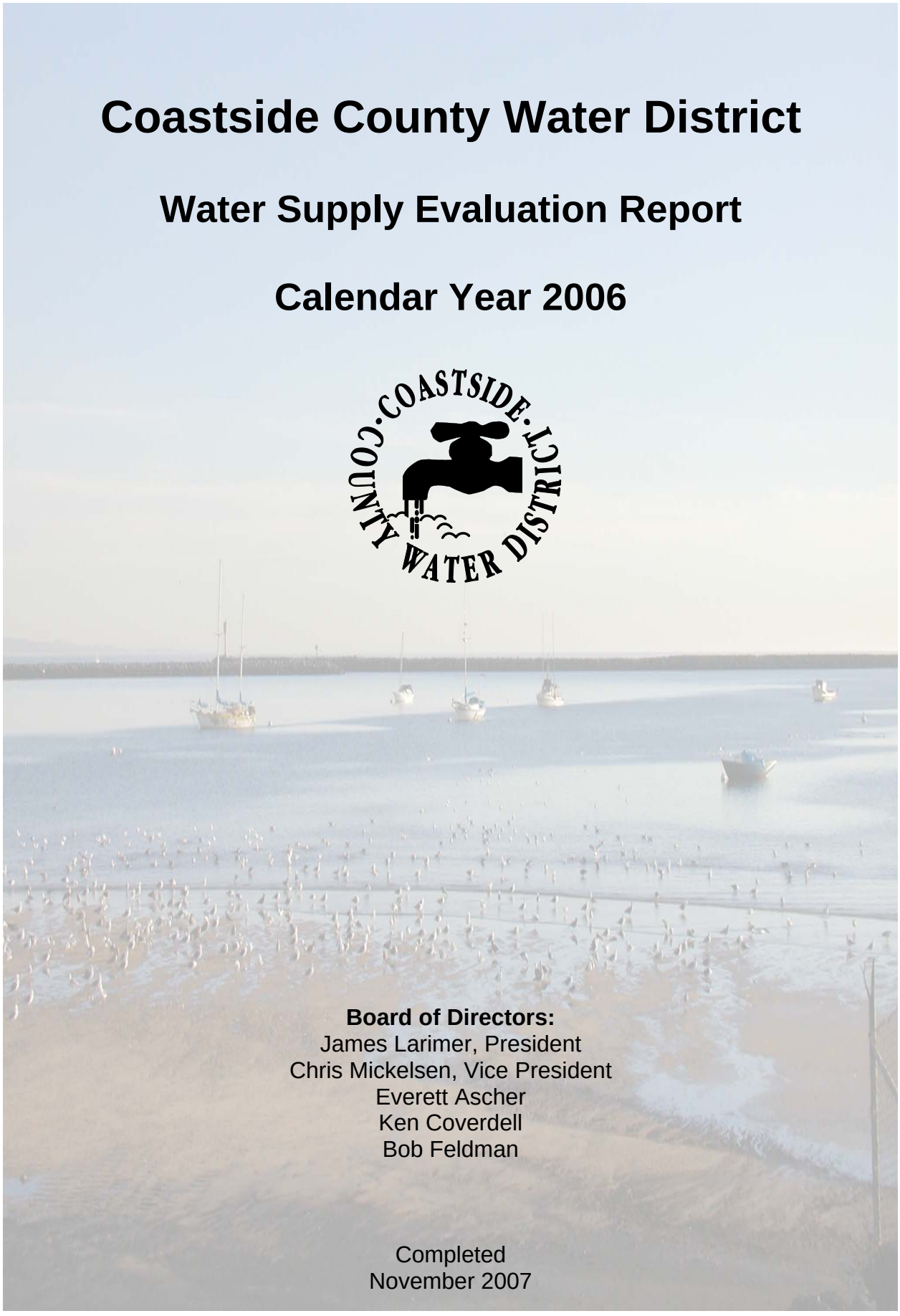
Coastside County Water District

Water Supply Evaluation Report

Calendar Year 2006



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I. Introduction

The Coastside County Water District's (District) Water Supply Evaluation Report is prepared annually following the compilation of water production and water sales data for the prior calendar year. This year's report contains water production data for the period 1972-2006 and water sales data for 1975-2006. The body of this report is focused on summarizing calendar year 2006.

II. System Supply, Production and Transmission Capabilities

Water Supply Sources

The District currently has multiple water supply sources. There are two sources owned and operated by the San Francisco Public Utilities Commission (SFPUC) and there are three sources owned and operated by the District. Appendix G contains a map of the water supply system.

SFPUC

The District purchases water under an agreement (Master Contract) executed in 1984 from two sources owned and operated by SFPUC (1) Pilarcitos Lake and (2) Upper Crystal Springs Reservoir. While terms of this agreement are complex, for the purpose of this report it may be stated that the District is currently entitled to purchase a maximum of approximately 800 MG (million gallons) annually, except in drought years when mandatory water rationing is in effect. The Master Contract between the District and the SFPUC expires in 2009 at which time a new contract will be negotiated and implemented. The transmission pipelines from each of the two sources from SFPUC interconnect in upper Pilarcitos Canyon. Water can be purchased from only one of these sources at any one point in time because of the system hydraulics, including a check valve in the pipeline from Pilarcitos Lake.

Pilarcitos Lake

Water from the Pilarcitos Lake source is normally only available during the winter and spring months because the SFPUC seeks to keep the lake relatively full for use during emergencies. In addition, the District's transmission pipeline from Pilarcitos Lake has a limited capacity of 1,889 gpm (gallons per minute). This limited flow rate is caused by the restriction of the 2,200 linear feet of 50-year-old 12-inch diameter steel pipeline between the SFPUC service connection and northerly end of the 18-inch diameter Pilarcitos Canyon pipeline. The District estimates the safe yield of Pilarcitos Lake to be 520 MG per year. The Pilarcitos Lake supply source is important to the District because it flows by gravity (no pumping required) from the SFPUC service connection to the District's Nunes Water Treatment Plant (WTP). The benefits of the gravity flow of water from Pilarcitos Lake to the treatment plant are low operating costs and high dependability.

Crystal Springs Reservoir

The District pumps water from Upper Crystal Springs Reservoir through an 18-inch diameter transmission pipeline to the Nunes WTP. Water from the Crystal Springs source is available throughout the year on an as-needed basis. The Crystal Springs project was designed for an ultimate capacity of 12.0 MGD. The present capacity to provide water to Half Moon Bay is 4.5 MGD and is limited by the operation constraints of the Nunes WTP. Expansion of the project capacity would require the approval of the SFPUC and the Coastal Commission. The Crystal Springs supply source is important to the District because Crystal Springs Reservoir is inter-tied with SFPUC's main supply source, the Hetch Hetchy system. The Crystal Springs supply is more expensive than the other supply sources because of pumping (electrical power) costs.

<u>Pilarcitos Well Field</u>

The Pilarcitos Well Field is located in Pilarcitos Canyon between Pilarcitos Lake and Highway 92 and it is owned and operated by the District. Operation of this well field is limited by a state-issued water rights license to the period November 1 through March 31 of each year. Also, the license limits the maximum pumping rate to 673 gpm and annual

production to 117 MG. Because the production of these wells is dependent upon infiltration from the Pilarcitos Creek stream flow, their yield is extremely low during drought years.

Denniston Project

The Denniston Project is located in the vicinity of the Half Moon Bay Airport. The Denniston Project has two water supply sources: Denniston Wells and Denniston Surface Water (stream diversion). The District owns and operates these water production facilities.

Denniston Surface Water

Water may be diverted from both Denniston and San Vicente Creeks under a water rights permit issued by the State, but currently there are no facilities for the diversion of water from San Vicente Creek. The water production available from these surface water sources during the summer months is limited by the amount of flow in the creeks and the amount of diversion allowed under the water rights permit, which is sometimes greater than the amount of flow in the creeks during the summer months. During drought years the production from these creeks is extremely low because of the small watershed area. The intake at the Denniston stream diversion has been negatively impacted by the build up of silt. Routine dredging has not occurred in recent years due to difficulty obtaining permits. The silt build up affects both the quality and the quantity of water from the Denniston stream diversion.

Denniston Wells

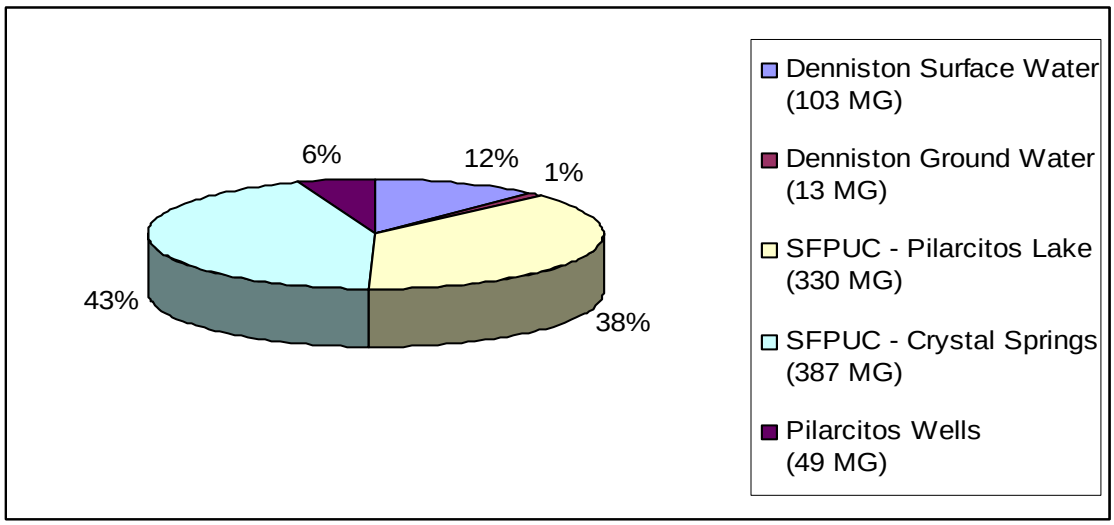
The production from the Denniston area wells is not under the control of a water rights permit, but a Coastal Development Permit limits annual total production of the well field to 130 MG. The production from the Denniston well field decreases substantially during drought periods due to lowering of the water table in the Denniston groundwater basin.

Water Production

In 2006, the District produced a gross total of 880 million gallons of water from the three supply sources. Figure 1 illustrates the percentage of water production from the three

supply sources. Water purchased from the SFPUC constituted 81% of the District's 2006 annual water production, while the District's local water sources composed of 19%.

Figure 1: 2006 Production of Water Supply Sources



Capability of Supply Sources to Meet Annual Demands

The quantity of water available from each of the District's supply sources is in some degree dependent upon precipitation for local sources and snowfall for imported sources. Therefore, the amount of water available from the different sources varies annually. Despite the fact that severe droughts occur infrequently, the District must limit the number of service connections in its system to meet basic water requirements of its customers during drought years. The amount of water that a supply source can reasonably be expected to produce during severe droughts such as those which occurred during 1976-77 and 1989-91 is defined as its "drought yield" (also referred to as safe yield); the amount that this source can be expected to produce following several years of average precipitation is defined as its "normal yield."

In times of drought, the District has proven it can reduce water demand by approximately 25-30%, by measures implemented by SFPUC and the District in 1977, 1978, 1988, 1990, 1991, and 1992. There is concern that "demand hardening" due to more water efficient

appliances and fixtures may impact the ability of customers to duplicate the large percentage reductions in drought years, since their current usage is more efficient.

Fire safety is dependent upon having adequate water in the storage tanks, in either a drought yield or a normal yield. Under drought conditions, the drought yield supply is ample to meet fire safety regulations since water rationing measures would be instituted to reduce overall demand.

Table 1: Benchmarking Survey for Treated Storage Capacity

	Name of Agency	Storage in Million Gallons	Population	Gallons Storage per Capita
1	Guadalupe Valley Muni Improvement Dist.	2.7	438	6,164
2	Purissima Hills Water District	9.9	6,000	1,647
3	City of Brisbane	2.7	3,159	855
4	Town of Hillsborough	8.3	10,965	753
5	North Coast Water District	23.8	40,000	595
6	Estero	20.0	34,385	582
7	Westborough Water District	6.5	12,000	542
8	City of Menlo Park	5.5	10,213	539
9	Coastside County Water District	8.1	17,372	466
10	Mid-Peninsula (Belmont)	12.0	26,050	461
11	San Jose Municipal System-North	6.0	15,256	393
12	Stanford University	8.0	27,715	289
13	Skyline County Water District	0.5	1,812	270
14	Alameda County Water District	85.8	324,800	264
15	City of Redwood City	21.2	83,492	254
16	City of Santa Clara	27.3	108,700	251
17	City of Milpitas	16.3	64,998	251
18	City of Daly City	23.1	104,661	221
19	City of Sunnyvale	27.5	133,544	206
20	City of San Bruno	8.0	40,165	199
21	City of Hayward	28.1	146,398	192
22	Calwater Bear Gulch	10.0	55,820	179
23	City of Palo Alto	10.5	62,148	169
24	Calwater Mid-Peninsula	20.4	123,890	165
25	Calwater So. San Francisco	8.1	56,900	142
26	City of Millbrae	2.6	20,718	125
27	City of Mountain View	9.0	72,033	125
28	City of Burlingame	2.9	28,000	105
29	East Palo Alto Water District	0.0	25,696	0

BAWSCA Annual Survey Data March 2007

The District has approximately 8.1 MG of storage available for a population of 17,372 residents. This currently equates to 466 gallons per capita of storage. Each person is estimated to use roughly 75 gallons per day. Of the 29 regional water agencies benchmarked, the District ranks 9th in storage available per customer. See Table 1 for the District's storage capacity and ranking among other regional water districts. Water supply planning manuals ("Water Supply Planning" by David Prasifka) recommend enough storage capacity to meet peak flow demand.

The estimated drought yield and normal yield annual production for each of the District's supply sources is shown below in Table 2.

Table 2: Estimated Annual Production Capability in MG

Supply Source	Drought Yield (Safe Yield)	Normal Yield
SFPUC (Crystal Springs Res. and Pilarcitos Lake)	[1]600	[2]800
Pilarcitos Well Field	[3]16	[4]53
Denniston Surface Water	[5]101	[6]204
Denniston Groundwater	[7]43	[8]55
Annual Total	**760**	**1112**

[1] Based on the SFPUC Agreement less 25% mandatory rationing which has been imposed by SFPUC during recent droughts.
[2] Based on SFPUC Agreement amount.
[3] Based on historical year of lowest production, 1977.
[4] Average production since 1983.
[5] Based on historical lowest year of production, 1977.
[6] Average production since 1992, when the maximum capacity of the Denniston WTP was decreased to 700 gpm for compliance with the Surface Water Treatment Rule.
[7] Based on well production capability at end of 1991. Well production was low this year because it was during a drought period when flow in the creek was minimal.
[8] Based on well production during 1995 during which production was maximized.

Transmission System Capability to Meet Peak Daily Demands

The capability of the District's existing water supply and transmission system to meet the demands placed upon it by existing and potential new service connections must be evaluated in regards to two parameters: (1) annual demands and (2) peak daily demands. The system must have both an adequate water supply to meet peak annual demands and sufficient pipeline transmission capacity to meet peak daily demands.

The supply system's transmission pipelines must have sufficient capacity to meet peak daily demands, which occur during periods of hot weather. The District's two primary supply system transmission pipelines are those which convey water from the two primary supply sources available during the summer months, Crystal Springs Reservoir (or Pilarcitos Lake) and the Denniston Project. The system's capability to meet these peak daily demands is shown in Table 3.

Table 3: Transmission Capability at Peak Demand Periods (gpm)

Water Supply Sources	Drought Conditions	Average Precipitation
SFPUC (Crystal Springs Res. & Pilarcitos Lake)	[9]3,125	[10]3,125
Pilarcitos Well Field	[11]0	[12]0
Denniston Surface Water	[13]180	[14]464
Denniston Well Field	[15]78	[16]110
Total Peak Flow	**3,383**	**3,699**

[9] Based on 4.5 MGD rated capacity of the Nunes WTP. The Crystal Springs Pump Station rated capacity is 3,847 gpm. The peak capacity of the transmission pipeline from Pilarcitos Lake is 1,889 gpm.
[10] Same as footnote 9.
[11] Well field cannot be operated during peak demand months.
[12] Same as footnote 11.
[13] Based on minimum stream flow during 1976-77 drought.
[14] Average productions since 1992 for months when peak demands occur (June, July, August, September).
[15] Based on peak well production capability at end of 1991.
[16] Average productions during 1995 for months when peak demands occur (June, July, August, September).

The above information assumes that peak daily demands will occur during summer or fall months. Denniston surface water is normally available in greater quantity to meet peak demands during spring months. Also, footnote 9 contains important information regarding

system capacity during peak demand periods, which should be briefly discussed. As stated in footnote 9, the transmission capacity from SFPUC source is shown as 3,125 gpm based on the 4.5 MGD rated capacity of the Nunes WTP. This rated capacity of the treatment plant is based on water quality requirements for the treated water, not on hydraulic capacity. During periods of low untreated water turbidity, which is the normal condition for Crystal Springs water during summer and fall months, the Nunes WTP can be operated satisfactorily at the full 3,848 gpm rated capacity of the Crystal Springs Pump Station. Using this 3,848 gpm amount in the table shown above instead of the 3,125 gpm amount, the resulting total peak flow capabilities are 4,106 gpm during drought conditions and 4,417 gpm during average precipitation conditions.

III. System Demands

System demands are monitored by two methods: (1) water sales as recorded on the customer's individual water meters, and (2) water production as recorded on the District's master water meters at each of its supply sources. More water must be produced than is sold due to losses within the distribution system, distribution system flushing and treatment plant uses.

Annual Demand

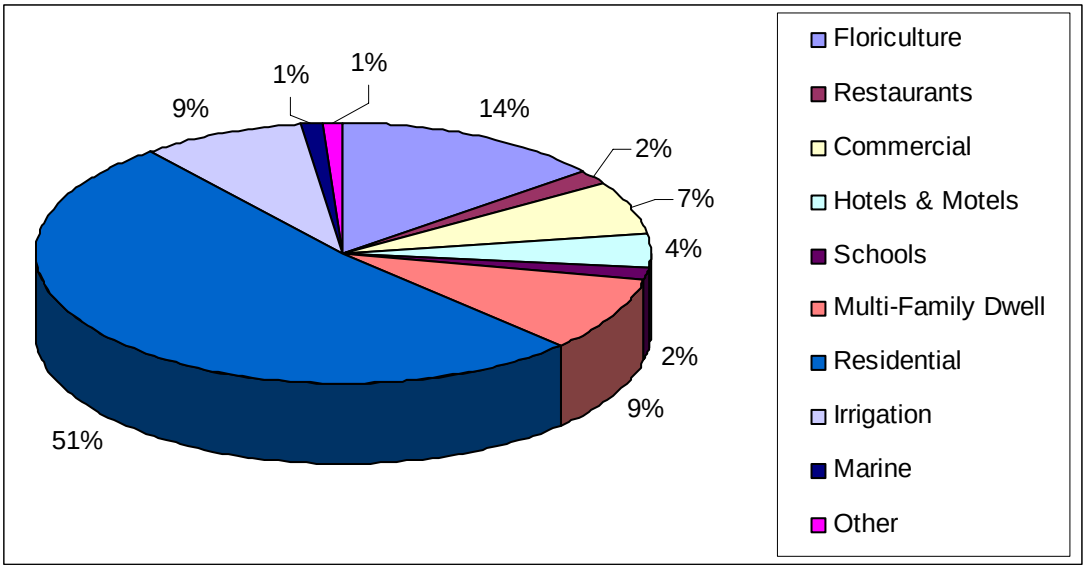
The District began monitoring water sales to its major customers in 1972, prior to construction of the Denniston Project, as it was apparent that system demands were reaching the capacity of the Pilarcitos Lake source. In 1979, following publication of the draft public works section of the San Mateo County Local Coastal Program (LCP), it became evident that a much more sophisticated monitoring program would be required in order for the District to have the data necessary to support permit applications for expansion, maintenance, and upgrades of its water supply, storage, and transmission facilities.

Beginning with the 1979 Water Supply Evaluation study, the District initiated a much more thorough annual analysis of its water sales and production. These analyses use 1975 as

the base year since that was the last year of normal water usage prior to the 1976-77 drought (1979 was the first full year subsequent to the drought that no form of water rationing was in effect). The water usage data has also been compiled by the user categories found in the LCP's. A summary of water production from each of the three supply sources since 1972 is shown in Appendix A.

In accordance with the LCP, the District breaks down its user categories into eleven different sectors. In 2006, 60% of the District's water sales were sold to the residential sector. The second major water user is the floriculture sector, totaling 14% of sales. Water sales by categories from 1975 are shown in Appendix B. Figure 2 illustrates the breakdown of water sales by category for 2006. The "Other" label includes the following sales categories; portable meters, recreation, beaches/parks, and fire accounts.

Figure 2: 2006 Water Sales by Category



Water sales have generally increased annually due to the number of new water service connections that are installed and activated each year. Figure 3 is a comparison by year of the sales categories and total sales. This chart illustrates changes in consumption year

to year in each sales category. Appendix D shows the number of new service connections installed each year from 1970 to 2006.

Figure 3: Comparison of Sales by Year (1996-2006)

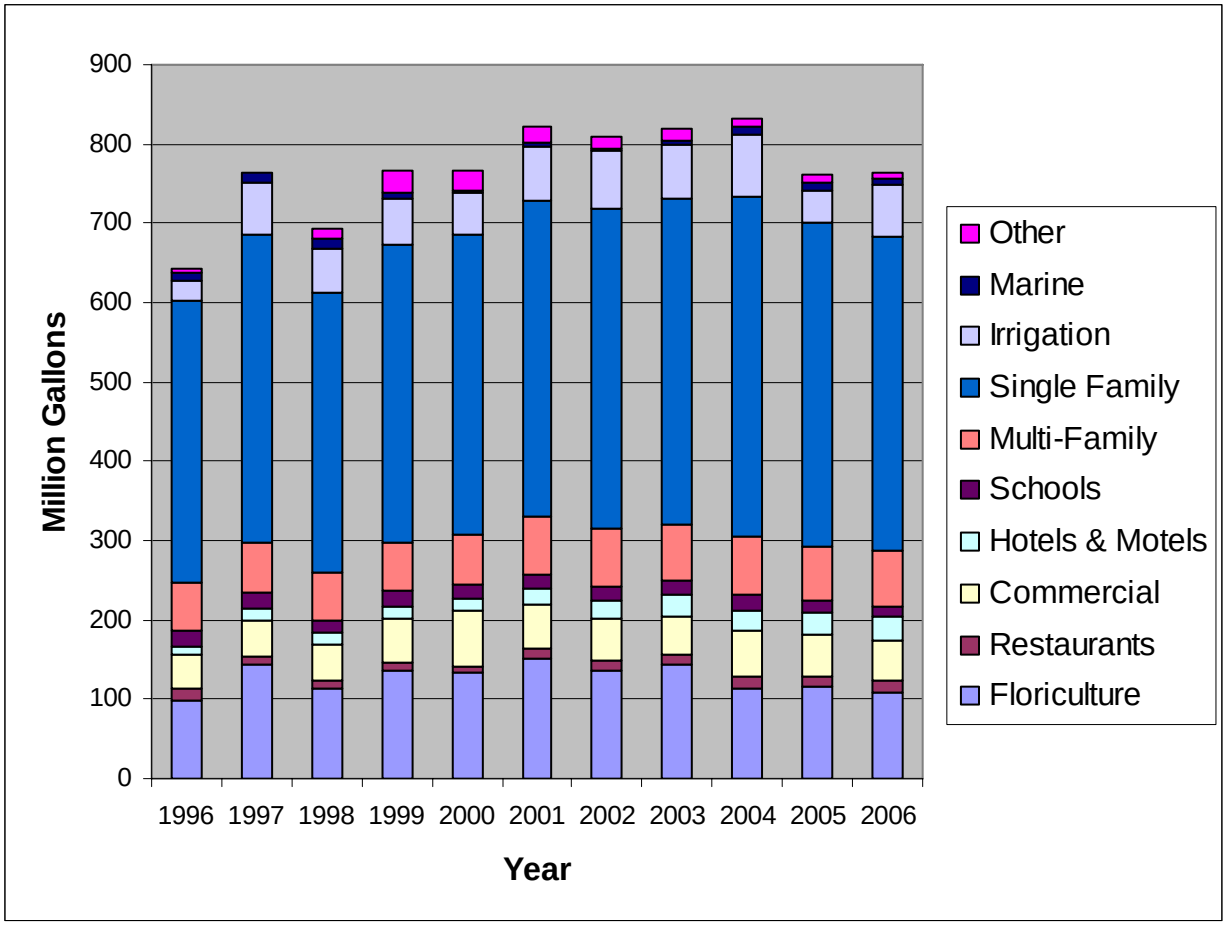


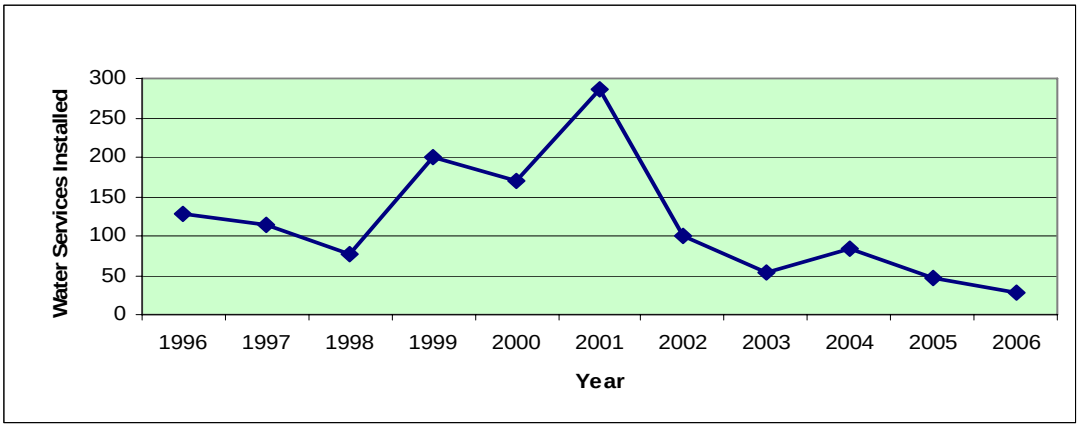
Table 4 lists the total sales accounts by category for the year 2006. Active service connections (active accounts) are defined as those for which the water meter has been installed and the District is billing the customer. This table demonstrates that the majority of accounts are residential, which corresponds with 60% of water sales (consumption) coming from residential accounts.

Table 4: Number of Accounts by Sales Category-2006

Sales Category	Number of Accounts
Floriculture	37
Restaurants	32
Commercial	286
Hotels and Motels	38
Schools	20
Multi-Family Residential	848
Single Family Residential	5448
Irrigation	48
Marine	24
Fire	739
Total	7520

Figure 4 illustrates the number of new water service connections installed on the District's water system for the past eleven years. In 2006, there were 29 new water connections installed. This figure does not include fire service connections.

Figure 4: Number of New Water Connections Installed (1996-2006)



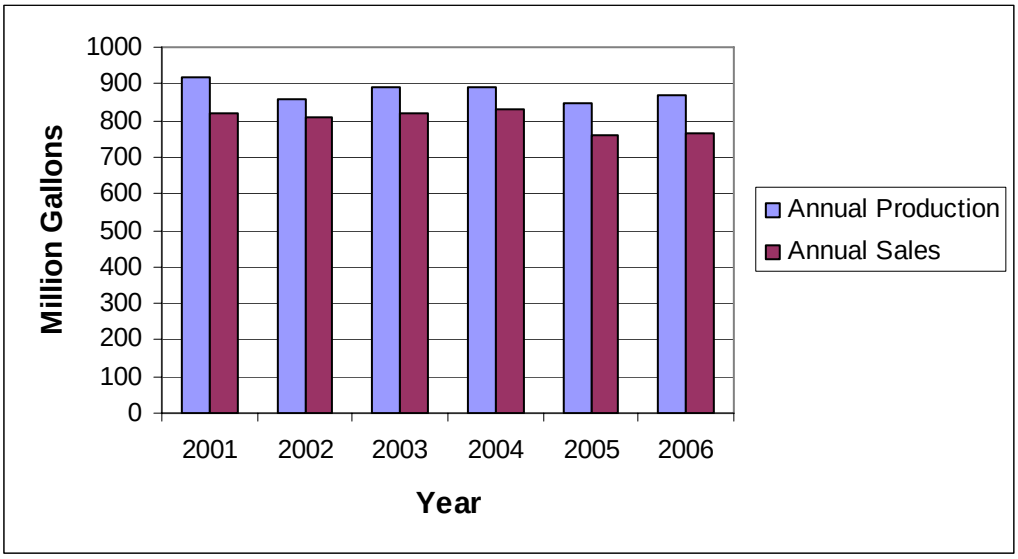
A summary of the Crystal Springs Connections is shown in Table 5. This table shows the total number and the type of connections permitted by the Crystal Springs Project – Coastal Development Permit and their status as of December 31, 2006.

Table 5: Crystal Springs Connections

Crystal Springs Water Supply Project				
Summary of all Crystal Springs Connections				
County of San Mateo Coastal Development Permit Conditions				
	Number of Connections	5/8th Equivalents	Priority	Non-Priority
Total Permitted by CSP-CDP	3,546.0	3,546.0	1,043.0	2,503.0
Total Sold and Uninstalled			111.5	1,133.0
Total Sold and Installed			549.5	1,298.0
Amount Reserved				72.0
Amount Reserved CSP-CDP			202.5	
Total Unsold Priority			179.5	
12/31/2006				

Figure 5 illustrates the annual production versus the annual sales from the last six years (2001-2006). Appendix E contains a table that compares consumption and production for single family accounts since 1975. Appendix C presents a table that has a comparison of sales and production, since 1975. More water must be produced than sold because of water lost within the distribution system between the supply sources and the customers' water meters.

Figure 5: Annual Sales vs. Production (2001-2006)



Un-metered Water

Based on the American Water Works Association (AWWA), the generally accepted industry standard for unaccounted for (un-metered) water is from 7%-15%. The District's goal is to keep unaccounted for water losses as minimal as possible. During 2006, the amount of unaccounted for water was 11% of the amount of water produced and delivered to the distribution system.

According to the Memorandum of Understanding with the California Urban Water Conservation Council (CUWCC), unaccounted water loss should be no more than 10% of total water into the water supplier's system. Unauthorized losses include pipeline leaks, unauthorized connections, theft, water meter inaccuracy, accounting procedure errors, and tank overflows (distribution system malfunctions). The District has an on-going program to reduce the amount of unaccounted for water losses through pipeline leakage and water meter inaccuracy. Water loss cannot be totally eliminated because there is no way to eliminate leaking pipes and system malfunctions.

The difference between the water produced and delivered to the distribution system (859.3 MG) and water sold (765.2 MG) is 94.1 MG. This amount of 94.1 MG is un-metered water use that is both authorized and unauthorized water use. Typically, un-metered water use that is characterized as authorized is from fire hydrants and includes; fire training, fire suppression, sewer flushing, and main flushing. Unauthorized (un-metered) water use could be from theft, accounting errors, and leaks.

(A) Pipeline Leakage

While there are no known pipelines that are currently losing a significant amount of water from leakage, there are numerous identified areas with old pipelines that often develop minor leaks resulting in losses of water. Implementation of pipeline replacement projects is dependent upon funding as part of the annual Capital Improvement Program. While all observed (visible) pipeline leaks are repaired by the District field staff, water from undetected (invisible) leaks percolates downward into the soil and is lost.

(B) Water Meter Inaccuracy

Authorized metered use is a term used to describe the metered deliveries of water to customers. The term "meter inaccuracy" describes water that flows through a water meter but is undetected. As meters age and get worn out, they will under register water consumption. Meters will start to register a flow lower than the actual, causing undetected water to flow through the meter. Water auditing methodology (AWWA M36) allows for a correction to be made in consumption figures for each meter type and size, if meter testing is in place. Correcting the actual consumption figures can give the district a more accurate accounting of actual leakage or water loss in the distribution system. The District tries to replace old meters every year with new ones to reduce the amount of water lost and unread within the system. The meter replacement program, as currently budgeted, tries to maintain the maximum meter age at 15 years, a duration that is considered acceptable from an accuracy standpoint for single family residential meters. Larger commercial meters for customers with high demand should be replaced and tested more frequently, such as, every 1 to 5 years.

Peak Daily Demands

In addition to meeting annual water supply requirements, the system must have sufficient transmission pipeline capacity between the supply sources and the distribution system to convey the volume of water required to meet the peak day demands which occur during periods of hot weather or events such as fire suppression. The annual episodes of significant peak demand that have occurred since 1980 are tabulated in Appendix F.

For 2006, peak daily demand was chosen by reviewing the three months that had the highest production and consumption. From these three months, the top seven days of peak production were chosen.

The district is in the process of developing a hydraulic model for the distribution system and upgrading the data logger to a SCADA /Telemetry system. These tools will help the District calculate and track peak demand in the future.

IV. Analysis of System

As noted previously in this report, the adequacy of the water system to meet the requirements of its customers must be evaluated with regard to both current annual demands and peak demands.

Annual Demand

It is important to understand that gross production demand does not reflect the amount of water taken from the water sources. Approximately 12.81 MG from the Denniston Treatment Plant was recycled back into the aquifer (water source).

The total current supply capability of the District's water supply sources to meet annual demands has previously been stated in Section II to be 760 MG on a drought yield basis and 1,120 MG on a normal yield (average precipitation) basis. The production requirement for year 2006 was 880 MG. The available water supply during non-drought years is above the District's current requirements.

However, during drought years the current demand of 880 MG exceeds the estimated drought yield supply of 760 MG by 120 MG, which would require a cutback of approximately 14%. During the most recent drought (1989-1992), San Francisco Public Utilities Commission mandated a 20-25% reduction of water use by each of its suburban customers. Should another water reduction occur, the District will refer to its Water Shortage Contingency Plan (June 2005) in order to achieve the required reduction.

The calendar year of 2006 included two water years. The water year of 2005 (October 1, 2005 to September 30, 2006) was considered a wet year with above normal precipitation amounts. The water year of 2006 (October 1, 2006 to September 30, 2007) was considered critically dry.

Demand Management

The District practices demand management during normal water years by implementing water conservation programs. Water conservation programs are tracked and reported on a fiscal year to the California Urban Water Conservation Council. The District signed a memorandum of understanding (MOU) to implement the demand management best management practices. Table 6 lists the best management practices that the District has committed to implement.

Table 6: Best Management Practices – Water Conservation

California Urban Water Conservation Council
Water Survey Programs for Single Family and Multi-Family Residential Customers
Residential Plumbing Retrofits
System Wide Audits, Leak Detection and Repair
Metering with Commodity Rates for all New Connections and Retrofit of Existing
Large Landscape Conservation Programs and Incentives
High Efficiency Washing Machine Rebate Programs
Public Information Programs
School Education Programs
Commercial, Industrial and Institutional Conservation Programs
Conservation Pricing (Rates)
Conservation Coordinator
Water Waste Prohibitions
Ultra Low Flow Toilets – Residential Replacement Programs

Appendix H of this report contains data on the consumption of appliances and fixtures for both ultra low flow and high efficiency. Plumbing fixtures are regulated by state and federal standards. In California, ultra low flow standards have been in place for new construction, since 1992. In 1994, these standards were adopted nation wide as part of the U.S Energy Policy Act. In the last few years, water conservation technologies have advanced and there are now fixtures and appliances that are rated as high efficiency

because they exceed the current mandated standards. The Environmental Protection Agency has sponsored programs and partnerships to encourage manufacturers to exceed current mandated standards.

The District participates with and coordinates water conservation programs (demand management programs) and activities with the Bay Area Water Supply and Conservation Agency (BAWSCA). In 2006, the District participated in a regional high efficiency clothes washer rebate program, a large landscape audit program, and an elementary school education program. The district managed its own toilet rebate program in 2006.

Capitol Improvement Projects

In 2006, the District completed the Avenue Balboa Project, the Nunes Treatment Plant Influent Flow Meter Project, the Nunes Influent Valve Project, The Denniston Backwash Return Project and the Carter Hill West Project.

In progress are the Nunes Backwash Flow Meter Project, the Nunes Filter Media Replacement Project, SCADA/Telemetry Upgrades, Office Equipment Upgrades, and the Nunes Filter Backwash Valves. Phase III of the El Granada pipeline replacement project is in progress and scheduled to be complete in spring of 2008.

V. Summary

The water system continues to operate reliably. In 2006, the District produced a gross total 880 million gallons of water and sold 765 million gallons to its customers.

Appendices

Monthly Production of Water Supply Sources in MG
1972

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	0.0	0.0	6.2	13.0	19.2
February	0.0	0.0	12.0	17.6	29.6
March	0.0	0.0	9.3	6.3	15.6
April	0.0	0.0	22.9	0.0	22.9
May	0.0	0.0	35.1	0.0	35.1
June	0.0	0.0	39.3	0.0	39.3
July	0.0	0.0	47.0	0.0	47.0
August	0.0	0.0	45.4	0.0	45.4
September	0.0	0.0	45.9	0.0	45.9
October	0.0	0.0	48.6	0.0	48.6
November	0.0	0.0	18.3	24.2	42.5
December	0.0	0.0	4.7	27.4	32.1
Total	**0.0**	**0.0**	**334.7**	**88.5**	**423.2**
Total %	**0.0%**	**0.0%**	**79.1%**	**20.9%**	**100.0%**

Monthly Production of Water Supply Sources in MG
1973

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	0.0	0.0	0.0	19.3	19.3
February	0.0	0.0	0.0	23.3	23.3
March	0.0	0.0	0.0	30.1	30.1
April	0.0	0.0	0.9	21.8	22.7
May	0.0	0.0	19.1	4.1	23.2
June	0.0	0.0	49.7	0.0	49.7
July	0.0	0.0	59.0	0.0	59.0
August	0.0	0.0	61.1	0.0	61.1
September	0.0	0.0	60.6	0.0	60.6
October	0.0	0.0	36.7	0.0	36.7
November	4.3	0.0	22.7	17.9	44.9
December	4.4	0.0	0.0	20.4	24.8
Total	**8.7**	**0.0**	**309.8**	**136.9**	**455.4**
Total %	**1.9%**	**0.0%**	**68.0%**	**30.1%**	**100.0%**

Monthly Production of Water Supply Sources in MG
1974

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	9.9	0.0	0.4	23.0	33.3
February	12.2	0.0	0.2	12.2	24.6
March	12.5	0.0	0.0	21.8	34.3
April	16.5	0.0	1.0	11.4	28.9
May	34.4	0.0	3.6	0.0	38.0
June	33.7	0.0	13.0	0.0	46.7
July	32.8	0.0	14.7	0.0	47.5
August	27.0	0.0	14.6	0.0	41.6
September	23.4	0.0	18.8	0.0	42.2
October	22.9	0.0	18.4	0.0	41.3
November	19.6	0.0	11.8	5.8	37.2
December	19.6	0.0	2.1	7.0	28.7
Total	**264.5**	**0.0**	**98.6**	**81.2**	**444.3**
Total %	**59.5%**	**0.0%**	**22.2%**	**18.3%**	**100.0%**

Monthly Production of Water Supply Sources in MG
1975

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	24.6	0.0	0.2	12.1	36.9
February	15.8	0.0	0.2	15.1	31.1
March	22.3	0.0	0.2	16.8	39.3
April	31.5	0.0	0.0	0.0	31.5
May	34.1	0.0	4.0	0.0	38.1
June	21.4	0.0	21.2	0.0	42.6
July	21.5	0.0	22.9	0.0	44.4
August	21.7	0.0	27.4	0.0	49.1
September	29.9	0.0	23.5	0.0	53.4
October	27.1	0.0	17.7	0.0	44.8
November	21.5	0.0	8.3	9.2	39.0
December	24.8	0.0	0.0	7.1	31.9
Total	**296.2**	**0.0**	**125.6**	**60.3**	**482.1**
Total %	**61.4%**	**0.0%**	**26.1%**	**12.5%**	**100.0%**

Monthly Production of Water Supply Sources in MG
1976

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	19.0	1.0	1.9	4.1	26.0
February	25.8	1.0	9.3	5.2	41.3
March	17.6	3.4	2.0	6.5	29.5
April	23.6	3.1	4.4	0.0	31.1
May	8.9	5.5	30.3	0.0	44.7
June	1.0	6.6	37.7	0.0	45.3
July	2.7	6.2	37.7	0.0	46.6
August	7.8	5.8	35.8	0.0	49.4
September	23.0	5.6	20.3	0.0	48.9
October	7.8	5.4	21.1	0.0	34.3
November	8.1	6.2	22.1	7.8	44.2
December	9.5	6.1	13.2	5.1	33.9
Total	**154.8**	**55.9**	**235.8**	**28.7**	**475.2**
Total %	**32.6%**	**11.8%**	**49.6%**	**6.0%**	**100.0%**

* Voluntary water rationing (prohibition of nonessential water use) and water service connection moratorium enacted May 25,

Monthly Production of Water Supply Sources in MG
1977

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	22.0	0.0	10.3	3.7	36.0
February	13.2	6.3	11.7	1.2	32.4
March	10.1	5.5	9.7	4.2	29.5
April	9.5	5.6	6.1	0.0	21.2
May	5.6	5.6	10.8	0.0	22.0
June	2.7	5.9	13.8	0.0	22.4
July	1.1	5.2	18.9	0.0	25.2
August	1.5	5.5	29.2	0.0	36.2
September	4.8	5.4	22.6	0.0	32.8
October	9.6	5.9	17.5	0.0	33.0
November	13.9	6.3	15.5	0.0	35.7
December	7.3	6.1	8.5	7.4	29.3
Total	**101.3**	**63.3**	**174.6**	**16.5**	**355.7**
Total %	**28.5%**	**17.8%**	**49.1%**	**4.6%**	**100.0%**

*Mandatory water rationing enacted April 12, 1977

Monthly Production of Water Supply Sources in MG
1978

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	14.6	0.0	1.8	13.7	30.1
February	12.5	0.0	0.0	10.3	22.8
March	15.0	0.0	0.0	14.0	29.0
April	25.0	0.0	0.0	0.0	25.0
May	32.8	0.6	0.6	4.9**	34.0
June	16.7	7.3	12.6	0.0	36.6
July	22.8	7.2	20.9	0.0	50.9
August	15.1	5.2	23.0	0.0	43.3
September	16.0	6.2	29.2	0.0	51.4
October	18.6	6.4	22.2	0.0	47.2
November	22.5	4.5	15.8	2.2	45.0
December	21.0		4.9	3.4	29.3
Total	**232.6**	**37.4**	**131.0**	**48.5**	**449.5**
Total %	**51.7%**	**8.3%**	**29.1%**	**10.8%**	**100.0%**

*Water rationing suspended March 29, 1978

** Temporary diversion permit issued by State Division of Water Rights

Monthly Production of Water Supply Sources in MG
1979

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	19.4	0.0	2.5	11.6	33.5
February	17.9	0.1	1.0	12.0	31.0
March	19.8	0.2	0.4	11.8	32.2
April	29.7	0.0	0.5	0.0	30.2
May	34.9	0.0	4.4	0.0	39.3
June	32.0	0.0	14.4	0.0	46.4
July	23.6	9.4	26.0	0.0	59.0
August	19.4	9.4	23.4	0.0	52.2
September	18.0	7.7	33.4	0.0	59.1
October	12.3	10.6	31.5	0.0	54.4
November	17.0	6.1	12.8	12.3	48.2
December	23.5	0.6	1.7	11.8	37.6
Total	**267.5**	**44.1**	**152.0**	**59.5**	**523.1**
Total %	**51.1%**	**8.4%**	**29.1%**	**11.4%**	**100.0%**

Monthly Production of Water Supply Sources in MG
1980

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	19.0	0.0	0.9	14.8	34.7
February	27.1	0.9	1.0	18.0	47.0
March	14.1	0.3	1.1	20.3	35.8
April	21.9	2.2	0.0	0.0	24.1
May	29.9	0.0	0.0	1.0*	29.9
June	31.8	0.0	14.7	0.0	46.5
July	28.6	0.0	21.0	0.0	49.6
August	21.3	7.0	23.7	0.0	52.0
September	24.6	5.4	20.5	0.0	50.5
October	25.2	3.8	19.0	0.0	48.0
November	20.8	6.8	15.2	3.0	45.8
December	27.0	0.0	6.2	4.3	37.5
Total	**291.3**	**26.4**	**123.3**	**61.4**	**502.4**
Total %	**58.0%**	**5.3%**	**24.5%**	**12.2%**	**100.0%**

*Water released down Pilarcitos Creek by SFPUC during period of high turbidity at Stone Dam Reservoir

Monthly Production of Water Supply Sources in MG
1981

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	23.4	0.0	5.6	18.0	47.0
February	23.1	0.5	1.2	9.7	34.5
March	18.8	0.0	0.0	12.8	31.6
April	28.4	0.1	2.0	0.0	30.5
May	25.8	0.0	17.5	0.0	43.3
June	11.6	7.4	28.6	0.0	47.6
July	11.2	7.7	43.4	0.0	62.3
August	5.3	9.6	40.5	0.0	55.4
September	6.2	9.8	39.3	0.0	55.3
October	10.0	9.0	9.7	0.0	28.7
November	12.2	7.9	9.8	4.3	34.2
December	24.3	4.1	14.6	18.8	61.8
Total	**200.3**	**56.1**	**212.2**	**64.6**	**532.2**
Total %	**37.6%**	**10.5%**	**39.9%**	**12.1%**	**100.0%**

Monthly Production of Water Supply Sources in MG
1982

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	10.0	6.2	*	23.8	40.0
February	3.8	8.2	*	21.9	33.9
March	5.2	6.8	*	20.1	32.1
April	6.4	8.6	*	24.4**	39.4
May	2.7	10.3	*	23.3**	36.3
June	26.7	1.7	2.3	0.0	30.7
July	28.1	0.0	41.6	0.0	69.7
August	23.1	6.7	45.9	0.0	75.7
September	12.6	5.6	39.5	0.0	58.0
October	9.0	5.5	34.6	0.0	49.1
November	13.8	0.9	8.2	7.8	30.7
December	10.5	1.7	2.8	17.6	32.6
Total	**151.9**	**62.5**	**174.9**	**138.9**	**528.2**
Total %	**28.8%**	**11.8%**	**33.1%**	**26.3%**	**100.0%**

*SFPUC meter inoperative

**SFPUC released water from Stone Dam (upstream)

Monthly Production of Water Supply Sources in MG
1983

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	11.7	1.8	0.8	20.5	34.8
February	7.1	3.9	1.0	19.1	31.1
March	0.1	2.2	0.0	18.3	20.6
April	13.8	2.3	17.2	10.2	43.5
May	25.2	0.0	22.9	0.0	48.1
June	31.8	0.0	32.3	0.0	64.1
July	35.4	0.0	39.6	0.0	75.0
August	30.4	1.0	36.9	0.0	68.3
September	30.8	5.0	34.8	0.0	70.6
October	21.1	2.1	30.1	0.0	53.3
November	12.6	5.5	14.7	7.6	40.4
December	11.3	8.3	1.7	18.5	39.8
Total	**231.3**	**32.1**	**232.0**	**94.2**	**589.6**
Total %	**39.2%**	**5.4%**	**39.3%**	**16.0%**	**100.0%**

Monthly Production of Water Supply Sources in MG
1984

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	6.4	7.3	12.6	16.2	42.5
February	19.2	0.0	14.6	5.2	39.0
March	23.0	0.0	12.1	11.9	47.0
April	24.9	0.0	18.2	0.0	43.1
May	25.8	1.4	30.5	0.0	57.7
June	21.3	5.6	46.6	0.0	73.5
July	12.7	7.3	46.0	0.0	66.0
August	11.6	7.0	49.1	0.0	67.7
September	9.7	7.4	54.5	0.0	71.6
October	17.4	1.6	47.1	0.0	66.1
November	11.8	4.4	26.6	9.0	51.8
December	8.8	7.5	10.5	22.2	49.0
Total	**192.6***	**49.5**	**368.4**	**64.5**	**675.0***
Total %	**28.5%**	**7.3%**	**54.6%**	**9.6%**	**100.0%**

*Includes approximately 40 mg used for filter backwashing at the Denniston WTP

Monthly Production of Water Supply Sources in MG
1985

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	14.1	5.2	6.3	18.7	44.3
February	12.4	3.8	6.5	15.1	37.8
March	18.9	2.3	12.0	14.9	48.1
April	16.4	1.9	14.2	0.0	32.5
May	27.2	0.0	37.9	0.0	65.1
June	24.7	1.2	36.3	0.0	62.2
July	16.2	5.0	46.5	0.0	67.7
August	18.1	6.9	42.8	0.0	67.8
September	18.1	0.6	50.0	0.0	68.7
October	12.8	6.1	42.3	0.0	61.2
November	18.2	1.5	39.8	11.0	70.5
December	13.0	5.4	10.1	8.2	36.7
Total	**210.4***	**39.9**	**344.4**	**67.9**	**662.6***
Total %	**31.8%**	**6.0%**	**52.0%**	**10.2%**	**100.0%**

*Includes approximately 13 mg used for filter backwashing at the Denniston WTP

Monthly Production of Water Supply Sources in MG
1986

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	12.00	3.91	14.61	15.29	45.81
February	8.30	4.85	12.38	15.16	40.69
March	13.10	6.17	34.95	13.94	68.16
April	21.70	6.58	42.12	2.82	73.22
May	21.70	4.57	48.72	0.00	74.99
June	28.50	0.00	55.08	0.00	83.58
July	21.50	7.44	48.91	0.00	77.85
August	24.00	4.38	49.96	0.00	78.34
September	14.20	5.22	43.60	0.00	63.02
October	8.23	6.70	43.02	0.00	57.95
November	13.83	6.41	29.16	5.43	54.83
December	15.45	4.57	20.73	6.71	47.46
Total	**202.51**	**60.80**	**443.24**	**59.35**	**765.90***
Total %	**26.4%**	**7.9%**	**57.9%**	**7.7%**	**100.0%**

*Includes 18 mg used for filter backwashing at the Denniston WTP

Monthly Production of Water Supply Sources in MG
1987

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	12.05	5.13	23.50	10.03	50.71
February	11.70	4.90	17.20	15.06	48.86
March	12.42	4.92	22.60	15.30	55.24
April	18.11	5.19	43.50	0.00	66.80
May	19.26	5.16	51.60	0.00	76.02
June	13.18	5.05	56.10	0.00	74.33
July	11.75	5.59	68.00	0.00	85.34
August	10.96	3.34	65.50	0.00	79.80
September	5.54	2.40	53.00	0.00	60.94
October	8.72	3.59	40.90	0.00	53.21
November	11.11	3.80	16.70	8.52	40.13
December	7.05	6.11	16.07	12.67	41.90
Total	**141.85**	**55.18**	**474.67**	**61.58**	**733.28***
Total %	**19.3%**	**7.5%**	**64.7%**	**8.4%**	**100.0%**

*Includes 18 mg used fro filter backwashing at the Denniston WTP

Monthly Production of Water Supply Sources in MG
1988

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	9.04	4.84	14.64	15.73	44.25
February	13.44	3.43	24.39	10.80	52.06
March	16.12	4.43	39.88	6.75	67.18
April	10.98	5.33	41.13	0.00	57.44
May	13.94	4.33	39.48	0.00	57.75
June	13.13	2.52	40.56	0.00	56.21
July	7.34	4.37	54.26	0.00	65.97
August	8.50	3.78	44.15	0.00	56.43
September	6.39	4.09	40.75	0.00	51.23
October	11.95	3.19	28.87	0.00	44.01
November	13.06	1.96	14.52	7.52	37.06
December	12.99	3.42	13.45	12.71	42.57
Total	**136.88***	**45.69**	**396.08**	**53.51**	**632.16***
Total %	**21.7%**	**7.2%**	**62.7%**	**8.5%**	**100.0%**

*Includes 18 mg used for filter backwashing at the Denniston Creek WTP
Note: Voluntary and mandatory water rationing in effect during year

Monthly Production of Water Supply Sources in MG
1989

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	10.59	3.28	10.64	12.58	37.09
February	10.98	3.86	10.35	11.31	36.50
March	8.09	4.27	20.10	15.26	47.72
April	18.95	3.75	22.73	0.00	45.43
May	21.08	3.27	29.50	0.00	53.85
June	16.71	0.82	42.67	0.00	60.20
July	16.79	1.79	49.16	0.00	67.74
August	12.58	7.02	49.40	0.00	69.00
September	13.54	5.59	40.68	0.00	59.81
October	12.65	4.56	34.41	0.00	51.62
November	15.57	5.35	30.41	4.59	55.92
December	16.61	4.31	30.27	0.84	52.03
Total	**174.14***	**47.87**	**370.32**	**44.58**	**636.91***
Total %	**27.3%**	**7.5%**	**58.1%**	**7.0%**	**100.0%**

*Includes 24 mg used for filter backwashing at the Denniston Creek WTP/ Note: mandatory water rationing in effect Jan-Apr

Monthly Production of Water Supply Sources in MG
1990

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	11.57	3.79	19.27	7.62	42.25
February	8.66	5.54	18.77	8.70	41.67
March	14.98	5.05	20.00	9.08	49.11
April	10.97	5.95	37.90	0.00	54.82
May	8.56	5.89	38.87	0.00	53.32
June	10.35	5.01	31.57	0.00	46.93
July	9.93	3.48	46.47	0.00	59.88
August	7.53	4.07	44.30	0.00	55.90
September	8.91	3.91	37.47	0.00	50.29
October	8.11	3.54	35.86	0.00	47.51
November	11.98	3.31	26.28	3.90	45.47
December	14.20	3.46	23.46	4.97	46.09
Total	**125.75**	**53.00**	**380.22**	**34.27**	**593.24**
Total %	**21.2%**	**8.9%**	**64.1%**	**5.8%**	**100.0%**

Note: Voluntary water rationing was in effect from Jan-Apr, and mandatory water rationing from May-Dec

Monthly Production of Water Supply Sources in MG
1991

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	6.23	2.44	20.26	4.29	33.22
February	9.61	3.22	14.70	7.78	35.31
March	9.25	3.52	6.77	11.47	31.01
April	14.31	3.94	21.99	0.00	40.24
May	9.88	4.23	28.17	0.00	42.28
June	11.23	3.96	34.22	0.00	49.41
July	5.26	4.12	31.10	0.00	40.48
August	7.93	3.81	36.63	0.00	48.37
September	6.38	3.47	39.76	0.00	49.61
October	4.30	3.73	30.31	0.00	38.34
November	9.90	3.32	23.41	3.59	40.22
December	5.78	3.31	16.21	5.39	30.69
Total	**100.06**	**43.07**	**303.53**	**32.52**	**479.18**
Total %	**20.9%**	**9.0%**	**63.3%**	**6.8%**	**100.0%**

Note: Mandatory water rationing was in effect throughout the year

Monthly Production of Water Supply Sources in MG
1992

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	11.01	2.54	16.45	8.82	38.82
February	7.93	3.16	3.37	10.37	24.83
March	12.50	4.10	13.55	13.36	43.51
April	23.32	0.13	24.13	0.00	47.58
May	20.65	0.51	26.64	0.00	47.80
June	19.94	4.57	28.92	0.00	53.43
July	22.33	4.32	40.16	0.00	66.81
August	13.00	4.11	44.79	0.00	61.90
September	9.47	4.95	36.66	0.00	51.08
October	8.30	5.58	30.79	0.00	44.67
November	9.46	4.18	15.78	6.11	35.53
December	9.62	4.53	5.75	12.55	32.45
Total	**167.53**	**42.68**	**286.99**	**51.21**	**548.41**
Total %	**30.5%**	**7.8%**	**52.3%**	**9.3%**	**100.0%**

Note: Mandatory water rationing was in effect throughout the year

Monthly Production of Water Supply Sources in MG
1993

	Denniston Project		SFPUC		
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Pilarcitos Wells**	**Monthly Total**
January	13.43	5.13	4.67	9.75	32.98
February	16.27	2.93	3.91	10.92	34.03
March	23.02	0.00	3.32	13.79	40.13
April	21.65	3.41	21.18	1.71	47.95
May	20.10	5.36	30.39	0.00	55.85
June	24.08	6.06	42.15	0.00	72.29
July	24.97	6.10	31.30	0.00	62.37
August	22.65	5.20	44.79	0.00	72.64
September	21.99	5.07	42.50	0.00	69.56
October	22.27	4.49	33.93	0.00	60.69
November	18.39	4.21	25.55	2.33	50.48
December	23.07	3.06	12.46	6.03	44.62
Total	**251.89***	**51.02**	**296.15**	**44.53**	**643.59***
Total %	**39.1%**	**7.9%**	**46.0%**	**6.9%**	**100.0%**

*Includes 75.44 mg in-plant water use at the Denniston WTP. Actual net production from all sources = 568.15 mg

Note: Mandatory water rationing was in effect Jan 1 through April 13, 1993

Monthly Production of Water Supply Sources in MG
1994

	Denniston Project		San Francisco Public Utilities Commission			
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Crystal Springs Res.**	**Pilarcitos Wells**	**Monthly Total**
January	21.70	2.21	13.92	0.00	3.99	41.82
February	19.48	3.82	5.26	0.00	8.36	36.92
March	20.72	4.62	16.33	0.00	8.72	50.39
April	19.53	4.58	29.62	0.00	0.00	53.73
May	15.58	3.84	32.04	0.00	0.00	51.46
June	17.56	4.10	48.95	0.00	0.00	70.61
July	13.03	4.12	48.56	0.00	0.00	65.71
August	12.63	3.75	53.28	0.00	0.00	69.66
September	10.45	3.06	9.86	37.65	0.00	61.02
October	12.64	2.30	0.00	40.37	0.00	55.31
November	16.93	2.61	0.00	19.78	6.30	45.62
December	17.28	3.17	11.16	0.00	11.72	43.33
Total	**197.53***	**42.18**	**268.98**	**97.80**	**39.09**	**645.58***
Total %	**30.6%**	**6.5%**	**41.7%**	**15.1%**	**6.1%**	**100.0%**

* Includes 62.01 mg for in-plant uses at the Denniston WTP. The actual total net production from all sources = 583.57 mg

Monthly Production of Water Supply Sources in MG
1995

	Denniston Project		San Francisco Public Utilities Commission			
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Crystal Springs Res.**	**Pilarcitos Wells**	**Monthly Total**
January	13.60	3.50	5.73	0.00	14.41	37.24
February	12.60	3.27	3.18	0.00	17.05	36.10
March	19.08	4.24	7.04	0.00	15.35	45.71
April	16.77	4.59	23.40	0.00	0.00	44.76
May	19.01	5.03	27.50	0.00	0.00	51.54
June	19.00	4.00	37.60	0.00	0.00	60.60
July	22.26	5.34	53.10	0.00	0.00	80.70
August	20.39	3.97	52.30	0.00	0.00	76.66
September	16.91	5.73	49.71	0.00	0.00	72.35
October	13.70	4.96	52.54	0.00	0.00	71.20
November	11.96	4.85	41.83	11.47	0.00	70.11
December	11.83	5.34	17.01	6.74	2.00	42.92
Total	**197.11***	**54.82**	**370.94**	**18.21**	**48.81**	**689.89**
Total %	**28.6%**	**7.9%**	**53.8%**	**2.6%**	**7.1%**	**100.0%**

*Includes 44.11 mg for in-plant uses at the Denniston WTP. The actual total net production from all sources = 645.78 mg

Monthly Production of Water Supply Sources in MG
1996

	Denniston Project		San Francisco Public Utilities Commission			
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Crystal Springs Res.**	**Pilarcitos Wells**	**Monthly Total**
January	11.30	3.10	12.30	0.00	14.60	41.30
February	12.70	6.13	5.20	0.00	16.71	40.74
March	20.12	2.88	6.71	0.00	21.19	50.90
April	20.79	0.00	34.90	0.00	0.00	55.69
May	27.98	0.00	44.71	0.00	0.00	72.69
June	26.15	0.00	51.10	0.00	0.00	77.25
July	25.50	0.00	51.69	0.00	0.00	77.19
August	22.61	0.00	48.50	0.00	0.00	71.11
September	24.83	0.00	55.58	0.00	0.00	80.41
October	22.38	0.00	44.50	0.00	0.00	66.88
November	22.20	0.00	18.54	4.91	0.77	46.42
December	15.17	0.00	0.00	5.24	13.58	33.99
Total	**251.73***	**12.11**	**373.73**	**10.15**	**66.85**	**714.57***
Total %	**35.2%**	**1.7%**	**52.3%**	**1.4%**	**9.4%**	**100.0%**

* Includes 45.23 mg for in-plant uses at the Denniston WTP. The actual total net production from all sources = 669.34 mg

Monthly Production of Water Supply Sources in MG
1997

	Denniston Project		San Francisco Public Utilities Commission			
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Crystal Springs Res.**	**Pilarcitos Wells**	**Monthly Total**
January	7.33	0.00	3.21	0.00	26.58	37.12
February	14.58	0.00	12.92	0.00	20.74	48.24
March	19.29	0.00	24.43	0.00	16.10	59.82
April	25.34	0.00	48.75	0.00	0.00	74.09
May	25.71	0.00	59.60	0.00	0.00	85.31
June	26.16	0.00	71.34	0.00	0.00	97.50
July	23.74	3.65	67.83	0.00	0.00	95.22
August	21.72	5.26	69.92	0.00	0.00	96.90
September	19.74	3.91	69.70	0.00	0.00	93.35
October	17.31	4.17	55.80	3.38	0.00	80.66
November	16.16	4.20	5.22	33.08	1.62	60.28
December	12.25	4.84	16.44	0.00	10.48	44.01
Total	**229.33***	**26.03**	505.16	**36.46**	**75.52**	**872.50***
Total %	**26.3%**	**3.0%**	**57.9%**	**4.2%**	**8.6%**	**100.0%**

*Includes 43.47 mg for in-plant uses at the Denniston WTP. The actual total net production from all sources = 829.03 mg

Monthly Production of Water Supply Sources in MG
1998

	Denniston Project		San Francisco Public Utilities Commission			
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Crystal Springs Res.**	**Pilarcitos Wells**	**Monthly Total**
January	7.52	2.26	7.38	0.00	24.06	41.22
February	1.38	0.54	10.32	0.00	28.37	40.61
March	14.31	2.21	12.95	0.00	17.81	47.28
April	17.04	2.65	35.70	0.10	0.00	55.49
May	24.12	0.00	38.13	0.00	0.00	62.25
June	23.20	0.00	45.84	5.45	0.00	74.49
July	25.57	0.00	54.82	5.13	0.00	85.52
August	25.89	0.00	63.88	8.91	0.00	98.68
September	25.37	0.00	53.62	10.01	0.00	89.00
October	23.17	0.00	53.63	3.61	0.00	80.41
November	19.08	0.00	20.50	12.54	1.11	53.23
December	21.14	0.00	26.21	0.80	6.70	54.85
Total	**227.79***	**7.66**	**422.98**	**46.55**	**78.05**	**783.03***
Total %	**29.1%**	**1.0%**	**54.0%**	**5.9%**	**10.0%**	**100.0%**

*Includes 36.41 mg for in-plant uses at the Denniston WTP. The actual total net production from all sources = 746.62 mg

Monthly Production of Water Supply Sources in MG
1999

	Denniston Project		San Francisco Public Utilities Commission			
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Crystal Springs Res.**	**Pilarcitos Wells**	**Monthly Total**
January	20.84	0.00	31.62	0.00	7.22	59.68
February	12.96	1.72	13.64	0.00	17.41	45.73
March	19.84	0.00	19.50	0.00	16.00	55.34
April	18.39	0.00	44.98	0.00	0.00	63.37
May	25.10	0.54	52.18	5.38	0.00	83.20
June	23.41	0.00	53.57	7.61	0.00	84.59
July	27.15	0.38	61.95	6.42	0.00	95.90
August	22.66	0.95	43.17	6.59	0.00	73.37
September	25.13	0.00	0.00	65.48	0.00	90.61
October	25.46	0.37	0.00	62.73	0.00	88.56
November	22.95	0.00	13.50	16.54	0.00	52.99
December	20.43	0.14	20.83	4.71	0.77	46.88
Total	**264.32***	**4.10**	**354.94**	**175.46**	**41.40**	**840.22***
Total %	**31.5%**	**0.5%**	**42.2%**	**20.9%**	**4.9%**	**100.0%**

*Includes 40.95 mg for in-plant uses at the Denniston WTP. The actual total net production from all sources = 799.27 mg

Monthly Production of Water Supply Sources in MG
2000

	Denniston Project		San Francisco Public Utilities Commission			
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Crystal Springs Res.**	**Pilarcitos Wells**	**Monthly Total**
January	17.59	0.99	2.83	15.26	8.24	44.91
February	3.20	4.33	7.40	0.00	18.28	33.21
March	9.45	3.22	7.11	0.00	20.66	40.44
April	24.05	1.63	49.48	3.46	0.00	78.62
May	25.04	0.81	38.86	3.98	0.00	68.69
June	20.57	0.00	50.00	8.57	0.00	79.14
July	24.56	0.00	56.11	5.85	0.00	86.52
August	23.73	0.00	67.08	7.09	0.00	97.90
September	24.44	2.33	0.00	70.83	0.00	97.60
October	17.54	2.75	0.00	54.57	0.00	74.86
November	18.86	2.71	0.00	42.15	0.00	63.72
December	18.66	2.63	0.00	32.15	5.46	58.90
Total	**227.69***	**21.40**	**278.87**	**243.91**	**52.65**	**824.51***
Total %	**27.6%**	**2.6%**	**33.8%**	**29.6%**	**6.4%**	**100.0%**

*Includes 45.73 mg for in-plant uses at Denniston WTP. The actual total net production from all sources = 778.78 mg

Monthly Production of Water Supply Sources in MG
2001

	Denniston Project		San Francisco Public Utilities Commission			
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Crystal Springs Res.**	**Pilarcitos Wells**	**Monthly Total**
January	20.13	3.09	29.07	0.00	8.97	61.26
February	17.71	1.26	28.43	0.00	6.68	54.08
March	15.40	4.44	36.73	0.00	6.64	63.21
April	19.66	1.54	47.49	2.13	0.00	70.82
May	22.38	0.00	66.05	8.55	0.00	96.98
June	18.79	3.10	38.14	40.10	0.00	100.13
July	16.48	6.45	0.00	81.61	0.00	104.54
August	12.30	6.13	92.80	33.92	0.00	145.15
September	11.96	5.79	62.35	8.50	0.00	88.60
October	15.03	5.05	0.00	66.59	0.00	86.67
November	19.37	4.05	0.00	36.65	0.00	60.07
December	17.81	5.64	14.48	3.15	10.72	51.80
Total	**207.02***	**46.54**	**415.54**	**281.20**	**33.01**	**983.31***
Total %	**21.0%**	**4.7%**	**42.3%**	**28.6%**	**3.4%**	**100.0%**

* Includes 67.1 mg for in-plant uses at the Denniston WTP. The actual total net production from all sources = 916.22 mg

Monthly Production of Water Supply Sources in MG
2002

	Denniston Project		San Francisco Public Utilities Commission			
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Crystal Springs Res.**	**Pilarcitos Wells**	**Monthly Total**
January	11.37	5.21	14.99	0.00	10.99	42.56
February	12.34	5.38	23.17	0.00	7.51	48.40
March	14.70	5.81	31.84	0.00	10.37	62.72
April	12.70	5.00	48.92	0.00	0.00	66.62
May	13.50	4.67	61.53	6.28	0.00	85.98
June	18.02	4.11	64.42	7.28	0.00	93.83
July	24.20	3.83	68.10	6.64	0.00	102.77
August	19.83	4.52	17.81	52.07	0.00	94.23
September	15.82	4.75	0.00	71.39	0.00	91.96
October	16.62	4.89	23.66	41.39	0.00	86.56
November	17.91	4.30	51.38	1.67	0.00	75.26
December	11.20	2.56	32.56	0.52	7.69	54.53
Total	**188.21**	**55.03**	**438.38**	**187.24**	**36.56**	**905.42**
Total %	**20.8%**	**6.1%**	**48.4%**	**20.7%**	**4.0%**	**100.0%**

* Includes 47.33 mg for in-plant uses at the Denniston WTP. The actual total net production from all sources = 858.08 mg

Monthly Production of Water Supply Sources in MG
2003

	Denniston Project		San Francisco Public Utilities Commission			
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Crystal Springs Res.**	**Pilarcitos Wells**	**Monthly Total**
January	8.84	3.97	21.29	0.12	16.71	50.93
February	8.69	3.18	28.00	0.19	10.15	50.21
March	19.22	3.04	40.27	0.00	5.37	67.90
April	23.35	2.47	52.41	0.00	0.00	78.23
May	15.87	3.71	46.64	1.21	0.00	67.43
June	18.02	5.21	58.36	15.95	0.00	97.54
July	23.78	4.18	0.00	81.11	0.00	109.07
August	37.94	6.92	0.00	87.25	0.00	132.11
September	24.83	4.97	0.00	87.78	0.00	117.58
October	25.09	5.13	0.00	66.08	0.00	96.30
November	15.35	5.41	0.00	46.06	0.00	66.82
December	14.63	3.65	3.53	0.00	5.12	26.93
Total	**235.61**	**51.84**	**250.50**	**385.75**	**37.35**	**961.05**
Total %	**24.5%**	**5.4%**	**26.1%**	**40.1%**	**3.9%**	**100.0%**

* Includes 70.42 mg for in-plant uses at the Denniston WTP. The actual total net production from all sources = 890.63 mg

Monthly Production of Water Supply Sources in MG
2004

	Denniston Project		San Francisco Public Utilities Commission			
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Crystal Springs Res.**	**Pilarcitos Wells**	**Monthly Total**
January	8.84	3.75	22.11	8.42	11.53	54.65
February	6.88	3.43	32.09	0.20	9.96	52.56
March	14.39	3.65	39.88	2.52	7.99	68.43
April	15.10	3.22	56.19	17.13	0.00	91.64
May	20.09	3.01	48.68	9.73	0.00	81.51
June	24.28	2.76	0.69	80.69	0.00	108.42
July	16.53	5.10	0.00	84.95	0.00	106.58
August	15.47	4.36	0.00	71.00	0.00	90.83
September	13.95	3.85	0.00	73.68	0.00	91.48
October	13.44	2.51	0.00	56.38	0.00	72.33
November	15.63	2.24	0.00	41.12	0.88	59.87
December	10.71	4.12	29.47	10.76	5.32	60.38
Total	**175.31**	**42.00**	**229.11**	**456.58**	**35.67**	**938.67**
Total %	**18.7%**	**4.5%**	**24.4%**	**48.6%**	**3.8%**	**100.0%**

* Includes 45.95 mg for in-plant uses at the Denniston WTP. The actual total net production from all sources = 892.72 mg

Monthly Production of Water Supply Sources in MG
2005

	Denniston Project		San Francisco Public Utilities Commission			
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Crystal Springs Res.**	**Pilarcitos Wells**	**Monthly Total**
January	13.18	1.94	29.97	0.00	8.04	53.13
February	11.30	2.95	28.76	0.00	7.06	50.07
March	11.69	4.42	37.79	0.00	7.97	61.87
April	11.05	4.00	52.13	0.00	0.00	67.18
May	12.70	3.82	60.70	0.00	0.00	77.22
June	13.18	3.90	63.12	5.16	0.00	85.36
July	14.50	3.37	68.46	7.70	0.00	94.03
August	14.31	3.31	64.28	7.71	0.00	89.61
September	15.53	3.76	0.00	62.20	0.00	81.49
October	14.75	2.29	0.00	51.40	0.00	68.44
November	10.26	2.15	0.00	51.70	0.49	64.60
December	1.06	0.12	0.00	46.00	4.65	51.83
Total	**143.51**	**36.03**	**405.21**	**231.87**	**28.21**	**844.83**
Total %	**17.0%**	**4.3%**	**48.0%**	**27.4%**	**3.3%**	**100.0%**

* Includes 22.10 mg for in-plant uses at the Denniston WTP. The actual total net production from all sources = 822.73 mg

Monthly Production of Water Supply Sources in MG*
2006

	Denniston Project		San Francisco Public Utilities Commission			Gross Production
Month	**Surface Water**	**Ground Water**	**Pilarcitos Lake**	**Crystal Springs Res.**	**Pilarcitos Wells**	**Monthly Total**
January	0.00	0.00	14.19	24.20	9.22	47.61
February	3.66	1.60	30.66	0.46	11.44	47.82
March	0.00	0.00	37.41	0.24	13.26	50.91
April	0.00	0.00	77.36	0.20	0.00	77.56
May	11.26	2.42	62.49	0.00	0.00	76.17
June	14.01	1.50	45.54	20.30	0.00	81.35
July	16.35	1.69	0.00	91.78	0.00	109.82
August	14.81	1.04	0.00	76.55	0.00	92.40
September	15.86	1.59	0.00	77.88	0.00	95.33
October	15.26	1.27	0.00	64.98	0.00	81.51
November	7.04	0.73	17.20	30.34	7.17	62.48
December	4.42	0.70	45.17	0.00	7.60	57.89
Total	**102.67**	**12.54**	**330.02**	**386.93**	**48.69**	**880.85**
Total %	**11.7%**	**1.4%**	**37.5%**	**43.9%**	**5.5%**	**100.0%**

*uncorrected raw production data

Annual Water Sales and Percentage of Annual Total by User Categories in MG

User Category	1975	% of Total	1976	% of Total	1977	% of Total	1978	% of Total	1979	% of Total
Floriculture	80.0	20.0	82.5	18.7	61.3	19.0	61.5	15.9	64.2	15.0
Beaches and Parks	3.6	0.9	3.7	0.8	2.9	0.9	3.0	0.8	3.3	0.8
Recreation	1.2	0.3	1.7	0.4	0.5	0.2	0.6	0.2	1.2	0.3
Marine Related	4.6	1.2	5.9	1.3	4.0	1.2	4.2	1.1	5.5	1.3
Restaurants	7.1	1.8	8.4	1.9	7.1	2.2	8.7	2.3	10.6	2.5
Commercial	24.2	6.1	23.2	5.2	13.5	4.2	19.8	5.1	20.8	4.9
Hotels & Motels	1.5	0.4	3.4	0.8	3.8	1.2	4.6	1.2	4.8	1.1
Schools	12.0	3.0	8.8	2.0	6.4	2.0	11.9	3.1	10.5	2.4
Multi-Family Dwellings	18.2	4.6	20.3	4.6	17.5	5.4	20.5	5.3	23.9	5.5
Residential	247.0	61.7	283.7	64.3	205.3	63.7	251.5	65.0	284.4	66.2
Irrigation										
Total Sales	**399.4**	100	**441.6**	100	**322.3**	100	**386.3**	100	**429.2**	100

User Category	1980	% of Total	1981	% of Total	1982	% of Total	1983	% of Total	1984	% of Total
Floriculture	62.2	13.8	66.8	14.0	80.1	16.3	83.3	15.8	94.4	16.7
Beaches and Parks	3.6	0.8	3.6	0.8	3.2	0.7	2.8	0.5	3.2	0.6
Recreation	2.3	0.5	2.2	0.5	2.2	0.4	2.6	0.5	3.3	0.6
Marine Related	2.8	0.6	5.3	1.1	5.2	1.1	4.9	0.9	6.8	1.2
Restaurants	10.8	2.4	11.8	2.5	12.2	2.5	9.7	1.8	10.7	1.9
Commercial	30.7	6.8	36.9	7.7	38.4	7.8	34.6	6.5	47.0	8.3
Hotels & Motels	4.1	0.9	4.1	0.9	5.6	1.1	5.0	1.0	6.0	1.0
Schools	8.9	2.0	9.0	1.9	8.2	1.7	7.7	1.5	10.1	1.7
Multi-Family Dwellings	27.2	6.0	27.6	5.8	30.2	6.1	28.3	5.5	35.8	6.4
Residential	297.1	66.2	309.0	64.8	305.8	62.3	347.4	66.0	347.6	61.6
Irrigation										
Total Sales	**449.7**	100	**476.3**	100	**491.1**	100	**526.3**	100	**564.9**	100

Annual Water Sales and Percentage of Annual Total by User Categories in MG

User Category	1985	% of Total	1986	% of Total	1987	% of Total	1988	% of Total	1989	% of Total
Floriculture	88.1	15.6	95.6	16.1	104.5	16.5	88.9	16.0	84.8	16.2
Beaches and Parks	4.5	0.8	5.0	0.8	5.3	0.8	3.5	0.6	2.4	0.5
Recreation	3.3	0.7	6.2	1.0	5.5	0.9	6.4	1.2	0.5	0.1
Marine Related	2.0	0.5	2.0	0.3	2.3	0.4	1.6	0.3	7.1	1.3
Restaurants	10.0	1.7	12.2	2.1	14.0	2.2	13.9	2.5	12.0	2.3
Commercial	36.1	6.3	36.1	6.1	44.1	7.0	38.3	6.9	39.7	7.6
Hotels & Motels	9.0	1.6	9.9	1.7	11.0	1.7	11.9	2.1	9.9	1.9
Schools	11.0	1.9	14.5	2.5	18.8	3.0	13.7	2.5	14.3	2.7
Multi-Family Dwellings	60.0	10.6	64.4	10.9	64.4	10.2	59.4	10.7	53.1	10.1
Residential	324.7	57.4	330.5	55.8	345.7	54.5	297.4	53.6	284.2	54.2
Irrigation	16.6	2.9	16.0	2.7	17.6	2.8	19.9	3.6	16.2	3.1
Total Sales	**565.3**	100	**592.4**	100	**633.2**	100	**554.9**	100	**524.2**	100

User Category	1990	% of Total	1991	% of Total	1992	% of Total	1993	% of Total	1994	% of Total
Floriculture	116.2	20.9	80.8	18.6	91.5	18.8	86.5	16.3	94.9	16.9
Beaches and Parks	3.0	0.5	0.6	0.2	1.7	0.3	3.0	0.6	3.1	0.6
Recreation	0.9	0.2	1.2	0.3	1.0	0.2	1.0	0.2	1.3	0.2
Marine Related	7.5	1.3	6.2	1.4	6.3	1.3	8.2	1.5	10.7	1.9
Restaurants	12.0	2.2	11.0	2.5	10.3	2.1	11.2	2.1	11.4	2.0
Commercial	44.8	8.1	36.2	8.3	35.1	7.2	34.2	6.5	35.4	6.2
Hotels & Motels	9.3	1.7	8.4	1.9	9.1	1.9	9.2	1.7	11.0	2.0
Schools	13.5	2.4	10.3	2.4	17.1	3.5	16.3	3.1	14.0	2.5
Multi-Family Dwellings	53.1	9.6	46.1	10.6	51.5	10.6	57.3	10.8	57.2	10.2
Residential	278.4	50.2	219.7	50.6	249.4	51.2	281.1	53.1	303.6	53.9
Irrigation	16.1	2.9	13.7	3.2	14.1	2.9	21.9	4.1	20.3	3.6
Total Sales	**554.8**	100	**434.2**	100	**487.1**	100	**529.9**	100	**562.9**	100

Annual Water Sales and Percentage of Annual Total by User Categories in MG

User Category	1995	% of Total	1996	% of Total	1997	% of Total	1998	% of Total	1999	% of Total
Floriculture	104.2	17.0	99.0	15.4	114.4	15.0	113.5	16.4	135.1	17.6
Beaches and Parks	3.4	0.6	3.3	0.5	4.0	0.5	3.2	0.5	3.9	0.5
Recreation	1.3	0.2	1.1	0.2	1.0	0.1	1.1	0.2	6.4	0.8
Marine Related	10.6	1.7	10.2	1.6	11.5	1.5	12.5	1.8	7.1	0.9
Restaurants	13.0	2.1	13.6	2.1	9.9	1.3	9.3	1.3	10.0	1.3
Commercial	38.7	6.3	42.7	6.7	45.7	6.0	46.4	6.7	56.9	7.4
Hotels & Motels	10.6	1.8	11.8	1.8	13.8	1.8	14.1	2.0	14.6	1.9
Schools	16.0	2.6	18.5	2.9	20.4	2.7	14.7	2.1	19.8	2.6
Multi-Family Dwellings	59.1	9.7	62.3	9.7	64.4	8.4	62.7	9.0	62.1	8.1
Residential	332.3	54.3	353.6	55.1	386.8	50.6	352.0	50.8	374.8	48.9
Irrigation	22.6	3.7	25.8	4.0	66.4	8.7	56.2	8.1	58.7	7.7
Portable Meter Sales					26.3	3.4	7.2	1.0	16.3	2.1
Total Sales	**611.8**	100	**641.9**	100	**764.6**	100	**692.9**	100	**765.7**	100

User Category	2000	% of Total	2001	% of Total	2002	% of Total	2003	% of Total	2004	% of Total
Floriculture	133.1	17.4	151.9	18.5	136.8	16.9	143.2	17.5	114.7	13.8
Beaches and Parks	6.3	0.8	4.5	0.5	5.1	0.6	4.1	0.5	4.5	0.5
Recreation	8.4	1.1	8.8	1.1	7.5	0.9	7.5	0.9	1.9	0.2
Marine Related	3.2	0.4	3.5	0.4	3.6	0.4	3.6	0.4	9.4	1.1
Restaurants	10.1	1.3	12.7	1.5	12.3	1.5	13.7	1.7	13.2	1.6
Commercial	70.8	9.3	53.9	6.6	52.3	6.5	48.5	5.9	58.4	7.0
Hotels & Motels	14.7	1.9	22.1	2.7	23.6	2.9	26.9	3.3	26.3	3.2
Schools	18.5	2.4	17.8	2.2	17.6	2.2	16.9	2.1	18.1	2.2
Multi-Family Dwellings	63.2	8.3	71.3	8.7	73.1	9.0	71.1	8.7	74.4	8.9
Residential	376.3	49.2	399.8	48.7	403.8	49.9	412.0	50.3	427.6	51.4
Irrigation	54.0	7.1	68.0	8.3	71.5	8.8	67.9	8.3	79.0	9.5
Portable Meter Sales	6.8	0.9	6.5	0.8	2.8	0.3	4.0	0.5	4.3	0.5
Total Sales	**765.4**	100	**820.8**	100	**810.0**	100	**819.4**	100	**831.8**	100

Annual Water Sales and Percentage of Annual Total by User Categories in MG

User Category	2005	% of Total	2006	% of Total	2007	% of Total	2008	% of Total	2009	% of Total
Floriculture	115.5	15.2	108.2	14.1%						
Beaches and Parks	4.0	0.5	4.3	0.6%						
Recreation	1.9	0.3	1.6	0.2%						
Marine Related	10.1	1.3	8.2	1.1%						
Restaurants	14.2	1.9	14.6	1.9%						
Commercial	51.6	6.8	50.1	6.5%						
Hotels & Motels	28.8	3.8	30.9	4.0%						
Schools	14.6	1.9	13.9	1.8%						
Multi-Family Dwellings	67.8	8.9	69.0	9.0%						
Residential	407.7	53.5	395.4	51.7%						
Irrigation	41.8	5.5	66.2	8.6%						
Portable Meter Sales	4.0	0.5	2.7	0.4%						
Total Sales	**762.1**	100	**765.2**	100.0%						

User Category	2010	% of Total	2011	% of Total	2012	% of Total	2013	% of Total	2014	% of Total
Floriculture										
Beaches and Parks										
Recreation										
Marine Related										
Restaurants										
Commercial										
Hotels & Motels										
Schools										
Multi-Family Dwellings										
Residential										
Irrigation										
Portable Meter Sales										
Total Sales										

Comparison of Water Production and Sales in MG

Description	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Annual Production	482.2	475.2	355.7	449.5	523.1	502.4	532.2	528.2	589.6	635.0	649.6
Annual Sales	399.4	441.6	322.3	386.3	429.2	449.7	476.3	491.1	526.3	564.9	565.3
Unmetered Water, MG	82.2	33.6	33.4	63.2	93.9	52.7	55.9	37.1	63.3	71.1	84.3
Unmetered Water	17.0%	7.1%	9.4%	14.1%	18.0%	10.5%	10.5%	7.0%	10.7%	11.2%	13.0%

Description	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Annual Production	747.9	715.3	614.2	612.9	593.2	479.2	548.4	568.2	583.6	645.8	669.3
Annual Sales	592.4	633.3	554.8	524.2	554.8	434.2	487.1	529.9	562.9	611.8	641.9
Unmetered Water, MG	155.5	82.1	59.4	88.7	38.4	45.0	61.3	38.3	20.7	34.0	27.4
Unmetered Water	20.8%	11.5%	9.7%	14.5%	6.5%	9.4%	11.2%	6.7%	3.5%	5.3%	4.1%

Description	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Annual Production	829.0	746.6	799.3	778.8	916.2	858.1	890.6	892.7	822.7	859.3
Annual Sales	764.6	692.9	765.7	765.4	820.8	810.0	819.4	831.8	762.1	765.2
Unmetered Water, MG	64.6	53.7	33.6	13.4	95.4	48.1	71.2	60.9	60.6	94.1
Unmetered Water	7.8%	7.2%	4.2%	1.7%	10.4%	5.6%	8.0%	6.8%	7.4%	11.0%

*Annual sales includes portable meters from 1997 and on.

**Unmetered water is based on production. Denniston in-plant uses have been subtracted from total production since water never reaches distribution system.

Number of Service Connections

Year	Number of New Installed Connections	Total Number of Service Connections
1970	---	2,264
1971	301	2,565
1972	160	2,725
1973	64	2,789
1974	72	2,861
1975	169	3,030
1976	274	3,040
1977	106	3,410
1978	26	3,436
1979	72	3,508
1980	126	3,634
1981	74	3,708
1982	45	3,753
1983	28	3,781
1984	82	3,863
1985	106	3,969
1986	78	4,047
1987	88	4,135
1988	55	4,190
1989	87	4,277
1990	64	4,341
1991	1	4,342
1992	9	4,351
	-101*	4,250
1993	113	4,364
1994	601	4,964
1995	213	5,177
1996	129	5,306
1997	113	5,419
1998	76	5,495
1999	200	5,695
2000	170	5,865
2001	285	6,150
2002	99	6,249
2003	53	6,302
2004	84	6,386
2005	46	6,432
2006	29	6,461

*Fire service connections deleted from listing of water service connections.

Annual Comparison of Average Daily Residential Water Usage

(gallons per day)

Year	Average Daily Usage Per Single Family Residence	Production Requirements Per Residence
1975	255	307
1976	271	292
1977	182	201
1978	221	257
1979	249	304
1980	259	289
1981	267	298
1982	261	282
1983	282	316
1984	278	317
1985	271	311
1986	272	343
1987	277	313
1988	236	274
1989	220	265
1990	212	228
1991	167	179
1992	189	204
1993	216	224
1994	202	207
1995	224	235
1996	234	240
1997	251	269
1998	225	239
1999	234	241
2000	227	229
2001	244	270
2002	242	257
2003	244	262
2004	215	230
2005	203	222
2006	199	223

Notes:

1) The calculations for 2005 are based on 5,495 single family residential service connections.

2) Mandatory water rationing was in effect during portions of 1977, 1978, 1988, 1989, 1990, 1991, 1992 and 1993.

3) The change in average usage per residence in 1985 was a result of a reclassification of "residential" and "multiple dwelling" service connections when the new computer billing system was installed.

4) The number of single family residential service connections was adjusted in 1993 by the deletion of 101 fire service connections which had been inadvertently included previously.

5) The number of single family residential service connections was adjusted (corrected) in 1995 by the transfer of a number of multiple family connections from the single family residential category to the multiple family category.

6) The calculations for 2006 are based on 5,448 single family residential service connections.

Peak Daily Demand Periods (gpm)

Note: Peak daily demands are calculated as the sum of (1) production from the Nunes WTP, (2) production from the Denniston WTP, and (3) arithmetic sum of the difference in the volume of water contained in the water storage tanks.

Year	Peak Demand	Description
1980	1,400	Several consecutive days in July
1981	1,800	Several consecutive days in June
1982	1,800	Three consecutive days in August
1983	2,230	July 13
	1,990	July 7-16
1984		No significant peaks demands
1985	2,140	August 16
	2,000	Five other days
1986	2,190	May 16
	2,105	May 15-19
	2,085	May 24-27
1987	2,045	August 16
	2,020	July 27, August 7, September 2
1988-1994	No significant peak demands due to water conservation habits resulting from water rationing	
1995	1,950-2,000	July 14-19
	1,950-2,000	July 28-29
	1,900	August 18-21
1996	2,010-2,070	June 3-15
	2,050-2,155	June 30-July 2
	2,150	July 6
	2,150	July 22-23
	2,300	August 30-31
1997	3,600	May 17
	3,045	May 18
	3,130	May 19
	2,370	June 19-22
	2,505	June 24-26
	2,795	July 4
	2,985	July 11
	2,790	July 27
	3,025	August 3-5
	2,730	August 15
	2,530	September 24
	2,490	October 5
1998	2,170	June 16-19
	2,430	June 26
	2,260	July 17-21
	2,410	August 1-14
	2,260	September 13

Peak Daily Demand Periods (gpm)

Year	Peak Demand	Description
1999	2,195	June 14
	2,100	June 26
	2,203	June 27
	2,214	June 30
	2,280	July 4
	2,306	July 6
	2,369	July 9
	2,429	July 12
	2,467	August 5
	2,645	August 8
	2,448	August 11
	2,761	August 12
	2,087	September 2
	2,057	September 3
	2,148	September 27
	2,182	September 29
	2,019	October 8
	2,094	October 11
	1,949	October 16
	2,053	October 17

2000	1,956	May 1
	1,948	May 6
	2,248	May 21
	1,960	May 22
	2,346	June 13
	2,630	June 14
	2,293	June 15
	2,301	June 18
	2,216	July 7
	2,268	July 13
	2,351	July 14
	2,220	July 26
	2,276	August 5
	2,506	August 12
	2,260	August 21
	2,283	August 25
	2,490	September 7
	2,394	September 17
	2,406	September 18
	2,415	19-Sep
	2,075	October 3
	2,035	October 7
	2,169	October 22
	2,201	October 23

Peak Daily Demand Periods (gpm)

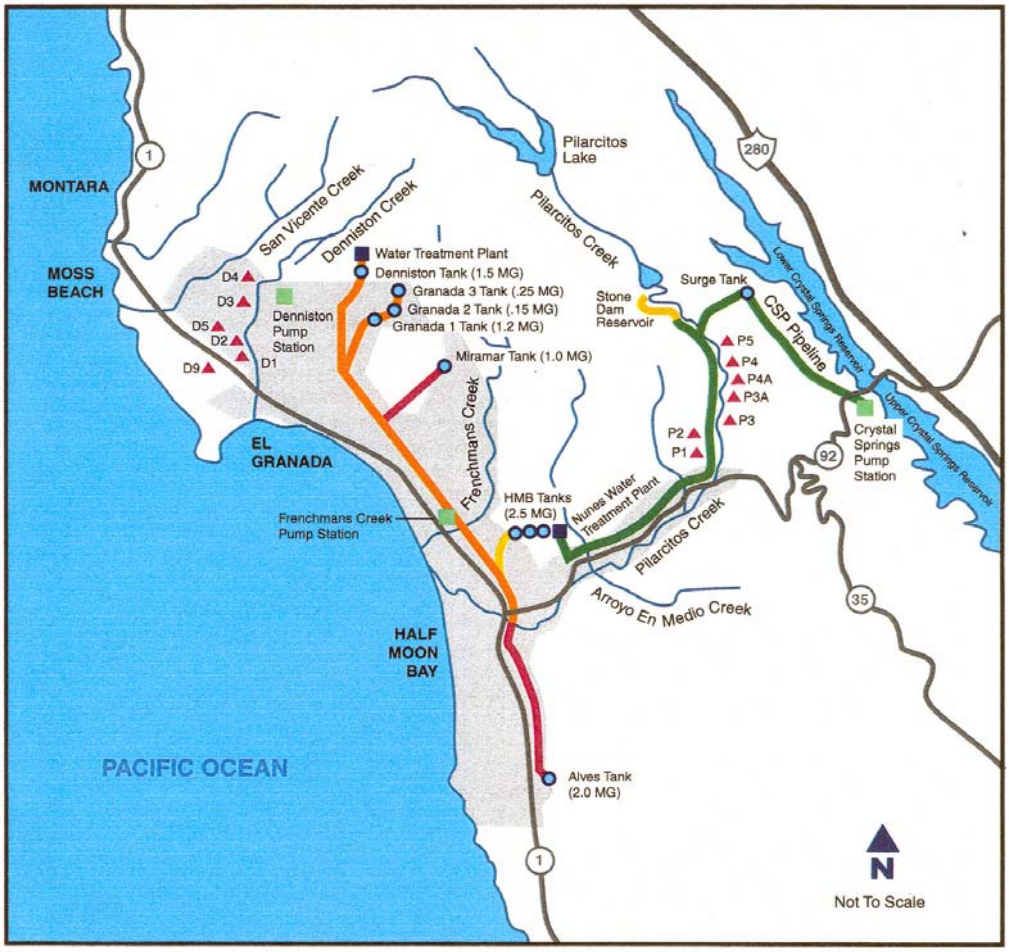
Year	Peak Demand	Description
2001	2,379	May 4
	2,347	May 8
	2,331	May 19
	2,291	May 25
	2,705	June 17
	2,755	June 20
	2,635	June 23
	2,744	June 25
	2,176	July 22
	2,549	July 24
	2,301	July 28
	2,284	August 6
	2,367	August 12
	2,267	August 26
	2,371	September 3
	2,125	September 7
	2,318	September 10
	2,195	October 12
	2,336	October 13
	2,163	October 14
2002	2,106	May 11
	2,173	May 12
	2,340	May 15
	2,123	May 17
	2,281	June 6
	2,435	June 10
	2,274	June 15
	2,284	June 16
	2,293	July 2
	2,500	July 10
	2,249	July 11
	2,456	July 25
	2,436	August 9
	2,584	August 10
	2,493	August 11
	2,499	August 13
	2,454	September 3
	2,270	September 14
	2,358	September 21
2003	2,719	June 26
	2,565	June 27
	2,803	June 28
	2,532	June 30
	2,710	July 3
	2,656	July 8
	2,589	July 11
	2,758	July 17
	2,887	July 20
	2,878	August 8
	2,690	August 15
	2,670	August 23
	2,765	August 24
	2,778	August 25

Peak Daily Demand Periods (gpm)

Year	Peak Demand	Description
2004	3,285	September 4
	3,377	September 5
	3,064	September 6
	3,716*	September 7
	3,232	September 11
	3,166	October 12
	3,045	October 14
2005	2,504	September 5
	2,452	September 24
	2,339	September 28
	2,344	October 3
	2,555	October 4
	2,581	November 15
	2,556	November 21
	3,036	November 22
2006	2,713	July 23
	2,641	July 21
	2,428	July 25
	2,428	July 19
	2,424	July 22
	2,390	August 14
	2,373	August 9

Coastside County Water District

Water Supply and Transmission System



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DISTRICT INFORMATION

Treatment Water Storage	7.60 MG
Water Treatment Plants	
Nunes	4.5 mgd
Denniston	1.0 mgd
Transmission Pipeline	17 miles
Distribution Pipeline	83 miles

LEGEND

- District Boundry
- Wells
- Water Storage Tanks
- Pump Station
- Water Treatment Plant
- 10" Pipeline
- 12" Pipeline
- 16" Pipeline
- 18" Pipeline

Appliance and Fixture Consumption Data

Appliance Consumption Data	
Appliance	**Water Use**
Dishwashers	
1995 -Present	4.5 to 7.0 gallons per load
1990-1995	7.0 to 12.0 gallons per load
1980 -1990	14.0 gallons per load
Clothes Washers	
1998-Present	27-39 gallons per load
1990-1998	39-43 gallons per load
1980-1990	51 gallons per load
Pre-1980	56 gallons per load
Data from *Handbook of Water Use and Conservation* by Amy Vickers – May 2001 Consumption figures and time periods are approximate.	

Fixture Consumption Data	
Fixture	**Standard (ultra low flow)** maximum water use allowed
Toilets	1.6 gallons per flush
Urinals	1.0 gallons per flush
Showerheads	2.5 gallons per minute at 80psi
	2.2 gallons per minute at 60psi
Kitchen Faucets and Bathroom Faucets	2.5 gallons per minute at 80psi
	2.2 gallons per minute at 60psi
Data from *Handbook of Water Use and Conservation* by Amy Vickers – May 2001	

High Efficiency Consumption Data	
Fixture	**Standard**
Toilets	1.28 gallons per flush
Urinals	0.5 gallons per flush 1.0 quart per flush 1.0 pint per flush
Bathroom Faucets	0.5 gallons per minute
Data from California Urban Water Conservation Council	