
Crestline Village Water District



Final
2005 Urban Water Management Plan

October 2006

Crestline Village Water District
Urban Water Management Plan

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Conversion Table:

Acre-Foot	Cubic Feet	Gallons	Million Gallons
1	43,560	325,829	0.3258

Crestline Village Water District
2005 Urban Water Management Plan
Contact Sheet

Date plan submitted to the Department of Water Resources: **October 27, 2006**

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The Water supplier is a: **Public Agency**

The Water supplier is a: **Retail water purveyor**

Utility services provided by the water supplier include: **Domestic Water**

Is This Agency a Bureau of Reclamation Contractor? **No**

Is This Agency a State Water Project Contractor? **No**

Executive Summary

This Urban Water Management Plan for Crestline Village Water District (CVWD) is intended to help the District assure reliable water supplies, strengthen water conservation, handle water shortages, and analyze the potential use of recycled water in the District's service area. Based upon this plan, the District may choose to modify some of its policies and requirements in order to promote these goals. This plan was developed with interagency consultation and public review.

Crestline Village Water District serves a 5-square-mile area in the Crestline-Lake Gregory area of the San Bernardino Mountains. The area is a mountain resort district where development is constrained by natural conditions as well as local planning policies. The District served 4,857 active connections (96 percent were general/residential) and an estimated population of 7,500 residents in 2004. The remaining connections are commercial/ governmental. CVWD has no industrial customers. As of the 2000 Census, CVWD's sphere of influence contained approximately 6,700 dwellings, 5,500 households, and 10,200 residents. Forty percent of all housing units in CVWD's service area were vacation or second homes, reserved for seasonal, part-time, or occasional use. The District estimates that the population within their service area boundary will be approximately 9,700 in the year 2025. The District's sphere of influence covers 12 square miles and includes areas served by other water purveyors.

Growth forecast data from the San Bernardino County General Plan (SBCGP) indicates a 1.3 percent per year population growth rate in the CVWD service area over the next two decades. The SBCGP forecasts that the Crest Forest portion of the planning area, which includes CVWD, will contain 6,400 households and a population of approximately 15,600 in the year 2030.

Based on County land use plans and U.S. Forest Service management policies, the full buildout of the Crest Forest area is estimated at 9,866 dwelling units plus 98 acres of commercial use and 100 acres of institutional uses. This growth projection is considered consistent with the SCAG forecast as well as with the County's general plan.

CVWD has 54 approved groundwater sources located on 22 well sites, which produced 15.5 million cubic feet of water in 2004. CVWD also buys supplemental water (24.5 million cubic feet in 2004) from the Crestline-Lake Arrowhead Water Agency (CLAWA). The District operates 12 water storage tanks and approximately 90 miles of water lines. The District is proposing to construct three additional water storage tanks. The District has an ongoing program of main line replacement and other improvements to older components of its system.

CVWD's total water production peaked in 1989 at 44 million cubic feet, and for the last five years has been approximately 36-40 million cubic feet. The District's water supply can be affected in dry years, but is considered to be very reliable due to the

diversity of sources. Future water supply projections are based upon average local well production of 19.0 million cubic feet, increasing slightly over time, plus supplemental water from CLAWA as required. The amount of supplemental water purchased from CLAWA by CVWD each year can range from 20 percent of total supply to 80 percent of total supply, depending upon various factors. Over the last five years, CVWD has purchased on average approximately 62 percent of their total water supply from CLAWA.

Water demand in CVWD was 37 million cubic feet in 2004, of which 86 percent was delivered to residential customers. Future demand will increase as a result of (a) development, (b) conversion of seasonal residences to full-time occupancy, and (c) annexations to the District's service area. Overall, water demand is projected to increase based upon the 1.3 percent population growth rate forecasted in the SBCGP. The District's projected supply is expected to be sufficient to meet projected demand on an average year basis.

As a member of the California Urban Water Conservation Council and a signatory to the Memorandum of Understanding Regarding Urban Water Conservation in California, CVWD has conservation programs in place to make a good faith effort to implement a number of particular Best Management Practices (BMPs). The District will be evaluating a 14 BMP plan, pursuant to SB 553, and implementing those that are feasible and reasonable, in the coming months and years.

The District has had a water shortage contingency plan in place for several years. It includes measures to reduce demand and allocate supply during shortages.

The potential for use of recycled water (reclaimed wastewater effluent) by CVWD is limited, due to a lack of uses, lack of customers for such water, and a lack of supply. Crestline Sanitation District, the wastewater agency in CVWD's area, disposes of its wastewater effluent outside the CVWD service area, and intends to continue doing so in the future.

Appendix F, References, lists some of the documents referred to as general information sources during preparation of this plan.

NOTE: Agencies reporting water data use measurements appropriate for their individual purposes. For this reason, a conversion table has been provided at the bottom of the Table of Contents of this document.

1. Introduction

Adoption and Implementation of UWMP

Law

10642. Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan. Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing thereon. Prior to the hearing, notice of the time and place of hearing shall be published. After the hearing, the plan shall be adopted as prepared or as modified after the hearing.

1.1 What This Document Is

This document is an Urban Water Management Plan for the Crestline Village Water District (CVWD or the District). The purpose of this plan is to address the District's long-term needs and policies concerning water supply, water demand, water conservation, and water reclamation and reuse. The intended benefits of this plan are:

- to help assure reliable water supplies,
- to promote the wise and efficient use of water,
- to plan ahead for periods of water shortage, and
- to analyze the potential use of recycled water in the District's service area.

1.2 Why This Plan Has Been Prepared

This Urban Water Management Plan has been prepared to meet the requirements of the Urban Water Management Planning Act (California Water Code Division 6, Part 2.6). The Urban Water Management Planning Act requires water suppliers who directly or indirectly provide water for municipal purposes to more than 3,000 customers, or supply more than 3,000 acre-feet of water annually, to develop and implement an Urban Water Management Plan.

1.3 How This Plan Will Affect CVWD and Its Customers

This plan, when adopted by the Board of Directors of CVWD, will guide the District's water supply and conservation efforts over the next five years. Based upon this plan, the District may:

- require new conservation measures,
- enforce new development conditions,
- seek new sources of supply, including the use of recycled water,
- modify rate structures, and
- implement programs providing information, assistance, and enforcement.

2. Public Involvement

2.1 Plan Preparation

Crestline Village Water District prepared this Urban Water Management Plan during late 2005 and during the first half of 2006. The original completion date of December 31, 2005 was extended with the approval of the California Department of Water Resources. CVWD staff, CVWD's District Engineer (Albert A. Webb Associates), and District counsel Ron Van Blarcom collaborated in the development of the plan.

The format and content of this plan comply with recent amendments to Section(s) 10631 of the Water Code, which was adopted as SB 553, allowing members of the California Urban Water Conservation Council to follow a 14 Demand Management Measures plan, as opposed to the original 16 DMM. SB 553 took effect on September 28, 2000. The next required plan update will be due on December 31, 2010. The District will compile data over the next five years in order to aid in the preparation of the next plan.

2.2 Interagency Coordination

CVWD has contacted a number of public agencies to obtain information and input, and has notified other parties of the preparation of this plan. CVWD provided earlier drafts of this plan to some parties for comment. The process of coordination with other agencies continued as the plan underwent public review. APPENDIX A provides a list of persons and organizations contacted in the development of this plan.

1. Other Water Suppliers

Crestline Village Water District receives imported water from the CLAWA. CLAWA has been consulted concerning estimated future water supply and demand. CLAWA supplies sixteen other water purveyors in the mountain area (*CLAWA 2005*). There are no purveyors who share a common local source of supply with CVWD. In addition to CLAWA, the following nearby water companies have been advised of the preparation of this plan and invited to comment. They are:

- Cedarpines Park Mutual Water Company
- Strawberry Lodge Mutual Water Company
- Valley of Enchantment Mutual Water Company
- Valley View Park Mutual Water Company

2. Water Management Agencies

The California Department of Health Services and the County of San Bernardino Department of Environmental Health Services were consulted to obtain information about water suppliers in the area for previous UWMP updates but no additional data was obtained for the 2005 update. The California Regional Water Quality Control Board, Lahontan and Santa Ana Regions, have also been advised.

3. Other Relevant Public Agencies

The public agencies with land use authority in the CVWD service area are the County of San Bernardino and the U.S. Department of Agriculture, Forest Service. The County Planning Department has been consulted regarding land use data and growth projections. The Forest Service management plan for the San Bernardino National Forest has been reviewed with regard to land use planning and land management direction.

The Crestline Sanitation District provides wastewater collection and treatment services within the CVWD service area, and has been consulted concerning potential wastewater reclamation and reuse. This is discussed in Section 9, Recycled Water Opportunities.

2.3 Public Review

Crestline Village Water District customers have been encouraged to participate in the urban water management planning process. Water in all its aspects - quality, sources, availability, pricing, conservation, and reuse - is a topic of high public interest in the Crestline and Lake Gregory areas. The population served by CVWD has done an excellent job of conserving water, both historically and recently. Many of the conservation measures discussed in this plan are already in effect, following public input and with public support. In other words, much of the water management planning process for CVWD has already taken place through past District actions, with full public involvement and review.

CVWD has notified the public of the availability of this plan, in draft form, through newspaper advertisements and announcements at CVWD meetings. The plan has been made available for public inspection and comment, including a PDF copy on the District's Website.

2.4 Plan Adoption

Before plan adoption, a duly noticed public hearing will be held to receive public comment and discuss questions and issues. The CVWD Board of Directors plans to adopt this Urban Water Management Plan on October 10, 2006. After approval, the final document will be submitted to the California Department of Water Resources within 30 days. A copy of the resolution for adoption of the plan is provided in APPENDIX B.

3. CVWD Background and Water Facilities

Law

10631. A plan shall be adopted in accordance with this chapter and shall do all of the following:

10631 (a) Describe the service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.

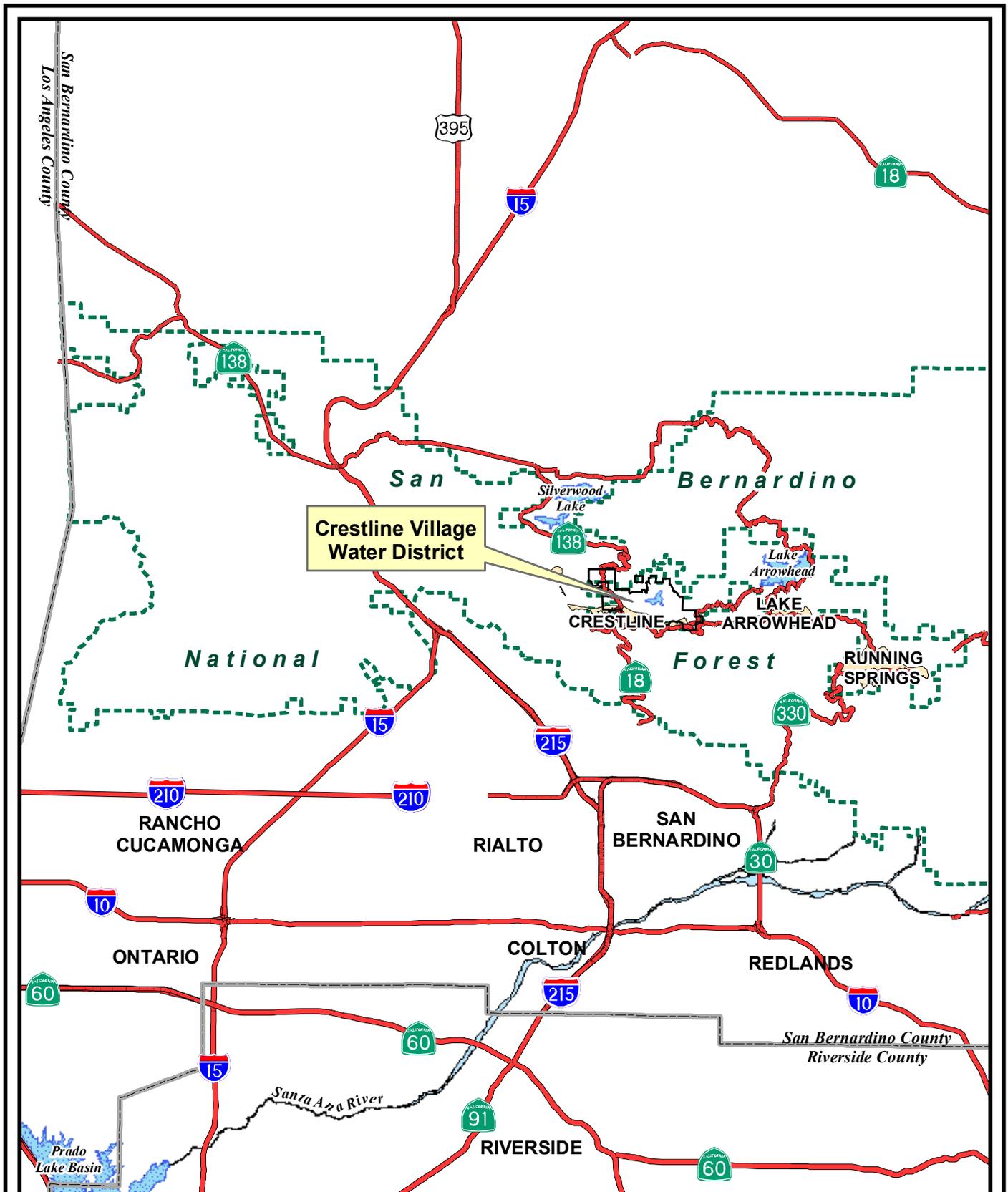
3.1 Crestline Village Water District Service Area

Crestline Village Water District is a public agency, which provides domestic water service in the Crestline and Lake Gregory areas of San Bernardino County, California. Crestline is located about ten miles north of the City of San Bernardino in the San Bernardino Mountains, as shown in FIGURE 1, REGIONAL LOCATION. As indicated in FIGURE 1, most land in the San Bernardino Mountains is included within the San Bernardino National Forest. Crestline and nearby mountain communities occupy islands of private land surrounded by National Forest territory.

FIGURE 2, VICINITY MAP, shows the major travel routes and communities in the area and also shows CVWD's boundary. CVWD's service area lies predominantly on the north side of State Highway 18 (Rim of the World Drive) and is served by State Highways 138 and 189.

The CVWD service area is located along the crest of the San Bernardino Mountains and in adjacent valleys high on the mountains' north slopes. The terrain is rugged, with moderate-to-steep slopes and elevations ranging from about 4,000 feet to over 5,600 feet. The elevation at Lake Gregory is 4,550 feet (USGS datum). Unlike Southern California's valleys, this area experiences a four-season climate.

Crestline Village Water District was organized on January 19, 1954 by the citizens of Crestline, under the authority of the County Water District Law (California Water Code sections 31000 *et seq.*). CVWD was originally known as the Crestline Village County Water District and served only the immediate Crestline area, with approximately 1,600 service connections. All of CVWD's water supplies were from local sources until Crestline Lake Arrowhead Water Agency (CLAWA) began delivering imported water in 1972. Since then, CVWD has relied on both local and imported water supplies.



Not to Scale

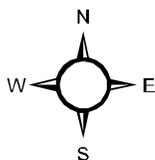


Figure 1

Vicinity Map

Crestline Village Water District
Urban Water Management Plan

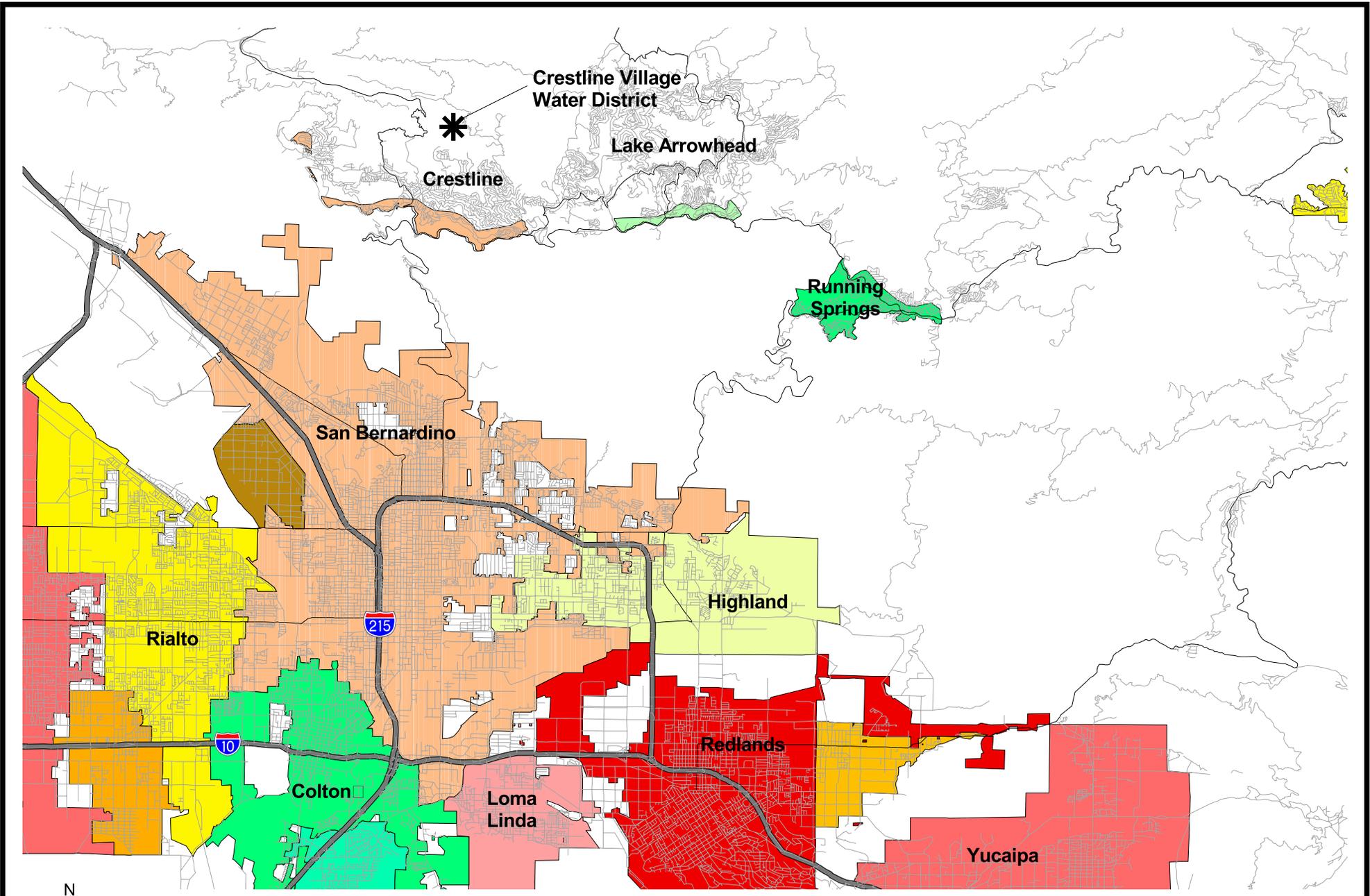


FIGURE 2
Vicinity Map
Crestline Village Water District
Urban Water Management Plan

The area served by CVWD has grown over the years, as additional land has been annexed. The largest change occurred on October 1, 1979, when CVWD acquired the facilities of the Lake Gregory Water Company and accepted responsibility for providing retail water service in the area around Lake Gregory. By purchasing the Water Company CVWD almost doubled in size.

CVWD's existing boundary encompasses approximately five square miles, as shown in FIGURE 3, CRESTLINE VILLAGE WATER DISTRICT SERVICE AREA. The existing service area includes portions of Sections 14 through 16 and Sections 20 through 28, Township 2 North, Range 4 West, and Section 30, Township 2 North, Range 3 West, San Bernardino Base and Meridian. The communities currently served by CVWD include Crestline and Lake Gregory.

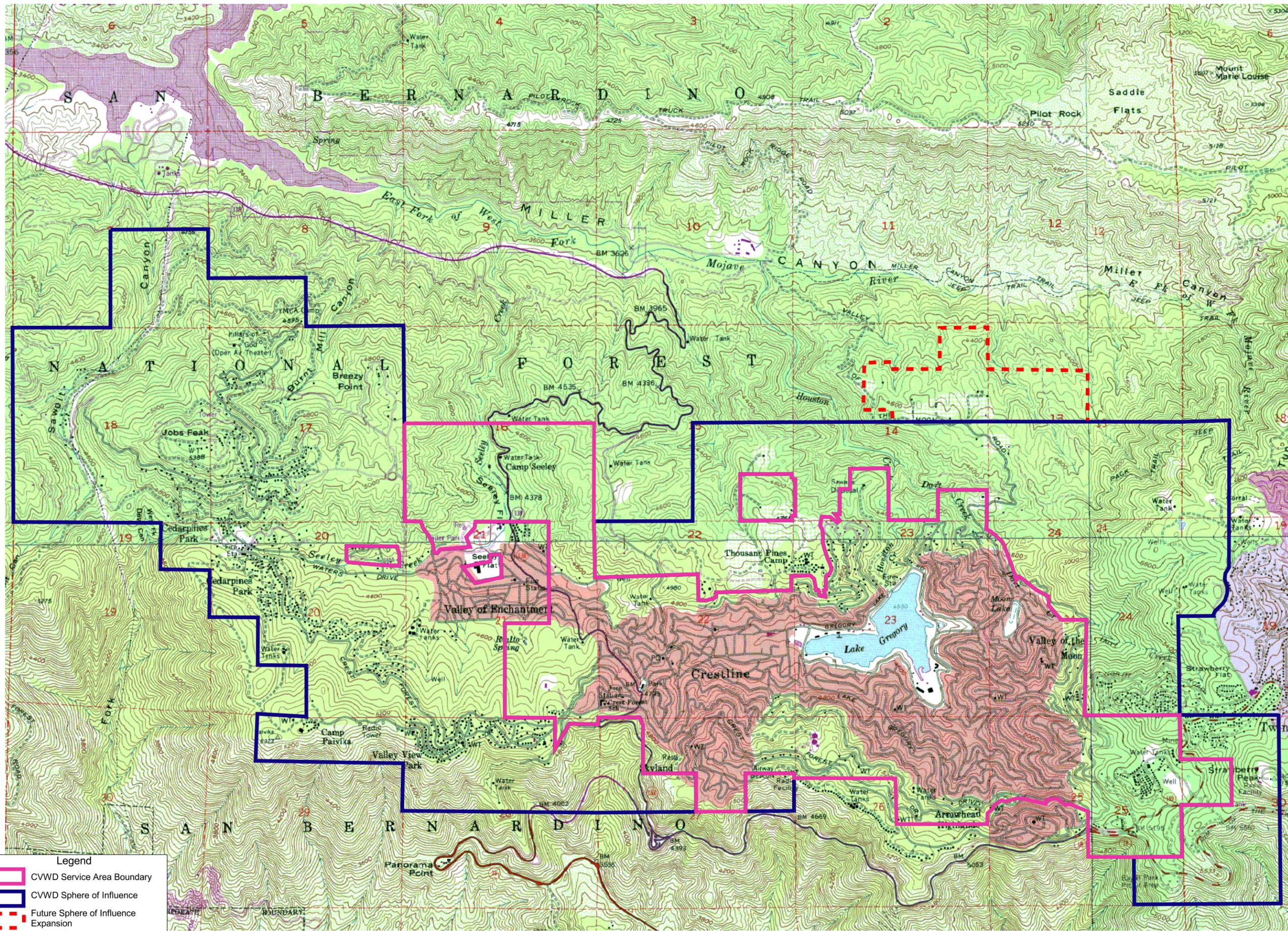
3.2 CVWD Sphere of Influence

Pursuant to California Government Code section 56425, the Local Agency Formation Commission of San Bernardino County (LAFCO) is required to develop and determine a "sphere of influence" for every local governmental agency in the County, which includes the CVWD. A sphere of influence is defined by Government Code Section 56076 as "a plan for the probable physical boundaries and service area of a local agency, as determined by the commission."

The sphere of influence for CVWD was established by LAFCO in 1974 (LAFCO No. 1347). CVWD's sphere of influence covers an area of approximately twelve square miles (see FIGURE 3). The sphere of influence is located almost entirely within Township 2 North, Range 4 West (in Sections 7 and 13 through 29); the eastern end of the sphere extends into Township 2 North, Range 3 West (in Sections 18, 19, and 30). CVWD's sphere includes the communities of Valley View Park, Cedarpines Park, Valley of Enchantment, and a portion of Dart Canyon, along with areas that are not identified as named communities. These areas that are not identified are either presently undeveloped or are receiving water service from private water companies in the area. Sources of supply for these areas include local sources and supplemental water obtained from CLAWA.

Designation of a sphere of influence is a legal requirement for public agency water purveyors, but it does not effect pre-existing service arrangements by others within the sphere. For example, the Cedarpines Park area is within CVWD's sphere of influence, but is served by the Cedarpines Park Mutual Water Company. Also, inclusion in the sphere of influence does not mean that land will eventually be annexed to CVWD. CVWD will annex property in its sphere only if requested to do so by the property owner, and CVWD has no authority over any land in its sphere until an annexation occurs.

FIGURE 3
Crestline Village
Water District
Service Area



Legend

- CVWD Service Area Boundary
- CVWD Sphere of Influence
- Future Sphere of Influence Expansion



1":2,500"
ALBERT A.
WEBB
 ASSOCIATES
 ENGINEERING CONSULTANTS

The CVWD's sphere of influence contained approximately 10,121 residences as of the 2000 Census; however, 54 percent of all housing units were vacation homes, second homes, reserved for seasonal, part-time, occasional use, or otherwise vacant. Thus, there were approximately 5,475 occupied housing units within the sphere, and an estimated population of 14,090. Due to the large percentage of part-time and seasonal residences in the San Bernardino Mountains, the population can double during holiday weekends and other peak times.

Based on the San Bernardino County land use plans and U.S. Forest Service management policies, the full buildout of the Crest Forest Community Plan, which encompasses an area larger than the actual CVWD sphere of influence, is estimated at 9,866 occupied units plus 118 acres of commercial use, 4 acres of industrial use, and 100 acres¹ of institutional uses. This growth projection is considered consistent with the SCAG forecast as well as with the County's general plan.

Of the areas in the sphere that are served by purveyors other than CVWD, only the Cedarpines Park area has the potential for substantial development in the future. The Strawberry Lodge, Valley of Enchantment, and Valley View Park areas are already substantially developed, although some new construction can be expected.

Outside CVWD's sphere of influence, most of the adjoining land is within the San Bernardino National Forest. However, there is one area of privately owned land, immediately adjacent to CVWD's current sphere of influence. This is the area of Dart Canyon, where future development can be expected to occur (in the north half of Sections 13 and 14, T2N R4W). Since there is no other water purveyor to serve this area, CVWD may eventually incorporate this area within its sphere of influence and service boundary.

3.3 Population and Uses Served

Development in the San Bernardino Mountains is naturally constrained by rugged terrain, limited access to public services, and lack of support infrastructure, as well as by planning and environmental policies, which place much of the area off limits to significant development. Most of the mountain area, including portions of CVWD's service area, is within the San Bernardino National Forest. Forestlands are devoted primarily to resource protection and recreational use.

Crestline and neighboring communities are part of a mountain resort area that experiences significant tourism. There is a large seasonal population component as well

¹ Acreage estimates for the CVWD service area are based on planimeter readings by Webb Associates, extrapolated from County land use designations, within the CVWD service area boundary. The acreage estimates for the sphere of influence are based primarily upon the County's acreage totals for the Crest Forest Planning Area as a whole, with minimal planimetry used to exclude land not within CVWD's sphere. The estimated institutional acreage within CVWD's service area (104 acres) slightly exceeds the County-based estimate for the sphere of influence (100 acres) due to the difference in data sources. Both figures should be considered approximations due to the margin of error involved in planimetry.

as a substantial influx of visitors. The seasonal population is not reflected in available demographic statistics, which count only year-round residents. Seasonal changes in water demand in the mountain area are quite different from the normal seasonal variation in water use by customers of any water purveyor, which reflect monthly changes in water use for landscape irrigation, swimming pools, car washing, space cooling, etc. (*PMC 1990*). By contrast, Crestline and other nearby mountain resort areas experience huge seasonal swings in the number of people served, with peaks in both summer and winter due to the abundance of recreational activities within the mountain communities.

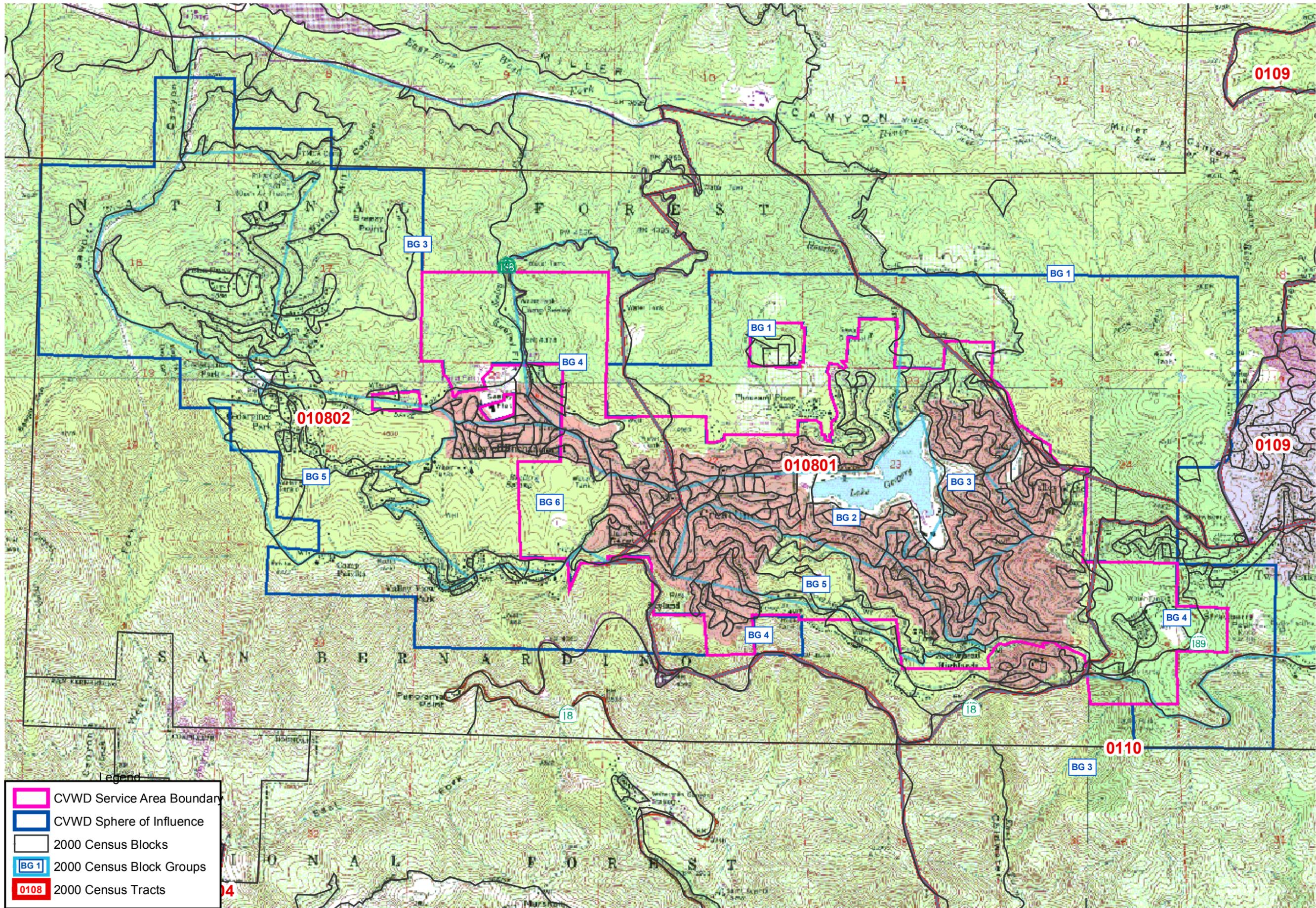
The CVWD service area does include commercial uses that are oriented to tourists, seasonal residents, and year-round residents. However, the development pattern in the CVWD service area is primarily single family residential; this pattern is expected to continue for the duration of the planning period. There were approximately 4,857 active service connections in the CVWD service area as of December 31, 2005 (*CVWD 2005*). Of this total, the majority (4,678 or 96 percent) were classified as general or residential. There were 179 commercial connections, no industrial connections, and negligible agricultural/irrigation connections.

CVWD estimated that its service area had a permanent population of approximately 7,500 in 2004 (*CVWD 2005*). This is much lower than the 14,090 full-time residents reported by the 2000 Census throughout CVWD's sphere of influence. The discrepancy in number is likely due to the number of seasonal residents. The strong seasonal fluctuation in population increases the peak population to an estimated 15,000 people.

The 2000 census information was utilized in an attempt to quantify the number of households and estimate population within CVWD's sphere of influence. FIGURE 4, CENSUS TRACTS, shows the census tracts surrounding the Crestline area as defined in the 2000 federal census (*Census 2000*); Figure 4 also shows the CVWD sphere boundary. The CVWD service area is located almost entirely within Census Tract 108, which includes Tracts 108.01 and 108.02. Census Tract 108 extends north and south of the CVWD area to the San Bernardino National Forest boundary, and westward to Interstate 15. The southeast portion of CVWD's service area, lying south of Highway 189, is located within Census Tract 110. The remaining area of Tract 110 covers the south shore of Lake Arrowhead and extends down the mountain face to the northern fringes of San Bernardino. The CVWD service area is only a small portion of each these census tracts, therefore, in order to determine what the actual population of the CVWD service area is, census *block* data was used to extrapolate the portions of the census tracts which were not included in CVWD's service area. Census blocks that were either fifty percent in or fifty percent out were only taken for one half of their actual census values.

Using the above described method to extrapolate block data, TABLE 1 gives selected data about housing units, such as owner occupancy, single family vs. multifamily structures, and selected structural characteristics. For comparison, data for the Riverside-San Bernardino Primary Metropolitan Statistical Area (PMSA) are also shown.

**FIGURE 4
Census Tracts**



- Legend
- CVWD Service Area Boundary
 - CVWD Sphere of Influence
 - 2000 Census Blocks
 - BG 1 2000 Census Block Groups
 - 0108 2000 Census Tracts



1" = 2500'

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Table 1: 2000 Census Housing Characteristics for Census Tract 108

CHARACTERISTIC	CENSUS TRACTS 108 and 110		FOR COMPARISON	
	Total Tracts	Percent	Riv.- Sbdno. PMSA	Percent
Total Population ¹	14,090	100	3,254,821	100
Total Housing Units ²	10,121	100	1,186,043	100
Vacant Housing Units:				
Total vacant housing units	4,646	46	151,231	13
For sale	262	3	19,906	2
For rent	130	1	27,028	2
Rented or sold, not occupied	91	<1	7,492	<1
For seasonal, recreational, or occasional use	4,030	40	69,873	6
For migrant workers	0	0	93	<1
Other vacant	135	1	26,839	2
Occupied Housing Units	5,475	100	1,034,812	100
Owner-occupied Housing Units	3,939	71	689,465	67
Units in Structure³				
Unit Total	10,931	100	1,186,043	100
1- Detached	10,057	92	772,568	65
1- Attached	293	3	69,133	6
2-	155	1	18,145	2
3 or 4	23	<1	50,928	4
5 to 9	18	<1	39,976	3
10 to 19	25	<1	30,244	3
20 to 49	15	<1	22,423	2
Mobile Home or Trailer	275	3	116,786	10
Bedrooms				
No bedroom	193	2	49,512	4
1 bedroom	1,480	14	165,402	14
2 bedrooms	3,307	30	346,145	29
3 bedrooms	4,224	39	398,198	34
4 bedrooms	1,380	13	194,787	16
5 or more bedrooms	347	3	31,999	3
Persons in Unit				
Average Household Size	2.57		3.07	
1 person	1,316	12	202,039	17
2 persons	1,991	18	295,409	25
3 persons	885	8	166,173	14
4 persons	873	8	169,585	14
5 persons	352	3	103,828	9
6 or more persons	249	2	97,778	8

Source: **Census 2000**; Albert A. Webb Associates (96-0033; UWMP; Tables 2001)

¹ Total population is the sum of total population within associated Census Tracts minus 50 percent of census blocks that are partially within the CVWD Service Area.

² The data provided for the CVWD planning area has been extrapolated from the 2000 Census information provided at www.factfinder.census.gov. Information on total housing units and population has been estimated from Census Block data and their relevance to the CVWD sphere of influence (SOI). It was determined which Census Block were less than or greater than 50 percent in or out of the SOI, and these values were subtracted from the totals of each of the pertinent Census Tracts.

³ Data is not available for individual Census Blocks pertaining to the unit type. The data presented represents the entire Census Tracts information for Tracts 108 and 110. The values are strictly for comparative purposes.

TABLE 2: CENSUS BLOCK WITHIN THE CVWD SERVICE AREA

Census Tract	Census Block	Full or Partial inclusion in CVWD Service Area
010801	1001	< 50% in Service Area
010801	1007	
010801	1008	
010801	1009	
010801	1010	
010801	1011	
010801	1012	
010801	1013	
010801	1014	
010801	1015	
010801	1016	
010801	1017	
010801	1018	
010801	1019	
010801	1020	
010801	2000	
010801	2001	
010801	2002	
010801	2003	
010801	2004	
010801	2005	
010801	2006	
010801	2007	
010801	2008	
010801	2009	
010801	2010	
010801	2011	
010801	2012	
010801	2013	
010801	2014	
010801	2015	
010801	2016	
010801	2017	
010801	2018	
010801	2019	
010801	2020	
010801	2021	
010801	2022	
010801	2023	
010801	3000	
010801	3001	

Census Tract	Census Block	Full or Partial inclusion in CVWD Service Area
010801	3002	> 50% in Service Area
010801	3003	
010801	3004	
010801	3005	
010801	3006	
010801	3007	
010801	3008	
010801	3009	
010801	3010	
010801	3011	
010801	3012	
010801	3013	
010801	3014	
010801	3015	
010801	3016	
010801	3017	
010801	3018	
010801	3019	
010801	3020	
010801	3021	
010801	3022	
010801	3023	
010801	3024	
010801	3025	
010801	3026	
010801	4001	> 50% in Service Area
010801	4002	
010801	4003	
010801	4004	
010801	4005	
010801	4006	
010801	4007	
010801	4008	
010801	4009	
010801	4010	
010801	4011	
010801	4012	
010801	4013	
010801	4014	
010801	4015	
010801	4016	
010801	4017	

Census Tract	Census Block	Full or Partial inclusion in CVWD Service Area
010801	4018	
010801	4019	< 50% in Service Area
010801	4020	< 50% in Service Area
010801	4021	< 50% in Service Area
010801	4022	
010801	4023	
010801	4024	
010801	4025	
010801	4026	
010801	4027	
010801	4028	
010801	4029	
010801	4030	
010801	4031	
010801	4032	
010801	4033	
010801	4034	
010801	4035	
010801	4036	
010801	4044	< 50% in Service Area
010801	5000	
010801	5001	
010801	5002	
010801	5003	
010801	5004	
010801	5005	
010801	5006	
010801	5007	
010801	5008	
010801	5009	
010801	5010	
010801	5011	
010801	5012	
010801	5013	
010801	5014	> 50% in Service Area
010801	5015	
010801	5016	
010801	5017	
010801	5018	
010802	1141	< 50% in Service Area
010802	1143	< 50% in Service Area
010802	1145	

Census Tract	Census Block	Full or Partial inclusion in CVWD Service Area
010802	1146	
010802	1152	< 50% in Service Area
010802	3002	< 50% in Service Area
010802	3003	< 50% in Service Area
010802	3029	< 50% in Service Area
010802	4000	> 50% in Service Area
010802	4004	> 50% in Service Area
010802	4005	
010802	4006	
010802	4007	
010802	4008	
010802	4009	
010802	6000	
010802	6001	
010802	6002	
010802	6003	
010802	6004	
010802	6005	
010802	6006	< 50% in Service Area
010802	6007	
010802	6018	> 50% in Service Area
010802	6019	> 50% in Service Area
010802	6038	
010802	6039	
010802	6040	
010802	6041	
010802	6042	
010802	6043	
010802	6044	
010802	3000	< 50% in Service Area
011000	4008	< 50% in Service Area
011000	4020	> 50% in Service Area
011000	4022	
011000	4023	
011000	4024	

Table 1 indicates that the portion of Census Tract 108.01, 108.02, and 110.00, of which CVWD is a part, differs substantially from the surrounding metropolitan area in several important respects:

- 92 percent of all homes in the CVWD Service Area Census Tracts are single family dwellings, as compared to 65 percent in the Riverside-San Bernardino PMSA.
- The CVWD Service Area Census Tracts housing stock has very few multifamily units (4 percent), condominiums (0.3 percent), and mobile homes (3 percent). This compares to averages for the entire PMSA of 15 percent multifamily, 5 percent condominiums, and 10 percent mobile homes.
- Homes in CVWD Service Area Census Tracts are more likely to be owner-occupied (71 percent in Census Tracts 108.01, 108.02, and 110.00 vs. 67 percent in the Riverside-San Bernardino PMSA).
- 46 percent of the housing units within the CVWD Service Area Census Tracts were classified as vacant at the time of the 2000 Census. This is primarily because 40 percent of all dwelling units are classified as "for seasonal, recreational, or occasional use." The Census Bureau describes these homes as, "These are vacant units used or intended for use only in certain seasons or for weekend or other occasional use throughout the year. By comparison, only 6 percent of the housing units in the entire PMSA are in this category.
- The CVWD Service Area Census Tracts have 2.57 persons per household in comparison with the PMSA as a whole which has 3.07 persons per household.

TABLE 3
2000 CENSUS ESTIMATES FOR CVWD SPHERE OF INFLUENCE

CHARACTERISTIC	DATA FOR CVWD SERVICE AREA
Total Population (a)	10,218
Total Households (a)	5,475
Total Housing Units (a)	6,695
Single Family Detached Housing Units (b)	6,259
Multifamily Housing Units (b)	288
Mobile Homes (b)	155
Housing Units Reserved for Seasonal or Occasional Use (a) (b)	4,030
Seasonal Housing Ratio (a) (c)	0.40

Source: Census 2000; Albert A. Webb Associates.

- a. From tabulation in TABLE 1. A household is an occupied housing unit.
- b. Estimated based on 2000 Census data for the Crestline Census Defined Place.
- c. Per 2000 Census data for Crestline CDP.

Because of limitations in the reporting of census data, these figures for the Crestline *Census Defined Place* (CDP) are necessarily approximations. As shown in TABLE 3, THE 2000 Census recorded a population of approximately 10,218 within the current boundary of the Crestline CDP (Census 2000). Also, there were a total of 5,475 households and 6,695 housing units indicated within the Crestline CDP boundary. The seasonal element of the Crestline area's population is not reflected in the census data for the Crestline CDP; however it is indicated in the information provided in Table 1.

3.4 Population Growth Forecasts

The Southern California Association of Governments (SCAG) is the council of governments responsible for growth forecasting and planning in the region. SCAG has adopted growth forecasts for sub-regions within Southern California. The SCAG growth forecast is not simply a projection of what is expected to occur; it is a policy statement based upon decisions as to where growth should be encouraged or discouraged. CVWD is within SCAG's San Bernardino sub-region, which consists of all of San Bernardino County. Forecast datum is broken into incorporated cities and unincorporated areas within the county. This is the official regional growth forecast data applicable to the CVWD service area, and is given in TABLE 4. The majority of census tracts 108.01, 108.02, and 110.00 encompass unincorporated areas; further, CVWD's service area is almost entirely unincorporated. Thus, the forecast data provided includes incorporated and unincorporated portions of census tracts. The unincorporated areas are most pertinent to the forecast of housing units in CVWD's service area because the incorporated cities of San Bernardino and Hesperia are not served by CVWD. However, the total unincorporated areas of census tracts 108.01, 108.02, and 110.00 are much larger than the CVWD's service area, and consequently will lead to much higher forecast data than its service area will ultimately sustain.

TABLE 4

SCAG GROWTH FORECAST
FOR SAN BERNARDINO SUB-REGION

ELEMENT	ACTUAL	SCAG GROWTH FORECAST					2000-2025	
	2000	2005	2010	2015	2020	2025	GROWTH	RATE
Population	1,718,312	1,919,195	2,059,375	2,229,672	2,397,685	2,558,745	840,433	1.61
Households	530,498	567,164	618,781	686,533	756,596	826,609	296,111	1.79
Employment	594,925	669,034	770,877	870,468	972,255	1,074,884	479,959	2.39

Source: SCAG 2005; Albert A. Webb Associates.

The most detailed data available from SCAG is from the census tract and census defined place level. Although these do not constitute the official growth forecast (which applies only at the sub regional level), these figures are provided in TABLE 5, GROWTH FORECAST DATA FOR CENSUS TRACTS 108 AND 110; SCAG forecast data is not available for smaller demographic areas within the San Bernardino mountains, so the

information provided in Table 5 is intended to delineate the incorporated and unincorporated portions of the subregional data. While the CVWD service area is only a small portion of these census tracts (See FIGURE 4), the figures are useful for comparison between census data and SCAG projections.

FIGURE 5, POPULATION FORECAST, shows the actual 2000 population, per the 2000 Census; SCAG forecast data is also included in this figure for the time period up to 2030, for the unincorporated portion of census tracts 108.01, 108.02, and 110.00. To reiterate, the CVWD service area is only a small portion of these census tracts. FIGURE 6, HOUSEHOLDS FORECAST, and FIGURE 7, EMPLOYMENT FORECAST, give similar data for households and employment. From the forecasts, it is calculated that by 2030, the population in the unincorporated areas of these census tracts is projected to grow from 14,725 in 2000 to 21,694. This is equivalent to an average compound growth rate of 1.3 percent rate. Households are forecast to increase from 5,673 to 8,747, at a 1.5 percent rate, and employment is expected to grow at 1.8 percent rate, from 2,977 to 5,025.

SCAG does not provide a forecast for the number of housing units, only for households. A household is defined as an occupied housing unit; thus, vacant units must be added to the number of households to arrive at total housing units. The 2000 Census found that 40 percent of the dwelling units in census tracts 108.01, 108.02, and 110.00 were held for seasonal or part-time occupancy, while another 6 percent were vacant for other reasons, giving a total vacancy ratio of 46 percent. TABLE 6, HOUSING PROJECTION FOR SCAG FORECAST AREA, depicts the total seasonal units and other vacant units per the 2000 Census. The table estimates future housing units corresponding to the SCAG growth forecast for households. This projection adds to SCAG's households forecast a number of vacant dwelling units which is based upon the ratio of vacant homes observed within the unincorporated portion of these census tracts (*Census 2000*).

CVWD 2005 URBAN WATER MANAGEMENT PLAN

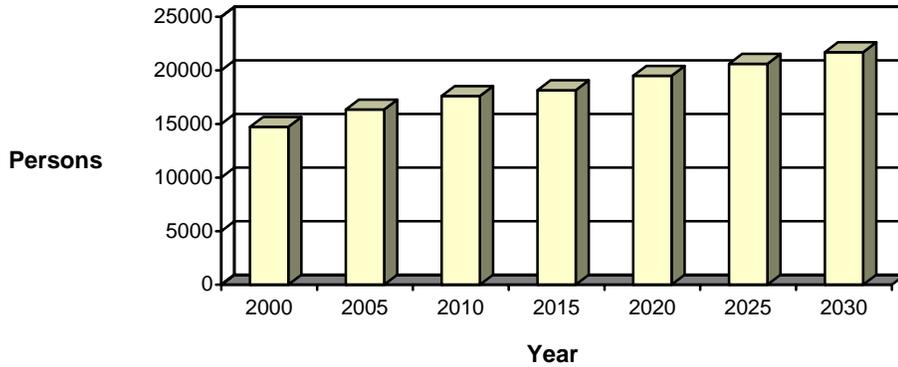
TABLE 5

GROWTH FORECAST DATA FOR CENSUS TRACTS 108 AND 110

Census Tract	Place	Actual 2000	SCAG Growth Forecast					
			2005	2010	2015	2020	2025	2030
POPULATION								
10801	Unincorporated	6,346	6,772	7,125	7,253	7,745	8,159	8,556
10802	Hesperia	8	35	97	110	139	164	188
10802	San Bernardino	348	369	381	353	360	364	369
10802	Unincorporated	4,792	5,303	5,656	5,922	6,397	6,796	7,180
11000	San Bernardino	484	516	536	520	526	531	535
11000	Unincorporated	3,587	4,266	4,824	4,973	5,343	5,656	5,958
	Total	15,565	17,261	18,619	19,131	20,510	21,670	22,786
	Unincorp. Total	14,725	16,341	17,605	18,148	19,485	20,611	21,694
HOUSEHOLDS								
10801	Unincorporated	2,469	2,493	2,547	2,744	3,069	3,350	3,634
10802	Hesperia	3	13	34	41	50	59	68
10802	San Bernardino	130	132	133	110	115	119	124
10802	Unincorporated	1,861	1,976	2,215	2,298	2,453	2,584	2,718
11000	San Bernardino	191	193	195	184	190	196	203
11000	Unincorporated	1,343	1,471	1,760	1,880	2,068	2,230	2,395
	Total	5,997	6,278	6,884	7,257	7,945	8,538	9,142
	Unincorp. Total	5,673	5,940	6,522	6,922	7,590	8,164	8,747
EMPLOYMENT								
10801	Unincorporated	910	944	995	1,125	1,214	1,301	1,388
10802	Hesperia	57	72	94	138	181	234	288
10802	San Bernardino	57	61	68	134	204	266	334
10802	Unincorporated	1,220	1,388	1,624	1,825	1,980	2,079	2,203
11000	San Bernardino	28	32	38	43	49	54	59
11000	Unincorporated	847	922	1,027	1,160	1,254	1,344	1,434
	Total	3,119	3,419	3,846	4,425	4,882	5,278	5,706
	Unincorp. Total	2,977	3,254	3,646	4,110	4,448	4,724	5,025

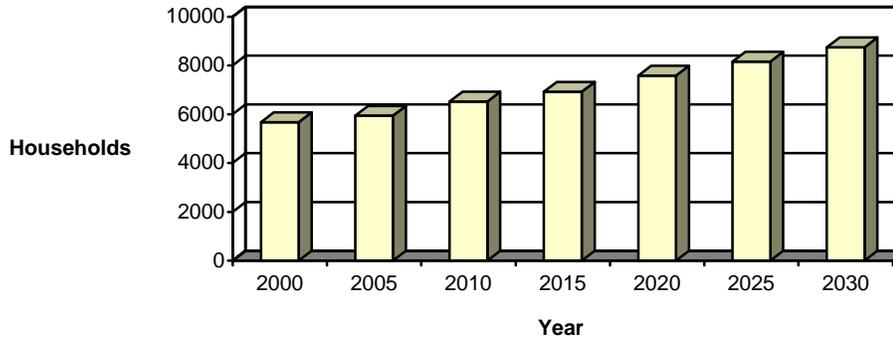
Source: SCAG 2005; Albert A. Webb Associates.

FIGURE 5
POPULATION FORECAST
 UNINCORPORATED PORTION OF CENSUS TRACTS 108 AND 110



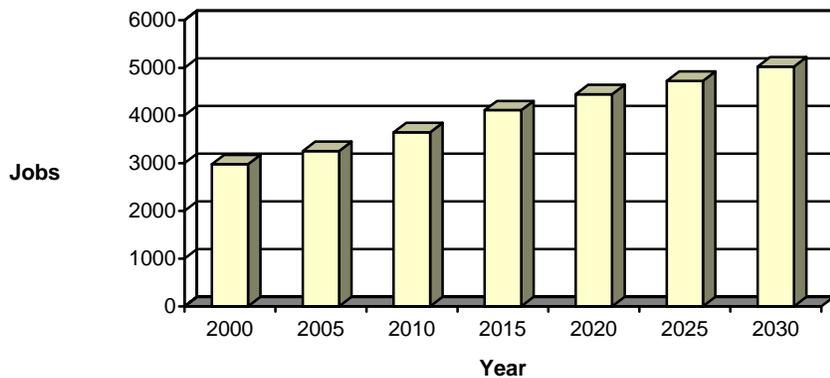
Source: SCAG 2005, Albert A. Webb Associates. See TABLE 5.

FIGURE 6
HOUSEHOLDS FORECAST
 UNINCORPORATED PORTION OF CENSUS TRACTS 108 AND 110



Source: SCAG 2005; Albert A. Webb Associates. See TABLE 6.

FIGURE 7
EMPLOYMENT FORECAST
 UNINCORPORATED PORTION OF CENSUS TRACTS 108 AND 110



Source: SCAG 2005; Albert A. Webb Associates. See TABLE 5.

CVWD 2005 URBAN WATER MANAGEMENT PLAN

TABLE 6
HOUSING PROJECTION FOR SCAG FORECAST AREA

Part 1		2005	2010	2015	2020	2025	2030	Rate¹
SCAG Households ²	5,673	5,940	6,522	6,922	7,590	8,614	8,747	1.45%
Seasonal Units	4,030	4,219	4,633	4,915	5,389	6,115	6,209	1.45%
Other Vacant	616	645	708	751	823	934	948	1.45%
Total Housing Units ³	10,319	10,804	11,863	12,588	13,802	15,663	15,904	
Seasonal Ratio	39%	39%	39%	39%	39%	39%	39%	
Other Vacant Ratio	6%	6%	6%	6%	6%	6%	6%	
Part 2								
SCAG Households ²	5,673	5,940	6,522	6,922	7,590	8,614	8,747	1.45%
Seasonal Units	4,030	3,998	4,152	4,154	4,279	4,542	4,294	1.45%
Other Vacant	616	645	708	751	823	934	948	1.45%
Total Housing Units ⁴	10,319	10,582	11,382	11,827	12,692	14,099	13,989	
Declining Seasonal Ratio	39%	37%	35%	33%	31%	29%	27%	
Other Vacant Ratio	6%	6%	6%	6%	6%	6%	6%	

1. The rate of 1.45% is an average rate of change between each five year planning period.
2. SCAG does not forecast values for seasonal units or other vacant units; therefore, these values were extrapolated using the constant rate of change of the SCAG household forecast.
3. Assuming constant growth over the entire planning period.
4. Total housing units multiplied by the declining ratio equals the new seasonal ratio plus the SCAG household forecast and other vacant units.

The number of housing units that will be needed to accommodate the number of households forecast by SCAG depends on whether or not how many seasonal/part-time units become available for full-time occupancy. FIGURE 8, HOUSING PROJECTION, UNINCORPORATED PORTION OF CENSUS TRACTS 108 AND 110, presents the results of these two projections.

Part 2 of Table 6 and Figure 8 indicate that if part-time residences convert to full-time occupancy at a rate of two percent per five year planning period less housing units will be required to house the increasing population; an additional 3,670 housing units will be needed by 2030 to accommodate the 8,747 households forecast by SCAG for the unincorporated portion of Census Tracts 108.01, 108.02, and 110.00. Comparably, if occupancy patterns remain unchanged, then 40 percent of housing in 2030 would remain unavailable for year-round occupancy. This would mean that a total housing stock of 15,904 units would be required to house the 8,747 households and also accommodate the

part-time and seasonal residents. The growth rate for the housing stock for the period 2000-2030 would be 1.45 percent, as compared to the original growth rate calculated.

3.5 Local Land Use Planning

The official SCAG growth forecasts cover a large area, so local planning data has also been used to estimate future growth in the CVWD service area. The County of San Bernardino has jurisdiction over land use planning and development on privately owned land in the CVWD service area. CVWD's service area is almost entirely within the Crest Forest Planning Area as identified in the San Bernardino County General Plan (*SBCo 2006*). FIGURE 9, CREST FOREST PLANNING AREA, shows its boundaries. Land use planning data is available from the County only for the entire planning area. TABLE 7, County Land Use Designations within the Crest Forest Planning Area, gives the County's acreage estimates and land use designations for this area.

Some parts of the CVWD service area are within the San Bernardino National Forest. The U.S. Department of Agriculture, Forest Service controls land use in these areas. Forest Service land in the CVWD area lie within the Back Country Management Area of the forest and is administered by the Arrowhead Ranger District. The Land and Resource Management Plan for the forest establish management emphasis zones to guide the management of the forest (*USFS 2005*). As shown in FIGURE 10, SAN BERNARDINO NATIONAL FOREST AREAS, the management emphasis zones on Forest lands in CVWD's service area are Wildlife, Range/Wildlife, Watershed, and Recreation. The general thrust of these designations is to protect the natural resources of the forest; little or no development is permitted under forest management policies. However, land exchanges are possible, in which Forestlands could be made available for development. National Forest lands are included within the overall acreage for the Crest Forest Planning Area.

FIGURE 8

HOUSING PROJECTION
UNINCORPORATED PORTION OF CENSUS TRACTS 108 AND 110

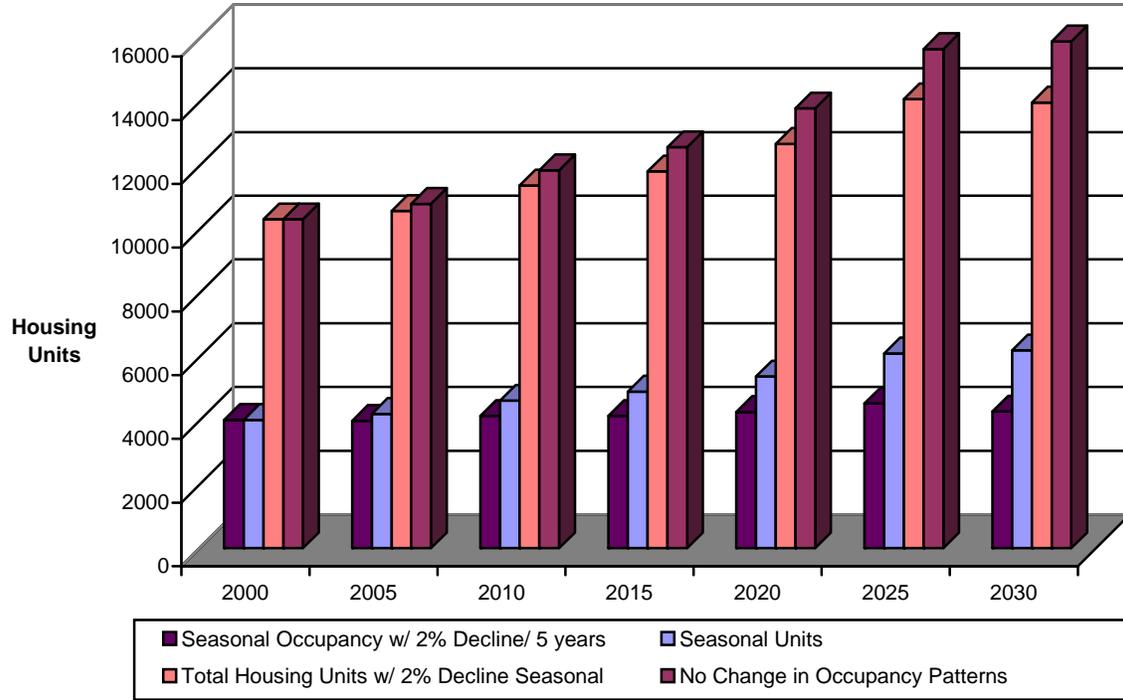
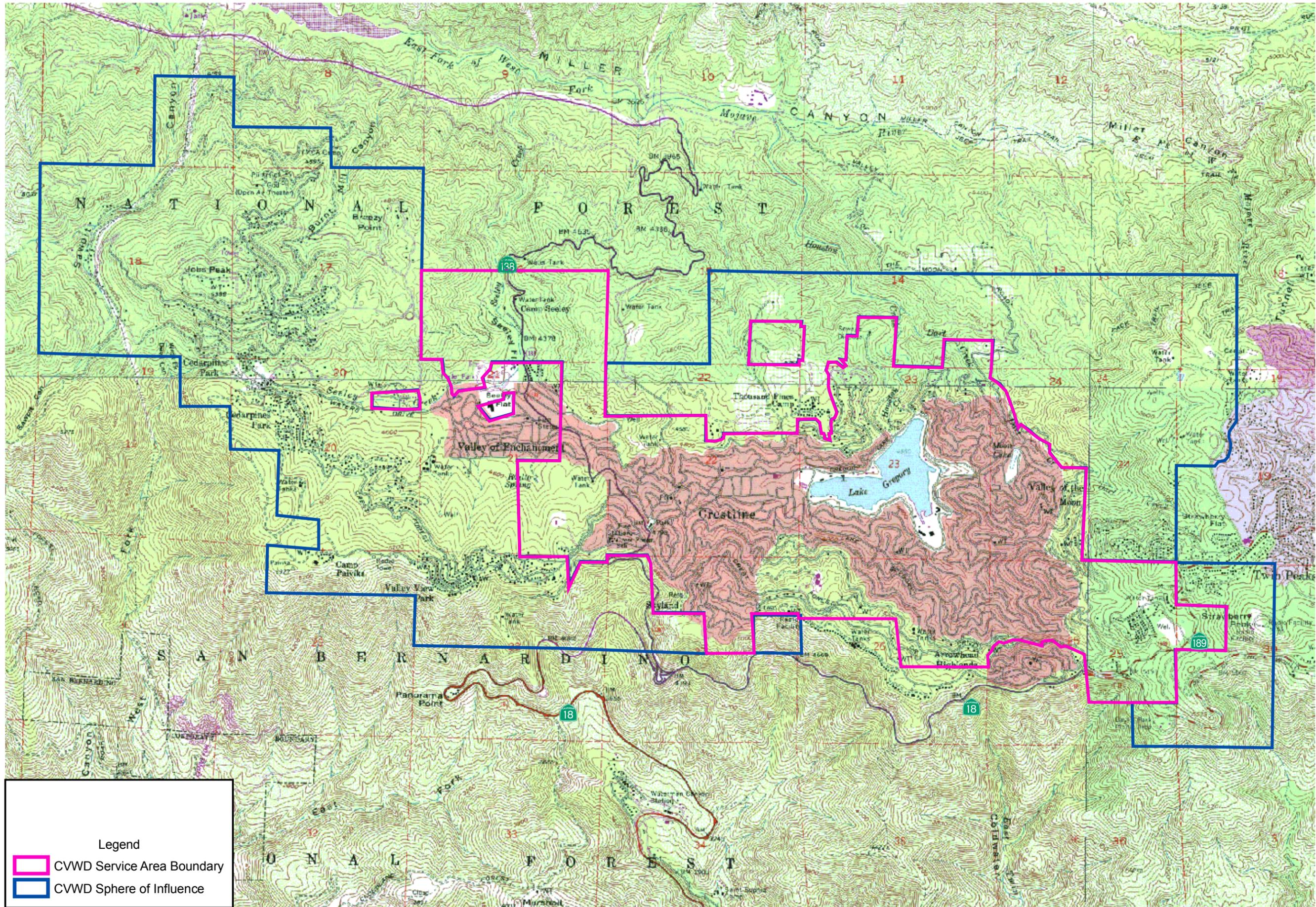


FIGURE 9
Crest Forest
Planning Area



Legend

- CVWD Service Area Boundary
- CVWD Sphere of Influence

N

 1" = 2500'
ALBERT A.
WEBB
 ASSOCIATES
 ENGINEERING CONSULTANTS

TABLE 7

COUNTY LAND USE DESIGNATIONS
CREST FOREST PLANNING AREA

LAND USE DESIGNATION	SYMBOL	ACREAGE	PERCENTAGE
Resource Conservation	RC	212	4 %
Agriculture	AG	0	0 %
Rural Living	RL	92	2 %
Single Residential	RS	1	<1 %
Single Residential	RS-1	407	7 %
Single Residential	RS-14M	2,403	44 %
Multiple Residential	RM	61	1 %
Office Commercial	CO	16	<1 %
Neighborhood Commercial	CN	5	<1 %
General Commercial	CG	60	1 %
Service Commercial	CS	17	<1 %
Community Industrial	IC	4	<1 %
Regional Industrial	IR	0	0 %
Institutional	IN	100	2 %
Floodway	FW	94	2 %
TOTAL	-	5,439	100

Source: Albert A. Webb Associates.

Estimated by planimetry based on County land use maps (SBCo 1995) and CVWD service area boundary (LAFCO 2000).

Columns may not add to totals due to rounding

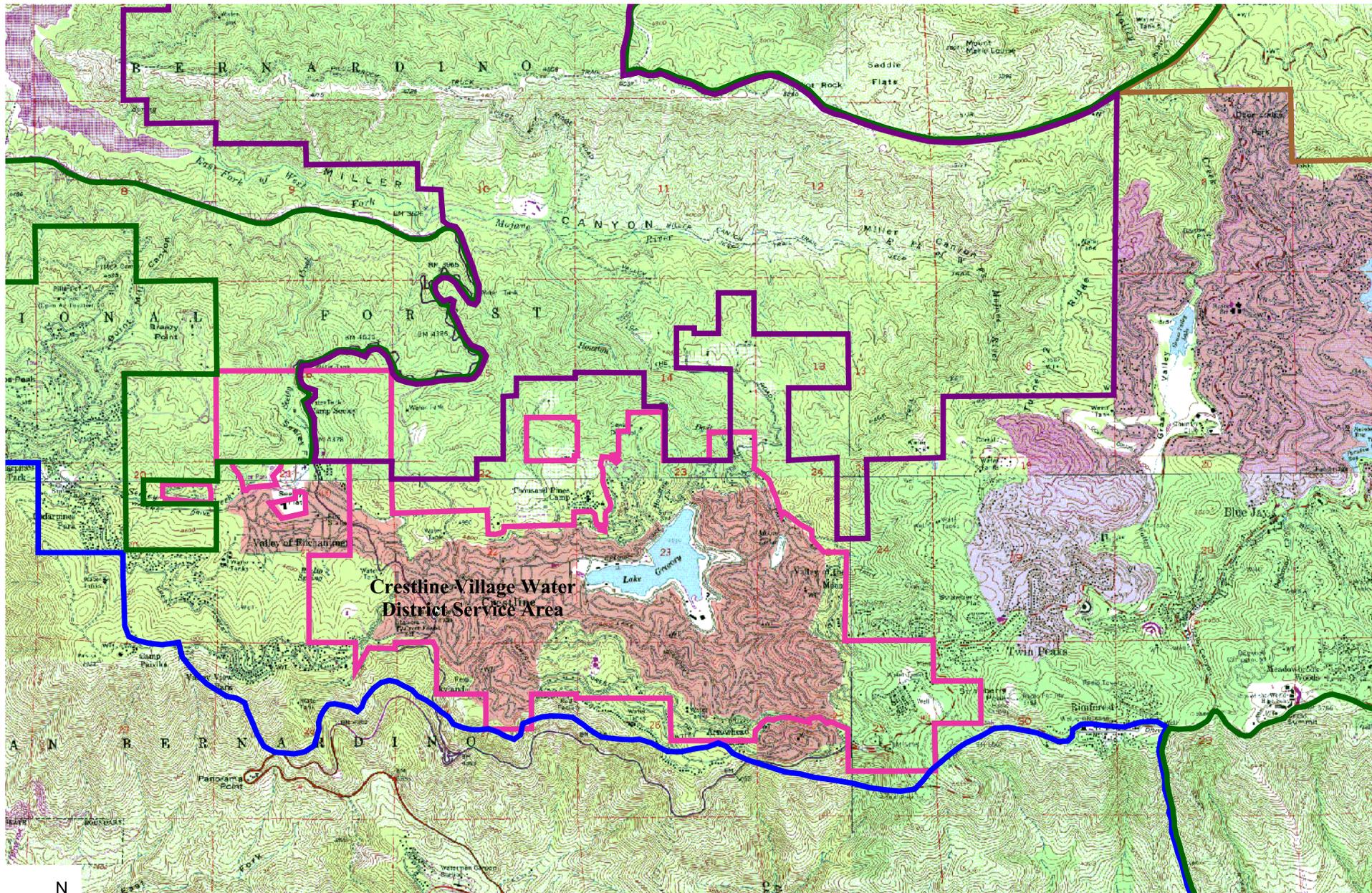


FIGURE 10
San Bernardino National Forest Areas
Crestline Village Water District Urban Water Management Plan

N
 1"=4000'
 ALBERT A.
WEBB
 ASSOCIATES
 ENGINEERING CONSULTANTS

Legend

-  Range / Wildlife
-  Wildlife
-  Recreation
-  Watershed
-  CVWD Service Area

The Crest Forest Planning Area is larger than the CVWD service area. TABLE 8 provides the estimated acreage of each County land use designation in the Crest Forest Planning Area which includes CVWD's service area.

As TABLE 8 shows, the major land uses planned by the County in the Crest Forest Planning area are Single Residential (51 percent of all acreage), Planned Development (10.2 percent), Rural Living (9 percent), and resource conservation (4 percent). Commercial uses of all types total 95 acres (4 percent); there are only 4 acres of designated industrial land in the entire planning area.

The County's General Plan provides a maximum permissible development density for each residential land use designation. However, most land in the CVWD service area carries minimum lot size designations. This results in densities lower than the maximum (*SBCo 2006*). Specifically:

- While the Rural Living (RL) land use designation throughout the County allows lots as small as 2.5 acres, the areas zoned RL in the CVWD service area typically have a 5-acre minimum lot size.
- Similarly, the Residential Single (RS) designation provides a minimum lot size of 7,200 square feet. In the CVWD service area the RS areas are typically designated for minimum lot sizes 15,000 square feet, with some at 1 acre.
- Planned Development (PD) areas are typically designated for either 14,000 square feet or 1-acre minimum lot sizes. This allows only 1 or 2 dwelling units per acre as opposed to the 14 units per acre allowed elsewhere in the County.
- Only in the Residential Multiple (RM) category do the local lot size designations allow the full density to occur.

Also, while the Resource Conservation (RC) designation allows some residential use, the RC land in CVWD's service area is within the San Bernardino National Forest and hence essentially off-limits to significant development.

TABLE 8
 COUNTY LAND USE DESIGNATIONS
 CVWD SERVICE AREA

LAND USE DESIGNATION	SYMBOL	ACREAGE	PERCENTAGE
Resource Conservation	RC	212	4
Agriculture	AG	0	0
Rural Living	RL	234.4	9.0
Single Residential	RS	1,340.9	51.2
Multiple Residential	RM	48.1	1.8
Office Commercial	CO	15.1	0.6
Neighborhood Commercial	CN	2.2	0.1
General Commercial	CG	72.3	2.8
Service Commercial	CS	5.2	0.2
Community Industrial	IC	3.1	0.1
Regional Industrial	IR	0	0
Planned Development	PD	268.3	10.2
Institutional	IN	103.9	4.0
Floodway	FW	92.2	3.5
TOTAL		2,619.1	100

*Information provided in this table is from the San Bernardino County General Plan, Crest Forest Community Plan.
 Estimated by planimetry based on County land use maps (SBCo 2006) and CVWD service area boundary (LAFCO 2000).

Local land use restrictions result in a lower maximum level of development than the base zoning classifications would allow elsewhere. The normal land use does not reach the maximum intensity allowable under local planning and zoning. First, some land is lost to roadways and easements and is therefore not available for use. Second, when development decisions are made by many independent parties over a period of many years, inevitably many properties will develop at varying intensities as compared to their original zoning. Third, in any community, there will always be some vacant lots as well as some properties that have been destroyed or have deteriorated. Fourth, in the CVWD service area specifically, physical conditions (steep slopes, geologic hazards, infrastructure constraints, etc.) will also limit development. Last, the CVWD's service area is surrounded by National Forest land that will not convert to private development and thus will not experience growth similar to other communities in San Bernardino County. The local land use classifications reflect these physical constraints to some extent.

Incidentally, there are substantial areas within CVWD's service area which were developed with smaller lot sizes than current zoning would allow, which are thought to have been completed before the current zoning was established. For this reason, actual existing development in CVWD's service area is higher than the County's land use designations would indicate.

As depicted in Table 9, it is estimated that the Crest Forest Planning Area will contain 9,866 dwelling units and approximately 25,250 residents at full buildout. This scenario for buildout of the CVWD service area can be compared to the SCAG forecast data for the relevant census tracts, as given above in TABLES 5 and 6 and depicted in FIGURES 5 and 8. If seasonal housing converts to full-time as assumed, the buildout level of 9,866 dwelling units is well within the total of 13,989 dwelling units projected for the year 2025 in these census tracts. The buildout level is well below the 15,904 housing units projected if occupancy patterns were to remain unchanged. The buildout projection is based directly on the County's land use designations, and therefore is consistent with the County's General Plan; therefore, the buildout projection can be considered consistent with the SCAG growth forecast.

Due to the fact that the Census tracts and Crest Forest Planning Area do not match up with CVWD's district boundary, the District will utilize its customer account information to estimate the current population. The census data, SCAG information, and County information will be utilized in estimating projections going forward. As stated previously, CVWD currently serves 4,857 active connections. Of these active connections, approximately 60 percent are full time residences with an estimated population of 7,500. For purposes of this report the population projection for CVWD's service area will be based upon a 1.3 percent growth rate as documented by SCAG and SBCGP over the next twenty years. These projections yield a population estimate for the year 2025 of 9,700 full time residents. Table 9A shows the population projection over time.

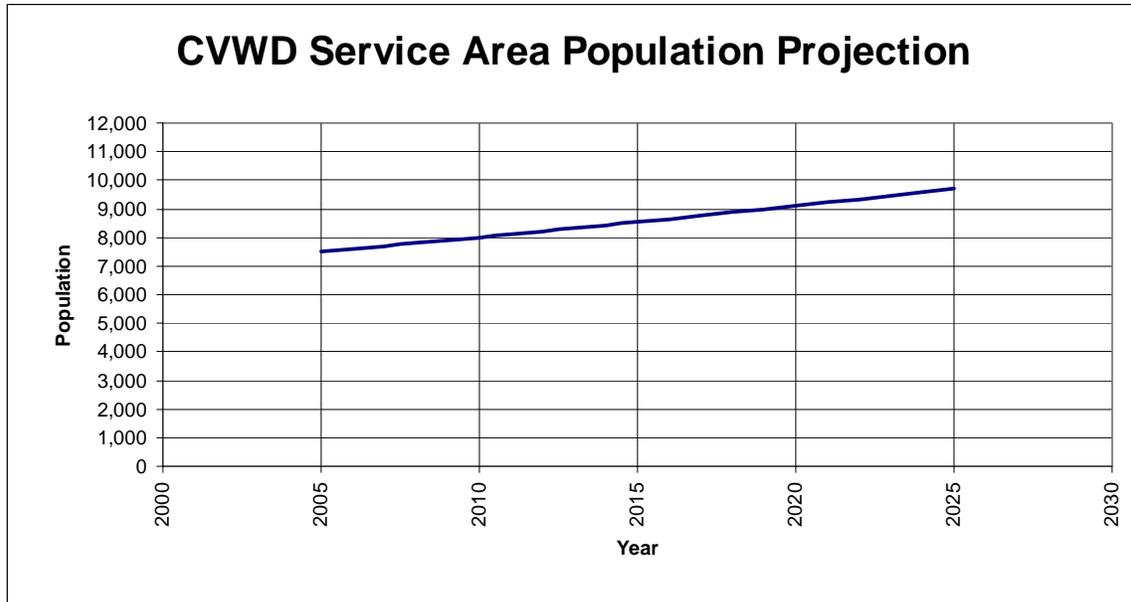
CVWD 2005 URBAN WATER MANAGEMENT PLAN

**TABLE 9:
CREST FOREST COMMUNITY PLAN POPULATION, HOUSEHOLDS, AND EMPLOYMENT
PROJECTIONS 2000-2030**

	1990	2000	2030	Average Annual Growth Rate: 1990-2000	Projected Average Annual Growth Rate: 2000-2030	Maximum Policy Map Build-Out	Ratio of 2030 Projection to Land Use Policy Plan Build-out
Population	8,944	10,606	15,592	1.7%	1.3%	25,257	0.62
Households	3,406	4,154	6,406	2.0%	1.5%	9,866	0.65
Employment	813	925	1,378	1.2%	1.4%	4,680	0.29

*Information provided in this table is from the San Bernardino County General Plan, Crest Forest Community Plan.

**TABLE 9A
POPULATION PROJECTION FOR CVWD SERVICE AREA**



3.6 CVWD Water System

Crestline Village Water District produces water locally from 54 approved groundwater sources located on 22 individual sites. In addition, CVWD obtains supplemental water supply from the Crestline-Lake Arrowhead Water Agency (CLAWA). CLAWA is the State Water Project contractor, which acts as a water wholesaler to the San Bernardino Mountains area. CVWD has six connections to the CLAWA water system.

Supplemental water purchased from CLAWA has been treated at CLAWA's water treatment facility at Silverwood Lake. Water produced locally from CVWD's wells meets applicable drinking water standards and does not require treatment, other than chlorination of some wells. Thus, the District operates no centralized, complete water treatment facilities of its own. CVWD chlorinates water from its Pioneer, Horst, and Wilson wells and monitors water quality at those sources.

The District has 12 water storage tanks at 11 locations, with a total storage capacity of approximately 6.6 million gallons. The District is currently in the process of building two additional 1 million gallon storage tanks at one of the 11 locations. Pumping and pressure reducing facilities are used where needed. A schematic plan of CVWD's water system is provided in APPENDIX C. The system contains many miles of pipelines, of varying ages, types, and conditions.

The original portion of the District, formed to serve the Crestline area in 1954, is referred to as Division 10 of the CVWD system. The Lake Gregory area, which was added to the District in 1979, is referred to as Division 20. While the two systems were operated under separate Domestic Water Supply Permits from the California Department of Health Services in the past, in 1995 the entire CVWD system was consolidated under a single DHS permit.

Some of the older components of CVWD's domestic water system are in a deteriorating condition, and the District has a continuing program to upgrade or replace these facilities as required. Old, leaking pipelines have caused excessive water loss, increased maintenance and operations costs, and rusty water in some locations. Because of the leaks in the system, the District has historically lost significant amounts of water each year.

To remedy these problems, CVWD implemented a program of improvements to its water distribution system. The District obtained funding from the federal Farmers Home Administration (currently known as the Rural Economic and Community Development Services) in 1979-1980, and also obtained funding from the California

Department of Water Resources under the Safe Drinking Water Act in 1980-1981. Losses within the system have historically averaged 15 percent of the total water supply, however, the District is currently nearing the end of the twenty-year capital investment program and is reporting only a 6.33 percent loss of the total water supply in the year 2005. The CVWD Source of Supply Production report, included in Appendix D, illustrates system loss over the last 13 months.

CVWD is coming to the end of a twenty-year capital improvement program in which major investments have been made in the District's water system, including aggressive pipeline replacement, leak detection programs, and improvements involving existing and new storage facilities. The District has replaced approximately 92 percent of the system pipeline. CVWD expects to replace the remaining 2,500 feet of pipeline by the end of 2006.

CVWD has also been aggressively renovating existing storage tanks that have experienced failure of existing internal protective coatings. The storage tank program is approximately 80 percent completed. Additional improvements to tanks include seismic upgrading, recoating of existing tanks, as well as the construction of the new Pinecrest, and Zurich reservoirs in the final years of the program. The new proposed tanks will add approximately 2 million gallons of storage capacity to the CVWD system. The additional water storage capacity will increase system reliability in emergencies and increase fire flow capacity.

3.7 Wastewater Treatment

The Crestline Sanitation District provides wastewater collection and treatment services in CVWD's service area. Information on its wastewater treatment systems is included in Section 9 of this plan.

4. Past, Current, and Projected Water Supply

Law

10631. A plan shall be adopted in accordance with this chapter and shall do all of the following:

10631 (b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments [to 20 years or as far as data is available.]

Law

10631. A plan shall be adopted in accordance with this chapter and shall do all of the following:

10631 (c) Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable.

10631 (c) For any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors, describe plans to replace that source with alternative sources or water demand management measures, to the extent practicable.

10631 (c) Provide data for each of the following:

(1) An average water year, (2) A single dry water year, (3) Multiple dry water years.

Law

10631. A plan shall be adopted in accordance with this chapter and shall do all of the following:

10631 (d) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.

Law

10631. A plan shall be adopted in accordance with this chapter and shall do all of the following:

10631 (e)(1) Quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, identifying the uses among water use sectors including, but not necessarily limited to, all of the following uses:

(A) Single-family residential; (B) Multifamily; (C) Commercial; (D) Industrial; (E) Institutional and governmental; (F) Landscape; (G) Sales to other agencies; (H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof; and (I) Agricultural.

10631 (e)(2) The water use projections shall be in the same 5-year increments to 20 years or as far as data is available.

4.1 Local Water Sources

CVWD has a total of 54 approved groundwater sources (owned and leased), located on 22 individual sites. In 2004, the District's wells produced approximately 15.5 million cubic feet of water.

FIGURE 11, CVWD WELL PRODUCTION, 18 YEAR AVERAGE AND 2001-2004, depicts monthly and annual production from CVWD's wells over the last several years. Since the 2001 UWMP, CVWD has added CHAMOIS Vertical, Pinecrest Vertical and Felsen Vertical wells and continues the pursuit of additional sources to ensure the reliability of the CVWD system and to decrease dependence upon outside sources.

4.2 Imported Water

The Crestline-Lake Arrowhead Water Agency (CLAWA) provides CVWD with supplemental water from the State Water Project (SWP). CLAWA takes delivery of its SWP water at Silverwood Lake, a man-made reservoir on the East Branch of the State Water Project, which stores water imported from Northern California. CLAWA's water supply also includes some flows into Silverwood Lake from Huston Creek, pursuant to diversion water rights.

The supplemental water that CVWD obtains from CLAWA is treated at CLAWA's treatment facility on the south shore of Silverwood Lake. After treatment, five booster stations pump the water uphill a total of 3,800 feet and through CLAWA's transmission facilities located across the San Bernardino Mountains. CVWD has a total of nine meters at six locations through which supplemental water from CLAWA is received.

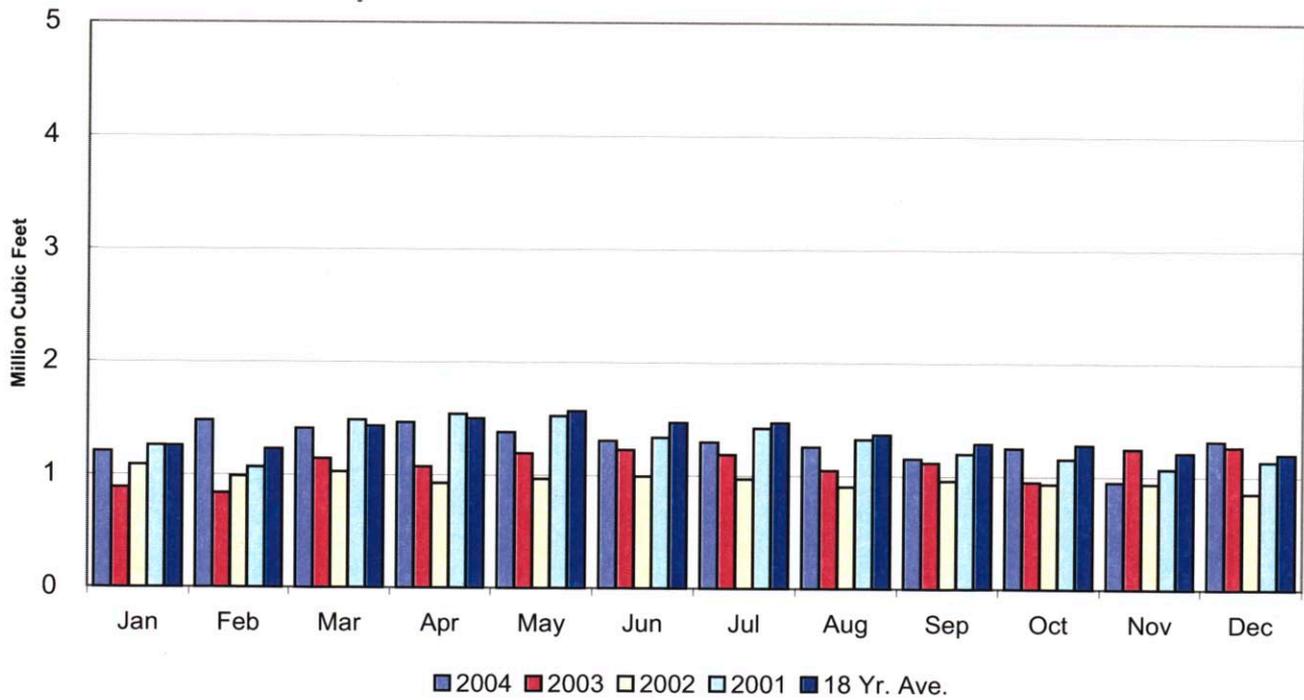
FIGURE 12, CVWD PURCHASED WATER, 18 YEAR AVERAGE AND 2001-2004, illustrates the District's total purchases of supplemental water over the last several years. In 2004, the District purchased a total of 24.5 million cubic feet of supplemental water. The amount of water purchased has varied considerably from year to year, as FIGURE 12 illustrates.

4.3 Recycled Water

To date, Crestline Village Water District has made no use of recycled water. There are a number of reasons for this. See Section 9 for additional information.

Crestline Village Water District

Well Production by Month



Well Production Cumulative

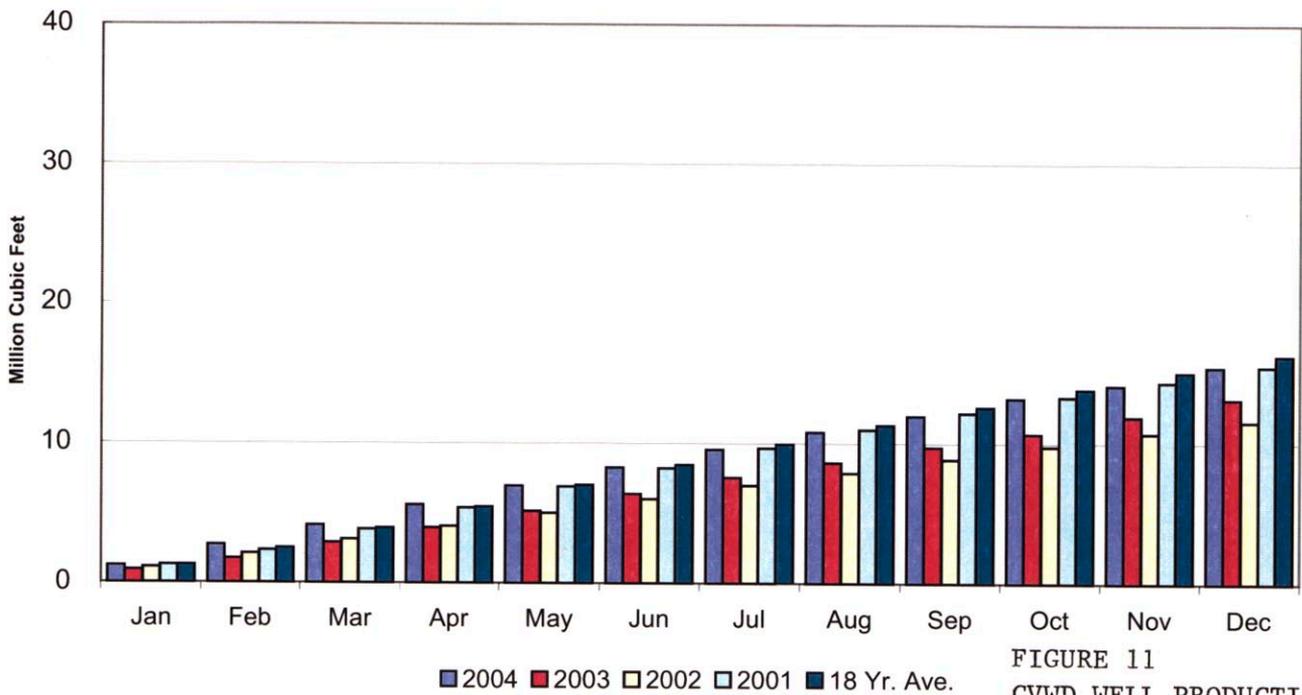
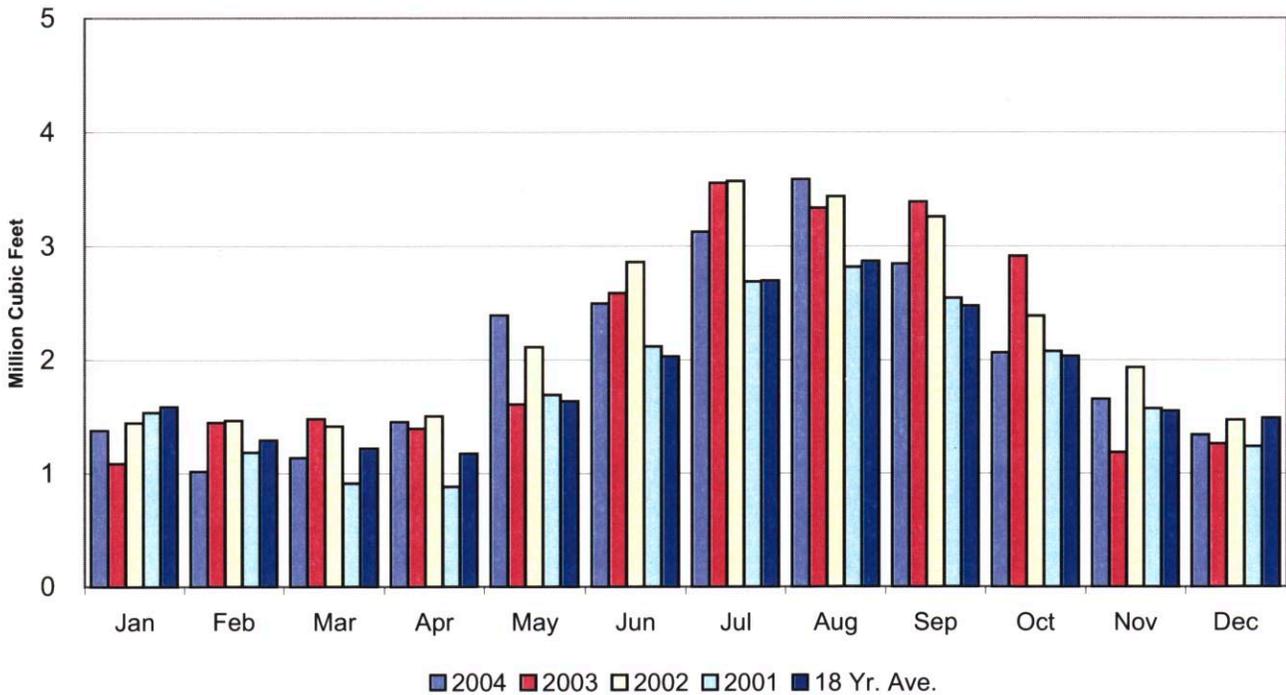


FIGURE 11
CVWD WELL PRODUCTION
18 YR AVG. AND 2001-2004
CVWD UMWP

Crestline Village Water District

Purchased Water by Month



Purchased Water Cumulative

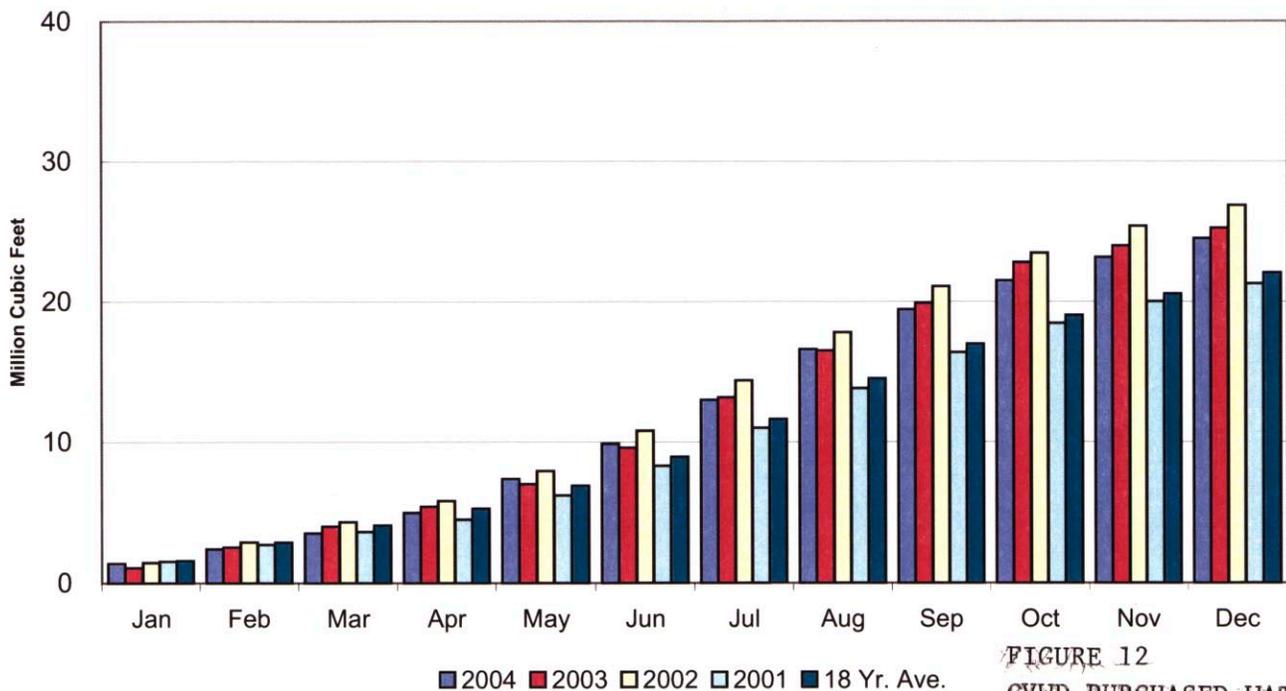


FIGURE 12
 CVWD PURCHASED WATER
 18 YR AVG. AND 2001-2004
 CVWD UMWP

4.4 Total Water Supply

CVWD's combined water production, from local sources and supplemental supply, is shown in FIGURE 13, CVWD TOTAL WATER PRODUCTION, 18 YEAR AVERAGE AND 2001-2004. For the last four years, production has been between 36 to 40 million cubic feet.

Supplemental water purchased from CLAWA supplied an average of 61 percent of CVWD's water in the year 2004. However, the District has been increasing its own local production fairly steadily for the last several years. Due to a prolonged drought, supplemental water purchased from CLAWA in 2002 amounted to approximately 70 percent of CVWD's total production.

In 2004, CVWD reported only a 6.33 percent water loss from the system. The average water loss for the last 13 months was 6.0 percent, with a low of 0.8 percent in October 2004. The major decrease in water loss from the system is due to the near complete pipeline replacement program and diligent leak detection program that has undergone implementation over the past twenty years.

4.5 Reliability of Water Supply

As a result of its long establishment and excellent information systems, the Crestline Village Water District has good historical records of its past water production and sources. FIGURE 14, HISTORICAL WATER SUPPLY, 1980-2004, shows total production from District wells and CLAWA purchases for each year back to 1980.

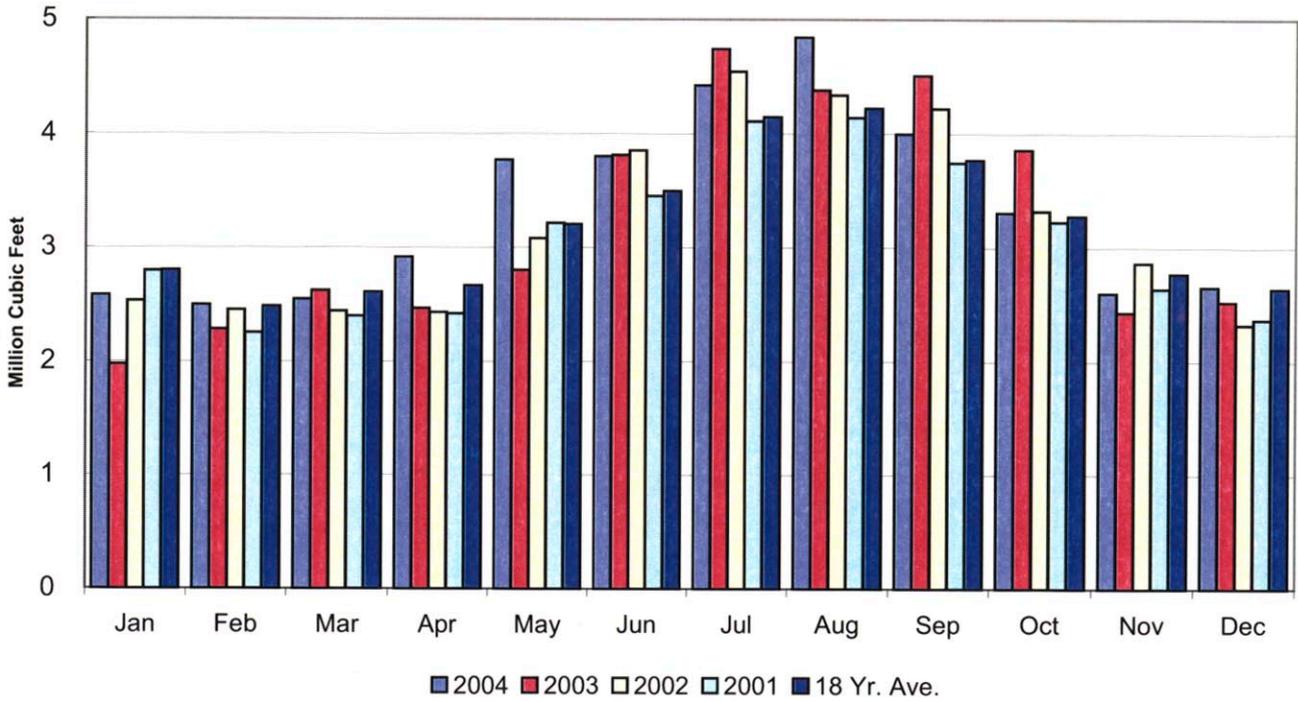
The factors affecting CVWD's local supply are to a large degree independent of the factors that affect its supplemental water supply. Thus, CVWD can have wet years locally but face shortages in supplemental supply due to drought affecting northern areas of the state. Conversely, dry local years can often be offset by available supplemental supply.

1. Local Sources of Supply

Water production from the District's local wells is partially dependent upon groundwater recharge, which results from local precipitation. The long-term variability of local precipitation can be seen in FIGURE 15, HISTORICAL PRECIPITATION AT LAKE ARROWHEAD, 1980-2005. Over this period, local precipitation has ranged from less than 20 inches to more than 80 inches per year. FIGURE 16, HISTORICAL PRECIPITATION, 1893-1999, illustrates the range of annual precipitation over a 100-year period.

Crestline Village Water District

Total Production by Month



Total Production Cumulative

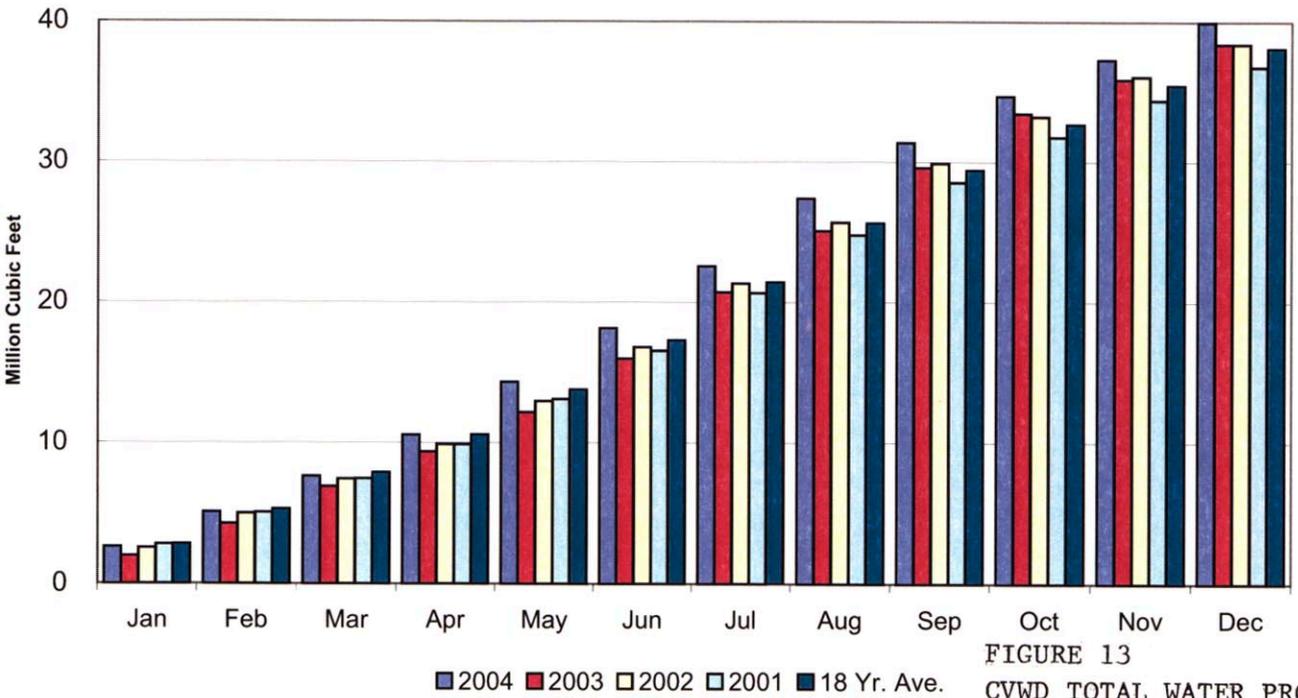


FIGURE 13
 CVWD TOTAL WATER PRODUCTION
 18 YR AVG. AND 2001-2004
 CVWD UMWP

Cresline Village Water District
Annual Sources of Supply/System Loss/Rainfall

Year	District Wells Cubic Feet	% of Total	CLAWA Purchases Cubic Feet	% of Total	Total Sources	System Loss Cubic Feet	% of Total	Annual Rainfall Calendar Year
1980	13,642,246	40.68%	19,896,427	59.32%	33,538,673			
1981	8,977,306	26.35%	25,096,551	73.65%	34,073,937			
1982	10,409,809	32.35%	21,772,131	67.65%	32,181,940			
1983	18,293,983	56.30%	14,197,706	43.70%	32,491,689			
1984	15,985,190	48.99%	16,644,431	51.01%	32,629,621			
1985	13,121,796	36.57%	22,755,534	63.43%	35,877,330			
1986	13,411,753	37.50%	22,348,217	62.50%	35,759,970			
1987	10,850,634	26.48%	30,121,885	73.52%	40,972,519			
1988	10,418,220	24.87%	31,474,248	75.13%	41,892,468			
1989	8,547,043	19.30%	35,742,248	80.70%	44,289,291	10,577,208	23.88%	19.89
1990	6,222,175	15.82%	33,117,784	84.18%	39,339,959	6,655,426	16.92%	41.28
1991	6,954,813	19.01%	29,637,089	80.99%	36,591,902	5,266,612	14.39%	52.74
1992	9,301,608	27.42%	24,616,766	72.58%	33,918,374	3,817,605	11.26%	72.57
1993	18,966,342	55.28%	15,344,969	44.72%	34,311,311	3,758,094	10.95%	34.82
1994	15,535,737	44.28%	19,550,913	55.72%	35,086,650	5,054,849	14.41%	55.38
1995	24,979,110	74.09%	8,737,593	25.91%	33,716,703	3,459,478	10.26%	45.64
1996	22,586,525	62.44%	13,585,633	37.56%	36,172,158	3,738,576	10.34%	28.94
1997	21,602,218	58.89%	15,080,107	41.11%	36,682,325	3,094,122	8.43%	58.27
1998	27,213,134	79.10%	7,190,864	20.90%	34,403,998	2,234,155	6.49%	14.50
1999	21,163,765	58.15%	15,234,263	41.85%	36,398,028	2,966,894	8.15%	25.95
2000	16,808,289	46.40%	19,419,055	53.60%	36,227,344	2,182,007	5.94%	28.83
2001	15,515,154	42.19%	21,258,156	57.81%	36,773,310	2,071,042	5.63%	17.73
2002	11,550,321	30.07%	26,861,873	69.93%	38,412,194	2,041,378	5.31%	33.90
2003	13,168,805	33.64%	25,978,785	66.36%	39,147,590	2,025,581	5.17%	33.64
2004	15,462,866	38.70%	24,488,914	61.30%	39,951,780	2,530,489	6.33%	
Total	370,688,922		540,152,142		910,841,064	61,443,516		564.08
Ave.	14,827,957	40.70%	21,606,086	59.30%	36,433,643	3,840,220	10.54%	37.61

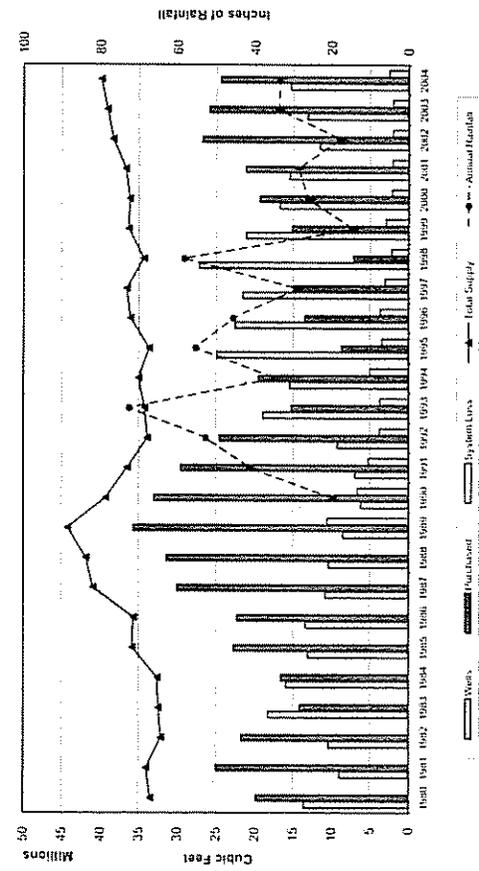
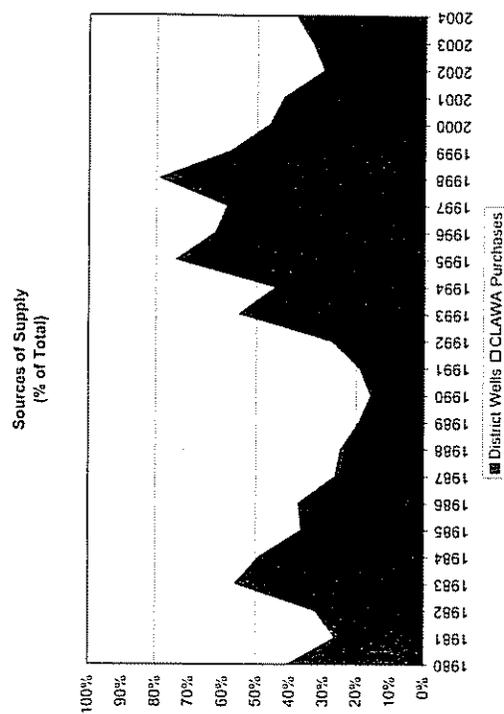
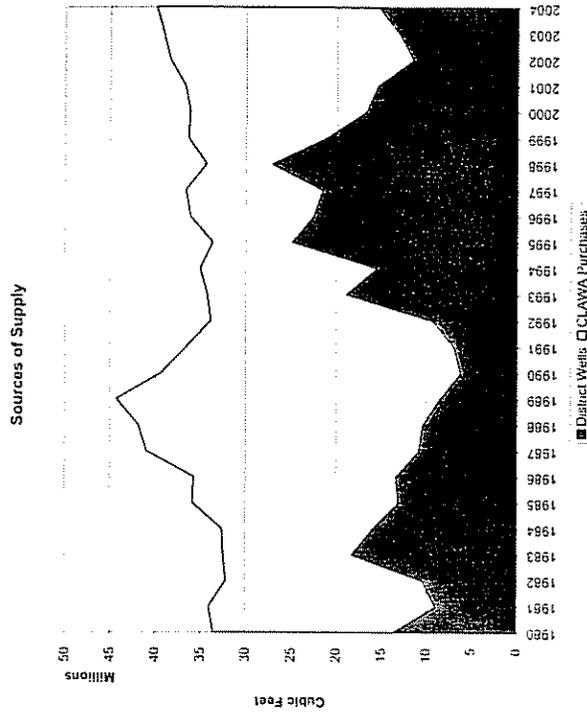
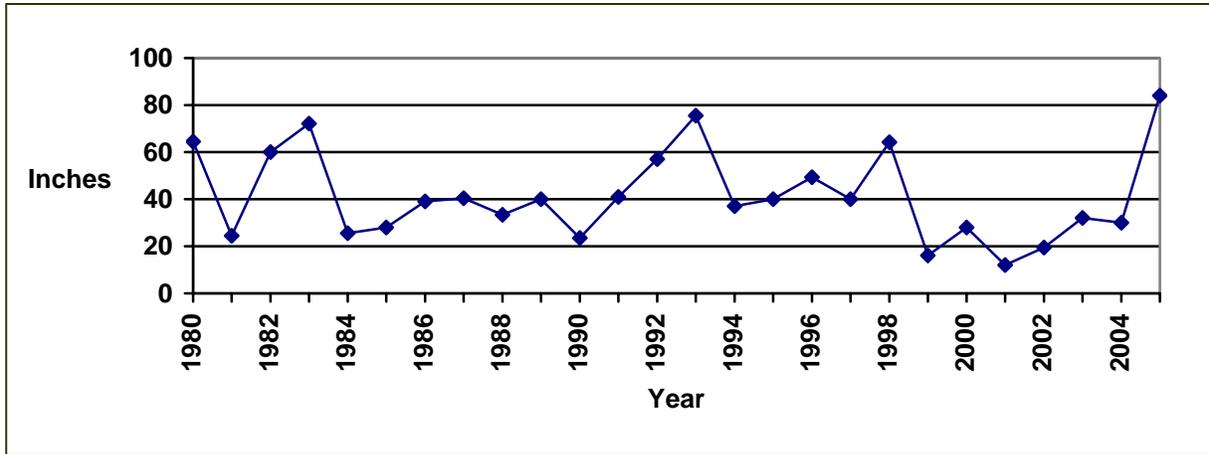
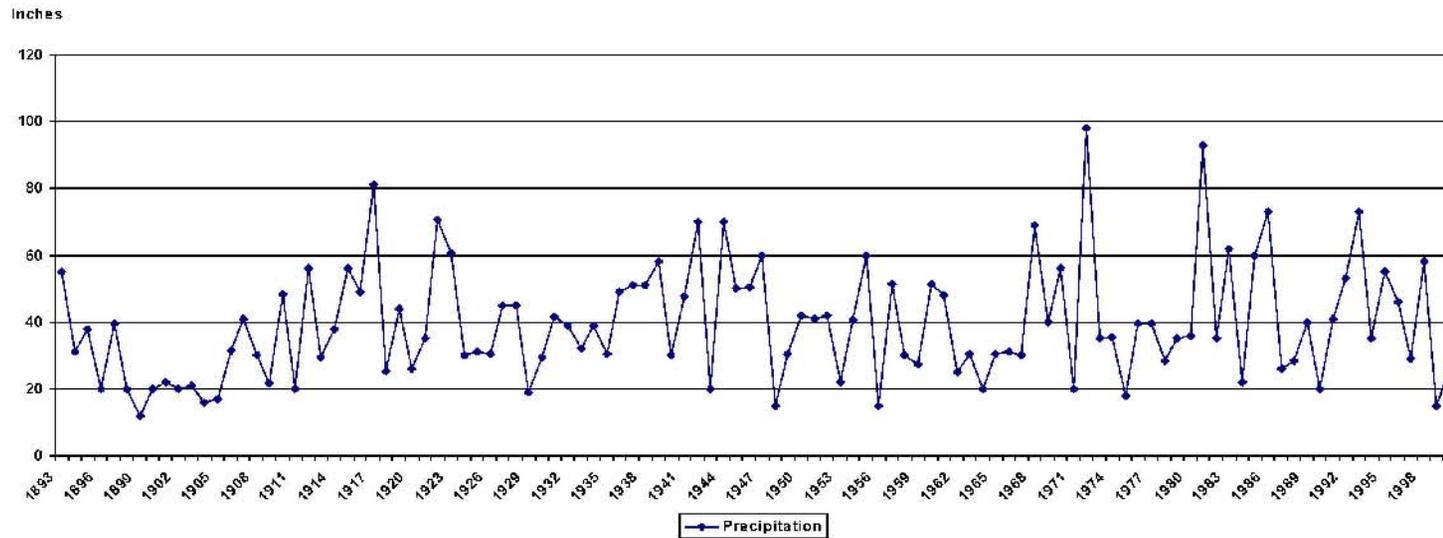


FIGURE 14
CVWD Historical
Water Production
1980-2004

FIGURE 15
HISTORICAL PRECIPITATION, 1980 - 2005



Source: NCDC 2005. Data for Lake Arrowhead reporting station.



G:\96-0033\UWMP\Fig 16.doc

Source: NCDC; data for Lake Arrowhead Fire Station, Squirrel Inn, Sierra Madre, Lake Eleanor



FIGURE 16
Historical Precipitation
1893-1999

Crestline Village Water District
Urban Water Management Plan

FIGURE 17, PRECIPITATION, 2000, depicts recent rainfall levels in the Crestline area as compared to the normal average. It shows that 2000 was a moderately dry year, with local precipitation of 25.95 inches, below the normal 37 inches (*NCDC 2005*). Refer to Figures 18 and 19 for additional, more recent precipitation data.

CVWD's average production from local wells over the last 25 years is shown in FIGURE 14 and averages approximately 14.8 million cubic feet (340 AF) annually. The average production for the last ten years (1995-2004) has been 19.0 million cubic feet (436 AF). The District has aggressively pursued the development of additional local sources in the last several years, which would tend to increase its average production in the future. However, local well production is subject to a number of variables that are not controllable. The supply available from local sources fluctuates as a result of climatic factors as well as the effects of water production and use. From 1999 to 2004 the area experienced less than normal rainfall which has impacted that availability of local supplies. The availability of local supplies may also be affected in the future by water quality problems and/or by the imposition of new water quality requirements (e.g., for radon or other substances). The District is projecting that local water production can be increased by 0.5 percent per year through the development of new sources and the continued reduction of water loss in the distribution system.

A 1963 CLAWA report estimated that at least 1,620 acre-feet of water was available as local supply within the area to be served by CLAWA (*CLAWA 1963*). This is equivalent to 70.6 million cubic feet annually. CVWD produced 15.5 million cubic feet (355 AF) in 2004. Thus, CVWD's 2004 local water production represents approximately 22% of the potentially available supply in the region. As noted above, CVWD's local production has increased in recent years as a result of well development, and CVWD's overall water production has been reduced due to the minimization of water loss. For the purposes of this plan, CVWD's average production over the last ten years (19.0 million cubic feet) will be used to represent local water supply availability in an average year.

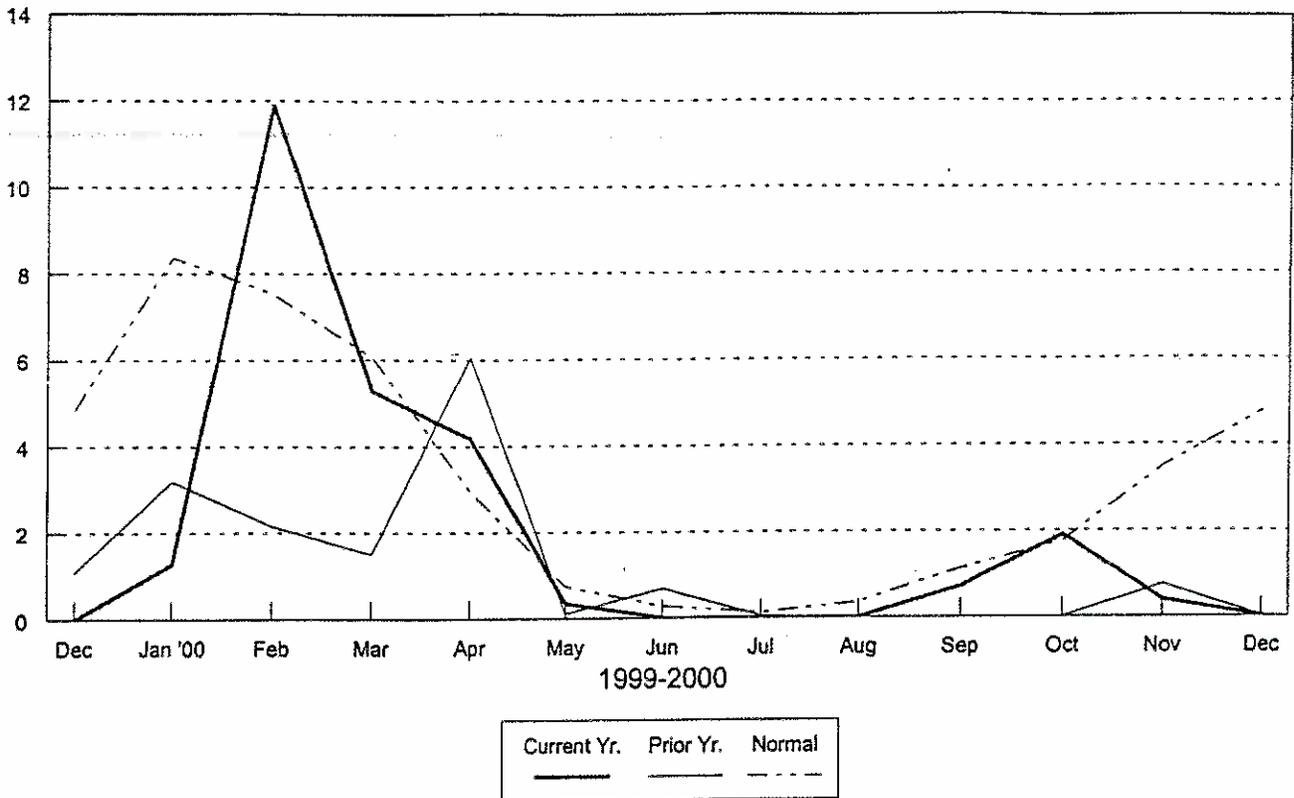
The District's experience since 1980 provides data to evaluate the reliability of CVWD's water supply for an average water year, a single dry water year, and multiple dry water years. FIGURE 14 depicts this most clearly.

Based upon a review of FIGURE 14 (historical production since 1980) and FIGURE 16 (historical rainfall) indicates that 1990 can be taken as representative of a single dry year, and 1989-1991 as representative of multiple dry years. Local well production in 1990 was approximately 6.2 million cubic feet or approximately 33% of average production. The average local well production from 1989-1991 was 7.2 million cubic feet or approximately 38%.

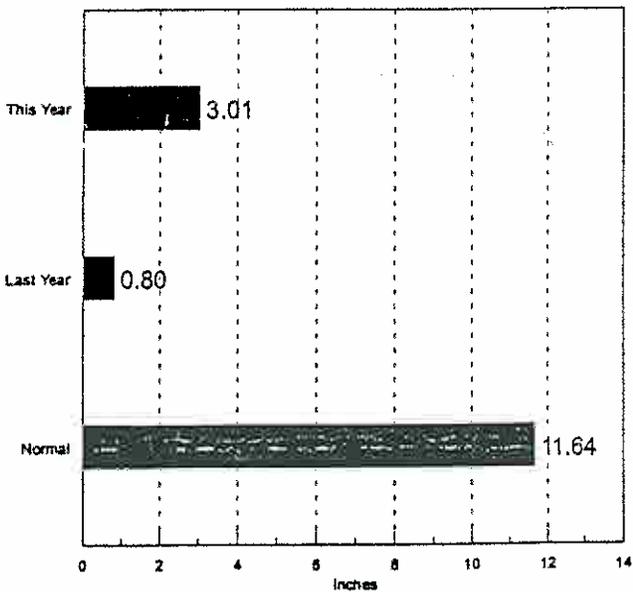
Nearing the completion of a rather aggressive pipeline replacement program, CVWD's system reliability has increased greatly, which will help minimize water loss. Also, to these historical figures for local well production must be added an allowance for production from new wells which were not in operation in previous years, but are producing now. The new Chamois, Pinecrest and Felsen wells were placed in service between late 2003 and early 2004. The three wells have yielded 5.0 and 5.7 million cubic

feet over the past two years of service. They are estimated to have a safe yield of 5-6 million cubic feet during average years and 2.5 million cubic feet in dry years. These new facilities have increased the overall local production capacity available to CVWD. Due to the fact that the single dry year well production occurred prior to these new wells going online, they will be added to the single dry year production total from 1990. This will bring the single dry year capacity for local well production to 8.7 million cubic feet. The total estimated production for the multiple dry year scenario will be increased from 7.2 million cubic feet to 9.7 million cubic feet for the same reason. Table 10 summarizes the average year, single dry year, and multiple dry year production capabilities of CVWD's local wells.

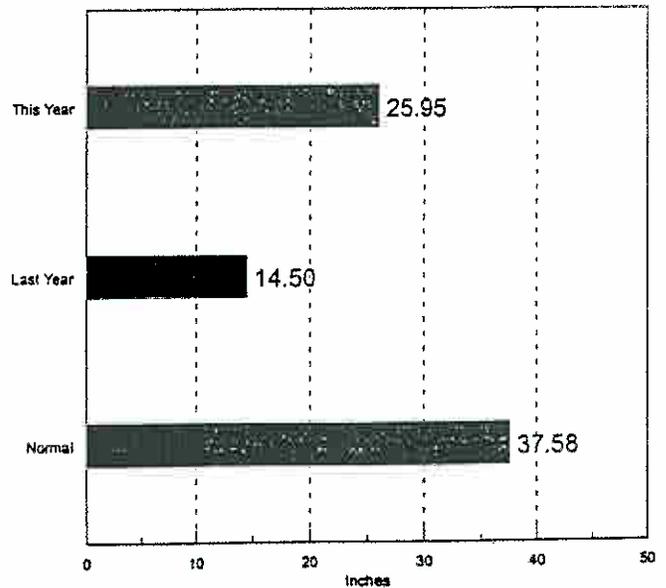
Rainfall
13 Months
Inches



Total Rainfall
July 1, 2000 to December 31, 2000



Total Rainfall
12 Months ending December 31, 2000

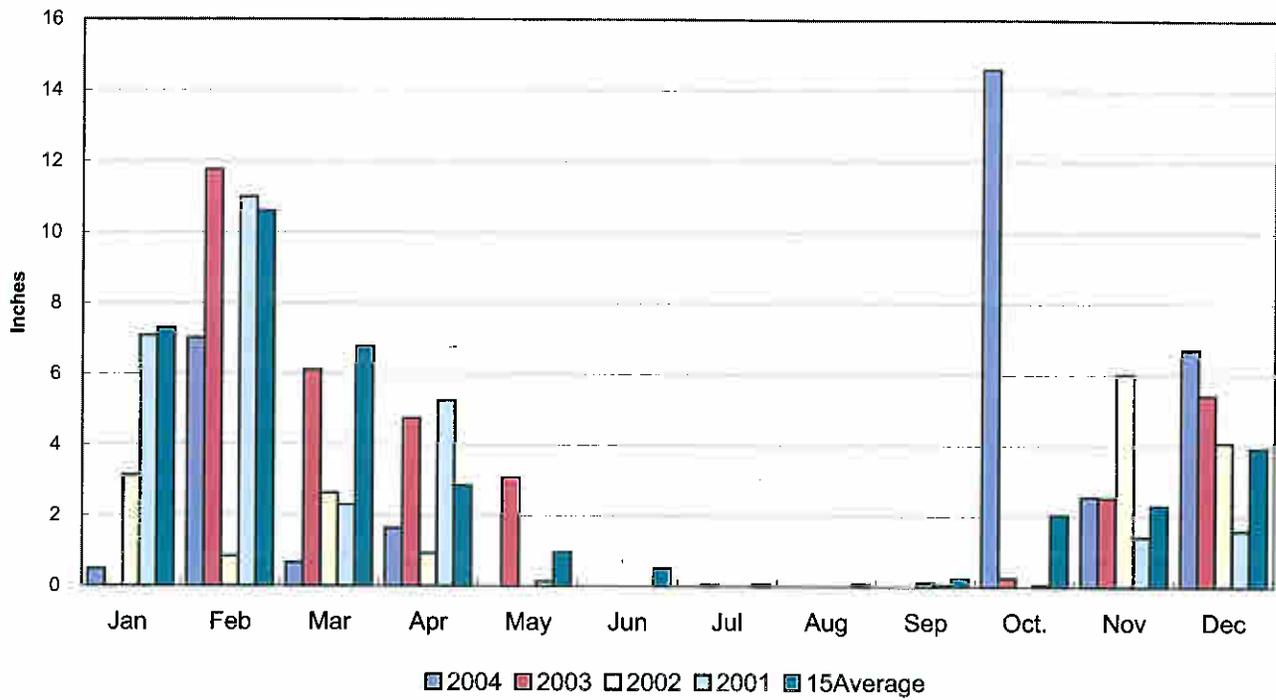


Source: CVWD 2000a

FIGURE 17
Precipitation, 2000
Crestline Village Water District
Urban Water Management Plan

Crestline Village Water District

Rainfall by Month



Rainfall Cumulative

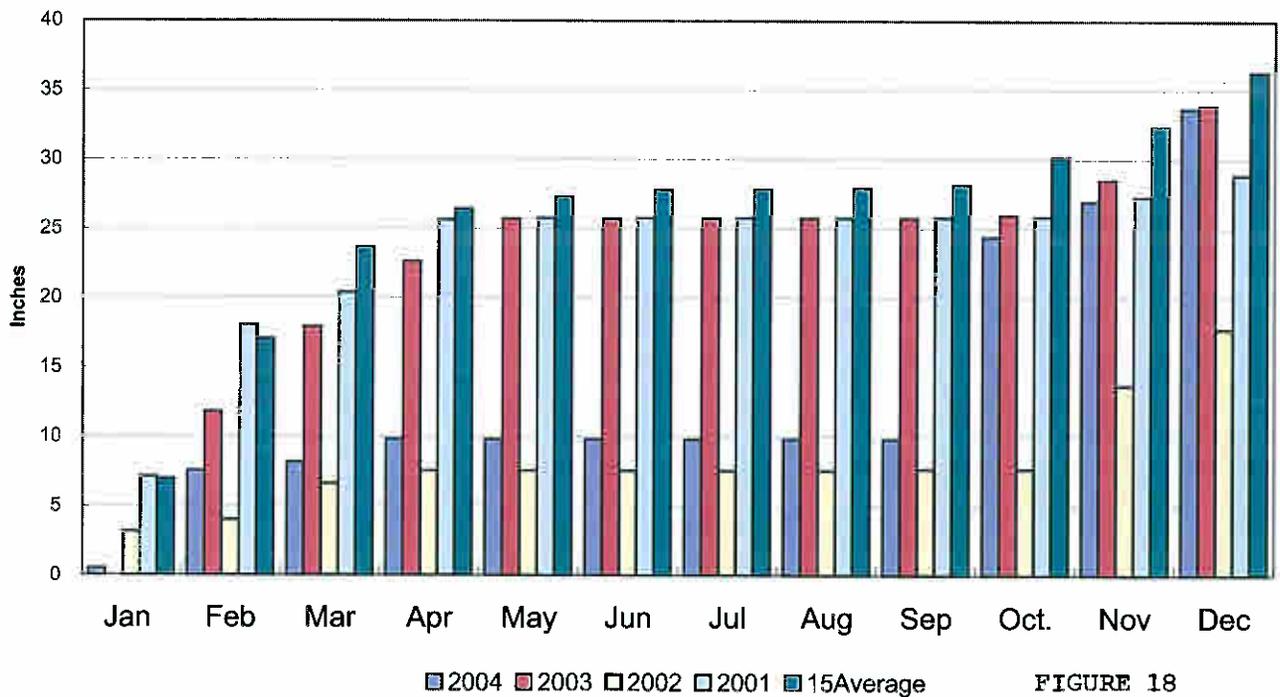
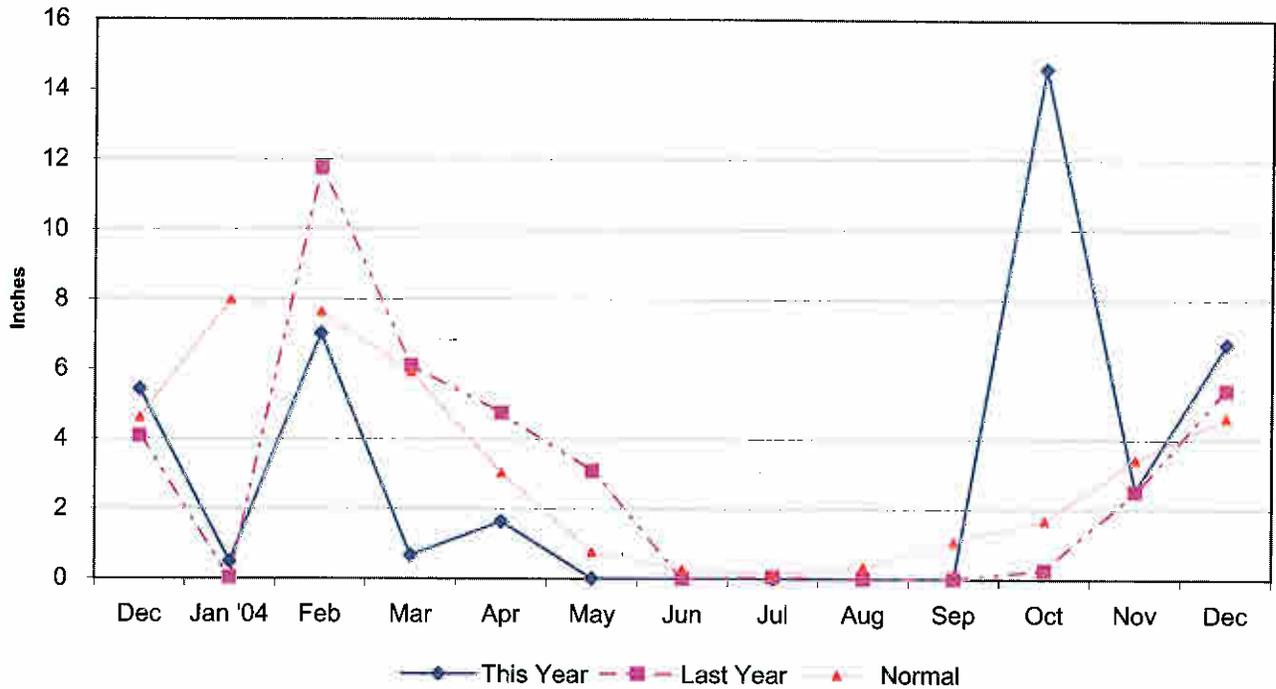


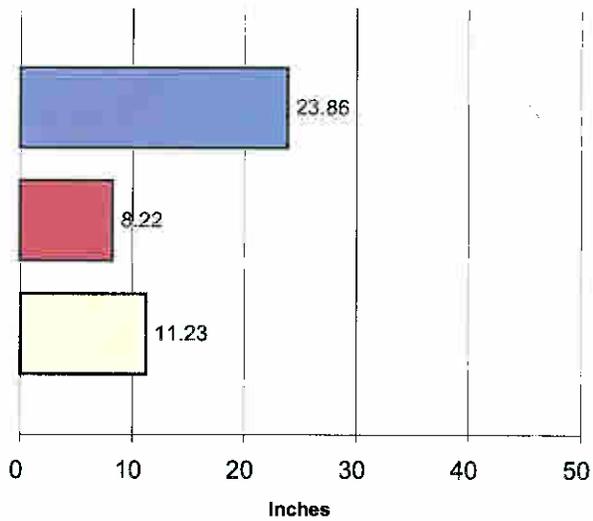
FIGURE 18
 Precipitation, 2001-2004
 Crestline Village Water District
 Urban Water Management Plan
 1/17/2005 -

Crestline Village Water District

Rainfall - Last 13 Months

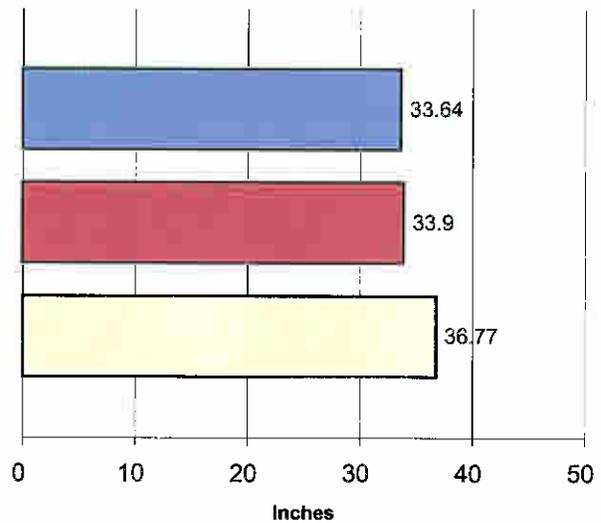


**Total Rainfall
July 1, 2004 to Beginning of
Current Month**



□ Normal □ Last Year □ This Year

**Total Rainfall
Last 12 Months**



□ Normal □ Last Year □ This Year

FIGURE 19
Precipitation, 2004
Crestline Village Water District
Urban Water Management Plan

2. Supplemental Water Supply

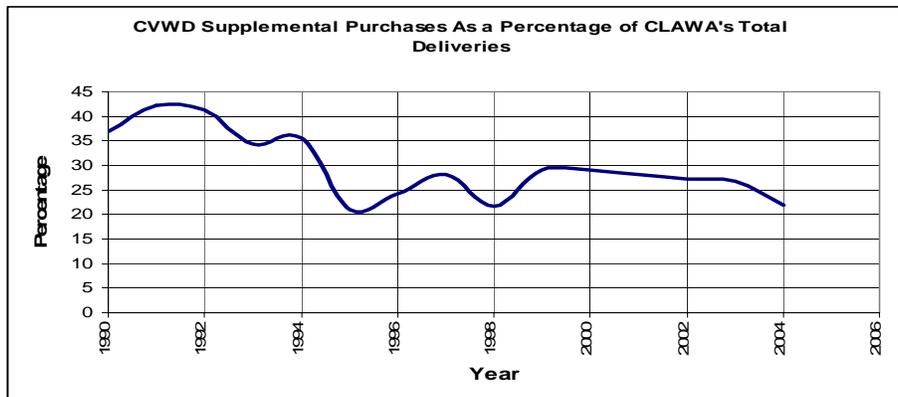
CVWD's supplemental water supply has historically averaged about 21.6 million cubic feet (496 AF) over the period 1980-2004, as shown in FIGURE 14. The District's use of imported water has been below that average in recent years, in an inverse relationship to local well production. The average demand for supplemental water purchases for the last ten years (1995-2004) has been 17.8 million cubic feet (408 AF). Based upon the District's decreased water loss and increased production capacity, the more current average from 1995-2004 will be used to represent CVWD's typical water purchases in an average year.

The year 1991 can be used to represent the effect of a single dry year with respect to imported water supplies. The State Water Project was affected by severe drought beginning in 1987, and continuing through 1991 (CLAWA 2005). The District's supplemental water supply during that year was 29.6 million cubic feet. CLAWA has reported in its 2005 UWMP that the supplemental water supply available to its retail water purveyors will be approximately 70% of total Table A allocation during average years, 34% of total supply during critical dry years and 40% during multiple dry years. This means that CLAWA's water supply will be 4,060 ac-ft during average years, 1,950 ac-ft during critical dry years and 2,493 during multiple dry years.

Based upon a review of CVWD's annual purchases from CLAWA as a percentage of CLAWA's total water deliveries, CVWD has historically (1990-2004) represented 30% of CLAWA's total deliveries (see Figure 19A). In order to estimate single dry year and multiple dry year supplemental supplies from CLAWA, the 30% factor will be utilized. It is important to note that CLAWA does not allocate its water supply by purveyor. This method will allow CVWD to make a reasonable estimation regarding dry year supplemental water supplies. Table 10 shows the totals for estimated water supply during average, single dry year, and multiple dry year scenarios.

Figure 19A

CVWD Water Purchases as a Percentage of CLAWA's Total Deliveries



Source: CLAWA annual deliveries and Figure 14 herein

3. Combined Sources of Supply

TABLE 10, WATER SUPPLY RELIABILITY, summarizes these results. One may infer from TABLE 10 that the District's overall water supply does vary in response to dry conditions, but is relatively stable due to geographical separation of the sources.

The reliability of supply from local wells is dependent upon local climatic conditions and possibly groundwater production by others. State Water Project supplemental water, purchased from CLAWA, is the replacement for locally produced water if supply from local wells should decrease.

TABLE 10
PROJECTED WATER SUPPLY AVAILABILITY
(MILLION CUBIC FEET)

SOURCE	AVERAGE WATER YEAR		SINGLE DRY WATER YEAR		MULTIPLE DRY WATER YEARS	
	TYPICAL	SUPPLY	TYPICAL	SUPPLY	TYPICAL	SUPPLY
Wells	1995-2004	19.0	1990*	6.2 + 2.5	1989-1991**	7.2 + 2.5
Supplemental***	2002	58.7	1991	25.5	1991-1993	32.5
Total Supply		77.7		34.2		42.2

Source: CVWD 2005; NCDC 2005; Albert A. Webb Associates, and CLAWA 2005.

* Local well supply equals 1990 production plus allowance for three new wells installed since 2003.

**Local well supply equals 1989-1991 average production plus allowance for three new wells installed since 2003.

*** CVWD has averaged 30% of CLAWA's historical water deliveries. Example for the average year (CLAWA 4,493 ac-ft x 30% = 1,348 ac-ft or 58.7 million cubic feet)

Water shortages at the state level have the potential to disrupt CLAWA's water imports, and hence CVWD's supplemental supply. However, many approaches are being pursued at the state level, as well as regionally and locally, to reduce the likelihood of serious shortages. As all of CLAWA's supplies are for municipal purposes, it has been less affected than some agencies by deficiencies in deliveries of agricultural water from the SWP. CLAWA has an ultimate Table A allocation of 5,800 acre-feet water annually from the State Water Project; however, a current study by the Department of Water Resources (DWR) projects that 70% of SWP contract allocations will be available 70% of the time (please refer to DWR's reliability report including as Appendix "D" of CLAWA's 2005 UWMP). The Agency's need for its full Table A allocation is projected to be well beyond 2025. However, CLAWA's average year demand is expected to equal the average year supply within 10-15 years. In addition to developing local sources, Crestline Village Water District can continue to rely upon CLAWA's imported water deliveries to meet its long-term growth needs.

4.6 Projected Water Supply

CVWD's long-term projected water supply consists of (1) local well production and (2) supplemental water purchased from CLAWA. The District intends to continue pursuing additional local well production in future years. It is assumed that well production will slightly increase from its recent average level of 19.0 million cubic feet, as discussed previously. On an average year basis, supplemental water will be available through CLAWA to continue to bridge the gap between CVWD's local production and total supply needs well beyond 2025. Table 11 gives a breakdown of average year projected water supply availability and projected average year demands throughout the District's service area. Based upon this analysis, CVWD will be able to provide water service, during average year conditions, to all of its customers well beyond 2025.

TABLE 11

AVERAGE YEAR PROJECTED WATER SUPPLY AND DEMAND
THROUGHOUT CVWD'S SERVICE AREA
(MILLION CUBIC FEET)

Sources	Year				
	2005	2010	2015	2020	2025
Projected Average Local Supply (MCF) ¹	19.0	19.5	20.0	20.5	21.0
Projected Average Supplemental Supply (MCF) ²	58.7	58.7	58.7	58.7	58.7
Total Projected Average Water Supply Available (MCF)	77.7	78.2	78.7	79.2	79.7
Projected Average Water Demand for CVWD Service Area (MCF) ³	40.3	42.9	45.8	48.9	52.1

¹ Based upon assumed growth rate of local supply at 0.5% per year

² Estimated based upon CVWD's Historical purchases from CLAWA as a percentage of CLAWA's Total supply.

³ Estimated using service area population and 110 gal/person-day and 0.19 ac-ft/active connection

4.7 Opportunities for Water Exchange

The District is not currently pursuing opportunities for water exchange, on either a short-term or a long-term basis. However, on behalf of CVWD and the other water purveyors in the San Bernardino Mountains, CLAWA has begun a water banking and exchange program with San Bernardino Valley Municipal Water District (SBVMWD) and the Lake Arrowhead Community Services District (LACSD). The details of this program can be found in CLAWA's 2005 Urban Water Management Plan (Pg. 32). Essentially the program consists of CLAWA purchasing 7,600 ac-ft of water from SBVMWD for treatment and delivery to LACSD over the next 10-15 years. The benefit of this program to CVWD is that CLAWA has the right to withdraw water from this banking agreement to use as drought relief water for CLAWA's retail purveyors.

5. Past, Current, and Projected Water Use

5.1 Current Water Demand

In 2004, CVWD delivered 37.3 million cubic feet of water to its customers. Of this total, approximately 32.1 million cubic feet was delivered to residential customers, and 5.2 million cubic feet to commercial and governmental customers. Refer to Appendix H for CVWD's Source of Supply Production Report, 2004.

5.2 Water Use by Customer Sector

Currently, 86 percent of CVWD's water deliveries go to residential customers. (About 99 percent of these are single-family units, as discussed above.) 8.4 percent of CVWD's water goes to commercial customers, and 5.6 percent goes to Institutional and Government customers. There are no industrial and negligible agricultural/irrigation uses within CVWD, and no water sales to other agencies. Refer to Appendix H for CVWD's Worksheet by Customer Types, 1980-2024.

5.3 Projected Water Demand

There are three components of future growth in water demand in CVWD's service area: (1) future development, (2) conversion of existing development to full-time occupancy, and (3) annexation of undeveloped land to CVWD's service area. Refer to Appendix I for CVWD's Consumption Analysis (dated 11/15/05).

1. Future Development

Within CVWD's current service boundary, there are three known areas where significant developments are anticipated: (1) 32 acres adjacent to the CLAWA headquarters (in Section 26, T2N R4W), a possible future subdivision to be served by CVWD; (2) the former Crestline Mountain Park mobile home development (in Section 20, T2N R4W), which is planned to be redeveloped as a school; and (3) possible additional private development in the Pinecrest area (in Section 25, T2N R4W). Throughout the rest of CVWD's current service area, moderate development can be expected.

2. Conversion of Existing Development to Full-time Occupancy

Aside from new development, there will be ongoing conversions of part-time residences to full-time occupancy, thus increasing water demand from existing residences over time. This trend will be a very significant factor in future water demand for the mountain area. The average water demand for a permanent, full-time residential connection in CVWD's service area has been estimated at approximately 0.3 acre-feet per year. (Recent figures are lower, as discussed below in Section 5.3.4.) For seasonal and part-time residential connections, estimated demand averages about 0.1 acre-feet per

year. Because there is such a large proportion of dwelling units in CVWD's service area that are occupied only seasonally or part-time, the weighted average water demand has been estimated at about 0.19 acre-feet per residential connection.

There has been a clear historic trend in the Crestline-Lake Gregory area for dwellings that were once vacation homes or part-time residences to transition to full-time occupancy. While there is little hard data, this trend is widely recognized. Each home that converts in this manner will incrementally raise the average demand for all existing residential connections in CVWD.

The census data show that 46 percent of all housing units in the Crestline-Lake Gregory area (Census Tract 108) are classified as vacant. This is because 40 percent of all dwelling units are vacation or second homes (see TABLE 1). For planning purposes, it is assumed that the total percentage of dwelling units classified as reserved for seasonal or part-time occupancy will fall by 2 percent annually. Thus, there will be additional new water demand from the full-time residents of existing units that are now occupied only part-time or occasionally.

3. Annexation of Undeveloped Land to CVWD Service Area

There is substantial vacant land near CVWD's service area, and within CVWD's sphere of influence, where future development can be expected. Some of this growth could be served by CVWD if the property owners desire to annex to the District. However, there are several other water purveyors in the area who may also provide service to future developments in their vicinity. The possibility of future annexations of undeveloped land to the District is not something that can be predicted with any accuracy.

4. Water Demand Projection

TABLE 12, HISTORICAL WATER DEMAND AND SERVICE CONNECTIONS, gives CVWD's total metered water deliveries from 1980 through 2004. Total water deliveries have increased from 26.8 million cubic feet in 1980 to 37.3 million cubic feet in 2004. The average annual rate of increase over this entire period was about 1.4 percent. Growth rates in the late 1980s reached as high as 6 percent per year. The average rate of increase in metered water deliveries from 2000 to 2004 was about 2 percent annually. Subsequently, water use has continued to increase at about the same rate, as can be seen in FIGURE 20, HISTORICAL WATER DELIVERIES. Increase for 2000-2004 is a pointer to the underlying level of demand, which has been masked by other factors, primarily the effects of the recession. The late 1980s growth rate was quite rapid, compared to CVWD's previous history, and perhaps could not have been sustained over a long term. The SCAG forecast projects that population in the area around Crestline will grow at a compound rate of 1.6 percent per year. The Crest Forest Community Plan and SCAG project an average compound growth rate of 1.3 percent per year (Table 9). This more modest rate of 1.3 percent per year has been used to project future growth rates and resulting water demand.

Table 12
Historical Water Demand and Service Connections

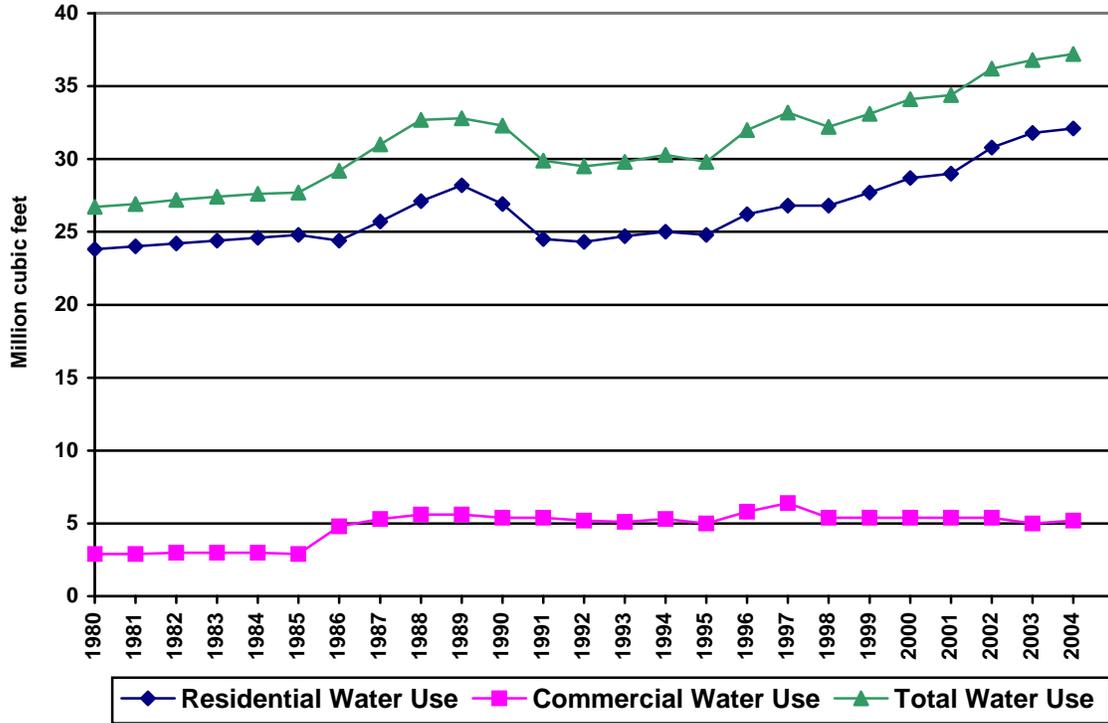
	Metered Water Deliveries (Cubic Feet)					Active Service Connections			Water Use Per Connection (Acre-Feet)			
	Residential Water Use	Commercial Water Use	Total Water Use	Rate of Increase	Percent Commercial	Residential	Commercial	Total	Residential	Commercial	Total Use	Rate of Increase
◆ 1980	23,879,535	2,951,403	26,830,938		11%			3,781			0.163	
◆ ★ 1981	24,052,313	2,972,758	27,025,071	0.007	11%			3,868			0.160	(0.015)
◆ ★ 1982	24,225,092	2,994,112	27,219,204	0.007	11%			3,929			0.159	(0.008)
◆ ★ 1983	24,397,870	3,015,467	27,413,337	0.007	11%			4,021			0.157	(0.016)
◆ ★ 1984	24,570,649	3,036,822	27,607,471	0.007	11%			4,139			0.153	(0.022)
1985	24,856,684	2,944,920	27,801,604	0.007	11%			4,207			0.152	(0.009)
1986	24,366,310	4,827,540	29,193,850	0.050	17%			4,339			0.154	0.018
◆ ★ 1987	25,681,731	5,260,114	30,941,845	0.060	17%			4,407			0.161	0.044
◆ 1988	27,132,566	5,557,273	32,689,839	0.056	17%			4,471			0.168	0.041
1989	28,200,534	5,637,701	33,838,235	0.035	17%			4,549			0.171	0.017
1990	26,901,330	5,441,538	32,342,868	(0.044)	17%			4,615			0.161	(0.058)
1991	24,359,625	5,389,037	29,748,662	(0.080)	18.1%	4,496	198	4,694	0.124	0.625	0.145	(0.096)
1992	24,312,834	5,169,786	29,482,620	(0.009)	17.5%	4,568	184	4,752	0.122	0.645	0.142	(0.021)
1993	24,725,936	5,089,572	29,815,508	0.011	17.1%	4,595	185	4,780	0.124	0.632	0.143	0.005
1994	25,015,602	5,252,058	30,267,660	0.015	17.4%	4,595	185	4,780	0.125	0.652	0.145	0.015
1995	24,886,446	5,015,676	29,902,122	(0.012)	16.8%	4,595	182	4,777	0.124	0.633	0.144	(0.011)
1996	26,225,100	5,828,976	32,054,076	0.072	18.2%	4,604	183	4,787	0.131	0.731	0.154	0.070
1997	26,790,942	6,369,270	33,160,212	0.035	19.2%	4,609	183	4,792	0.133	0.799	0.159	0.033
1998	26,858,004	5,390,466	32,248,470	(0.027)	16.7%	4,621	182	4,803	0.133	0.680	0.154	(0.030)
1999	27,772,998	5,407,572	33,180,570	0.029	16.3%	4,632	179	4,811	0.138	0.694	0.158	0.027
2000	28,694,418	5,378,538	34,072,956	0.027	15.8%	4,640	179	4,819	0.142	0.690	0.162	0.025
2001	29,015,184	5,428,560	34,443,744	0.011	16%	4,649	179	4,828	0.143	0.696	0.164	0.009
2002	30,790,176	5,393,958	36,184,134	0.051	15%	4,661	179	4,840	0.152	0.692	0.172	0.048
2003	31,792,704	4,960,680	36,753,384	0.016	14%	4,657	179	4,836	0.157	0.636	0.174	0.017
2004	32,065,674	5,187,288	37,252,962	0.014	14%	4,678	179	4,857	0.157	0.665	0.176	0.009

◆ - No residential/commercial breakdown available. Values estimated using 11% commercial prior to 1985 and 17% commercial thereafter.

★ - No data available; values interpolated arithmetically.

FIGURE 20

HISTORICAL WATER DELIVERIES



Source: CVWD 2005, Albert A. Webb Associates

As discussed above (see Section 5.3.2), CVWD has long estimated that full-time residential connections use about 0.3 acre-feet per year, and part-time connections use about 0.1 acre-feet per year. Based on the data in TABLE 12, the average water used annually by each active service connection in CVWD is plotted in FIGURE 21, WATER USE PER ACTIVE CONNECTION. As shown, water deliveries since 1991 have averaged about 0.15 to 0.16 acre-feet per year for all uses, and in recent years have not exceeded approximately 0.18 acre-feet per connection per year. This reflects the effects of water conservation measures as well as the economic recession and high water prices. It is expected that, as economic conditions improve, per-unit water demand will increase from its recent levels.

CVWD staff has previously estimated that past water demand has increased by about 4 percent over every five years. During the past five years, the water demand has increased by approximately 9 percent. The average growth rate of 6.5 percent over every five years established in the Crest Forest Community Plan (Table 9) has been assumed as the projection for the future growth rate. TABLE 13, PROJECTED WATER DEMAND, gives both the past trend estimate of 6.5 percent increase over five year increments, and a faster increase estimate based on the SCAG forecast for population growth that indicates on

average a 12 percent increase in demand over five year increments. Calculation of the faster increase estimates using SCAG projections includes an area much larger than the CVWD boundary resulting in an overly exaggerated rate of growth. Therefore, the faster increase estimates have not been included in projecting future water supply.

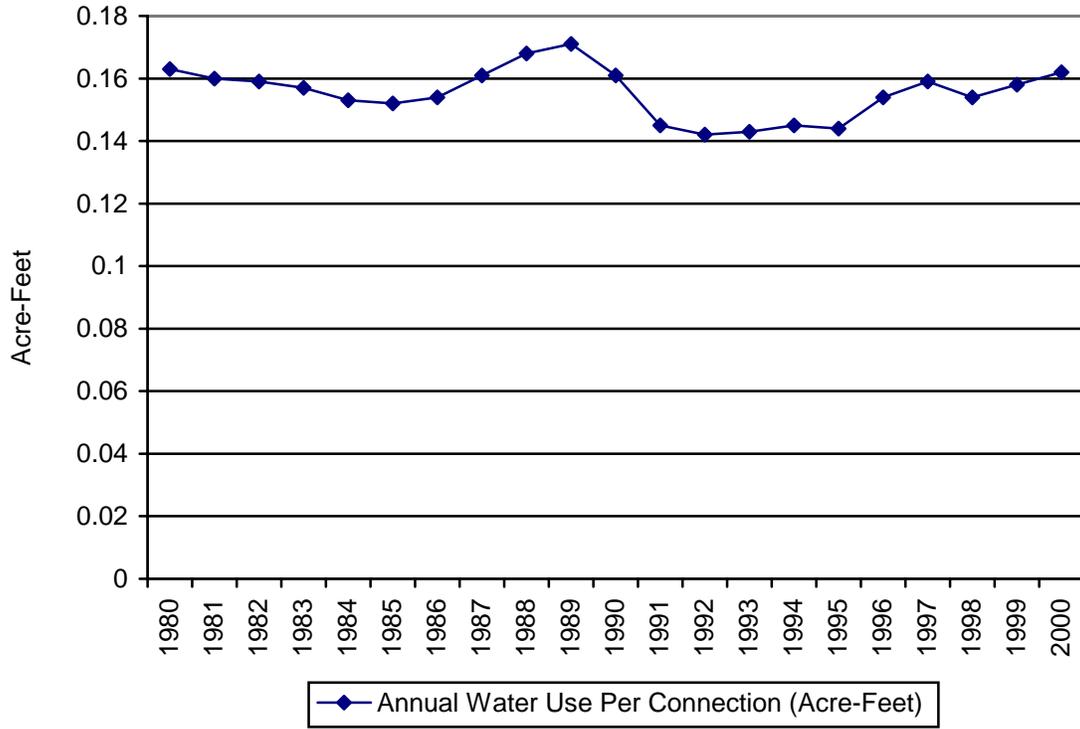
TABLE 13
AVERAGE YEAR PROJECTED WATER DEMAND

YEAR	PROJECTED DEMAND (MCF)	
	PAST TREND	FASTER INCREASE
2005	40.0	40.0
2010	42.9	44.8
2015	45.8	50.2
2020	48.9	56.2
2025	52.1	62.9

Source: CVWD 2005; Albert A. Webb Associates

FIGURE 21

WATER USE PER ACTIVE CONNECTION



Source: CVWD 2005, Albert A. Webb Associates

6. Adequacy of Projected Water Supply

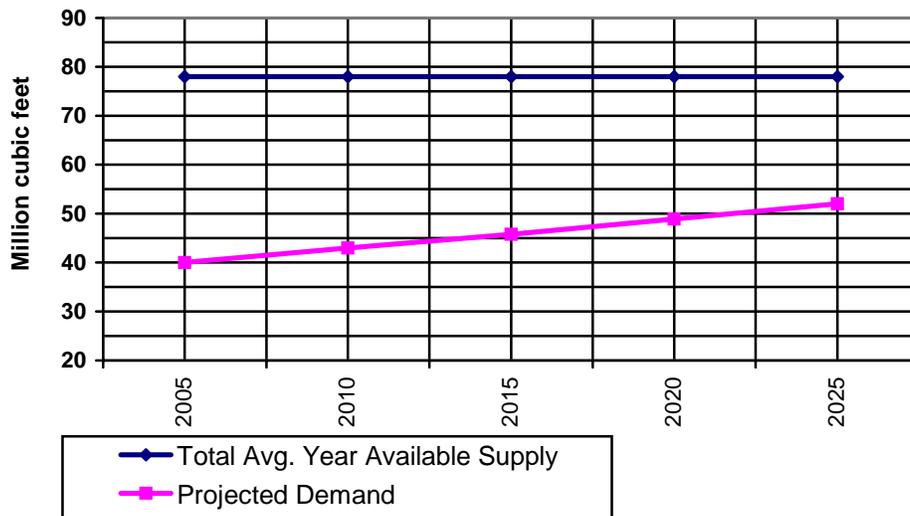
6.1 Supply and Demand Comparison

FIGURES 22, PROJECTED WATER SUPPLY AND DEMANDS, illustrates the average year supply projections discussed in Section 4.6 and the average year demand projections discussed in Section 5.3.

It appears that supply will be adequate to satisfy future demand in CVWD's service area during average year conditions. Well production is expected to stabilize at approximately 19-21 million cubic feet per year over the next twenty years. Supplemental water purchases from CLAWA will increase as needed to meet the total supply. FIGURES 22A AND 22B illustrates the impact of single dry year and multiple dry year water supply and demands. The means by which CVWD will utilize to mitigate the shortfall depicted in Figures 22A and 22B are discussed further in Section 8.

FIGURE 22

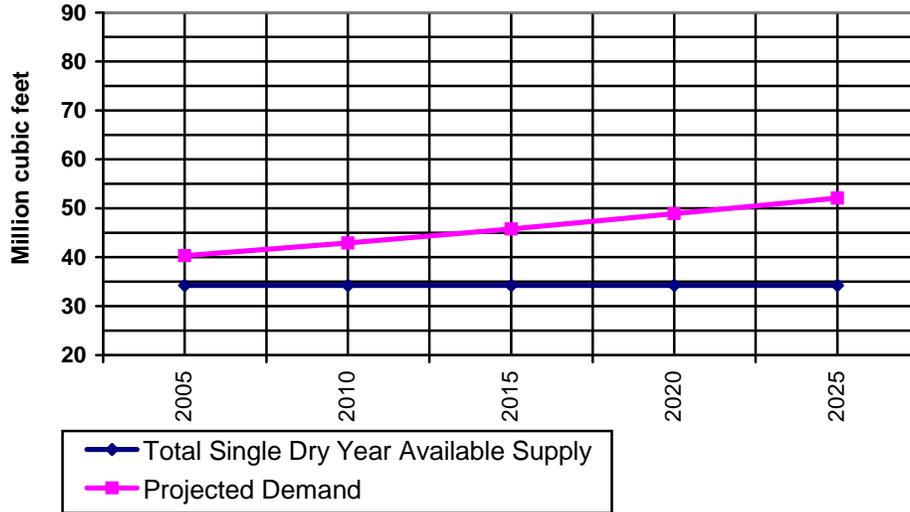
AVERAGE YEAR PROJECTED WATER SUPPLY AND DEMAND



Source: Albert A. Webb Associates CVWD 2005.

FIGURE 22A

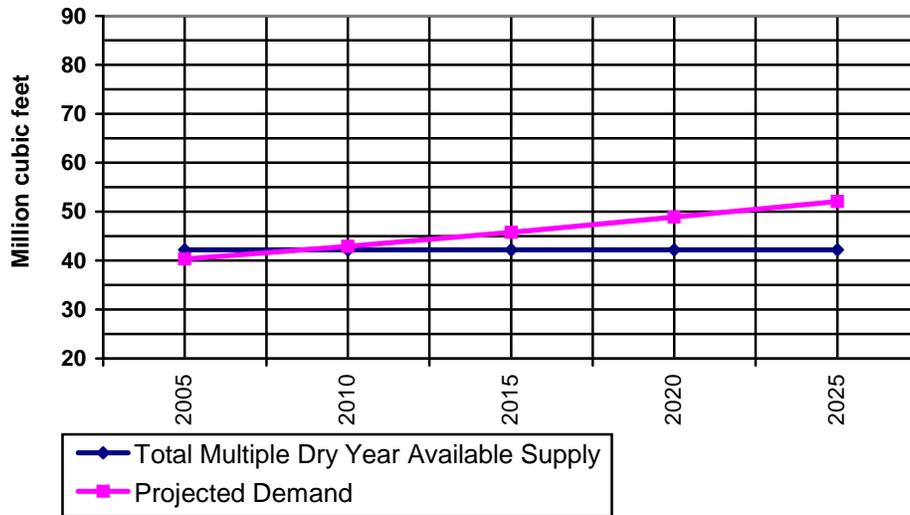
SINGLE DRY YEAR PROJECTED WATER SUPPLY AND DEMAND



Source: Albert A. Webb Associates CVWD 2005.

FIGURE 22B

MULTIPLE DRY YEAR PROJECTED WATER SUPPLY AND DEMAND



Source: Albert A. Webb Associates CVWD 2005.

6.2 Transmittal to County

This comparison of projected water supply and demand will be provided to the County of San Bernardino and CLAWA within 60 days after the submission of this Urban Water Management Plan to the Department of Water Resources.

7. Water Conservation Programs

Demand Management Measures

Law

10631. A plan shall be adopted in accordance with this chapter and shall do all of the following:

10631 (f) Provide a description of the supplier's water demand management measures. This description shall include all of the following:

(1) A description of each water demand management measure that is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following:

(2) A schedule of implementation for all water demand management measures proposed or described in the plan.

(3) A description of the methods if any, that the supplier will use to evaluate the effectiveness of water demand management measures implemented or described under the plan.

(4) An estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the savings on the supplier's ability to further reduce demand.

7.1 California Urban Water Conservation Council

Crestline Village Water District became a member of the California Urban Water Conservation Council in March of 1996, by executing the Memorandum of Understanding Regarding Urban Water Conservation in California (MOU) (*CUWCC 1994*). The Council is a voluntary organization whose members agree to implement reasonable water conservation measures. The Memorandum of Understanding identifies specific Best Management Practices (BMPs) for water conservation. All signatory agencies have agreed to make a good faith effort to implement these BMPs. CVWD's annual reports to the Council (facsimile) is provided in APPENDIX D, for 2000 and 2004.

CVWD has committed itself to make a good faith effort to implement the Best Management Practices that lie within its authority, are technically and economically reasonable, and are environmentally and socially acceptable.

CVWD's customers already use their water in an extremely efficient way compared to other areas. The average annual water consumption for CVWD (based on data from TABLE 11) is about 157 gallons per connection per day. In other areas of California, water agencies are attempting to reduce their water consumption *down* to 250-300 gallons per connection per day.

Because water conservation is already strongly practiced within the District's service area, specific water conservation measures may yield less benefit in the CVWD service area than they would in other areas of the state which use more water to begin with. For this reason, the reasonableness and effectiveness of each proposed conservation measure needs to be carefully analyzed in light of the conditions unique to the San Bernardino Mountains area.

The following sections identify each BMP as defined in the MOU (in boxed text), and discuss CVWD's activities related to it. Signatories of the MOU are not required to provide detailed discussion and analysis of each BMP in their Urban Water Management Plans. The following discussion covers some of CVWD's existing practices and highlights some issues which will be evaluated in more detail by CVWD in the future.

7.2 BMP 1 - Water Survey Programs for Single-Family Residential and Multi-Family Residential Customers

"Implementation methods shall be at least as effective as identifying the top 20% of water users in each sector, directly contacting them (e.g., by mail and/or telephone) and offering the service on a repeating cycle; providing incentives sufficient to achieve customer implementation (e.g., free showerheads, hose and sprinkler timers, adjustment to high water use bills if customers implement water conservation measures, etc.). This could be a cooperative program among organizations that would benefit from its implementation."

In the year 2004, the District offered 917 single-family residential surveys and 9 multi-family surveys. 142 single-family surveys and 9 multi-family surveys were completed for the District's customers. Surveys included:

- Checks for leaks within faucets, toilets, waterlines, and meter checks
- Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary
- Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as necessary; replace or recommend replacement of leaking toilet flapper, if necessary
- Check irrigation systems and timers
- Review and develop customer irrigation schedules

The District did not allot a budget amount to this BMP however, the District actually spent \$5,000 implementing the surveys.

7.3 BMP 2 - Residential Plumbing Retrofit

"Implementation methods shall be at least as effective as identifying single-family and multi-family residences constructed prior to 1992, and targeting a marketing strategy to distribute or directly install high-quality, low-flow showerheads (rated 2.5 gpm or less), toilet displacement devices and toilet flappers (as needed), and faucet aerators (rated 2.2 gpm or less) to residences that require them. Devices shall not be distributed to less than 10% of single-family and multi-family connections each reporting period, or require their installation through enforceable ordinance, until 75% of single-family and multi-family residences are fitted with high-quality, low-flow water fixtures. Completed retrofits, number of devices distributed, and costs of the program shall be tracked."

The District included this item in its water conservation ordinance (Ordinance No. 29). The requirement for ultra low flush toilets has been incorporated into state law.

The District has not incorporated plumbing retrofit measures in its program, although CVWD has provided free water conservation kits to its customers upon request. These kits include toilet tank displacement devices, dye tablets for toilet leak detection, and flow restrictors for showerheads.

As part of its water conservation program established under Ordinance No. 29, CVWD continues to provide these water conservation kits at no charge to any interested customer.

7.4 BMP 3 - Distribution System Water Audits, Leak Detection and Repair

"Implementation methods shall be at least as effective as completing an annual pre-screening water audit of the water supplier's distribution system using methodology such as that described in the American Water Works Association's "Manual of Water Supply Practices, Water Audits and Leak Detection"; and the completion of a full-scale audit, when indicated, advising customers whenever it appears possible that leaks exist on the customers' side of the meter; and performing distribution system leak detection when warranted and cost effective, repair leaks when found."

The District performed a pre-screening system water audit for the year 2004. The results yielded that the District would not be required to perform a full-scale system water audit. The District does operate a system leak detection program and 90 miles of the total 90 miles of distribution lines were surveyed.

The District foresees that prescreening audits will occur on a yearly basis and full-scale audits will be performed when necessary. The District did not allot any budget to implement this BMP however, spent \$69,000 performing the surveys.

7.5 BMP 4 - Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections

"Implementation methods shall be requiring meters for all new connections and billing by volume of use; and establishing a program for retrofitting any existing unmetered connections and billing by volume of use; for example, through a requirement that all connections be retrofitted at or within six months of resale of the property or retrofitted by neighborhood."

CVWD meters all connections and bills customers based upon their water usage. The District maintains three CII mixed-use accounts, all of which are on mixed-use meters.

7.6 BMP 5 - Large Landscape Conservation Programs and Incentives

"Implementation methods shall be at least as effective as providing support and incentives to all irrigators of large (at least 3 acres) landscapes; determining account status by accounts with dedicated irrigation meters, metered mixed-use accounts, or non-metered mixed-use accounts; offering dedicated irrigation metered accounts water use budgets and notification of the relationship between the budget and actual consumption each billing cycle; offering metered mixed-use accounts water use surveys through direct contact (by mail and/or telephone); offering non-metered mixed-use accounts landscape surveys; providing, when cost effective, landscape water use analysis/surveys, water use budgets, installation of dedicated landscape meters, cost-effective incentives sufficient to achieve customer implementation; providing follow-up audits when appropriate; and providing multi-lingual training and information necessary for implementation.

The District does not currently provide water audits to landscape/irrigation customers. CVWD has only about four accounts that might be considered large landscape water users.

CVWD's water conservation ordinance (Ordinance No. 29) includes some landscaping requirements. See Section 6C of the ordinance.

7.7 BMP 6 - High-Efficiency Washing Machine Rebate Programs

"Water suppliers will support local, state, and federal legislation to improve efficiency standards for washing machines. In the event an energy service provider or wastewater utility within the service area of the water supplier offers financial incentive for the purchase of high-efficiency washing machines, the water district shall also offer financial incentive based on the benefits of water saving. Incentive levels shall be based in conjunction with the methods addressed in *A Guide to Customer Incentives for Water Conservation* prepared for the CUWCC."

CVWD does not currently have a High-Efficiency Washing Machine Rebate Program. This BMP required detailed analysis to assess the feasibility in the District's case. The MOU contains additional technical materials spelling out the analytical approaches and assumptions, which can be used to evaluate the feasibility of this specific measure. The circumstances in CVWD's service area are such that the advisability of implementing high-efficiency washing machine rebate programs is in question. The MOU does provide for exemptions from particular BMPs under certain conditions. Further analysis will be undertaken concerning this issue.

7.8 BMP 7 - Public Information Programs

"Implementation methods shall be at least as effective as ongoing programs promoting water conservation and conservation related benefits including providing speakers to community groups and the media; using paid and public service advertising; using bill inserts; providing information on customers' bills showing use in gallons per day for the last billing period compared to the same period the year before; providing public information to promote other water conservation practices; and coordinating with other governmental agencies, industry groups and public interest groups."

The District provides public education in the form of bill inserts and messages, and by showing previous water use on customers' water bills.

7.9 BMP 8 - School Education Programs

"Implementation methods shall be at least as effective as ongoing programs promoting water conservation and conservation related benefits including working with the school districts in the water supplier's service area to provide educational materials and instructional assistance."

CVWD does not currently offer a formal school education program, although the District has provided speakers to various classes upon request.

7.10 BMP 9 - Conservation Programs for Commercial, Industrial, and Institutional Accounts

"Implementation methods shall be at least as effective as identifying and ranking all commercial, industrial, and institutional (CII) accounts according to water use; establish long-term targets for transition to ULFTs in the CII sector; implementation of CII Water-use Survey and Incentive Program by contacting the top 10% of the CII sector directly (by mail and/or telephone); offering audits and incentives sufficient to achieve customer implementation, providing annual follow-up audits and/or implement programs to achieve at least 10% baseline water savings within the CII Sector over a ten year period."

The District has identified its large water users and is currently implementing water use surveys and incentive programs for its CII customers. In the year 2004, CVWD offered 12 surveys to its Commercial Accounts and 3 surveys to its Institutional Accounts. Surveys involved site visits, evaluation of all water-using apparatus and processes, and a customer report identifying recommended efficiency measures, paybacks, and agency incentives. Estimated annual savings from site-verified actions taken by the District since 1991 equal 0.5 AF/Year.

7.11 BMP 10 - Wholesale Agency Programs

"Implementation methods shall be at least as effective as providing financial incentive, or equivalent resources, as appropriate and beneficial, to retail water customers for the purpose of advancing water conservation; supporting all BMPs implemented at the retail level that have shown to be cost effective, using adopted cost-effectiveness analysis procedures; providing technical and informational support at the retail level."

CVWD is a retail water agency. The above BMP does not apply to this entity.

7.12 BMP 11 - Conservation Pricing

"Implementation methods shall be at least as effective as eliminating nonconserving pricing and adopting conserving pricing. For signatories supplying both water and sewer service, this BMP applies to pricing of both water and sewer service. Signatories that supply water but not sewer service shall make good faith efforts to work with sewer agencies so that those sewer agencies adopt conservation pricing for sewer service.

"Nonconserving pricing provides no incentives to customers to reduce use. Such pricing is characterized by one or more of the following components:

- "a. Rates in which the unit price decreases as the quantity used increases (declining block rates);
- "b. Rates that involve charging customers a fixed amount per billing cycle regardless of the quantity used;
- "c. Pricing in which the typical bill is determined by high fixed charges and low commodity charges.

"Conservation pricing provides incentives to customers to reduce average or peak use, or both. Such pricing includes:

- "a. Rates designed to recover the cost of providing service; and

- "b. Billing for water and sewer service based on metered water use.
- "Conservation pricing is also characterized by one or more of the following components:
- "c. Rates in which the unit rate is constant regardless of the quantity used (uniform rates) or increases as the quantity used decreases (increasing block rates);
- "d. Seasonal rates or excess-use surcharges to reduce peak demands during summer months;
- "e. Rates based upon the long-run marginal cost or the cost of adding the next unit or capacity to the system;
- "f. Lifeline rates."

CVWD implements conservation pricing in its rate schedule. Ordinance No. 29 requires higher water rates after a basic amount of water is used, and increases the rate and reduces the basic allowance as the water supply becomes more restricted. The basic water allocation is currently approximately 1,300 cubic feet per month for single family residential uses. The ordinance does provide some adjustments to the basic allocation for high volume users such as homes with more than six full-time residents, attached dwellings, and for medical or handicapped necessity and consideration. However, once the basic allocation is established, water use above the basic allocation pays a surcharge of approximately 50 percent.

7.13 BMP 12 - Water Conservation Coordinator

"Implementation methods shall be at least as effective as designating a water conservation coordinator responsible for coordination and oversight of conservation programs and BMP implementation; preparing the BMP implementation report; coordination of conservation programs; preparation of annual conservation budget; and preparation of the conservation plan. Operation of joint regional conservation programs is acceptable; duplicative and redundant staff is not expected."

The District has appointed Mr. Karl B. Drew to serve as its Conservation Coordinator since December 15, 1997. Mr. Drew dedicates five percent of his time performing the duties of Conservation Coordinator.

7.14 BMP 13 - Water Waste Prohibition

"Implementation methods shall be enacting and enforcing measures prohibiting gutter flooding, single pass cooling systems in new connections, nonrecirculating systems in all new conveyer car wash and commercial laundry systems, and nonrecycling decorative water fountains.

"Signatories shall also support efforts to develop state law regarding exchange-type water softeners that would: (1) allow the sale of only more efficient, demand-initiated regenerating (DIR) models; (2) develop minimum appliance efficiency standards that (a) increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used; and (b) implement an identified maximum number of gallons discharged per gallon of soft water produced; (3) allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply.

"Signatories shall also include water softener checks in home water audit programs and include information about DIR and exchange-type water softeners in their educational efforts to encourage replacement of less efficient timer models."

Ordinance No. 29 prohibits water waste during times of water shortage. These prohibitions include gutter flooding, non-recirculating systems in all new conveyor or car wash systems, non-recirculating systems in all new decorative fountains, customer plumbing leaks, and hosing of hard surfaces, as well as other restrictions. The District reserves the rights to implement more stringent standards and/or ban on-site regeneration of water softeners if it is demonstrated that there is an adverse effect on reclaimed water or groundwater supply.

7.15 BMP 14 - Residential Ultra-Low-Flush Toilet Replacement Programs

"Implementation methods shall be at least as effective as implementing programs for replacement of existing high-water using toilets with ultra-low-flush toilets (1.6 gallons or less) in single-family and multi-family residences; minimal requirements include toilet replacement at time of resale."

CVWD does not currently have an ultra-low-flush (ULF) toilet replacement program. This BMP requires detailed analysis to assess its feasibility in the District's case. The MOU contains additional technical materials spelling out analytical approaches and assumptions, which can be used to evaluate the feasibility of this specific measure. The circumstances in CVWD's service area are such that the advisability of implementing ultra-low-flush toilet replacement is in question. The MOU does provide for exemptions from particular BMPs under certain conditions. Further analysis will be undertaken concerning this issue.

8. Water Shortage Contingency Analysis

Law

10632 The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier:

10632 (a) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a fifty percent reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage.

10632 (b) An estimate of the water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.

10632 (c) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.

10632 (d) Additional Mandatory Prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.

10632 (e) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.

10632 (f) Penalties or charges for excessive use, where applicable.

10632 (g) An analysis of the impact if each of the actions and conditions described in subdivisions (a) to (f), inclusive, on the revenues and expenditures of the urban water suppliers, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.

10632 (h) A draft water shortage contingency resolution or ordinance.

10632 (i) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.

8.1 Three-Year Worst-Case Water Supply Projection

The driest three years on record for CVWD are 1990-1992. During those years the District's total local production totaled 6.22 MCF, 6.95 MCF, and 9.30 MCF respectively. The District's available supplemental supply from CLAWA was 75.8 MCF, 22.7 MCF, and 34.1 MCF respectively. The yearly average over this time was 51.7 MCF of available supply, which would satisfy the District's average yearly demand until the year 2025. However, based upon the data shown in Figure 22B, the District's projected total multiple dry year demand will exceed the projected available supply in the year 2010.

8.2 Response Plan for Catastrophic Water Supply Interruption

The most likely events which could cause CVWD to sustain a catastrophic interruption in water supply are wildland fires, earthquakes, and widespread system failure. CVWD has recently prepared a system wide vulnerability assessment, emergency response plans and a participated in the preparation of a regional hazard mitigation plan. Each of these plans attempts to mitigate the effects of these catastrophic interruptions in water supply.

The primary effect of fires and earthquakes on water supply is the interruption of power throughout the San Bernardino Mountains and potential damage to CVWD's storage and distribution facilities. In order to minimize system damage during an earthquake, CVWD's facilities have been designed in accordance with the most current building and safety requirements and have generally been constructed with multiple units to minimize the system disruption if a single unit is damaged. In addition, all of the District's above ground storage tanks have undergone a seismic and structural evaluation based upon current building codes. Each tank has now been upgraded to current building codes to provide maximum safety and system reliability.

8.3 Water Shortage Stages and Triggering Mechanisms

Crestline Village Water District has developed a water conservation plan designed for supply reductions of up to 50 percent. The District enacted Ordinance No. 29 in 1991, establishing a water conservation program. It was amended by Ordinance No. 30 in 1992, and further implemented by Resolution No. 279 in 1993. These ordinances and resolution will implement the District's water shortage contingency plan. Copies are provided in APPENDIX E.

In accordance with the requirements of the California Water Code, Ordinance No. 29 provides the District with specific stages of action to be undertaken in response to a water supply shortage. The ordinance also describes the mandatory provisions, which prohibit wasteful practices, consumption limits, and penalties for excessive use. The plan provides for reductions in water supply up to 50 percent, and outlines specific water supply conditions, which are applicable to each stage.

8.4 Prohibitions, Consumption Reduction Methods, and Penalties

8.4.1 Mandatory Prohibitions on Wasting Water

Ordinance No. 29 contains mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning. Please see APPENDIX E.

8.4.2 Consumption Reduction Methods

The District's water conservation program includes methods to reduce consumption on a staged basis. The basic allocation for each customer is progressively reduced as water shortages worsen. Surcharges for water use in excess of the basic allocation are increased in the more restrictive stages. The plan also provides for increasingly stringent prohibitions of nonessential uses of water.

8.4.3 Penalties or Charges for Excessive Use

Ordinance No. 29 includes surcharges for water use in excess of a basic allocation. Both the allocation and the surcharges become more stringent in more severe water shortages.

8.5 CVWD Revenue and Expenditure Impacts

This section provides an analysis of the effect of the urban water management plan on the revenues and expenditures of the Crestline Village Water District and identifies measures, which are in place to offset potential revenue shortfalls in periods of reduced consumption.

A general analysis of effects on revenues and expenditures is provided in TABLE 14, FISCAL EFFECT OF IMPLEMENTATION OF WATER SHORTAGE CONTINGENCY PLAN (*CVWD 2005, revised*).

TABLE 14 shows the District's recorded water consumption of 38 million cubic feet in Fiscal Year 2004-05. Projected water consumption levels under Phases II through VI of the District's water shortage contingency plan are also shown, reflecting water use reductions ranging from 10 percent to 50 percent.

The District's revenues and expenditures for Fiscal Year 2004-05, and the projected revenues and expenditures for each phase of implementation of the water plan are depicted in TABLE 14. In the event of a worsening drought, increasingly stringent water rationing phases would be implemented. Operating expenses would tend to decrease mainly as a result of the reduced amount of supplemental water available for purchase. Operating expenses relating to local well production would also be subject to change depending upon the origin of the water shortage. However, transmission and distribution costs would remain the same inasmuch as the water distribution network would remain unchanged. Customer accounts, salaries, and administration would

increase as a result of an increase in activities related to monitoring of the plan and administrative duties. Overall, the District's operating expenses tend to decrease as a result of a water shortage of supplemental water and implementation of the plan.

As operating expenses increase, the District is forced to find a way to increase its operating revenues in order to avoid a revenue shortfall. The District's revenues are derived from a combination of standby charges, water rates and surcharges for usage exceeding allocations. The District's operating procedures involve an ongoing monitoring of the revenue/expenditure balance during the fiscal year. If it becomes apparent that a positive balance may not be met, the General Manager notifies the Board of Directors so that corrective action can be taken. Normally, a water rate increase would be proposed. The figures in TABLE 14, would need to be adjusted to reflect rate increases necessary to maintain a positive revenue/expenditure balance. Inasmuch as future surcharge revenue resulting from implementation of each phase is unpredictable at this time, given the uncertainty of customer reaction to increasing surcharges, the exact customer rate increase that will be necessary cannot be precisely estimated but will be determined at the time of its establishment.

8.6 Water Shortage Contingency Ordinance/Resolution

CVWD's ordinance has already been enacted. Please see APPENDIX E.

8.7 Water Shortage Contingency Plan

As shown in Figure 22A and 22B, the District could be confronted with a water supply shortage during critically dry years. The occurrence of a critically dry year both locally and on the State Water Project (SWP) are rare but can happen as experienced in 1991 when local production was 6.9 MCF and the SWP supply was cut to 30%. It is estimated that if these conditions occurred again only 34.2 MCF would be available to CVWD. Due to the fact that all other local water purveyors would be in a similar situation and the lack of water storage in the mountains, the District cannot rely on neighboring retail purveyors as a means to mitigate a shortfall in supply. The mitigation measures currently available to CVWD to reduce and replace the shortfall are as follows.

- Implement mandatory conservation effort as described in the District's conservation plan to reduce the actual demand. As previously discussed, it is anticipated that a reduction of up to 50 percent can be achieved through conservation. As seen in Figures 22A and 22B a 50 percent reduction in demand would reduce the demand below the available supply through the year 2025.
- If conservation efforts are not able to reduce the demand sufficiently, CVWD will rely upon CLAWA to provide enough water to mitigate the shortage. The options available to CLAWA as the local SWP Contractor and wholesale provider in the San Bernardino Mountains are discussed in detail in CLAWA's Urban Water Management Plan. They generally include 1) Utilizing the water available through the SBVMWD and LACSD transfer agreement, 2) Purchasing additional drought relief water from DWR (drought relief water is typically available at a

higher cost during critically dry periods), and 3) Long-term storage currently being pursued by CLAWA.

Table 14
Fiscal Effects of Implimentation of Water Shortage Contingency Plan

OPERATING REVENUES AND EXPENSES	ACTUAL FY 2004-05	PHASE II -10%	PHASE III -20%	PHASE IV -30%	PHASE V -40%	PHASE VI -50%
OPERATING REVENUES						
Residential	\$2,462,211	\$2,420,768	\$2,222,201	\$2,084,823	\$1,926,445	\$1,810,067
Business and Other	331,496	377,219	299,812	266,932	213,052	201,172
Total Water Sales	2,793,707	2,797,987	2,522,013	2,351,755	2,139,497	2,011,239
Service Charges	48,724	53,596	58,956	64,852	71,337	78,471
TOTAL REVENUE	\$2,842,431	\$2,851,583	\$2,580,969	\$2,416,607	\$2,210,834	\$2,089,710
OPERATING EXPENSES						
Purchased & Local Water Cost	\$628,399	\$573,214	\$518,029	\$462,844	\$407,659	\$352,474
Pumping	72,605	72,605	72,605	72,605	72,605	72,605
Water Treatment	7,972	7,972	7,972	7,972	7,972	7,972
Transmission and Distribution	169,186	169,186	169,186	169,186	169,186	169,186
Customer Accounts	57,810	60,701	63,736	66,923	70,269	73,782
Salaries	334,533	334,533	334,533	334,533	334,533	334,533
Administration and General	814,049	814,049	814,049	814,049	814,049	814,049
Depreciation and Other	578,449	578,449	578,449	578,449	578,449	578,449
TOTAL EXPENSES	2,663,003	2,610,709	2,558,559	2,506,561	2,454,722	2,403,050
SURPLUS (OR DEFICIT)	179,428	240,874	22,410	-89,954	-243,888	-313,340

9. Recycled Water Opportunities

Law

10633. The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. To the extent practicable, the preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies and shall include all of the following:

10633 (a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

10633 (b) A description of the recycled water currently being used in the supplier's service area, including but not limited to, the type, place and quantity of use.

10633 (c) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

9.1 Wastewater Collection and Treatment in the CVWD Service Area

The Crestline Sanitation District (CSD) is a special district of San Bernardino County, formed in 1946. Crestline Sanitation District operates three small wastewater treatment plants, with a combined treatment capacity of 4.3 ac-ft per day (af/d) or 1.4 MGD in the San Bernardino National Forest.

The Houston Creek wastewater treatment plant, located north of Lake Gregory, has a treatment capacity of 2.2 af/d. The Seeley Creek treatment plant, located north of Valley of Enchantment, has 1.5 acre-foot capacity, and the Cleghorn facility, southwest of Lake Silverwood, has capacity of 0.6 ac-ft. CSD also disposes of effluent from the Pilot Rock Treatment Plant, located in Miller Canyon north of Crestline, which is owned by the California Department of Forestry and has a treatment capacity of 0.3 af/d.

The largest flows are in late winter (usually February, March, or April). The peak wet day flow is about two times the average wet day flow, and is influenced by snowmelt and runoff. Another smaller peak period usually occurs in July, August, or September. This summer peak is related to the full summer use of camps and the presence of many part-time residents and tourists. Average daily flows in recent years have been

approximately 50-60 gallons per capita on dry days and 110 gallons per capita on wet days. CSD has based its long-term planning on an average dry weather flow of 75 gallons per capita per day.

Crestline Sanitation District's wastewater collection system comprises approximately 475,201 linear feet of sewer lines. As of 2000, CSD served approximately 5,208 residential and commercial connections. The area currently served by CSD sewers, as shown in FIGURE 24, corresponds to the developed core of CVWD's service area. The Huston Creek plant treats the wastewater from approximately 65 percent of the sewered area, the Seeley Creek facility serves the remaining 35 percent. The Cleghorn and Pilot Rock treatment plants provide treatment service areas whose collection systems are owned and maintained by the California Department of Forestry and the California Department of Parks and Recreation. Three pump stations are included in CSD's collection system.

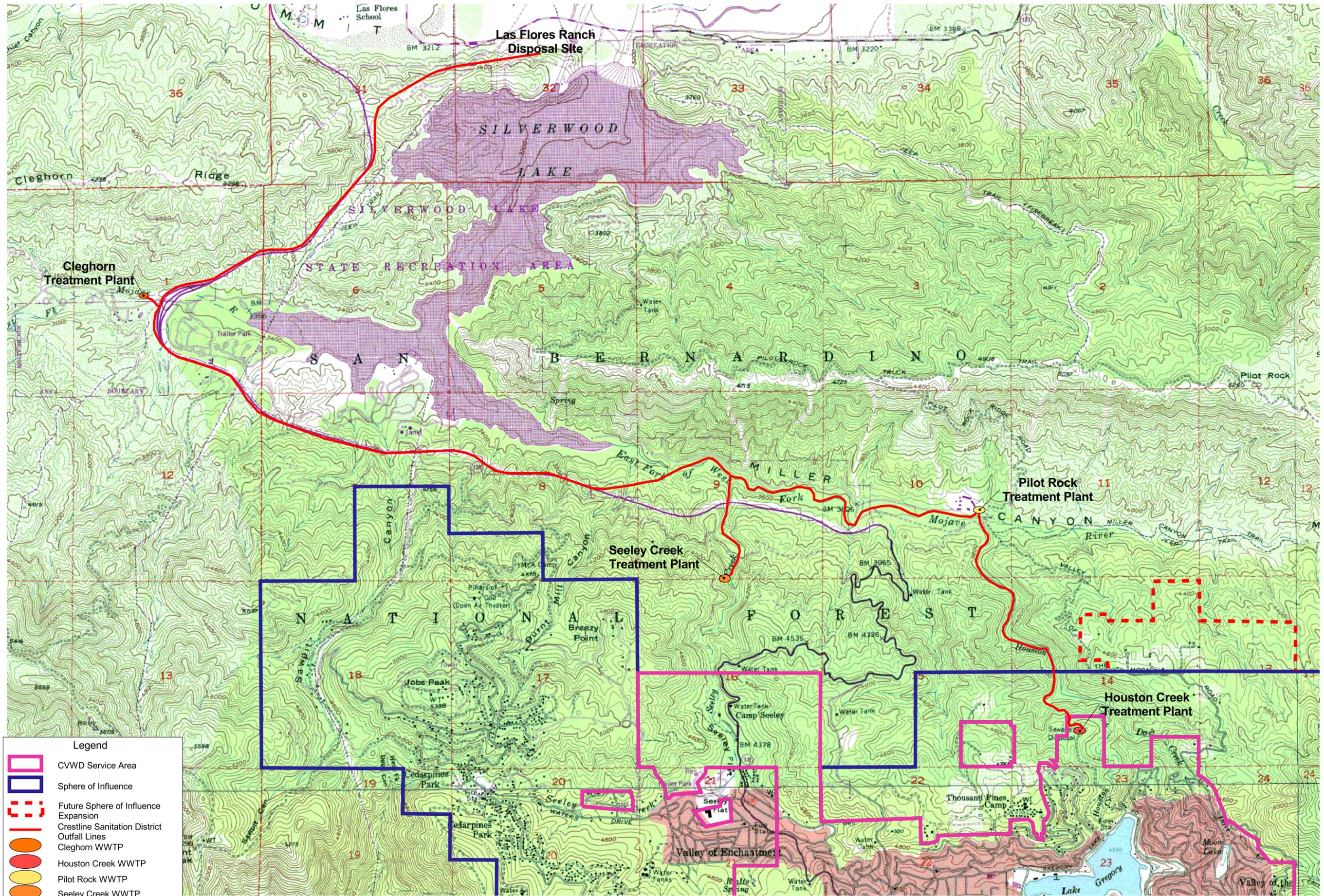
All treated effluent from the four treatment plants is conveyed through a single 14-mile outfall line, which flows from the Huston Creek treatment plant, down Miller Canyon, to a junction point with the Seeley Creek outfall pipeline. The outfall passes around the south and west boundaries of Silverwood Lake, through Cleghorn Creek, into Summit Valley. The effluent is discharged just below Cedar Springs Dam, near Las Flores Ranch, and used for flood-irrigation of a nearby pasture area.

9.2 Wastewater Treatment Processes and Resulting Water Quality

The Huston Creek and Seeley Creek plants provide primary treatment, fixed-film (i.e., trickling filter) secondary treatment, and chlorine disinfection. The Cleghorn plant provides primary treatment, activated sludge secondary treatment using an extended aeration process (i.e., oxidation ditch), and chlorine disinfection. Sludge thickening and dewatering of solids from all three plants is performed at the Huston Creek facility. Huston Creek also accepts septic tank discharge, treating approximately 160,000 gallons of septage per year. CSD's treated effluent meets the discharge monitoring requirements issued by the California Regional Water Quality Control Board, Lahontan Region.

Crestline Sanitation District currently has no plans to upgrade its facilities to provide tertiary treatment. The Las Flores Ranch, CSD's effluent disposal site, is proposed for development within the City of Hesperia. The development proposal for the Las Flores Ranch Specific Plan includes the construction of infrastructure for tertiary

FIGURE 23
Crestline
Sanitation
District



treatment of Crestline Sanitation District's flows, as well as generalized flows from the Las Flores Ranch development. The developers of Las Flores Ranch are negotiating to obtain approval for reuse of tertiary treated effluent. The Las Flores Ranch development, at the magnitude proposed, is dependent upon the use of effluent flows from CSD. CSD is also interested in capturing economic value for its effluent through negotiated sales. Therefore, Crestline Sanitation District currently has no interest in pursuing tertiary treatment or reuse in the mountain area. Wastewater generated in the mountain area can be put to use however, due to the ordinance issued by the Lahontan Water Quality Control Board prohibiting the use of reclaimed water above 3,200 feet, wastewater must be used elsewhere.

9.3 Current Use of Recycled Water

There is no known use of reclaimed water in CVWD at this time.

9.4 Potential Uses of Recycled Water

The potential applications of recycled water within CVWD are limited as a result of natural conditions and development patterns. The terrain in CVWD's service area is steep and irregular, winters are severe, and maintenance of natural forest conditions is preferred. As a result, most lots have little landscaped area that requires irrigation. There are no industrial uses at all in the CVWD service area, hence there are no potential markets for industrial use of reclaimed water. Most commercial uses are also fairly small. There are virtually no agricultural/irrigation uses. The dearth of potential major users of recycled water makes the economic feasibility of constructing dual water systems questionable. Thus, although various uses of recycled water are possible in the abstract, most have low potential in the CVWD service area.

There is a potential to use recycled water for wildlife habitat and wetland enhancement within the National Forest. The Forest Service is interested in exploring opportunities for water reuse. However, regulatory constraints would have to be overcome to make this possible.

The California Regional Water Quality Control Board, Lahontan Region, has had a longstanding prohibition against the use of recycled water at elevations above 3,200 feet in the San Bernardino Mountains. In January 2003, a request for a Basin Plan amendment was filed. The amendment would allow the discharge of treated waters that are of waste origin above 3,200-foot elevation. In early September 2003, the Regional Board recommended approval of the Basin Plan Amendment. The amendment was reviewed and approved by the State Water Resources Control Board and the US Environmental Protection Agency in 2004. These changes will allow recycled water projects to proceed on a case-by-case basis.

In consultations related to this plan, the Crestline Sanitation District has indicated that it intends to use the reclaimed water from its system in locations outside of CVWD's service area. If CSD's effluent is not used at the Las Flores Ranch, the district intends to

market its reclaimed water elsewhere. Therefore, CVWD assumes that no supply of recycled water will be available from Crestline Sanitation District.

There are no other potential sources of reclaimed water in the District's service area. Lake Arrowhead Community Services District adjoins CVWD to the east, and produces tertiary-treated wastewater effluent. Lake Arrowhead Community Services District is currently attempting to implement a recycled water reuse program within their service area.

9.5 Encouraging Recycled Water Use

No use of recycled water is projected. Please see Sections 9.2 and 9.4.

9.6 Recycled Water Optimization Plan

At the present time, such a plan is not financially feasible. Please see Sections 9.2 and 9.4.

10. Water Quality Impacts on Reliability

Law

10634. The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

The quality of the District's potable water supply has been historically very good. The District is currently satisfying every standard established by the State Department of Health Services and the Environmental Protection Agency.

The fact that CVWD is dependant on CLAWA to treat State Water Project water and deliver it into the District's potable water system creates an interdependence between CVWD and CLAWA with respect to water quality. The District does not anticipate any local supply reductions in the future due to water quality problems and CLAWA has been diligent in ensuring that the supplemental water delivered to CVWD meets all established guidelines set by the State and Federal Governments. For more information on water quality impacts relating to supplemental water see CLAWA's Urban Water Management Plan (CLAWA 2005).

11. Water Service Reliability

Law

10635 (a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional or local agency population projections within the service area of the urban water supplier.

10635 (b) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

10635 (c) Nothing in this article is intended to create a right or entitlement to water service or any specific level of water service.

10635 (d) Nothing in this article is intended to change existing law concerning an urban water supplier's obligation to provide water service to its existing customers or to any potential future customers.

Projected Normal Water Year Supply – MCF

	2010	2015	2020	2025
Supply	78.2	78.7	79.2	79.7
% of Max. Year	70%	70%	70%	70%

Projected Normal Water Year Demand – MCF

	2010	2015	2020	2025
Demand	42.6	45.8	48.9	52.1
% of year 2005	106%	113%	121%	129%

Projected Normal Year Supply and Demand Comparison – MCF

	2010	2015	2020	2025
Supply totals	78.2	78.7	79.2	79.7
Demand totals	42.6	45.8	48.9	52.1
Difference (supply minus demand)	35.3	32.9	30.3	27.6
Difference as % of Supply	45%	42%	38%	34%
Difference as % of Demand	82%	72%	62%	53%

Projected Single Dry Water Year Supply – MCF

	2010	2015	2020	2025
Supply	34.2	34.2	34.2	34.2
% of Max. Year	30%	30%	30%	30%

Projected Single Dry Water Year Demand – MCF

	2010	2015	2020	2025
Demand	42.6	45.8	48.9	52.1
% of year 2005	106%	113%	121%	129%

Projected Single Dry Year Supply and Demand Comparison – MCF

	2010	2015	2020	2025
Supply totals	34.2	34.2	34.2	34.2
Demand totals	42.6	45.8	48.9	52.1
Difference (supply minus demand)	-8.7	-11.6	-14.7	-17.9
Difference as % of Supply	-25%	-34%	-43%	-52%
Difference as % of Demand	-20%	-25%	-30%	-34%

Projected supply during multiple dry year period ending in 2010 – MCF

	2006	2007	2008	2009	2010
Supply*	75.8	22.7	34.1	94.8	53.4
% of projected average	97%	29%	44%	122%	69%

* Based upon years 1990 – 1994, which are the driest five years on record for CVWD.

Projected demand multiple dry year period ending in 2010 – MCF

	2006	2007	2008	2009	2010
Demand	40.8	41.3	41.8	42.4	42.9
% of projected average	100%	100%	100%	100%	100%

Projected Supply & Demand Comparison during multiple dry year period ending in 2010 –MCF

	2006	2007	2008	2009	2010
Supply totals	75.8	22.7	34.1	94.8	53.4
Demand totals	40.8	41.3	41.8	42.4	42.9
Difference (supply minus demand)	35.0	-18.6	-7.7	52.4	10.5
Difference as % of Supply	46%	-82%	-23%	55%	20%
Difference as % of Demand	86%	-45%	-18%	123%	24%

Projected supply during multiple dry year period ending in 2015 – MCF

	2011	2012	2013	2014	2015
Supply*	75.8	22.7	34.1	94.8	53.4
% of projected average	97%	29%	44%	122%	69%

* Based upon years 1990 – 1994, which are the driest five years on record for CVWD.

Projected demand multiple dry year period ending in 2015 – MCF

	2011	2012	2013	2014	2015
Demand	43.5	44.1	44.6	45.2	45.8
% of projected average	100%	100%	100%	100%	100%

Projected Supply & Demand Comparison during multiple dry year period ending in 2015-MCF

	2011	2012	2013	2014	2015
Supply totals*	75.8	22.7	34.1	94.8	53.4
Demand totals	43.5	44.1	44.6	45.2	45.8
Difference (supply minus demand)	32.3	-21.4	-10.5	49.6	7.6
Difference as % of Supply	43%	-94%	-31%	52%	14%
Difference as % of Demand	74%	-49%	-24%	109%	17%

* Based upon years 1990 – 1994, which are the driest five years on record for CVWD.

Projected supply during multiple dry year period ending in 2025 – MCF

	2021	2022	2023	2024	2025
Supply*	75.8	22.7	34.1	94.8	53.4
% of projected average	97%	29%	44%	122%	69%

* Based upon years 1990 – 1994, which are the driest five years on record for CVWD.

Projected demand multiple dry year period ending in 2025 – MCF

	2021	2022	2023	2024	2025
Demand	49.5	50.1	50.8	51.5	52.1
% of projected average	100%	100%	100%	100%	100%

Projected Supply & Demand Comparison during multiple dry year period ending in 2025-MCF

	2021	2022	2023	2024	2025
Supply totals*	75.8	22.7	34.1	94.8	53.4
Demand totals	49.5	50.1	50.8	51.5	52.1
Difference (supply minus demand)	26.3	-27.4	-16.7	43.3	1.3
Difference as % of Supply	35%	-121%	-49%	46%	2%
Difference as % of Demand	53%	-55%	-33%	84%	2%

* Based upon years 1990 – 1994, which are the driest five years on record for CVWD.

**Appendix A
Agencies, Organizations, and
Individuals Contacted**

APPENDIX A

AGENCIES, ORGANIZATIONS, AND INDIVIDUALS CONTACTED

Comments regarding the proposed plan were solicited by direct mail, newspaper, advertisement, public hearing, and personal contact. The following agencies, organizations, and individuals were contacted during the development and public review of this plan.

Crestline Village Water District
Norman L. Hunt, General Manager
Karl B. Drew, Office Manager

Albert A. Webb Associates, Civil Engineers
Fred Hans Hanson, Vice President
Brian P. Knoll, P.E., Senior Engineer

Ronald A. Van Blarcom, Attorney at Law
General Counsel for CVWD

Crestline-Lake Arrowhead Water Agency

Crestline Sanitation District

San Bernardino County Office of Special Districts

County of San Bernardino, Land Use Services

Southern California Association of Governments

Local Agency Formation Commission for the County of San Bernardino

California Department of Water Resources

California Department of Health Services
Division of Drinking Water and Environmental Management

County of San Bernardino, Department of Environmental Health Services

U.S. Department of Agriculture, Forest Service, San Bernardino National Forest

Cedarpines Park Mutual Water Company

Strawberry Lodge Mutual Water Company

Valley of Enchantment Mutual Water Company

Valley View Park Mutual Water Company

Appendix B
Resolution Adopting the
Urban Water Management Plan

RESOLUTION NO. 355

**RESOLUTION OF THE BOARD OF
DIRECTORS OF CRESTLINE VILLAGE
WATER DISTRICT ADOPTING AN URBAN
WATER MANAGEMENT PLAN.**

WHEREAS, the District is an urban water supplier providing water to more than 3,000 customers in the Crestline area of the San Bernardino Mountains; and

WHEREAS, in accordance with the Urban Water Management Planning Act (Water Code Sections 10610 *et seq.*), the District desires to update its existing Urban Water Management Plan by preparing a new Urban Water Management Plan (the "Plan") and the District desires to file that Plan with the California Department of Water Resources; and

WHEREAS, the District has made the Plan available for public review and, in compliance with the Urban Water Management Planning Act, the District has properly noticed and held a public hearing to discuss the Plan.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Crestline Village Water District as follows:

Section 1. The District's 2005 Urban Water Management Plan dated October 2006 and attached hereto as Exhibit "A", is hereby adopted. The District's Urban Water Management Plan, dated June 2001 and any and all previously adopted Urban Water Management Plans or portions thereof are hereby repealed and replaced by the Plan dated October 2006.

Section 2. Pursuant to Water Code Section 10621, the District Secretary is hereby authorized and directed to file a copy of the District's Urban Water Management Plan with the California Department of Water Resources.

Section 3. The District General Manager, or his designee, is hereby authorized to implement the Urban Water Management Plan.

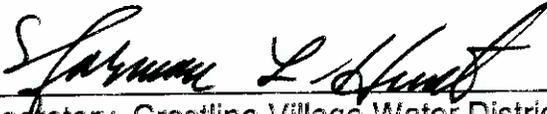
Section 4. In accordance with Water Code Section 10652, the District finds that adoption and implementation of the Urban Water Management Plan is statutorily exempt from the provisions of the California Environmental Quality Act (Public Resources Code Sections 21000 *et seq.*).

Dated: October 10, 2006



President, Crestline Village Water District

ATTEST:

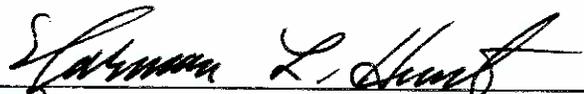


Secretary, Crestline Village Water District

STATE OF CALIFORNIA)
) ss.
COUNTY OF SAN BERNARDINO)

I, NORMAN L. HUNT, Secretary of the Board of Directors of the Crestline Village Water District, do hereby certify that the foregoing Resolution was duly adopted by the Board of Directors of said District at a regular meeting of said Board held on the 10th day of October, 2006, and that it was adopted by the following roll call vote:

AYES: Directors McGehee, Spinks and Stone
NOES: Directors Huckell and Clanin
ABSENT: None
ABSTAINED: None


Secretary of the Board of Directors
of Crestline Village Water District

(SEAL)

STATE OF CALIFORNIA)
) ss.
COUNTY OF SAN BERNARDINO)

I, Norman L. Hunt, Secretary of the Board of Directors of the Crestline Village Water District, do hereby certify that the above and foregoing is a full, true and correct copy of Resolution No. 355 of said Board, and that the same has not been amended or repealed.

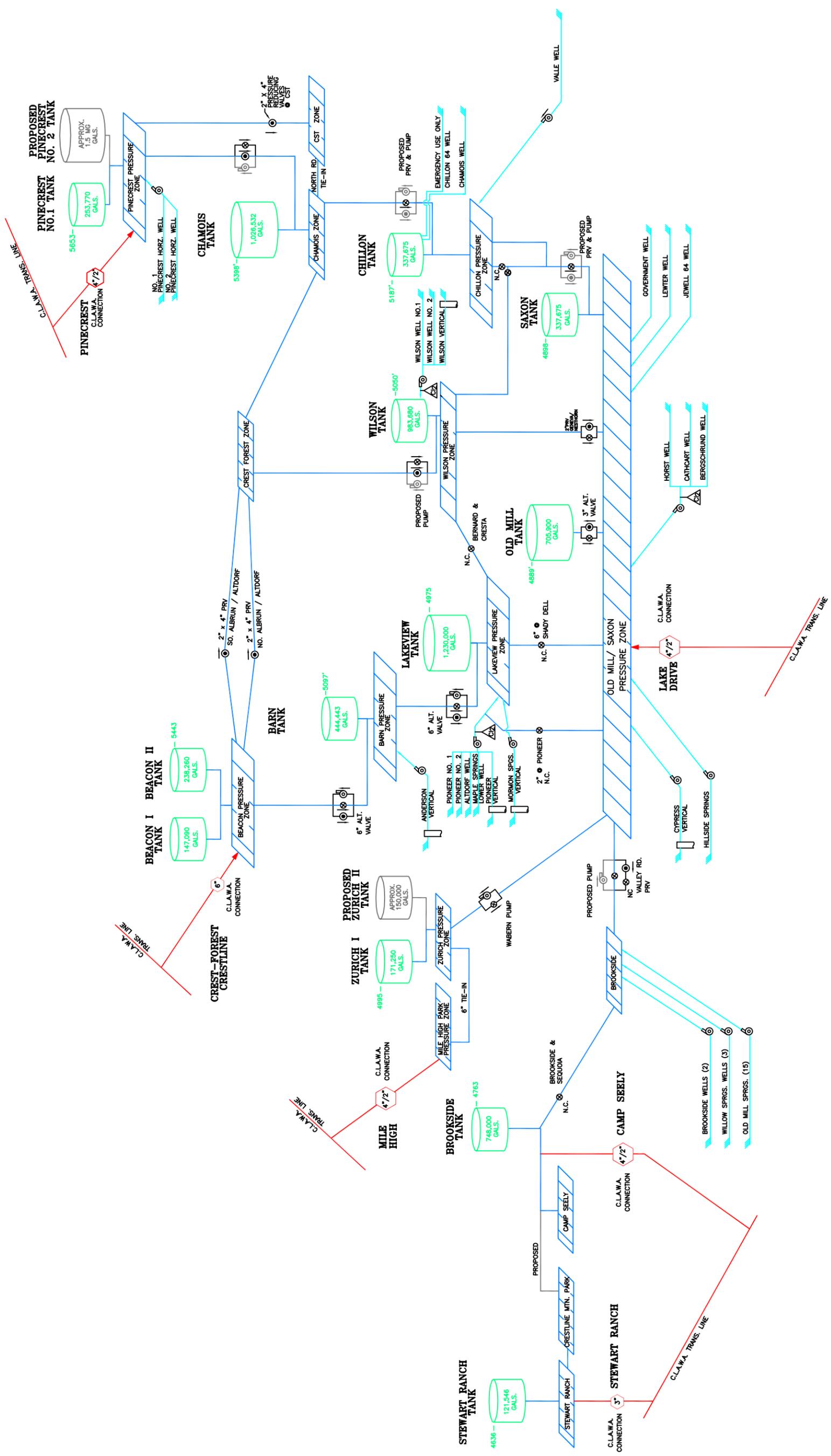
DATED: 10/11/06


Secretary of the Board of Directors
of Crestline Village Water District

(SEAL)

Appendix C
Crestline Village Water District
System Schematic Plan

CRESTLINE VILLAGE WATER DISTRICT SAN BERNARDINO COUNTY, CALIFORNIA



Appendix D
California Urban Water Conservation Council
2000 & 2004 Annual Report (Facsimile)
2000 & 2004 CVWD Source of Supply Production Report



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Memorandum of
 Understanding

Water Supply & Reuse																						
Reporting Unit: Crestline Village Water District	Year: 2000	Submitted to CUWCC 02/22/2001																				
Water Supply Source Information You must click "Update" or "Delete" for each supply source you identify. Selecting Update is the same as the "Save Session" button on other forms. Acre Feet Conversion Calculator																						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Supply Source Name</th> <th style="text-align: left;">Quantity (AF) Supplied</th> <th style="text-align: left;">Supply Type</th> <th style="text-align: left;">Update/Delete a Supply Source</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td>Choose One ▾</td> <td> </td> </tr> <tr> <td>District Wells</td> <td>385.87</td> <td>Groundwater ▾</td> <td> </td> </tr> <tr> <td>CLAWA</td> <td>445.8</td> <td>Imported ▾</td> <td> </td> </tr> <tr> <td colspan="4" style="text-align: center;">Total AF: 831.67</td> </tr> </tbody> </table>	Supply Source Name	Quantity (AF) Supplied	Supply Type	Update/Delete a Supply Source			Choose One ▾		District Wells	385.87	Groundwater ▾		CLAWA	445.8	Imported ▾		Total AF: 831.67					
Supply Source Name	Quantity (AF) Supplied	Supply Type	Update/Delete a Supply Source																			
		Choose One ▾																				
District Wells	385.87	Groundwater ▾																				
CLAWA	445.8	Imported ▾																				
Total AF: 831.67																						

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Memorandum of Understanding

Accounts & Water Use					
Reporting Unit Name: Crestline Village Water District		Submitted to CUWCC 02/22/2001		Year: 2000	
A. Service Area Population Information:					
1. Total service area population		6900			
B. Number of Accounts and Water Deliveries (AF)					
	Type	Metered		Unmetered	
		No. of Accounts	Water Deliveries (AF)	No. of Accounts	Water Deliveries (AF)
1.	Single-Family	4593	646.83	0	0
2.	Multi-Family	47	20.7	0	0
3.	Commercial	156	74.89	0	0
4.	Industrial	0	0	0	0
5.	Institutional	23	48.59	0	0
6.	Dedicated Irrigation	0	0	0	0
7.	Other	0	0	0	0
8.	Unaccounted	NA	40.66	NA	0
Total		4819	831.67	0	0
AF Conversion Calculator:		Metered		Unmetered	

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BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit: Crestline Village Water District	Submitted to CUWCC: 02/22/2001	Year: 2000
--	--	----------------------

A. Implementation

- | | |
|--|------------|
| 1. Based on your signed MOU date, 03/19/1996, your Agency STRATEGY DUE DATE is: | 07/01/1998 |
| 2. Has your agency developed and implemented a targeting/marketing strategy for SINGLE-FAMILY residential water use surveys? | yes |
| a. If YES, when was it implemented? | 12/15/1997 |
| 3. Has your agency developed and implemented a targeting/marketing strategy for MULTI-FAMILY residential water use surveys? | yes |
| a. If YES, when was it implemented? | 12/15/1997 |

B. Water Survey Data

Survey Counts:	Single Family Accounts	Multi-Family Units
1. Number of surveys offered:	920	10
2. Number of surveys completed:	120	8

Indoor Survey:

- | | | |
|---|-----|-----|
| 3. Check for leaks, including toilets, faucets and meter checks | yes | yes |
| 4. Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary | yes | yes |
| 5. Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as necessary; replace leaking toilet flapper, as necessary | yes | yes |

Outdoor Survey:

- | | | |
|--|-----|-------|
| 6. Check irrigation system and timers | yes | yes |
| 7. Review or develop customer irrigation schedule | yes | yes |
| 8. Measure landscaped area (Recommended but not required for surveys) | no | no |
| 9. Measure total irrigable area (Recommended but not required for surveys) | no | no |
| 10. Which measurement method is typically used (Recommended but not required for surveys) | | Other |
| 11. Were customers provided with information packets that included evaluation results and water savings recommendations? | no | no |
| 12. Have the number of surveys offered and completed, survey results, and survey costs been tracked? | no | no |
| a. If yes, in what form are surveys tracked? | | None |

C. Water Survey Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	5000	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

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BMP 02: Residential Plumbing Retrofit

Reporting Unit:
Crestline Village Water District

Submitted to CUWCC
02/22/2001

Year:
2000

A. Implementation

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts? no
2. Has your agency satisfied the 75% saturation requirement for single-family housing units? no
3. Estimated percent of single-family households with low-flow showerheads: %
4. Has your agency satisfied the 75% saturation requirement for multi-family housing units? no
5. Estimated percent of multi-family households with low-flow showerheads: %

B. Low-Flow Device Distribution Information

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices? no
 - a. If YES, when did your agency begin implementing this strategy?

Low-Flow Devices Distributed/ Installed	SF Accounts	MF Units
2. Number of low-flow showerheads distributed:	0	0
3. Number of toilet-displacement devices distributed:	10	550
4. Number of toilet flappers distributed:	0	0
5. Number of faucet aerators distributed:	0	0
6. Does your agency track the distribution and cost of low-flow devices? a. If YES, in what format are low-flow devices tracked?		no

C. Low-Flow Device Distribution Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	100	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

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BMP 03: System Water Audits, Leak Detection and Repair

Reporting Unit:
Crestline Village
Water District

Submitted to
CUWCC
02/22/2001

Year:
2000

A. Implementation

1. Has your agency completed a pre-screening system audit for this reporting year? yes
2. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:
 - a. Determine metered sales (AF) 791.01
 - b. Determine other system verifiable uses (AF) 3.44
 - c. Determine total supply into the system (AF) 831.67
 - d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required. 0.96
3. Does your agency keep necessary data on file to verify the values used to calculate verifiable uses as a percent of total production? yes
4. Did your agency complete a full-scale audit during this report year? [Field Tag: The field "awwa_audit_required_yn" could not be found]
5. Does your agency maintain in-house records of audit results or the completed AWWA audit worksheets for the completed audit? yes
6. Does your agency operate a system leak detection program? yes

B. Survey Data

1. Total number of miles of distribution system line. 88
2. Number of miles of distribution system line surveyed. 85

C. System Audit / Leak Detection Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	12000	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

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BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit:
Crestline Village Water District

Submitted to CUWCC
02/22/2001

Year:
2000

A. Implementation

- | | |
|---|-----|
| 1. Does your agency require meters for all new connections and bill by volume-of-use? | yes |
| 2. Does your agency have a program for retrofitting existing unmetered connections and bill by volume-of-use? | no |
| a. If YES, when was the plan to retrofit and bill by volume-of-use existing unmetered connections completed? | |
| 3. Number of previously unmetered accounts fitted with meters during report year. | 0 |

B. Feasibility Study

- | | |
|--|----|
| 1. Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? | no |
| a. If YES, when was the feasibility study conducted?
(mm/dd/yy) | |
| 2. Number of CII accounts with mixed-use meters. | 3 |
| 3. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period. | 0 |

C. Meter Retrofit Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

- | | |
|---|----|
| 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? | No |
|---|----|

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BMP 05: Large Landscape Conservation Programs and Incentives

Reporting Unit:
Crestline Village Water District

Submitted to CUWCC
 02/22/2001

Year:
 2000

A. Water Use Budgets

- | | |
|--|----|
| 1. Number of Dedicated Irrigation Meter Accounts: | 0 |
| 2. Number of Dedicated Irrigation Meter Accounts with Water Budgets: | 0 |
| 3. Budgeted Use for Irrigation Meter Accounts with Water Budgets (AF): | 0 |
| 4. Actual Use for Irrigation Meter Accounts with Water Budgets (AF): | 0 |
| 5. Does your agency provide water use notices to accounts with budgets each billing cycle? | no |

B. Landscape Surveys

- | | |
|--|----|
| 1. Has your agency developed a marketing / targeting strategy for landscape surveys? | no |
| a. If YES, when did your agency begin implementing this strategy? | |
| 2. Number of Surveys Offered. | 0 |
| 3. Number of Surveys Completed. | 0 |
| 4. Indicate which of the following Landscape Elements are part of your survey: | |
| a. Irrigation System Check | no |
| b. Distribution Uniformity Analysis | no |
| c. Review / Develop Irrigation Schedules | no |
| d. Measure Landscape Area | no |
| e. Measure Total Irrigable Area | no |
| f. Provide Customer Report / Information | no |
| 5. Do you track survey offers and results? | no |
| 6. Does your agency provide follow-up surveys for previously completed surveys? | no |

C. Other BMP 5 Actions

- | | |
|---|----|
| 1. An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. Does your agency provide mixed-use accounts with landscape budgets? | no |
| 2. Number of CII mixed-use accounts with landscape budgets. | 0 |
| 3. Do you offer landscape irrigation training? | no |
| 4. Does your agency offer financial incentives to improve landscape water use efficiency? | no |

Type of Financial Incentive:	Budget (Dollars/Year)	Number Awarded to Customers	Total Amount Awarded
------------------------------	-----------------------	-----------------------------	----------------------

 a. Rebates

b. Loans

c. Grants

- | | |
|--|-----|
| 5. Do you provide landscape water use efficiency information to new customers and customers changing services? | No |
| 6. Do you have irrigated landscaping at your facilities? | yes |
| a. If yes, is it water-efficient? | yes |
| b. If yes, does it have dedicated irrigation metering? | no |
| 7. Do you provide customer notices at the start of the irrigation season? | no |
| 8. Do you provide customer notices at the end of the irrigation season? | no |

D. Landscape Conservation Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

E. "At Least As Effective As"

- | | |
|---|----|
| 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? | No |
|---|----|

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BMP 06: High-Efficiency Washing Machine Rebate Programs

Reporting Unit: Crestline Village Water District	Submitted to CUWCC 02/22/2001	Year: 2000
--	----------------------------------	----------------------

A. Implementation

- | | |
|---|----|
| 1. Do any energy service providers or waste water utilities in your service area offer rebates for high-efficiency washers? | no |
| 2. Does your agency offer rebates for high-efficiency washers? | no |
| 3. What is the level of the rebate? | 0 |
| 4. Number of rebates awarded. | 0 |

B. Rebate Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

- | | |
|---|----|
| 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? | no |
|---|----|

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BMP 07: Public Information Programs

Reporting Unit:
Crestline Village Water District

Submitted to CUWCC
02/22/2001

Year:
2000

A. Implementation

1. Does your agency maintain an active public information program to promote and educate customers about water conservation? yes
2. Indicate which and how many of the following activities are included in your public information program.

Public Information Program Activity	Yes/No	Number of Events
a. Paid Advertising	no	
b. Public Service Announcement	no	
c. Bill Inserts / Newsletters / Brochures	yes	6
d. Bill showing water usage in comparison to previous year's usage	yes	
e. Demonstration Gardens	no	
f. Special Events, Media Events	no	
g. Speaker's Bureau	yes	4
h. Program to coordinate with other government agencies, industry and public interest groups and media	no	

B. Conservation Information Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	500	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

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BMP 08: School Education Programs

Reporting Unit: Crestline Village Water District	Submitted to CUWCC 02/22/2001	Year: 2000
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A. Implementation

1. Has your agency implemented a school information program to promote water conservation? no

2. Please provide information on your school programs (by grade level):

Grade	Are grade-appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
Grades K-3rd	yes	1	22	0
Grades 4th-6th	yes	1	35	0
Grades 7th-8th	yes	0	0	0
High School	yes	0	0	0

3. Did your Agency's materials meet state education framework requirements? no

4. When did your Agency begin implementing this program?

B. School Education Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	100	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

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BMP 09: Conservation Programs for CII Accounts

Reporting Unit:
Crestline Village Water District

Submitted to CUWCC
 02/22/2001

Year:
2000

A. Implementation

- 1. Has your agency identified and ranked COMMERCIAL customers according to use? yes
- 2. Has your agency identified and ranked INDUSTRIAL customers according to use? no
- 3. Has your agency identified and ranked INSTITUTIONAL customers according to use? no

Option A: CII Water Use Survey and Customer Incentives Program

4. Is your agency operating a CII water use survey and customer incentives program for the purpose of complying with BMP 9 under this option? yes

CII Surveys	Commercial Accounts	Industrial Accounts	Institutional Accounts
a. Number of New Surveys Offered	15	0	3
b. Number of New Surveys Completed	2	0	1
c. Number of Site Follow-ups of Previous Surveys (within 1 yr)	0	0	0
d. Number of Phone Follow-ups of Previous Surveys (within 1 yr)	3	0	1
CII Survey Components	Commercial Accounts	Industrial Accounts	Institutional Accounts
e. Site Visit	yes	no	yes
f. Evaluation of all water-using apparatus and processes	yes	no	yes
g. Customer report identifying recommended efficiency measures, paybacks and agency incentives	yes	no	no
Agency CII Customer Incentives	Budget (\$/Year)	No. Awarded to Customers	Total \$ Amount Awarded
h. Rebates	0	0	0
i. Loans	0	0	0
j. Grants	0	0	0
k. Others	0	0	0

Option B: CII Conservation Program Targets

- 5. Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this option? yes
- 6. Does your agency document and maintain records on how savings were realized and the method of calculation for estimated savings? no
- 7. Estimated annual savings (AF/yr) from site-verified actions taken by agency since 1991. .5
- 8. Estimated annual savings (AF/yr) from non-site-verified actions taken by agency since 1991. .6

B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

- 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

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BMP 11: Conservation Pricing

Reporting Unit:
Crestline Village
Water District

Submitted to CUWCC
02/22/2001

Year:
2000

A. Implementation

Rate Structure Data Volumetric Rates for Water Service by Customer Class

1. Residential

a. Water Rate Structure	Increasing Block
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	\$1109555
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$1002240

2. Commercial

a. Water Rate Structure	Increasing Block
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	\$0
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$0

3. Industrial

a. Water Rate Structure	Increasing Block
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	\$102000
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$42960

4. Institutional / Government

- a. Water Rate Structure Increasing Block
- b. Sewer Rate Structure Service Not Provided
- c. Total Revenue from Volumetric Rates \$144225
- d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources \$460

5. Irrigation

- a. Water Rate Structure Increasing Block
- b. Sewer Rate Structure Service Not Provided
- c. Total Revenue from Volumetric Rates \$0
- d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources \$0

6. Other

- a. Water Rate Structure Increasing Block
- b. Sewer Rate Structure Service Not Provided
- c. Total Revenue from Volumetric Rates \$0
- d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources \$0

B. Conservation Pricing Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

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BMP 12: Conservation Coordinator

Reporting Unit: Crestline Village Water District	Submitted to CUWCC: 02/22/2001	Year: 2000
--	-----------------------------------	----------------------

A. Implementation

1. Does your Agency have a conservation coordinator? yes
2. Is this a full-time position? no
3. If no, is the coordinator supplied by another agency with which you cooperate in a regional conservation program? no
4. Partner agency's name:
5. If your agency supplies the conservation coordinator:
 - a. What percent is this conservation coordinator's position? 5%
 - b. Coordinator's Name Karl B Drew
 - c. Coordinator's Title Office Manager
 - d. Coordinator's Experience and Number of Years On the job for 20 years
 - e. Date Coordinator's position was created (mm/dd/yyyy) 12/15/1997
6. Number of conservation staff, including Conservation Coordinator. 1

B. Conservation Staff Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no

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BMP 13: Water Waste Prohibition

Reporting Unit: Crestline Village Water District	Submitted to CUWCC 02/22/2001	Year: 2000
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A. Requirements for Documenting BMP Implementation

- | | |
|---|-----|
| 1. Is a water waste prohibition ordinance in effect in your service area? | yes |
| 2. Is a copy of the most current ordinance(s) on file with CUWCC? | no |

B. Implementation

1. Indicate which of the water uses listed below are prohibited by your agency or service area.

- | | |
|---|-----|
| a. Gutter flooding | yes |
| b. Single-pass cooling systems for new connections | no |
| c. Non-recirculating systems in all new conveyor or car wash systems | yes |
| d. Non-recirculating systems in all new commercial laundry systems | no |
| e. Non-recirculating systems in all new decorative fountains | yes |
| f. Other, please name
customer plumbing leaks, hosing of hard surfaces | yes |

Water Softeners:

3. Indicate which of the following measures your agency has supported in developing state law:

- | | |
|---|-----|
| a. Allow the sale of more efficient, demand-initiated regenerating DIR models. | no |
| b. Develop minimum appliance efficiency standards that: | |
| i.) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used. | no |
| ii.) Implement an identified maximum number of gallons discharged per gallon of soft water produced. | no |
| c. Allow local agencies, including municipalities and special districts, to set more stringent standards and/or ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply. | yes |

4. Does your agency include water softener checks in home water audit programs? no

5. Does your agency include information about DIR and exchange-type water softeners in educational efforts to encourage replacement of less efficient timer models? no

C. Water Waste Prohibition Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

no

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BMP 14: Residential ULFT Replacement Programs

Reporting Unit:
Crestline Village Water District

Submitted to CUWCC
02/22/2001

Year:
2000

A. Implementation

	Single-Family Accounts	Multi-Family Units
1. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	no	no

Number of Toilets Replaced by Agency Program During Report Year

Replacement Method	SF Accounts	MF Units
2. Rebate	0	0
3. Direct Install	0	0
4. CBO Distribution	0	0
5. Other	0	0

Total 0 0

6. Describe your agency's ULFT program for single-family residences. Required for new construction

7. Describe your agency's ULFT program for multi-family residences. Required for new construction

8. Is a toilet retrofit on resale ordinance in effect for your service area? no

B. Residential ULFT Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no

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Water Supply & Reuse

Reporting Unit:

Crestline Village Water District

Year:

2004

Water Supply Source Information

Supply Source Name

Quantity (AF) Supplied Supply Type

Crestline-Lake Arrowhead Water Agency

562.19

Imported

Wells

354.98

Groundwater

Total AF: 917.17

Accounts & Water Use

Reporting Unit Name:
Crestline Village Water District

Submitted to
CUWCC
10/27/2005

Year:
2004

A. Service Area Population Information:

1. Total service area population 7200

B. Number of Accounts and Water Deliveries (AF)

Type	Metered		Unmetered	
	No. of Accounts	Water Deliveries (AF)	No. of Accounts	Water Deliveries (AF)
1. Single-Family	4627	712.85	0	0
2. Multi-Family	51	23.28	0	0
3. Commercial	159	71.74	0	0
4. Industrial	0	0	0	0
5. Institutional	22	47.35	0	0
6. Dedicated Irrigation	0	0	0	0
7. Recycled Water	0	0	0	0
8. Other	0	0	0	0
9. Unaccounted	NA	63.95	NA	0
Total	4859	919.17	0	0

Metered

Unmetered

Reported as of 11/8/05

BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit: **Crestline Village Water District** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

- | | |
|--|------------|
| 1. Based on your signed MOU date, 03/19/1996, your Agency STRATEGY DUE DATE is: | 03/19/1998 |
| 2. Has your agency developed and implemented a targeting/marketing strategy for SINGLE-FAMILY residential water use surveys? | yes |
| a. If YES, when was it implemented? | 12/15/1997 |
| 3. Has your agency developed and implemented a targeting/marketing strategy for MULTI-FAMILY residential water use surveys? | yes |
| a. If YES, when was it implemented? | 12/15/1997 |

B. Water Survey Data

Survey Counts:	Single Family Accounts	Multi-Family Units
1. Number of surveys offered:	917	9
2. Number of surveys completed:	142	2

Indoor Survey:

- | | | |
|---|-----|-----|
| 3. Check for leaks, including toilets, faucets and meter checks | yes | yes |
| 4. Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary | yes | yes |
| 5. Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as necessary; replace leaking toilet flapper, as necessary | yes | yes |

Outdoor Survey:

- | | | |
|--|-----|------|
| 6. Check irrigation system and timers | yes | yes |
| 7. Review or develop customer irrigation schedule | yes | yes |
| 8. Measure landscaped area (Recommended but not required for surveys) | no | no |
| 9. Measure total irrigable area (Recommended but not required for surveys) | no | no |
| 10. Which measurement method is typically used (Recommended but not required for surveys) | | None |
| 11. Were customers provided with information packets that included evaluation results and water savings recommendations? | no | no |
| 12. Have the number of surveys offered and completed, survey results, and survey costs been tracked? | no | no |
| a. If yes, in what form are surveys tracked? | | None |
| b. Describe how your agency tracks this information. | | |

C. Water Survey Program Expenditures

This Year	Next Year
------------------	------------------

1. Budgeted Expenditures	0	0
2. Actual Expenditures	500	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

BMP 02: Residential Plumbing Retrofit

Reporting Unit: **Crestline Village Water District** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts? no
 - a. If YES, list local jurisdictions in your service area and code or ordinance in each:

2. Has your agency satisfied the 75% saturation requirement for single-family housing units? no
3. Estimated percent of single-family households with low-flow showerheads: %
4. Has your agency satisfied the 75% saturation requirement for multi-family housing units? no
5. Estimated percent of multi-family households with low-flow showerheads: %
6. If YES to 2 OR 4 above, please describe how saturation was determined, including the dates and results of any survey research.

B. Low-Flow Device Distribution Information

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices? no
 - a. If YES, when did your agency begin implementing this strategy?
 - b. Describe your targeting/ marketing strategy.

Low-Flow Devices Distributed/ Installed	SF Accounts	MF Units	
2. Number of low-flow showerheads distributed:	0	0	
3. Number of toilet-displacement devices distributed:	0	0	
4. Number of toilet flappers distributed:	0	0	
5. Number of faucet aerators distributed:	0	0	
6. Does your agency track the distribution and cost of low-flow devices?			no
<ol style="list-style-type: none"> a. If YES, in what format are low-flow devices tracked? b. If yes, describe your tracking and distribution system : 			

C. Low-Flow Device Distribution Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

BMP 03: System Water Audits, Leak Detection and Repair

Reporting Unit: **Crestline Village Water District** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

- 1. Has your agency completed a pre-screening system audit for this reporting year? yes
- 2. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:
 - a. Determine metered sales (AF) 855.22
 - b. Determine other system verifiable uses (AF) 3.86
 - c. Determine total supply into the system (AF) 917.17
 - d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required. 0.94
- 3. Does your agency keep necessary data on file to verify the values used to calculate verifiable uses as a percent of total production? yes
- 4. Did your agency complete a full-scale audit during this report year? no
- 5. Does your agency maintain in-house records of audit results or the completed AWWA audit worksheets for the completed audit? yes
- 6. Does your agency operate a system leak detection program? yes
 - a. If yes, describe the leak detection program:

Survey all mains and services every 6 months.

B. Survey Data

- 1. Total number of miles of distribution system line. 90
- 2. Number of miles of distribution system line surveyed. 90

C. System Audit / Leak Detection Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	69000	

D. "At Least As Effective As"

- 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit: **Crestline Village Water District** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

- 1. Does your agency require meters for all new connections and bill by volume-of-use? yes
- 2. Does your agency have a program for retrofitting existing unmetered connections and bill by volume-of-use? no
 - a. If YES, when was the plan to retrofit and bill by volume-of-use existing unmetered connections completed?
 - b. Describe the program:
- 3. Number of previously unmetered accounts fitted with meters during report year. 0

B. Feasibility Study

- 1. Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? no
 - a. If YES, when was the feasibility study conducted? (mm/dd/yy)
 - b. Describe the feasibility study:
- 2. Number of CII accounts with mixed-use meters. 3
- 3. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period. 0

C. Meter Retrofit Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

- 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

BMP 05: Large Landscape Conservation Programs and Incentives

Reporting Unit:
Crestline Village Water District

BMP Form Status:
100% Complete

Year:
2004

A. Water Use Budgets

- | | |
|--|----|
| 1. Number of Dedicated Irrigation Meter Accounts: | 0 |
| 2. Number of Dedicated Irrigation Meter Accounts with Water Budgets: | 0 |
| 3. Budgeted Use for Irrigation Meter Accounts with Water Budgets (AF): | 0 |
| 4. Actual Use for Irrigation Meter Accounts with Water Budgets (AF): | 0 |
| 5. Does your agency provide water use notices to accounts with budgets each billing cycle? | no |

B. Landscape Surveys

- | | |
|--|----|
| 1. Has your agency developed a marketing / targeting strategy for landscape surveys? | no |
| a. If YES, when did your agency begin implementing this strategy? | |
| b. Description of marketing / targeting strategy: | |
| 2. Number of Surveys Offered. | 0 |
| 3. Number of Surveys Completed. | 0 |
| 4. Indicate which of the following Landscape Elements are part of your survey: | |
| a. Irrigation System Check | no |
| b. Distribution Uniformity Analysis | no |
| c. Review / Develop Irrigation Schedules | no |
| d. Measure Landscape Area | no |
| e. Measure Total Irrigable Area | no |
| f. Provide Customer Report / Information | no |
| 5. Do you track survey offers and results? | no |
| 6. Does your agency provide follow-up surveys for previously completed surveys? | no |
| a. If YES, describe below: | |

C. Other BMP 5 Actions

- | | |
|---|----|
| 1. An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. Does your agency provide mixed-use accounts with landscape budgets? | no |
| 2. Number of CII mixed-use accounts with landscape budgets. | 0 |
| 3. Do you offer landscape irrigation training? | no |
| 4. Does your agency offer financial incentives to improve landscape water use efficiency? | no |

Type of Financial Incentive:	Budget (Dollars/Year)	Number Awarded to Customers	Total Amount Awarded
a. Rebates	0	0	0

b. Loans	0	0	0
c. Grants	0	0	0

5. Do you provide landscape water use efficiency information to new customers and customers changing services?

No

a. If YES, describe below:

6. Do you have irrigated landscaping at your facilities?

yes

a. If yes, is it water-efficient?

yes

b. If yes, does it have dedicated irrigation metering?

no

7. Do you provide customer notices at the start of the irrigation season?

no

8. Do you provide customer notices at the end of the irrigation season?

no

D. Landscape Conservation Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

E. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

F. Comments

BMP 06: High-Efficiency Washing Machine Rebate Programs

Reporting Unit: **Crestline Village Water District** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

- 1. Do any energy service providers or waste water utilities in your service area offer rebates for high-efficiency washers? no
 - a. If YES, describe the offerings and incentives as well as who the energy/waste water utility provider is.

- 2. Does your agency offer rebates for high-efficiency washers? no
- 3. What is the level of the rebate? 0
- 4. Number of rebates awarded. 0

B. Rebate Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

- 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

BMP 07: Public Information Programs

Reporting Unit: **Crestline Village Water District** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

1. Does your agency maintain an active public information program to promote and educate customers about water conservation? yes

a. If YES, describe the program and how it's organized.

Managers and Supervisors are available to speak at schools and service organizations. The District also provides informational inserts with its water bills. Information is also provided on the District's internet site.

2. Indicate which and how many of the following activities are included in your public information program.

Public Information Program Activity	Yes/No	Number of Events
a. Paid Advertising	no	0
b. Public Service Announcement	no	0
c. Bill Inserts / Newsletters / Brochures	yes	6
d. Bill showing water usage in comparison to previous year's usage	yes	
e. Demonstration Gardens	no	0
f. Special Events, Media Events	no	0
g. Speaker's Bureau	yes	2
h. Program to coordinate with other government agencies, industry and public interest groups and media	no	

B. Conservation Information Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	500	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

BMP 08: School Education Programs

Reporting Unit: **Crestline Village Water District** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

1. Has your agency implemented a school information program to promote water conservation? no

2. Please provide information on your school programs (by grade level):

Grade	Are grade-appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
Grades K-3rd	no	1	24	0
Grades 4th-6th	no	0	0	0
Grades 7th-8th	no	0	0	0
High School	no	0	0	0

3. Did your Agency's materials meet state education framework requirements? no

4. When did your Agency begin implementing this program?

B. School Education Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

BMP 09: Conservation Programs for CII Accounts

Reporting Unit:
Crestline Village Water District

BMP Form Status:
100% Complete

Year:
2004

A. Implementation

1. Has your agency identified and ranked COMMERCIAL customers according to use? yes
2. Has your agency identified and ranked INDUSTRIAL customers according to use? no
3. Has your agency identified and ranked INSTITUTIONAL customers according to use? yes

Option A: CII Water Use Survey and Customer Incentives Program

4. Is your agency operating a CII water use survey and customer incentives program for the purpose of complying with BMP 9 under this option? yes

CII Surveys	Commercial Accounts	Industrial Accounts	Institutional Accounts
a. Number of New Surveys Offered	12	0	3
b. Number of New Surveys Completed	4	0	1
c. Number of Site Follow-ups of Previous Surveys (within 1 yr)	0	0	0
d. Number of Phone Follow-ups of Previous Surveys (within 1 yr)	0	0	0

CII Survey Components	Commercial Accounts	Industrial Accounts	Institutional Accounts
e. Site Visit	yes	no	yes
f. Evaluation of all water-using apparatus and processes	yes	no	yes
g. Customer report identifying recommended efficiency measures, paybacks and agency incentives	yes	no	yes

Agency CII Customer Incentives	Budget (\$/Year)	No. Awarded to Customers	Total \$ Amount Awarded
h. Rebates	0	0	0
i. Loans	0	0	0
j. Grants	0	0	0
k. Others	0	0	0

Option B: CII Conservation Program Targets

5. Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this no

option?

6. Does your agency document and maintain records on how savings were realized and the method of calculation for estimated savings? no

7. Estimated annual savings (AF/yr) from site-verified actions taken by agency since 1991.

8. Estimated annual savings (AF/yr) from non-site-verified actions taken by agency since 1991.

B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	200	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

BMP 09a: CII ULFT Water Savings

Reporting Unit:

Crestline Village Water District

BMP Form Status:
100% Complete

Year:
2004

1. Did your agency implement a CII ULFT replacement program in the reporting year?
If No, please explain why on Line B. 10.

No

A. Targeting and Marketing

1. What basis does your agency use to target customers for participation in this program?

Check all that apply.

a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

2. How does your agency advertise this program? Check all that apply.

a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

B. Implementation

1. Does your agency keep and maintain customer participant information? (Read the Help information for a complete list of all the information for this BMP.)

2. Would your agency be willing to share this information if the CUWCC did a study to evaluate the program on behalf of your agency?

3. What is the total number of customer accounts participating in the program during the last year ?

CII Subsector	Number of Toilets Replaced			
	Standard Gravity Tank	Air Assisted	Valve Floor Mount	Valve Wall Mount
4.				
a. Offices				
b. Retail / Wholesale				
c. Hotels				
d. Health				
e. Industrial				
f. Schools: K to 12				
g. Eating				
h. Government				
i. Churches				
j. Other				

5. Program design.

6. Does your agency use outside services to implement this program?

a. If yes, check all that apply.

7. Participant tracking and follow-up.

8. Based on your program experience, please rank on a scale of 1 to 5, with 1 being the least frequent cause and 5 being the most frequent cause, the following reasons why customers refused to participate in the program.

a. Disruption to business

b. Inadequate payback

c. Inadequate ULFT performance

d. Lack of funding

e. American's with Disabilities Act

f. Permitting

g. Other. Please describe in B. 9.

9. Please describe general program acceptance/resistance by customers, obstacles to implementation, and other issues affecting program implementation or effectiveness.

10. Please provide a general assessment of the program for this reporting year. Did your program achieve its objectives? Were your targeting and marketing approaches effective? Were program costs in line with expectations and budgeting?

Customers have incentive to lower water consumption due to high water rates.

C. Conservation Program Expenditures for CII ULFT

1. CII ULFT Program: Annual Budget & Expenditure Data

	Budgeted	Actual Expenditure
a. Labor		
b. Materials		
c. Marketing & Advertising		
d. Administration & Overhead		
e. Outside Services		
f. Total	0	0

2. CII ULFT Program: Annual Cost Sharing

a. Wholesale agency contribution		
b. State agency contribution		
c. Federal agency contribution		
d. Other contribution		
e. Total		0

D. Comments

BMP 11: Conservation Pricing

Reporting Unit:
Crestline Village Water District

BMP Form
 Status:
100% Complete

Year:
2004

A. Implementation

Rate Structure Data Volumetric Rates for Water Service by Customer Class

1. Residential

a. Water Rate Structure	Increasing Block
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	\$1486771
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$783146

2. Commercial

a. Water Rate Structure	Increasing Block
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	\$176358
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$26618

3. Industrial

a. Water Rate Structure	Increasing Block
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	\$0
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$0

4. Institutional / Government

a. Water Rate Structure	Increasing Block
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	\$123979.34
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$3583

5. Irrigation

a. Water Rate Structure	Increasing Block
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	\$0
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$0

6. Other

a. Water Rate Structure	Increasing Block
b. Sewer Rate Structure	Service Not Provided
c. Total Revenue from Volumetric Rates	\$0
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$0

B. Conservation Pricing Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

BMP 12: Conservation Coordinator

Reporting Unit: **Crestline Village Water District** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

- 1. Does your Agency have a conservation coordinator? yes
- 2. Is this a full-time position? no
- 3. If no, is the coordinator supplied by another agency with which you cooperate in a regional conservation program ? no
- 4. Partner agency's name:
- 5. If your agency supplies the conservation coordinator:
 - a. What percent is this conservation coordinator's position? 5%
 - b. Coordinator's Name Karl B Drew
 - c. Coordinator's Title Office Manager
 - d. Coordinator's Experience and Number of Years On the job 24 years.
 - e. Date Coordinator's position was created (mm/dd/yyyy) 12/15/1997
- 6. Number of conservation staff, including Conservation Coordinator. 1

B. Conservation Staff Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

- 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

C. Water Waste Prohibition Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

**Crestline Village Water District
Source of Supply Production Report
Cubic Feet
Last 13 Months**

01/12/2001

Source Name	December	January '00	February	March	April	May	June	July	August	September	October	November	December	12 Months Total	13 Months Total
1 Aldorf	83,358	87,611	81,987	91,321	88,935	84,520	81,167	81,724	77,979	66,465	41,035	71,523	66,037	920,304	1,003,662
2 Pioneer #2	103,930	108,447	95,378	100,811	99,306	94,110	91,428	92,375	89,117	76,082	75,776	74,022	70,470	1,065,322	1,169,252
3 Pioneer #1	57,060	57,038	64,800	85,484	75,323	59,083	49,724	46,150	43,580	44,559	72,107	44,807	42,079	684,734	741,794
4 Old Mill Springs	49,820	49,310	46,990	71,650	69,120	63,240	56,260	53,480	48,430	39,720	40,710	38,780	38,420	616,110	665,930
5 Lower Wall	5,256	4,584	18,620	46,270	21,889	13,704	7,043	15,714	3,842	5,217	6,650	7,222	5,175	155,730	160,986
6 Maple Springs	90,107	90,478	82,114	88,166	84,621	78,308	73,310	71,461	67,071	59,552	62,267	54,455	48,676	860,479	950,586
7 Willow Springs	24,170	22,560	19,550	32,150	32,160	27,420	22,790	21,170	17,960	13,380	13,310	11,880	7,400	241,730	265,900
8 Brookside Springs	29,540	28,830	33,490	66,280	64,380	53,640	43,150	44,500	36,590	28,550	34,210	33,590	19,700	486,910	516,450
9 Pioneer Vertical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Hillside Springs	23,360	23,500	20,130	24,620	25,800	24,450	23,190	22,240	20,720	18,430	19,270	17,260	15,900	255,510	278,870
11 Pinecrest	46,060	36,580	38,580	58,670	76,630	77,560	70,340	65,410	57,380	46,170	48,580	40,440	36,300	652,650	698,710
12 Cypress Vertical	100,790	155,300	117,400	132,900	141,030	128,970	126,140	118,030	130,150	124,500	132,470	122,210	116,710	1,545,810	1,646,600
13 Anderson Vertical	113,300	125,300	101,000	0	34,400	142,900	119,200	122,300	97,100	85,400	84,800	98,800	58,100	1,068,300	1,182,600
14 Clifton Heights	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 Division 10 Totals	726,751	787,538	720,039	798,322	813,594	847,905	763,742	754,554	689,719	608,025	631,195	614,989	524,967	8,554,589	9,281,340
16 Division 20	183,700	187,600	162,700	170,100	166,100	157,000	153,000	154,500	148,600	135,600	107,100	108,100	106,300	1,756,700	1,940,400
17 Wilson Springs #1 & 2	221,300	219,400	223,900	207,700	237,900	238,800	233,100	240,300	175,400	116,600	245,000	226,500	217,900	2,582,500	2,803,800
18 Wilson Vertical	129,300	128,900	112,100	121,200	124,700	120,100	116,900	116,800	110,700	101,200	107,100	97,000	90,500	1,347,200	1,476,500
19 Forest	96,400	103,900	91,800	100,200	101,800	98,300	96,500	98,400	96,400	88,200	96,800	89,700	86,000	1,148,000	1,244,400
20 Jewell, Inc. 64	29,500	30,200	27,600	33,600	34,300	32,300	30,300	30,100	28,800	28,600	28,600	30,400	29,100	361,900	391,400
21 Cathcart	27,600	27,300	24,000	30,300	27,700	24,900	22,000	21,000	18,700	18,100	20,400	20,800	19,100	274,300	301,900
22 Bergschrund	6,600	7,300	8,300	13,900	13,900	12,900	10,300	12,000	9,500	7,200	5,200	6,400	3,300	110,200	116,800
23 Chantrelles	21,900	22,800	22,100	30,800	32,000	29,900	800	4,200	23,500	22,500	22,400	20,300	16,800	250,100	272,000
24 Valle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 Chillon 64	31,700	33,800	24,600	26,800	27,100	26,600	27,000	28,700	29,000	27,500	31,400	29,600	28,600	340,900	372,600
26 Government	6,400	6,500	6,200	9,300	9,200	8,700	7,200	6,700	6,300	5,400	5,800	5,400	5,200	81,900	88,300
27 Lewter	754,400	767,700	703,300	743,900	774,700	749,500	697,100	712,700	646,900	548,900	669,800	634,200	605,000	8,253,700	9,008,100
28 Division 20 Totals	1,481,151	1,555,236	1,423,339	1,542,222	1,586,294	1,597,405	1,460,842	1,467,254	1,336,619	1,156,925	1,300,995	1,249,189	1,129,967	16,808,289	18,289,440
29 Total District Sources	651,337	684,091	496,123	675,000	766,845	1,186,898	1,587,166	1,691,845	1,578,209	1,378,075	1,187,647	852,807	743,583	12,808,289	13,459,626
30 C.L.A.W.A.	218,390	226,631	187,112	177,781	174,412	216,738	252,045	275,775	307,380	284,225	233,489	170,789	164,799	2,671,176	2,887,566
31 Crest Forest 6"	90,120	76,430	50,896	63,249	49,011	80,535	138,824	96,123	161,658	195,949	153,155	107,594	100,789	1,274,213	1,364,333
32 Mile High Park 2"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33 Mile High Park 4"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34 Pinecrest 2"	25,267	36,056	23,570	25,775	33,503	41,765	50,936	57,032	57,620	41,778	45,348	23,503	22,888	459,774	485,041
35 Stewart Ranch	0	0	0	0	0	0	67,500	149,104	0	348,035	136,444	90,615	65,668	857,366	857,366
36 Lake Drive 2"	0	0	0	0	0	0	0	344,226	557,754	121,658	0	0	0	1,023,638	1,023,638
37 Lake Drive 4"	0	0	0	0	0	0	0	40,909	61,230	0	0	0	0	158,155	158,155
38 Camp Seely	983,114	1,023,208	757,701	941,805	1,023,771	1,581,952	2,096,471	2,748,864	2,796,445	2,369,720	1,736,083	1,245,308	1,097,727	19,419,055	20,402,169
39 C.L.A.W.A. Totals	2,464,285	2,578,446	2,181,040	2,484,027	2,612,065	3,179,357	3,557,313	4,216,118	4,133,064	3,526,645	3,037,078	2,484,497	2,227,894	36,227,344	38,691,609
40 Grand Totals	9,207,936	9,835,684	8,601,079	9,279,027	9,389,159	11,766,263	15,144,479	15,907,963	15,711,273	14,904,720	14,214,725	13,733,686	13,173,514	194,810,633	207,141,209

Crestline Village Water District Source of Supply Production Report System Loss - Last 13 Months In Cubic Feet

Sources of Supply	Dec 1999	Jan 2000	Feb 2000	Mar 2000	Apr 2000	May 2000	Jun 2000	Jul 2000	Aug 2000	Sep 2000	Oct 2000	Nov 2000	Dec 2000	Total
Wells	1,481,151	1,555,238	1,423,339	1,542,222	1,588,294	1,597,405	1,460,842	1,467,254	1,336,619	1,156,925	1,300,995	1,249,189	1,129,967	18,289,440
Purchased Water	983,114	1,023,208	757,701	941,805	1,023,771	1,581,952	2,096,471	2,748,864	2,796,445	2,369,720	1,736,083	1,245,308	1,097,727	20,402,169
Adjustment to Wells *	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Water Supplied	2,464,265	2,578,446	2,181,040	2,484,027	2,612,065	3,179,357	3,557,313	4,216,118	4,133,064	3,526,645	3,037,078	2,494,497	2,227,694	38,691,609

Water Used **	Dec 1999	Jan 2000	Feb 2000	Mar 2000	Apr 2000	May 2000	Jun 2000	Jul 2000	Aug 2000	Sep 2000	Oct 2000	Nov 2000	Dec 2000	Total
Metered Accounts	1,034,354	1,112,345	974,229	1,048,118	1,186,507	1,382,731	1,588,855	1,755,760	1,708,827	1,677,169	1,381,972	1,114,239	970,892	16,916,098
Crestline Area	1,239,659	1,344,758	1,102,794	1,181,271	1,257,555	1,444,940	1,639,959	2,078,559	2,129,635	1,727,330	1,776,009	1,260,725	1,197,250	19,390,444
Lake Gregory Area	24,068	(13,855)	(6,962)	30,559	(20,321)	46,704	3,433	(68,056)	77,202	(3,851)	(45,231)	(732)	(73,859)	(50,901)
Change in Storage	18,397	6,618	3,764	8,569	10,948	15,553	10,639	22,288	13,137	10,692	10,066	6,183	13,122	149,976
Flushing & Other	2,316,478	2,449,866	2,073,925	2,278,517	2,434,689	2,889,928	3,242,886	3,788,551	3,928,801	3,411,340	3,102,816	2,380,415	2,107,505	36,405,617

Accounted for Water	Dec 1999	Jan 2000	Feb 2000	Mar 2000	Apr 2000	May 2000	Jun 2000	Jul 2000	Aug 2000	Sep 2000	Oct 2000	Nov 2000	Dec 2000	Total
System Loss (CF)	147,787	128,580	107,215	205,510	177,376	289,429	314,427	427,567	204,263	115,305	(65,738)	114,082	120,189	2,285,992
System Loss (%)	6.0%	5.0%	4.9%	8.3%	6.8%	9.1%	8.8%	10.1%	4.9%	3.3%	-2.2%	4.6%	5.4%	5.9%
System Loss (GPM)	25.6	20.9	19.2	34.4	29.7	50.1	54.4	71.6	34.2	20.7	(10.7)	19.8	21.5	30.1

Month to Month Averaging ***	Dec 1999	Jan 2000	Feb 2000	Mar 2000	Apr 2000	May 2000	Jun 2000	Jul 2000	Aug 2000	Sep 2000	Oct 2000	Nov 2000	Dec 2000	Total
System Loss (CF)	55,336	136,184	117,898	156,363	191,443	233,403	301,928	370,997	315,815	159,784	24,784	24,172	117,136	2,207,343
System Loss (%)	2.3%	5.5%	5.0%	6.6%	7.5%	7.9%	9.0%	9.5%	7.5%	4.1%	0.6%	1.2%	5.0%	5.7%
System Loss (GPM)	9.6	23.2	20.0	26.8	32.1	39.9	52.3	63.0	52.9	27.4	5.0	4.5	20.6	29.0

Estimated Uses	Dec 1999	Jan 2000	Feb 2000	Mar 2000	Apr 2000	May 2000	Jun 2000	Jul 2000	Aug 2000	Sep 2000	Oct 2000	Nov 2000	Dec 2000	Total
Known leaks - Est. loss	27,530	27,530	1,203	1,925	201	10,041	17,941	10,695	3,850	2,077	12,032	12,045	3,144	130,214
Total Estimated Uses	27,530	27,530	1,203	1,925	201	10,041	17,941	10,695	3,850	2,077	12,032	12,045	3,144	130,214

Unaccounted for Water (CF)	Dec 1999	Jan 2000	Feb 2000	Mar 2000	Apr 2000	May 2000	Jun 2000	Jul 2000	Aug 2000	Sep 2000	Oct 2000	Nov 2000	Dec 2000	Total
Unaccounted For (%)	4.9%	3.9%	4.9%	8.2%	6.8%	8.8%	8.3%	9.9%	4.9%	3.2%	-2.6%	4.1%	5.3%	5.6%
Unaccounted For (GPM)	20.8	16.4	19.0	34.1	29.7	48.4	51.3	69.9	33.6	20.3	(12.6)	17.7	21.0	28.3

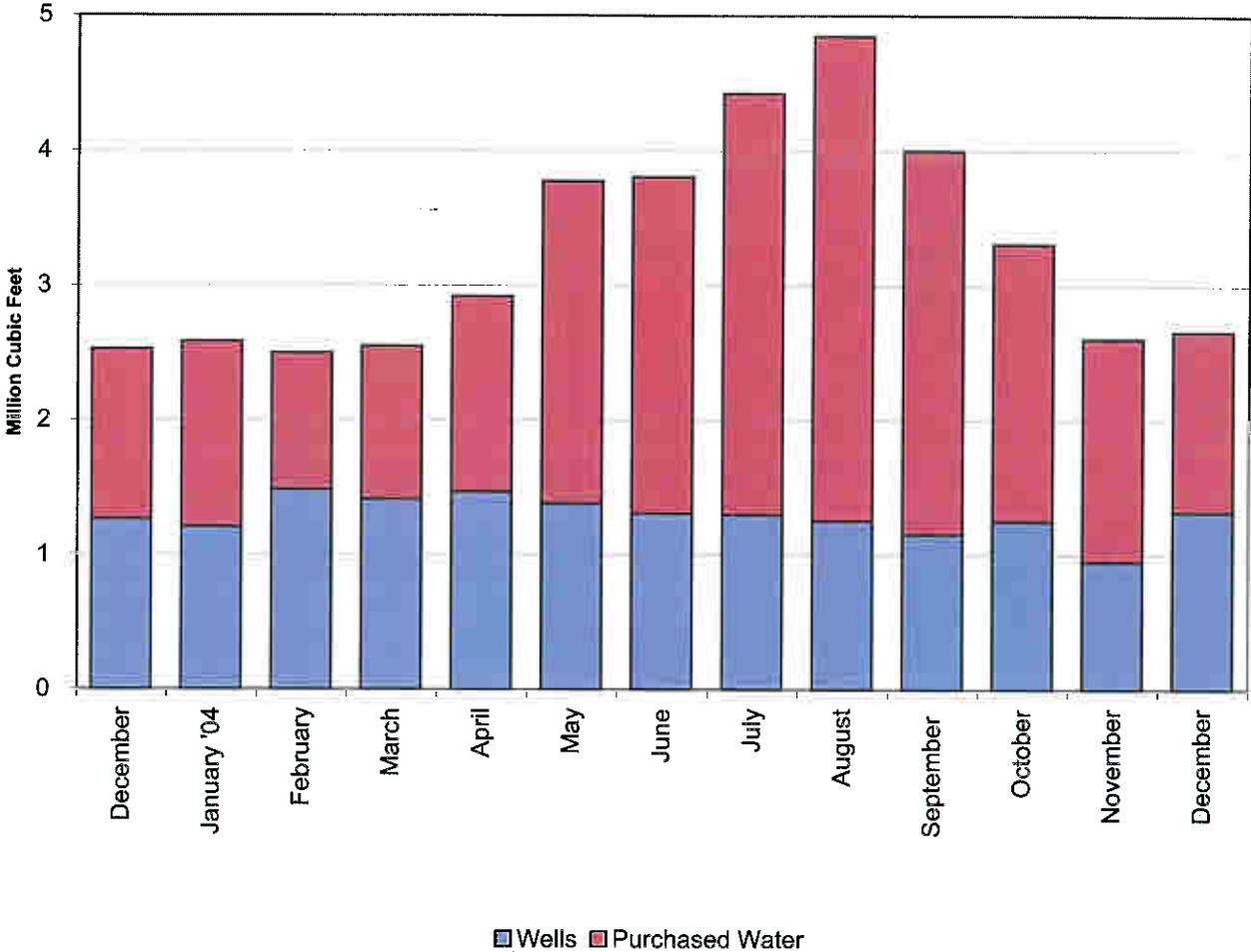
Number of Days In Period	Dec 1999	Jan 2000	Feb 2000	Mar 2000	Apr 2000	May 2000	Jun 2000	Jul 2000	Aug 2000	Sep 2000	Oct 2000	Nov 2000	Dec 2000	Total
	30	32	29	31	31	31	30	31	31	29	32	30	29	395

System Loss Costs		Dec 2000	Mo. Average
Cost of System Loss:		\$3,092	\$4,483
Cost of 5% System Loss:		2,941	3,929
Amount above (below) 5% System Loss:		\$151	\$554
Note: Cost is calculated at highest cost (GLAWA Rate: \$2.64/100 c.f.)			

NOTES:
 Estimated - Includes estimated billing period. This month includes estimated consumption. The following billing period will reflect adjustments to actual water used.
 * - Currently there are no Adjustments to Wells being made.
 ** - Water Used - Metered Accounts is adjusted to the time period in Total Water Supplied.
 *** - Month to Month averaging averages the System Loss for each period with the immediately prior period for trending purposes.

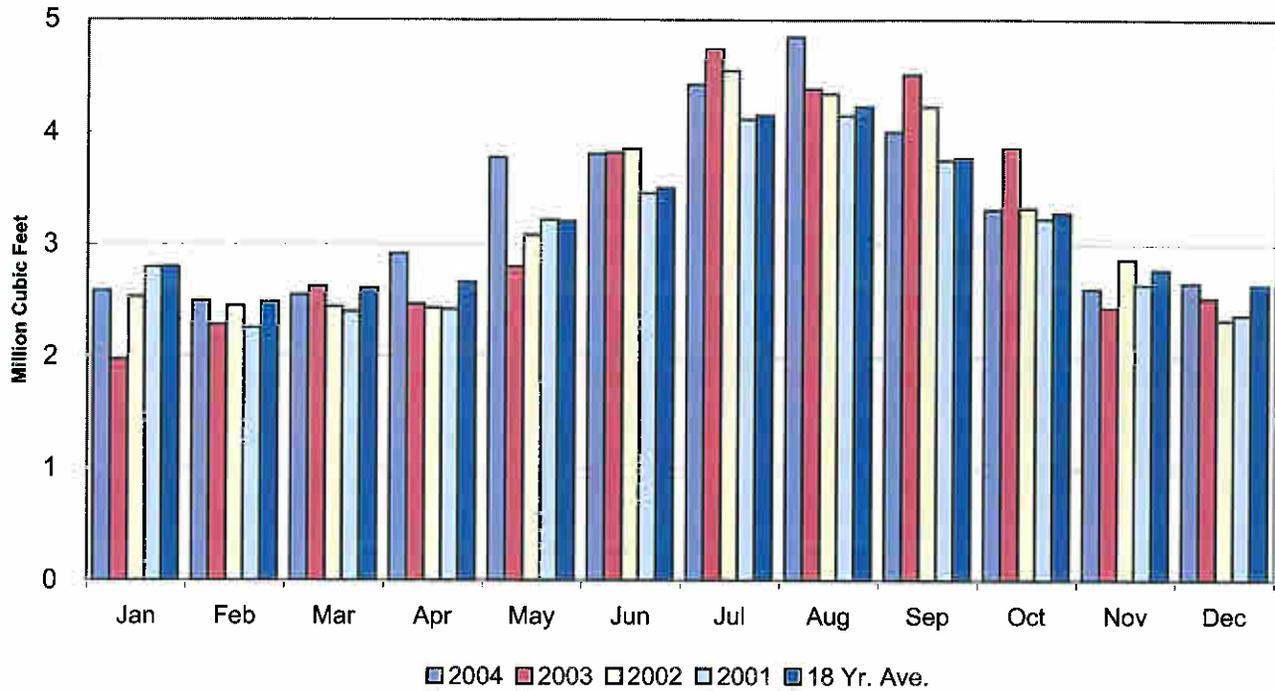
Crestline Village Water District

Water Sources - Last 13 Months

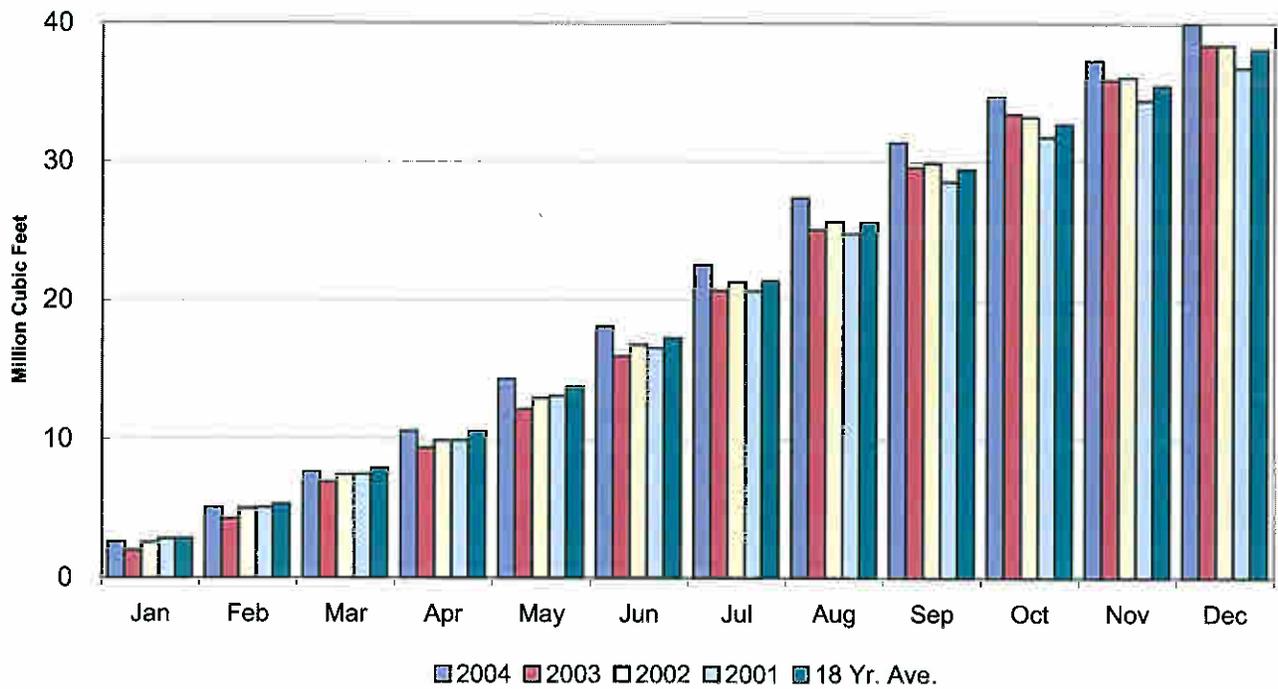


Crestline Village Water District

Total Production by Month

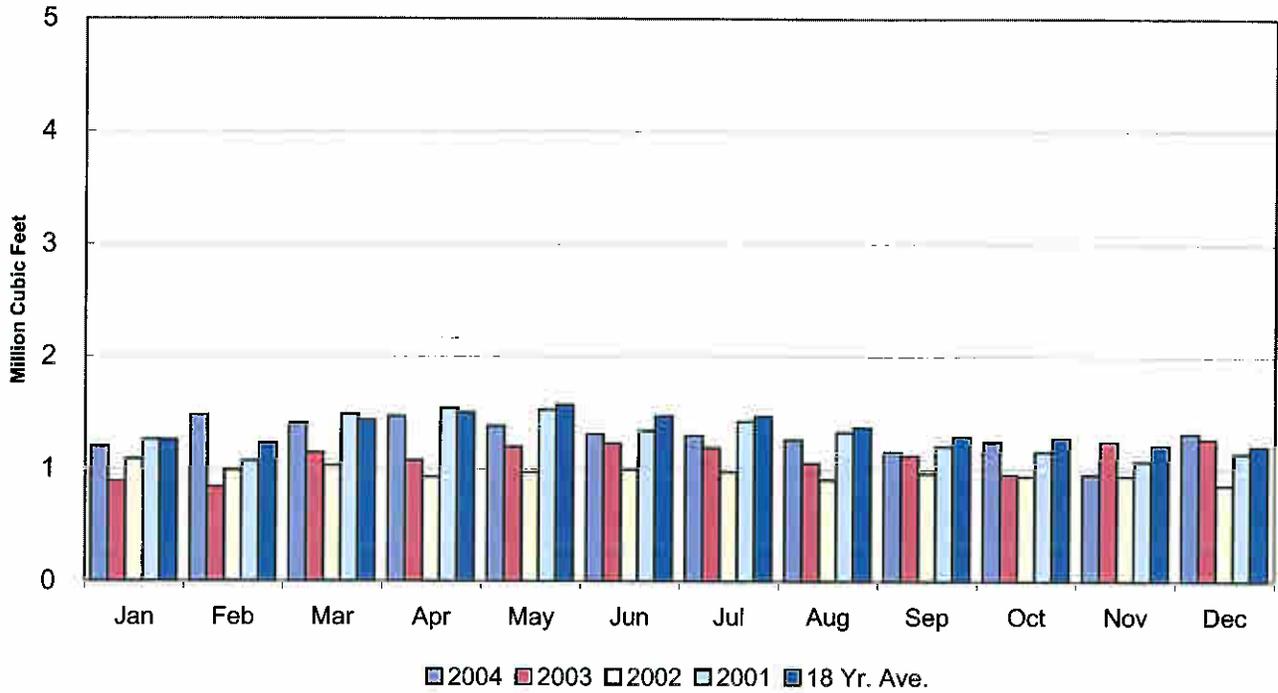


Total Production Cumulative

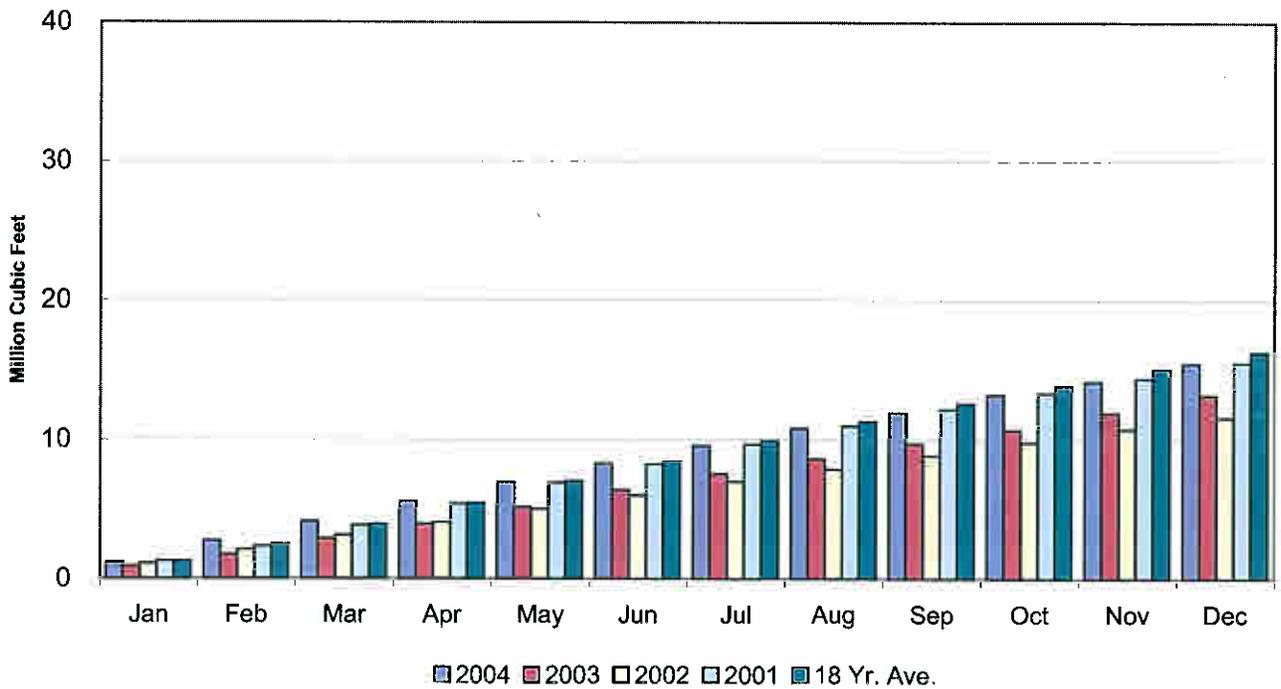


Crestline Village Water District

Well Production by Month

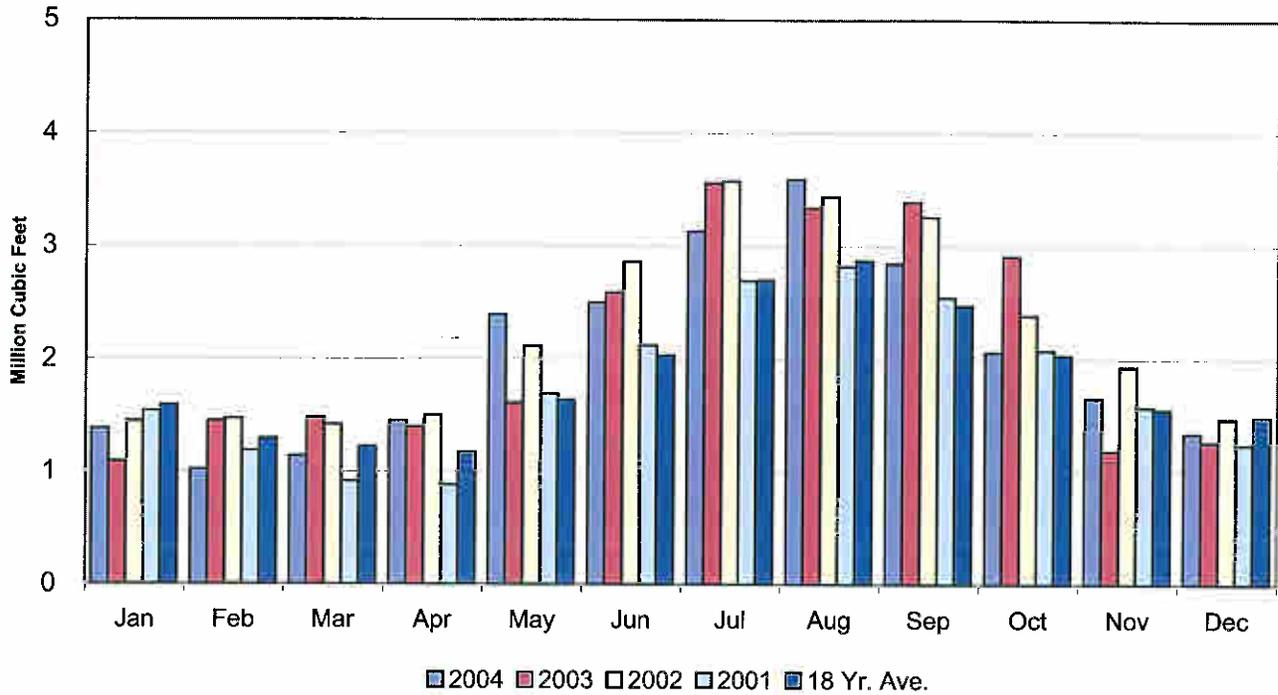


Well Production Cumulative

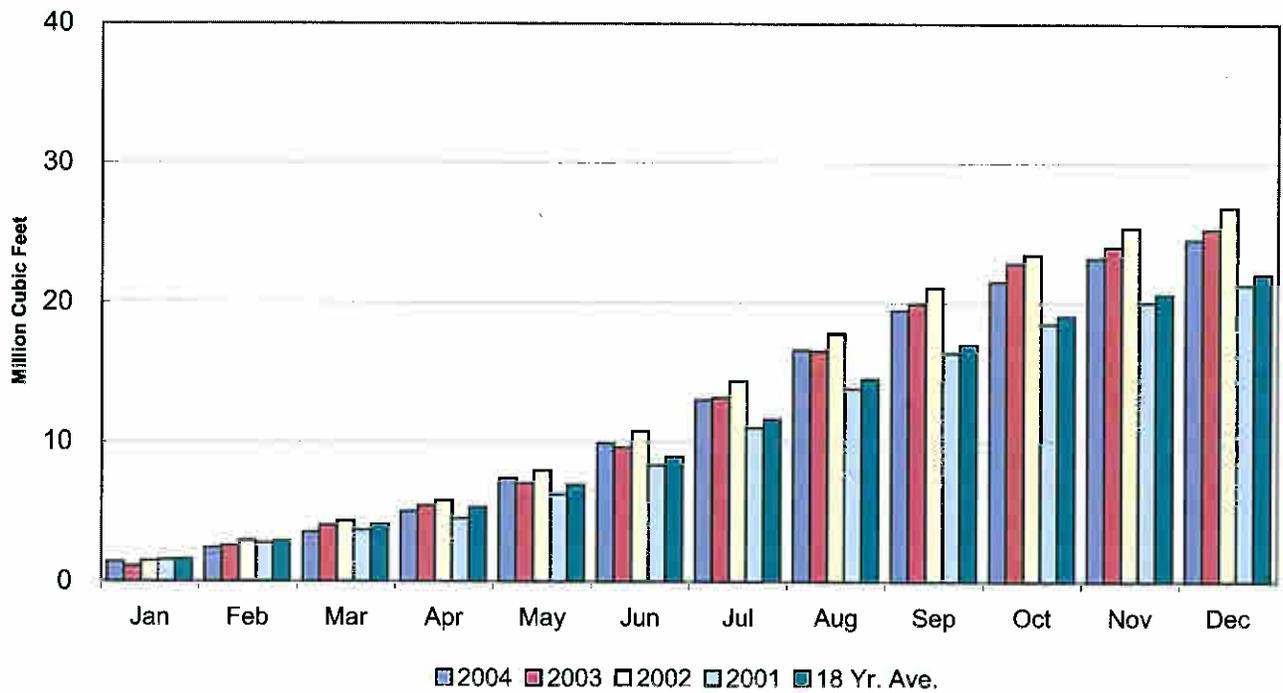


Crestline Village Water District

Purchased Water by Month



Purchased Water Cumulative



Appendix E
CVWD Ordinances and Resolutions

ORDINANCE NO. 29

AN ORDINANCE OF THE BOARD OF THE CRESTLINE
VILLAGE COUNTY WATER DISTRICT ESTABLISHING A
WATER CONSERVATION PROGRAM.

WHEREAS, severe drought conditions exist within the State of California, created by five consecutive years of below average rainfall; and

WHEREAS, the Crestline Village County Water District (hereinafter "District") receives more than 80% of its water supply from Crestline-Lake Arrowhead Water Agency (hereinafter "Agency") and depends on said water supply; and

WHEREAS, on February 14, 1991, the Board of Directors of the Crestline-Lake Arrowhead Water Agency adopted a water conservation program, effective March 1, 1991, designed to restrict the amount of water available to the District; and

WHEREAS, the production of the wells and springs that supply the balance of the District's water supply has decreased by more than 20% during the calendar year 1990 due to the extended drought conditions; and

WHEREAS, action must be taken by this Board of Directors in order to (1) protect the health, safety, and welfare of the customers

of the District, (2) assure the maximum beneficial use of the water supplies of the District, and (3) ensure that there will be sufficient water supplies to meet the basic needs of human consumption, sanitation and fire protection; and

WHEREAS, this ordinance is enacted in conformity with Section 3100, et seq., and Section 31026 of the Water Code,

NOW, THEREFORE, BE IT ORDERED by the Board of Directors of Crestline Village County Water District as follows:

Section 1. Purpose and Findings

Based upon information submitted and testimony received at the Public Hearing held on February 21, 1991, this Board of Directors finds that a drought emergency and water shortage exists which requires the enactment of this Ordinance. The District has received notice from the Agency that the amount of water delivered to the District during calendar year 1991 will be 5% less than the amount delivered in 1990, and that more severe reductions will likely be imposed if drought conditions continue during the first few months of 1991. These conditions impose a threat to the public health, safety, and welfare because of a reduced water supply for human consumption, sanitation and fire protection. In order to conserve the water supply for the greatest public benefit, it is necessary to enact and impose rules and regulations governing various water uses.

Section 2. Water Use Reduction Program

No customer of the District shall make, cause, use or permit the use of water received from the District for any purpose in a manner contrary to any provision of this ordinance or in an amount in excess of that use permitted by the conservation phase then in effect pursuant to this ordinance or pursuant to action taken by the Board in accordance to the provisions herein.

Each customer of the District is required to install a shut-off valve on the customer's side of the meter, outside the meter box, to allow on-site plumbing to be drained as necessary to prevent loss of water from frozen or broken pipes. It shall be the customers' responsibility to maintain their on-site plumbing and operate these valves as necessary to prevent water loss, especially during periods of freezing conditions when the premises are unoccupied.

A. Phase I - General Water Use Reduction Program

- (1) Consumer Curtailment. The District has established a Surcharge for Excess Consumption which establishes 1,250 cubic feet per month as the basic allocation for each single family residential customer. The customer of record may request an increase in this basic

allocation as provided in Section 3 below. Multi-Family, Commercial and Political Entity accounts may request an increase in this basic allocation based upon the number of units served and/or uses of water as provided in Section 3 below. Every consumer shall eliminate the waste of potable water from the District in an effort to conserve District water supplies.

- (2) Surcharge for Excess Consumption. The rate for water used in excess of the basic allocation shall be one and one half times the rate for the basic allocation.

B. Phase II - 10 Percent Water Use Reduction Program

- (1) Consumer Curtailment. The basic allocation is reduced to 1,125 cubic feet per month. Every consumer shall eliminate the waste and non-essential use of potable water from the District in an effort to aid the District in achieving a ten percent reduction of the amount of water used by all consumers during calendar year 1990.
- (2) Surcharge for Excess Consumption. The rate for water used in excess of the basic allocation shall be two (2) times the rate for the basic allowance.
- (3) Prohibited Uses. It shall be unlawful for any consumer

to use potable water from the District for the following uses:

(a) The washing of sidewalks, walkways, driveways, parking lots and all other hard-surfaced areas by direct hosing, except as may be necessary to properly dispose of flammable or otherwise dangerous liquids or substances, or as otherwise necessary to prevent or eliminate materials dangerous to the public health and safety;

(b) The escape of water through breaks, leaks or dripping faucets within the consumer's plumbing or private distribution system for any substantial period of time within which such break or leak should be reasonably have been discovered or corrected. It shall be presumed that a period of forty-eight hours after the consumer discovers such a leak or break, or receives notice from the District of such leak or break, whichever occurs first, is reasonable time within which to correct such leak or break;

(c) The use of running water during freezing weather to prevent the freezing of water lines. Water lines should be protected by other means.

(d) Using a hose to wash cars, trucks, boats, trailers or other vehicles unless it has a spring-release shut-off nozzle;

(e) Lawn or garden watering, or any other irrigation or other water use, in a manner which results in water runoff or over spray of the areas being watered. Every consumer is deemed to have under control at all times its water distribution lines and facilities, and to know the manner and extent of its water use and any runoff. Any irrigation, or landscaping installed after the date upon which this subsection has been activated, is prohibited;

(f) Sprinkling for dust control;

(g) Any water use that results in the runoff of water in street, gutters, driveways, or other waterways.

C. Phase III - 20 Percent Water Use Reduction Program

- (1) Consumer Curtailment. The basic allocation is reduced to 1,000 cubic feet per month. Every consumer shall eliminate the waste and non-essential use of potable water from the District in an effort to aid the District in achieving a twenty percent reduction of the amount of water used by all consumers during calendar

year 1990.

(2) Surcharge for Excess Consumption. The rate for water used in excess of the basic allocation shall be two and one half (2 1/2) times the rate for the basic allowance.

(3) Prohibited Uses. It shall be unlawful for any consumer to use potable water from the District contrary to the provisions of subsection B (3), or for the following uses:

(a) The draining and refilling of a pool or spa unless necessary for significant health or safety reasons:

(b) Using water for decorative fountains or the filling of decorative lakes or ponds, except when reclaimed or recycled water is used;

D. Phase IV - 30 Percent Water Use Reduction Program

(1) Consumer Curtailment. The basic allocation is reduced to 875 cubic feet per month. Every consumer shall eliminate the waste and non-essential use of potable water from the District in an effort to aid the District in achieving a thirty percent reduction of the

amount of water used by all consumers during calendar year 1990.

(2) Surcharge for Excess Consumption. The rate for water used in excess of the basic allocation shall be three (3) times the rate for the basic allowance.

(3) Prohibited Uses. It shall be unlawful for any consumer to use potable water from the District contrary to the provisions of subsection C (3), or for the following uses:

(a) The filling of new pools or spas;

(b) Sewer or storm system flushing for normal maintenance, and fire department training, except as approved in writing by the District;

(c) Use of potable water for construction;

(d) The washing of motor vehicles, trailers, boats or other vehicles by hosing, or by use of water directly from faucets or other outlets, except:

It shall be lawful to wash such vehicles from water contained in a bucket or container not

exceeding three (3) gallon capacity; and

This prohibition shall not be applicable to the washing of such vehicles at commercial vehicle washing facilities operated at fixed locations which employ water recycling equipment.

(e) Lawn or garden watering, or any other irrigation, beyond what is needed to sustain plant life.

E. Phase V - 40 Percent Water Use Reduction Program

- (1) Consumer Curtailment. The basic allocation is reduced to 750 cubic feet per month. Every consumer shall eliminate the waste and non-essential use of potable water from the District in an effort to aid the District in achieving a forty percent reduction of the amount of water used by all consumers during calendar year 1990.
- (2) Surcharge for Excess Consumption. The rate for water used in excess of the basic allocation shall be three and one half (3 1/2) times the rate for the basic allowance.
- (3) Prohibited Uses. It shall be unlawful for any consumer to use potable water from the District contrary to the

provisions of subsection D (3), or for the following uses:

(a) The use of potable water for any non-essential outdoor use. Essential uses of potable water are uses necessary for the health, sanitation, fire protection or safety of the consumer or public.

F. Phase VI - 50 Percent Water Use Reduction Program

- (1) Consumer Curtailment. The basic allocation is reduced to 625 cubic feet per month. Every consumer shall eliminate the waste and non-essential use of potable water from the District in an effort to aid the District in achieving a fifty percent reduction of the amount of water used by all consumers during calendar year 1990.
- (2) Surcharge for Excess Consumption. The rate for water used in excess of the basic allocation shall be four (4) times the rate for the basic allowance.
- (3) Prohibited Uses. It shall be unlawful for any consumer to use potable water from the District contrary to the provisions of subsection E (3), or for any non-essential use. Essential uses of potable water are

uses necessary for the health, sanitation, fire protection or safety of the consumer or public.

Section 3 - Exceptions

A. Exceptions to Basic Allocation. Exceptions to increase the amount of water which may be used without exceeding the basic allotment may be granted by the District Manager or his designee, upon written request for the following reasons:

- (1) Substantiated medical requirements.
- (2) Multiple family units served by a single meter.
- (3) A single family residential household exceeding six (6) residents.
- (4) Unnecessary and undue hardship to the consumer or the public, including but not limited to, adverse economic impacts.

B. Exceptions to Prohibited Uses. Exceptions to prohibited uses may be granted by the General Manager or his designee, upon written request if it is found and determined that failure to do so would cause an unnecessary and undue hardship to the consumer or the public, including, but not limited to, adverse economic impacts.

C. Further Exceptions to Prohibited Uses. Exceptions to

prohibited uses shall be granted by the General Manager or his designee, upon written request if it is found and determined that failure to do so would cause an emergency condition affecting the health, sanitation, fire protection or safety of the consumer or the public.

Section 4 - Water Use Reduction Phase Implementation

- A. Initial Implementation. Phase II shall be effective upon the effective date of this ordinance, and the provisions of Phase II as set forth in Section 2 hereof shall apply to all water consumption on and after said date.
- B. Phase Change Initiation. The District shall monitor and evaluate the projected supply and demand for water by its customers, and shall recommend to the Board of Directors any change in customer curtailment as indicated in the respective phases of this ordinance. The Board of Directors shall, by resolution, order that the appropriate phase of water use reduction be implemented. The effective date of said phase change shall be published once in a local newspaper and a notice shall be mailed to all property owners and customers of record within 10 days after the adoption date of the resolution changing the phase of water use reduction. Said phase shall remain in effect until a different phase is initiated and made effective pursuant to

the provisions of this section. The District can, by resolution, order a more stringent phase be implemented, and it need not order one phase at a time.

Section 5 - Enforcement

Any consumer who violates the provisions of Section 2 herein may be cited by the District or its representative.

- A. Excess Use. When the requirements of Sections 2B, 2C, 2D, 2E or 2F are in effect, any customer using more than 125% of the basic allocation, for any billing period, will be warned that such use is considered waste of water, and that a reduction in use is required to avoid being subject to the enforcement provisions of subsection B.
- B. (1) First Violation. Any consumer found by the District to be violating the regulations and restrictions on water use set forth in this ordinance shall receive a written warning, which describes the penalty for subsequent violations.
- (2) Second Violation. In the event that a second violation is found by the District, the District may add a single \$50 charge to the next water bill of the premises for which or upon which the violation has occurred.

- (3) Third Violation. In the event that a third violation is found by the District, the District will discontinue the water service pursuant to the District's Rules and Regulations and the appropriate reinstatement charge will apply. Installation of flow restrictor may be required before service is reinstated. If the installation of a flow restrictor is required, the District may add a charge to the next water bill of the premises, that covers the cost of said installation.

Section 6 - Restrictions on New Connections

A new service connection shall only be granted upon the following conditions being met:

- A. Equipped with ultralow-flush toilets and low-flow showers, faucets and appliances.
- B. Equipped with an approved hot water circulation system.
- C. Use of drought tolerant or native plants for exterior landscaping.

Information regarding required devices and landscaping may be obtained at the District's office.

Section 7 - Notification

It is the responsibility of each property owner to notify any person or persons that use their premises, including, but not limited to weekend rentals, multi-unit apartments, motels and commercial buildings, of any water use restrictions currently in effect. The District will mail a notice to all property owners and customers of record within 10 days of the adoption date of a water use reduction phase change.

Section 8 - Tampering, Damage and Unauthorized Use of District Property

It is unlawful for any person to operate, damage or tamper with District valves, meters and appurtenances. Such unlawful use is governed by Section XIII of Resolution No. 200, as amended by Resolution No. 252 of this Board.

Section 9 - Use of Surcharge and Other Charges

The revenues collected by the District as a result of consumer use of water in excess of the basic allocation set forth in Section 2 and the charges to be added to consumer bills set forth in Section 5 shall be deposited into the operating fund as reimbursement for the District's costs and expenses of administration and enforcement of this ordinance, and to provide funding to promote, encourage and implement water conservation programs.

Section 10 - Rules and Regulations for Water Service

The provisions of this ordinance are in addition to all other District Rules and Regulations for Water Service, and in the event of a conflict between this ordinance and other rules and regulations relating to the same subject matter, the conflict shall, insofar as practical, be resolved to implement the purpose of this ordinance.

Sections 11 - Severability

If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be unconstitutional or invalid by a court of competent jurisdiction, such decision shall not affect the remaining portions of this ordinance and those shall remain in full force and effect.

Sections 12 - CEQA Exemption

This Board finds and determines that the adoption of this ordinance and implementation of the measures set forth herein are exempt from requirements of the California Environmental Quality Act because of the necessity to mitigate an emergency.

Section 13 - Effective Date

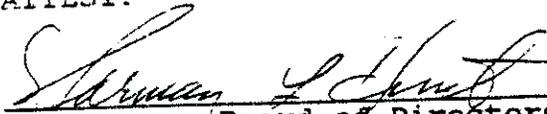
This ordinance shall take effect on March 1, 1991.

ADOPTED this 21st day of February, 1991.



President, Board of Directors
Crestline Village County Water District

ATTEST:



Secretary, Board of Directors
Crestline Village County Water District

CERTIFICATION

I hereby certify that the foregoing ordinance was duly and regularly adopted and passed by the Board of Directors of Crestline Village County Water District at a regular meeting thereof held on the 21st day of February, 1991 at Crestline, California, by the following vote of the members thereof:

AYES: Directors Olson, Anderson, Dorton, Wright, Huckell

NOES: None

ABSENT: None

ABSTAIN: None

Secretary - Board of Directors
Crestline Village County Water District

ORDINANCE NO. 30

AN ORDINANCE OF THE BOARD OF DIRECTORS OF
CRESTLINE VILLAGE WATER DISTRICT MODIFYING THE
BASIC MONTHLY WATER ALLOCATIONS SET FORTH IN THE
DISTRICT'S WATER CONSERVATION PROGRAM AND
AMENDING ORDINANCE NO. 29

WHEREAS, Crestline Village Water District receives more than 80% of its water supply from Crestline-Lake Arrowhead Water Agency (the "Agency") and depends on said water supply; and

WHEREAS, rainfall in the last five years and in this current water year has been substantially below normal in the watershed supplying the Agency and there is a serious drought which is causing water shortages in many communities of the State; and

WHEREAS, the production of the wells and springs that supply the balance of the District's water supply have also decreased due to the extended drought conditions; and

WHEREAS, these shortages have and will cause this District, its residents, businesses and industries to suffer adversely, such that an active water conservation program is essential to protect against drought and help alleviate against Statewide shortages; and

WHEREAS, the District, on February 21, 1991 adopted Ordinance No. 29 establishing a Water Conservation Program for the District in order to (1) protect the health, safety and welfare of the customers of the District, (2) assure the maximum beneficial use of the water supplies of the District, and (3) ensure that there will be sufficient water supplies to meet the basic needs of human consumption, sanitation and fire protection; and

WHEREAS, based on information provided by the District staff regarding the water conservation efforts of the District customers generally, and in order to more efficiently implement the District's Water Conservation Program, the District Board of Directors desires to modify the basic monthly water allocations for the six water conservation phases set forth in Ordinance No. 29; and

NOW, THEREFORE, BE IT ORDAINED by the Board of Directors of Crestline Village Water District as follows:

1. That the basic monthly water allocations set forth in Section 2 - Water Use Reduction Program, of Ordinance No. 29, be amended as follows:

PHASE I - 1,300 cubic feet per month.

PHASE II - 1,200 cubic feet per month.

PHASE III - 1,100 cubic feet per month.

PHASE IV - 900 cubic feet per month.

PHASE V - 800 cubic feet per month.

PHASE VI - 700 cubic feet per month.

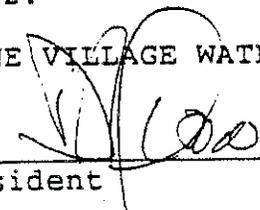
2. The Secretary of the Board shall certify to the adoption of this Ordinance and shall cause the same to be posted within the District, and published as required by law.

3. Except as specifically modified by this Ordinance No. 30, Ordinance No. 29 remains in full force and effect.

4. The increase in basic monthly water allocations set forth in this Ordinance shall take effect at the earliest billing period feasible for the District customers.

ADOPTED this 27th day of August, 1992.

CRESTLINE VILLAGE WATER DISTRICT

By: 

President

ATTEST:



Secretary, Board of Directors
Crestline Village Water District

CERTIFICATION

That the foregoing Ordinance was duly and

RESOLUTION NO. 279

RESOLUTION OF THE BOARD OF DIRECTORS OF
CRESTLINE VILLAGE WATER DISTRICT
CHANGING THE EXISTING PHASE OF WATER
CONSERVATION UNDER THE DISTRICT'S
WATER CONSERVATION PROGRAM

WHEREAS, the Board of Directors of Crestline Village Water District adopted Ordinance No. 29 on February 21, 1991, which Ordinance established the District's Water Conservation Program; and

WHEREAS, the District Board of Directors adopted Ordinance No. 30 on August 27, 1992, which ordinance modified the basic monthly allocations of water for the water conservation phases set forth in Ordinance No. 29; and

WHEREAS, pursuant to Section 4 of Ordinance No. 29, the District Board of Directors may, by resolution, order a change in the existing phase of water conservation; and

WHEREAS, the District is presently operating under Phase II, requiring a 10% reduction in water use within the District and establishing a basic allocation of 1200 cubic feet of water per month; and

WHEREAS, based on the recommendation and report of District Staff, the projected supply and demand for water throughout the District is such that Phase I provides for more appropriate conservation of water within the District;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Crestline Village Water District as follows:

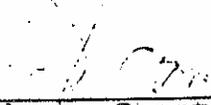
Section 1. Based on the report and recommendation of the District Staff, the projected water supply and demand for water in the District is such that water conservation efforts as provided in Phase I of the District's Water Conservation Program, implemented pursuant to Ordinance No. 29, as modified by Ordinance No. 30, are sufficient to encourage the conservation of water within the District's service area.

Section 2. Effective with the March 1993 billing period for the District's service areas, the conservation phase of the District's Water Conservation Program shall be changed from Phase II to Phase I.

Section 3. This Board finds and determines that reduction to Phase I is exempt from the requirements of the California Environmental Quality Act because it can be seen with certainty that there is no possibility that this activity may have a significant effect on the environment and the decision relates only to ongoing operation of District facilities.

Section 4. In accordance with Section 4 of Ordinance No. 29, within 10 days after the adoption date of this Resolution, the Secretary of the District shall publish the effective date of this phase change once in a local newspaper and shall mail notice of the phase change to all property owners and customers of record.

ADOPTED, SIGNED and APPROVED this 18th day of February, 1993.



President, Crestline
Village Water District

ATTEST:



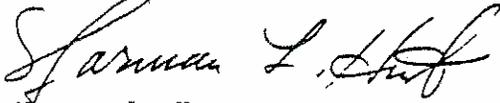
Secretary, Crestline
Village Water District

PUBLIC NOTICE

NOTICE OF CHANGE IN THE EXISTING STAGE OF
WATER CONSERVATION UNDER THE
CRESTLINE VILLAGE WATER DISTRICT'S
WATER CONSERVATION PROGRAM

Effective as of the March 1993 billing period, the Board of Directors of Crestline Village Water District adopted Resolution No. 279 and, thereby, changed the existing phase of water conservation under the District's Water Conservation Program. The District was operating under Phase II requiring a 10% reduction in water use and establishing a basic allocation of 1200 cubic feet of water per month. Pursuant to Resolution No. 279, the District will be operating under Phase I with a basic allocation of 1300 cubic feet of water per month.

February 22, 1993

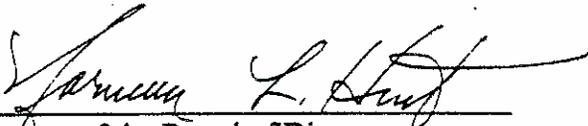


Norman L. Hunt
Secretary, Board of Directors
CRESTLINE VILLAGE WATER DISTRICT

STATE OF CALIFORNIA)
) ss.
COUNTY OF SAN BERNARDINO)

I, NORMAN L. HUNT, Secretary of the Board of Directors of the Crestline Village Water District, do hereby certify that the foregoing Resolution was duly adopted by the Board of Directors of said District at a regular meeting of said Board held on the 18th day of February, 1993, and that it was adopted by the following roll call vote:

AYES: Olson, Anderson and Huckell
NOES:
ABSENT: Vukovich
ABSTAINED:



Secretary of the Board of Directors
of Crestline Village Water District

(SEAL)

STATE OF CALIFORNIA)
) ss.
COUNTY OF SAN BERNARDINO)

I, NORMAN L. HUNT, Secretary of the Board of Directors of the Crestline Village Water District, do hereby certify that the above and foregoing is a full, true and correct copy of Resolution No. 279 of said Board, and that the same has not been amended or repealed.

DATED: _____

Secretary of the Board of Directors
of Crestline Village Water District

(SEAL)

1. That the basic monthly water allocations set forth in Section 2 - Water Use Reduction Program, of Ordinance No. 29, be amended as follows:

PHASE I - 1,300 cubic feet per month.

PHASE II - 1,200 cubic feet per month.

PHASE III - 1,100 cubic feet per month.

PHASE IV - 900 cubic feet per month.

PHASE V - 800 cubic feet per month.

PHASE VI - 700 cubic feet per month.

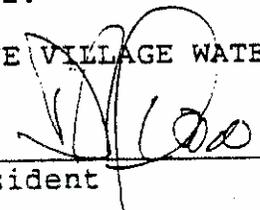
2. The Secretary of the Board shall certify to the adoption of this Ordinance and shall cause the same to be posted within the District, and published as required by law.

3. Except as specifically modified by this Ordinance No. 30, Ordinance No. 29 remains in full force and effect.

4. The increase in basic monthly water allocations set forth in this Ordinance shall take effect at the earliest billing period feasible for the District customers.

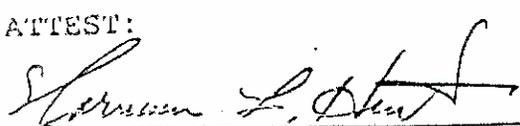
ADOPTED this 27th day of August, 1992.

CRESTLINE VILLAGE WATER DISTRICT

By: 

President

ATTEST:



Secretary, Board of Directors
Crestline Village Water District

CERTIFICATION

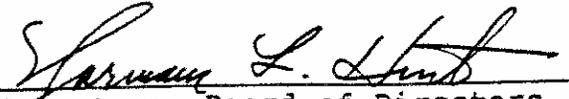
I hereby certify that the foregoing Ordinance was duly and regularly adopted and passed by the Board of Directors of Crestline Village Water District at a regular meeting thereof held on the 27th day of August, 1992 at Crestline, California, by the following vote of the members thereof;

AYES: Olson, Anderson, Huckell, Wright, Vukovich

NOES:

ABSENT:

ABSTAIN:


Secretary, Board of Directors
Crestline Village Water District

Appendix F
References

APPENDIX F

REFERENCES

The following documents were referred to as general information sources during preparation of this plan. They are available for public review at the locations abbreviated after each listing and spelled out at the end of this section. Some of these documents are also available at public libraries and at other public agency offices in the area.

Cited as:	Source:
DHS 1996	California Department of Health Services, Division of Drinking Water and Environmental Management. Annual Reports to the Drinking Water Program; most recent reports filed by Crestline-Lake Arrowhead Water Agency and its purveyor customers (with 200 or more service connections). April 1996. (<i>Available at DHS</i>)
DWR/AWWA 1992	California Department of Water Resources, Water Conservation Office, and American Water Works Association, California-Nevada Section. Water Audit and Leak Detection Guidebook. Water Conservation Guidebook No. 5 . August 1986. Revised June 1992. (<i>Available at DWR</i>)
DWR 1993	California Department of Water Resources. Program Environmental Impact Report, State Drought Water Bank. Final. November 1993. (<i>Available at DWR</i>)
RWQCB 1994	California Regional Water Quality Control Board, Lahontan Region. Water Quality Control Plan for the Lahontan Region, North and South Basins. Approved by Regional Board, October 1994. (Subsequently approved by California Office of Administrative Law, March 1995.) (<i>Available at RWQCB</i>)
CUWCC 1994	California Urban Water Conservation Council. Memorandum of Understanding Regarding Urban Water Conservation in California. Amended September, 1991; February 10, 1993; March 9, 1994. Current as of April 1996. (<i>Available at CVWD</i>)
SBCo 2006	County of San Bernardino. San Bernardino County General Plan. Adopted 2006. (<i>Available at Planning</i>)
CLAWA 1963	Crestline-Lake Arrowhead Water Agency. Revised Eligibility Report on Imported Water Requirements and Financial Analysis of Ability to Meet Capital Recovery Costs. Prepared by Albert A. Webb Associates. 1963. (<i>Available at CLAWA</i>)

- CLAWA 1991 Crestline-Lake Arrowhead Water Agency. Water Conservation Program for the Crestline-Lake Arrowhead Water Agency. January 1991. *(Available at CLAWA)*
- CLAWA 1992 Crestline-Lake Arrowhead Water Agency. Resolution No. 475. Resolution of the Board of Directors of Crestline-Lake Arrowhead Water Agency Adopting an Urban Water Shortage Contingency Plan. February 6, 1992. *(Available at CLAWA)*
- CLAWA 2005 Crestline-Lake Arrowhead Water Agency. Urban Water Management Plan. Prepared by Albert A. Webb Associates; May 2006. *(Available at CLAWA and Webb)*
- CSan 1992 Crestline Sanitation District. Master Plan Update. Prepared by Engineering-Science, Inc. February 1992. *(Available at CSan)*
- CVWD 1992 Crestline Village Water District. Urban Water Shortage Contingency Plan. Prepared by Albert A. Webb Associates. June 18, 1992. *(Available at CVWD)*
- CVWD 2001 Crestline Village Water District. System Schematic. 2001. *(Available at CVWD)*
- CVWD 2005 Crestline Village Water District. Sources of Supply, Source of Supply Production Report, System Report, System Loss, and accompanying reports. January 2005. *(Available at CVWD)*
- NCDC 2005 National Climatic Data Center, Ashville, North Carolina. Data for Lake Arrowhead Fire Department Station 91, San Bernardino County, California. *(Available at Webb)*
- SCAG 2005 Southern California Association of Governments. SCAG growth forecast data and 2000 census data by census tract and place for Regional Statistical Area 30. *(Available at Webb)*
- USFS 2005 U.S. Department of Agriculture, Forest Service. Final Land and Resource Management Plan, San Bernardino National Forest Land and Resource Management Plan. 2005. *(Available at USFS)*
- Census 2000 U.S. Department of Commerce, Bureau of the Census. 2000 Census of Population and Housing. Census Tracts. Riverside-San Bernardino-Ontario, California Standard Metropolitan Statistical Area. Data from Tables P-1, P-9, P-10, P-11, H-1, H-7, H-8, and Appendix B. *(Available at Webb)*

USGS U.S. Department of the Interior, Geological Survey. Topographic maps, 7.5 minute series, California--San Bernardino County. (*Available at Planning*):

1980 Harrison Mtn. Quadrangle, 1967, photorevised 1980.

1988a Lake Arrowhead Quadrangle, 1971, photorevised 1988.

1988b San Bernardino North Quadrangle, 1967, photorevised 1988.

1988c Silverwood Lake Quadrangle, 1956, photorevised 1988.

Location:

Address:

DHS California Department of Health Services, Division of Drinking Water and Environmental Management, 1836 South Commercenter Circle, Suite B, San Bernardino, CA 92408, (909) 383-4328

DWR California Department of Water Resources, Southern District Office, 770 Fairmount Avenue, Glendale, CA 91209-9068, (808) 543-4622; also Bulletins and Reports, P. O. Box 942836, Sacramento, CA 94236-0001, (916) 653-0197

RWQCB California Regional Water Quality Control Board, Lahontan Region, Victorville Branch Office, 15428 Civic Drive, Suite 100, Victorville, CA 92392-2383, (619) 241-6583

DEHS County of San Bernardino, Department of Environmental Health Services, Water Section, 385 North Arrowhead Avenue, San Bernardino, CA 92415-0160, (909) 387-4666

Planning County of San Bernardino, Planning Department, 385 North Arrowhead Avenue, San Bernardino, CA 92415-0180, (909) 387-8311

CLAWA Crestline-Lake Arrowhead Water Agency, 24116 Crest Forest Drive, P. O. Box 3880, Crestline, CA 92325, (909) 338-1779

CSan Crestline Sanitation District, 24516 Lake Drive, P. O. Box 3395, Crestline, CA 92325-3395, (909) 338-1751

CVWD Crestline Village Water District, 777 Cottonwood Drive, P. O. Box 3347, Crestline, CA 92325, (909) 338-1727

LACSD Lake Arrowhead Community Services District, 201 North Cumberland Drive, P. O. Box 789, Lake Arrowhead, CA 92352, (909) 337-8555

LAFCO Local Agency Formation Commission for the County of San Bernardino, 175 West Fifth Street, 2nd Floor, San Bernardino, CA 92415-0490, (909) 387-5866

SCAG Southern California Association of Governments, 818 West Seventh Street, 12th Floor, Los Angeles, CA 90017-3435, (213) 236-1800

USFS U.S. Department of Agriculture, Forest Service, San Bernardino National Forest, Arrowhead District Ranger Station, 28104 Highway 18, P. O. Box 350, Skyforest, CA 92385, (909) 337-2444; also San Bernardino National Forest, Supervisor's Office, 1824 South Commercenter Circle, San Bernardino, CA 92408, (909) 383-5588

Webb Albert A. Webb Associates, 3788 McCray Street, Riverside, CA 92506-2927, (951) 686-1070

Appendix G
2004 System Loss-Last 13 Months
In Cubic Feet
CVWD Source of Supply Production Report

Crestline Village Water District Source of Supply Production Report System Loss - Last 13 Months In Cubic Feet

Sources of Supply	Dec	Jan '04	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Wells	1,263,239	1,203,993	1,479,357	1,410,039	1,465,116	1,378,649	1,305,973	1,298,046	1,255,034	1,153,752	1,248,395	950,212	1,316,300	18,169,595
Purchased Water	1,261,645	1,379,143	1,017,192	1,137,809	1,453,075	2,391,578	2,496,524	3,125,936	3,587,166	2,845,040	2,060,626	1,653,863	1,340,962	25,750,559
Adjustment to Wells *	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Water Supplied 2,524,884 2,583,136 2,496,549 2,547,848 2,918,191 3,770,227 3,802,497 4,421,982 4,842,200 3,998,792 3,309,021 2,604,075 2,657,262 42,476,664

Water Used **	Estimated													
Metered Accounts	Estimated													
Crestline Area	1,113,809	1,059,544	1,075,444	1,090,009	1,269,262	1,667,726	1,627,181	1,956,823	2,023,252	1,765,222	1,387,162	1,122,489	1,011,672	18,169,595
Lake Gregory Area	1,336,010	1,268,432	1,257,414	1,139,924	1,474,424	1,725,082	1,837,095	2,205,178	2,451,711	2,187,898	2,040,345	1,202,573	1,347,429	21,533,515
Change in Storage	(49,960)	59,248	(31,334)	(17,009)	(5,804)	(2,673)	22,628	21,025	140	(18,927)	(30,166)	72,319	(30,264)	(10,877)
Flushing & Other	6,665	20,417	6,880	7,040	8,520	15,457	21,801	5,193	24,018	4,483	14,058	515	435	135,482

Accounted for Water 2,406,624 2,407,641 2,308,404 2,279,964 2,746,402 3,405,592 3,508,705 4,188,219 4,499,121 3,938,676 3,411,399 2,397,896 2,329,272 39,827,915

System Loss (CF)	118,260	175,495	188,145	267,884	171,789	364,635	293,792	233,763	343,079	60,116	(102,378)	206,179	327,990	2,648,749
System Loss (%)	4.7%	6.8%	7.5%	10.5%	5.9%	9.7%	7.7%	5.3%	7.1%	1.5%	-3.1%	7.9%	12.3%	6.2%
System Loss (GPM)	20.5	30.4	31.5	46.4	29.7	59.2	52.6	40.5	55.7	10.4	(16.6)	36.9	56.8	34.8

Month to Month Averaging **														
System Loss (CF)	111,279	146,878	181,820	228,015	219,837	268,212	329,214	263,778	288,421	201,598	(21,131)	51,901	267,085	2,536,907
System Loss (%)	4.5%	5.7%	7.2%	9.0%	8.2%	7.8%	8.7%	6.5%	6.2%	4.3%	-0.8%	2.4%	10.1%	6.0%
System Loss (GPM)	19.9	25.4	31.0	39.0	38.1	44.5	55.9	46.5	48.1	33.0	(3.1)	10.2	46.9	33.4

Estimated Uses
Known leaks - Est. loss 845 14,439 8,021 8,021 0 8,021 0 8,487 401 10,310 4,878 4,582 14,559 7,701 82,245

Total Estimated Uses 845 14,439 8,021 8,021 0 8,021 0 8,487 401 10,310 4,878 4,582 14,559 7,701 82,245

Unaccounted for Water (CF)	117,415	161,056	180,124	257,884	163,768	364,635	285,305	233,362	332,769	55,238	(106,960)	191,620	320,289	2,566,504
Unaccounted For (%)	4.7%	6.2%	7.2%	10.5%	5.6%	9.7%	7.5%	5.3%	6.9%	1.4%	-3.2%	7.4%	12.1%	6.0%
Unaccounted For (GPM)	20.3	27.9	30.2	46.4	28.4	59.2	51.1	40.4	54.0	9.6	(17.4)	34.3	55.5	33.8

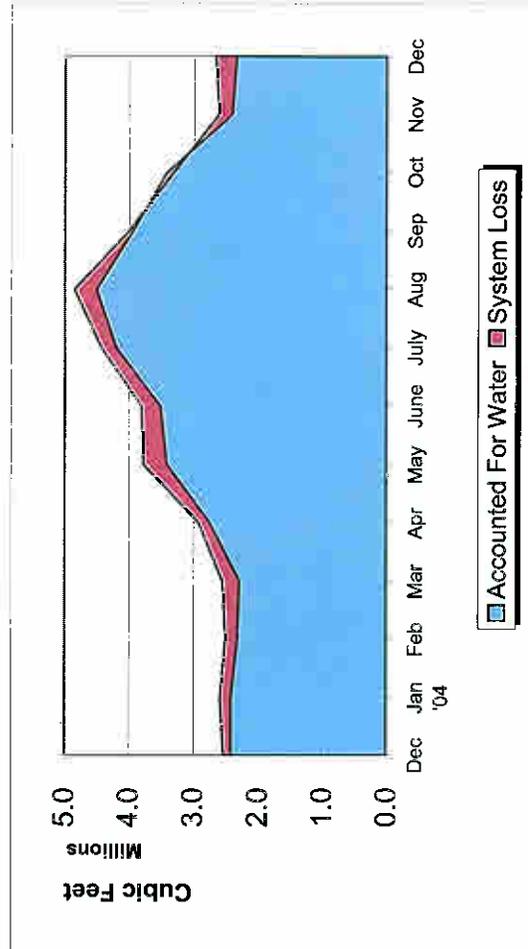
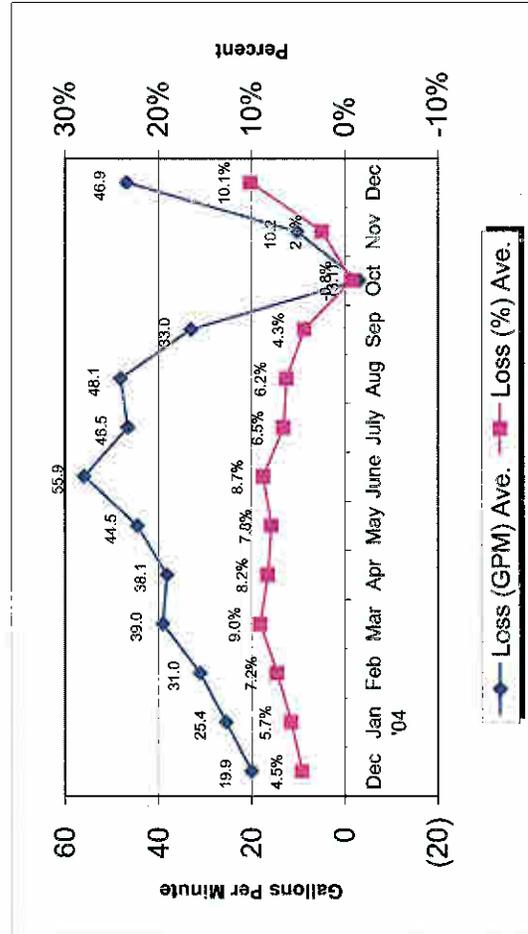
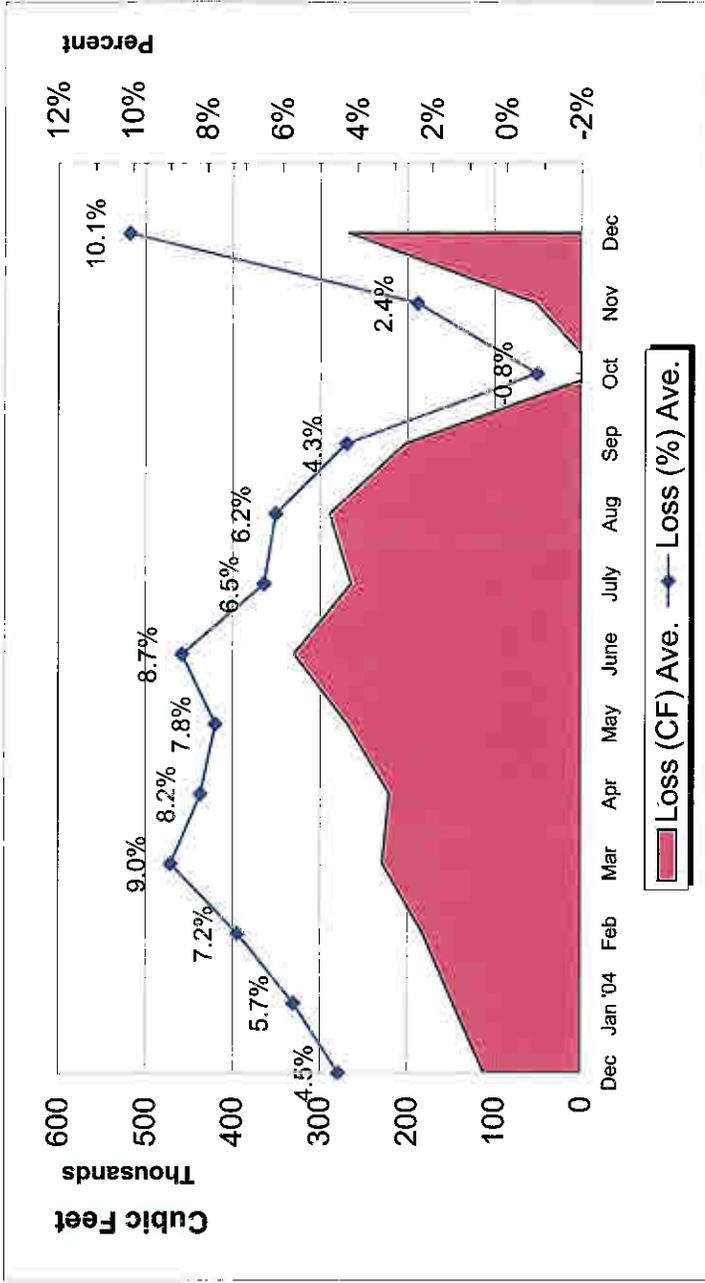
Number of Days in Period 30 30 31 30 30 32 29 30 32 30 30 32 29 30 395

System Loss Costs		
Cost of System Loss:	This Month	Average
Cost of 5% System Loss:	\$7,051	\$5,152
Amount above (below) 5% System Loss:	\$3,543	4,313
Note: Cost is calculated at highest cost (CLAWA Rate: \$2.64/100 c.f.)		

NOTES:
 Estimated - Includes estimated billing period. This month includes estimated consumption. The following billing period will reflect adjustments to actual water used.
 * - Currently there are no Adjustments to Wells being made.
 ** - Water Used - Metered Accounts is adjusted to the time period in Total Water Supplied
 *** - Month to Month averaging averages the System Loss for each period with the immediately prior period for trending purposes.

Crestline Village Water District

System Loss
Last 13 Months
With Month to Month
Averaging



**Crestline Village Water District
Source of Supply Production Report
Cubic Feet
Last 13 Months**

Source Name	December	January '04	February	March	April	May	June	July	August	September	October	November	December	Last 12 Months	13 Months
Division 10															
Altford	61,483	59,398	61,793	65,653	57,466	61,332	53,148	52,737	54,485	49,563	19,852	9,760	65,561	610,748	672,231
Pioneer #2	56,692	55,914	57,385	53,877	46,932	55,719	44,462	51,144	53,376	48,488	19,235	5,899	35,809	528,240	584,932
Pioneer #1	35,187	29,839	33,642	34,817	29,457	28,888	24,602	24,999	25,836	23,419	9,309	9,843	54,038	328,689	363,886
Old Mill Springs	30,930	32,250	33,520	42,490	19,250	37,860	28,610	29,330	28,950	25,110	27,790	40,610	51,560	397,330	428,260
Lower Well	1,227	0	0	0	0	0	0	0	0	0	0	0	0	1,227	0
Maple Springs	13,569	9,928	9,915	8,482	6,917	6,239	2,396	1,913	284	666	36	11,653	5,636	61,065	74,634
Willow Springs	5,820	8,720	8,890	8,380	8,490	7,850	7,820	4,840	4,190	3,000	3,640	0	7,860	73,680	79,500
Brookside Springs	18,230	2,970	23,820	28,120	24,930	0	0	18,350	8,730	3,950	17,060	27,850	26,890	161,770	200,000
Pioneer Vertical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hillside Springs	7,790	0	0	0	0	0	31,110	11,250	10,300	7,900	9,700	9,790	9,860	89,910	97,700
Pinecrest	45,760	42,890	41,750	48,590	50,450	38,950	49,650	42,380	40,270	33,560	34,480	44,800	49,270	517,040	562,800
Pinecrest Vertical	0	0	183,600	146,790	176,710	186,810	164,260	165,910	176,270	157,390	168,710	140,060	156,830	1,911,300	2,091,600
Cypress Vertical	123,100	118,850	120,630	113,370	112,450	119,840	107,450	110,240	82,810	110,180	111,070	0	16,550	1,740,510	1,740,510
Anderson Vertical	80,300	76,400	83,300	77,100	78,000	106,700	100,900	91,000	36,400	34,000	124,100	69,800	144,700	1,123,440	1,246,540
Mormon Springs	909	9,390	20,304	13,038	23,601	24,483	21,409	22,152	22,891	21,373	22,845	16,024	21,450	238,961	239,870
Clifton Heights	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Division 10 Totals	481,007	443,549	678,549	640,708	712,583	591,521	612,377	600,515	528,522	504,669	575,387	379,389	646,014	6,913,783	7,394,790
Division 20															
Wilson Springs #1 & 2	102,600	93,300	89,000	82,600	77,500	84,800	74,200	73,700	76,000	69,700	72,800	58,500	73,600	925,800	1,028,400
Wilson Vertical	180,300	151,600	183,900	173,500	170,500	177,900	158,400	165,100	159,800	145,500	172,300	114,100	138,700	1,911,300	2,091,600
Felsen Vertical	194,180	187,290	187,160	180,490	176,710	186,810	164,260	165,910	176,270	157,390	168,710	140,060	156,830	2,047,890	2,242,070
Horst	74,500	69,400	67,400	64,300	63,100	65,100	56,800	56,000	58,600	52,200	53,200	49,100	51,500	706,700	781,200
Jewell No. 64	77,900	77,000	79,000	77,300	77,500	81,800	74,400	70,000	81,300	75,100	80,300	68,124	75,254	917,078	994,978
Cathcart	28,900	27,300	25,500	25,700	25,100	26,700	22,100	22,700	23,800	21,500	23,000	23,800	24,600	291,800	320,700
Bergschrund	15,872	14,454	14,038	13,721	13,163	14,608	7,296	7,071	8,942	7,563	7,128	8,007	7,292	119,283	135,155
Chamois	3,700	3,800	3,800	5,700	5,100	4,500	2,900	2,100	1,500	900	1,800	3,800	3,900	39,800	43,500
Chamois Vertical	74,180	105,600	119,410	114,620	111,960	115,110	102,040	100,650	105,400	88,630	62,570	68,910	102,720	1,197,620	1,271,800
Valle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chillon 64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Government	25,600	26,200	27,000	26,600	27,200	29,000	26,900	28,100	30,400	26,500	26,400	32,022	31,190	337,512	363,112
Lewler	4,500	4,500	4,600	4,800	4,500	4,800	4,300	4,200	4,500	4,100	4,800	4,400	4,700	54,300	58,800
Division 20 Totals	782,232	760,444	800,808	769,331	762,533	787,128	693,596	695,531	726,512	649,083	673,008	570,823	670,286	8,549,083	9,331,315
Total District Sources	1,263,239	1,203,993	1,479,357	1,410,039	1,465,116	1,378,649	1,305,973	1,296,046	1,255,034	1,153,752	1,248,395	950,212	1,316,300	15,462,866	16,726,105
C.L.A.W.A.															
Crest Forest 6"	702,674	776,337	521,524	580,749	691,711	1,063,102	1,110,685	1,360,027	1,553,877	1,367,513	1,080,882	856,684	823,797	11,786,898	12,489,572
Mile High Park 2"	0	0	0	0	0	0	0	0	0	0	33,342	188,021	167,607	388,970	388,970
Mile High Park 4"	228,342	204,545	174,465	186,230	214,706	311,230	262,701	315,775	340,642	337,032	270,187	0	0	2,617,513	2,845,855
Pinecrest 2"	297,059	319,866	52,353	60,936	0	0	0	0	0	0	45,775	8,222	70,013	557,165	854,224
Pinecrest 4"	134	15,775	268,850	237,701	443,984	511,230	470,989	692,647	791,979	681,150	493,449	600,936	279,545	5,488,235	5,488,369
Stewart Ranch	33,436	11,952	0	0	0	0	0	0	0	0	0	0	0	11,952	45,388
Lake Drive 2"	0	0	0	0	28,510	0	0	0	0	56,136	36,858	0	0	121,604	121,604
Lake Drive 4"	0	0	0	0	35,595	466,711	571,257	701,337	777,807	390,241	61,898	0	0	3,004,946	3,004,946
Camp Seely	0	50,668	0	72,193	38,369	39,305	80,882	56,150	122,861	12,988	38,235	0	0	511,631	511,631
C.L.A.W.A. Totals	1,261,645	1,379,143	1,017,192	1,137,809	1,453,975	2,391,578	2,496,524	3,125,936	3,587,166	2,845,040	2,060,626	1,653,863	1,340,962	24,488,914	25,750,559
Grand Totals	2,524,884	2,583,136	2,496,549	2,547,848	2,918,191	3,770,227	3,802,497	4,421,982	4,842,200	3,998,792	3,309,021	2,604,075	2,657,262	39,951,780	42,476,664

**Crestline Village Water District
Source of Supply Production Report
Cubic Feet
Last 13 Months**

01/17/05

Source Name	December	January '04	February	March	April	May	June	July	August	September	October	November	December	Last 12 Months	13 Months
District Sources															
Division 10	481,007	443,549	678,549	640,708	712,583	591,521	612,377	600,515	528,522	504,669	575,387	379,389	646,014	6,913,783	7,394,790
Division 20	782,232	760,444	800,808	769,331	752,533	787,128	693,596	695,531	726,512	649,083	673,008	570,823	670,286	8,549,093	9,331,315
Total	1,263,239	1,203,993	1,479,357	1,410,039	1,465,116	1,378,649	1,305,973	1,296,046	1,255,034	1,153,752	1,248,395	950,212	1,316,300	15,462,866	16,726,105
Division 10	38.08%	36.84%	45.87%	45.44%	48.84%	42.91%	46.89%	46.33%	42.11%	43.74%	46.09%	39.93%	49.08%	44.71%	44.21%
Division 20	61.92%	63.16%	54.13%	54.56%	51.36%	57.09%	53.11%	53.67%	57.89%	56.26%	53.91%	60.07%	50.92%	55.29%	55.79%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
All Sources															
District Sources	1,263,239	1,203,993	1,479,357	1,410,039	1,465,116	1,378,649	1,305,973	1,296,046	1,255,034	1,153,752	1,248,395	950,212	1,316,300	15,462,866	16,726,105
C.L.A.W.A.	1,261,645	1,379,143	1,017,192	1,137,809	1,453,075	2,391,578	2,496,524	3,125,936	3,587,166	2,845,040	2,060,626	1,653,863	1,340,962	24,488,914	25,750,559
Total Sources	2,524,884	2,583,136	2,496,549	2,547,848	2,918,191	3,770,227	3,802,497	4,421,982	4,842,200	3,998,792	3,309,021	2,604,075	2,657,262	39,951,780	42,476,664
District Sources	50.03%	48.61%	59.26%	55.34%	50.21%	36.57%	34.35%	29.31%	25.92%	28.85%	37.73%	36.49%	49.54%	38.70%	39.38%
C.L.A.W.A.	49.97%	53.39%	40.74%	44.66%	49.79%	63.43%	65.65%	70.69%	74.08%	71.15%	62.27%	63.51%	50.46%	61.30%	60.62%
Total Sources	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Appendix H
CVWD Metered Water Deliveries (CF)
Dated 11/15/05

Crestline Village Water District

**TABLE 1
METERED WATER DELIVERIES (CF)**

CUSTOMER TYPES	1980*	1985	1986	1988*	1989	1990	1991	1992
Residential (SINGLE & MULTI-FAMILY)		24,856,684	24,366,310		28,200,534	26,901,330	24,359,625	24,312,834
Commercial (Including Government)		2,944,920	4,827,540		5,637,701	5,441,538	5,389,037	5,169,786
TOTAL	26,830,938	27,801,604	29,193,850	32,689,839	33,838,235	32,342,868	29,748,662	29,482,620

CUSTOMER TYPES	1993	1994	1995	1996	1997	1998	1999	2000
Residential (SINGLE & MULTI-FAMILY)	24,725,936	25,015,602	24,886,446	26,225,100	26,790,942	26,858,004	27,772,998	28,694,418
Commercial (Including Government)	5,089,572	5,252,058	5,015,676	5,828,976	6,369,270	5,390,466	5,407,572	5,677,951
TOTAL	29,815,508	30,267,660	29,902,122	32,054,076	33,160,212	32,248,470	33,180,570	34,072,956
Active Service Connections				4,787	4,792	4,803	4,811	4,819
Active Residential				4,604	4,609	4,621	4,632	4,640
Active Commercial				183	183	182	179	179

CUSTOMER TYPES	2001	2002	2003	2004
Residential (SINGLE & MULTI-FAMILY)	29,015,184	30,790,176	31,792,704	32,065,674
Commercial (Including Government)	5,428,560	5,393,958	4,960,680	5,187,288
TOTAL	34,443,744	36,184,134	36,753,384	37,252,962
Active Service Connections	4,828	4,840	4,836	4,857
Active Residential	4,649	4,661	4,657	4,678
Active Commercial	179	179	179	179

CUSTOMER TYPES	2009**	2014**	2019**	2024**
Residential (SINGLE & MULTI-FAMILY)	35,272,241	38,799,465	42,679,412	46,947,353
Commercial (Including Government)	5,706,017	6,276,619	6,904,281	7,594,709
TOTAL	40,978,258	45,076,084	49,583,693	54,542,062
Faster Increase (12%)	41,723,317	46,730,115	52,337,729	58,618,256

* Data not available on basis of customer types.

** Projected Future Growth (10%)

Appendix I
CVWD Consumption Analysis

ALL ACCOUNTS - ALL ZIP CODE
FROM BOOK 00 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	1012	700	970	741	911	0	699	0	703	0	682	0	829	240-
1- 200	941	131606	971	136723	784	111413	793	111429	749	106560	762	108284	833	117669
201- 400	783	273996	815	285657	664	229007	674	236242	623	217891	654	229031	702	245304
401- 600	757	415279	741	404789	621	338859	600	329302	585	320001	591	325398	649	355604
601- 700	331	231700	293	204922	309	216048	286	199867	288	200928	257	179396	294	205476
701- 800	248	198164	233	186173	256	204627	240	191736	236	188565	228	182264	240	191921
801- 900	167	150129	191	171684	218	195878	211	189900	231	207723	231	207577	208	187148
901-1000	146	145862	138	137950	198	197907	191	191000	177	176912	192	191591	173	173537
1001-1100	115	126500	104	114110	151	166010	171	188100	132	145049	154	169326	137	151515
1101-1200	73	87366	87	104137	130	156000	129	154725	131	156814	153	183600	117	140440
1201-1300	63	81774	63	81679	95	123422	118	153234	124	161030	138	179302	100	130073
1301+	221	618592	251	619622	520	1317465	745	2008785	878	2466787	815	2336487	571	1561289
TOTALS	4857	2460268	4857	2446705	4857	3256636	4857	3954320	4857	4348260	4857	4292256	4857	3459740

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	817	0	913	0	1038	0	1100	367	1033	0	1091	0	998	61-
1- 200	853	118941	845	117184	817	116185	944	125602	948	127473	901	127696	884	122180
201- 400	663	232095	667	232590	671	234253	813	279331	777	269026	824	287878	735	255862
401- 600	650	358188	631	347097	671	365850	769	417206	710	385920	730	398008	693	378711
601- 700	277	193501	284	198725	307	214454	299	207841	317	220266	306	214035	298	208137
701- 800	246	196585	256	204583	293	234089	241	191177	239	189722	230	183923	250	200013
801- 900	234	210471	247	222056	220	197770	168	150011	203	181345	180	161824	208	187246
901-1000	170	169784	176	175921	161	160922	120	119150	155	153802	152	151921	155	155250
1001-1100	169	185571	168	184800	127	139700	106	115701	116	126702	110	120915	132	145564
1101-1200	141	169033	112	134246	104	124609	62	73950	84	100350	56	67200	93	111564
1201-1300	112	145524	99	128491	94	122150	45	58176	52	67276	52	67600	75	98202
1301+	525	1540280	459	1290953	354	967468	190	468830	223	532346	225	518621	329	886416
TOTALS	4857	3519973	4857	3236646	4857	2877450	4857	2206608	4857	2354228	4857	2299621	4857	2749087

TOTAL ACTIVE & INACTIVE ACCOUNTS: 4961

BUSINESS - ALL ZIP CODE
FROM BOOK 00 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	26	0	21	0	24	0	20	0	15	0	18	0	20	0
1- 200	38	5100	42	5600	31	4600	25	3305	35	5300	24	3505	32	4568
201- 400	11	3750	9	3050	11	3700	18	5900	12	4500	19	6400	13	4550
401- 600	15	7851	17	8851	15	8100	14	8100	15	8129	12	6600	14	7938
601- 700	4	2800	6	4200	10	7000	6	4200	3	2100	6	4200	5	4083
701- 800	8	6300	5	3900	5	4000	5	4000	5	4000	5	4000	5	4366
801- 900	3	2650	3	2650	7	6300	4	3600	0	0	1	900	3	2683
901-1000	6	5912	6	6000	5	5000	4	4000	10	10000	4	4000	5	5818
1001-1100	3	3300	3	3300	1	1100	5	5500	5	5500	3	3300	3	3666
1101-1200	3	3500	5	5900	1	1200	3	3600	3	3600	3	3600	3	3566
1201-1300	5	6450	3	3850	1	1300	3	3900	3	3900	7	9100	3	4750
1301+	37	164350	39	177950	48	210800	52	265915	53	310600	57	304900	47	239085
TOTALS	159	211963	159	225251	159	253100	159	312020	159	357629	159	350505	159	285078

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	18	0	18	0	25	0	21	0	21	0	29	0	22	0
1- 200	31	4300	34	4706	28	3726	39	4729	41	5100	36	4723	34	4547
201- 400	15	5100	13	4600	20	6800	20	6400	22	7250	20	6800	18	6158
401- 600	15	8400	16	8706	16	8600	16	8513	10	5350	10	5500	13	7511
601- 700	7	4819	6	4200	6	4200	7	4800	5	3400	6	4200	6	4269
701- 800	4	3200	6	4800	5	4000	5	3857	5	3857	3	2400	4	3685
801- 900	4	3600	6	5400	7	6300	2	1800	5	4500	7	6300	5	4650
901-1000	5	5000	4	4000	2	2000	6	5900	3	2900	6	6000	4	4300
1001-1100	6	6600	3	3300	4	4400	5	5401	6	6502	2	2200	4	4733
1101-1200	7	8319	3	3600	2	2400	1	1200	5	6000	2	2400	3	3986
1201-1300	1	1300	1	1300	3	3900	1	1250	3	3850	3	3900	2	2583
1301+	46	256500	49	273300	41	185017	36	141511	33	142524	35	137000	40	189308
TOTALS	159	307138	159	317912	159	231343	159	185361	159	191233	159	181423	159	235735

PUBLIC AGENC - ALL ZIP CODE
FROM BOOK 00 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	3	0	4	0	5	0	4	0	5	0	5	0	4	0
1- 200	4	700	5	690	2	300	3	400	2	300	1	200	2	431
201- 400	3	1100	1	300	1	400	3	870	3	925	2	625	2	703
401- 600	0	0	0	0	0	0	0	0	0	0	2	1000	0	166
601- 700	0	0	0	0	0	0	0	0	0	0	0	0	0	0
701- 800	0	0	1	800	1	800	0	0	0	0	0	0	0	266
801- 900	0	0	0	0	1	820	0	0	0	0	0	0	0	136
901-1000	0	0	0	0	0	0	0	0	1	1000	0	0	0	166
1001-1100	1	1100	0	0	0	0	0	0	0	0	0	0	0	183
1101-1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1201-1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1301+	11	41860	11	44600	12	162500	12	250000	11	381900	12	395100	11	212660
TOTALS	22	44760	22	46390	22	164820	22	251270	22	384125	22	396925	22	214715

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	4	0	4	0	4	0	5	0	5	0	4	0	4	0
1- 200	1	100	1	100	2	200	2	200	3	500	3	400	2	250
201- 400	3	1100	3	900	2	600	1	300	1	300	3	860	2	676
401- 600	0	0	1	500	1	500	2	1150	4	2070	2	1100	1	886
601- 700	1	700	0	0	1	700	1	700	1	700	1	700	0	583
701- 800	0	0	1	800	1	800	0	0	0	0	0	0	0	266
801- 900	0	0	0	0	1	900	1	900	0	0	1	900	0	450
901-1000	0	0	0	0	0	0	0	0	1	1000	0	0	0	166
1001-1100	0	0	0	0	0	0	1	1100	0	0	1	1100	0	366
1101-1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1201-1300	0	0	0	0	0	0	1	1250	2	2550	1	1300	0	850
1301+	13	293840	12	206100	10	171500	8	33900	5	20600	6	21200	9	124523
TOTALS	22	295740	22	208400	22	175200	22	39500	22	27720	22	27560	22	129020

ALL RESIDENT - ALL ZIP CODE
FROM BOOK 00 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	985	700	947	741	884	0	677	0	685	0	661	0	806	240-
1- 200	899	125806	924	130433	751	106513	765	107724	712	100960	737	104579	798	112669
201- 400	769	269146	805	282307	652	224907	653	229472	608	212466	633	222006	686	240050
401- 600	742	407428	724	395938	606	330759	586	321202	570	311872	577	317798	634	347499
601- 700	327	228900	287	200722	299	209048	280	195667	285	198828	251	175196	288	201393
701- 800	240	191864	227	181473	250	199827	235	187736	231	184565	223	178264	234	187288
801- 900	164	147479	188	169034	210	188758	207	186300	231	207723	230	206677	205	184328
901-1000	140	139950	132	131950	193	192907	187	187000	166	165912	188	187591	167	167551
1001-1100	111	122100	101	110810	150	164910	166	182600	127	139549	151	166026	134	147665
1101-1200	70	83866	82	98237	129	154800	126	151125	128	153214	150	180000	114	136873
1201-1300	58	75324	60	77829	94	122122	115	149334	121	157130	131	170202	96	125323
1301+	173	412382	201	397072	460	944165	681	1492870	814	1774287	746	1636487	512	1109543
TOTALS	4678	2203545	4678	2175064	4678	2838716	4678	3391030	4678	3606506	4678	3544826	4678	2959947

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	797	0	893	0	1011	0	1076	367	1009	0	1060	0	974	61-
1- 200	821	114541	810	112378	787	112259	903	120673	904	121873	862	122573	847	117382
201- 400	645	225895	651	227090	649	226853	792	272631	754	261476	801	280218	715	249027
401- 600	635	349788	614	337891	654	356750	751	407543	696	378500	718	391408	678	370313
601- 700	269	187982	278	194525	300	209554	291	202341	311	216166	299	209135	291	203283
701- 800	242	193385	249	198983	287	229289	236	187320	234	185865	227	181523	245	196060
801- 900	230	206871	241	216656	212	190570	165	147311	198	176845	172	154624	203	182146
901-1000	165	164784	172	171921	159	158922	114	113250	151	149902	146	145921	151	150783
1001-1100	163	178971	165	181500	123	135300	100	109200	110	120200	107	117615	128	140464
1101-1200	134	160714	109	130646	102	122209	61	72750	79	94350	54	64800	89	107578
1201-1300	111	144224	98	127191	91	118250	43	55676	47	60876	48	62400	73	94769
1301+	466	989940	398	811553	303	610951	146	293419	185	369222	184	360421	280	572584
TOTALS	4678	2917095	4678	2710334	4678	2470907	4678	1981747	4678	2135275	4678	2090638	4678	2384332

MULTI-UNIT R - ALL ZIP CODE
FROM BOOK 00 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	1	0	1	0	2	0	0	0	0	0	1	0	0	0
1- 200	4	700	4	600	3	500	1	100	3	328	0	0	2	371
201- 400	2	700	1	400	5	1900	3	1100	1	400	3	1000	2	916
401- 600	6	3300	7	3717	1	500	6	3100	3	1600	5	2900	4	2519
601- 700	1	700	0	0	2	1400	2	1400	5	3500	2	1400	2	1400
701- 800	2	1550	4	3150	3	2400	0	0	2	1600	2	1600	2	1716
801- 900	5	4500	4	3600	1	900	3	2700	1	900	1	900	2	2250
901-1000	1	1000	4	4000	2	2000	1	1000	1	1000	3	2950	2	1991
1001-1100	4	4400	0	0	2	2200	3	3300	2	2125	3	3300	2	2554
1101-1200	2	2400	3	3600	0	0	1	1200	3	3514	2	2400	1	2185
1201-1300	3	3900	0	0	1	1300	2	2600	2	2600	2	2600	1	2166
1301+	20	52350	23	57150	29	72110	29	85721	28	87914	27	92724	26	74661
TOTALS	51	75500	51	76217	51	85210	51	102221	51	105481	51	111774	51	92733

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
1- 200	1	200	3	500	1	100	1	150	3	550	3	500	2	333
201- 400	3	1000	2	700	3	1100	4	1350	2	650	4	1500	3	1050
401- 600	4	2200	6	3100	4	2200	6	3300	7	3800	8	4200	5	3133
601- 700	2	1400	1	700	3	2100	3	2100	2	1400	4	2800	2	1750
701- 800	4	3200	2	1600	4	3200	1	800	5	4000	3	2400	3	2533
801- 900	2	1800	2	1800	5	4429	2	1800	3	2700	2	1800	2	2388
901-1000	3	2950	5	5000	5	4922	3	2950	4	3860	5	5000	4	4113
1001-1100	5	5500	7	7700	2	2200	5	5450	3	3250	1	1100	3	4200
1101-1200	3	3514	1	1200	2	2400	5	5950	4	4750	2	2400	2	3369
1201-1300	2	2600	2	2600	2	2600	3	3900	2	2600	0	0	1	2383
1301+	20	63620	18	52418	18	56500	16	48950	14	42150	17	42700	17	51056
TOTALS	51	87984	51	77318	51	81751	51	76700	51	69710	51	64400	51	76310

ALL ACCOUNTS - ALL ZIP CODE
FROM BOOK 00 THRU 42

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	501	700	457	741	484	0	365	0	364	0	343	0	419	240-
1- 200	453	62719	474	66930	401	58097	394	55211	385	53737	368	52576	412	58211
201- 400	365	127358	376	131630	335	114735	346	122546	308	106923	298	103205	338	117732
401- 600	328	179623	327	177378	291	158653	288	158658	292	158633	275	151235	300	164030
601- 700	133	93100	118	82514	133	92939	109	76205	134	93467	117	81820	124	86674
701- 800	96	76650	98	78173	104	83126	98	78220	98	78318	82	65600	96	76681
801- 900	70	62900	77	69250	95	85343	81	72900	101	90900	93	83558	86	77475
901-1000	66	65862	60	59950	68	68000	76	76000	74	73912	78	77684	70	70234
1001-1100	53	58300	45	49403	51	56010	71	78100	51	55949	64	70326	55	61348
1101-1200	32	38166	47	56137	56	67200	46	55200	46	55042	74	88800	50	60090
1201-1300	25	32450	26	33665	24	31200	45	58334	44	57116	57	74100	36	47810
1301+	108	316411	125	356907	188	528510	311	933848	333	1072452	381	1238174	241	741050
TOTALS	2230	1112839	2230	1161196	2230	1343813	2230	1765222	2230	1896449	2230	2087078	2230	1561099

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	437	0	435	0	502	0	476	367	524	0	586	0	493	61-
1- 200	391	55198	439	61992	400	56739	453	56693	469	59491	433	60421	430	58422
201- 400	314	108261	349	119851	310	106989	356	119904	389	132595	406	141856	354	121576
401- 600	286	157022	281	154856	295	160597	311	166387	317	168224	321	175469	301	163759
601- 700	105	73265	113	79100	127	88724	133	91725	124	85416	111	77535	118	82627
701- 800	93	74319	100	79872	102	81550	110	86546	86	67322	82	65600	95	75868
801- 900	92	82750	93	83527	99	89029	79	69911	65	57234	56	50310	80	72126
901-1000	71	70876	74	73921	71	71000	61	60150	61	59983	64	64000	67	66655
1001-1100	63	69141	65	71500	48	52800	61	66201	46	49702	39	42815	53	58693
1101-1200	73	87433	46	55200	42	50400	37	43950	38	45150	20	24000	42	51022
1201-1300	40	51924	36	46720	46	59800	28	36076	20	25750	18	23400	31	40611
1301+	265	853339	199	685025	188	536251	125	329500	91	264824	94	263502	160	488740
TOTALS	2230	1683528	2230	1511564	2230	1353879	2230	1126676	2230	1015691	2230	988908	2230	1280041

TOTAL ACTIVE & INACTIVE ACCOUNTS: 2311

BUSINESS - ALL ZIP CODE
FROM BOOK 00 THRU 42

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	22	0	17	0	21	0	17	0	12	0	15	0	17	0
1- 200	37	5000	41	5500	30	4400	24	3205	34	5100	23	3500	31	4450
201- 400	9	3050	8	2650	11	3700	18	5900	12	4500	19	6400	12	4366
401- 600	15	7851	16	8351	13	7100	14	8100	15	8129	11	6000	14	7588
601- 700	3	2100	5	3500	10	7000	5	3500	3	2100	6	4200	5	3733
701- 800	7	5500	5	3900	4	3200	5	4000	4	3200	5	4000	5	3966
801- 900	3	2650	2	1750	6	5400	4	3600	0	0	1	900	2	2383
901-1000	5	4912	5	5000	5	5000	4	4000	9	9000	4	4000	5	5318
1001-1100	3	3300	3	3300	1	1100	4	4400	5	5500	2	2200	3	3300
1101-1200	3	3500	5	5900	1	1200	2	2400	2	2400	3	3600	2	3166
1201-1300	5	6450	3	3850	1	1300	2	2600	1	1300	6	7800	3	3883
1301+	29	140050	31	151350	38	174600	42	221500	44	235500	46	242400	38	194233
TOTALS	141	184363	141	195051	141	214000	141	263205	141	276729	141	285000	141	236391

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	15	0	14	0	22	0	17	0	17	0	25	0	18	0
1- 200	30	4200	34	4706	28	3726	38	4629	40	4900	35	4623	34	4464
201- 400	15	5100	13	4600	19	6500	19	6100	21	6950	19	6500	17	5958
401- 600	14	7800	15	8106	12	6600	14	7413	10	5350	9	5000	12	6711
601- 700	6	4119	6	4200	6	4200	7	4800	5	3400	5	3500	5	4036
701- 800	4	3200	5	4000	5	4000	5	3857	5	3857	2	1600	4	3419
801- 900	4	3600	6	5400	7	6300	2	1800	2	1800	6	5400	4	4050
901-1000	5	5000	2	2000	2	2000	3	2900	2	1900	5	5000	3	3133
1001-1100	4	4400	3	3300	4	4400	5	5401	6	6502	2	2200	4	4367
1101-1200	7	8319	3	3600	1	1200	1	1200	5	6000	2	2400	3	3786
1201-1300	1	1300	1	1300	3	3900	1	1250	2	2550	3	3900	1	2366
1301+	36	212800	39	227200	32	145200	29	116300	26	113624	28	112100	31	154537
TOTALS	141	259838	141	268412	141	188026	141	155650	141	156833	141	152223	141	196830

PUBLIC AGENC - ALL ZIP CODE
FROM BOOK 00 THRU 42

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	2	0	2	0	3	0	3	0	3	0	3	0	2	0
1- 200	1	200	2	400	0	0	1	200	1	100	1	200	1	183
201- 400	2	800	1	300	1	400	1	300	1	300	0	0	1	350
401- 600	0	0	0	0	0	0	0	0	0	0	1	500	0	83
601- 700	0	0	0	0	0	0	0	0	0	0	0	0	0	0
701- 800	0	0	1	800	1	800	0	0	0	0	0	0	0	266
801- 900	0	0	0	0	0	0	0	0	0	0	0	0	0	0
901-1000	0	0	0	0	0	0	0	0	1	1000	0	0	0	166
1001-1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101-1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1201-1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1301+	7	24200	6	20900	7	58300	7	111600	6	204900	7	230800	6	108450
TOTALS	12	25200	12	22400	12	59500	12	112100	12	206300	12	231500	12	109500

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	3	0	3	0	3	0	2	0	2	0	2	0	2	0
1- 200	0	0	0	0	0	0	1	100	1	100	1	200	0	66
201- 400	2	700	2	600	1	300	1	300	1	300	1	300	1	416
401- 600	0	0	0	0	1	500	2	1150	3	1650	2	1100	1	733
601- 700	0	0	0	0	1	700	0	0	1	700	1	700	0	350
701- 800	0	0	0	0	0	0	0	0	0	0	0	0	0	0
801- 900	0	0	0	0	1	900	0	0	0	0	0	0	0	150
901-1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1001-1100	0	0	0	0	0	0	1	1100	0	0	1	1100	0	366
1101-1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1201-1300	0	0	0	0	0	0	1	1250	2	2550	1	1300	0	850
1301+	7	159400	7	112000	5	70300	4	17500	2	9700	3	14200	4	63850
TOTALS	12	160100	12	112600	12	72700	12	21400	12	15000	12	18900	12	66783

CRESTLINE VILLAGE WATER
CONSUMPTION ANALYSISALL RESIDENT - ALL ZIP CODE
FROM BOOK 00 THRU 42

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	479	700	440	741	462	0	347	0	351	0	327	0	401	240-
1- 200	415	57519	431	61030	371	53697	369	51806	350	48537	344	48876	380	53577
201- 400	354	123508	367	128680	323	110635	327	116346	295	102123	279	96805	324	113016
401- 600	313	171772	311	169027	278	151553	274	150558	277	150504	263	144735	286	156358
601- 700	130	91000	113	79014	123	85939	104	72705	131	91367	111	77620	118	82940
701- 800	89	71150	92	73473	99	79126	93	74220	94	75118	77	61600	90	72447
801- 900	67	60250	75	67500	89	79943	77	69300	101	90900	92	82658	83	75091
901-1000	61	60950	55	54950	63	63000	72	72000	64	63912	74	73684	64	64749
1001-1100	50	55000	42	46103	50	54910	67	73700	46	50449	62	68126	52	58048
1101-1200	29	34666	42	50237	55	66000	44	52800	44	52642	71	85200	47	56924
1201-1300	20	26000	23	29815	23	29900	43	55734	43	55816	51	66300	33	43927
1301+	72	152161	88	184657	143	295610	262	600748	283	632052	328	764974	196	438367
TOTALS	2079	903276	2079	943745	2079	1070313	2079	1389917	2079	1413420	2079	1570578	2079	1215208

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	421	0	420	0	479	0	459	367	507	0	561	0	474	61-
1- 200	361	50998	405	57286	372	53013	414	51964	428	54491	397	55598	396	53891
201- 400	297	102461	334	114651	290	100189	336	113504	367	125345	386	135056	335	115201
401- 600	272	149222	266	146750	282	153497	295	157824	304	161224	310	169369	288	156314
601- 700	99	69146	107	74900	120	83824	126	86925	118	81316	105	73335	112	78241
701- 800	89	71119	95	75872	97	77550	105	82689	81	63465	80	64000	91	72449
801- 900	88	79150	87	78127	91	81829	77	68111	63	55434	50	44910	76	67926
901-1000	66	65876	72	71921	69	69000	58	57250	59	58083	59	59000	63	63521
1001-1100	59	64741	62	68200	44	48400	55	59700	40	43200	36	39515	49	53959
1101-1200	66	79114	43	51600	41	49200	36	42750	33	39150	18	21600	39	47235
1201-1300	39	50624	35	45420	43	55900	26	33576	16	20650	14	18200	28	37395
1301+	222	481139	153	345825	151	320751	92	195700	63	141500	63	137202	124	270352
TOTALS	2079	1263590	2079	1130552	2079	1093153	2079	949626	2079	843858	2079	817785	2079	1016427

MULTI-UNIT R - ALL ZIP CODE
FROM BOOK 00 THRU 42

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	1	0	1	0	2	0	0	0	0	0	1	0	0	0
1- 200	4	700	3	500	2	300	1	100	3	328	0	0	2	321
201- 400	1	400	1	400	4	1500	2	700	0	0	3	1000	1	666
401- 600	5	2800	6	3217	1	500	5	2600	2	1100	4	2300	3	2086
601- 700	1	700	0	0	2	1400	2	1400	5	3500	1	700	1	1283
701- 800	2	1550	4	3150	3	2400	0	0	2	1600	2	1600	2	1716
801- 900	5	4500	4	3600	1	900	3	2700	1	900	1	900	2	2250
901-1000	1	1000	4	4000	2	2000	1	1000	0	0	3	2950	1	1825
1001-1100	3	3300	0	0	1	1100	2	2200	2	2125	2	2200	1	1820
1101-1200	2	2400	2	2400	0	0	1	1200	3	3514	1	1200	1	1785
1201-1300	2	2600	0	0	1	1300	1	1300	1	1300	2	2600	1	1516
1301+	19	50650	21	54050	27	69010	28	83921	27	86414	26	90724	24	72461
TOTALS	46	70600	46	71317	46	80410	46	97121	46	100781	46	106174	46	87733

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	1	0	2	0	2	0	2	0	2	0	2	0	1	0
1- 200	1	200	2	400	0	0	1	150	3	550	3	500	1	300
201- 400	3	1000	2	700	3	1100	2	650	2	650	4	1500	2	933
401- 600	3	1600	5	2600	4	2200	6	3300	5	2700	7	3700	5	2683
601- 700	2	1400	1	700	2	1400	2	1400	2	1400	3	2100	2	1400
701- 800	4	3200	2	1600	4	3200	1	800	4	3200	2	1600	2	2266
801- 900	1	900	2	1800	5	4429	2	1800	2	1800	1	900	2	1938
901-1000	3	2950	4	4000	3	3000	3	2950	4	3860	5	5000	3	3626
1001-1100	5	5500	6	6600	2	2200	5	5450	3	3250	1	1100	3	4016
1101-1200	2	2314	1	1200	1	1200	4	4750	4	4750	2	2400	2	2769
1201-1300	2	2600	1	1300	2	2600	2	2600	2	2600	0	0	1	1950
1301+	19	62120	18	52418	18	56500	16	48950	13	40750	16	41300	16	50339
TOTALS	46	83784	46	73318	46	77829	46	72800	46	65510	46	60100	46	72223

ALL ACCOUNTS - ALL ZIP CODE
FROM BOOK 45 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	511	0	513	0	427	0	334	0	339	0	339	0	410	0
1- 200	488	68887	497	69793	383	53316	399	56218	364	52823	394	55708	420	59457
201- 400	418	146638	439	154027	329	114272	328	113696	315	110968	356	125826	364	127571
401- 600	429	235656	414	227411	330	180206	312	170644	293	161368	316	174163	349	191574
601- 700	198	138600	175	122408	176	123109	177	123662	154	107461	140	97576	170	118802
701- 800	152	121514	135	108000	152	121501	142	113516	138	110247	146	116664	144	115240
801- 900	97	87229	114	102434	123	110535	130	117000	130	116823	138	124019	122	109673
901-1000	80	80000	78	78000	130	129907	115	115000	103	103000	114	113907	103	103302
1001-1100	62	68200	59	64707	100	110000	100	110000	81	89100	90	99000	82	90167
1101-1200	41	49200	40	48000	74	88800	83	99525	85	101772	79	94800	67	80349
1201-1300	38	49324	37	48014	71	92222	73	94900	80	103914	81	105202	63	82262
1301+	113	302181	126	262715	332	788955	434	1074937	545	1394335	434	1098313	330	820239
TOTALS	2627	1347429	2627	1285509	2627	1912823	2627	2189098	2627	2451811	2627	2205178	2627	1898641

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	380	0	478	0	536	0	624	0	509	0	505	0	505	0
1- 200	462	63743	406	55192	417	59446	491	68909	479	67982	468	67275	453	63757
201- 400	349	123834	318	112739	361	127264	457	159427	388	136431	418	146022	381	134286
401- 600	364	201166	350	192241	376	205253	458	250819	393	217696	409	222539	391	214952
601- 700	172	120236	171	119625	180	125730	166	116116	193	134850	195	136500	179	125509
701- 800	153	122266	156	124711	191	152539	131	104631	153	122400	148	118323	155	124145
801- 900	142	127721	154	138529	121	108741	89	80100	138	124111	124	111514	128	115119
901-1000	99	98908	102	102000	90	89922	59	59000	94	93819	88	87921	88	88595
1001-1100	106	116430	103	113300	79	86900	45	49500	70	77000	71	78100	79	86871
1101-1200	68	81600	66	79046	62	74209	25	30000	46	55200	36	43200	50	60542
1201-1300	72	93600	63	81771	48	62350	17	22100	32	41526	34	44200	44	57591
1301+	260	686941	260	605928	166	431217	65	139330	132	267522	131	255119	169	397676
TOTALS	2627	1836445	2627	1725082	2627	1523571	2627	1079932	2627	1338537	2627	1310713	2627	1469046

TOTAL ACTIVE & INACTIVE ACCOUNTS: 2650

BUSINESS - ALL ZIP CODE
FROM BOOK 45 THRU 93

CONSUMPTION	1 PERIOD AGO		2 PERIODS AGO		3 PERIODS AGO		4 PERIODS AGO		5 PERIODS AGO		6 PERIODS AGO		AVERAGE	
	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF
0	4	0	4	0	3	0	3	0	3	0	3	0	3	0
1- 200	1	100	1	100	1	200	1	100	1	200	1	5	1	117
201- 400	2	700	1	400	0	0	0	0	0	0	0	0	0	183
401- 600	0	0	1	500	2	1000	0	0	0	0	1	600	0	350
601- 700	1	700	1	700	0	0	1	700	0	0	0	0	0	350
701- 800	1	800	0	0	1	800	0	0	1	800	0	0	0	400
801- 900	0	0	1	900	1	900	0	0	0	0	0	0	0	300
901-1000	1	1000	1	1000	0	0	0	0	1	1000	0	0	0	500
1001-1100	0	0	0	0	0	0	1	1100	0	0	1	1100	0	366
1101-1200	0	0	0	0	0	0	1	1200	1	1200	0	0	0	400
1201-1300	0	0	0	0	0	0	1	1300	2	2600	1	1300	0	866
1301+	8	24300	8	26600	10	36200	10	44415	9	75100	11	62500	9	44852
TOTALS	18	27600	18	30200	18	39100	18	48815	18	80900	18	65505	18	48686

CONSUMPTION	7 PERIODS AGO		8 PERIODS AGO		9 PERIODS AGO		10 PERIODS AGO		11 PERIODS AGO		12 PERIODS AGO		AVERAGE	
	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF
0	3	0	4	0	3	0	4	0	4	0	4	0	3	0
1- 200	1	100	0	0	0	0	1	100	1	200	1	100	0	83
201- 400	0	0	0	0	1	300	1	300	1	300	1	300	0	200
401- 600	1	600	1	600	4	2000	2	1100	0	0	1	500	1	800
601- 700	1	700	0	0	0	0	0	0	0	0	1	700	0	233
701- 800	0	0	1	800	0	0	0	0	0	0	1	800	0	266
801- 900	0	0	0	0	0	0	0	0	3	2700	1	900	0	600
901-1000	0	0	2	2000	0	0	3	3000	1	1000	1	1000	1	1166
1001-1100	2	2200	0	0	0	0	0	0	0	0	0	0	0	366
1101-1200	0	0	0	0	1	1200	0	0	0	0	0	0	0	200
1201-1300	0	0	0	0	0	0	0	0	1	1300	0	0	0	216
1301+	10	43700	10	46100	9	39817	7	25211	7	28900	7	24900	8	34771
TOTALS	18	47300	18	49500	18	43317	18	29711	18	34400	18	29200	18	38904

PUBLIC AGENC - ALL ZIP CODE
FROM BOOK 45 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	1	0	2	0	2	0	1	0	2	0	2	0	1	0
1- 200	3	500	3	290	2	300	2	200	1	200	0	0	1	248
201- 400	1	300	0	0	0	0	2	570	2	625	2	625	1	353
401- 600	0	0	0	0	0	0	0	0	0	0	1	500	0	83
601- 700	0	0	0	0	0	0	0	0	0	0	0	0	0	0
701- 800	0	0	0	0	0	0	0	0	0	0	0	0	0	0
801- 900	0	0	0	0	1	820	0	0	0	0	0	0	0	136
901-1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1001-1100	1	1100	0	0	0	0	0	0	0	0	0	0	0	183
1101-1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1201-1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1301+	4	17660	5	23700	5	104200	5	138400	5	177000	5	164300	4	104210
TOTALS	10	19560	10	23990	10	105320	10	139170	10	177825	10	165425	10	105215

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	1	0	1	0	1	0	3	0	3	0	2	0	1	0
1- 200	1	100	1	100	2	200	1	100	2	400	2	200	1	183
201- 400	1	400	1	300	1	300	0	0	0	0	2	560	0	260
401- 600	0	0	1	500	0	0	0	0	1	420	0	0	0	153
601- 700	1	700	0	0	0	0	1	700	0	0	0	0	0	233
701- 800	0	0	1	800	1	800	0	0	0	0	0	0	0	266
801- 900	0	0	0	0	0	0	1	900	0	0	1	900	0	300
901-1000	0	0	0	0	0	0	0	0	1	1000	0	0	0	166
1001-1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101-1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1201-1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1301+	6	134440	5	94100	5	101200	4	16400	3	10900	3	7000	4	60673
TOTALS	10	135640	10	95800	10	102500	10	18100	10	12720	10	8660	10	62236

ALL RESIDENT - ALL ZIP CODE
FROM BOOK 45 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	506	0	507	0	422	0	330	0	334	0	334	0	405	0
1- 200	484	68287	493	69403	380	52816	396	55918	362	52423	393	55703	418	59091
201- 400	415	145638	438	153627	329	114272	326	113126	313	110343	354	125201	362	127034
401- 600	429	235656	413	226911	328	179206	312	170644	293	161368	314	173063	348	191141
601- 700	197	137900	174	121708	176	123109	176	122962	154	107461	140	97576	169	118452
701- 800	151	120714	135	108000	151	120701	142	113516	137	109447	146	116664	143	114840
801- 900	97	87229	113	101534	121	108815	130	117000	130	116823	138	124019	121	109236
901-1000	79	79000	77	77000	130	129907	115	115000	102	102000	114	113907	102	102802
1001-1100	61	67100	59	64707	100	110000	99	108900	81	89100	89	97900	81	89617
1101-1200	41	49200	40	48000	74	88800	82	98325	84	100572	79	94800	66	79949
1201-1300	38	49324	37	48014	71	92222	72	93600	78	101314	80	103902	62	81396
1301+	101	260221	113	212415	317	648555	419	892122	531	1142235	418	871513	316	671176
TOTALS	2599	1300269	2599	1231319	2599	1768403	2599	2001113	2599	2193086	2599	1974248	2599	1744739

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	376	0	473	0	532	0	617	0	502	0	499	0	499	0
1- 200	460	63543	405	55092	415	59246	489	68709	476	67382	465	66975	451	63491
201- 400	348	123434	317	112439	359	126664	456	159127	387	136131	415	145162	380	133826
401- 600	363	200566	348	191141	372	203253	456	249719	392	217276	408	222039	389	213999
601- 700	170	118836	171	119625	180	125730	165	115416	193	134850	194	135800	178	125042
701- 800	153	122266	154	123111	190	151739	131	104631	153	122400	147	117523	154	123611
801- 900	142	127721	154	138529	121	108741	88	79200	135	121411	122	109714	127	114219
901-1000	99	98908	100	100000	90	89922	56	56000	92	91819	87	86921	87	87261
1001-1100	104	114230	103	113300	79	86900	45	49500	70	77000	71	78100	78	86505
1101-1200	68	81600	66	79046	61	73009	25	30000	46	55200	36	43200	50	60342
1201-1300	72	93600	63	81771	48	62350	17	22100	31	40226	34	44200	44	57374
1301+	244	508801	245	465728	152	290200	54	97719	122	227722	121	223219	156	302231
TOTALS	2599	1653505	2599	1579782	2599	1377754	2599	1032121	2599	1291417	2599	1272853	2599	1367905

MULTI-UNIT R - ALL ZIP CODE
FROM BOOK 45 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1- 200	0	0	1	100	1	200	0	0	0	0	0	0	0	50
201- 400	1	300	0	0	1	400	1	400	1	400	0	0	0	250
401- 600	1	500	1	500	0	0	1	500	1	500	1	600	0	433
601- 700	0	0	0	0	0	0	0	0	0	0	1	700	0	116
701- 800	0	0	0	0	0	0	0	0	0	0	0	0	0	0
801- 900	0	0	0	0	0	0	0	0	0	0	0	0	0	0
901-1000	0	0	0	0	0	0	0	0	1	1000	0	0	0	166
1001-1100	1	1100	0	0	1	1100	1	1100	0	0	1	1100	0	733
1101-1200	0	0	1	1200	0	0	0	0	0	0	1	1200	0	400
1201-1300	1	1300	0	0	0	0	1	1300	1	1300	0	0	0	650
1301+	1	1700	2	3100	2	3100	1	1800	1	1500	1	2000	1	2200
TOTALS	5	4900	5	4900	5	4800	5	5100	5	4700	5	5600	5	5000

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1- 200	0	0	1	100	1	100	0	0	0	0	0	0	0	33
201- 400	0	0	0	0	0	0	2	700	0	0	0	0	0	116
401- 600	1	600	1	500	0	0	0	0	2	1100	1	500	0	450
601- 700	0	0	0	0	1	700	1	700	0	0	1	700	0	350
701- 800	0	0	0	0	0	0	0	0	1	800	1	800	0	266
801- 900	1	900	0	0	0	0	0	0	1	900	1	900	0	450
901-1000	0	0	1	1000	2	1922	0	0	0	0	0	0	0	487
1001-1100	0	0	1	1100	0	0	0	0	0	0	0	0	0	183
1101-1200	1	1200	0	0	1	1200	1	1200	0	0	0	0	0	600
1201-1300	0	0	1	1300	0	0	1	1300	0	0	0	0	0	433
1301+	1	1500	0	0	0	0	0	0	1	1400	1	1400	0	716
TOTALS	5	4200	5	4000	5	3922	5	3900	5	4200	5	4300	5	4087

ALL ACCOUNTS - 92325 ZIP
FROM BOOK 00 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	132	700	129	270	127	0	103	0	108	0	117	0	119	161-
1- 200	433	65796	432	67105	337	53237	288	45035	275	41691	278	41794	340	52443
201- 400	629	221564	646	227676	485	168511	455	160415	404	143119	405	144243	504	177588
401- 600	648	355135	644	351655	507	277428	466	255666	451	247101	450	248359	527	289224
601- 700	296	207200	258	180514	250	174830	225	157338	224	156210	200	139751	242	169307
701- 800	214	171064	209	167150	221	176627	200	159736	193	154239	183	146350	203	162527
801- 900	149	134050	169	151967	182	163635	175	157500	189	170010	200	179866	177	159504
901-1000	126	125950	118	117950	171	170907	159	159000	145	145000	154	153685	145	145415
1001-1100	100	110000	91	99908	129	141900	148	162800	117	128549	126	138600	118	130292
1101-1200	68	81480	71	85057	107	128400	109	130725	107	128100	128	153600	98	117893
1201-1300	52	67550	54	69979	82	106600	90	116923	101	131216	116	150702	82	107161
1301+	140	305510	166	333965	389	804655	569	1255440	673	1517735	630	1417663	427	939161
TOTALS	2987	1844599	2987	1852656	2987	2366730	2987	2760578	2987	2962970	2987	2914613	2987	2450357

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	144	0	149	0	185	0	211	67	205	0	226	0	186	11-
1- 200	328	49565	363	53159	350	54480	451	68537	428	64589	423	64250	390	59096
201- 400	466	163805	480	169030	507	178696	633	220244	598	209439	621	218176	550	193231
401- 600	510	282500	507	279422	561	306586	671	363872	602	327782	620	337392	578	316259
601- 700	220	153673	228	159525	266	185930	258	179341	269	186866	265	185424	251	175126
701- 800	214	171069	220	175783	256	204750	201	159620	205	162815	195	155923	215	171660
801- 900	199	178971	216	194156	177	159070	148	132303	171	152914	158	142024	176	159906
901-1000	148	147784	163	162921	143	142922	102	101300	132	130952	135	135000	137	136813
1001-1100	141	154771	139	152900	109	119900	94	102501	105	114602	94	103315	113	124664
1101-1200	119	142719	90	107846	85	101809	50	59700	71	84900	48	57600	77	92429
1201-1300	96	124724	84	109121	80	104000	34	43976	39	50550	44	57200	62	81595
1301+	402	847160	348	748628	268	551224	134	280069	162	339396	158	322021	245	514749
TOTALS	2987	2416741	2987	2312491	2987	2109367	2987	1711396	2987	1824805	2987	1778325	2987	2025520

TOTAL ACTIVE & INACTIVE ACCOUNTS: 4961

BUSINESS - 92325 ZIP
FROM BOOK 00 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	15	0	13	0	14	0	11	0	9	0	10	0	12	0
1- 200	25	3400	27	3800	24	3700	15	1905	21	3100	15	2200	21	3017
201- 400	10	3500	8	2800	7	2400	16	5200	10	3800	18	6100	11	3966
401- 600	12	6251	15	7851	13	7000	12	7000	15	8129	10	5500	12	6955
601- 700	4	2800	5	3500	7	4900	5	3500	3	2100	5	3500	4	3383
701- 800	7	5550	4	3150	4	3200	5	4000	5	4000	5	4000	5	3983
801- 900	3	2650	2	1750	6	5400	4	3600	0	0	1	900	2	2383
901-1000	3	3000	5	5000	5	5000	2	2000	8	8000	2	2000	4	4166
1001-1100	2	2200	2	2200	1	1100	4	4400	5	5500	3	3300	2	3116
1101-1200	2	2350	3	3550	0	0	3	3600	2	2400	2	2400	2	2383
1201-1300	4	5150	3	3850	1	1300	3	3900	3	3900	5	6500	3	4100
1301+	17	58850	17	59350	22	72800	24	93400	23	103400	28	120700	21	84750
TOTALS	104	95701	104	96801	104	106800	104	132505	104	144329	104	157100	104	122206

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	10	0	9	0	15	0	10	0	9	0	14	0	11	0
1- 200	19	2700	24	3406	15	2300	26	3429	28	3700	28	3810	23	3224
201- 400	12	4200	11	4000	17	5800	16	5000	17	5450	15	5200	14	4941
401- 600	13	7200	14	7706	15	8100	14	7513	10	5350	9	4900	12	6794
601- 700	7	4819	5	3500	6	4200	6	4150	4	2750	4	2800	5	3703
701- 800	4	3200	6	4800	5	4000	2	1600	2	1600	2	1600	3	2800
801- 900	2	1800	4	3600	5	4500	2	1800	5	4500	6	5400	4	3600
901-1000	4	4000	4	4000	2	2000	5	4950	2	1950	4	4000	3	3483
1001-1100	6	6600	3	3300	2	2200	5	5401	6	6502	0	0	3	4000
1101-1200	5	5919	2	2400	1	1200	1	1200	4	4800	2	2400	2	2986
1201-1300	1	1300	1	1300	2	2600	0	0	1	1300	1	1300	1	1300
1301+	21	85900	21	87000	19	72000	17	57450	16	60974	19	60200	18	70587
TOTALS	104	127638	104	125012	104	108900	104	92493	104	98876	104	91610	104	107421

PUBLIC AGENC - 92325 ZIP
FROM BOOK 00 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	2	0	3	0	3	0	2	0	3	0	3	0	2	0
1- 200	1	100	1	90	0	0	1	100	0	0	0	0	0	48
201- 400	0	0	0	0	0	0	1	270	1	325	1	325	0	153
401- 600	0	0	0	0	0	0	0	0	0	0	0	0	0	0
601- 700	0	0	0	0	0	0	0	0	0	0	0	0	0	0
701- 800	0	0	0	0	0	0	0	0	0	0	0	0	0	0
801- 900	0	0	0	0	1	820	0	0	0	0	0	0	0	136
901-1000	0	0	0	0	0	0	0	0	1	1000	0	0	0	166
1001-1100	1	1100	0	0	0	0	0	0	0	0	0	0	0	183
1101-1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1201-1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1301+	4	13260	4	13800	4	20200	4	23500	3	22600	4	23400	3	19460
TOTALS	8	14460	8	13890	8	21020	8	23870	8	23925	8	23725	8	20148

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	2	0	2	0	2	0	2	0	2	0	1	0	1	0
1- 200	1	100	1	100	1	100	1	100	1	200	1	100	1	116
201- 400	0	0	0	0	0	0	0	0	0	0	2	560	0	93
401- 600	0	0	1	500	0	0	1	550	2	970	1	500	0	420
601- 700	0	0	0	0	1	700	1	700	0	0	0	0	0	233
701- 800	0	0	0	0	1	800	0	0	0	0	0	0	0	133
801- 900	0	0	0	0	0	0	1	900	0	0	1	900	0	300
901-1000	0	0	0	0	0	0	0	0	1	1000	0	0	0	166
1001-1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101-1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1201-1300	0	0	0	0	0	0	0	0	1	1300	0	0	0	216
1301+	5	22040	4	17900	3	18500	2	7800	1	2900	2	6600	2	12623
TOTALS	8	22140	8	18500	8	20100	8	10050	8	6370	8	8660	8	14303

ALL RESIDENT - 92325 ZIP
FROM BOOK 00 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	116	700	114	270	111	0	91	0	97	0	105	0	105	161-
1- 200	407	62296	404	63215	313	49537	272	43030	254	38591	263	39594	318	49377
201- 400	619	218064	638	224876	478	166111	438	154945	393	138994	386	137818	492	173468
401- 600	636	348884	629	343804	494	270428	454	248666	436	238972	440	242859	514	282268
601- 700	292	204400	253	177014	243	169930	220	153838	221	154110	195	136251	237	165923
701- 800	207	165514	205	164000	217	173427	195	155736	188	150239	178	142350	198	158544
801- 900	146	131400	167	150217	175	157415	171	153900	189	170010	199	178966	174	156984
901-1000	123	122950	113	112950	166	165907	157	157000	136	136000	152	151685	141	141082
1001-1100	97	106700	89	97708	128	140800	144	158400	112	123049	123	135300	115	126992
1101-1200	66	79130	68	81507	107	128400	106	127125	105	125700	126	151200	96	115510
1201-1300	48	62400	51	66129	81	105300	87	113023	98	127316	111	144202	79	103061
1301+	119	233400	145	260815	363	711655	541	1138540	647	1391735	598	1273563	402	834951
TOTALS	2876	1734438	2876	1741965	2876	2238910	2876	2604203	2876	2794716	2876	2733788	2876	2308003

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	133	0	139	0	169	0	200	67	195	0	212	0	174	11-
1- 200	308	46765	338	49653	334	52080	424	65008	399	60689	394	60340	366	55755
201- 400	454	159605	469	165030	490	172896	617	215244	581	203989	604	212416	535	188196
401- 600	497	275300	492	271216	546	298486	656	355809	590	321462	610	331992	565	309044
601- 700	213	148854	223	156025	259	181030	251	174491	265	184116	261	182624	245	171190
701- 800	210	167869	214	170983	250	199950	199	158020	203	161215	193	154323	211	168726
801- 900	197	177171	212	190556	172	154570	145	129603	166	148414	151	135724	173	156006
901-1000	144	143784	159	158921	141	140922	97	96350	129	128002	131	131000	133	133163
1001-1100	135	148171	136	149600	107	117700	89	97100	99	108100	94	103315	110	120664
1101-1200	114	136800	88	105446	84	100609	49	58500	67	80100	46	55200	74	89442
1201-1300	95	123424	83	107821	78	101400	34	43976	37	47950	43	55900	61	80078
1301+	376	739220	323	643728	246	460724	115	214819	145	275522	137	255221	223	431539
TOTALS	2876	2266963	2876	2168979	2876	1980367	2876	1608853	2876	1719559	2876	1678055	2876	1903796

MULTI-UNIT R - 92325 ZIP
FROM BOOK 00 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
1- 200	3	500	3	500	1	100	1	100	2	228	0	0	1	238
201- 400	1	400	0	0	5	1900	3	1100	0	0	2	700	1	683
401- 600	4	2100	4	1917	0	0	4	2100	3	1600	4	2300	3	1669
601- 700	1	700	0	0	1	700	1	700	4	2800	1	700	1	933
701- 800	0	0	3	2400	2	1600	0	0	1	800	1	800	1	933
801- 900	4	3600	3	2700	1	900	1	900	1	900	1	900	1	1650
901-1000	0	0	2	2000	1	1000	0	0	1	1000	3	2950	1	1158
1001-1100	3	3300	0	0	1	1100	3	3300	2	2125	1	1100	1	1820
1101-1200	2	2400	2	2400	0	0	1	1200	1	1200	1	1200	1	1400
1201-1300	2	2600	0	0	0	0	1	1300	1	1300	2	2600	1	1300
1301+	5	11500	8	15400	12	25300	10	24021	9	27800	8	23300	8	21220
TOTALS	25	27100	25	27317	25	32600	25	34721	25	39753	25	36550	25	33006

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	0	0	1	0	1	0	1	0	1	0	1	0	0	0
1- 200	1	200	2	400	0	0	0	0	1	200	1	200	0	166
201- 400	2	700	1	300	2	800	3	1050	2	650	3	1100	2	766
401- 600	4	2200	5	2600	4	2200	5	2750	5	2750	5	2700	4	2533
601- 700	1	700	1	700	3	2100	2	1400	2	1400	3	2100	2	1400
701- 800	2	1600	1	800	3	2400	0	0	3	2400	3	2400	2	1600
801- 900	2	1800	1	900	3	2629	2	1800	3	2700	2	1800	2	1938
901-1000	2	1950	4	4000	2	1922	1	1000	3	2910	3	3000	2	2463
1001-1100	1	1100	2	2200	1	1100	3	3250	1	1050	1	1100	1	1633
1101-1200	1	1200	0	0	1	1200	2	2400	2	2400	0	0	1	1200
1201-1300	1	1300	1	1300	1	1300	2	2600	0	0	0	0	0	1083
1301+	8	20400	6	14800	4	12100	4	10700	2	6800	3	8000	4	12133
TOTALS	25	33150	25	28000	25	27751	25	26950	25	23260	25	22400	25	26918

ALL ACCOUNTS - 92325 ZIP
FROM BOOK 00 THRU 42

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	76	700	70	270	77	0	61	0	60	0	71	0	69	161-
1- 200	225	32635	230	34982	201	31676	155	24552	157	23164	137	20700	184	27951
201- 400	294	103342	286	100714	256	88796	244	86732	205	72572	181	63648	244	85967
401- 600	276	151307	276	149455	237	129529	225	124022	226	122633	206	113111	241	131676
601- 700	112	78400	103	72014	106	74121	78	54600	107	74567	93	65100	99	69800
701- 800	80	63950	86	68750	90	71926	85	67820	80	63918	68	54400	81	65127
801- 900	56	50350	64	57550	78	70200	63	56700	80	72000	78	70150	69	62825
901-1000	53	52950	50	49950	59	59000	65	65000	60	60000	56	55778	57	57113
1001-1100	45	49500	36	39503	42	46200	65	71500	44	48249	51	56100	47	51842
1101-1200	29	34680	36	43057	47	56400	37	44400	40	47928	63	75600	42	50344
1201-1300	21	27250	22	28465	20	26000	33	42823	35	45416	46	59800	29	38292
1301+	59	131050	67	139550	113	242300	215	486448	232	533708	276	650150	160	363867
TOTALS	1326	774714	1326	783720	1326	896148	1326	1124597	1326	1164155	1326	1284537	1326	1004645

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	79	0	84	0	98	0	96	67	111	0	124	0	98	11-
1- 200	172	26096	202	30143	177	27527	204	29680	229	33300	233	34992	202	30289
201- 400	225	77841	252	87186	242	84032	265	90267	304	104780	314	110056	267	92360
401- 600	217	119188	226	124406	244	133147	265	141753	266	141100	275	149869	248	134910
601- 700	82	57165	89	62300	109	76300	107	73725	102	70216	93	65024	97	67455
701- 800	84	67119	82	65472	87	69550	88	69305	69	54015	69	55200	79	63443
801- 900	74	66550	74	66427	70	62929	69	61203	56	49503	48	43110	65	58287
901-1000	60	59876	69	68921	57	57000	49	48300	51	50133	53	53000	56	56205
1001-1100	47	51541	54	59400	41	45100	53	57401	42	45302	33	36215	45	49159
1101-1200	60	71919	31	37200	34	40800	30	35700	32	38100	17	20400	34	40686
1201-1300	32	41524	30	39000	39	50700	19	24476	13	16750	14	18200	24	31775
1301+	194	433919	133	324300	128	278824	81	175750	51	124574	53	121802	106	243194
TOTALS	1326	1072738	1326	964755	1326	925909	1326	807493	1326	727773	1326	707868	1326	867756

TOTAL ACTIVE & INACTIVE ACCOUNTS: 2311

CRESTLINE VILLAGE WATER
CONSUMPTION ANALYSISBUSINESS - 92325 ZIP
FROM BOOK 00 THRU 42

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	14	0	12	0	13	0	10	0	8	0	9	0	11	0
1- 200	25	3400	27	3800	24	3700	15	1905	21	3100	15	2200	21	3017
201- 400	8	2800	7	2400	7	2400	16	5200	10	3800	18	6100	11	3783
401- 600	12	6251	14	7351	12	6500	12	7000	15	8129	9	4900	12	6688
601- 700	3	2100	4	2800	7	4900	4	2800	3	2100	5	3500	4	3033
701- 800	6	4750	4	3150	3	2400	5	4000	4	3200	5	4000	4	3583
801- 900	3	2650	1	850	5	4500	4	3600	0	0	1	900	2	2083
901-1000	2	2000	4	4000	5	5000	2	2000	7	7000	2	2000	3	3666
1001-1100	2	2200	2	2200	1	1100	3	3300	5	5500	2	2200	2	2750
1101-1200	2	2350	3	3550	0	0	2	2400	1	1200	2	2400	1	1983
1201-1300	4	5150	3	3850	1	1300	2	2600	1	1300	4	5200	2	3233
1301+	13	44250	13	45150	16	50200	19	67800	19	69300	22	84900	17	60266
TOTALS	94	77901	94	79101	94	82000	94	102605	94	104629	94	118300	94	94089

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	9	0	8	0	14	0	9	0	8	0	13	0	10	0
1- 200	19	2700	24	3406	15	2300	25	3329	27	3500	27	3710	22	3157
201- 400	12	4200	11	4000	17	5800	15	4700	16	5150	14	4900	14	4791
401- 600	12	6600	13	7106	12	6600	12	6413	10	5350	8	4400	11	6078
601- 700	6	4119	5	3500	6	4200	6	4150	4	2750	3	2100	5	3469
701- 800	4	3200	5	4000	5	4000	2	1600	2	1600	2	1600	3	2666
801- 900	2	1800	4	3600	5	4500	2	1800	2	1800	5	4500	3	3000
901-1000	4	4000	2	2000	2	2000	2	1950	1	950	3	3000	2	2316
1001-1100	4	4400	3	3300	2	2200	5	5401	6	6502	0	0	3	3633
1101-1200	5	5919	2	2400	0	0	1	1200	4	4800	2	2400	2	2786
1201-1300	1	1300	1	1300	2	2600	0	0	1	1300	1	1300	1	1300
1301+	16	63500	16	62100	14	52500	15	45650	13	46274	16	47100	15	52854
TOTALS	94	101738	94	96712	94	86700	94	76193	94	79976	94	75010	94	86054

CRESTLINE VILLAGE WATER
CONSUMPTION ANALYSISPUBLIC AGENC - 92325 ZIP
FROM BOOK 00 THRU 42

CONSUMPTION	1 PERIOD AGO		2 PERIODS AGO		3 PERIODS AGO		4 PERIODS AGO		5 PERIODS AGO		6 PERIODS AGO		AVERAGE	
	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF
0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
1- 200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
201- 400	0	0	0	0	0	0	0	0	0	0	0	0	0	0
401- 600	0	0	0	0	0	0	0	0	0	0	0	0	0	0
601- 700	0	0	0	0	0	0	0	0	0	0	0	0	0	0
701- 800	0	0	0	0	0	0	0	0	0	0	0	0	0	0
801- 900	0	0	0	0	0	0	0	0	0	0	0	0	0	0
901-1000	0	0	0	0	0	0	0	0	1	1000	0	0	0	166
1001-1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101-1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1201-1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1301+	2	6600	2	4500	2	10100	2	11300	1	6200	2	8800	1	7916
TOTALS	3	6600	3	4500	3	10100	3	11300	3	7200	3	8800	3	8083

CONSUMPTION	7 PERIODS AGO		8 PERIODS AGO		9 PERIODS AGO		10 PERIODS AGO		11 PERIODS AGO		12 PERIODS AGO		AVERAGE	
	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF	COUNT	CONS. CF
0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
1- 200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
201- 400	0	0	0	0	0	0	0	0	0	0	0	0	0	0
401- 600	0	0	0	0	0	0	1	550	1	550	1	500	0	266
601- 700	0	0	0	0	1	700	0	0	0	0	0	0	0	116
701- 800	0	0	0	0	0	0	0	0	0	0	0	0	0	0
801- 900	0	0	0	0	0	0	0	0	0	0	0	0	0	0
901-1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1001-1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101-1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1201-1300	0	0	0	0	0	0	0	0	1	1300	0	0	0	216
1301+	2	7800	2	6800	1	5700	1	4400	0	0	1	3300	1	4666
TOTALS	3	7800	3	6800	3	6400	3	4950	3	1850	3	3800	3	5266

CRESTLINE VILLAGE WATER
CONSUMPTION ANALYSISALL RESIDENT - 92325 ZIP
FROM BOOK 00 THRU 42

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	62	700	58	270	64	0	51	0	52	0	62	0	58	161-
1- 200	200	29235	203	31182	177	27976	140	22647	136	20064	122	18500	163	24934
201- 400	286	100542	279	98314	249	86396	228	81532	195	68772	163	57548	233	82184
401- 600	264	145056	262	142104	225	123029	213	117022	211	114504	197	108211	228	124987
601- 700	109	76300	99	69214	99	69221	74	51800	104	72467	88	61600	95	66767
701- 800	74	59200	82	65600	87	69526	80	63820	76	60718	63	50400	77	61544
801- 900	53	47700	63	56700	73	65700	59	53100	80	72000	77	69250	67	60741
901-1000	51	50950	46	45950	54	54000	63	63000	52	52000	54	53778	53	53279
1001-1100	43	47300	34	37303	41	45100	62	68200	39	42749	49	53900	44	49092
1101-1200	27	32330	33	39507	47	56400	35	42000	39	46728	61	73200	40	48360
1201-1300	17	22100	19	24615	19	24700	31	40223	34	44116	42	54600	27	35059
1301+	44	80200	52	89900	95	182000	194	407348	212	458208	252	556450	141	295684
TOTALS	1230	690213	1230	700119	1230	804048	1230	1010692	1230	1052326	1230	1157437	1230	902472

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	70	0	76	0	84	0	87	67	103	0	111	0	88	11-
1- 200	153	23396	178	26737	162	25227	179	26351	202	29800	206	31282	180	27132
201- 400	213	73641	241	83186	225	78232	250	85567	288	99630	300	105156	252	87568
401- 600	205	112588	213	117300	232	126547	252	134790	255	135200	266	144969	237	128565
601- 700	76	53046	84	58800	102	71400	101	69575	98	67466	90	62924	91	63868
701- 800	80	63919	77	61472	82	65550	86	67705	67	52415	67	53600	76	60776
801- 900	72	64750	70	62827	65	58429	67	59403	54	47703	43	38610	61	55287
901-1000	56	55876	67	66921	55	55000	47	46350	50	49183	50	50000	54	53888
1001-1100	43	47141	51	56100	39	42900	48	52000	36	38800	33	36215	41	45526
1101-1200	55	66000	29	34800	34	40800	29	34500	28	33300	15	18000	31	37900
1201-1300	31	40224	29	37700	37	48100	19	24476	11	14150	13	16900	23	30258
1301+	176	362619	115	255400	113	220624	65	125700	38	78300	36	71402	90	185674
TOTALS	1230	963200	1230	861243	1230	832809	1230	726350	1230	645947	1230	629058	1230	776434

MULTI-UNIT R - 92325 ZIP
FROM BOOK 00 THRU 42

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
1- 200	3	500	3	500	1	100	1	100	2	228	0	0	1	238
201- 400	1	400	0	0	4	1500	2	700	0	0	2	700	1	550
401- 600	3	1600	3	1417	0	0	4	2100	2	1100	3	1700	2	1319
601- 700	1	700	0	0	1	700	1	700	4	2800	1	700	1	933
701- 800	0	0	3	2400	2	1600	0	0	1	800	1	800	1	933
801- 900	4	3600	3	2700	1	900	1	900	1	900	1	900	1	1650
901-1000	0	0	2	2000	1	1000	0	0	0	0	3	2950	1	991
1001-1100	2	2200	0	0	0	0	2	2200	2	2125	1	1100	1	1270
1101-1200	2	2400	1	1200	0	0	1	1200	1	1200	0	0	0	1000
1201-1300	1	1300	0	0	0	0	0	0	1	1300	2	2600	0	866
1301+	5	11500	7	14000	11	23800	10	24021	8	26300	7	21300	8	20153
TOTALS	22	24200	22	24217	22	29600	22	31921	22	36753	22	32750	22	29906

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	0	0	1	0	1	0	1	0	1	0	1	0	0	0
1- 200	1	200	2	400	0	0	0	0	1	200	1	200	0	166
201- 400	2	700	1	300	2	800	2	650	2	650	3	1100	2	700
401- 600	3	1600	4	2100	4	2200	5	2750	4	2150	5	2700	4	2250
601- 700	1	700	1	700	2	1400	1	700	2	1400	2	1400	1	1050
701- 800	2	1600	1	800	3	2400	0	0	2	1600	2	1600	1	1333
801- 900	1	900	1	900	3	2629	2	1800	2	1800	1	900	1	1488
901-1000	2	1950	3	3000	0	0	1	1000	3	2910	3	3000	2	1976
1001-1100	1	1100	2	2200	1	1100	3	3250	1	1050	1	1100	1	1633
1101-1200	1	1200	0	0	1	1200	2	2400	2	2400	0	0	1	1200
1201-1300	1	1300	0	0	1	1300	1	1300	0	0	0	0	0	650
1301+	7	18900	6	14800	4	12100	4	10700	2	6800	3	8000	4	11883
TOTALS	22	30150	22	25200	22	25129	22	24550	22	20960	22	20000	22	24331

ALL ACCOUNTS - 92325 ZIP
FROM BOOK 45 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	56	0	59	0	50	0	42	0	48	0	46	0	50	0
1- 200	208	33161	202	32123	136	21561	133	20483	118	18527	141	21094	156	24491
201- 400	335	118222	360	126962	229	79715	211	73683	199	70547	224	80595	259	91620
401- 600	372	203828	368	202200	270	147899	241	131644	225	124468	244	135248	286	157547
601- 700	184	128800	155	108500	144	100709	147	102738	117	81643	107	74651	142	99506
701- 800	134	107114	123	98400	131	104701	115	91916	113	90321	115	91950	121	97400
801- 900	93	83700	105	94417	104	93435	112	100800	109	98010	122	109716	107	96679
901-1000	73	73000	68	68000	112	111907	94	94000	85	85000	98	97907	88	88302
1001-1100	55	60500	55	60405	87	95700	83	91300	73	80300	75	82500	71	78450
1101-1200	39	46800	35	42000	60	72000	72	86325	67	80172	65	78000	56	67549
1201-1300	31	40300	32	41514	62	80600	57	74100	66	85800	70	90902	53	68869
1301+	81	174460	99	194415	276	562355	354	768992	441	984027	354	767513	267	575293
TOTALS	1661	1069885	1661	1068936	1661	1470582	1661	1635981	1661	1798815	1661	1630076	1661	1445712

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	65	0	65	0	87	0	115	0	94	0	102	0	88	0
1- 200	156	23469	161	23016	173	26953	247	38857	199	31289	190	29258	187	28807
201- 400	241	85964	228	81844	265	94664	368	129977	294	104659	307	108120	283	100871
401- 600	293	163312	281	155016	317	173439	406	222119	336	186682	345	187523	329	181348
601- 700	138	96508	139	97225	157	109630	151	105616	167	116650	172	120400	154	107671
701- 800	130	103950	138	110311	169	135200	113	90315	136	108800	126	100723	135	108216
801- 900	125	112421	142	127729	107	96141	79	71100	115	103411	110	98914	113	101619
901-1000	88	87908	94	94000	86	85922	53	53000	81	80819	82	82000	80	80608
1001-1100	94	103230	85	93500	68	74800	41	45100	63	69300	61	67100	68	75505
1101-1200	59	70800	59	70646	51	61009	20	24000	39	46800	31	37200	43	51742
1201-1300	64	83200	54	70121	41	53300	15	19500	26	33800	30	39000	38	49820
1301+	208	413241	215	424328	140	272400	53	104319	111	214822	105	200219	138	271554
TOTALS	1661	1344003	1661	1347736	1661	1183458	1661	903903	1661	1097032	1661	1070457	1661	1157764

TOTAL ACTIVE & INACTIVE ACCOUNTS: 2650

BUSINESS - 92325 ZIP
FROM BOOK 45 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
1- 200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
201- 400	2	700	1	400	0	0	0	0	0	0	0	0	0	183
401- 600	0	0	1	500	1	500	0	0	0	0	1	600	0	266
601- 700	1	700	1	700	0	0	1	700	0	0	0	0	0	350
701- 800	1	800	0	0	1	800	0	0	1	800	0	0	0	400
801- 900	0	0	1	900	1	900	0	0	0	0	0	0	0	300
901-1000	1	1000	1	1000	0	0	0	0	1	1000	0	0	0	500
1001-1100	0	0	0	0	0	0	1	1100	0	0	1	1100	0	366
1101-1200	0	0	0	0	0	0	1	1200	1	1200	0	0	0	400
1201-1300	0	0	0	0	0	0	1	1300	2	2600	1	1300	0	866
1301+	4	14600	4	14200	6	22600	5	25600	4	34100	6	35800	4	24483
TOTALS	10	17800	10	17700	10	24800	10	29900	10	39700	10	38800	10	28116

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
1- 200	0	0	0	0	0	0	1	100	1	200	1	100	0	66
201- 400	0	0	0	0	0	0	1	300	1	300	1	300	0	150
401- 600	1	600	1	600	3	1500	2	1100	0	0	1	500	1	716
601- 700	1	700	0	0	0	0	0	0	0	0	1	700	0	233
701- 800	0	0	1	800	0	0	0	0	0	0	0	0	0	133
801- 900	0	0	0	0	0	0	0	0	3	2700	1	900	0	600
901-1000	0	0	2	2000	0	0	3	3000	1	1000	1	1000	1	1166
1001-1100	2	2200	0	0	0	0	0	0	0	0	0	0	0	366
1101-1200	0	0	0	0	1	1200	0	0	0	0	0	0	0	200
1201-1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1301+	5	22400	5	24900	5	19500	2	11800	3	14700	3	13100	3	17733
TOTALS	10	25900	10	28300	10	22200	10	16300	10	18900	10	16600	10	21366

PUBLIC AGENC - 92325 ZIP
FROM BOOK 45 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	1	0	2	0	2	0	1	0	2	0	2	0	1	0
1- 200	1	100	1	90	0	0	1	100	0	0	0	0	0	48
201- 400	0	0	0	0	0	0	1	270	1	325	1	325	0	153
401- 600	0	0	0	0	0	0	0	0	0	0	0	0	0	0
601- 700	0	0	0	0	0	0	0	0	0	0	0	0	0	0
701- 800	0	0	0	0	0	0	0	0	0	0	0	0	0	0
801- 900	0	0	0	0	1	820	0	0	0	0	0	0	0	136
901-1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1001-1100	1	1100	0	0	0	0	0	0	0	0	0	0	0	183
1101-1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1201-1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1301+	2	6660	2	9300	2	10100	2	12200	2	16400	2	14600	2	11543
TOTALS	5	7860	5	9390	5	10920	5	12570	5	16725	5	14925	5	12065

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	1	0	1	0	1	0	1	0	1	0	0	0	0	0
1- 200	1	100	1	100	1	100	1	100	1	200	1	100	1	116
201- 400	0	0	0	0	0	0	0	0	0	0	2	560	0	93
401- 600	0	0	1	500	0	0	0	0	1	420	0	0	0	153
601- 700	0	0	0	0	0	0	1	700	0	0	0	0	0	116
701- 800	0	0	0	0	1	800	0	0	0	0	0	0	0	133
801- 900	0	0	0	0	0	0	1	900	0	0	1	900	0	300
901-1000	0	0	0	0	0	0	0	0	1	1000	0	0	0	166
1001-1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101-1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1201-1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1301+	3	14240	2	11100	2	12800	1	3400	1	2900	1	3300	1	7956
TOTALS	5	14340	5	11700	5	13700	5	5100	5	4520	5	4860	5	9036

ALL RESIDENT - 92325 ZIP
FROM BOOK 45 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	54	0	56	0	47	0	40	0	45	0	43	0	47	0
1- 200	207	33061	201	32033	136	21561	132	20383	118	18527	141	21094	155	24443
201- 400	333	117522	359	126562	229	79715	210	73413	198	70222	223	80270	258	91284
401- 600	372	203828	367	201700	269	147399	241	131644	225	124468	243	134648	286	157281
601- 700	183	128100	154	107800	144	100709	146	102038	117	81643	107	74651	141	99156
701- 800	133	106314	123	98400	130	103901	115	91916	112	89521	115	91950	121	97000
801- 900	93	83700	104	93517	102	91715	112	100800	109	98010	122	109716	107	96243
901-1000	72	72000	67	67000	112	111907	94	94000	84	84000	98	97907	87	87802
1001-1100	54	59400	55	60405	87	95700	82	90200	73	80300	74	81400	70	77900
1101-1200	39	46800	35	42000	60	72000	71	85125	66	78972	65	78000	56	67149
1201-1300	31	40300	32	41514	62	80600	56	72800	64	83200	69	89602	52	68002
1301+	75	153200	93	170915	268	529655	347	731192	435	933527	346	717113	260	539267
TOTALS	1646	1044225	1646	1041846	1646	1434862	1646	1593511	1646	1742390	1646	1576351	1646	1405530

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	63	0	63	0	85	0	113	0	92	0	101	0	86	0
1- 200	155	23369	160	22916	172	26853	245	38657	197	30889	188	29058	186	28623
201- 400	241	85964	228	81844	265	94664	367	129677	293	104359	304	107260	283	100628
401- 600	292	162712	279	153916	314	171939	404	221019	335	186262	344	187023	328	180478
601- 700	137	95808	139	97225	157	109630	150	104916	167	116650	171	119700	153	107321
701- 800	130	103950	137	109511	168	134400	113	90315	136	108800	126	100723	135	107949
801- 900	125	112421	142	127729	107	96141	78	70200	112	100711	108	97114	112	100719
901-1000	88	87908	92	92000	86	85922	50	50000	79	78819	81	81000	79	79274
1001-1100	92	101030	85	93500	68	74800	41	45100	63	69300	61	67100	68	75138
1101-1200	59	70800	59	70646	50	59809	20	24000	39	46800	31	37200	43	51542
1201-1300	64	83200	54	70121	41	53300	15	19500	26	33800	30	39000	38	49820
1301+	200	376601	208	388328	133	240100	50	89119	107	197222	101	183819	133	245864
TOTALS	1646	1303763	1646	1307736	1646	1147558	1646	882503	1646	1073612	1646	1048997	1646	1127361

MULTI-UNIT R - 92325 ZIP
FROM BOOK 45 THRU 93

CONSUMPTION	1 PERIOD AGO COUNT/CONS. CF		2 PERIODS AGO COUNT/CONS. CF		3 PERIODS AGO COUNT/CONS. CF		4 PERIODS AGO COUNT/CONS. CF		5 PERIODS AGO COUNT/CONS. CF		6 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1- 200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
201- 400	0	0	0	0	1	400	1	400	0	0	0	0	0	133
401- 600	1	500	1	500	0	0	0	0	1	500	1	600	0	350
601- 700	0	0	0	0	0	0	0	0	0	0	0	0	0	0
701- 800	0	0	0	0	0	0	0	0	0	0	0	0	0	0
801- 900	0	0	0	0	0	0	0	0	0	0	0	0	0	0
901-1000	0	0	0	0	0	0	0	0	1	1000	0	0	0	166
1001-1100	1	1100	0	0	1	1100	1	1100	0	0	0	0	0	550
1101-1200	0	0	1	1200	0	0	0	0	0	0	1	1200	0	400
1201-1300	1	1300	0	0	0	0	1	1300	0	0	0	0	0	433
1301+	0	0	1	1400	1	1500	0	0	1	1500	1	2000	0	1066
TOTALS	3	2900	3	3100	3	3000	3	2800	3	3000	3	3800	3	3100

CONSUMPTION	7 PERIODS AGO COUNT/CONS. CF		8 PERIODS AGO COUNT/CONS. CF		9 PERIODS AGO COUNT/CONS. CF		10 PERIODS AGO COUNT/CONS. CF		11 PERIODS AGO COUNT/CONS. CF		12 PERIODS AGO COUNT/CONS. CF		AVERAGE COUNT/CONS. CF	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1- 200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
201- 400	0	0	0	0	0	0	1	400	0	0	0	0	0	66
401- 600	1	600	1	500	0	0	0	0	1	600	0	0	0	283
601- 700	0	0	0	0	1	700	1	700	0	0	1	700	0	350
701- 800	0	0	0	0	0	0	0	0	1	800	1	800	0	266
801- 900	1	900	0	0	0	0	0	0	1	900	1	900	0	450
901-1000	0	0	1	1000	2	1922	0	0	0	0	0	0	0	487
1001-1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101-1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1201-1300	0	0	1	1300	0	0	1	1300	0	0	0	0	0	433
1301+	1	1500	0	0	0	0	0	0	0	0	0	0	0	250
TOTALS	3	3000	3	2800	3	2622	3	2400	3	2300	3	2400	3	2587