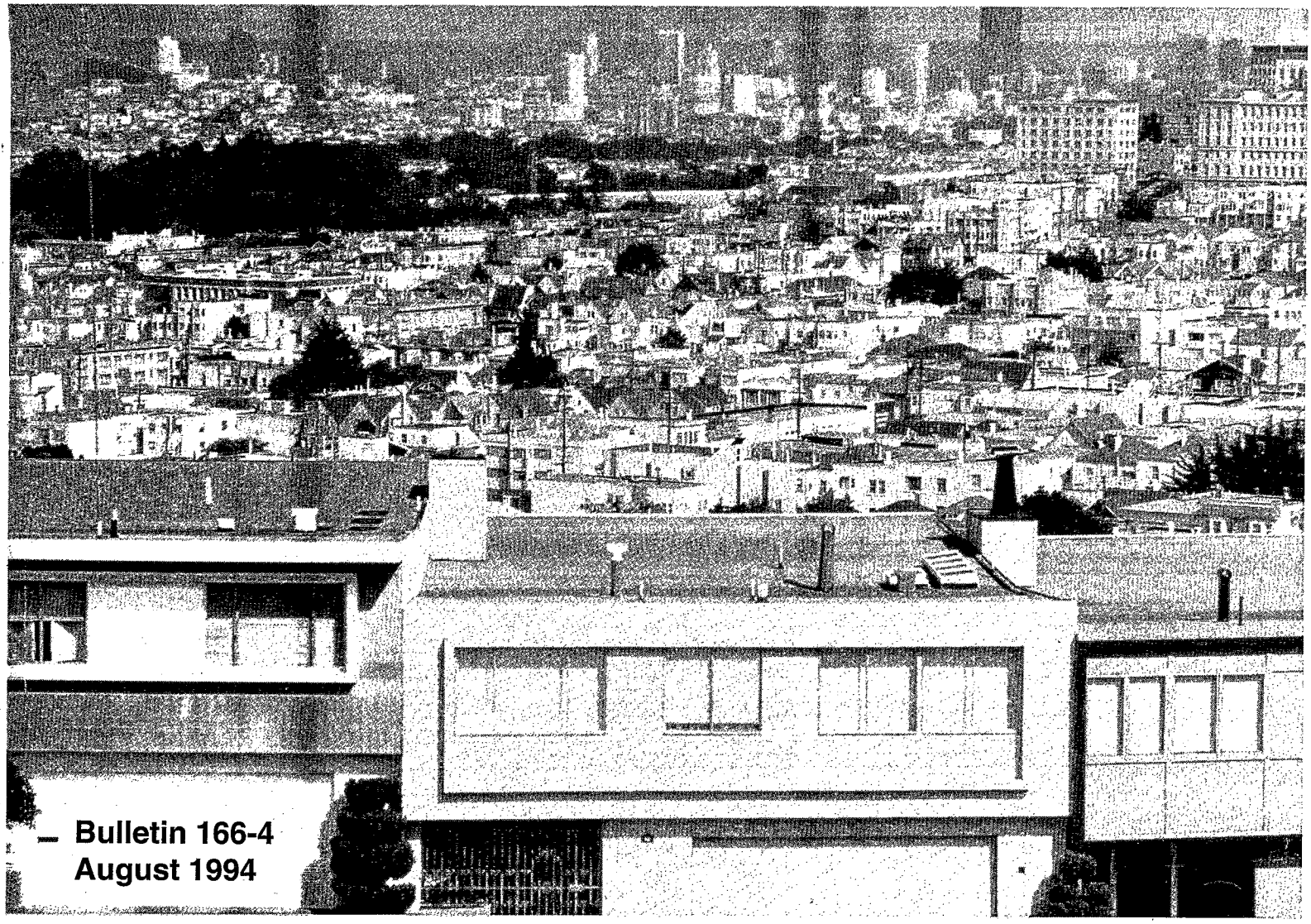

Bulletin 166-4
August 1994

State of California
The Resources Agency

Department of
Water Resources

Urban Water Use in California

Douglas P. Wheeler
Secretary for Resources
The Resources Agency

Pete Wilson
Governor
State of California

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California Department of Water Resources

URBAN WATER USE IN CALIFORNIA

Bulletin 166-4

August 1994

Douglas P. Wheeler
Secretary for Resources
The Resources Agency

Pete Wilson
Governor
State of California

David N. Kennedy
Director
Department of Water Resources

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Foreword

Planning for future urban water supply needs in California entails a wide range of efforts by local, State, and federal water agencies and other interested parties. Analysis of past water use trends is important to the effectiveness of this effort and the reliability of forecasts of water needs. The Department of Water Resources has surveyed retail water agencies and analyzed their water production data for over 35 years and has made the results available since 1968 through the Bulletin 166 series.

Bulletin 166-4 is a compilation of monthly urban water production data from nearly 300 retail water purveyors for the decade ending 1990. The data come from service areas in all 10 hydrologic regions (major water planning subdivisions) of the State. Socioeconomic and natural phenomena, notably climate, population growth, and pricing, which have influenced water use trends in the 1980s are discussed. The text also provides an analysis of urban water use by hydrologic regions and the major sectors (residential, commercial, industrial, and governmental). The urban water demands cited in the recent *California Water Plan Update*, Bulletin 160-93, are largely based on Bulletin 166-4 data.

The intent of Bulletin 166-4 is to provide the water community with information on the urban water use data that can be employed in statewide and regional water planning decisions. Estimates of per capita water use can indicate changes in water use patterns for a community, a region, an industry, or the State.

Bulletin 166-4 introduces the Water Savings Simulation Program, a model for urban water use forecasting developed by the Department with the University of California, Los Angeles. The Department hopes that this model will be an effective tool for planning and calculating future urban water demands.

David N. Kennedy, Director
Department of Water Resources
State of California

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The California Water Commission serves as a policy advisory body to the Director of Water Resources on all California water resources matters. The nine-member citizen commission provides a water resources forum for the people of the State, acts as a liaison between the legislative and executive branches of State Government, and coordinates federal, state, and local water resources efforts.

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Department of Water Resources

Mission

To manage the water resources of California, in cooperation with other agencies, to benefit the State's people and protect, restore, and enhance the natural and human environments.

Major responsibilities of the Department are to:

- **Prepare and update the California Water Plan** to guide development and management of the State's water resources.
- **Plan, design, construct, operate, and maintain the State Water Resources Development System** to supply good water quality for municipal, industrial, agricultural, and recreational uses for fish and wildlife protection and enhancement.
- **Protect and restore the Sacramento-San Joaquin Delta** by controlling salinity and providing water supplies for Delta water users; planning long-term solutions for environmental and water use problems facing the Delta; and administering levee maintenance reimbursements and special flood control projects.
- **Regulate dams, provide flood protection, and assist in emergency management to safeguard life and property** by supervising design, construction, operation, and maintenance of more than 1,200 jurisdictional dams; encouraging preventive floodplain management practices; maintaining and operating Sacramento Valley flood control facilities; cooperating in flood control planning and facility development; and providing flood advisory information.
- **Educate the public** about the importance of water and its proper use and collect, analyze, and distribute water-related information to the general public and to the scientific, technical, educational, and water management communities.
- **Serve local water needs** by providing technical assistance, cooperating with local agencies on water resources investigations, supporting watershed and river restoration programs, encouraging water conservation, exploring conjunctive use of ground and surface water, facilitating voluntary water transfers, and, when needed, operating a State drought water bank.

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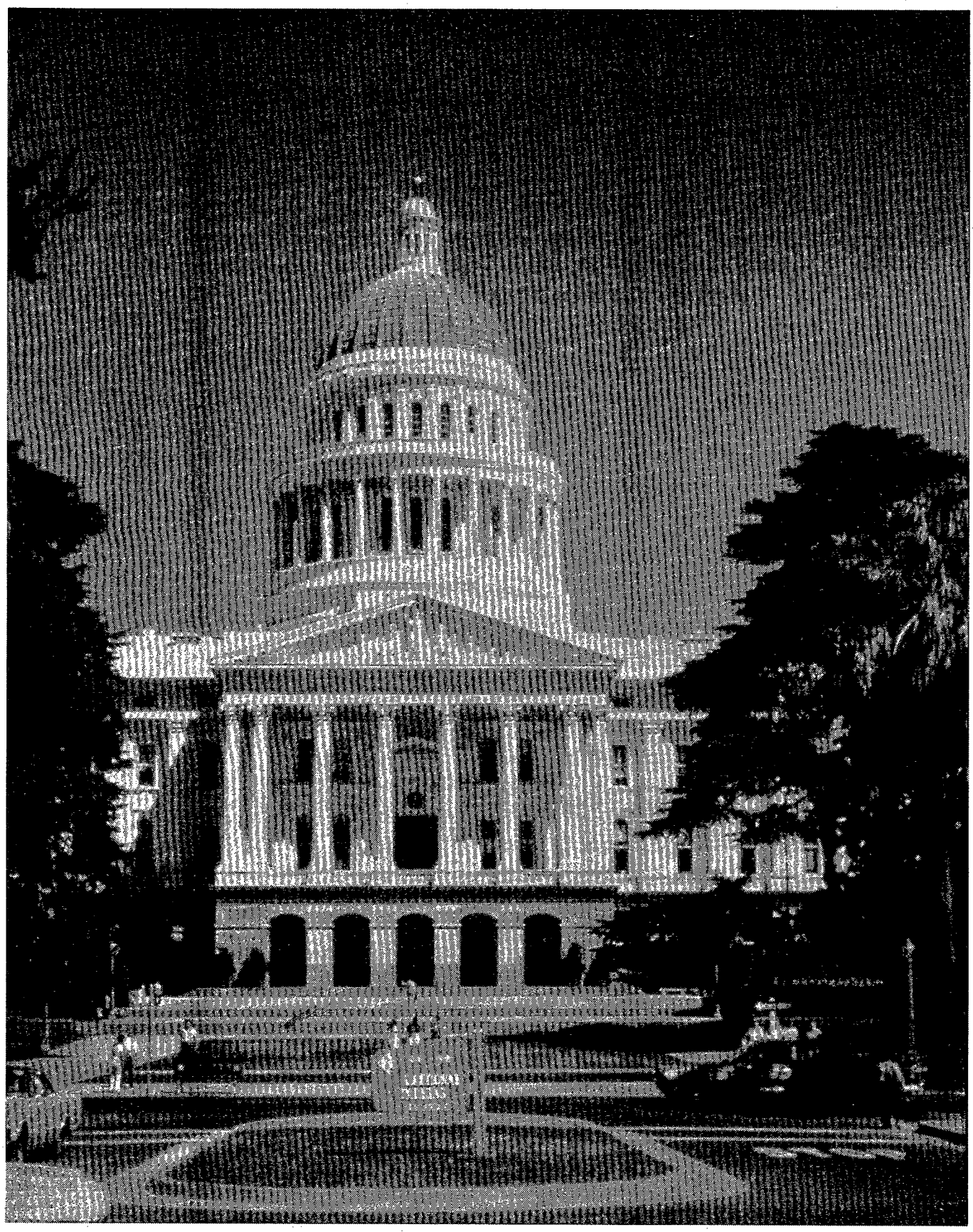

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Chapter 1. Introduction

Authorization

The California Water Code and Constitution require that the water resources of the State be put to beneficial uses to the fullest extent possible, and that waste, unreasonable use, or unreasonable methods of water use be prevented. The law charges the Department of Water Resources and other State agencies with the responsibility to ensure protection of the State's water resources for the benefit of present and future generations. The Department operates under a mission statement that dedicates its efforts toward fulfillment of this obligation. This report helps the Department meet the first, fifth, and sixth goals of its mission. Collecting and reporting statewide water information is necessary to forecast future water demands and plan to meet future local and statewide needs.

In the 1940s, the Division of Water Resources under the Department of Public Works (predecessor to the Department of Water Resources) began compiling water use data. In 1959, Section 226 was added to the Water Code, enabling the Department to collect records on diversion and use of water, and conduct investigations on actual water use for various purposes. Further, Section 232 directed the Department to conduct investigations and prepare findings on current uses of water within each watershed. Water data collection is a cooperative effort among federal and State agencies and water purveyors and users throughout the State. Data and analyses are made available to those with an interest or a need for the information. The Department publishes its findings in the reports discussed below.

DWR Water Use Reports

Bulletin 160 Series

In 1957, the Department published the *California Water Plan* (Bulletin 3), a report detailing current water use and supply along with major aspects of water planning and development. Since 1966, the Plan has been updated six times under the Bulletin 160 series most recently as Bulletin 160-93, *California Water Plan Update*. Each update summarized the Department's findings on statewide developed water supply and uses including projections for up to 30 years into the future.

For the first time, Bulletin 160-93 presented *average* water year and *drought* year water demand and supply scenarios through the year 2020. Also, Bulletin 160-93 gave full standing to environmental water use as a major category along with urban and agricultural water use. Table 1-1, taken from Bulletin 160-93, shows a summary of current and projected water uses under average water year and drought scenarios. Definitions of water terms used in Table 1-1 are found on page 3.

Bulletin 166 Series

In 1968, the Department began the Bulletin 166 series focusing on urban water use in California. This bulletin periodically updates historical urban water use data.

Some objectives of the Bulletin 166 series are to:

- Prepare data and analysis for updating the *California Water Plan*, for use in other planning studies, and for general public information;
- Provide basic water use information including summaries of urban water production, delivery, and related data from local water agencies;
- Summarize historical water data and analyze trends in water use by hydrologic regions and major categories of use;
- Quantify self-supplied water use;
- Describe methods for forecasting future water requirements; and
- Assess the effects of water conservation practices.

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Table 1-1. California Water Demand
(millions acre-feet)

Category of Use	1990		2020		1990-2020 Change	
	average	drought	average	drought	average	drought
Urban						
Applied water	7.8	8.1	12.7	13.2	4.9	5.1
Net water	6.8	7.1	10.5	11.0	3.7	3.9
Depletion	5.7	6.0	8.4	8.8	2.7	2.8
Agricultural						
Applied water	31.1	32.8	28.8	30.4	−2.3	−2.4
Net water	26.8	28.2	24.9	26.1	−1.9	−2.1
Depletion	24.2	25.6	22.8	24.1	−1.4	−1.5
Environmental [1]						
Applied water	28.8	16.8	29.3	17.3	0.5	0.5
Net water	28.4	16.4	28.8	16.8	0.4	0.4
Depletion	24.4	12.9	24.7	13.3	0.3	0.4
Other [2]						
Applied water	0.3	0.3	0.3	0.3	0.0	0.0
Net water	1.5	1.5	1.5	1.4	0.0	−0.1
Depletion	1.0	1.0	1.0	1.0	0.0	0.0
Total						
Applied water	**68.0**	**58.0**	**71.1**	**61.2**	**3.1**	**3.2**
Net water	**63.5**	**53.2**	**65.7**	**55.3**	**2.2**	**2.5**
Depletion	**55.3**	**45.5**	**56.9**	**47.2**	**1.6**	**1.4**

[1] Includes water dedicated to wetlands, instream flows, wild and scenic river flows, and salinity repulsion. There may also be 1 to 3 MAF in additional environmental demand.
[2] Other includes conveyance losses, recreation uses, and energy production.

Bulletin 166-1 (*Municipal and Industrial Water Use*, August 1968) compiled water use data from 1961 through 1965 on 85 water suppliers and major manufacturing facilities, presented as per capita water use on a daily, monthly, and annual basis. This was the Department's first report to present detailed urban water use data, including per capita water use data and projections for cities in the various hydrologic regions of the State.

Bulletin 166-2, *Urban Water Use in California* (October 1975) summarized monthly per capita water use data from 1961 through 1970 for 147 water service agencies throughout the State. This report noted, "Historic trends in per capita water use are generally continuing upward, although rates of use have leveled off or remained the same within a number of communities."

Bulletin 166-3, *Urban Water Use in California,* (October 1983) reported water use rates for 178 water service agencies (including those reported in Bulletin 166-2) from 1970-71, through 1980. This report noted, "After years of a generally upward trend, overall per-capita water use appears to have tended to level off during the past decade." This report recognized a marked drop in water use during the dry years of 1976 and 1977, followed by a return to previous levels of usage, but also conjectured, "Most major water suppliers in California have active water conservation programs, which should further tend to reduce future per-capita water use rates."

Bulletins 166-4 and 160-93 were developed concurrently and are based on the same urban water use data through 1990.

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Other Department reports focus specifically on water use by manufacturing industries (Bulletin 124 series, last updated in 1982), and by agriculture (Bulletin 113 series, last updated in 1986).

Highlights of This Report

Bulletin 166-4 summarizes historical urban water use trends, per capita urban water use, applied and net water use and depletions, and type of use (residential, commercial, industrial, and governmental) during the period 1980 through 1990.

Applied Water Use, Net Water Use, and Depletions

Urban applied water means the water produced and supplied to the system of an urban water purveyor. Three other terms, also found in Appendix B, are important enough to be explained here:

ETAW (Evapotranspiration of Applied Water): The portion of the total evapotranspiration provided by irrigation.

Net Water Demand: The amount of water needed in a service area to meet all requirements. It is the sum of ETAW, irrecoverable losses from the distribution system and the outflow leaving the service area.

Depletion: The water consumed within a service area that is no longer available as a source of supply. For urban use it is ETAW from landscapes and gardens, sewage effluent that flows to a salt sink, and incidental evapotranspiration losses.

As in previous issues of this report, a major portion consists of 10-year summaries (Appendix A) of actual monthly water use data as reported to the Department by nearly 300 retail urban water purveyors representing all 10 major hydrologic regions in California. These suppliers report populations in their service areas that range from a few hundred to over 3 million, totaling about 74 percent of the State's population. They deliver from less than 100 to over 650,000 acre-feet annually, and constitute about 90 percent of total urban water deliveries statewide. Appendix A includes regional maps and a listing of water suppliers reporting in this bulletin. The per capita values calculated for the water agencies in Appendix A are weighted by population for regional and statewide urban water use estimates.

Since the primary focus of this bulletin is on actual water-use history from 1980 to 1990, the effects of the 1987-1992 drought and conservation programs adopted by State and local agencies are evident in the data in Appendix A. In contrast, some of the analyses in this report and in Bulletin 160-93 use estimates for 1990 that are *normalized* by averaging 1980-87 data to eliminate the skewing effects of the drought.

Chapter 2 of this Bulletin describes and analyzes the four major sectors of urban water use and introduces terminology. Chapter 3 discusses climatic, socioeconomic, and demand management factors that influence water usage rates. Chapter 4 is a discussion of water pricing methods and policies. Chapter 5 discusses future water demands and illustrates an urban water-use forecasting model to evaluate the effects of water conservation management practices. Finally, Chapter 6 describes the data gathering processes used in acquiring the 1980-1990 water use data in Appendix A.

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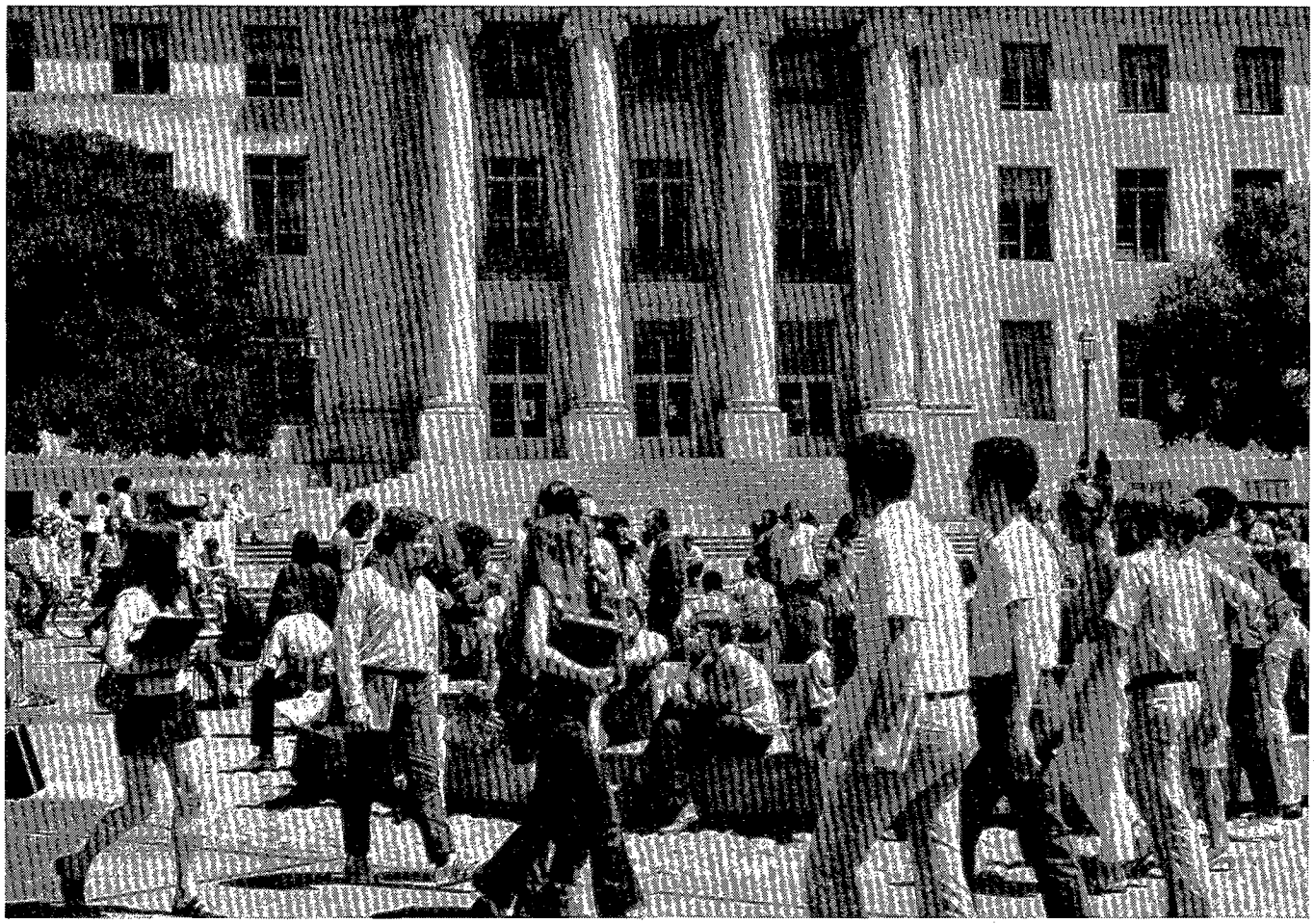

Even with aggressive conservation programs, urban water use will continue to increase as population grows.

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Chapter 2. Urban Water Use in California

Population Growth

Population estimates for 1990 and 2020 are based on census data and projections provided by the Department of Finance. State law mandates that these estimates are used in the Department's planning studies. Regional planning agencies, such as the Southern California Association of Governments, Association of Bay Area Governments, and others also prepare population projections.

The Department of Water Resources divides California into 10 major hydrologic regions (see Figure 2-1) for water planning. Each region is divided into planning subareas (PSA), which are further divided into detailed analysis units (DAU) (see also Appendix A). The Department's major water use bulletins incorporate data gathered and analyzed by DAU and aggregated to PSAs and hydrologic regions. Table 2-1 compares 1990 and 2020 urban population by hydrologic region.

Table 2-1. Urban Population by Hydrologic Regions (millions)

Region	1980	1990	2020
North Coast	0.5	0.6	0.9
San Francisco	4.8	5.5	6.9
Central Coast	1.0	1.3	2.0
South Coast	12.9	16.3	25.3
Sacramento River	1.7	2.2	4.1
San Joaquin River	1.0	1.4	3.2
Tulare Lake	1.2	1.5	3.5
North Lahontan	0.1	0.1	0.1
South Lahontan	0.3	0.6	1.9
Colorado River	0.3	0.5	1.0
Total	**23.8**	**30.0**	**48.9**

Population growth varies throughout the State. Growth rates are increasing in the hotter interior of California where residential per capita water use is greatest. Table 2-2 shows county population growth between 1980 and 1990.

Urban Applied Water and Per Capita Water Use

Urban applied water is the measured quantity introduced into a water supplier's system (water production) and is equivalent to water delivered to customers plus unaccounted losses. Urban applied water includes the water produced for all urban needs—residential, commercial, industrial, and governmental. Although, most urban water use occurs in urban areas, it also occurs in outlying rural-area residences, commercial facilities, manufacturing plants, and governmental facilities. See Appendix B for a glossary of terms.

Per capita water use is all applied water divided by the total permanent resident population of the water service area. The most difficult aspect of quantifying the per capita use is accurately determining population of the service area.

Table 2-3 presents normalized 1990 per capita water use by hydrologic region used in Bulletin 160-93. The normalized 1990 levels were calculated based on the average per capita use in more than 170 California communities during 1980 to 1987, a period unaffected by the 1987-92 drought. The averages also include estimates of self-supplied (not delivered by water purveyors) ground and surface water, estimated by the U.S. Geological Survey (1993) at over 550,000 acre-feet per year statewide.

The values in Table 2-3 represent gross per capita water use (see Glossary, Appendix B) including the residential, commercial, industrial, and governmental water use sectors. The residential per capita water use was based on the percentage of the total water delivered to residences in each region. The statewide average was calculated by weighting the per capita water use of each region by population. The heavily populated South Coast most strongly influenced the statewide average. These values reflect reductions in per capita use caused by conservation that have accumulated since 1980. It is estimated that urban applied water in the normalized 1990 year compared to 1980 was being reduced by about 435,000 acre-feet statewide due to ongoing conservation programs (Bulletin 160-93).

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Table 2-2. Population Growth by County, 1980 to 1990							
County	Total Population		% Growth 1980-1990	County	Total Population		% Growth 1980-1990
	1980	1990			1980	1990	
Alameda	1,109,500	1,282,400	16	Placer	118,400	175,600	48
Alpine	1,100	1,100	0	Plumas	17,400	19,900	14
Amador	19,500	30,600	57	Riverside	669,800	1,195,400	78
Butte	144,900	183,900	27	Sacramento	787,900	1,051,400	33
Calaveras	20,900	32,500	56	San Benito	25,200	37,000	47
Colusa	12,900	16,400	27	San Bernardino	902,200	1,440,700	60
Contra Costa	658,500	810,300	23	San Diego	1,873,300	2,520,500	35
Del Norte	18,300	24,500	34	San Francisco	680,500	723,900	6
El Dorado	86,500	128,200	48	San Joaquin	350,200	483,800	38
Fresno	517,400	673,900	30	San Luis Obispo	156,600	219,500	40
Glenn	21,500	25,000	16	San Mateo	588,100	652,100	11
Humboldt	108,900	119,800	10	Santa Barbara	300,000	371,400	24
Imperial	92,500	110,400	19	Santa Clara	1,300,200	1,502,200	16
Inyo	17,900	18,400	3	Santa Cruz	189,100	230,800	22
Kern	406,100	549,800	35	Shasta	116,600	148,800	28
Kings	74,200	102,500	38	Sierra	3,100	3,400	10
Lake	36,800	51,100	39	Siskiyou	40,000	43,800	10
Lassen	21,800	27,800	28	Solano	237,200	345,700	46
Los Angeles	7,500,300	8,897,500	19	Sonoma	301,400	392,000	30
Madera	63,900	89,800	41	Stanislaus	267,700	376,100	40
Marin	222,700	231,200	4	Sutter	52,600	65,100	24
Mariposa	11,200	14,500	29	Tehama	39,100	50,100	28
Mendocino	67,000	81,000	21	Trinity	12,000	13,100	9
Merced	135,200	180,600	34	Tulare	247,400	314,600	27
Modoc	8,700	9,700	11	Tuolumne	34,200	49,000	43
Mono	8,700	10,200	17	Ventura	532,200	671,600	26
Monterey	292,100	358,800	23	Yolo	113,900	142,500	25
Napa	99,300	111,700	12	Yuba	49,800	58,700	18
Nevada	52,500	79,600	52				
Orange	1,944,800	2,424,100	25	**Statewide Total**	**23,781,700**	**29,976,000**	**26**
Source: Department of Finance							

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Figure 2-1. Hydrologic Regions of California

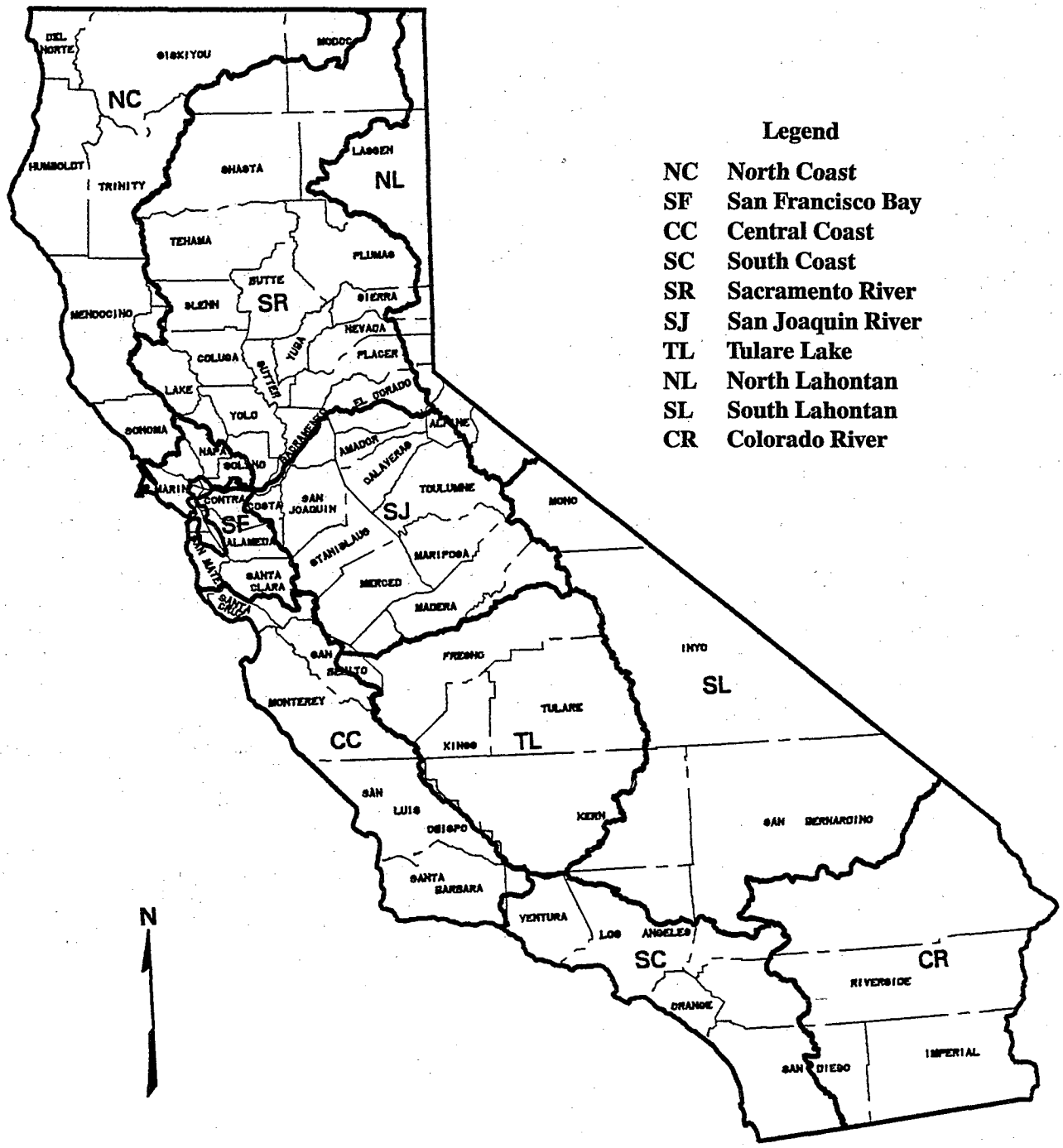

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Table 2-3. 1990 Per Capita Water Use in California (gallons per capita daily)

Region	All Uses	Residential
North Coast	263	84
San Francisco	193	106
Central Coast	189	113
South Coast	211	124
Sacramento River	301	166
San Joaquin River	309	170
Tulare Lake	301	202
North Lahontan	421	194
South Lahontan	278	175
Colorado River	579	342
Statewide Weighted Average*	**232**	**134**

*Average of 1980-87 data used as the 1990 normalized base for Bulletin 160-93, weighted by population.

Figure 2-2 plots statewide annual changes in per capita water use between 1940 and 1990 in six major regions of the State. The two drought periods of 1976-77 and 1987-92 clearly affect the annual values. Department data from 1920 through 1970 indicates that daily per capita use increased by 1.7 gallons per year. However, per capita water use has remained relatively constant since 1970, except for the variations due to weather. During drought years trends were modified downward by imposed water use restrictions and voluntary efforts by users to reduce use.

The hydrologic regions with the highest total urban applied water use are the densely populated San Francisco Bay and South Coast. The relationship between population density and per capita use is discussed in Chapter 3 and Appendix D. Table 2-4 shows normalized demand by hydrologic region.

Table 2-4. Normalized 1990 Urban Applied Water Demand by Hydrologic Region (millions acre-feet)

Hydrologic Region	Applied Water	Net Water	Depletion
North Coast	0.17	0.17	0.11
San Francisco	1.19	0.19	1.09
Central Coast	0.27	0.23	0.20
South Coast	3.80	3.51	3.34
Sacramento River	0.74	0.75	0.24
San Joaquin River	0.49	0.35	0.19
Tulare Lake	0.52	0.19	0.21
North Lahontan	0.04	0.04	0.02
South Lahontan	0.19	0.12	0.12
Colorado River	0.30	0.20	0.20
Total	**7.76**	**6.77**	**5.72**

Source: Adapted from Bulletin 160-93

Per capita use is considerably higher in the Central Valley and Colorado River regions where it may reach over 600 gallons in July, compared to less than 100 gallons in some North Coast Region communities during the same period. Maximum values occur in the Palm Springs area, due to tourism and intense summer heat, which raises evapotranspiration to high levels on golf courses and landscaped residential areas. Coastal populations are expanding eastward into these warmer climates, tending to increase the statewide per capita water use and partially offset the demand reductions gained through conservation efforts.

The gross per capita use method is useful for estimating statewide urban water demands. It is sometimes used to compare the water use of communities, which is not appropriate without evaluating all the factors affecting demand.

To illustrate how difficult it is to generalize about the factors affecting urban water use, data from pairs of communities having the same climate is shown in Table 2-5.

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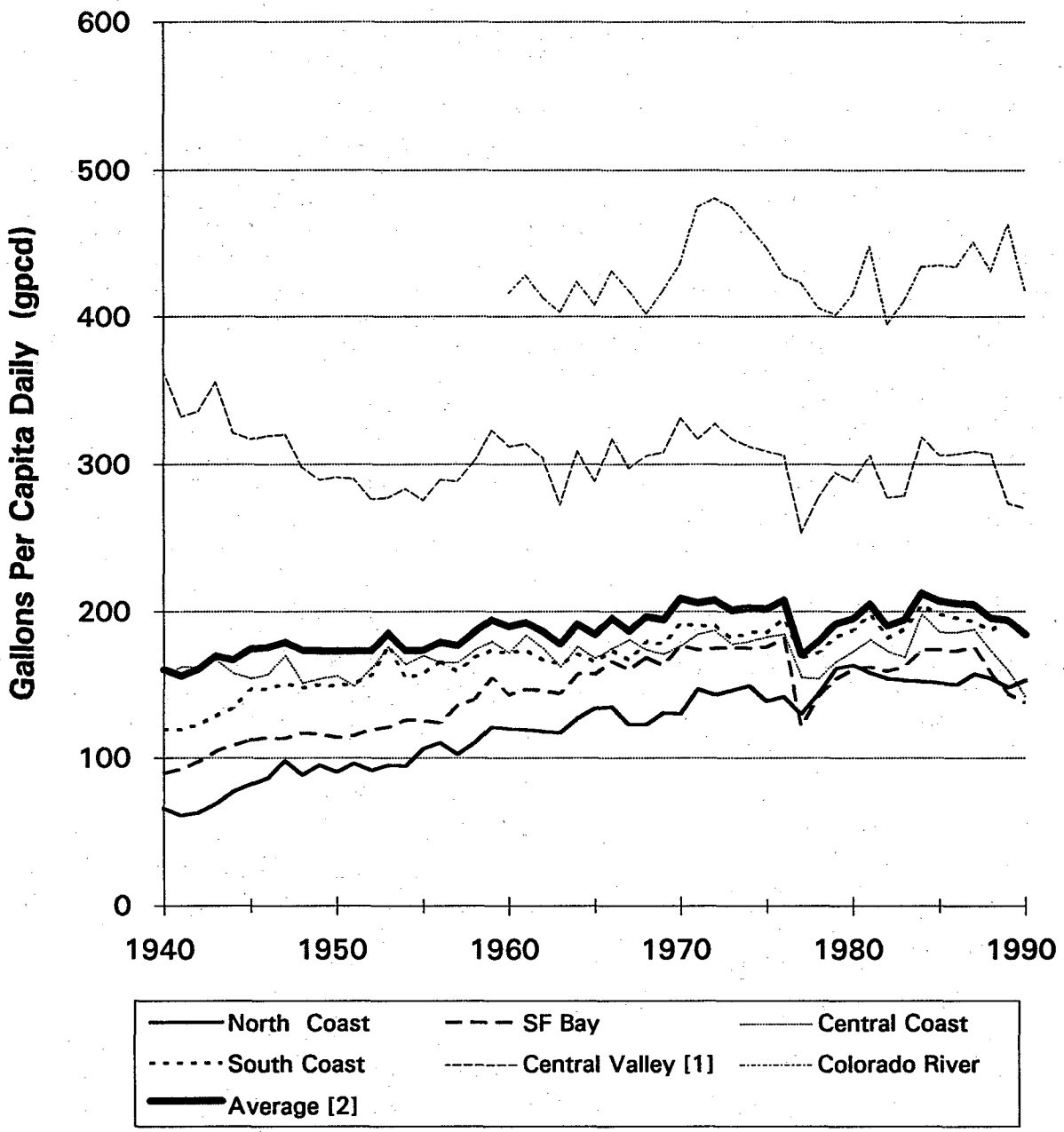
Figure 2-2. Urban Agency Supplied Per Capita Water Use in Selected Hydrologic Regions



1. Average of Sacramento River, San Joaquin River, and Tulare Lake hydrologic regions.
2. Weighted by hydrologic region populations.

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Table 2-5. Per Capita Water Use of Pairs of Communities in the Same Climatic Zone			
Community	**Location**	**GPCD**	**Comments**
A	Western SF Bay Region	102	Both communities were metered but Community B had much larger homes, lot sizes, and higher incomes.
B		277	
C	Northern Tulare Lake Basin	170	Community C was primarily lower income residential, while Community D had a balance of commercial, industrial, and moderate-income residential. Both communities were not metered.
D		329	
E	South Coast Inland Valley	214	Both communities were metered but Community E was less affluent and had more multi-family housing than Community F.
F		367	

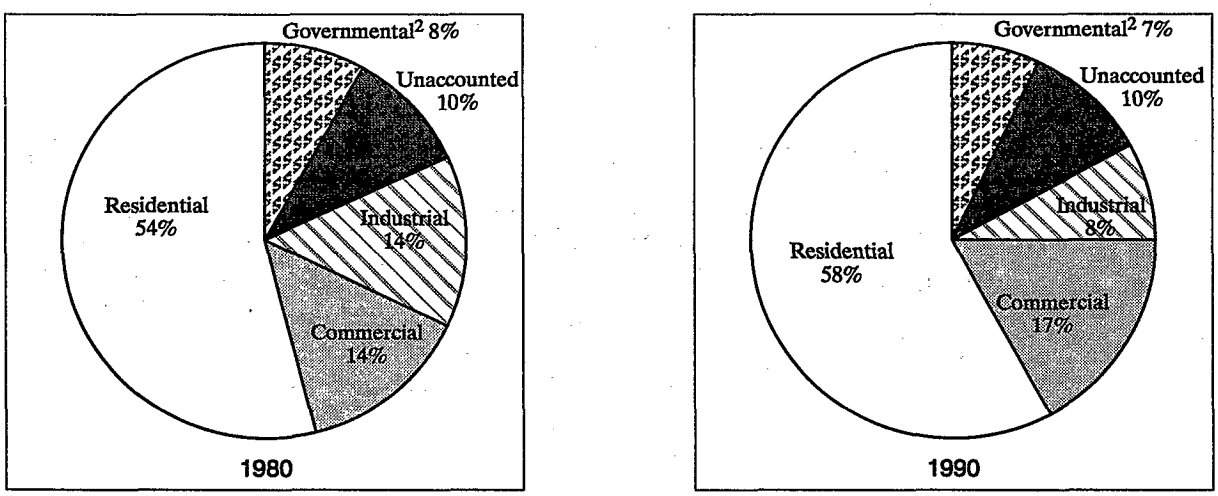
Water Use in the Major Urban Sectors

The urban applied water and per capita values discussed previously include all categories of urban water use. The Department's urban water use analysis recognizes four classes of use: residential, commercial, industrial, and governmental. However, there is no statewide standard as to what constitutes each category. Some water agencies classify institutional with commercial and consider governmental as public use. In other agencies, multi-family residential may be included with commercial or combined commercial/residential. Commercial water use reflects the impact of tourist and recreational visitors on per capita values of the permanent local population. In Department analysis, residential uses include single-family dwellings, apartment units, and mobile (or manufactured) home parks. The other three classes have been defined from the groupings established in the *Standard Industrial Classification Manual* published by the U.S. Office of Management and Budget. As described in the Manual: "The Standard Industrial Classification (SIC) is the statistical classification standard underlying all establishment-based Federal economic statistics classified by industry. The SIC is used to promote the comparability of data describing various facets of the U.S. economy. The classification covers the entire field of economic activities and defines industries in accordance with the composition and structure of the economy. . . ." The major SIC groups that the Department uses for the industrial, commercial, and governmental categories are identified in this chapter.

Some of the water produced by urban water agencies is unaccounted for in customer deliveries. In California, regional unaccounted water, whether authorized use, unauthorized use, or distribution system losses, commonly ranges between 6 and 15 percent. Agencies that received leak detection grants from the State in 1984—serving 13 percent of the State's population—showed an average 10-percent loss.

Figure 2-3 and Table 2-6 illustrate the percentages of water use in all water use sectors statewide and by hydrologic region.

Figure 2-3. 1990 Urban Applied Water Use By Sector[1]



[1] Includes self-supplied water
[2] Includes irrigation of public golf courses, park sites, etc.

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Table 2-6. 1990 Percentage of Urban Water Use by Sector*					
Region	**Residential**	**Commercial**	**Industrial**	**Governmental**	**Unaccounted**
North Coast	52	15	14	5	14
San Francisco	54	22	9	7	8
Central Coast	60	16	8	6	10
South Coast	59	18	8	6	9
Sacramento River	56	17	6	12	9
San Joaquin River	70	8	10	6	6
Tulare Lake	67	10	10	4	9
North Lahontan	38	19	26	10	7
South Lahontan	63	13	1	13	10
Colorado River	59	22	2	3	14
Statewide	**58**	**17**	**8**	**7**	**10**

*Includes industry self-supplied

Residential Water Use

The largest single urban water-using group is residential water users, which comprised about 58 percent of the statewide total of urban water use in 1990. The largest users are single-family dwellings that customarily have individual front and rear landscaped areas requiring irrigation during the growing season. Apartments share the water used for common gardens and turf and as a result, per capita water use is smaller. Other multi-family group dwellings such as condominiums, duplexes, halfplexes, and mobile homes in parks have a wide range in water use depending on climate, lot size, and the extent of landscaping. Table 2-7 shows the percentage of residential use and total applied water for residential use in California's hydrologic regions. Since 1980, the percentage of residential use, in relation to total urban use, has increased 4 percent.

The categories of interior residential water use were shown as percentages, not as volumes of water in the *California Water Plan Update* (DWR Bulletin 160-93). However, *Water Conservation in California* (DWR Bulletin 198, May 1976) separated volumes of urban water use into the categories displayed in Table 2-8. For this report, the percentages found in Bulletin 160-93 have been used to calculate the volumes shown in Table 2-9.

Table 2-7. Residential Water Use in California*		
Region	**Percentage of Total Urban Use**	**Applied Water Use (1,000 AF)**
North Coast	52	88
San Francisco	54	643
Central Coast	60	162
South Coast	59	2,240
Sacramento River	56	414
San Joaquin River	70	343
Tulare Lake	67	348
North Lahontan	35	14
South Lahontan	63	120
Colorado River	59	177
	Statewide 58	**Total 4,549**

* Average of 1980-87 data used as the *normalized* 1990 base value for Bulletin 160-93

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Table 2-8. Indoor Residential Water Use in California, 1972		
Interior Use	**Percentage of Total Interior Use**	**Total Applied Use (1,000 AF)**
Toilet	42	800
Bath	32	600
Kitchen	8	150
Laundry	14	270
Cooking	4	80
Total	**100**	**1,900**

Source: Bulletin 198, Figure 7 (May 1976) 1972 data
Note: Assumes statewide total interior use as 56% of residential use.

Table 2-9. Indoor Residential Water Use in California, 1990		
Interior Use	**Percentage of Total Interior Use**	**Total Applied Use (1,000 AF)**
Toilet	36	840
Bath/Shower	28	650
Dishwashing	3	70
Laundry	20	460
Faucets	13	300
Total	**100**	**2,320**

Source: Adapted from Table 6-7, Bulletin 160-93 (November 1993 draft)

Because of low-flow fixture laws and conservation efforts during the 1980s, the percentage of total urban use in toilets and baths has declined from 56 percent of gross urban water use in 1972 to 51 percent in 1990. All faucets and showerheads manufactured after January 1, 1994, were restricted to a flow of 2.5 gallons per minute as established in the Federal Energy Policy Act of 1992. Further, all water closets sold or installed in California must use no more than 1.6 gallons per flush under State and federal laws. These and other factors should cause interior water use to decline per person but the increase in population will cause the total water used in residences to increase.

While gross indoor residential applied water use has increased, it has not increased as rapidly as population growth. Comparison of the 1972 and 1990 data in Table 2-8 and Table 2-9 shows an increase of 24 percent in interior use while population increased 43 percent. In contrast, applying the same analysis to exterior water use, predominantly landscaping (discussed in Chapter 3), shows an increase of 44 percent over the same period while population increased 43 per cent.

Commercial Water Use

The percentage of commercial water use rose during the 1980s from 14 percent to 17 percent of total urban use. In Bulletin 166-3, the commercial sector included office buildings, restaurants, and other business establishments, but excluded governmental uses. The commercial categories based on SIC codes included:

Division	Description	Codes
C	Construction	15-17
E	Transportation, Communication, etc.	40-49
F	Wholesale Trade	50-51
G	Retail Trade	52-59
H	Finance, Insurance and Real Estate	60-67
I	Services	70-89
K	Non-classifiable Establishment	99

This bulletin uses the same categories to describe commercial use. However, commercial water use data are not gathered by category. In addition, there are methods of classifying urban water use that combine commercial and some governmental categories. There is little reason to assume that water use in a privately-owned hospital differs significantly from a University of California Medical Center in the same geographic location. A standardized grouping of SIC codes to describe commercial water use would be useful.

The regional commercial water use is illustrated in Table 2-10. Two other factors making the data on commercial use relatively *soft* are that multi-family housing units are often classified as commercial by local water agencies and that there is little data on the amount of commercial water use that is self-supplied. The U.S. Geological Survey (1993) estimated that 26 percent of all commercial use is self-supplied.

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Table 2-10. Commercial Applied Water Use in California, by Hydrologic Region*				
Region	Percentage of Total Urban Use		Applied Water Use (1,000 AF)	
North Coast	15		26	
San Francisco	22		262	
Central Coast	16		43	
South Coast	18		684	
Sacramento River	17		126	
San Joaquin River	8		39	
Tulare Lake	10		52	
North Lahontan	16		6	
South Lahontan	13		25	
Colorado River	22		66	
	Average	17	Total	1,329

* Average of 1980-87 data used as the 1990 *normalized* base for Bulletin 160-93

Generally, broad commercial services develop in proportion to industrial, military, or governmental development. With its overall mild climate, the most populous state also abounds with tourist and recreational services year round and in most regions. The San Francisco Bay Region, North Lahontan (Lake Tahoe is in this region), and the Colorado River Region (Palm Springs) have the highest percentages of commercial use. The highly urbanized South Coast Region, which dedicates 80 percent of its total water demand to urban uses, has growing commercial water use (700,000 acre-feet) due to the growth in services and tourism.

In previous bulletins, the Department did not estimate volumes of water used in this category by hydrologic region. This is a growing category of urban water use that needs to be analyzed more completely in the 1990s.

The East Bay Municipal Utility District (1992) estimated that the 1986 actual demand of commercial enterprises was 15 percent of its applied water demand. Similarly, the base year (1990) projection of water use in The Metropolitan Water District of Southern California (Planning and Management Consultants, 1990) indicated that 17 percent of the use was commercial.

Industrial Water Use

The Department's Bulletin 124-3, *Water Use by Manufacturing Industries in California* (May 1982), identified a number of water intensive manufacturing industries including SIC Major Groups:

20: Food and Kindred Products
24: Lumber and Wood Products, Except Furniture
26: Paper and Allied Products
28: Chemical and Allied Products
29: Petroleum Refining and Related Industries
32: Stone, Clay, Glass, and Concrete Products
36: Electronic and other electrical equipment.

As of 1990, 8 percent of urban water deliveries are received by manufacturers, representing a decrease of 6 percent since 1980. Industrial water use in the hydrologic regions of California is shown in Table 2-11.

In areas where these water-intensive industries are sited, overall per capita water use may be higher than in areas without these industries. Where water-intensive industries exist, much of the industrial supply may be self-produced rather than utility supplied. Where this occurs, this additional amount of water must be identified and added to the amount distributed by water agencies before per capita rates can be calculated. Bulletin 124-3 estimated that 58 percent of the fresh water supplied to manufacturing plants in 1979 was agency-supplied, while 42 percent was self-supplied through wells, diversion, or springs. The U.S. Geological Survey (1993) indicated that approximately 25 percent of fresh industrial water was self-supplied in 1990. A survey of industrial use in 12 San Francisco Bay Area and Southern California counties indicated that 18 percent of their water was self-supplied (California Urban Water Agencies, 1990). However, the data are limited for the Central Valley, where it is assumed much of the industrial water is self-supplied because of accessible ground water. Twenty-five percent of industrial water was assumed to be self produced in 1990 for this Bulletin.

The total industrial water use of 620,000 acre-feet shown in Table 2-11 is almost a 300,000 acre-feet reduction from the 918,000 acre-feet reported in Bulletin 124-3 for 1979. While this is a rough approximation, it does show that the Clean Water Act of 1972 and its amendments in 1977, along with industrial conservation programs and a de-

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cline in the lumber industry, have been important factors in reducing water use.

Table 2-11. Industrial Applied Water Use in California*

Region	Percentage	Applied Water Use (1,000 AF)
North Coast	14	24
San Francisco	9	107
Central Coast	8	22
South Coast	8	304
Sacramento River	6	44
San Joaquin River	10	49
Tulare Lake	10	52
North Lahontan	23	9
South Lahontan	1	2
Colorado River	2	6
Average	8	Total 619

* Average of 1980-87 data used as the 1990 *normalized* base for Bulletin 160-93

The highest percentage of industrial water use in relation to total urban use is the pulp and lumber industry in the sparsely populated North Coast Region. In the San Francisco Bay Region, high-water-using industries include oil refining and electronics. Even with the decline in the steel, aerospace, and defense industries in the South Coast Region, it remains the largest manufacturing center in the United States. Industrial water use in the Central Valley remains dominated by the food processing, concrete, and chemical industries and petroleum refining in the Tulare Lake Region.

Governmental/Public Water Use

The percentage of total water use in this category declined 1 percent from 1980 to 1990. Most governmental users are classified and described in the SIC Manual, Division J, Public Administration. This division includes the executive, legislative, judicial, administrative, and regulatory activities of federal, State, local, and international governments. As was done in Bulletin 166-3, the Department has expanded the category to include all public functions that may not have been specifically identified in the SIC Manual, such as schools, public offices, military installations, public parks, public cemeteries, and golf courses, and other public-controlled entities. There are frequent cases of overlap with commercial activities such as golf courses and hospitals. The use of the SIC code for this category may need to be modified in the future.

The governmental water use data presented in Table 2-12 may not be consistent with locally derived data because of the inclusion of many users considered in commercial or irrigation categories by others. Many types of governmental activities will use nearly the same water as similar commercial enterprises. Some current forecasting techniques group much of this category with commercial and use the public/other category for the remainder.

Table 2-12. Governmental Applied Water Use in California*

Region	Percentage	Applied Water Use (1,000 AF)
North Coast	5	8
San Francisco	7	83
Central Coast	6	16
South Coast	6	228
Sacramento River	12	89
San Joaquin River	6	29
Tulare Lake	4	21
North Lahontan	10	4
South Lahontan	14	27
Colorado River	3	9
Average	7	Total 514

* Average of 1980-87 data used as the 1990 *normalized* base for Bulletin 160-93. Does not include military bases.

There was no analysis of the total volume of governmental use in past bulletins; however, it has shown a slight percentage decrease of gross urban use since 1980.

Unaccounted Water

Unaccounted water was not identified in Bulletin 166-3. However, water production ranges from about 6 to 15 percent higher than water ultimately delivered to customers in each hydrologic region. The difference between water production and delivery to customers is called *unaccounted water*, which consists of actual losses in the delivery system including authorized and unauthorized uses.

Table 2-13 shows that the proportion of unaccounted water varies substantially in each region of the State. The quality of this data in the Central Valley is affected by the lack of residential metering in many areas.

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Table 2-13. Unaccounted Water in California*				
Region	Percentage		Water Use (1,000 AF)	
North Coast	14		24	
San Francisco	8		95	
Central Coast	10		27	
South Coast	9		342	
Sacramento River	9		67	
San Joaquin River	6		29	
Tulare Lake	9		47	
North Lahontan	15		6	
South Lahontan	10		19	
Colorado River	14		42	
	Average	**10**	**Total**	**698**
* Average of 1980-87 excluding drought years.				

System losses were reported at about 8 percent for the City of Sacramento (Boyle Engineering, October 1991), 9 percent for EBMUD in 1986 (EDAW, December 1992) and 9 percent for MWD (PMCL, February 1990).

The percentage of statewide urban water that is unaccounted for has remained about the same between 1980 and 1990. There have been aggressive leak detection and repair programs by the Department and some local agencies. Such programs reduce urban applied water and are cost effective in most cases. The results of the Department's 1984 program managed by the Water Conservation Office were published in the *Water Engineering and Management Magazine* (May 1987). The program found that:

- an average of the 57 cooperating agencies found 10 percent unaccounted water,
- the maximum unaccounted water was 30 percent,
- over 2 years, almost 16,000 acre-feet were recovered, and
- the benefit-to-cost ratio was almost three to one.

The results of this study indicate that substantial amounts of water could be conserved statewide by aggressive leak detection and repair programs implemented on a large scale.

Effects of Drought and Water Conservation on Urban Applied Water

The 1976-77 drought had a severe and immediate impact on per capita water use through enforced rationing programs and voluntary efforts on the part of water users. However, after recovery from the drought in 1978, a trend toward predrought consumption clearly began. Previous per capita use rates were reached in 1981 and slightly exceeded in 1984. Succeeding years were level until the start of the 1987-92 drought. When constraining measures were reinstituted about 1988, consumption rates again fell. Under these circumstances, it is difficult to assess the real effect of conservation education and other persuasive measures responsible for a general leveling of per capita water use.

The increase in water conservation efforts over the past 20 years is also forcing other changes in the way we manage water supplies. During the drought of 1976-77, many agencies were able to reduce per capita water demand sharply through a variety of water conservation measures. As more conservation measures are adopted, making permanent changes in the way we use water, there is less flexibility to reduce per capita use during droughts and other shortages. Estimates made in Bulletin 160-93 indicate that 435,000 acre-feet of urban applied water were conserved in 1990 compared to 1980, and that an additional 1,285,000 acre-feet of applied water reductions will occur by 2020 due to BMPs (Table 2-14).

Table 2-14 estimates 2020 urban applied water reduction and reductions in depletions for each hydrologic region of California.

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Table 2-14. Projected 2020 Applied Urban Water Reductions and Reductions in Depletions by Hydrologic Region
(thousands of acre-feet)

Region	Applied Water Reductions	Reductions in Depletions
North Coast	65	55
San Francisco	250	250
Central Coast	30	30
South Coast	610	490
Sacramento River	110	25
San Joaquin River	60	20
Tulare Lake	65	20
North Lahontan	5	0
South Lahontan	50	10
Colorado River	40	35
Total	**1,285**	**935**

Water Recycling and Gray Water

Two other water management options, reclamation and gray water use, are getting increasing attention in California.

The 1990 level of water recycling is based on evaluation of data presented in Bulletin 160-93 from the report *Water Recycling 2000* (September 1991). Table 2-15 displays recycled volumes for 1990 by hydrologic region. The estimated type of recycling by percentage of the total volume is shown in Figure 2-4.

Table 2-15. 1990 Water Recycling by Hydrologic Region

Region	Total Water Recycled (1,000 AF/yr)
North Coast	14
San Francisco	36
Central Coast	40
South Coast	140
Sacramento River	9
San Joaquin River	24
Tulare Lake	63
North Lahontan	8
South Lahontan	13
Colorado River	7
Total	**354**

Source: *Water Recycling 2000* (September 1991)

Bulletin 160-93 also projected that an additional 967,000 acre-feet per year would be produced by 2020 based on a recent report by the WateReuse Association of California (July 1993).

In 1992, the California Legislature approved and the Governor signed Assembly Bill 3518 to permit statewide use of gray water for landscape irrigation. The California Plumbing Code (Title 24, Part 5, California Administrative Code) defines gray water as untreated household waste water that has not come into contact with toilet waste.

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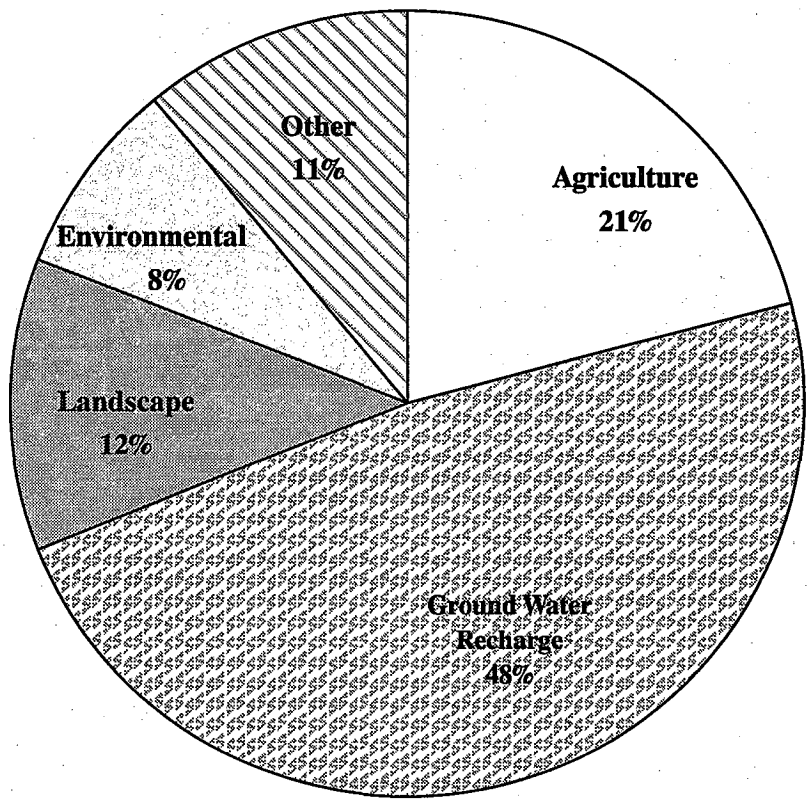
Figure 2-4. Estimated 1990 Water Recycling by Category



Adapted from *Water Recycling 2000,* September 1991, State Water Conservation Coalition Reclamation/Reuse Task Force and the Bay Delta Reclamation Sub-work Group. Estimated 1990 use of reclaimed water is based on actual 1989 use reported in *Water Recycling 2000*.

Gray water use could help reduce the demand for potable fresh water over the long term. Most households produce between 24 and 36 gallons of gray water per person per day. Many population centers in California are located in areas where the climate requires landscape irrigation at least 7 months of the year, so gray water could replace potable water during that time. Gray water would generally only be practical in larger lots where adequate side clearances can be maintained for subsurface irrigation fields.

A more substantial use of gray water in residential areas would require major investments in plumbing and may not be practical for existing housing. The expected population increase between 1990 and 2020 is about 19 million people. If half these people live in single-family dwellings in new housing with gray water plumbing, the potential for gray water use, at 30 gallons per person per day, could be about 180,000 acre-feet of water in 2020.

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California's climate, weather, demographic patterns, and other factors influence water demands.

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Chapter 3. Factors Influencing Urban Water Use

This chapter discusses climatic, socioeconomic, and water conservation factors that influence per capita water use. More information on climatic factors is found in Appendix E.

Climatic Factors

Climate has a great overall influence on annual and seasonal changes in per capita water use. Climatic factors (temperature, precipitation, solar radiation, humidity, wind) operate in combination to influence the amount of water consumed by plants. Their effects differ with locality and fluctuate seasonally and from year to year.

The sun is the original source of all energy involved in the transformation of water from liquid to vapor. Solar radiation provides the energy for photosynthesis and plant growth. Factors such as humidity, wind, and temperature originate as a result of solar radiation. For this reason, California's sunny inland valleys have much higher rates of water use than coastal areas.

Temperature is the climatic factor that most influences the water use of landscape vegetation. Seasonal per capita water use values reflect the changes in urban landscape water demands as users respond to changes in temperature.

Precipitation most effectively reduces the need for supplemental landscape irrigation water when it occurs during late spring through early fall when vegetation is actively growing. In winter, landscape water requirements are sharply reduced when dormancy, or near dormancy, of warm weather turf species such as Bermuda grass and ornamental shrubs and trees lowers or eliminates the need for irrigation.

High humidity suppresses plant water use. The evaporating power of the atmosphere increases under drier conditions, causing water to be used at a greater rate by plants. In coastal areas, the humidity remains uniformly high because of proximity to the ocean and prevailing westerly winds.

Wind accelerates water use. Air movement removes saturated air from contact with moist soil, water, and leaf surfaces and replaces it with warmer and drier air from adjacent areas. Plants exercise partial control over water loss from their leaves, while moisture loss from water and soil surfaces increases in relation to wind speed.

Evaporative Demand

The evaporative demand is the cumulative influence of these climatic variables on the rate of water evaporation. Numerous studies have shown that water evaporation from a standard water surface resolves the climatic influences into one easily measured variable that closely correlates to plant water use. The standard water surface most commonly used in California is the U.S. Weather Bureau Class A evaporation pan.

Evapotranspiration

The climatic factors mentioned previously drive the processes of evapotranspiration (ET). The components of ET are transpiration, the movement of water through the leaves into the air as vapor to cool the plant, and evaporation of water from the plant surface or soil adjacent to the plant.

Evaporative demand based on evaporation of water from a standard U.S. Weather Bureau Class A evaporation pan in an irrigated pasture or equivalent environment can be used as an index for evapotranspiration.

The evapotranspiration of cool-season grass, or *reference* evapotranspiration (ETo) can be used as an index of landscape water requirements. The map in Figure 3-2 (previously published in DWR Bulletin 113-3) shows average annual ETo in California. These values range from 30 inches in the extreme northwest in Del Norte County to more than 90 inches in the desert of southeast California.

The lines of equal average annual ETo extend generally from north to south, with higher values in the south. The 60-inch iso-line is characteristic of the Central Valley and also extends through Central Los Angeles County. The hot summers in the Central Valley are offset by the warm-

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er winter climate in Los Angeles, resulting in about the same average annual ETo for both areas. The effect of seasonal variations in ETo on plant water use is reflected in per capita water use values.

As determined by the Department, variations in per capita water use and ETo, precipitation, and July temperatures for 20 communities in California are displayed in Figure 3-1, Figure E-1, and Figure E-2 (Appendix E) respectively. These figures indicate that climatic factors alone cannot explain all differences in per capita use.

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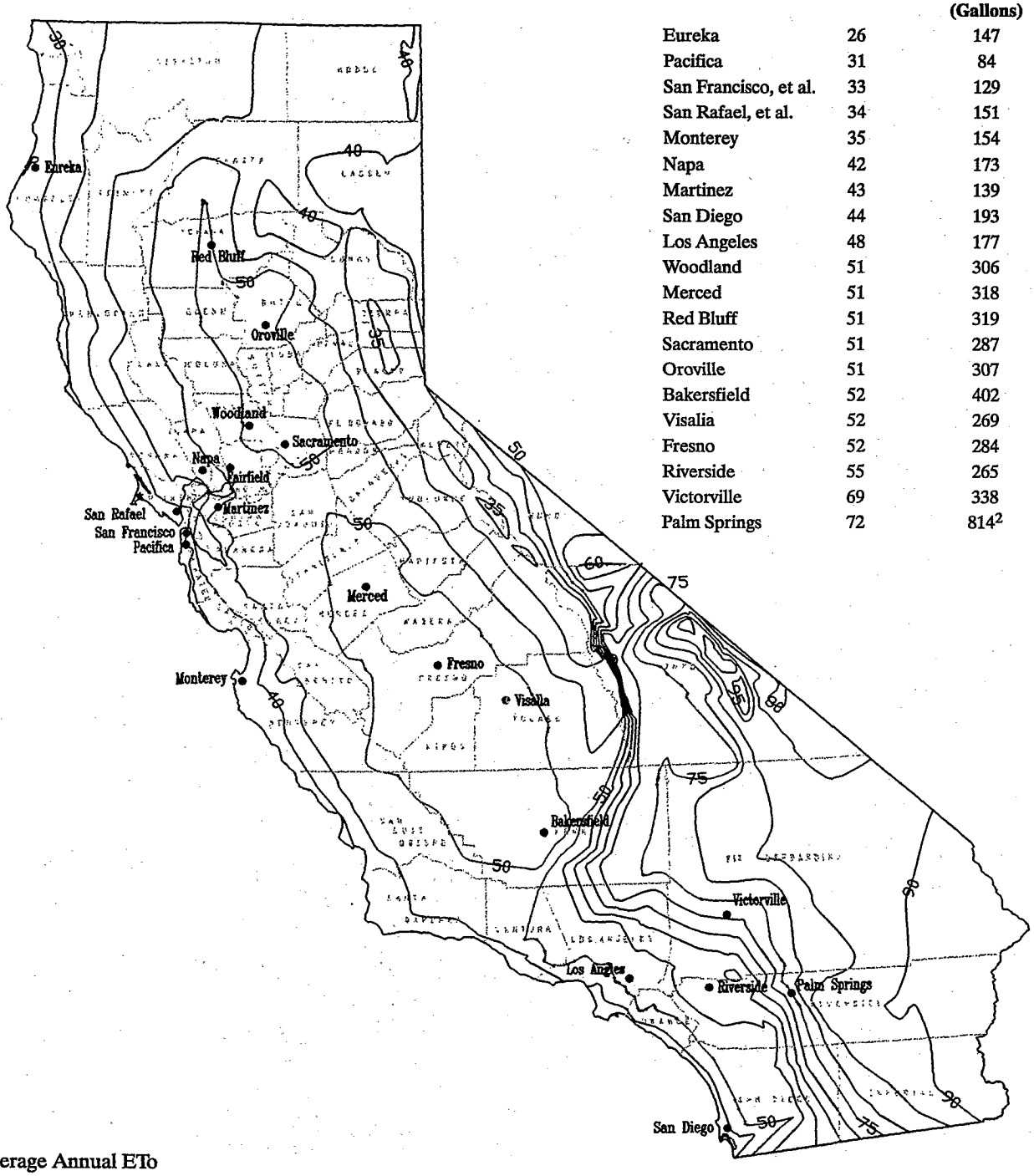
Figure 3-1. Variations in GPCD and ETo

Area	Average Annual ETo[1]	1980-1990 Average Daily Per Capita Water Use (Gallons)
Eureka	26	147
Pacifica	31	84
San Francisco, et al.	33	129
San Rafael, et al.	34	151
Monterey	35	154
Napa	42	173
Martinez	43	139
San Diego	44	193
Los Angeles	48	177
Woodland	51	306
Merced	51	318
Red Bluff	51	319
Sacramento	51	287
Oroville	51	307
Bakersfield	52	402
Visalia	52	269
Fresno	52	284
Riverside	55	265
Victorville	69	338
Palm Springs	72	814[2]



Average Annual ETo
5" iso-lines gradients

[1] Based on *Reference Evapotranspiration (ETo) for California,* Bulletin 1922, University of California
[2] GPCD is high for Palm Springs because the water use is affected by the large amount of commercial water use by nonresidents.

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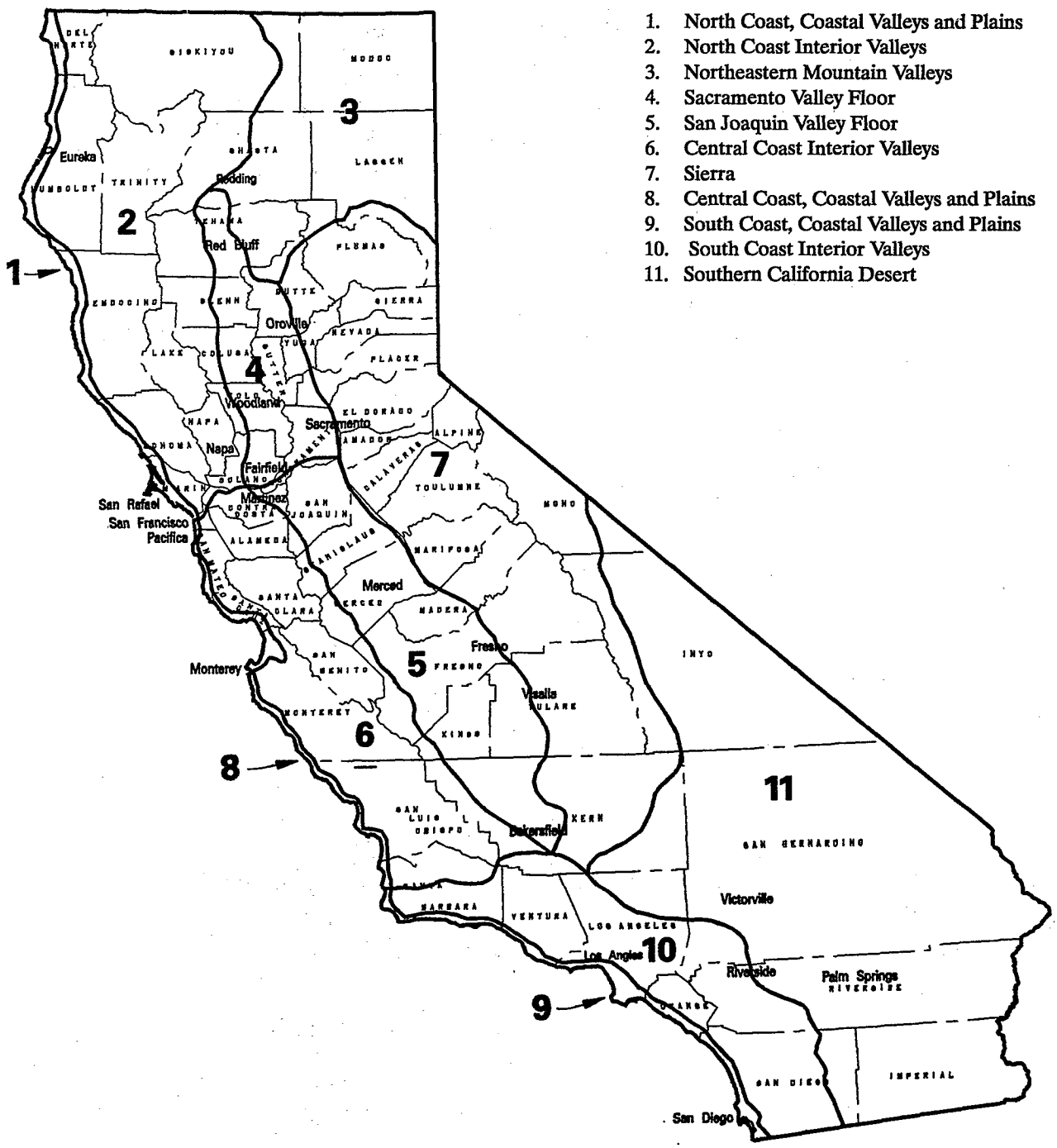
Figure 3-2. Zones of Similar Evaporative Demand in California



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Seasonal Water Use

The variation in seasonal water use in any water year is directly related to the variation in the climatic and meteorological factors. Previous issues in the Bulletin 166 series focused primarily on outdoor use and its relationship to evapotranspiration. The seasonality of water use is represented in Figure 3-3. This graph also illustrates how the seasonality of water use varies depending on the type of water year. The water use between October and April increases in drought years versus average water years because less precipitation means more landscape irrigation.

A thorough discussion of the seasonality of water use is found in Seasonal Components of Urban Water Use in Southern California (PMCL, 1990). The seasonal use was derived by the minimum month method of analyzing water use records. Although most of the residential seasonal water use is due to landscape irrigation, the seasonal variation in commercial, industrial, and governmental uses is the result of space cooling and process cooling needs as well. The seasonal water uses related to the categories of use in Southern California are displayed in Table 3-1.

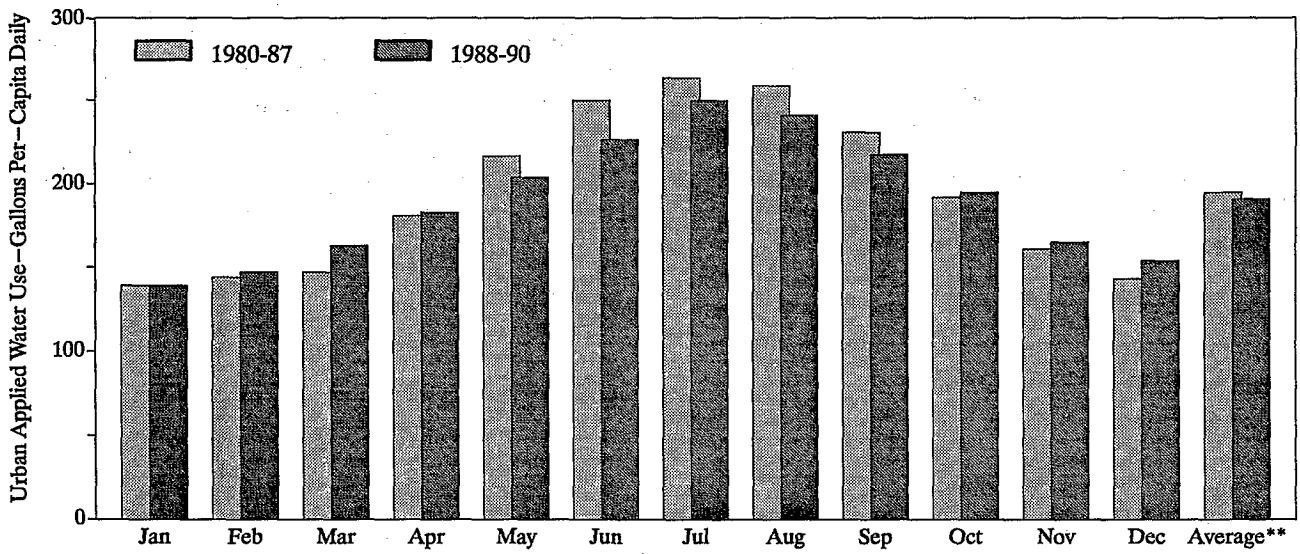
Seasonal Use: An aggregate of end uses of water (e.g., lawn watering, cooling) that varies from month to month in response to weather conditions and other seasonal influences.

Nonseasonal Use: An aggregate of end uses of water (e.g., toilet flushing, washing machine use) that remains fairly constant from month to month because these end uses are not sensitive to weather conditions and other seasonal influences.

Minimum Month Method: Seasonal and nonseasonal components of urban water use in the major classes are often estimated by the minimum month method. For a given year, this method first determines the month of lowest use; this amount is assumed to be constant throughout the year. By definition, seasonal use is zero in the minimum month and will vary with weather conditions during the remaining months. Seasonal use typically peaks during the hottest summer months.

Source: PMCL, 1990

Figure 3-3. Average Monthly Urban Per Capita Water Use* Statewide



*Does not include self-supplied water
**Average is Average Annual GPCD

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Table 3-1. Percentages of Seasonal and Baseline Use in Southern California		
Category	**Baseline**	**Seasonal**
Single-family residences	69	31
Multi-family residences	84	16
Commercial	75	25
Industrial	80	20
Public	56	54
Source: Seasonal Components of Urban Water Use in Southern California, Planning and Management Consultants, Ltd., February 1990.		

For this bulletin, the Department analyzed water production data from 1980-87 for 68 cities in various regions of California using the minimum month method. Transects were followed from the coast to the interior. The percentage of seasonal use is displayed in Table 3-2.

Table 3-2. Percentage of Seasonal Urban Water Use in Various Regions of California			
Region	**Coastal Plains**	**Coastal Valleys**	**Interior Valleys**
Northern	26	--	55
Central	39	47	56
San Joaquin	32	47	58
Southern	34	38	54
Source: 1980-87 data from 68 communities analyzed by DWR for the minimum month of use.			

Figure 3-4 illustrates the annual variation in seasonal water use for Los Angeles and Fresno based on the minimum month method. While baseline water use for both cities is essentially the same, the seasonal use in Fresno is greater due to the large landscape irrigation requirement during summer in the Central Valley. The large seasonal component reflects in Fresno's annual per capita water use. Table 3-3 compares baseline and peak seasonal use, percentage seasonal use, and annual per capita use for Los Angeles and Fresno.

Table 3-3. Comparison of Seasonal Water Use and Annual Per Capita Water Use in Los Angeles and Fresno During 1980-87		
	Los Angeles	**Fresno**
Baseline use (gpcd) (March 1982)	127	128
Peak seasonal use (gpcd) (July-Aug 1984)	90	342
Percentage seasonal use	30	55
Annual per capita water use (gpcd)	186	284
Source: DWR data (Appendix A)		

Seasonal Versus Outdoor Use

The difference between seasonal water use and outdoor use may need further explanation. Since landscape irrigation, car washing, etc., may occur in any month of the year, the minimum month method may underestimate outdoor use and, therefore, overestimate indoor use. Indoor water use may also increase during the summer.

The PMCL seasonal use study (February 1990) indicated that outdoor use was almost 9 percent higher than that estimated by seasonal use in Southern California. Of the outdoor use, 90 percent in the residential sector and 84 percent in the non-residential sector was due to irrigation.

For the statewide analysis of urban water use in this bulletin, it is assumed that the minimum month determined over the 7-year period (1980-87) approximates indoor use. This is considered a valid assumption because the difference in volume of water between seasonal and outdoor use is small and affects the statewide analysis of total urban water use very little.

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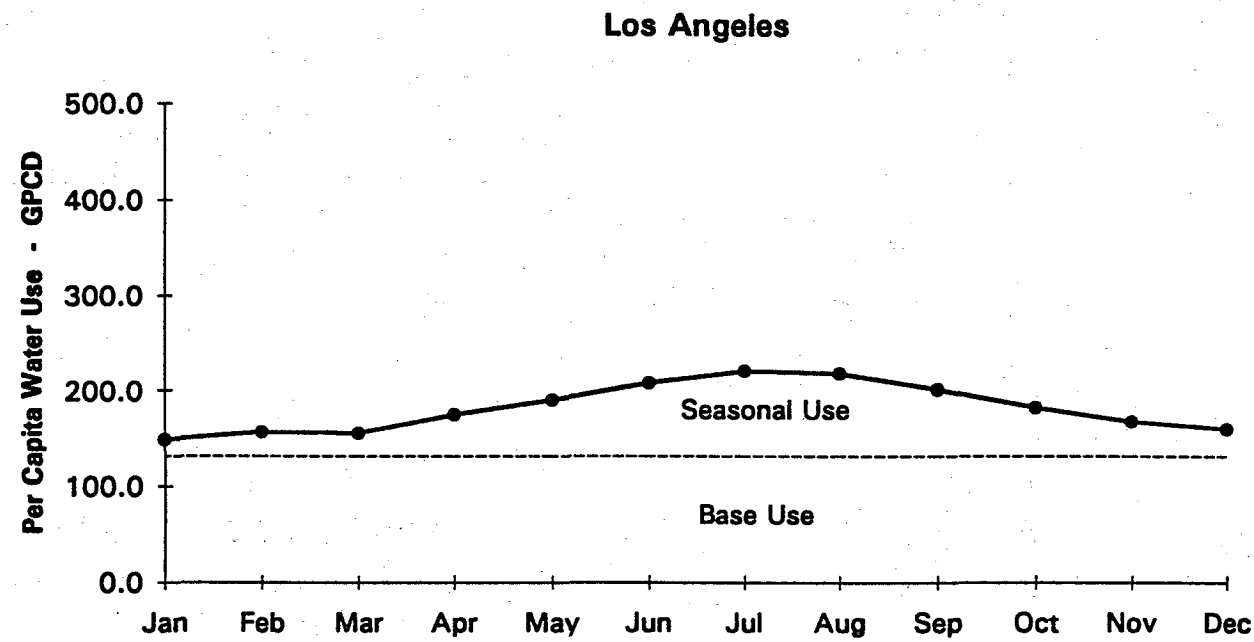
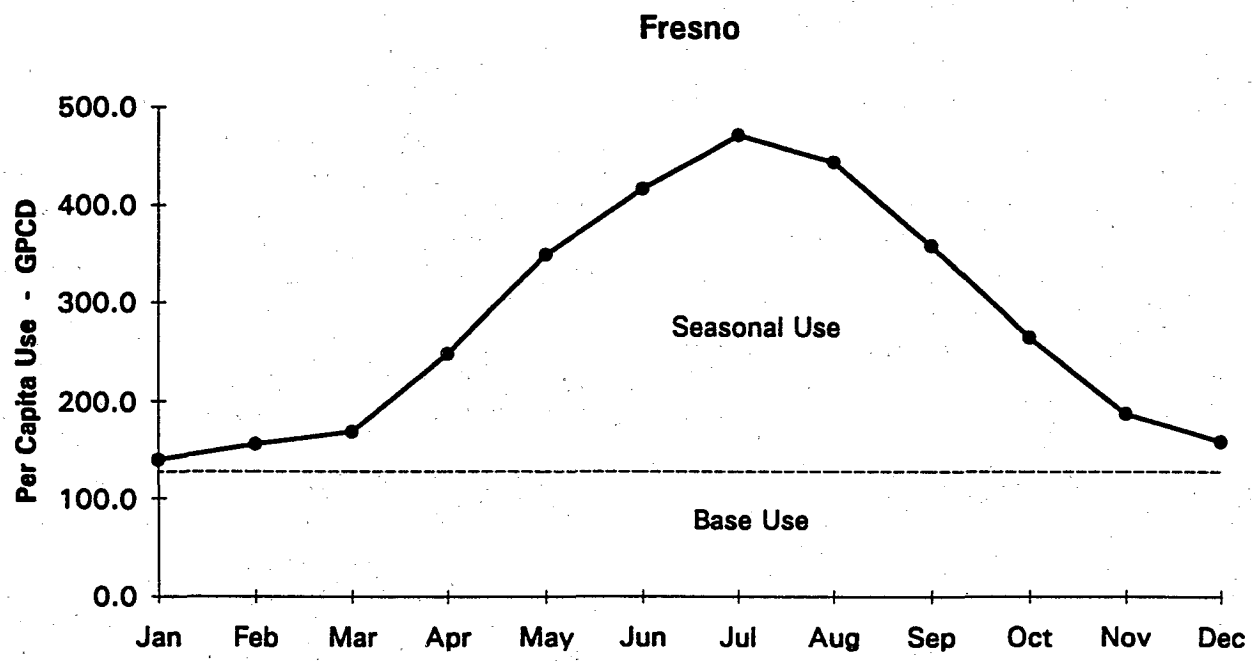
Figure 3-4. Allocation of Seasonal and Base (nonseasonal) Water Use Using Minimum Month Method Los Angeles and Fresno





Note: Seasonal use does not reach the base level because some largely seasonal uses, such as irrigation, occur in small amounts during the winter.

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Socioeconomic Factors

Climatological factors help explain much of the water use in various regions. Other factors affecting water use range from economic to esthetic factors and cover a wide range of activities.

Income

A previous Departmental study found that personal income correlates with unit water use in various areas of the South Coast study area (DWR, 1959). Cities with a large per capita income generally used more water per capita than cities with lower per capita income. A recent update of that report shows a similar relationship of consumption of water to household income that is illustrated in Figure 3-5.

Large residential lots in higher income areas require more irrigation water and water costs tend to constitute a smaller fraction of the household financial budget. Also, higher income families may own more water-using appliances. However, this trend may not be as obvious currently because most families have major appliances.

Swimming pools are normally associated with higher income families in single-family residences. One method estimates that swimming pools, compared to ordinary landscaping, add about 40 gallons per housing unit per day to single-family residential use in Southern California (PMCL, 1990).

Evaluating Urban Water Conservation Programs: A Procedures Manual (February 1992), a report prepared for California Urban Water Agencies supports the presumption of higher water consumption with higher income levels. It states, "Empirical studies clearly show that increasing income (in real terms) will cause an increase in water use in the residential sector." The elasticity of income in single-family sectors varies from 0.3 to 0.6. This means that a 10 percent increase in income may cause a 3 to 6 percent increase in water use. Further, a number of new urban water-use-forecasting methods include income as one explanatory variable.

Water Price

Water pricing structures generally serve as a means for water suppliers to recover costs of delivery to the end users. When California's developed water supply was deemed more than adequate to serve the existing population, urban water suppliers used a declining block pricing structure, where the unit cost varied inversely to the quantity of water used. As water shortages have become more common, suppliers have tended to discontinue such rate structures.

Pricing can work to influence demand by providing an incentive for customers to manage water use more carefully. The customer's sensitivity to pricing may be enhanced by rate structures that increase the cost of water at a constant or increasing rate as use increases.

Chapter 4 contains a detailed discussion of water pricing that is continued in Appendix F.

Water Meters

Today, virtually all large communities in California are at least partially metered. In 1991, Senate Bill No. 229 enacted the Water Measurement Law (Section 110 of Chapter 8 of Division 1 to the Water Code) requiring all new potable water service connections be metered after January 1, 1992. Generally, commercial and manufacturing businesses (other than self-supplied) have been metered for many years. Some unmetered or partially metered communities are still found in the Central Valley, foothills, and mountains, primarily involving residential accounts.

Bulletin 166-1 (DWR, 1968) documented the effects of metering in the San Joaquin Valley (southern portion of the Central Valley). It reported a 42 percent lower per capita water use in metered cities compared to flat rate communities. This study compared metering of all water users rather than restricting the study to only residential users. *A Study of the Proposed Requirement for Mandatory Water Metering for Municipalities or for Domestic Water Systems* (Arthur D. Little, Inc., 1974) showed that flat-rate services in 1970 averaged 330 gpcd in the Central Valley of California compared with 230 gpcd for metered cities, a 43 percent difference. However, this report also concluded that (1) the cost of metering may outweigh its benefits, (2) non-metered cities normally are close to inexpensive supplies, and (3) effective metering could cause landscaping to bear the brunt of water savings. Currently, metering would not have as dramatic an effect because of conservation activities causing a "hardening" of demand.

Generally, metering caused a reduction in water use and provided useful planning data for establishing a rate structure. While there is still opposition to metering in

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parts of the Central Valley and other outlying areas, the trend toward metering all deliveries in California continues. In some agencies, metering and pricing are linked to indoor versus outdoor water usage.

Water-Using Appliances and Other Household Uses

More water-using household appliances came into use during this century. A variety of these water-using or water-operated fixtures were added to homes and early models were not designed to save water. This contributed to increasing per capita water use trends. Most newer models on the market now require far less water than their predecessors. For example, new horizontal axis washing machines are being introduced that reduce indoor water use further. The introduction of new water-using devices is also diminishing.

Community Make-up

A number of sizeable communities surrounding large metropolitan areas and within commuting distance of city centers have developed as *bedroom communities* for people working in industrial and commercial city core areas. Bedroom communities generally expand rapidly, but initially have little growth in job-supporting industries.

As bedroom communities enlarge, they sometimes develop their own manufacturing and services industries and become more self-sufficient. For example, in recent decades communities in San Mateo County that were formerly small residential satellites of San Francisco have matured into predominantly industrialized areas. This increased industrialization in San Mateo County and in neighboring Santa Clara County has led to higher local per capita water use rates.

Water use trends are affected by changes in the patterns of land use. As cities age and enlarge, the centers are progressively rezoned for higher population density uses under urban renewal or similar programs. Single-family dwellings are replaced by multiple-unit structures with some land set aside for commercial strips and other industrial development.

In a small community, the addition or removal of a single high-water-using entity, such as food processing, of significant size can noticeably increase or decrease the per capita water use. The effect can be less pronounced for a major city where one addition or removal of a water-intensive industry may have minimal impact.

Many communities have an influx of non-residents (daily, on weekends, or seasonally) who are probably counted as permanent residents of another community and are not considered in per capita water use calculations. Relying solely on gross per-capita use values in these communities can be misleading.

Residential Density

Population density is higher in apartments than in single family dwellings. Per capita interior household water use is slightly higher in single family homes than apartments. Also, the rate of exterior water use to irrigate landscape for apartment dwellers is somewhat less than for persons living in single family dwellings, due in part to more persons sharing the landscaped area. For example, in the Metropolitan Water District service area, the average outdoor use was 92 gpcd for single family dwellings and 79 gpcd in multifamily units (MWD, 1990).

Between 1970 and 1980, there was a decrease in the percentage of single-family dwellings to multiple-family households. This trend leveled off in the 1980s. Table 3-4 shows the percentages of single family and multiple family dwellings in California between 1970 and 1990. The reduction in proportion of single-family dwellings led to the leveling in the statewide per capita water use.

Table 3-4. Percentage of Single and Multi-Family Households in California

	1970	1980	1990
Single Family	75.9	63.1	62.7
Multi-Family	24.1	36.9	37.3
Total	**100.0**	**100.0**	**100.0**

Source: 1970, 1980, and 1990 U.S. Census data

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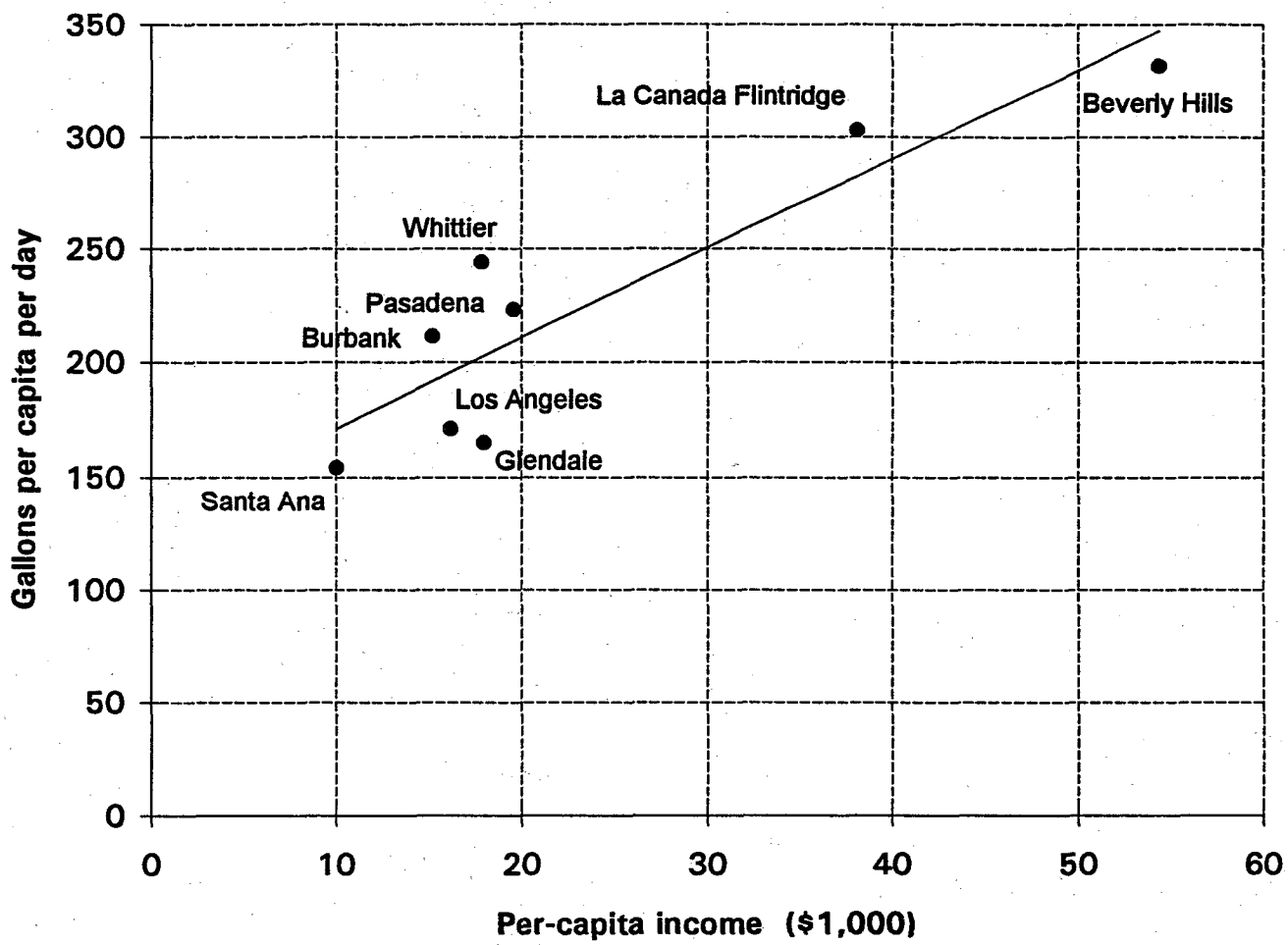
Figure 3-5. Relationship Between GPCD and Per Capita Income for Eight California Cities in 1989



*Other variables such as temperature, rainfall, percentage of single-family versus multi-family dwellings also affect gpcd.

Source: Department of Finance and DWR Urban Water Use Data

Persons per Household

In 1970, an average of 3.3 persons lived in single family dwellings and 2.4 persons occupied the average apartment unit (Table 3-5). The overall effect of the decrease in persons per household during the 1970s was to increase per capita water use by increasing landscape water requirements per person. Conversely, increasing persons per household lowers per capita residential water use. An increase in persons per household, which occurred during the 1980s, contributed to a leveling of the statewide gpcd.

Table 3-5. Persons Per Household by Housing Type

	1970	1980	1990
Multi-Family	2.4	2.1	2.3
Single Family	3.3	3.0	3.1
All Households	3.1	2.7	2.8

Source: 1970, 1980, and 1990 U.S. Census Data

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Water Conservation

In recent years, urban water conservation has contributed to the leveling off of the historically upward trend of per capita water use, even before the droughts of 1976-77 and 1987-92. In the early 1970s, a number of California water suppliers established conservation programs and the State increased its efforts to disseminate information and help local agencies implement programs to reduce water consumption. The need to stretch existing water supplies to meet the needs of a growing population was recognized.

The 1976-77 drought helped prompt the incorporation of water demand management into the State's laws and institutions. California was the first state to establish efficiency standards for toilets in 1978. The same year, the California Energy Commission established flow rate standards for shower heads and faucets, conserving both water and the energy used to heat it.

A report prepared for the California Urban Water Agencies by the Planning and Management Consultants, Ltd. (February 1992), states that ". . . an important change in water supply planning involves the use of water demand management (or water conservation alternatives). . . Comprehensive water supply management requires the evaluation of two basic sets of alternatives: (1) those alternatives that reduce water use and/or loss, and (2) those alternatives that augment supplies. Taken together, these alternatives provide the basis for efficient water management."

Urban Best Management Practices

As a result of hearings held by the State Water Resources Control Board on water rights affecting the San Francisco Bay and Delta, a coalition of urban and environmental water interests formed the California Urban Water Conservation Council. In 1991, the Council developed a voluntary Memorandum of Understanding that will lead to implementation of 16 Best Management Practices for urban water users and requires signatories to report on their status of implementation of the BMPs. The Council is continuing its efforts toward quantifying the effects of these practices and developing guidelines to help water suppliers determine the effectiveness of BMPs for their systems.

As of May 1994, 111 water suppliers, serving at least 80 percent of the State's population, plus 16 public advocacy groups and 47 other interested parties, had signed the MOU.

Initial Best Management Practices. As stated in the MOU, the initial BMPs that signatory water suppliers have committed to implement are:

1. Interior and exterior water audits and incentive programs for single family residential, multifamily residential, and governmental/institutional customers.

2. Plumbing, New and Retrofit.

   a. Enforcement of water-conserving plumbing fixture standards including requirements for ultra low flush (ULF) toilets in all new construction beginning January 1, 1992.

   b. Support of State and federal legislation prohibiting sale of toilets using more than 1.6 gallons per flush.

   c. Plumbing retrofit.

3. Distribution system water audits, leak detection, and repair.

4. Metering with commodity rates for all new connections and retrofitting existing connections.

5. Large landscape water audits and incentives.

6. Landscape water conservation requirements for new and existing commercial, industrial, institutional, governmental, and multifamily developments.

7. Public information.

8. School education.

9. Commercial and industrial water conservation.

10. New commercial and industrial water use review.

11. Conservation pricing.

12. Landscape water conservation for new and existing single family homes.

13. Water waste prohibition.

14. Water conservation coordinator.

15. Financial incentives.

16. Ultra low flush toilet replacement.

Potential Best Management Practices. The MOU commits the California Urban Water Conservation Council to study potential measures to determine whether they meet the criteria to be designated as BMPs. These include:

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1. Rate structures and other economic incentives and disincentives to encourage water conservation.

2. Efficiency standards for water using appliances and irrigation devices.

3. Replacement of existing water using appliances (except toilets and showerheads whose replacements are incorporated as Best Management Practices) and irrigation devices.

4. Retrofit of existing car washes.

5. Gray water use.

6. Distribution system pressure regulation.

7. Water supplier billing records broken down by customer class (e.g., residential, commercial, industrial).

8. Swimming pool and spa conservation including covers to reduce evaporation.

9. Restrictions or prohibitions on devices that use evaporation to cool exterior spaces.

10. Point-of-use water heaters, recirculating hot water systems and hot water pipe insulation.

11. Efficiency standards for new industrial and commercial processes.

Over time, additional cost-effective measures will probably be identified and implemented as technology improves and alternative supplies become more expensive.

Urban Water Management Planning Act

Assembly Bill 797 enacted the Urban Water Management Planning Act in 1983. As an amendment to the Water Code, this act requires urban water suppliers serving more than 3,000 customers or more than 3,000 acre-feet annually to prepare and file with the Department a comprehensive water management plan including specified elements. The first plans were due in 1985, with updates required at least every 5 years. Currently over 300 public and privately owned water suppliers are reporting.

Landscape Water Use and Conservation

Landscape water use is directly related to a community's climate, makeup, housing mix, population density, and income.

In recent years, the Department's Agricultural Mobile Lab Program has focused on landscape irrigation system evaluations. During 1992, the Department contracted with UC Davis (Bowers and Hanson, 1993) to analyze 363 landscape irrigation evaluation reports in San Diego, Riverside, and Ventura counties. The mobile lab program was developed primarily to provide management direction and not to gather basic data. However, the data on distribution uniformity and irrigation efficiency are certainly useful when only a few landscape water-use data sets are available. The distribution uniformity and irrigation efficiency statistics are presented in Table E-1 (in Appendix E) and Table 3-6 respectively.

Although difficult to apply to landscapes, the methods developed to estimate landscape water use are based on concepts developed for agriculture. Landscapes include a wide variety of species, planted in different densities and in varying microclimates (Table E-2). UC Cooperative Extension Leaflet 21493 (1991) suggests an approach for developing an overall landscape coefficient based on a species factor, density factor, and microclimate factor. This coefficient is determined by multiplying the three factors found in Table E-2.

Table 3-6. Statistics for Irrigation Efficiency for Landscapes Evaluated by the Mobile Irrigation Laboratory

District	N	Mean	Min	Max	Range
Ventura	12	69.1 a	30	103	73
Riverside	106	61.3 a	17	96	79
Mission	24	59.9 a	8	87	79
Coachella	149	41.6 b	13	84	69

Source: *An Analysis of Mobile Laboratory Irrigation System Evaluation Data: Urban Systems*, University of California, Davis, 1993

Probably the most comprehensive publication on landscape water efficiency was published by the American Water Works Association (Bennett and Hazinski, 1993). This publication discusses the water-budget approach, where landscapes are metered, and the checklist approach for unmetered landscapes.

Water demands for landscaping is expected to increase as population growth moves inland. In examining the data for 1980 from Bulletin 198-84 (DWR, 1984) about 2 million acre-feet were allocated to exterior landscape uses in California. By 1990, this value had risen to over 3 million acre-feet.

PMCL (1991) analyzed residential landscape irrigation in Southern California. In this study, households with

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deficit irrigations exceeded households with surplus irrigations 56 percent to 44 percent. The actual percentage of deficit irrigation is probably higher than reported because all rainfall was considered effective at reducing the irrigation requirement.

In North Marin Water District, a study on water savings from irrigation scheduling on large turf sites at schools and parks (classified as governmental) showed that a 16 percent reduction in water usage could be expected (NEOS Corporation, 1991). However, a similarly scheduled private park showed a water savings of only 7.7 percent.

A study carried out for East Bay Municipal Utility District (1992) compared daily water consumption for single family homes having water-conserving landscapes with traditional turf-oriented landscapes. The water savings were estimated at 42 percent for the front yards of homes using water-conserving landscapes.

In September 1990, Assembly Bill 325 was passed and added Article 10.8 to Chapter 3, Division 1 of Title 7 of the Government Code. This legislation required the Department to develop a model landscape ordinance. The ordinance used a water budget approach relying on ETo data in the required landscape design. The water budget specified an average landscape coefficient of 0.5, divided by a minimum irrigation efficiency of 0.625, to yield an *ET Adjustment Factor* of 0.8. This factor was then used to adjust the average annual ETo.

Water conservation will undoubtedly continue to play a significant role in balancing California's water supply with urban, agricultural, and environmental water needs. Proven conservation measures will be implemented by more agencies and new measures will gain acceptance. Current measures for landscape conservation have yet to affect statewide landscape water use noticeably. However, BMPs and ordinances for landscape water use have only been adopted since 1991 and 1992. Agencies will need to manage water in new ways and prepare differently for shortages as water use continues to become more efficient.

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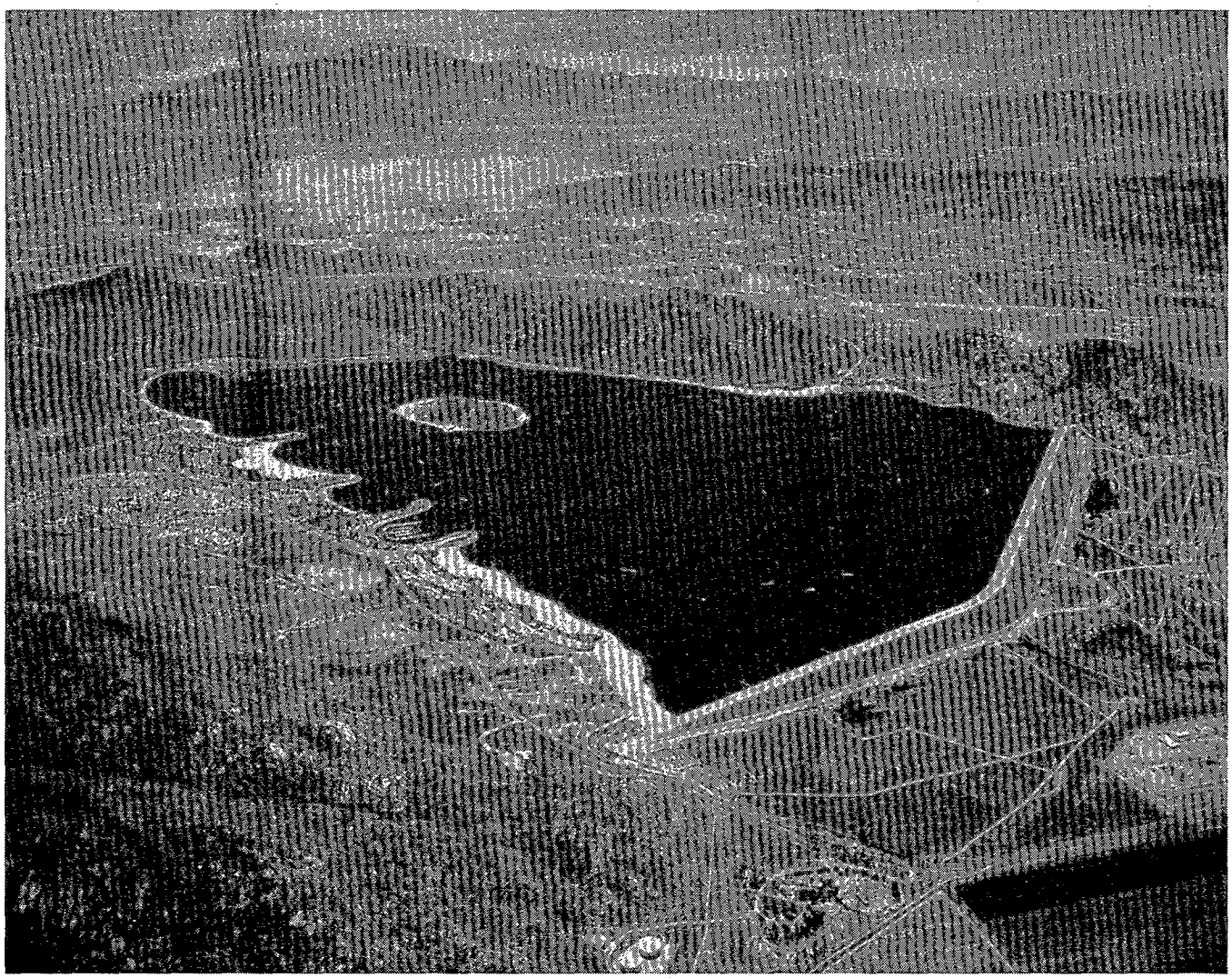

Lake Perris, in Riverside County, receives water at mile 450 of the Governor Edmund G. Brown California Aqueduct. The cost of water varies with the distance it is transported from source to user.

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Chapter 4. Water Pricing

Over 10,000 public and private water agencies provide water to communities throughout California. These include municipal water companies, independent special districts, and private purveyors regulated by the California Public Utilities Commission. More than 300 of these agencies serve 3,000 or more connections.

Most of these local agencies are directly involved in the retail sales of water to urban users. However, some only wholesale water to other agencies. In addition to local agencies, the U.S. Bureau of Reclamation operates the Central Valley Project (and other federal projects) and the California Department of Water Resources operates the State Water Project. Water supplied from these projects is sold to local retail and wholesale agencies throughout the State. Sometimes water supplies will pass through one or more wholesalers and a retailer before reaching the final users.

Factors Affecting Water Prices

Many factors influence the retail water prices levied by urban water agencies. Some of these are discussed below.

Source

Water prices depend greatly on the costs of obtaining the water supplies. For example, the cost of diverting water from a river and using it on adjoining land can be less than $2 per acre-foot. In contrast, the cost of sea water desalination is about $2,000 per acre-foot.

Transportation

Another significant factor is the distance water must be transported from the source to the ultimate place of use. For example, the State Water Project delivers supplies to users in northern, central, and southern California. Water delivered to Southern California must travel through hundreds of miles of aqueducts and be pumped over a mountain range before reaching the final destination. Like a train ticket, SWP transportation costs increase with the distance traveled, although power revenues may offset part of these costs.

Costs

Generally, water provided for urban needs costs more than that for agriculture. This is because urban supply systems are more complex. To meet domestic water quality standards, urban systems often involve costly local facilities for system regulation, treatment plants, distribution systems, water meters, and system operation, including meter reading and customer billing. In addition, some water prices include costs for waste water treatment. However, agricultural water prices are at the *farm head gate*, or edge of property, and seldom need treatment. Farmers incur additional costs to distribute water supplies throughout their farms.

Water treatment costs can be a significant component of total water costs to urban water agencies. These agencies must adhere to drinking water standards set by the federal government (the Federal Safe Drinking Water Act of 1974, amended in 1986) and by the State government (the Safe Drinking Water Act of 1976, amended in 1989). Amendments to these acts may significantly increase future water treatment costs because of more stringent water quality standards.

Weather

During years of normal or above-normal precipitation, most agencies' supplies are adequate to meet current demands. But drought years can significantly disrupt the availability of water and can affect agency water rates. For example, during the 1987-92 drought, many water purveyors adopted more conservation-oriented water rates. Several even implemented drought penalty rates designed to drastically reduce water use. These policies resulted in a substantial reduction in average water use. However, an unwanted consequence of reduced water use for metered systems was reduced revenues to the agencies, which still must pay their fixed costs plus the costs of expanded conservation programs. Hence, to remain solvent many water agencies had to increase retail water prices several times.

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Water Pricing Policies

The policies adopted by the various water agencies will also significantly affect the retail prices charged to consumers. Some agencies use water prices to fully recover the costs of acquiring and delivering supplies, whereas others use a combination of water prices and local property taxes. Policies concerning the use of meters and rate structure are also important. Although most urban retail agencies in the State use meters to monitor customer use and to levy charges, some (mainly in the Central Valley) do not. Typically, the costs to consumers of using unmetered supplies are less than if those same supplies were metered. With metered water, customers pay for all water used. In contrast, unmetered water customers pay a flat rate regardless of quantities.

Where supplies are metered, rate structure becomes important. For example, most agencies have switched from declining block rates (where unit water costs decreased with increasing usage) to either constant or increasing block rates. These rates encourage water conservation.

Urban Retail Water Prices

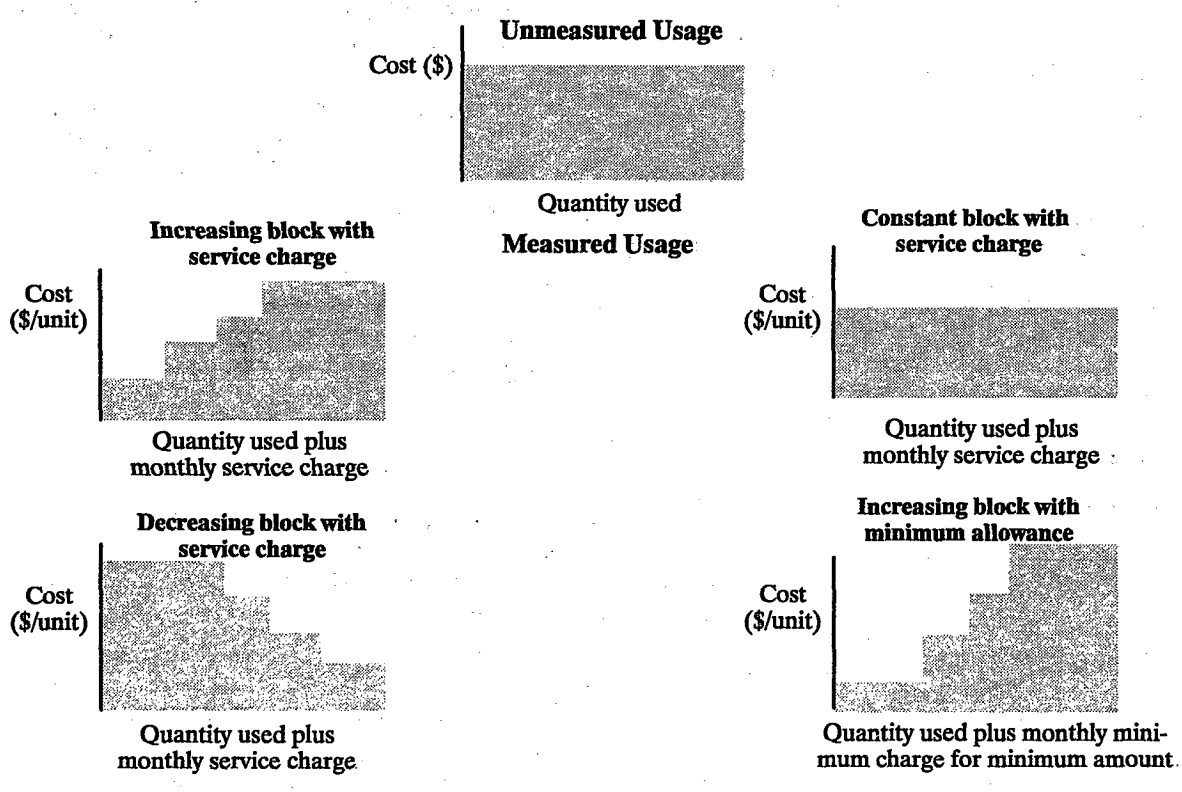
Urban retail water prices are very complex because of the large number of agencies and different pricing policies in use throughout the State. In addition to differences among the water agencies, each agency is likely to have different pricing policies for different customer classes, such as residential, commercial, and industrial.

Rate Structure

The most common rate structures include a monthly service charge plus either an increasing, constant, or decreasing per unit block rate. With an increasing block rate, increasing rates are charged for higher water consumption. With a constant block rate, a constant rate is charged for all levels of consumption. In contrast, a declining block rate structure has decreasing rates for higher water consumption. However, most cities have switched away from declining block rates to encourage water conservation.

An agency's pricing policies are reflected in its rate structures. Figure 4-1 illustrates some of the common urban rate structures.

Figure 4-1. Common Urban Retail Water Rate Structures



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A variation of these rate structures is the use of a minimum monthly charge instead of a service charge. With a minimum monthly charge, a minimum amount of water use is allowed at a certain rate. However, consumption over the minimum amount is then subject to a per unit charge.

Another type of rate structure is a flat rate, where the customer pays a set amount each month regardless of the amount of water consumed. Flat rates are still found in the Central Valley where some cities do not have residential water meters.

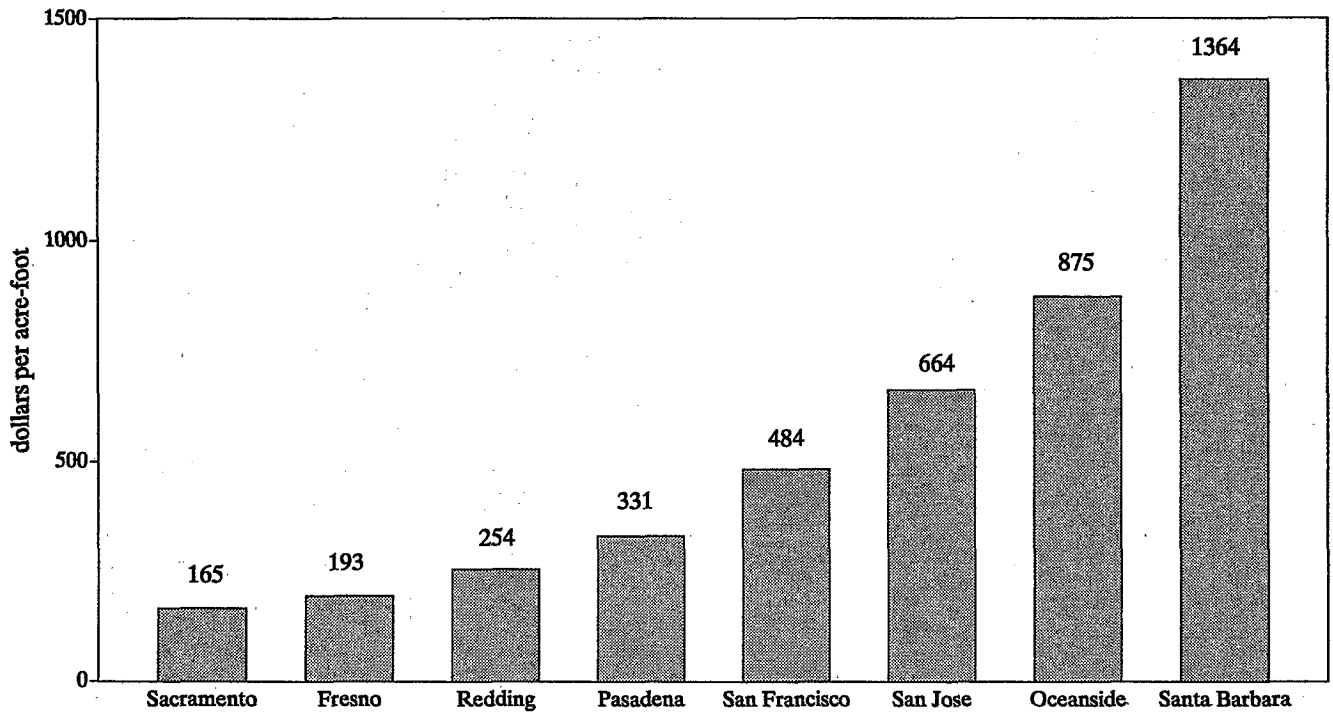
Because of the factors discussed at the beginning of this chapter, there is tremendous variation in water costs throughout the State. To illustrate this, Figure 4-2 compares 1990-91 single family retail water costs (on a cost per acre-foot basis) for selected California cities. **Because of the prolonged and severe drought, some of these water costs may be higher than what would have been expected for a non-drought year.** This is particularly true for Santa Barbara, which enacted strict drought penalty rates to encourage additional water conservation. However, the underlying relationships of water costs in the State shown by the figure are still valid—water costs generally increase from north to south and water costs are usually less in the Central Valley compared to coastal locations.

The Department recently compiled 1990-91 water use and cost information for many water agencies throughout the State. Based on this information, the Department estimated average monthly water costs (i.e., water bills) to the different customer categories for these agencies. This information is presented in Appendix F: Urban Retail Water Costs.

Urban Wholesale Water Prices

Numerous agencies within the State wholesale water supplies to other agencies, which ultimately deliver these supplies for urban or agricultural uses. The two largest agencies are the U.S. Bureau of Reclamation and the California Department of Water Resources. Two of the larger local wholesaling agencies are the Metropolitan Water District of Southern California and the San Francisco Water Department. Each agency has its own pricing policies.

Figure 4-2. Single Family Retail Water Costs from Selected California Cities (1990-91) (in dollars per acre-foot)



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U.S. Bureau of Reclamation

USBR operates the Central Valley Project, which delivers about 7 million acre-feet per year to contractors in the Valley. These supplies are used primarily for agriculture, although there are some municipal and industrial deliveries.

Municipal and industrial contractors are charged cost-of-service rates. Preliminary 1993 M&I cost-of-service rates range from about $4.30 to over $140 per acre-foot.

USBR pricing policies are undergoing significant revisions as the result of the Central Valley Project Improvement Act of 1992. Several provisions of this act will potentially influence USBR water prices, including requirements for pricing reform to encourage conservation, metering water use, and fish and wildlife restoration activities.

California Department of Water Resources

DWR operates the State Water Project, which currently wholesales water to 29 contractors located in the following service areas: Feather River, North Bay, South Bay, San Joaquin Valley, Central Coastal, and Southern California. The primary components of SWP water costs include a Delta water charge and a transportation charge. The Delta water charge is paid by all contractors and recovers capital and operation, maintenance, and replacement costs, plus interest, associated with the SWP conservation (storage) facilities. The transportation charge is paid by contractors served by transportation facilities. This charge recovers capital and OM&R costs, plus interest.

In 1992, average water costs to the SWP service areas were as follows:

Service Area	Cost/AF
Feather River	$ 20
North Bay	$ 166
South Bay	$ 80
San Joaquin Valley	$ 49
Central Coastal	$ 626
Southern California	$ 243

The Metropolitan Water District of Southern California

MWD is composed of 27 member agencies; 14 are also wholesale agencies that serve their own member agencies (such as the San Diego County Water Authority). In 1990, the total population of MWD member agencies was about 14.9 million people. MWD deliveries to member agencies in 1990 totaled about 2.5 MAF. MWD imports its supplies from the SWP and Colorado River. In addition, MWD works with member agencies to improve conjunctive use of local ground water supplies.

MWD's water pricing structure for member agencies includes five service classes: non-interruptible (primarily M&I uses), interruptible (primarily agricultural and ground water recharge uses), emergency, seasonal storage, and reclaimed. In addition, within each of these classes (except reclaimed), a distinction is made whether supplies are treated or untreated. The 1993 rates for these classes were as follows:

Class	Cost/AF
Non-interruptible	
Untreated	$318
Treated	$385
Emergency	
Untreated	$954
Treated	$1,021
Seasonal Storage	
Untreated	$208
Treated	$253
Reclaimed	$113

San Francisco Water Department

SFWD provides both wholesale and retail water supplies, with wholesale users representing about 60 percent of the city's deliveries. Wholesale supplies are delivered to 33 cities and water districts. In 1990, SFWD served a total of about 2.6 million people. SFWD obtains its supplies from the Tuolumne River in the Sierra Nevada (Hetch-Hetchy system) plus local reservoirs in the Bay Area. In 1990, a connection was installed to allow transfers from the SWP to the Hetch-Hetchy system.

As of July 1, 1992, SFWD was charging its wholesale customers about $379/AF plus a service charge based on the customer's meter size. This service charge ranges from under $10 per month to over $5,000, depending on the size and type of meter.

Property Taxes and Other Assessments

Although most urban water customers receive bills for the amounts of water delivered, these bills often do not reflect the total cost of water supplies to the users. Many

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local water agencies also collect property tax revenues and other assessments. For example, during the 1989-90 fiscal year, the MWD collected about $90 million in ad-valorem property taxes, annexation charges, and allocated county-wide taxes on utilities. These revenues represented about 16 percent of the combined MWD water sales and tax levy revenues for that fiscal year.

Another example of the use of assessments is the Kern County Water Agency. KCWA has contracts with its member agencies to recover the costs of imported SWP supplies. Most of these costs are recovered through payments from those agencies receiving the supplies. In turn, these agencies obtain revenues from user charges and assessments levied directly on the water user. However, KCWA also uses an ad-valorem *zone-of-benefit* assessment to recover some of the cost for agricultural SWP supplies. The premise is that other individuals besides the water users benefit from the project. Delivery of SWP supplies improves ground water levels and benefits the local economy. Others besides the direct water user should therefore share in the project costs.

KCWA's SWP water used for urban needs is not supported by zone-of-benefit assessments, except KCWA levies a special zone-of-benefit to pay for SWP water used by its Improvement District No. 4. (ID No. 4 includes most of the urban Bakersfield area and is KCWA's largest user of urban SWP water supplies.) This special zone-of-benefit is in lieu of a contract for water service, as with KCWA's other member agencies.

Urban Ground Water Costs

Local water agencies provide supplies to most residential and commercial customers in the State. Within the industrial sector, small manufacturing firms also obtain supplies mainly from water agencies. However, many large water-intensive manufacturing firms (such as refineries and chemical manufacturers) have developed their own ground water supplies.

Ground water costs vary widely throughout the State. Many factors influence these costs, including depth to ground water, electricity rates, pump efficiencies, and treatment requirements. Typically ground water costs are less than the costs of agency-supplied surface water. Table 4-1 presents ranges of urban ground water costs for the hydrologic regions. These costs include capital, operations (including pumping energy costs), maintenance, replacement, and treatment costs. These costs were obtained from a survey of water agencies.

Table 4-1. 1992 Urban Ground Water Costs by Hydrologic Region

Hydrologic Region	Ground Water Costs ($/acre-foot)*
North Coast	75-85
San Francisco	85-330
Central Coast	200-300
South Coast	45-190
Sacramento River	50-80
San Joaquin River	70-270
Tulare Lake	80-175
North Lahontan	120-190
South Lahontan	85-90
Colorado River	115-275

*These costs are higher than pumping raw water for agricultural use because capital, operation, maintenance, replacement, and treatment costs are greater.
Source: Bulletin 160-93, Table 6-6

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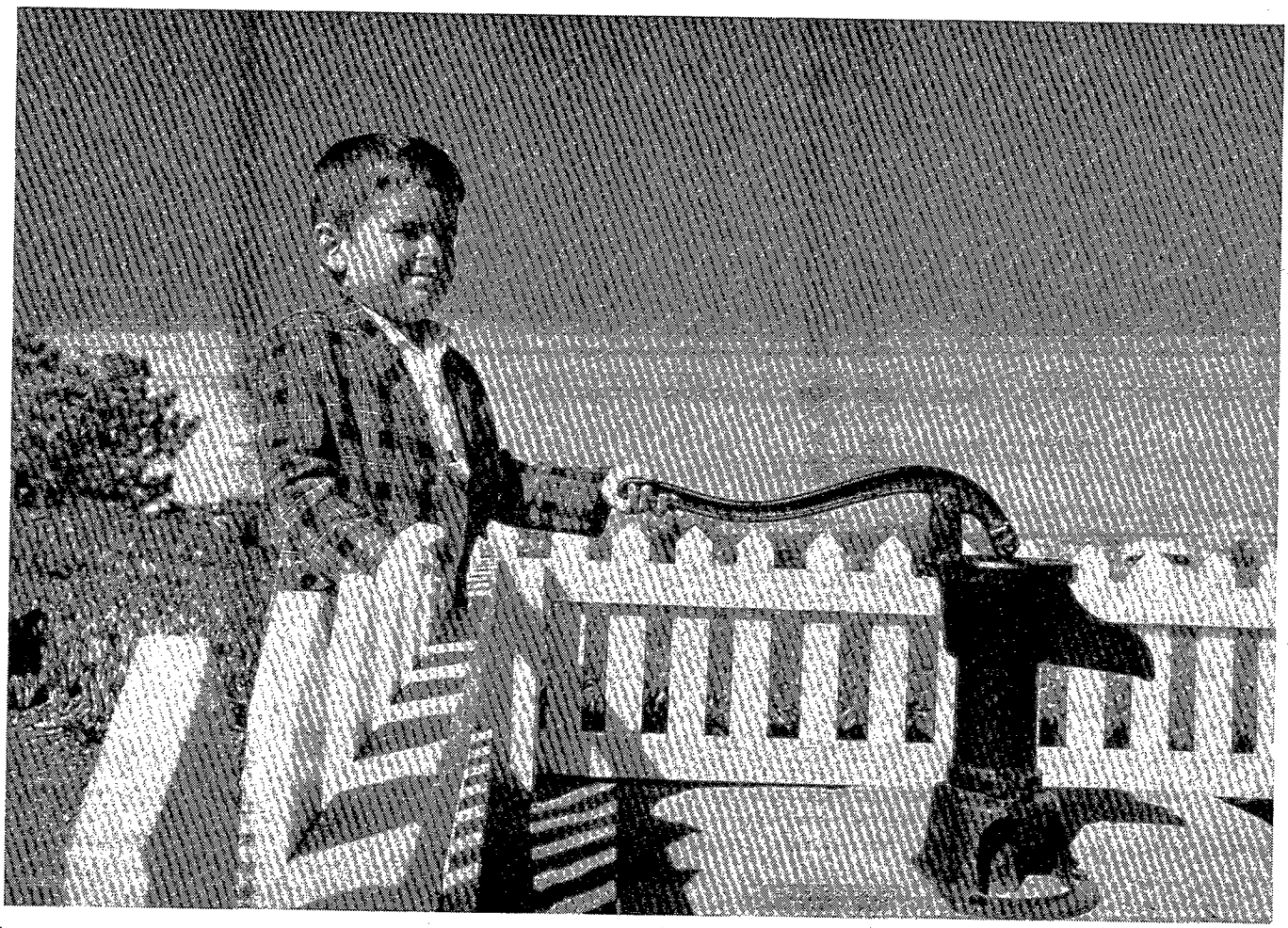

Forecasts for future water demands are difficult because they will be affected by where future generations live, the jobs they hold, and how they use and conserve California's water resources.

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Chapter 5. Forecasting Water Demand in California

Urban water use forecasting is an essential component of the development of the California Water Plan. Reliable estimates of future water use are needed by all water purveyors to plan for an adequate future water supply and to evaluate the effects of water conservation programs on applied water demand. This chapter provides an overview of commonly used forecasting techniques and introduces the Water Savings Simulation Program, a new direction for Department forecasting efforts. Details on the development and preliminary testing of the WSSP are contained in Appendix G.

Methods of Forecasting Water Demand

Water use forecasting methods relate expected changes in one or more explanatory variables to future water use. The various methods differ in the number of explanatory variables and the presumed effect of these variables on current and future water use. Early forecasting methods relied solely on service area population as the explanatory variable, assuming a direct relationship between population growth and applied water demand. However, as discussed in Chapter 3, water demand may grow at a different rate than population, according to the various factors that affect water use.

Water use forecasting techniques can be classified as one of four general methods (Table 5-1). There is a wide range in the sophistication and data requirements among these methods. In general, the more complicated are the most data intensive. Following is an overview of each method beginning with the least complex.

Table 5-1. Urban Water Use Forecasting Methods

Method	Basis of Water Use Forecast
Time series	Extension of historical water use trends
Water use coefficient	Historical water use data; historical and predicted tally of end users
Regression	Historical water use data; historical and predicted values of one or more explanatory variables
Component	Historical water use data; historical and predicted values of one or more explanatory variables for each defined component of urban water use

Time Series Analysis

Water use forecasting using time series analysis is based on the assumption that past trends in water use will continue into the future. Implicit in this assumption is that relationships between water use and the explanatory variables will either remain unchanged or continue to change as they have in the past. This method is perhaps the most basic forecasting technique and probably the most limited in accuracy for long-term forecasting.

Time series analysis is simple to perform and can be used alone or in conjunction with another method. Urban applied water demand is forecast by simple extrapolation of a predefined relationship. The relationship can be determined by expert judgement, graphical extension of historical data, or mathematically.

Time series techniques are the least data intensive of the four general methods. Records of past water use are the only input necessary. Time series analysis provides acceptable results over the short term, especially when there is an abundant water supply and steady socioeconomic growth.

If historical population data are available, the time series method can be used to project water use through time on a unit basis (e.g., per capita or per connection). The resulting water unit use coefficients are used in combination with estimates of population growth rates to forecast future water use. This combination method has been used by the Department to forecast statewide urban water demand.

Water Use Coefficient Methods

Unit water use coefficients, such as per capita water use, are valuable for studying water consumption trends and for forecasting future consumption. The initial values of the coefficients are derived by dividing total water consumption for a category of water use by the number of units, or end-users, within the category. Water use is forecasted by multiplying the water use coefficient by the projected number of end-users at the forecast year. The water use coefficient can be assumed fixed through time or

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projected by extrapolation to change according to past water use patterns.

End-users are specified for each category of water use primarily on the basis of past correlation with water consumption. The end-user is typically defined as a person, an employee, or a service connection. The per capita water use approach is the most commonly used water use coefficient method, where the end-user is the service area resident and water use is expressed on a per person (i.e., per capita) basis.

The water use coefficient method can be used to forecast overall water use or specific categories of water use. Geographic variations in explanatory variables can be accounted for by performing forecasts for each subarea of the water service area. The single explanatory variable in this method is the number of end-users.

The water use coefficient method is widely considered to be the most simple and inexpensive method to forecast water use with some accuracy. The only data requirements are historical and projected unit population, and historical water use. However, this method in basic form fails to take into account many important variables that influence water use, such as changes in the ratio of single to multifamily dwellings, climate, commercial and industrial growth, income, and price of water. Therefore, forecast accuracy may decrease sharply in the mid- to long-term period.

Regression Analysis

Regression methods employ statistical techniques such as least squares regression to model water use as the function of one or more explanatory variables. The choice of variables is based on past correlation with water use. Forecasts of water use are calculated based on projected future values of the explanatory variables combined according to the regression model. This method can be applied to overall water use or to individual end-user sectors. Geographic variations in explanatory variables can be accounted for by performing separate forecasts for each subarea of the water service area.

Regression methods can be separated into *requirements models* and *demand models*. Requirements models do not include the price of water as an explanatory variable, with the implicit assumption that water use is a basic requirement unaffected by changes in economic conditions. The time extrapolation and water use coefficient methods discussed previously are also requirements models.

Demand, or econometric models, include the cost of water to the user, usually accompanied by a measure of personal income. Although the price of urban water currently explains relatively little of the variance in water use, it could become more important if water prices increase significantly. Further, price is usually the only variable that can be controlled by the water supplier and is increasingly used to manage demand when water is in short supply. However, under California law, water agencies cannot make excessive revenues, which limits the prices that can be charged. Continually expanding population combined with new environmental regulations are increasing the probability of water shortages in California. Therefore, understanding the interactions between price and water use will become essential for forecasting urban water consumption.

Component Water Use Forecasts

The determinants of water use vary according to water use sector. Chapter 2 discusses how the Department classifies various types of water use. Proper classification is important because variables that best explain water use in one sector may be less effective or inappropriate for explaining use in other sectors. Further, models specified for a particular geographic area may not hold in areas of differing climate and socioeconomic conditions.

To address this problem, water resource planners are developing component methods of forecasting water use. In this design, overall water use is separated into components according to geography, water use category, or season of year. The nature and number of components is determined according to the purpose of the forecast and the availability of data. Water use is then forecasted separately for each of the components based on the explanatory variables best related to each component. For example, residential water use is strongly correlated with housing type, lot size, and climate, whereas commercial water use is better related to the number of commercial employees. Spatial variation in water use can be accounted for by defining geographic components according to socioeconomic and climatic variables. Seasonality of use (discussed in Chapter 3) can be accounted for by conducting separate forecasts for summer and winter. The forecast of overall water use is obtained by summing the individual component forecasts.

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The Water Savings Simulation Program

The Water Savings Simulation Program is a component forecasting system designed to account for the impacts of demand management techniques such as the best management practices. WSSP was developed by the Department of Economics at University of California, Los Angeles, under contract to the Department of Water Resources. A preliminary version of the program was released in April 1993.

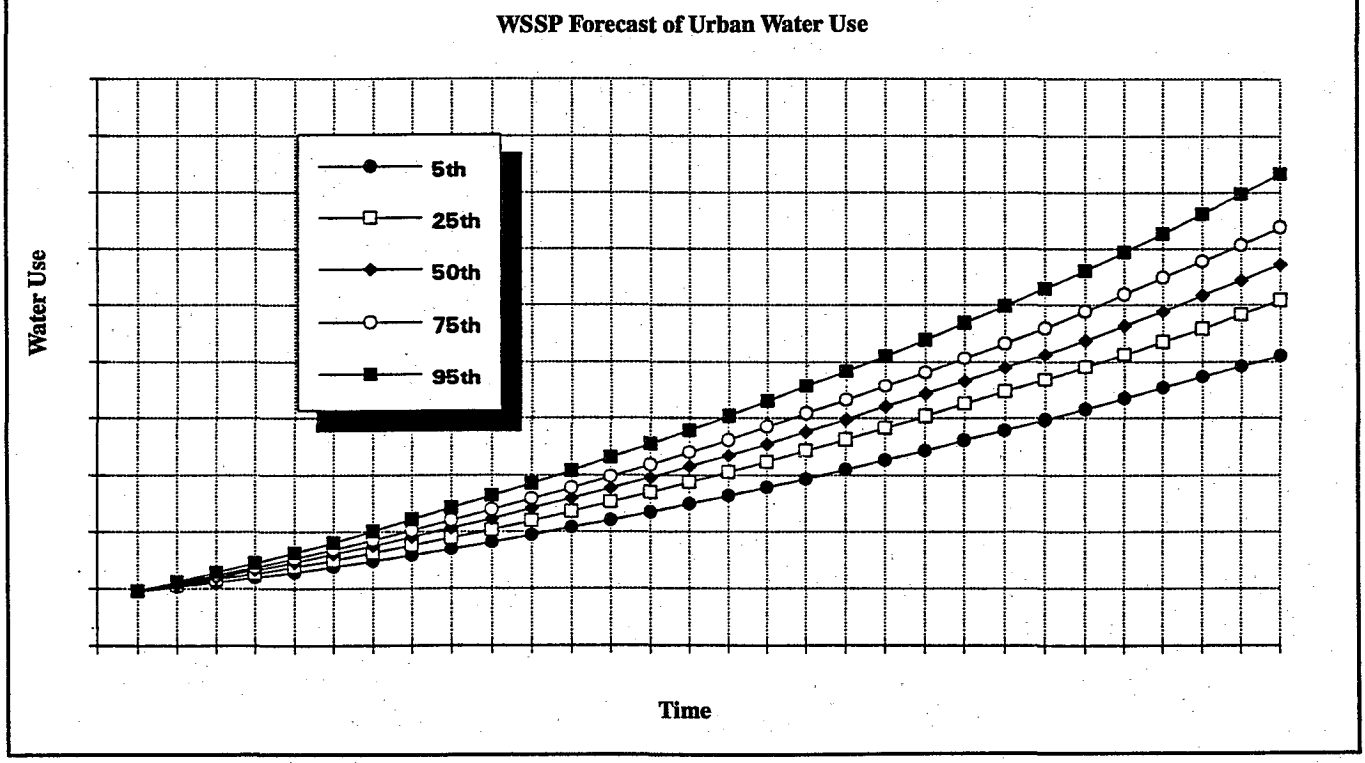
The WSSP system uses simulation techniques to produce multiple estimates of water consumption for each year of the forecast period. Each estimate is based on randomly selected values of each input variable. The resulting forecasts are presented as a series of point estimates with confidence intervals to indicate the actual range of probable forecast values. The confidence intervals widen through time (Figure 5-1) to convey the increasing level of uncertainty as forecasts are carried into the future.

The Department is conducting a pilot study involving 10 water service areas, one in each hydrologic region of California (Table 5-2). The results of the study will be used to assess the accuracy of the forecasts and to define potential enhancements to the program. The final version of WSSP will be used to forecast urban applied water demand for each hydrologic region of California. More detail on the WSSP and its application are discussed in Appendix G.

Table 5-2. Water Service Areas of WSSP Pilot Study by Hydrologic Region

Hydrologic Region	Water Service Area
North Coast	Eureka, City of
San Francisco Bay	East Bay Municipal Utility District
Central Coast	Santa Barbara, City of
South Coast	San Diego County
Sacramento River	Sacramento, City of
San Joaquin River	Stockton, City of
Tulare Lake	Fresno, City of
North Lahontan	Susanville, City of
South Lahontan	Victorville, City of
Colorado River	El Centro, City of

Figure 5-1. Water Savings Simulation Program forecast results in the form of the 5th, 25th, 50th, 75th, and 95th percentiles of the distribution of simulation estimates. The 50th percentile plot represents the most likely value for each year of the forecast period under the given assumptions.



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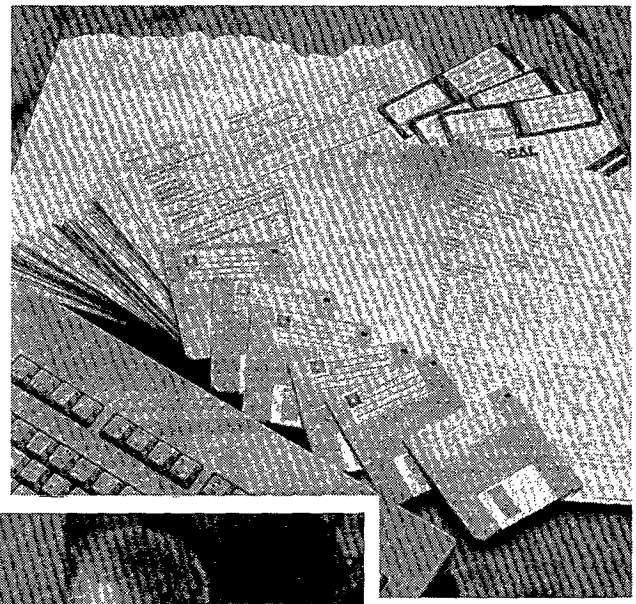

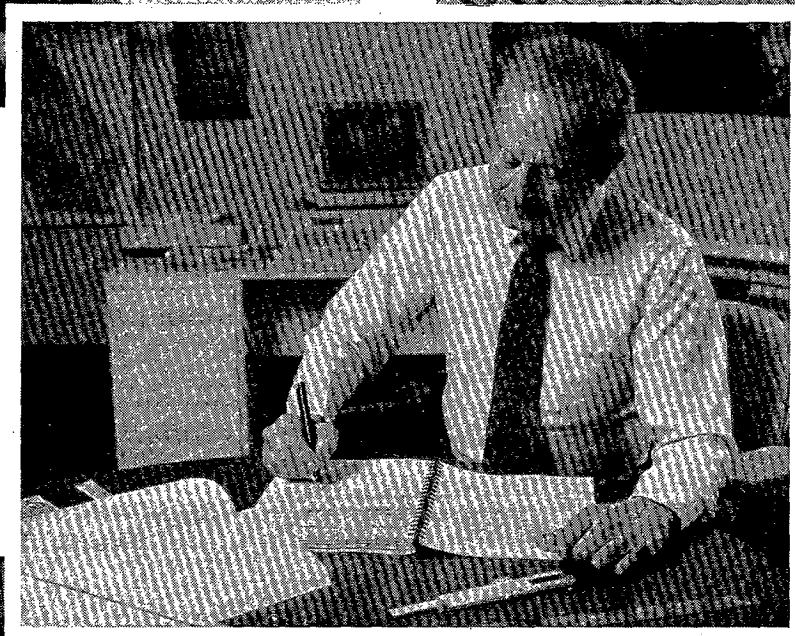

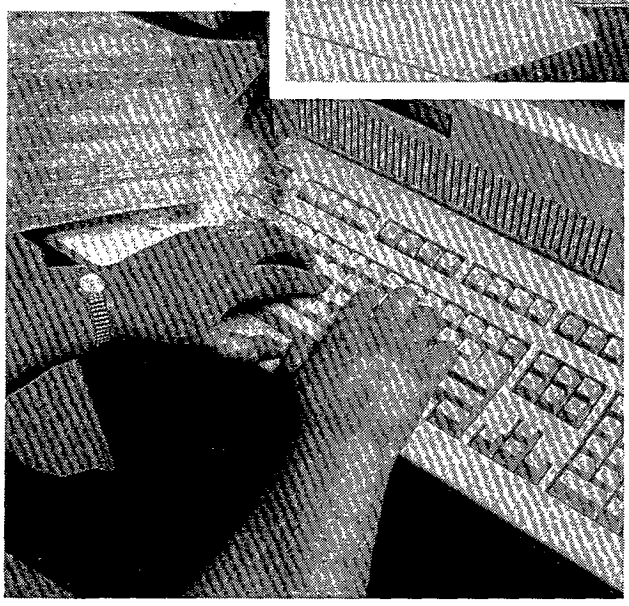

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Chapter 6. Data Collection and Analysis

Sources of Data

There is no requirement in California for water purveyors to report water production and related delivery data to a central agency. Therefore, gathering such information to make estimates of water usage is an involved process drawing on various sources. Many agencies, including local suppliers and statewide and regional planners, are interested in water use data. In preparing bulletins and reports, the Department collects and verifies numerous individual data sets from the local water purveyors.

In a 1993 report, *Drinking Water Into the 21st Century*, the Department of Health Services reports that drinking water is supplied to California residents through a myriad of governmental agencies, cities, districts, private utilities, mutual water companies, private businesses, and individually-owned wells. DHS estimates that there are over 10,000 water suppliers ranging in size from 5 to over 700,000 service connections, subject to some level of drinking water standards enforcement, serving about 29 million consumers. In addition, over 300,000 residents obtain their water from private individual wells. Systems with fewer than five service connections are not subject to enforcement of standards.

Appendix A of Bulletin 166-4 includes an 11-year history of applied water data from 298 retail urban water suppliers. Applied water demand is not adjusted for system losses and other depletions discussed elsewhere in the bulletin. Most of this information is submitted voluntarily to the Department annually on forms provided through DHS and State Controller's office surveys (Figure 6-1). The information includes the amount of water delivered into the system (produced water), deliveries to the users, the number of active accounts, the extent of customer metering, deliveries for various uses (residential, commercial, industrial, and governmental), the area served, and other factors. Some suppliers did not submit complete information.

Both publicly-owned and privately-owned systems provide water to urban retail customers in California. Cities, water districts, irrigation districts, and other special districts and political subdivisions of the State are publicly owned. Investor-owned water companies (regulated by the California Public Utilities Commission), mutual water associations, and other non-public suppliers are privately-owned.

Data Collection and Geographic Uniformity of Data Coverage

Because of the great number of water purveyors throughout the State, it is virtually impossible to locate and gather data from each and every water system. Although record keeping has greatly improved among the water agencies over the past decade, water use records are still not universally available. True statistical sampling requires that each entity selected must contribute data and that no part of the data sample be withheld. In practice, that level of response is not possible. Instead, all data are gathered and reported as available to maximize coverage of the population served.

Where possible, the larger agencies areas were selected to obtain a higher coverage of the State's population, and generally to secure more complete records. However, with the widespread use of computers today, even the smaller and more remote agencies have the capability of maintaining quality records. Table 6-1 summarizes 1980 and 1990 population distribution by hydrologic region and the percentages of population reported by the data in Appendix A. Table A-1 compares 1980 and 1990 population by county and the percentages reported by the data in Appendix A.

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State of California — DEPARTMENT OF WATER RESOURCES — The Resources Agency

URBAN WATER UTILITY STATISTICS

SYSTEM NAME:

CALENDAR YEAR: 1993

SERVING CITY(IES) OF: _____ COUNTY OF: _____

1. CLASSIFICATION AND NUMBER OF ACTIVE ACCOUNTS:

	INSIDE CITY LIMITS		OUTSIDE CITY LIMITS	
	FLAT-RATE	METERED	FLAT-RATE	METERED
RESIDENTIAL				
COMMERCIAL				
INDUSTRIAL (MFG.)				
GOVERNMENTAL				
IRRIGATION: Agricultural Crops				
Parks, Golf Courses, etc.				
(Please see instructions) **TOTAL**				

2. RESIDENTIAL:
PLEASE INDICATE: (a) Number of single family dwellings you serve ..... _____
(b) Number of all other dwelling units you serve ..... _____

3. ESTIMATED RESIDENT (PERMANENT) POPULATION SERVED:
INSIDE CITY LIMITS ..... _____
OUTSIDE CITY LIMITS ..... _____

4. MONTHLY WATER PRODUCTION: (Million gallons) — Because of normal system losses "Water Production" will be greater than "Total Delivered".

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR TOTAL
WATER INTO SYSTEM													
RECLAIMED WATER													
ACQUIRED FOR SALE *(Please see instructions)*													

5. SOURCES OF WATER :

SELF-PRODUCED _____ % and/or **PURCHASED** _____ %
WELLS _____ % WELLS _____ %
SURFACE _____ % SURFACE _____ %

6. METERED DELIVERIES: (Million gallons)

RESIDENTIAL													
Apartments (Multiples)													
Single Family													
COMMERCIAL													
INDUSTRIAL (MFG.)													
GOVERNMENTAL													
IRRIGATION: Agricultural Crops													
Parks, Golf Courses, etc.													
TOTAL DELIVERED													

7. DELIVERY(IES) TO OTHER AGENCY(IES): _____ **Yes** _____ **No** **NAME(S) OF AGENCY(IES)** [and amounts (MG) use separate sheet if necessary] _____

8. UNUSUAL EVENT, (i.e., annexation, major price change, new industry, etc.): _____

NAME, TITLE AND PHONE NUMBER OF OFFICIAL RESPONSIBLE FOR DATA: _____

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PLEASE READ INSTRUCTIONS ON REVERSE SIDE

Figure 6-1. Urban Water Utility Statistics (DWR reporting form)

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Figure 6-1 (continued). Urban Water Utility Statistics (DWR reporting form)

INSTRUCTIONS FOR COMPLETING URBAN WATER UTILITY STATISTICS FORM

1. **CLASSIFICATION AND NUMBER OF ACCOUNTS**

   Show the number of FLAT-RATE and metered accounts in each classification of use. Separate by location INSIDE, or OUTSIDE of the corporate city limits. Do not include inactive accounts, hydrants or fire protection connections. The number of accounts should be the average for the calendar year. IRRIGATION deliveries should be divided into AGRICULTURAL CROP and LANDSCAPE (parks, golf courses, etc.) subcategories. Do not include accounts of other agencies that you may serve.

2. **RESIDENTIAL**

   Show the number of single-family dwellings and the number of all other dwelling **UNITS** (not structures) that you serve. (This housing data may be available at the Planning Commission Office, or at other agencies of the city or county governments, and in the Census of Housing).

3. **ESTIMATED RESIDENT POPULATION SERVED** — (Your Service Area Only)

   Base permanent population estimates on most recent (1990) Census count; or special census that may have been taken recently. Unless the city limits are the same as the water agency service area, individual census tracts constituting the water service area can be totaled. A persons-per-connection factor computed from the latest census year can be used for estimating population served. DO NOT INCLUDE tourist, "weekend" population, or population of other cities to which water is sold through another agency.

4. **MONTHLY WATER PRODUCTION** — (Your Service Area Only)

   Indicate measured quantities of water produced and introduced into the system for each month of the CALENDAR YEAR. **Do not include** amounts of water sold to other water utilities. Also show the amount of RECLAIMED water acquired for resale. Do not include RECLAIMED water that has been discharged, percolated or evaporated.

5. **SOURCES OF WATER**

   Indicate the percentage of your water supply that is SELF-PRODUCED and that which is PURCHASED. Then divide each category to show the percentage of water from WELLS and/or from SURFACE SUPPLIES.

6. **METERED DELIVERIES** — (Your Service Area Only)

   Show monthly delivered amounts for each class of use whether revenue producing or not. Under the category METERED DELIVERIES-RESIDENTIAL, show the amount of water delivered to apartments separately from the amount of water delivered to single-family dwellings. The category of COMMERCIAL may include water for construction, line flushing or other uses in addition to business uses. The category of INDUSTRIAL for this report, means industries that manufacture a product (S.I.C. Major Groups 20 - 39). GOVERNMENTAL should include any water delivered to a public facility (that is schools, public buildings, military installations, etc.). IRRIGATION deliveries should be divided into AGRICULTURAL CROP and LANDSCAPE subcategories. Include RECLAIMED water delivered for these purposes.

7. **DELIVERIES TO OTHER AGENCIES**

   Indicate whether, or not, you deliver water to another water agency. If affirmative, provide that agency's name and amount in million gallons. Do not include this amount in 4, 5 and 6 (other side).

8. **UNUSUAL EVENT**

   Occasionally, an abrupt change occurs in data. Often the change is easily explained by some major change in the system, system operation or service area. If this may have occurred during the past year, please identify the event.

NOTE: If you have already completed a similar form issued by the Office of the State Controller, please disregard this form.

IMPORTANT: Please return this colored original form.

CONVERSION TABLE			
1 Million Gallons	=	3.0689	acre feet
1 Acre Foot	=	325,851	gallons
100 Cubic Feet	=	748.1	gallons

DWR 4154-B (Rev.10/93) Side Two

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Table 6-1. Population Distribution and Percentage of Population of Reported Data, by Hydrologic Region 1980 and 1990

Hydrologic Region	Total Population (thousands)		Percent of Total State Population		Percent of Population Reported	
	1980	1990	1980	1990	1980	1990
North Coast	467.5	571.7	1.9	1.9	47	51
San Francisco	4,787.1	5,483.7	20.2	18.3	89	93
Central Coast	1,017.3	1,292.9	4.2	4.3	57	65
South Coast	12,965.9	16,292.8	54.6	54.4	59	79
Sacramento River	1,660.9	2,209.0	7.0	7.4	49	64
San Joaquin River	1,010.5	1,430.0	4.3	4.8	42	41
Tulare Lake	1,178.0	1,553.8	5.0	5.2	52	61
North Lahontan	64.3	78.1	0.3	0.3	18	22
South Lahontan	313.3	599.8	1.3	2.0	21	21
Colorado River	317.2	464.2	1.3	1.5	34	62
Total	**23,782.0**	**29,976.0**	**100.0**	**100.0**	**63**	**74**

Source: Department of Finance, Report I-80-90, Intercensal Estimates of the Population of California: State and Counties 1980-1990, June 1991.

Population Served

The boundaries of water purveyor service areas seldom correspond to those of overlying census tracts, census designated places, city limits, or other boundaries for which populations can be determined. The calculation of per capita water use estimates depends on reliable estimates of the *permanent* resident population of a water service area. *Transient* populations (e.g., recreational and tourists) are counted in the population of their permanent residence, even though their water use affects the values of the areas they visit.

There are various methods to estimate service area populations. Wherever possible, official census or annual Department of Finance update estimates are applied. For a given water service area, an estimate of persons per connection can be multiplied by the known number of service connections. However, the number of persons per connection varies within and between communities due to housing configurations (single-family or multi-family, ranchettes, etc.) and the mix of land uses (residential, commercial, industrial, etc.). In some cases, the estimated persons per connection of an overlying agency (county or water district) can be assumed as a reasonable estimate for an underlying service area or a similar community.

Appendix A identifies the city served by each retail water supplier. For this bulletin, *city* is used in a broad sense, from the geographic extent of a concentration of residences and work places, to a metropolitan area, central city, and suburbs. A city in this sense is a named community and may be incorporated or not. An urban water supplier may serve all or part of city, plus customers beyond its central boundaries, and/or all or parts of more than one city.

In Appendix A tables, 1980 and 1990 *city census population* refers to the official population of the closest overlying census place. This is for comparison with the water supplier's estimated service area population. In some cases, census information is used with persons per connection information to estimate service area population.

Verifying Data

The Department receives most data from agencies on the form shown in Figure 6-1. Some agencies are unable to complete the form as requested for various reasons. In some cases, their accounting system does not aggregate the requested data, or totalizing meters have not been installed on intake lines to the system. Many systems in the Central Valley and some remote areas do not meter some or all residential customers. Some agencies are unable to identify total services or to accurately count the individuals within their service area.

A large part of the data analysis process involves checking data for accuracy. Each water agency has a unique water system, accounting method, and data collection technique. Therefore, each response must be examined to ensure that

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the correct units of measure were used and that questions on the response form were interpreted properly.

Extraordinary impacts on per capita water use may need special attention. For example, the tourist, non-resident population of Palm Springs and vicinity raises water use to more than 800 gallons per capita daily. High unit rates of water use occur in the Lake Tahoe basin because of high year-round tourism. Exceptionally high industrial water use may have a similar effect. The lumber and paper manufacturing industries in the North Coast Region require considerably more water than other urban users. If this amount of water were assigned to the resident population, the rate would be several thousand gpcd. The amount of water delivered to very high-water-using industries is treated as a separate demand and not included with the normal urban requirement.

Uses of the Data

As reported by the local water purveyors and verified to the extent possible by the Department, Appendix A constitutes a unique set of water information. Analyses of these data are presented in the Bulletin 166 and Bulletin 160 series.

The Department uses per capita water use to identify trends in the data in Appendix A. On a local basis, per capita use is affected by many factors, as discussed above and in Chapter 3, that must be considered when comparing the gpcd of various localities. Summarizing per capita use by hydrologic regions and statewide remains a valid method of estimating water use.

The data in Appendix A have been used in this report as follows:

1. Estimates of unaccounted water were prepared from the data by comparing the difference between water produced and metered deliveries. Unmetered water deliveries may complicate such calculations.

2. The monthly water production data allowed for analysis of seasonal patterns of water use.

3. The average of the 1980-87 data was used to establish the 1990 *normalized* use that was not affected by rationing or conservation methods used only during the drought.

4. The normalized per capita water uses are multiplied by population and adjusted for conservation to make projections.

5. Where data were available on the water use by sector, they were used to calculate percentage water by sector for each hydrologic region.

6. The lowest water use in the winter months over the 1980-87 period was considered an approximation of the interior *baseline* use.

While the data in Appendix A have been useful in the Department's statewide and regional water use estimates and forecasts, it needs strengthening to better estimate the factors affecting current use and for future projections.

Urban water use data are also important for studies to:

1. Identify developing water supply shortages

2. Evaluate the availability of water for local use, export to other areas of need, or both

3. Determine the ability of users to pay for additional water supplies

4. Analyze ground water extraction rates

5. Quantify water rights

6. Determine the quantity and nature of water use (including the timing of applications and the routing of water) to optimize State and federal reservoir operations

7. Assist evaluation of the impact of proposed water management actions and facilities on specific areas.

Questions concerning the data may be directed to the Water Use Unit in the appropriate Department of Water Resources District Office (Figure 6-2).

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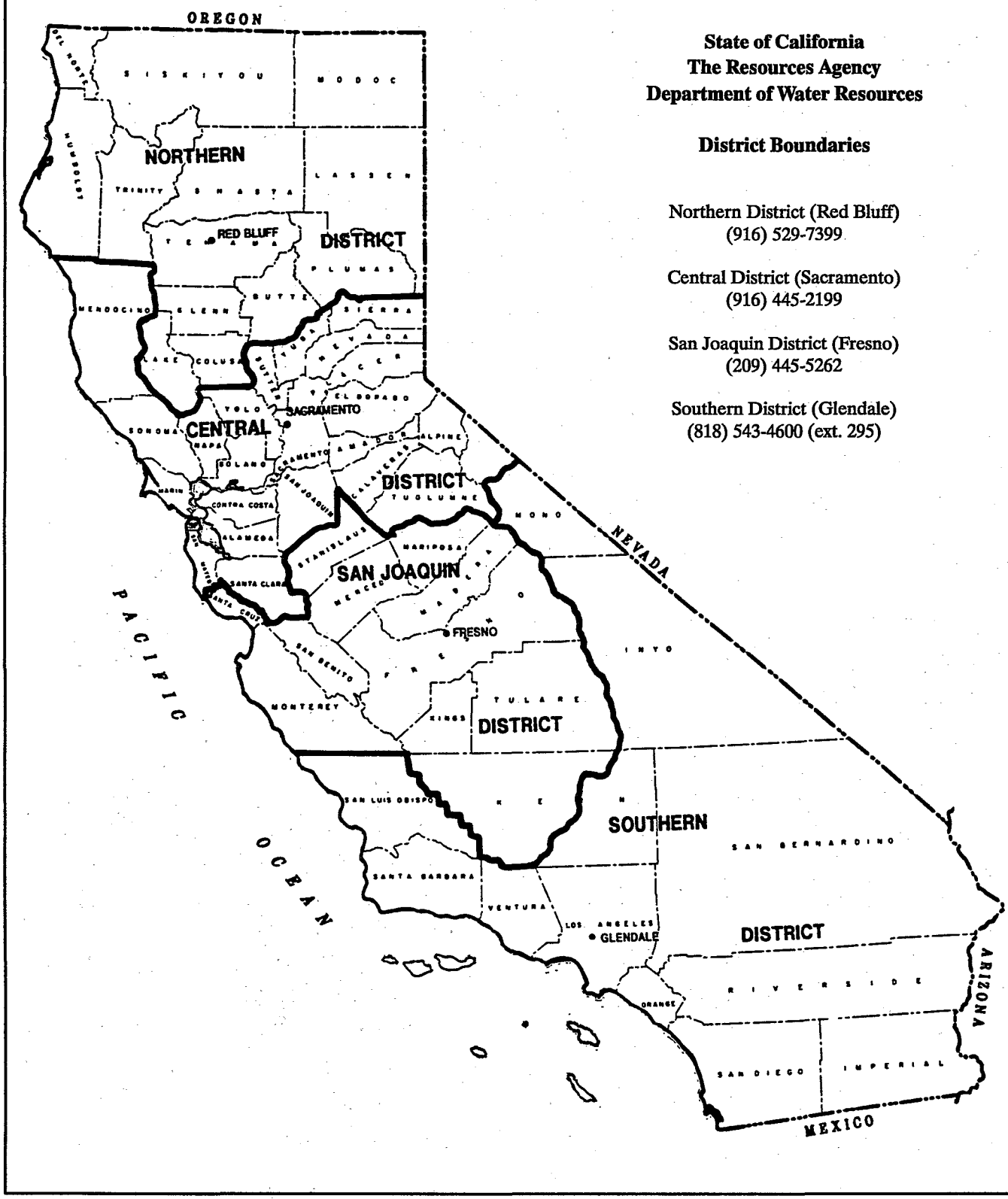
Figure 6-2. DWR District Boundaries



State of California
The Resources Agency
Department of Water Resources

District Boundaries

Northern District (Red Bluff)
(916) 529-7399

Central District (Sacramento)
(916) 445-2199

San Joaquin District (Fresno)
(209) 445-5262

Southern District (Glendale)
(818) 543-4600 (ext. 295)

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Appendix A
Ten-Year Urban Water Use Data

Appendix A data tables are based on information provided directly by the water suppliers. Each supplier was given an opportunity to verify the input, but not all responded. Questions concerning the data may be directed to the Water Use Unit in the appropriate Department of Water Resources District Office (Figure 6-2).

Appendix A groups the reporting water systems by Hydrologic Regions (see Figure A-1). Within Regions, systems are arranged numerically in Detailed Analysis Unit order (see Figure A-2). See the alphabetical listing (Table A-2) to find systems by name.

Appendix A. Ten-Year Urban Water Use Data

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Figure A-1. Major Hydrologic Regions of California

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Figure A-2. Planning Subareas and Hydrologic Regions

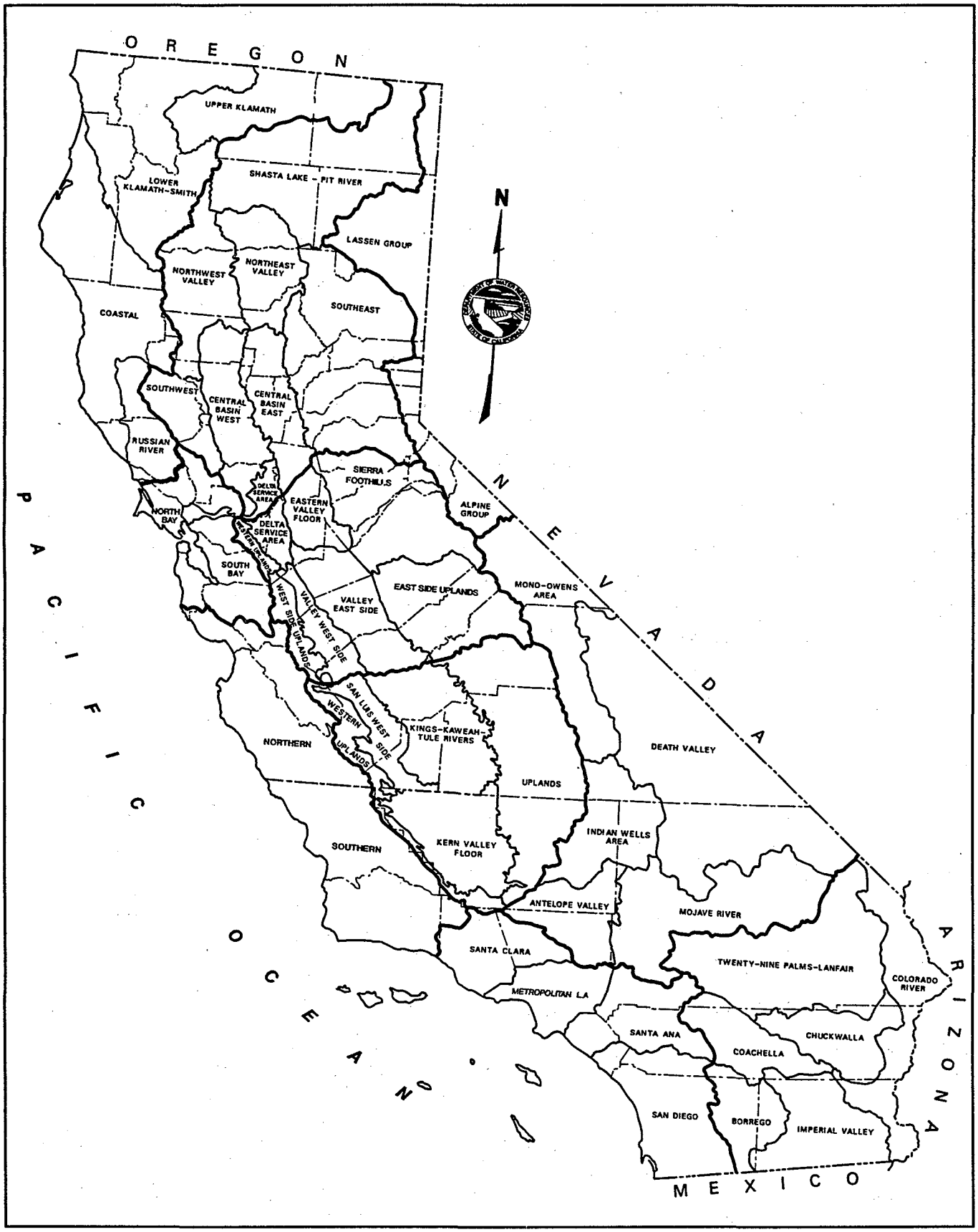

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Table A-1. Population Growth by County, 1980 and 1990									
County	Total Population		Percent of Population Reported		County	Total Population		Percent of Population Reported	
	1980	1990	1980	1990		1980	1990	1980	1990
Alameda	1,109,500	1,282,400	97	90	Placer	118,400	175,600	21	387
Alpine	1,100	1,100	–	0	Plumas	17,400	19,900	11	12
Amador	19,500	30,600	–	0	Riverside	669,800	1,195,400	51	33
Butte	144,900	183,900	54	77	Sacramento	787,900	1,051,400	62	83
Calaveras	20,900	32,500	–	7	San Benito	25,200	37,000	46	52
Colusa	12,900	16,400	90	59	San Bernardino	902,200	1,440,700	37	58
Contra Costa	658,500	810,300	90	82	San Diego	1,873,300	2,520,500	69	95
Del Norte	18,300	24,500	46	54	San Francisco	680,500	723,900	100	100
El Dorado	86,500	128,200	–	0	San Joaquin	350,200	483,800	42	27
Fresno	517,400	673,900	61	69	San Luis Obispo	156,600	219,500	46	49
Glenn	21,500	25,000	33	50	San Mateo	588,100	652,100	79	58
Humboldt	108,900	119,800	60	71	Santa Barbara	300,000	371,400	75	77
Imperial	92,500	110,400	19	62	Santa Clara	1,300,200	1,502,200	88	94
Inyo	17,900	18,400	19	0	Santa Cruz	189,100	230,800	50	44
Kern	406,100	549,800	50	55	Shasta	116,600	148,800	45	62
Kings	74,200	102,500	38	31	Sierra	3,100	3,400	–	35
Lake	36,800	51,100	10	42	Siskiyou	40,000	43,800	26	29
Lassen	21,800	27,800	30	29	Solano	237,200	345,700	50	92
Los Angeles	7,500,300	8,897,500	62	79	Sonoma	301,400	392,000	56	59
Madera	63,900	89,800	34	33	Stanislaus	267,700	376,100	34	72
Marin	222,700	231,200	98	96	Sutter	52,600	65,100	–	42
Mariposa	11,200	14,500	–	8	Tehama	39,100	50,100	37	37
Mendocino	67,000	81,000	18	26	Trinity	12,000	13,100	–	42
Merced	135,500	180,600	42	45	Tulare	247,400	314,600	40	47
Modoc	8,700	9,700	36	34	Tuolumne	34,200	49,000	10	14
Mono	8,700	10,200	–	47	Ventura	532,200	671,600	47	67
Monterey	292,100	358,800	62	59	Yolo	113,900	142,500	60	88
Napa	99,300	111,700	66	70	Yuba	49,800	58,700	20	21
Nevada	52,500	79,600	–	51					
Orange	1,944,800	2,424,100	51	85	**Statewide Total**	**23,782,000**	**29,976,000**	**63**	**74**

Source:
[1] Population—Department of Finance, Report I 80-90, Intercensal Estimates of the Population of California: State and Counties 1980-1990, June 1991.
[2] Land area—Sacramento Area Council of Governments, 1990 Census Geographic Areas Reference List, Part A, October 1991.

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Table A-2. Master Alphabetical Listing of Reporting Agencies, Indicating Hydrologic Region				
Page	Name	County	Region	DAU
	Alameda County Water District	Alameda	SF	47
	Alhambra	Los Angeles	SC	92
	Alturas	Modoc	SR	130
	American Canyon County Water District	Napa	SF	40
	Anaheim	Orange	SC	96
	Anderson	Shasta	SR	141
	Angels Camp	Calaveras	SJ	194
	Antioch	Contra Costa	SJ	46
	Arbuckle Public Utility District	Colusa	SR	163
	Arcade Water District	Sacramento	SR	173
	Arcadia	Los Angeles	SC	92
	Arcata	Humboldt	NC	32
	Arroyo Grande	San Luis Obispo	CC	68
	Atascadero Mutual Water Company	San Luis Obispo	CC	65
	Banning	Riverside	CR	348
	Belmont County Water District	San Mateo	SF	43
	Benicia	Solano	SF	41
	Beverly Hills	Los Angeles	SC	89
	Big Bear City Community Services District	San Bernardino	SC	100
	Biggs	Butte	SR	168
	Blue Lake	Humboldt	NC	30
	Brawley	Imperial	CR	353
	Brea	Orange	SC	96
	Brentwood	Contra Costa	SJ	185
	Bridgeport Public Utility District	Mono	NL	270
	Buckingham Park County Water District	Lake	SR	174
	Buena Park	Orange	SC	96
	Burney Water District	Shasta	SR	134
	Calexico	Imperial	CR	353
	California American Water Co., Baldwin Hills	Los Angeles	SC	92
	California American Water Co., Duarte	Los Angeles	SC	92
	California American Water Co., Monterey	Monterey	CC	52
	California American Water Co., San Marino	Los Angeles	SC	92
	California Water Service Co., Bakersfield	Kern	TL	254
	California Water Service Co., Bear Gulch District	San Mateo	SF	43
	California Water Service Co., Chico/Hamilton City	Butte	SR	142
	California Water Service Co., Dixon	Solano	SR	191
	California Water Service Co., East Los Angeles	Los Angeles	SC	92
	California Water Service Co., Hermosa/Redondo	Los Angeles	SC	89
	California Water Service Co., Livermore	Alameda	SF	45
	California Water Service Co., Los Altos	Santa Clara	SF	44
	California Water Service Co., Marysville	Yuba	SR	171
	California Water Service Co., Palos Verdes	Los Angeles	SC	89

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Table A-2 (continued). Master Alphabetical Listing of Reporting Agencies, Indicating Hydrologic Region				
Page	Name	County	Region	DAU
	California Water Service Co., Salinas	Monterey	CC	48
	California Water Service Co., San Carlos	San Mateo	SF	43
	California Water Service Co., San Mateo	San Mateo	SF	43
	California Water Service Co., Selma	Fresno	TL	236
	California Water Service Co., So. San Francisco	San Mateo	SF	43
	California Water Service Co., Stockton	San Joaquin	SJ	182
	California Water Service Co., Visalia	Tulare	TL	242
	California Water Service Co., Willows	Glenn	SR	163
	Calistoga	Napa	SF	40
	Camarillo	Ventura	SC	81
	Camrosa County Water District	Ventura	SC	81
	Capistrano Valley Water District	Orange	SC	114
	Carmichael Water District	Sacramento	SR	173
	Carpinteria County Water District	Santa Barbara	SC	75
	Casitas Municipal Water District	Ventura	SC	81
	Centerville Community Services District	Shasta	SR	141
	Ceres	Stanislaus	SJ	208
	Cerritos	Los Angeles	SC	89
	Chino	San Bernardino	SC	100
	Citizen's Utilities Company, Isleton	Sacramento	SR	186
	Citizen's Utilities Company, Sacramento	Sacramento	SR	172,173
	Clearlake Oaks County Water District	Lake	SR	174
	Clovis	Fresno	TL	233
	Coachella	Riverside	CR	348
	Coalinga	Fresno	TL	245
	Coastside County Water District	San Mateo	SF	42
	Cobb Mutual Water Company	Lake	SR	174
	Colton	San Bernardino	SC	100
	Colusa	Colusa	SR	164
	Compton	Los Angeles	SC	89
	Contra Costa Water District	Contra Costa	SF	46
	Corning	Tehama	SR	142
	Covina	Los Angeles	SC	92
	Crescent City	Del Norte	NC	14
	Crescenta Valley County Water District	Los Angeles	SC	90
	Daly City	San Mateo	SF	43
	Davis	Yolo	SR	162
	Del Paso Manor County Water District	Sacramento	SR	172
	Delano	Kern	TL	256
	Desert Water Agency	Riverside	CR	348
	Dominguez Water Corporation	Los Angeles	SC	89
	Dos Palos	Merced	SJ	216
	Downey	Los Angeles	SC	89

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Table A-2 (continued). Master Alphabetical Listing of Reporting Agencies, Indicating Hydrologic Region				
Page	Name	County	Region	DAU
	Dublin San Ramon Community Services District	Alameda	SF	45
	East Bay Municipal Utilities District	Alameda/Contra Costa	SF	46,47
	East Niles Community Services District	Kern	TL	254
	El Centro	Imperial	CR	353
	El Segundo	Los Angeles	SC	89
	El Toro Water District	Orange	SC	114
	Escalon	San Joaquin	SJ	205
	Escondido/Rincon Del Diablo MWD	San Diego	SC	120
	Eureka	Humboldt	NC	32
	Fair Oaks Water District	Sacramento	SR	172
	Fairfield	Solano	SF	41
	Fieldbrook Community Services District	Humboldt	NC	30
	Fillmore	Ventura	SC	81
	Finley County Service Area #6	Lake	SR	174
	Fort Bragg	Mendocino	NC	17
	Fortuna	Humboldt	NC	20
	Fresno	Fresno	TL	233
	Fullerton	Orange	SC	96
	Garden Grove	Orange	SC	96
	Glendale	Los Angeles	SC	90
	Glendora	Los Angeles	SC	92
	Gilroy	Santa Clara	CC	62
	Goleta Water District	Santa Barbara	CC	75
	Gridley	Butte	SR	168
	Groveland Community Services District	Tuolumne	SJ	195
	Gustine	Merced	SJ	216
	Hanford	Kings	TL	238
	Happy Camp Community Services District	Siskiyou	NC	10
	Hawthorne	Los Angeles	SC	89
	Hayward	Alameda	SF	47
	Healdsburg	Sonoma	NC	35
	Helix Water District	San Diego	SC	120
	Hemet	Riverside	SC	104
	Hesperia Water District	San Bernardino	SL	309
	Hillsborough	San Mateo	SF	43
	Hollister/Sunnyslope Water District	San Benito	CC	62
	Humboldt Community Services District	Humboldt	NC	32
	Huntington Beach	Orange	SC	96
	Huron	Fresno	TL	244
	Hydesville County Water District	Humboldt	NC	21
	Indian Wells Water District	Kern	SL	303
	Indio	Riverside	CR	348

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Table A-2 (continued). Master Alphabetical Listing of Reporting Agencies, Indicating Hydrologic Region				
Page	Name	County	Region	DAU
	Inglewood	Los Angeles	SC	89
	Kelseyville County Waterworks District #3	Lake	SR	174
	Konocti County Water District	Lake	SR	174
	La Habra	Orange	SC	96
	La Verne	Los Angeles	SC	92
	Laguna Beach County Water District	Orange	SC	114
	Lake Arrowhead Community Services District	San Bernardino	SL	309
	Lakeport	Lake	SR	174
	Lakeside Water District	San Diego	SC	120
	Lakewood	Los Angeles	SC	89
	Las Virgenes MWD	Los Angeles	SC	90
	Lincoln Avenue Water Company	Los Angeles	SC	92
	Lindsay	Tulare	TL	242
	Lodi	San Joaquin	SJ	182
	Loma Linda	San Bernardino	SC	100
	Lompoc	Santa Barbara	CC	74
	Long Beach	Los Angeles	SC	89
	Los Alisos Water District	Orange	SC	114
	Los Angeles Department of Water and Power	Los Angeles	SC	89
	Los Banos	Merced	SJ	216
	Loyalton	Sierra	SR	154
	Madera	Madera	SJ	213
	Mammoth County Water District	Mono	SL	276
	Manhattan Beach	Los Angeles	SC	89
	Manteca	San Joaquin	SJ	205
	Marin Municipal Water District	Marin	SF	39b
	Martinez	Contra Costa	SF	47
	Maywood Mutual Water Company #1	Los Angeles	SC	89
	McKinleyville Community Services District	Humboldt	NC	30
	Merced	Merced	SJ	210
	Mesa Consolidated Water District	Orange	SC	96
	Millbrae	San Mateo	SF	43
	Milpitas	Santa Clara	SF	44
	Modesto/Del Este Water Company	Stanislaus	SJ	206
	Mojave Public Utility District	Kern	SL	305
	Monrovia	Los Angeles	SC	92
	Montague	Siskiyou	NC	4
	Montecito Water District	Santa Barbara	CC	75
	Monterey Park	Los Angeles	SC	92
	Morgan Hill	Santa Clara	CC	62
	Morro Bay	San Luis Obispo	CC	67
	Moulton Niguel Water District	Orange	SC	114

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Table A-2 (continued). Master Alphabetical Listing of Reporting Agencies, Indicating Hydrologic Region				
Page	Name	County	Region	DAU
	Mount Konocti Mutual Water Company	Lake	SR	174
	Mount Shasta	Siskiyou	SR	136
	Mountain View	Santa Clara	SF	44
	Napa	Napa	SF	40
	Needles	San Bernardino	CR	340
	Nevada Irrigation District, North Auburn	Placer	SR	161
	Newman	Stanislaus	SJ	215
	Norco	Riverside	SC	98
	North Coast County Water District	San Mateo	SF	42
	North Marin County Water District	Marin	SF	39b
	North Tahoe Public Utility District	Placer	NL	268
	Northridge Water District	Sacramento	SR	173
	Oakdale	Stanislaus	SJ	206
	Oceanside	San Diego	SC	120
	Oildale Mutual Water Company	Kern	TL	254
	Ontario	San Bernardino	SC	100
	Orange	Orange	SC	96
	Orchard Dale Water District	Los Angeles	SC	89
	Orland	Glenn	SR	142
	Oroville (various suppliers)	Butte	SR	159,168,170
	Oxnard	Ventura	SC	81
	Palmdale Water District	Los Angeles	SL	307
	Palo Alto	Santa Clara	SF	44
	Paradise Irrigation District	Butte	SR	147
	Paramount	Los Angeles	SC	89
	Pasadena	Los Angeles	SC	92
	Paso Robles	San Luis Obispo	CC	65
	Petaluma	Sonoma	SF	39a
	Pico Rivera	Los Angeles	SC	89
	Pittsburg	Contra Costa	SF	46
	Placerville	El Dorado	SR	158
	Pleasanton	Alameda	SF	45
	Pomona	Los Angeles	SC	92
	Port Hueneme	Ventura	SC	81
	Porterville	Tulare	TL	243
	Portola	Plumas	SR	154
	Ramona Municipal Water District	San Diego	SC	120
	Rancho Cucamonga County Water District	San Bernardino	SC	100
	Red Bluff	Tehama	SR	142
	Redding	Shasta	SR	141
	Redlands	San Bernardino	SC	100
	Redwood City	San Mateo	SF	43
	Reedley	Fresno	TL	239

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Table A-2 (continued). Master Alphabetical Listing of Reporting Agencies, Indicating Hydrologic Region				
Page	Name	County	Region	DAU
	Rialto	San Bernardino	SC	100
	Rio Dell	Humboldt	NC	20
	Rio Vista	Solano	SR	186
	Riverbank	Stanislaus	SJ	206
	Riverside	Riverside	SC	98
	Riviera Heights Mutual Water Company	Lake	SR	174
	Rohnert Park	Sonoma	NC	36
	Roseville	Placer	SR	172
	Rowland Water District	Los Angeles	SC	92
	Rubio Canon Land and Water Association	Los Angeles	SC	92
	Sacramento	Sacramento	SR	172
	San Bruno	San Mateo	SF	43
	San Clemente	Orange	SC	114
	San Diego	San Diego	SC	120
	San Dieguito Water District	San Diego	SC	120
	San Fernando	Los Angeles	SC	90
	San Francisco	San Francisco	SF	43
	San Gabriel County Water District	Los Angeles	SC	92
	San Gabriel Valley Water Company, Fontana	San Bernardino	SC	100
	San Gabriel Valley Water Company, Montebello	Los Angeles	SC	89
	San Jose	Santa Clara	SF	44
	San Jose Water Company	Santa Clara	SF	44
	San Juan Suburban Water District, Orangevale/Roseville	Sacramento/Placer	SR	172
	San Lorenzo Valley Water District	Santa Cruz	CC	60
	San Luis Obispo	San Luis Obispo	CC	67
	Sanger	Fresno	TL	236
	Santa Ana	Orange	SC	96
	Santa Barbara	Santa Barbara	CC	75
	Santa Clara	Santa Clara	SF	44
	Santa Cruz	Santa Cruz	CC	60
	Santa Fe Irrigation District	San Diego	SC	120
	Santa Fe Springs	Los Angeles	SC	89
	Santa Maria	Santa Barbara	CC	71
	Santa Monica	Los Angeles	SC	89
	Santa Paula Water Works	Ventura	SC	81
	Santa Rosa	Sonoma	NC	36
	Seal Beach	Orange	SC	96
	Sebastopol	Sonoma	NC	36
	Shafter	Kern	TL	256
	Shasta Dam Area Public Utilities District	Shasta	SR	143
	Solvang	Santa Barbara	CC	74
	Sonoma	Sonoma	SF	39a

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Table A-2 (continued). Master Alphabetical Listing of Reporting Agencies, Indicating Hydrologic Region				
Page	Name	County	Region	DAU
	Soquel Creek County Water District	Santa Cruz	CC	60
	South Coast County Water District	Orange	SC	114
	South Gate	Los Angeles	SC	89
	South Pasadena	Los Angeles	SC	92
	South Tahoe Public Utility District	El Dorado	NL	268
	Southern California Water Company	Ventura	SC	81
	Spring Valley County Service Area #12	Lake	SR	174
	Starview County Service Area #18	Lake	SR	174
	Suburban Water Systems	Los Angeles	SC	89
	Sunnyvale	Santa Clara	SF	44
	Susanville	Lassen	NL	264
	Sweetwater Authority, National City	San Diego	SC	120
	Sweetwater Authority, Otay Water District	San Diego	SC	120
	Tahoe City Public Utility District	Placer	NL	268
	Tehachapi	Kern	TL	231
	Thousand Oaks	Ventura	SC	81
	Torrance	Los Angeles	SC	89
	Tracy	San Joaquin	SJ	185
	Trinidad	Humboldt	NC	30
	Trinity County Waterworks District #1	Trinity	NC	7
	Tulare	Tulare	TL	242
	Tuolumne Utilities District	Sonora	SJ	195
	Turlock	Stanislaus	SJ	208
	Tustin	Orange	SC	96
	Twentynine Palms Water District	San Bernardino	CR	327
	Ukiah	Mendocino	SF	33c
	Upland	San Bernardino	SC	100
	Vacaville	Solano	SR	191
	Vallecitos County Water District	San Diego	SC	120
	Vallejo	Solano	SF	40
	Valley of the Moon Water District	Sonoma	SF	39a
	Valley Water Company	Los Angeles	SC	89
	Victor Valley County Water District	San Bernardino	SL	309
	Walnut Valley Water District	Los Angeles	SC	92
	Watsonville	Santa Cruz	CC	59
	Weaverville Community Services District	Trinity	NC	7
	West Covina	Los Angeles	SC	92
	Whittier	Los Angeles	SC	89
	Williams	Colusa	SR	163
	Woodland	Yolo	SR	162
	Yorba Linda Water District	Orange	SC	96
	Yreka	Siskiyou	NC	4
	Yuba City	Sutter	SR	168

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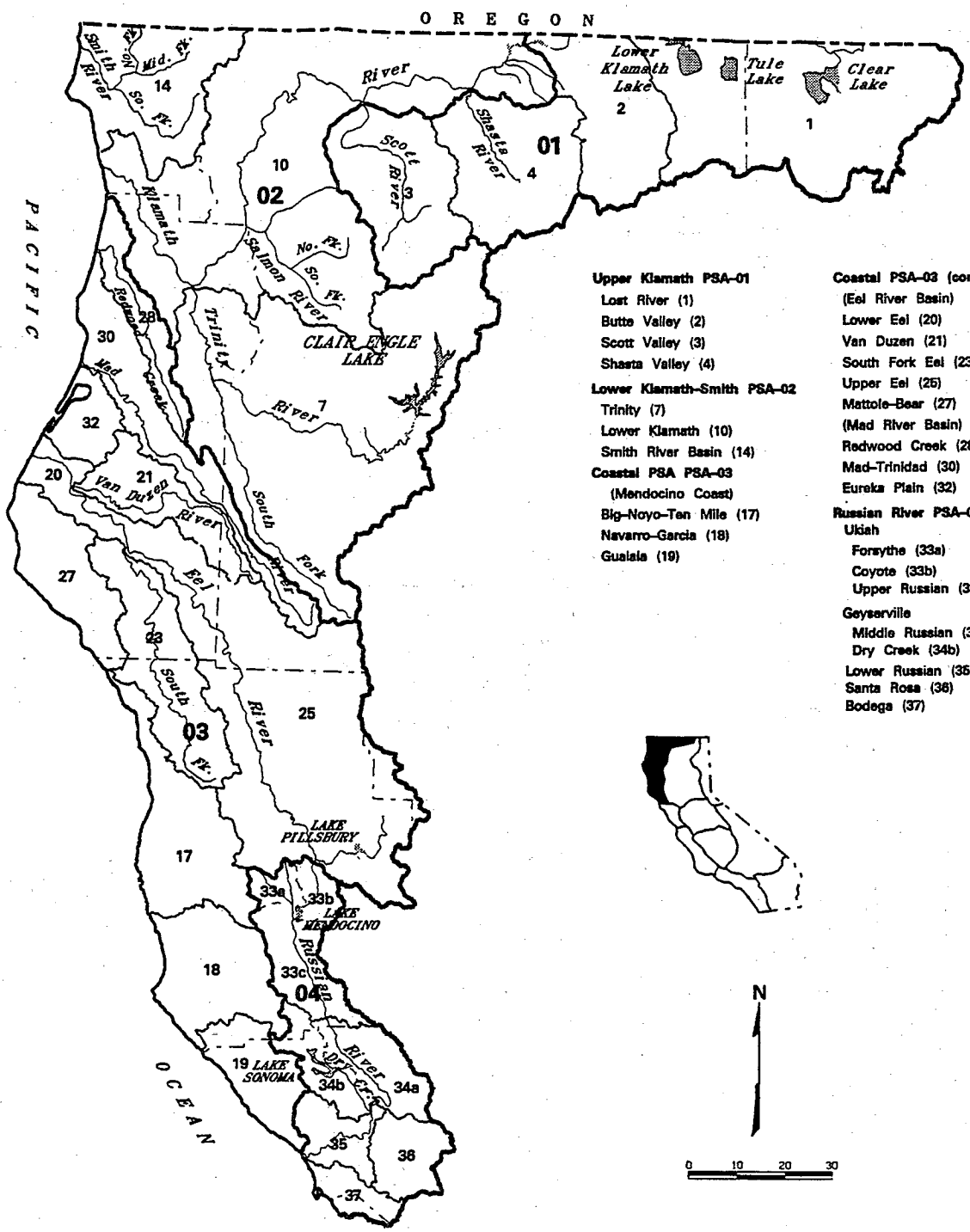
Figure A-3. North Coast Region



Upper Klamath PSA–01
- Lost River (1)
- Butte Valley (2)
- Scott Valley (3)
- Shasta Valley (4)

Lower Klamath–Smith PSA–02
- Trinity (7)
- Lower Klamath (10)
- Smith River Basin (14)

Coastal PSA PSA–03
(Mendocino Coast)
- Big–Noyo–Ten Mile (17)
- Navarro–Garcia (18)
- Gualala (19)

Coastal PSA–03 (con't)
(Eel River Basin)
- Lower Eel (20)
- Van Duzen (21)
- South Fork Eel (23)
- Upper Eel (25)
- Mattole–Bear (27)

(Mad River Basin)
- Redwood Creek (28)
- Mad–Trinidad (30)
- Eureka Plain (32)

Russian River PSA–04
Ukiah
- Forsythe (33a)
- Coyote (33b)
- Upper Russian (33c)

Geyserville
- Middle Russian (34a)
- Dry Creek (34b)

- Lower Russian (35)
- Santa Rosa (36)
- Bodega (37)

PLANNING SUBAREAS
AND DETAILED ANALYSIS UNITS

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Table A-3. North Coast Region Water Production and Per Capita Water Use

COUNTY..SISKIYOU
CITY....MONTAGUE
SYSTEM #..... 47007
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....UPPER KLAMATH
DAU # 4

CITY CENSUS POPULATION
1980..... 1,285
1990..... 1,415

WATER AGENCY.....MONTAGUE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	465	Metered.....	11	Metered.....	2	Metered.....	7
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	448	448	8.4	8.4	10.0	12.0	18.0	18.0	26.0	26.0	17.0	13.0	9.0	8.0	173.8
1981	482	482	8.9	9.8	9.5	11.4	15.3	22.7	25.1	21.8	13.4	4.8	4.3	4.7	151.7
1982	465	465	4.9	4.4	4.4	5.8	13.1	11.5	14.0	17.0	8.7	4.9	4.4	4.1	97.1
1983	485	485	4.7	3.3	3.6	4.4	9.8	13.2	16.8	13.5	8.1	4.6	3.2	3.7	88.8
1984	477	475	4.3	3.7	3.7	4.6	9.4	12.8	15.6	13.6	7.2	4.3	3.6	4.1	86.9
1985	491	489	4.1	3.3	3.7	6.1	8.9	12.0	16.8	11.3	5.5	4.4	3.5	3.7	83.2
1986	495	493	3.8	3.1	4.0	5.7	8.6	12.9	15.3	15.8	7.0	4.4	3.5	3.8	88.1
1987	499	497	3.8	3.4	3.9	7.7	11.7	12.1	11.8	13.9	8.0	6.1	3.5	3.8	89.8
1988	503	501	3.7	3.2	4.3	5.4	7.0	8.8	15.7	13.8	10.2	6.2	3.5	3.7	85.5
1989	513	511	4.0	3.5	3.2	4.5	5.9	11.0	16.3	12.7	7.5	4.2	3.5	3.8	79.9
1990	487	485	3.6	3.3	3.9	6.2	8.4	9.8	15.6	13.4	10.1	5.2	3.6	4.1	87.2

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.87	1,285	211	225	251	311	452	467	653	653	441	326	233	201	371	0.415
1981	2.87	1,385	207	253	221	274	356	546	584	507	322	113	103	109	300	0.336
1982	2.88	1,338	117	117	107	144	315	285	338	410	216	118	110	98	199	0.223
1983	2.88	1,398	107	83	82	104	227	315	388	310	193	106	77	86	174	0.195
1984	2.89	1,378	101	92	87	112	220	309	365	318	175	101	87	95	173	0.194
1985	2.89	1,420	94	83	83	142	202	281	381	257	129	100	81	84	161	0.180
1986	2.90	1,434	85	76	91	133	194	301	344	355	163	100	82	86	168	0.188
1987	2.90	1,448	86	85	86	177	260	279	262	310	185	136	82	84	170	0.190
1988	2.91	1,463	82	76	95	122	155	201	345	304	232	137	80	81	160	0.179
1989	2.91	1,494	86	84	70	100	128	246	351	274	167	90	77	81	147	0.164
1990	2.92	1,421	81	84	88	145	190	231	353	303	238	119	84	94	168	0.188
AVERAGE			114	114	115	160	245	315	397	364	224	131	100	100	199	0.223

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
Note: Water production data estimated for 1/80 & 2/80.

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C-059121

COUNTY..SISKIYOU
CITY.... YREKA
SYSTEM #..... 47011
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....UPPER KLAMATH
DAU # 4

WATER AGENCY.....YREKA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 5,916
1990..... 6,948

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,400	Metered.....	159	Metered.....	11	Metered.....	43
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,125	2,113	21.0	25.0	35.0	42.0	61.0	67.0	89.0	100.0	72.0	55.0	33.0	23.0	623.0
1981	2,263	2,250	30.0	34.0	38.0	45.0	65.0	86.0	108.0	114.0	83.0	40.0	33.0	28.0	704.0
1982	2,300	2,285	36.0	29.0	39.0	42.0	77.0	74.0	88.0	110.0	66.0	43.0	34.0	26.0	664.0
1983	2,400	2,385	40.0	19.0	32.0	35.0	74.0	93.0	108.0	92.0	60.0	43.0	30.0	37.0	663.0
1984	2,513	2,500	42.0	37.0	41.0	41.0	77.0	100.0	120.0	113.0	69.0	43.0	34.0	36.0	753.0
1985	2,576	2,562	43.0	38.0	41.0	59.0	82.0	100.0	120.0	106.0	57.0	47.0	29.0	42.0	764.0
1986	2,577	2,563	42.0	30.0	39.0	55.0	78.0	111.0	126.0	129.0	80.0	48.0	41.0	40.0	819.0
1987	2,577	2,563	41.0	36.0	39.0	68.0	94.0	98.0	99.0	124.0	84.0	67.0	40.0	41.0	831.0
1988	2,568	2,553	42.0	38.0	46.0	58.0	67.0	137.0	137.0	127.0	100.0	68.0	38.0	42.0	900.0
1989	2,625	2,609	44.0	44.0	45.0	53.0	60.0	104.0	128.0	105.0	79.0	51.0	36.0	41.0	790.0
1990	2,629	2,610	41.0	38.0	42.0	58.0	82.0	92.0	122.0	107.0	90.0	55.0	36.0	44.0	807.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.80	5,950	114	145	190	235	331	375	483	542	403	298	185	125	287	0.321
1981	2.79	6,305	153	193	194	238	333	455	553	583	439	205	174	143	306	0.343
1982	2.77	6,376	182	162	197	220	390	387	445	557	345	218	178	132	285	0.320
1983	2.76	6,620	195	102	156	176	361	468	526	448	302	210	151	180	274	0.307
1984	2.74	6,897	196	185	192	198	360	483	561	528	333	201	164	168	299	0.335
1985	2.73	7,035	197	193	188	280	376	474	550	486	270	216	137	193	298	0.333
1986	2.72	7,002	193	153	180	262	359	528	580	594	381	221	195	184	320	0.359
1987	2.70	6,967	190	185	181	325	435	469	458	574	402	310	191	190	327	0.366
1988	2.69	6,907	196	190	215	280	313	661	640	593	483	318	183	196	357	0.400
1989	2.68	7,024	202	224	207	252	276	494	588	482	375	234	171	188	308	0.345
1990	2.66	6,999	189	194	194	276	378	438	562	493	429	254	171	203	316	0.354
AVERAGE			183	175	190	249	356	476	541	535	378	244	173	173	307	0.344

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059122

COUNTY.. TRINITY
CITY.... HAYFORK
SYSTEM #..... 53003
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....LOWER KLAMATH-SMITH
DAU # 7

WATER AGENCY.....TRINITY COUNTY WATER DISTRICT #1
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ESTIMATED POPULATION
1980..... 1,610
1990..... 1,565

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	442	Metered.....	59	Metered.....	5	Metered.....	27
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	540	540	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981	540	540	-	-	-	-	-	-	19.8	26.5	14.2	12.0	5.2	6.4	-
1982	538	538	5.5	5.9	5.0	7.5	16.5	17.8	17.9	18.9	12.5	10.7	5.5	9.8	133.5
1983	500	500	7.1	5.3	5.4	9.4	10.4	19.4	28.1	23.6	12.9	9.2	6.6	9.2	146.6
1984	516	516	5.9	6.5	8.8	9.2	13.5	31.1	28.0	22.5	19.4	10.7	7.9	9.9	173.4
1985	532	532	7.8	9.3	8.8	10.7	21.3	35.4	30.8	30.7	13.5	12.4	10.1	10.1	200.9
1986	522	522	8.7	8.3	9.1	12.7	25.2	27.4	39.6	32.9	18.4	12.2	10.0	11.0	215.6
1987	524	524	10.0	8.0	7.5	12.7	18.9	21.1	23.0	27.2	18.2	14.6	7.2	8.1	176.5
1988	527	527	8.0	7.2	8.4	9.8	11.6	14.7	22.3	26.4	17.7	14.2	7.0	7.9	155.0
1989	524	524	9.7	7.8	7.3	12.3	18.3	20.3	22.9	23.9	16.1	9.8	8.7	8.9	166.0
1990	525	525	8.7	8.3	10.4	13.4	18.7	22.9	28.1	26.2	20.0	16.2	13.0	17.4	203.3

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.98	1,610	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.98	1,610	-	-	-	-	-	-	397	531	294	240	108	128	-	-
1982	2.98	1,604	111	131	101	156	332	370	360	380	260	215	114	197	228	0.255
1983	2.98	1,491	154	127	117	210	225	434	608	511	288	199	148	199	269	0.302
1984	2.98	1,538	124	146	185	199	283	674	587	472	420	224	171	208	309	0.346
1985	2.98	1,586	159	209	179	225	433	744	626	624	284	252	212	205	347	0.389
1986	2.98	1,556	180	190	189	273	522	587	821	683	395	252	213	228	380	0.425
1987	2.98	1,562	207	183	155	271	390	450	475	562	388	301	154	167	310	0.347
1988	2.98	1,571	164	157	171	208	237	312	458	542	376	292	149	162	270	0.303
1989	2.98	1,562	200	178	151	262	378	433	473	494	344	202	186	184	291	0.326
1990	2.98	1,565	179	189	214	285	385	488	579	540	426	334	277	359	356	0.399
AVERAGE			164	168	162	232	354	499	538	534	347	251	173	204	307	0.343

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data not available

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C-059123

COUNTY.. TRINITY
CITY....WEAVERVILLE
SYSTEM #..... 53001
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....LOWER KLAMATH-SMITH
DAU # 7

WATER AGENCY.....WEAVERVILLE COMM. SERVS. DIST.
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ESTIMATED POPULATION
1980..... 3,320
1990..... 3,960

ORIGIN OF WATER (in percent):
SURFACE WATER..... 99
WELLS AND SPRINGS.. 1

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,100	Metered.....	186	Metered.....	1	Metered.....	40
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,108	1,108	9.3	9.2	9.8	10.8	15.9	21.3	24.9	20.7	19.4	15.4	14.1	18.8	189.5
1981	1,125		18.0	12.0	17.0	21.0	22.0	26.0	35.9	29.4	24.3	16.1	13.3	13.5	248.5
1982	1,138		12.0	11.0	11.4	10.8	11.4	22.5	22.3	25.0	16.5	12.5	12.3	11.5	179.2
1983	1,149		11.3	9.5	10.9	10.3	15.2	22.9	22.3	26.2	18.6	14.4	15.3	14.6	191.5
1984	1,158		14.8	15.5	13.2	15.4	21.3	26.3	30.8	31.2	22.4	17.9	15.1	16.2	240.0
1985	1,207		15.3	13.4	12.5	16.6	23.0	23.4	30.1	23.2	18.3	17.4	13.3	14.1	220.6
1986	1,218		17.4	13.2	15.3	18.6	26.5	34.3	33.7	36.8	26.1	17.1	13.4	19.9	272.1
1987	1,232		18.2	15.4	15.2	19.7	25.2	28.7	32.6	34.7	27.7	20.8	22.1	20.8	281.1
1988	1,254		16.5	17.0	18.6	18.1	18.2	21.9	32.3	37.3	28.9	17.5	13.7	13.8	253.6
1989	1,238		15.7	15.5	16.1	16.1	22.3	32.9	35.1	37.2	20.1	17.4	14.6	14.9	257.9
1990	1,320	1,320	17.1	14.6	13.6	17.2	19.8	22.9	30.9	27.9	23.0	18.0	13.2	15.5	233.7

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.00	3,320	91	95	95	108	155	214	242	201	195	149	141	182	156	0.175
1981	3.00	3,371	172	127	163	208	211	257	343	282	240	154	131	129	202	0.226
1982	3.00	3,411	113	115	108	105	108	220	211	236	161	118	120	109	144	0.161
1983	3.00	3,444	106	99	102	100	142	222	209	246	180	135	148	137	152	0.171
1984	3.00	3,471	137	154	123	148	198	253	286	290	215	166	145	150	189	0.212
1985	3.00	3,619	136	132	111	153	205	215	268	207	168	155	123	126	167	0.187
1986	3.00	3,652	154	129	135	169	234	313	298	325	238	151	123	175	204	0.229
1987	3.00	3,695	159	149	133	178	220	259	284	303	250	182	200	182	208	0.233
1988	3.00	3,761	141	155	159	161	156	194	277	319	256	150	121	118	185	0.207
1989	3.00	3,714	136	149	140	145	194	295	305	323	180	151	131	129	190	0.213
1990	3.00	3,960	139	132	111	145	161	193	252	227	194	147	111	126	162	0.181
AVERAGE			135	131	125	147	180	240	270	269	207	151	136	142	178	0.200

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059124

COUNTY..SISKIYOU
CITY....HAPPY CAMP
SYSTEM #..... 47012
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....LOWER KLAMATH-SMITH
DAU # 10

WATER AGENCY.....HAPPY CAMP COMM. SERVS. DIST.
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

ESTIMATED POPULATION
1980..... 1,085
1990..... 1,110

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	3	Metered.....	61	Metered.....	2	Metered.....	7
Flat Rate.....	329	Flat Rate...	2	Flat Rate...	0	Flat Rate...	5

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	422	422	/5	-	-	-	-	-	30.0	30.0	26.0	20.0	18.0	16.0	-
1981	426	426	16.0	11.0	8.0	10.0	18.0	21.0	26.0	22.0	13.0	15.0	14.0	12.0	186.0
1982	431	431	15.0	12.0	14.0	14.0	24.0	21.0	32.0	35.0	24.0	15.0	13.0	12.0	231.0
1983	434	434	13.0	12.0	10.0	12.0	22.0	28.0	35.0	39.0	26.0	17.0	14.0	13.0	241.0
1984	423	423	14.0	13.0	11.0	14.0	24.0	31.0	-	-	-	-	-	-	-
1985	420	420	16.7	14.1	14.3	15.1	21.3	26.0	30.7	27.5	20.6	14.7	11.6	16.0	228.6
1986	429	429	13.9	12.2	13.5	14.5	16.4	-	-	-	5.5	14.4	13.0	14.9	-
1987	414	414	22.6	13.7	14.3	17.8	22.3	23.0	27.0	31.3	20.8	22.2	18.0	17.8	250.8
1988	407	407	17.5	14.8	15.6	15.4	14.3	-	-	-	-	-	-	13.1	-
1989	408	408	13.5	14.5	13.2	13.8	15.9	26.2	34.2	35.0	24.0	15.0	13.3	13.6	232.2
1990	410	410	13.0	12.3	12.8	16.0	20.7	21.9	33.0	26.7	22.4	16.1	12.9	18.5	226.3

PER CAPITA WATER USE (gpcd)/3

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	ANNUALLY afpca /4
1980	2.57	1,085	-	-	-	-	-	-	892	892	799	595	553	476	-	-
1981	2.58	1,101	469	357	234	303	527	636	762	645	394	439	424	352	463	0.518
1982	2.60	1,120	432	383	403	417	691	625	922	1,008	714	432	387	346	565	0.633
1983	2.61	1,134	370	378	285	353	626	823	996	1,110	765	484	412	370	582	0.652
1984	2.63	1,111	407	404	319	420	697	930	-	-	-	-	-	-	-	-
1985	2.64	1,108	486	454	416	454	620	782	893	800	619	428	349	466	565	0.633
1986	2.65	1,138	394	383	383	425	465	-	-	-	161	408	381	422	-	-
1987	2.67	1,104	660	443	418	537	652	695	789	915	628	649	544	520	622	0.697
1988	2.68	1,091	518	468	461	471	423	-	-	-	-	-	-	387	-	-
1989	2.69	1,099	396	471	387	419	467	795	1,004	1,027	728	440	403	399	579	0.648
1990	2.71	1,110	378	396	372	480	602	658	959	776	673	468	387	538	559	0.626
AVERAGE			451	414	368	428	577	743	902	897	609	483	427	428	562	0.630

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C—0 5 9 1 2 5

C-059125

COUNTY..DEL NORTE
CITY....CRESCENT CITY
SYSTEM #..... 8001
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....LOWER KLAMATH-SMITH
DAU # 14

WATER AGENCY.....CRESCENT CITY, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 3,075
1990..... 4,380

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	3,382	Metered.....	414	Metered.....	8	Metered.....	26
Flat Rate.....	2	Flat Rate...	1	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,266	830	32.4	28.5	29.5	33.5	37.6	44.8	53.9	55.6	44.6	37.8	31.0	32.8	462.0
1981	2,640	1,219	36.1	30.4	33.5	37.0	40.5	43.0	58.7	55.1	44.7	37.0	35.3	39.2	490.5
1982	2,662	1,112	31.6	28.4	30.1	31.7	45.9	39.3	48.7	54.3	42.0	36.6	30.2	33.2	452.0
1983	2,796	1,188	32.5	29.8	33.1	33.1	36.6	45.7	55.6	65.6	40.9	38.8	36.8	40.2	488.7
1984	2,990	1,252	35.3	32.7	35.9	32.5	35.7	40.4	59.3	60.6	51.2	41.2	34.1	36.2	495.1
1985	2,934	1,227	36.2	30.8	30.8	32.9	42.7	36.4	55.2	52.6	38.5	36.2	30.2	33.2	455.7
1986	3,029	1,244	30.7	28.3	31.6	34.0	39.8	47.2	56.4	53.7	42.4	35.4	31.3	34.9	465.7
1987	3,148	1,256	32.9	30.3	32.1	41.7	45.8	49.9	58.9	55.8	46.9	43.8	32.0	35.0	505.1
1988	3,190	1,255	30.6	28.1	30.8	32.1	36.1	42.6	56.2	56.0	44.5	43.5	33.1	37.4	471.0
1989	3,261	1,262	38.8	40.2	39.3	51.3	59.0	62.6	64.2	69.7	59.6	50.8	41.5	45.3	622.3
1990	3,733	1,226	47.4	40.9	51.6	57.0	69.8	71.2	80.7	76.9	67.9	66.2	59.0	69.7	758.3

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.70	8,395	124	117	113	133	144	178	207	214	177	145	123	126	151	0.169
1981	3.69	9,746	119	111	111	127	134	147	194	182	153	122	121	130	138	0.154
1982	3.68	9,792	104	104	99	108	151	134	160	179	143	121	103	109	126	0.142
1983	3.67	10,248	102	104	104	108	115	149	175	206	133	122	120	127	131	0.146
1984	3.65	10,919	104	103	106	99	105	123	175	179	156	122	104	107	124	0.139
1985	3.64	10,676	109	103	93	103	129	114	167	159	120	109	94	100	117	0.131
1986	3.63	10,982	90	92	93	103	117	143	166	158	129	104	95	103	116	0.130
1987	3.61	11,371	93	95	91	122	130	146	167	158	137	124	94	99	122	0.136
1988	3.60	11,481	86	84	87	93	101	124	158	157	129	122	96	105	112	0.126
1989	3.59	11,693	107	123	108	146	163	178	177	192	170	140	118	125	146	0.163
1990	3.57	13,336	115	110	125	142	169	178	195	186	170	160	147	169	156	0.174
AVERAGE			105	104	103	117	133	147	177	179	147	127	110	118	131	0.146

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059126

COUNTY..MENDOCINO
CITY....FORT BRAGG
SYSTEM #..... 23001
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....COASTAL
DAU # 17

CITY CENSUS POPULATION
1980..... 5,019
1990..... 6,078

WATER AGENCY.....FORT BRAGG, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,006	Metered.....	346	Metered.....	18	Metered.....	20
Flat Rate.....	2	Flat Rate...	2	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,044	1,961	27.0	25.0	26.0	27.0	33.0	34.0	42.0	41.0	35.0	32.0	27.0	28.0	377.0
1981	2,079	1,996	26.0	25.0	25.0	26.0	31.0	38.0	40.0	39.0	38.0	32.0	28.0	29.0	377.0
1982	2,114	2,031	30.0	28.0	31.0	28.0	34.0	36.0	40.0	37.0	32.0	28.0	23.0	24.0	371.0
1983	2,149	2,066	22.0	23.0	29.0	30.0	31.0	35.0	37.0	34.0	28.0	27.0	23.0	26.0	345.0
1984	2,184	2,101	26.0	25.0	28.0	29.0	36.0	41.0	48.0	41.0	35.0	27.0	26.0	27.0	389.0
1985	2,219	2,136	28.0	37.0	28.0	31.0	41.0	43.0	42.0	39.0	33.0	34.0	29.0	27.0	412.0
1986	2,254	2,171	31.0	26.0	32.0	37.0	40.0	44.0	47.0	45.0	37.0	35.0	33.0	32.0	439.0
1987	2,286	2,205	33.0	31.0	36.0	36.0	41.0	42.0	42.0	40.0	36.0	36.0	24.0	23.0	420.0
1988	2,318	2,239	23.0	25.0	30.0	31.0	32.0	35.0	41.0	38.0	35.0	27.0	24.0	24.0	365.0
1989	2,324	2,238	23.0	21.0	23.0	25.0	31.0	35.0	39.0	38.0	32.0	30.0	27.0	27.0	351.0
1990	2,394	2,311	22.0	20.0	24.0	28.0	31.0	33.0	41.0	39.0	36.0	33.0	26.0	26.0	359.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.56	5,231	166	165	160	172	203	217	259	253	223	197	172	173	197	0.221
1981	2.57	5,336	157	167	151	162	187	237	242	236	237	193	175	175	194	0.217
1982	2.57	5,440	178	184	184	172	202	221	237	219	196	166	141	142	187	0.209
1983	2.58	5,546	128	148	169	180	180	210	215	198	168	157	138	151	170	0.191
1984	2.59	5,651	148	153	160	171	205	242	274	234	206	154	153	154	189	0.211
1985	2.59	5,758	157	230	157	179	230	249	235	219	191	190	168	151	196	0.220
1986	2.60	5,864	171	158	176	210	220	250	259	248	210	193	188	176	205	0.230
1987	2.61	5,964	178	186	195	201	222	235	227	216	201	195	134	124	193	0.216
1988	2.62	6,064	122	142	160	170	170	192	218	202	192	144	132	128	165	0.185
1989	2.62	6,096	122	123	122	137	164	191	206	201	175	159	148	143	158	0.177
1990	2.63	6,296	113	113	123	148	159	175	210	200	191	169	138	133	156	0.175
AVERAGE			149	161	160	173	195	220	235	220	199	174	153	150	183	0.205

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059127

COUNTY..HUMBOLDT
CITY.... FORTUNA
SYSTEM #..... 12006
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....COASTAL
DAU # 20

WATER AGENCY.....FORTUNA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 4,740
1990..... 8,788

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	3,487	Metered.....	337	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,921	1,897	/5	-	10.2	16.6	17.1	20.0	24.5	24.4	21.0	21.4	19.7	21.2	-
1981	1,925	1,900	18.8	16.7	17.9	17.3	18.8	24.5	27.5	26.7	22.2	20.9	19.5	18.5	249.3
1982	1,930	1,906	18.5	17.4	18.0	18.4	22.8	23.7	24.9	26.1	20.7	19.3	16.6	21.6	247.9
1983	2,050	2,020	19.5	14.5	20.2	20.3	20.7	27.0	27.7	29.8	24.8	21.7	21.0	22.4	269.6
1984	2,160	2,137	22.4	20.6	19.9	20.4	19.2	22.3	28.3	28.2	24.3	20.2	19.8	20.8	266.3
1985	2,161	2,138	20.5	18.5	20.5	20.6	25.4	23.8	29.8	28.4	19.1	14.9	18.0	17.4	256.9
1986	3,534	3,460	24.7	23.4	23.4	27.8	27.6	36.1	42.5	39.5	31.7	29.8	23.5	25.2	355.2
1987	3,699	3,625	24.3	23.7	25.9	28.6	34.4	37.2	42.2	41.7	34.7	35.1	27.5	31.4	386.7
1988	3,720	3,645	27.1	25.2	28.7	27.9	33.6	30.7	44.2	39.9	35.8	29.5	28.2	28.2	379.0
1989	3,739	3,665	26.8	26.3	27.7	27.8	33.6	36.1	42.5	40.7	35.5	32.6	31.0	30.2	391.0
1990	3,825	3,751	30.2	27.2	28.3	29.0	35.6	35.9	44.3	42.0	37.0	32.9	30.2	30.9	403.5

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.50	4,800	-	-	69	115	115	139	165	164	146	144	137	143	-	-
1981	2.48	4,780	127	124	121	120	127	171	186	180	155	141	136	125	143	0.160
1982	2.47	4,762	125	131	122	129	155	166	169	177	145	130	116	146	143	0.160
1983	2.45	5,026	125	103	130	135	133	179	178	191	164	139	139	144	147	0.165
1984	2.44	5,263	138	135	122	129	118	141	173	173	154	124	125	128	139	0.155
1985	2.42	5,231	127	126	126	131	157	152	184	175	122	92	115	107	135	0.151
1986	2.41	8,500	94	98	89	109	105	141	161	150	124	113	92	96	115	0.128
1987	2.39	8,839	89	96	94	108	126	140	154	152	131	128	104	115	120	0.134
1988	2.37	8,831	99	98	105	105	123	116	161	146	135	108	106	103	118	0.132
1989	2.36	8,818	98	106	101	105	123	136	155	149	134	119	117	110	121	0.136
1990	2.34	8,961	109	108	102	108	128	134	159	151	138	118	113	111	123	0.138
AVERAGE			113	113	107	118	128	147	168	164	141	123	118	121	130	0.146

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ MiMissing data unavailable

C—0 5 9 1 2 8

C-059128

COUNTY..HUMBOLDT
CITY....RIO DELL
SYSTEM #..... 12012
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....COASTAL
DAU # 20

CITY CENSUS POPULATION
1980..... 2,715
1990..... 3,012

WATER AGENCY.....RIO DELL, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,123	Metered.....	27	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,100	1,060	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982	1,105	1,077	-	-	-	-	-	-	7.0	7.0	7.0	7.0	5.0	10.0	-
1983	1,109	1,081	7.0	10.0	11.0	9.0	9.0	11.0	7.0	7.0	7.0	7.0	5.0	10.0	100.0
1984	1,100	1,074	7.0	10.0	11.0	9.0	9.0	12.0	8.0	8.0	8.0	8.0	6.0	9.0	105.0
1985	1,080	1,052	8.0	8.0	8.0	9.0	8.0	11.0	12.0	10.0	11.0	11.0	9.0	8.0	113.0
1986	1,175	1,155	8.0	8.0	8.0	8.0	9.0	12.0	14.0	12.0	13.0	12.0	10.0	9.0	123.0
1987	1,050	1,029	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	1,064	1,042	7.0	7.0	8.0	9.0	9.0	9.0	12.0	12.0	11.0	9.0	9.0	11.0	113.0
1989	1,125	1,100	12.0	7.0	8.0	8.0	9.0	10.0	11.0	11.0	9.0	8.0	8.0	8.0	109.0
1990	1,154	1,130	6.0	6.0	6.0	6.0	7.0	8.0	10.0	9.0	8.0	7.0	6.0	6.0	85.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.56	2,817	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.57		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	2.58	2,853	-	-	-	-	-	-	79	79	82	79	58	113	-	-
1983	2.59	2,875	79	124	123	104	101	128	79	79	81	79	58	112	95	0.107
1984	2.60	2,863	79	120	124	105	101	140	90	90	93	90	70	101	100	0.113
1985	2.61	2,822	91	101	91	106	91	130	137	114	130	126	106	91	110	0.123
1986	2.62	3,083	84	93	84	86	94	130	146	126	141	126	108	94	109	0.122
1987	2.63	2,766	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	2.64	2,814	80	86	92	107	103	107	138	138	130	103	107	126	110	0.123
1989	2.66	2,987	130	84	86	89	97	112	119	119	100	86	89	86	100	0.112
1990	2.67	3,076	63	70	63	65	73	87	105	94	87	73	65	63	76	0.085
AVERAGE			86	97	95	95	95	119	112	105	105	95	83	98	100	0.112

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C—0 5 9 1 2 9

C-059129

COUNTY..HUMBOLDT
CITY....HYDESVILLE
SYSTEM #..... 12019
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....COASTAL
DAU # 21

WATER AGENCY.....HYDESVILLE COUNTY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ESTIMATED POPULATION
1980..... 810
1990..... 1,050

ORIGIN OF WATER (in percent):
SURFACE WATER.....
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	380	Metered.....	3	Metered.....	NA	Metered.....	2
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	270	270	5/	-	-	-	-	-	-	-	-	-	-	-	-
1981	275		-	-	-	-	-	-	-	-	-	-	-	-	-
1982	275		-	-	-	-	-	-	-	-	-	-	-	-	-
1983	280		-	-	-	-	-	-	5.5	4.8	3.2	3.1	2.5	2.5	-
1984	292		2.8	2.5	2.8	3.2	3.3	3.6	2.7	5.0	3.9	2.9	2.2	2.3	37.1
1985	295		2.9	2.3	2.3	2.7	4.2	4.2	-	-	-	-	-	-	-
1986	301		2.2	2.4	2.6	2.6	3.2	5.0	5.7	6.1	3.3	2.8	2.5	2.5	40.9
1987	326		2.4	2.1	2.3	2.9	4.2	5.5	5.4	6.0	3.9	3.6	2.7	2.7	43.7
1988	349		2.5	2.5	2.9	3.0	3.5	2.4	4.4	5.2	4.8	3.6	3.0	2.7	40.6
1989	350		2.6	2.6	2.8	2.9	3.7	4.9	5.9	5.2	4.1	3.3	3.1	3.0	44.1
1990	376	376	3.2	2.7	3.1	3.4	4.5	4.6	6.3	5.5	5.1	3.7	3.2	4.5	49.6

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.00	810	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.98	819	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	2.96	814	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.94	823	-	-	-	-	-	-	215	189	129	121	101	99	-	-
1984	2.92	852	105	100	106	125	126	140	101	188	151	109	88	88	119	0.134
1985	2.90	854	110	95	87	104	157	163	-	-	-	-	-	-	-	-
1986	2.88	866	80	101	97	99	121	193	212	227	126	104	97	94	129	0.145
1987	2.85	931	83	80	80	104	145	197	188	207	139	126	98	95	129	0.144
1988	2.83	989	83	88	95	102	114	80	143	171	161	117	101	88	113	0.126
1989	2.81	985	85	96	92	99	122	164	193	170	139	109	103	99	123	0.138
1990	2.79	1,050	99	92	94	106	138	146	194	169	162	112	100	139	130	0.145
AVERAGE			92	93	93	106	132	155	178	189	144	114	98	100	124	0.139

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C—0 5 9 1 3 0

C-059130

COUNTY..HUMBOLDT
CITY....BLUE LAKE
SYSTEM #..... 12002
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....COASTAL
DAU # 30

WATER AGENCY.....BLUE LAKE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 1,201
1990..... 1,235

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	603	Metered.....	31	Metered.....	6	Metered.....	7
Flat Rate.....	0	Flat Rate...	1	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (million gallons) /5 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	548	480	4.6	4.3	4.6	4.2	5.2	6.2	7.4	8.0	5.3	4.8	4.7	4.6	63.9
1981	557	490	4.7	4.8	5.7	5.8	5.7	7.7	8.7	8.4	7.0	6.0	6.4	5.4	76.4
1982	556	489	4.3	4.3	5.6	5.6	7.7	6.3	7.1	7.2	6.1	5.5	4.5	4.7	68.8
1983	556	489	5.1	4.5	6.1	4.8	5.7	7.0	7.5	7.0	5.4	6.0	5.3	4.8	69.3
1984	552	488	5.8	5.4	6.2	6.2	8.2	8.9	8.7	8.3	7.0	5.0	4.7	4.8	79.3
1985	592	511	5.1	4.2	4.9	4.9	6.8	7.5	9.4	8.7	8.5	5.5	4.3	4.7	74.5
1986	637	540	5.0	4.3	7.3	5.9	10.2	13.2	17.9	17.3	14.5	11.2	15.2	12.8	134.7
1987	611	517	8.9	10.5	11.9	10.1	13.5	14.5	15.1	16.4	13.6	13.4	10.6	11.5	150.1
1988	626	532	11.4	10.4	11.5	9.4	12.4	13.1	14.5	15.7	11.1	12.8	12.7	10.2	145.2
1989	653	562	11.4	10.1	10.6	10.5	12.9	13.9	15.5	14.6	13.6	12.6	11.0	11.5	148.3
1990	649	563	11.9	8.1	11.8	10.9	13.8	14.2	16.2	15.1	14.0	12.9	12.1	8.4	149.3

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.50	1,371	109	109	108	103	122	151	173	187	128	113	115	108	128	0.143
1981	2.47	1,376	111	126	133	140	134	186	204	198	170	142	156	126	152	0.170
1982	2.44	1,357	103	113	132	137	184	155	168	170	151	132	111	111	139	0.156
1983	2.41	1,340	123	121	146	120	137	175	181	170	135	144	131	116	142	0.159
1984	2.38	1,313	143	143	152	158	202	227	214	203	178	123	118	118	165	0.185
1985	2.35	1,390	118	107	114	117	158	179	217	203	205	129	104	110	147	0.165
1986	2.32	1,476	108	104	160	134	223	299	391	378	326	244	343	280	250	0.280
1987	2.29	1,397	206	267	276	241	313	346	348	379	326	311	253	265	294	0.330
1988	2.26	1,412	261	254	262	221	283	309	331	360	263	293	300	233	282	0.316
1989	2.22	1,453	254	248	236	241	287	319	345	324	313	279	253	256	280	0.313
1990	2.19	1,424	269	203	268	255	312	333	368	343	327	292	282	190	287	0.322
AVERAGE			164	163	181	170	214	243	267	265	229	200	197	174	206	0.231

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
Note: Production increase beginning in May 1986, reflects increase in deliveries to industrial customers.

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C-059131

COUNTY..HUMBOLDT
CITY....FIELDBROOK
SYSTEM #..... 12020
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....COASTAL
DAU # 30

ESTIMATED POPULATION
1980..... 820
1990..... 1,150

WATER AGENCY.....FIELDBROOK COMMUN. SERVS. DIST.
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	435	Metered.....	14	Metered.....	4	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	330	330	1.3	1.8	2.0	2.3	2.1	3.3	5.4	4.7	3.7	2.9	3.0	3.7	36.1
1981	429	429	3.6	2.9	3.4	3.8	5.2	7.2	9.4	8.3	7.4	5.3	5.0	5.1	66.6
1982	422	422	4.7	3.5	3.7	3.8	6.3	6.6	7.0	7.2	5.9	4.0	4.8	3.3	60.8
1983	437	437	3.4	3.3	2.6	3.6	4.5	6.2	6.8	7.7	4.4	3.9	3.3	3.3	53.0
1984	437	437	3.8	3.0	3.4	3.7	4.0	5.0	8.1	7.5	5.9	4.0	2.2	3.4	53.8
1985	451	451	3.6	3.1	3.8	3.4	4.9	5.5	7.8	6.7	4.4	3.7	2.9	3.3	53.2
1986	453	453	3.0	2.7	3.4	3.4	4.4	5.9	8.6	8.0	5.1	3.6	3.7	4.1	56.0
1987	451	451	3.9	3.8	4.9	5.0	5.9	7.2	7.8	9.0	6.2	5.8	3.7	4.4	67.5
1988	457	457	4.7	3.5	4.5	4.5	5.0	5.2	9.1	8.3	6.4	5.2	3.9	3.5	63.8
1989	460	460	3.8	3.4	3.6	3.8	5.3	6.9	8.8	8.2	6.2	4.9	4.2	4.2	63.3
1990	460	460	4.5	2.3	3.3	5.1	6.3	6.5	8.0	8.2	6.7	5.9	4.9	6.0	67.5

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.48	820	51	74	79	95	81	132	212	184	152	115	121	145	120	0.135
1981	2.49	1,067	109	97	103	118	158	224	284	250	232	161	157	155	171	0.192
1982	2.49	1,050	145	118	115	121	193	210	216	222	186	122	151	102	159	0.178
1983	2.49	1,088	100	110	78	109	133	191	201	229	134	115	101	98	133	0.149
1984	2.49	1,089	112	95	100	114	117	152	240	221	180	119	69	100	135	0.152
1985	2.49	1,124	104	97	108	101	141	164	225	193	131	105	85	95	130	0.145
1986	2.49	1,130	85	86	97	101	127	175	245	229	150	102	108	117	136	0.152
1987	2.50	1,125	112	120	141	148	170	213	222	258	184	165	109	127	164	0.184
1988	2.50	1,141	133	105	127	133	140	152	256	236	188	148	115	98	153	0.172
1989	2.50	1,149	106	105	100	111	150	200	247	231	180	138	122	119	151	0.169
1990	2.50	1,150	126	71	93	147	176	189	224	230	193	165	141	167	161	0.180
AVERAGE			108	98	104	118	144	182	234	226	174	132	116	120	147	0.164

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059132

COUNTY..HUMBOLDT | WATER AGENCY.....MCKINLEYVILLE COMM. SERVS. DIST. | ORIGIN OF WATER (in percent):

CITY....McKINLEYVILLE | TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM #..... 12016 | SURFACE WATER..... 0

HYDROLOGIC REGION..... NORTH COAST | SYSTEM SERVES: | WELLS AND SPRINGS.. 100

PLANNING SUBAREA #.....COASTAL

DAU # ..... 30 | ENTIRE CITY.....

ENTIRE CITY PLUS OUTSIDE..... | SOURCE OF WATER (in percent):

ESTIMATED POPULATION | PORTION OF THE CITY.....

1980..... 5,743 | OTHER..... X | PURCHASED..... 100

1990..... 9,184 | SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	3,085	Metered.....	130	Metered.....	NA	Metered.....	18
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,051	2,051	17.8	22.1	23.1	29.0	30.9	37.9	45.5	40.2	35.3	31.0	18.8	23.7	355.3
1981	2,142	2,142	24.8	21.4	23.4	27.2	38.0	43.3	46.8	46.1	36.7	24.3	22.1	23.5	377.6
1982	2,232	2,232	24.0	21.9	22.2	25.4	43.7	40.5	36.7	40.7	34.0	25.7	22.6	23.6	361.0
1983	2,323	2,323	24.3	21.5	23.4	24.9	31.8	39.4	42.4	44.4	31.1	28.4	29.0	39.4	380.0
1984	2,359	2,359	30.2	21.8	23.7	23.0	26.6	31.1	42.2	40.8	37.2	25.5	13.4	25.1	340.6
1985	2,440	2,440	24.9	21.8	24.3	25.6	35.9	34.1	42.0	42.3	25.3	27.3	24.2	24.8	352.5
1986	2,652	2,652	24.1	21.4	25.1	27.1	30.5	47.7	45.6	42.1	33.3	26.9	24.5	25.4	373.7
1987	2,726	2,726	26.1	24.3	23.9	25.0	36.1	41.7	48.8	50.2	41.9	38.4	27.1	27.6	411.1
1988	2,900	2,900	29.1	28.7	29.6	31.6	33.8	33.7	51.3	48.3	44.5	33.1	28.0	28.5	420.2
1989	2,957	2,957	29.9	27.1	26.3	34.6	38.1	49.2	53.8	56.8	44.1	33.4	27.9	30.8	452.0
1990	3,280	3,280	28.3	25.5	29.8	31.4	39.6	40.3	51.1	46.8	40.3	37.0	28.8	34.4	433.3

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.80	5,743	100	133	130	168	174	220	256	226	205	174	109	133	169	0.190
1981	2.80	5,998	133	127	126	151	204	241	252	248	204	131	123	126	172	0.193
1982	2.80	6,250	124	125	115	135	226	216	189	210	181	133	121	122	158	0.177
1983	2.80	6,505	121	118	116	128	158	202	210	220	159	141	149	195	160	0.179
1984	2.80	6,605	147	114	116	116	130	157	206	199	188	125	68	123	141	0.158
1985	2.80	6,832	118	114	115	125	170	166	198	200	123	129	118	117	141	0.158
1986	2.80	7,426	105	103	109	122	132	214	198	183	149	117	110	110	138	0.154
1987	2.80	7,633	110	114	101	109	153	182	206	212	183	162	118	117	148	0.165
1988	2.80	8,120	116	122	118	130	134	138	204	192	183	131	115	113	142	0.159
1989	2.80	8,280	116	117	102	139	148	198	210	221	178	130	112	120	150	0.168
1990	2.80	9,184	99	99	105	114	139	146	179	164	146	130	105	121	129	0.145
AVERAGE			117	117	114	131	161	189	210	207	173	137	113	127	150	0.168

1/ Number of services

2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.

3/ gpcd - gallons per capita daily

4/ afpca - acre-feet per capita annually

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C-059133

COUNTY..HUMBOLDT
CITY....TRINIDAD
SYSTEM #..... 12018
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....COASTAL
DAU # 30

CITY CENSUS POPULATION
1980..... 379
1990..... 362

WATER AGENCY.....TRINIDAD, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	245	Metered.....	28	Metered.....	NA	Metered.....	2
Flat Rate.....	3	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	256	182	/5	-	-	-	-	-	2.8	2.6	2.1	1.8	1.8	1.9	-
1981	258	186	1.8	1.7	1.8	1.9	2.1	2.3	2.8	2.1	2.1	2.7	1.7	1.7	24.7
1982	259	187	1.8	1.5	1.8	1.8	2.5	2.3	2.6	2.8	2.6	2.3	1.7	1.8	25.5
1983	263		1.8	1.7	1.9	1.9	3.0	3.0	3.1	3.3	3.0	2.4	1.8	1.6	28.6
1984	267		1.9	1.8	2.1	2.4	2.1	2.5	3.6	3.4	2.3	1.7	1.7	1.6	27.1
1985	269		1.8	1.9	2.0	2.0	2.2	2.3	3.0	2.7	2.0	2.2	2.6	2.2	26.9
1986	270	190	2.2	2.0	2.3	2.4	2.5	3.0	3.4	2.6	2.0	2.3	2.1	2.2	29.0
1987	271		2.0	1.9	2.1	2.1	2.7	2.9	3.0	3.0	2.7	2.5	1.9	1.8	28.5
1988	273		2.3	1.7	1.9	1.9	2.5	2.8	3.2	3.1	2.8	2.4	2.2	1.7	28.3
1989	276		1.7	1.8	2.0	2.0	2.1	2.2	2.8	2.8	2.2	2.1	2.0	2.2	26.0
1990	278	194	1.8	1.9	1.9	2.0	2.3	2.6	3.0	3.1	2.8	2.3	2.2	2.5	28.3

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.08	533	-	-	-	-	-	-	169	157	131	109	113	115	-	-
1981	2.06	532	109	114	109	119	127	144	170	127	132	164	107	103	127	0.143
1982	2.04	528	110	101	110	114	153	145	159	171	164	140	107	110	132	0.148
1983	2.02	531	109	114	116	119	182	188	190	201	187	148	113	99	148	0.165
1984	2.00	533	115	116	127	150	127	156	218	206	144	103	106	97	139	0.156
1985	1.97	531	109	128	121	126	134	144	182	164	126	134	163	134	139	0.155
1986	1.95	527	135	135	141	152	153	190	208	159	126	141	133	135	151	0.169
1987	1.93	523	124	127	130	131	165	186	184	187	172	155	119	109	149	0.167
1988	1.91	521	140	115	116	120	152	181	195	193	178	146	137	108	149	0.167
1989	1.89	521	108	124	127	127	128	138	173	172	143	132	131	136	137	0.153
1990	1.87	519	113	129	117	127	145	164	184	190	179	145	143	155	149	0.167
AVERAGE			117	120	121	128	147	164	185	175	153	138	125	118	142	0.159

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/Missing data unavailable

C—0 5 9 1 3 4

C-059134

COUNTY..HUMBOLDT
CITY.... ARCATA
SYSTEM #..... 12001
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....COASTAL
DAU # 32

CITY CENSUS POPULATION
1980..... 12,850
1990..... 15,197

WATER AGENCY.....ARCATA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4,426	Metered.....	403	Metered.....	10	Metered.....	25
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,114	3,636	55.0	51.7	53.7	55.3	59.4	67.2	76.0	66.6	63.7	66.2	59.1	55.9	729.9
1981	4,524	3,772	57.7	54.1	46.2	51.5	58.1	57.6	66.8	62.9	54.8	52.4	51.7	49.8	663.6
1982	4,458	3,836	53.5	35.4	53.5	56.5	69.0	64.2	62.9	60.5	46.1	50.1	49.0	46.0	646.5
1983	4,392	3,901	47.5	40.7	43.0	41.4	45.2	48.6	50.7	55.2	48.5	54.5	49.1	42.1	566.7
1984	4,326	3,965	44.0	42.1	42.7	37.7	44.0	44.4	56.7	56.1	50.6	53.0	46.6	44.1	562.0
1985	4,260	4,029	43.5	36.6	34.1	37.3	47.4	47.8	55.5	59.2	47.8	55.5	52.3	43.5	560.3
1986	4,705	4,459	50.0	45.1	48.9	49.9	53.5	54.6	66.2	61.2	48.9	55.9	56.9	56.8	647.7
1987	4,469	4,223	52.2	52.9	51.5	49.9	57.5	60.5	62.7	69.7	58.7	56.7	46.5	41.5	660.1
1988	4,356	4,134	45.1	50.4	42.6	63.5	65.8	63.6	85.1	80.7	76.5	72.0	63.6	62.2	771.0
1989	4,705	4,244	67.2	61.5	61.3	67.8	67.6	73.5	84.0	88.1	82.3	80.3	70.8	69.2	873.6
1990	4,900	4,450	71.7	66.3	72.9	72.3	77.4	74.6	83.0	85.4	85.0	81.7	72.3	72.2	914.7

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.53	14,539	122	123	119	127	132	154	169	148	146	147	136	124	138	0.154
1981	3.52	15,934	117	121	93	108	118	121	135	127	115	106	108	101	114	0.128
1982	3.51	15,649	110	81	110	120	142	137	130	125	98	103	104	95	113	0.127
1983	3.50	15,365	100	95	90	90	95	105	106	116	105	115	107	88	101	0.113
1984	3.49	15,083	94	96	91	83	94	98	121	120	112	113	103	94	102	0.114
1985	3.47	14,802	95	88	74	84	103	108	121	129	108	121	118	95	104	0.116
1986	3.46	16,292	99	99	97	102	106	112	131	121	100	111	116	112	109	0.122
1987	3.45	15,421	109	123	108	108	120	131	131	146	127	119	100	87	117	0.131
1988	3.44	14,980	97	116	92	141	142	141	183	174	170	155	141	134	141	0.158
1989	3.43	16,124	134	136	123	140	135	152	168	176	170	161	146	138	148	0.166
1990	3.42	16,734	138	141	140	144	149	149	160	165	169	158	144	139	150	0.168
AVERAGE			111	111	103	113	121	128	141	141	129	128	120	110	122	0.136

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059135

COUNTY..HUMBOLDT
CITY.... EUREKA
SYSTEM #..... 12004
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....COASTAL
DAU # 32

CITY CENSUS POPULATION
1980..... 24,153
1990..... 27,025

WATER AGENCY.....EUREKA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	8,050	Metered.....	1,143	Metered.....	N/A	Metered.....	N/A
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	8,835	8,777	109.1	95.9	103.9	102.3	116.6	131.4	167.4	157.0	150.1	129.1	110.2	114.3	1487.3
1981	8,948	8,896	111.1	100.9	111.6	110.7	122.9	142.0	167.9	156.9	139.1	124.9	106.6	108.1	1502.7
1982	9,061	9,014	104.2	91.9	106.2	104.7	140.7	142.1	151.9	157.1	123.2	111.7	99.1	100.6	1433.4
1983	9,175	9,133	103.3	94.1	105.8	106.4	117.0	147.0	150.3	149.4	115.7	116.8	98.3	97.5	1401.6
1984	9,288	9,251	103.0	87.5	95.1	92.2	107.5	122.6	152.7	143.8	120.9	100.6	90.9	91.2	1308.0
1985	9,401	9,370	94.7	87.6	96.4	94.7	122.2	123.9	151.3	136.7	106.3	108.6	100.3	103.7	1326.4
1986	9,464	9,431	99.6	89.8	101.7	103.4	126.2	139.3	162.5	147.6	117.7	98.5	96.6	98.3	1381.2
1987	9,288	9,250	95.3	88.2	99.3	108.4	127.5	146.3	156.4	150.7	126.5	118.4	97.8	94.1	1408.9
1988	9,174	9,141	95.7	89.5	97.2	101.9	116.3	118.0	153.1	149.5	126.3	109.3	95.5	101.6	1353.9
1989	9,277	9,244	100.3	90.4	96.9	101.3	108.1	128.8	155.4	151.6	125.0	121.4	109.3	108.6	1397.1
1990	9,193	9,160	106.6	95.8	108.8	109.0	112.8	124.5	159.8	147.1	128.6	113.7	101.9	112.8	1421.4

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.75	24,313	145	136	138	140	155	180	222	208	206	171	151	152	168	0.188
1981	2.77	24,801	145	145	145	149	160	191	218	204	187	162	143	141	166	0.186
1982	2.79	25,294	133	130	135	138	179	187	194	200	162	142	131	128	155	0.174
1983	2.81	25,795	129	130	132	137	146	190	188	187	150	146	127	122	149	0.167
1984	2.83	26,297	126	115	117	117	132	155	187	176	153	123	115	112	136	0.153
1985	2.85	26,803	114	117	116	118	147	154	182	165	132	131	125	125	136	0.152
1986	2.87	27,171	118	118	121	127	150	171	193	175	144	117	119	117	139	0.156
1987	2.89	26,850	114	117	119	135	153	182	188	181	157	142	121	113	144	0.161
1988	2.91	26,702	116	116	117	127	140	147	185	181	158	132	119	123	139	0.156
1989	2.93	27,186	119	119	115	124	128	158	184	180	153	144	134	129	141	0.158
1990	2.95	27,122	127	126	129	134	134	153	190	175	158	135	125	134	144	0.161
AVERAGE			126	124	126	131	148	170	194	185	160	141	128	127	147	0.165

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059136

COUNTY..HUMBOLDT
CITY.... CUTTEN
SYSTEM #..... 12009
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....COASTAL
DAU # 32

ESTIMATED POPULATION
1980..... 12,390
1990..... 16,106

WATER AGENCY.....HUMBOLDT COMMUNITY SERVICES DIST.
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5,584	Metered.....	216	Metered.....	5	Metered.....	1
Flat Rate.....	1	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,997	3,997	42.0	39.6	43.0	44.2	44.3	49.0	58.7	55.2	52.2	45.2	40.4	40.8	554.6
1981	4,055	4,055	/5	-	-	-	-	-	-	-	-	-	-	-	-
1982	4,926	4,926	43.3	45.6	50.1	50.1	62.1	69.8	69.2	72.6	63.9	53.8	50.4	49.8	680.7
1983	4,990	4,990	53.3	47.7	48.8	53.3	60.8	69.1	65.1	78.9	62.6	60.7	58.6	61.4	720.3
1984	5,093	5,093	65.6	54.4	78.3	57.1	61.7	64.3	86.7	80.7	71.0	59.6	56.3	60.1	795.8
1985	5,191	5,191	59.2	52.8	58.6	55.4	70.2	72.9	82.1	73.2	61.8	59.1	60.6	54.3	760.2
1986	5,302	5,302	60.1	52.1	59.7	57.8	63.6	80.2	90.3	91.8	65.4	62.9	63.4	61.1	808.4
1987	5,414	5,414	63.2	63.9	61.2	67.1	80.3	83.8	89.5	89.6	78.1	73.4	69.8	68.7	888.6
1988	5,545	5,545	72.7	59.6	70.4	63.5	75.0	70.5	97.5	88.4	80.4	71.3	64.9	69.8	884.0
1989	5,680	5,680	76.7	69.4	74.0	77.0	70.6	75.9	88.1	97.9	82.6	81.5	75.6	72.1	941.4
1990	5,777	5,777	81.3	68.6	73.9	78.6	85.6	83.4	107.2	98.9	91.9	79.4	73.4	76.1	998.3

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.10	12,390	109	110	112	119	115	132	153	144	140	118	109	106	123	0.137
1981	3.07	12,443	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3.04	14,962	93	109	108	112	134	156	149	157	142	116	112	107	125	0.140
1983	3.01	15,001	115	114	105	118	131	154	140	170	139	131	130	132	132	0.147
1984	2.98	15,152	140	124	167	126	131	141	185	172	156	127	124	128	144	0.161
1985	2.94	15,282	125	123	124	121	148	159	173	155	135	125	132	115	136	0.153
1986	2.91	15,443	126	120	125	125	133	173	189	192	141	131	137	128	143	0.161
1987	2.88	15,601	131	146	127	143	166	179	185	185	167	152	149	142	156	0.175
1988	2.85	15,805	148	130	144	134	153	149	199	180	170	146	137	142	153	0.172
1989	2.82	16,013	155	155	149	160	142	158	177	197	172	164	157	145	161	0.180
1990	2.79	16,106	163	152	148	163	171	173	215	198	190	159	152	152	170	0.190
AVERAGE			130	128	131	132	143	157	176	175	155	137	134	130	144	0.162

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

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C-059137

COUNTY..MENDOCINO
CITY.... UKIAH
SYSTEM #..... 23003
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....RUSSIAN RIVER
DAU # 33C

WATER AGENCY.....UKIAH, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 38
WELLS AND SPRINGS.. 62

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 12,035
1990..... 14,599

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4,133	Metered.....	282	Metered.....	100	Metered.....	NA
Flat Rate.....	1,710	Flat Rate...	0	Flat Rate...	0	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,423	5,317	49.0	49.0	55.0	67.0	107.0	127.0	160.0	169.0	89.0	81.0	60.0	55.0	1068.0
1981	5,484	5,378	54.0	45.0	51.0	78.0	105.0	150.0	166.0	157.0	113.0	64.0	54.0	55.0	1092.0
1982	5,491	5,473	55.0	45.0	52.0	53.0	136.0	127.0	150.0	149.0	101.0	74.0	52.0	54.0	1048.0
1983	5,462	5,443	52.0	47.0	55.0	54.0	91.0	141.0	150.0	144.0	111.0	83.0	51.0	52.0	1031.0
1984	5,518	5,495	54.0	48.0	57.0	66.0	118.0	143.0	183.0	158.0	136.0	109.0	46.0	57.0	1175.0
1985	5,642	5,620	55.0	50.0	57.0	94.0	116.0	142.0	157.0	152.0	87.0	79.0	46.0	52.0	1087.0
1986	5,753	5,732	48.0	42.0	49.0	69.0	98.0	138.0	160.0	151.0	91.0	78.0	65.0	61.0	1050.0
1987	5,813	5,792	59.0	64.0	61.0	94.0	125.0	144.0	148.0	147.0	122.0	93.0	55.0	54.0	1166.0
1988	5,873	5,852	53.0	53.0	78.0	76.0	107.0	123.0	155.0	144.0	124.0	93.0	58.0	55.0	1119.0
1989	5,966	5,945	56.0	46.0	50.0	62.0	104.0	137.0	160.0	163.0	115.0	82.0	60.0	61.0	1096.0
1990	6,078	6,057	58.0	53.0	64.0	95.0	112.0	131.0	166.0	160.0	123.0	99.0	70.0	67.0	1198.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.26	12,275	129	138	145	182	281	345	420	444	242	213	163	145	238	0.267
1981	2.28	12,493	139	129	132	208	271	400	429	405	301	165	144	142	239	0.268
1982	2.29	12,590	141	128	133	140	348	336	384	382	267	190	138	138	228	0.255
1983	2.31	12,604	133	133	141	143	233	373	384	369	294	212	135	133	224	0.251
1984	2.32	12,814	136	129	143	172	297	372	461	398	354	274	120	143	251	0.281
1985	2.34	13,185	135	135	139	238	284	359	384	372	220	193	116	127	226	0.253
1986	2.35	13,529	114	111	117	170	234	340	382	360	224	186	160	145	213	0.238
1987	2.37	13,755	138	166	143	228	293	349	347	345	296	218	133	127	232	0.260
1988	2.38	13,983	122	131	180	181	247	293	358	332	296	215	138	127	219	0.246
1989	2.40	14,292	126	115	113	145	235	320	361	368	268	185	140	138	210	0.235
1990	2.41	14,650	128	129	141	216	247	298	366	352	280	218	159	148	224	0.251
AVERAGE			131	131	139	184	270	344	389	375	276	206	141	138	228	0.255

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059138

COUNTY.. SONOMA
CITY....HEALDSBURG
SYSTEM #..... 49005
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....RUSSIAN RIVER
DAU # 35

CITY CENSUS POPULATION
1980..... 7,217
1990..... 9,469

WATER AGENCY.....HEALDSBURG, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,996	Metered.....	448	Metered.....	NA	Metered.....	220
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
			TOTAL WATER INTO SYSTEM (MILLION GALLONS)												
1980	3,000	3,000	37.0	32.0	38.0	57.0	80.0	53.0	76.0	84.0	72.0	64.0	51.0	36.0	680.0
1981	3,050	3,050	45.0	39.0	34.0	53.0	63.0	99.0	84.0	86.0	59.0	45.0	40.0	41.0	688.0
1982	3,100	3,100	34.0	35.0	35.0	40.0	81.0	79.0	84.0	87.0	62.0	56.0	34.0	31.0	658.0
1983	3,250	3,250	41.0	32.0	38.0	44.0	54.0	76.0	97.0	76.0	62.0	62.0	45.0	33.0	660.0
1984	3,395	3,395	43.0	40.0	43.0	53.0	76.0	91.0	93.0	86.0	68.0	58.0	40.0	37.0	728.0
1985	3,450	3,450	46.0	40.0	41.0	51.0	89.0	78.0	89.0	82.0	65.0	62.0	37.0	24.0	704.0
1986	3,500	3,500	31.0	36.0	43.0	48.0	70.0	82.0	93.0	83.0	68.0	57.0	44.0	55.0	710.0
1987	3,700	3,700	44.0	38.0	43.0	61.0	79.0	94.0	97.0	93.0	81.0	65.0	44.0	42.0	781.0
1988	3,850	3,850	41.0	49.0	59.0	64.0	69.0	80.0	89.0	93.0	82.0	60.0	40.0	42.0	768.0
1989	3,950	3,950	43.0	42.0	44.0	53.0	81.0	88.0	101.0	90.0	73.0	56.0	45.0	38.0	754.0
1990	4,025	3,951	50.0	48.0	52.0	91.0	86.0	97.0	103.0	88.0	88.0	74.0	57.0	49.0	883.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	ANNUALLY afpca /4
			PER CAPITA WATER USE (gpcd)/3													
1980	2.41	7,217	165	153	170	263	358	245	340	375	333	286	236	161	258	0.289
1981	2.40	7,335	198	190	150	241	277	450	369	378	268	198	182	180	257	0.288
1982	2.40	7,452	147	168	152	179	351	353	364	377	277	242	152	134	242	0.271
1983	2.40	7,810	169	146	157	188	223	324	401	314	265	256	192	136	232	0.259
1984	2.40	8,155	170	169	170	217	301	372	368	340	278	229	164	146	245	0.274
1985	2.40	8,284	179	172	160	205	347	314	347	319	262	241	149	93	233	0.261
1986	2.40	8,401	119	153	165	190	269	325	357	319	270	219	175	211	232	0.259
1987	2.40	8,878	160	153	156	229	287	353	352	338	304	236	165	153	241	0.270
1988	2.40	9,234	143	183	206	231	241	289	311	325	296	210	144	147	228	0.255
1989	2.40	9,470	146	158	150	187	276	310	344	307	257	191	158	129	218	0.244
1990	2.40	9,646	167	178	174	314	288	335	344	294	304	247	197	164	251	0.281
AVERAGE			160	166	164	222	292	334	354	335	283	232	174	150	240	0.268

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—059139

C-059139

COUNTY.. SONOMA
CITY....ROHNERT PARK
SYSTEM #..... 49014
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....RUSSIAN RIVER
DAU # 36

WATER AGENCY.....ROHNERT PARK, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 60
WELLS AND SPRINGS.. 40

SOURCE OF WATER (in percent):
PURCHASED..... 60
SELF SUPPLIED..... 40

CITY CENSUS POPULATION
1980..... 22,965
1990..... 36,326

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	348	Metered.....	407	Metered.....	4	Metered.....	3
Flat Rate.....	7,215	Flat Rate...	29	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,011	5,011	64.0	61.0	74.0	94.0	129.0	161.0	183.0	160.0	136.0	108.0	95.0	72.0	1337.0
1981	5,230	5,230	70.0	67.0	69.0	107.0	159.0	201.0	191.0	170.0	145.0	104.0	69.0	71.0	1423.0
1982	5,511	5,511	73.0	70.0	75.0	89.0	156.0	160.0	176.0	178.0	141.0	118.0	78.0	75.0	1389.0
1983	5,860	5,860	80.0	70.0	76.0	86.0	122.0	178.0	185.0	192.0	156.0	128.0	71.0	89.0	1433.0
1984	6,203	6,203	85.0	77.0	96.0	164.0	180.0	207.0	207.0	196.0	181.0	119.0	93.0	93.0	1698.0
1985	6,257	6,257	95.0	85.0	142.0	144.0	183.0	205.0	211.0	190.0	156.0	131.0	84.0	90.0	1716.0
1986	6,882	6,882	99.0	87.0	99.0	151.0	186.0	203.0	202.0	154.0	103.0	85.0	73.0	96.0	1538.0
1987	6,896	6,896	112.0	94.0	131.0	170.0	214.0	235.0	256.0	245.0	205.0	173.0	107.0	103.0	2045.0
1988	6,909	6,909	105.0	113.0	151.0	162.0	182.0	212.0	270.0	235.0	193.0	159.0	116.0	114.0	2012.0
1989	7,375	7,375	112.0	98.0	115.0	146.0	208.0	232.0	271.0	253.0	190.0	151.0	126.0	117.0	2019.0
1990	7,452	7,452	120.0	108.0	128.0	163.0	181.0	196.0	265.0	248.0	245.0	208.0	150.0	132.0	2144.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.58	22,965	90	92	104	136	181	234	257	225	197	152	138	101	160	0.179
1981	4.61	24,121	94	99	92	148	213	278	255	227	200	139	95	95	162	0.181
1982	4.64	25,578	92	98	95	116	197	209	222	224	184	149	102	95	149	0.167
1983	4.67	27,369	94	91	90	105	144	217	218	226	190	151	86	105	143	0.161
1984	4.70	29,152	94	91	106	188	199	237	229	217	207	132	106	103	160	0.179
1985	4.73	29,588	104	103	155	162	200	231	230	207	176	143	95	98	159	0.178
1986	4.76	32,744	98	95	98	154	183	207	199	152	105	84	74	95	129	0.144
1987	4.79	33,012	109	102	128	172	209	237	250	239	207	169	108	101	170	0.190
1988	4.82	33,276	102	117	146	162	176	212	262	228	193	154	116	111	166	0.186
1989	4.85	35,735	101	98	104	136	188	216	245	228	177	136	118	106	155	0.173
1990	4.87	36,326	107	106	114	150	161	180	235	220	225	185	138	117	162	0.181
AVERAGE			99	99	112	148	186	223	237	218	187	145	107	102	156	0.174

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059140

COUNTY.. SONOMA
CITY....SANTA ROSA
SYSTEM #..... 49009
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....RUSSIAN RIVER
DAU # 36

CITY CENSUS POPULATION
1980..... 83,320
1990..... 113,313

WATER AGENCY.....SANTA ROSA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	35,370	Metered.....	3,000	Metered.....	20	Metered.....	180
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	28,998	26,501	278.0	260.0	296.0	334.0	454.0	563.0	616.0	572.0	493.0	427.0	293.0	334.0	4920.0
1981	29,102	26,566	279.0	261.0	287.0	421.0	510.0	741.0	686.0	650.0	536.0	416.0	316.0	282.0	5385.0
1982	30,727	28,226	277.0	265.0	318.0	327.0	505.0	619.0	617.0	696.0	503.0	401.0	330.0	292.0	5150.0
1983	31,135	28,617	309.0	281.0	301.0	299.0	462.0	644.0	658.0	736.0	570.0	458.0	324.0	287.0	5329.0
1984	32,524	29,986	367.0	309.0	355.0	430.0	630.0	686.0	782.0	726.0	636.0	498.0	360.0	354.0	6133.0
1985	33,816	31,132	354.0	342.0	349.0	495.0	638.0	776.0	808.0	687.0	609.0	530.0	365.0	404.0	6357.0
1986	34,417	31,723	365.0	322.0	362.0	473.0	579.0	788.0	814.0	708.0	555.0	521.0	413.0	437.0	6337.0
1987	36,290	33,288	377.0	349.0	411.0	594.0	716.0	844.0	836.0	807.0	721.0	605.0	430.0	343.0	7033.0
1988	36,794	33,483	312.0	468.0	581.0	530.0	623.0	678.0	802.0	821.0	676.0	571.0	395.0	395.0	6852.0
1989	36,911	34,542	436.0	352.0	380.0	461.0	761.0	638.0	899.0	834.0	592.0	561.0	456.0	399.0	6769.0
1990	37,445	34,817	419.0	356.0	380.0	610.0	671.0	671.0	810.0	823.0	723.0	657.0	509.0	490.0	7119.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.14	91,171	98	98	105	122	161	206	218	202	180	151	107	118	148	0.166
1981	3.16	91,819	98	102	101	153	179	269	241	228	195	146	115	99	161	0.180
1982	3.17	97,286	92	97	105	112	167	212	205	231	172	133	113	97	145	0.162
1983	3.18	98,922	101	101	98	101	151	217	215	240	192	149	109	94	148	0.165
1984	3.19	103,694	114	103	110	138	196	221	243	226	204	155	116	110	162	0.181
1985	3.20	108,187	106	113	104	153	190	239	241	205	188	158	112	120	161	0.180
1986	3.21	110,490	107	104	106	143	169	238	238	207	167	152	125	128	157	0.176
1987	3.22	116,904	104	107	113	169	198	241	231	223	206	167	123	95	165	0.185
1988	3.23	118,934	85	136	158	149	169	190	218	223	189	155	111	107	158	0.177
1989	3.24	119,720	117	105	102	128	205	178	242	225	165	151	127	108	155	0.173
1990	3.25	121,866	111	104	101	167	178	184	214	218	198	174	139	130	160	0.179
AVERAGE			103	106	109	139	178	218	228	221	187	154	118	110	156	0.175

1/ Number of services Estimated
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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COUNTY.. SONOMA
CITY....SEBASTOPOL
SYSTEM #..... 49011
HYDROLOGIC REGION..... NORTH COAST
PLANNING SUBAREA #.....RUSSIAN RIVER
DAU # 36

WATER AGENCY.....SEBASTOPOL, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 5,595
1990..... 7,004

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,993	Metered.....	390	Metered.....	NA	Metered.....	47
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,024	1,989	15.0	16.0	20.0	20.0	27.0	38.0	31.0	30.0	34.0	24.0	22.0	23.0	300.0
1981	2,044	1,998	21.0	18.0	18.0	27.0	43.0	41.0	32.0	34.0	32.0	27.0	26.0	18.0	337.0
1982	2,054	2,018	18.0	17.0	23.0	18.0	36.0	31.0	44.0	45.0	32.0	28.0	24.0	17.0	333.0
1983	2,066	2,020	22.0	17.0	17.0	24.0	24.0	35.0	34.0	41.0	26.0	29.0	16.0	15.0	300.0
1984	2,081	2,037	18.0	16.0	17.0	24.0	30.0	31.0	50.0	41.0	34.0	30.0	22.0	23.0	336.0
1985	2,117	2,073	17.0	21.0	19.0	27.0	28.0	35.0	47.0	38.0	35.0	29.0	22.0	24.0	342.0
1986	2,123	2,077	18.0	19.0	25.0	25.0	32.0	51.0	40.0	48.0	31.0	28.0	24.0	27.0	368.0
1987	2,289	2,242	21.0	23.0	22.0	29.0	39.0	49.0	42.0	52.0	40.0	34.0	28.0	20.0	399.0
1988	2,323	2,278	24.0	22.0	26.0	31.0	37.0	37.0	43.0	49.0	37.0	39.0	22.0	24.0	391.0
1989	2,358	2,314	20.0	20.0	20.0	28.0	34.0	41.0	53.0	45.0	35.0	35.0	23.0	24.0	378.0
1990	2,392	2,350	26.0	22.0	21.0	36.0	37.0	34.0	53.0	40.0	39.0	43.0	28.0	30.0	409.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.81	5,693	85	97	113	117	153	222	176	170	199	136	129	130	144	0.162
1981	2.83	5,784	117	111	100	156	240	236	178	190	184	151	150	100	160	0.179
1982	2.85	5,847	99	104	127	103	199	177	243	248	182	154	137	94	156	0.175
1983	2.86	5,915	120	103	93	135	131	197	185	224	147	158	90	82	139	0.156
1984	2.88	5,993	97	92	92	133	161	172	269	221	189	161	122	124	154	0.172
1985	2.90	6,132	89	122	100	147	147	190	247	200	190	153	120	126	153	0.171
1986	2.91	6,185	94	110	130	135	167	275	209	250	167	146	129	141	163	0.183
1987	2.93	6,707	101	122	106	144	188	244	202	250	199	164	139	96	163	0.183
1988	2.95	6,846	113	111	123	151	174	180	203	231	180	184	107	113	156	0.175
1989	2.96	6,988	92	102	92	134	157	196	245	208	167	162	110	111	148	0.166
1990	2.98	7,129	118	110	95	168	167	159	240	181	182	195	131	136	157	0.176
AVERAGE			102	108	106	138	171	204	218	216	181	160	124	114	154	0.172

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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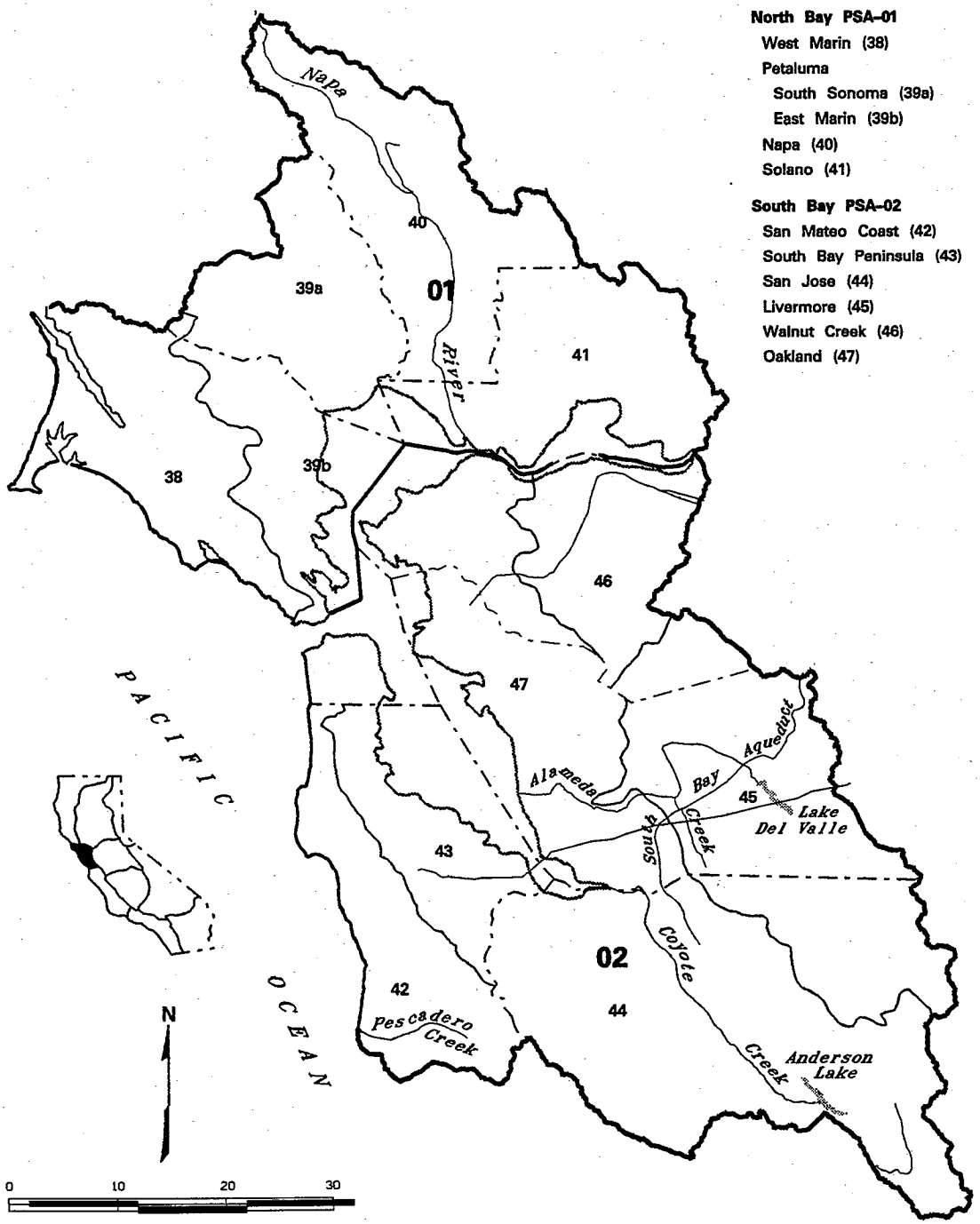
C-059142

Figure A-4: San Francisco Bay Region



PLANNING SUBAREAS
AND DETAILED ANALYSIS UNITS

C-059143

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Table A-4. San Francisco Region Water Production and Per Capita Water Use

COUNTY.. SONOMA
CITY....PETALUMA
SYSTEM #..... 49006
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....NORTH BAY
DAU # 39A

WATER AGENCY.....PETALUMA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 97
WELLS AND SPRINGS.. 3

SOURCE OF WATER (in percent):
PURCHASED..... 97
SELF SUPPLIED..... 3

CITY CENSUS POPULATION
1980..... 33,834
1990..... 43,184

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	12,950	Metered.....	1,149	Metered.....	36	Metered.....	127
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	11,168	10,636	112.0	103.0	121.0	141.0	186.0	217.0	234.0	227.0	195.0	164.0	138.0	120.0	1958.0
1981	11,405	10,831	113.0	102.0	115.0	158.0	212.0	272.0	261.0	246.0	202.0	148.0	115.0	116.0	2060.0
1982	11,542	11,004	121.0	106.0	116.0	125.0	211.0	217.0	247.0	243.0	200.0	166.0	117.0	116.0	1985.0
1983	11,663	11,133	114.0	104.0	116.0	123.0	171.0	234.0	270.0	248.0	213.0	175.0	120.0	123.0	2011.0
1984	12,034	11,504	126.0	117.0	140.0	160.0	239.0	262.0	292.0	269.0	244.0	166.0	127.0	128.0	2270.0
1985	12,339	11,803	130.0	124.0	139.0	175.0	239.0	281.0	290.0	272.0	208.0	197.0	145.0	134.0	2334.0
1986	12,692	12,151	131.0	122.0	142.0	179.0	242.0	278.0	306.0	287.0	203.0	189.0	176.0	146.0	2401.0
1987	13,210	12,665	142.0	128.0	147.0	215.0	277.0	289.0	309.0	301.0	267.0	220.0	145.0	145.0	2585.0
1988	13,704	13,154	146.0	150.0	204.0	207.0	240.0	266.0	319.0	293.0	267.0	221.0	152.0	151.0	2616.0
1989	14,307	13,751	148.0	137.0	146.0	183.0	255.0	300.0	338.0	317.0	236.0	195.0	170.0	161.0	2586.0
1990	14,572	14,013	157.0	136.0	166.0	219.0	256.0	287.0	332.0	322.0	293.0	260.0	195.0	177.0	2800.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.18	35,526	102	100	110	132	169	204	212	206	183	149	129	109	151	0.169
1981	3.17	36,167	101	101	103	146	189	251	233	219	186	132	106	103	156	0.175
1982	3.16	36,487	107	104	103	114	187	198	218	215	183	147	107	103	149	0.167
1983	3.15	36,753	100	101	102	112	150	212	237	218	193	154	109	108	150	0.168
1984	3.14	37,803	108	107	119	141	204	231	249	230	215	142	112	109	165	0.184
1985	3.13	38,638	109	115	116	151	200	242	242	227	179	164	125	112	165	0.185
1986	3.12	39,618	107	110	116	151	197	234	249	234	171	154	148	119	166	0.186
1987	3.11	41,103	111	111	115	174	217	234	243	236	217	173	118	114	172	0.193
1988	3.10	42,504	111	122	155	162	182	209	242	222	209	168	119	115	169	0.189
1989	3.09	44,232	108	111	106	138	186	226	246	231	178	142	128	117	160	0.179
1990	3.08	44,907	113	108	119	163	184	213	238	231	217	187	145	127	171	0.191
AVERAGE			107	108	115	144	188	223	237	224	194	156	122	112	161	0.181

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—059144

C-059144

COUNTY.. SONOMA
CITY.... SONOMA
SYSTEM #..... 49012
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....NORTH BAY
DAU # 39A

WATER AGENCY.....SONOMA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 6,054
1990..... 8,121

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,790	Metered.....	315	Metered.....	NA	Metered.....	55
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,454	2,165	21.0	20.0	26.0	31.0	45.0	55.0	57.0	54.0	50.0	40.0	26.0	27.0	452.0
1981	2,499	2,208	22.0	22.0	23.0	37.0	48.0	69.0	63.0	60.0	50.0	34.0	27.0	25.0	480.0
1982	2,508	2,217	24.0	24.0	25.0	32.0	45.0	59.0	65.0	63.0	46.0	37.0	27.0	26.0	473.0
1983	2,590	2,298	27.0	24.0	26.0	29.0	44.0	59.0	57.0	66.0	52.0	37.0	28.0	26.0	475.0
1984	2,713	2,419	29.0	27.0	31.0	39.0	57.0	64.0	75.0	68.0	57.0	47.0	30.0	32.0	556.0
1985	2,760	2,465	28.0	28.0	30.0	46.0	56.0	70.0	74.0	65.0	57.0	48.0	32.0	34.0	568.0
1986	2,810	2,513	31.0	28.0	33.0	43.0	55.0	73.0	76.0	81.0	42.0	48.0	40.0	43.0	593.0
1987	2,852	2,554	33.0	29.0	35.0	53.0	62.0	75.0	76.0	74.0	64.0	53.0	36.0	33.0	623.0
1988	2,949	2,648	31.0	37.0	49.0	49.0	56.0	64.0	74.0	78.0	66.0	55.0	39.0	39.0	637.0
1989	3,067	2,764	39.0	34.0	33.0	43.0	69.0	72.0	86.0	80.0	60.0	60.0	48.0	40.0	664.0
1990	3,125	2,820	40.0	33.0	37.0	56.0	63.0	61.0	84.0	71.0	65.0	73.0	48.0	42.0	673.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.80	6,862	99	101	122	151	212	267	268	254	243	188	126	127	180	0.202
1981	2.80	7,009	101	112	106	176	221	328	290	276	238	156	128	115	188	0.210
1982	2.81	7,055	110	121	114	151	206	279	297	288	217	169	128	119	184	0.206
1983	2.82	7,307	119	117	115	132	194	269	252	291	237	163	128	115	178	0.199
1984	2.83	7,677	122	121	130	169	240	278	315	286	247	197	130	134	198	0.222
1985	2.84	7,833	115	128	124	196	231	298	305	268	243	198	136	140	199	0.223
1986	2.85	7,998	125	125	133	179	222	304	307	327	175	194	167	173	203	0.227
1987	2.85	8,142	131	127	139	217	246	307	301	293	262	210	147	131	210	0.235
1988	2.86	8,443	118	151	187	193	214	253	283	298	261	210	154	149	207	0.232
1989	2.87	8,807	143	138	121	163	253	273	315	293	227	220	182	147	207	0.231
1990	2.88	8,999	143	131	133	207	226	226	301	254	241	262	178	151	205	0.229
AVERAGE			121	125	129	176	224	280	294	284	236	197	146	136	196	0.220

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059145

COUNTY.. SONOMA
CITY....BOYES SPRINGS
SYSTEM #..... 49013
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....NORTH BAY
DAU # 39A

WATER AGENCY.....VALLEY OF THE MOON WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 14,000
1990..... 15,300

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	6,402	Metered.....	194	Metered.....	NA	Metered.....	NA
Flat Rate.....	1	Flat Rate...	5	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,008	5,008	35.0	33.0	37.0	55.0	69.0	99.0	81.0	73.0	70.0	57.0	39.0	43.0	691.0
1981	5,008	5,008	34.0	30.0	31.0	39.0	59.0	80.0	94.0	81.0	71.0	51.0	33.0	34.0	637.0
1982	5,089	5,089	33.0	29.0	20.0	26.0	44.0	61.0	95.0	90.0	75.0	60.0	40.0	40.0	613.0
1983	5,200	5,200	40.0	35.0	25.0	30.0	50.0	65.0	95.0	90.0	75.0	60.0	40.0	40.0	645.0
1984	5,231	5,231	45.8	40.2	46.1	54.4	78.0	85.7	101.1	93.5	77.9	64.0	47.3	47.4	781.2
1985	5,419	5,419	46.0	44.0	44.0	53.0	77.0	97.0	100.0	89.0	80.0	71.0	46.0	52.0	799.0
1986	5,244	5,244	47.3	43.6	46.2	60.4	76.3	102.3	106.0	95.7	84.6	70.8	57.8	62.0	853.2
1987	5,580	5,580	49.0	45.0	54.0	76.0	88.0	104.0	103.0	100.0	95.0	80.0	51.0	51.0	896.0
1988 /5			-	-	-	-	-	-	-	-	-	-	-	-	-
1989	6,254	6,254	58.6	51.2	52.9	61.7	53.8	96.7	121.9	116.3	87.8	82.4	67.2	55.1	905.7
1990	6,464	6,464	63.0	53.0	59.0	86.0	93.0	90.0	115.0	116.0	87.0	82.0	67.0	59.0	970.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.80	14,000	81	81	85	131	159	236	187	168	167	131	93	99	135	0.151
1981	2.75	13,785	80	78	73	94	138	193	220	190	172	119	80	80	127	0.142
1982	2.71	13,790	77	75	47	63	103	147	222	211	181	140	97	94	122	0.136
1983	2.67	13,868	93	90	58	72	116	156	221	209	180	140	96	93	127	0.143
1984	2.62	13,727	108	101	108	132	183	208	238	220	189	150	115	111	156	0.175
1985	2.58	13,988	106	112	101	126	178	231	231	205	191	164	110	120	156	0.175
1986	2.54	13,311	115	117	112	151	185	256	257	232	212	172	145	150	176	0.197
1987	2.50	13,925	114	115	125	182	204	249	239	232	227	185	122	118	176	0.197
1988	2.45		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	2.41	15,071	125	121	113	137	115	214	261	249	194	176	149	118	165	0.184
1990	2.37	15,300	133	124	124	187	196	196	242	245	190	173	146	124	174	0.195
AVERAGE			103	102	95	128	158	209	232	216	190	155	115	111	151	0.170

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ 1988 data not available

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C-059146

COUNTY.. MARIN
CITY....SAN RAFAEL, ET AL
SYSTEM #..... 21002
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....NORTH BAY
DAU # 39B

CITY CENSUS POPULATION
1980..... 175,000
1990..... 181,000

WATER AGENCY.....MARIN MUNICIPAL WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 73
SELF SUPPLIED..... 27

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	53,081	Metered.....	3,217	Metered.....	1,048	Metered.....	300
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	52,060	52,060	498.0	479.0	552.0	622.0	806.0	999.0	1023.0	1017.0	892.0	839.0	658.0	531.0	8916.0
1981	52,460	52,460	510.0	457.0	527.0	726.0	957.0	1153.0	1126.0	1084.0	925.0	729.0	551.0	527.0	9272.0
1982	52,470	52,470	601.0	503.0	576.0	604.0	945.0	998.0	1093.0	1102.0	915.0	812.0	581.0	576.0	9306.0
1983	52,619	52,619	582.0	504.0	678.0	660.0	832.0	1076.0	1202.0	1161.0	1025.0	838.0	730.0	598.0	9886.0
1984	52,971	52,971	586.0	544.0	666.0	769.0	1079.0	1153.0	1300.0	1217.0	1105.0	779.0	573.0	581.0	10352.0
1985	53,301	53,301	605.0	579.0	645.0	823.0	1055.0	1162.0	1261.0	1196.0	996.0	901.0	669.0	631.0	10523.0
1986	63,462	63,462	616.0	559.0	698.0	811.0	1057.0	1183.0	1270.0	1200.0	933.0	908.0	809.0	636.0	10680.0
1987	54,327	54,327	598.0	543.0	617.0	896.0	1121.0	1175.0	1241.0	1220.0	1092.0	938.0	642.0	635.0	10718.0
1988	55,327	55,327	536.0	665.0	872.0	848.0	888.0	958.0	1102.0	978.0	941.0	819.0	608.0	619.0	9834.0
1989	56,147	56,147	613.0	543.0	526.0	612.0	849.0	1016.0	1165.0	1124.0	901.0	787.0	676.0	648.0	9460.0
1990	56,765	56,765	615.0	548.0	643.0	780.0	830.0	861.0	1027.0	1010.0	982.0	872.0	677.0	645.0	9490.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.36	175,000	92	94	102	118	149	190	189	187	170	155	125	98	140	0.156
1981	3.34	175,437	94	93	97	138	176	219	207	199	176	134	105	97	145	0.162
1982	3.33	174,564	111	103	106	115	175	191	202	204	175	150	111	106	146	0.164
1983	3.31	174,149	108	103	126	126	154	206	223	215	196	155	140	111	156	0.174
1984	3.29	174,398	108	108	123	147	200	220	240	225	211	144	110	107	163	0.182
1985	3.28	174,563	112	118	119	157	195	222	233	221	190	166	128	117	165	0.185
1986	3.26	206,744	96	97	109	131	165	191	198	187	150	142	130	99	142	0.159
1987	3.24	176,045	110	110	113	170	205	222	227	224	207	172	122	116	167	0.187
1988	3.22	178,328	97	129	158	159	161	179	199	177	176	148	114	112	151	0.169
1989	3.21	180,000	110	108	94	113	152	188	209	201	167	141	125	116	144	0.161
1990	3.19	181,000	110	108	115	144	148	159	183	180	181	155	125	115	144	0.161
AVERAGE			104	106	115	138	171	199	210	202	182	151	121	109	151	0.169

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059147

COUNTY.. MARIN — WATER AGENCY.....NORTH MARIN COUNTY WATER DISTRICT — ORIGIN OF WATER (in percent):

CITY.... NOVATO — TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM #..... 21003 — SURFACE WATER..... 100

HYDROLOGIC REGION..... SAN FRANCISCO BAY — SYSTEM SERVES: — WELLS AND SPRINGS.. 0

PLANNING SUBAREA #.....NORTH BAY

DAU # .....398 — ENTIRE CITY.....

ENTIRE CITY PLUS OUTSIDE..... X — SOURCE OF WATER (in percent):

CITY CENSUS POPULATION — PORTION OF THE CITY.....

1980..... 49,941 — OTHER..... — PURCHASED..... 10

1990..... 52,307 — SELF SUPPLIED..... 90

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	14,370	Metered.....	1,860	Metered.....	NA	Metered.....	676
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	14,495	14,495	135.0	128.0	152.0	181.0	241.0	292.0	318.0	311.0	271.0	228.0	186.0	155.0	2598.0
1981	14,666	14,666	150.0	139.0	142.0	212.0	290.0	370.0	359.0	335.0	269.0	186.0	147.0	153.0	2752.0
1982	14,756	14,756	159.0	150.0	154.0	167.0	288.0	300.0	342.0	336.0	273.0	224.0	139.0	155.0	2687.0
1983	14,837	14,837	155.0	140.0	156.0	164.0	232.0	332.0	373.0	342.0	299.0	225.0	165.0	175.0	2758.0
1984	14,975	14,975	167.0	157.0	196.0	235.0	334.0	339.0	395.0	369.0	337.0	222.0	160.0	161.0	3072.0
1985	15,403	15,403	158.0	172.0	176.0	238.0	315.0	374.0	393.0	365.0	293.0	263.0	175.0	160.0	3082.0
1986	15,727	15,727	159.0	144.0	173.0	234.0	313.0	365.0	397.0	369.0	258.0	258.0	226.0	183.0	3079.0
1987	16,061	16,061	176.0	158.0	181.0	273.0	351.0	368.0	388.0	390.0	338.0	281.0	179.0	169.0	3252.0
1988	15,945	15,945	175.0	184.0	256.0	252.0	287.0	327.0	286.0	353.0	323.0	272.0	182.0	176.0	3073.0
1989	16,481	16,481	173.0	175.0	178.0	227.0	313.0	351.0	406.0	381.0	286.0	248.0	202.0	188.0	3128.0
1990	16,906	16,906	156.0	117.0	204.0	281.0	303.0	342.0	400.0	392.0	350.0	327.0	232.0	215.0	3319.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.45	49,941	87	88	98	121	156	195	205	201	181	147	124	100	143	0.160
1981	3.41	50,015	97	99	92	141	187	247	232	216	179	120	98	99	151	0.169
1982	3.38	49,803	103	108	100	112	187	201	222	218	183	145	93	100	148	0.166
1983	3.34	49,555	101	101	102	110	151	223	243	223	201	146	111	114	152	0.171
1984	3.30	49,490	109	109	128	158	218	228	257	241	227	145	108	105	170	0.190
1985	3.27	50,363	101	122	113	158	202	248	252	234	194	168	116	102	168	0.188
1986	3.23	50,870	101	101	110	153	198	239	252	234	169	164	148	116	166	0.186
1987	3.20	51,386	110	110	114	177	220	239	244	245	219	176	116	106	173	0.194
1988	3.16	50,454	112	126	164	166	183	216	183	226	213	174	120	113	167	0.187
1989	3.13	51,571	108	121	111	147	196	227	254	238	185	155	131	118	166	0.186
1990	3.09	52,307	96	80	126	179	187	218	247	242	223	202	148	133	174	0.195
AVERAGE			102	106	114	148	190	225	235	229	198	158	119	110	162	0.181

1/ Number of services

2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.

3/ gpcd - gallons per capita daily

4/ afpca - acre-feet per capita annually

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C-059148

COUNTY.. NAPA
CITY....AMERICAN CANYON
SYSTEM #..... 28005
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....NORTH BAY
DAU # 40

WATER AGENCY.....AMERICAN CANYON COUNTY WATER DIST.
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 6,000
1990..... 7,706

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,209	Metered.....	345	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,217	1,217	16.0	16.0	20.0	22.0	32.0	38.0	39.0	35.0	31.0	26.0	22.0	19.0	316.0
1981	1,222	1,222	19.0	16.0	18.0	27.0	33.0	47.0	41.0	40.0	32.0	23.0	19.0	18.0	333.0
1982	1,256	1,256	17.0	16.0	17.0	19.0	35.0	35.0	40.0	40.0	32.0	28.0	18.0	18.0	315.0
1983	1,258	1,258	17.0	15.0	17.0	18.0	28.0	41.0	43.0	39.0	36.0	26.0	18.0	19.0	317.0
1984	1,296	1,296	19.0	17.0	23.0	26.0	41.0	39.0	43.0	39.0	36.0	26.0	18.0	19.0	346.0
1985	1,305	1,305	23.0	20.0	23.0	28.0	41.0	46.0	45.0	43.0	38.0	25.0	17.0	21.0	370.0
1986	1,449	1,449	21.0	18.0	20.0	27.0	39.0	45.0	47.0	42.0	31.0	31.0	30.0	23.0	374.0
1987	1,571	1,571	24.0	20.0	24.0	40.0	57.0	57.0	58.0	62.0	55.0	44.0	22.0	23.0	486.0
1988	1,799	1,799	22.0	24.0	39.0	36.0	44.0	56.0	65.0	66.0	59.0	47.0	26.0	28.0	512.0
1989	2,063	2,063	26.0	24.0	26.0	35.0	59.0	68.0	84.0	75.0	46.0	40.0	34.0	35.0	552.0
1990	2,274	2,274	26.0	24.0	36.0	52.0	47.0	70.0	82.0	84.0	75.0	68.0	47.0	37.0	648.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.93	6,000	86	92	108	122	172	211	210	188	172	140	122	102	144	0.162
1981	4.78	5,836	105	98	99	154	182	268	227	221	183	127	109	99	156	0.175
1982	4.62	5,805	94	98	94	109	194	201	222	222	184	156	103	100	149	0.167
1983	4.47	5,620	98	95	98	107	161	243	247	224	214	149	107	109	155	0.173
1984	4.31	5,590	110	105	133	155	237	233	248	225	215	150	107	110	170	0.190
1985	4.16	5,428	137	132	137	172	244	282	267	256	233	149	104	125	187	0.209
1986	4.01	5,804	117	111	111	155	217	258	261	233	178	172	172	128	177	0.198
1987	3.85	6,050	128	118	128	220	304	314	309	331	303	235	121	123	220	0.246
1988	3.70	6,651	107	124	189	180	213	281	315	320	296	228	130	136	211	0.236
1989	3.54	7,309	115	117	115	160	260	310	371	331	210	177	155	154	207	0.232
1990	3.39	7,706	109	111	151	225	197	303	343	352	324	285	203	155	230	0.258
AVERAGE			109	109	124	160	216	264	275	264	228	179	130	122	182	0.204

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059149

COUNTY.. NAPA
CITY....CALISTOGA
SYSTEM #..... 28002
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....NORTH BAY
DAU # 40

CITY CENSUS POPULATION
1980..... 3,879
1990..... 4,468

WATER AGENCY.....CALISTOGA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 85
WELLS AND SPRINGS.. 15

SOURCE OF WATER (in percent):
PURCHASED..... 35
SELF SUPPLIED..... 65

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,134	Metered.....	164	Metered.....	7	Metered.....	20
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,152	1,082	14.0	12.0	16.0	16.0	19.0	21.0	23.0	22.0	18.0	18.0	14.0	16.0	209.0
1981	1,152	1,082	12.0	13.0	12.0	14.0	17.0	17.0	17.0	16.0	16.0	13.0	12.0	11.0	170.0
1982	1,154	1,084	12.0	11.0	12.0	12.0	17.0	19.0	20.0	19.0	17.0	14.0	12.0	12.0	177.0
1983	1,154	1,084	13.0	12.0	13.0	14.0	18.0	21.0	23.0	22.0	21.0	19.0	16.0	17.0	209.0
1984	1,156	1,086	16.0	14.0	16.0	17.0	22.0	23.0	25.0	24.0	21.0	19.0	17.0	16.0	230.0
1985	1,156	1,086	19.0	17.0	16.0	19.0	22.0	26.0	27.0	26.0	19.0	19.0	17.0	19.0	246.0
1986	1,207	1,137	18.0	16.0	17.0	18.0	23.0	28.0	30.0	28.0	22.0	19.0	18.0	16.0	253.0
1987	1,205	1,135	18.0	17.0	20.0	24.0	29.0	31.0	31.0	32.0	28.0	26.0	20.0	18.0	294.0
1988	1,251	1,181	16.0	19.0	25.0	26.0	27.0	31.0	38.0	33.0	31.0	27.0	22.0	25.0	320.0
1989	1,274	1,204	21.0	18.0	19.0	23.0	27.0	30.0	38.0	36.0	25.0	22.0	19.0	19.0	297.0
1990	1,299	1,229	18.0	16.0	21.0	24.0	24.0	29.0	34.0	35.0	30.0	28.0	21.0	22.0	302.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.59	4,130	109	100	125	129	148	169	180	172	145	141	113	125	139	0.155
1981	3.59	4,136	94	112	94	113	133	137	133	125	129	101	97	86	113	0.126
1982	3.60	4,149	93	95	93	96	132	153	156	148	137	109	96	93	117	0.131
1983	3.60	4,155	101	103	101	112	140	168	179	171	168	148	128	132	138	0.154
1984	3.61	4,168	124	116	124	136	170	184	194	186	168	147	136	124	151	0.169
1985	3.61	4,173	147	145	124	152	170	208	209	201	152	147	136	147	161	0.181
1986	3.62	4,364	133	131	126	137	170	214	222	207	168	140	137	118	159	0.178
1987	3.62	4,363	133	139	148	183	214	237	229	237	214	192	153	133	185	0.207
1988	3.63	4,535	114	144	178	191	192	228	270	235	228	192	162	178	193	0.217
1989	3.63	4,625	146	139	133	166	188	216	265	251	180	153	137	133	176	0.197
1990	3.64	4,722	123	121	143	169	164	205	232	239	212	191	148	150	175	0.196
AVERAGE			120	122	126	144	166	193	206	197	173	151	131	129	155	0.174

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY.. NAPA
CITY.... NAPA
SYSTEM #..... 28003
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....NORTH BAY
DAU # 40

CITY CENSUS POPULATION -
1980..... 50,879
1990..... 61,843

WATER AGENCY.....CITY OF NAPA
TYPE OF AGENCY.....MUNICIPAL WATER DEPT.

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 35
SELF SUPPLIED..... 65

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	19,692	Metered.....	1,324	Metered.....	0	Metered.....	21
Flat Rate.....	0	Flat Rate...	36	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	18,450	15,592	179.0	177.0	203.0	254.0	373.0	437.0	474.0	431.0	382.0	341.0	272.0	211.0	3734.0
1981	18,709	15,970	202.0	220.0	220.0	237.0	406.0	525.0	473.0	431.0	382.0	257.0	272.0	211.0	3836.0
1982	18,854	16,143	207.0	181.0	202.0	248.0	470.0	438.0	530.0	477.0	419.0	293.0	211.0	170.0	3846.0
1983	18,735	16,665	259.0	195.0	256.0	272.0	406.0	580.0	486.0	526.0	353.0	322.0	250.0	214.0	4119.0
1984	18,941	16,872	231.0	208.0	247.0	327.0	522.0	572.0	632.0	518.0	475.0	338.0	239.0	232.0	4541.0
1985	19,279	17,203	214.0	227.0	255.0	345.0	491.0	621.0	644.0	574.0	425.0	352.0	335.0	251.0	4734.0
1986	19,432	17,372	228.0	224.0	241.0	308.0	488.0	556.0	567.0	512.0	386.0	350.0	309.0	240.0	4409.0
1987	19,588	17,543	229.0	217.0	243.0	300.0	475.0	570.0	565.0	524.0	392.0	354.0	304.0	246.0	4419.0
1988	19,745	17,727	230.0	219.0	236.0	301.0	466.0	577.0	607.0	536.0	399.0	353.0	299.0	253.0	4476.0
1989	20,588	18,490	235.0	210.0	232.0	292.0	445.0	585.0	647.0	560.0	413.0	369.0	289.0	267.0	4544.0
1990	20,991	18,866	285.0	225.0	265.0	371.0	425.0	474.0	647.0	560.0	415.0	369.0	289.0	267.0	4592.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.26	60,205	96	101	109	141	200	242	254	231	211	183	151	113	170	0.190
1981	3.26	61,078	107	129	116	129	214	287	250	228	208	136	148	111	172	0.193
1982	3.27	61,579	108	105	106	134	246	237	278	250	227	153	114	89	171	0.192
1983	3.27	61,219	136	114	135	148	214	316	256	277	192	170	136	113	184	0.206
1984	3.27	61,920	120	116	129	176	272	308	329	270	256	176	129	121	201	0.225
1985	3.27	63,054	109	129	130	182	251	328	329	294	225	180	177	128	206	0.230
1986	3.27	63,583	116	126	122	161	248	291	288	260	202	178	162	122	190	0.213
1987	3.27	64,122	115	121	122	156	239	296	284	264	204	178	158	124	189	0.211
1988	3.28	64,666	115	117	118	155	232	297	303	267	206	176	154	126	190	0.212
1989	3.28	67,457	112	111	111	144	213	289	309	268	204	176	143	128	185	0.207
1990	3.28	68,809	134	117	124	180	199	230	303	263	201	173	140	125	183	0.205
AVERAGE			115	117	120	155	230	284	289	261	212	171	147	118	185	0.208

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059151

COUNTY.. SOLANO
CITY.... VALLEJO
SYSTEM #..... 48007
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....NORTH BAY
DAU # 40

WATER AGENCY.....VALLEJO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 79
SELF SUPPLIED..... 21

CITY CENSUS POPULATION
1980..... 80,303
1990..... 109,199

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	31,364	Metered.....	1,677	Metered.....	246	Metered.....	428
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	24,000	24,000 /5	-	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984	25,519	25,219	369.0	382.0	441.0	503.0	639.0	657.0	724.0	680.0	632.0	493.0	388.0	414.0	6322.0
1985	28,075	28,075	395.0	371.0	399.0	490.0	600.0	672.0	715.0	664.0	557.0	567.0	430.0	428.0	6288.0
1986	29,595	29,595	422.0	378.0	471.0	558.0	706.0	719.0	731.0	702.0	529.0	549.0	485.0	434.0	6684.0
1987			442.0	382.0	427.0	588.0	712.0	742.0	752.0	688.0	685.0	584.0	441.0	429.0	-
1988	34,474	34,474	440.0	454.0	585.0	569.0	659.0	700.0	814.0	764.0	696.0	606.0	458.0	476.0	7221.0
1989			461.0	423.0	471.0	570.0	715.0	782.0	880.0	838.0	674.0	582.0	518.0	458.0	-
1990	35,000	35,000	471.0	405.0	512.0	626.0	686.0	622.0	718.0	728.0	681.0	648.0	502.0	488.0	7087.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.35	80,303	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.32		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3.30		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3.28		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	3.26	83,079	143	159	171	202	248	264	281	264	254	191	156	161	208	0.234
1985	3.23	90,765	140	146	142	180	213	247	254	236	205	202	158	152	190	0.213
1986	3.21	95,011	143	142	160	196	240	252	248	238	186	186	170	147	193	0.216
1987	3.19		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	3.17	109,116	130	143	173	174	195	214	241	226	213	179	140	141	181	0.203
1989	3.14		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	3.12	109,199	139	132	151	191	203	190	212	215	208	191	153	144	178	0.199
AVERAGE			139	145	159	188	220	233	247	236	213	190	155	149	190	0.213

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data not available.

C—059152

C-059152

COUNTY.. SOLANO
CITY.... BENICIA
SYSTEM #..... 48001
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....NORTH BAY
DAU # 41

WATER AGENCY.....BENICIA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 15,376
1990..... 24,437

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	7,500	Metered.....	700	Metered.....	NA	Metered.....	195
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,819	4,819	67.0	61.0	82.0	76.0	94.0	106.0	118.0	120.0	106.0	101.0	88.0	78.0	1097.0
1981	4,850	4,850	75.0	66.0	73.0	98.0	125.0	149.0	149.0	141.0	123.0	99.0	67.0	62.0	1227.0
1982	5,381	5,381	67.0	58.0	63.0	67.0	113.0	122.0	149.0	153.0	124.0	117.0	88.0	93.0	1214.0
1983	5,567	5,567	94.0	78.0	86.0	97.0	128.0	148.0	162.0	145.0	133.0	107.0	76.0	68.0	1322.0
1984	5,895	5,895	71.0	65.0	90.0	107.0	144.0	157.0	167.0	157.0	160.0	101.0	52.0	53.0	1324.0
1985	6,096	6,096	53.0	52.0	56.0	93.0	126.0	149.0	179.0	166.0	134.0	121.0	92.0	84.0	1305.0
1986	6,419	6,419	78.0	66.0	79.0	114.0	149.0	173.0	187.0	178.0	142.0	134.0	119.0	89.0	1508.0
1987	6,648	6,648	85.0	80.0	80.0	110.0	170.0	180.0	204.0	203.0	181.0	154.0	98.0	94.0	1639.0
1988	6,950	6,950	86.0	115.0	154.0	155.0	178.0	180.0	206.0	196.0	177.0	189.0	134.0	130.0	1900.0
1989	7,461	7,461	115.0	92.0	77.0	117.0	146.0	143.0	157.0	153.0	120.0	115.0	94.0	67.0	1396.0
1990	7,797	7,797	94.0	86.0	111.0	144.0	145.0	184.0	212.0	226.0	224.0	198.0	165.0	146.0	1935.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.19	15,376	141	137	172	165	197	230	248	252	230	212	191	164	195	0.219
1981	3.19	15,447	157	153	152	211	261	322	311	294	265	207	145	129	218	0.244
1982	3.18	17,108	126	121	119	131	213	238	281	288	242	221	171	175	194	0.218
1983	3.17	17,668	172	158	157	183	234	279	296	265	251	195	143	124	205	0.230
1984	3.17	18,676	123	120	155	191	249	280	288	271	286	174	93	92	194	0.218
1985	3.16	19,278	89	96	94	161	211	258	300	278	232	202	159	141	185	0.208
1986	3.16	20,263	124	116	126	188	237	285	298	283	234	213	196	142	204	0.228
1987	3.15	20,949	131	136	123	175	262	286	314	313	288	237	156	145	214	0.240
1988	3.15	21,861	127	181	227	236	263	274	304	289	270	279	204	192	238	0.267
1989	3.14	23,426	158	140	106	166	201	203	216	211	171	158	134	92	163	0.183
1990	3.13	24,437	124	126	147	196	191	251	280	298	306	261	225	193	217	0.243
AVERAGE			134	135	143	182	229	264	285	277	252	215	165	144	203	0.227

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

Note: Jan. 1987 through Jun. 1987 city had system failure and data has been lost. DWR'S Central Dist. estimated water production for this period.

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C-059153

COUNTY.. SOLANO
CITY....FAIRFIELD
SYSTEM #..... 48003
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....NORTH BAY
DAU # 41

WATER AGENCY.....FAIRFIELD, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 58,099
1990..... 77,211

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	18,117	Metered.....	744	Metered.....	30	Metered.....	625
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	12,681	12,624	243.0	243.0	279.0	328.0	436.0	493.0	517.0	472.0	412.0	349.0	273.0	200.0	4245.0
1981	12,705	12,705	184.0	172.0	190.0	290.0	430.0	538.0	523.0	527.0	406.0	253.0	206.0	193.0	3912.0
1982	12,985	12,985	271.0	213.0	234.0	271.0	467.0	484.0	539.0	531.0	413.0	356.0	228.0	244.0	4251.0
1983	13,381	13,381	247.0	231.0	266.0	299.0	415.0	506.0	523.0	469.0	465.0	352.0	256.0	249.0	4278.0
1984	13,970	13,904	265.0	238.0	282.0	360.0	564.0	487.0	575.0	530.0	477.0	340.0	262.0	286.0	4666.0
1985	14,696	14,696	283.0	262.0	292.0	387.0	507.0	620.0	573.0	535.0	434.0	392.0	287.0	295.0	4867.0
1986	16,182	16,182	278.0	258.0	286.0	359.0	479.0	536.0	585.0	605.0	428.0	423.0	351.0	264.0	4852.0
1987	16,556	16,556	266.0	243.0	291.0	444.0	549.0	563.0	585.0	594.0	524.0	422.0	285.0	280.0	5046.0
1988	17,415	17,415	284.0	274.0	413.0	423.0	481.0	547.0	666.0	640.0	567.0	464.0	299.0	289.0	5347.0
1989	17,570	17,570	302.0	231.0	292.0	379.0	536.0	589.0	673.0	652.0	494.0	431.0	319.0	275.0	5173.0
1990	19,088	19,088	255.0	255.0	291.0	419.0	525.0	553.0	655.0	658.0	557.0	537.0	373.0	327.0	5405.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.60	58,361	134	144	154	187	241	282	286	261	235	193	156	111	199	0.223
1981	4.55	57,764	103	106	106	167	240	310	292	294	234	141	119	108	186	0.208
1982	4.49	58,313	150	130	129	155	258	277	298	294	236	197	130	135	200	0.224
1983	4.44	59,346	134	139	145	168	226	284	284	255	261	191	144	135	197	0.221
1984	4.38	61,180	140	134	149	196	297	265	303	279	260	179	143	151	209	0.234
1985	4.32	63,540	144	147	148	203	257	325	291	272	228	199	151	150	210	0.235
1986	4.27	69,063	130	133	134	173	224	259	273	283	207	198	169	123	192	0.216
1987	4.21	69,737	123	124	135	212	254	269	271	275	250	195	136	130	198	0.222
1988	4.16	72,385	127	131	184	195	214	252	297	285	261	207	138	129	202	0.227
1989	4.10	72,050	135	115	131	175	240	272	301	292	229	193	148	123	197	0.220
1990	4.05	77,211	107	118	122	181	219	239	274	275	240	224	161	137	192	0.215
AVERAGE			130	129	140	183	243	276	288	279	240	193	145	130	198	0.222

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059154

COUNTY..SAN MATEO
CITY....HALF MOON BAY
SYSTEM #..... 41011
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 42

CITY CENSUS POPULATION
1980..... 12,805
1990..... 15,014

WATER AGENCY.....COASTSIDE COUNTY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 80
WELLS AND SPRINGS.. 20

SOURCE OF WATER (in percent):
PURCHASED..... 50
SELF SUPPLIED..... 50

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4,034	Metered.....	380	Metered.....	NA	Metered.....	15
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,638	3,638	34.7	47.0	35.8	24.1	30.9	46.5	49.6	52.0	51.0	48.0	46.0	38.0	503.6
1981	3,653	3,653	47.0	35.0	32.0	31.0	43.0	48.0	62.0	55.0	55.0	29.0	34.0	62.0	533.0
1982	3,689	3,689	40.0	34.0	32.0	39.0	36.0	31.0	70.0	76.0	58.0	49.0	31.0	33.0	529.0
1983	3,781	3,781	35.0	31.0	21.0	44.0	48.0	64.0	75.0	68.0	71.0	53.0	40.0	40.0	590.0
1984	3,905	3,905	43.0	39.0	47.0	43.0	58.0	74.0	66.0	68.0	72.0	66.0	52.0	49.0	677.0
1985	4,000	4,000	44.0	38.0	48.0	33.0	65.0	62.0	68.0	68.0	69.0	61.0	71.0	37.0	664.0
1986	3,923	3,923	46.0	47.0	58.0	72.0	70.0	92.0	82.0	76.0	63.0	64.0	63.0	51.0	784.0
1987	4,312	4,312	51.0	49.0	53.0	67.0	76.0	74.0	85.0	80.0	61.0	53.0	40.0	42.0	731.0
1988	4,190	4,190	44.0	52.0	67.0	57.0	58.0	56.0	66.0	56.0	51.0	44.0	37.0	43.0	631.0
1989	4,235	4,235	40.0	39.0	50.0	50.0	60.0	69.0	66.0	56.0	51.0	44.0	37.0	46.0	608.0
1990	4,389	4,389	42.0	42.0	49.0	55.0	53.0	47.0	60.0	56.0	50.0	48.0	46.0	46.0	594.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.52	12,805	87	127	90	63	78	121	125	131	133	121	120	96	108	0.121
1981	3.51	12,822	118	97	81	81	108	125	156	138	143	73	88	156	114	0.128
1982	3.50	12,911	100	94	80	101	90	80	175	190	150	122	80	82	112	0.126
1983	3.49	13,196	86	84	51	111	117	162	183	166	179	130	101	98	122	0.137
1984	3.48	13,590	102	99	112	105	138	182	157	161	177	157	128	116	136	0.153
1985	3.47	13,881	102	98	112	79	151	149	158	158	166	142	170	86	131	0.147
1986	3.46	13,575	109	124	138	177	166	226	195	181	155	152	155	121	158	0.177
1987	3.45	14,879	111	118	115	150	165	166	184	173	137	115	90	91	135	0.151
1988	3.44	14,416	98	124	150	132	130	129	148	125	118	98	86	96	120	0.134
1989	3.43	14,529	89	96	111	115	133	158	147	124	117	98	85	102	115	0.128
1990	3.42	15,014	90	100	105	122	114	104	129	120	111	103	102	99	108	0.121
AVERAGE			99	105	104	112	126	146	160	152	144	119	109	104	124	0.138

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059155

COUNTY..SAN MATEO
CITY....PACIFICA
SYSTEM #..... 41025
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 42

CITY CENSUS POPULATION
1980..... 37,000
1990..... 39,670

WATER AGENCY.....NORTH COAST COUNTY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 98
SELF SUPPLIED..... 2

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	10,893	Metered.....	299	Metered.....	0	Metered.....	113
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	10,774	10,774	73.0	74.0	80.0	85.0	109.0	116.0	120.0	117.0	102.0	101.0	93.0	84.0	1154.0
1981	10,847	10,847	82.0	73.0	86.0	98.0	112.0	129.0	125.0	112.0	108.0	91.0	87.0	82.0	1185.0
1982	10,855	10,855	88.0	74.0	87.0	90.0	115.0	112.0	123.0	116.0	111.0	99.0	83.0	88.0	1186.0
1983	10,863	10,863	93.0	75.0	83.0	93.0	104.0	117.0	132.0	126.0	119.0	104.0	82.0	87.0	1215.0
1984	10,892	10,892	85.0	75.0	86.0	98.0	119.0	113.0	129.0	112.0	112.0	90.0	80.0	78.0	1177.0
1985	10,914	10,914	80.0	79.0	61.0	86.0	106.0	107.0	118.0	107.0	91.0	98.0	66.0	73.0	1072.0
1986	10,966	10,966	81.0	70.0	71.0	95.0	101.0	109.0	112.0	114.0	94.0	92.0	83.0	85.0	1107.0
1987	10,980	10,980	81.0	70.0	71.0	95.0	101.0	109.0	132.0	140.0	129.0	114.0	95.0	101.0	1238.0
1988	11,186	11,186	94.0	99.0	107.0	111.0	110.0	104.0	113.0	104.0	96.0	92.0	81.0	86.0	1197.0
1989	11,175	11,175	84.0	76.0	78.0	79.0	97.0	116.0	121.0	120.0	101.0	101.0	92.0	94.0	1159.0
1990	11,306	11,306	86.0	80.0	93.0	96.0	100.0	90.0	101.0	99.0	96.0	101.0	92.0	88.0	1122.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.43	37,000	64	69	70	77	95	105	105	102	92	88	84	73	85	0.096
1981	3.44	37,332	71	70	74	88	97	115	108	97	96	79	78	71	87	0.097
1982	3.45	37,440	76	71	75	80	99	100	106	100	99	85	74	76	87	0.097
1983	3.46	37,549	80	71	71	83	89	104	113	108	106	89	73	75	89	0.099
1984	3.46	37,730	73	69	74	87	102	100	110	96	99	77	71	67	85	0.096
1985	3.47	37,888	68	74	52	76	90	94	100	91	80	83	58	62	78	0.087
1986	3.48	38,150	68	66	60	83	85	95	95	96	82	78	73	72	79	0.089
1987	3.49	38,281	68	65	60	83	85	95	111	118	112	96	83	85	89	0.099
1988	3.49	39,082	78	87	88	95	91	89	93	86	82	76	69	71	84	0.094
1989	3.50	39,127	69	69	64	67	80	99	100	99	86	83	78	77	81	0.091
1990	3.51	39,670	70	72	76	81	81	76	82	81	81	82	77	72	77	0.087
AVERAGE			71	71	69	82	90	97	102	98	92	83	74	73	84	0.094

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059156

COUNTY..SAN MATEO
CITY.... BELMONT
SYSTEM #..... 41001
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 43

CITY CENSUS POPULATION
1980..... 24,786
1990..... 24,127

WATER AGENCY.....BELMONT COUNTY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	6,832	Metered.....	440	Metered.....	52	Metered.....	96
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	7,143	7,097	64.0	79.0	67.0	87.0	87.0	136.0	96.0	142.0	104.0	138.0	87.0	98.0	1185.0
1981	7,211	7,151	73.0	84.0	100.0	127.0	138.0	160.0	140.0	131.0	103.0	79.0	76.0	83.0	1294.0
1982	7,213	6,957	74.0	80.0	87.0	124.0	131.0	141.0	138.0	131.0	101.0	90.0	83.0	78.0	1258.0
1983	7,234	6,978	75.0	79.0	96.0	95.0	144.0	86.0	140.0	132.0	107.0	85.0	86.0	72.0	1197.0
1984	7,260	7,004	79.0	91.0	101.0	123.0	148.0	152.0	142.0	149.0	117.0	90.0	79.0	72.0	1343.0
1985	7,329	7,073	78.0	91.0	99.0	121.0	142.0	153.0	140.0	139.0	124.0	102.0	90.0	72.0	1351.0
1986	7,346	7,091	85.0	81.0	98.0	128.0	133.0	149.0	156.0	140.0	110.0	117.0	93.0	82.0	1372.0
1987	7,358	7,104	94.0	86.0	109.0	143.0	141.0	142.0	151.0	141.0	125.0	103.0	73.0	80.0	1388.0
1988	7,370	7,116	89.0	86.0	112.0	97.0	105.0	110.0	110.0	102.0	92.0	88.0	69.0	78.0	1138.0
1989	7,389	7,135	69.0	66.0	81.0	84.0	96.0	92.0	95.0	87.0	99.0	112.0	80.0	82.0	1043.0
1990	7,408	7,151	71.0	73.0	97.0	105.0	92.0	110.0	99.0	108.0	93.0	85.0	76.0	77.0	1086.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.49	24,947	83	109	87	116	112	182	124	184	139	178	116	127	130	0.146
1981	3.48	25,099	94	120	129	169	177	212	180	168	137	102	101	107	141	0.158
1982	3.47	25,020	95	114	112	165	169	188	178	169	135	116	111	101	138	0.154
1983	3.46	25,007	97	113	124	127	186	115	181	170	143	110	115	93	131	0.147
1984	3.45	25,011	102	125	130	164	191	203	183	192	156	116	105	93	147	0.165
1985	3.43	25,162	100	129	127	160	182	203	179	178	164	131	119	92	147	0.165
1986	3.42	25,133	109	115	126	170	171	198	200	180	146	150	123	105	150	0.168
1987	3.41	25,087	121	122	140	190	181	189	194	181	166	132	97	103	152	0.170
1988	3.40	25,041	115	118	144	129	135	146	142	131	122	113	92	100	125	0.139
1989	3.39	25,018	89	94	104	112	124	123	122	112	132	144	107	106	114	0.128
1990	3.37	24,994	92	104	125	140	119	147	128	139	124	110	101	99	119	0.133
AVERAGE			100	115	123	149	159	173	165	164	142	128	108	102	136	0.152

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059157

COUNTY..SAN MATEO — WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY — ORIGIN OF WATER (in percent):

CITY....BEAR GULCH DISTRICT — TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM #..... 41006 — SURFACE WATER..... 100

HYDROLOGIC REGION..... SAN FRANCISCO BAY — SYSTEM SERVES: — WELLS AND SPRINGS.. 0

PLANNING SUBAREA #.....SOUTH BAY

DAU # ..... 43 — ENTIRE CITY.....

ENTIRE CITY PLUS OUTSIDE..... — SOURCE OF WATER (in percent):

CITY CENSUS POPULATION — PORTION OF THE CITY.....

1980..... 52,963 — OTHER..... X — PURCHASED..... 100

1990..... 74,895 — SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	16,580	Metered.....	1,278	Metered.....	7	Metered.....	105
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	16,084	16,084	146.0	148.0	175.0	243.0	353.0	420.0	445.0	435.0	370.0	323.0	241.0	172.0	3471.0
1981	16,181	16,181	164.0	143.0	160.0	290.0	403.0	520.0	496.0	444.0	380.0	265.0	169.0	158.0	3592.0
1982	16,221	16,221	161.0	147.0	152.0	191.0	427.0	429.0	469.0	462.0	351.0	297.0	167.0	177.0	3430.0
1983	16,251	16,251	173.0	138.0	147.0	202.0	279.0	473.0	534.0	481.0	397.0	303.0	187.0	171.0	3485.0
1984	16,329	16,329	172.0	175.0	246.0	307.0	479.0	504.0	534.0	481.0	397.0	303.0	187.0	171.0	3956.0
1985	16,405	16,405	168.0	181.0	202.0	335.0	441.0	508.0	552.0	508.0	470.0	295.0	172.0	176.0	4008.0
1986	16,479	16,479	173.0	161.0	212.0	322.0	453.0	519.0	551.0	503.0	385.0	363.0	301.0	216.0	4159.0
1987	16,598	16,598	195.0	176.0	226.0	377.0	470.0	513.0	534.0	524.0	455.0	373.0	209.0	178.0	4230.0
1988	16,654	16,654	179.0	232.0	335.0	326.0	323.0	368.0	406.0	390.0	339.0	312.0	189.0	178.0	3577.0
1989	16,760	16,760	168.0	155.0	153.0	244.0	346.0	435.0	489.0	493.0	385.0	316.0	258.0	221.0	3663.0
1990	23,580	23,580	184.0	163.0	235.0	330.0	326.0	339.0	425.0	415.0	368.0	337.0	260.0	219.0	3601.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.29	52,963	89	96	107	153	215	264	271	265	233	197	152	105	180	0.201
1981	3.28	53,094	100	96	97	182	245	326	301	270	239	161	106	96	185	0.208
1982	3.27	53,036	98	99	92	120	260	270	285	281	221	181	105	108	177	0.198
1983	3.26	52,944	105	93	90	127	170	298	325	293	250	185	118	104	180	0.202
1984	3.25	53,008	105	114	150	193	291	317	325	293	250	184	118	104	204	0.229
1985	3.23	53,063	102	122	123	210	268	319	336	309	295	179	108	107	207	0.232
1986	3.22	53,110	105	108	129	202	275	326	335	306	242	220	189	131	215	0.240
1987	3.21	53,300	118	118	137	236	284	321	323	317	285	226	131	108	217	0.244
1988	3.20	53,285	108	150	203	204	196	230	246	236	212	189	118	108	184	0.206
1989	3.19	53,429	101	104	92	152	209	271	295	298	240	191	161	133	188	0.210
1990	3.18	74,895	79	78	101	147	140	151	183	179	164	145	116	94	132	0.148
AVERAGE			101	107	120	175	232	281	293	277	239	187	129	109	188	0.211

1/ Number of services

2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.

3/ gpcd - gallons per capita daily

4/ afpca - acre-feet per capita annually

Note: Bear Gulch District consists of: Atherton,Menlo Park,Portola Valley Woodside, North Fair Oaks and West Menlo Park.

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C-059158

COUNTY..SAN MATEO
CITY....SAN CARLOS
SYSTEM #..... 41007
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 43

WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 25,461
1990..... 26,167

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	10,267	Metered.....	9,816	Metered.....	92	Metered.....	57
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	9,169	9,169	85.0	87.0	95.0	110.0	133.0	149.0	156.0	154.0	138.0	128.0	107.0	91.0	1433.0
1981	9,285	9,285	88.0	78.0	88.0	120.0	145.0	176.0	173.0	162.0	135.0	111.0	89.0	87.0	1452.0
1982	9,331	9,331	87.0	81.0	88.0	98.0	147.0	148.0	160.0	158.0	135.0	120.0	90.0	91.0	1403.0
1983	9,358	9,358	90.0	80.0	90.0	97.0	129.0	160.0	170.0	160.0	149.0	121.0	91.0	85.0	1422.0
1984	9,432	9,432	90.0	85.0	104.0	119.0	158.0	158.0	173.0	164.0	154.0	115.0	86.0	86.0	1492.0
1985	9,515	9,515	90.0	87.0	93.0	124.0	148.0	162.0	171.0	160.0	139.0	126.0	96.0	86.0	1482.0
1986	9,580	9,580	88.0	78.0	95.0	117.0	152.0	168.0	175.0	166.0	135.0	134.0	118.0	98.0	1524.0
1987	9,686	9,686	96.0	87.0	103.0	140.0	159.0	163.0	168.0	167.0	152.0	133.0	96.0	91.0	1555.0
1988	9,731	9,731	93.0	103.0	129.0	121.0	126.0	134.0	142.0	135.0	120.0	108.0	85.0	85.0	1381.0
1989	9,896	9,896	83.0	80.0	77.0	97.0	120.0	137.0	148.0	149.0	124.0	114.0	101.0	95.0	1325.0
1990	11,807	11,807	87.0	77.0	95.0	115.0	118.0	121.0	131.0	130.0	119.0	116.0	95.0	89.0	1293.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.78	25,461	108	118	120	144	169	195	198	195	181	162	140	115	154	0.173
1981	2.72	25,263	112	110	112	158	185	232	221	207	178	142	117	111	157	0.176
1982	2.66	24,865	113	116	114	131	191	198	208	205	181	156	121	118	155	0.173
1983	2.61	24,412	119	117	119	132	170	218	225	211	203	160	124	112	160	0.179
1984	2.55	24,076	121	122	139	165	212	219	232	220	213	154	119	115	170	0.190
1985	2.50	23,755	122	131	126	174	201	227	232	217	195	171	135	117	171	0.191
1986	2.44	23,380	121	119	131	167	210	240	241	229	192	185	168	135	179	0.200
1987	2.38	23,095	134	135	144	202	222	235	235	233	219	186	139	127	184	0.207
1988	2.33	22,657	132	157	184	178	179	197	202	192	177	154	125	121	167	0.187
1989	2.27	22,487	119	127	110	144	172	203	212	214	184	164	150	136	161	0.181
1990	2.22	26,167	107	105	117	146	145	154	161	160	152	143	121	110	135	0.152
AVERAGE			119	123	129	158	187	211	215	208	189	161	133	120	163	0.183

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059159

COUNTY..SAN MATEO
CITY....SAN MATEO
SYSTEM #..... 41008
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 43

WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 81,584
1990..... 88,130

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	22,110	Metered.....	24,836	Metered.....	12	Metered.....	244
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	24,007	24,007	267.0	256.0	291.0	330.0	406.0	464.0	456.0	461.0	458.0	420.0	352.0	312.0	4473.0
1981	24,141	24,141	285.0	243.0	264.0	343.0	418.0	498.0	491.0	434.0	373.0	319.0	257.0	249.0	4174.0
1982	24,144	24,144	252.0	239.0	256.0	284.0	431.0	433.0	474.0	478.0	397.0	354.0	261.0	266.0	4125.0
1983	24,212	24,212	267.0	233.0	264.0	288.0	374.0	475.0	512.0	485.0	449.0	371.0	275.0	273.0	4266.0
1984	24,331	24,331	274.0	258.0	324.0	368.0	492.0	482.0	523.0	500.0	471.0	356.0	270.0	272.0	4590.0
1985	24,431	24,431	279.0	269.0	296.0	379.0	455.0	510.0	538.0	507.0	427.0	390.0	309.0	292.0	4651.0
1986	24,497	24,497	281.0	252.0	308.0	368.0	470.0	505.0	531.0	504.0	418.0	409.0	363.0	332.0	4741.0
1987	24,598	24,598	320.0	282.0	332.0	436.0	487.0	502.0	522.0	505.0	486.0	462.0	322.0	308.0	4964.0
1988	24,685	24,685	322.0	337.0	388.0	353.0	374.0	394.0	426.0	397.0	358.0	318.0	252.0	257.0	4176.0
1989	24,700	24,700	253.0	227.0	247.0	299.0	384.0	432.0	468.0	464.0	386.0	461.0	303.0	292.0	4216.0
1990	36,349	36,349	262.0	240.0	296.0	356.0	366.0	374.0	404.0	401.0	364.0	356.0	291.0	277.0	3987.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.40	81,584	106	108	115	135	161	190	180	182	187	166	144	123	150	0.168
1981	3.30	79,689	115	109	107	143	169	208	199	176	156	129	108	101	144	0.161
1982	3.20	77,347	105	110	107	122	180	187	198	199	171	148	112	111	146	0.164
1983	3.11	75,207	115	111	113	128	160	211	220	208	199	159	122	117	155	0.174
1984	3.01	73,208	121	122	143	168	217	219	230	220	214	157	123	120	172	0.192
1985	2.91	71,130	127	135	134	178	206	239	244	230	200	177	145	132	179	0.201
1986	2.81	68,936	131	131	144	178	220	244	248	236	202	191	176	155	188	0.211
1987	2.72	66,825	154	151	160	217	235	250	252	244	242	223	161	149	204	0.228
1988	2.62	64,658	161	180	194	182	187	203	213	198	185	159	130	128	177	0.198
1989	2.52	62,292	131	130	128	160	199	231	242	240	207	239	162	151	185	0.208
1990	2.42	88,130	96	97	108	135	134	141	148	147	138	130	110	101	124	0.139
AVERAGE			124	126	132	159	188	211	216	207	191	171	136	126	166	0.186

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY..SAN MATEO WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY ORIGIN OF WATER (in percent):

CITY....SO. SAN FRANCISCO DIST. TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM #..... 41009 SURFACE WATER..... 85

HYDROLOGIC REGION..... SAN FRANCISCO BAY SYSTEM SERVES: WELLS AND SPRINGS.. 15

PLANNING SUBAREA #.....SOUTH BAY

DAU # ..... 43 ENTIRE CITY.....

ENTIRE CITY PLUS OUTSIDE..... SOURCE OF WATER (in percent):

CITY CENSUS POPULATION PORTION OF THE CITY..... X

1980..... 48,488 OTHER..... PURCHASED..... 85

1990..... 59,154 SELF SUPPLIED..... 15

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	12,710	Metered.....	16,110	Metered.....	80	Metered.....	221
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	13,887	13,887	187.0	180.0	206.0	227.0	254.0	267.0	256.0	262.0	239.0	239.0	200.0	191.0	2708.0
1981	13,981	13,981	189.0	169.0	190.0	223.0	258.0	282.0	264.0	266.0	249.0	217.0	182.0	177.0	2666.0
1982	14,023	14,023	185.0	170.0	190.0	223.0	258.0	282.0	264.0	266.0	249.0	217.0	167.0	159.0	2630.0
1983	14,018	14,018	188.0	169.0	187.0	185.0	236.0	280.0	278.0	288.0	266.0	237.0	193.0	188.0	2695.0
1984	14,107	14,107	191.0	189.0	221.0	240.0	284.0	265.0	281.0	285.0	280.0	237.0	181.0	166.0	2820.0
1985	14,169	14,169	195.0	186.0	191.0	225.0	277.0	288.0	297.0	278.0	250.0	251.0	202.0	178.0	2818.0
1986	14,180	14,180	180.0	174.0	198.0	231.0	283.0	296.0	300.0	288.0	245.0	247.0	212.0	172.0	2826.0
1987	14,303	14,303	191.0	175.0	197.0	253.0	286.0	287.0	290.0	299.0	264.0	255.0	191.0	186.0	2874.0
1988	14,373	14,373	185.0	198.0	239.0	229.0	232.0	240.0	238.0	240.0	221.0	202.0	172.0	171.0	2567.0
1989	14,500	14,500	168.0	153.0	162.0	199.0	228.0	253.0	264.0	270.0	232.0	219.0	197.0	185.0	2530.0
1990	17,236	17,236	175.0	164.0	194.0	220.0	226.0	230.0	242.0	245.0	229.0	234.0	200.0	179.0	2538.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.49	48,488	124	128	137	156	169	184	170	174	164	159	137	127	153	0.171
1981	3.49	48,733	125	124	126	153	171	193	175	176	170	144	124	117	150	0.168
1982	3.48	48,796	122	124	126	152	171	193	175	176	170	143	114	105	148	0.165
1983	3.47	48,695	125	124	124	127	156	192	184	191	182	157	132	125	152	0.170
1984	3.47	48,920	126	133	146	164	187	181	185	188	191	156	123	109	158	0.177
1985	3.46	49,050	128	135	126	153	182	196	195	183	170	165	137	117	157	0.176
1986	3.46	49,004	118	127	130	157	186	201	197	190	167	163	144	113	158	0.177
1987	3.45	49,344	125	127	129	171	187	194	190	195	178	167	129	122	160	0.179
1988	3.44	49,500	121	138	156	154	151	162	155	156	149	132	116	111	142	0.159
1989	3.44	49,850	109	110	105	133	148	169	171	175	155	142	132	120	139	0.156
1990	3.43	59,154	95	99	106	124	123	130	132	134	129	128	113	98	118	0.132
AVERAGE			120	124	128	149	166	181	175	176	166	150	127	115	149	0.166

1/ Number of services

2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.

3/ gpcd - gallons per capita daily

4/ afpca - acre-feet per capita annually

Note: South San Francisco District consists of: South San Francisco, Colma and Broadmoor.

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C-059161

COUNTY..SAN MATEO
CITY....DALY CITY
SYSTEM #..... 41013
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 43

CITY CENSUS POPULATION
1980..... 78,427
1990..... 92,311

WATER AGENCY.....DALY CITY, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 38
WELLS AND SPRINGS.. 62

SOURCE OF WATER (in percent):
PURCHASED..... 38
SELF SUPPLIED..... 62

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	19,640	Metered.....	527	Metered.....	83	Metered.....	268
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	19,188	19,188	184.0	172.0	196.0	207.0	223.0	246.0	245.0	236.0	224.0	225.0	197.0	195.0	2550.0
1981	19,290	19,290	192.0	172.0	194.0	210.0	245.0	261.0	259.0	242.0	232.0	217.0	195.0	190.0	2609.0
1982	20,022	20,022	197.0	177.0	192.0	200.0	246.0	246.0	249.0	248.0	234.0	230.0	201.0	203.0	2623.0
1983	20,058	20,058	201.0	182.0	203.0	203.0	236.0	252.0	275.0	272.0	257.0	238.0	202.0	199.0	2720.0
1984	20,077	20,077	215.0	212.0	235.0	246.0	280.0	265.0	279.0	278.0	271.0	237.0	215.0	229.0	2962.0
1985	20,159	20,159	226.0	205.0	227.0	233.0	268.0	270.0	287.0	280.0	253.0	247.0	229.0	230.0	2955.0
1986	20,514	20,508	229.0	207.0	234.0	244.0	273.0	286.0	300.0	280.0	258.0	258.0	246.0	241.0	3056.0
1987	20,847	20,847	237.0	215.0	233.0	353.0	294.0	279.0	296.0	294.0	276.0	265.0	233.0	231.0	3206.0
1988	20,919	20,919	233.0	230.0	259.0	260.0	250.0	230.0	247.0	229.0	225.0	225.0	208.0	213.0	2809.0
1989	21,209	21,209	221.0	188.0	210.0	215.0	239.0	253.0	271.0	270.0	247.0	243.0	225.0	228.0	2810.0
1990	21,303	21,303	224.0	201.0	227.0	234.0	239.0	233.0	242.0	241.0	229.0	227.0	211.0	215.0	2723.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.09	78,427	76	76	81	88	92	105	101	97	95	93	84	80	89	0.100
1981	4.11	79,318	78	77	79	88	100	110	105	98	97	88	82	77	90	0.101
1982	4.14	82,821	77	76	75	80	96	99	97	97	94	90	81	79	87	0.097
1983	4.16	83,463	78	78	78	81	91	101	106	105	103	92	81	77	89	0.100
1984	4.19	84,036	83	87	90	98	107	105	107	107	107	91	85	88	97	0.108
1985	4.21	84,875	86	86	86	92	102	106	109	106	99	94	90	87	95	0.107
1986	4.23	86,874	85	85	87	94	101	110	111	104	99	96	94	89	96	0.108
1987	4.26	88,797	86	86	85	133	107	105	108	107	104	96	87	84	99	0.111
1988	4.28	89,618	84	88	93	97	90	86	89	82	84	81	77	77	86	0.096
1989	4.31	91,382	78	73	74	78	84	92	96	95	90	86	82	80	84	0.094
1990	4.33	92,311	78	78	79	84	84	84	85	84	83	79	76	75	81	0.091
AVERAGE			81	81	82	92	96	100	101	98	96	90	84	81	90	0.101

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059162

COUNTY..SAN MATEO
CITY....HILLSBOROUGH
SYSTEM #..... 41016
HYDROLOGIC REGION 1/.....SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 43

WATER AGENCY.....HILLSBOROUGH, TOWN OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ALL IN THE CITY.....
ALL IN THE CITY PLUS OUTSIDE... X
PARTLY IN THE CITY ONLY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 10,372
1990..... 10,667

SERVICE CONNECTIONS: 2/

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4,304	Metered.....	NA	Metered.....	0	Metered.....	33
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS 3/ SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,880	3,776	49	36	68	92	127	152	166	146	141	99	67	57	1200.0
1981	3,932	3,828	42	42	56	123	145	210	184	172	110	79	38	39	1240.0
1982	3,948	3,844	37	44	40	109	153	154	181	161	117	66	47	38	1147.0
1983	3,960	3,856	35	33	48	70	159	178	202	168	131	81	43	49	1197.0
1984	3,973	3,869	49	58	91	114	177	206	192	183	149	64	42	45	1370.0
1985	3,992	3,888	46	61	84	130	159	209	188	164	158	96	52	50	1397.0
1986	4,015	3,911	49	47	75	134	176	191	210	186	124	118	90	55	1455.0
1987	4,056	3,952	53	54	86	158	169	190	193	185	155	86	52	50	1431.0
1988	4,089	3,985	46	87	142	84	113	133	128	120	97	62	37	44	1093.0
1989	4,156	4,052	37	38	47	75	132	166	156	162	111	88	64	63	1139.0
1990	4,171	4,067	41	50	77	122	107	121	133	142	110	94	70	54	1121.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.75	10,658	148	116	206	288	384	475	502	442	441	300	210	173	308	0.345
1981	2.73	10,752	126	140	168	381	435	651	552	516	341	237	118	117	316	0.354
1982	2.72	10,747	111	146	120	338	459	478	543	483	363	198	146	114	292	0.328
1983	2.71	10,730	105	110	144	217	478	553	607	505	407	244	134	147	306	0.342
1984	2.70	10,716	148	187	274	355	533	641	578	551	463	193	131	135	350	0.392
1985	2.68	10,718	138	203	253	404	479	650	566	494	491	289	162	150	357	0.400
1986	2.67	10,730	147	156	225	416	529	593	631	559	385	355	280	165	372	0.416
1987	2.66	10,789	158	179	257	488	505	587	577	553	479	257	161	149	363	0.407
1988	2.65	10,826	137	277	423	259	337	410	381	358	299	185	114	131	277	0.310
1989	2.64	10,952	109	124	138	228	389	505	459	477	338	259	195	186	285	0.319
1990	2.62	10,940	121	163	227	372	316	369	392	419	335	277	213	159	281	0.314
AVERAGE			132	164	221	341	440	537	526	487	395	254	169	148	319	0.357

1/ Abbreviation for Hydrologic Region
2/ Number of services
3/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
4/ gpcd - gallons per capita daily
5/ afpca - acre-feet per capita annually
6/ N/A - not available, or not applicable

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C-059163

COUNTY..SAN MATEO
CITY....MILLBRAE
SYSTEM #..... 41018
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 43

WATER AGENCY.....MILLBRAE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 20,000
1990..... 20,412

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,534	Metered.....	10	Metered.....	1	Metered.....	4
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
			TOTAL WATER INTO SYSTEM (MILLION GALLONS)												
1980	6,000	6,000	/5	-	-	-	-	-	-	-	-	-	-	-	895.0
1981	6,200	6,200	-	-	-	-	-	-	-	-	-	-	-	-	925.0
1982	6,515	6,515	-	-	-	-	-	-	-	-	-	-	-	-	923.0
1983	6,515	6,515	66.0	61.0	65.0	73.0	107.0	116.0	116.0	117.0	89.0	70.0	62.0	60.0	1002.0
1984	6,575	6,575	71.0	69.0	83.0	105.0	119.0	130.0	131.0	115.0	93.0	82.0	63.0	62.0	1123.0
1985	6,286	6,286	65.0	84.0	82.0	111.0	112.0	131.0	129.0	115.0	93.0	81.0	78.0	65.0	1146.0
1986	6,307	6,307	59.0	67.0	65.0	71.0	98.0	123.0	135.0	118.0	85.0	87.0	75.0	65.0	1048.0
1987	6,429	6,429	62.0	67.0	57.0	55.0	125.0	117.0	127.0	122.0	101.0	98.0	73.0	63.0	1067.0
1988	6,552	6,552	65.0	116.0	48.0	39.0	151.0	110.0	118.0	126.0	116.0	109.0	71.0	61.0	1130.0
1989	6,317	6,317	57.0	54.0	63.0	67.0	85.0	104.0	93.0	85.0	83.0	62.0	53.0	64.0	870.0
1990	6,401	6,401	61.0	61.0	75.0	81.0	85.0	81.0	102.0	112.0	82.0	69.0	62.0	61.0	932.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
			PER CAPITA WATER USE (gpcd)/3													
1980	3.33	20,000	-	-	-	-	-	-	-	-	-	-	-	-	123	0.137
1981	3.32	20,577	-	-	-	-	-	-	-	-	-	-	-	-	123	0.138
1982	3.30	21,528	-	-	-	-	-	-	-	-	-	-	-	-	117	0.132
1983	3.29	21,434	99	102	98	114	161	180	175	176	138	105	96	90	128	0.143
1984	3.28	21,537	106	110	124	163	178	201	196	172	144	123	98	93	143	0.160
1985	3.26	20,499	102	146	129	180	176	213	203	181	151	127	127	102	153	0.172
1986	3.25	20,477	93	117	102	116	154	200	213	186	138	137	122	102	140	0.157
1987	3.23	20,780	96	115	88	88	194	188	197	189	162	152	117	98	141	0.158
1988	3.22	21,083	99	190	73	62	231	174	181	193	183	167	112	93	147	0.164
1989	3.20	20,235	91	95	100	110	136	171	148	136	137	99	87	102	118	0.132
1990	3.19	20,412	96	107	119	132	134	132	161	177	134	109	101	96	125	0.140
AVERAGE			98	123	104	121	171	183	184	176	148	127	108	97	133	0.148

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

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C-059164

COUNTY..SAN MATEO
CITY....REDWOOD CITY
SYSTEM #..... 41022
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 43

WATER AGENCY.....REDWOOD CITY, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 54,965
1990..... 66,072

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	17,625	Metered.....	1,756	Metered.....	21	Metered.....	377
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	18,316	16,681	218.0	219.0	239.0	243.0	285.0	331.0	361.0	387.0	364.0	349.0	320.0	223.0	3539.0
1981	18,473	16,823	210.0	210.0	210.0	230.0	290.0	335.0	406.0	383.0	348.0	299.0	224.0	200.0	3345.0
1982	18,562	16,902	208.0	199.0	202.0	219.0	304.0	337.0	335.0	344.0	317.0	251.0	197.0	189.0	3102.0
1983	18,562	15,583	189.0	186.0	190.0	228.0	257.0	356.0	353.0	403.0	379.0	296.0	256.0	220.0	3313.0
1984	18,914	15,792	212.0	227.0	243.0	282.0	340.0	394.0	401.0	392.0	394.0	332.0	266.0	234.0	3717.0
1985	19,422	15,792	215.0	235.0	253.0	278.0	350.0	399.0	422.0	404.0	383.0	339.0	277.0	220.0	3775.0
1986	19,422	15,897	224.0	222.0	215.0	275.0	348.0	379.0	423.0	440.0	391.0	312.0	328.0	255.0	3812.0
1987	20,001	16,380	240.0	235.0	232.0	305.0	392.0	379.0	416.0	412.0	388.0	346.0	267.0	206.0	3818.0
1988	20,225	16,527	219.0	238.0	262.0	316.0	285.0	307.0	314.0	309.0	294.0	260.0	247.0	190.0	3241.0
1989	19,981	16,498	206.0	187.0	175.0	228.0	225.0	302.0	377.0	359.0	345.0	308.0	255.0	224.0	3191.0
1990	20,969	17,384	223.0	197.0	207.0	283.0	307.0	289.0	342.0	316.0	344.0	293.0	264.0	218.0	3283.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.30	60,352	117	125	128	134	152	183	193	207	201	187	177	119	161	0.180
1981	3.35	61,804	110	121	110	124	151	181	212	200	188	156	121	104	148	0.166
1982	3.40	63,040	106	113	103	116	156	178	171	176	168	128	104	97	135	0.151
1983	3.45	63,979	95	104	96	119	130	185	178	203	197	149	133	111	142	0.159
1984	3.50	66,149	103	118	119	142	166	199	196	191	199	162	134	114	154	0.172
1985	3.55	68,907	101	122	118	134	164	193	198	189	185	159	134	103	150	0.168
1986	3.60	69,889	103	113	99	131	161	181	195	203	186	144	156	118	149	0.167
1987	3.65	72,984	106	115	103	139	173	173	184	182	177	153	122	91	143	0.161
1988	3.70	74,824	94	110	113	141	123	137	135	133	131	112	110	82	119	0.133
1989	3.75	74,932	89	89	75	101	97	134	162	155	153	133	113	96	117	0.131
1990	3.80	79,698	90	88	84	118	124	121	138	128	144	119	110	88	113	0.126
AVERAGE			101	111	104	127	145	170	178	179	175	146	129	102	139	0.156

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
Note: Data from 1/81 to 6/81 is estimated.

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C-059165

COUNTY..SAN MATEO
CITY....SAN BRUNO
SYSTEM #..... 41023
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 43

WATER AGENCY.....SAN BRUNO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 71
WELLS AND SPRINGS.. 29

SOURCE OF WATER (in percent):
PURCHASED..... 71
SELF SUPPLIED..... 29

CITY CENSUS POPULATION
1980..... 35,417
1990..... 38,961

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	10,383	Metered.....	804	Metered.....	6	Metered.....	125
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	14,167	14,167	97.0	97.0	104.0	104.0	142.0	142.0	178.0	178.0	171.0	171.0	141.0	141.0	1666.0
1981	14,324	14,324	104.0	104.0	111.0	111.0	133.0	133.0	170.0	170.0	148.0	148.0	109.0	109.0	1550.0
1982	14,481	14,481	101.0	101.0	104.0	104.0	135.0	135.0	169.0	169.0	155.0	155.0	116.0	116.0	1560.0
1983	14,638	14,638	106.0	106.0	109.0	109.0	137.0	137.0	169.0	169.0	164.0	164.0	130.0	130.0	1630.0
1984	14,795	14,795	115.0	110.0	124.0	122.0	143.0	158.0	151.0	152.0	146.0	147.0	91.0	118.0	1577.0
1985	14,952	14,952 /5	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	15,109	15,109	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	15,266	15,266	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	15,423	15,423	116.0	119.0	121.0	146.0	135.0	126.0	136.0	152.0	142.0	126.0	106.0	93.0	1518.0
1989	15,580	15,580	98.0	94.0	88.0	92.0	104.0	128.0	144.0	153.0	152.0	128.0	96.0	107.0	1384.0
1990	15,584	15,584	104.0	107.0	97.0	106.0	128.0	124.0	142.0	143.0	148.0	135.0	121.0	117.0	1472.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.50	35,417	88	94	95	98	129	134	162	162	161	156	133	128	129	0.144
1981	2.50	35,810	94	104	100	103	120	124	153	153	138	133	101	98	119	0.133
1982	2.50	36,202	90	100	93	96	120	124	151	151	143	138	107	103	118	0.132
1983	2.50	36,595	93	103	96	99	121	125	149	149	149	145	118	115	122	0.137
1984	2.50	36,988	100	103	108	110	125	142	132	133	132	128	82	103	117	0.131
1985	2.50	37,380	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	2.50	37,773	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	2.50	38,166	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	2.50	38,558	97	106	101	126	113	109	114	127	123	105	92	78	108	0.121
1989	2.50	38,951	81	86	73	79	86	110	119	127	130	106	82	89	97	0.109
1990	2.50	38,961	86	98	80	91	106	106	118	118	127	112	104	97	104	0.116
AVERAGE			91	99	93	100	115	122	137	140	138	128	102	101	114	0.128

1/ number of service connections estimated.
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ Missing data unavailable.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059166

COUNTY..SAN FRANCISCO
CITY....SAN FRANCISCO ET AL
SYSTEM #..... 38001
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 43

WATER AGENCY.....SAN FRANCISCO CITY AND COUNTY
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 678,974
1990..... 723,959

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	141,058	Metered.....	21,825	Metered.....	144	Metered.....	1,549
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	160,266	159,631	2599.0	2412.0	2666.0	2924.0	2728.0	2588.0	2819.0	2673.0	2598.0	2770.0	2523.0	2598.0	31898.0
1981	160,266	159,631	2516.0	2276.0	2604.0	2654.0	2852.0	2839.0	3012.0	2918.0	2703.0	2616.0	2420.0	2520.0	31930.0
1982	160,697	160,119	2431.0	2323.0	2528.0	2552.0	2848.0	2844.0	3017.0	3030.0	2834.0	2781.0	2480.0	2556.0	32224.0
1983	160,697	160,119	2653.0	2446.0	2710.0	2659.0	2867.0	3067.0	3097.0	3126.0	2959.0	2953.0	2688.0	2780.0	34005.0
1984	161,596	161,002	2783.0	2559.0	2688.0	2723.0	3080.0	2941.0	3151.0	3051.0	2965.0	2885.0	2599.0	2614.0	34039.0
1985	162,141	161,537	2919.0	2684.0	2969.0	2895.0	3178.0	3121.0	3108.0	3216.0	2985.0	2889.0	2509.0	2582.0	35055.0
1986	162,453	161,946	2544.0	2449.0	1973.0	2811.0	3065.0	3094.0	3129.0	3056.0	2866.0	2967.0	2829.0	2849.0	33632.0
1987	162,884	162,398	2708.0	2587.0	2806.0	2882.0	3113.0	3084.0	3287.0	3077.0	2929.0	2882.0	2712.0	2716.0	34783.0
1988	163,746	163,257	2749.0	2684.0	3013.0	2890.0	2753.0	2596.0	2612.0	2638.0	2705.0	2419.0	2393.0	2409.0	31861.0
1989	164,586	164,145	2399.0	2184.0	2410.0	2438.0	2699.0	2849.0	3042.0	3046.0	2744.0	2823.0	2598.0	2660.0	31892.0
1990	164,892	164,450	2688.0	2590.0	2653.0	2915.0	2936.0	2598.0	2769.0	2570.0	2536.0	2521.0	2489.0	2420.0	31685.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.25	681,675	123	122	126	143	129	127	133	126	127	131	123	123	128	0.144
1981	4.27	684,061	119	119	123	129	134	138	142	138	132	123	118	119	128	0.143
1982	4.28	688,294	114	121	118	124	133	138	141	142	137	130	120	120	128	0.144
1983	4.30	690,687	124	126	127	128	134	148	145	146	143	138	130	130	135	0.151
1984	4.31	696,957	129	127	124	130	143	141	146	141	142	134	124	121	134	0.150
1985	4.33	701,722	134	137	136	138	146	148	143	148	142	133	119	119	137	0.153
1986	4.34	705,491	116	124	90	133	140	146	143	140	135	136	134	130	131	0.146
1987	4.36	709,789	123	130	128	135	141	145	149	140	138	131	127	123	134	0.150
1988	4.37	715,983	124	129	136	135	124	121	118	119	126	109	111	109	122	0.137
1989	4.39	722,107	107	108	108	113	121	132	136	136	127	126	120	119	121	0.136
1990	4.40	725,905	119	127	118	134	130	119	123	114	116	112	114	108	120	0.134
AVERAGE			121	125	121	131	134	137	138	135	133	128	122	120	129	0.144

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059167

COUNTY..SANTA CLARA | WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY | ORIGIN OF WATER (in percent):

CITY....LOS ALTOS DISTRICT | TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM #..... 43001 | SURFACE WATER..... 30

HYDROLOGIC REGION..... SAN FRANCISCO BAY | SYSTEM SERVES: | WELLS AND SPRINGS.. 70

PLANNING SUBAREA #.....SOUTH BAY

DAU # ..... 44 | ENTIRE CITY.....

ENTIRE CITY PLUS OUTSIDE..... | SOURCE OF WATER (in percent):

CITY CENSUS POPULATION | PORTION OF THE CITY.....

1980..... 43,982 | OTHER..... X | PURCHASED..... 63

1990..... 53,088 | SELF SUPPLIED..... 37

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	16,078	Metered.....	1,049	Metered.....	24	Metered.....	174
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	15,575	15,575	176.0	181.0	209.0	294.0	413.0	483.0	493.0	515.0	429.0	380.0	295.0	223.0	4091.0
1981	15,610	15,610	199.0	178.0	216.0	355.0	465.0	568.0	559.0	525.0	418.0	312.0	195.0	182.0	4172.0
1982	15,630	15,630	178.0	173.0	185.0	234.0	460.0	463.0	534.0	550.0	443.0	350.0	209.0	198.0	3977.0
1983	16,954	16,954	208.0	172.0	194.0	249.0	406.0	555.0	605.0	542.0	501.0	361.0	238.0	202.0	4233.0
1984	17,001	17,001	209.0	208.0	306.0	383.0	550.0	577.0	627.0	584.0	533.0	351.0	216.0	207.0	4751.0
1985	17,026	17,026	217.0	227.0	245.0	396.0	515.0	605.0	637.0	588.0	454.0	392.0	264.0	226.0	4766.0
1986	17,044	17,044	214.0	189.0	257.0	370.0	510.0	579.0	615.0	588.0	447.0	415.0	352.0	258.0	4794.0
1987	17,157	17,157	235.0	217.0	268.0	439.0	559.0	577.0	601.0	598.0	512.0	418.0	254.0	207.0	4885.0
1988	17,275	17,275	213.0	290.0	401.0	381.0	433.0	497.0	573.0	557.0	484.0	417.0	281.0	281.0	4808.0
1989	17,324	17,324	230.0	221.0	218.0	347.0	418.0	458.0	487.0	470.0	377.0	330.0	290.0	253.0	4099.0
1990	17,322	17,322	214.0	188.0	259.0	343.0	346.0	386.0	423.0	432.0	385.0	363.0	270.0	223.0	3832.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.82	43,982	129	142	153	223	303	366	362	378	325	279	224	164	255	0.285
1981	2.85	44,457	144	143	157	266	337	426	406	381	313	226	146	132	257	0.288
1982	2.87	44,890	128	138	133	174	331	344	384	395	329	252	155	142	243	0.272
1983	2.90	49,101	137	125	127	169	267	377	397	356	340	237	162	133	236	0.265
1984	2.92	49,647	136	144	199	257	357	387	407	379	358	228	145	134	262	0.294
1985	2.94	50,130	140	162	158	263	331	402	410	378	302	252	176	145	260	0.292
1986	2.97	50,594	136	133	164	244	325	381	392	375	295	265	232	164	260	0.291
1987	2.99	51,342	148	151	168	285	351	375	378	376	332	263	165	130	261	0.292
1988	3.02	52,112	132	192	248	244	268	318	355	345	310	258	180	174	253	0.283
1989	3.04	52,677	141	150	133	220	256	290	298	288	239	202	184	155	213	0.239
1990	3.06	53,088	130	126	157	215	210	242	257	262	242	221	170	136	198	0.221
AVERAGE			136	146	163	233	303	355	368	356	308	244	176	146	245	0.275

1/ Number of services

2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.

3/ gpcd - gallons per capita daily

4/ afpca - acre-feet per capita annually

Note: Los Altos District consists of: Los Altos, Cupertino, Mountain View, Sunnyvale and Los Altos Hills.

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C-059168

COUNTY..SANTA CLARA
CITY....MILPITAS
SYSTEM #..... 43005
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 44

CITY CENSUS POPULATION
1980..... 37,820
1990..... 50,686

WATER AGENCY.....MILPITAS, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	11,764	Metered.....	457	Metered.....	310	Metered.....	951
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	9,000	9,000	94.0	100.0	110.0	131.0	189.0	204.0	217.0	234.0	197.0	172.0	127.0	112.0	1887.0
1981	9,500	9,500	109.0	99.0	109.0	157.0	219.0	265.0	267.0	237.0	206.0	158.0	114.0	116.0	2056.0
1982	10,000	10,000	115.0	114.0	118.0	165.0	234.0	254.0	287.0	273.0	234.0	182.0	144.0	136.0	2256.0
1983	10,500	10,500	130.0	128.0	138.0	165.0	192.0	263.0	300.0	300.0	263.0	190.0	144.0	141.0	2354.0
1984	10,784	10,784	144.0	145.0	182.0	205.0	288.0	321.0	352.0	324.0	294.0	215.0	161.0	162.0	2793.0
1985	11,307	11,307	158.0	181.0	166.0	231.0	304.0	344.0	339.0	344.0	266.0	242.0	197.0	196.0	2968.0
1986	11,703	11,703	203.0	182.0	208.0	250.0	315.0	355.0	366.0	370.0	276.0	283.0	228.0	176.0	3212.0
1987	11,999	11,999	201.0	172.0	199.0	290.0	348.0	361.0	392.0	351.0	335.0	276.0	192.0	206.0	3323.0
1988	12,337	12,337	181.0	211.0	248.0	279.0	268.0	292.0	297.0	300.0	295.0	231.0	173.0	194.0	2969.0
1989	12,734	12,734	170.0	164.0	184.0	204.0	249.0	330.0	326.0	347.0	274.0	246.0	213.0	219.0	2926.0
1990	12,963	12,963	183.0	180.0	213.0	250.0	292.0	297.0	308.0	324.0	269.0	248.0	236.0	199.0	2999.0

PER CAPITA WATER USE (gpcd)/3

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	ANNUALLY afpca /4
1980	4.20	37,820	80	91	94	115	161	180	185	200	174	147	112	96	137	0.153
1981	4.17	39,644	89	89	89	132	178	223	217	193	173	129	96	94	142	0.159
1982	4.14	41,438	90	98	92	133	182	204	223	213	188	142	116	106	149	0.167
1983	4.11	43,203	97	106	103	127	143	203	224	224	203	142	111	105	149	0.167
1984	4.09	44,056	105	113	133	155	211	243	258	237	222	157	122	119	174	0.195
1985	4.06	45,863	111	141	117	168	214	250	238	242	193	170	143	138	177	0.199
1986	4.03	47,127	139	138	142	177	216	251	251	253	195	194	161	120	187	0.209
1987	4.00	47,968	135	128	134	202	234	251	264	236	233	186	133	139	190	0.213
1988	3.97	48,959	119	149	163	190	177	199	196	198	201	152	118	128	166	0.186
1989	3.94	50,163	109	117	118	136	160	219	210	223	182	158	142	141	160	0.179
1990	3.91	50,686	116	127	136	164	186	195	196	206	177	158	155	127	162	0.182
AVERAGE			108	118	120	154	187	220	224	220	195	158	128	119	163	0.183

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059169

COUNTY..SANTA CLARA
CITY....MOUNTAIN VIEW
SYSTEM #..... 43007
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 44

WATER AGENCY.....MOUNTAIN VIEW, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 95
WELLS AND SPRINGS.. 5

SOURCE OF WATER (in percent):
PURCHASED..... 95
SELF SUPPLIED..... 5

CITY CENSUS POPULATION
1980..... 58,655
1990..... 67,460

SERVICE CONNECTIONS /1

RESIDENTIAL:	COMMERCIAL:	INDUSTRIAL:	GOVERNMENTAL:
Metered..... 12,732	Metered..... 1,234	Metered..... 463	Metered..... 640
Flat Rate..... 0	Flat Rate... 0	Flat Rate... 0	Flat Rate... 0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	12,471	12,471	318.0	306.0	332.0	378.0	446.0	495.0	520.0	524.0	468.0	451.0	368.0	319.0	4925.0
1981	12,966	12,966	328.0	295.0	324.0	401.0	481.0	551.0	544.0	516.0	460.0	408.0	317.0	307.0	4932.0
1982	13,142	13,142	316.0	299.0	332.0	356.0	508.0	564.0	542.0	567.0	475.0	438.0	324.0	309.0	5030.0
1983	13,317	13,317	323.0	281.0	301.0	349.0	454.0	556.0	595.0	580.0	537.0	440.0	344.0	321.0	5081.0
1984	13,493	13,493	330.0	323.0	407.0	431.0	532.0	570.0	611.0	578.0	524.0	431.0	320.0	294.0	5351.0
1985	13,668	13,668	312.0	307.0	335.0	433.0	516.0	536.0	573.0	545.0	462.0	419.0	311.0	279.0	5028.0
1986	13,934	13,934	286.0	253.0	304.0	400.0	502.0	539.0	591.0	543.0	441.0	421.0	363.0	306.0	4949.0
1987	14,200	14,200	307.0	287.0	336.0	469.0	522.0	555.0	588.0	573.0	506.0	444.0	306.0	285.0	5178.0
1988	14,814	14,814	296.0	328.0	417.0	407.0	435.0	466.0	503.0	487.0	449.0	369.0	293.0	305.0	4755.0
1989	14,654	14,654	270.0	268.0	301.0	356.0	418.0	466.0	494.0	477.0	399.0	361.0	311.0	293.0	4414.0
1990	14,715	14,715	298.0	249.0	315.0	369.0	409.0	425.0	468.0	458.0	409.0	381.0	320.0	285.0	4386.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.70	58,655	175	180	183	215	245	281	286	288	266	248	209	175	230	0.258
1981	4.69	60,829	174	173	172	220	255	302	288	274	252	216	174	163	222	0.249
1982	4.68	61,498	166	174	174	193	266	306	284	297	257	230	176	162	224	0.251
1983	4.67	62,159	168	161	156	187	236	298	309	301	288	228	184	167	224	0.251
1984	4.66	62,820	169	177	209	229	273	302	314	297	278	221	170	151	233	0.261
1985	4.64	63,472	159	173	170	227	262	281	291	277	243	213	163	142	217	0.243
1986	4.63	64,542	143	140	152	207	251	278	295	271	228	210	187	153	210	0.235
1987	4.62	65,605	151	156	165	238	257	282	289	282	257	218	155	140	216	0.242
1988	4.61	68,266	140	166	197	199	206	228	238	230	219	174	143	144	191	0.214
1989	4.60	67,355	129	142	144	176	200	231	237	228	197	173	154	140	180	0.201
1990	4.58	67,460	142	132	151	182	196	210	224	219	202	182	158	136	178	0.200
AVERAGE			156	161	170	207	241	273	278	270	244	210	170	152	211	0.237

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059170

COUNTY..SANTA CLARA
CITY....PALO ALTO
SYSTEM #..... 43009
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 44

CITY CENSUS POPULATION
1980..... 55,300
1990..... 56,000

WATER AGENCY.....PALO ALTO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	9,445	Metered.....	4,180	Metered.....	3,211	Metered.....	1,900
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	18,799	18,799	271.0	271.0	317.0	404.0	494.0	556.0	575.0	601.0	394.0	465.0	372.0	305.0	5025.0
1981	18,819	18,819	305.0	281.0	295.0	442.0	572.0	611.0	665.0	602.0	539.0	427.0	301.0	288.0	5328.0
1982	18,846	18,846	279.0	265.0	292.0	283.0	548.0	559.0	582.0	601.0	444.0	386.0	299.0	277.0	4815.0
1983	18,860	18,860	292.0	275.0	295.0	321.0	477.0	623.0	700.0	670.0	611.0	474.0	337.0	301.0	5376.0
1984	18,893	18,893	308.0	323.0	429.0	473.0	667.0	659.0	708.0	698.0	638.0	475.0	326.0	288.0	5992.0
1985	18,962	18,962	313.0	333.0	402.0	489.0	508.0	655.0	688.0	664.0	549.0	490.0	356.0	314.0	5761.0
1986	18,989	18,989	322.0	223.0	382.0	480.0	514.0	528.0	666.0	665.0	588.0	590.0	449.0	361.0	5768.0
1987	18,952	18,952	348.0	319.0	387.0	520.0	620.0	639.0	671.0	665.0	579.0	492.0	327.0	285.0	5852.0
1988	18,958	18,958	291.0	351.0	473.0	429.0	479.0	530.0	634.0	685.0	465.0	420.0	238.0	292.0	5287.0
1989	18,839	18,839	270.0	258.0	273.0	363.0	465.0	545.0	593.0	585.0	446.0	352.0	282.0	300.0	4732.0
1990	18,912	18,912	292.0	255.0	318.0	403.0	401.0	436.0	469.0	470.0	422.0	401.0	324.0	274.0	4465.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.94	55,300	158	169	185	244	288	335	335	351	237	271	224	178	249	0.279
1981	2.94	55,395	178	181	172	266	333	368	387	351	324	249	181	168	264	0.295
1982	2.95	55,512	162	170	170	170	318	336	338	349	267	224	180	161	238	0.266
1983	2.95	55,589	169	177	171	192	277	374	406	389	366	275	202	175	265	0.297
1984	2.95	55,723	178	200	248	283	386	394	410	404	382	275	195	167	295	0.330
1985	2.95	55,964	180	213	232	291	293	390	397	383	327	282	212	181	282	0.316
1986	2.95	56,080	185	142	220	285	296	314	383	383	349	339	267	208	282	0.316
1987	2.96	56,008	200	203	223	309	357	380	386	383	345	283	195	164	286	0.321
1988	2.96	56,063	167	216	272	255	276	315	365	394	276	242	142	168	258	0.289
1989	2.96	55,747	156	165	158	217	269	326	343	339	267	204	169	174	233	0.260
1990	2.96	56,000	168	163	183	240	231	260	270	271	251	231	193	158	218	0.245
AVERAGE			173	182	203	250	302	345	366	363	308	261	196	173	261	0.292

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059171

COUNTY..SANTA CLARA
CITY....EVERGREEN ZONE
SYSTEM #..... 43020
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 44

CITY CENSUS POPULATION
1980..... 50,000
1990..... 70,000

WATER AGENCY.....SAN JOSE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 85
WELLS AND SPRINGS.. 15

SOURCE OF WATER (in percent):
PURCHASED..... 85
SELF SUPPLIED..... 15

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	12,727	Metered.....	1,993	Metered.....	NA	Metered.....	614
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	10,863	10,861	112.0	100.0	112.0	180.0	250.0	280.0	290.0	275.0	230.0	170.0	120.0	115.0	2234.0
1981	11,310	11,309	113.0	99.0	112.0	188.0	236.0	294.0	293.0	277.0	234.0	170.0	117.0	114.0	2247.0
1982	11,747	11,754	110.0	104.0	110.0	137.0	255.0	259.0	283.0	273.0	214.0	175.0	118.0	117.0	2155.0
1983	12,204	12,200	118.0	102.0	115.0	145.0	212.0	284.0	311.0	292.0	268.0	196.0	133.0	128.0	2304.0
1984	12,651	12,645	127.0	130.0	166.0	209.0	304.0	322.0	355.0	330.0	314.0	209.0	141.0	143.0	2750.0
1985	13,098	13,096	142.0	151.0	160.0	237.0	304.0	352.0	369.0	351.0	271.0	247.0	176.0	162.0	2922.0
1986	13,334	13,332	153.0	140.0	180.0	239.0	334.0	372.0	392.0	366.0	277.0	272.0	234.0	180.0	3139.0
1987	14,040	14,038	172.0	152.0	184.0	296.0	353.0	370.0	384.0	391.0	330.0	282.0	176.0	87.0	3177.0
1988	14,688	14,686	172.0	207.0	264.0	258.0	288.0	345.0	417.0	378.0	326.0	296.0	201.0	190.0	3342.0
1989	15,011	15,011	173.0	181.0	232.0	254.0	286.0	325.0	386.0	364.0	314.0	285.0	204.0	188.0	3192.0
1990	15,334	15,332	173.0	155.0	199.0	249.0	284.0	305.0	355.0	350.0	302.0	274.0	207.0	186.0	3039.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.60	50,009	72	69	72	120	161	187	187	177	153	110	80	74	122	0.137
1981	4.60	52,024	70	68	69	120	146	188	182	172	150	105	75	71	118	0.133
1982	4.60	53,990	66	69	66	85	152	160	169	163	132	105	73	70	109	0.122
1983	4.59	56,043	68	65	66	86	122	169	179	168	159	113	79	74	113	0.126
1984	4.59	58,048	71	77	92	120	169	185	197	183	180	116	81	79	130	0.145
1985	4.58	60,049	76	90	86	132	163	195	198	189	150	133	98	87	133	0.149
1986	4.58	61,081	81	82	95	130	176	203	207	193	151	144	128	95	141	0.158
1987	4.58	64,261	86	84	92	154	177	192	193	196	171	142	91	44	135	0.152
1988	4.57	67,171	83	106	127	128	138	171	200	182	162	142	100	91	136	0.153
1989	4.57	68,591	81	94	109	123	135	158	182	171	153	134	99	88	127	0.143
1990	4.57	70,009	80	79	92	119	131	145	164	161	144	126	99	86	119	0.133
AVERAGE			76	80	88	120	152	178	187	178	155	124	91	78	126	0.141

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
Note: 1980 data is estimated.

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C-059172

COUNTY..SANTA CLARA
CITY....SAN JOSE, ET AL
SYSTEM #..... 43011
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 44

CITY CENSUS POPULATION
1980..... 712,477
1990..... 873,714

WATER AGENCY.....SAN JOSE WATER COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 55
WELLS AND SPRINGS.. 45

SOURCE OF WATER (in percent):
PURCHASED..... 47
SELF SUPPLIED..... 53

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	181,669	Metered.....	18,838	Metered.....	82	Metered.....	1,413
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	184,349	184,349	2254.0	2183.0	2516.0	3071.0	4044.0	4771.0	4894.0	5109.0	4256.0	3785.0	3005.0	2460.0	42348.0
1981	187,963	187,963	2443.0	2153.0	2367.0	3541.0	4480.0	5520.0	5496.0	5177.0	4359.0	3429.0	2426.0	2329.0	43720.0
1982	190,158	190,158	2587.0	2162.0	2457.0	2825.0	4065.0	5126.0	5569.0	5224.0	4732.0	3550.0	2569.0	2493.0	43359.0
1983	191,553	191,553	2355.0	2195.0	2371.0	2795.0	4714.0	4758.0	5146.0	5135.0	4085.0	3436.0	2427.0	2489.0	41906.0
1984	192,357	192,357	2564.0	2543.0	3313.0	3864.0	5214.0	5320.0	5886.0	5450.0	5006.0	3605.0	2681.0	2543.0	47989.0
1985	193,196	193,196	2642.0	2673.0	2868.0	3813.0	4871.0	5641.0	5816.0	5550.0	4411.0	4006.0	2977.0	2735.0	48003.0
1986	194,840	194,840	2651.0	2453.0	3009.0	3824.0	5007.0	5571.0	5927.0	5615.0	4319.0	4143.0	3506.0	2959.0	48984.0
1987	196,102	196,102	2891.0	2593.0	3033.0	4446.0	5341.0	5593.0	5785.0	5792.0	5022.0	4260.0	2877.0	2780.0	50413.0
1988	197,493	197,493	2738.0	3184.0	4008.0	3880.0	4352.0	4954.0	5762.0	5460.0	4792.0	4219.0	3033.0	2968.0	49350.0
1989	199,780	199,780	2762.0	2553.0	2661.0	3311.0	3873.0	4199.0	4420.0	4290.0	3631.0	3295.0	2888.0	2823.0	40706.0
1990	201,150	201,150	2610.0	2302.0	2934.0	3387.0	3744.0	3902.0	4408.0	4423.0	3936.0	3734.0	3027.0	2747.0	41154.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.86	712,477	102	106	114	144	183	223	222	231	199	171	141	111	163	0.182
1981	3.91	735,444	107	105	104	160	197	250	241	227	198	150	110	102	163	0.182
1982	3.96	753,136	111	103	105	125	174	227	239	224	209	152	114	107	158	0.177
1983	4.01	767,832	99	102	100	121	198	207	216	216	177	144	105	105	150	0.167
1984	4.06	780,264	106	112	137	165	216	227	243	225	214	149	115	105	169	0.189
1985	4.10	792,917	107	120	117	160	198	237	237	226	185	163	125	111	166	0.186
1986	4.15	808,993	106	108	120	158	200	230	236	224	178	165	144	118	166	0.186
1987	4.20	823,621	113	112	119	180	209	226	227	227	203	167	116	109	168	0.188
1988	4.25	838,919	105	131	154	154	167	197	222	210	190	162	121	114	161	0.181
1989	4.30	858,198	104	106	100	129	146	163	166	161	141	124	112	106	130	0.146
1990	4.34	873,714	96	94	108	129	138	149	163	163	150	138	115	101	129	0.145
AVERAGE			105	109	116	148	184	212	219	212	186	153	120	108	156	0.175

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 1 7 3

C-059173

COUNTY..SANTA CLARA
CITY....SANTA CLARA
SYSTEM #..... 43012
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 44

WATER AGENCY.....SANTA CLARA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 38
WELLS AND SPRINGS.. 62

SOURCE OF WATER (in percent):
PURCHASED..... 38
SELF SUPPLIED..... 62

CITY CENSUS POPULATION
1980..... 87,633
1990..... 93,800

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	20,370	Metered.....	2,534	Metered.....	465	Metered.....	333
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	23,125	23,125	461.0	492.0	520.0	724.0	703.0	1005.0	816.0	863.0	941.0	709.0	738.0	495.0	8467.0
1981	23,343	23,343	599.0	513.0	528.0	669.0	929.0	892.0	906.0	864.0	987.0	682.0	638.0	486.0	8693.0
1982	23,455	23,455	588.0	531.0	543.0	571.0	923.0	873.0	841.0	879.0	957.0	704.0	658.0	486.0	8554.0
1983	23,295	23,295	617.0	475.0	544.0	637.0	902.0	959.0	906.0	959.0	1110.0	754.0	745.0	550.0	9158.0
1984	22,431	22,431	683.0	629.0	775.0	819.0	1034.0	1063.0	1114.0	1087.0	1038.0	843.0	667.0	617.0	10369.0
1985	22,566	22,566	656.0	693.0	695.0	790.0	977.0	1068.0	1073.0	1022.0	893.0	841.0	668.0	581.0	9957.0
1986	22,898	22,898	647.0	582.0	707.0	815.0	988.0	1067.0	1135.0	1092.0	913.0	855.0	771.0	654.0	10226.0
1987	22,906	22,906	628.0	612.0	750.0	934.0	1010.0	1146.0	1150.0	1143.0	1018.0	960.0	676.0	643.0	10670.0
1988	22,959	22,959	694.0	722.0	922.0	819.0	944.0	1040.0	1083.0	1009.0	934.0	861.0	682.0	646.0	10356.0
1989	22,896	22,896	636.0	581.0	591.0	682.0	715.0	768.0	804.0	813.0	735.0	616.0	591.0	568.0	8100.0
1990	23,031	23,031	549.0	506.0	657.0	628.0	729.0	749.0	747.0	810.0	770.0	697.0	598.0	548.0	7988.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.79	87,633	170	194	191	275	259	382	300	318	358	261	281	182	265	0.296
1981	3.82	89,120	217	206	191	250	336	334	328	313	369	247	239	176	267	0.299
1982	3.85	90,212	210	210	194	211	330	323	301	314	354	252	243	174	260	0.291
1983	3.87	90,257	221	188	194	235	322	354	324	343	410	269	275	197	278	0.311
1984	3.90	87,544	252	248	286	312	381	405	410	401	395	311	254	227	325	0.363
1985	3.93	88,710	239	279	253	297	355	401	390	372	336	306	251	211	308	0.344
1986	3.96	90,664	230	229	252	300	352	392	404	389	336	304	283	233	309	0.346
1987	3.99	91,345	222	239	265	341	357	418	406	404	371	339	247	227	320	0.358
1988	4.02	92,206	243	270	323	296	330	376	379	353	338	301	247	226	308	0.345
1989	4.04	92,602	222	224	206	245	249	276	280	283	265	215	213	198	240	0.268
1990	4.07	93,800	189	193	226	223	251	266	257	279	274	240	213	188	233	0.261
AVERAGE			219	225	235	271	320	357	344	342	346	277	250	204	283	0.317

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059174

COUNTY..SANTA CLARA
CITY....SUNNYVALE
SYSTEM #..... 43014
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 44

WATER AGENCY.....SUNNYVALE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 80
WELLS AND SPRINGS.. 20

SOURCE OF WATER (in percent):
PURCHASED..... 80
SELF SUPPLIED..... 20

CITY CENSUS POPULATION
1980..... 106,932
1990..... 117,229

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	24,180	Metered.....	1,362	Metered.....	553	Metered.....	824
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	26,403	26,403	571.0	564.0	617.0	756.0	887.0	1007.0	946.0	985.0	885.0	821.0	659.0	615.0	9313.0
1981	26,500	26,500	578.0	526.0	540.0	741.0	892.0	916.0	1096.0	900.0	878.0	734.0	555.0	541.0	8897.0
1982	26,550	26,550	505.0	527.0	514.0	647.0	896.0	1019.0	985.0	979.0	856.0	710.0	540.0	577.0	8755.0
1983	26,575	26,575	551.0	500.0	528.0	630.0	808.0	1055.0	1075.0	1061.0	943.0	756.0	582.0	574.0	9063.0
1984	26,800	26,800	592.0	574.0	783.0	809.0	1004.0	1116.0	1121.0	1110.0	953.0	759.0	646.0	537.0	10004.0
1985	26,850	26,850	628.0	612.0	620.0	829.0	1022.0	1076.0	1113.0	1055.0	868.0	848.0	602.0	564.0	9837.0
1986	26,900	26,900	621.0	533.0	619.0	849.0	947.0	1055.0	1088.0	1095.0	931.0	855.0	790.0	600.0	9983.0
1987	27,000	27,000	610.0	580.0	633.0	876.0	1042.0	1145.0	1145.0	1022.0	962.0	881.0	602.0	587.0	10085.0
1988	27,088	27,088	566.0	649.0	770.0	793.0	803.0	873.0	997.0	911.0	863.0	742.0	606.0	588.0	9161.0
1989	27,546	27,546	547.0	499.0	530.0	624.0	705.0	782.0	802.0	815.0	683.0	639.0	577.0	547.0	7750.0
1990	27,434	27,434	491.0	441.0	561.0	617.0	667.0	770.0	792.0	805.0	716.0	678.0	576.0	492.0	7606.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.05	106,932	172	182	186	236	268	314	285	297	276	248	205	186	239	0.267
1981	4.07	107,916	173	174	161	229	267	283	328	269	271	219	171	162	226	0.253
1982	4.09	108,712	150	173	153	198	266	312	292	290	262	211	166	171	221	0.247
1983	4.12	109,408	162	163	156	192	238	321	317	313	287	223	177	169	227	0.254
1984	4.14	110,932	172	178	228	243	292	335	326	323	286	221	194	156	247	0.277
1985	4.16	111,738	181	196	179	247	295	321	321	305	259	245	180	163	241	0.270
1986	4.18	112,546	178	169	177	251	271	312	312	314	276	245	234	172	243	0.272
1987	4.21	113,567	173	182	180	257	296	336	325	290	282	250	177	167	243	0.272
1988	4.23	114,542	159	195	217	231	226	254	281	257	251	209	176	166	219	0.245
1989	4.25	117,093	151	152	146	178	194	223	221	225	194	176	164	151	181	0.203
1990	4.27	117,229	135	134	154	175	184	219	218	222	204	187	164	135	178	0.199
AVERAGE			164	173	176	222	254	294	293	282	259	221	183	163	224	0.251

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059175

COUNTY.. ALAMEDA
CITY....LIVERMORE
SYSTEM #..... 1003
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 45

WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY..... X
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 65
WELLS AND SPRINGS.. 35

SOURCE OF WATER (in percent):
PURCHASED..... 65
SELF SUPPLIED..... 35

CITY CENSUS POPULATION
1980..... 42,174
1990..... 56,741

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	12,831	Metered.....	684	Metered.....	6	Metered.....	128
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	12,665	12,665	111.0	111.0	136.0	165.0	230.0	269.0	286.0	286.0	231.0	195.0	143.0	111.0	2274.0
1981	12,706	12,706	107.0	100.0	113.0	181.0	247.0	310.0	322.0	287.0	237.0	172.0	108.0	108.0	2292.0
1982	12,757	12,757	112.0	104.0	110.0	139.0	258.0	282.0	319.0	321.0	227.0	190.0	121.0	124.0	2307.0
1983	12,881	12,881	124.0	100.0	112.0	135.0	210.0	292.0	404.0	313.0	274.0	191.0	135.0	126.0	2416.0
1984	13,133	13,133	127.9	125.5	167.6	208.0	297.9	323.6	404.0	313.0	274.0	191.0	135.0	126.0	2693.5
1985	13,236	13,236	126.0	130.0	145.0	212.0	291.0	356.0	380.0	341.0	319.0	198.0	130.0	126.0	2754.0
1986	13,398	13,398	121.0	110.0	144.0	204.0	279.0	332.0	366.0	347.0	260.0	235.0	186.0	134.0	2718.0
1987	13,430	13,430	130.0	106.0	137.0	242.0	315.0	343.0	356.0	358.0	316.0	256.0	134.0	129.0	2822.0
1988	13,644	13,644	131.0	158.0	206.0	205.0	255.0	300.0	366.0	343.0	312.0	241.0	152.0	144.0	2813.0
1989	13,738	13,738	135.0	126.0	135.0	214.0	277.0	335.0	375.0	361.0	275.0	230.0	199.0	180.0	2842.0
1990	17,345	14,000	162.0	138.0	161.0	229.0	264.0	299.0	359.0	349.0	299.0	249.0	172.0	117.0	2798.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.33	42,174	85	91	104	130	176	213	219	219	183	149	113	85	148	0.165
1981	3.40	43,229	80	83	84	140	184	239	240	214	183	128	83	81	145	0.163
1982	3.47	44,325	82	84	80	105	188	212	232	234	171	138	91	90	143	0.160
1983	3.55	45,687	88	78	79	98	148	213	285	221	200	135	98	89	145	0.162
1984	3.62	47,530	87	91	114	146	202	227	274	212	192	130	95	86	155	0.174
1985	3.69	48,860	83	95	96	145	192	243	251	225	218	131	89	83	154	0.173
1986	3.76	50,427	77	78	92	135	178	219	234	222	172	150	123	86	148	0.165
1987	3.84	51,518	81	73	86	157	197	222	223	224	204	160	87	81	150	0.168
1988	3.91	53,325	79	102	125	128	154	188	221	207	195	146	95	87	145	0.162
1989	3.98	54,686	80	82	80	130	163	204	221	213	168	136	121	106	142	0.159
1990	4.05	70,298	74	70	74	109	121	142	165	160	142	114	82	54	109	0.122
AVERAGE			81	84	92	129	173	211	233	214	184	138	98	84	144	0.161

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059176

COUNTY.. ALAMEDA
CITY....DUBLIN/SAN RAMON
SYSTEM #..... 1009
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 45

WATER AGENCY.....DUBLIN/SAN RAMON CSD
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 13,496
1990..... 23,229

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5,517	Metered.....	302	Metered.....	NA	Metered.....	214
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,050	4,050	36.0	37.0	42.0	52.0	68.0	89.0	76.0	99.0	83.0	77.0	52.0	40.0	751.0
1981	4,167	4,167	39.0	35.0	45.0	62.0	85.0	112.0	115.0	107.0	84.0	61.0	44.0	40.0	829.0
1982	4,283	4,283	42.0	36.0	41.0	48.0	88.0	88.0	99.0	104.0	75.0	64.0	43.0	42.0	770.0
1983	4,400	4,400	42.0	36.0	43.0	50.0	65.0	118.0	115.0	116.0	100.0	73.0	51.0	47.0	856.0
1984	4,550	4,550	45.0	43.0	57.0	67.0	104.0	117.0	136.0	127.0	115.0	67.0	44.0	50.0	972.0
1985	5,164	5,164	51.0	52.0	58.0	76.0	102.0	112.0	133.0	106.0	87.0	78.0	65.0	57.0	977.0
1986	5,686	5,686	57.0	53.0	65.0	88.0	115.0	135.0	148.0	142.0	108.0	105.0	88.0	69.0	1173.0
1987	5,802	5,802	66.0	58.0	68.0	98.0	118.0	131.0	136.0	144.0	123.0	103.0	85.0	58.0	1188.0
1988	5,914	5,914	57.0	70.0	89.0	92.0	105.0	122.0	147.0	143.0	132.0	106.0	70.0	63.0	1196.0
1989	5,963	5,963	60.0	55.0	61.0	93.0	126.0	138.0	165.0	160.0	127.0	101.0	86.0	78.0	1250.0
1990	6,014	6,014	70.0	61.0	79.0	108.0	122.0	132.0	156.0	155.0	134.0	118.0	89.0	74.0	1298.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.33	13,496	86	95	100	128	163	220	182	237	205	184	128	96	152	0.171
1981	3.39	14,107	89	89	103	147	194	265	263	245	198	139	104	91	161	0.180
1982	3.44	14,727	92	87	90	109	193	199	217	228	170	140	97	92	143	0.160
1983	3.49	15,362	88	84	90	108	136	256	241	244	217	153	111	99	153	0.171
1984	3.54	16,127	90	92	114	138	208	242	272	254	238	134	91	100	165	0.185
1985	3.60	18,577	89	100	101	136	177	201	231	184	156	135	117	99	144	0.161
1986	3.65	20,756	89	91	101	141	179	217	230	221	173	163	141	107	155	0.173
1987	3.70	21,487	99	96	102	152	177	203	204	216	191	155	132	87	151	0.170
1988	3.76	22,216	83	109	129	138	152	183	213	208	198	154	105	91	147	0.165
1989	3.81	22,716	85	86	87	136	179	203	234	227	186	143	126	111	151	0.169
1990	3.86	23,229	97	94	110	155	169	189	217	215	192	164	128	103	153	0.171
AVERAGE			90	93	102	135	175	216	228	225	193	151	116	98	152	0.171

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059177

COUNTY.. ALAMEDA
CITY....PLEASANTON
SYSTEM #..... 1008
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 45

CITY CENSUS POPULATION
1980..... 35,160
1990..... 50,570

WATER AGENCY.....PLEASANTON, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 68
WELLS AND SPRINGS.. 32

SOURCE OF WATER (in percent):
PURCHASED..... 68
SELF SUPPLIED..... 32

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	15,058	Metered.....	754	Metered.....	37	Metered.....	226
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	396

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	10,013	9,764	105.0	104.0	123.0	159.0	208.0	262.0	289.0	288.0	239.0	204.0	154.0	117.0	2252.0
1981	10,139	9,883	110.0	100.0	115.0	179.0	246.0	350.0	360.0	310.0	241.0	172.0	117.0	117.0	2417.0
1982	10,336	10,078	116.0	109.0	129.0	141.0	262.0	281.0	319.0	328.0	227.0	189.0	117.0	122.0	2340.0
1983	10,616	10,356	124.0	105.0	121.0	142.0	217.0	306.0	345.0	343.0	333.0	221.0	142.0	119.0	2518.0
1984	11,464	11,202	124.0	138.0	192.0	234.0	358.0	408.0	455.0	423.0	389.0	229.0	148.0	142.0	3240.0
1985	12,804	12,542	143.0	160.0	188.0	269.0	381.0	478.0	503.0	469.0	371.0	281.0	163.0	148.0	3554.0
1986	13,485	13,223	152.0	132.0	167.0	271.0	394.0	464.0	514.0	488.0	368.0	336.0	252.0	190.0	3728.0
1987	14,151	13,889	167.0	157.0	195.0	349.0	440.0	508.0	533.0	530.0	443.0	352.0	187.0	156.0	4017.0
1988	14,762	14,500	164.0	221.0	309.0	307.0	383.0	453.0	565.0	551.0	489.0	391.0	227.0	215.0	4275.0
1989	15,677	15,415	190.0	175.0	188.0	310.0	444.0	537.0	609.0	590.0	446.0	350.0	263.0	222.0	4324.0
1990	16,195	15,933	213.0	194.0	272.0	381.0	472.0	527.0	627.0	619.0	513.0	450.0	320.0	230.0	4818.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.60	36,057	94	99	110	147	186	242	259	258	221	183	142	105	171	0.192
1981	3.56	36,077	98	99	103	165	220	323	322	277	223	154	108	105	184	0.206
1982	3.52	36,337	103	107	115	129	233	258	283	291	208	168	107	108	176	0.198
1983	3.47	36,868	108	102	106	128	190	277	302	300	301	193	128	104	187	0.210
1984	3.43	39,323	102	121	158	198	294	346	373	347	330	188	125	116	226	0.253
1985	3.39	43,373	106	132	140	207	283	367	374	349	285	209	125	110	224	0.251
1986	3.34	45,104	109	105	119	200	282	343	368	349	272	240	186	136	226	0.254
1987	3.30	46,727	115	120	135	249	304	362	368	366	316	243	133	108	236	0.264
1988	3.26	48,114	110	158	207	213	257	314	379	369	339	262	157	144	243	0.273
1989	3.22	50,427	122	124	120	205	284	355	390	377	295	224	174	142	235	0.263
1990	3.17	51,402	134	135	171	247	296	342	393	388	333	282	208	144	257	0.288
AVERAGE			109	118	135	190	257	321	346	334	284	213	145	120	215	0.241

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059178

COUNTY..CONTRA COSTA
CITY.... ANTIOCH
SYSTEM #..... 7001
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 46

CITY CENSUS POPULATION
1980..... 43,559
1990..... 62,195

WATER AGENCY.....ANTIOCH, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 64
SELF SUPPLIED..... 36

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	17,893	Metered.....	563	Metered.....	16	Metered.....	74
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	13,037	13,016	120.0	116.0	137.0	168.0	229.0	255.0	277.0	280.0	240.0	204.0	166.0	140.0	2332.0
1981	13,414	13,393	139.0	124.0	139.0	212.0	284.0	332.0	277.0	280.0	241.0	204.0	167.0	135.0	2534.0
1982	13,628	13,607	136.0	119.0	127.0	157.0	273.0	278.0	335.0	318.0	272.0	193.0	154.0	135.0	2497.0
1983	13,917	13,900	142.0	124.0	138.0	153.0	243.0	315.0	314.0	306.0	234.0	199.0	141.0	140.0	2449.0
1984	14,395	14,380	140.0	134.0	178.0	230.0	323.0	342.0	335.0	319.0	280.0	211.0	149.0	139.0	2780.0
1985	14,762	14,748	151.0	154.0	172.0	242.0	330.0	370.0	396.0	360.0	296.0	253.0	187.0	165.0	3076.0
1986	15,304	15,293	169.0	151.0	186.0	275.0	340.0	385.0	404.0	384.0	304.0	274.0	241.0	190.0	3303.0
1987	15,804	15,793	187.0	153.0	200.0	308.0	350.0	400.0	412.0	408.0	312.0	295.0	295.0	215.0	3535.0
1988	16,304	16,804	192.0	171.0	192.0	303.0	368.0	412.0	431.0	414.0	345.0	300.0	257.0	210.0	3595.0
1989	17,552	17,541	197.0	188.0	183.0	297.0	386.0	424.0	449.0	420.0	378.0	304.0	218.0	205.0	3649.0
1990	18,801	18,791	214.0	198.0	259.0	326.0	400.0	425.0	446.0	452.0	341.0	283.0	251.0	228.0	3823.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.35	43,629	89	92	101	128	169	195	205	207	183	151	127	104	146	0.164
1981	3.34	44,842	100	99	100	158	204	247	199	201	179	147	124	97	155	0.173
1982	3.34	45,507	96	93	90	115	194	204	237	225	199	137	113	96	150	0.168
1983	3.34	46,421	99	95	96	110	169	226	218	213	168	138	101	97	145	0.162
1984	3.33	47,962	94	96	120	160	217	238	225	215	195	142	104	93	159	0.178
1985	3.33	49,131	99	112	113	164	217	251	260	236	201	166	127	108	172	0.192
1986	3.32	50,879	107	106	118	180	216	252	256	243	199	174	158	120	178	0.199
1987	3.32	52,483	115	104	123	196	215	254	253	251	198	181	187	132	185	0.207
1988	3.32	54,083	115	109	115	187	219	254	257	247	213	179	158	125	182	0.204
1989	3.31	58,159	109	115	102	170	214	243	249	233	217	169	125	114	172	0.193
1990	3.31	62,228	111	114	134	175	207	228	231	234	183	147	134	118	168	0.189
AVERAGE			103	103	110	158	204	236	236	228	194	157	133	110	165	0.184

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059179

COUNTY..CONTRA COSTA
CITY....CONCORD, ET AL
SYSTEM #..... 7003
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 46

CITY CENSUS POPULATION
1980..... 170,000
1990..... 190,000

WATER AGENCY.....CONTRA COSTA WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	50,169	Metered.....	2,613	Metered.....	19	Metered.....	204
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	45,832	45,832	468.0	462.0	544.0	686.0	890.0	1082.0	1166.0	1160.0	967.0	881.0	699.0	584.0	9589.0
1981	46,912	46,912	566.0	480.0	551.0	811.0	1143.0	1419.0	1418.0	1310.0	1087.0	808.0	576.0	567.0	10736.0
1982	47,440	47,440	484.0	421.0	474.0	664.0	1197.0	1190.0	1339.0	1337.0	1019.0	892.0	526.0	519.0	10062.0
1983	47,474	47,474	528.0	466.0	516.0	634.0	1001.0	1236.0	1383.0	1376.0	1220.0	868.0	578.0	552.0	10358.0
1984	48,960	48,960	578.0	555.0	748.0	920.0	1308.0	1373.0	1569.0	1445.0	1337.0	892.0	597.0	584.0	11906.0
1985	50,447	50,447	574.0	606.0	661.0	962.0	1269.0	1463.0	1594.0	1453.0	1164.0	1020.0	694.0	605.0	12065.0
1986	50,910	50,910	596.0	528.0	674.0	939.0	1270.0	1459.0	1584.0	1536.0	1165.0	1049.0	918.0	721.0	12439.0
1987	52,307	52,307	658.0	588.0	710.0	1151.0	1399.0	1504.0	1579.0	1564.0	1328.0	1065.0	635.0	596.0	12777.0
1988	53,006	53,006	611.0	701.0	946.0	911.0	1049.0	1174.0	1476.0	1385.0	1242.0	1013.0	686.0	646.0	11840.0
1989	54,208	54,208	615.0	558.0	584.0	890.0	1198.0	1336.0	1531.0	1404.0	1072.0	915.0	768.0	693.0	11564.0
1990	54,538	54,538	626.0	566.0	730.0	965.0	1130.0	1286.0	1486.0	1452.0	1274.0	1124.0	812.0	656.0	12107.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.71	170,000	89	94	103	135	169	212	221	220	190	167	137	111	155	0.173
1981	3.69	172,949	106	99	103	156	213	273	264	244	210	151	111	106	170	0.190
1982	3.66	173,826	90	86	88	127	222	228	248	248	195	166	101	96	159	0.178
1983	3.64	172,880	99	96	96	122	187	238	258	257	235	162	111	103	164	0.184
1984	3.62	177,188	105	108	136	173	238	258	286	263	252	162	112	106	184	0.206
1985	3.60	181,433	102	119	118	177	226	269	283	258	214	181	128	108	182	0.204
1986	3.57	181,951	106	104	119	172	225	267	281	272	213	186	168	128	187	0.210
1987	3.55	185,764	114	113	123	207	243	270	274	272	238	185	114	103	188	0.211
1988	3.53	187,052	105	129	163	162	181	209	255	239	221	175	122	111	173	0.194
1989	3.51	190,072	104	105	99	156	203	234	260	238	188	155	135	118	167	0.187
1990	3.48	190,000	106	106	124	169	192	226	252	247	224	191	142	111	175	0.196
AVERAGE			102	105	116	160	209	244	262	251	216	171	126	109	173	0.194

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059180

COUNTY..ALAMEDA,CONTRA COSTA WATER AGENCY.....EAST BAY MUNICIPAL UTILITY DIST. ORIGIN OF WATER (in percent):
CITY....OAKLAND, ET AL TYPE OF AGENCY.....PUBLIC WATER DISTRICT
SYSTEM #..... 1005 SURFACE WATER..... NA
HYDROLOGIC REGION..... SAN FRANCISCO BAY SYSTEM SERVES: WELLS AND SPRINGS.. NA
PLANNING SUBAREA #.....SOUTH BAY
DAU # ..... 46 47 ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... SOURCE OF WATER (in percent):
CITY CENSUS POPULATION PORTION OF THE CITY.....
1980..... 1043000 OTHER..... X PURCHASED..... NA
1990..... 1100000 SELF SUPPLIED..... NA

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	330636	Metered.....	19744	Metered.....	3927	Metered.....	3927
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	322236	322236	4513	4260	4862	5192	6117	6886	7309	7319	6443	6078	5125	4701	68805
1981	324936	324936	4641	4054	4591	5614	6795	8134	8078	7775	6783	5582	4514	4488	71049
1982	326840	326840	4621	4253	4573	4808	7055	7171	7769	7780	6577	5993	4541	4570	69711
1983	327029	327029	4676	4221	4700	5056	6322	7789	8604	8357	7624	6170	4810	5011	73340
1984	328748	328748	5025	4838	5744	6031	7862	8096	9200	8744	8050	6200	4912	4985	79687
1985	329406	329406	5009	4891	5249	6309	7760	8393	9049	8536	7088	6739	5261	4960	79244
1986	335000	335000	4920	4557	5294	6028	7670	8327	8899	8589	6981	6713	5934	5100	79012
1987	340001	340001	5072	4612	5256	7007	8095	8421	8687	8862	7842	6652	4887	4765	80158
1988	344546	344546	4846	5102	6053	5755	5964	5853	6684	6497	6005	5410	4297	4467	66933
1989	346466	346466	4333	3965	4204	4979	6211	6775	7505	7376	6284	5881	5168	5033	67714
1990	352676	352676	4741	4289	5176	5946	6418	6663	7599	7621	6887	6588	5322	5081	72331

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.24	1043000	140	141	150	166	189	220	226	226	206	188	164	145	181	0.202
1981	3.22	1047913	143	138	141	179	209	259	249	239	216	172	144	138	186	0.208
1982	3.21	1050205	142	145	140	153	217	228	239	239	209	184	144	140	182	0.204
1983	3.20	1046962	144	144	145	161	195	248	265	257	243	190	153	154	192	0.215
1984	3.19	1048594	155	159	177	192	242	257	283	269	256	191	156	153	208	0.233
1985	3.18	1046814	154	167	162	201	239	267	279	263	226	208	168	153	207	0.232
1986	3.17	1060647	150	153	161	189	233	262	271	261	219	204	186	155	204	0.229
1987	3.15	1072477	153	154	158	218	243	262	261	267	244	200	152	143	205	0.229
1988	3.14	1082756	144	162	180	177	178	180	199	194	185	161	132	133	169	0.190
1989	3.13	1084711	129	131	125	153	185	208	223	219	193	175	159	150	171	0.192
1990	3.12	1100000	139	139	152	180	188	202	223	223	209	193	161	149	180	0.202
AVERAGE			145	148	154	179	211	236	247	242	219	188	156	147	190	0.212

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059181

COUNTY..CONTRA COSTA
CITY....PITTSBURG
SYSTEM #..... 7008
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 46

CITY CENSUS POPULATION
1980..... 33,465
1990..... 47,564

WATER AGENCY.....PITTSBURG, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	12,715	Metered.....	519	Metered.....	23	Metered.....	89
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	2	Flat Rate...	1

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	10,547	10,529	126.0	107.0	117.0	142.0	191.0	215.0	230.0	245.0	212.0	193.0	156.0	122.0	2056.0
1981	10,669	10,651	125.0	102.0	113.0	165.0	233.0	285.0	296.0	269.0	236.0	189.0	137.0	132.0	2282.0
1982	10,790	10,772	122.0	112.0	118.0	133.0	227.0	228.0	265.0	266.0	204.0	127.0	123.0	119.0	2044.0
1983	10,912	10,894	115.0	103.0	112.0	130.0	194.0	253.0	284.0	277.0	247.0	188.0	125.0	123.0	2151.0
1984	11,215	11,194	126.0	118.0	150.0	182.0	263.0	286.0	325.0	318.0	273.0	193.0	140.0	124.0	2498.0
1985	11,385	11,365	131.0	136.0	148.0	197.0	276.0	293.0	317.0	291.0	239.0	215.0	142.0	136.0	2521.0
1986	11,735	11,720	155.0	151.0	144.0	191.0	265.0	304.0	321.0	314.0	243.0	226.0	202.0	165.0	2681.0
1987	11,848	11,833	167.0	140.0	151.0	224.0	346.0	303.0	383.0	303.0	288.0	291.0	164.0	138.0	2898.0
1988	11,854	11,838	162.0	174.0	219.0	210.0	243.0	278.0	352.0	329.0	298.0	240.0	199.0	209.0	2913.0
1989	12,097	12,081	203.0	176.0	182.0	247.0	332.0	369.0	334.0	343.0	385.0	249.0	269.0	240.0	3329.0
1990	12,313	12,296	256.0	184.0	184.0	268.0	250.0	248.0	331.0	352.0	301.0	277.0	230.0	185.0	3066.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.18	33,522	121	110	113	141	184	214	221	236	211	186	155	117	168	0.188
1981	3.25	34,646	116	105	105	159	217	274	276	250	227	176	132	123	180	0.202
1982	3.32	35,783	110	112	106	124	205	212	239	240	190	114	115	107	156	0.175
1983	3.39	36,941	100	100	98	117	169	228	248	242	223	164	113	107	160	0.179
1984	3.45	38,740	105	105	125	157	219	246	271	265	235	161	120	103	177	0.198
1985	3.52	40,113	105	121	119	164	222	243	255	234	199	173	118	109	172	0.193
1986	3.59	42,156	119	128	110	151	203	240	246	240	192	173	160	126	174	0.195
1987	3.66	43,379	124	115	112	172	257	233	285	225	221	216	126	103	183	0.205
1988	3.73	44,219	118	136	160	158	177	210	257	240	225	175	150	152	180	0.202
1989	3.80	45,960	142	137	128	179	233	268	234	241	279	175	195	168	198	0.222
1990	3.87	47,630	173	138	125	188	169	174	224	238	211	188	161	125	176	0.198
AVERAGE			121	119	118	155	205	231	250	241	219	173	140	122	175	0.196

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059182

COUNTY.. ALAMEDA
CITY....FREMONT, ET AL
SYSTEM #..... 1001
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 47

CITY CENSUS POPULATION
1980..... 203,500
1990..... 265,385

WATER AGENCY.....ALAMEDA COUNTY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 48
SELF SUPPLIED..... 52

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	46,216	Metered.....	6,698	Metered.....	4,689	Metered.....	9,377
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	53,560	53,560	587.0	566.0	648.0	771.0	988.0	1163.0	1197.0	1216.0	1050.0	952.0	777.0	674.0	10589.0
1981	55,360	55,360	656.0	577.0	643.0	852.0	1110.0	1370.0	1342.0	1286.0	1115.0	874.0	669.0	642.0	11136.0
1982	55,375	55,375	609.0	594.0	640.0	721.0	1202.0	1245.0	1297.0	1294.0	1049.0	920.0	658.0	671.0	10900.0
1983	55,948	55,948	690.0	610.0	641.0	750.0	1027.0	1321.0	1464.0	1405.0	1274.0	917.0	721.0	680.0	11500.0
1984	58,110	58,110	720.0	698.0	850.0	984.0	1366.0	1439.0	1617.0	1512.0	1396.0	967.0	734.0	737.0	13020.0
1985	59,510	59,510	758.0	760.0	852.0	1064.0	1370.0	1553.0	1678.0	1556.0	1293.0	1205.0	894.0	840.0	13823.0
1986	60,949	60,949	834.0	731.0	909.0	1167.0	1501.0	1641.0	1778.0	1690.0	1386.0	1252.0	1138.0	932.0	14959.0
1987	62,840	62,840	866.0	794.0	945.0	1372.0	1594.0	1661.0	1736.0	1757.0	1522.0	1316.0	930.0	862.0	15355.0
1988	64,898	64,898	881.0	990.0	1217.0	1180.0	1372.0	1428.0	1667.0	1588.0	1414.0	1221.0	899.0	895.0	14752.0
1989	68,140	68,140	854.0	797.0	890.0	1151.0	1416.0	1621.0	1757.0	1699.0	1385.0	1189.0	1040.0	994.0	14793.0
1990	66,980	66,980	933.0	844.0	1017.0	1233.0	1416.0	1478.0	1656.0	1648.0	1468.0	1408.0	1098.0	1008.0	15207.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.80	203,500	93	96	103	126	157	190	190	193	172	151	127	107	143	0.160
1981	3.82	211,240	100	98	98	134	170	216	205	196	176	133	106	98	144	0.162
1982	3.83	212,198	93	100	97	113	183	196	197	197	165	140	103	102	141	0.158
1983	3.85	215,304	103	101	96	116	154	205	219	211	197	137	112	102	146	0.164
1984	3.86	224,569	103	107	122	146	196	214	232	217	207	139	109	106	159	0.178
1985	3.88	230,947	106	118	119	154	191	224	234	217	187	168	129	117	164	0.184
1986	3.90	237,523	113	110	123	164	204	230	241	230	195	170	160	127	173	0.193
1987	3.91	245,915	114	115	124	186	209	225	228	230	206	173	126	113	171	0.192
1988	3.93	255,024	111	134	154	154	174	187	211	201	185	154	118	113	158	0.177
1989	3.95	268,873	102	106	107	143	170	201	211	204	172	143	129	119	151	0.169
1990	3.96	265,385	113	114	124	155	172	186	201	200	184	171	138	123	157	0.176
AVERAGE			105	109	115	145	180	207	215	209	186	153	123	112	155	0.174

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059183

COUNTY.. ALAMEDA
CITY.... HAYWARD
SYSTEM #..... 1006
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 47

CITY CENSUS POPULATION
1980..... 88,500
1990..... 111,498

WATER AGENCY.....HAYWARD, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	24,247	Metered.....	1,666	Metered.....	1,519	Metered.....	436
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	25,069	24,801	321.0	311.0	296.0	405.0	416.0	496.0	555.0	536.0	496.0	502.0	391.0	308.0	5033.0
1981	25,752	25,501	352.0	330.0	334.0	379.0	498.0	598.0	632.0	612.0	545.0	420.0	363.0	295.0	5358.0
1982	25,990	25,734	294.0	314.0	306.0	320.0	522.0	556.0	555.0	560.0	512.0	460.0	333.0	310.0	5042.0
1983	26,081	25,816	310.0	304.0	310.0	383.0	427.0	615.0	616.0	582.0	613.0	447.0	355.0	338.0	5300.0
1984	26,178	25,913	327.0	335.0	401.0	455.0	546.0	648.0	676.0	658.0	593.0	455.0	387.0	338.0	5819.0
1985	26,511	26,246	350.0	381.0	370.0	452.0	556.0	653.0	668.0	651.0	547.0	500.0	406.0	318.0	5852.0
1986	27,024	26,752	365.0	355.0	348.0	451.0	531.0	671.0	675.0	698.0	576.0	499.0	502.0	394.0	6065.0
1987	27,708	27,435	379.0	403.0	381.0	530.0	653.0	623.0	641.0	658.0	611.0	559.0	418.0	358.0	6214.0
1988	27,469	27,196	369.0	426.0	449.0	514.0	500.0	404.0	476.0	547.0	489.0	470.0	366.0	335.0	5345.0
1989	27,230	26,956	379.0	326.0	315.0	355.0	445.0	510.0	577.0	614.0	494.0	547.0	417.0	366.0	5345.0
1990	27,445	27,171	407.0	348.0	375.0	470.0	502.0	474.0	544.0	505.0	553.0	461.0	397.0	362.0	5398.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.57	89,456	116	120	107	151	150	185	200	193	185	181	146	111	154	0.173
1981	3.62	93,272	122	126	116	135	172	214	219	212	195	145	130	102	157	0.176
1982	3.68	95,525	99	117	103	112	176	194	187	189	179	155	116	105	145	0.162
1983	3.73	97,255	103	112	103	131	142	211	204	193	210	148	122	112	149	0.167
1984	3.78	99,017	107	117	131	153	178	218	220	214	200	148	130	110	161	0.180
1985	3.84	101,696	111	134	117	148	176	214	212	206	179	159	133	101	158	0.177
1986	3.89	105,110	112	121	107	143	163	213	207	214	183	153	159	121	158	0.177
1987	3.94	109,253	112	132	112	162	193	190	189	194	186	165	128	106	156	0.175
1988	4.00	109,781	108	134	132	156	147	123	140	161	148	138	111	98	133	0.149
1989	4.05	110,283	111	106	92	107	130	154	169	180	149	160	126	107	133	0.149
1990	4.10	112,622	117	110	107	139	144	140	156	145	164	132	118	104	131	0.147
AVERAGE			111	121	112	140	161	187	191	191	180	153	129	107	149	0.167

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059184

COUNTY..CONTRA COSTA
CITY....MARTINEZ
SYSTEM #..... 7006
HYDROLOGIC REGION..... SAN FRANCISCO BAY
PLANNING SUBAREA #.....SOUTH BAY
DAU # 47

CITY CENSUS POPULATION
1980..... 22,582
1990..... 31,808

WATER AGENCY.....MARTINEZ, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	7,937	Metered.....	372	Metered.....	52	Metered.....	248
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	78

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	8,307	6,907	82.0	65.0	84.0	116.0	154.0	195.0	166.0	171.0	144.0	125.0	112.0	96.0	1510.0
1981	8,349	6,944	83.0	66.0	85.0	121.0	159.0	199.0	167.0	170.0	143.0	126.0	109.0	94.0	1522.0
1982	8,391	6,981	81.0	63.0	82.0	110.0	148.0	190.0	164.0	172.0	144.0	124.0	115.0	97.0	1490.0
1983	8,477	7,060	71.0	74.0	76.0	104.0	114.0	199.0	167.0	155.0	135.0	136.0	88.0	96.0	1415.0
1984	8,587	7,167	88.0	85.0	85.0	122.0	165.0	245.0	194.0	187.0	214.0	121.0	105.0	102.0	1713.0
1985	8,799	7,369	95.0	81.0	105.0	131.0	182.0	207.0	227.0	206.0	167.0	145.0	103.0	92.0	1741.0
1986	8,913	7,378	101.0	87.0	101.0	157.0	197.0	207.0	219.0	208.0	159.0	146.0	125.0	106.0	1813.0
1987	9,082	7,531	101.0	87.0	101.0	157.0	197.0	207.0	220.0	218.0	189.0	158.0	101.0	99.0	1835.0
1988	8,850	7,347	105.0	105.0	144.0	144.0	156.0	171.0	204.0	191.0	171.0	143.0	126.0	82.0	1742.0
1989	8,681	7,255	99.0	93.0	98.0	128.0	173.0	196.0	204.0	191.0	171.0	143.0	126.0	82.0	1704.0
1990	9,019	7,484	97.0	94.0	108.0	137.0	156.0	170.0	223.0	206.0	157.0	140.0	115.0	99.0	1702.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.27	27,159	97	83	100	142	183	239	197	203	177	148	137	114	152	0.171
1981	3.37	28,115	95	84	98	143	182	236	192	195	170	145	129	108	148	0.166
1982	3.47	29,080	90	77	91	126	164	218	182	191	165	138	132	108	140	0.157
1983	3.56	30,209	76	87	81	115	122	220	178	166	149	145	97	103	128	0.144
1984	3.66	31,443	90	93	87	129	169	260	199	192	227	124	111	105	149	0.167
1985	3.76	33,082	93	87	102	132	177	209	221	201	168	141	104	90	144	0.161
1986	3.86	34,385	95	90	95	152	185	201	205	195	154	137	121	99	144	0.162
1987	3.96	35,928	91	86	91	146	177	192	198	196	175	142	94	89	140	0.157
1988	4.05	35,878	94	101	129	134	140	159	183	172	159	129	117	74	133	0.149
1989	4.15	36,044	89	92	88	118	155	181	183	171	158	128	117	73	130	0.145
1990	4.25	38,332	82	88	91	119	131	148	188	173	137	118	100	83	122	0.136
AVERAGE			90	88	96	132	162	206	193	187	167	136	114	95	139	0.156

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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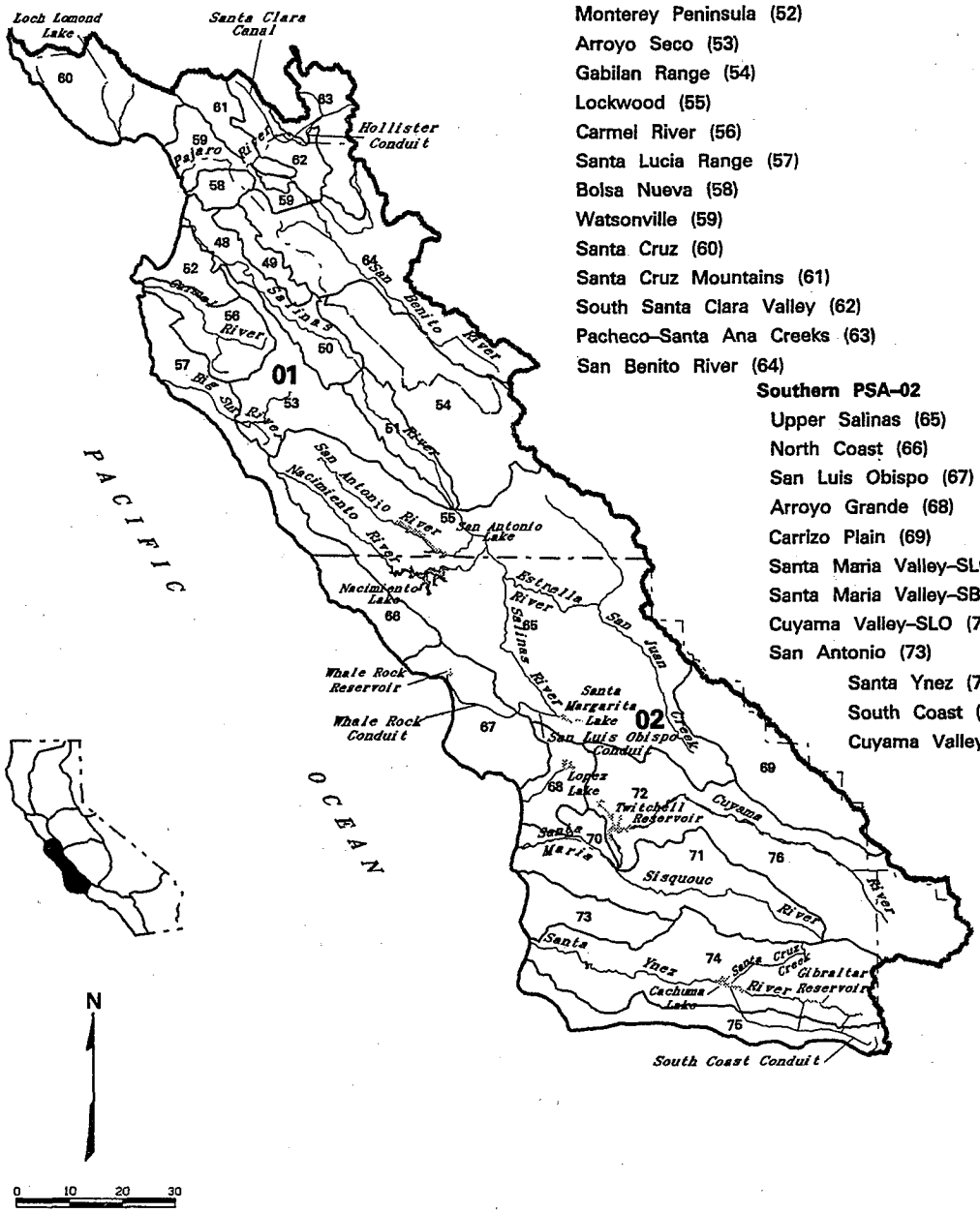
Figure A-5. Central Coast Region



Northern PSA–01

- Pressure (48)
- East Side (49)
- Forebay (50)
- Upper Valley (51)
- Monterey Peninsula (52)
- Arroyo Seco (53)
- Gabilan Range (54)
- Lockwood (55)
- Carmel River (56)
- Santa Lucia Range (57)
- Bolsa Nueva (58)
- Watsonville (59)
- Santa Cruz (60)
- Santa Cruz Mountains (61)
- South Santa Clara Valley (62)
- Pacheco–Santa Ana Creeks (63)
- San Benito River (64)

Southern PSA–02

- Upper Salinas (65)
- North Coast (66)
- San Luis Obispo (67)
- Arroyo Grande (68)
- Carrizo Plain (69)
- Santa Maria Valley–SLO (70)
- Santa Maria Valley–SB (71)
- Cuyama Valley–SLO (72)
- San Antonio (73)
- Santa Ynez (74)
- South Coast (75)
- Cuyama Valley–SB (76)

PLANNING SUBAREAS
AND DETAILED ANALYSIS UNITS

C—059186

C-059186

Table A-5. Central Coast Region Water Production and Per Capita Water Use

COUNTY..MONTEREY
CITY.... SALINAS
SYSTEM #..... 27010
HYDROLOGIC REGION .....CENTRAL COAST
PLANNING SUBAREA #.....NORTHERN
DAU # 48

WATER AGENCY.....CALIFORNIA WATER SERVICE CO.
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... NA
SELF SUPPLIED..... NA

CITY CENSUS POPULATION
1980..... 80,850
1990..... 109,500

SERVICE CONNECTIONS: 2/

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	21,744	Metered.....	2,014	Metered.....	36	Metered.....	187
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS 3/ SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	19,350	19,350	241.0	239.0	264.0	343.0	403.0	461.0	456.0	456.0	422.0	402.0	340.0	290.0	4317.0
1981	19,614	19,614	290.0	248.0	266.0	336.0	445.0	527.0	510.0	469.0	452.0	379.0	295.0	265.0	4482.0
1982	20,723	/5	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	20,982		-	-	-	-	-	-	-	-	-	-	-	-	-
1984	21,385		-	-	-	-	-	-	-	-	-	-	-	-	-
1985	21,982		289.0	289.0	299.0	389.0	508.0	560.0	567.0	568.0	518.0	469.0	354.0	335.0	5145.0
1986	22,311		329.0	296.0	345.0	410.0	549.0	587.0	593.0	561.0	494.0	452.0	427.0	362.0	5405.0
1987	19,405	17,644	280.0	247.0	279.0	385.0	439.0	465.0	488.0	491.0	440.0	415.0	304.0	276.0	4509.0
1988	19,793	18,005	269.0	304.0	372.0	384.0	426.0	466.0	495.0	477.0	430.0	384.0	300.0	276.0	4583.0
1989	20,376	18,537	266.0	252.0	308.0	400.0	467.0	506.0	511.0	508.0	430.0	386.0	358.0	335.0	4727.0
1990	21,034	19,147	298.0	280.0	336.0	407.0	441.0	442.0	480.0	467.0	422.0	415.0	337.0	299.0	4624.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.18	80,850	96	102	105	141	161	190	182	182	174	160	140	116	146	0.164
1981	4.33	84,975	110	104	101	132	169	207	194	178	177	144	116	101	145	0.162
1982	4.49	92,972	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	4.64	97,367	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	4.79	102,531	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	4.95	108,780	86	95	89	119	151	172	168	168	159	139	108	99	130	0.145
1986	5.10	113,846	93	93	98	120	156	172	168	159	145	128	125	103	130	0.146
1987	5.26	102,007	89	86	88	126	139	152	154	155	144	131	99	87	121	0.136
1988	5.41	107,096	81	98	112	120	128	145	149	144	134	116	93	83	117	0.131
1989	5.56	113,389	76	79	88	118	133	149	145	145	126	110	105	95	114	0.128
1990	5.72	120,292	80	83	90	113	118	122	129	125	117	111	93	80	105	0.118
AVERAGE			89	93	96	124	144	164	161	157	147	130	110	96	126	0.141

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/Missing data unavailable

NOTE: Population figures drop after 1986 because Alco Water Co. was dropped from calculations.

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C-059187

COUNTY..MONTEREY
CITY....MONTEREY, ET AL
SYSTEM #..... 27004
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....NORTHERN
DAU # 52 53

WATER AGENCY.....CALIFORNIA AMERICAN WATER COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 19
WELLS AND SPRINGS.. 81

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 94,000
1990..... 94,150

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	30,297	Metered.....	4,977	Metered.....	7	Metered.....	1,025
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	30,716	30,716	334.0	290.0	332.0	378.0	427.0	520.0	509.0	526.0	472.0	463.0	417.0	355.0	5023.0
1981	30,950	30,950	339.0	293.0	323.0	411.0	496.0	585.0	582.0	545.0	498.0	431.0	350.0	342.0	5195.0
1982	31,199	31,199	342.0	306.0	330.0	374.0	500.0	502.0	539.0	562.0	476.0	427.0	331.0	325.0	5014.0
1983	31,465	31,465	339.0	293.0	363.0	375.0	452.0	521.0	596.0	567.0	533.0	460.0	345.0	324.0	5168.0
1984	31,865	31,865	334.0	292.0	380.0	419.0	571.0	539.0	639.0	559.0	604.0	518.0	425.0	331.0	5611.0
1985	32,343	32,343	360.0	336.0	354.0	424.0	534.0	571.0	610.0	627.0	543.0	498.0	418.0	355.0	5630.0
1986	33,216	33,216	413.0	347.0	393.0	447.0	600.0	627.0	624.0	579.0	503.0	489.0	455.0	383.0	5860.0
1987	33,906	33,906	365.0	343.0	393.0	534.0	531.0	614.0	606.0	652.0	577.0	521.0	368.0	333.0	5837.0
1988	34,490	34,490	340.0	405.0	464.0	445.0	518.0	561.0	619.0	596.0	524.0	462.0	359.0	340.0	5633.0
1989	35,412	35,412	282.0	237.0	258.0	349.0	399.0	441.0	450.0	442.0	361.0	337.0	326.0	299.0	4181.0
1990	36,303	36,303	275.0	235.0	264.0	346.0	361.0	396.0	433.0	420.0	384.0	392.0	323.0	281.0	4110.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.06	94,000	115	106	114	134	147	184	175	181	167	159	148	122	146	0.164
1981	3.01	93,271	117	112	112	147	172	209	201	188	178	149	125	118	153	0.171
1982	2.97	92,565	119	118	115	135	174	181	188	196	171	149	119	113	148	0.166
1983	2.92	91,885	119	114	127	136	159	189	209	199	193	161	125	114	154	0.173
1984	2.87	91,566	118	110	134	153	201	196	225	197	220	182	155	117	168	0.188
1985	2.83	91,430	127	131	125	155	188	208	215	221	198	176	152	125	169	0.189
1986	2.78	92,347	144	134	137	161	210	226	218	202	182	171	164	134	174	0.195
1987	2.73	92,682	127	132	137	192	185	221	211	227	208	181	132	116	173	0.193
1988	2.69	92,668	118	151	162	160	180	202	215	207	188	161	129	118	167	0.187
1989	2.64	93,492	97	91	89	124	138	157	155	153	129	116	116	103	123	0.137
1990	2.59	94,150	94	89	90	122	124	140	148	144	136	134	114	96	120	0.134
AVERAGE			118	117	122	147	171	192	196	192	179	158	135	116	154	0.172

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059188

COUNTY..SANTA CRUZ
CITY....WATSONVILLE
SYSTEM #..... 44011
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....NORTHERN
DAU # 59

CITY CENSUS POPULATION
1980..... 23,600
1990..... 31,099

WATER AGENCY.....WATSONVILLE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 90
WELLS AND SPRINGS.. 10

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	10,404	Metered.....	908	Metered.....	50	Metered.....	97
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	10,647	6,071	131.0	127.0	163.0	167.0	187.0	220.0	225.0	223.0	200.0	212.0	171.0	132.0	2158.0
1981	10,513	6,171	129.0	123.0	153.0	190.0	213.0	244.0	248.0	237.0	217.0	190.0	193.0	143.0	2280.0
1982	10,717	6,344	132.0	128.0	157.0	173.0	224.0	223.0	242.0	246.0	213.0	208.0	161.0	160.0	2267.0
1983	10,921	6,531	143.0	127.0	152.0	170.0	201.0	247.0	286.0	272.0	261.0	215.0	173.0	167.0	2414.0
1984	11,138	6,727	148.0	145.0	185.0	195.0	249.0	242.0	271.0	260.0	253.0	195.0	154.0	145.0	2442.0
1985	11,281	6,849	147.0	145.0	166.0	203.0	239.0	256.0	261.0	256.0	222.0	216.0	179.0	162.0	2452.0
1986	11,364	6,930	129.0	102.0	142.0	205.0	245.0	271.0	281.0	266.0	232.0	218.0	206.0	171.0	2468.0
1987	11,370	7,095	173.0	175.0	190.0	223.0	244.0	266.0	275.0	276.0	244.0	230.0	167.0	152.0	2615.0
1988	11,468	7,331	143.0	172.0	211.0	205.0	229.0	255.0	280.0	265.0	240.0	221.0	171.0	160.0	2552.0
1989	11,830	7,562	150.0	145.0	175.0	209.0	248.0	265.0	277.0	258.0	226.0	218.0	188.0	168.0	2527.0
1990	11,963	7,763	160.0	126.0	175.0	184.0	229.0	236.0	251.0	254.0	223.0	213.0	171.0	163.0	2385.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.89	41,388	102	106	127	134	146	177	175	174	161	165	138	103	143	0.160
1981	3.90	40,992	102	107	120	155	168	198	195	187	176	150	157	113	152	0.171
1982	3.91	41,915	102	109	121	138	172	177	186	189	169	160	128	123	148	0.166
1983	3.92	42,843	108	106	114	132	151	192	215	205	203	162	135	126	154	0.173
1984	3.93	43,826	109	114	136	148	183	184	199	191	192	144	117	107	153	0.171
1985	3.95	44,523	107	116	120	152	173	192	189	185	166	156	134	117	151	0.169
1986	3.96	44,985	93	81	102	152	176	201	202	191	172	156	153	123	150	0.168
1987	3.97	45,144	124	138	136	165	174	196	197	197	180	164	123	109	159	0.178
1988	3.98	45,669	101	130	149	150	162	186	198	187	175	156	125	113	153	0.171
1989	3.99	47,251	102	110	119	147	169	187	189	176	159	149	133	115	147	0.164
1990	4.01	47,924	108	94	118	128	154	164	169	171	155	143	119	110	136	0.153
AVERAGE			105	110	124	146	166	187	192	187	174	155	133	114	150	0.168

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059189

COUNTY..SANTA CRUZ
CITY....BOULDER CREEK, ET AL
SYSTEM #..... 44014
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....NORTHERN
DAU # 60

WATER AGENCY.....SAN LORENZO VALLEY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 50
WELLS AND SPRINGS.. 50

SOURCE OF WATER (in percent):
PURCHASED..... NA
SELF SUPPLIED..... NA

CITY CENSUS POPULATION
1980..... 14,000
1990..... 16,000

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5,325	Metered.....	116	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,179	5,179	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981	5,202	5,202	-	-	-	-	-	-	68.0	50.0	60.0	41.0	42.0	28.0	-
1982	5,225	5,225	25.0	52.0	22.0	25.0	40.0	23.0	-	-	-	-	-	-	-
1983	5,247	5,247	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	5,270	5,270	-	-	-	-	-	-	71.0	60.0	53.0	47.0	39.0	41.0	-
1985	5,293	5,293	43.0	35.0	37.0	42.0	52.0	58.0	-	-	-	-	-	-	-
1986	5,315	5,315	32.0	35.0	36.0	44.0	54.0	59.0	58.0	59.0	40.0	43.0	41.0	35.0	536.0
1987	5,332	5,332	40.0	30.0	31.0	45.0	53.0	60.0	61.0	65.0	55.0	46.0	35.0	32.0	553.0
1988	5,372	5,372	32.0	36.0	36.0	47.0	45.0	52.0	63.0	60.0	52.0	50.0	36.0	30.0	539.0
1989	5,405	5,405	36.0	25.0	33.0	41.0	48.0	52.0	64.0	58.0	50.0	43.0	42.0	40.0	532.0
1990	5,410	5,410	39.0	34.0	33.0	48.0	63.0	52.0	52.0	52.0	50.0	46.0	37.0	39.0	545.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.70	14,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.73	14,194	-	-	-	-	-	-	155	114	141	93	99	64	-	-
1982	2.75	14,390	56	129	49	58	90	53	-	-	-	-	-	-	-	-
1983	2.78	14,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2.80	14,782	-	-	-	-	-	-	155	131	120	103	88	89	-	-
1985	2.83	14,981	93	83	80	93	112	129	-	-	-	-	-	-	-	-
1986	2.86	15,178	68	82	77	97	115	130	123	125	88	91	90	74	97	0.108
1987	2.88	15,363	84	70	65	98	111	130	128	136	119	97	76	67	99	0.110
1988	2.91	15,614	66	80	74	100	93	111	130	124	111	103	77	62	95	0.106
1989	2.93	15,848	73	56	67	86	98	109	130	118	105	88	88	81	92	0.103
1990	2.96	16,000	79	76	67	100	127	108	105	105	104	93	77	79	93	0.105
AVERAGE			74	82	68	90	106	110	132	122	113	95	85	74	95	0.106

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/Missing data unavailable.

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C-059190

COUNTY..SANTA CRUZ
CITY....SANTA CRUZ
SYSTEM #..... 44010
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....NORTHERN
DAU # 60

WATER AGENCY.....SANTA CRUZ, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 90
WELLS AND SPRINGS.. 10

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 41,800
1990..... 49,350

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	19,439	Metered.....	1,884	Metered.....	178	Metered.....	178
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	19,277	12,770	249.0	219.0	258.0	302.0	314.0	382.0	380.0	401.0	343.0	351.0	298.0	243.0	3740.0
1981	19,587	13,045	253.0	234.0	267.0	315.0	403.0	429.0	421.0	395.0	345.0	310.0	248.0	249.0	3869.0
1982	19,655	13,020	233.0	214.0	231.0	249.0	363.0	348.0	376.0	370.0	292.0	311.0	236.0	233.0	3456.0
1983	19,734	13,088	246.0	230.0	237.0	250.0	313.0	431.0	420.0	397.0	532.0	275.0	258.0	242.0	3831.0
1984	19,668	13,187	259.0	233.0	260.0	299.0	428.0	389.0	391.0	408.0	349.0	283.0	232.0	215.0	3746.0
1985	20,274	13,363	227.0	219.0	234.0	322.0	414.0	434.0	471.0	444.0	384.0	382.0	273.0	290.0	4094.0
1986	20,326	13,415	264.0	245.0	299.0	337.0	407.0	441.0	446.0	436.0	347.0	363.0	340.0	292.0	4217.0
1987	20,590	13,750	259.0	246.0	289.0	384.0	415.0	421.0	442.0	456.0	386.0	353.0	273.0	233.0	4157.0
1988	21,490	14,005	282.0	286.0	387.0	315.0	335.0	383.0	448.0	440.0	399.0	349.0	272.0	264.0	4160.0
1989	21,724	14,152	271.0	240.0	232.0	288.0	351.0	405.0	410.0	422.0	318.0	323.0	335.0	258.0	3853.0
1990	21,883	14,298	253.0	228.0	258.0	304.0	278.0	284.0	324.0	336.0	307.0	307.0	265.0	258.0	3402.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.27	63,099	127	120	132	160	161	202	194	205	181	179	157	124	162	0.182
1981	3.29	64,463	127	130	134	163	202	222	211	198	178	155	128	125	164	0.184
1982	3.31	65,037	116	118	115	128	180	178	186	184	150	154	121	116	146	0.163
1983	3.33	65,650	121	125	116	127	154	219	206	195	270	135	131	119	160	0.179
1984	3.34	65,781	127	122	127	152	210	197	192	200	177	139	118	105	156	0.175
1985	3.36	68,170	107	115	111	157	196	212	223	210	188	181	133	137	165	0.184
1986	3.38	68,707	124	127	140	163	191	214	209	205	168	170	165	137	168	0.188
1987	3.40	69,966	119	126	133	183	191	201	204	210	184	163	130	107	163	0.182
1988	3.42	73,407	124	134	170	143	147	174	197	193	181	153	124	116	155	0.174
1989	3.43	74,594	117	115	100	129	152	181	177	182	142	140	150	112	142	0.158
1990	3.45	75,530	108	108	110	134	119	125	138	144	135	131	117	110	123	0.138
AVERAGE			120	122	126	149	173	193	194	193	178	155	134	119	155	0.173

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059191

COUNTY..SANTA CRUZ
CITY....SOQUEL, APTOS
SYSTEM #..... 44017
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....NORTHERN
DAU # 60

WATER AGENCY.....SOQUEL CREEK COUNTY WATER DIST.
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 30,138
1990..... 38,043

SERVICE CONNECTIONS /1

RESIDENTIAL:
Metered..... 11,538
Flat Rate..... 0

COMMERCIAL:
Metered..... 1,282
Flat Rate... 0

INDUSTRIAL:
Metered..... NA
Flat Rate... NA

GOVERNMENTAL:
Metered..... NA
Flat Rate... NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	10,875	10,875	88.0	89.0	94.0	108.0	126.0	151.0	139.0	145.0	129.0	125.0	108.0	94.0	1396.0
1981	11,058	11,058	95.0	83.0	92.0	114.0	129.0	162.0	155.0	157.0	133.0	109.0	93.0	88.0	1410.0
1982	11,241	11,241	93.0	85.0	92.0	101.0	138.0	144.0	157.0	159.0	130.0	120.0	95.0	95.0	1409.0
1983	11,425	11,425	98.0	89.0	100.0	108.0	131.0	156.0	179.0	169.0	151.0	122.0	98.0	97.0	1498.0
1984	11,608	11,608	101.0	97.0	112.0	125.0	170.0	164.0	179.0	169.0	152.0	123.0	98.0	98.0	1588.0
1985	11,930	11,930	101.0	100.0	107.0	129.0	158.0	167.0	177.0	178.0	155.0	137.0	110.0	106.0	1625.0
1986	11,986	11,986	103.0	95.0	111.0	132.0	165.0	181.0	178.0	173.0	140.0	137.0	134.0	113.0	1662.0
1987	12,298	12,298	110.0	108.0	116.0	154.0	165.0	178.0	191.0	186.0	165.0	148.0	112.0	107.0	1740.0
1988	12,512	12,512	103.0	118.0	142.0	135.0	150.0	168.0	180.0	176.0	158.0	140.0	108.0	110.0	1688.0
1989	12,600	12,600	108.0	98.0	105.0	129.0	159.0	171.0	173.0	163.0	152.0	144.0	122.0	118.0	1642.0
1990	12,700	12,700	111.0	100.0	115.0	137.0	145.0	151.0	173.0	163.0	152.0	144.0	122.0	118.0	1631.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.77	30,138	94	102	101	119	135	167	149	155	143	134	119	101	127	0.142
1981	2.79	30,893	99	96	96	123	135	175	162	164	144	114	100	92	125	0.140
1982	2.82	31,656	95	96	94	106	141	152	160	162	137	122	100	97	122	0.137
1983	2.84	32,431	97	98	99	111	130	160	178	168	155	121	101	96	127	0.142
1984	2.86	33,210	98	101	109	125	165	165	174	164	153	119	98	95	131	0.147
1985	2.88	34,399	95	104	100	125	148	162	166	167	150	128	107	99	129	0.145
1986	2.91	34,829	95	97	103	126	153	173	165	160	134	127	128	105	131	0.146
1987	2.93	36,012	99	107	104	143	148	165	171	167	153	133	104	96	132	0.148
1988	2.95	36,919	90	110	124	122	131	152	157	154	143	122	98	96	125	0.140
1989	2.97	37,461	93	93	90	115	137	152	149	140	135	124	109	102	120	0.134
1990	3.00	38,043	94	94	98	120	123	132	147	138	133	122	107	100	117	0.132
AVERAGE			95	100	102	121	140	159	162	158	144	124	106	98	126	0.141

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059192

COUNTY..SANTA CLARA
CITY.... GILROY
SYSTEM #..... 43004
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....NORTHERN
DAU # 62

WATER AGENCY.....GILROY, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 21,641
1990..... 31,487

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	7,004	Metered.....	663	Metered.....	NA	Metered.....	261
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,900	5,890	65.0	88.0	68.0	84.0	138.0	161.0	198.0	189.0	162.0	147.0	143.0	82.0	1525.0
1981	6,235	6,217	93.0	73.0	70.0	82.0	176.0	163.0	260.0	187.0	157.0	178.0	89.0	68.0	1596.0
1982	6,314	6,302	84.0	69.0	75.0	97.0	134.0	174.0	213.0	199.0	238.0	120.0	86.0	77.0	1566.0
1983	6,463	6,452	88.0	71.0	67.0	108.0	92.0	231.0	217.0	219.0	249.0	147.0	140.0	77.0	1706.0
1984	6,801	6,795	76.0	90.0	111.0	121.0	161.0	258.0	232.0	287.0	227.0	182.0	109.0	98.0	1952.0
1985	6,906	6,900	77.0	103.0	94.0	111.0	145.0	244.0	208.0	218.0	226.0	192.0	140.0	83.0	1841.0
1986	7,541	7,541	102.0	87.0	76.0	107.0	202.0	208.0	263.0	253.0	208.0	194.0	138.0	110.0	1948.0
1987	7,595	7,595	98.0	91.0	104.0	147.0	212.0	215.0	251.0	268.0	219.0	197.0	115.0	89.0	2006.0
1988	7,815	7,815	109.0	103.0	129.0	194.0	178.0	187.0	250.0	239.0	275.0	181.0	145.0	115.0	2105.0
1989	7,907	7,907	93.0	87.0	102.0	100.0	131.0	204.0	206.0	219.0	204.0	196.0	128.0	111.0	1781.0
1990	7,907	7,907	128.0	89.0	113.0	124.0	163.0	160.0	201.0	247.0	231.0	171.0	154.0	117.0	1898.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.67	21,678	97	140	101	129	205	248	295	281	249	219	220	122	193	0.216
1981	3.70	23,101	130	113	98	118	246	235	363	261	227	249	128	95	189	0.212
1982	3.74	23,588	115	104	103	137	183	246	291	272	336	164	122	105	182	0.204
1983	3.77	24,343	117	104	89	148	122	316	288	290	341	195	192	102	192	0.215
1984	3.80	25,826	95	120	139	156	201	333	290	358	293	227	141	122	207	0.232
1985	3.83	26,437	94	139	115	140	177	308	254	266	285	234	177	101	191	0.214
1986	3.86	29,101	113	107	84	123	224	238	292	280	238	215	158	122	183	0.205
1987	3.89	29,543	107	110	114	166	231	243	274	293	247	215	130	97	186	0.208
1988	3.92	30,639	115	116	136	211	187	203	263	252	299	191	158	121	188	0.211
1989	3.95	31,243	96	99	105	107	135	218	213	226	218	202	137	115	156	0.175
1990	3.98	31,487	131	101	116	131	167	169	206	253	245	175	163	120	165	0.185
AVERAGE			110	114	109	142	189	251	275	276	271	208	157	111	185	0.207

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—059193

C-059193

COUNTY..SAN BENITO
CITY....HOLLISTER
SYSTEM #..... 3505
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....NORTHERN
DAU # 62

WATER AGENCY.....HOLLISTER, CITY OF/SUNNYSLOPE WD
TYPE OF AGENCY.....MUNI. WATER DEPT./PUBL. W. DIST.

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 11,700
1990..... 19,400

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	6,600	Metered.....	419	Metered.....	170	Metered.....	6
Flat Rate.....	1	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,929	3,526	65.0	59.0	61.0	57.0	62.0	83.0	93.0	109.0	101.0	87.0	85.0	57.0	919.0
1981	5,087	3,921	66.0	53.0	60.0	64.0	78.0	104.0	107.0	107.0	103.0	82.0	46.0	43.0	913.0
1982	5,244	3,944	40.0	37.0	40.0	49.0	70.0	81.0	102.0	120.0	89.0	71.0	47.0	41.0	787.0
1983	5,377	4,071	42.0	39.0	42.0	48.0	75.0	96.0	110.0	120.0	88.0	76.0	61.0	52.0	849.0
1984	5,535	4,188	52.0	49.0	60.0	69.0	101.0	106.0	122.0	116.0	103.0	70.0	47.0	49.0	944.0
1985	5,719	4,339	53.0	50.0	53.0	69.0	92.0	97.0	136.0	131.0	106.0	83.0	58.0	53.0	981.0
1986	6,040	4,469	56.0	51.0	61.0	73.0	103.0	125.0	136.0	142.0	117.0	89.0	79.0	61.0	1093.0
1987	6,402	4,598	60.0	53.0	64.0	101.0	93.0	123.0	146.0	156.0	136.0	112.0	68.0	61.0	1173.0
1988	6,560	4,817	54.0	63.0	94.0	110.0	108.0	120.0	152.0	163.0	125.0	97.0	78.0	72.0	1236.0
1989	7,202	5,558	64.0	53.0	67.0	98.0	115.0	130.0	170.0	160.0	131.0	95.0	79.0	82.0	1244.0
1990	8,199	6,695	66.0	63.0	76.0	87.0	98.0	113.0	148.0	152.0	132.0	98.0	82.0	73.0	1188.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.32	16,355	128	124	120	116	122	169	183	215	206	172	173	112	154	0.172
1981	3.28	16,666	128	114	116	128	151	208	207	207	206	159	92	83	150	0.168
1982	3.23	16,960	76	78	76	96	133	159	194	228	175	135	92	78	127	0.142
1983	3.19	17,164	79	81	79	93	141	186	207	226	171	143	118	98	136	0.152
1984	3.15	17,435	96	97	111	132	187	203	226	215	197	130	90	91	148	0.166
1985	3.11	17,774	96	100	96	129	167	182	247	238	199	151	109	96	151	0.169
1986	3.07	18,518	98	98	106	131	179	225	237	247	211	155	142	106	162	0.181
1987	3.02	19,359	100	98	107	174	155	212	243	260	234	187	117	102	166	0.186
1988	2.98	19,561	89	111	155	187	178	204	251	269	213	160	133	119	173	0.194
1989	2.94	21,172	98	89	102	154	175	205	259	244	206	145	124	125	161	0.180
1990	2.90	23,758	90	95	103	122	133	159	201	206	185	133	115	99	137	0.153
AVERAGE			98	99	107	133	157	192	223	232	200	152	119	101	151	0.170

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059194

COUNTY..SANTA CLARA
CITY....MORGAN HILL
SYSTEM #..... 43006
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....NORTHERN
DAU # 62

CITY CENSUS POPULATION
1980..... 17,060
1990..... 23,928

WATER AGENCY.....MORGAN HILL, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	7,106	Metered.....	342	Metered.....	45	Metered.....	229
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,973	4,823	59.0	52.0	63.0	76.0	106.0	128.0	135.0	148.0	121.0	111.0	84.0	60.0	1143.0
1981	4,985	4,880	64.0	59.0	63.0	99.0	170.0	190.0	184.0	167.0	178.0	100.0	71.0	50.0	1395.0
1982	5,087	4,978	67.0	43.0	61.0	74.0	137.0	148.0	148.0	162.0	133.0	85.0	62.0	59.0	1179.0
1983	5,153	5,037	63.0	53.0	59.0	70.0	109.0	149.0	152.0	152.0	117.0	119.0	58.0	55.0	1156.0
1984	5,580	5,459	61.0	58.0	83.0	106.0	125.0	127.0	183.0	153.0	120.0	100.0	70.0	67.0	1253.0
1985	5,783	5,662	79.0	72.0	65.0	92.0	142.0	213.0	165.0	208.0	126.0	122.0	93.0	90.0	1467.0
1986	5,909	5,783	67.0	119.0	107.0	94.0	130.0	198.0	212.0	224.0	168.0	133.0	94.0	106.0	1652.0
1987	6,379	6,254	115.0	101.0	115.0	171.0	235.0	208.0	251.0	226.0	242.0	191.0	128.0	116.0	2099.0
1988	6,760	6,637	125.0	120.0	180.0	184.0	204.0	219.0	264.0	260.0	211.0	180.0	127.0	112.0	2186.0
1989	7,260	7,125	98.0	95.0	88.0	127.0	160.0	188.0	216.0	195.0	162.0	119.0	114.0	105.0	1667.0
1990	7,755	7,618	86.0	76.0	87.0	110.0	136.0	138.0	153.0	161.0	141.0	127.0	131.0	100.0	1446.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.54	17,591	108	102	116	144	194	243	248	271	229	204	159	110	178	0.199
1981	3.50	17,436	118	121	117	189	315	363	340	309	340	185	136	93	219	0.246
1982	3.46	17,591	123	87	112	140	251	280	271	297	252	156	117	108	184	0.206
1983	3.42	17,615	115	107	108	132	200	282	278	278	221	218	110	101	180	0.201
1984	3.38	18,853	104	106	142	187	214	225	313	262	212	171	124	115	182	0.204
1985	3.34	19,310	132	133	109	159	237	368	276	347	218	204	161	150	208	0.233
1986	3.30	19,497	111	218	177	161	215	339	351	371	287	220	161	175	232	0.260
1987	3.26	20,795	178	173	178	274	365	333	389	351	388	296	205	180	277	0.310
1988	3.22	21,769	185	190	267	282	302	335	391	385	323	267	194	166	275	0.308
1989	3.18	23,091	137	147	123	183	224	271	302	272	234	166	165	147	198	0.222
1990	3.14	24,358	114	111	115	151	180	189	203	213	193	168	179	132	163	0.182
AVERAGE			130	136	142	182	245	293	306	305	263	205	156	134	209	0.234

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059195

COUNTY..SAN LUIS OBISPO
CITY....ATASCADERO
SYSTEM #..... 40002
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....SOUTHERN
DAU # 65

WATER AGENCY.....ATASCADERO MUTUAL WATER COMPANY
TYPE OF AGENCY.....INVESTOR OWNED ASSOCIATION

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 15,930
1990..... 23,138

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	7,263	Metered.....	655	Metered.....	NA	Metered.....	35
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,212	5,212	47.0	43.0	38.0	63.0	76.0	112.0	132.0	168.0	121.0	125.0	81.0	61.0	1067.0
1981	5,619	5,619	59.0	50.0	52.0	90.0	145.0	196.0	193.0	181.0	148.0	105.0	60.0	58.0	1337.0
1982	5,625	5,625	57.0	49.0	54.0	69.0	94.0	150.0	146.0	185.0	170.0	95.0	75.0	55.0	1199.0
1983	6,845	6,845	48.0	38.0	58.0	60.0	63.0	166.0	191.0	197.0	168.0	116.0	93.0	62.0	1260.0
1984	6,120	6,120	57.0	68.0	84.0	104.0	160.0	205.0	231.0	217.0	207.0	155.0	92.0	62.0	1642.0
1985	6,415	6,415	72.0	64.0	69.0	100.0	148.0	207.0	236.0	219.0	197.0	155.0	105.0	70.0	1642.0
1986	6,654	6,654	75.0	67.0	67.0	88.0	159.0	215.0	223.0	230.0	210.0	128.0	131.0	94.0	1687.0
1987	7,000	7,000	102.0	84.0	68.0	117.0	209.0	198.0	233.0	247.0	220.0	194.0	97.0	78.0	1847.0
1988	7,066	7,066	90.0	96.0	106.0	175.0	139.0	210.0	265.0	248.0	264.0	193.0	135.0	88.0	2009.0
1989	7,367	7,367	83.0	86.0	86.0	152.0	152.0	210.0	274.0	257.0	236.0	144.0	121.0	107.0	1908.0
1990	7,401	7,401	95.0	79.0	79.0	148.0	179.0	212.0	237.0	219.0	226.0	157.0	118.0	108.0	1857.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.06	15,930	95	93	77	132	154	234	267	340	253	253	169	124	184	0.206
1981	3.06	17,213	111	104	97	174	272	380	362	339	287	197	116	109	213	0.238
1982	3.07	17,271	106	101	101	133	176	290	273	346	328	177	145	103	190	0.213
1983	3.08	21,065	74	64	89	95	96	263	292	302	266	178	147	95	164	0.184
1984	3.08	18,876	97	124	144	184	273	362	395	371	366	265	162	106	238	0.267
1985	3.09	19,831	117	115	112	168	241	348	384	356	331	252	176	114	227	0.254
1986	3.10	20,617	117	116	105	142	249	348	349	360	340	200	212	147	224	0.251
1987	3.11	21,737	151	138	101	179	310	304	346	367	337	288	149	116	233	0.261
1988	3.11	21,992	132	151	155	265	204	318	389	364	400	283	205	129	250	0.280
1989	3.12	22,980	117	134	121	220	213	305	385	361	342	202	176	150	227	0.255
1990	3.13	23,138	132	122	110	213	250	305	330	305	326	219	170	151	220	0.246
AVERAGE			114	115	110	173	222	314	343	346	325	229	166	122	215	0.241

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059196

COUNTY..SAN LUIS OBISPO
CITY....PASO ROBLES
SYSTEM #..... 40007
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....SOUTHERN
DAU # 65

WATER AGENCY.....PASO ROBLES, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 9,163
1990..... 18,583

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5,568	Metered.....	446	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,670	3,547	39.0	38.0	43.0	67.0	90.0	117.0	121.0	127.0	103.0	92.0	65.0	51.0	953.0
1981	3,828	3,774	56.0	51.0	52.0	63.0	95.0	106.0	128.0	118.0	98.0	78.0	57.0	54.0	956.0
1982	4,062	4,015	43.0	41.0	41.0	57.0	105.0	119.0	145.0	145.0	105.0	79.0	51.0	49.0	980.0
1983	4,262	4,208	47.0	42.0	42.0	50.0	99.0	137.0	162.0	149.0	134.0	77.0	73.0	50.0	1062.0
1984	4,490	4,431	51.0	56.0	82.0	98.0	154.0	156.0	180.0	161.0	144.0	101.0	63.0	71.0	1317.0
1985	4,894	4,829	54.0	45.0	60.0	103.0	143.0	168.0	180.0	161.0	144.0	101.0	63.0	71.0	1293.0
1986	5,128	5,063	59.0	52.0	64.0	95.0	139.0	154.0	166.0	165.0	120.0	100.0	86.0	68.0	1268.0
1987	5,541	5,479	61.0	57.0	62.0	116.0	139.0	155.0	195.0	176.0	147.0	93.0	60.0	61.0	1322.0
1988	5,717	5,707	59.0	72.0	98.0	96.0	133.0	153.0	188.0	176.0	154.0	132.0	83.0	72.0	1416.0
1989	5,836	5,771	63.0	66.0	81.0	123.0	146.0	168.0	197.0	187.0	143.0	107.0	91.0	80.0	1452.0
1990	6,135	6,080	70.0	61.0	88.0	123.0	151.0	179.0	202.0	196.0	156.0	142.0	109.0	86.0	1563.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.58	9,481	133	138	146	236	306	411	412	432	362	313	229	174	275	0.308
1981	2.63	10,070	179	181	167	209	304	351	410	378	324	250	189	173	260	0.291
1982	2.68	10,878	128	135	122	175	311	365	430	430	322	234	156	145	247	0.276
1983	2.73	11,615	131	129	117	143	275	393	450	414	385	214	209	139	251	0.281
1984	2.77	12,449	132	155	212	262	399	418	466	417	386	262	169	184	290	0.325
1985	2.82	13,800	126	116	140	249	334	406	421	376	348	236	152	166	257	0.287
1986	2.87	14,703	129	126	140	215	305	349	364	362	272	219	195	149	236	0.265
1987	2.91	16,149	122	126	124	239	278	320	390	352	303	186	124	122	224	0.251
1988	2.96	16,933	112	147	187	189	253	301	358	335	303	251	163	137	229	0.257
1989	3.01	17,561	116	134	149	233	268	319	362	344	271	197	173	147	227	0.254
1990	3.06	18,751	120	116	151	219	260	318	348	337	277	244	194	148	228	0.256
AVERAGE			130	137	150	215	299	359	401	380	323	237	178	153	248	0.277

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059197

COUNTY..SAN LUIS OBISPO
CITY....MORRO BAY
SYSTEM #..... 40011
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....SOUTHERN
DAU # 67

WATER AGENCY.....MORRO BAY, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 9,064
1990..... 9,664

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4,083	Metered.....	411	Metered.....	6	Metered.....	59
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,000	4,000	30.4	33.0	32.4	55.9	43.3	50.1	65.5	48.1	52.0	41.9	38.3	47.2	538.1
1981	4,025	4,025	46.9	34.2	32.7	51.3	46.5	65.7	56.7	52.9	61.1	43.1	34.0	38.2	563.3
1982	4,070	4,070	33.1	24.0	59.0	52.5	41.1	57.6	48.6	49.5	41.9	39.4	39.7	30.5	516.9
1983	4,100	4,100	33.1	30.1	37.7	33.0	47.3	47.5	52.7	61.7	45.6	41.0	40.1	30.1	499.9
1984	4,150	4,150	41.6	34.8	39.8	42.1	61.8	42.0	63.9	52.7	49.1	51.5	34.0	30.7	544.0
1985	4,169	4,167	43.0	37.0	35.0	41.0	58.0	50.0	64.0	53.0	49.0	52.0	34.0	31.0	547.0
1986	4,254	4,252	43.0	32.0	34.0	49.0	47.0	44.0	62.0	48.0	44.0	49.0	39.0	34.0	525.0
1987	4,385	4,383	43.0	34.0	43.0	42.0	44.0	48.0	65.0	54.0	59.0	43.0	34.0	39.0	548.0
1988	4,497	4,487	33.0	40.0	50.0	40.0	55.0	48.0	51.0	63.0	45.0	36.0	43.0	32.0	536.0
1989	4,562	4,552	39.0	33.0	34.0	39.0	49.0	44.0	47.0	57.0	43.0	37.0	48.0	39.0	509.0
1990	4,545	4,539	34.0	34.0	36.0	48.0	49.0	41.0	56.0	43.0	39.0	49.0	36.0	34.0	499.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.27	9,064	108	126	115	206	154	184	233	171	191	149	141	168	163	0.182
1981	2.25	9,066	167	135	116	189	165	242	202	188	225	153	125	136	170	0.191
1982	2.24	9,111	117	94	209	192	146	211	172	175	153	139	145	108	155	0.174
1983	2.22	9,122	117	118	133	121	167	174	186	218	167	145	147	106	150	0.168
1984	2.21	9,177	146	131	140	153	217	153	225	185	178	181	124	108	162	0.182
1985	2.20	9,162	151	144	123	149	204	182	225	187	178	183	124	109	164	0.183
1986	2.18	9,290	149	123	118	176	163	158	215	167	158	170	140	118	155	0.173
1987	2.17	9,516	146	128	146	147	149	168	220	183	207	146	119	132	158	0.177
1988	2.16	9,698	110	142	166	137	183	165	170	210	155	120	148	106	151	0.170
1989	2.14	9,775	129	121	112	133	162	150	155	188	147	122	164	129	143	0.160
1990	2.13	9,677	113	125	120	165	163	141	187	143	134	163	124	113	141	0.158
AVERAGE			132	126	136	161	170	175	199	183	172	152	136	121	156	0.174

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059198

COUNTY..SAN LUIS OBISPO
CITY....SAN LUIS OBISPO
SYSTEM #..... 40009
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....SOUTHERN
DAU # 67

WATER AGENCY.....SAN LUIS OBISPO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:

ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):

SURFACE WATER..... 59
WELLS AND SPRINGS.. 41

SOURCE OF WATER (in percent):

PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 34,252
1990..... 41,958

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	10,607	Metered.....	1,191	Metered.....	55	Metered.....	196
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	9,223	9,223	129.0	130.0	144.0	180.0	200.0	226.0	220.0	217.0	209.0	213.0	183.0	148.0	2199.0
1981	9,466	9,466	147.0	130.0	130.0	182.0	220.0	254.0	247.0	241.0	220.0	206.0	147.0	138.0	2262.0
1982	9,466	9,466	142.0	135.0	133.0	156.0	215.0	212.0	233.0	237.0	209.0	199.0	146.0	129.0	2146.0
1983	9,700	9,700	151.0	127.0	136.0	150.0	197.0	234.0	274.0	234.0	230.0	204.0	147.0	132.0	2216.0
1984	10,022	10,022	162.0	159.0	194.0	201.0	262.0	255.0	268.0	266.0	266.0	222.0	168.0	139.0	2562.0
1985	10,617	10,617	161.0	154.0	158.0	214.0	261.0	277.0	292.0	275.0	247.0	247.0	166.0	163.0	2615.0
1986	11,053	11,053	161.0	147.0	165.0	217.0	283.0	278.0	287.0	293.0	240.0	253.0	224.0	178.0	2726.0
1987	11,504	11,504	186.0	160.0	175.0	247.0	275.0	285.0	277.0	295.0	266.0	247.0	166.0	159.0	2738.0
1988	11,699	11,699	175.0	214.0	221.0	230.0	262.0	249.0	278.0	271.0	250.0	250.0	188.0	152.0	2740.0
1989	12,022	12,022	179.0	157.0	171.0	195.0	188.0	176.0	182.0	172.0	149.0	143.0	132.0	113.0	1957.0
1990	12,350	12,350	120.0	110.0	127.0	142.0	144.0	134.0	142.0	145.0	133.0	139.0	122.0	102.0	1560.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.71	34,252	121	131	136	175	188	220	207	204	203	201	178	139	176	0.197
1981	3.68	34,855	136	133	120	174	204	243	229	223	210	191	141	128	178	0.199
1982	3.65	34,556	133	140	124	150	201	205	218	221	202	186	141	120	170	0.191
1983	3.62	35,103	139	129	125	142	181	222	252	215	218	187	140	121	173	0.194
1984	3.59	35,951	145	153	174	186	235	236	240	239	247	199	156	125	195	0.219
1985	3.56	37,750	138	146	135	189	223	245	250	235	218	211	147	139	190	0.213
1986	3.52	38,950	133	135	137	186	234	238	238	243	205	210	192	147	192	0.215
1987	3.49	40,176	149	142	141	205	221	236	222	237	221	198	138	128	187	0.209
1988	3.46	40,486	139	182	176	189	209	205	221	216	206	199	155	121	185	0.208
1989	3.43	41,224	140	136	134	158	147	142	142	135	120	112	107	88	130	0.146
1990	3.40	41,958	92	94	98	113	111	106	109	111	106	107	97	78	102	0.114
AVERAGE			133	138	136	170	196	209	212	207	196	182	144	121	171	0.191

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059199

COUNTY..SAN LUIS OBISPO
CITY....ARROYO GRANDE
SYSTEM #..... 40001
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....SOUTHERN
DAU # 68

WATER AGENCY.....ARROYO GRANDE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 95
WELLS AND SPRINGS.. 5

SOURCE OF WATER (in percent):
PURCHASED..... 95
SELF SUPPLIED..... 5

CITY CENSUS POPULATION
1980..... 11,290
1990..... 14,378

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4,388	Metered.....	357	Metered.....	1	Metered.....	70
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,687	3,613	36.0	33.0	42.0	56.0	65.0	73.0	74.0	74.0	61.0	58.0	57.0	45.0	674.0
1981	3,678	3,668	45.0	33.0	40.0	61.0	73.0	88.0	80.0	81.0	70.0	59.0	49.0	43.0	722.0
1982	3,686	3,676	42.0	38.0	38.0	49.0	76.0	76.0	87.0	77.0	68.0	69.0	42.0	38.0	700.0
1983	3,948	3,938	49.0	35.0	38.0	50.0	66.0	80.0	97.0	78.0	75.0	66.0	46.0	46.0	726.0
1984	4,114	4,104	47.0	53.0	65.0	72.0	98.0	98.0	88.0	92.0	95.0	76.0	46.0	45.0	875.0
1985	4,177	4,167	46.0	48.0	49.0	77.0	92.0	102.0	102.0	92.0	93.0	83.0	61.0	52.0	897.0
1986	4,305	4,295	54.0	45.0	54.0	77.0	92.0	103.0	104.0	101.0	79.0	77.0	74.0	61.0	921.0
1987	4,400	4,387	58.0	52.0	53.0	81.0	92.0	100.0	105.0	108.0	95.0	82.0	66.0	51.0	943.0
1988	4,762	4,751	54.0	69.0	83.0	81.0	91.0	104.0	101.0	98.0	88.0	84.0	71.0	64.0	988.0
1989	5,023	5,012	53.0	54.0	64.0	87.0	91.0	96.0	106.0	98.0	79.0	79.0	75.0	77.0	959.0
1990	4,970	4,959	60.0	54.0	70.0	76.0	87.0	95.0	99.0	95.0	89.0	83.0	73.0	72.0	953.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.12	11,521	101	99	118	162	182	211	207	207	176	162	165	126	160	0.180
1981	3.10	11,410	127	103	113	178	206	257	226	229	204	167	143	122	173	0.194
1982	3.08	11,352	119	120	108	144	216	223	247	219	200	196	123	108	169	0.189
1983	3.06	12,070	131	104	102	138	176	221	259	208	207	176	127	123	165	0.185
1984	3.03	12,485	121	146	168	192	253	262	227	238	254	196	123	116	192	0.215
1985	3.01	12,582	118	136	126	204	236	270	262	236	246	213	162	133	195	0.219
1986	2.99	12,870	135	125	135	199	231	267	261	253	205	193	192	153	196	0.220
1987	2.97	13,055	143	142	131	207	227	255	259	267	243	203	169	126	198	0.222
1988	2.94	14,022	124	170	191	193	209	247	232	225	209	193	169	147	193	0.216
1989	2.92	14,677	116	131	141	198	200	218	233	215	179	174	170	169	179	0.200
1990	2.90	14,410	134	134	157	176	195	220	222	213	206	186	169	161	181	0.203
AVERAGE			125	128	135	181	212	241	240	228	212	187	156	135	182	0.204

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—059200

C-059200

COUNTY..SANTA BARBARA
CITY....SANTA MARIA
SYSTEM #..... 42011
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....SOUTHERN
DAU # 71

WATER AGENCY.....SANTA MARIA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 39,685
1990..... 61,284

SERVICE CONNECTIONS /1

RESIDENTIAL:
Metered..... 12,806
Flat Rate..... 0

COMMERCIAL:
Metered..... 1,323
Flat Rate... 0

INDUSTRIAL:
Metered..... 109
Flat Rate... 0

GOVERNMENTAL:
Metered..... NA
Flat Rate... NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	10,912	10,912	150.0	145.0	163.0	251.0	277.0	299.0	313.0	292.0	253.0	281.0	217.0	211.0	2852.0
1981	11,690	11,690	184.0	147.0	153.0	225.0	281.0	334.0	347.0	290.0	270.0	245.0	172.0	185.0	2833.0
1982	12,172	12,172	143.0	153.0	168.0	207.0	255.0	283.0	331.0	309.0	268.0	247.0	171.0	174.0	2709.0
1983	12,657	12,657	182.0	141.0	151.0	207.0	274.0	328.0	374.0	327.0	312.0	252.0	177.0	177.0	2902.0
1984	12,761	12,761	184.0	202.0	285.0	282.0	379.0	359.0	364.0	394.0	311.0	276.0	213.0	193.0	3442.0
1985	13,378	13,378	182.0	199.0	212.0	286.0	364.0	352.0	402.0	410.0	309.0	306.0	230.0	215.0	3467.0
1986	13,633	13,633	236.0	196.0	206.0	268.0	388.0	362.0	405.0	396.0	309.0	331.0	258.0	242.0	3597.0
1987	13,559	13,559	226.0	207.0	216.0	299.0	344.0	385.0	433.0	387.0	396.0	331.0	201.0	223.0	3648.0
1988	13,973	13,973	185.0	260.0	303.0	305.0	362.0	384.0	429.0	415.0	390.0	310.0	265.0	252.0	3860.0
1989	14,261	14,261	214.0	220.0	294.0	323.0	386.0	443.0	420.0	426.0	361.0	330.0	322.0	323.0	4062.0
1990	14,238	14,238	242.0	220.0	281.0	332.0	359.0	400.0	413.0	449.0	321.0	345.0	330.0	237.0	3929.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.64	39,685	122	126	132	211	225	251	254	237	213	228	182	172	197	0.221
1981	3.70	43,295	137	121	114	173	209	257	259	216	208	183	132	138	179	0.201
1982	3.77	45,892	101	119	118	150	179	206	233	217	195	174	124	122	162	0.181
1983	3.84	48,566	121	104	100	142	182	225	248	217	214	167	121	118	164	0.183
1984	3.90	49,816	119	140	185	189	245	240	236	255	208	179	143	125	189	0.212
1985	3.97	53,118	111	134	129	179	221	221	244	249	194	186	144	131	179	0.200
1986	4.04	55,040	138	127	121	162	227	219	237	232	187	194	156	142	179	0.201
1987	4.10	55,646	131	133	125	179	199	231	251	224	237	192	120	129	180	0.201
1988	4.17	58,278	102	154	168	174	200	220	237	230	223	172	152	139	181	0.203
1989	4.24	60,431	114	130	157	178	206	244	224	227	199	176	178	172	184	0.206
1990	4.30	61,284	127	128	148	181	189	218	217	236	175	182	179	125	176	0.197
AVERAGE			120	129	136	174	208	230	240	231	205	185	148	138	179	0.201

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059201

COUNTY..SANTA BARBARA
CITY.... LOMPOC
SYSTEM #..... 42006
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....SOUTHERN
DAU # 74

CITY CENSUS POPULATION
1980..... 26,267
1990..... 37,649

WATER AGENCY.....LOMPOC, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	8,428	Metered.....	219	Metered.....	NA	Metered.....	61
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	6,844	6,782	75.0	70.0	73.0	98.0	110.0	132.0	136.0	133.0	121.0	106.0	93.0	82.0	1229.0
1981	7,003	6,939	76.0	70.0	70.0	91.0	114.0	134.0	136.0	125.0	110.0	104.0	77.0	81.0	1188.0
1982	7,157	7,093	75.0	69.0	76.0	82.0	118.0	122.0	135.0	131.0	110.0	108.0	78.0	81.0	1185.0
1983	7,250	7,153	90.0	80.0	89.0	92.0	106.0	106.0	154.0	138.0	123.0	140.0	97.0	86.0	1301.0
1984	7,655	7,548	85.0	82.0	113.0	121.0	152.0	149.0	151.0	148.0	143.0	120.0	99.0	87.0	1450.0
1985	7,828	7,791	96.0	85.0	100.0	125.0	144.0	155.0	161.0	148.0	150.0	129.0	89.0	102.0	1484.0
1986	8,052	8,023	104.0	89.0	109.0	128.0	159.0	180.0	182.0	182.0	140.0	138.0	119.0	108.0	1638.0
1987	8,216	8,184	101.0	89.0	108.0	128.0	152.0	165.0	164.0	181.0	159.0	142.0	102.0	102.0	1593.0
1988	8,187	8,147	104.0	117.0	132.0	129.0	160.0	177.0	188.0	186.0	164.0	151.0	119.0	118.2	1745.2
1989	8,358	8,325	119.0	106.0	123.0	158.0	168.0	190.0	197.0	187.0	157.0	149.0	141.0	135.0	1830.0
1990	8,708	8,675	112.0	102.0	122.0	121.0	145.0	147.0	163.0	168.0	151.0	142.0	121.0	112.0	1606.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.87	26,507	91	91	89	123	134	166	166	162	152	129	117	100	127	0.142
1981	3.92	27,450	89	91	82	111	134	163	160	147	134	122	94	95	119	0.133
1982	3.97	28,388	85	87	86	96	134	143	153	149	129	123	92	92	114	0.128
1983	4.01	29,095	100	98	99	105	118	121	171	153	141	155	111	95	123	0.137
1984	4.06	31,078	88	91	117	130	158	160	157	154	153	125	106	90	128	0.143
1985	4.11	32,146	96	94	100	130	145	161	162	149	156	129	92	102	126	0.142
1986	4.15	33,441	100	95	105	128	153	179	176	176	140	133	119	104	134	0.150
1987	4.20	34,506	94	92	101	124	142	159	153	169	154	133	99	95	126	0.142
1988	4.25	34,767	96	116	122	124	148	170	174	173	157	140	114	110	138	0.154
1989	4.29	35,883	107	106	111	147	151	176	177	168	146	134	131	121	140	0.156
1990	4.34	37,792	96	96	104	107	124	130	139	143	133	121	107	96	116	0.130
AVERAGE			95	96	102	120	140	157	162	158	145	131	107	100	126	0.142

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059202

COUNTY..SANTA BARBARA
CITY.... SOLVANG
SYSTEM #..... 42013
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....SOUTHERN
DAU # 74

WATER AGENCY.....SOLVANG, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 25
SELF SUPPLIED..... 75

CITY CENSUS POPULATION
1980..... 2,800
1990..... 4,741

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,068	Metered.....	222	Metered.....	NA	Metered.....	3
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,000	990	14.0	15.0	18.0	29.0	33.0	44.0	48.0	57.0	40.0	44.0	35.0	24.0	401.0
1981	1,066	1,057	24.0	18.0	20.0	37.0	50.0	70.0	80.0	74.0	58.0	41.0	29.0	25.0	526.0
1982	1,113	1,104	19.0	21.0	22.0	29.0	55.0	61.0	77.0	84.0	56.0	44.0	23.0	19.0	510.0
1983	1,178	1,169	21.0	16.0	18.0	29.0	41.0	55.0	68.0	62.0	56.0	36.0	21.0	19.0	442.0
1984	1,255	1,246	23.0	29.0	47.0	53.0	69.0	73.0	78.0	75.0	67.0	48.0	27.0	21.0	610.0
1985	1,317	1,308	23.2	25.5	30.7	50.5	67.7	77.6	85.0	77.7	63.0	52.4	31.8	29.2	614.3
1986	1,398	1,389	30.0	22.0	29.0	48.0	78.0	82.0	86.0	84.0	62.0	55.0	49.0	34.0	659.0
1987	1,428	1,419	30.0	29.0	31.0	60.0	73.0	79.0	84.0	84.0	70.0	52.0	28.0	30.0	650.0
1988	1,483	1,482	27.0	38.0	52.0	52.0	70.0	77.0	90.0	93.0	72.0	57.0	40.0	33.0	701.0
1989	1,598	1,591	28.0	28.0	42.0	64.0	71.0	77.0	83.0	80.0	61.0	52.0	48.0	42.0	676.0
1990	2,295	2,295	29.0	26.0	37.0	52.0	65.0	72.0	78.2	76.9	63.9	58.7	45.6	35.5	639.8

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.83	2,828	160	183	205	342	376	519	547	650	471	502	413	274	388	0.435
1981	2.75	2,934	264	219	220	420	550	795	880	814	659	451	330	275	491	0.550
1982	2.68	2,978	206	252	238	325	596	683	834	910	627	477	257	206	469	0.525
1983	2.60	3,062	221	187	190	316	432	599	716	653	610	379	229	200	395	0.443
1984	2.52	3,167	234	316	479	558	703	768	795	764	705	489	284	214	528	0.591
1985	2.45	3,223	232	283	307	522	678	803	851	778	652	524	329	292	522	0.585
1986	2.37	3,314	292	237	282	483	759	825	837	818	624	535	493	331	545	0.610
1987	2.29	3,277	295	316	305	610	719	804	827	827	712	512	285	295	543	0.609
1988	2.22	3,290	265	398	510	527	686	780	883	912	730	559	405	324	584	0.654
1989	2.14	3,423	264	292	396	623	669	750	782	754	594	490	467	396	541	0.606
1990	2.07	4,741	197	196	252	366	442	506	532	523	449	399	321	242	370	0.414
AVERAGE			239	262	308	463	601	712	771	764	621	483	347	277	489	0.547

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059203

COUNTY..SANTA BARBARA
CITY....CARPINTERIA
SYSTEM #..... 42001
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....SOUTHERN
DAU # 75

WATER AGENCY.....CARPINTERIA COUNTY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 70
WELLS AND SPRINGS.. 30

SOURCE OF WATER (in percent):
PURCHASED..... 70
SELF SUPPLIED..... 30

CITY CENSUS POPULATION
1980..... 10,835
1990..... 13,747

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,984	Metered.....	358	Metered.....	54	Metered.....	45
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,932	2,308	40.0	40.0	47.0	47.0	63.0	63.0	81.0	81.0	62.0	62.0	53.0	53.0	692.0
1981	2,914	2,419	33.0	61.0	26.0	61.0	68.0	90.0	66.0	132.0	21.0	89.0	33.0	57.0	737.0
1982	3,074	2,566	27.0	46.0	40.0	45.0	70.0	67.0	87.0	72.0	38.0	61.0	30.0	33.0	616.0
1983	2,945	2,445	16.0	61.0	24.0	57.0	34.0	100.0	30.0	103.0	53.0	72.0	32.0	58.0	640.0
1984	3,022	2,522	27.0	62.0	45.0	86.0	61.0	122.0	31.0	108.0	57.0	93.0	40.0	61.0	793.0
1985	3,102	2,579	28.0	61.0	31.0	76.0	51.0	98.0	64.0	104.0	59.0	93.0	40.0	64.0	769.0
1986	3,211	2,657	32.0	66.0	27.0	69.0	47.0	93.0	62.0	109.0	54.0	87.0	42.0	73.0	761.0
1987	3,339	2,789	35.0	69.0	33.0	77.0	56.0	98.0	62.0	112.0	63.0	95.0	38.0	66.0	804.0
1988	3,339	2,789	29.0	69.0	42.0	81.0	51.0	97.0	61.0	117.0	59.0	86.0	45.0	73.0	810.0
1989	3,367	2,825	32.0	70.0	35.0	75.0	51.0	105.0	61.0	109.0	54.0	87.0	46.0	77.0	802.0
1990	3,441	2,866	63.0	47.0	62.0	49.0	50.0	60.0	70.0	70.0	51.0	57.0	55.0	45.0	679.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.69	13,764	94	100	110	114	148	153	190	190	150	145	128	124	138	0.154
1981	4.70	13,710	78	159	61	148	160	219	155	311	51	209	80	134	147	0.165
1982	4.71	14,494	60	113	89	103	156	154	194	160	87	136	69	73	116	0.130
1983	4.73	13,916	37	157	56	137	79	240	70	239	127	167	77	134	126	0.141
1984	4.74	14,310	61	149	101	200	138	284	70	243	133	210	93	138	152	0.170
1985	4.75	14,721	61	148	68	172	112	222	140	228	134	204	91	140	143	0.160
1986	4.76	15,271	68	154	57	151	99	203	131	230	118	184	92	154	137	0.153
1987	4.77	15,914	71	155	67	161	114	205	126	227	132	193	80	134	138	0.155
1988	4.78	15,948	59	149	85	169	103	203	123	237	123	174	94	148	139	0.156
1989	4.79	16,116	64	155	70	155	102	217	122	218	112	174	95	154	136	0.153
1990	4.80	16,505	123	102	121	99	98	121	137	137	103	111	111	88	113	0.126
AVERAGE			70	140	80	146	119	202	132	220	115	173	92	129	135	0.151

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—059204

C-059204

COUNTY..SANTA BARBARA
CITY.... GOLETA
SYSTEM #..... 42004
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....SOUTHERN
DAU # 75

WATER AGENCY.....GOLETA WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:

ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):

SURFACE WATER..... 75
WELLS AND SPRINGS.. 25

SOURCE OF WATER (in percent):

PURCHASED..... 76
SELF SUPPLIED..... 24

CITY CENSUS POPULATION
1980..... 68,730
1990..... 70,480

SERVICE CONNECTIONS /1

RESIDENTIAL:
Metered..... 12,595
Flat Rate..... 0

COMMERCIAL:
Metered..... 935
Flat Rate... 0

INDUSTRIAL:
Metered..... 0
Flat Rate... 0

GOVERNMENTAL:
Metered..... NA
Flat Rate... NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	13,960	13,960	212.0	212.0	218.0	255.0	298.0	342.0	371.0	360.0	333.0	310.0	286.0	264.0	3461.0
1981	13,962	13,962	241.0	225.0	218.0	243.0	296.0	351.0	386.0	361.0	329.0	303.0	273.0	245.0	3471.0
1982	13,882	13,882	179.0	282.0	215.0	287.0	401.0	348.0	389.0	242.0	271.0	326.0	133.0	146.0	3219.0
1983	12,470	12,470	219.0	196.0	218.0	249.0	334.0	370.0	427.0	371.0	369.0	266.0	222.0	139.0	3380.0
1984	12,756	12,756	238.0	330.0	449.0	360.0	457.0	380.0	427.0	427.0	365.0	313.0	121.0	173.0	4040.0
1985	12,664	12,664	232.0	233.0	265.0	368.0	418.0	404.0	458.0	423.0	389.0	335.0	226.0	223.0	3974.0
1986	12,906	12,906	236.0	200.0	250.0	344.0	325.0	404.0	397.0	385.0	320.0	308.0	268.0	216.0	3653.0
1987	13,010	13,010	218.0	231.0	211.0	415.0	414.0	378.0	361.0	410.0	322.0	263.0	158.0	224.0	3605.0
1988	13,189	13,189	213.0	302.0	322.0	301.0	365.0	403.0	332.0	376.0	287.0	250.0	187.0	181.0	3519.0
1989	13,184	13,184	199.0	197.0	228.0	316.0	211.0	268.0	214.0	252.0	172.0	210.0	168.0	155.0	2590.0
1990	13,750	13,750	137.0	137.0	163.0	174.0	155.0	182.0	195.0	147.0	176.0	174.0	152.0	142.0	1934.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.92	68,730	100	106	102	124	140	166	174	169	162	145	139	124	138	0.155
1981	4.94	69,023	113	116	102	117	138	170	180	169	159	142	132	115	138	0.154
1982	4.96	68,908	84	146	101	139	188	168	182	113	131	153	64	68	128	0.143
1983	4.98	62,152	114	113	113	134	173	198	222	193	198	138	119	72	149	0.167
1984	5.00	63,835	120	178	227	188	231	198	216	216	191	158	63	87	173	0.194
1985	5.02	63,631	118	131	134	193	212	212	232	214	204	170	118	113	171	0.192
1986	5.04	65,109	117	110	124	176	161	207	197	191	164	153	137	107	154	0.172
1987	5.07	65,897	107	125	103	210	203	191	177	201	163	129	80	110	150	0.168
1988	5.09	67,070	102	155	155	150	176	200	160	181	143	120	93	87	144	0.161
1989	5.11	67,312	95	105	109	156	101	133	103	121	85	101	83	74	105	0.118
1990	5.13	70,480	63	69	75	82	71	86	89	67	83	80	72	65	75	0.084
AVERAGE			103	123	122	152	163	175	176	167	153	135	100	93	139	0.155

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY..SANTA BARBARA
CITY....MONTECITO
SYSTEM #..... 42007
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....SOUTHERN
DAU # 75

WATER AGENCY.....MONTECITO WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 87
WELLS AND SPRINGS.. 13

SOURCE OF WATER (in percent):
PURCHASED..... 48
SELF SUPPLIED..... 52

CITY CENSUS POPULATION
1980..... 9,740
1990..... 11,490

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	3,059	Metered.....	68	Metered.....	0	Metered.....	6
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,000	3,000 /5		-	-	-	-	-	-	-	-	-	-	-	-
1981	3,040	3,040	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3,080	3,080	52.0	48.0	53.0	48.0	72.0	72.0	84.0	85.0	76.0	69.0	53.0	39.0	751.0
1983	3,162	3,162	46.0	59.0	52.0	67.0	118.0	137.0	174.0	190.0	127.0	137.0	62.0	49.0	1218.0
1984	3,100	3,100	68.0	109.0	137.0	165.0	198.0	169.0	198.0	193.0	164.0	150.0	80.0	67.0	1698.0
1985	3,175	3,175	82.0	63.0	77.0	118.0	169.0	188.0	217.0	196.0	169.0	145.0	97.0	79.0	1600.0
1986	3,109	3,109	92.0	73.0	73.0	116.0	174.0	179.0	204.0	200.0	161.0	143.0	134.0	111.0	1660.0
1987	3,295	3,295	96.0	80.0	82.0	157.0	159.0	176.0	173.0	205.0	179.0	132.0	76.0	77.0	1592.0
1988	3,377	3,377	54.0	74.0	76.0	133.0	111.0	137.0	163.0	139.0	174.0	110.0	74.0	102.0	1347.0
1989	3,424	3,424	85.0	64.0	97.0	143.0	155.0	155.0	174.0	161.0	141.0	120.0	115.0	102.0	1512.0
1990	3,444	3,444	88.0	67.0	104.0	161.0	172.0	184.0	196.0	185.0	167.0	138.0	129.0	117.0	1708.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.25	9,740	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.26	9,897	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3.26	10,055	167	170	170	159	231	239	269	273	252	221	176	125	205	0.229
1983	3.27	10,351	143	204	162	216	368	441	542	592	409	427	200	153	322	0.361
1984	3.28	10,176	216	369	434	541	628	554	628	612	537	476	262	212	457	0.512
1985	3.29	10,450	253	215	238	376	522	600	670	605	539	448	309	244	419	0.470
1986	3.30	10,261	289	254	229	377	547	581	641	629	523	450	435	349	443	0.496
1987	3.31	10,904	284	262	243	480	470	538	512	606	547	390	232	228	400	0.448
1988	3.32	11,206	155	228	219	396	320	408	469	400	518	317	220	294	329	0.369
1989	3.33	11,393	241	201	275	418	439	454	493	456	413	340	336	289	364	0.407
1990	3.34	11,490	247	208	292	467	483	534	550	519	484	387	374	328	407	0.456
AVERAGE			222	235	251	381	445	483	531	521	469	384	283	247	372	0.417

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

COUNTY..SANTA BARBARA
CITY....SANTA BARBARA
SYSTEM #..... 42010
HYDROLOGIC REGION..... CENTRAL COAST
PLANNING SUBAREA #.....SOUTHERN
DAU # 75

CITY CENSUS POPULATION
1980..... 74,542
1990..... 85,571

WATER AGENCY.....SANTA BARBARA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 68
WELLS AND SPRINGS.. 32

SOURCE OF WATER (in percent):
PURCHASED..... 61
SELF SUPPLIED..... 39

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	21,405	Metered.....	2,304	Metered.....	48	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	20,645	19,805	273.0	241.0	326.0	409.0	389.0	488.0	515.0	505.0	418.0	426.0	403.0	349.0	4742.0
1981	22,137	21,297	320.0	278.0	280.0	355.0	374.0	511.0	537.0	499.0	448.0	389.0	305.0	299.0	4595.0
1982	22,012	21,172	242.0	235.0	325.0	306.0	382.0	436.0	566.0	527.0	397.0	399.0	295.0	281.0	4391.0
1983	/5		351.0	289.0	310.0	372.0	413.0	393.0	569.0	515.0	447.0	385.0	337.0	326.0	-
1984	23,065	22,116	352.0	371.0	410.0	486.0	521.0	553.0	592.0	583.0	503.0	468.0	334.0	313.0	5486.0
1985	24,040	23,091	320.0	338.0	354.0	434.0	503.0	533.0	594.0	529.0	550.0	463.0	361.0	346.0	5325.0
1986	24,935	23,817	348.0	285.0	339.0	414.0	519.0	534.0	562.0	570.0	463.0	470.0	439.0	363.0	5306.0
1987			366.0	333.0	346.0	458.0	483.0	526.0	544.0	565.0	532.0	432.0	332.0	346.0	-
1988	24,100	23,000	318.0	380.0	454.0	425.0	520.0	539.0	521.0	525.0	498.0	467.0	389.0	348.0	5384.0
1989	24,207	23,207	328.0	318.0	391.0	430.0	456.0	468.0	489.0	478.0	422.0	386.0	369.0	354.0	4889.0
1990	24,146	22,933	290.0	259.0	262.0	236.0	245.0	249.0	276.0	256.0	248.0	254.0	248.0	256.0	3079.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.76	77,704	113	107	135	175	161	209	214	210	179	177	173	145	167	0.187
1981	3.76	83,247	124	119	108	142	145	205	208	193	179	151	122	116	151	0.169
1982	3.76	82,706	94	101	127	123	149	176	221	206	160	156	119	110	145	0.163
1983	3.75		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	3.75	86,513	131	148	153	187	194	213	221	217	194	175	129	117	174	0.195
1985	3.75	90,092	115	134	127	161	180	197	213	189	203	166	134	124	162	0.181
1986	3.74	93,365	120	109	117	148	179	191	194	197	165	162	157	125	156	0.174
1987	3.74		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	3.74	90,082	114	145	163	157	186	199	187	188	184	167	144	125	164	0.183
1989	3.73	90,403	117	126	140	159	163	173	174	171	156	138	136	126	148	0.166
1990	3.73	90,097	104	103	94	87	88	92	99	92	92	91	92	92	94	0.105
AVERAGE			115	121	129	149	161	184	192	185	168	154	134	120	151	0.169

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

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C-059207

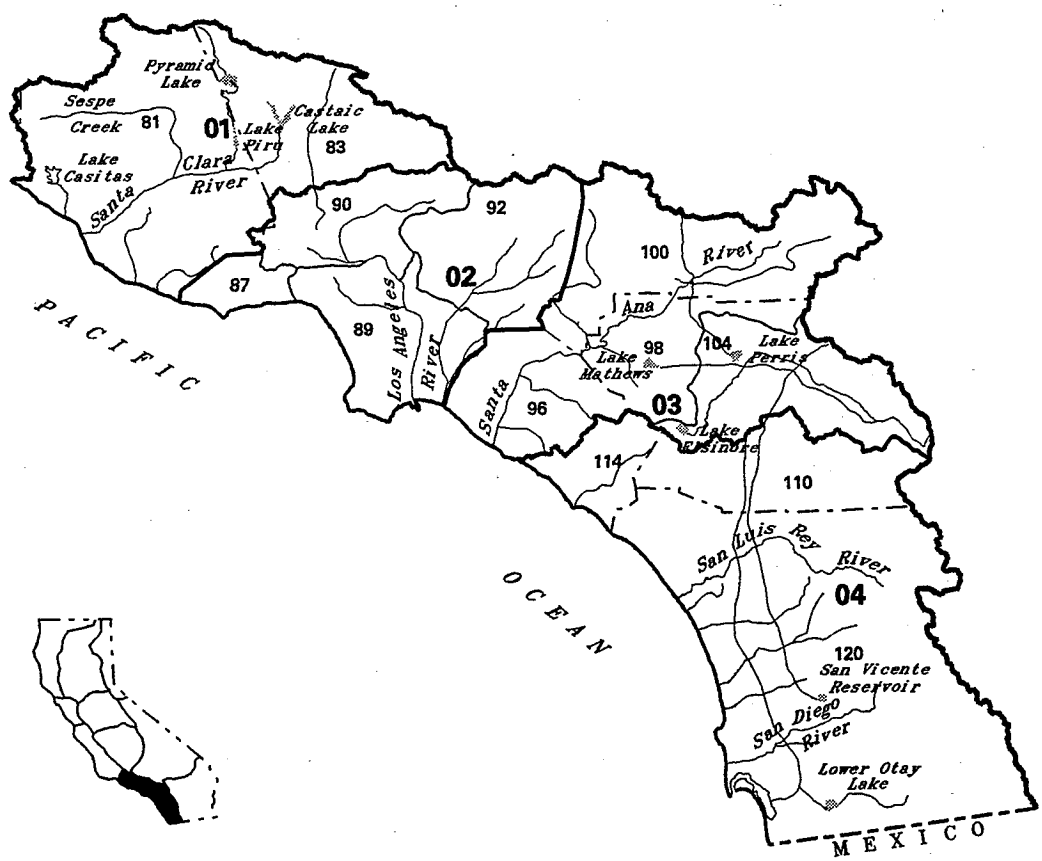
Figure A-6. South Coast Region

Santa Clara PSA–01
- Ventura County (81)
- Los Angeles County (83)

Metropolitan LA PSA–02
- Malibu (87)
- Coastal (89)
- San Fernando (90)
- San Gabriel (92)

Santa Ana PSA–03
- Orange (96)
- Riverside North (98)
- San Bernardino (100)
- Riverside South (104)

San Diego PSA–04
- Temecula (110)
- Viejo (114)
- San Diego County (120)



PLANNING SUBAREAS
AND DETAILED ANALYSIS UNITS

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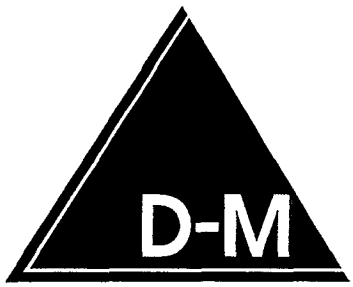

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Table A-6. South Coast Region Water Production and Per Capita Water Use

COUNTY.. VENTURA
CITY....CAMARILLO
SYSTEM #..... 56019
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA CLARA
DAU # 81

WATER AGENCY.....CAMARILLO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 49
WELLS AND SPRINGS.. 51

SOURCE OF WATER (in percent):
PURCHASED..... 49
SELF SUPPLIED..... 51

CITY CENSUS POPULATION
1980..... 37,732
1990..... 52,303

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	9,396	Metered.....	579	Metered.....	20	Metered.....	317
Flat Rate.....	0	Flat Rate...	8	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	8,293	8,293	/5	-	-	-	-	-	272.0	245.0	194.0	212.0	203.0	157.0	-
1981	8,300	8,300	146.0	120.0	129.0	207.0	245.0	299.0	295.0	267.0	236.0	202.0	161.0	137.0	2444.0
1982	8,446	8,446	124.0	151.0	129.0	162.0	233.0	234.0	287.0	255.0	211.0	224.0	146.0	130.0	2286.0
1983	8,518	8,518	156.0	100.0	109.0	149.0	218.0	251.0	280.0	235.0	215.0	175.0	136.0	112.0	2136.0
1984	8,657	8,657	188.0	191.0	252.0	244.0	289.0	289.0	311.0	281.0	235.0	248.0	149.0	121.0	2798.0
1985	8,845	8,845	159.0	153.0	167.0	251.0	256.0	310.0	315.0	295.0	259.0	238.0	163.0	165.0	2731.0
1986	8,902	8,902	168.0	113.0	139.0	193.0	256.0	269.0	283.0	251.0	200.0	232.0	196.0	180.0	2480.0
1987	8,955	8,955	158.0	147.0	166.0	256.0	271.0	263.0	273.0	288.0	241.0	193.0	144.0	127.0	2527.0
1988	9,042	9,042	140.0	170.0	222.0	204.0	263.0	263.0	283.0	256.0	232.0	230.0	174.0	176.0	2613.0
1989	9,083	9,083	180.0	140.0	199.0	248.0	251.0	292.0	307.0	272.0	257.0	245.0	245.0	235.0	2871.0
1990	9,343	9,343	171.0	151.0	211.0	208.0	237.0	252.0	266.0	253.0	248.0	252.0	233.0	231.0	2713.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.55	37,732	-	-	-	-	-	-	233	209	171	181	179	134	-	-
1981	4.65	38,634	122	111	108	179	205	258	246	223	204	169	139	114	173	0.194
1982	4.76	40,199	100	134	104	134	187	194	230	205	175	180	121	104	156	0.174
1983	4.86	41,434	121	86	85	120	170	202	218	183	173	136	109	87	141	0.158
1984	4.97	43,018	141	153	189	189	217	224	233	211	182	186	115	91	178	0.200
1985	5.07	44,879	114	122	120	186	184	230	226	212	192	171	121	119	167	0.187
1986	5.18	46,102	118	88	97	140	179	194	198	176	145	162	142	126	147	0.165
1987	5.28	47,315	108	111	113	180	185	185	186	196	170	132	101	87	146	0.164
1988	5.39	48,722	93	120	147	140	174	180	187	169	159	152	119	117	147	0.165
1989	5.49	49,895	116	100	129	166	162	195	198	176	172	158	164	152	158	0.177
1990	5.60	52,303	105	103	130	133	146	161	164	156	158	155	148	142	142	0.159
AVERAGE			114	113	122	157	181	202	211	192	173	162	133	116	156	0.174

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

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C-059210

COUNTY.. VENTURA
CITY....CAMARILLO & VIC.
SYSTEM #..... 56063
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA CLARA
DAU # 81

CITY CENSUS POPULATION
1980..... 10,000
1990..... 24,000

WATER AGENCY.....CAMROSA COUNTY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 82
WELLS AND SPRINGS.. 18

SOURCE OF WATER (in percent):
PURCHASED..... 82
SELF SUPPLIED..... 18

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4,651	Metered.....	131	Metered.....	NA	Metered.....	86
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,443	2,443	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3,373	3,373	-	-	-	-	-	-	336.0	307.0	332.0	169.0	103.0	73.0	-
1984			194.0	231.0	283.0	260.0	312.0	330.0	-	-	-	-	-	-	-
1985			-	-	-	-	-	-	-	-	-	-	-	-	-
1986	3,930	3,930	160.0	72.0	109.0	202.0	260.0	385.0	418.0	394.0	323.0	342.0	256.0	212.0	3133.0
1987	4,510	4,510	232.0	195.0	144.0	309.0	366.0	446.0	447.0	423.0	413.0	328.0	125.0	192.0	3620.0
1988	4,912	4,912	130.0	231.0	301.0	260.0	412.0	403.0	414.0	411.0	401.0	406.0	262.0	295.0	3926.0
1989	5,365	5,365	242.0	189.0	273.0	387.0	398.0	440.0	475.0	454.0	413.0	395.0	382.0	415.0	4463.0
1990	5,544	5,544	-	-	-	-	-	-	416.0	472.0	359.0	387.0	306.0	369.0	-

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.09	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	4.12		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	4.14		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	4.16	14,045	-	-	-	-	-	-	772	705	788	388	244	168	-	-
1984	4.19		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	4.21		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	4.23	16,643	310	155	211	405	504	771	810	764	647	663	513	411	516	0.578
1987	4.26	19,205	390	363	242	536	615	774	751	711	717	551	217	322	516	0.578
1988	4.28	21,033	199	379	462	412	632	639	635	630	636	623	415	452	511	0.573
1989	4.31	23,099	338	292	381	558	556	635	663	634	596	552	551	580	529	0.593
1990	4.33	24,000	-	-	-	-	-	-	559	634	499	520	425	496	-	-
AVERAGE			309	297	324	478	577	705	698	680	647	549	394	405	518	0.580

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

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C-059211

COUNTY.. VENTURA
CITY....VENTURA, OJAI, ET AL
SYSTEM #..... 56024
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA CLARA
DAU # 81

CITY CENSUS POPULATION
1980..... 50,000
1990..... 55,000

WATER AGENCY.....CASITAS MUNICIPAL WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... NA
WELLS AND SPRINGS.. NA

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,420	Metered.....	92	Metered.....	12	Metered.....	36
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,076	2,076	/5	-	-	-	-	-	-	1329.0	-	1178.0	-	932.0	-
1981	2,076	2,076	-	689.0	-	639.0	-	1205.0	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2,486	2,486	-	-	-	-	-	-	-	1543.0	-	1196.0	-	444.0	-
1984	2,486	2,486	-	745.0	-	1122.0	-	1612.0	-	2001.0	-	1483.0	-	534.0	-
1985	2,522	2,522	214.0	186.0	326.0	588.0	661.0	747.0	935.0	928.0	786.0	684.0	344.0	190.0	6589.0
1986	2,705	2,705	201.0	148.0	137.0	236.0	617.0	692.0	785.0	810.0	583.0	635.0	515.0	462.0	5821.0
1987	2,740	2,740	392.0	345.0	274.0	613.0	682.0	749.0	817.0	936.0	883.0	696.0	387.0	346.0	7120.0
1988	2,672	2,672	182.0	349.0	389.0	429.0	679.0	778.0	869.0	887.0	887.0	761.0	502.0	473.0	7185.0
1989	2,860	2,680	313.0	268.0	503.0	714.0	713.0	810.0	985.0	996.0	941.0	803.0	777.0	730.0	8553.0
1990	2,427	2,427	341.0	419.0	118.0	217.0	483.0	459.0	780.0	791.0	816.0	765.0	612.0	615.0	6416.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	24.08	50,000	-	-	-	-	-	-	-	857	-	760	-	601	-	-
1981	23.94	49,705	-	495	-	429	-	808	-	-	-	-	-	-	-	-
1982	23.80		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	23.66	58,813	-	-	-	-	-	-	-	846	-	656	-	244	-	-
1984	23.52	58,460	-	439	-	640	-	919	-	1,104	-	818	-	295	-	-
1985	23.37	58,947	117	113	178	333	362	422	512	508	444	374	195	104	306	0.343
1986	23.23	62,840	103	84	70	125	317	367	403	416	309	326	273	237	254	0.284
1987	23.09	63,263	200	195	140	323	348	395	417	477	465	355	204	176	308	0.345
1988	22.95	61,313	96	196	205	233	357	423	457	467	482	400	273	249	321	0.360
1989	22.80	65,220	155	147	249	365	353	414	487	493	481	397	397	361	359	0.402
1990	22.66	55,000	200	272	69	132	283	278	457	464	495	449	371	361	320	0.358
AVERAGE			145	243	152	322	337	503	456	626	446	504	285	292	311	0.349

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

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C-059212

COUNTY.. VENTURA
CITY....FILLMORE
SYSTEM #..... 56002
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA CLARA
DAU # 81

CITY CENSUS POPULATION
1980..... 9,602
1990..... 11,992

WATER AGENCY.....FILLMORE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,633	Metered.....	141	Metered.....	12	Metered.....	75
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,476	2,466	27.0	25.0	30.0	45.0	62.0	75.0	73.0	69.0	70.0	52.0	39.0	44.0	611.0
1981	2,500	2,490	32.0	33.0	36.0	54.0	51.0	73.0	85.0	76.0	62.0	59.0	49.0	41.0	651.0
1982	2,532	2,517	33.0	34.0	34.0	41.0	58.0	64.0	83.0	80.0	60.0	56.0	35.0	34.0	612.0
1983	2,445	2,430	33.0	26.0	31.0	38.0	56.0	66.0	84.0	70.0	67.0	47.0	34.0	32.0	584.0
1984	2,538	2,523	40.0	47.0	57.0	66.0	79.0	74.0	86.0	76.0	72.0	60.0	99.0	34.0	790.0
1985	2,560	2,545	37.0	38.0	45.0	65.0	75.0	85.0	91.0	87.0	75.0	64.0	44.0	44.0	750.0
1986	2,710	2,695	37.0	38.0	45.0	65.0	75.0	84.0	91.0	86.0	75.0	64.0	44.0	43.0	747.0
1987	2,708	2,693	49.0	41.0	39.0	78.0	79.0	82.0	85.0	84.0	71.0	60.0	42.0	39.0	749.0
1988	2,776	2,761	41.0	49.0	60.0	56.0	74.0	79.0	87.0	81.0	76.0	69.0	50.0	47.0	769.0
1989	2,844	2,829	44.0	41.0	55.0	70.0	72.0	84.0	92.0	85.0	75.0	64.0	59.0	59.0	800.0
1990	2,856	2,846	45.0	41.0	55.0	69.0	72.0	84.0	91.0	85.0	75.0	64.0	59.0	59.0	799.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.89	9,641	90	89	100	156	207	259	244	231	242	174	135	147	174	0.194
1981	3.93	9,814	105	120	118	183	168	248	279	250	211	194	166	135	182	0.204
1982	3.96	10,021	106	121	109	136	187	213	267	258	200	180	116	109	167	0.187
1983	3.99	9,755	109	95	103	130	185	226	278	231	229	155	116	106	164	0.184
1984	4.02	10,207	126	159	180	216	250	242	272	240	235	190	323	107	212	0.237
1985	4.05	10,377	115	131	140	209	233	273	283	270	241	199	141	137	198	0.222
1986	4.09	11,072	108	123	131	196	219	253	265	251	226	186	132	125	185	0.207
1987	4.12	11,151	142	131	113	233	229	245	246	243	212	174	126	113	184	0.206
1988	4.15	11,519	115	147	168	162	207	229	244	227	220	193	145	132	183	0.205
1989	4.18	11,893	119	123	149	196	195	235	250	231	210	174	165	160	184	0.206
1990	4.21	12,034	121	122	147	191	193	233	244	228	208	172	163	158	182	0.204
AVERAGE			114	124	133	183	207	241	261	242	221	181	157	130	183	0.205

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059213

COUNTY.. VENTURA
CITY.... OXNARD
SYSTEM #..... 56007
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA CLARA
DAU # 81

WATER AGENCY.....OXNARD, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 71
WELLS AND SPRINGS.. 29

SOURCE OF WATER (in percent):
PURCHASED..... 97
SELF SUPPLIED..... 3

CITY CENSUS POPULATION
1980..... 108,195
1990..... 142,216

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	25,731	Metered.....	1,879	Metered.....	144	Metered.....	208
Flat Rate.....	301	Flat Rate...	241	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	23,292	23,292	395.0	373.0	417.0	476.0	498.0	562.0	552.0	579.0	522.0	517.0	470.0	421.0	5782.0
1981	24,439	24,439	430.0	380.0	430.0	502.0	566.0	611.0	626.0	654.0	591.0	533.0	456.0	420.0	6199.0
1982	25,000	25,000	411.0	400.0	427.0	464.0	551.0	558.0	620.0	618.0	554.0	549.0	415.0	410.0	5977.0
1983	25,000	25,000	415.0	383.0	410.0	447.0	507.0	565.0	603.0	576.0	598.0	524.0	438.0	424.0	5890.0
1984	24,887	24,887	477.0	480.0	563.0	561.0	627.0	610.0	650.0	691.0	632.0	570.0	445.0	412.0	6718.0
1985	25,464	25,464	451.0	422.0	491.0	549.0	605.0	615.0	629.0	667.0	620.0	574.0	458.0	459.0	6540.0
1986	25,785	25,785	473.0	370.0	362.0	483.0	572.0	478.0	486.0	577.0	605.0	576.0	373.0	392.0	5747.0
1987	26,536	26,536	492.0	454.0	508.0	539.0	624.0	630.0	657.0	701.0	672.0	587.0	465.0	459.0	6788.0
1988	27,231	27,231	468.0	490.0	559.0	517.0	641.0	652.0	644.0	668.0	642.0	689.0	520.0	497.0	6987.0
1989	28,307	28,307	506.0	444.0	544.0	594.0	625.0	669.0	730.0	726.0	676.0	645.0	599.0	602.0	7360.0
1990	28,072	28,072	544.0	476.0	582.0	578.0	653.0	632.0	660.0	682.0	624.0	620.0	513.0	539.0	7103.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.65	108,195	118	119	124	147	148	173	165	173	161	154	145	126	146	0.164
1981	4.69	114,552	121	118	121	146	159	178	176	184	172	150	133	118	148	0.166
1982	4.73	118,234	112	121	116	131	150	157	169	169	156	150	117	112	138	0.155
1983	4.77	119,286	112	115	111	125	137	158	163	156	167	142	122	115	135	0.152
1984	4.81	119,795	128	138	152	156	169	170	175	186	176	153	124	111	154	0.172
1985	4.86	123,644	118	122	128	148	158	166	164	174	167	150	123	120	145	0.162
1986	4.90	126,288	121	105	92	127	146	126	124	147	160	147	98	100	125	0.140
1987	4.94	131,083	121	124	125	137	154	160	162	173	171	144	118	113	142	0.159
1988	4.98	135,663	111	125	133	127	152	160	153	159	158	164	128	118	141	0.158
1989	5.02	142,215	115	112	123	139	142	157	166	165	158	146	140	137	142	0.159
1990	5.07	142,216	123	120	132	135	148	148	150	155	146	141	120	122	137	0.153
AVERAGE			118	120	123	138	151	159	161	167	163	149	124	117	141	0.158

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059214

COUNTY.. VENTURA
CITY....PORT HUENEME
SYSTEM #..... 56009
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA CLARA
DAU # 81

CITY CENSUS POPULATION
1980..... 17,803
1990..... 20,319

WATER AGENCY.....PORT HUENEME, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,153	Metered.....	120	Metered.....	NA	Metered.....	NA
Flat Rate.....	3,887	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	NA

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,255	4,255	43.0	71.0	47.0	67.0	69.0	102.0	93.0	99.0	124.0	87.0	106.0	61.0	969.0
1981	4,378	4,378	/5	-	-	-	-	-	-	-	-	-	-	-	-
1982	4,397	4,397	72.0	68.0	77.0	87.0	92.0	95.0	131.0	71.0	144.0	73.0	86.0	91.0	1087.0
1983	4,400	4,400	118.0	138.0	108.0	116.0	80.0	101.0	95.0	86.0	97.0	92.0	96.0	98.0	1225.0
1984	4,462	4,462	79.0	91.0	118.0	103.0	104.0	126.0	125.0	124.0	116.0	109.0	86.0	83.0	1264.0
1985	4,300	4,300	61.0	65.0	93.0	104.0	122.0	112.0	122.0	137.0	104.0	68.0	116.0	78.0	1182.0
1986	4,550	4,550	66.0	125.0	95.0	112.0	100.0	91.0	100.0	118.0	66.0	80.0	61.0	86.0	1100.0
1987	4,550	4,550	90.0	77.0	78.0	106.0	114.0	117.0	116.0	117.0	115.0	98.0	76.0	80.0	1184.0
1988	4,660	4,660	68.0	93.0	91.0	109.0	136.0	122.0	131.0	123.0	111.0	107.0	89.0	85.0	1265.0
1989	4,660	4,660	79.0	72.0	71.0	78.0	113.0	141.0	126.0	114.0	104.0	93.0	96.0	76.0	1163.0
1990	5,840	5,840	50.0	72.0	87.0	81.0	95.0	98.0	99.0	77.0	99.0	93.0	92.0	82.0	1025.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.18	17,803	78	138	85	125	125	191	169	179	232	158	198	111	149	0.167
1981	4.11	18,009	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	4.04	17,777	131	137	140	163	167	178	238	129	270	132	161	165	168	0.188
1983	3.97	17,479	218	282	199	221	148	193	175	159	185	170	183	181	192	0.215
1984	3.90	17,411	146	180	219	197	193	241	232	230	222	202	165	154	199	0.223
1985	3.83	16,476	119	141	182	210	239	227	239	268	210	133	235	153	197	0.220
1986	3.76	17,113	124	261	179	218	188	177	188	222	129	151	119	162	176	0.197
1987	3.69	16,793	173	164	150	210	219	232	223	225	228	188	151	154	193	0.216
1988	3.62	16,870	130	190	174	215	260	241	250	235	219	205	176	163	205	0.230
1989	3.55	16,542	154	155	138	157	220	284	246	222	210	181	193	148	193	0.216
1990	3.48	20,319	79	127	138	133	151	161	157	122	162	148	151	130	138	0.155
AVERAGE			135	177	160	185	191	212	212	199	207	167	173	152	181	0.203

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

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C-059215

COUNTY.. VENTURA
CITY....SANTA PAULA
SYSTEM #..... 56011
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA CLARA
DAU # 81

WATER AGENCY.....SANTA PAULA WATER WORKS
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 7
WELLS AND SPRINGS.. 93

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 22,400
1990..... 25,062

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5,865	Metered.....	747	Metered.....	NA	Metered.....	122
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,858	5,558	76.0	70.0	85.0	123.0	121.0	161.0	186.0	174.0	140.0	142.0	128.0	108.0	1514.0
1981	6,042	5,742	150.0	85.0	85.0	138.0	202.0	277.0	283.0	259.0	239.0	192.0	154.0	108.0	2172.0
1982	6,041	5,741	90.0	84.0	87.0	97.0	175.0	224.0	246.0	242.0	194.0	197.0	100.0	92.0	1828.0
1983	6,041	5,741	102.0	82.0	87.0	93.0	120.0	144.0	175.0	151.0	149.0	113.0	84.0	98.0	1398.0
1984	6,212	5,912	98.0	130.0	159.0	164.0	197.0	189.0	207.0	203.0	175.0	158.0	105.0	84.0	1869.0
1985	6,264	5,964	91.0	96.0	126.0	157.0	188.0	203.0	241.0	237.0	197.0	178.0	127.0	108.0	1949.0
1986	6,300	6,000	108.0	96.0	116.0	143.0	180.0	169.0	184.0	178.0	149.0	142.0	126.0	114.0	1705.0
1987	6,400	6,100	106.0	103.0	105.0	150.0	160.0	164.0	169.0	175.0	151.0	135.0	97.0	92.0	1607.0
1988	6,513	6,213	92.0	111.0	127.0	125.0	149.0	162.0	169.0	169.0	153.0	142.0	115.0	110.0	1624.0
1989	6,600	6,300	100.0	89.0	114.0	145.0	146.0	154.0	170.0	162.0	151.0	142.0	137.0	133.0	1643.0
1990	6,734	6,434	105.0	93.0	120.0	119.0	142.0	149.0	165.0	155.0	144.0	146.0	125.0	116.0	1579.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.03	23,609	104	102	116	174	165	227	254	238	198	194	181	148	176	0.197
1981	4.02	24,269	199	125	113	190	268	380	376	344	328	255	212	144	245	0.275
1982	4.00	24,184	120	124	116	134	233	309	328	323	267	263	138	123	207	0.232
1983	3.99	24,102	137	122	116	129	161	199	234	202	206	151	116	131	159	0.178
1984	3.98	24,700	128	181	208	221	257	255	270	265	236	206	142	110	207	0.232
1985	3.96	24,823	118	138	164	211	244	273	313	308	265	231	171	140	215	0.241
1986	3.95	24,880	140	138	150	192	233	226	239	231	200	184	169	148	188	0.210
1987	3.94	25,189	136	146	134	199	205	217	216	224	200	173	128	118	175	0.196
1988	3.92	25,546	116	150	160	163	188	211	213	213	200	179	150	139	174	0.195
1989	3.91	25,798	125	123	143	187	183	199	213	203	195	178	177	166	174	0.195
1990	3.90	26,231	129	127	148	151	175	189	203	191	183	180	159	143	165	0.185
AVERAGE			132	134	143	177	210	244	260	249	225	199	158	137	190	0.212

1/Number of services estimated,commercial & industrial comb
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059216

COUNTY.. VENTURA
CITY.... OJAI
SYSTEM #..... 56014
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA CLARA
DAU # 81

WATER AGENCY.....SOUTHERN CALIFORNIA WATER COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 25
WELLS AND SPRINGS.. 75

SOURCE OF WATER (in percent):
PURCHASED..... 25
SELF SUPPLIED..... 75

CITY CENSUS POPULATION
1980..... 6,816
1990..... 7,613

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	NA	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	NA	Flat Rate...	NA	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,411	2,411	24.0	24.0	29.0	44.0	41.0	60.0	73.0	69.0	56.0	57.0	45.0	35.0	557.0
1981	2,476	2,476	34.0	28.0	27.0	38.0	55.0	76.0	75.0	81.0	67.0	49.0	41.0	34.0	605.0
1982	2,488	2,488	14.0	31.0	12.0	24.0	28.0	40.0	44.0	64.0	70.0	57.0	34.0	32.0	450.0
1983	2,504	2,504	28.0	22.0	27.0	33.0	46.0	56.0	70.0	64.0	67.0	38.0	28.0	28.0	507.0
1984	2,512	2,512	31.0	43.0	49.0	58.0	76.0	74.0	88.0	85.0	69.0	58.0	36.0	29.0	696.0
1985	2,544	2,544	31.0	30.0	41.0	58.0	66.0	77.0	88.0	84.0	69.0	62.0	42.0	36.0	684.0
1986	2,562	2,562	37.0	28.0	37.0	43.0	68.0	73.0	79.0	82.0	64.0	55.0	50.0	48.0	664.0
1987	2,619	2,619	40.0	37.0	40.0	62.0	71.0	76.0	79.0	81.0	76.0	58.0	39.0	36.0	695.0
1988	2,641	2,641	36.0	45.0	55.0	53.0	75.0	79.0	88.0	85.0	75.0	70.0	48.0	44.0	753.0
1989	2,683	2,683	39.0	36.0	50.0	62.0	58.0	72.0	89.0	76.0	56.0	84.0	62.0	57.0	741.0
1990	2,710	2,710	41.0	44.0	56.0	55.0	68.0	73.0	88.0	80.0	75.0	67.0	52.0	53.0	752.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.83	6,816	114	121	137	215	194	293	345	327	274	270	220	166	224	0.251
1981	2.83	6,995	157	143	125	181	254	362	346	374	319	226	195	157	237	0.265
1982	2.82	7,025	64	158	55	114	129	190	202	294	332	262	161	147	176	0.197
1983	2.82	7,066	128	111	123	156	210	264	320	292	316	173	132	128	197	0.220
1984	2.82	7,084	141	209	223	273	346	348	401	387	325	264	169	132	269	0.301
1985	2.82	7,169	139	149	184	270	297	358	396	378	321	279	195	162	261	0.293
1986	2.82	7,215	165	139	165	199	304	337	353	367	296	246	231	215	252	0.282
1987	2.81	7,371	175	179	175	280	311	344	346	354	344	254	176	158	258	0.289
1988	2.81	7,429	156	209	239	238	326	354	382	369	337	304	215	191	278	0.311
1989	2.81	7,542	167	170	214	274	248	318	381	325	248	359	274	244	269	0.301
1990	2.81	7,613	174	206	237	241	288	320	373	339	328	284	228	225	271	0.303
AVERAGE			144	163	171	222	264	317	349	346	313	266	200	175	245	0.274

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059217

COUNTY.. VENTURA
CITY....THOUSAND OAKS
SYSTEM #..... 56020
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA CLARA
DAU # 81

WATER AGENCY.....THOUSAND OAKS, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY..... X
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 28,000
1990..... 40,000

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	12,067	Metered.....	814	Metered.....	0	Metered.....	1
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	10,400	10,280	127.0	124.0	128.0	193.0	199.0	282.0	359.0	321.0	242.0	242.0	208.0	193.0	2618.0
1981	10,659	10,484	182.0	155.0	158.0	203.0	263.0	351.0	361.0	346.0	290.0	214.0	192.0	150.0	2865.0
1982	10,918	10,689	126.0	143.0	145.0	170.0	239.0	250.0	331.0	349.0	276.0	271.0	181.0	143.0	2624.0
1983	11,143	10,913	164.0	115.0	115.0	164.0	236.0	260.0	322.0	288.0	271.0	194.0	149.0	130.0	2408.0
1984	11,400	11,200	181.0	200.0	247.0	257.0	318.0	311.0	342.0	356.0	310.0	327.0	264.0	160.0	3273.0
1985	11,600	11,400	163.0	155.0	146.0	144.0	265.0	300.0	377.0	368.0	306.0	268.0	200.0	178.0	2870.0
1986	11,898	11,660	196.0	132.0	163.0	200.0	275.0	349.0	397.0	379.0	299.0	308.0	279.0	258.0	3235.0
1987	12,421	12,233	229.0	207.0	226.0	331.0	336.0	358.0	375.0	392.0	351.0	271.0	195.0	177.0	3448.0
1988	12,617	12,367	173.0	218.0	263.0	255.0	340.0	371.0	386.0	387.0	340.0	307.0	217.0	212.0	3469.0
1989	12,733	12,446	193.0	167.0	228.0	295.0	336.0	346.0	405.0	390.0	358.0	338.0	292.0	298.0	3646.0
1990	12,882	12,578	223.0	179.0	256.0	251.0	325.0	354.0	388.0	379.0	352.0	326.0	270.0	253.0	3556.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.72	28,327	145	151	146	227	227	332	409	366	285	276	245	220	253	0.284
1981	2.77	29,519	199	188	173	229	287	396	394	378	327	234	217	164	266	0.298
1982	2.82	30,734	132	166	152	184	251	271	347	366	299	284	196	150	234	0.262
1983	2.86	31,876	166	129	116	171	239	272	326	291	283	196	156	132	207	0.232
1984	2.91	33,132	176	208	240	259	310	313	333	347	312	318	266	156	271	0.303
1985	2.95	34,243	154	162	138	140	250	292	355	347	298	252	195	168	230	0.257
1986	3.00	35,665	177	132	147	187	249	326	359	343	279	279	261	233	249	0.278
1987	3.04	37,800	195	196	193	292	287	316	320	335	310	231	172	151	250	0.280
1988	3.09	38,972	143	193	218	218	281	317	319	320	291	254	186	175	244	0.273
1989	3.13	39,912	156	149	184	246	272	289	327	315	299	273	244	241	250	0.280
1990	3.18	40,967	176	156	202	204	256	288	306	298	286	257	220	199	238	0.266
AVERAGE			165	166	174	214	264	310	345	337	297	260	214	181	245	0.274

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059218

COUNTY..LOS ANGELES
CITY....BEVERLY HILLS
SYSTEM #..... 19156
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 32,367
1990..... 31,971

WATER AGENCY.....BEVERLY HILLS, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	8,808	Metered.....	1,168	Metered.....	90	Metered.....	167
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	9,870	8,091	265.0	273.0	287.0	359.0	343.0	426.0	485.0	465.0	402.0	384.0	384.0	336.0	4409.0
1981	11,200	9,000	326.0	294.0	298.0	345.0	414.0	468.0	501.0	480.0	440.0	394.0	372.0	330.0	4662.0
1982	10,750	8,699	281.0	306.0	284.0	336.0	388.0	386.0	459.0	467.0	395.0	402.0	337.0	302.0	4343.0
1983	10,303	8,399	329.0	264.0	271.0	311.0	379.0	393.0	476.0	441.0	456.0	376.0	303.0	298.0	4297.0
1984	9,854	8,098	344.0	356.0	404.0	401.0	465.0	457.0	505.0	493.0	480.0	445.0	348.0	306.0	5004.0
1985	9,984	8,047	333.0	319.0	345.0	396.0	423.0	456.0	501.0	489.0	432.0	419.0	341.0	335.0	4789.0
1986	10,510	8,627	351.0	283.0	335.0	378.0	445.0	443.0	486.0	492.0	411.0	391.0	373.0	350.0	4738.0
1987	10,598	8,684	347.0	321.0	635.0	430.0	433.0	445.0	454.0	473.0	433.0	395.0	312.0	336.0	5014.0
1988	10,282	8,464	328.0	355.0	389.0	373.0	431.0	449.0	468.0	472.0	416.0	418.0	347.0	342.0	4788.0
1989	10,211	8,385	336.0	288.0	364.0	429.0	438.0	440.0	500.0	483.0	453.0	422.0	409.0	386.0	4948.0
1990	10,233	8,421	356.0	311.0	372.0	343.0	404.0	405.0	459.0	444.0	430.0	430.0	380.0	380.0	4714.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.00	39,484	217	238	234	303	280	360	396	380	339	314	324	275	306	0.343
1981	3.98	44,576	236	236	216	258	300	350	363	347	329	285	278	239	287	0.321
1982	3.96	42,566	213	257	215	263	294	302	348	354	309	305	264	229	280	0.313
1983	3.94	40,586	261	232	215	255	301	323	378	351	375	299	249	237	290	0.325
1984	3.92	38,616	287	318	337	346	388	394	422	412	414	372	300	256	355	0.398
1985	3.90	38,922	276	293	286	339	351	391	415	405	370	347	292	278	337	0.378
1986	3.88	40,759	278	248	265	309	352	362	385	389	336	309	305	277	318	0.357
1987	3.86	40,884	274	280	501	351	342	363	358	373	353	312	254	265	336	0.376
1988	3.84	39,456	268	310	318	315	352	379	383	386	351	342	293	280	332	0.372
1989	3.82	38,975	278	264	301	367	363	376	414	400	387	349	350	319	348	0.390
1990	3.80	38,850	296	286	309	294	335	347	381	369	369	357	326	316	332	0.372
AVERAGE			262	269	291	309	333	359	386	379	358	326	294	270	320	0.359

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059219

COUNTY..LOS ANGELES
CITY....HERMOSA & REDONDO BEACH
SYSTEM #..... 19134
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 75,172
1990..... 88,420

WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	21,600	Metered.....	2,250	Metered.....	44	Metered.....	364
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	22,497	22,497	319.0	295.0	288.0	332.0	378.0	421.0	450.0	448.0	437.0	394.0	373.0	357.0	4492.0
1981	22,574	22,574	352.0	316.0	355.0	401.0	451.0	508.0	541.0	523.0	460.0	424.0	391.0	350.0	5072.0
1982	22,621	22,621	342.0	321.0	347.0	367.0	435.0	446.0	524.0	515.0	427.0	439.0	359.0	355.0	4877.0
1983	22,687	22,687	339.0	311.0	302.0	306.0	330.0	402.0	440.0	458.0	452.0	390.0	343.0	325.0	4398.0
1984	23,852	23,852	373.0	373.0	437.0	419.0	494.0	493.0	540.0	517.0	487.0	445.0	377.0	350.0	5305.0
1985	23,033	23,033	367.0	339.0	383.0	433.0	465.0	493.0	543.0	532.0	459.0	451.0	379.0	360.0	5204.0
1986	23,197	23,197	397.0	322.0	366.0	412.0	488.0	491.0	524.0	508.0	439.0	412.0	389.0	380.0	5128.0
1987	23,430	23,430	379.0	351.0	396.0	449.0	481.0	473.0	487.0	506.0	461.0	428.0	464.0	355.0	5230.0
1988	23,763	23,763	360.0	374.0	427.0	409.0	471.0	470.0	501.0	490.0	443.0	430.0	374.0	367.0	5116.0
1989	23,971	23,971	366.0	325.0	393.0	444.0	468.0	470.0	507.0	505.0	456.0	434.0	416.0	409.0	5193.0
1990	24,219	24,219	375.0	338.0	401.0	397.0	430.0	441.0	490.0	476.0	448.0	434.0	387.0	381.0	4998.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.34	75,172	137	135	124	147	162	187	193	192	194	169	165	153	164	0.183
1981	3.37	76,128	149	148	150	176	191	222	229	222	201	180	171	148	183	0.204
1982	3.40	76,986	143	149	145	159	182	193	220	216	185	184	155	149	174	0.194
1983	3.43	77,913	140	143	125	131	137	172	182	190	193	161	147	135	155	0.173
1984	3.47	82,652	146	156	171	169	193	199	211	202	196	174	152	137	176	0.197
1985	3.50	80,527	147	150	153	179	186	204	218	213	190	181	157	144	177	0.198
1986	3.53	81,818	157	141	144	168	192	200	207	200	179	162	158	150	172	0.192
1987	3.56	83,364	147	150	153	180	186	189	188	196	184	166	186	137	172	0.193
1988	3.59	85,285	136	151	162	160	178	184	189	185	173	163	146	139	164	0.184
1989	3.62	86,773	136	134	146	171	174	181	188	188	175	161	160	152	164	0.184
1990	3.65	88,420	137	137	146	150	157	166	179	174	169	158	146	139	155	0.173
AVERAGE			143	145	147	163	176	191	200	198	185	169	159	144	169	0.189

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY..LOS ANGELES
CITY....PALOS VERDES
SYSTEM #..... 19104
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 59,228
1990..... 64,831

WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	25,137	Metered.....	487	Metered.....	12	Metered.....	205
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	22,042	22,042	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981	22,164	22,164	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	22,195	22,195	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	22,226	22,226	-	-	-	-	-	-	713.0	665.0	556.0	412.0	318.0	282.0	-
1984	22,364	22,364	360.0	432.0	531.0	545.0	684.0	674.0	765.0	717.0	684.0	561.0	381.0	304.0	6638.0
1985	22,485	22,485	340.0	345.0	420.0	545.0	615.0	696.0	-	-	-	-	-	-	-
1986	22,714	22,714	427.0	280.0	371.0	500.0	650.0	657.0	734.0	762.0	573.0	503.0	492.0	405.0	6354.0
1987	22,778	22,778	381.0	370.0	427.0	606.0	647.0	631.0	656.0	694.0	663.0	532.0	385.0	362.0	6354.0
1988	22,873	22,873	380.0	424.0	555.0	493.0	660.0	633.0	685.0	682.0	660.0	600.0	447.0	398.0	6617.0
1989	23,012	23,012	380.0	320.0	434.0	591.0	674.0	671.0	784.0	754.0	683.0	594.0	580.0	554.0	7019.0
1990	23,124	23,124	-	-	-	-	-	-	-	-	-	-	-	-	-

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.69	59,228	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.70	59,814	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	2.71	60,157	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.72	60,500	-	-	-	-	-	-	380	355	306	220	175	150	-	-
1984	2.73	61,136	190	244	280	297	361	367	404	378	373	296	208	160	297	0.333
1985	2.75	61,729	178	200	219	294	321	376	-	-	-	-	-	-	-	-
1986	2.76	62,622	220	160	191	266	335	350	378	393	305	259	262	209	278	0.311
1987	2.77	63,064	195	210	218	320	331	334	336	355	350	272	203	185	276	0.309
1988	2.78	63,594	193	230	282	258	335	332	347	346	346	304	234	202	285	0.319
1989	2.79	64,249	191	178	218	307	338	348	394	379	354	298	301	278	299	0.335
1990	2.80	64,831	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AVERAGE			194	203	235	290	337	351	373	367	339	275	231	197	287	0.322

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

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C-059221

COUNTY..LOS ANGELES
CITY....CERRITOS
SYSTEM #..... 19019
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

WATER AGENCY.....CERRITOS, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 33
WELLS AND SPRINGS.. 67

SOURCE OF WATER (in percent):
PURCHASED..... 33
SELF SUPPLIED..... 67

CITY CENSUS POPULATION
1980..... 52,756
1990..... 53,240

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	14,013	Metered.....	812	Metered.....	61	Metered.....	457
Flat Rate.....	44	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	14,500	14,500	170.0	150.0	171.0	239.0	265.0	350.0	421.0	395.0	350.0	319.0	241.0	188.0	3259.0
1981	14,600	14,600	201.0	167.0	184.0	264.0	320.0	404.0	408.0	394.0	383.0	281.0	252.0	199.0	3457.0
1982	14,640	14,640	174.0	194.0	196.0	253.0	321.0	313.0	378.0	344.0	295.0	311.0	220.0	163.0	3162.0
1983	14,770	14,770	240.0	193.0	223.0	285.0	343.0	381.0	428.0	423.0	408.0	285.0	120.0	220.0	3549.0
1984	14,700	14,700	255.0	281.0	302.0	316.0	407.0	379.0	407.0	373.0	393.0	336.0	248.0	206.0	3903.0
1985	14,900	14,900	222.0	206.0	260.0	312.0	346.0	369.0	450.0	423.0	360.0	326.0	253.0	226.0	3753.0
1986	14,910	14,910	249.0	187.0	221.0	291.0	385.0	395.0	407.0	374.0	319.0	240.0	290.0	282.0	3640.0
1987	14,930	14,930	256.0	218.0	241.0	347.0	367.0	387.0	408.0	408.0	393.0	309.0	246.0	241.0	3821.0
1988	15,020	15,020	240.0	231.0	299.0	279.0	351.0	359.0	383.0	356.0	317.0	289.0	247.0	227.0	3578.0
1989	15,100	15,100	231.0	203.0	258.0	308.0	334.0	340.0	371.0	350.0	340.0	302.0	288.0	264.0	3589.0
1990	15,160	15,160	261.0	223.0	268.0	275.0	320.0	331.0	371.0	347.0	318.0	312.0	258.0	255.0	3539.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.64	52,756	104	98	105	151	162	221	257	242	221	195	152	115	169	0.190
1981	3.63	52,935	122	113	112	166	195	254	249	240	241	171	159	121	179	0.200
1982	3.61	52,895	106	131	120	159	196	197	231	210	186	190	139	99	164	0.183
1983	3.60	53,178	146	130	135	179	208	239	260	257	256	173	75	133	183	0.205
1984	3.59	52,740	156	184	185	200	249	240	249	228	248	206	157	126	203	0.227
1985	3.58	53,269	134	138	157	195	210	231	273	256	225	197	158	137	193	0.216
1986	3.56	53,116	151	126	134	183	234	248	247	227	200	146	182	171	188	0.210
1987	3.55	52,999	156	147	147	218	223	243	248	248	247	188	155	147	198	0.221
1988	3.54	53,128	146	150	182	175	213	225	233	216	199	175	155	138	185	0.207
1989	3.52	53,220	140	136	156	193	202	213	225	212	213	183	180	160	185	0.207
1990	3.51	53,240	158	150	162	172	194	207	225	210	199	189	162	155	182	0.204
AVERAGE			138	137	145	181	208	229	245	231	221	183	152	137	184	0.206

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—059222

C-059222

COUNTY..LOS ANGELES
CITY.... COMPTON
SYSTEM #..... 19026
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 81,286
1990..... 90,454

WATER AGENCY.....COMPTON, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 47
WELLS AND SPRINGS.. 53

SOURCE OF WATER (in percent):
PURCHASED..... 47
SELF SUPPLIED..... 53

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	13,666	Metered.....	1,062	Metered.....	180	Metered.....	197
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	10,000	10,000	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			197.0	179.0	193.0	221.0	265.0	293.0	315.0	310.0	272.0	242.0	211.0	204.0	-
1982			198.0	188.0	199.0	201.0	238.0	255.0	300.0	298.0	257.0	252.0	212.0	213.0	-
1983			221.0	176.0	194.0	198.0	240.0	269.0	323.0	312.0	272.0	254.0	212.0	217.0	-
1984			219.0	222.0	268.0	250.0	300.0	320.0	337.0	318.0	300.0	274.0	228.0	221.0	-
1985	14,500	14,500	242.0	221.0	247.0	265.0	295.0	318.0	358.0	339.0	262.0	267.0	243.0	237.0	3294.0
1986	14,500	14,500	249.0	208.0	228.0	263.0	313.0	312.0	330.0	345.0	295.0	272.0	253.0	256.0	3324.0
1987	14,500	14,500	249.0	216.0	257.0	287.0	307.0	303.0	322.0	327.0	284.0	289.0	247.0	237.0	3325.0
1988	14,500	14,500	243.0	241.0	276.0	266.0	299.0	320.0	340.0	331.0	310.0	297.0	257.0	247.0	3427.0
1989	14,905	14,905	256.0	232.0	275.0	303.0	314.0	317.0	368.0	359.0	332.0	296.0	283.0	282.0	3617.0
1990	15,000	15,000	262.0	239.0	284.0	279.0	301.0	307.0	339.0	335.0	314.0	302.0	289.0	283.0	3534.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	8.13	81,286	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	7.92		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	7.71		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	7.50		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	7.29		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	7.08	102,652	76	77	78	86	93	103	113	107	85	84	79	74	88	0.098
1986	6.87	99,609	81	75	74	88	101	104	107	112	99	88	85	83	91	0.102
1987	6.66	96,567	83	80	86	99	103	105	108	109	98	97	85	79	94	0.106
1988	6.45	93,524	84	89	95	95	103	114	117	114	110	102	92	85	100	0.112
1989	6.24	93,009	89	89	95	109	109	114	128	125	119	103	101	98	107	0.119
1990	6.03	90,454	93	94	101	103	107	113	121	119	116	108	106	101	107	0.120
AVERAGE			84	84	88	97	103	109	115	114	105	97	91	87	98	0.110

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C—0 5 9 2 2 3

C-059223

COUNTY..LOS ANGELES
CITY....CARSON, ET AL
SYSTEM #..... 19033
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 100,000
1990..... 101,000

WATER AGENCY.....DOMINGUEZ WATER CORPORATION
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 73
WELLS AND SPRINGS.. 27

SOURCE OF WATER (in percent):
PURCHASED..... 73
SELF SUPPLIED..... 27

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	27,546	Metered.....	2,716	Metered.....	130	Metered.....	281
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	30,000	30,000	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981	30,500	30,500	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	30,123	30,123	-	-	-	-	-	-	1144.0	1160.0	1011.0	1035.0	852.0	839.0	-
1983	30,175	30,175	898.0	830.0	878.0	887.0	1018.0	1120.0	1208.0	1138.0	1095.0	969.0	834.0	776.0	11651.0
1984	30,220	30,220	823.0	857.0	1020.0	994.0	1143.0	1162.0	1288.0	1211.0	1122.0	1127.0	920.0	837.0	12504.0
1985	30,512	30,512	883.0	793.0	908.0	1031.0	1109.0	1153.0	-	-	-	-	-	-	-
1986	29,776	29,776	903.0	771.0	871.0	940.0	1082.0	1084.0	1151.0	1152.0	1055.0	980.0	983.0	897.0	11869.0
1987	29,859	29,859	897.0	830.0	924.0	1064.0	1169.0	1114.0	1096.0	1172.0	1073.0	1005.0	881.0	908.0	12133.0
1988	30,188	30,188	983.0	982.0	1234.0	1115.0	1162.0	1182.0	1268.0	1305.0	1239.0	1174.0	997.0	986.0	13627.0
1989	30,979	30,979	922.0	847.0	1005.0	1109.0	1166.0	1184.0	1323.0	1315.0	1205.0	1157.0	1092.0	1090.0	13415.0
1990	31,611	31,611	973.0	890.0	950.0	982.0	1059.0	1158.0	1233.0	1213.0	1127.0	1130.0	985.0	967.0	12667.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.33	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.32	101,245	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3.31	99,577	-	-	-	-	-	-	371	376	338	335	285	272	-	-
1983	3.29	99,332	292	298	285	298	331	376	392	370	367	315	280	252	321	0.360
1984	3.28	99,062	268	298	332	334	372	391	419	394	378	367	310	273	346	0.387
1985	3.26	99,598	286	284	294	345	359	386	-	-	-	-	-	-	-	-
1986	3.25	96,784	301	285	290	324	361	373	384	384	363	327	339	299	336	0.376
1987	3.24	96,641	299	307	308	367	390	384	366	391	370	335	304	303	344	0.385
1988	3.22	97,288	326	348	409	382	385	405	420	433	425	389	342	327	384	0.430
1989	3.21	99,409	299	304	326	372	378	397	429	427	404	375	366	354	370	0.414
1990	3.20	101,000	311	315	303	324	338	382	394	387	372	361	325	309	344	0.385
AVERAGE			298	305	319	343	364	387	397	395	377	351	319	298	349	0.391

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
5/ Missing data unavailable.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Includes part of Torrance

COUNTY..LOS ANGELES
CITY.... DOWNEY
SYSTEM #..... 19034
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 82,602
1990..... 91,444

WATER AGENCY.....DOWNEY, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 14
WELLS AND SPRINGS.. 86

SOURCE OF WATER (in percent):
PURCHASED..... 14
SELF SUPPLIED..... 86

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	19,550	Metered.....	2,300	Metered.....	1,199	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	23,000	23,000	332.0	288.0	340.0	427.0	431.0	597.0	647.0	535.0	576.0	379.0	428.0	399.0	5379.0
1981	23,000	23,000	361.0	305.0	329.0	416.0	514.0	594.0	653.0	651.0	537.0	451.0	406.0	368.0	5585.0
1982	23,000	23,000	324.0	348.0	333.0	399.0	501.0	510.0	668.0	580.0	513.0	443.0	371.0	361.0	5351.0
1983	23,000	23,000	325.0	282.0	292.0	348.0	442.0	509.0	610.0	612.0	489.0	413.0	322.0	317.0	4961.0
1984	23,000	23,000	395.0	363.0	489.0	444.0	605.0	600.0	665.0	601.0	592.0	496.0	372.0	345.0	5967.0
1985	23,000	23,000	369.0	333.0	397.0	491.0	502.0	653.0	661.0	605.0	553.0	480.0	398.0	374.0	5816.0
1986	23,000	23,000	386.0	283.0	357.0	514.0	535.0	659.0	658.0	640.0	448.0	458.0	422.0	373.0	5733.0
1987	23,000	23,000	354.0	340.0	408.0	585.0	550.0	568.0	664.0	599.0	680.0	363.0	368.0	360.0	5839.0
1988	23,000	23,000	323.0	380.0	662.0	307.0	523.0	708.0	528.0	554.0	580.0	483.0	385.0	355.0	5788.0
1989	23,000	23,000	401.0	326.0	413.0	518.0	523.0	567.0	635.0	586.0	502.0	534.0	446.0	481.0	5932.0
1990	23,000	23,000	347.0	348.0	418.0	440.0	475.0	520.0	623.0	576.0	549.0	472.0	482.0	400.0	5650.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.59	82,602	130	120	133	172	168	241	253	209	232	148	173	156	178	0.200
1981	3.63	83,486	139	130	127	166	199	237	252	252	214	174	162	142	183	0.205
1982	3.67	84,370	124	147	127	158	192	201	255	222	203	169	147	138	174	0.195
1983	3.71	85,255	123	118	110	136	167	199	231	232	191	156	126	120	159	0.179
1984	3.75	86,139	148	145	183	172	227	232	249	225	229	186	144	129	190	0.213
1985	3.78	87,023	137	137	147	188	186	250	245	224	212	178	152	139	183	0.205
1986	3.82	87,907	142	115	131	195	196	250	241	235	170	168	160	137	179	0.200
1987	3.86	88,791	129	137	148	220	200	213	241	218	255	132	138	131	180	0.202
1988	3.90	89,676	116	146	238	114	188	263	190	199	216	174	143	128	177	0.198
1989	3.94	90,560	143	129	147	191	186	209	226	209	185	190	164	171	179	0.201
1990	3.98	91,444	122	136	147	160	168	190	220	203	200	167	176	141	169	0.190
AVERAGE			132	133	149	170	189	226	237	221	210	167	153	139	177	0.199

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY..LOS ANGELES
CITY....EL SEGUNDO
SYSTEM #..... 19040
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 13,752
1990..... 15,223

WATER AGENCY.....EL SEGUNDO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL: /6		GOVERNMENTAL:	
Metered.....	3,538	Metered.....	252	Metered.....	476	Metered.....	107
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,250	4,250	/5	-	-	-	-	-	570.0	568.0	565.0	560.0	504.0	518.0	-
1981	4,292	4,292	458.0	420.0	455.0	500.0	555.0	545.0	614.0	604.0	569.0	510.0	510.0	474.0	6214.0
1982	4,335	4,335	461.0	457.0	488.0	481.0	510.0	500.0	583.0	524.0	500.0	520.0	428.0	407.0	5859.0
1983	4,337	4,337	396.0	361.0	444.0	462.0	537.0	536.0	603.0	596.0	595.0	593.0	504.0	487.0	6114.0
1984	4,345	4,345	513.0	512.0	568.0	553.0	600.0	579.0	621.0	653.0	578.0	607.0	516.0	462.0	6762.0
1985	4,352	4,352	521.0	508.0	531.0	497.0	563.0	584.0	610.0	614.0	508.0	539.0	508.0	513.0	6496.0
1986	4,322	4,322	503.0	421.0	509.0	516.0	569.0	534.0	606.0	585.0	539.0	552.0	503.0	494.0	6331.0
1987	4,333	4,333	484.0	441.0	503.0	558.0	569.0	554.0	567.0	564.0	541.0	588.0	523.0	532.0	6424.0
1988	4,337	4,337	511.0	505.0	577.0	603.0	619.0	612.0	646.0	586.0	553.0	567.0	548.0	542.0	6869.0
1989	4,324	4,324	550.0	475.0	565.0	553.0	587.0	596.0	657.0	615.0	598.0	580.0	523.0	530.0	6829.0
1990	4,367	4,367	515.0	468.0	564.0	528.0	558.0	564.0	592.0	604.0	539.0	582.0	558.0	530.0	6602.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.24	13,752	-	-	-	-	-	-	1,337	1,332	1,369	1,314	1,222	1,215	-	-
1981	3.26	13,995	1,056	1,072	1,049	1,191	1,279	1,298	1,415	1,392	1,355	1,176	1,215	1,093	1,216	1.362
1982	3.29	14,244	1,044	1,146	1,105	1,126	1,155	1,170	1,320	1,187	1,170	1,178	1,002	922	1,127	1.262
1983	3.31	14,359	890	898	997	1,072	1,206	1,244	1,355	1,339	1,381	1,332	1,170	1,094	1,167	1.307
1984	3.34	14,494	1,142	1,218	1,264	1,272	1,335	1,332	1,382	1,453	1,329	1,351	1,187	1,028	1,278	1.432
1985	3.36	14,626	1,149	1,240	1,171	1,133	1,242	1,331	1,345	1,354	1,158	1,189	1,158	1,131	1,217	1.363
1986	3.39	14,634	1,109	1,027	1,122	1,175	1,254	1,216	1,336	1,290	1,228	1,217	1,146	1,089	1,185	1.328
1987	3.41	14,779	1,056	1,066	1,098	1,259	1,242	1,249	1,238	1,231	1,220	1,283	1,180	1,161	1,191	1.334
1988	3.44	14,901	1,106	1,169	1,249	1,349	1,340	1,369	1,398	1,269	1,237	1,227	1,226	1,173	1,263	1.414
1989	3.46	14,965	1,186	1,134	1,218	1,232	1,265	1,328	1,416	1,326	1,332	1,250	1,165	1,142	1,250	1.400
1990	3.49	15,223	1,091	1,098	1,195	1,156	1,182	1,235	1,254	1,280	1,180	1,233	1,222	1,123	1,188	1.331
AVERAGE			1,083	1,107	1,147	1,196	1,250	1,277	1,345	1,314	1,269	1,250	1,172	1,107	1,208	1.353

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
5/ Missing data unavailable
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
6/Agency provides water toChevron Oil Refinery and other large industries

C—0 5 9 2 2 6

C-059226

COUNTY..LOS ANGELES
CITY....HAWTHORNE
SYSTEM #..... 19047
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 26,447
1990..... 38,000

WATER AGENCY.....HAWTHORNE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 73
WELLS AND SPRINGS.. 27

SOURCE OF WATER (in percent):
PURCHASED..... 73
SELF SUPPLIED..... 27

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5,220	Metered.....	658	Metered.....	187	Metered.....	50
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	6,047	6,047	/5	-	-	-	-	-	164.0	161.0	145.0	144.0	134.0	127.0	-
1981	6,047	6,047	126.0	115.0	128.0	130.0	151.0	165.0	171.0	170.0	157.0	147.0	139.0	130.0	1729.0
1982	5,991	5,991	131.0	123.0	134.0	127.0	144.0	140.0	176.0	175.0	157.0	159.0	136.0	132.0	1734.0
1983	5,996	5,996	136.0	123.0	135.0	130.0	149.0	156.0	177.0	176.0	162.0	148.0	134.0	133.0	1759.0
1984	5,935	5,935	133.0	142.0	155.0	145.0	171.0	170.0	186.0	174.0	171.0	169.0	144.0	134.0	1894.0
1985	6,023	6,023	137.0	138.0	149.0	152.0	167.0	175.0	185.0	182.0	170.0	155.0	138.0	144.0	1892.0
1986	6,036	6,036	151.0	132.0	154.0	159.0	170.0	172.0	187.0	184.0	169.0	162.0	151.0	147.0	1938.0
1987	6,036	6,036	127.0	100.0	128.0	136.0	130.0	138.0	140.0	105.0	95.0	84.0	74.0	78.0	1335.0
1988	6,022	6,022	113.0	110.0	133.0	131.0	129.0	143.0	151.0	156.0	139.0	125.0	101.0	95.0	1526.0
1989	6,036	6,036	122.0	110.0	126.0	131.0	132.0	157.0	196.0	196.0	171.0	177.0	169.0	170.0	1857.0
1990	6,056	6,056	142.0	130.0	153.0	144.0	151.0	151.0	167.0	161.0	149.0	153.0	141.0	142.0	1784.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.37	26,447	-	-	-	-	-	-	200	196	183	176	169	155	-	-
1981	4.56	27,597	147	149	150	157	177	199	200	199	190	172	168	152	172	0.192
1982	4.75	28,480	148	154	152	149	163	164	199	198	184	180	159	150	167	0.187
1983	4.94	29,644	148	148	147	146	162	175	193	192	182	161	151	145	163	0.182
1984	5.13	30,471	141	161	164	159	181	186	197	184	187	179	158	142	170	0.191
1985	5.32	32,067	138	154	150	158	168	182	186	183	177	156	143	145	162	0.181
1986	5.51	33,284	146	142	149	159	165	172	181	178	169	157	151	142	160	0.179
1987	5.70	34,432	119	104	120	132	122	134	131	98	92	79	72	73	106	0.119
1988	5.89	35,497	103	107	121	123	117	134	137	142	131	114	95	86	118	0.132
1989	6.08	36,727	107	107	111	119	116	142	172	172	155	155	153	149	139	0.155
1990	6.27	38,000	121	122	130	126	128	132	142	137	131	130	124	121	129	0.144
AVERAGE			132	135	139	143	150	162	176	171	162	151	140	133	148	0.166

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C—0 5 9 2 2 7

C-059227

COUNTY..LOS ANGELES
CITY....INGLEWOOD
SYSTEM #..... 19051
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

WATER AGENCY.....INGLEWOOD, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 94,245
1990..... 109,602

SERVICE CONNECTIONS /1

RESIDENTIAL:	COMMERCIAL:	INDUSTRIAL:	GOVERNMENTAL:
Metered..... 12,671	Metered..... 1,426	Metered..... 68	Metered..... 161
Flat Rate..... 0	Flat Rate... 0	Flat Rate... 0	Flat Rate... 0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	14,589	14,589	259.0	234.0	305.0	364.0	297.0	340.0	378.0	382.0	306.0	314.0	304.0	251.0	3734.0
1981	14,589	14,589	284.0	255.0	293.0	325.0	387.0	416.0	477.0	513.0	359.0	362.0	315.0	275.0	4261.0
1982	14,290	14,290	294.0	264.0	286.0	291.0	357.0	367.0	482.0	358.0	359.0	353.0	296.0	293.0	4000.0
1983	14,300	14,300	327.0	270.0	296.0	316.0	333.0	458.0	433.0	395.0	399.0	310.0	307.0	270.0	4114.0
1984	14,235	14,235	330.0	381.0	303.0	407.0	351.0	416.0	462.0	426.0	394.0	408.0	304.0	271.0	4453.0
1985	14,232	14,232	307.0	286.0	319.0	355.0	389.0	415.0	462.0	426.0	394.0	736.0	328.0	301.0	4718.0
1986	14,312	14,312	312.0	264.0	313.0	329.0	419.0	391.0	364.0	458.0	354.0	344.0	362.0	309.0	4219.0
1987	15,976	15,976	322.0	329.0	519.0	537.0	426.0	404.0	343.0	428.0	403.0	356.0	335.0	327.0	4729.0
1988	14,517	14,517	325.0	317.0	344.0	339.0	395.0	405.0	424.0	415.0	367.0	366.0	323.0	364.0	4384.0
1989	14,346	14,346	274.0	289.0	334.0	378.0	394.0	424.0	460.0	431.0	359.0	373.0	358.0	356.0	4430.0
1990	14,560	14,560	325.0	292.0	247.0	336.0	380.0	385.0	440.0	411.0	388.0	375.0	338.0	337.0	4254.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	6.46	94,245	89	86	104	129	102	120	129	131	108	107	108	86	109	0.122
1981	6.57	95,803	96	95	99	113	130	145	161	173	125	122	110	93	122	0.136
1982	6.67	95,365	99	99	97	102	121	128	163	121	125	119	103	99	115	0.129
1983	6.78	96,958	109	99	98	109	111	157	144	131	137	103	106	90	116	0.130
1984	6.89	98,037	109	134	100	138	115	141	152	140	134	134	103	89	124	0.139
1985	6.99	99,536	99	103	103	119	126	139	150	138	132	239	110	98	130	0.145
1986	7.10	101,623	99	93	99	108	133	128	116	145	116	109	119	98	114	0.127
1987	7.21	115,144	90	102	145	155	119	117	96	120	117	100	97	92	113	0.126
1988	7.31	106,179	99	103	105	106	120	127	129	126	115	111	101	111	113	0.127
1989	7.42	106,460	83	97	101	118	119	133	139	131	112	113	112	108	114	0.128
1990	7.53	109,602	96	95	73	102	112	117	130	121	118	110	103	99	106	0.119
AVERAGE			97	101	102	118	119	132	137	134	122	124	106	97	116	0.130

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059228

COUNTY..LOS ANGELES
CITY....LAKEWOOD
SYSTEM #..... 19239
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

WATER AGENCY.....LAKEWOOD, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 74,654
1990..... 73,557

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	19,265	Metered.....	851	Metered.....	NA	Metered.....	174
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	19,368	19,368	178.0	160.0	183.0	232.0	260.0	319.0	353.0	332.0	277.0	250.0	229.0	189.0	2962.0
1981	19,438	19,438	181.0	174.0	187.0	233.0	289.0	348.0	362.0	352.0	297.0	233.0	217.0	187.0	3060.0
1982	19,438	19,438	179.0	174.0	179.0	211.0	259.0	281.0	357.0	343.0	265.0	267.0	192.0	180.0	2887.0
1983	19,743	19,743	189.0	157.0	166.0	192.0	256.0	283.0	345.0	325.0	289.0	228.0	185.0	181.0	2796.0
1984	20,081	20,081	196.0	213.0	262.0	271.0	345.0	334.0	381.0	346.0	325.0	271.0	200.0	185.0	3329.0
1985	20,081	20,081	184.0	175.0	211.0	258.0	299.0	348.0	376.0	358.0	289.0	266.0	210.0	207.0	3181.0
1986	20,191	20,191	216.0	173.0	207.0	253.0	324.0	337.0	358.0	370.0	290.0	243.0	221.0	211.0	3203.0
1987	21,190	21,190	207.0	193.0	221.0	295.0	321.0	331.0	342.0	347.0	311.0	257.0	202.0	174.0	3201.0
1988	20,000	20,000	199.0	205.0	259.0	209.0	265.0	280.0	314.0	301.0	242.0	225.0	206.0	230.0	2935.0
1989	20,300	20,300	190.0	177.0	217.0	290.0	320.0	333.0	369.0	351.0	302.0	263.0	251.0	244.0	3307.0
1990	20,350	20,350	211.0	187.0	241.0	233.0	274.0	286.0	336.0	318.0	293.0	270.0	235.0	226.0	3110.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.85	74,654	77	74	79	104	112	142	153	143	124	108	102	82	109	0.122
1981	3.83	74,457	78	83	81	104	125	156	157	153	133	101	97	81	113	0.126
1982	3.81	73,991	78	84	78	95	113	127	156	150	119	116	86	78	107	0.120
1983	3.78	74,678	82	75	72	86	111	126	149	140	129	98	83	78	103	0.115
1984	3.76	75,475	84	97	112	120	147	148	163	148	144	116	88	79	121	0.135
1985	3.73	74,993	79	83	91	115	129	155	162	154	128	114	93	89	116	0.130
1986	3.71	74,920	93	82	89	113	140	150	154	159	129	105	98	91	117	0.131
1987	3.69	78,118	85	88	91	126	133	141	141	143	133	106	86	72	112	0.126
1988	3.66	73,252	88	97	114	95	117	127	138	133	110	99	94	101	110	0.123
1989	3.64	73,863	83	86	95	131	140	150	161	153	136	115	113	107	123	0.137
1990	3.61	73,557	93	91	106	106	120	130	147	139	133	118	106	99	116	0.130
AVERAGE			84	86	92	108	126	141	153	147	129	109	95	87	113	0.127

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059229

COUNTY..LOS ANGELES
CITY....LONG BEACH
SYSTEM #..... 19065
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 361,334
1990..... 429,433

WATER AGENCY.....LONG BEACH, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 65
WELLS AND SPRINGS.. 35

SOURCE OF WATER (in percent):
PURCHASED..... 65
SELF SUPPLIED..... 35

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	87,923	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	85,330	85,224	1423.0	1323.0	1460.0	1681.0	1814.0	2034.0	2271.0	2218.0	1997.0	1887.0	1775.0	1579.0	21462.0
1981	84,844	84,755	1529.0	1425.0	1582.0	1786.0	1979.0	2321.0	2488.0	2496.0	2210.0	1863.0	1851.0	1642.0	23172.0
1982	85,097	85,009	1635.0	1502.0	1589.0	1731.0	1999.0	2070.0	2331.0	2416.0	2043.0	2076.0	1679.0	1643.0	22714.0
1983	85,113	85,029	1701.0	1412.0	1566.0	1616.0	1961.0	2047.0	2387.0	2319.0	2192.0	1926.0	1632.0	1624.0	22383.0
1984	86,815	86,735	1754.0	1772.0	2043.0	1986.0	2354.0	2250.0	2573.0	2465.0	2312.0	2200.0	1725.0	1635.0	25069.0
1985	87,100	87,025	1648.0	1553.0	1777.0	2021.0	2202.0	2297.0	2711.0	2477.0	2278.0	2131.0	1865.0	1683.0	24643.0
1986	86,901	86,884	1801.0	1561.0	1765.0	1928.0	2216.0	2304.0	2419.0	2402.0	2196.0	2015.0	1854.0	1767.0	24228.0
1987	87,272	87,272	1735.0	1649.0	1935.0	2146.0	2240.0	2346.0	2415.0	2508.0	2283.0	2071.0	1767.0	1738.0	24833.0
1988	87,642	87,573	1659.0	1773.0	2072.0	1928.0	2212.0	2273.0	2329.0	2428.0	2183.0	2124.0	1725.0	1730.0	24436.0
1989	87,688	87,619	1744.0	1565.0	1842.0	2023.0	2267.0	2212.0	2498.0	2482.0	2266.0	2121.0	1993.0	1922.0	24935.0
1990	87,923	87,853	1817.0	1600.0	1944.0	1873.0	2111.0	2199.0	2373.0	2339.0	2230.0	2151.0	1927.0	1884.0	24448.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.24	361,783	127	126	130	155	162	187	202	198	184	168	164	141	163	0.182
1981	4.30	365,223	135	139	140	163	175	212	220	220	202	165	169	145	174	0.195
1982	4.37	371,829	142	144	138	155	173	186	202	210	183	180	151	143	167	0.187
1983	4.43	377,416	145	134	134	143	168	181	204	198	194	165	144	139	162	0.182
1984	4.50	390,591	145	156	169	169	194	192	212	204	197	182	147	135	176	0.197
1985	4.56	397,520	134	140	144	169	179	193	220	201	191	173	156	137	170	0.190
1986	4.63	402,245	144	139	142	160	178	191	194	193	182	162	154	142	165	0.185
1987	4.69	409,620	137	144	152	175	176	191	190	198	186	163	144	137	166	0.186
1988	4.76	417,038	128	147	160	154	171	182	180	188	174	164	138	134	161	0.180
1989	4.82	422,942	133	132	140	159	173	174	191	189	179	162	157	147	162	0.181
1990	4.89	429,775	136	133	146	145	158	171	178	176	173	161	149	141	156	0.175
AVERAGE			137	139	145	159	173	187	199	198	186	168	152	140	166	0.185

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY..LOS ANGELES
CITY....LOS ANGELES
SYSTEM #..... 19067
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

WATER AGENCY.....LOS ANGELES DEPT. OF WATER & POWER
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 89
WELLS AND SPRINGS.. 11

SOURCE OF WATER (in percent):
PURCHASED..... 73
SELF SUPPLIED..... 27

CITY CENSUS POPULATION
1980..... 2966763
1990..... 3485398

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	460516	Metered.....	166740	Metered.....	7493	Metered.....	5394
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	620,224	614,410	12257	11977	14488	16915	16638	17541	21348	20530	17884	17654	15848	14414	197494
1981	629,760	623,839	14919	13795	12456	15233	18099	20794	21986	20811	20062	16130	15582	15599	205466
1982	637,401	631,787	13490	13468	12473	14664	17597	17923	20413	21344	18945	16647	16157	15294	198415
1983	631,969	628,791	13823	13712	15415	15125	17291	18791	21019	20845	19140	17635	16944	15632	205372
1984	640,052	634,813	14790	15369	17376	17559	21319	20674	23614	22732	21356	19558	15311	13930	223588
1985	630,353	625,224	14973	14026	15413	18054	19286	21688	23730	23039	19678	19031	15541	15437	219896
1986	632,251	627,032	16042	13947	15686	16182	21818	21113	22547	23515	20105	17463	17976	16766	223160
1987	645,284	640,125	16127	15722	16450	19785	20035	22180	21554	22828	21224	19387	15352	15743	226387
1988	693,563	688,414	15726	15224	17706	18050	19520	21161	22393	22203	16633	19560	13656	18663	220495
1989	640,572	635,349	15576	15828	17319	19877	20642	21082	23551	22243	19446	19555	19738	18923	233780
1990	635,698	620,699	16394	14505	17292	16421	18805	19444	21925	20788	20141	19163	17141	16790	218809

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.83	2994837	132	138	156	188	179	195	230	221	199	190	176	155	181	0.202
1981	4.91	3090422	156	159	130	164	189	224	229	217	216	168	168	163	182	0.204
1982	4.99	3178059	137	151	127	154	179	188	207	217	199	169	169	155	171	0.192
1983	5.06	3200689	139	153	155	158	174	196	212	210	199	178	176	158	176	0.197
1984	5.14	3291976	145	161	170	178	209	209	231	223	216	192	155	137	186	0.208
1985	5.22	3291677	147	152	151	183	189	220	233	226	199	187	157	151	183	0.205
1986	5.30	3351324	154	149	151	161	210	210	217	226	200	168	179	161	182	0.204
1987	5.38	3471167	150	162	153	190	186	213	200	212	204	180	147	146	179	0.200
1988	5.46	3785433	134	139	151	159	166	186	191	189	146	167	120	159	160	0.179
1989	5.54	3546600	142	159	158	187	188	198	214	202	183	178	186	172	181	0.202
1990	5.62	3569622	148	145	156	153	170	182	198	188	188	173	160	152	168	0.188
AVERAGE			144	152	151	170	185	202	215	212	195	177	163	155	177	0.198

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY..LOS ANGELES
CITY....MANHATTAN BEACH
SYSTEM #..... 19083
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 31,542
1990..... 32,063

WATER AGENCY.....MANHATTAN BEACH, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 86
WELLS AND SPRINGS.. 14

SOURCE OF WATER (in percent):
PURCHASED..... 86
SELF SUPPLIED..... 14

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	12,231	Metered.....	185	Metered.....	5	Metered.....	80
Flat Rate.....	0	Flat Rate...	61	Flat Rate...	5	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	11,354	11,354	112.0	112.0	116.0	147.0	159.0	182.0	196.0	187.0	163.0	156.0	153.0	135.0	1818.0
1981	11,500	11,500	131.0	147.0	158.0	178.0	205.0	213.0	265.0	188.0	159.0	199.0	136.0	133.0	2112.0
1982	11,750	11,750	125.0	125.0	129.0	78.0	92.0	111.0	125.0	155.0	139.0	145.0	153.0	99.0	1476.0
1983	12,000	12,000	140.0	115.0	127.0	138.0	168.0	189.0	217.0	197.0	181.0	160.0	147.0	140.0	1919.0
1984	12,000	12,000	148.0	151.0	176.0	174.0	208.0	210.0	229.0	219.0	209.0	196.0	162.0	142.0	2224.0
1985	12,350	12,350	151.0	140.0	158.0	180.0	201.0	211.0	237.0	232.0	198.0	190.0	148.0	151.0	2197.0
1986	13,500	13,500	163.0	128.0	151.0	179.0	212.0	219.0	237.0	232.0	200.0	187.0	168.0	170.0	2246.0
1987	13,000	13,000	165.0	152.0	170.0	201.0	221.0	223.0	231.0	233.0	209.0	193.0	165.0	158.0	2321.0
1988	12,500	12,500	166.0	163.0	190.0	191.0	220.0	223.0	232.0	225.0	207.0	199.0	168.0	168.0	2352.0
1989	12,800	12,800	156.0	142.0	182.0	199.0	223.0	225.0	248.0	247.0	218.0	204.0	191.0	184.0	2419.0
1990	12,800	12,800	168.0	151.0	181.0	185.0	207.0	212.0	248.0	220.0	209.0	203.0	182.0	175.0	2341.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.78	31,542	115	122	119	155	163	192	200	191	172	160	162	138	158	0.177
1981	2.75	31,633	134	166	161	188	209	224	270	192	168	203	143	136	183	0.205
1982	2.72	32,000	126	140	130	81	93	116	126	156	145	146	159	100	126	0.142
1983	2.70	32,353	140	127	127	142	168	195	216	196	186	160	151	140	163	0.182
1984	2.67	32,026	149	163	177	181	210	219	231	221	218	197	169	143	190	0.213
1985	2.64	32,622	149	153	156	184	199	216	234	229	202	188	151	149	185	0.207
1986	2.61	35,291	149	130	138	169	194	207	217	212	189	171	159	155	174	0.195
1987	2.59	33,629	158	161	163	199	212	221	222	224	207	185	164	152	189	0.212
1988	2.56	31,994	167	176	192	199	222	232	234	227	216	201	175	169	201	0.226
1989	2.53	32,413	155	156	181	205	222	231	247	246	224	203	196	183	204	0.229
1990	2.50	32,063	169	168	182	192	208	220	250	221	217	204	189	176	200	0.224
AVERAGE			146	151	157	172	191	207	222	210	195	183	165	149	179	0.201

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY..LOS ANGELES
CITY....HUNTINGTON PARK
SYSTEM #..... 19084
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 5,000
1990..... 7,500

WATER AGENCY.....MAYWOOD MUTUAL WATER CO. #1
TYPE OF AGENCY.....WATER ASSOCIATION

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... NA
WELLS AND SPRINGS.. NA

SOURCE OF WATER (in percent):
PURCHASED..... 30
SELF SUPPLIED..... 70

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,230	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	NA	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,000	1,000	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984			-	-	-	-	-	-	-	-	-	-	-	-	-
1985			-	-	-	-	-	-	-	-	-	-	-	-	-
1986	1,250	1,250	27.0	18.0	24.0	6.0	24.0	6.0	22.0	21.0	18.0	18.0	18.0	26.0	228.0
1987	1,250	1,250	26.0	27.0	27.0	30.0	34.0	35.0	33.0	36.0	27.0	33.0	32.0	32.0	372.0
1988	1,250	1,250	26.0	30.0	31.0	27.0	33.0	32.0	33.0	33.0	29.0	30.0	29.0	29.0	362.0
1989	1,230	1,230	24.0	28.0	27.0	36.0	31.0	33.0	36.0	35.0	35.0	29.0	31.0	30.0	375.0
1990	1,230	1,230	26.0	24.0	24.0	23.0	25.0	28.0	35.0	32.0	30.0	28.0	27.0	25.0	327.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	5.00	5,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	5.11		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	5.22		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	5.33		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	5.44		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	5.55		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	5.66	7,073	123	91	109	28	109	28	100	96	85	82	85	119	88	0.099
1987	5.77	7,210	116	134	121	139	152	162	148	161	125	148	148	143	141	0.158
1988	5.88	7,348	114	141	136	122	145	145	145	145	132	132	132	127	135	0.151
1989	5.99	7,365	105	136	118	163	136	149	158	153	158	127	140	131	139	0.156
1990	6.10	7,500	112	114	103	102	108	124	151	138	133	120	120	108	119	0.134
AVERAGE			114	123	118	111	130	122	140	139	127	122	125	126	125	0.140

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

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C-059233

COUNTY..LOS ANGELES
CITY....WHITTIER /5
SYSTEM #..... 19101
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 12,000
1990..... 20,000

WATER AGENCY.....ORCHARD DALE WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 50
WELLS AND SPRINGS.. 50

SOURCE OF WATER (in percent):
PURCHASED..... 50
SELF SUPPLIED..... 50

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4,050	Metered.....	108	Metered.....	NA	Metered.....	11
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,700	3,700	40.0	33.0	35.0	64.0	64.0	81.0	91.0	88.0	72.0	70.0	62.0	54.0	754.0
1981	3,746	3,746	51.0	41.0	32.0	44.0	59.0	83.0	88.0	86.0	71.0	63.0	48.0	54.0	720.0
1982	3,746	3,746	50.0	50.0	38.0	51.0	39.0	64.0	74.0	74.0	60.0	68.0	70.0	43.0	681.0
1983	3,768	3,768	46.0	39.0	43.0	45.0	59.0	68.0	88.0	86.0	78.0	55.0	46.0	42.0	695.0
1984	3,826	3,826	50.0	42.0	59.0	59.0	95.0	87.0	64.0	59.0	70.0	57.0	54.0	46.0	742.0
1985	3,826	3,826	76.0	58.0	70.0	82.0	77.0	87.0	100.0	100.0	76.0	62.0	54.0	57.0	899.0
1986	3,949	3,949	58.0	48.0	57.0	62.0	74.0	91.0	103.0	113.0	78.0	69.0	61.0	58.0	872.0
1987	3,849	3,849	56.0	53.0	53.0	75.0	83.0	89.0	92.0	102.0	86.0	64.0	51.0	48.0	852.0
1988	4,034	4,034	51.0	53.0	65.0	63.0	76.0	90.0	99.0	90.0	82.0	72.0	55.0	54.0	850.0
1989	4,053	4,053	52.0	46.0	57.0	77.0	80.0	81.0	97.0	93.0	74.0	61.0	63.0	59.0	840.0
1990	4,050	4,050	47.0	41.0	54.0	54.0	72.0	74.0	90.0	82.0	75.0	66.0	55.0	53.0	763.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.24	12,000	108	95	94	178	172	225	245	237	200	188	172	145	172	0.193
1981	3.41	12,784	129	115	81	115	149	216	222	217	185	159	125	136	154	0.173
1982	3.58	13,419	120	133	91	127	94	159	178	178	149	163	174	103	139	0.156
1983	3.75	14,137	105	99	98	106	135	160	201	196	184	126	108	96	135	0.151
1984	3.92	15,003	108	97	127	131	204	193	138	127	156	123	120	99	136	0.152
1985	4.09	15,651	157	132	144	175	159	185	206	206	162	128	115	117	157	0.176
1986	4.26	16,824	111	102	109	123	142	180	197	217	155	132	121	111	142	0.159
1987	4.43	17,050	106	111	100	147	157	174	174	193	168	121	100	91	137	0.153
1988	4.60	18,553	89	99	113	113	132	162	172	156	147	125	99	94	126	0.141
1989	4.77	19,328	87	85	95	133	134	140	162	155	128	102	109	98	119	0.133
1990	4.94	20,000	76	73	87	90	116	123	145	132	125	106	92	85	105	0.117
AVERAGE			109	104	104	131	145	174	185	183	160	134	121	107	138	0.155

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
/5 Agency serves unincorporated portion of Los Angeles county
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059234

COUNTY..LOS ANGELES
CITY....PARAMOUNT
SYSTEM #..... 19105
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 36,407
1990..... 47,669

WATER AGENCY.....PARAMOUNT, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 30
WELLS AND SPRINGS.. 70

SOURCE OF WATER (in percent):
PURCHASED..... 30
SELF SUPPLIED..... 70

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5,791	Metered.....	414	Metered.....	606	Metered.....	298
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	6,147	6,147	/5	-	-	-	-	-	201.0	215.0	187.0	177.0	172.0	146.0	-
1981	6,147	6,147	145.0	141.0	150.0	166.0	182.0	217.0	228.0	218.0	194.0	163.0	163.0	148.0	2115.0
1982	6,346	6,346	149.0	137.0	165.0	164.0	180.0	184.0	208.0	217.0	183.0	183.0	156.0	149.0	2075.0
1983	6,420	6,420	145.0	130.0	134.0	155.0	164.0	169.0	208.0	206.0	237.0	184.0	157.0	153.0	2042.0
1984	6,520	6,520	147.0	157.0	167.0	161.0	181.0	202.0	232.0	218.0	216.0	194.0	157.0	142.0	2174.0
1985	6,710	6,710	149.0	144.0	168.0	183.0	203.0	220.0	251.0	243.0	208.0	203.0	167.0	162.0	2301.0
1986	6,800	6,800	165.0	142.0	170.0	187.0	218.0	226.0	240.0	248.0	211.0	191.0	185.0	174.0	2357.0
1987	7,100	7,100	160.0	144.0	179.0	207.0	219.0	220.0	227.0	238.0	220.0	206.0	170.0	168.0	2358.0
1988	6,777	6,777	169.0	165.0	196.0	192.0	211.0	230.0	246.0	236.0	217.0	205.0	181.0	171.0	2419.0
1989	7,078	7,078	173.0	158.0	188.0	211.0	225.0	230.0	243.0	247.0	223.0	210.0	190.0	188.0	2486.0
1990	7,106	7,106	181.0	165.0	193.0	180.0	209.0	212.0	247.0	236.0	222.0	211.0	197.0	192.0	2445.0

PER CAPITA WATER USE (gpcd)/3

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	5.92	36,407	-	-	-	-	-	-	178	190	171	157	157	129	-	-
1981	6.00	36,890	127	137	131	150	159	196	199	191	175	143	147	129	157	0.176
1982	6.08	38,583	125	127	138	142	150	159	174	181	158	153	135	125	147	0.165
1983	6.16	39,537	118	117	109	131	134	142	170	168	200	150	132	125	142	0.158
1984	6.24	40,665	117	133	132	132	144	166	184	173	177	154	129	113	146	0.164
1985	6.32	42,377	113	121	128	144	155	173	191	185	164	155	131	123	149	0.167
1986	6.39	43,480	122	117	126	143	162	173	178	184	162	142	142	129	149	0.166
1987	6.47	45,956	112	112	126	150	154	160	159	167	160	145	123	118	141	0.157
1988	6.55	44,397	123	128	142	144	153	173	179	171	163	149	136	124	149	0.167
1989	6.63	46,925	119	120	129	150	155	163	167	170	158	144	135	129	145	0.163
1990	6.71	47,669	122	124	131	126	141	148	167	160	155	143	138	130	141	0.157
AVERAGE			120	124	129	141	151	165	177	176	168	148	137	125	147	0.164

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

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C-059235

COUNTY..LOS ANGELES
CITY....PICO RIVERA
SYSTEM #..... 19042
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 33,421
1990..... 37,075

WATER AGENCY.....PICO RIVERA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4,674	Metered.....	371	Metered.....	5	Metered.....	77
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	8,494	8,494	/5	-	-	-	-	-	209.0	194.0	166.0	158.0	144.0	127.0	-
1981	8,494	8,494	114.0	107.0	117.0	137.0	162.0	199.0	212.0	210.0	179.0	140.0	131.0	117.0	1825.0
1982	8,494	8,494	108.0	104.0	109.0	125.0	148.0	162.0	200.0	187.0	156.0	155.0	118.0	107.0	1679.0
1983	8,494	8,494	118.0	97.0	108.0	114.0	146.0	163.0	200.0	186.0	173.0	146.0	122.0	120.0	1693.0
1984	9,032	9,000	91.0	96.0	113.0	115.0	145.0	146.0	236.0	220.0	209.0	171.0	128.0	115.0	1785.0
1985	9,570	9,535	121.0	118.0	134.0	160.0	184.0	195.0	231.0	211.0	185.0	173.0	139.0	136.0	1987.0
1986	9,500	9,500	140.0	115.0	139.0	164.0	200.0	193.0	231.0	233.0	184.0	159.0	152.0	164.0	2074.0
1987	8,900	8,875	140.0	115.0	138.0	165.0	200.0	193.0	230.0	232.0	183.0	158.0	151.0	146.0	2051.0
1988			-	-	-	-	-	-	-	-	-	-	-	-	-
1989	9,531	9,531	133.0	117.0	150.0	186.0	201.0	208.0	208.0	211.0	197.0	168.0	173.0	128.0	2080.0
1990	9,050	9,050	148.0	127.0	132.0	150.0	162.0	175.0	207.0	199.0	192.0	171.0	155.0	134.0	1952.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.93	33,421	-	-	-	-	-	-	202	187	166	153	144	123	-	-
1981	3.95	33,559	110	114	112	136	156	198	204	202	178	135	130	112	149	0.167
1982	3.97	33,696	103	110	104	124	142	160	191	179	154	148	117	102	137	0.153
1983	3.98	33,834	113	102	103	112	139	161	191	177	170	139	120	114	137	0.154
1984	4.00	36,123	81	92	101	106	129	135	211	196	193	153	118	103	135	0.152
1985	4.02	38,430	102	110	112	139	154	169	194	177	160	145	121	114	142	0.159
1986	4.03	38,303	118	107	117	143	168	168	195	196	160	134	132	138	148	0.166
1987	4.05	36,028	125	114	124	153	179	179	206	208	169	141	140	131	156	0.175
1988	4.06		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	4.08	38,891	110	107	124	159	167	178	173	175	169	139	148	106	147	0.164
1990	4.10	37,075	129	122	115	135	141	157	180	173	173	149	139	117	144	0.162
AVERAGE			110	109	113	134	153	167	195	187	169	144	131	116	144	0.161

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

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C-059236

COUNTY..LOS ANGELES
CITY....MONTEBELLO
SYSTEM #..... 19189
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

WATER AGENCY.....SAN GABRIEL VALLEY WATER COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY..... X
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 4,700
1990..... 4,700

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,571	Metered.....	2	Metered.....	0	Metered.....	8
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,580	1,580	/5	-	-	-	-	-	-	-	-	-	-	-	282.0
1981	1,580	1,580	-	-	-	-	-	-	-	-	-	-	-	-	279.0
1982	1,580	1,580	-	-	-	-	-	-	-	-	-	-	-	-	266.0
1983	1,580	1,580	-	-	-	-	-	-	-	-	-	-	-	-	283.0
1984	1,580	1,580	-	-	-	-	-	-	-	-	-	-	-	-	335.0
1985	1,580	1,580	-	-	-	-	-	-	-	-	-	-	-	-	307.0
1986	1,580	1,580	21.0	19.0	20.0	29.0	32.0	33.0	35.0	36.0	32.0	26.0	20.0	19.0	322.0
1987	1,580	1,580	-	-	-	-	-	-	-	-	-	-	-	-	323.0
1988	1,580	1,580	20.0	21.0	26.0	23.0	30.0	32.0	36.0	34.0	30.0	28.0	23.0	21.0	324.0
1989	1,580	1,580	19.0	16.0	21.0	28.0	31.0	32.0	37.0	36.0	31.0	27.0	26.0	25.0	329.0
1990	1,581	1,581	20.0	17.0	22.0	22.0	25.0	27.0	33.0	30.0	30.0	28.0	23.0	21.0	298.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.97	4,700	-	-	-	-	-	-	-	-	-	-	-	-	164	0.184
1981	2.97	4,700	-	-	-	-	-	-	-	-	-	-	-	-	163	0.182
1982	2.97	4,699	-	-	-	-	-	-	-	-	-	-	-	-	155	0.174
1983	2.97	4,699	-	-	-	-	-	-	-	-	-	-	-	-	165	0.185
1984	2.97	4,699	-	-	-	-	-	-	-	-	-	-	-	-	195	0.219
1985	2.97	4,699	-	-	-	-	-	-	-	-	-	-	-	-	179	0.200
1986	2.97	4,698	144	144	137	206	220	234	240	247	227	179	142	130	188	0.210
1987	2.97	4,698	-	-	-	-	-	-	-	-	-	-	-	-	188	0.211
1988	2.97	4,698	137	154	179	163	206	227	247	233	213	192	163	144	189	0.212
1989	2.97	4,697	130	122	144	199	213	227	254	247	220	185	185	172	192	0.215
1990	2.97	4,700	137	129	151	156	172	191	226	206	213	192	163	144	174	0.195
AVERAGE			137	137	153	181	203	220	242	233	218	187	163	148	177	0.199

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C—0 5 9 2 3 7

C-059237

COUNTY..LOS ANGELES
CITY....SANTA FE SPRINGS
SYSTEM #..... 19245
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 10,000
1990..... 16,200

WATER AGENCY.....SANTA FE SPRINGS, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 49
WELLS AND SPRINGS.. 46

SOURCE OF WATER (in percent):
PURCHASED..... 54
SELF SUPPLIED..... 46

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	3,206	Metered.....	1,417	Metered.....	117	Metered.....	139
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,314	3,994	/5	-	-	-	-	-	225.0	217.0	186.0	182.0	186.0	167.0	-
1981	4,314	3,994	155.0	150.0	160.0	184.0	184.0	204.0	230.0	-	-	-	-	-	-
1982	4,695	4,397	-	-	-	-	-	-	236.0	238.0	198.0	197.0	168.0	161.0	-
1983	4,695	4,397	167.0	145.0	159.0	173.0	195.0	218.0	242.0	245.0	232.0	198.0	173.0	153.0	2300.0
1984	4,804	4,804	164.0	175.0	208.0	185.0	217.0	233.0	250.0	253.0	237.0	219.0	172.0	142.0	2455.0
1985	4,840	4,541	161.0	153.0	181.0	208.0	236.0	249.0	271.0	273.0	236.0	240.0	188.0	183.0	2579.0
1986	4,974	4,974	190.0	163.0	187.0	201.0	256.0	263.0	277.0	290.0	248.0	232.0	209.0	195.0	2711.0
1987	5,057	4,724	194.0	186.0	209.0	248.0	287.0	300.0	305.0	313.0	283.0	249.0	211.0	205.0	2990.0
1988	4,750	4,430	-	-	-	-	-	-	336.0	319.0	297.0	287.0	237.0	229.0	-
1989	4,750	4,430	222.0	189.0	253.0	274.0	279.0	303.0	320.0	308.0	293.0	268.0	242.0	248.0	3199.0
1990	5,320	4,986	219.0	207.0	248.0	255.0	272.0	293.0	326.0	334.0	293.0	282.0	253.0	232.0	3214.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.50	10,801	-	-	-	-	-	-	672	648	574	544	574	499	-	-
1981	2.58	11,123	450	482	464	551	534	611	667	-	-	-	-	-	-	-
1982	2.65	12,455	-	-	-	-	-	-	611	616	530	510	450	417	-	-
1983	2.73	12,805	421	404	401	450	491	567	610	617	604	499	450	385	492	0.551
1984	2.80	13,460	393	448	498	458	520	577	599	606	587	525	426	340	500	0.560
1985	2.88	13,922	373	392	419	498	547	596	628	633	565	556	450	424	508	0.568
1986	2.95	14,678	418	397	411	456	563	597	609	637	563	510	475	429	506	0.567
1987	3.03	15,300	409	434	441	540	605	654	643	660	617	525	460	432	535	0.600
1988	3.10	14,725	-	-	-	-	-	-	736	699	672	629	536	502	-	-
1989	3.17	15,079	475	448	541	606	597	670	685	659	648	573	535	531	581	0.651
1990	3.25	17,285	409	428	463	492	508	565	608	623	565	526	488	433	509	0.571
AVERAGE			418	429	455	507	545	605	643	640	592	540	484	439	519	0.581

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

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C-059238

COUNTY..LOS ANGELES
CITY....SANTA MONICA
SYSTEM #..... 19146
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 88,314
1990..... 86,905

WATER AGENCY.....SANTA MONICA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 70
WELLS AND SPRINGS.. 30

SOURCE OF WATER (in percent):
PURCHASED..... 70
SELF SUPPLIED..... 30

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	13,240	Metered.....	2,610	Metered.....	420	Metered.....	324
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	15,178	15,178	375.3	338.3	351.0	476.0	446.4	481.6	538.9	535.8	430.7	473.3	439.6	485.8	5372.7
1981	15,399	15,399	384.8	382.8	387.3	426.3	457.9	486.4	549.7	529.2	498.5	469.9	413.8	404.5	5391.1
1982	15,448	15,448	418.8	388.6	422.5	403.4	467.7	508.6	598.5	593.3	579.5	538.2	475.0	462.6	5856.7
1983	15,182	15,182	433.2	373.1	412.3	427.3	417.9	486.9	551.5	523.4	528.6	537.0	490.3	457.9	5639.4
1984	15,521	15,521	455.2	447.9	480.5	499.1	545.0	544.0	567.0	551.9	549.0	479.0	451.0	432.0	6001.6
1985	15,237	15,237	444.4	440.3	453.3	469.0	526.8	544.5	589.4	645.1	523.4	516.5	445.9	433.6	6032.2
1986	15,400	15,400	449.0	389.0	441.0	446.0	557.0	520.0	573.0	604.0	501.0	501.0	485.0	499.0	5965.0
1987	15,227	15,227	504.0	466.0	463.7	538.5	570.9	558.0	539.9	548.7	419.1	514.5	587.7	449.0	6160.0
1988	15,606	15,606	449.0	435.0	482.0	455.0	509.0	492.0	519.0	511.0	494.0	478.0	420.0	436.0	5680.0
1989	15,175	15,175	428.5	382.9	498.2	462.7	503.1	515.5	546.1	544.5	493.4	491.7	462.7	481.6	5810.9
1990	16,594	16,594	444.0	390.1	443.2	424.9	467.3	465.0	506.7	475.1	463.0	444.5	393.3	395.9	5313.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	5.82	88,314	137	132	128	180	163	182	197	196	163	173	166	177	167	0.187
1981	5.76	88,705	140	154	141	160	167	183	200	192	187	171	155	147	167	0.186
1982	5.70	88,089	153	158	155	153	171	192	219	217	219	197	180	169	182	0.204
1983	5.64	85,689	163	156	155	166	157	189	208	197	206	202	191	172	180	0.202
1984	5.59	86,700	169	178	179	192	203	209	211	205	211	178	173	161	190	0.212
1985	5.53	84,228	170	187	174	186	202	215	226	247	207	198	176	166	196	0.220
1986	5.47	84,233	172	165	169	176	213	206	219	231	198	192	192	191	194	0.217
1987	5.41	82,402	197	202	182	218	223	226	211	215	170	201	238	176	205	0.229
1988	5.35	83,545	173	180	186	182	197	196	200	197	197	185	168	168	186	0.209
1989	5.30	80,356	172	170	200	192	202	214	219	219	205	197	192	193	198	0.222
1990	5.24	86,905	165	160	165	163	173	178	188	176	178	165	151	147	167	0.188
AVERAGE			165	167	167	179	188	199	209	208	195	187	180	170	185	0.207

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059239

COUNTY..LOS ANGELES
CITY....SOUTH GATE
SYSTEM #..... 19152
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 59,950
1990..... 76,800

WATER AGENCY.....SOUTH GATE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 98
WELLS AND SPRINGS.. 2

SOURCE OF WATER (in percent):
PURCHASED..... 98
SELF SUPPLIED..... 2

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	12,602	Metered.....	1,202	Metered.....	91	Metered.....	63
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	15,673	15,673	211.0	200.0	262.0	240.0	391.0	360.0	385.0	277.0	274.0	347.0	292.0	318.0	3557.0
1981	14,699	14,699	255.0	251.0	259.0	295.0	339.0	404.0	432.0	388.0	363.0	346.0	308.0	313.0	3953.0
1982	14,353	14,353	205.0	168.0	190.0	298.0	251.0	275.0	364.0	364.0	323.0	346.0	275.0	289.0	3348.0
1983	14,333	14,333	274.0	251.0	279.0	300.0	333.0	363.0	425.0	436.0	413.0	325.0	305.0	292.0	3996.0
1984	14,377	14,377	281.0	309.0	336.0	324.0	403.0	370.0	460.0	454.0	382.0	367.0	304.0	254.0	4244.0
1985	14,397	14,397	273.0	269.0	300.0	320.0	358.0	381.0	380.0	400.0	349.0	315.0	237.0	264.0	3846.0
1986	14,257	14,257	264.0	205.0	228.0	286.0	369.0	366.0	354.0	375.0	304.0	310.0	236.0	256.0	3553.0
1987	14,500	14,500	253.0	229.0	306.0	349.0	335.0	333.0	355.0	320.0	340.0	300.0	232.0	261.0	3613.0
1988	14,500	14,500	223.0	247.0	291.0	286.0	308.0	325.0	350.0	343.0	333.0	294.0	267.0	274.0	3541.0
1989	14,500	14,500	243.0	223.0	287.0	306.0	322.0	336.0	337.0	344.0	334.0	300.0	293.0	294.0	3619.0
1990	14,080	14,080	232.0	236.0	282.0	254.0	322.0	279.0	327.0	349.0	272.0	298.0	284.0	248.0	3383.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.83	59,950	114	115	141	133	210	200	207	149	152	187	162	171	163	0.182
1981	3.99	58,620	140	153	143	168	187	230	238	214	206	190	175	172	185	0.207
1982	4.15	59,579	111	101	103	167	136	154	197	197	181	187	154	156	154	0.172
1983	4.31	61,831	143	145	146	162	174	196	222	227	223	170	164	152	177	0.198
1984	4.48	64,364	141	166	168	168	202	192	231	228	198	184	157	127	181	0.202
1985	4.64	66,799	132	144	145	160	173	190	184	193	174	152	118	127	158	0.177
1986	4.80	68,473	124	107	107	139	174	178	167	177	148	146	115	121	142	0.159
1987	4.97	72,003	113	114	137	162	150	154	159	143	157	134	107	117	137	0.154
1988	5.13	74,365	97	115	126	128	134	146	152	149	149	128	120	119	130	0.146
1989	5.29	76,728	102	104	121	133	135	146	142	145	145	126	127	124	129	0.145
1990	5.45	76,800	97	110	118	110	135	121	137	147	118	125	123	104	121	0.135
AVERAGE			120	125	132	148	165	173	185	179	168	157	139	136	152	0.171

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY..LOS ANGELES
CITY....WHITTIER
SYSTEM #..... 19174
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 30,000
1990..... 51,255

WATER AGENCY.....SUBURBAN WATER SYSTEMS
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY..... X
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 8
WELLS AND SPRINGS.. 92

SOURCE OF WATER (in percent):
PURCHASED..... 28
SELF SUPPLIED..... 72

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	16,785	Metered.....	631	Metered.....	3	Metered.....	58
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	16,285	16,285	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984	16,500	16,500	304.0	347.0	469.0	462.0	576.0	559.0	620.0	615.0	543.0	451.0	342.0	284.0	5572.0
1985	16,600	16,600	304.0	284.0	343.0	396.0	447.0	542.0	617.0	565.0	507.0	522.0	414.0	390.0	5331.0
1986	16,700	16,700	453.9	387.8	430.4	486.4	580.8	597.3	613.0	612.6	490.4	473.4	436.1	414.0	5976.1
1987	16,950	16,950	389.6	329.0	354.7	500.0	564.5	482.0	586.0	583.0	529.0	475.0	333.0	326.0	5451.8
1988	17,085	17,085	336.0	386.0	529.0	496.0	535.0	530.0	621.0	579.0	514.0	490.0	420.0	404.0	5840.0
1989	17,332	17,332	370.0	292.0	373.0	443.0	458.0	461.0	532.0	499.0	454.0	405.0	399.0	411.0	5097.0
1990	17,423	17,423	335.0	311.0	413.0	370.0	426.0	437.0	531.0	456.0	452.0	438.0	387.0	382.0	4938.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	1.84	30,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	1.95		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	2.06		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.17		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2.28	37,654	260	318	402	409	493	495	531	527	481	386	303	243	405	0.454
1985	2.39	39,707	247	255	279	332	363	455	501	459	426	424	348	317	368	0.412
1986	2.50	41,783	350	331	332	388	448	477	473	473	391	365	348	320	392	0.439
1987	2.61	44,272	284	265	258	376	411	363	427	425	398	346	251	238	337	0.378
1988	2.72	46,503	233	286	367	356	371	380	431	402	368	340	301	280	344	0.385
1989	2.83	49,081	243	212	245	301	301	313	350	328	308	266	271	270	285	0.319
1990	2.94	51,255	211	217	260	241	268	284	334	287	294	276	252	240	264	0.296
AVERAGE			261	269	306	343	380	395	435	414	381	343	296	273	342	0.383

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
/5 Missing data unavailable
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059241

COUNTY..LOS ANGELES
CITY....TORRANCE
SYSTEM #..... 19213
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

WATER AGENCY.....TORRANCE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 92
WELLS AND SPRINGS.. 8

SOURCE OF WATER (in percent):
PURCHASED..... 92
SELF SUPPLIED..... 8

CITY CENSUS POPULATION
1980..... 95,150
1990..... 96,710

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	22,300	Metered.....	2,043	Metered.....	105	Metered.....	877
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	23,916	23,841	496.0	461.0	521.0	620.0	641.0	678.0	791.0	811.0	665.0	649.0	631.0	555.0	7519.0
1981	24,632	24,557	595.0	516.0	550.0	626.0	731.0	850.0	872.0	809.0	718.0	661.0	540.0	482.0	7950.0
1982	24,735	24,660	446.0	417.0	461.0	515.0	644.0	617.0	728.0	712.0	591.0	603.0	475.0	401.0	6610.0
1983	24,500	24,425	496.0	418.0	476.0	499.0	578.0	647.0	748.0	737.0	663.0	553.0	477.0	481.0	6773.0
1984	24,800	24,725	492.0	531.0	596.0	598.0	727.0	703.0	740.0	735.0	674.0	588.0	487.0	441.0	7312.0
1985	25,075	25,003	463.0	443.0	514.0	598.0	650.0	675.0	746.0	717.0	635.0	577.0	462.0	447.0	6927.0
1986	25,200	25,137	465.0	389.0	443.0	581.0	640.0	650.0	773.0	741.0	636.0	586.0	577.0	548.0	7029.0
1987	25,200	25,145	530.0	498.0	550.0	668.0	751.0	741.0	756.0	782.0	728.0	609.0	513.0	521.0	7647.0
1988	25,250	25,215	539.0	537.0	629.0	613.0	725.0	757.0	823.0	777.0	716.0	665.0	579.0	565.0	7925.0
1989	25,433	25,415	560.0	493.0	626.0	705.0	766.0	761.0	849.0	828.0	754.0	684.0	679.0	648.0	8353.0
1990	25,345	25,325	572.0	528.0	636.0	635.0	711.0	714.0	801.0	780.0	754.0	677.0	631.0	616.0	8055.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.99	95,449	168	167	176	217	217	237	267	274	232	219	220	188	216	0.242
1981	3.97	97,883	196	188	181	213	241	289	287	267	245	218	184	159	223	0.249
1982	3.96	97,866	147	152	152	175	212	210	240	235	201	199	162	132	185	0.207
1983	3.94	96,514	166	155	159	172	193	223	250	246	229	185	165	161	192	0.215
1984	3.92	97,268	163	188	198	205	241	241	245	244	231	195	167	146	206	0.231
1985	3.90	97,915	153	162	169	204	214	230	246	236	216	190	157	147	194	0.217
1986	3.89	97,969	153	142	146	198	211	221	255	244	216	193	196	180	197	0.220
1987	3.87	97,535	175	182	182	228	248	253	250	259	249	201	175	172	215	0.241
1988	3.85	97,294	179	190	209	210	240	259	273	258	245	220	198	187	223	0.250
1989	3.84	97,561	185	180	207	241	253	260	281	274	258	226	232	214	235	0.263
1990	3.82	96,786	191	195	212	219	237	246	267	260	260	226	217	205	228	0.255
AVERAGE			170	173	181	207	228	243	260	254	235	207	189	172	210	0.235

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 2 4 2

C-059242

COUNTY..LOS ANGELES
CITY....LA CANADA, ET AL
SYSTEM #..... 19166
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 10,000
1990..... 10,300

WATER AGENCY.....VALLEY WATER COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER.....
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED.....

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	3,283	Metered.....	200	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,000	3,000	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984	3,000	3,000	54.0	69.0	83.0	91.0	128.0	118.0	161.0	146.0	135.0	110.0	63.0	43.0	1201.0
1985	3,435	3,435	47.0	46.0	56.0	94.0	101.0	137.0	161.0	146.0	133.0	110.0	63.0	43.0	1137.0
1986	3,418	3,418	62.0	39.0	53.0	76.0	116.0	129.0	144.0	147.0	115.0	89.0	82.0	65.0	1117.0
1987	3,428	3,428	60.0	53.0	58.0	101.0	112.0	126.0	131.0	143.0	128.0	96.0	53.0	51.0	1112.0
1988	3,500	3,500	50.0	64.0	82.0	80.0	107.0	126.0	146.0	131.0	106.0	105.0	74.0	61.0	1132.0
1989	3,500	3,500	51.0	45.0	66.0	96.0	104.0	117.0	157.0	136.0	127.0	99.0	96.0	85.0	1179.0
1990	3,483	3,483	60.0	48.0	70.0	68.0	95.0	113.0	151.0	136.0	130.0	116.0	93.0	74.0	1154.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.33	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.30		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3.26		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3.22		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	3.18	9,549	182	249	280	318	432	412	544	493	471	372	220	145	345	0.386
1985	3.15	10,804	140	152	167	290	302	423	481	436	410	328	194	128	288	0.323
1986	3.11	10,622	188	131	161	238	352	405	437	446	361	270	257	197	288	0.323
1987	3.07	10,524	184	180	178	320	343	399	402	438	405	294	168	156	289	0.324
1988	3.03	10,614	152	208	249	251	325	396	444	398	333	319	232	185	292	0.327
1989	2.99	10,482	157	153	203	305	320	372	483	419	404	305	305	262	308	0.345
1990	2.96	10,300	188	166	219	220	298	366	473	426	421	363	301	232	307	0.344
AVERAGE			170	177	208	278	339	396	466	437	401	322	240	187	303	0.339

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C—0 5 9 2 4 3

C-059243

COUNTY..LOS ANGELES
CITY....WHITTIER
SYSTEM #..... 19173
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 89

CITY CENSUS POPULATION
1980..... 27,500
1990..... 47,050

WATER AGENCY.....WHITTIER, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY..... X
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	NA	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	NA	Flat Rate...	NA	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	11,200	11,200	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981	11,285	11,285	175.0	160.0	170.0	205.0	263.0	324.0	331.0	329.0	281.0	226.0	202.0	177.0	2843.0
1982	11,276	11,276	154.0	169.0	161.0	198.0	220.0	244.0	316.0	307.0	237.0	242.0	175.0	157.0	2580.0
1983	11,598	11,598	194.0	146.0	151.0	181.0	233.0	258.0	315.0	303.0	279.0	204.0	173.0	162.0	2599.0
1984	11,826	11,826	180.0	204.0	251.0	256.0	322.0	303.0	355.0	327.0	311.0	265.0	304.0	171.0	3249.0
1985	11,665	11,665	174.0	174.0	204.0	250.0	270.0	298.0	345.0	335.0	255.0	249.0	204.0	178.0	2936.0
1986	11,690	11,690	217.0	154.0	197.0	235.0	297.0	306.0	324.0	336.0	258.0	236.0	221.0	211.0	2992.0
1987	11,715	11,715	203.0	187.0	204.0	262.0	285.0	286.0	314.0	316.0	293.0	242.0	187.0	180.0	2959.0
1988	11,740	11,740	194.0	210.0	250.0	232.0	276.0	300.0	337.0	316.0	278.0	260.0	201.0	187.0	3041.0
1989	11,765	11,765	171.0	168.0	300.0	266.0	285.0	254.0	355.0	354.0	278.0	243.0	235.0	225.0	3134.0
1990	11,600	11,600	191.0	172.0	211.0	212.0	240.0	261.0	307.0	286.0	262.0	251.0	222.0	219.0	2834.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.46	27,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.62	29,515	191	194	186	232	287	366	362	360	317	247	228	193	264	0.296
1982	2.78	31,296	159	193	166	211	227	260	326	316	252	249	186	162	226	0.253
1983	2.94	34,047	184	153	143	177	221	253	298	287	273	193	169	153	209	0.234
1984	3.10	36,609	159	192	221	233	284	276	313	288	283	234	277	151	243	0.272
1985	3.26	37,978	148	164	173	219	229	262	293	285	224	211	179	151	212	0.237
1986	3.42	39,930	175	138	159	196	240	255	262	271	215	191	184	170	205	0.230
1987	3.58	41,891	156	159	157	208	219	228	242	243	233	186	149	139	194	0.217
1988	3.74	43,859	143	165	184	176	203	228	248	232	211	191	153	138	190	0.213
1989	3.90	45,836	120	131	211	193	201	185	250	249	202	171	171	158	187	0.210
1990	4.06	47,050	131	131	145	150	165	185	210	196	186	172	157	150	165	0.185
AVERAGE			157	162	175	200	228	250	280	273	240	205	185	157	209	0.235

1/ service connections not available
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
5/ missing data unavailable
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—059244

C-059244

COUNTY..LOS ANGELES
CITY....LA CRESCENTA
SYSTEM #..... 19028
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 90

CITY CENSUS POPULATION
1980..... 27,250
1990..... 31,000

WATER AGENCY.....CRESCENTA VALLEY CO. WD
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 32
WELLS AND SPRINGS.. 68

SOURCE OF WATER (in percent):
PURCHASED..... 32
SELF SUPPLIED..... 68

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	7,587	Metered.....	339	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	7,793	7,793	/5	-	-	-	-	-	175.0	156.0	131.0	136.0	116.0	103.0	1307.0
1981	7,802	7,802	-	-	-	-	-	-	-	-	-	-	-	-	1502.0
1982	7,811	7,811	-	-	-	-	-	-	-	-	-	-	-	-	1354.0
1983	7,821	7,821	-	-	-	-	-	-	172.0	152.0	137.0	105.0	83.0	81.0	1296.0
1984	7,821	7,821	96.0	106.0	120.0	128.0	168.0	167.0	199.0	178.0	169.0	142.0	98.0	87.0	1658.0
1985	7,827	7,827	92.0	86.0	91.0	126.0	131.0	172.0	194.0	191.0	141.0	133.0	103.0	99.0	1559.0
1986	7,856	7,856	103.0	77.0	93.0	110.0	146.0	162.0	179.0	199.0	140.0	124.0	119.0	110.0	1562.0
1987	7,869	7,869	104.0	91.0	102.0	134.0	146.0	166.0	170.0	183.0	166.0	139.0	98.0	99.0	1598.0
1988	7,189	7,189	-	-	-	-	-	-	175.0	167.0	154.0	144.0	109.0	105.0	1624.0
1989	7,189	7,189	97.0	85.0	110.0	141.0	135.0	153.0	185.0	175.0	158.0	135.0	130.0	126.0	1630.0
1990	7,902	7,902	105.0	89.0	114.0	102.0	124.0	144.0	169.0	149.0	149.0	141.0	121.0	113.0	1520.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.50	27,250	-	-	-	-	-	-	207	185	160	161	142	122	131	0.147
1981	3.54	27,614	-	-	-	-	-	-	-	-	-	-	-	-	149	0.167
1982	3.58	27,979	-	-	-	-	-	-	-	-	-	-	-	-	133	0.148
1983	3.62	28,348	-	-	-	-	-	-	196	173	161	119	98	92	125	0.140
1984	3.67	28,682	108	127	135	149	189	194	224	200	196	160	114	98	158	0.177
1985	3.71	29,037	102	106	101	145	146	197	216	212	162	148	118	110	147	0.165
1986	3.75	29,480	113	93	102	124	160	183	196	218	158	136	135	120	145	0.163
1987	3.80	29,864	112	109	110	150	158	185	184	198	185	150	109	107	147	0.164
1988	3.84	27,590	-	-	-	-	-	-	205	195	186	168	132	123	161	0.181
1989	3.88	27,896	112	109	127	168	156	183	214	202	189	156	155	146	160	0.179
1990	3.92	31,000	109	103	119	110	129	155	176	155	160	147	130	118	134	0.150
AVERAGE			109	108	116	141	156	183	202	193	173	149	126	115	145	0.162

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data not available.

COUNTY..LOS ANGELES
CITY....GLENDALE
SYSTEM #..... 19043
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 90

CITY CENSUS POPULATION
1980..... 139,060
1990..... 180,038

WATER AGENCY.....GLENDALE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 93
WELLS AND SPRINGS.. 7

SOURCE OF WATER (in percent):
PURCHASED..... 93
SELF SUPPLIED..... 7

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	27,977	Metered.....	3,675	Metered.....	650	Metered.....	430
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	31,242	31,242	516.0	474.0	413.0	488.0	534.0	672.0	758.0	1018.0	752.0	800.0	609.0	677.0	7711.0
1981	31,425	31,425	604.0	519.0	517.0	642.0	808.0	1007.0	1073.0	1063.0	936.0	745.0	696.0	634.0	9244.0
1982	31,482	31,482	522.0	486.0	547.0	587.0	744.0	732.0	991.0	813.0	822.0	768.0	585.0	574.0	8171.0
1983	31,436	31,436	580.0	501.0	517.0	580.0	712.0	848.0	974.0	952.0	883.0	654.0	592.0	559.0	8352.0
1984	31,465	31,465	628.0	672.0	779.0	805.0	993.0	963.0	876.0	1036.0	1012.0	886.0	660.0	566.0	9876.0
1985	31,500	31,500	608.0	529.0	696.0	807.0	844.0	974.0	1142.0	1057.0	908.0	804.0	657.0	659.0	9685.0
1986	31,517	31,517	618.0	521.0	672.0	725.0	938.0	960.0	1077.0	1091.0	859.0	814.0	735.0	686.0	9696.0
1987	31,622	31,622	673.0	597.0	666.0	895.0	911.0	1039.0	1010.0	1094.0	1013.0	909.0	627.0	645.0	10079.0
1988	32,148	32,114	674.0	679.0	770.0	776.0	941.0	966.0	1103.0	989.0	934.0	919.0	724.0	699.0	10174.0
1989	32,191	32,146	665.0	622.0	735.0	867.0	944.0	964.0	1107.0	1090.0	999.0	880.0	846.0	792.0	10511.0
1990	32,778	32,732	743.0	611.0	793.0	746.0	865.0	895.0	1093.0	998.0	918.0	918.0	794.0	770.0	10144.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.45	139,060	120	118	96	117	124	161	176	236	180	186	146	157	152	0.170
1981	4.56	143,172	136	129	116	149	182	234	242	240	218	168	162	143	177	0.198
1982	4.66	146,735	115	118	120	133	164	166	218	179	187	169	133	126	153	0.171
1983	4.77	149,819	125	119	111	129	153	189	210	205	196	141	132	120	153	0.171
1984	4.87	153,259	132	151	164	175	209	209	184	218	220	186	144	119	177	0.198
1985	4.98	156,735	125	121	143	172	174	207	235	218	193	165	140	136	169	0.190
1986	5.08	160,127	124	116	135	151	189	200	217	220	179	164	153	138	166	0.186
1987	5.19	163,978	132	130	131	182	179	211	199	215	206	179	127	127	168	0.189
1988	5.29	170,079	128	138	146	152	178	189	209	188	183	174	142	133	164	0.184
1989	5.40	173,684	124	128	137	166	175	185	206	202	192	163	162	147	166	0.186
1990	5.50	180,291	133	121	142	138	155	165	196	179	170	164	147	138	154	0.173
AVERAGE			127	126	131	151	171	193	208	209	193	169	144	135	163	0.183

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C-059246

C-059246

COUNTY..LOS ANGELES
CITY....CALABASAS
SYSTEM #..... 19225
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 90

CITY CENSUS POPULATION
1980..... 30,000
1990..... 69,000

WATER AGENCY.....LAS VIRGENES MUNICIPAL WATER DIST.
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	15,890	Metered.....	541	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	9,500	9,500	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984	12,224	12,224	256.0	304.0	374.0	359.0	534.0	523.0	643.0	611.0	547.0	487.0	402.0	371.0	5411.0
1985	12,445	12,445	341.0	338.0	377.0	330.0	335.0	487.0	-	-	-	-	-	-	-
1986			-	-	-	-	-	-	-	-	-	-	-	-	-
1987			-	-	-	-	-	-	-	-	-	-	-	-	-
1988	14,671	14,671	270.0	349.0	414.0	433.0	572.0	636.0	698.0	683.0	620.0	551.0	388.0	376.0	5990.0
1989	15,982	15,982	339.0	311.0	432.0	555.0	603.0	669.0	771.0	757.0	666.0	585.0	529.0	506.0	6723.0
1990	17,195	17,195	384.0	323.0	435.0	449.0	566.0	638.0	774.0	726.0	679.0	621.0	517.0	468.0	6580.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.16	30,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.24		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3.33		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3.41		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	3.50	42,782	193	245	282	280	403	407	485	461	426	367	313	280	347	0.388
1985	3.59	44,620	247	271	273	247	242	364	-	-	-	-	-	-	-	-
1986	3.67		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	3.76		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	3.84	56,363	155	214	237	256	327	376	399	391	367	315	229	215	291	0.326
1989	3.93	62,766	174	177	222	295	310	355	396	389	354	301	281	260	293	0.329
1990	4.01	69,000	180	167	203	217	265	308	362	339	328	290	250	219	261	0.293
AVERAGE			190	215	243	259	309	362	411	395	369	318	268	243	298	0.334

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

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C-059247

COUNTY..LOS ANGELES | WATER AGENCY.....SAN FERNANDO, CITY OF | ORIGIN OF WATER (in percent):

CITY....SAN FERNANDO | TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM #..... 19143 | SURFACE WATER..... 25

HYDROLOGIC REGION..... SOUTH COAST | SYSTEM SERVES: | WELLS AND SPRINGS.. 75

PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES

DAU # ..... 90 | ENTIRE CITY..... X

ENTIRE CITY PLUS OUTSIDE..... | SOURCE OF WATER (in percent):

CITY CENSUS POPULATION | PORTION OF THE CITY.....

1980..... 17,731 | OTHER..... | PURCHASED..... 25

1990..... 22,580 | SELF SUPPLIED..... 75

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4,117	Metered.....	392	Metered.....	343	Metered.....	34
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,727	4,727	/5	-	-	-	-	-	129.0	113.0	48.0	104.0	90.0	83.0	-
1981	4,727	4,727	76.0	52.0	62.0	81.0	98.0	127.0	-	-	-	-	-	-	-
1982	4,735	4,735	-	-	-	-	-	-	123.0	128.0	101.0	100.0	79.0	43.0	-
1983	4,735	4,735	75.0	64.0	76.0	76.0	78.0	84.0	127.0	117.0	110.0	92.0	65.0	77.0	1041.0
1984	4,820	4,820	86.0	87.0	101.0	105.0	129.0	124.0	145.0	141.0	123.0	109.0	89.0	84.0	1323.0
1985	4,824	4,824	88.0	81.0	90.0	106.0	76.0	70.0	100.0	143.0	114.0	113.0	93.0	93.0	1167.0
1986	4,800	4,800	98.0	82.0	96.0	103.0	125.0	134.0	90.0	95.0	79.0	109.0	105.0	101.0	1217.0
1987	4,910	4,910	99.0	88.0	102.0	122.0	128.0	117.0	132.0	142.0	142.0	108.0	193.0	81.0	1454.0
1988	4,848	4,848	88.0	88.0	106.0	99.0	113.0	126.0	134.0	130.0	117.0	109.0	98.0	88.0	1296.0
1989	4,848	4,848	86.0	75.0	92.0	111.0	111.0	117.0	133.0	131.0	117.0	105.0	94.0	104.0	1276.0
1990	4,996	4,996	84.0	75.0	67.0	120.0	105.0	118.0	128.0	121.0	117.0	110.0	96.0	90.0	1231.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.75	17,731	-	-	-	-	-	-	235	206	90	189	169	151	-	-
1981	3.83	18,094	135	103	111	149	175	234	-	-	-	-	-	-	-	-
1982	3.90	18,489	-	-	-	-	-	-	215	223	182	174	142	75	-	-
1983	3.98	18,853	128	121	130	134	133	149	217	200	194	157	115	132	151	0.169
1984	4.06	19,562	142	153	167	179	213	211	239	233	210	180	152	139	185	0.208
1985	4.14	19,949	142	145	146	177	123	117	162	231	190	183	155	150	160	0.180
1986	4.21	20,218	156	145	153	170	199	221	144	152	130	174	173	161	165	0.185
1987	4.29	21,059	152	149	156	193	196	185	202	218	225	165	305	124	189	0.212
1988	4.37	21,166	134	143	162	156	172	198	204	198	184	166	154	134	168	0.188
1989	4.44	21,538	129	124	138	172	166	181	199	196	181	157	145	156	162	0.182
1990	4.52	22,580	120	119	96	177	150	174	183	173	173	157	142	129	149	0.167
AVERAGE			138	134	140	167	170	186	200	203	176	170	165	135	166	0.186

1/ Number of services

2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.

3/ gpcd - gallons per capita daily

4/ afpca - acre-feet per capita annually

5/ Missing data unavailable.

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C-059248

COUNTY..LOS ANGELES
CITY....ALHAMBRA
SYSTEM #..... 19001
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

WATER AGENCY.....ALHAMBRA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 21
WELLS AND SPRINGS.. 79

SOURCE OF WATER (in percent):
PURCHASED..... 21
SELF SUPPLIED..... 79

CITY CENSUS POPULATION
1980..... 64,615
1990..... 82,106

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	14,557	Metered.....	998	Metered.....	275	Metered.....	176
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	15,812	15,812	266.0	210.0	228.0	287.0	285.0	358.0	409.0	397.0	337.0	332.0	304.0	298.0	3711.0
1981	15,810	15,810	265.0	237.0	252.0	280.0	345.0	417.0	447.0	437.0	385.0	315.0	307.0	273.0	3960.0
1982	15,841	15,841	313.0	296.0	325.0	340.0	382.0	398.0	489.0	490.0	405.0	410.0	333.0	323.0	4504.0
1983	15,810	15,810	269.0	228.0	245.0	272.0	334.0	362.0	436.0	416.0	386.0	315.0	269.0	256.0	3788.0
1984	15,800	15,800	278.0	295.0	343.0	350.0	431.0	413.0	490.0	468.0	427.0	389.0	299.0	270.0	4453.0
1985	15,790	15,790	280.0	263.0	301.0	362.0	387.0	438.0	487.0	464.0	388.0	365.0	306.0	297.0	4338.0
1986	15,775	15,775	312.0	251.0	298.0	341.0	418.0	431.0	463.0	483.0	382.0	334.0	325.0	323.0	4361.0
1987	15,700	15,700	322.0	290.0	309.0	391.0	412.0	447.0	440.0	459.0	417.0	368.0	295.0	296.0	4446.0
1988	15,730	15,730	303.0	298.0	341.0	339.0	398.0	421.0	459.0	443.0	403.0	391.0	324.0	309.0	4429.0
1989	15,742	15,742	306.0	269.0	323.0	375.0	405.0	424.0	479.0	465.0	413.0	386.0	369.0	363.0	4577.0
1990	15,718	15,718	336.0	295.0	351.0	341.0	374.0	398.0	455.0	433.0	408.0	395.0	347.0	341.0	4474.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.09	64,615	133	112	114	148	142	185	204	198	174	166	157	149	157	0.176
1981	4.20	66,405	129	127	122	141	168	209	217	212	193	153	154	133	163	0.183
1982	4.31	68,337	148	155	153	166	180	194	231	231	198	194	162	152	181	0.202
1983	4.43	70,001	124	116	113	130	154	172	201	192	184	145	128	118	148	0.166
1984	4.54	71,753	125	142	154	163	194	192	220	210	198	175	139	121	170	0.190
1985	4.66	73,504	123	128	132	164	170	199	214	204	176	160	139	130	162	0.181
1986	4.77	75,228	134	119	128	151	179	191	199	207	169	143	144	139	159	0.178
1987	4.88	76,656	136	135	130	170	173	194	185	193	181	155	128	125	159	0.178
1988	5.00	78,591	124	131	140	144	163	179	188	182	171	160	137	127	154	0.173
1989	5.11	80,441	123	119	130	155	162	176	192	186	171	155	153	146	156	0.175
1990	5.22	82,106	132	128	138	138	147	162	179	170	166	155	141	134	149	0.167
AVERAGE			130	128	132	152	167	187	203	199	180	160	144	134	160	0.179

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059249

COUNTY..LOS ANGELES
CITY.... ARCADIA
SYSTEM #..... 19003
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

CITY CENSUS POPULATION
1980..... 45,994
1990..... 48,290

WATER AGENCY.....ARCADIA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 4
WELLS AND SPRINGS.. 96

SOURCE OF WATER (in percent):
PURCHASED..... 4
SELF SUPPLIED..... 96

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	11,838	Metered.....	799	Metered.....	NA	Metered.....	337
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	12,786	12,786	307.0	213.0	188.0	221.0	295.0	334.0	489.0	514.0	636.0	441.0	509.0	336.0	4483.0
1981	12,751	12,751	283.0	245.0	262.0	388.0	528.0	675.0	686.0	667.0	572.0	406.0	364.0	254.0	5330.0
1982	12,847	12,847	193.0	241.0	242.0	308.0	382.0	421.0	624.0	610.0	444.0	427.0	288.0	255.0	4435.0
1983	12,859	12,840	284.0	254.0	224.0	278.0	418.0	454.0	620.0	515.0	504.0	357.0	277.0	233.0	4418.0
1984	12,863	12,863	278.0	352.0	413.0	459.0	601.0	563.0	709.0	625.0	575.0	487.0	315.0	233.0	5610.0
1985	12,907	12,907	260.0	277.0	342.0	457.0	500.0	697.0	782.0	695.0	546.0	462.0	331.0	309.0	5658.0
1986	12,908	12,908	345.0	232.0	315.0	419.0	572.0	611.0	684.0	704.0	521.0	427.0	384.0	332.0	5546.0
1987	13,443	13,443	309.0	285.0	319.0	499.0	537.0	582.0	629.0	662.0	589.0	453.0	298.0	286.0	5448.0
1988	12,940	12,940	294.0	334.0	428.0	413.0	556.0	619.0	683.0	646.0	571.0	558.0	368.0	325.0	5795.0
1989	12,955	12,955	306.0	270.0	387.0	511.0	549.0	585.0	695.0	653.0	570.0	491.0	454.0	413.0	5884.0
1990	12,974	12,974	315.0	267.0	385.0	360.0	471.0	534.0	669.0	607.0	581.0	527.0	441.0	394.0	5551.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.60	45,994	215	160	132	160	207	242	343	360	461	309	369	236	267	0.299
1981	3.61	46,027	198	190	184	281	370	489	481	467	414	285	264	178	317	0.355
1982	3.62	46,534	134	185	168	221	265	302	433	423	318	296	206	177	261	0.292
1983	3.63	46,738	196	194	155	198	288	324	428	355	359	246	198	161	259	0.290
1984	3.65	46,913	191	259	284	326	413	400	488	430	409	335	224	160	328	0.367
1985	3.66	47,235	178	209	234	323	341	492	534	475	385	316	234	211	328	0.368
1986	3.67	47,400	235	175	214	295	389	430	465	479	366	291	270	226	321	0.359
1987	3.68	49,532	201	205	208	336	350	392	410	431	396	295	201	186	301	0.338
1988	3.70	47,840	198	241	289	288	375	431	461	436	398	376	256	219	332	0.372
1989	3.71	48,058	205	201	260	354	369	406	467	438	395	330	315	277	335	0.376
1990	3.72	48,290	210	197	257	248	315	369	447	405	401	352	304	263	315	0.353
AVERAGE			197	201	217	275	335	389	450	427	391	312	258	209	306	0.343

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059250

COUNTY..LOS ANGELES | WATER AGENCY.....CALIFORNIA AMERICAN WATER COMPANY | ORIGIN OF WATER (in percent):

CITY....BALDWIN HILLS | TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM #..... 19052 | SURFACE WATER..... 28

HYDROLOGIC REGION..... SOUTH COAST | SYSTEM SERVES: | WELLS AND SPRINGS.. 72

PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES

DAU # ..... 92 | ENTIRE CITY.....

ENTIRE CITY PLUS OUTSIDE..... | SOURCE OF WATER (in percent):

CITY CENSUS POPULATION | PORTION OF THE CITY.....

1980..... 20,960 | OTHER..... X | PURCHASED..... 72

1990..... 25,800 | SELF SUPPLIED..... 28

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5,793	Metered.....	272	Metered.....	2	Metered.....	20
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,975	5,975	76.0	71.0	80.0	105.0	104.0	131.0	142.0	141.0	115.0	114.0	113.0	97.0	1289.0
1981	5,956	5,956	87.0	79.0	82.0	97.0	120.0	142.0	148.0	146.0	127.0	104.0	117.0	88.0	1337.0
1982	5,948	5,948	68.0	75.0	73.0	86.0	112.0	115.0	141.0	138.0	103.0	115.0	84.0	77.0	1187.0
1983	5,970	5,970	87.0	65.0	71.0	80.0	102.0	119.0	138.0	129.0	121.0	95.0	80.0	75.0	1162.0
1984	6,002	6,002	85.0	90.0	106.0	104.0	132.0	126.0	151.0	135.0	125.0	110.0	91.0	81.0	1336.0
1985	6,073	6,073	85.0	77.0	89.0	109.0	123.0	137.0	152.0	142.0	121.0	111.0	99.0	91.0	1336.0
1986	6,081	6,081	93.0	70.0	88.0	106.0	134.0	135.0	145.0	148.0	113.0	100.0	101.0	93.0	1326.0
1987	6,071	6,071	90.0	82.0	92.0	119.0	127.0	130.0	138.0	140.0	126.0	108.0	87.0	88.0	1327.0
1988	6,088	6,088	91.0	95.0	106.0	99.0	128.0	130.0	142.0	130.0	120.0	115.0	98.0	89.0	1343.0
1989	6,087	6,087	91.0	77.0	97.0	114.0	125.0	128.0	141.0	133.0	112.0	110.0	107.0	103.0	1338.0
1990	6,095	6,095	91.0	77.0	92.0	92.0	101.0	102.0	127.0	103.0	115.0	107.0	98.0	100.0	1205.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.51	20,960	117	117	123	167	160	208	219	217	183	175	180	149	168	0.189
1981	3.58	21,325	132	132	124	152	182	222	224	221	199	157	183	133	172	0.192
1982	3.65	21,728	101	123	108	132	166	176	209	205	158	171	129	114	150	0.168
1983	3.73	22,241	126	104	103	120	148	178	200	187	181	138	120	109	143	0.160
1984	3.80	22,795	120	136	150	152	187	184	214	191	183	156	133	115	161	0.180
1985	3.87	23,505	117	117	122	155	169	194	209	195	172	152	140	125	156	0.174
1986	3.94	23,977	125	104	118	147	180	188	195	199	157	135	140	125	152	0.170
1987	4.02	24,378	119	120	122	163	168	178	183	185	172	143	119	116	149	0.167
1988	4.09	24,888	118	132	137	133	166	174	184	168	161	149	131	115	148	0.166
1989	4.16	25,325	116	109	124	150	159	168	180	169	147	140	141	131	145	0.162
1990	4.23	25,800	114	107	115	119	126	132	159	129	149	134	127	125	128	0.143
AVERAGE			119	118	122	144	165	182	198	188	169	150	140	123	152	0.170

1/ Number of services

2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.

3/ gpcd - gallons per capita daily

4/ afpca - acre-feet per capita annually

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C-059251

COUNTY.. LOS ANGELES
CITY.... DUARTE
SYSTEM #..... 19186
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

CITY CENSUS POPULATION
1980..... 16,766
1990..... 20,688

WATER AGENCY.....CALIFORNIA-AMERICAN WATER COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 6
WELLS AND SPRINGS.. 94

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	6,907	Metered.....	525	Metered.....	20	Metered.....	169
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	6,126	5,976	85.0	82.0	88.0	137.0	120.0	200.0	246.0	222.0	204.0	175.0	157.0	122.0	1838.0
1981	6,383	6,233	115.0	90.0	91.0	124.0	183.0	246.0	281.0	274.0	223.0	159.0	163.0	116.0	2065.0
1982	6,460	6,310	92.0	119.0	99.0	125.0	165.0	170.0	244.0	261.0	179.0	165.0	114.0	105.0	1838.0
1983	6,500	6,350	115.0	87.0	92.0	112.0	167.0	185.0	265.0	217.0	218.0	150.0	112.0	100.0	1820.0
1984	6,596	6,446	119.0	147.0	165.0	193.0	250.0	221.0	306.0	268.0	222.0	215.0	123.0	102.0	2331.0
1985	6,639	6,489	110.0	103.0	127.0	170.0	199.0	241.0	260.0	253.0	199.0	171.0	139.0	115.0	2087.0
1986	6,799	6,649	138.0	99.0	124.0	163.0	215.0	240.0	267.0	291.0	191.0	162.0	163.0	130.0	2183.0
1987	6,799	6,649	119.0	118.0	126.0	196.0	215.0	217.0	243.0	258.0	227.0	174.0	124.0	117.0	2134.0
1988	6,824	6,674	121.0	128.0	162.0	159.0	214.0	234.0	272.0	242.0	215.0	203.0	138.0	135.0	2223.0
1989	6,826	6,676	119.0	107.0	146.0	198.0	201.0	230.0	284.0	280.0	217.0	200.0	184.0	159.0	2325.0
1990	6,875	6,725	147.0	116.0	150.0	161.0	196.0	204.0	281.0	252.0	242.0	215.0	190.0	169.0	2323.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.81	17,187	160	165	165	266	225	388	462	417	396	328	304	229	293	0.328
1981	2.83	18,081	205	178	162	229	326	454	501	489	411	284	301	207	313	0.350
1982	2.86	18,474	161	230	173	226	288	307	426	456	323	288	206	183	273	0.305
1983	2.89	18,764	198	166	158	199	287	329	456	373	387	258	199	172	266	0.298
1984	2.91	19,220	200	264	277	335	420	383	514	450	385	361	213	171	332	0.372
1985	2.94	19,525	182	188	210	290	329	411	430	418	340	283	237	190	293	0.328
1986	2.97	20,179	221	175	198	269	344	396	427	465	316	259	269	208	296	0.332
1987	3.00	20,363	189	207	200	321	341	355	385	409	372	276	203	185	287	0.322
1988	3.02	20,623	189	214	253	257	335	378	425	379	348	318	223	211	295	0.331
1989	3.05	20,814	184	184	226	317	312	368	440	434	348	310	295	246	306	0.343
1990	3.08	21,149	224	196	229	254	299	322	429	384	381	328	299	258	301	0.337
AVERAGE			192	197	205	269	319	372	445	425	364	299	250	206	296	0.331

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY..LOS ANGELES
CITY....SAN MARINO
SYSTEM #..... 19139
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

WATER AGENCY.....CALIFORNIA AMERICAN WATER COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 90
WELLS AND SPRINGS.. 10

SOURCE OF WATER (in percent):
PURCHASED..... 90
SELF SUPPLIED..... 10

CITY CENSUS POPULATION
1980..... 42,000
1990..... 48,000

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	12,290	Metered.....	1,151	Metered.....	73	Metered.....	128
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	13,000	13,000 /5	-	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984	13,670	13,670	266.0	230.0	295.0	314.0	366.0	428.0	559.0	496.0	499.0	387.0	279.0	235.0	4354.0
1985	12,667	12,667	250.0	242.0	299.0	370.0	414.0	502.0	-	-	-	-	-	-	-
1986	13,573	13,573	292.0	214.0	268.0	337.0	415.0	429.0	460.0	503.0	354.0	336.0	331.0	280.0	4219.0
1987	13,586	13,586	262.0	239.0	246.0	328.0	340.0	319.0	435.0	480.0	404.0	339.0	255.0	230.0	3877.0
1988	13,629	13,269	271.0	277.0	342.0	322.0	432.0	462.0	523.0	460.0	432.0	397.0	303.0	267.0	4488.0
1989	13,650	13,650	260.0	231.0	299.0	392.0	390.0	432.0	499.0	509.0	434.0	420.0	383.0	344.0	4593.0
1990	14,000	14,000	-	-	-	-	-	-	-	-	-	-	-	-	-

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.23	42,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.25		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3.27		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3.29		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	3.31	45,246	190	175	210	231	261	315	399	354	368	276	206	168	264	0.295
1985	3.33	42,177	191	205	229	292	317	397	-	-	-	-	-	-	-	-
1986	3.35	45,462	207	168	190	247	294	315	326	357	260	238	243	199	254	0.285
1987	3.37	45,774	185	186	173	239	240	232	307	338	294	239	186	162	232	0.260
1988	3.39	46,189	189	207	239	232	302	333	365	321	312	277	219	186	266	0.298
1989	3.41	46,530	180	177	207	281	270	309	346	353	311	291	274	238	270	0.303
1990	3.43	48,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AVERAGE			190	186	208	254	281	317	349	345	309	264	225	191	257	0.288

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C-059253

C-059253

COUNTY..LOS ANGELES
CITY....EAST LOS ANGELES
SYSTEM #..... 19036
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

CITY CENSUS POPULATION
1980..... 110,130
1990..... 122,200

WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 79
WELLS AND SPRINGS.. 21

SOURCE OF WATER (in percent):
PURCHASED..... 79
SELF SUPPLIED..... 21

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	20,101	Metered.....	4,939	Metered.....	281	Metered.....	350
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	25,259	25,259	487.0	453.0	488.0	533.0	551.0	624.0	723.0	678.0	585.0	600.0	529.0	487.0	6738.0
1981	25,359	25,359	197.0	316.0	448.0	473.0	536.0	582.0	565.0	542.0	486.0	412.0	399.0	379.0	5335.0
1982	25,459	25,459	460.0	426.0	472.0	494.0	548.0	573.0	664.0	680.0	591.0	585.0	482.0	470.0	6445.0
1983	25,439	25,439	485.0	426.0	477.0	490.0	556.0	601.0	690.0	707.0	664.0	586.0	522.0	491.0	6695.0
1984	25,489	25,489	492.0	531.0	623.0	611.0	739.0	714.0	740.0	735.0	699.0	595.0	487.0	443.0	7409.0
1985	25,539	25,539	476.0	461.0	522.0	641.0	674.0	765.0	868.0	819.0	673.0	577.0	510.0	492.0	7478.0
1986	25,589	25,589	565.0	482.0	557.0	606.0	686.0	695.0	746.0	778.0	663.0	631.0	585.0	579.0	7573.0
1987	25,639	25,639	587.0	531.0	589.0	681.0	698.0	719.0	737.0	761.0	707.0	662.0	561.0	551.0	7784.0
1988	25,624	25,624	560.0	559.0	645.0	620.0	689.0	714.0	738.0	735.0	693.0	676.0	593.0	583.0	7805.0
1989	25,631	25,631	569.0	524.0	607.0	656.0	654.0	707.0	763.0	768.0	709.0	662.0	626.0	616.0	7861.0
1990	25,673	25,673	590.0	540.0	628.0	606.0	665.0	688.0	743.0	737.0	694.0	698.0	601.0	583.0	7773.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.36	110,130	143	142	143	161	161	189	212	199	177	176	160	143	168	0.188
1981	4.40	111,580	57	101	130	141	155	174	163	157	145	119	119	110	131	0.147
1982	4.44	113,038	131	135	135	146	156	169	189	194	174	167	142	134	156	0.175
1983	4.48	113,966	137	133	135	143	157	176	195	200	194	166	153	139	161	0.180
1984	4.52	115,209	138	159	174	177	207	207	207	206	202	167	141	124	176	0.197
1985	4.56	116,456	132	141	145	183	187	219	240	227	193	160	146	136	176	0.197
1986	4.60	117,708	155	146	153	172	188	197	204	213	188	173	166	159	176	0.197
1987	4.64	118,963	159	159	160	191	189	201	200	206	198	180	157	149	179	0.201
1988	4.68	119,918	151	161	174	172	185	198	199	198	193	182	165	157	178	0.200
1989	4.72	120,975	152	155	162	181	174	195	203	205	195	177	172	164	178	0.199
1990	4.76	122,200	156	158	166	165	176	188	196	195	189	184	164	154	174	0.195
AVERAGE			137	145	152	167	176	192	201	200	186	168	153	143	169	0.189

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—059254

C-059254

COUNTY..LOS ANGELES
CITY.... COVINA
SYSTEM #..... 19127
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

CITY CENSUS POPULATION
1980..... 33,751
1990..... 43,207

WATER AGENCY.....COVINA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 92
WELLS AND SPRINGS.. 8

SOURCE OF WATER (in percent):
PURCHASED..... 92
SELF SUPPLIED..... 8

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	6,527	Metered.....	911	Metered.....	548	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	7,906	6,834	129.7	117.2	136.2	195.7	179.1	238.0	265.4	246.2	228.5	191.6	267.7	146.4	2341.7
1981	8,100	7,000	131.9	128.0	137.8	171.0	201.5	253.1	274.6	255.2	217.0	190.6	169.5	149.5	2279.7
1982	8,364	7,181	121.8	107.8	123.7	150.4	171.8	212.4	241.9	245.7	193.0	194.5	163.0	132.3	2058.3
1983	8,447	7,252	136.6	100.1	109.6	129.1	165.8	190.6	242.8	227.2	219.7	157.9	128.7	112.0	1920.1
1984	8,569	7,359	139.1	70.4	184.1	194.5	243.0	236.4	294.5	267.5	246.5	216.1	145.4	121.2	2358.7
1985	8,697	7,481	133.5	129.2	149.1	193.9	215.5	253.5	305.5	285.5	234.5	208.7	157.8	151.5	2418.2
1986	8,720	7,499	158.3	120.9	144.2	187.6	262.2	273.9	302.8	314.1	259.7	179.1	170.4	150.0	2523.2
1987	8,745	7,875	142.1	138.2	143.8	202.0	221.9	253.0	269.7	288.8	261.2	212.4	140.0	132.7	2405.8
1988	8,935	7,966	138.7	146.0	276.2	185.6	215.3	267.8	271.9	255.5	230.5	208.2	164.8	149.7	2510.2
1989	8,104	7,217	138.7	127.3	168.1	201.2	226.3	281.2	329.4	310.9	249.0	213.1	201.1	172.1	2618.4
1990	8,197	7,310	143.6	129.8	162.2	164.2	194.3	227.2	295.4	263.6	239.0	212.3	180.6	163.2	2375.4

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.94	39,045	107	104	113	167	148	203	219	203	195	158	229	121	164	0.184
1981	5.04	40,791	104	112	109	140	159	207	217	202	177	151	139	118	153	0.171
1982	5.13	42,933	92	90	93	117	129	165	182	185	150	146	127	99	131	0.147
1983	5.23	44,180	100	81	80	97	121	144	177	166	166	115	97	82	119	0.133
1984	5.33	45,651	98	53	130	142	172	173	208	189	180	153	106	86	142	0.159
1985	5.42	47,178	91	98	102	137	147	179	209	195	166	143	111	104	140	0.157
1986	5.52	48,151	106	90	97	130	176	190	203	210	180	120	118	100	144	0.161
1987	5.62	49,139	93	100	94	137	146	172	177	190	177	139	95	87	134	0.150
1988	5.72	51,075	88	99	174	121	136	175	172	161	150	131	108	95	135	0.151
1989	5.81	47,112	95	97	115	142	155	199	226	213	176	146	142	118	152	0.171
1990	5.91	48,450	96	96	108	113	129	156	197	176	164	141	124	109	134	0.150
AVERAGE			97	93	110	131	147	178	199	190	171	140	127	102	141	0.158

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—059255

C-059255

COUNTY..LOS ANGELES
CITY....GLENDORA
SYSTEM #..... 19044
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

CITY CENSUS POPULATION
1980..... 38,654
1990..... 47,828

WATER AGENCY.....GLENDORA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 34
WELLS AND SPRINGS.. 66

SOURCE OF WATER (in percent):
PURCHASED..... 34
SELF SUPPLIED..... 66

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	12,130	Metered.....	615	Metered.....	101	Metered.....	2
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	11,875	10,675	208.0	236.0	191.0	316.0	300.0	270.0	650.0	465.0	343.0	305.0	344.0	243.0	3871.0
1981	11,995	10,956	236.0	193.0	244.0	267.0	350.0	473.0	489.0	491.0	390.0	261.0	271.0	215.0	3880.0
1982	12,033	10,993	199.0	172.0	176.0	204.0	275.0	291.0	440.0	473.0	328.0	287.0	192.0	185.0	3222.0
1983	11,984	10,948	206.0	168.0	168.0	242.0	279.0	309.0	489.0	368.0	396.0	265.0	215.0	177.0	3282.0
1984	12,093	11,059	213.0	230.0	293.0	341.0	472.0	415.0	569.0	490.0	437.0	326.0	201.0	159.0	4146.0
1985	12,500	11,466	184.0	205.0	227.0	323.0	374.0	454.0	525.0	437.0	419.0	300.0	232.0	197.0	3877.0
1986	12,774	11,740	230.0	158.0	209.0	316.0	431.0	440.0	534.0	567.0	325.0	257.0	266.0	172.0	3905.0
1987	13,000	12,565	250.0	228.0	229.0	363.0	423.0	461.0	465.0	523.0	456.0	362.0	192.0	204.0	4156.0
1988	13,000	12,570	210.0	196.0	324.0	330.0	364.0	447.0	568.0	414.0	416.0	360.0	247.0	219.0	4095.0
1989	12,734	12,308	235.0	197.0	268.0	380.0	403.0	424.0	535.0	509.0	402.0	389.0	355.0	337.0	4434.0
1990	12,848	12,422	234.0	210.0	276.0	248.0	353.0	391.0	534.0	495.0	484.0	409.0	435.0	294.0	4363.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.62	42,999	156	189	143	245	225	209	488	349	266	229	267	182	247	0.276
1981	3.64	43,709	174	158	180	204	258	361	361	362	297	193	207	159	243	0.272
1982	3.67	44,123	145	139	129	154	201	220	322	346	248	210	145	135	200	0.224
1983	3.69	44,218	150	136	123	182	204	233	357	268	299	193	162	129	203	0.228
1984	3.71	44,898	153	177	211	253	339	308	409	352	324	234	149	114	253	0.283
1985	3.74	46,695	127	157	157	231	258	324	363	302	299	207	166	136	227	0.255
1986	3.76	48,012	155	118	140	219	290	305	359	381	226	173	185	116	223	0.250
1987	3.78	49,159	164	166	150	246	278	313	305	343	309	238	130	134	232	0.259
1988	3.80	49,457	137	137	211	222	237	301	370	270	280	235	166	143	227	0.254
1989	3.83	48,737	156	144	177	260	267	290	354	337	275	257	243	223	249	0.279
1990	3.85	49,468	153	152	180	167	230	263	348	323	326	267	293	192	242	0.271
AVERAGE			152	152	164	217	253	284	367	330	286	221	192	151	231	0.259

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—059256

C-059256

COUNTY..LOS ANGELES
CITY....LA VERNE
SYSTEM #..... 19062
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

WATER AGENCY.....LA VERNE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 78
WELLS AND SPRINGS.. 22

SOURCE OF WATER (in percent):
PURCHASED..... 78
SELF SUPPLIED..... 22

CITY CENSUS POPULATION
1980..... 26,500
1990..... 31,753

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	7,350	Metered.....	252	Metered.....	34	Metered.....	31
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	6,863	6,174	/5	-	-	-	-	-	327.0	280.0	236.0	214.0	175.0	148.0	-
1981	6,863	6,174	126.0	97.0	112.0	157.0	185.0	291.0	319.0	310.0	275.0	193.0	138.0	121.0	2324.0
1982	6,871	6,175	96.0	92.0	101.0	132.0	189.0	204.0	294.0	301.0	240.0	212.0	144.0	127.0	2132.0
1983	6,989	6,243	129.0	96.0	102.0	139.0	220.0	228.0	176.0	166.0	184.0	175.0	124.0	73.0	1812.0
1984	7,217	6,486	99.0	130.0	46.0	209.0	60.0	282.0	322.0	310.0	274.0	232.0	130.0	110.0	2204.0
1985	7,552	6,788	121.0	121.0	143.0	208.0	248.0	303.0	353.0	332.0	253.0	220.0	145.0	142.0	2589.0
1986	7,552	6,788	157.0	123.0	137.0	198.0	268.0	304.0	335.0	360.0	242.0	188.0	174.0	156.0	2642.0
1987	7,891	7,130	144.0	133.0	146.0	241.0	286.0	311.0	327.0	335.0	292.0	222.0	144.0	134.0	2715.0
1988	8,019	7,249	132.0	189.0	194.0	198.0	268.0	294.0	330.0	311.0	261.0	245.0	154.0	148.0	2724.0
1989	8,020	7,527	127.0	113.0	171.0	227.0	255.0	318.0	336.0	315.0	270.0	226.0	205.0	182.0	2745.0
1990	7,907	7,562	134.0	118.0	173.0	159.0	226.0	258.0	333.0	318.0	280.0	251.0	191.0	163.0	2604.0

PER CAPITA WATER USE (gpcd)/3

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	ANNUALLY afpca /4
1980	4.29	29,457	-	-	-	-	-	-	358	307	267	234	198	162	-	-
1981	4.28	29,393	138	118	123	178	203	330	350	340	312	212	156	133	217	0.243
1982	4.27	29,364	105	112	111	150	208	232	323	331	272	233	163	140	199	0.223
1983	4.26	29,803	140	115	110	155	238	255	190	180	206	189	139	79	167	0.187
1984	4.25	30,708	104	146	48	227	63	306	338	326	297	244	141	116	197	0.220
1985	4.25	32,063	122	135	144	216	250	315	355	334	263	221	151	143	221	0.248
1986	4.24	31,992	158	137	138	206	270	317	338	363	252	190	181	157	226	0.253
1987	4.23	33,355	139	142	141	241	277	311	316	324	292	215	144	130	223	0.250
1988	4.22	33,821	126	193	185	195	256	290	315	297	257	234	152	141	221	0.247
1989	4.21	33,751	121	120	163	224	244	314	321	301	267	216	202	174	223	0.250
1990	4.20	33,202	130	127	168	160	220	259	324	309	281	244	192	158	215	0.241
AVERAGE			128	134	133	195	223	293	321	310	270	221	165	139	211	0.236

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

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C-059257

COUNTY..LOS ANGELES
CITY....ALTADENA
SYSTEM #..... 19063
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

CITY CENSUS POPULATION 7/
1980..... 16,000
1990..... 16,000

WATER AGENCY.....LINCOLN AVE WATER COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 75
WELLS AND SPRINGS.. 25

SOURCE OF WATER (in percent):
PURCHASED..... 75
SELF SUPPLIED..... 25

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	3,981	Metered.....	94	Metered.....	NA	Metered.....	19
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,061	4,061	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981	4,061	4,061	48.0	41.0	42.0	53.0	60.0	86.0	98.0	95.0	77.0	56.0	55.0	46.0	757.0
1982	4,033	4,033	41.0	38.0	39.0	44.0	52.0	56.0	85.0	87.0	66.0	56.0	42.0	42.0	648.0
1983	4,027	4,027	43.0	35.0	38.0	40.0	53.0	59.0	83.0	75.0	65.0	45.0	42.0	40.0	618.0
1984	4,036	4,036	41.0	48.0	56.0	60.0	83.0	76.0	95.0	85.0	74.0	63.0	45.0	40.0	766.0
1985	4,037	4,037	41.0	39.0	44.0	59.0	66.0	83.0	97.0	92.0	66.0	57.0	47.0	45.0	736.0
1986	4,073	4,073	46.0	36.0	43.0	50.0	73.0	79.0	84.0	93.0	62.0	53.0	50.0	45.0	714.0
1987	4,069	4,069	45.0	41.0	43.0	62.0	64.0	77.0	77.0	81.0	73.0	61.0	42.0	43.0	709.0
1988	4,063	4,063	46.0	48.0	54.0	53.0	64.0	77.0	86.0	78.0	68.0	65.0	48.0	47.0	734.0
1989	4,086	4,086	44.0	41.0	53.0	65.0	65.0	72.0	90.0	85.0	73.0	59.0	58.0	56.0	761.0
1990	4,094	4,094	45.0	39.0	48.0	49.0	58.0	67.0	86.0	77.0	72.0	68.0	55.0	54.0	718.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.94	16,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.94	15,987	97	92	85	111	121	179	198	192	161	113	115	93	130	0.145
1982	3.93	15,864	83	86	79	92	106	118	173	177	139	114	88	85	112	0.125
1983	3.93	15,828	88	79	77	84	108	124	169	153	137	92	88	82	107	0.120
1984	3.93	15,850	83	104	114	126	169	160	193	173	156	128	95	81	132	0.148
1985	3.92	15,841	83	88	90	124	134	175	198	187	139	116	99	92	127	0.143
1986	3.92	15,970	93	81	87	104	147	165	170	188	129	107	104	91	122	0.137
1987	3.92	15,941	91	92	87	130	130	161	156	164	153	123	88	87	122	0.136
1988	3.91	15,905	93	104	110	111	130	161	174	158	143	132	101	95	126	0.142
1989	3.91	15,982	89	92	107	136	131	150	182	172	152	119	121	113	130	0.146
1990	3.91	16,000	91	87	97	102	117	140	173	155	150	137	115	109	123	0.138
AVERAGE			89	90	93	112	129	153	179	172	146	118	101	93	123	0.138

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ Missing data unavailable
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY..LOS ANGELES
CITY....MONROVIA
SYSTEM #..... 19090
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

WATER AGENCY.....MONROVIA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 30,531
1990..... 35,761

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	7,994	Metered.....	641	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	8,675	8,675	132.0	121.0	135.0	183.0	169.0	254.0	314.0	290.0	237.0	222.0	198.0	166.0	2421.0
1981	8,720	8,720	156.0	135.0	135.0	170.0	214.0	298.0	305.0	299.0	253.0	190.0	187.0	146.0	2488.0
1982	8,759	8,759	125.0	122.0	134.0	149.0	176.0	206.0	290.0	284.0	216.0	202.0	150.0	139.0	2193.0
1983	9,135	9,135	166.0	125.0	160.0	191.0	258.0	264.0	301.0	315.0	233.0	196.0	188.0	181.0	2578.0
1984	9,027	9,027	148.0	168.0	201.0	214.0	282.0	262.0	327.0	285.0	260.0	222.0	156.0	136.0	2661.0
1985	9,027	9,027	142.0	141.0	163.0	210.0	235.0	282.0	325.0	317.0	237.0	210.0	163.0	159.0	2584.0
1986	9,176	9,176	172.0	158.0	177.0	226.0	275.0	279.0	301.0	315.0	233.0	196.0	188.0	181.0	2701.0
1987	9,029	9,029	172.0	158.0	177.0	225.0	274.0	278.0	293.0	304.0	283.0	229.0	166.0	166.0	2725.0
1988	9,210	9,210	161.0	176.0	212.0	212.0	250.0	280.0	302.0	295.0	260.0	249.0	180.0	172.0	2749.0
1989	8,845	8,845	167.0	141.0	179.0	230.0	248.0	266.0	334.0	297.0	269.0	241.0	224.0	205.0	2801.0
1990	8,645	8,645	177.0	152.0	192.0	181.0	221.0	240.0	306.0	271.0	261.0	246.0	208.0	193.0	2648.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.52	30,531	139	137	143	200	179	277	332	306	259	235	216	175	217	0.243
1981	3.58	31,228	161	154	139	181	221	318	315	309	270	196	200	151	218	0.244
1982	3.64	31,908	126	137	135	156	178	215	293	287	226	204	157	141	188	0.211
1983	3.70	33,841	158	132	153	188	246	260	287	300	230	187	185	173	209	0.234
1984	3.77	33,998	140	170	191	210	268	257	310	270	255	211	153	129	214	0.240
1985	3.83	34,556	133	146	152	203	219	272	303	296	229	196	157	148	205	0.229
1986	3.89	35,692	155	158	160	211	249	261	272	285	218	177	176	164	207	0.232
1987	3.95	35,678	156	158	160	210	248	260	265	275	264	207	155	150	209	0.234
1988	4.01	36,961	141	164	185	191	218	253	264	257	234	217	162	150	204	0.228
1989	4.07	36,042	149	140	160	213	222	246	299	266	249	216	207	183	213	0.238
1990	4.14	35,761	160	152	173	169	199	224	276	244	243	222	194	174	203	0.227
AVERAGE			147	150	159	194	222	258	292	281	243	206	178	158	208	0.233

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059259

COUNTY..LOS ANGELES
CITY....MONTEREY PARK
SYSTEM #..... 19092
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

CITY CENSUS POPULATION
1980..... 54,338
1990..... 60,738

WATER AGENCY.....MONTEREY PARK, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	11,376	Metered.....	703	Metered.....	NA	Metered.....	66
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	12,127	12,127	184.0	171.0	183.0	224.0	225.0	287.0	320.0	314.0	267.0	268.0	243.0	221.0	2907.0
1981	12,088	12,088	212.0	185.0	196.0	222.0	267.0	326.0	344.0	338.0	298.0	246.0	242.0	213.0	3089.0
1982	12,133	12,133	201.0	189.0	202.0	222.0	253.0	266.0	335.0	340.0	277.0	273.0	215.0	209.0	2982.0
1983	12,109	12,109	222.0	180.0	202.0	213.0	258.0	284.0	338.0	322.0	303.0	251.0	218.0	210.0	3001.0
1984	12,110	12,110	224.0	243.0	277.0	281.0	342.0	325.0	392.0	360.0	344.0	300.0	238.0	222.0	3548.0
1985	12,062	12,062	224.0	209.0	245.0	283.0	308.0	346.0	394.0	374.0	317.0	303.0	251.0	242.0	3496.0
1986	12,059	12,059	253.0	206.0	244.0	276.0	337.0	345.0	377.0	389.0	318.0	288.0	276.0	267.0	3576.0
1987	12,059	12,059	262.0	235.0	262.0	325.0	344.0	352.0	362.0	380.0	345.0	307.0	251.0	248.0	3673.0
1988	12,047	12,047	252.0	251.0	297.0	292.0	329.0	345.0	379.0	365.0	337.0	325.0	271.0	263.0	3706.0
1989	12,021	12,021	247.0	218.0	276.0	313.0	334.0	347.0	387.0	375.0	338.0	309.0	293.0	301.0	3738.0
1990	12,145	12,145	274.0	234.0	277.0	270.0	304.0	313.0	365.0	349.0	327.0	318.0	284.0	279.0	3594.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.48	54,338	109	109	109	137	134	176	190	186	164	159	149	131	147	0.164
1981	4.53	54,792	125	121	115	135	157	198	203	199	181	145	147	125	154	0.173
1982	4.58	55,628	117	121	117	133	147	159	194	197	166	158	129	121	147	0.164
1983	4.64	56,148	128	114	116	126	148	169	194	185	180	144	129	121	146	0.164
1984	4.69	56,782	127	148	157	165	194	191	223	205	202	170	140	126	171	0.192
1985	4.74	57,185	126	131	138	165	174	202	222	211	185	171	146	137	167	0.188
1986	4.79	57,798	141	127	136	159	188	199	210	217	183	161	159	149	170	0.190
1987	4.84	58,426	145	144	145	185	190	201	200	210	197	170	143	137	172	0.193
1988	4.90	58,994	138	147	162	165	180	195	207	200	190	178	153	144	172	0.193
1989	4.95	59,492	134	131	150	175	181	194	210	203	189	168	164	163	172	0.193
1990	5.00	60,738	146	138	147	148	161	172	194	185	179	169	156	148	162	0.182
AVERAGE			130	130	136	154	169	187	204	200	183	163	147	137	162	0.181

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059260

COUNTY..LOS ANGELES
CITY....PASADENA
SYSTEM #..... 19124
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

CITY CENSUS POPULATION
1980..... 119,374
1990..... 131,590

WATER AGENCY.....PASADENA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 67
WELLS AND SPRINGS.. 33

SOURCE OF WATER (in percent):
PURCHASED..... 66
SELF SUPPLIED..... 34

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	NA	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	NA	Flat Rate...	NA	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	36,579	29,985	622.0	566.0	621.0	855.0	764.0	1148.0	1409.0	1252.0	1155.0	1046.0	942.0	754.0	11134.0
1981	36,434	29,840	751.0	649.0	684.0	810.0	957.0	1373.0	1432.0	1260.0	1332.0	880.0	869.0	719.0	11716.0
1982	36,415	29,875	531.0	525.0	649.0	582.0	810.0	874.0	1231.0	1383.0	1045.0	900.0	747.0	584.0	9861.0
1983	36,531	30,045	740.0	650.0	655.0	702.0	919.0	1069.0	1260.0	1429.0	1139.0	906.0	738.0	663.0	10870.0
1984	36,593	30,101	776.0	851.0	969.0	1084.0	1334.0	1193.0	1591.0	1402.0	1206.0	1335.0	750.0	750.0	13241.0
1985	36,621	30,127	770.0	715.0	805.0	1109.0	1159.0	1292.0	1746.0	1427.0	1302.0	1086.0	867.0	742.0	13020.0
1986	36,621	30,221	769.0	670.0	753.0	913.0	1192.0	1325.0	1376.0	1549.0	1073.0	1026.0	958.0	724.0	12328.0
1987	36,662	30,362	828.0	741.0	865.0	1145.0	1269.0	1199.0	1228.0	1519.0	1229.0	1051.0	834.0	765.0	12673.0
1988	36,600	31,233	712.0	881.0	982.0	912.0	1081.0	1242.0	1449.0	1214.0	1266.0	1196.0	837.0	831.0	12603.0
1989	36,708	31,202	760.0	701.0	874.0	1186.0	1093.0	1243.0	1492.0	1439.0	1225.0	1107.0	1025.0	898.0	13043.0
1990	36,998	31,448	837.0	693.0	838.0	877.0	1089.0	1125.0	1484.0	1302.0	1230.0	1196.0	1025.0	933.0	12629.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.98	145,626	138	134	138	196	169	263	312	277	264	232	216	167	209	0.235
1981	4.00	145,789	166	159	151	185	212	314	317	279	305	195	199	159	220	0.247
1982	4.02	146,453	117	128	143	132	178	199	271	305	238	198	170	129	184	0.207
1983	4.04	147,662	162	157	143	158	201	241	275	312	257	198	167	145	202	0.226
1984	4.06	148,656	168	197	210	243	289	268	345	304	270	290	168	163	244	0.273
1985	4.08	149,514	166	171	174	247	250	288	377	308	290	234	193	160	239	0.267
1986	4.10	150,259	165	159	162	203	256	294	295	333	238	220	213	155	225	0.252
1987	4.12	151,172	177	175	185	252	271	264	262	324	271	224	184	163	230	0.257
1988	4.14	151,660	151	200	209	200	230	273	308	258	278	254	184	177	228	0.255
1989	4.16	152,854	160	164	184	259	231	271	315	304	267	234	224	190	234	0.262
1990	4.18	154,813	174	160	175	189	227	242	309	271	265	249	221	194	223	0.250
AVERAGE			159	164	170	206	229	265	308	298	268	230	194	164	222	0.248

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059261

COUNTY..LOS ANGELES WATER AGENCY.....POMONA, CITY OF ORIGIN OF WATER (in percent):

CITY.... POMONA TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM #..... 19126 SURFACE WATER..... 44

HYDROLOGIC REGION..... SOUTH COAST SYSTEM SERVES: WELLS AND SPRINGS.. 56

PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES

DAU # ..... 92 ENTIRE CITY..... X

ENTIRE CITY PLUS OUTSIDE..... SOURCE OF WATER (in percent):

CITY CENSUS POPULATION PORTION OF THE CITY.....

1980..... 92,742 OTHER..... PURCHASED..... 44

1990..... 131,723 SELF SUPPLIED..... 56

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	24,743	Metered.....	1,960	Metered.....	154	Metered.....	295
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	23,951	23,951	476.0	437.0	464.0	607.0	638.0	840.0	953.0	907.0	756.0	723.0	625.0	564.0	7990.0
1981	24,759	24,759	533.0	470.0	503.0	596.0	733.0	951.0	986.0	988.0	856.0	691.0	616.0	530.0	8453.0
1982	24,996	24,996	487.0	446.0	492.0	547.0	675.0	720.0	942.0	912.0	737.0	683.0	501.0	473.0	7615.0
1983	25,115	25,115	498.0	415.0	446.0	504.0	657.0	725.0	899.0	840.0	769.0	608.0	491.0	452.0	7304.0
1984	26,088	26,088	496.0	543.0	658.0	687.0	886.0	852.0	1019.0	978.0	878.0	770.0	562.0	480.0	8809.0
1985	26,502	26,502	488.0	470.0	555.0	701.0	802.0	935.0	1050.0	1016.0	793.0	732.0	556.0	513.0	8611.0
1986	26,543	26,543	558.0	460.0	539.0	658.0	863.0	935.0	1028.0	1066.0	833.0	662.0	628.0	570.0	8800.0
1987	26,646	26,646	538.0	537.0	554.0	741.0	866.0	928.0	942.0	985.0	869.0	712.0	512.0	525.0	8709.0
1988	26,757	26,757	542.0	634.0	713.0	686.0	839.0	956.0	1111.0	1062.0	916.0	811.0	615.0	568.0	9453.0
1989	27,230	27,230	536.0	488.0	622.0	740.0	845.0	924.0	1089.0	1076.0	931.0	813.0	737.0	695.0	9496.0
1990	27,412	27,412	599.0	520.0	661.0	681.0	779.0	807.0	1078.0	924.0	973.0	808.0	689.0	596.0	9115.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.87	92,742	166	162	161	218	222	302	331	315	272	251	225	196	236	0.264
1981	3.97	98,181	175	171	165	202	241	323	324	325	291	227	209	174	236	0.264
1982	4.06	101,453	155	157	156	180	215	237	300	290	242	217	165	150	206	0.230
1983	4.15	104,280	154	142	138	161	203	232	278	260	246	188	157	140	192	0.215
1984	4.25	110,754	144	169	192	207	258	256	297	285	264	224	169	140	218	0.244
1985	4.34	114,985	137	146	156	203	225	271	295	285	230	205	161	144	205	0.230
1986	4.43	117,640	153	140	148	186	237	265	282	292	236	182	178	156	205	0.230
1987	4.53	120,583	144	159	148	205	232	257	252	264	240	190	142	140	198	0.222
1988	4.62	123,582	141	177	186	185	219	258	290	277	247	212	166	148	210	0.235
1989	4.71	128,307	135	136	156	192	212	240	274	271	242	204	191	175	203	0.227
1990	4.81	131,723	147	141	162	172	191	204	264	226	246	198	174	146	190	0.212
AVERAGE			150	155	161	192	223	259	290	281	251	209	176	155	209	0.234

1/ Number of services

2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.

3/ gpcd - gallons per capita daily

4/ afpca - acre-feet per capita annually

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C-059262

COUNTY..LOS ANGELES
CITY....WEST COVINA, ET AL /5
SYSTEM #..... 19194
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

CITY CENSUS POPULATION
1980..... 35,000
1990..... 51,804

WATER AGENCY.....ROWLAND WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	10,648	Metered.....	NA	Metered.....	800	Metered.....	30
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	9,000	9,000	165.0	150.0	161.0	215.0	250.0	349.0	446.0	413.0	324.0	297.0	235.7	179.0	3184.7
1981	9,200	9,200	178.0	164.0	167.0	197.0	275.0	413.0	437.0	429.0	350.0	229.0	157.0	120.0	3116.0
1982	9,400	9,400	85.0	101.0	157.0	170.0	226.0	255.0	267.0	377.0	298.0	264.0	185.0	171.0	2556.0
1983	9,600	9,600	181.0	151.0	170.0	198.0	256.0	294.0	396.0	250.0	223.0	142.0	139.0	139.0	2539.0
1984	9,937	9,937	139.0	130.0	140.0	153.0	317.0	289.0	257.0	375.0	408.0	282.0	207.0	169.0	2866.0
1985	10,464	10,464	116.0	151.0	196.0	253.0	296.0	340.0	420.0	456.0	317.0	296.0	219.0	210.0	3270.0
1986	10,584	10,584	221.0	180.0	218.0	262.0	350.0	377.0	444.0	464.0	340.0	266.0	255.0	231.0	3608.0
1987	11,056	11,056	226.0	184.0	222.0	329.0	344.0	366.0	510.0	433.0	361.0	315.0	234.0	225.0	3749.0
1988	11,306	11,306	210.0	240.0	273.0	275.0	344.0	380.0	394.0	411.0	372.0	334.0	280.0	211.0	3724.0
1989	11,412	11,412	249.0	220.0	270.0	318.0	359.0	385.0	442.0	442.0	393.0	352.0	319.0	313.0	4062.0
1990	11,974	11,974	274.0	247.0	293.0	340.0	365.0	383.0	457.0	430.0	407.0	371.0	305.0	295.0	4167.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.89	35,000	152	148	148	205	230	332	411	381	309	274	224	165	249	0.279
1981	3.93	36,180	159	162	149	181	245	381	390	382	322	204	145	107	236	0.264
1982	3.98	37,378	73	97	135	152	195	227	230	325	266	228	165	148	187	0.210
1983	4.02	38,593	151	140	142	171	214	254	331	209	193	119	120	116	180	0.202
1984	4.06	40,383	111	111	112	126	253	239	205	300	337	225	171	135	194	0.218
1985	4.11	42,982	87	125	147	196	222	264	315	342	246	222	170	158	208	0.233
1986	4.15	43,938	162	146	160	199	257	286	326	341	258	195	193	170	225	0.252
1987	4.20	46,381	157	142	154	236	239	263	355	301	259	219	168	156	221	0.248
1988	4.24	47,925	141	173	184	191	232	264	265	277	259	225	195	142	213	0.238
1989	4.28	48,873	164	161	178	217	237	263	292	292	268	232	218	207	228	0.255
1990	4.33	51,804	171	170	182	219	227	246	285	268	262	231	196	184	220	0.247
AVERAGE			139	143	154	190	232	274	310	311	271	216	179	153	215	0.241

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Includes City of Industry

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C-059263

COUNTY..LOS ANGELES
CITY....ALTADENA
SYSTEM #..... 19140
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

WATER AGENCY.....RUBIO CANON LAND & WATER ASSOC.
TYPE OF AGENCY.....INVESTOR OWNED ASSOCIATION

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 9
WELLS AND SPRINGS.. 62

SOURCE OF WATER (in percent):
PURCHASED..... 29
SELF SUPPLIED..... 71

CITY CENSUS POPULATION
1980..... 6,000
1990..... 8,000

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	3,135	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,000	3,000	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3,109	3,109	39.0	33.0	38.0	40.0	48.0	66.0	78.0	94.0	63.0	55.0	42.0	37.0	633.0
1983	3,109	3,109	41.0	30.0	31.0	38.0	56.0	60.0	83.0	84.0	65.0	48.0	37.0	32.0	605.0
1984	3,109	3,109	49.0	53.0	60.0	74.0	91.0	73.0	108.0	85.0	82.0	74.0	47.0	35.0	831.0
1985	3,115	3,115	47.0	45.0	39.0	71.0	69.0	85.0	116.0	92.0	80.0	60.0	41.0	40.0	785.0
1986	3,117	3,117	57.0	36.0	40.0	58.0	79.0	86.0	93.0	100.0	74.0	60.0	57.0	48.0	788.0
1987	3,119	3,119	47.0	43.0	49.0	71.0	77.0	84.0	87.0	93.0	80.0	59.0	39.0	41.0	770.0
1988	3,120	3,120	44.0	47.0	56.0	57.0	72.0	81.0	92.0	81.0	74.0	69.0	49.0	45.0	767.0
1989	3,120	3,120	41.0	37.0	49.0	81.0	66.0	72.0	95.0	85.0	75.0	60.0	62.0	58.0	781.0
1990	3,125	3,125	45.0	37.0	51.0	44.0	54.0	68.0	87.0	76.0	76.0	72.0	60.0	52.0	722.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.00	6,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.06		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	2.11	6,566	192	179	187	203	236	335	383	462	320	270	213	182	264	0.296
1983	2.17	6,740	196	159	148	188	268	297	397	402	321	230	183	153	246	0.275
1984	2.22	6,914	229	264	280	357	425	352	504	397	395	345	227	163	329	0.369
1985	2.28	7,102	213	226	177	333	313	399	527	418	375	273	192	182	303	0.339
1986	2.34	7,281	253	177	177	266	350	394	412	443	339	266	261	213	296	0.332
1987	2.39	7,461	203	206	212	317	333	375	376	402	357	255	174	177	283	0.317
1988	2.45	7,638	186	212	237	249	304	354	389	342	323	291	214	190	275	0.308
1989	2.50	7,812	169	169	202	346	273	307	392	351	320	248	265	239	274	0.307
1990	2.56	8,000	181	165	206	183	218	283	351	306	317	290	250	210	247	0.277
AVERAGE			202	195	203	271	302	344	415	391	341	274	220	190	280	0.313

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C-059264

C-059264

COUNTY..LOS ANGELES
CITY....SAN GABRIEL
SYSTEM #..... 19144
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

CITY CENSUS POPULATION
1980..... 30,072
1990..... 37,120

WATER AGENCY.....SAN GABRIEL COUNTY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 1
SELF SUPPLIED..... 99

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	6,431	Metered.....	1,715	Metered.....	429	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	8,331	5,997	132.0	122.0	131.0	164.0	169.0	216.0	255.0	228.0	188.0	180.0	157.0	139.0	2081.0
1981	8,331	5,997	127.0	108.0	120.0	150.0	185.0	235.0	247.0	245.0	211.0	167.0	156.0	139.0	2090.0
1982	8,331	5,997	/5	-			-			-	-	-	-	-	-
1983	8,331	5,997	128.0	107.0	113.0	128.0	169.0	190.0	237.0	213.0	191.0	171.0	145.0	140.0	1932.0
1984	8,263	5,949	156.0	167.0	181.0	193.0	241.0	223.0	263.0	238.0	226.0	191.0	142.0	136.0	2357.0
1985	8,221	5,920	134.0	125.0	145.0	182.0	200.0	235.0	160.0	248.0	201.0	189.0	151.0	149.0	2119.0
1986	8,276	5,959	154.0	125.0	152.0	180.0	223.0	228.0	244.0	253.0	199.0	173.0	164.0	154.0	2249.0
1987	8,383	6,036	151.0	140.0	145.0	196.0	206.0	212.0	225.0	237.0	215.0	179.0	142.0	147.0	2195.0
1988	8,461	6,092	150.0	151.0	183.0	173.0	206.0	219.0	237.0	231.0	206.0	196.0	162.0	155.0	2269.0
1989	8,489	6,112	144.0	127.0	159.0	185.0	199.0	218.0	245.0	232.0	208.0	188.0	173.0	180.0	2258.0
1990	8,575	6,174	159.0	135.0	161.0	156.0	192.0	203.0	233.0	214.0	204.0	193.0	167.0	158.0	2175.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	5.01	41,776	102	101	101	131	130	172	197	176	150	139	125	107	136	0.153
1981	5.11	42,607	96	91	91	117	140	184	187	185	165	126	122	105	134	0.151
1982	5.21	43,438	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	5.31	44,270	93	86	82	96	123	143	173	155	144	125	109	102	120	0.134
1984	5.41	44,733	112	129	131	144	174	166	190	172	168	138	106	98	144	0.162
1985	5.51	45,326	95	98	103	134	142	173	114	177	148	135	111	106	128	0.143
1986	5.61	46,455	107	96	106	129	155	164	169	176	143	120	118	107	133	0.149
1987	5.71	47,892	102	104	98	136	139	148	152	160	150	121	99	99	126	0.141
1988	5.81	49,182	98	106	120	117	135	148	155	152	140	129	110	102	126	0.142
1989	5.91	50,191	93	90	102	123	128	145	157	149	138	121	115	116	123	0.138
1990	6.01	51,556	99	94	101	101	120	131	146	134	132	121	108	99	116	0.129
AVERAGE			100	100	103	123	139	157	164	163	148	127	112	104	129	0.144

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

C—0 5 9 2 6 5

C-059265

COUNTY..LOS ANGELES
CITY....SOUTH PASADENA
SYSTEM #..... 19154
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

CITY CENSUS POPULATION
1980..... 22,674
1990..... 23,928

WATER AGENCY.....SOUTH PASADENA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 1
WELLS AND SPRINGS.. 99

SOURCE OF WATER (in percent):
PURCHASED..... 1
SELF SUPPLIED..... 99

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,314	Metered.....	366	Metered.....	0	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,859	5,859	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	175.0	174.0	150.0	122.0	121.0	99.0	-
1982			85.0	84.0	86.0	99.0	118.0	129.0	173.0	179.0	145.0	145.0	98.0	89.0	-
1983			96.0	75.0	80.0	90.0	119.0	135.0	171.0	156.0	141.0	109.0	88.0	84.0	-
1984			95.0	105.0	122.0	129.0	167.0	156.0	190.0	170.0	161.0	143.0	101.0	94.0	-
1985			102.0	90.0	106.0	134.0	145.0	174.0	191.0	182.0	150.0	135.0	107.0	105.0	-
1986	5,973	5,973	113.0	85.0	103.0	127.0	165.0	173.0	184.0	196.0	152.0	130.0	129.0	115.0	1672.0
1987			108.0	99.0	108.0	144.0	160.0	165.0	171.0	181.0	161.0	133.0	100.0	97.0	-
1988	5,817	5,817	100.0	105.0	128.0	121.0	151.0	162.0	181.0	170.0	153.0	146.0	134.0	106.0	1657.0
1989			99.0	89.0	117.0	149.0	148.0	166.0	180.0	157.0	173.0	141.0	136.0	131.0	-
1990	6,073	6,073	113.0	99.0	126.0	120.0	134.0	149.0	175.0	159.0	154.0	145.0	132.0	121.0	1627.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.87	22,674	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.88		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3.88		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3.89		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	3.90		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	3.91		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	3.91	23,366	156	130	142	181	228	247	254	271	217	179	184	159	196	0.220
1987	3.92		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	3.93	22,838	141	159	181	177	213	236	256	240	223	206	196	150	199	0.223
1989	3.93		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	3.94	23,928	152	148	170	167	181	208	236	214	215	195	184	163	186	0.209
AVERAGE			150	145	164	175	207	230	249	242	218	194	188	157	194	0.217

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C-059266

C-059266

COUNTY..LOS ANGELES
CITY.... WALNUT
SYSTEM #..... 19234
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

WATER AGENCY.....WALNUT VALLEY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

CITY CENSUS POPULATION
1980..... 60,000
1990..... 92,000

ORIGIN OF WATER (in percent):
SURFACE WATER..... 99
WELLS AND SPRINGS.. 1

SOURCE OF WATER (in percent):
PURCHASED..... 99
SELF SUPPLIED..... 1

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	23,421	Metered.....	1,185	Metered.....	189	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	15,892	15,892	207.0	188.1	206.1	317.8	328.5	452.6	556.0	553.2	420.3	400.5	361.0	319.6	4310.7
1981	16,923	16,923	294.8	234.2	250.0	341.2	448.3	586.6	661.6	610.1	513.6	371.8	344.4	282.6	4939.2
1982	17,340	17,340	228.4	234.5	242.3	289.6	376.1	399.3	557.7	563.2	441.7	416.8	289.9	260.0	4299.5
1983	17,463	17,463	286.8	203.5	216.4	268.2	377.1	438.3	565.4	507.6	498.7	347.3	265.5	235.9	4210.7
1984	17,750	17,750	283.5	343.1	411.4	443.9	569.5	554.3	698.8	683.8	570.2	495.9	313.9	257.9	5626.2
1985	18,177	18,177	281.8	273.9	336.5	430.1	508.3	522.3	730.3	714.7	572.5	531.9	356.6	317.5	5576.4
1986	19,142	19,142	359.5	247.9	306.2	421.8	605.5	662.6	738.3	744.4	572.2	469.1	437.4	388.3	5953.2
1987	20,386	20,386	345.8	347.2	353.6	570.5	636.6	689.5	715.4	752.6	677.9	545.1	380.2	376.2	6390.6
1988	22,812	22,812	386.7	443.7	553.4	539.9	691.9	800.0	881.7	858.2	761.0	676.6	491.4	445.2	7529.7
1989	23,936	23,936	416.8	364.8	500.1	656.4	774.0	828.0	995.3	950.2	826.5	687.3	640.6	599.8	8239.8
1990	24,480	24,480	449.5	411.1	551.9	559.7	713.6	790.1	986.3	926.6	866.8	777.1	644.9	588.9	8266.5

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.78	60,000	111	108	111	177	177	251	299	297	234	215	201	172	197	0.220
1981	3.77	63,863	149	131	126	178	226	306	334	308	268	188	180	143	212	0.237
1982	3.77	65,407	113	128	120	148	185	203	275	278	225	206	148	128	180	0.202
1983	3.77	65,841	141	110	106	136	185	222	277	249	252	170	134	116	175	0.196
1984	3.77	66,892	137	177	198	221	275	276	337	330	284	239	156	124	230	0.258
1985	3.77	68,470	133	143	159	209	239	254	344	337	279	251	174	150	223	0.250
1986	3.77	72,071	161	123	137	195	271	306	330	333	265	210	202	174	226	0.253
1987	3.76	76,720	145	162	149	248	268	300	301	316	295	229	165	158	228	0.256
1988	3.76	85,810	145	178	208	210	260	311	331	323	296	254	191	167	240	0.269
1989	3.76	89,997	149	145	179	243	277	307	357	341	306	246	237	215	251	0.281
1990	3.76	92,000	158	160	194	203	250	286	346	325	314	272	234	206	246	0.276
AVERAGE			140	142	153	197	238	275	321	312	274	226	184	159	219	0.245

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C-059267

C-059267

COUNTY..LOS ANGELES
CITY....WEST COVINA
SYSTEM #..... 19014
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....METROPOLITAN LOS ANGELES
DAU # 92

CITY CENSUS POPULATION
1980..... 80,094
1990..... 96,086

WATER AGENCY.....WEST COVINA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	6,663	Metered.....	174	Metered.....	NA	Metered.....	140
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,418	4,418	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983	5,818	5,818	-	-	-	-	-	-	229.0	190.0	211.0	130.0	97.0	75.0	-
1984	5,818	5,818	95.0	141.0	162.0	170.0	227.0	231.0	274.0	251.0	229.0	182.0	119.0	73.0	2154.0
1985	6,589	4,230	102.0	92.0	81.0	125.0	155.0	171.0	194.0	278.0	206.0	199.0	163.0	136.0	1902.0
1986	6,701	6,701	135.0	87.0	117.0	160.0	229.0	232.0	266.0	282.0	215.0	173.0	154.0	142.0	2192.0
1987	6,944	4,215	99.0	132.0	89.0	164.0	171.0	243.0	286.0	308.0	237.0	317.0	194.0	113.0	2353.0
1988	6,959	6,959	112.0	142.0	158.0	179.0	237.0	266.0	338.0	320.0	262.0	205.0	139.0	124.0	2482.0
1989	6,965	6,965	118.0	100.0	152.0	200.0	244.0	281.0	364.0	375.0	324.0	258.0	240.0	201.0	2857.0
1990	6,977	6,977	178.0	159.0	231.0	229.0	269.0	266.0	374.0	330.0	299.0	273.0	204.0	173.0	2985.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	18.13	80,094	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	17.69		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	17.26		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	16.82	97,870	-	-	-	-	-	-	75	63	72	43	33	25	-	-
1984	16.39	95,335	32	51	55	59	77	81	93	85	80	62	42	25	62	0.069
1985	15.95	105,097	31	31	25	40	48	54	60	85	65	61	52	42	50	0.056
1986	15.51	103,964	42	30	36	51	71	74	83	87	69	54	49	44	58	0.065
1987	15.08	104,708	30	45	27	52	53	77	88	95	75	98	62	35	62	0.069
1988	14.64	101,902	35	48	50	59	75	87	107	101	86	65	45	39	67	0.075
1989	14.21	98,956	38	36	50	67	80	95	119	122	109	84	81	66	79	0.089
1990	13.77	96,086	60	59	78	79	90	92	126	111	104	92	71	58	85	0.095
AVERAGE			39	43	46	58	70	80	94	94	83	70	54	42	66	0.074

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

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C-059268

COUNTY.. ORANGE
CITY.... ANAHEIM
SYSTEM #..... 30001
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 96

WATER AGENCY.....ANAHEIM, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 49
WELLS AND SPRINGS.. 51

SOURCE OF WATER (in percent):
PURCHASED..... 49
SELF SUPPLIED..... 51

CITY CENSUS POPULATION
1980..... 221,847
1990..... 266,406

SERVICE CONNECTIONS /1

RESIDENTIAL:
Metered..... 51,780
Flat Rate..... 0

COMMERCIAL:
Metered..... 5,490
Flat Rate... 0

INDUSTRIAL:
Metered..... NA
Flat Rate... 0

GOVERNMENTAL:
Metered..... 305
Flat Rate... 0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	49,765	47,775	1151.0	1020.0	1172.0	1520.0	1631.0	1984.0	2274.0	2194.0	1883.0	1794.0	1634.0	1435.0	19692.0
1981	49,999	60,558	1442.0	1122.0	1111.0	1338.0	2016.0	2385.0	2304.0	1630.0	1910.0	1698.0	1469.0	1574.0	19999.0
1982	50,233	50,233	1185.0	1157.0	1234.0	1441.0	1742.0	1825.0	2264.0	1676.0	1825.0	1855.0	1450.0	1264.0	18918.0
1983	57,097	50,597	1356.0	1267.0	2060.0	1415.0	1932.0	2153.0	2162.0	2217.0	2050.0	1635.0	1386.0	1271.0	20904.0
1984	51,546	51,546	1413.0	1514.0	1805.0	1829.0	2176.0	2212.0	2462.0	2448.0	2216.0	2001.0	1496.0	1272.0	22844.0
1985	51,900	51,900	1385.0	1289.0	1528.0	1829.0	2084.0	2299.0	2569.0	2531.0	2062.0	1985.0	1534.0	1471.0	22566.0
1986	52,720	52,720	1615.0	1238.0	1490.0	1804.0	2252.0	2288.0	2531.0	2518.0	2063.0	1805.0	1696.0	1560.0	22860.0
1987	53,866	53,866	1533.0	1385.0	1579.0	2037.0	2169.0	2296.0	2358.0	2416.0	2159.0	1915.0	1616.0	1404.0	22867.0
1988	53,800	53,800	1394.0	1566.0	1888.0	2079.0	2123.0	2076.0	2417.0	2356.0	2190.0	2008.0	1888.0	1815.0	23800.0
1989	54,100	54,100	1529.0	1338.0	1741.0	1962.0	2226.0	2355.0	2382.0	2444.0	2108.0	2376.0	1739.0	1732.0	23932.0
1990	55,500	55,500	1584.0	1191.0	1788.0	1956.0	1773.0	2227.0	2614.0	2531.0	2068.0	2224.0	2002.0	2106.0	24064.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.64	231,088	161	152	164	219	228	286	317	306	272	250	236	200	233	0.261
1981	4.66	232,957	200	172	154	191	279	341	319	226	273	235	210	218	235	0.263
1982	4.67	234,834	163	176	170	205	239	259	311	230	259	255	206	174	221	0.247
1983	4.69	267,816	163	169	248	176	233	268	260	267	255	197	173	153	214	0.240
1984	4.71	242,585	188	215	240	251	289	304	327	326	304	266	206	169	258	0.289
1985	4.72	245,064	182	188	201	249	274	313	338	333	280	261	209	194	252	0.283
1986	4.74	249,761	209	177	192	241	291	305	327	325	275	233	226	201	251	0.281
1987	4.75	256,033	193	193	199	265	273	299	297	304	281	241	210	177	245	0.274
1988	4.77	256,562	175	210	237	270	267	270	304	296	285	252	245	228	254	0.285
1989	4.78	258,839	191	185	217	253	277	303	297	305	271	296	224	216	253	0.284
1990	4.80	266,406	192	160	217	245	215	279	317	306	259	269	250	255	247	0.277
AVERAGE			183	182	203	233	261	293	310	293	274	251	218	199	242	0.271

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 2 6 9

C-059269

COUNTY.. ORANGE
CITY.... BREA
SYSTEM #..... 30002
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 96

WATER AGENCY.....BREA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 27,913
1990..... 32,873

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	8,310	Metered.....	525	Metered.....	237	Metered.....	57
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	8,252	8,207 /5	-	-	-	-	-	212.0	421.0	196.0	405.0	154.0	175.0	-	
1981	8,537	8,492	123.0	173.0	122.0	167.0	146.0	258.0	238.0	328.0	239.0	284.0	196.0	209.0	2483.0
1982	8,455	8,410	118.0	152.0	100.0	139.0	175.0	231.0	176.0	276.0	275.0	266.0	196.0	181.0	2285.0
1983	8,794	8,749	119.0	145.0	108.0	137.0	105.0	202.0	174.0	296.0	283.0	279.0	203.0	179.0	2230.0
1984	9,032	8,989	126.0	154.0	159.0	237.0	217.0	284.0	-	-	-	-	-	-	-
1985	9,066	9,023	132.0	148.0	129.0	182.0	172.0	253.0	288.0	359.0	294.0	338.0	234.0	230.0	2759.0
1986	9,191	9,147	268.0	225.0	248.0	300.0	359.0	354.0	455.0	476.0	402.0	313.0	265.0	234.0	3899.0
1987	9,151	8,455	261.0	223.0	268.0	357.0	412.0	423.0	399.0	433.0	392.0	331.0	260.0	294.0	4053.0
1988	9,486	9,443	246.0	281.0	332.0	343.0	403.0	437.0	472.0	484.0	385.0	357.0	290.0	282.0	4312.0
1989	9,506	9,463	264.0	227.0	323.0	364.0	423.0	428.0	483.0	456.0	380.0	324.0	329.0	302.0	4303.0
1990	9,542	9,499	234.0	207.0	252.0	271.0	348.0	360.0	429.0	396.0	380.0	317.0	274.0	272.0	3740.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.40	28,066	-	-	-	-	-	-	244	484	233	465	183	201	-	-
1981	3.41	29,086	136	212	135	191	162	296	264	364	274	315	225	232	234	0.262
1982	3.41	28,857	132	188	112	161	196	267	197	309	318	297	226	202	217	0.243
1983	3.42	30,067	128	172	116	152	113	224	187	318	314	299	225	192	203	0.228
1984	3.42	30,934	131	172	166	255	226	306	-	-	-	-	-	-	-	-
1985	3.43	31,105	137	170	134	195	178	271	299	372	315	351	251	239	243	0.272
1986	3.44	31,588	274	254	253	317	367	374	465	486	424	320	280	239	338	0.379
1987	3.44	31,505	267	253	274	378	422	448	409	443	415	339	275	301	352	0.395
1988	3.45	32,715	243	296	327	349	397	445	465	477	392	352	295	278	361	0.404
1989	3.45	32,841	259	247	317	369	415	434	474	448	386	318	334	297	359	0.402
1990	3.46	33,022	229	224	246	274	340	363	419	387	384	310	277	266	310	0.348
AVERAGE			194	219	208	264	282	343	342	409	345	337	257	245	291	0.326

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ Missing data unavailable
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY.. ORANGE
CITY....BUENA PARK
SYSTEM #..... 30003
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 96

CITY CENSUS POPULATION
1980..... 64,615
1990..... 68,784

WATER AGENCY.....BUENA PARK, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 50
WELLS AND SPRINGS.. 50

SOURCE OF WATER (in percent):
PURCHASED..... 50
SELF SUPPLIED..... 50

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	15,459	Metered.....	1,387	Metered.....	196	Metered.....	270
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	17,290	17,014	277.0	250.0	282.0	388.0	414.0	425.0	590.0	561.0	468.0	529.0	400.0	330.0	4914.0
1981	17,567	17,404	319.0	273.0	273.0	299.0	391.0	488.0	595.0	629.0	591.0	513.0	387.0	364.0	5122.0
1982	17,472	17,306	284.0	284.0	309.0	340.0	432.0	467.0	610.0	544.0	458.0	450.0	313.0	304.0	4795.0
1983	17,378	17,212	319.0	263.0	306.0	321.0	446.0	471.0	563.0	594.0	525.0	378.0	314.0	296.0	4796.0
1984	17,211	17,377	322.0	350.0	429.0	448.0	584.0	558.0	658.0	615.0	533.0	487.0	334.0	280.0	5598.0
1985	17,663	17,497	289.0	288.0	319.0	423.0	471.0	553.0	590.0	545.0	492.0	427.0	334.0	328.0	5059.0
1986	17,698	17,532	343.0	266.0	323.0	395.0	502.0	548.0	572.0	563.0	488.0	579.0	347.0	378.0	5304.0
1987	17,500	17,334	319.0	313.0	369.0	474.0	483.0	545.0	544.0	544.0	575.0	521.0	433.0	353.0	5473.0
1988	17,077	16,911	330.0	365.0	430.0	421.0	520.0	529.0	554.0	572.0	494.0	458.0	371.0	349.0	5393.0
1989	17,457	17,291	343.0	301.0	379.0	453.0	516.0	525.0	590.0	574.0	489.0	442.0	417.0	377.0	5406.0
1990	18,379	18,213	344.0	301.0	366.0	397.0	480.0	473.0	577.0	538.0	481.0	482.0	407.0	378.0	5224.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.80	65,663	136	131	139	197	203	216	290	276	238	260	203	162	205	0.230
1981	3.80	66,678	154	146	132	149	189	244	288	304	295	248	193	176	210	0.236
1982	3.79	66,281	138	153	150	171	210	235	297	265	230	219	157	148	198	0.222
1983	3.79	65,887	156	143	150	162	218	238	276	291	266	185	159	145	199	0.223
1984	3.79	65,218	159	185	212	229	289	285	325	304	272	241	171	138	235	0.263
1985	3.79	66,893	139	154	154	211	227	276	285	263	245	206	166	158	207	0.232
1986	3.79	66,988	165	142	156	197	242	273	275	271	243	279	173	182	217	0.243
1987	3.78	66,202	155	169	180	239	235	274	265	265	290	254	218	172	226	0.254
1988	3.78	64,566	165	195	215	217	260	273	277	286	255	229	192	174	229	0.256
1989	3.78	65,966	168	163	185	229	252	265	289	281	247	216	211	184	225	0.251
1990	3.78	69,411	160	155	170	191	223	227	268	250	231	224	195	176	206	0.231
AVERAGE			154	158	167	199	232	255	285	278	256	233	185	165	214	0.240

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059271

COUNTY.. ORANGE
CITY....FULLERTON
SYSTEM #..... 30010
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 96

CITY CENSUS POPULATION
1980..... 102,034
1990..... 114,144

WATER AGENCY.....FULLERTON, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 54
WELLS AND SPRINGS.. 46

SOURCE OF WATER (in percent):
PURCHASED..... 54
SELF SUPPLIED..... 46

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	25,154	Metered.....	1,766	Metered.....	135	Metered.....	226
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	25,957	25,953	559.0	532.0	612.0	760.0	789.0	1028.0	1140.0	1183.0	1018.0	940.0	755.0	704.0	10020.0
1981	26,500	26,496	656.0	551.0	642.0	747.0	919.0	1172.0	1303.0	1241.0	1081.0	849.0	739.0	622.0	10522.0
1982	26,956	26,955	567.0	725.0	587.0	665.0	746.0	922.0	1166.0	1177.0	970.0	911.0	645.0	589.0	9670.0
1983	26,869	26,400	632.0	830.0	547.0	626.0	819.0	992.0	1155.0	1124.0	1081.0	810.0	649.0	587.0	9852.0
1984	27,536	27,535	648.0	761.0	873.0	860.0	1065.0	1080.0	1283.0	1225.0	1129.0	974.0	677.0	595.0	11170.0
1985	27,338	27,337	601.0	591.0	736.0	839.0	974.0	1119.0	1338.0	1258.0	1059.0	953.0	688.0	673.0	10829.0
1986	27,400	27,399	722.0	549.0	691.0	817.0	1056.0	1059.0	1245.0	1289.0	1058.0	1216.0	820.0	740.0	11262.0
1987	27,301	27,300	688.0	661.0	763.0	951.0	1027.0	1139.0	1183.0	1209.0	1102.0	911.0	686.0	641.0	10961.0
1988	27,528	27,525	672.0	668.0	810.0	839.0	1027.0	1146.0	1262.0	1222.0	1146.0	1001.0	761.0	712.0	11266.0
1989	27,603	27,602	590.0	518.0	672.0	826.0	887.0	915.0	1082.0	1085.0	925.0	841.0	803.0	777.0	9921.0
1990	27,890	27,889	704.0	577.0	765.0	773.0	938.0	1017.0	1154.0	1103.0	1030.0	929.0	815.0	779.0	10584.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.93	102,050	177	180	193	248	249	336	360	374	333	297	247	223	269	0.301
1981	3.95	104,612	202	188	198	238	283	373	402	383	344	262	235	192	276	0.309
1982	3.96	106,847	171	242	177	207	225	288	352	355	303	275	201	178	248	0.278
1983	3.98	106,935	191	277	165	195	247	309	348	339	337	244	202	177	252	0.283
1984	4.00	110,034	190	238	256	261	312	327	376	359	342	286	205	174	278	0.311
1985	4.01	109,684	177	192	216	255	286	340	394	370	322	280	209	198	270	0.303
1986	4.03	110,375	211	178	202	247	309	320	364	377	320	355	248	216	280	0.313
1987	4.04	110,416	201	214	223	287	300	344	346	353	333	266	207	187	272	0.305
1988	4.06	111,778	194	206	234	250	296	342	364	353	342	289	227	205	276	0.309
1989	4.08	112,528	169	164	193	245	254	271	310	311	274	241	238	223	242	0.271
1990	4.09	114,148	199	181	216	226	265	297	326	312	301	263	238	220	254	0.285
AVERAGE			189	206	207	242	275	322	358	353	323	278	223	199	265	0.297

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY.. ORANGE
CITY....GARDEN GROVE
SYSTEM #..... 30014
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 96

CITY CENSUS POPULATION
1980..... 123,351
1990..... 140,000

WATER AGENCY.....GARDEN GROVE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 30
WELLS AND SPRINGS.. 70

SOURCE OF WATER (in percent):
PURCHASED..... 30
SELF SUPPLIED..... 70

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	32,649	Metered.....	1,707	Metered.....	593	Metered.....	659
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	32,402	31,714	392.0	444.0	644.0	670.0	822.0	1051.0	1072.0	806.0	734.0	745.0	508.0	532.0	8420.0
1981	32,574	31,896	532.0	472.0	531.0	700.0	877.0	976.0	1000.0	1076.0	842.0	658.0	696.0	569.0	8929.0
1982	32,385	31,716	539.0	441.0	549.0	579.0	800.0	779.0	754.0	780.0	709.0	689.0	552.0	501.0	7672.0
1983	32,848	32,189	569.0	437.0	437.0	519.0	739.0	832.0	994.0	935.0	902.0	668.0	520.0	524.0	8076.0
1984	32,631	31,982	565.0	559.0	771.0	774.0	1014.0	928.0	1087.0	1023.0	960.0	783.0	612.0	534.0	9610.0
1985	32,724	32,041	553.0	506.0	629.0	772.0	872.0	1023.0	1072.0	1059.0	845.0	802.0	615.0	566.0	9314.0
1986	32,723	32,071	612.0	512.0	592.0	732.0	971.0	986.0	1150.0	1088.0	859.0	813.0	690.0	630.0	9635.0
1987	32,887	32,235	593.0	552.0	631.0	843.0	945.0	985.0	1002.0	1031.0	938.0	779.0	583.0	571.0	9453.0
1988	33,756	33,104	585.0	635.0	758.0	766.0	951.0	1001.0	1069.0	1033.0	845.0	844.0	628.0	617.0	9732.0
1989	33,969	33,044	594.0	537.0	670.0	843.0	936.0	982.0	1096.0	1039.0	887.0	819.0	758.0	736.0	9897.0
1990	33,818	33,161	621.0	556.0	669.0	741.0	862.0	946.0	1056.0	1003.0	912.0	800.0	702.0	690.0	9558.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.89	126,027	100	121	165	177	210	278	274	206	194	191	134	136	183	0.205
1981	3.92	127,779	134	132	134	183	221	255	252	272	220	166	182	144	191	0.214
1982	3.96	128,113	136	123	138	151	201	203	190	196	184	173	144	126	164	0.184
1983	3.99	131,037	140	119	108	132	182	212	245	230	229	164	132	129	169	0.189
1984	4.02	131,256	139	147	189	197	249	236	267	251	244	192	155	131	201	0.225
1985	4.06	132,717	134	136	153	194	212	257	261	257	212	195	154	138	192	0.215
1986	4.09	133,801	148	137	143	182	234	246	277	262	214	196	172	152	197	0.221
1987	4.12	135,564	141	145	150	207	225	242	238	245	231	185	143	136	191	0.214
1988	4.16	140,268	135	156	174	182	219	238	246	238	201	194	149	142	190	0.213
1989	4.19	142,282	135	135	152	197	212	230	248	236	208	186	178	167	191	0.213
1990	4.22	142,774	140	139	151	173	195	221	239	227	213	181	164	156	183	0.205
AVERAGE			135	136	151	180	215	238	249	238	214	184	155	141	187	0.209

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059273

COUNTY.. ORANGE
CITY....HUNTINGTON BEACH
SYSTEM #..... 30053
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 96

WATER AGENCY.....HUNTINGTON BEACH, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 53
WELLS AND SPRINGS.. 47

SOURCE OF WATER (in percent):
PURCHASED..... 53
SELF SUPPLIED..... 47

CITY CENSUS POPULATION
1980..... 170,505
1990..... 181,519

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	44,908	Metered.....	3,077	Metered.....	NA	Metered.....	586
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	43,594	42,811	639.0	568.0	653.0	828.0	875.0	1033.0	1122.0	1049.0	943.0	877.0	816.0	712.0	10115.0
1981	44,312	43,529	691.0	603.0	658.0	824.0	956.0	1127.0	1136.0	1139.0	997.0	862.0	790.0	698.0	10481.0
1982	44,482	43,699	687.0	621.0	703.0	786.0	954.0	1002.0	1153.0	1135.0	958.0	965.0	770.0	716.0	10450.0
1983	44,936	44,153	683.0	580.0	661.0	680.0	810.0	899.0	681.0	673.0	590.0	663.0	667.0	685.0	8272.0
1984	45,105	44,356	780.0	837.0	978.0	980.0	1156.0	1136.0	972.0	977.0	925.0	963.0	786.0	723.0	11213.0
1985	45,625	44,910	771.0	715.0	853.0	990.0	1097.5	1165.0	1222.0	1178.0	1133.0	1021.0	797.0	744.0	11686.5
1986	45,963	45,247	871.0	683.0	801.0	931.0	1144.0	1176.0	1214.0	1253.0	1049.0	986.0	921.0	846.0	11875.0
1987	46,069	45,069	839.0	779.0	891.0	1063.0	1160.0	1169.0	1218.0	1255.0	1152.0	993.0	835.0	835.0	12189.0
1988	47,799	47,075	833.0	939.0	1054.0	925.0	1259.0	1217.0	1256.0	1213.0	1074.0	1057.0	876.0	831.0	12534.0
1989	47,986	47,252	898.0	897.0	1025.0	1108.0	1274.0	1231.0	1399.0	1372.0	1114.0	999.0	948.0	1069.0	13334.0
1990	48,571	47,837	798.0	814.0	962.0	964.0	1258.0	1246.0	1299.0	1301.0	1118.7	1015.0	897.0	858.0	12530.7

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.98	173,623	119	113	121	159	163	198	208	195	181	163	157	132	160	0.179
1981	3.96	175,649	127	123	121	156	176	214	209	209	189	158	150	128	163	0.183
1982	3.95	175,486	126	126	129	149	175	190	212	209	182	177	146	132	163	0.183
1983	3.93	176,431	125	117	121	128	148	170	125	123	111	121	126	125	128	0.144
1984	3.91	176,246	143	164	179	185	212	215	178	179	175	176	149	132	174	0.195
1985	3.89	177,419	140	144	155	186	200	219	222	214	213	186	150	135	180	0.202
1986	3.87	177,868	158	137	145	174	207	220	220	227	197	179	173	153	183	0.205
1987	3.85	177,411	153	157	162	200	211	220	221	228	216	181	157	152	188	0.211
1988	3.83	183,174	147	177	186	168	222	221	221	214	195	186	159	146	187	0.210
1989	3.81	182,988	158	175	181	202	225	224	247	242	203	176	173	188	200	0.224
1990	3.79	184,304	140	158	168	174	220	225	227	228	202	178	162	150	186	0.209
AVERAGE			140	145	152	171	196	211	208	206	188	171	155	143	174	0.195

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059274

COUNTY.. ORANGE
CITY....LA HABRA
SYSTEM #..... 30018
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 96

CITY CENSUS POPULATION
1980..... 45,232
1990..... 51,266

WATER AGENCY.....LA HABRA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 30
WELLS AND SPRINGS.. 70

SOURCE OF WATER (in percent):
PURCHASED..... 30
SELF SUPPLIED..... 70

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	10,780	Metered.....	566	Metered.....	156	Metered.....	65
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	19,850	10,850	160.0	155.0	166.0	225.0	236.0	294.0	341.0	330.0	258.0	241.0	229.0	178.0	2813.0
1981	10,876	10,876	211.0	158.0	176.0	230.0	267.0	370.0	357.0	334.0	295.0	238.0	219.0	183.0	3038.0
1982	10,881	10,881	176.0	168.0	176.0	209.0	241.0	255.0	337.0	325.0	270.0	249.0	201.0	183.0	2790.0
1983	10,900	10,900	190.0	154.0	158.0	196.0	233.0	270.0	316.0	312.0	289.0	210.0	185.0	169.0	2682.0
1984	10,925	10,925	190.0	210.0	242.0	246.0	268.0	285.0	392.0	353.0	343.0	275.0	200.0	175.0	3179.0
1985	11,077	11,077	208.0	196.0	222.0	255.0	312.0	318.0	380.0	349.0	276.0	276.0	198.0	217.0	3207.0
1986	11,348	11,348	187.0	185.0	181.0	222.0	266.0	310.0	346.0	355.0	289.0	242.0	213.0	231.0	3027.0
1987	11,400	11,400	206.0	190.0	210.0	274.0	290.0	334.0	312.0	335.0	308.0	265.0	196.0	210.0	3130.0
1988	11,425	11,425	200.0	217.0	260.0	249.0	292.0	314.0	347.0	348.0	301.0	271.0	256.0	203.0	3258.0
1989	11,455	11,455	195.0	181.0	220.0	262.0	299.0	304.0	355.0	348.0	290.0	271.0	256.0	240.0	3221.0
1990	11,562	11,562	218.0	179.0	217.0	231.0	282.0	281.0	324.0	331.0	309.0	300.0	256.0	226.0	3154.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.17	82,752	62	65	65	91	92	118	133	129	104	94	92	69	93	0.104
1981	4.20	45,629	149	124	124	168	189	270	252	236	216	168	160	129	182	0.204
1982	4.22	45,938	124	131	124	152	169	185	237	228	196	175	146	129	166	0.186
1983	4.25	46,308	132	119	110	141	162	194	220	217	208	146	133	118	159	0.178
1984	4.27	46,703	131	155	167	176	185	203	271	244	245	190	143	121	186	0.209
1985	4.30	47,647	141	147	150	178	211	222	257	236	193	187	139	147	184	0.207
1986	4.33	49,114	123	135	119	151	175	210	227	233	196	159	145	152	169	0.189
1987	4.35	49,641	134	137	136	184	188	224	203	218	207	172	132	136	173	0.193
1988	4.38	50,053	129	149	168	166	188	209	224	224	200	175	170	131	178	0.200
1989	4.41	50,488	125	128	141	173	191	201	227	222	191	173	169	153	175	0.196
1990	4.43	51,266	137	125	137	150	177	183	204	208	201	189	166	142	169	0.189
AVERAGE			126	128	131	157	175	202	223	218	196	166	145	130	167	0.187

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY.. ORANGE
CITY....COSTA MESA
SYSTEM #..... 30004
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 96

WATER AGENCY.....MESA CONSOLIDATED WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 55
WELLS AND SPRINGS.. 45

SOURCE OF WATER (in percent):
PURCHASED..... 55
SELF SUPPLIED..... 45

CITY CENSUS POPULATION
1980..... 82,291
1990..... 96,357

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	18,863	Metered.....	2,436	Metered.....	271	Metered.....	285
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	20,138	18,120	/5	-	-	-	-	-	-	-	-	-	-	-	5942.7
1981	20,632	18,600	-	-	-	-	-	-	-	-	-	-	-	-	6221.0
1982	21,160	19,000	-	-	-	-	-	-	-	-	-	-	-	-	6019.0
1983	21,280	19,200	486.0	346.0	257.0	290.0	475.0	524.0	649.0	712.0	650.0	529.0	391.0	352.0	5661.0
1984	21,400	19,300	448.0	450.0	527.0	355.0	551.0	694.0	671.0	747.0	687.0	592.0	473.0	415.0	6610.0
1985	21,500	19,350	454.0	414.0	499.0	530.0	613.0	692.0	763.0	739.0	619.0	623.0	482.0	443.0	6871.0
1986	21,950	19,750	477.0	376.0	436.0	522.0	661.0	666.0	723.0	755.0	660.0	592.0	551.0	472.0	6891.0
1987	21,787	19,608	458.0	430.0	483.0	599.0	667.0	723.0	719.0	744.0	686.0	596.0	473.0	468.0	7046.0
1988	22,201	19,981	481.0	498.0	594.0	565.0	704.0	732.0	785.0	779.0	709.0	642.0	520.0	503.0	7512.0
1989	22,500	20,280	506.0	417.0	559.0	693.0	705.0	707.0	783.0	765.0	689.0	615.0	564.0	542.0	7545.0
1990	22,657	20,437	480.0	431.0	548.0	540.0	661.0	707.0	782.0	751.0	693.0	657.0	536.0	561.0	7347.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.54	91,456	-	-	-	-	-	-	-	-	-	-	-	-	178	0.199
1981	4.56	94,057	-	-	-	-	-	-	-	-	-	-	-	-	181	0.203
1982	4.58	96,831	-	-	-	-	-	-	-	-	-	-	-	-	170	0.191
1983	4.59	97,749	160	126	85	99	157	179	214	235	222	175	133	116	159	0.178
1984	4.61	98,671	146	157	172	120	180	234	219	244	232	194	160	136	184	0.206
1985	4.63	99,505	147	149	162	178	199	232	247	240	207	202	161	144	189	0.212
1986	4.65	101,968	151	132	138	171	209	218	229	239	216	187	180	149	185	0.207
1987	4.66	101,589	145	151	153	197	212	237	228	236	225	189	155	149	190	0.213
1988	4.68	103,904	149	165	184	181	219	235	244	242	227	199	167	156	198	0.222
1989	4.70	105,694	154	141	171	219	215	223	239	233	217	188	178	165	196	0.219
1990	4.71	106,824	145	144	165	169	200	221	236	227	216	198	167	169	188	0.211
AVERAGE			150	146	154	166	199	222	232	237	220	192	163	148	183	0.205

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data not available.

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C-059276

COUNTY.. ORANGE
CITY.... ORANGE
SYSTEM #..... 30027
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 96

WATER AGENCY.....ORANGE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 91,788
1990..... 110,658

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	29,761	Metered.....	2,442	Metered.....	221	Metered.....	170
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	27,841	26,696	442.0	395.0	447.0	608.0	621.0	761.0	874.0	822.0	722.0	688.0	644.0	544.0	7568.0
1981	26,408	25,262	464.0	425.0	487.0	600.0	701.0	868.0	927.0	915.0	780.0	630.0	579.0	472.0	7848.0
1982	26,500	25,352	450.0	415.0	421.0	535.0	672.0	726.0	864.0	913.0	720.0	744.0	550.0	498.0	7508.0
1983	28,000	26,851	522.0	409.0	446.0	490.0	642.0	727.0	885.0	823.0	767.0	592.0	502.0	435.0	7240.0
1984	27,500	26,349	513.0	555.0	676.0	700.0	852.0	827.0	1001.0	955.0	850.0	776.0	563.0	443.0	8711.0
1985	27,310	26,158	503.0	473.0	644.0	692.0	808.0	880.0	1004.0	1004.0	794.0	807.0	577.0	532.0	8718.0
1986	28,243	26,989	595.0	430.0	539.0	684.0	903.0	902.0	999.0	1027.0	811.0	697.0	692.0	616.0	8895.0
1987	30,000	28,644	588.0	532.0	564.0	806.0	874.0	929.0	958.0	965.0	859.0	706.0	558.0	545.0	8884.0
1988	33,962	32,403	558.0	601.0	741.0	720.0	880.0	944.0	1056.0	989.0	915.0	915.0	636.0	607.0	9562.0
1989	34,065	32,506	590.0	518.0	672.0	826.0	887.0	915.0	1082.0	1085.0	925.0	841.0	803.0	777.0	9921.0
1990	33,288	31,729	607.0	529.0	657.0	691.0	855.0	925.0	1061.0	1019.0	950.0	888.0	757.0	704.0	9643.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.44	95,725	149	142	151	212	209	265	295	277	251	232	224	183	217	0.243
1981	3.44	90,928	165	167	173	220	249	318	329	325	286	224	212	167	236	0.265
1982	3.45	91,376	159	162	149	195	237	265	305	322	263	263	201	176	225	0.252
1983	3.45	96,686	174	151	149	169	214	251	295	275	264	198	173	145	205	0.230
1984	3.46	95,095	174	201	229	245	289	290	340	324	298	263	197	150	251	0.281
1985	3.46	94,573	172	179	220	244	276	310	342	342	280	275	203	181	253	0.283
1986	3.47	97,943	196	157	178	233	297	307	329	338	276	230	236	203	249	0.279
1987	3.47	104,184	182	182	175	258	271	297	297	299	275	219	179	169	234	0.262
1988	3.48	118,111	152	175	202	203	240	266	288	270	258	250	179	166	222	0.248
1989	3.48	118,637	160	156	183	232	241	257	294	295	260	229	226	211	229	0.257
1990	3.49	116,095	169	163	183	198	238	266	295	283	273	247	217	196	228	0.255
AVERAGE			168	167	181	219	251	281	310	305	271	239	204	177	232	0.259

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059277

COUNTY.. ORANGE
CITY....SANTA ANA
SYSTEM #..... 30038
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....ORANGE
DAU # 96

CITY CENSUS POPULATION
1980..... 203,713
1990..... 293,742

WATER AGENCY.....SANTA ANA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 25
WELLS AND SPRINGS.. 75

SOURCE OF WATER (in percent):
PURCHASED..... 25
SELF SUPPLIED..... 75

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	NA	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	NA	Flat Rate...	NA	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	39,860	39,817	832.0	768.0	858.0	1052.0	1133.0	1306.0	1431.0	1373.0	1228.0	1200.0	1092.0	976.0	13249.0
1981	40,522	40,478	930.0	830.0	925.0	1117.0	1247.0	1443.0	1479.0	1486.0	1326.0	1145.0	1068.0	927.0	13923.0
1982	40,653	40,607	890.0	856.0	939.0	1009.0	1186.0	1238.0	1441.0	1430.0	1199.0	1242.0	992.0	936.0	13358.0
1983	43,089	43,042	989.0	811.0	921.0	1020.0	1203.0	1281.0	1507.0	1521.0	1386.0	1194.0	1051.0	991.0	13875.0
1984	43,125	43,076	1037.0	1071.0	1273.0	1243.0	1484.0	1447.0	1629.0	1587.0	1498.0	1380.0	1106.0	997.0	15752.0
1985	45,093	45,043	1074.0	973.0	1149.0	1293.0	1431.0	1546.0	1691.0	1641.0	1384.0	1398.0	1127.0	1073.0	15780.0
1986	44,950	44,899	1122.0	921.0	1078.0	1229.0	1495.0	1522.0	1603.0	1665.0	1393.0	1283.0	1220.0	1119.0	15650.0
1987	43,000	42,947	1100.0	1033.0	1151.0	1371.0	1461.0	1520.0	1570.0	1602.0	1480.0	1343.0	1113.0	1101.0	15845.0
1988	44,832	44,775	1100.0	1142.0	1353.0	1309.0	1515.0	1561.0	1650.0	1610.0	1481.0	1413.0	1192.0	1165.0	16491.0
1989	47,124	47,067	1159.0	1035.0	1259.0	1426.0	1538.0	1536.0	1689.0	1707.0	1520.0	1429.0	1364.0	1329.0	16991.0
1990	43,491	43,491	1188.0	1068.0	1270.0	1261.0	1457.0	1542.0	1695.0	1632.0	1515.0	1481.0	1314.0	1242.0	16665.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	5.12	203,933	132	130	136	172	179	213	226	217	201	190	178	154	178	0.199
1981	5.28	213,957	140	139	139	174	188	225	223	224	207	173	166	140	178	0.200
1982	5.44	221,307	130	138	137	152	173	186	210	208	181	181	149	136	165	0.185
1983	5.61	241,625	132	120	123	141	161	177	201	203	191	159	145	132	157	0.176
1984	5.77	248,890	134	148	165	166	192	194	211	206	201	179	148	129	173	0.194
1985	5.94	267,634	129	130	138	161	172	193	204	198	172	169	140	129	162	0.181
1986	6.10	274,148	132	120	127	149	176	185	189	196	169	151	148	132	156	0.175
1987	6.26	269,297	132	137	138	170	175	188	188	192	183	161	138	132	161	0.181
1988	6.43	288,114	123	137	151	151	170	181	185	180	171	158	138	130	157	0.176
1989	6.59	310,561	120	119	131	153	160	165	175	177	163	148	146	138	150	0.168
1990	6.75	293,742	130	130	139	143	160	175	186	179	172	163	149	136	155	0.174
AVERAGE			130	132	139	158	173	189	200	198	183	166	150	135	163	0.183

1/ Service connection breakdown not available.
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059278

COUNTY.. ORANGE
CITY....SEAL BEACH
SYSTEM #..... 30041
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 96

WATER AGENCY.....SEAL BEACH, CITY OF
TYPE OF AGENCY.....MUNCIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 20
WELLS AND SPRINGS.. 80

SOURCE OF WATER (in percent):
PURCHASED..... 20
SELF SUPPLIED..... 80

CITY CENSUS POPULATION
1980..... 25,975
1990..... 25,098

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4,508	Metered.....	213	Metered.....	7	Metered.....	35
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,780	4,780	/5	-	-	-	-	-	123.0	130.0	104.0	90.0	127.0	113.0	-
1981	4,785	4,785	93.0	58.0	112.0	122.0	170.0	92.0	120.0	131.0	114.0	91.0	62.0	56.0	1221.0
1982	4,858	4,858	66.0	51.0	49.0	75.0	93.0	111.0	119.0	112.0	91.0	69.0	52.0	56.0	944.0
1983	4,733	4,735	57.0	72.0	91.0	99.0	125.0	106.0	-	-	-	-	-	-	-
1984	4,776	4,776	-	-	-	-	-	-	134.0	128.0	149.0	117.0	81.0	62.0	-
1985	4,751	4,751	62.0	58.0	65.0	94.0	120.0	136.0	151.0	148.0	130.0	95.0	68.0	60.0	1187.0
1986	4,768	4,768	59.0	48.0	62.0	97.0	95.0	107.0	125.0	126.0	82.0	94.0	84.0	77.0	1056.0
1987	4,768	4,768	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	4,762	4,762	73.0	74.0	104.0	89.0	115.0	123.0	134.0	130.0	108.0	94.0	83.0	76.0	1203.0
1989	4,698	4,698	70.0	65.0	82.0	103.0	124.0	132.0	138.0	141.0	126.0	110.0	100.0	102.0	1293.0
1990	4,734	4,734	83.0	75.0	97.0	101.0	121.0	129.0	140.0	131.0	118.0	110.0	101.0	91.0	1297.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	5.43	25,975	-	-	-	-	-	-	153	161	133	112	163	140	-	-
1981	5.42	25,939	116	80	139	157	211	118	149	163	146	113	80	70	129	0.144
1982	5.41	26,270	81	69	60	95	114	141	146	138	115	85	66	69	98	0.110
1983	5.39	25,532	72	101	115	129	158	138	-	-	-	-	-	-	-	-
1984	5.38	25,700	-	-	-	-	-	-	168	161	193	147	105	78	-	-
1985	5.37	25,503	78	81	82	123	152	178	191	187	170	120	89	76	128	0.143
1986	5.35	25,531	75	67	78	127	120	140	158	159	107	119	110	97	113	0.127
1987	5.34	25,468	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	5.33	25,373	93	101	132	117	146	162	170	165	142	120	109	97	130	0.145
1989	5.31	24,969	90	93	106	138	160	176	178	182	168	142	133	132	142	0.159
1990	5.30	25,098	107	107	125	134	156	171	180	168	157	141	134	117	142	0.159
AVERAGE			89	87	105	127	152	153	166	165	148	122	110	97	126	0.141

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C—0 5 9 2 7 9

C-059279

COUNTY.. ORANGE
CITY.... TUSTIN
SYSTEM #..... 30046
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 96

CITY CENSUS POPULATION
1980..... 32,073
1990..... 50,689

WATER AGENCY.....TUSTIN, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 46
WELLS AND SPRINGS.. 54

SOURCE OF WATER (in percent):
PURCHASED..... 46
SELF SUPPLIED..... 54

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	9,550	Metered.....	2,968	Metered.....	1,062	Metered.....	55
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	13,800	5,900	/5	-	-	-	-	-	-	-	-	-	347.0	277.0	-
1981	13,886	5,998	257.0	229.0	252.0	322.0	400.0	491.0	490.0	497.0	434.0	352.0	328.0	264.0	4316.0
1982	13,872	7,016	247.0	247.0	239.0	285.0	375.0	383.0	492.0	480.0	352.0	385.0	283.0	255.0	4023.0
1983	13,778	6,972	285.0	205.0	216.0	272.0	357.0	400.0	481.0	421.0	409.0	328.0	268.0	228.0	3870.0
1984	13,850	7,011	289.0	304.0	359.0	378.0	462.0	452.0	520.0	494.0	452.0	400.0	293.0	237.0	4640.0
1985	13,949	7,062	266.0	241.0	308.0	371.0	431.0	489.0	536.0	514.0	403.0	409.0	309.0	272.0	4549.0
1986	14,031	7,102	293.0	228.0	263.0	327.0	417.0	459.0	491.0	490.0	412.0	345.0	332.0	274.0	4331.0
1987	13,611	8,167	268.0	280.0	348.0	312.0	465.0	449.0	449.0	469.0	415.0	347.0	275.0	257.0	4334.0
1988	13,630	7,881	265.0	252.0	315.0	341.0	438.0	425.0	449.0	458.0	394.0	368.0	277.0	262.0	4244.0
1989	13,633	4,891	261.0	223.0	282.0	369.0	411.0	401.0	524.0	494.0	421.0	369.0	309.0	328.0	4392.0
1990	13,635	7,905	273.0	235.0	305.0	322.0	394.0	401.0	497.0	458.0	433.0	400.0	347.0	312.0	4377.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	5.44	75,018	-	-	-	-	-	-	-	-	-	-	154	119	-	-
1981	5.53	76,841	108	106	106	140	168	213	206	209	188	148	142	111	154	0.172
1982	5.63	78,118	102	113	99	122	155	163	203	198	150	159	121	105	141	0.158
1983	5.73	78,934	116	93	88	115	146	169	197	172	173	134	113	93	134	0.150
1984	5.83	80,698	116	130	144	156	185	187	208	197	187	160	121	95	158	0.176
1985	5.92	82,636	104	104	120	150	168	197	209	201	163	160	125	106	151	0.169
1986	6.02	84,492	112	96	100	129	159	181	187	187	163	132	131	105	140	0.157
1987	6.12	83,291	104	120	135	125	180	180	174	182	166	134	110	100	143	0.160
1988	6.22	84,738	101	103	120	134	167	167	171	174	155	140	109	100	137	0.154
1989	6.31	86,088	98	93	106	143	154	155	196	185	163	138	120	123	140	0.157
1990	6.41	87,431	101	96	113	123	145	153	183	169	165	148	132	115	137	0.154
AVERAGE			106	105	113	134	163	177	193	187	167	145	125	106	143	0.161

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

COUNTY.. ORANGE
CITY....YORBA LINDA ET AL
SYSTEM #..... 30037
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 96

WATER AGENCY.....YORBA LINDA WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 55
WELLS AND SPRINGS.. 45

SOURCE OF WATER (in percent):
PURCHASED..... 55
SELF SUPPLIED..... 45

CITY CENSUS POPULATION
1980..... 40,000
1990..... 60,800

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	18,194	Metered.....	439	Metered.....	5	Metered.....	302
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	12,009	12,009	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984			-	-	-	-	-	-	-	-	-	-	-	-	-
1985			-	-	-	-	-	-	-	-	-	-	-	-	-
1986	15,609	15,609	314.0	208.0	253.0	417.0	515.0	534.0	621.4	625.0	541.0	375.0	365.0	358.0	5126.4
1987	15,582	15,582	287.0	276.0	340.0	478.0	520.0	573.0	578.0	606.0	616.0	414.0	273.0	281.0	5242.0
1988			-	-	-	-	-	-	-	-	-	-	-	-	-
1989	17,936	17,936	312.0	246.0	358.0	522.0	569.0	592.0	711.0	705.0	575.0	490.0	505.0	480.0	6065.0
1990	19,224	19,224	336.0	301.0	416.0	417.0	558.0	644.0	755.0	704.0	653.0	604.0	491.0	457.0	6336.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.33	40,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.31		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3.30		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3.28		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	3.26		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	3.25		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	3.23	50,416	201	147	162	276	330	353	398	400	358	240	241	229	279	0.312
1987	3.21	50,067	185	197	219	318	335	381	372	390	410	267	182	181	287	0.321
1988	3.20		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	3.18	57,028	176	154	203	305	322	346	402	399	336	277	295	272	291	0.326
1990	3.16	60,800	178	177	221	229	296	353	401	374	358	320	269	242	286	0.320
AVERAGE			185	169	201	282	321	358	393	391	365	276	247	231	286	0.320

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

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C-059281

COUNTY..RIVERSIDE
CITY.... NORCO
SYSTEM #..... 33025
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 98

WATER AGENCY.....NORCO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 78
SELF SUPPLIED..... 22

CITY CENSUS POPULATION
1980..... 21,126
1990..... 23,302

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5,737	Metered.....	366	Metered.....	0	Metered.....	21
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,330	5,330	64.0	53.0	59.0	109.0	117.0	164.0	224.0	194.0	144.0	122.0	112.0	92.0	1454.0
1981	5,364	5,364	84.0	72.0	79.0	118.0	183.0	185.0	194.0	208.0	163.0	116.0	103.0	83.0	1588.0
1982	5,397	5,397	72.0	68.0	74.0	92.0	137.0	149.0	212.0	207.0	143.0	139.0	89.0	72.0	1454.0
1983	5,374	5,374	81.0	58.0	63.0	33.0	129.0	158.0	194.0	181.0	171.0	101.0	82.0	71.0	1322.0
1984	5,406	5,406	80.0	100.0	132.0	148.0	196.0	186.0	214.0	195.0	179.0	141.0	95.0	72.0	1738.0
1985	5,435	5,435	88.0	74.0	102.0	136.0	165.0	195.0	218.0	209.0	150.0	132.0	96.0	87.0	1652.0
1986	5,513	5,513	95.0	70.0	83.0	113.0	168.0	185.0	192.0	205.0	143.0	118.0	111.0	92.0	1575.0
1987	5,664	5,664	89.0	83.0	88.0	154.0	173.0	188.0	206.0	195.0	161.0	116.0	87.0	81.0	1621.0
1988	5,664	5,664	82.0	93.0	125.0	120.0	165.0	181.0	203.0	198.0	171.0	145.0	101.0	95.0	1679.0
1989	5,930	5,930	89.0	73.0	87.0	148.0	177.0	192.0	218.0	211.0	174.0	138.0	138.0	126.0	1771.0
1990	6,050	6,050	99.0	85.0	124.0	131.0	165.0	192.0	225.0	206.0	190.0	161.0	129.0	117.0	1824.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.96	21,126	98	87	90	172	179	259	342	296	227	186	177	140	189	0.211
1981	3.95	21,201	128	121	120	186	278	291	295	316	256	177	162	126	205	0.230
1982	3.94	21,271	109	114	112	144	208	233	322	314	224	211	139	109	187	0.210
1983	3.93	21,120	124	98	96	52	197	249	296	276	270	154	129	108	171	0.192
1984	3.92	21,185	122	163	201	233	298	293	326	297	282	215	149	110	225	0.252
1985	3.91	21,238	134	124	155	213	251	306	331	317	235	200	151	132	213	0.239
1986	3.90	21,481	143	116	125	175	252	287	288	308	222	177	172	138	201	0.225
1987	3.89	22,006	130	135	129	233	254	285	302	286	244	170	132	119	202	0.226
1988	3.87	21,942	121	146	184	182	243	275	298	291	260	213	153	140	210	0.235
1989	3.86	22,906	125	114	123	215	249	279	307	297	253	194	201	177	212	0.237
1990	3.85	23,302	137	130	172	187	228	275	311	285	272	223	185	162	214	0.240
AVERAGE			125	123	137	181	240	276	311	299	250	193	159	133	203	0.227

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059282

COUNTY..RIVERSIDE
CITY....RIVERSIDE
SYSTEM #..... 33031
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 98

CITY CENSUS POPULATION
1980..... 170,876
1990..... 226,505

WATER AGENCY.....RIVERSIDE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 8
WELLS AND SPRINGS.. 92

SOURCE OF WATER (in percent):
PURCHASED..... 80
SELF SUPPLIED..... 92

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	6,700	Metered.....	4,578	Metered.....	NA	Metered.....	70
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	50,999	49,112	914.0	740.0	811.0	1355.0	1489.0	1959.0	2411.0	2324.0	1748.0	1926.0	1502.0	1421.0	18600.0
1981	52,087	50,171	927.0	803.0	885.0	1215.0	1483.0	1944.0	2129.5	2069.0	1753.0	1294.0	1130.0	900.0	16532.5
1982	52,058	50,161	795.0	775.0	848.0	1020.0	1416.0	1527.0	1990.0	1947.0	1518.0	1457.9	992.0	858.0	15143.9
1983	51,024	49,041	958.0	685.0	741.0	960.0	1316.0	1606.0	1982.0	1671.0	1659.6	1137.9	978.0	863.9	14558.4
1984	51,258	49,284	974.0	1120.0	1420.0	1528.7	1946.0	1867.0	2149.6	2072.0	1818.0	1556.7	1078.0	827.6	18357.6
1985	52,000	50,003	911.0	904.0	1135.0	1531.0	1809.0	2062.0	2329.6	2232.0	1761.0	1603.0	1158.0	1063.0	18498.6
1986	53,647	51,606	1157.0	884.0	1067.0	1384.0	1953.0	2100.0	2292.0	2374.0	1785.0	1569.0	1391.0	1217.0	19173.0
1987	54,625	52,540	1137.0	1055.0	1116.0	1752.0	1951.0	2136.0	2253.0	2306.0	1968.0	1471.0	1097.0	1070.0	19312.0
1988	54,845	52,509	1099.0	1231.0	1585.0	1545.0	2019.0	2234.0	2470.0	2341.0	2054.0	1800.0	1342.0	1266.0	20986.0
1989	64,000	61,330	1177.0	1039.0	1441.0	1850.0	2136.8	2279.0	2654.0	2534.0	2193.0	1816.0	1701.0	1549.0	22369.8
1990	66,348	63,348	1246.0	1098.0	1471.0	1573.0	2025.0	2286.0	2578.0	2466.0	2261.0	2023.0	1715.0	1475.0	22217.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.48	177,441	166	144	147	255	271	368	438	422	328	350	282	258	287	0.322
1981	3.49	181,728	165	158	157	223	263	357	378	367	322	230	207	160	249	0.279
1982	3.50	182,128	141	152	150	187	251	279	352	345	278	258	182	152	228	0.255
1983	3.51	179,002	173	137	134	179	237	299	357	301	309	205	182	156	223	0.250
1984	3.52	180,316	174	214	254	283	348	345	385	371	336	278	199	148	279	0.312
1985	3.53	183,427	160	176	200	278	318	375	410	393	320	282	210	187	276	0.309
1986	3.54	189,753	197	166	181	243	332	369	390	404	314	267	244	207	277	0.310
1987	3.55	193,738	189	194	186	301	325	368	375	384	339	245	189	178	273	0.306
1988	3.56	195,046	182	218	262	264	334	382	409	387	351	298	229	209	295	0.330
1989	3.57	228,220	166	163	204	270	302	333	375	358	320	257	248	219	269	0.301
1990	3.58	237,232	169	165	200	221	275	321	351	335	318	275	241	201	257	0.287
AVERAGE			171	172	189	246	296	345	384	370	321	268	220	189	265	0.297

1/ Number of services estimated, commercial and industrial combined.

2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.

3/ gpcd - gallons per capita daily

4/ afpca - acre-feet per capita annually

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C-059283

COUNTY..SAN BERNARDINO
CITY....BIG BEAR CITY
SYSTEM #..... 36008
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 100

CITY CENSUS POPULATION
1980..... 5,000
1990..... 8,000

WATER AGENCY.....BIG BEAR CITY COMMUN. SERV. DIST.
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5,163	Metered.....	151	Metered.....	0	Metered.....	1
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,950	3,950	-	-	-	-	-	-	59.0	57.0	48.0	42.0	37.0	36.0	-
1981	3,960	3,960	36.0	37.0	36.0	41.0	57.0	67.0	-	-	-	-	-	-	-
1982 /5			-	-	-	-	-	-	-	-	-	-	-	-	-
1983	4,500	4,500	-	-	-	-	-	-	76.0	58.0	53.0	45.0	38.0	36.0	-
1984	4,530	4,530	35.0	31.0	36.0	39.0	59.0	56.0	39.0	38.0	36.0	30.0	20.0	22.0	441.0
1985	4,602	4,602	21.0	21.0	17.0	22.0	37.0	47.0	-	-	-	-	-	-	-
1986	4,732	4,732	18.0	16.0	17.0	20.0	41.0	50.0	48.0	47.0	34.0	20.0	17.0	18.0	346.0
1987	4,805	4,805	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	5,032	5,032	23.0	19.0	18.0	21.0	29.0	38.0	42.0	35.0	28.0	26.0	19.0	20.0	318.0
1989	5,151	5,151	25.0	21.0	20.0	25.0	32.0	39.0	25.0	21.0	20.0	25.0	32.0	48.0	333.0
1990	5,300	5,300	45.0	37.0	29.0	24.0	21.0	21.0	45.0	37.0	29.0	24.0	21.0	21.0	354.0

PER CAPITA WATER USE (gpcd)/3

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	ANNUALLY afpca /4
1980	1.27	5,000	-	-	-	-	-	-	381	368	320	271	247	232	-	-
1981	1.29	5,109	227	259	227	267	360	437	-	-	-	-	-	-	-	-
1982	1.31		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	1.34	6,025	-	-	-	-	-	-	407	311	293	241	210	193	-	-
1984	1.36	6,176	183	173	188	211	308	302	204	198	194	157	108	115	196	0.219
1985	1.39	6,386	106	117	86	115	187	245	-	-	-	-	-	-	-	-
1986	1.41	6,682	87	86	82	100	198	249	232	227	170	97	85	87	142	0.159
1987	1.44	6,902	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	1.46	7,350	101	89	79	95	127	172	184	154	127	114	86	88	119	0.133
1989	1.49	7,650	105	98	84	109	135	170	105	89	87	105	139	202	119	0.134
1990	1.51	8,000	181	165	117	100	85	88	181	149	121	97	88	85	121	0.136
AVERAGE			142	141	123	142	200	238	242	214	187	154	138	143	139	0.156

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C-059284

C-059284

COUNTY..SAN BERNARDINO
CITY.... CHINO
SYSTEM #..... 36102
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 100

WATER AGENCY.....CHINO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 28
WELLS AND SPRINGS.. 72

SOURCE OF WATER (in percent):
PURCHASED..... 28
SELF SUPPLIED..... 72

CITY CENSUS POPULATION
1980..... 40,165
1990..... 59,682

SERVICE CONNECTIONS /1

RESIDENTIAL:	COMMERCIAL:	INDUSTRIAL:	GOVERNMENTAL:
Metered..... 10,177	Metered..... 1,047	Metered..... 433	Metered..... 33
Flat Rate..... 0	Flat Rate... 0	Flat Rate... 0	Flat Rate... 0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	7,900	7,900	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981	7,925	7,925	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	8,072	8,072	124.8	113.2	118.8	116.9	145.5	200.9	308.4	305.0	216.4	226.7	150.2	148.5	2175.3
1983	8,228	8,072	149.0	131.0	115.0	156.0	225.0	277.0	291.0	291.0	256.0	213.0	160.0	133.0	2397.0
1984	8,890	8,881	162.0	184.0	234.0	248.0	311.0	295.0	335.0	310.0	274.0	242.0	181.0	138.0	2914.0
1985	9,329	9,329	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	9,684	9,676	200.0	150.0	173.0	238.0	322.0	367.0	374.0	375.0	342.0	245.0	242.0	191.0	3219.0
1987	10,425	10,414	186.0	173.0	193.0	209.0	315.0	369.0	370.0	376.0	351.0	267.0	193.0	221.0	3223.0
1988	10,564	10,552	179.0	150.0	170.0	374.0	218.0	401.0	302.0	337.0	392.0	300.0	235.0	249.0	3307.0
1989	10,747	10,727	176.0	181.0	248.0	205.0	351.0	390.0	422.0	448.0	379.0	343.0	317.0	388.0	3848.0
1990	12,812	12,688	345.0	223.0	339.0	332.0	374.0	442.0	469.0	487.0	389.0	386.0	340.0	271.0	4397.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	5.08	40,165	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	5.05	39,991	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	5.01	40,425	100	100	95	96	116	166	246	243	178	181	124	118	147	0.165
1983	4.97	40,894	118	114	91	127	177	226	230	230	209	168	130	105	161	0.180
1984	4.93	43,846	119	145	172	189	229	224	246	228	208	178	138	102	182	0.204
1985	4.89	45,656	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	4.86	47,025	137	114	119	169	221	260	257	257	242	168	172	131	188	0.210
1987	4.82	50,227	119	123	124	139	202	245	238	241	233	171	128	142	176	0.197
1988	4.78	50,495	114	102	109	247	139	265	193	215	259	192	155	159	179	0.201
1989	4.74	50,961	111	127	157	134	222	255	267	284	248	217	207	246	207	0.232
1990	4.70	60,265	185	132	181	184	200	244	251	261	215	207	188	145	200	0.224
AVERAGE			125	120	131	161	188	236	241	245	224	185	155	143	180	0.202

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

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C-059285

COUNTY..SAN BERNARDINO
CITY.... COLTON
SYSTEM #..... 36014
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 100

WATER AGENCY.....COLTON, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 21,310
1990..... 40,213

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	7,101	Metered.....	789	Metered.....	NA	Metered.....	75
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	6,500	6,500	94.0	107.0	93.0	133.0	146.0	277.0	267.0	297.6	251.7	161.9	140.1	153.2	2121.5
1981	6,507	6,507	100.7	116.0	98.3	144.4	157.6	299.8	249.5	277.0	234.2	150.7	130.4	142.6	2101.2
1982	6,600	6,600	93.7	108.0	91.7	134.4	146.7	279.1	279.5	265.3	232.5	175.3	121.4	108.2	2035.8
1983	6,703	6,703	113.9	112.6	95.5	139.4	150.4	245.1	249.6	262.5	231.3	185.2	146.7	134.3	2066.5
1984	6,974	6,974	134.3	145.2	169.9	229.5	222.1	240.8	320.8	264.9	281.9	219.0	188.3	130.0	2546.7
1985	6,999	6,999	131.2	161.4	144.2	190.8	170.4	429.3	299.4	429.9	184.1	344.2	98.3	218.9	2802.1
1986	7,273	7,273	178.4	97.4	144.3	198.3	315.5	275.7	398.0	347.5	184.8	324.9	191.3	192.5	2848.6
1987	7,271	7,271	211.4	171.2	134.8	314.2	256.3	329.8	328.4	352.7	323.2	283.0	148.6	167.8	3021.4
1988	7,926	7,926	191.0	196.8	196.3	300.5	287.9	349.4	408.1	350.7	312.3	314.9	191.7	174.9	3274.5
1989	8,081	8,081	175.1	200.6	175.2	303.6	297.9	373.9	413.0	342.1	331.5	326.2	255.1	256.4	3450.6
1990	8,100	8,100	182.5	183.6	206.1	246.4	311.8	250.4	428.7	332.0	242.4	302.6	244.6	151.7	3082.8

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.28	21,310	142	173	141	208	221	433	404	450	394	245	219	232	273	0.305
1981	3.45	22,430	145	185	141	215	227	446	359	398	348	217	194	205	257	0.287
1982	3.62	23,864	127	162	124	188	198	390	378	359	325	237	170	146	234	0.262
1983	3.78	25,366	145	159	121	183	191	322	317	334	304	236	193	171	223	0.250
1984	3.95	27,568	157	182	199	278	260	291	375	310	341	256	228	152	253	0.283
1985	4.12	28,846	147	200	161	220	191	496	335	481	213	385	114	245	266	0.298
1986	4.29	31,202	184	111	149	212	326	295	411	359	197	336	204	199	250	0.280
1987	4.46	32,419	210	189	134	323	255	339	327	351	332	282	153	167	255	0.286
1988	4.63	36,676	168	185	173	273	253	318	359	308	284	277	174	154	245	0.274
1989	4.80	38,756	146	185	146	261	248	322	344	285	285	272	219	213	244	0.273
1990	4.96	40,213	146	163	165	204	250	208	344	266	201	243	203	122	210	0.235
AVERAGE			156	172	150	233	238	351	359	355	293	271	188	182	246	0.276

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059286

COUNTY..SAN BERNARDINO
CITY....LOMA LINDA
SYSTEM #..... 36013
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 100

CITY CENSUS POPULATION
1980..... 11,411
1990..... 17,847

WATER AGENCY.....LOMA LINDA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	3,446	Metered.....	200	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,434	2,424	/5	-	-	-	-	-	117.0	137.0	100.0	81.0	68.0	56.0	-
1981	2,434	2,424	47.0	41.0	46.0	62.0	81.0	107.0	116.0	108.0	94.0	69.0	64.0	53.0	888.0
1982	2,599	2,450	42.0	42.0	46.0	56.0	66.0	76.0	131.0	126.0	101.0	83.0	59.0	52.0	880.0
1983	2,832	2,683	55.0	43.0	47.0	55.0	81.0	72.0	103.0	92.0	95.0	68.0	56.0	47.0	814.0
1984	2,832	2,683	56.0	59.0	77.0	86.0	106.0	103.0	113.0	120.0	113.0	87.0	60.0	49.0	1029.0
1985	3,004	2,855	53.0	51.0	60.0	86.0	108.0	118.0	138.0	131.0	98.0	90.0	65.0	58.0	1056.0
1986	3,260	3,111	68.0	51.0	62.0	87.0	119.0	133.0	149.0	149.0	93.0	96.0	86.0	93.0	1186.0
1987	3,392	3,243	71.0	67.0	69.0	109.0	124.0	139.0	146.0	150.0	129.0	101.0	72.0	71.0	1248.0
1988	3,788	3,639	-	-	-	-	-	-	158.0	151.0	138.0	120.0	84.0	79.0	-
1989	3,788	3,639	72.0	67.0	91.0	114.0	130.0	144.0	173.0	168.0	145.0	123.0	109.0	102.0	1438.0
1990	4,429	4,280	72.0	70.0	95.0	88.0	130.0	148.0	170.0	162.0	151.0	131.0	112.0	94.0	1423.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.71	11,458	-	-	-	-	-	-	329	386	291	228	198	158	-	-
1981	4.65	11,327	134	129	131	182	231	315	330	308	277	197	188	151	215	0.241
1982	4.60	11,955	113	125	124	156	178	212	353	340	282	224	165	140	202	0.226
1983	4.55	12,875	138	119	118	142	203	186	258	231	246	170	145	118	173	0.194
1984	4.49	12,723	142	160	195	225	269	270	287	304	296	221	157	124	222	0.248
1985	4.44	13,334	128	137	145	215	261	295	334	317	245	218	162	140	217	0.243
1986	4.38	14,295	153	127	140	203	269	310	336	336	217	217	201	210	227	0.255
1987	4.33	14,691	156	163	152	247	272	315	321	329	293	222	163	156	233	0.261
1988	4.28	16,203	-	-	-	-	-	-	315	301	284	239	173	157	-	-
1989	4.22	15,999	145	150	183	238	262	300	349	339	302	248	227	206	246	0.276
1990	4.17	18,468	126	135	166	159	227	267	297	283	273	229	202	164	211	0.236
AVERAGE			137	138	150	196	241	275	319	316	273	219	180	157	216	0.242

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C-059287

C-059287

COUNTY..SAN BERNARDINO
CITY.... ONTARIO
SYSTEM #..... 36034
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 100

CITY CENSUS POPULATION
1980..... 88,820
1990..... 133,179

WATER AGENCY.....ONTARIO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 46
WELLS AND SPRINGS.. 54

SOURCE OF WATER (in percent):
PURCHASED..... 46
SELF SUPPLIED..... 54

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	25,432	Metered.....	1,972	Metered.....	456	Metered.....	160
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	24,882	24,882	369.0	371.0	394.0	608.0	631.0	809.0	983.0	1008.0	764.0	733.0	563.0	495.0	7728.0
1981	34,000	34,000	458.0	394.0	436.0	500.0	748.0	989.0	1056.0	1016.0	839.0	627.0	536.0	438.0	8037.0
1982	25,746	25,746	322.0	369.0	380.0	516.0	782.0	704.0	987.0	942.0	726.0	653.0	443.0	403.0	7227.0
1983	26,195	26,195	424.0	325.0	323.0	441.0	649.0	769.0	1018.0	884.0	844.0	582.0	459.0	409.0	7127.0
1984	28,000	27,992	475.0	544.0	668.0	717.0	972.0	914.0	1107.0	1035.0	897.0	779.0	533.0	419.0	9060.0
1985	26,607	26,602	469.0	446.0	531.0	728.0	930.0	1020.0	1198.0	1096.0	841.0	786.0	570.0	516.0	9131.0
1986	27,292	27,287	584.0	443.0	526.0	704.0	1011.0	1107.0	1193.0	1237.0	923.0	768.0	712.0	640.0	9848.0
1987	27,770	27,767	611.0	566.0	627.0	867.0	1102.0	1096.0	1223.0	1309.0	1175.0	893.0	612.0	642.0	10723.0
1988	28,246	28,244	610.0	565.0	626.0	898.0	1065.0	1149.0	1173.0	1312.0	1121.0	898.0	611.0	641.0	10669.0
1989	27,576	27,573	706.0	612.0	798.0	1012.0	1147.0	1215.0	1366.0	1309.0	1167.0	1008.0	938.0	906.0	12184.0
1990	28,019	28,018	759.0	643.0	770.0	852.0	1096.0	1104.0	1446.0	1364.0	1193.0	1107.0	909.0	858.0	12101.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.57	88,820	134	144	143	228	229	304	357	366	287	266	211	180	238	0.267
1981	3.69	125,393	118	112	112	133	192	263	272	261	223	161	142	113	176	0.197
1982	3.81	97,999	106	134	125	176	257	239	325	310	247	215	151	133	202	0.226
1983	3.92	102,809	133	113	101	143	204	249	319	277	274	183	149	128	190	0.213
1984	4.04	113,207	135	166	190	211	277	269	315	295	264	222	157	119	219	0.246
1985	4.16	110,725	137	144	155	219	271	307	349	319	253	229	172	150	226	0.253
1986	4.28	116,806	161	135	145	201	279	316	329	342	263	212	203	177	231	0.259
1987	4.40	122,139	161	166	166	237	291	299	323	346	321	236	167	170	241	0.269
1988	4.52	127,576	154	153	158	235	269	300	297	332	293	227	160	162	229	0.257
1989	4.63	127,814	178	171	201	264	289	317	345	330	304	254	245	229	261	0.293
1990	4.75	133,184	184	172	186	213	265	276	350	330	299	268	228	208	249	0.279
AVERAGE			146	146	153	205	257	285	326	319	275	225	180	161	224	0.251

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059288

COUNTY..SAN BERNARDINO
CITY....RANCHO CUCAMONGA
SYSTEM #..... 36018
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 100

WATER AGENCY.....RANCHO CUCAMONGA CO. WTR DIST.
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 59
WELLS AND SPRINGS.. 41

SOURCE OF WATER (in percent):
PURCHASED..... 46
SELF SUPPLIED..... 54

CITY CENSUS POPULATION
1980..... 55,250
1990..... 101,409

SERVICE CONNECTIONS /1

RESIDENTIAL:	COMMERCIAL:	INDUSTRIAL:	GOVERNMENTAL:
Metered..... 30,985	Metered..... 1,201	Metered..... 411	Metered..... 1,197
Flat Rate..... 0	Flat Rate... 0	Flat Rate... 0	Flat Rate... 0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	16,573	16,573	261.0	252.0	282.0	459.0	452.0	724.0	893.0	1015.0	920.8	663.1	489.6	472.1	6883.6
1981	16,870	16,870	376.0	331.0	332.0	483.0	616.0	909.0	987.0	960.0	791.0	540.0	505.0	381.0	7211.0
1982	17,000	17,000	306.0	299.0	310.0	436.0	596.0	664.0	961.0	896.0	660.0	589.0	371.0	325.0	6413.0
1983	18,134	18,134	333.0	262.0	232.0	377.0	601.0	675.0	919.7	798.8	782.3	506.2	369.2	288.2	6144.4
1984	19,633	19,633	361.4	459.2	555.2	654.3	878.0	864.5	1084.0	993.1	916.0	707.5	433.1	305.8	8212.1
1985	20,299	20,299	360.9	391.8	481.2	698.6	854.3	1037.0	1189.0	1178.0	862.0	727.0	475.0	434.0	8688.8
1986	21,708	21,708	506.0	330.0	450.0	651.0	933.0	1092.0	1209.0	1313.0	925.0	707.0	673.0	562.0	9351.0
1987	24,478	24,478	513.0	493.0	607.0	874.0	1075.0	1155.0	1206.0	1131.0	1030.0	808.0	538.0	498.0	9928.0
1988	26,844	26,844	505.0	644.0	840.0	790.0	1092.0	1228.0	1441.0	1348.0	1217.0	1119.0	727.0	656.0	11607.0
1989	31,009	31,009	650.0	557.0	806.0	1052.0	1205.0	1379.0	1639.0	1610.0	1463.0	1206.0	1075.0	962.0	13604.0
1990	32,567	32,567	740.0	631.0	838.0	932.0	1231.0	1366.0	1670.0	1597.0	1524.0	1307.0	1062.0	912.0	13810.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.33	55,250	152	157	165	277	264	437	521	593	556	387	295	276	341	0.382
1981	3.31	55,869	217	212	192	288	356	542	570	554	472	312	301	220	354	0.396
1982	3.29	55,926	177	191	179	260	344	396	554	517	393	340	221	187	314	0.352
1983	3.27	59,258	181	158	126	212	327	380	501	435	440	276	208	157	284	0.318
1984	3.25	63,724	183	248	281	342	444	452	549	503	479	358	227	155	353	0.395
1985	3.22	65,440	178	214	237	356	421	528	586	581	439	358	242	214	364	0.407
1986	3.20	69,505	235	170	209	312	433	524	561	609	444	328	323	261	369	0.413
1987	3.18	77,836	213	226	252	374	446	495	500	469	441	335	230	206	349	0.391
1988	3.16	84,769	192	262	320	311	416	483	548	513	479	426	286	250	375	0.420
1989	3.14	97,239	216	205	267	361	400	473	544	534	502	400	369	319	383	0.429
1990	3.11	101,409	235	222	267	306	392	449	531	508	501	416	349	290	373	0.418
AVERAGE			198	206	227	309	386	469	542	529	468	358	277	230	351	0.393

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C-059289

C-059289

COUNTY..SAN BERNARDINO
CITY....REDLANDS
SYSTEM #..... 36037
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 100

WATER AGENCY.....REDLANDS, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

CITY CENSUS POPULATION
1980..... 43,619
1990..... 60,394

ORIGIN OF WATER (in percent):
SURFACE WATER..... 46
WELLS AND SPRINGS.. 54

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	16,530	Metered.....	863	Metered.....	NA	Metered.....	116
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	15,562	13,484	202.0	198.0	208.0	368.0	392.0	685.0	849.0	726.0	584.0	580.0	467.0	429.0	5688.0
1981	16,151	13,864	287.0	140.0	200.0	305.0	328.0	316.0	306.0	231.0	210.0	257.0	244.0	295.0	3119.0
1982	16,663	14,533	239.0	225.0	254.0	359.0	470.0	579.0	708.0	735.0	603.0	450.0	313.0	235.0	5170.0
1983	15,909	14,016	268.0	180.0	186.0	286.0	515.0	681.0	927.0	715.0	673.0	445.0	308.0	241.0	5425.0
1984	16,355	14,455	303.0	329.0	442.0	534.0	631.0	698.0	692.0	692.0	614.0	539.0	355.0	221.0	6050.0
1985	17,859	16,026	265.0	296.0	345.0	539.0	701.0	839.0	977.0	926.0	658.0	594.0	373.0	332.0	6845.0
1986	16,173	14,356	380.0	271.0	352.0	509.0	782.0	896.0	922.0	960.0	711.0	566.0	499.0	381.0	7229.0
1987	16,400	14,636	352.0	348.0	324.0	661.0	776.0	1128.0	913.0	941.0	812.0	596.0	370.0	362.0	7583.0
1988	17,012	15,176	342.0	444.0	601.0	564.0	796.0	897.0	1003.0	954.0	864.0	795.0	507.0	436.0	8203.0
1989	17,611	15,413	369.0	332.0	515.0	721.0	780.0	912.0	1074.0	1024.0	870.0	727.0	651.0	553.0	8528.0
1990	17,489	15,291	418.0	346.0	483.0	515.0	758.0	896.0	1047.0	985.0	896.0	751.0	609.0	536.0	8240.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.23	50,341	129	136	133	244	251	454	544	465	387	372	309	275	310	0.347
1981	3.31	53,401	173	94	121	190	198	197	185	140	131	155	152	178	160	0.179
1982	3.38	56,285	137	143	146	213	269	343	406	421	357	258	185	135	252	0.282
1983	3.45	54,875	158	117	109	174	303	414	545	420	409	262	187	142	271	0.303
1984	3.52	57,582	170	197	248	309	353	404	388	388	355	302	206	124	288	0.322
1985	3.59	64,154	133	165	173	280	352	436	491	466	342	299	194	167	292	0.327
1986	3.66	59,254	207	163	192	286	426	504	502	523	400	308	281	207	334	0.374
1987	3.74	61,257	185	203	171	360	409	614	481	496	442	314	201	191	339	0.380
1988	3.81	64,759	170	236	299	290	397	462	500	475	445	396	261	217	347	0.389
1989	3.88	68,298	174	174	243	352	368	445	507	484	425	343	318	261	342	0.383
1990	3.95	69,075	195	179	226	249	354	432	489	460	432	351	294	250	327	0.366
AVERAGE			167	164	187	268	335	428	458	431	375	305	235	195	297	0.332

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY..SAN BERNARDINO
CITY.... RIALTO
SYSTEM #..... 36038
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 100

CITY CENSUS POPULATION
1980..... 35,615
1990..... 72,388

WATER AGENCY.....RIALTO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 97
WELLS AND SPRINGS.. 3

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	10,087	Metered.....	467	Metered.....	12	Metered.....	124
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	8,246	8,246	118.0	102.0	116.0	159.0	156.0	287.0	360.0	306.0	243.0	177.0	181.0	154.0	2359.0
1981	8,300	8,300	146.0	122.0	128.0	165.0	222.0	355.0	368.0	330.0	267.0	168.0	163.0	126.0	2560.0
1982	8,360	8,359	116.0	109.0	113.0	142.0	201.0	225.0	315.0	321.0	243.0	205.0	146.0	127.0	2263.0
1983	9,124	9,123	134.0	103.0	110.0	137.0	228.0	266.0	337.0	266.0	255.0	142.0	119.0	97.0	2194.0
1984	9,300	9,297	120.0	145.0	183.0	194.0	292.0	281.0	344.0	317.0	278.0	237.0	159.0	134.0	2684.0
1985	9,500	9,497	144.0	138.0	218.0	217.0	283.0	334.0	380.0	368.0	269.0	237.0	177.0	161.0	2926.0
1986	9,880	9,877	175.0	135.0	167.0	220.0	327.0	391.0	410.0	432.0	314.0	257.0	244.0	214.0	3286.0
1987	9,990	9,987	201.0	182.0	190.0	304.0	366.0	394.0	399.0	412.0	349.0	267.0	191.0	187.0	3442.0
1988	10,231	10,228	191.0	216.0	289.0	273.0	344.0	393.0	440.0	418.0	347.0	311.0	235.0	220.0	3677.0
1989	10,347	10,344	194.0	171.0	222.0	293.0	319.0	361.0	431.0	407.0	352.0	297.0	268.0	254.0	3569.0
1990	10,690	10,690	194.0	193.0	233.0	247.0	351.0	355.0	407.0	395.0	356.0	308.0	265.0	233.0	3537.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.32	35,615	107	99	105	149	141	269	326	277	227	160	169	139	181	0.203
1981	4.56	37,884	124	115	109	145	189	312	313	281	235	143	143	107	185	0.207
1982	4.81	40,208	93	97	91	118	161	187	253	258	201	164	121	102	154	0.173
1983	5.05	46,120	94	80	77	99	159	192	236	186	184	99	86	68	130	0.146
1984	5.30	49,291	79	101	120	131	191	190	225	207	188	155	108	88	149	0.167
1985	5.55	52,680	88	94	133	137	173	211	233	225	170	145	112	99	152	0.170
1986	5.79	57,211	99	84	94	128	184	228	231	244	183	145	142	121	157	0.176
1987	6.04	60,298	108	108	102	168	196	218	213	220	193	143	106	100	156	0.175
1988	6.28	64,262	96	116	145	142	173	204	221	210	180	156	122	110	157	0.176
1989	6.53	67,528	93	90	106	145	152	178	206	194	174	142	132	121	145	0.162
1990	6.77	72,388	86	95	104	114	156	163	181	176	164	137	122	104	134	0.150
AVERAGE			97	98	108	134	171	214	240	225	191	145	124	105	155	0.173

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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COUNTY..SAN BERNARDINO
CITY.... FONTANA
SYSTEM #..... 36041
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 100

CITY CENSUS POPULATION
1980..... 55,000
1990..... 75,000

WATER AGENCY.....SAN GABRIEL VALLEY WATER COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 30
WELLS AND SPRINGS.. 70

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	28,041	Metered.....	205	Metered.....	117	Metered.....	229
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	17,678	17,678	/5	-	-	-	-	-	-	-	-	-	-	-	4612.0
1981	18,200	18,200	-	-	-	-	-	-	-	-	-	-	-	-	5321.0
1982	18,254	18,254	-	-	-	-	-	-	-	-	-	-	-	-	4652.0
1983	18,646	18,646	-	-	-	-	-	-	-	-	-	-	-	-	4560.0
1984	19,352	19,352	-	-	-	-	-	-	-	-	-	-	-	-	5856.0
1985	20,632	20,632	-	-	-	-	-	-	-	-	-	-	-	-	6004.0
1986	22,705	22,705	421.0	316.0	411.0	495.0	679.0	802.0	785.0	916.0	709.0	549.0	545.0	435.0	7063.0
1987	25,127	25,127	480.0	395.0	405.0	639.0	783.0	833.0	868.0	966.0	756.0	647.0	455.0	422.0	7649.0
1988	26,087	26,087	-	-	-	-	-	-	-	-	-	-	-	-	8903.0
1989	27,302	27,302	533.0	477.0	604.0	803.0	888.0	981.0	987.0	1020.0	994.0	768.0	1096.0	760.0	9911.0
1990	28,000	28,000	-	-	-	-	-	-	-	-	-	-	-	-	10411.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.11	55,000	-	-	-	-	-	-	-	-	-	-	-	-	230	0.257
1981	3.07	55,837	-	-	-	-	-	-	-	-	-	-	-	-	261	0.292
1982	3.02	55,213	-	-	-	-	-	-	-	-	-	-	-	-	231	0.259
1983	2.98	55,592	-	-	-	-	-	-	-	-	-	-	-	-	225	0.252
1984	2.94	56,859	-	-	-	-	-	-	-	-	-	-	-	-	282	0.316
1985	2.89	59,727	-	-	-	-	-	-	-	-	-	-	-	-	275	0.308
1986	2.85	64,746	210	174	205	255	338	413	391	456	365	274	281	217	299	0.335
1987	2.81	70,566	219	200	185	302	358	393	397	442	357	296	215	193	297	0.333
1988	2.77	72,133	-	-	-	-	-	-	-	-	-	-	-	-	338	0.379
1989	2.72	74,312	231	229	262	360	385	440	428	443	446	333	492	330	365	0.409
1990	2.68	75,000	-	-	-	-	-	-	-	-	-	-	-	-	380	0.426
AVERAGE			220	201	217	306	361	415	405	447	389	301	329	247	289	0.324

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

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COUNTY..SAN BERNARDINO WATER AGENCY.....UPLAND, CITY OF ORIGIN OF WATER (in percent):

CITY.... UPLAND TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM #..... 36050 SURFACE WATER..... 81

HYDROLOGIC REGION..... SOUTH COAST SYSTEM SERVES: WELLS AND SPRINGS.. 19

PLANNING SUBAREA #.....SANTA ANA

DAU # ..... 100 ENTIRE CITY.....

ENTIRE CITY PLUS OUTSIDE..... X SOURCE OF WATER (in percent):

CITY CENSUS POPULATION PORTION OF THE CITY.....

1980..... 47,647 OTHER..... PURCHASED..... 81

1990..... 63,374 SELF SUPPLIED..... 19

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	NA	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	NA	Flat Rate...	NA	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	12,672	12,481	220.0	191.0	215.0	349.0	324.0	537.0	696.0	627.0	518.0	521.0	451.0	369.0	5018.0
1981	13,010	12,841	315.0	258.0	264.0	382.0	452.0	697.0	765.0	720.0	612.0	449.0	412.0	294.0	5620.0
1982	13,258	13,109	220.0	223.0	228.0	304.0	415.0	453.0	696.0	682.0	538.0	502.0	297.0	245.0	4803.0
1983	13,426	13,261	270.0	206.0	202.0	301.0	253.0	471.5	691.0	557.0	563.0	384.0	310.0	243.0	4451.5
1984	13,870	13,700	309.0	374.0	430.0	463.0	622.0	607.0	790.0	765.0	717.0	590.0	396.0	273.0	6336.0
1985	14,030	13,865	281.0	289.0	360.0	487.0	565.0	558.0	802.0	778.0	632.0	525.0	358.0	306.0	5941.0
1986	14,659	14,494	338.0	252.0	337.0	472.0	666.0	745.0	821.0	872.0	591.0	432.0	441.0	374.0	6341.0
1987	15,810	15,715	334.0	327.0	338.0	558.0	652.0	710.0	726.0	785.0	681.0	523.0	344.0	344.0	6322.0
1988	16,418	16,233	321.0	383.0	496.0	479.0	650.0	721.0	843.0	730.0	690.0	608.0	432.0	335.0	6688.0
1989	16,488	16,393	344.0	295.0	416.0	592.0	654.0	708.0	876.0	774.0	712.0	600.0	500.0	450.0	6921.0
1990	16,525	16,430	337.0	233.0	406.0	439.0	547.0	596.0	815.0	725.0	691.0	640.0	515.0	440.0	6384.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.82	48,376	147	136	143	240	216	370	464	418	357	347	311	246	284	0.318
1981	3.82	49,718	204	185	171	256	293	467	496	467	410	291	276	191	310	0.347
1982	3.83	50,718	140	157	145	200	264	298	443	434	354	319	195	156	259	0.291
1983	3.83	51,414	169	143	127	195	159	306	434	349	365	241	201	152	237	0.266
1984	3.83	53,170	187	243	261	290	377	381	479	464	450	358	248	166	326	0.366
1985	3.84	53,839	168	192	216	302	339	345	481	466	391	315	222	183	302	0.339
1986	3.84	56,310	194	160	193	279	382	441	470	500	350	247	261	214	309	0.346
1987	3.85	60,794	177	192	179	306	346	389	385	417	373	278	189	183	285	0.319
1988	3.85	63,198	164	209	253	253	332	380	430	373	364	310	228	171	290	0.325
1989	3.85	63,532	175	166	211	311	332	371	445	393	374	305	262	228	298	0.334
1990	3.86	63,740	171	131	205	230	277	312	412	367	361	324	269	223	274	0.307
AVERAGE			172	174	191	260	301	369	449	422	377	303	242	192	289	0.323

1/ Service connections cannot be broken into classificatios

2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.

3/ gpcd - gallons per capita daily

4/ afpca - acre-feet per capita annually

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C-059293

COUNTY..RIVERSIDE
CITY.... HEMET
SYSTEM #..... 33106
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SANTA ANA
DAU # 104

WATER AGENCY.....HEMET, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 30
WELLS AND SPRINGS.. 70

SOURCE OF WATER (in percent):
PURCHASED..... 30
SELF SUPPLIED..... 70

CITY CENSUS POPULATION
1980..... 23,211
1990..... 36,094

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	7,296	Metered.....	1,921	Metered.....	384	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	7,505	7,487	66.0	67.0	54.0	64.0	72.0	81.0	122.0	121.0	138.0	110.0	107.0	79.0	1081.0
1981	7,647	7,629	52.0	43.0	45.0	74.0	101.0	139.0	161.0	132.0	181.0	81.0	66.0	59.0	1134.0
1982	7,793	7,775	49.0	37.0	50.0	71.0	88.0	112.0	140.0	134.0	97.0	86.0	63.0	45.0	972.0
1983	7,900	7,882	53.0	45.0	50.0	62.0	93.0	121.0	163.0	140.0	151.0	98.0	88.0	83.0	1147.0
1984	8,114	8,092	82.0	101.0	122.0	135.0	157.0	166.0	159.0	135.0	135.0	120.0	109.0	80.0	1501.0
1985	8,200	8,182	66.0	77.0	91.0	125.0	153.0	156.0	209.0	172.0	135.0	150.0	93.0	94.0	1521.0
1986	8,250	8,232	97.0	76.0	96.0	116.0	149.0	210.0	197.0	220.0	158.0	118.0	110.0	100.0	1647.0
1987	8,300	8,282	87.0	85.0	81.0	96.0	172.0	132.0	215.0	211.0	212.0	142.0	90.0	84.0	1607.0
1988	8,500	8,465	100.0	99.0	166.0	162.0	155.0	182.0	192.0	213.0	217.0	175.0	123.0	106.0	1890.0
1989	9,130	9,112	94.0	88.0	157.0	172.0	193.0	183.0	208.0	214.0	194.0	137.0	113.0	105.0	1858.0
1990	9,601	9,583	102.0	90.0	137.0	114.0	152.0	171.0	195.0	198.0	157.0	162.0	160.0	125.0	1763.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.10	23,267	92	99	75	92	100	116	169	168	198	153	153	110	127	0.143
1981	3.17	24,217	69	63	60	102	135	191	214	176	249	108	91	79	128	0.144
1982	3.23	25,198	63	52	64	94	113	148	179	172	128	110	83	58	106	0.118
1983	3.30	26,070	66	62	62	79	115	155	202	173	193	121	113	103	121	0.135
1984	3.37	27,317	97	127	144	165	185	203	188	159	165	142	133	94	151	0.169
1985	3.43	28,153	76	98	104	148	175	185	239	197	160	172	110	108	148	0.166
1986	3.50	28,875	108	94	107	134	166	242	220	246	182	132	127	112	156	0.175
1987	3.57	29,603	95	103	88	108	187	149	234	230	239	155	101	92	149	0.167
1988	3.63	30,882	104	111	173	175	162	196	201	222	234	183	133	111	168	0.188
1989	3.70	33,779	90	93	150	170	184	181	199	204	191	131	112	100	151	0.169
1990	3.77	36,162	91	89	122	105	136	158	174	177	145	145	147	112	134	0.150
AVERAGE			86	90	105	125	151	175	202	193	189	141	118	98	140	0.157

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059294

COUNTY.. ORANGE
CITY....SAN JUAN CAPISTRANO
SYSTEM #..... 30030
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 114

WATER AGENCY.....CAPISTRANO VALLEY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 79
WELLS AND SPRINGS.. 21

SOURCE OF WATER (in percent):
PURCHASED..... 79
SELF SUPPLIED..... 21

CITY CENSUS POPULATION
1980..... 18,959
1990..... 26,183

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	8,683	Metered.....	355	Metered.....	NA	Metered.....	2
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	6,767	6,767	123.0	108.0	98.0	150.0	151.0	228.0	259.0	237.0	234.0	195.0	207.0	136.0	2126.0
1981	6,900	6,900	126.0	83.0	96.0	157.0	185.0	273.0	273.0	254.0	224.0	189.0	161.0	105.0	2126.0
1982	7,200	7,200	83.0	83.0	100.0	122.0	137.0	210.0	210.0	218.0	173.0	168.0	117.0	90.0	1711.0
1983	7,937	7,937	132.0	92.0	83.0	118.0	157.0	192.0	218.0	241.0	222.0	162.0	119.0	98.0	1834.0
1984	7,524	7,524	125.0	126.0	173.0	224.0	222.0	231.0	273.0	252.0	242.0	214.0	141.0	100.0	2323.0
1985	7,704	7,704	98.0	100.0	150.0	189.0	217.0	247.0	291.0	275.0	248.0	224.0	176.0	158.0	2373.0
1986	8,075	8,075	171.0	105.0	112.0	170.0	228.0	233.0	267.0	275.0	195.0	230.0	179.0	141.0	2306.0
1987	7,572	7,572	141.0	132.0	140.0	213.0	228.0	259.0	263.0	315.0	214.0	191.0	135.0	133.0	2364.0
1988	7,796	7,796	135.0	156.0	204.0	201.0	255.0	277.0	258.0	245.0	223.0	234.0	162.0	147.0	2497.0
1989	9,029	9,029	133.0	137.0	174.0	224.0	266.0	264.0	311.0	298.0	265.0	208.0	216.0	198.0	2694.0
1990	9,030	9,030	149.0	125.0	177.0	182.0	251.0	245.0	292.0	282.0	268.0	246.0	190.0	175.0	2582.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.80	18,959	209	196	167	264	257	401	441	403	411	332	364	231	307	0.344
1981	2.81	19,399	210	153	160	270	308	469	454	422	385	314	277	175	300	0.336
1982	2.82	20,313	132	146	159	200	218	345	333	346	284	267	192	143	231	0.258
1983	2.83	22,470	189	146	119	175	225	285	313	346	329	233	177	141	224	0.250
1984	2.84	21,374	189	203	261	349	335	360	412	380	377	323	220	151	298	0.333
1985	2.85	21,961	144	163	220	287	319	375	427	404	376	329	267	232	296	0.332
1986	2.86	23,098	239	162	156	245	318	336	373	384	281	321	258	197	274	0.306
1987	2.87	21,733	209	217	208	327	338	397	390	468	328	283	207	197	298	0.334
1988	2.88	22,452	194	240	293	298	366	411	371	352	331	336	241	211	305	0.341
1989	2.89	26,092	164	188	215	286	329	337	384	368	339	257	276	245	283	0.317
1990	2.90	26,183	184	171	218	232	309	312	360	347	341	303	242	216	270	0.303
AVERAGE			188	180	198	267	302	366	387	384	344	300	247	194	280	0.314

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059295

COUNTY.. ORANGE
CITY....EL TORO, ET AL
SYSTEM #..... 30079
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 114

WATER AGENCY.....EL TORO WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 49,000
1990..... 50,493

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	8,557	Metered.....	669	Metered.....	NA	Metered.....	163
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	9,600	9,600	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984	9,700	9,700	-	-	-	-	-	-	434.6	446.8	396.6	312.6	230.8	156.5	-
1985	9,701	9,701	202.2	190.7	247.2	309.2	361.0	403.6	435.0	447.0	396.0	313.0	231.0	156.0	3691.9
1986	9,678	9,678	260.6	169.8	199.1	281.9	376.8	390.2	444.2	452.8	348.1	270.5	255.6	211.5	3661.1
1987	9,809	9,809	206.7	203.8	213.6	324.8	360.3	398.0	387.4	430.2	382.1	272.4	206.8	195.2	3581.3
1988	9,897	9,897	201.7	233.2	287.1	279.2	379.3	401.1	450.5	429.5	371.6	295.0	233.0	225.9	3787.1
1989	9,899	9,899	212.8	196.1	287.4	345.6	376.8	388.7	460.3	454.1	393.0	316.0	327.1	295.6	4053.5
1990	9,899	9,899	245.5	206.9	277.8	279.3	366.6	389.1	458.6	432.1	408.0	349.9	304.1	265.5	3983.4

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	5.10	49,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	5.10		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	5.10		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	5.10		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	5.10	49,497	-	-	-	-	-	-	283	291	267	204	155	102	-	-
1985	5.10	49,499	132	138	161	208	235	272	283	291	267	204	156	102	204	0.229
1986	5.10	49,379	170	123	130	190	246	263	290	296	235	177	173	138	203	0.228
1987	5.10	50,044	133	145	138	216	232	265	250	277	255	176	138	126	196	0.220
1988	5.10	50,489	129	159	183	184	242	265	288	274	245	188	154	144	205	0.230
1989	5.10	50,496	136	139	184	228	241	257	294	290	259	202	216	189	220	0.246
1990	5.10	50,493	157	146	177	184	234	257	293	276	269	224	201	170	216	0.242
AVERAGE			143	142	162	202	238	263	283	285	257	196	170	139	208	0.232

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

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C-059296

COUNTY.. ORANGE
CITY....LAGUNA BEACH
SYSTEM #..... 30017
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 114

WATER AGENCY.....LAGUNA BEACH COUNTY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

CITY CENSUS POPULATION
1980..... 17,860
1990..... 23,170

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	NA	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	NA	Flat Rate...	NA	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	7,217	7,217	79.0	66.0	75.0	92.0	94.0	112.0	128.0	134.0	104.0	104.0	105.0	86.0	1179.0
1981	7,320	7,320	92.0	80.0	82.0	101.0	119.0	127.0	137.0	141.0	120.0	99.0	97.0	82.0	1277.0
1982	7,430	7,430	77.0	70.0	85.0	84.0	101.0	122.0	138.0	150.0	108.0	113.0	87.0	79.0	1214.0
1983	7,535	7,535	91.0	72.0	81.0	82.0	108.0	116.0	140.0	134.0	126.0	107.0	83.0	77.0	1217.0
1984	7,640	7,640	85.0	100.0	115.0	115.0	136.0	130.0	150.0	145.0	134.0	121.0	97.0	91.0	1419.0
1985	7,750	7,750	91.0	80.0	106.0	111.0	123.0	135.0	159.0	157.0	132.0	133.0	104.0	90.0	1421.0
1986	7,854	7,854	114.0	86.0	96.0	116.0	136.0	128.0	161.0	158.0	131.0	122.0	115.0	106.0	1469.0
1987	7,759	7,759	105.0	97.0	112.0	131.0	142.0	149.0	151.0	157.0	147.0	118.0	97.0	100.0	1506.0
1988	7,950	7,950	108.0	114.0	130.0	121.0	139.0	137.0	153.0	155.0	129.0	134.0	102.0	89.0	1511.0
1989	7,955	7,955	86.0	93.0	115.0	126.0	119.0	119.0	135.0	150.0	134.0	123.0	126.0	131.0	1457.0
1990	8,206	8,206	120.0	104.0	124.0	114.0	137.0	149.0	147.0	165.0	131.0	135.0	128.0	115.0	1569.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.47	17,860	143	127	135	172	170	209	231	242	194	188	196	155	181	0.203
1981	2.51	18,370	162	156	144	183	209	230	241	248	218	174	176	144	190	0.213
1982	2.54	18,905	131	132	145	148	172	215	235	256	190	193	153	135	176	0.197
1983	2.58	19,435	151	132	134	141	179	199	232	222	216	178	142	128	172	0.192
1984	2.61	19,973	137	173	186	192	220	217	242	234	224	195	162	147	195	0.218
1985	2.65	20,531	143	139	167	180	193	219	250	247	214	209	169	141	190	0.212
1986	2.68	21,080	174	146	147	183	208	202	246	242	207	187	182	162	191	0.214
1987	2.72	21,096	161	164	171	207	217	235	231	240	232	180	153	153	196	0.219
1988	2.75	21,893	159	180	192	184	205	209	225	228	196	197	155	131	189	0.212
1989	2.79	22,184	125	150	167	189	173	179	196	218	201	179	189	190	180	0.202
1990	2.82	23,170	167	160	173	164	191	214	205	230	188	188	184	160	186	0.208
AVERAGE			150	151	160	177	194	212	230	237	207	188	169	150	186	0.208

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C-059297

C-059297

COUNTY.. ORANGE
CITY.... EL TORO
SYSTEM #..... 30091
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 114

CITY CENSUS POPULATION
1980..... 9,000
1990..... 38,600

WATER AGENCY.....LOS ALISOS WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	10,781	Metered.....	379	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	7,500	7,500	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983	8,100	8,100	-	-	-	-	-	-	252.0	234.0	221.0	163.0	127.0	104.0	-
1984	8,387	8,387	163.0	194.0	230.0	235.0	290.0	287.0	356.0	341.0	312.0	277.0	160.0	111.0	2956.0
1985	8,849	8,849	141.0	126.0	185.0	210.0	252.0	287.0	320.0	288.0	250.0	255.0	166.0	156.0	2636.0
1986	9,813	9,813	187.0	125.0	161.0	217.0	292.0	295.0	325.0	312.0	268.0	229.0	195.0	181.0	2787.0
1987	11,093	11,093	174.0	162.0	165.0	257.0	289.0	324.0	336.0	337.0	305.0	230.0	181.0	173.0	2933.0
1988			-	-	-	-	-	-	-	-	-	-	-	-	-
1989	11,638	11,638	190.0	160.0	205.0	230.0	299.0	324.0	354.0	356.0	286.0	272.0	274.0	257.0	3207.0
1990	11,751	11,751	205.0	183.0	230.0	225.0	321.0	296.0	326.0	314.0	335.0	297.0	228.0	241.0	3201.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	1.20	9,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	1.41		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	1.62		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	1.83	14,786	-	-	-	-	-	-	550	511	498	356	286	227	-	-
1984	2.03	17,059	308	392	435	459	548	561	673	645	610	524	313	210	475	0.532
1985	2.24	19,843	229	227	301	353	410	482	520	468	420	415	279	254	364	0.408
1986	2.45	24,051	251	186	216	301	392	409	436	418	371	307	270	243	317	0.356
1987	2.66	29,500	190	196	180	290	316	366	367	369	345	251	205	189	272	0.305
1988	2.87		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	3.08	35,802	171	160	185	214	269	302	319	321	266	245	255	232	245	0.275
1990	3.28	38,600	171	169	192	194	268	256	272	262	289	248	197	201	227	0.254
AVERAGE			220	222	251	302	367	396	448	428	400	335	258	222	317	0.355

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
/5 Missing data unavailable
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059298

COUNTY.. ORANGE
CITY....MISSION VIEJO, ET AL
SYSTEM #..... 30073
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 114

WATER AGENCY.....MOULTON NIGUEL WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 36,000
1990..... 109,250

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	34,817	Metered.....	3,045	Metered.....	104	Metered.....	1,855
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	14,515	14,515	163.0	129.0	170.0	303.0	315.0	469.0	567.0	530.0	489.0	425.0	351.0	264.0	4175.0
1981	14,975	14,975	254.0	201.0	269.0	427.0	465.0	703.0	703.0	681.0	572.0	376.0	406.0	304.0	5361.0
1982	18,354	18,354	199.0	230.0	279.0	348.0	407.0	513.0	685.0	696.0	560.0	478.0	324.0	233.0	4952.0
1983	19,300	19,300	242.0	147.0	142.0	234.0	390.0	540.0	624.0	807.0	668.0	419.0	315.0	255.0	4783.0
1984	19,321	19,321	308.0	381.0	451.0	477.0	612.0	629.0	746.0	731.0	685.0	553.0	343.0	235.0	6151.0
1985	20,786	20,786	259.0	250.0	376.0	492.0	643.0	714.0	827.0	805.0	664.0	574.0	355.0	333.0	6292.0
1986	23,989	23,989	397.0	244.0	328.0	476.0	691.0	741.0	881.0	934.0	766.0	523.0	500.0	389.0	6870.0
1987	26,938	26,938	416.0	395.0	426.0	709.0	799.0	896.0	913.0	960.0	954.0	679.0	451.0	445.0	8043.0
1988	30,719	30,719	436.0	532.0	684.0	611.0	924.0	991.0	1167.0	1212.0	1171.0	932.0	602.0	789.0	10051.0
1989	34,523	34,523	483.0	465.0	640.0	861.0	1095.0	1075.0	1243.0	1297.0	1105.0	900.0	866.0	798.0	10828.0
1990	37,445	37,445	520.0	458.0	657.0	706.0	987.0	992.0	1242.0	1234.0	1202.0	1110.0	846.0	746.0	10700.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.48	36,000	146	124	152	281	282	434	508	475	453	381	325	237	318	0.356
1981	2.52	37,796	217	190	230	377	397	620	600	581	504	321	358	259	389	0.435
1982	2.57	47,127	136	174	191	246	279	363	469	476	396	327	229	159	288	0.322
1983	2.61	50,400	155	104	91	155	250	357	399	517	442	268	208	163	260	0.291
1984	2.66	51,300	194	256	284	310	385	409	469	460	445	348	223	148	328	0.368
1985	2.70	56,099	149	159	216	292	370	424	476	463	395	330	211	191	307	0.344
1986	2.74	65,793	195	132	161	241	339	375	432	458	388	256	253	191	286	0.320
1987	2.79	75,060	179	188	183	315	343	398	392	413	424	292	200	191	294	0.329
1988	2.83	86,939	162	211	254	234	343	380	433	450	449	346	231	293	317	0.355
1989	2.87	99,215	157	167	208	289	356	361	404	422	371	293	291	259	299	0.335
1990	2.92	109,250	154	150	194	215	291	303	367	364	367	328	258	220	268	0.301
AVERAGE			167	169	197	269	330	402	450	462	421	317	253	210	305	0.341

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059299

COUNTY.. ORANGE
CITY....SAN CLEMENTE
SYSTEM #..... 30036
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 114

WATER AGENCY.....SAN CLEMENTE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 91
WELLS AND SPRINGS.. 9

SOURCE OF WATER (in percent):
PURCHASED..... 91
SELF SUPPLIED..... 9

CITY CENSUS POPULATION
1980..... 27,325
1990..... 41,100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	12,598	Metered.....	659	Metered.....	NA	Metered.....	514
Flat Rate.....	3	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	8,950	8,950	/5	-	-	-	-	-	170.0	159.0	148.0	138.0	110.0	114.0	-
1981	8,950	8,950	90.0	84.0	102.0	123.0	109.0	172.0	191.0	217.0	172.0	118.0	134.0	104.0	1616.0
1982	9,082	9,082	79.0	81.0	96.0	111.0	115.0	150.0	168.0	183.0	155.0	138.0	118.0	93.0	1487.0
1983	9,082	9,082	114.0	86.0	93.0	105.0	134.0	151.0	175.0	190.0	161.0	143.0	112.0	109.0	1573.0
1984	9,610	9,610	124.0	130.0	160.0	174.0	210.0	220.0	252.0	265.0	246.0	232.0	158.0	148.0	2319.0
1985	10,843	10,843	148.0	135.0	116.0	146.0	182.0	205.0	224.0	266.0	246.0	233.0	158.0	148.0	2207.0
1986	11,271	11,271	165.0	158.0	128.0	198.0	199.0	359.0	373.0	385.0	436.0	335.0	211.0	233.0	3180.0
1987	13,465	13,465	241.0	240.0	195.0	181.0	170.0	150.0	143.0	136.0	145.0	204.0	228.0	230.0	2263.0
1988															
1989	13,060	13,060	189.0	167.0	202.0	249.0	289.0	308.0	363.0	352.0	309.0	277.0	246.0	233.0	3184.0
1990	13,209	13,209	200.0	165.0	215.0	225.0	279.0	268.0	335.0	336.0	319.0	325.0	261.0	238.0	3166.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.05	27,325	-	-	-	-	-	-	201	188	181	163	134	135	-	-
1981	3.06	27,377	106	110	120	150	128	209	225	256	209	139	163	123	162	0.181
1982	3.06	27,834	92	104	111	133	133	180	195	212	186	160	141	108	146	0.164
1983	3.07	27,887	132	110	108	126	155	180	202	220	192	165	134	126	155	0.173
1984	3.08	29,565	135	152	175	196	229	248	275	289	277	253	178	161	215	0.241
1985	3.08	33,421	143	144	112	146	176	204	216	257	245	225	158	143	181	0.203
1986	3.09	34,806	153	162	119	190	184	344	346	357	418	310	202	216	250	0.280
1987	3.09	41,660	187	206	151	145	132	120	111	105	116	158	182	178	149	0.167
1988	3.10		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	3.11	40,560	150	147	161	205	230	253	289	280	254	220	202	185	215	0.241
1990	3.11	41,100	157	143	169	182	219	217	263	264	259	255	212	187	211	0.236
AVERAGE			139	142	136	164	176	217	232	243	234	205	171	156	187	0.210

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

COUNTY.. ORANGE
CITY....LAGUNA BEACH
SYSTEM #..... 30042
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 114

CITY CENSUS POPULATION
1980..... 11,000
1990..... 19,000

WATER AGENCY.....SOUTH COAST COUNTY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	6,025	Metered.....	350	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,760	3,760	54.0	46.0	58.0	86.0	83.0	103.0	120.0	126.0	107.0	92.0	91.0	67.0	1033.0
1981	4,654	4,654	67.0	57.0	66.0	88.0	104.0	151.0	184.0	173.0	121.0	88.0	83.0	62.0	1244.0
1982	4,696	4,696	52.0	53.0	62.0	83.0	98.0	99.0	144.0	122.0	98.0	104.0	69.0	60.0	1044.0
1983	4,750	4,750	74.0	50.0	45.0	72.0	103.0	110.0	138.6	132.4	137.8	89.4	63.9	66.6	1082.7
1984	4,785	4,785	82.5	89.8	109.2	112.6	133.9	132.3	163.0	159.0	148.7	120.1	80.7	61.3	1393.1
1985	4,922	4,922	72.5	76.2	95.7	99.4	111.4	114.1	119.1	150.5	101.6	151.1	98.3	76.7	1266.6
1986	5,159	5,159	77.0	53.0	75.0	90.0	119.0	123.0	135.0	138.0	122.0	121.0	104.0	76.0	1233.0
1987	5,697	5,697	79.0	71.0	88.0	114.0	113.0	131.0	140.0	138.0	128.0	142.0	72.0	82.0	1298.0
1988	5,863	5,863	/5	-	-	-	-	-	231.0	234.0	198.0	193.0	115.0	95.0	-
1989	6,334	6,334	73.0	77.0	130.0	183.0	217.0	211.0	140.0	136.0	124.0	133.0	110.0	112.0	1646.0
1990	6,377	6,377	84.5	84.4	102.8	99.3	117.0	80.3	178.8	145.6	133.8	121.9	98.2	104.9	1351.5

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.93	11,000	158	144	170	261	243	312	352	370	324	270	276	196	257	0.288
1981	2.93	13,641	158	149	156	215	246	369	435	409	296	208	203	147	250	0.280
1982	2.94	13,789	122	137	145	201	229	239	337	285	237	243	167	140	207	0.232
1983	2.94	13,973	171	128	104	172	238	262	320	306	329	206	152	154	212	0.238
1984	2.95	14,102	189	220	250	266	306	313	373	364	351	275	191	140	271	0.303
1985	2.95	14,532	161	187	212	228	247	262	264	334	233	335	225	170	239	0.267
1986	2.96	15,260	163	124	159	197	252	269	285	292	266	256	227	161	221	0.248
1987	2.96	16,882	151	150	168	225	216	259	268	264	253	271	142	157	211	0.236
1988	2.97	17,405	-	-	-	-	-	-	428	434	379	358	220	176	-	-
1989	2.97	18,838	125	146	223	324	372	373	240	233	219	228	195	192	239	0.268
1990	2.98	19,000	143	159	175	174	199	141	304	247	235	207	172	178	195	0.218
AVERAGE			154	154	176	226	255	280	328	322	284	260	197	165	230	0.258

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
/5 Missing data unavailable.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059301

COUNTY..SAN DIEGO
CITY....ESCONDIDO
SYSTEM #..... 37006
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 120

CITY CENSUS POPULATION
1980..... 62,480
1990..... 108,635

WATER AGENCY.....ESCONDIDO/RINCON DEL DIABLO MWD
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	18,520	Metered.....	1,708	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	19,580	10,899	209.0	116.0	234.0	500.0	477.0	927.0	966.0	952.0	733.0	626.0	502.0	293.0	6535.0
1981	18,709	11,587	364.0	253.0	354.0	487.0	649.0	767.0	670.0	649.0	453.0	349.0	238.0	157.0	5390.0
1982	19,524	12,129	195.0	202.0	373.0	529.0	604.0	708.0	964.0	977.0	591.0	563.0	201.0	133.0	6040.0
1983	22,963	18,456	379.0	238.0	268.0	310.0	595.0	781.0	828.0	749.0	660.0	456.0	207.0	139.0	5610.0
1984	21,632	19,623	399.0	545.0	636.0	629.0	838.0	799.0	867.0	853.0	879.0	505.0	247.0	162.0	7359.0
1985	22,304	20,322	359.0	361.0	449.0	660.0	765.0	902.0	971.0	958.0	665.0	605.0	294.0	211.0	7200.0
1986	24,395	23,121	453.0	233.0	327.0	515.0	738.0	798.0	774.0	816.0	423.0	333.0	420.0	305.0	6135.0
1987	24,779	23,986	329.0	358.0	429.0	796.0	838.0	960.0	900.0	961.0	790.0	539.0	327.0	298.0	7525.0
1988	20,278	19,982	457.0	571.0	750.0	673.0	857.0	985.0	1072.0	1048.0	867.0	776.0	554.0	491.0	9101.0
1989	27,160	25,844	493.0	440.0	683.0	839.0	993.0	1027.0	1185.0	1113.0	1021.0	828.0	838.0	783.0	10243.0
1990	20,324	19,774	352.0	305.0	529.0	506.0	697.0	660.0	815.0	803.0	765.0	682.0	534.0	433.0	7081.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	5.73	112,245	60	36	67	148	137	275	278	274	218	180	149	84	160	0.179
1981	5.71	106,805	110	85	107	152	196	239	202	196	141	105	74	47	138	0.155
1982	5.68	110,991	57	65	108	159	176	213	280	284	177	164	60	39	149	0.167
1983	5.66	129,993	94	65	67	79	148	200	205	186	169	113	53	34	118	0.132
1984	5.64	121,942	106	154	168	172	222	218	229	226	240	134	68	43	165	0.185
1985	5.61	125,198	92	103	116	176	197	240	250	247	177	156	78	54	158	0.176
1986	5.59	136,352	107	61	77	126	175	195	183	193	103	79	103	72	123	0.138
1987	5.57	137,907	77	93	100	192	196	232	211	225	191	126	79	70	149	0.167
1988	5.54	112,372	131	175	215	200	246	292	308	301	257	223	164	141	222	0.249
1989	5.52	149,861	106	105	147	187	214	228	255	240	227	178	186	169	187	0.210
1990	5.49	111,657	102	98	153	151	201	197	235	232	228	197	159	125	174	0.195
AVERAGE			95	94	121	158	192	230	240	237	194	150	107	80	159	0.178

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059302

COUNTY..SAN DIEGO
CITY....EL CAJON, ET AL /5
SYSTEM #..... 37010
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 120

WATER AGENCY.....HELIX WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 99
WELLS AND SPRINGS.. 1

SOURCE OF WATER (in percent):
PURCHASED..... 98
SELF SUPPLIED..... 2

CITY CENSUS POPULATION
1980..... 204,263
1990..... 227,293

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	49,445	Metered.....	3,511	Metered.....	NA	Metered.....	391
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	49,255	49,255	700.0	601.0	699.0	910.0	871.0	1371.0	1587.0	1537.5	1291.8	1215.5	1066.6	907.0	12757.4
1981	49,673	49,673	833.0	709.0	722.0	917.0	1217.6	1555.3	1641.0	1597.0	1380.0	1097.0	967.0	845.0	13480.9
1982	49,834	49,834	690.0	645.0	749.0	911.0	1097.0	1181.0	1503.0	1541.0	1231.0	1173.0	805.0	697.0	12223.0
1983	50,033	50,033	728.0	612.0	638.0	730.0	1077.0	1198.0	1502.0	1387.0	1332.0	1070.0	818.0	673.0	11765.0
1984	50,368	50,368	705.0	878.0	1100.0	1105.0	1434.0	1382.0	1499.0	1411.0	1456.0	1105.0	825.0	702.0	13602.0
1985	50,549	50,549	705.0	716.0	897.0	1077.0	1300.0	1529.0	1729.0	1644.0	1304.0	1141.0	851.0	759.0	13652.0
1986	51,335	51,335	911.0	676.0	816.0	1029.0	1386.0	1458.0	1584.0	1681.0	1333.0	1023.0	983.0	847.0	13727.0
1987	52,100	52,100	792.0	799.0	808.0	1150.0	1325.0	1452.0	1553.0	1535.0	1284.0	1058.0	798.0	812.0	13366.0
1988	52,764	52,764	792.0	876.0	1129.0	1059.0	1304.0	1420.0	1563.0	1541.0	1428.0	1263.0	932.0	878.0	14185.0
1989	53,228	53,228	829.0	772.0	1046.0	1317.0	1361.0	1458.0	1639.0	1618.0	1393.0	1211.0	1129.0	1091.0	14864.0
1990	53,347	53,347	851.0	748.0	1006.0	1012.0	1274.0	1239.0	1487.0	1442.0	1363.0	1137.0	1024.0	931.0	13514.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.15	204,263	111	101	110	149	138	224	251	243	211	192	174	143	171	0.192
1981	4.16	206,561	130	123	113	148	190	251	256	249	223	171	156	132	179	0.200
1982	4.17	207,796	107	111	116	146	170	189	233	239	197	182	129	108	161	0.180
1983	4.18	209,195	112	104	98	116	166	191	232	214	212	165	130	104	154	0.173
1984	4.19	211,167	108	143	168	174	219	218	229	216	230	169	130	107	176	0.198
1985	4.20	212,500	107	120	136	169	197	240	262	250	205	173	133	115	176	0.197
1986	4.22	216,388	136	112	122	159	207	225	236	251	205	153	151	126	174	0.195
1987	4.23	220,204	116	130	118	174	194	220	228	225	194	155	121	119	166	0.186
1988	4.24	223,610	114	135	163	158	188	212	225	222	213	182	139	127	174	0.195
1989	4.25	226,181	118	122	149	194	194	215	234	231	205	173	166	156	180	0.202
1990	4.26	227,293	121	118	143	148	181	182	211	205	200	161	150	132	163	0.182
AVERAGE			116	120	131	158	186	215	236	231	209	171	144	124	170	0.191

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Agency serves: El Cajon,La Mesa, Lemon Grove, Spring Valley & Lakeside.

COUNTY..SAN DIEGO
CITY....LAKESIDE
SYSTEM #..... 37013
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 120

WATER AGENCY.....LAKESIDE WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 13,000
1990..... 22,000

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4,352	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	NA	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,100	3,100	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3,600	3,600	-	-	-	-	-	-	110.0	99.0	113.0	82.0	84.0	54.0	-
1984	3,600	3,600	43.0	43.0	70.0	69.0	99.0	96.0	133.0	119.0	125.0	89.0	58.0	44.0	988.0
1985	3,800	3,800	47.0	48.0	63.0	83.0	111.0	133.0	150.0	113.0	155.0	89.0	96.0	51.0	1139.0
1986	4,044	4,044	58.0	46.0	52.0	42.0	86.0	90.0	240.0	127.0	165.0	79.0	87.0	55.0	1127.0
1987	4,200	4,200	55.0	63.0	88.0	68.0	84.0	126.0	138.0	137.0	116.0	88.0	55.0	56.0	1074.0
1988	4,082	4,082	-	-	-	-	-	-	146.0	140.0	126.0	110.0	83.0	78.0	-
1989	4,082	4,082	62.0	51.0	80.0	98.0	101.0	134.0	152.0	150.0	122.0	101.0	94.0	87.0	1232.0
1990	4,168	4,168	65.0	56.0	81.0	79.0	108.0	101.0	114.0	119.0	99.0	91.0	82.0	55.0	1050.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.19	13,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	4.30		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	4.41		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	4.52	16,268	-	-	-	-	-	-	218	196	232	163	172	107	-	-
1984	4.63	16,659	83	89	136	138	192	192	258	230	250	172	116	85	162	0.182
1985	4.74	17,997	84	95	113	154	199	246	269	203	287	160	178	91	173	0.194
1986	4.84	19,591	96	84	86	71	142	153	395	209	281	130	148	91	158	0.177
1987	4.95	20,802	85	108	136	109	130	202	214	212	186	136	88	87	141	0.158
1988	5.06	20,660	-	-	-	-	-	-	228	219	203	172	134	122	-	-
1989	5.17	21,103	95	86	122	155	154	212	232	229	193	154	148	133	160	0.179
1990	5.28	22,000	95	91	119	120	158	153	167	174	150	133	124	81	131	0.146
AVERAGE			90	92	119	124	163	193	248	209	223	153	139	100	154	0.173

1/ Service connections unavailable except for residential
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C—0 5 9 3 0 4

C-059304

COUNTY..SAN DIEGO
CITY....OCEANSIDE
SYSTEM #..... 37014
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 120

CITY CENSUS POPULATION
1980..... 76,698
1990..... 128,398

WATER AGENCY.....OCEANSIDE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	32,252	Metered.....	1,245	Metered.....	NA	Metered.....	176
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	19,801	19,025	319.0	272.0	307.0	454.0	520.0	728.0	861.0	887.0	764.0	670.0	659.0	467.0	6908.0
1981	20,317	20,043	434.0	345.0	325.0	529.0	671.0	816.0	832.0	876.0	803.0	675.0	605.0	408.0	7319.0
1982	21,275	21,275	321.0	353.0	380.0	537.0	705.0	734.0	892.0	879.0	671.0	750.0	454.0	356.0	7032.0
1983	20,355	20,355	286.0	271.0	286.0	307.0	472.0	518.0	620.0	628.0	593.0	433.0	338.0	325.0	5077.0
1984	22,939	22,939	385.0	407.0	545.0	486.0	637.0	636.0	741.0	712.0	739.0	573.0	392.0	281.0	6534.0
1985	23,090	23,090	362.0	345.0	433.0	554.0	676.0	716.0	769.0	758.0	601.0	598.0	394.0	347.0	6553.0
1986	25,424	25,424	436.0	309.0	389.0	544.0	711.0	676.0	755.0	782.0	615.0	546.0	491.0	405.0	6659.0
1987	28,391	28,391	418.0	402.0	461.0	612.0	710.0	668.0	748.0	778.0	707.0	541.0	437.0	425.0	6907.0
1988	30,000	30,000	430.0	524.0	695.0	577.0	796.0	848.0	873.0	856.0	799.0	689.0	528.0	447.0	8062.0
1989	28,939	28,939	432.0	392.0	563.0	705.0	742.0	816.0	931.0	905.0	776.0	715.0	665.0	635.0	8277.0
1990	35,380	35,380	493.0	426.0	569.0	582.0	770.0	759.0	941.0	901.0	859.0	775.0	672.0	595.0	8342.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.03	79,826	129	117	124	190	210	304	348	358	319	271	275	189	237	0.266
1981	3.99	81,089	173	152	129	217	267	335	331	348	330	269	249	162	247	0.277
1982	3.95	84,057	123	150	146	213	271	291	342	337	266	288	180	137	229	0.257
1983	3.91	79,603	116	122	116	129	191	217	251	254	248	175	142	132	175	0.196
1984	3.87	88,786	140	158	198	182	231	239	269	259	277	208	147	102	202	0.226
1985	3.83	88,441	132	139	158	209	247	270	280	276	227	218	148	127	203	0.227
1986	3.79	96,358	146	115	130	188	238	234	253	262	213	183	170	136	189	0.212
1987	3.75	106,461	127	135	140	192	215	209	227	236	221	164	137	129	178	0.199
1988	3.71	111,287	125	162	201	173	231	254	253	248	239	200	158	130	198	0.222
1989	3.67	106,187	131	132	171	221	225	256	283	275	244	217	209	193	214	0.239
1990	3.63	128,398	124	118	143	151	193	197	236	226	223	195	174	149	178	0.199
AVERAGE			133	136	151	188	229	255	279	280	255	217	181	144	205	0.229

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C-059305

C-059305

COUNTY..SAN DIEGO
CITY.... RAMONA
SYSTEM #..... 37019
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 120

WATER AGENCY.....RAMONA MUNICIPAL WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. NA

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 15,000
1990..... 31,000

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	6,937	Metered.....	354	Metered.....	NA	Metered.....	52
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,000	5,000	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983	5,431	5,431	-	-	-	-	-	-	460.0	401.0	447.0	294.0	163.0	77.0	-
1984	5,431	5,431	135.0	218.0	291.0	264.0	409.0	383.0	448.0	405.0	458.0	349.0	166.0	60.0	3586.0
1985	5,220	5,220	92.0	86.0	141.0	209.0	307.0	394.0	495.0	472.0	364.0	319.0	213.0	104.0	3196.0
1986	6,103	6,103	202.0	78.0	158.0	231.0	364.0	403.0	468.0	509.0	363.0	271.0	244.0	141.0	3432.0
1987	6,512	6,500	154.0	140.0	69.0	263.0	302.0	383.0	401.0	443.0	403.0	257.0	126.0	114.0	3055.0
1988	7,866	7,848	-	-	-	-	-	-	449.0	438.0	434.0	394.0	196.0	195.0	-
1989	7,866	7,848	158.0	138.0	255.0	318.0	296.0	293.0	522.0	442.0	411.0	257.0	345.0	362.0	3797.0
1990	7,361	7,361	169.0	141.0	240.0	231.0	340.0	364.0	-	-	-	-	-	-	-

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.00	15,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.12		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3.24		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3.36	18,267	-	-	-	-	-	-	812	708	816	519	297	136	-	-
1984	3.48	18,925	230	397	496	465	697	675	764	690	807	595	292	102	519	0.581
1985	3.61	18,822	158	163	242	370	526	698	848	809	645	547	377	178	465	0.521
1986	3.73	22,745	286	122	224	339	516	591	664	722	532	384	358	200	413	0.463
1987	3.85	25,058	198	200	89	350	389	509	516	570	536	331	168	147	334	0.374
1988	3.97	31,221	-	-	-	-	-	-	464	453	463	407	209	201	-	-
1989	4.09	32,174	158	153	256	329	297	304	523	443	426	258	357	363	323	0.362
1990	4.21	31,000	176	162	250	248	354	391	-	-	-	-	-	-	-	-
AVERAGE			201	200	259	350	463	528	656	628	603	434	294	190	411	0.460

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C—0 5 9 3 0 6

C-059306

COUNTY..SAN DIEGO
CITY....SAN DIEGO
SYSTEM #..... 37020
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #..... SAN DIEGO
DAU # 120

CITY CENSUS POPULATION
1980..... 875,504
1990..... 1100549

WATER AGENCY.....SAN DIEGO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:
Metered..... 215,526
Flat Rate..... 0

COMMERCIAL:
Metered.....16,773
Flat Rate... 0

INDUSTRIAL:
Metered..... 615
Flat Rate... 0

GOVERNMENTAL:
Metered..... NA
Flat Rate... 0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	200,667	200,559	3517.5	3163.0	3498.0	4161.0	4172.0	5681.0	4519.0	5880.0	6120.8	5323.0	4822.0	4104.0	54961.3
1981	200,998	200,875	4579.0	3750.0	3869.0	4805.0	5851.0	6840.0	7312.0	7395.0	6654.0	5799.0	5176.0	4460.0	66490.0
1982	201,766	201,695	3248.0	5511.0	6755.0	5364.0	5724.0	4588.0	3443.0	4131.0	3006.0	3693.0	1748.0	4238.0	51449.0
1983	202,445	202,386	4883.0	4039.0	4332.0	5414.0	6997.0	7364.0	8601.0	8432.0	8010.0	6630.0	5144.0	4292.9	74138.9
1984	214,433	214,365	4164.0	4492.0	5756.0	5585.0	6615.0	6556.6	7381.7	7353.0	6984.8	6057.0	4656.0	3958.0	69559.1
1985	213,002	212,429	4319.0	4126.0	5047.0	5732.0	6725.0	7128.0	7953.0	7899.0	6697.0	6297.0	4916.0	4389.0	71228.0
1986	222,703	222,636	5197.0	4126.0	4638.0	5524.0	7042.0	3966.0	7736.0	8068.0	6710.5	5865.0	5571.0	4991.0	69434.5
1987	227,217	227,147	4940.0	4681.0	5030.0	6142.0	6876.0	7178.0	7667.0	7679.0	6978.0	5891.0	4879.0	4698.0	72639.0
1988	231,043	230,973	4901.0	5081.0	6151.0	5911.0	6971.0	7326.0	8005.0	7936.0	7428.0	6790.0	5411.0	5118.0	77029.0
1989	238,716	238,646	5063.0	4675.0	6019.0	6770.0	7145.0	7164.0	8089.0	8191.0	7318.0	6629.0	6308.0	6098.0	79469.0
1990	235,810	235,741	5119.0	4540.0	5821.0	5469.0	6764.0	6476.0	7582.0	7423.0	7038.0	6673.0	5753.0	5269.0	73927.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.37	875,975	130	125	129	158	154	216	166	217	233	196	183	151	172	0.193
1981	4.40	883,514	167	152	141	181	214	258	267	270	251	212	195	163	206	0.231
1982	4.43	893,006	117	220	244	200	207	171	124	149	112	133	65	153	158	0.177
1983	4.46	902,148	175	160	155	200	250	272	308	302	296	237	190	154	225	0.252
1984	4.49	962,070	140	161	193	194	222	227	248	247	242	203	161	133	198	0.222
1985	4.52	962,107	145	153	169	199	225	247	267	265	232	211	170	147	203	0.227
1986	4.55	1,012,677	166	146	148	182	224	131	246	257	221	187	183	159	188	0.210
1987	4.58	1,040,091	153	161	156	197	213	230	238	238	224	183	156	146	191	0.214
1988	4.61	1,064,609	149	165	186	185	211	229	243	240	233	206	169	155	198	0.222
1989	4.64	1,107,201	148	151	175	204	208	216	236	239	220	193	190	178	197	0.220
1990	4.67	1,100,871	150	147	171	166	198	196	222	218	213	196	174	154	184	0.206
AVERAGE			149	158	170	188	212	218	233	240	225	196	167	154	193	0.216

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059307

COUNTY..SAN DIEGO
CITY....ENCINITAS
SYSTEM #..... 37021
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 120

WATER AGENCY.....SAN DIEGUITO WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:

ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):

SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):

PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 30,000
1990..... 35,200

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	9,140	Metered.....	456	Metered.....	0	Metered.....	12
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	8,762	8,762	/5	-	-	-	-	-	291.0	310.0	246.0	219.0	195.0	166.0	-
1981	8,762	8,762	155.0	140.0	171.0	207.0	242.0	284.0	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983	8,955	8,955	-	-	-	-	-	-	273.0	261.0	245.0	198.0	152.0	128.0	-
1984	8,955	8,955	132.0	166.0	214.0	210.0	257.0	251.0	289.0	270.0	254.0	223.0	146.0	137.0	2549.0
1985	9,026	9,026	130.0	141.0	197.0	234.0	286.0	304.0	288.0	270.0	253.0	223.0	146.0	137.0	2609.0
1986	9,345	9,345	166.0	123.0	158.0	211.0	266.0	257.0	297.0	303.0	249.0	213.0	193.0	170.0	2606.0
1987	9,556	9,556	182.0	164.0	179.0	245.0	250.0	261.0	275.0	284.0	246.0	203.0	167.0	157.0	2613.0
1988			-	-	-	-	-	-	-	-	-	-	-	-	-
1989	9,906	9,906	-	-	-	-	-	-	299.0	319.0	251.0	237.0	225.0	222.0	-
1990	10,002	10,002	162.0	145.0	213.0	211.0	261.0	239.0	297.0	268.0	258.0	238.0	188.0	241.0	2721.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.42	30,000	-	-	-	-	-	-	313	333	273	235	217	178	-	-
1981	3.43	30,084	166	166	183	229	259	315	-	-	-	-	-	-	-	-
1982	3.44		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3.45	30,917	-	-	-	-	-	-	285	272	264	207	164	134	-	-
1984	3.46	31,003	137	185	223	226	267	270	301	281	273	232	157	143	225	0.252
1985	3.47	31,335	134	161	203	249	294	323	296	278	269	230	155	141	228	0.255
1986	3.48	32,531	165	135	157	216	264	263	295	300	255	211	198	169	219	0.246
1987	3.49	33,357	176	176	173	245	242	261	266	275	246	196	167	152	215	0.240
1988	3.50		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	3.51	34,768	-	-	-	-	-	-	277	296	241	220	216	206	-	-
1990	3.52	35,200	148	147	195	200	239	226	272	246	244	218	178	221	212	0.237
AVERAGE			154	162	189	227	261	276	288	285	258	219	181	168	220	0.246

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C—0 5 9 3 0 8

C-059308

COUNTY..SAN DIEGO
CITY....RANCHO SANTA FE
SYSTEM #..... 37023
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 120

CITY CENSUS POPULATION
1980..... 14,970 /5
1990..... 19,625 /5

WATER AGENCY.....SANTA FE IRRIGATION DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY..... X
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... NA
WELLS AND SPRINGS.. NA

SOURCE OF WATER (in percent):
PURCHASED..... 70
SELF SUPPLIED..... 30

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5,772	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	NA	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,000	5,000	/6	-	-	-	-	-	-	-	-	-	-	-	-
1981	5,216	5,216	154.0	104.0	299.0	227.0	285.0	378.0	418.0	407.0	335.0	280.0	216.0	125.0	3228.0
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984	5,527	5,527	147.0	218.0	310.0	293.0	407.0	412.0	463.0	443.0	398.0	330.0	170.0	100.0	3691.0
1985	5,648	5,648	142.0	144.0	207.0	270.0	357.0	390.0	462.0	481.0	390.0	351.0	186.0	130.0	3510.0
1986	5,752	5,752	205.0	100.0	138.0	251.0	390.0	402.0	460.0	477.0	358.0	280.0	243.0	171.0	3475.0
1987	5,869	5,869	178.0	186.0	188.0	351.0	406.0	451.0	498.0	524.0	468.0	289.0	179.0	160.0	3878.0
1988	5,947	5,939	166.0	223.0	315.0	292.0	428.0	470.0	508.0	492.0	448.0	386.0	217.0	194.0	4139.0
1989	6,016	6,008	188.0	173.0	301.0	389.0	428.0	433.0	517.0	546.0	434.0	364.0	320.0	322.0	4415.0
1990	6,020	6,020	184.0	160.0	247.0	222.0	398.0	390.0	506.0	480.0	436.0	417.0	318.0	280.0	4038.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.99	14,970	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.02	15,755	315	236	612	480	584	800	856	833	709	573	457	256	561	0.629
1982	3.05		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3.07		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	3.10	17,136	277	439	584	570	766	801	872	834	774	621	331	188	590	0.661
1985	3.13	17,661	259	291	378	510	652	736	844	879	736	641	351	237	544	0.610
1986	3.15	18,139	365	197	245	461	694	739	818	848	658	498	447	304	525	0.588
1987	3.18	18,664	308	356	325	627	702	805	861	906	836	499	320	277	569	0.638
1988	3.21	19,071	281	403	533	510	724	822	859	832	783	653	379	328	595	0.666
1989	3.23	19,452	312	318	499	667	710	742	857	905	744	604	548	534	622	0.696
1990	3.26	19,625	302	291	406	377	654	662	832	789	741	685	540	460	564	0.631
AVERAGE			302	316	448	525	686	763	850	853	748	597	422	323	571	0.640

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
/5 Serves a portion of the City of Solana Beach including Rancho Santa Fe.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
6/ Missing data is unavailable

C—059309

C-059309

COUNTY..SAN DIEGO
CITY....NATIONAL CITY, ET AL
SYSTEM #..... 37025
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 120

CITY CENSUS POPULATION
1980..... 120,000
1990..... 161,000

WATER AGENCY.....SWEETWATER AUTHORITY
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 91
WELLS AND SPRINGS.. 9

SOURCE OF WATER (in percent):
PURCHASED..... 91
SELF SUPPLIED..... 9

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	29,088	Metered.....	2,746	Metered.....	65	Metered.....	353
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	23,000	23,000	478.0	405.0	429.0	517.0	548.0	734.0	799.0	774.0	701.0	657.0	621.0	554.0	7217.0
1981	25,732	23,251	563.0	507.0	457.0	484.0	584.0	598.0	808.0	815.0	767.0	699.0	686.0	575.0	7543.0
1982	28,464	23,502	551.0	422.0	488.0	432.0	556.0	640.0	713.0	839.0	665.0	735.0	647.0	639.0	7327.0
1983	31,196	23,953	486.0	457.0	414.0	497.0	534.0	572.0	863.0	832.0	768.0	679.0	565.0	500.0	7167.0
1984	31,143	23,521	535.0	591.0	700.0	684.0	810.0	813.0	890.0	860.0	827.0	733.0	589.0	511.0	8543.0
1985	32,222	23,331	531.0	512.0	622.0	724.0	821.0	883.0	960.0	960.0	825.0	788.0	595.0	568.0	8789.0
1986	32,957	29,226	598.0	484.0	569.0	695.0	860.0	846.0	943.0	1011.0	786.0	695.0	644.0	580.0	8711.0
1987	33,559	29,202	571.0	532.0	545.0	660.0	756.0	774.0	862.0	878.0	775.0	682.0	551.0	553.0	8139.0
1988	34,239	29,973	563.0	561.0	670.0	640.0	770.0	806.0	867.0	861.0	814.0	740.0	610.0	589.0	8491.0
1989	35,232	30,503	532.0	517.0	660.0	747.0	787.0	796.0	911.0	916.0	805.0	715.0	679.0	659.0	8724.0
1990	32,263	23,205	542.0	494.0	614.0	621.0	733.0	742.0	813.0	809.0	761.0	719.0	621.0	576.0	8045.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	5.22	120,000	128	116	115	144	147	204	215	208	195	177	173	149	165	0.185
1981	5.39	138,682	131	131	106	116	136	144	188	190	184	163	165	134	149	0.167
1982	5.56	158,304	112	95	99	91	113	135	145	171	140	150	136	130	127	0.142
1983	5.73	178,866	88	91	75	93	96	107	156	150	143	122	105	90	110	0.123
1984	5.91	183,921	94	111	123	124	142	147	156	151	150	129	107	90	127	0.143
1985	6.08	195,838	87	93	102	123	135	150	158	158	140	130	101	94	123	0.138
1986	6.25	205,976	94	84	89	112	135	137	148	158	127	109	104	91	116	0.130
1987	6.42	215,514	85	88	82	102	113	120	129	131	120	102	85	83	103	0.116
1988	6.59	225,772	80	86	96	94	110	119	124	123	120	106	90	84	103	0.115
1989	6.77	238,383	72	77	89	104	106	111	123	124	113	97	95	89	100	0.112
1990	6.94	223,846	78	79	88	92	106	110	117	117	113	104	92	83	98	0.110
AVERAGE			95	96	97	109	122	135	151	153	141	126	114	101	120	0.135

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059310

COUNTY..SAN DIEGO
CITY....CHULA VISTA & VIC.
SYSTEM #..... 37034
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 120

CITY CENSUS POPULATION
1980..... 83,927
1990..... 135,163

WATER AGENCY.....SWEETWATER AUTHORITY/OTAY MWD
TYPE OF AGENCY.....PUBLIC WATER DISTRICTS

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 96
WELLS AND SPRINGS.. 4

SOURCE OF WATER (in percent):
PURCHASED..... 87
SELF SUPPLIED..... 13

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	55,993	Metered.....	4,101	Metered.....	139	Metered.....	352
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	46,068	46,068	664.0	589.0	607.0	626.0	751.0	910.0	1058.0	1158.0	1121.0	970.0	914.0	736.0	10104.0
1981	46,269	46,269	521.0	474.0	476.0	536.0	672.0	784.0	803.0	789.0	722.0	658.0	589.0	532.0	7556.0
1982	46,531	46,531	657.0	641.0	721.0	855.0	1061.0	1093.0	1326.0	1400.0	1133.0	1185.0	825.0	687.0	11584.0
1983	46,806	46,806	454.0	408.0	466.0	417.0	528.0	615.0	856.0	830.0	757.0	677.0	552.0	498.0	7058.0
1984	48,750	48,750	533.0	590.0	696.0	680.0	807.0	806.0	887.0	860.0	825.0	732.0	587.0	510.0	8513.0
1985	49,833	49,833	530.0	512.0	660.0	747.0	815.0	882.0	952.0	961.0	824.0	785.0	601.0	567.0	8836.0
1986	53,529	53,529	884.0	685.0	828.0	1063.0	1349.0	1391.0	1525.0	1613.0	1263.0	1054.0	981.0	888.0	13524.0
1987	55,744	55,744	870.0	818.0	847.0	1089.0	1249.0	1319.0	1452.0	1486.0	1293.0	1089.0	850.0	847.0	13209.0
1988	55,083	55,803	864.0	902.0	1131.0	1062.0	1322.0	1422.0	1575.0	1522.0	1469.0	1313.0	962.0	908.0	14452.0
1989	62,674	62,674	877.0	840.0	1139.0	1332.0	1381.0	1495.0	1703.0	1751.0	1484.0	1305.0	1188.0	1228.0	15723.0
1990	60,763	60,763	908.0	870.0	1235.0	1303.0	1463.0	1480.0	1721.0	1722.0	1588.0	1377.0	1243.0	1076.0	15986.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	1.82	83,927	255	242	233	249	289	361	407	445	445	373	363	283	330	0.369
1981	1.86	86,156	195	196	178	207	252	303	301	295	279	246	228	199	240	0.269
1982	1.90	88,517	239	259	263	322	387	412	483	510	427	432	311	250	359	0.402
1983	1.94	90,925	161	160	165	153	187	225	304	294	278	240	202	177	213	0.238
1984	1.98	96,664	178	210	232	234	269	278	296	287	284	244	202	170	241	0.270
1985	2.02	100,818	170	181	211	247	261	292	305	307	272	251	199	181	240	0.269
1986	2.06	110,451	258	221	242	321	394	420	445	471	381	308	296	259	335	0.376
1987	2.10	117,265	239	249	233	310	344	375	399	409	368	300	242	233	309	0.346
1988	2.14	118,093	236	263	309	300	361	401	430	416	415	359	272	248	335	0.376
1989	2.18	136,890	207	219	268	324	325	364	401	413	361	308	289	289	315	0.352
1990	2.22	135,163	217	230	295	321	349	365	411	411	392	329	307	257	324	0.363
AVERAGE			214	221	239	272	311	345	380	387	355	308	265	232	295	0.330

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 3 1 1

C-059311

COUNTY..SAN DIEGO
CITY....SAN MARCOS
SYSTEM #..... 37002
HYDROLOGIC REGION..... SOUTH COAST
PLANNING SUBAREA #.....SAN DIEGO
DAU # 120

WATER AGENCY.....VALLICITOS COUNTY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 30,000
1990..... 40,000

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	9,872	Metered.....	1,250	Metered.....	510	Metered.....	94
Flat Rate.....	1	Flat Rate...	1	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	6,000	6,000	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983	6,950	4,250	-	-	-	-	-	-	383.0	337.0	354.0	220.0	176.0	104.0	-
1984	6,950	4,250	151.0	176.0	291.0	281.0	349.0	326.0	401.0	378.0	386.0	323.0	203.0	125.0	3390.0
1985	7,229	4,480	144.0	148.0	201.0	256.0	338.0	399.0	454.0	434.0	352.0	348.0	203.0	159.0	3436.0
1986	7,761	4,961	241.0	136.0	178.0	272.0	391.0	397.0	452.0	474.0	330.0	270.0	260.0	182.0	3583.0
1987	8,700	5,850	193.0	212.0	175.0	325.0	364.0	397.0	419.0	415.0	390.0	262.0	175.0	169.0	3496.0
1988	9,069	6,120	177.0	253.0	336.0	302.0	394.0	415.0	464.0	456.0	438.0	388.0	266.0	248.0	4137.0
1989	9,340	6,340	231.0	224.0	287.0	344.0	378.0	428.0	486.0	474.0	481.0	376.0	376.0	350.0	4435.0
1990	10,360	7,360	230.0	202.0	326.0	291.0	397.0	394.0	503.0	483.0	474.0	445.0	316.0	296.0	4357.0

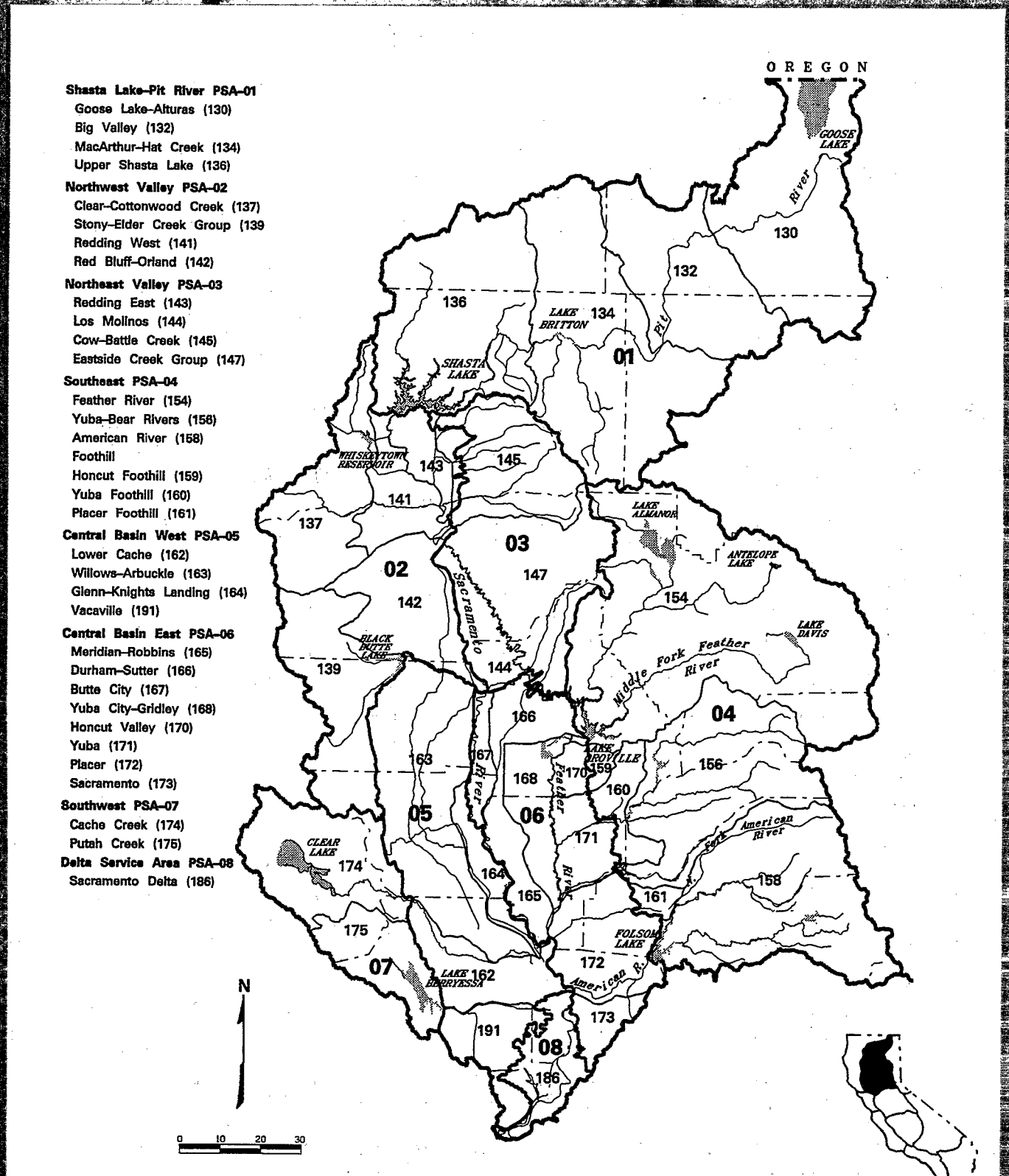
YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	5.00	30,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	5.04		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	5.09		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	5.13	35,657	-	-	-	-	-	-	346	305	331	199	165	94	-	-
1984	5.17	35,959	135	169	261	260	313	302	360	339	358	290	188	112	258	0.289
1985	5.22	37,717	123	140	172	226	289	353	388	371	311	298	179	136	250	0.280
1986	5.26	40,830	190	119	141	222	309	324	357	374	269	213	212	144	240	0.269
1987	5.30	46,148	135	164	122	235	254	287	293	290	282	183	126	118	208	0.232
1988	5.35	48,499	118	180	223	208	262	285	309	303	301	258	183	165	234	0.262
1989	5.39	50,355	148	159	184	228	242	283	311	304	318	241	249	224	241	0.270
1990	5.43	56,304	132	128	187	172	227	233	288	277	281	255	187	170	212	0.237
AVERAGE			140	151	184	222	271	295	332	320	306	242	186	145	235	0.263

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

C-059312

C-059312

Figure A-7. Sacramento River Region



PLANNING SUBAREAS
AND DETAILED ANALYSIS UNITS

C—059313

C-059313

Table A-7. Sacramento River Region Water Production and Per Capita Water Use

COUNTY.. MODOC
CITY.... ALTURAS
SYSTEM #..... 25001
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SHASTA LAKE-PIT RIVER
DAU # 130

WATER AGENCY.....ALTURAS, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 3,025
1990..... 3,231

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,427	Metered.....	204	Metered.....	NA	Metered.....	15
Flat Rate.....	37	Flat Rate...	0	Flat Rate...	0	Flat Rate...	1

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,256	1,211	17.0	12.0	18.0	22.0	28.0	45.0	63.0	65.0	22.0	29.0	25.0	17.0	363.0
1981	1,293	1,243	14.0	14.0	14.0	29.0	33.0	42.0	64.0	52.0	58.0	37.0	10.0	11.0	378.0
1982	1,271	1,222	19.0	15.0	16.0	28.0	40.0	27.0	53.0	73.0	42.0	20.0	22.0	13.0	368.0
1983	1,550	1,504	22.0	18.0	16.0	17.0	25.0	42.0	57.0	59.0	38.0	23.0	14.0	25.0	356.0
1984	1,569	1,523	12.0	17.0	16.0	17.0	24.0	69.0	58.0	58.0	36.0	24.0	15.0	24.0	370.0
1985	1,586	1,540	13.0	18.0	16.0	19.0	26.0	67.0	81.0	64.0	40.0	36.0	19.0	32.0	431.0
1986	1,537	1,491	17.0	23.0	14.0	17.0	23.0	68.0	70.0	67.0	53.0	18.0	17.0	16.0	403.0
1987	1,533	1,495	15.0	19.0	14.0	20.0	38.0	46.0	54.0	62.0	54.0	30.0	16.0	16.0	384.0
1988	1,531	1,493	17.0	18.0	17.0	20.0	21.0	47.0	62.0	70.0	52.0	26.0	19.0	16.0	385.0
1989	1,531	1,493	18.0	22.0	19.0	22.0	32.0	57.0	79.0	42.0	41.0	21.0	16.0	17.0	386.0
1990	1,684	1,646	18.0	17.0	16.0	24.0	37.0	33.0	56.0	58.0	40.0	28.0	16.0	17.0	360.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.50	3,137	175	132	185	234	288	478	648	668	234	298	266	175	317	0.355
1981	2.44	3,161	143	158	143	306	337	443	653	531	612	378	105	112	328	0.367
1982	2.39	3,039	202	176	170	307	425	296	563	775	461	212	241	138	332	0.372
1983	2.34	3,623	196	177	142	156	223	386	508	525	350	205	129	223	269	0.302
1984	2.28	3,583	108	164	144	158	216	642	522	522	335	216	140	216	283	0.317
1985	2.23	3,537	119	182	146	179	237	631	739	584	377	328	179	292	334	0.374
1986	2.18	3,346	164	245	135	169	222	677	675	646	528	174	169	154	330	0.370
1987	2.12	3,255	149	208	139	205	377	471	535	614	553	297	164	159	323	0.362
1988	2.07	3,169	173	196	173	210	214	494	631	713	547	265	200	163	333	0.373
1989	2.02	3,087	188	255	199	238	334	615	825	439	443	219	173	178	343	0.384
1990	1.96	3,306	176	184	156	242	361	333	546	566	403	273	161	166	298	0.334
AVERAGE			163	189	157	219	294	497	622	598	440	260	175	180	317	0.355

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 3 1 4

C-059314

COUNTY.. SHASTA
CITY.... BURNEY
SYSTEM #..... 45003
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SHASTA LAKE - PIT RIVER
DAU # 134

WATER AGENCY.....BURNEY COUNTY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

ESTIMATED POPULATION
1980..... 3,710
1990..... 4,410

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,604	Metered.....	151	Metered.....	2	Metered.....	NA
Flat Rate.....	2	Flat Rate...	0	Flat Rate...	2	Flat Rate...	1

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,481	1,481	14.7	13.1	14.8	16.2	25.8	31.1	48.8	47.4	29.4	20.9	15.9	14.6	292.7
1981	1,495	1,494	13.0	11.0	14.0	17.0	31.0	45.0	56.0	51.0	36.0	14.0	12.0	13.0	313.0
1982	1,516	1,514	14.0	12.0	13.0	17.0	36.0	36.0	46.0	44.0	26.0	16.0	13.0	14.0	287.0
1983	1,538	1,536	15.0	13.0	14.0	14.0	29.0	37.0	48.6	42.9	29.0	18.2	15.8	14.4	290.9
1984	1,646	1,644	15.0	12.3	14.3	15.7	35.3	43.0	44.4	39.2	24.1	12.9	10.9	11.6	278.7
1985	1,646	1,644	10.0	10.0	10.9	18.9	28.4	40.0	46.0	38.5	16.6	14.0	12.7	11.5	257.5
1986	1,660		11.0	11.0	13.0	13.0	22.5	41.5	49.0	44.0	24.0	12.0	13.0	12.0	266.0
1987	1,672		12.0	10.6	13.6	20.0	33.0	41.6	50.2	46.2	43.1	21.0	12.2	11.1	314.6
1988	1,686	1,686	11.0	17.0	12.7	17.3	20.4	35.0	51.8	43.7	30.2	21.8	11.6	12.9	285.4
1989	1,724		12.4	12.9	12.4	17.7	23.7	38.3	48.4	42.5	29.0	16.7	12.6	24.8	291.3
1990	1,760	1,760	24.1	33.2	27.1	39.6	37.5	46.8	63.2	48.7	45.4	32.2	22.2	41.4	461.4

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.51	3,710	128	122	129	145	225	279	424	412	264	182	143	127	216	0.242
1981	2.51	3,745	112	105	121	151	267	401	482	439	320	121	107	112	229	0.256
1982	2.51	3,798	119	113	110	149	306	316	391	374	228	136	114	119	207	0.232
1983	2.51	3,853	126	120	117	121	243	320	407	359	251	152	137	121	207	0.232
1984	2.51	4,124	117	103	112	127	276	348	347	307	195	101	88	91	185	0.207
1985	2.51	4,124	78	87	85	153	222	323	360	301	134	110	103	90	171	0.192
1986	2.51	4,159	85	94	101	104	175	333	380	341	192	93	104	93	175	0.196
1987	2.51	4,189	92	90	105	159	254	331	387	356	343	162	97	85	206	0.230
1988	2.51	4,224	84	139	97	137	156	276	396	334	238	166	92	99	185	0.207
1989	2.51	4,320	93	107	93	137	177	296	361	317	224	125	98	185	185	0.207
1990	2.51	4,410	176	269	198	299	274	354	462	356	343	236	168	303	287	0.321
AVERAGE			110	123	115	153	234	325	400	354	248	144	114	129	205	0.229

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059315

COUNTY..SISKIYOU
CITY....MOUNT SHASTA
SYSTEM #..... 47008
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SHASTA LAKE-PIT RIVER
DAU # 136

CITY CENSUS POPULATION
1980..... 2,837
1990..... 3,460

WATER AGENCY.....MOUNT SHASTA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	0	Metered.....	0	Metered.....	0	Metered.....	0
Flat Rate.....	1,139	Flat Rate...	268	Flat Rate...	2	Flat Rate...	18

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,306	1,206	23.6	21.4	24.3	27.8	39.9	44.8	75.4	69.0	46.3	34.2	23.3	23.1	453.1
1981	1,307	1,207	24.0	21.0	24.0	28.0	40.0	45.0	77.0	79.0	70.0	-	-	-	-
1982	/5											-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984			-	-	-	-	-	-	-	-	-	-	-	-	-
1985			-	-	-	-	-	-	-	-	-	-	-	-	-
1986			-	-	-	-	-	-	-	-	-	-	-	-	-
1987	1,364	1,288	35.0	35.0	35.0	35.0	70.0	78.0	80.7	92.3	70.8	52.1	28.2	28.5	640.6
1988	1,383	1,331	29.8	27.8	34.2	39.5	45.1	58.8	97.3	92.6	72.5	51.0	29.2	29.7	607.5
1989	1,411	1,383	32.0	32.9	32.1	39.1	46.6	73.8	94.5	86.9	61.4	41.8	33.2	34.1	608.4
1990	1,445	1,417	32.8	31.6	36.3	46.5	58.3	67.1	86.2	78.5	66.1	49.2	36.2	33.6	622.4

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.35	3,072	248	240	255	302	419	486	791	725	503	359	252	243	404	0.452
1981	2.36	3,086	251	243	251	302	418	486	805	826	756	-	-	-	-	-
1982	2.37		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.38		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2.39		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	2.40		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	2.41		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	2.41	3,294	343	379	343	354	686	789	790	904	716	510	285	279	533	0.597
1988	2.42	3,352	287	286	329	393	434	585	936	891	721	491	290	286	496	0.556
1989	2.43	3,433	301	342	302	380	438	717	888	817	596	393	322	320	486	0.544
1990	2.44	3,528	300	320	332	439	533	634	788	718	624	450	342	307	483	0.541
AVERAGE			288	302	302	362	488	616	833	813	653	440	298	287	480	0.538

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data is unavailable

C—0 5 9 3 1 6

C-059316

COUNTY.. SHASTA
CITY....ANDERSON
SYSTEM #..... 45001
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....NORTHWEST VALLEY
DAU # 141

WATER AGENCY.....ANDERSON, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 7,381
1990..... 8,299

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,125	Metered.....	207	Metered.....	3	Metered.....	19
Flat Rate.....	5	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,009	1,844	23.3	21.9	24.2	29.7	43.2	46.0	57.4	51.4	34.7	28.6	22.2	26.4	409.0
1981	2,042	1,860	/5	-	-	-	-	-	-	-	-	-	-	-	-
1982	2,156	1,971	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2,024	1,834	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2,077	1,888	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	2,156	1,955	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	2,238	2,038					42.9	69.0	79.5	76.0	44.0	33.7	31.2	18.8	-
1987	2,281	2,061	29.4	26.0	30.5	48.6	67.2	76.4	81.0	80.0	32.4	19.7	18.1	37.2	546.3
1988	2,287	2,065	33.5	37.0	45.2	47.0	47.7	64.6	101.1	88.7	78.7	54.6	43.4	30.2	671.7
1989	2,273	2,096	-	-	-	-	-	-	118.3	90.0	128.0	42.0	35.0	34.0	-
1990	2,359	2,172	31.1	29.1	39.8	53.5	64.5	119.3	92.5	-	-	56.5	37.9	36.9	-

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.00	8,041	94	94	97	123	173	191	230	206	144	115	92	106	139	0.156
1981	3.98	8,136	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3.97	8,551	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3.95	7,991	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	3.93	8,163	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	3.91	8,434	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	3.89	8,714	-	-	-	-	159	264	294	281	168	125	119	70	-	-
1987	3.88	8,840	107	105	111	183	245	288	296	292	122	72	68	136	169	0.190
1988	3.86	8,822	122	145	165	178	174	244	370	324	297	200	164	110	209	0.234
1989	3.84	8,726	-	-	-	-	-	-	437	333	489	155	134	126	-	-
1990	3.82	9,014	111	115	142	198	231	441	331	-	-	202	140	132	-	-
AVERAGE			109	115	129	170	196	286	326	287	244	145	120	113	172	0.193

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

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C-059317

COUNTY.. SHASTA
CITY....CENTERVILLE
SYSTEM #..... 45011
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....NORTHWEST VALLEY
DAU # 141

ESTIMATED POPULATION
1980..... 1,916
1990..... 2,434

WATER AGENCY.....CENTERVILLE CSD
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	802	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	618	618	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983	618	618	-	-	-	-	-	-	30.4	25.7	22.0	12.7	5.3	5.7	-
1984	630	630	6.2	6.2	8.4	9.8	20.8	28.0	37.4	33.8	27.3	10.9	7.1	5.5	201.3
1985	642	642	6.3	6.4	8.2	14.7	23.3	28.9	33.9	29.5	15.2	13.4	7.4	6.7	193.9
1986	648	648	5.8	5.3	7.6	12.3	22.7	34.1	39.5	38.1	19.9	14.3	10.8	7.6	218.0
1987	677	677	7.3	6.1	6.7	19.4	29.7	37.6	38.2	38.5	33.4	21.6	8.5	6.9	254.0
1988	703	703	6.4	8.9	14.9	15.6	16.6	26.4	46.7	43.9	36.2	26.8	8.0	8.3	258.7
1989	750	750	7.6	8.0	7.4	13.3	22.4	37.8	46.6	45.0	29.2	15.5	11.5	10.3	254.3
1990	785	785	8.8	7.6	12.2	20.9	28.2	33.2	46.5	42.5	35.5	29.5	15.1	13.3	293.4

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.10	1,916	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.10		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3.10		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3.10	1,916	-	-	-	-	-	-	512	433	383	214	93	96	-	-
1984	3.10	1,953	102	109	138	168	344	478	617	558	466	180	120	91	282	0.316
1985	3.10	1,991	102	116	133	245	378	484	549	477	255	216	124	108	267	0.299
1986	3.10	2,009	93	95	123	203	364	566	634	611	330	229	180	122	297	0.333
1987	3.10	2,099	112	103	103	308	456	598	588	592	530	333	135	106	331	0.371
1988	3.10	2,180	95	141	221	239	246	403	691	650	553	396	122	123	325	0.364
1989	3.10	2,325	105	122	103	190	311	542	646	624	419	214	164	142	300	0.336
1990	3.10	2,434	116	112	162	286	373	455	616	564	486	390	207	177	330	0.370
AVERAGE			104	114	140	234	353	504	607	564	428	272	143	121	305	0.341

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data is not available.

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C-059318

COUNTY.. SHASTA
CITY.... REDDING
SYSTEM #..... 45005
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....NE, NW VALLEY
DAU # 141 143

WATER AGENCY.....REDDING, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

CITY CENSUS POPULATION
1980..... 41,995
1990..... 66,462

ORIGIN OF WATER (in percent):
SURFACE WATER..... 70
WELLS AND SPRINGS.. 30

SOURCE OF WATER (in percent):
PURCHASED..... 70
SELF SUPPLIED..... 30

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	16,783	Metered.....	3,407	Metered.....	776	Metered.....	146
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	13,959	13,255	151.0	145.0	157.0	183.0	296.0	310.0	471.0	582.0	445.0	312.0	200.0	177.0	3429.0
1981	14,748	13,939	173.0	147.0	162.0	234.0	344.0	539.0	618.0	615.0	445.0	252.0	200.0	180.0	3909.0
1982	14,883	14,046	202.0	184.0	195.0	212.0	425.0	429.0	481.0	506.0	353.0	275.0	196.0	194.0	3652.0
1983	15,241	14,386	187.0	163.0	191.0	191.0	326.0	435.0	461.0	431.0	433.0	296.0	202.0	204.0	3520.0
1984	16,008	15,268	207.0	200.0	222.0	250.0	422.0	553.0	747.0	649.0	485.0	291.0	213.0	217.0	4456.0
1985	16,631	15,870	228.0	230.0	266.0	395.0	529.0	583.0	712.0	628.0	359.0	333.0	227.0	219.0	4709.0
1986	17,860	17,117	212.0	186.0	238.0	321.0	491.0	681.0	761.0	749.0	441.0	352.0	290.0	253.0	4975.0
1987	18,282	17,870	246.0	222.0	254.0	443.0	635.0	746.0	760.0	783.0	613.0	493.0	266.0	253.0	5714.0
1988	18,886	18,713	251.0	286.0	398.0	393.0	429.0	583.0	908.0	805.0	710.0	545.0	263.0	297.0	5868.0
1989	20,077	19,780	291.0	291.0	289.0	394.0	541.0	741.0	905.0	844.0	596.0	441.0	342.0	320.0	5995.0
1990	21,112	20,789	343.0	283.0	377.0	501.0	598.0	705.0	939.0	923.0	728.0	622.0	492.0	379.0	6890.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.17	44,225	110	113	115	138	216	234	344	425	335	228	151	129	212	0.238
1981	3.17	46,768	119	112	112	167	237	384	426	424	317	174	143	124	229	0.256
1982	3.17	47,238	138	139	133	150	290	303	328	346	249	188	138	132	212	0.237
1983	3.18	48,419	125	120	127	131	217	299	307	287	298	197	139	136	199	0.223
1984	3.18	50,901	131	135	141	164	267	362	473	411	318	184	139	138	240	0.269
1985	3.18	52,930	139	155	162	249	322	367	434	383	226	203	143	133	244	0.273
1986	3.19	56,893	120	117	135	188	278	399	431	425	258	200	170	143	240	0.268
1987	3.19	58,290	136	136	141	253	351	427	421	433	351	273	152	140	269	0.301
1988	3.19	60,270	134	164	213	217	230	322	486	431	393	292	145	159	267	0.299
1989	3.19	64,128	146	162	145	205	272	385	455	425	310	222	178	161	256	0.287
1990	3.20	67,495	164	150	180	247	286	348	449	441	360	297	243	181	280	0.313
AVERAGE			133	137	146	192	270	348	414	403	310	223	158	143	241	0.269

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 3 1 9

C-059319

COUNTY.. BUTTE
CITY....CHICO/HAMILTON CITY
SYSTEM #..... 4002
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....NORTHWEST VALLEY
DAU # 142

CITY CENSUS POPULATION
1980..... 26,603
1990..... 40,079

WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	3,424	Metered.....	2,644	Metered.....	41	Metered.....	250
Flat Rate.....	11,646	Flat Rate...	0	Flat Rate...	0	Flat Rate...	2

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	13,297	7,048	210.7	210.0	272.7	388.0	546.8	602.8	853.1	788.8	577.6	426.5	304.1	238.6	5419.7
1981	13,654	7,297	231.7	218.4	254.2	406.4	596.9	896.4	958.3	871.9	641.8	313.8	243.3	233.3	5866.4
1982	13,982	7,545	235.9	227.0	244.8	322.9	708.1	698.4	793.0	770.2	519.2	379.4	239.2	226.4	5364.5
1983	14,180	7,794	231.5	211.3	235.5	291.9	561.3	735.2	861.3	850.9	626.6	398.6	257.1	238.5	5499.7
1984	14,560	8,043	241.1	242.2	344.0	417.8	759.4	813.8	1021.8	879.6	708.6	377.2	261.2	251.2	6317.9
1985	15,048	8,292	250.5	297.1	314.4	521.0	749.4	965.1	1022.6	894.5	535.3	479.6	329.6	273.7	6632.8
1986	15,467	8,540	260.5	245.3	333.5	441.1	781.9	920.5	1022.3	963.9	588.0	486.1	406.6	306.0	6755.7
1987	15,891	8,789	290.7	274.8	336.0	602.3	862.9	983.1	978.7	985.9	794.4	598.5	334.2	318.7	7360.2
1988	16,421	9,037	315.5	375.1	545.0	556.9	635.0	855.3	1099.3	957.4	829.2	653.3	356.8	316.0	7494.8
1989	17,276	9,286	309.8	314.6	319.5	529.9	763.8	875.5	1060.0	984.1	681.8	458.7	383.8	361.5	7043.0
1990	17,989	9,535	325.4	317.1	459.9	664.7	758.7	883.7	1084.4	1005.1	823.6	700.4	423.1	412.2	7858.3

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.77	50,190	135	144	175	258	351	400	548	507	384	274	202	153	296	0.331
1981	3.82	52,123	143	150	157	260	369	573	593	540	410	194	156	144	308	0.345
1982	3.86	53,975	141	150	146	199	423	431	474	460	321	227	148	135	272	0.305
1983	3.90	55,347	135	136	137	176	327	443	502	496	377	232	155	139	272	0.305
1984	3.95	57,455	135	145	193	242	426	472	574	494	411	212	152	141	301	0.337
1985	3.99	60,026	135	177	169	289	403	536	550	481	297	258	183	147	303	0.339
1986	4.03	62,360	135	140	173	236	404	492	529	499	314	251	217	158	297	0.332
1987	4.07	64,751	145	152	167	310	430	506	488	491	409	298	172	159	311	0.349
1988	4.12	67,615	151	191	260	275	303	422	524	457	409	312	176	151	304	0.340
1989	4.16	71,876	139	156	143	246	343	406	476	442	316	206	178	162	268	0.301
1990	4.20	75,614	139	150	196	293	324	390	463	429	363	299	187	176	285	0.319
AVERAGE			139	154	174	253	373	461	520	481	365	251	175	151	293	0.328

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY.. TEHAMA
CITY.... CORNING
SYSTEM #..... 52001
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....NORTHWEST VALLEY
DAU # 142

WATER AGENCY.....CORNING, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 4,745
1990..... 5,870

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,618	Metered.....	154	Metered.....	2	Metered.....	4
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,800	1,800	32.0	26.0	37.0	39.0	35.0	61.0	56.0	98.0	81.0	69.0	76.0	55.0	665.0
1981	1,827	1,827	41.0	25.0	30.0	35.0	30.0	167.0	45.0	76.0	112.0	70.0	65.0	48.0	744.0
1982	1,832	1,832	48.0	41.0	43.0	38.0	48.0	79.0	59.0	49.0	84.0	45.0	56.0	45.0	635.0
1983	1,853	1,853	40.0	40.0	49.0	57.0	47.0	47.0	75.0	90.0	82.0	77.0	59.0	45.0	708.0
1984	1,863	1,863	36.0	30.0	31.0	34.0	43.0	74.0	82.0	93.0	85.0	66.0	60.0	49.0	683.0
1985	1,868	1,868	33.0	28.0	25.0	23.0	50.0	62.0	77.0	120.0	73.0	55.0	74.0	47.0	667.0
1986	1,868	1,868	/5	-	30.0	32.0	37.0	47.0	78.0	75.0	71.0	48.0	48.0	35.0	-
1987	1,869	1,869	42.0	34.0	33.0	37.0	49.0	68.0	84.0	65.0	58.0	58.0	47.0	17.0	592.0
1988	1,990	1,990	32.0	26.0	24.0	22.0	48.0	61.0	76.0	128.0	89.0	79.0	44.0	30.0	659.0
1989	1,838	1,838	34.0	39.0	33.0	42.0	70.0	75.0	92.0	89.0	51.0	54.0	45.0	39.0	663.0
1990	1,845	1,845	38.0	34.0	42.0	56.0	71.0	75.0	94.0	77.0	77.0	78.0	53.0	31.0	726.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.64	4,745	218	189	252	274	238	429	381	666	569	469	534	374	384	0.430
1981	2.69	4,916	269	182	197	237	197	1,132	295	499	759	459	441	315	415	0.464
1982	2.75	5,029	308	291	276	252	308	524	378	314	557	289	371	289	346	0.387
1983	2.80	5,188	249	275	305	366	292	302	466	560	527	479	379	280	374	0.419
1984	2.85	5,318	218	195	188	213	261	464	497	564	533	400	376	297	352	0.394
1985	2.91	5,434	196	184	148	141	297	380	457	712	448	327	454	279	336	0.377
1986	2.96	5,536	-	-	175	193	216	283	455	437	428	280	289	204	-	-
1987	3.02	5,641	240	215	189	219	280	402	480	372	343	332	278	97	288	0.322
1988	3.07	6,114	169	147	127	120	253	333	401	675	485	417	240	158	295	0.331
1989	3.13	5,747	191	242	185	244	393	435	516	500	296	303	261	219	316	0.354
1990	3.18	5,870	209	207	231	318	390	426	517	423	437	429	301	170	339	0.380
AVERAGE			227	213	207	234	284	464	440	520	489	380	357	244	344	0.386

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C—0 5 9 3 2 1

C-059321

COUNTY.. GLENN
CITY.... ORLAND
SYSTEM #..... 11001
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....NORTHWEST VALLEY
DAU # 142

WATER AGENCY.....ORLAND, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 4,031
1990..... 5,052

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,885	Metered.....	292	Metered.....	17	Metered.....	30
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,552	1,527	12.8	20.6	24.7	29.0	56.8	45.8	76.2	68.8	47.6	42.4	23.5	21.8	470.0
1981	1,648	1,636	21.3	19.5	24.0	41.3	55.0	96.7	88.9	78.6	57.6	33.3	22.3	23.8	562.3
1982	1,651	1,651	22.4	20.6	25.9	27.3	66.2	72.8	73.0	86.6	35.8	29.9	26.6	25.7	512.8
1983	1,660	1,660	21.5	24.4	25.1	26.4	42.8	-	83.6	71.1	76.0	55.9	41.4	24.5	-
1984	1,776	1,776	26.9	22.4	21.6	30.1	41.0	82.0	86.1	80.7	97.7	45.8	45.0	35.7	615.0
1985	1,893	1,893	11.0	23.6	27.8	34.9	45.9	60.7	76.6	78.4	59.9	30.2	38.4	31.8	519.2
1986	2,136	2,136	26.6	29.0	21.0	29.3	34.7	76.0	77.7	86.4	104.2	49.9	31.8	22.0	588.6
1987	2,172	2,172	49.6	14.9	20.7	32.6	48.7	64.8	97.8	69.0	77.6	55.9	58.6	27.1	617.3
1988	2,207	2,207	28.7	23.3	29.0	54.0	43.8	50.0	70.3	90.0	80.1	93.7	36.0	27.3	626.2
1989	2,212	2,212	28.4	31.5	24.2	32.1	44.1	83.8	101.8	82.2	51.4	37.7	27.5	35.7	580.4
1990	2,224	2,224	34.3	31.4	44.1	56.3	69.4	68.7	108.3	97.9	63.2	62.4	42.0	43.2	721.2

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.64	4,097	101	173	194	236	447	373	600	542	387	334	191	172	314	0.352
1981	2.60	4,290	160	162	180	321	414	751	669	591	448	250	173	179	359	0.402
1982	2.57	4,237	171	174	197	215	504	573	556	659	282	228	209	196	332	0.371
1983	2.53	4,199	165	208	193	210	329	-	642	546	603	429	329	188	-	-
1984	2.49	4,427	196	174	157	227	299	617	627	588	736	334	339	260	381	0.426
1985	2.46	4,649	76	181	193	250	319	435	532	544	430	210	275	221	306	0.343
1986	2.42	5,167	166	200	131	189	217	490	485	539	672	312	205	137	312	0.350
1987	2.38	5,174	309	103	129	210	304	417	610	430	500	349	378	169	327	0.366
1988	2.35	5,176	179	155	181	348	273	322	438	561	516	584	232	170	331	0.371
1989	2.31	5,106	179	220	153	210	279	547	643	519	336	238	180	226	311	0.349
1990	2.27	5,052	219	222	282	371	443	453	692	625	417	398	277	276	391	0.438
AVERAGE			175	179	181	253	348	498	590	559	484	333	253	199	336	0.377

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 3 2 2

C-059322

COUNTY.. TEHAMA
CITY....RED BLUFF
SYSTEM #..... 52004
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....NORTHWEST VALLEY
DAU # 142

CITY CENSUS POPULATION
1980..... 9,490
1990..... 12,363

WATER AGENCY.....RED BLUFF, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,566	Metered.....	392	Metered.....	1	Metered.....	29
Flat Rate.....	1,534	Flat Rate...	115	Flat Rate...	0	Flat Rate...	3

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,626	3,551	41.0	37.6	36.8	51.9	130.3	143.0	115.1	116.2	82.2	55.7	65.0	52.4	927.2
1981	3,653	3,576	44.1	35.9	41.1	45.4	112.7	176.0	152.3	170.7	136.8	65.9	44.3	55.7	1080.9
1982	3,703	3,622	49.6	45.2	42.9	60.2	109.8	121.3				78.5	58.1	67.3	-
1983	3,824	3,739	48.8	46.9	52.9	37.8	109.1	138.4	164.0	147.7	101.4	50.3	87.9	76.9	1062.1
1984	3,391	3,313	40.5	34.3	76.0	60.0	167.0	240.5	176.3	140.1	122.8	73.0	49.7	56.6	1236.8
1985	3,419	3,335	55.3	57.8	73.6	105.0	147.0	201.6	210.6	182.1	100.7	110.2	56.6	57.0	1357.5
1986	3,470	3,386	68.7	48.2	61.1	91.8	135.0	177.9	206.1	202.8	107.8	93.1	85.9	63.7	1342.1
1987	3,567	3,488	72.4	71.9	50.0	116.1	175.6	215.8	188.3	180.4	157.9	122.7	79.9	61.3	1492.3
1988	3,571	3,489	70.5	86.9	107.9	105.2	140.5	163.7	235.0	201.0	171.4	137.0	103.5	44.2	1566.8
1989	3,574	3,490	64.3	64.6	63.7	110.9	132.3	166.5	250.9	172.4	167.2	72.0	71.9	68.5	1405.2
1990	3,638	3,549	76.8	61.6	149.9	117.8	159.4	174.7	200.1	103.2	153.9	117.4	57.1	91.4	1463.3

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.67	9,690	136	134	123	179	434	492	383	387	283	185	224	174	262	0.294
1981	2.75	10,059	141	127	132	150	361	583	488	547	453	211	147	179	294	0.330
1982	2.83	10,497	152	154	132	191	337	385	-	-	-	241	184	207	-	-
1983	2.92	11,150	141	150	153	113	316	414	474	427	303	146	263	222	261	0.292
1984	3.00	10,162	129	116	241	197	530	789	560	445	403	232	163	180	333	0.373
1985	3.08	10,524	170	196	226	333	451	639	646	558	319	338	179	175	353	0.396
1986	3.16	10,962	202	157	180	279	397	541	606	597	328	274	261	187	335	0.376
1987	3.24	11,558	202	222	140	335	490	622	526	503	455	342	230	171	354	0.396
1988	3.32	11,860	192	253	293	296	382	460	639	547	482	373	291	120	362	0.405
1989	3.40	12,160	171	190	169	304	351	456	666	457	458	191	197	182	317	0.355
1990	3.48	12,673	195	174	382	310	406	460	509	263	405	299	150	233	316	0.354
AVERAGE			167	170	197	244	405	531	550	473	389	257	208	185	319	0.357

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 3 2 3

C-059323

COUNTY.. SHASTA
CITY....PROJECT CITY
SYSTEM #..... 45006
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....NORTHEAST VALLEY
DAU # 143

WATER AGENCY.....SHASTA DAM AREA PUD
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

ESTIMATED POPULATION
1980..... 7,805 /5
1990..... 9,250

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,838	Metered.....	147	Metered.....	13	Metered.....	9
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,518	2,518	/6	-	-	-	-	-	88.3	96.5	54.7	47.9	29.0	28.7	-
1981	2,704	2,704	28.1	24.1	27.7	39.1	57.7	92.3	110.5	90.3	65.5	32.9	26.1	30.6	624.9
1982	2,719	2,719	25.4	25.7	28.4	37.5	65.8	69.1	88.3	82.4	56.7	41.7	29.7	31.3	582.0
1983	2,734	2,734	28.3	25.8	30.3	32.6	45.0	74.6	75.0	71.0	59.0	42.0	36.0	31.0	550.6
1984	2,748	2,748	31.0	30.6	36.5	37.4	62.6	80.1	105.9	99.1	61.3	40.4	33.6	30.6	649.1
1985	2,755	2,755	32.0	31.0	38.0	49.0	72.0	79.0	99.0	84.0	43.0	42.0	31.0	30.0	630.0
1986	2,765	2,765	30.0	27.1	34.5	38.7	55.5	82.8	94.7	94.0	55.5	38.5	33.7	30.9	615.9
1987	2,774	2,774	31.5	29.3	35.4	51.5	77.4	84.2	90.7	100.7	72.2	62.7	30.5	35.7	701.8
1988	2,832	2,832	30.3	31.6	47.9	47.5	48.8	71.3	102.6	81.8	78.5	61.9	31.6	39.1	672.9
1989	2,907	2,907	32.5	33.8	34.8	45.2	58.6	86.6	96.8	87.3	62.2	46.9	37.1	37.8	659.6
1990	2,984	2,984	26.4	33.9	38.4	45.9	57.3	68.4	89.9	83.7	70.7	58.0	33.6	44.0	650.2

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.10	7,805	-	-	-	-	-	-	365	399	234	198	124	119	-	-
1981	3.10	8,382	108	103	107	155	222	367	425	348	260	127	104	118	204	0.229
1982	3.10	8,428	97	109	109	148	252	273	338	315	224	160	117	120	189	0.212
1983	3.10	8,475	108	109	115	128	171	293	285	270	232	160	142	118	178	0.199
1984	3.10	8,518	117	124	138	146	237	313	401	375	240	153	131	116	209	0.234
1985	3.10	8,540	121	130	144	191	272	308	374	317	168	159	121	113	202	0.226
1986	3.10	8,571	113	113	130	151	209	322	356	354	216	145	131	116	197	0.220
1987	3.10	8,599	118	122	133	200	290	326	340	378	280	235	118	134	224	0.250
1988	3.10	8,779	111	124	176	180	179	271	377	301	298	227	120	144	210	0.235
1989	3.10	9,011	116	134	125	167	210	320	347	313	230	168	137	135	201	0.225
1990	3.10	9,250	92	131	134	165	200	246	314	292	255	202	121	153	193	0.216
AVERAGE			110	120	131	163	224	304	357	333	240	176	124	126	201	0.225

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Population is estimated.
6/ Missing data is unavailable

COUNTY.. BUTTE
CITY....PARADISE
SYSTEM #..... 4007
HYDROLOGIC REGION..... SACRAMETO RIVER
PLANNING SUBAREA #.....NORTHEAST VALLEY
DAU # 147

CITY CENSUS POPULATION
1980..... 22,571
1990..... 25,408

WATER AGENCY.....PARADISE IRRIGATION DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	8,982	Metered.....	674	Metered.....	3	Metered.....	30
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	8,372	8,359	61.4	59.6	74.9	107.3	171.0	233.7	339.9	331.3	232.1	148.3	87.9	75.3	1922.7
1981	8,695	8,682	65.2	57.2	65.5	127.1	182.4	386.3	432.2	401.8	277.6	94.8	86.4	77.2	2253.7
1982	9,066	9,053	72.7	65.5	80.6	93.0	257.0	334.2	326.2	380.8	208.9	113.0	81.3	70.0	2083.2
1983	9,118	9,105	82.1	67.2	67.7	76.5	192.9	283.8	323.7	398.9	258.9	137.4	76.2	68.5	2033.8
1984	9,181	9,168	83.0	80.7	105.0	117.2	265.5	276.0	448.7	405.4	261.3	140.1	89.6	83.6	2356.1
1985	9,275	9,262	86.0	83.8	84.3	176.8	282.1	346.3	456.1	363.5	209.7	176.2	100.5	109.1	2474.4
1986	9,324	9,310	92.8	83.7	106.6	140.7	197.7	335.4	375.7	374.3	236.8	140.1	106.8	117.4	2308.0
1987	9,370	9,364	92.6	76.5	88.6	197.9	259.1	342.9	327.6	358.2	296.8	220.5	106.3	101.7	2468.7
1988	9,477	9,474	91.0	114.3	146.6	148.9	149.6	230.7	346.4	385.7	320.3	243.3	112.2	106.5	2395.5
1989	9,603	9,600	110.4	103.5	91.1	138.4	230.2	290.0	387.0	359.4	240.1	159.2	131.1	117.1	2357.5
1990	9,693	9,690	115.5	97.1	116.8	211.9	218.0	240.8	386.5	353.0	266.3	258.9	133.5	161.5	2559.8

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.70	22,606	88	91	107	158	244	345	485	473	342	212	130	107	233	0.261
1981	2.69	23,410	90	87	90	181	251	550	596	554	395	131	123	106	264	0.295
1982	2.68	24,338	96	96	107	127	341	458	432	505	286	150	111	93	235	0.263
1983	2.68	24,407	109	98	89	104	255	388	428	527	354	182	104	91	228	0.256
1984	2.67	24,504	109	114	138	159	350	375	591	534	355	184	122	110	263	0.295
1985	2.66	24,682	112	121	110	239	369	468	596	475	283	230	136	143	275	0.308
1986	2.65	24,740	121	121	139	190	258	452	490	488	319	183	144	153	256	0.286
1987	2.65	24,789	121	110	115	266	337	461	426	466	399	287	143	132	273	0.306
1988	2.64	24,998	117	158	189	199	193	308	447	498	427	314	150	137	263	0.294
1989	2.63	25,255	141	146	116	183	294	383	494	459	317	203	173	150	256	0.286
1990	2.62	25,416	147	136	148	278	277	316	491	448	349	329	175	205	276	0.309
AVERAGE			114	116	123	189	288	409	498	493	348	219	137	130	256	0.287

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 3 2 5

C-059325

COUNTY.. SIERRA
CITY....LOYALTON
SYSTEM #..... 46001
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SOUTHEAST
DAU # 154

WATER AGENCY.....LOYALTON, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 1,030
1990..... 1,191

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4	Metered.....	9	Metered.....	NA	Metered.....	NA
Flat Rate.....	465	Flat Rate...	35	Flat Rate...	NA	Flat Rate...	1

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	480	381	10.0	10.0	10.0	13.0	20.0	22.0	29.0	28.0	17.0	9.0	10.0	9.0	187.0
1981	508	410	9.0	10.0	9.0	13.0	18.0	30.0	35.0	32.0	20.0	11.0	9.0	9.0	205.0
1982	508	410	11.0	9.0	10.0	12.0	21.0	22.0	28.0	27.0	16.0	9.0	8.0	9.0	182.0
1983	526	428	9.0	7.0	8.0	8.0	13.0	22.0	32.0	21.0	15.0	9.0	8.0	8.0	160.0
1984	526	428	9.0	9.0	9.0	10.0	23.0	26.0	33.0	32.0	21.0	10.0	9.0	10.0	201.0
1985	524	423	10.0	9.0	10.0	14.0	27.0	30.0	33.0	29.0	14.0	11.0	9.0	9.0	205.0
1986	524	423	9.0	6.0	10.0	13.0	21.0	31.0	30.0	32.0	17.0	10.0	9.0	9.0	197.0
1987	514	414	9.0	9.0	9.0	16.0	18.0	28.0	30.0	33.0	24.0	15.0	8.0	9.0	208.0
1988	516	416	9.0	9.0	12.0	17.0	24.0	25.0	30.0	34.0	24.0	15.0	9.0	9.0	217.0
1989	516	416	9.0	9.0	12.0	17.0	24.0	25.0	36.0	23.0	20.0	21.0	13.0	10.0	219.0
1990	513	418	13.0	9.0	8.0	12.0	20.0	27.0	33.0	25.0	20.0	18.0	8.0	10.0	203.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.70	1,298	249	266	249	334	497	565	721	696	437	224	257	224	395	0.442
1981	2.72	1,381	210	259	210	314	421	724	818	748	483	257	217	210	407	0.456
1982	2.73	1,388	256	232	232	288	488	528	651	627	384	209	192	209	359	0.402
1983	2.75	1,445	201	173	179	185	290	507	714	469	346	201	185	179	303	0.340
1984	2.76	1,453	200	214	200	229	511	597	733	711	482	222	207	222	379	0.425
1985	2.78	1,455	222	221	222	321	599	687	732	643	321	244	206	200	386	0.432
1986	2.79	1,462	199	147	221	296	463	707	662	706	387	221	205	199	369	0.413
1987	2.81	1,442	201	223	201	370	403	647	671	738	555	336	185	201	395	0.443
1988	2.82	1,455	200	213	266	389	532	573	665	754	550	333	206	200	409	0.458
1989	2.83	1,463	198	220	265	387	529	570	794	507	456	463	296	221	410	0.459
1990	2.85	1,462	287	220	177	274	441	616	728	552	456	397	182	221	380	0.426
AVERAGE			220	217	220	308	470	611	717	650	441	282	213	208	381	0.427

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
Note: No lumber industry data

C—0 5 9 3 2 6

C-059326

COUNTY.. PLUMAS
CITY.... PORTOLA
SYSTEM #..... 32003
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SOUTHEAST
DAU # 154

WATER AGENCY.....PORTOLA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 36
SELF SUPPLIED..... 64

CITY CENSUS POPULATION
1980..... 1,885
1990..... 2,193

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	0	Metered.....	0	Metered.....	NA	Metered.....	0
Flat Rate.....	972	Flat Rate...	119	Flat Rate...	NA	Flat Rate...	9

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	936	860	9.7	9.2	11.6	12.9	19.1	22.3	30.7	29.4	30.6	15.7	10.9	10.7	212.8
1981	956	876	11.5	11.3	11.4	12.4	20.7	31.9	32.8	32.6	31.7	16.2	12.3	11.6	236.4
1982	969	887	/5	-	-	-	-	-	35.7	32.6	18.6	21.0	11.3	11.5	-
1983	982	898	13.6	11.6	12.5	19.6	20.3	27.0	41.1	23.1	23.5	13.0	13.3	15.8	234.4
1984	986	909	16.3	15.8	16.8	11.3	27.4	28.7	37.3	32.4	23.0	13.3	12.3	13.8	248.4
1985	990	920	15.1	16.3	17.4	14.3	27.9	29.8	41.0	27.0	23.0	13.0	13.0	15.0	252.8
1986	1,016	914	12.0	12.0	12.0	13.0	24.0	34.0	35.0	36.0	20.0	15.0	12.0	14.0	239.0
1987	991	902	13.9	11.7	12.5	20.4	24.5	32.2	38.1	36.6	29.5	20.2	*31.7	14.7	-
1988	999	909	-	-	-	-	-	-	43.5	41.0	31.8	20.5	13.3	14.7	-
1989	1,008	916	16.7	15.0	19.4	24.5	28.6	32.3	-	-	-	-	-	-	-
1990	1,100	986	14.6	13.4	17.5	23.5	28.2	33.1	46.4	43.3	33.5	22.4	13.6	15.5	305.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.19	2,052	153	155	182	210	300	362	483	462	497	247	177	168	284	0.318
1981	2.20	2,099	177	192	175	197	318	507	504	501	504	249	195	178	309	0.346
1982	2.20	2,130	-	-	-	-	-	-	541	494	291	318	177	174	-	-
1983	2.20	2,162	203	192	187	302	303	416	613	345	362	194	205	236	297	0.333
1984	2.20	2,174	242	251	249	173	407	440	553	481	353	197	189	205	313	0.351
1985	2.21	2,186	223	266	257	218	412	454	605	398	351	192	198	221	317	0.355
1986	2.21	2,247	172	191	172	193	345	504	503	517	297	215	178	201	291	0.326
1987	2.21	2,195	204	190	184	310	360	489	560	538	448	297	-	216	-	-
1988	2.22	2,215	-	-	-	-	-	-	633	597	478	298	200	214	-	-
1989	2.22	2,239	241	239	280	365	412	481	-	-	-	-	-	-	-	-
1990	2.22	2,447	193	196	231	320	372	451	612	571	456	295	185	204	342	0.383
AVERAGE			201	208	213	254	359	456	561	490	404	250	189	202	308	0.344

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable
* System Maintenance-Major tank cleaning

C—0 5 9 3 2 7

C-059327

COUNTY..EL DORADO
CITY....PLACERVILLE
SYSTEM #..... 15800
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....FOOTHILL
DAU # 158

CITY CENSUS POPULATION
1980..... 6,739
1990..... 8,355

WATER AGENCY.....PLACERVILLE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY..... X
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,118	Metered.....	315	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,024	2,022	20.0	19.0	19.0	20.0	28.0	37.0	43.0	46.0	35.0	28.0	21.0	19.0	335.0
1981	2,029	2,026	18.0	16.0	18.0	22.0	30.0	44.0	50.0	38.0	34.0	20.0	18.0	18.0	326.0
1982	2,032	2,029	20.0	16.0	17.0	20.0	32.0	37.0	42.0	43.0	28.0	20.0	18.0	19.0	312.0
1983	2,036	2,033	18.0	17.0	18.0	18.0	26.0	38.0	42.0	42.0	34.0	27.0	17.0	24.0	321.0
1984	2,039	2,036	20.0	18.0	22.0	22.0	35.0	40.0	53.0	49.0	41.0	26.0	21.0	24.0	371.0
1985	2,074	2,071	21.0	22.0	22.0	28.0	39.0	45.0	51.0	47.0	31.0	28.0	22.0	21.0	377.0
1986	2,094	2,091	19.0	18.0	20.0	21.0	28.0	39.0	45.0	44.0	30.0	25.0	22.0	29.0	340.0
1987	2,121	2,118	19.0	17.0	19.0	27.0	34.0	40.0	43.0	43.0	35.0	30.0	21.0	21.0	349.0
1988	2,159	2,156	21.0	22.0	24.0	21.0	24.0	29.0	34.0	33.0	30.0	26.0	18.0	18.0	300.0
1989	2,266	2,261	18.0	18.0	18.0	20.0	28.0	33.0	42.0	40.0	30.0	24.0	21.0	21.0	313.0
1990	2,388	2,383	20.0	18.0	20.0	21.0	27.0	32.0	42.0	41.0	35.0	29.0	22.0	23.0	330.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.33	6,746	96	97	91	99	134	183	206	220	173	134	104	91	136	0.152
1981	3.35	6,797	85	84	85	108	142	216	237	180	167	95	88	85	131	0.147
1982	3.37	6,843	94	84	80	97	151	180	198	203	136	94	88	90	125	0.140
1983	3.38	6,891	84	88	84	87	122	184	197	197	164	126	82	112	128	0.143
1984	3.40	6,937	93	89	102	106	163	192	246	228	197	121	101	112	147	0.164
1985	3.42	7,092	96	111	100	132	177	212	232	214	146	127	103	96	146	0.163
1986	3.44	7,197	85	89	90	97	126	181	202	197	139	112	102	130	129	0.145
1987	3.45	7,326	84	83	84	123	150	182	189	189	159	132	96	92	131	0.146
1988	3.47	7,495	90	101	103	93	103	129	146	142	133	112	80	77	110	0.123
1989	3.49	7,906	73	81	73	84	114	139	171	163	126	98	89	86	108	0.121
1990	3.51	8,373	77	77	77	84	104	127	162	158	139	112	88	89	108	0.121
AVERAGE			87	90	88	101	135	175	199	190	153	115	93	96	127	0.142

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY.. BUTTE — WATER AGENCY.....OROVILLE WATER AGENCIES — ORIGIN OF WATER (in percent):

CITY....OROVILLE — TYPE OF AGENCY.....WATER DISTRICTS AND COMPANY /5

SYSTEM #..... 4009 — SURFACE WATER..... 95

HYDROLOGIC REGION..... SACRAMENTO RIVER — SYSTEM SERVES: — WELLS AND SPRINGS.. 5

PLANNING SUBAREA #.....CENTRAL BASIN EAST/SE

DAU # .....159,168 170 — ENTIRE CITY.....

ENTIRE CITY PLUS OUTSIDE..... — SOURCE OF WATER (in percent):

INSIDE CITY POPULATION — PORTION OF THE CITY.....

1980..... 7,400 — OTHER..... X — PURCHASED..... 28

1990..... 10,101 — SELF SUPPLIED..... 72

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	9,059	Metered.....	988	Metered.....	17	Metered.....	132
Flat Rate.....	955	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,209	2,207	118.0	90.7	107.3	163.5	199.2	231.0	298.6	324.3	255.2	190.6	119.6	94.3	2192.3
1981	10,571	2,857	247.3	243.3	265.9	313.6	453.2	714.8	736.1	740.7	569.8	276.2	238.9	199.8	4999.6
1982	10,647	2,878	193.5	164.7	181.6	197.4	487.9	496.9	587.7	634.5	437.9	253.1	162.6	146.8	3944.6
1983	10,688	2,885	154.5	133.3	159.5	162.6	321.0	502.5	539.4	572.1	471.0	264.8	149.7	142.5	3572.9
1984	10,629	2,894	145.2	129.4	160.1	199.2	458.5	517.1	664.0	614.7	477.0	214.3	137.5	133.5	3850.5
1985	10,601	2,917	142.4	138.7	147.8	273.6	433.9	556.5	649.6	596.2	356.0	278.4	183.2	156.3	3912.6
1986	10,610	2,935	141.5	128.6	158.2	202.6	399.3	549.6	632.7	647.7	385.6	260.4	207.7	168.1	3882.0
1987	10,825	2,955	160.9	143.6	208.4	346.5	509.0	555.7	577.8	599.7	452.2	317.4	159.1	154.9	4185.2
1988	10,836	2,979	148.4	153.9	214.0	250.2	312.9	430.8	572.7	577.9	485.3	332.9	174.7	167.8	3821.5
1989	11,088	3,006	163.7	153.1	150.0	216.2	382.8	440.5	556.6	543.5	378.8	232.0	180.2	162.5	3559.9
1990	11,125	3,065	158.2	143.1	181.8	270.6	331.6	350.7	550.5	561.0	442.7	348.3	218.2	220.6	3777.3

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.35	18,048	211	173	192	302	356	427	534	580	471	341	221	169	333	0.373
1981	3.35	33,275	240	261	258	314	439	716	714	718	571	268	239	194	412	0.461
1982	3.34	33,456	187	176	175	197	470	495	567	612	436	244	162	142	323	0.362
1983	3.34	33,609	148	142	153	161	308	498	518	549	467	254	148	137	291	0.326
1984	3.33	33,477	140	133	154	198	442	515	640	592	475	206	137	129	315	0.353
1985	3.32	33,451	137	148	143	273	418	555	626	575	355	268	183	151	320	0.359
1986	3.32	33,549	136	137	152	201	384	546	608	623	383	250	206	162	317	0.355
1987	3.31	34,210	152	150	197	338	480	541	545	565	441	299	155	146	335	0.375
1988	3.31	34,275	140	155	201	243	294	419	539	544	472	313	170	158	305	0.342
1989	3.30	35,025	151	156	138	206	353	419	513	501	361	214	171	150	278	0.312
1990	3.30	35,175	145	145	167	256	304	332	505	514	420	319	207	202	294	0.330
AVERAGE			162	161	175	244	386	497	573	579	441	271	182	158	320	0.359

1/ Number of services

2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.

3/ gpcd - gallons per capita daily

4/ afpca - acre-feet per capita annually

5/ Agencies combined are: City of Oroville, Oroville Wyandotte and Thermalito ID (after 1980)

C—059329

C-059329

COUNTY.. PLACER
CITY....NORTH AUBURN
SYSTEM #..... 31026
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SOUTHEAST
DAU # 161

WATER AGENCY.....NEVADA IRRIGATION DISTRICT
TYPE OF AGENCY.....PUBLIC WATER AGENCY

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 3,000
1990..... 4,630

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,592	Metered.....	149	Metered.....	4	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,500	1,500	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984			-	-	-	-	-	-	-	-	-	-	-	-	-
1985			-	-	-	-	-	-	-	-	-	-	-	-	-
1986			-	-	-	-	-	-	-	-	-	-	-	-	-
1987			-	-	-	-	-	-	-	-	-	-	-	-	-
1988	1,745	1,745	20.8	23.0	30.8	30.2	33.5	44.4	62.5	58.5	51.2	52.2	25.3	20.8	453.3
1989	1,777	1,777	20.6	18.3	21.1	27.7	46.6	53.4	63.4	55.8	42.1	29.9	25.9	22.7	427.6
1990	1,780	1,780	24.9	23.2	27.2	34.8	41.5	47.6	62.4	59.8	44.6	46.7	30.6	26.9	470.2

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.00	3,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.06		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	2.12		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.18		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2.24		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	2.30		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	2.36		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	2.42		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	2.48	4,329	155	183	229	233	250	342	466	436	394	389	195	155	287	0.321
1989	2.54	4,515	147	145	151	205	333	394	453	398	311	214	191	162	259	0.291
1990	2.60	4,630	173	179	190	251	289	343	435	417	321	325	220	187	278	0.312
AVERAGE			159	169	190	229	291	360	451	417	342	309	202	168	275	0.308

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

C—059330

C-059330

COUNTY.. YOLO
CITY....DAVIS/EL MACERO
SYSTEM #..... 57001
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN WEST
DAU # 162

WATER AGENCY.....DAVIS, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 36,640
1990..... 46,209

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	10,281	Metered.....	374	Metered.....	17	Metered.....	22
Flat Rate.....	9,256	Flat Rate...	46	Flat Rate...	1	Flat Rate...	41

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	9,269	8,944	122.0	119.0	143.0	206.0	292.0	349.0	378.0	369.0	286.0	256.0	188.0	137.0	2845.0
1981	9,444	9,120	133.0	125.0	142.0	224.0	343.0	446.0	445.0	399.0	326.0	216.0	143.0	125.0	3067.0
1982	9,794	9,295	132.0	120.0	128.0	166.0	360.0	371.0	400.0	397.0	271.0	230.0	142.0	128.0	2845.0
1983	9,794	9,470	135.0	118.0	128.0	170.0	282.0	395.0	438.0	422.0	361.0	253.0	147.0	134.0	2983.0
1984	9,969	9,645	139.0	139.0	208.0	274.0	403.0	434.0	494.0	450.0	403.0	248.0	165.0	143.0	3500.0
1985	10,144	9,820	156.0	169.0	190.0	286.0	384.0	472.0	491.0	435.0	339.0	305.0	216.0	149.0	3592.0
1986	10,319	9,995	150.0	135.0	168.0	268.0	399.0	468.0	498.0	469.0	345.0	301.0	261.0	173.0	3635.0
1987	10,494	10,170	174.0	158.0	196.0	324.0	445.0	474.0	490.0	474.0	396.0	316.0	177.0	157.0	3781.0
1988	10,669	10,345	156.0	196.0	271.0	297.0	342.0	401.0	476.0	470.0	411.0	329.0	205.0	177.0	3731.0
1989	10,844	10,520	171.0	177.0	177.0	274.0	400.0	443.0	506.0	441.0	340.0	257.0	220.0	181.0	3587.0
1990	11,019	10,695	170.0	149.0	210.0	307.0	357.0	388.0	458.0	450.0	353.0	376.0	246.0	206.0	3670.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.10	37,971	104	108	121	181	248	306	321	313	251	217	165	116	205	0.230
1981	4.12	38,900	110	115	118	192	284	382	369	331	279	179	123	104	216	0.242
1982	4.14	40,561	105	106	102	136	286	305	318	316	223	183	117	102	192	0.215
1983	4.16	40,780	107	103	101	139	223	323	346	334	295	200	120	106	200	0.224
1984	4.19	41,732	107	115	161	219	312	347	382	348	322	192	132	111	230	0.257
1985	4.21	42,692	118	141	144	223	290	369	371	329	265	230	169	113	231	0.258
1986	4.23	43,660	111	110	124	205	295	357	368	347	263	222	199	128	228	0.255
1987	4.25	44,635	126	126	142	242	322	354	354	343	296	228	132	113	232	0.260
1988	4.28	45,619	110	148	192	217	242	293	337	332	300	233	150	125	224	0.251
1989	4.30	46,610	118	136	122	196	277	317	350	305	243	178	157	125	211	0.236
1990	4.32	47,609	115	112	142	215	242	272	310	305	247	255	172	140	211	0.237
AVERAGE			112	120	134	197	275	329	348	327	271	211	149	117	216	0.242

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 3 3 1

C-059331

COUNTY.. YOLO
CITY....WOODLAND
SYSTEM #..... 57006
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN WEST
DAU # 162

WATER AGENCY.....WOODLAND, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 30,235
1990..... 39,802

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	0	Metered.....	551	Metered.....	29	Metered.....	27
Flat Rate.....	9,879	Flat Rate...	146	Flat Rate...	1	Flat Rate...	29

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	8,744	8,721	150.0	141.0	139.0	155.0	225.0	320.0	385.0	445.0	413.0	338.0	243.0	207.0	3161.0
1981	8,621	8,602	126.0	137.0	143.0	156.0	261.0	381.0	493.0	507.0	477.0	361.0	193.0	149.0	3384.0
1982	8,657	8,638	145.0	157.0	157.0	192.0	398.0	411.0	460.0	414.0	283.0	238.0	143.0	141.0	3139.0
1983	8,852	8,832	151.0	124.0	146.0	177.0	311.0	434.0	602.0	497.0	384.0	264.0	150.0	143.0	3383.0
1984	8,888	8,869	146.0	139.0	209.0	275.0	414.0	423.0	492.0	459.0	384.0	242.0	174.0	143.0	3500.0
1985	9,012	9,007	155.0	175.0	199.0	305.0	412.0	502.0	541.0	467.0	342.0	300.0	196.0	142.0	3736.0
1986	9,225	9,225	175.0	143.0	192.0	291.0	440.0	514.0	556.0	540.0	350.0	296.0	288.0	237.0	4022.0
1987	9,617	9,617	188.0	175.0	222.0	370.0	524.0	557.0	558.0	563.0	479.0	337.0	194.0	169.0	4336.0
1988	10,370	10,370	197.0	219.0	332.0	305.0	348.0	426.0	575.0	496.0	461.0	344.0	217.0	209.0	4129.0
1989	10,608	10,603	179.0	171.0	178.0	298.0	488.0	500.0	589.0	524.0	376.0	269.0	230.0	208.0	4010.0
1990	10,935	10,933	198.0	184.0	235.0	282.0	364.0	356.0	566.0	539.0	440.0	599.0	292.0	238.0	4293.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.47	30,315	160	160	148	170	239	352	410	474	454	360	267	220	286	0.320
1981	3.48	30,038	135	163	154	173	280	423	529	544	529	388	214	160	309	0.346
1982	3.50	30,314	154	185	167	211	424	452	490	441	311	253	157	150	284	0.318
1983	3.52	31,150	156	142	151	189	322	464	623	515	411	273	161	148	298	0.333
1984	3.54	31,431	150	152	214	292	425	449	505	471	407	248	185	147	305	0.342
1985	3.55	32,026	156	195	200	317	415	522	545	470	356	302	204	143	320	0.358
1986	3.57	32,943	171	155	188	294	431	520	544	529	354	290	291	232	334	0.375
1987	3.59	34,510	176	181	208	357	490	538	522	526	463	315	187	158	344	0.386
1988	3.61	37,392	170	202	286	272	300	380	496	428	411	297	193	180	303	0.339
1989	3.62	38,435	150	159	149	258	410	434	494	440	326	226	199	175	286	0.320
1990	3.64	39,809	160	165	190	236	295	298	459	437	368	485	244	193	295	0.331
AVERAGE			158	169	187	252	366	439	511	479	399	312	209	173	306	0.342

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 3 3 2

C-059332

COUNTY.. COLUSA
CITY....ARBUCKLE
SYSTEM #..... 6001
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN WEST
DAU # 163

WATER AGENCY.....ARBUCKLE PUBLIC UTILITY DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 1,306
1990..... 1,912

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5	Metered.....	17	Metered.....	0	Metered.....	2
Flat Rate.....	642	Flat Rate...	81	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	620	612	5.1	4.7	5.7	11.4	18.7	19.8	27.9	22.9	19.8	15.3	9.3	5.6	166.2
1981	631	624	4.9	5.3	/5	8.0	18.7	27.1	28.0	25.4	18.8	10.0	7.2	6.2	-
1982	666	658	5.8	5.3	6.0	8.7	20.8	25.4	26.6	27.0	18.3	14.3	-	-	-
1983	727	720	9.6	5.5	7.0	8.6	18.4	27.7	29.1	30.5	23.8	14.4	8.9	7.0	190.5
1984	727	720	5.8	7.4	11.2	12.2	34.1	31.7	37.9	32.0	24.3	15.3	8.3	5.9	226.0
1985	729	722	6.7	7.7	8.6	18.6	27.1	32.7	38.7	31.2	23.4	13.0	9.8	7.4	224.8
1986	745	737	7.7	6.4	7.8	18.8	26.2	32.1	36.6	31.2	23.1	17.5	12.8	8.9	229.2
1987	745	737	10.4	7.4	10.5	21.3	28.4	36.7	33.8	33.3	28.2	20.8	7.8	9.2	247.8
1988	748	742	6.9	9.9	15.6	17.3	20.9	23.5	33.1	37.1	28.8	23.6	13.7	9.3	239.6
1989	745	737	3.4	7.4	8.4	16.4	30.6	27.7	34.1	37.0	22.1	17.0	12.7	9.4	226.1
1990	747	739	9.2	9.4	10.5	21.3	30.2	28.4	34.3	38.7	30.0	27.6	15.0	12.3	266.9

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.13	1,323	124	123	139	288	456	498	679	559	500	373	235	137	344	0.386
1981	2.18	1,375	115	137	-	194	439	658	656	595	457	233	176	146	-	-
1982	2.22	1,482	126	128	131	196	453	571	580	587	411	311	-	-	-	-
1983	2.27	1,650	188	119	137	174	360	560	569	596	481	281	179	137	316	0.354
1984	2.32	1,683	111	151	215	242	653	627	727	614	481	293	164	113	368	0.412
1985	2.36	1,721	125	160	161	359	509	634	726	585	453	244	189	138	358	0.401
1986	2.41	1,792	139	128	140	349	472	596	659	561	430	316	239	160	350	0.392
1987	2.45	1,826	183	145	185	389	502	670	597	588	514	367	142	162	372	0.416
1988	2.50	1,867	120	183	269	308	361	419	571	641	514	408	245	160	352	0.394
1989	2.54	1,894	58	139	142	289	521	488	581	631	389	290	224	160	327	0.366
1990	2.59	1,933	153	174	174	367	504	490	572	647	518	461	259	206	378	0.424
AVERAGE			131	144	169	287	476	565	629	600	468	325	205	152	352	0.394

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data is unavailable

C—059333

C-059333

COUNTY.. GLENN
CITY.... WILLOWS
SYSTEM #..... 11003
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN WEST
DAU # 163

CITY CENSUS POPULATION
1980..... 4,777
1990..... 5,988

WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	722	Metered.....	295	Metered.....	NA	Metered.....	39
Flat Rate.....	1,064	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,008	1,357	20.9	19.7	26.0	41.1	56.9	58.1	83.0	75.0	61.4	48.6	33.5	22.1	546.3
1981	2,031		21.0	19.4	24.0	42.6	59.8	87.9	87.1	79.5	57.3	28.8	23.2	19.6	550.2
1982	2,027		16.6	14.7	15.6	22.9	59.1	64.0	76.4	70.2	46.8	38.1	21.7	21.8	467.9
1983	2,047		20.9	18.4	21.1	24.6	49.7	71.1	82.2	71.5	57.8	40.2	21.9	21.3	500.7
1984	2,071		21.8	21.6	32.7	48.5	73.3	81.8	91.9	79.0	64.9	36.8	24.7	23.2	600.2
1985	2,086		23.2	26.5	28.1	48.0	65.2	88.3	88.1	76.9	48.5	46.4	30.0	20.1	589.3
1986	2,088		19.2	21.6	26.9	42.6	65.1	73.8	84.1	79.9	51.2	46.4	32.8	21.7	565.3
1987	2,093		21.5	20.1	20.6	50.5	69.6	75.9	79.4	78.0	60.6	47.4	25.5	24.1	573.2
1988	2,093		23.5	27.9	42.7	41.9	51.5	67.6	87.2	73.8	64.8	49.3	27.0	23.7	580.9
1989	2,122		25.7	25.4	25.6	44.2	66.9	68.7	79.2	74.6	46.9	31.6	28.0	27.6	544.4
1990	2,122	1,701	25.0	23.3	34.0	48.7	53.9	66.1	83.0	73.8	62.5	54.9	33.9	32.0	591.1

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.52	7,069	95	96	119	194	260	274	379	342	290	222	158	101	212	0.237
1981	3.52	7,150	95	97	108	199	270	410	393	359	267	130	108	88	211	0.236
1982	3.52	7,136	75	74	71	107	267	299	345	317	219	172	101	99	180	0.201
1983	3.52	7,206	94	91	94	114	222	329	368	320	267	180	101	95	190	0.213
1984	3.52	7,290	96	102	145	222	324	374	407	350	297	163	113	103	226	0.253
1985	3.52	7,343	102	129	123	218	286	401	387	338	220	204	136	88	220	0.246
1986	3.52	7,350	84	105	118	193	286	335	369	351	232	204	149	95	211	0.236
1987	3.52	7,368	94	97	90	228	305	343	348	341	274	208	115	106	213	0.239
1988	3.52	7,368	103	131	187	190	225	306	382	323	293	216	122	104	216	0.242
1989	3.52	7,470	111	121	111	197	289	307	342	322	209	136	125	119	200	0.224
1990	3.52	7,470	108	111	147	217	233	295	358	319	279	237	151	138	217	0.243
AVERAGE			96	105	119	189	270	334	371	335	259	188	125	103	209	0.234

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY.. COLUSA
CITY....WILLIAMS
SYSTEM #..... 6004
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN WEST
DAU # 163

WATER AGENCY.....WILLIAMS, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 1,655
1990..... 2,297

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	581	Metered.....	99	Metered.....	0	Metered.....	0
Flat Rate.....	20	Flat Rate...	20	Flat Rate...	0	Flat Rate...	1

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	617	597	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981	630	610	-	-	-	-	-	-	21.0	19.0	15.0	9.0	7.0	7.0	-
1982	645	620	6.0	6.0	7.0	9.0	16.0	14.0	15.0	18.0	9.0	9.0	7.0	7.0	123.0
1983	650	624	7.0	6.0	7.0	9.0	12.0	18.0	17.0	18.0	9.0	9.0	7.0	7.0	126.0
1984	664	631	7.0	6.0	7.0	9.0	14.0	18.0	19.0	20.0	19.0	11.0	8.0	8.0	146.0
1985	684	650	8.0	8.0	8.0	12.0	22.0	18.0	19.0	20.0	19.0	11.0	8.0	8.0	161.0
1986	667	657	7.7	7.0	7.9	10.7	17.8	20.3	20.0	19.0	12.4	10.3	9.1	7.9	150.1
1987	675	658	7.6	7.0	8.1	14.7	19.8	20.8	19.5	19.4	15.3	12.6	8.5	8.6	161.8
1988	705	689	8.8	8.0	13.5	10.8	14.6	15.9	19.4	16.1	13.7	11.4	8.4	7.5	148.0
1989	679	659	8.5	7.2	7.1	10.8	16.3	17.4	20.3	18.2	12.2	10.5	9.4	8.5	146.5
1990	711	691	7.7	7.3	9.6	14.1	14.3	17.6	22.0	17.0	13.9	12.4	10.1	9.6	155.6

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.77	1,710	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.83	1,781	-	-	-	-	-	-	380	344	281	163	131	127	-	-
1982	2.88	1,859	104	115	121	161	278	251	260	312	161	156	125	121	181	0.203
1983	2.94	1,910	118	112	118	157	203	314	287	304	157	152	122	118	181	0.202
1984	2.99	1,987	114	104	114	151	227	302	308	325	319	179	134	130	201	0.225
1985	3.05	2,085	124	137	124	192	340	288	294	309	304	170	128	124	212	0.237
1986	3.10	2,070	120	121	123	172	277	327	312	296	200	161	147	123	199	0.223
1987	3.16	2,132	115	117	123	230	300	325	295	293	239	190	132	130	208	0.233
1988	3.21	2,266	125	121	193	158	207	234	276	230	201	162	124	106	179	0.200
1989	3.27	2,220	123	116	103	163	237	262	295	264	183	152	142	124	181	0.203
1990	3.32	2,363	105	110	130	199	195	248	301	233	196	169	142	131	180	0.202
AVERAGE			117	117	128	176	252	283	301	291	224	165	133	123	191	0.214

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data is unavailable

C—0 5 9 3 3 5

C-059335

COUNTY.. COLUSA
CITY.... COLUSA
SYSTEM #..... 6002
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN WEST
DAU # 164

WATER AGENCY.....COLUSA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 4,075
1990..... 4,934

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,652	Metered.....	143	Metered.....	1	Metered.....	19
Flat Rate.....	39	Flat Rate...	0	Flat Rate...	0	Flat Rate...	13

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,574	1,419	20.0	20.1	25.1	30.6	48.5	52.5	64.1	62.6	43.5	35.7	25.2	21.5	449.4
1981	1,552	1,396	21.7	21.8	24.6	29.3	57.1	67.3	71.1	65.6	51.2	26.8	24.5	23.3	484.3
1982	1,530	1,374	21.9	18.2	20.1	23.1	48.4	56.4	61.5	59.1	50.8	58.9	23.4	22.0	463.8
1983	1,598	1,436	22.5	20.8	22.1	24.0	42.8	55.1	66.0	63.7	50.7	30.3	19.2	21.5	438.7
1984	1,665	1,497	21.6	20.1	26.8	38.2	62.7	70.2	77.8	72.4	54.9	32.6	24.7	23.1	525.1
1985	1,733	1,559	23.6	16.0	40.1	49.6	62.1	81.5	86.1	72.0	43.3	40.0	25.6	24.0	563.9
1986	1,741	1,577	23.0	20.1	24.2	38.3	66.9	70.8	79.4	77.4	47.0	39.0	31.8	22.3	540.2
1987	1,789	1,623	22.8	20.9	24.6	45.9	70.2	78.7	79.1	81.6	60.9	45.8	26.8	21.5	578.8
1988	1,823	1,655	25.0	26.2	34.9	39.2	52.2	68.3	85.9	78.5	64.9	47.6	25.6	23.6	571.9
1989	1,857	1,687	19.5	24.3	21.9	37.3	59.6	66.5	74.2	72.1	47.3	30.2	27.4	24.8	505.1
1990	1,854	1,684	24.8	22.4	31.5	46.7	55.0	62.3	82.0	72.2	55.9	48.1	30.8	27.5	559.2

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.87	4,520	143	153	179	226	346	387	457	447	321	255	186	153	272	0.305
1981	2.88	4,466	157	174	178	219	412	502	514	474	382	194	183	168	297	0.333
1982	2.88	4,412	160	147	147	175	354	426	450	432	384	431	177	161	288	0.323
1983	2.89	4,617	157	161	154	173	299	398	461	445	366	212	139	150	260	0.292
1984	2.90	4,820	145	144	179	264	420	485	521	485	380	218	171	155	298	0.334
1985	2.90	5,027	151	114	257	329	398	540	552	462	287	257	170	154	307	0.344
1986	2.91	5,060	147	142	154	252	426	466	506	493	310	249	209	142	292	0.328
1987	2.91	5,210	141	143	152	294	435	503	490	505	390	284	171	133	304	0.341
1988	2.92	5,320	152	170	212	246	317	428	521	476	407	289	160	143	295	0.330
1989	2.92	5,430	116	160	130	229	354	408	441	428	290	179	168	147	255	0.285
1990	2.93	5,432	147	147	187	287	327	382	487	429	343	286	189	163	282	0.316
AVERAGE			147	150	175	245	372	448	491	461	351	259	175	152	287	0.321

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 3 3 6

C-059336

COUNTY.. BUTTE
CITY.... BIGGS
SYSTEM #..... 4001
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN EAST
DAU # 168

WATER AGENCY.....BIGGS, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 1,413
1990..... 1,581

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	0	Metered.....	0	Metered.....	0	Metered.....	0
Flat Rate.....	560	Flat Rate...	35	Flat Rate...	1	Flat Rate...	1

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	529	519	6.0	5.0	7.0	12.0	23.0	27.0	31.0	26.0	20.0	15.0	9.0	7.0	188.0
1981	530	520	6.0	6.0	7.0	13.0	21.0	33.0	34.0	29.0	21.0	9.0	7.0	7.0	193.0
1982	534	525	6.0	6.0	7.0	9.0	23.0	28.0	28.0	30.0	17.0	11.0	7.0	7.0	179.0
1983	537	529	7.0	6.0	6.0	7.0	17.0	27.0	32.0	30.0	22.0	13.0	8.0	7.0	182.0
1984	543	535	7.0	7.0	9.0	15.0	28.0	31.0	37.0	31.0	22.0	11.0	8.0	10.0	216.0
1985	554	546	7.0	7.0	9.0	17.0	27.0	33.0	35.0	36.0	16.0	13.0	9.0	8.0	217.0
1986	561	551	8.0	7.0	9.0	15.0	27.0	32.0	33.0	31.0	17.0	13.0	11.0	8.0	211.0
1987	561	551	9.0	8.0	9.0	19.0	28.0	32.0	32.0	29.0	23.0	16.0	8.0	8.0	221.0
1988	564	554	8.0	8.0	14.0	15.0	18.0	35.0	35.0	30.0	23.0	17.0	9.0	8.0	220.0
1989	567	558	8.0	7.0	7.0	13.0	23.0	28.0	33.0	28.0	18.0	11.0	9.0	8.0	193.0
1990	597	588	7.0	7.0	10.0	17.0	21.0	26.0	34.0	30.0	24.0	18.0	10.0	8.0	212.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.72	1,440	134	120	157	278	515	625	694	582	463	336	208	157	358	0.401
1981	2.72	1,441	134	149	157	301	470	763	761	649	486	201	162	157	367	0.411
1982	2.72	1,450	133	148	156	207	512	644	623	667	391	245	161	156	338	0.379
1983	2.71	1,457	155	147	133	160	376	618	709	664	503	288	183	155	342	0.383
1984	2.71	1,471	154	164	197	340	614	702	811	680	499	241	181	219	402	0.451
1985	2.71	1,499	151	167	194	378	581	734	753	775	356	280	200	172	397	0.444
1986	2.70	1,516	170	165	192	330	575	704	702	660	374	277	242	170	381	0.427
1987	2.70	1,514	192	189	192	418	597	704	682	618	506	341	176	170	400	0.448
1988	2.70	1,520	170	181	297	329	382	767	743	637	504	361	197	170	396	0.444
1989	2.69	1,526	169	164	148	284	486	611	697	592	393	232	197	169	346	0.388
1990	2.69	1,605	141	156	201	353	422	540	683	603	498	362	208	161	362	0.405
AVERAGE			155	159	184	307	503	674	714	648	452	288	192	169	372	0.416

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—059337

C-059337

COUNTY.. BUTTE
CITY.... GRIDLEY
SYSTEM #..... 4004
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN EAST
DAU # 168

CITY CENSUS POPULATION
1980..... 3,982
1990..... 4,631

WATER AGENCY.....GRIDLEY, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,399	Metered.....	199	Metered.....	1	Metered.....	48
Flat Rate.....	10	Flat Rate...	8	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,591	1,591	20.3	16.2	21.6	32.2	44.7	56.5	56.9	61.7	65.8	28.3	9.4	9.7	423.3
1981	1,565	1,565	10.9	12.3	21.2	21.9	27.5	/5		30.5	27.8	21.4	20.7	11.6	-
1982	1,575	1,560	20.2	18.1	18.7	24.2	57.9	47.9	71.2	57.3	39.3	29.6	19.3	17.6	421.3
1983	1,637	1,622	20.4	17.2	19.3	19.2	35.8	59.7	67.9	64.3	47.7	32.2	18.6	18.6	420.9
1984	1,640	1,628	19.1	19.0	24.7	32.7	65.0	64.3	61.7	58.2	48.0	26.5	18.5	18.0	455.7
1985	1,648	1,636	18.0	18.8	20.3	37.0	56.7	69.9	73.1	62.2	36.5	34.1	23.3	20.9	470.8
1986	1,638	1,626	20.0	18.0	21.8	33.9	55.5	72.4	75.5	71.9	44.1	36.9	31.6	22.9	504.5
1987	1,642	1,630	22.9	21.0	23.9	45.7	61.1	73.4	72.6	71.3	55.2	41.4	22.4	21.5	532.4
1988	1,650	1,640	21.8	25.6	38.2	38.6	45.0	61.9	77.9	68.7	57.7	42.8	25.7	23.2	527.1
1989	1,654	1,644	22.6	21.3	22.1	35.0	51.0	66.9	79.1	72.3	45.6	33.5	21.2	22.6	493.2
1990	1,665	1,655	21.9	20.0	27.0	41.9	46.4	57.4	74.1	68.1	52.2	42.5	26.8	26.6	504.9

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.50	3,982	164	140	175	270	362	473	461	500	551	229	79	79	291	0.326
1981	2.53	3,963	89	111	173	184	224	-	-	248	234	174	174	94	-	-
1982	2.56	4,035	161	160	149	200	463	396	569	458	325	237	159	141	286	0.320
1983	2.59	4,242	155	145	147	151	272	469	516	489	375	245	146	141	272	0.304
1984	2.62	4,298	143	152	185	254	488	499	463	437	372	199	143	135	290	0.325
1985	2.65	4,368	133	154	150	282	419	533	540	459	279	252	178	154	295	0.331
1986	2.68	4,390	147	146	160	257	408	550	555	528	335	271	240	168	315	0.353
1987	2.71	4,449	166	169	173	342	443	550	526	517	414	300	168	156	328	0.367
1988	2.74	4,520	156	195	273	285	321	457	556	490	426	305	190	166	320	0.358
1989	2.77	4,579	159	166	156	255	359	487	557	509	332	236	154	159	295	0.330
1990	2.80	4,659	152	153	187	300	321	411	513	472	373	294	192	184	297	0.333
AVERAGE			148	154	175	253	371	482	526	464	365	249	166	143	299	0.335

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

COUNTY.. SUTTER
CITY....YUBA CITY
SYSTEM #..... 51002
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN EAST
DAU # 168

WATER AGENCY.....YUBA CITY, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 18,736
1990..... 27,437

SERVICE CONNECTIONS /1

RESIDENTIAL:
Metered..... 2,438
Flat Rate..... 3,528

COMMERCIAL:
Metered..... 650
Flat Rate... 206

INDUSTRIAL:
Metered..... 2
Flat Rate... 0

GOVERNMENTAL:
Metered..... 3
Flat Rate... 0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,256	5,256	86.0	78.0	88.0	138.0	211.0	291.0	274.0	252.0	200.0	156.0	113.0	86.0	1973.0
1981	5,303	5,297	88.0	80.0	90.0	130.0	205.0	282.0	277.0	256.0	195.0	153.0	111.0	89.0	1956.0
1982	5,350	5,338	90.0	82.0	92.0	122.0	198.0	272.0	280.0	259.0	190.0	149.0	108.0	92.0	1934.0
1983	5,444	5,421	94.0	85.0	95.0	106.0	185.0	253.0	285.0	266.0	180.0	142.0	103.0	97.0	1891.0
1984	5,500	5,469	96.0	91.0	125.0	161.0	254.0	278.0	284.0	281.0	223.0	157.0	96.0	92.0	2138.0
1985	5,988	5,931	101.0	87.0	115.0	186.0	260.0	310.0	317.0	285.0	192.0	175.0	123.0	108.0	2259.0
1986	5,059	5,059	112.0	105.0	133.0	165.0	245.0	308.0	368.0	335.0	237.0	206.0	177.0	139.0	2530.0
1987	5,492	5,445	104.0	94.0	116.0	213.0	285.0	309.0	237.0	320.0	257.0	178.0	99.0	124.0	2336.0
1988	5,559	5,512	123.0	138.0	199.0	193.0	233.0	288.0	353.0	332.0	288.0	227.0	147.0	136.0	2657.0
1989	6,112	6,051	129.0	120.0	128.0	185.0	258.0	306.0	362.0	326.0	240.0	187.0	162.0	150.0	2553.0
1990	7,083	6,989	147.0	141.0	181.0	235.0	267.0	313.0	385.0	369.0	294.0	271.0	178.0	161.0	2942.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.56	18,736	148	144	152	246	363	518	472	434	356	269	201	148	289	0.323
1981	3.60	19,095	149	150	152	227	346	492	468	432	340	258	194	150	281	0.314
1982	3.64	19,457	149	151	153	209	328	466	464	429	325	247	185	153	272	0.305
1983	3.67	19,996	152	152	153	177	298	422	460	429	300	229	172	156	259	0.290
1984	3.71	20,400	152	154	198	263	402	454	449	444	364	248	157	145	287	0.322
1985	3.75	22,426	145	139	165	276	374	461	456	410	285	252	183	155	276	0.309
1986	3.78	19,130	189	196	224	288	413	537	621	565	413	347	308	234	362	0.406
1987	3.82	20,965	160	160	178	339	439	491	365	492	409	274	157	191	305	0.342
1988	3.85	21,422	185	222	300	300	351	448	532	500	448	342	229	205	340	0.381
1989	3.89	23,773	175	180	174	259	350	429	491	442	337	254	227	204	294	0.330
1990	3.93	27,806	171	181	210	282	310	375	447	428	352	314	213	187	290	0.325
AVERAGE			161	166	187	260	361	463	475	455	357	276	202	175	296	0.331

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 3 3 9

C-059339

COUNTY.. YUBA
CITY....MARYSVILLE
SYSTEM #..... 58001
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN EAST
DAU # 171

CITY CENSUS POPULATION
1980..... 9,898
1990..... 12,324

WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	370	Metered.....	1,650	Metered.....	4	Metered.....	57
Flat Rate.....	2,695	Flat Rate...	2,695	Flat Rate...	0	Flat Rate...	37

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,586	3,586	45.0	43.0	50.0	66.0	93.0	110.0	132.0	120.0	97.0	74.0	56.0	47.0	933.0
1981	3,659	3,659	46.0	41.0	48.0	64.0	99.0	140.0	145.0	135.0	101.0	59.0	48.0	49.0	975.0
1982	3,674	3,674	50.0	45.0	49.0	57.0	105.0	113.0	131.0	124.0	83.0	66.0	51.0	52.0	926.0
1983	3,677	3,677	57.0	54.0	67.0	68.0	104.0	134.0	148.0	129.0	101.0	75.0	50.0	52.0	1039.0
1984	3,694	3,694	51.0	48.0	58.0	72.0	120.0	130.0	149.0	136.0	109.0	65.0	51.0	49.0	1038.0
1985	3,716	3,716	49.0	47.0	52.0	77.0	112.0	142.0	151.0	132.0	89.0	83.0	59.0	57.0	1050.0
1986	3,748	3,748	57.0	51.0	64.0	78.0	116.0	139.0	152.0	150.0	98.0	85.0	66.0	52.0	1108.0
1987	3,760	3,760	52.0	53.0	59.0	90.0	123.0	144.0	147.0	148.0	116.0	88.0	64.0	61.0	1145.0
1988	3,744	3,744	57.0	59.0	74.0	71.0	84.0	120.0	154.0	141.0	116.0	89.0	58.0	55.0	1078.0
1989	3,752	3,752	54.0	54.0	61.0	75.0	99.0	123.0	151.0	137.0	97.0	78.0	63.0	59.0	1051.0
1990	4,799	4,799	59.0	54.0	61.0	85.0	97.0	117.0	145.0	139.0	115.0	95.0	66.0	67.0	1100.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.76	9,898	147	150	163	222	303	370	430	391	327	241	189	153	258	0.289
1981	2.74	10,029	148	146	154	213	318	465	466	434	336	190	160	158	266	0.298
1982	2.72	10,000	161	161	158	190	339	377	423	400	277	213	170	168	254	0.284
1983	2.70	9,937	185	194	217	228	338	449	480	419	339	243	168	169	286	0.321
1984	2.68	9,912	166	167	189	242	391	437	485	443	367	212	172	159	287	0.321
1985	2.66	9,900	160	170	169	259	365	478	492	430	300	270	199	186	291	0.325
1986	2.64	9,913	185	184	208	262	377	467	495	488	330	277	222	169	306	0.343
1987	2.63	9,873	170	192	193	304	402	486	480	484	392	288	216	199	318	0.356
1988	2.61	9,759	188	208	245	243	278	410	509	466	396	294	198	182	303	0.339
1989	2.59	9,707	179	199	203	258	329	422	502	455	333	259	216	196	297	0.332
1990	2.57	12,324	154	156	160	230	254	316	380	364	311	249	179	175	245	0.274
AVERAGE			168	175	187	241	336	425	467	434	337	249	190	174	283	0.317

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY..SACRAMENTO
CITY....SACRAMENTO
SYSTEM #..... 34013
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN EAST
DAU # 172 173

WATER AGENCY.....CITIZENS UTILITIES COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 110,000
1990..... 166,000

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	51,000	Metered.....	687	Metered.....	NA	Metered.....	200
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	32,230	32,230	467.0	466.0	514.0	498.0	723.0	1043.0	1230.0	1398.0	1400.0	1213.0	885.0	715.0	10552.0
1981	33,155	33,155	563.0	454.0	503.0	525.0	884.0	1344.0	1568.0	1753.0	1503.0	1345.0	732.0	604.0	11778.0
1982	34,100	34,100	561.0	504.0	544.0	471.0	640.0	1191.0	1342.0	1370.0	1438.0	1092.0	733.0	511.0	10397.0
1983	34,549	34,549	481.0	530.0	504.0	486.0	574.0	974.0	1399.0	1701.0	1638.0	1321.0	898.0	640.0	11146.0
1984	35,490	34,590	487.0	556.0	589.0	593.0	812.0	1306.0	1337.0	1851.0	1480.0	1512.0	1030.0	669.0	12222.0
1985	36,798	36,798	566.0	701.0	667.0	734.0	965.0	1333.0	1663.0	1843.0	1682.0	1237.0	1112.0	830.0	13333.0
1986	40,095	40,095	712.0	669.0	653.0	657.0	911.0	1426.0	1780.0	1832.0	1781.0	1452.0	1047.0	921.0	13841.0
1987	39,749	39,749	892.0	743.0	919.0	789.0	1083.0	1564.0	1641.0	1785.0	1725.0	1681.0	1288.0	712.0	14822.0
1988	41,106	41,106	803.0	726.0	880.0	1046.0	1140.0	1183.0	1584.0	1729.0	1655.0	1685.0	1264.0	905.0	14600.0
1989	43,429	43,429	817.0	755.0	723.0	1001.0	1489.0	1758.0	1997.0	1880.0	1606.0	1062.0	931.0	817.0	14836.0
1990	46,064	46,064	785.0	833.0	957.0	1192.0	1352.0	1523.0	1967.0	1938.0	1772.0	1594.0	1130.0	1012.0	16055.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.41	110,000	137	146	151	151	212	316	361	410	424	356	268	210	263	0.294
1981	3.43	113,789	160	142	143	154	251	394	445	497	440	381	214	171	284	0.318
1982	3.45	117,683	154	153	149	133	175	337	368	376	407	299	208	140	242	0.271
1983	3.47	119,891	129	158	136	135	154	271	376	458	455	355	250	172	255	0.285
1984	3.49	123,834	127	155	153	160	212	352	348	482	398	394	277	174	270	0.303
1985	3.51	129,099	141	194	167	190	241	344	416	461	434	309	287	207	283	0.317
1986	3.53	141,431	162	169	149	155	208	336	406	418	420	331	247	210	268	0.300
1987	3.55	140,969	204	188	210	187	248	370	376	408	408	385	305	163	288	0.323
1988	3.57	146,565	177	171	194	238	251	269	349	381	376	371	287	199	273	0.306
1989	3.58	155,676	169	173	150	214	309	376	414	390	344	220	199	169	261	0.292
1990	3.60	166,000	153	179	186	239	263	306	382	377	356	310	227	197	265	0.297
AVERAGE			156	166	162	178	229	334	385	423	406	337	252	183	268	0.301

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY..SACRAMENTO
CITY....FAIR OAKS/ORANGEVALE
SYSTEM #..... 34009
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN EAST
DAU # 172

WATER AGENCY.....FAIR OAKS WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 95
WELLS AND SPRINGS.. 5

SOURCE OF WATER (in percent):
PURCHASED..... 95
SELF SUPPLIED..... 5

CITY CENSUS POPULATION
1980..... 30,447
1990..... 38,005

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	0	Metered.....	841	Metered.....	NA	Metered.....	NA
Flat Rate.....	14,388	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	26

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	11,417	11,417	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981	11,648	44,648	122.0	143.0	126.0	252.0	590.0	721.0	734.0	806.0	515.0	272.0	168.0	130.0	4579.0
1982	11,751	11,751	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	11,818	11,818	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	11,551	11,551	105.1	133.3	249.1	299.4	562.8	815.7	789.0	856.3	579.7	278.8	134.7	97.3	4901.2
1985	11,681	11,681	131.0	183.0	179.0	388.0	591.0	752.5	794.5	653.0	503.0	443.0	257.0	194.0	5069.0
1986	11,811	11,811	181.0	179.0	261.0	325.0	702.0	735.0	756.0	904.0	483.0	382.0	422.0	215.0	5545.0
1987	11,972	11,972	253.5	200.0	206.0	365.0	496.0	621.0	680.0	841.0	742.6	415.0	225.0	192.0	5237.1
1988	12,071	12,071	228.0	248.5	320.0	451.0	414.0	735.0	577.0	718.0	734.0	407.0	248.0	206.0	5286.5
1989	12,242	12,242	236.0	208.0	218.0	340.0	506.0	657.0	656.0	720.0	581.0	307.0	253.0	251.0	4933.0
1990	12,641	12,641	181.0	225.0	305.0	365.0	451.0	523.0	719.0	641.0	599.0	438.0	303.0	199.0	4949.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.67	30,447	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.70	31,459	125	162	129	267	605	764	753	826	546	279	178	133	399	0.447
1982	2.73	32,136	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.77	32,721	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2.80	32,374	105	142	248	308	561	840	786	853	597	278	139	97	415	0.465
1985	2.84	33,135	128	197	174	390	575	757	773	636	506	431	259	189	419	0.469
1986	2.87	33,905	172	189	248	320	668	723	719	860	475	363	415	205	448	0.502
1987	2.90	34,774	235	205	191	350	460	595	631	780	712	385	216	178	413	0.462
1988	2.94	35,471	207	242	291	424	376	691	525	653	690	370	233	187	408	0.457
1989	2.97	36,390	209	204	193	311	449	602	582	638	532	272	232	223	371	0.416
1990	3.01	38,005	154	211	259	320	383	459	610	544	525	372	266	169	357	0.400
AVERAGE			167	194	217	336	510	679	672	724	573	344	242	173	404	0.452

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

C—0 5 9 3 4 2

C-059342

COUNTY.. PLACER
CITY....ROSEVILLE
SYSTEM #..... 31008
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN EAST
DAU # 172

CITY CENSUS POPULATION
1980..... 24,347
1990..... 44,685

WATER AGENCY.....ROSEVILLE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	362	Metered.....	1,626	Metered.....	NA	Metered.....	NA
Flat Rate.....	16,544	Flat Rate...	838	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	9,736	9,729	121.0	111.0	139.0	153.0	271.0	337.0	369.0	358.0	268.0	193.0	160.0	141.0	2621.0
1981	10,236	10,229	129.0	102.0	118.0	163.0	231.0	352.0	371.0	356.0	220.0	139.0	91.0	87.0	2359.0
1982	10,591	10,584	94.0	74.0	93.0	123.0	343.0	417.0	414.0	366.0	259.0	192.0	116.0	121.0	2612.0
1983	10,861	10,854	114.0	96.0	121.0	138.0	275.0	445.0	453.0	429.0	353.0	240.0	172.0	143.0	2979.0
1984	11,351	11,344	155.0	130.0	172.0	229.0	388.0	433.0	506.0	462.0	379.0	220.0	142.0	144.0	3360.0
1985	11,742	11,735	139.0	131.0	145.0	257.0	391.0	486.0	497.0	446.0	311.0	284.0	171.0	139.0	3397.0
1986	12,764	12,764	139.0	128.0	145.0	252.0	449.0	510.0	570.0	536.0	353.0	306.0	250.0	164.0	3802.0
1987	13,786	13,782	178.0	150.0	183.0	335.0	455.0	514.0	536.0	530.0	432.0	333.0	181.0	160.0	3987.0
1988	14,539	14,535	156.0	196.0	276.0	271.0	331.0	446.0	560.0	537.0	470.0	364.0	192.0	169.0	3968.0
1989	15,871	15,867	162.0	164.0	190.0	278.0	448.0	495.0	602.0	542.0	413.0	290.0	273.0	233.0	4090.0
1990	17,249	17,245	221.0	200.0	275.0	344.0	417.0	504.0	651.0	611.0	501.0	411.0	288.0	219.0	4642.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.50	24,365	160	157	184	209	359	461	489	474	367	256	219	187	295	0.330
1981	2.51	25,707	162	142	148	211	290	456	466	447	285	174	118	109	251	0.282
1982	2.52	26,692	114	99	112	154	415	521	500	442	323	232	145	146	268	0.300
1983	2.53	27,469	134	125	142	167	323	540	532	504	428	282	209	168	297	0.333
1984	2.54	28,809	174	156	193	265	434	501	567	517	439	246	164	161	320	0.358
1985	2.55	29,905	150	156	156	286	422	542	536	481	347	306	191	150	311	0.349
1986	2.56	32,621	137	140	143	258	444	521	564	530	361	303	255	162	319	0.358
1987	2.56	35,355	162	152	167	316	415	485	489	484	407	304	171	146	309	0.346
1988	2.57	37,415	134	181	238	241	285	397	483	463	419	314	171	146	291	0.325
1989	2.58	40,984	128	143	150	226	353	403	474	427	336	228	222	183	273	0.306
1990	2.59	44,695	160	160	198	257	301	376	470	441	374	297	215	158	285	0.319
AVERAGE			147	146	167	236	367	473	506	474	371	267	189	156	293	0.328

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059343

COUNTY..SACRAMENTO
CITY....SACRAMENTO
SYSTEM #..... 34020
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN EAST
DAU # 172

WATER AGENCY.....SACRAMENTO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 95
WELLS AND SPRINGS.. 5

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 275,741
1990..... 369,365

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	0	Metered.....	2,841	Metered.....	NA	Metered.....	NA
Flat Rate.....	107,627	Flat Rate...	5,345	Flat Rate...	NA	Flat Rate...	93

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	93,481	93,481	1482.0	1342.0	1567.0	2043.0	2796.0	3427.0	4059.0	3941.0	3395.0	2279.0	1964.0	1634.0	29929.0
1981	94,135	94,135	1531.0	1378.0	1551.0	2276.0	3069.0	4328.0	4499.0	4219.0	3464.0	2254.0	1594.0	1440.0	31603.0
1982	98,024	96,535	1446.0	1342.0	1517.0	1743.0	3228.0	3607.0	4078.0	4098.0	2721.0	2580.0	1567.0	1442.0	29369.0
1983	100,240	98,751	1442.0	1403.0	1549.0	1787.0	2638.0	3547.0	4026.0	4016.0	3238.0	2646.0	1698.0	1535.0	29525.0
1984	101,307	99,818	1580.0	1550.0	2038.0	2525.0	3867.0	4123.0	4954.0	4500.0	3881.0	2516.0	1672.0	1586.0	34792.0
1985	104,217	102,728	1543.0	1570.0	1732.0	2681.0	3682.0	4369.0	4852.0	4368.0	3125.0	2819.0	1977.0	1761.0	34479.0
1986	104,668	104,668	1638.0	1537.0	1851.0	2450.0	3705.0	4491.0	4958.0	4652.0	3297.0	2785.0	2505.0	1799.0	35668.0
1987	107,704	107,704	1761.0	1609.0	1902.0	3055.0	4075.0	4551.0	5026.0	4884.0	4023.0	3104.0	2074.0	1945.0	38009.0
1988	109,305	109,305	1917.0	2121.0	2738.0	2822.0	3289.0	4098.0	5057.0	4767.0	4109.0	3421.0	2126.0	1962.0	38427.0
1989	110,663	110,663	1917.0	1685.0	1783.0	2636.0	3764.0	4208.0	5004.0	4633.0	3406.0	2926.0	2068.0	1870.0	35900.0
1990	111,785	110,330	1857.0	1665.0	2100.0	2881.0	3238.0	3588.0	4560.0	4639.0	3909.0	3838.0	2650.0	2232.0	37157.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.95	275,741	173	168	183	247	327	414	475	461	410	267	237	191	297	0.333
1981	2.99	281,418	175	175	178	270	352	513	516	484	410	258	189	165	308	0.345
1982	3.03	296,947	157	161	165	196	351	405	443	445	305	280	176	157	271	0.303
1983	3.07	307,650	151	163	162	194	277	384	422	421	351	277	184	161	263	0.294
1984	3.11	314,958	162	170	209	267	396	436	507	461	411	258	177	162	303	0.339
1985	3.15	328,154	152	171	170	272	362	444	477	429	317	277	201	173	288	0.322
1986	3.19	333,742	158	164	179	245	358	449	479	450	329	269	250	174	293	0.328
1987	3.23	347,710	163	165	176	293	378	436	466	453	386	288	199	180	299	0.335
1988	3.27	357,230	173	205	247	263	297	382	457	430	383	309	198	177	295	0.330
1989	3.31	366,074	169	164	157	240	332	383	441	408	310	258	188	165	269	0.301
1990	3.35	374,236	160	159	181	257	279	320	393	400	348	331	236	192	272	0.305
AVERAGE			163	170	183	249	337	415	461	440	360	279	203	173	287	0.321

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY..SACRAMENTO/PLACER
CITY....ORANGEVALE/ROSEVILLE
SYSTEM #..... 34021
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN EAST
DAU # 172

CITY CENSUS POPULATION
1980..... 7,000
1990..... 20,000

WATER AGENCY.....SAN JUAN SUBURBAN WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	111	Metered.....	321	Metered.....	NA	Metered.....	25
Flat Rate.....	6,768	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,000	4,000	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981	4,200	4,200	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	4,400	4,400	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	4,600	4,600	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	4,884	4,884	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	5,000	5,000	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	5,200	5,200	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	5,400	5,400	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	5,676	5,676	191.0	228.0	250.0	231.0	337.0	430.0	525.0	464.0	400.0	280.0	226.0	148.0	3710.0
1989	6,207	6,207	159.0	267.0	322.0	314.0	425.0	579.0	612.0	593.0	365.0	328.0	474.0	345.0	4783.0
1990	6,402	6,402	321.0	289.0	378.0	322.0	349.0	409.0	506.0	484.0	387.0	410.0	239.0	215.0	4309.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	1.75	7,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	1.89	7,927	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	2.02	8,909	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.16	9,946	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2.30	11,231	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	2.44	12,185	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	2.57	13,387	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	2.71	14,644	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	2.85	16,172	381	486	499	476	672	886	1,047	926	824	559	466	295	629	0.704
1989	2.99	18,538	277	514	560	565	740	1,041	1,065	1,032	656	571	852	600	707	0.792
1990	3.12	20,000	518	516	610	537	563	682	816	781	645	661	398	347	590	0.661
AVERAGE			392	506	556	526	658	870	976	913	709	597	572	414	642	0.719

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data is unavailable.

C—0 5 9 3 4 5

C-059345

COUNTY..SACRAMENTO
CITY....NORTH HIGHLANDS
SYSTEM #..... 34001
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN EAST
DAU # 173

WATER AGENCY.....ARCADE COUNTY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 91,000
1990..... 95,000

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	14,379	Metered.....	1,000	Metered.....	71	Metered.....	100
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	21,753	21,753	292.0	332.0	359.0	520.0	780.0	1075.0	1106.0	1099.0	931.0	711.0	434.0	392.0	8031.0
1981	21,810	21,810	337.0	302.0	358.0	572.0	815.0	1287.0	1267.0	1154.0	903.0	536.0	347.0	309.0	8187.0
1982	21,826	21,826	325.0	300.0	355.0	412.0	919.0	1008.0	1113.0	1147.0	804.0	566.0	333.0	358.0	7640.0
1983	21,878	21,878	378.0	309.0	358.0	427.0	740.0	1011.0	1228.0	1162.0	923.0	649.0	371.0	350.0	7906.0
1984	21,903	21,903	385.0	364.0	470.0	649.0	995.0	1271.0	1331.0	1263.0	1027.0	744.0	431.0	388.0	9318.0
1985	21,941	21,941	391.0	392.0	372.0	619.0	999.0	1052.0	1248.0	1193.0	834.0	693.0	459.0	330.0	8582.0
1986	22,037	22,037	332.0	302.0	388.0	454.0	902.0	1151.0	1251.0	1112.0	1028.0	648.0	584.0	393.0	8545.0
1987	22,081	22,081	372.0	341.0	403.0	705.0	897.0	1134.0	1188.0	1133.0	888.0	771.0	402.0	394.0	8628.0
1988	22,088	22,088	347.0	469.0	649.0	595.0	787.0	1028.0	1056.0	1291.0	930.0	703.0	444.0	350.0	8649.0
1989	22,251	22,251	360.0	348.0	388.0	507.0	894.0	1004.0	1177.0	1079.0	760.0	501.0	461.0	403.0	7882.0
1990	22,336	22,336	314.0	372.0	378.0	620.0	696.0	774.0	1082.0	1092.0	832.0	839.0	470.0	453.0	7922.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.18	91,000	104	126	127	190	276	394	392	390	341	252	159	139	242	0.271
1981	4.19	91,391	119	118	126	209	288	469	447	407	329	189	127	109	245	0.275
1982	4.20	91,610	114	117	125	150	324	367	392	404	293	199	121	126	228	0.256
1983	4.20	91,982	133	120	126	155	260	366	431	408	334	228	134	123	235	0.264
1984	4.21	92,240	135	136	164	235	348	459	465	442	371	260	156	136	277	0.310
1985	4.22	92,553	136	151	130	223	348	379	435	416	300	242	165	115	254	0.285
1986	4.23	93,112	115	116	134	163	312	412	433	385	368	224	209	136	251	0.282
1987	4.23	93,452	128	130	139	251	310	404	410	391	317	266	143	136	253	0.283
1988	4.24	93,636	120	173	224	212	271	366	364	445	331	242	158	121	253	0.283
1989	4.25	94,483	123	132	132	179	305	354	402	368	268	171	163	138	229	0.256
1990	4.25	95,000	107	140	128	218	236	272	367	371	292	285	165	154	228	0.256
AVERAGE			121	133	141	198	298	386	413	402	322	233	155	130	245	0.275

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059346

COUNTY..SACRAMENTO
CITY....CARMICHAEL
SYSTEM #..... 34004
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN EAST
DAU # 173

WATER AGENCY.....CARMICHAEL WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 60
WELLS AND SPRINGS.. 40

SOURCE OF WATER (in percent):
PURCHASED..... 60
SELF SUPPLIED..... 40

CITY CENSUS POPULATION
1980..... 30,000
1990..... 38,550

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	0	Metered.....	549	Metered.....	NA	Metered.....	3
Flat Rate.....	11,000	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	1

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	9,000	9,000	165.0	179.0	213.0	178.0	339.0	346.0	571.0	616.0	732.0	502.0	256.0	247.0	4344.0
1981	9,250	9,250	161.0	210.0	184.0	240.0	392.0	593.0	750.0	623.0	451.0	277.0	203.0	157.0	4241.0
1982	9,500	9,500	195.0	182.0	166.0	162.0	421.0	583.0	593.0	665.0	549.0	294.0	239.0	175.0	4224.0
1983	9,750	9,750	168.0	170.0	179.0	250.0	218.0	545.0	736.0	599.0	501.0	350.0	285.0	212.0	4213.0
1984	10,000	10,000	211.0	187.0	194.0	297.0	420.0	661.0	735.0	685.0	633.0	437.0	235.0	186.0	4881.0
1985	10,030	10,030	228.0	164.0	277.0	348.0	578.0	703.0	623.0	430.0	256.0	403.0	460.0	195.0	4665.0
1986	10,442	10,442	207.0	197.0	206.0	251.0	463.0	610.0	510.0	540.0	395.0	230.0	211.0	175.0	3995.0
1987	10,725	10,725	125.0	159.0	207.0	434.0	501.0	690.0	588.0	613.0	611.0	374.0	207.0	147.0	4656.0
1988	10,600	10,600	172.4	192.3	258.8	338.8	295.0	574.1	643.8	647.5	572.2	425.3	224.0	198.2	4542.4
1989	10,709	10,709	187.0	177.0	164.9	280.0	507.2	550.0	674.0	510.0	469.0	264.0	242.0	185.0	4210.1
1990	10,830	10,830	190.0	172.0	189.0	328.0	417.0	394.0	569.0	569.0	506.0	421.0	230.0	206.0	4191.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.33	30,000	177	206	229	198	365	384	614	662	813	540	284	266	397	0.444
1981	3.36	31,043	167	242	191	258	407	637	779	647	484	288	218	163	374	0.419
1982	3.38	32,096	196	203	167	168	423	605	596	668	570	295	248	176	361	0.404
1983	3.40	33,162	163	183	174	251	212	548	716	583	504	340	286	206	348	0.390
1984	3.42	34,238	199	188	183	289	396	644	692	645	616	412	229	175	391	0.437
1985	3.45	34,568	213	169	258	336	539	678	581	401	247	376	444	182	370	0.414
1986	3.47	36,224	184	194	183	231	412	561	454	481	363	205	194	156	302	0.338
1987	3.49	37,448	108	152	178	386	432	614	507	528	544	322	184	127	341	0.382
1988	3.51	37,252	149	178	224	303	255	514	557	561	512	368	200	172	334	0.374
1989	3.54	37,877	159	167	140	246	432	484	574	434	413	225	213	158	305	0.341
1990	3.56	38,550	159	159	158	284	349	341	476	476	438	352	199	172	298	0.334
AVERAGE			170	186	190	268	384	546	595	553	500	339	245	177	347	0.389

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059347

COUNTY..SACRAMENTO
CITY....SACRAMENTO
SYSTEM #..... 34007
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN EAST
DAU # 173

WATER AGENCY.....DEL PASO MANOR WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 6,000
1990..... 6,500

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	0	Metered.....	68	Metered.....	NA	Metered.....	3
Flat Rate.....	1,685	Flat Rate...	38	Flat Rate...	NA	Flat Rate...	1

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,785	1,785	22.0	21.0	17.0	27.0	42.0	65.0	66.0	80.0	69.0	50.0	34.0	26.0	519.0
1981	1,786	1,786	20.0	18.0	21.0	28.0	50.0	70.0	88.0	86.0	72.0	40.0	24.0	20.0	537.0
1982	1,788	1,788	19.0	20.0	20.0	21.0	41.0	64.0	72.0	89.0	54.0	33.0	27.0	22.0	482.0
1983	1,785	1,785	20.0	22.0	20.0	20.0	29.0	32.0	66.0	82.0	68.0	48.0	34.0	20.0	461.0
1984	1,790	1,790	19.0	33.0	26.0	23.0	51.0	77.0	81.0	90.0	80.0	51.0	25.0	21.0	577.0
1985	1,792	1,792	22.0	22.0	21.0	36.0	55.0	75.0	71.0	67.0	71.0	54.0	14.0	19.0	527.0
1986	1,801	1,801	20.0	22.0	21.0	28.0	41.0	65.0	85.0	73.0	79.0	39.0	45.0	32.0	550.0
1987	1,801	1,801	22.0	25.0	21.0	36.0	69.0	68.0	83.0	98.0	80.0	61.0	34.0	21.0	618.0
1988	1,806	1,806	23.0	26.0	30.0	48.0	39.0	51.0	82.0	85.0	77.0	59.0	36.0	20.0	576.0
1989	1,811	1,811	23.0	21.0	13.0	38.0	35.0	65.0	80.0	74.0	79.0	38.0	29.0	25.0	520.0
1990	1,811	1,811	21.0	21.0	19.0	33.0	52.0	44.0	70.0	82.0	65.0	59.0	39.0	25.0	530.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.36	6,000	118	121	91	150	226	361	355	430	383	269	189	140	237	0.265
1981	3.38	6,044	107	106	112	154	267	386	470	459	397	213	132	107	243	0.273
1982	3.41	6,092	101	117	106	115	217	350	381	471	295	175	148	117	217	0.243
1983	3.43	6,122	105	128	105	109	153	174	348	432	370	253	185	105	206	0.231
1984	3.45	6,180	99	184	136	124	266	415	423	470	432	266	135	110	256	0.286
1985	3.48	6,228	114	126	109	193	285	401	368	347	380	280	75	98	232	0.260
1986	3.50	6,300	102	125	108	148	210	344	435	374	418	200	238	164	239	0.268
1987	3.52	6,341	112	141	107	189	351	357	422	499	421	310	179	107	267	0.299
1988	3.54	6,400	116	140	151	250	197	266	413	428	401	297	188	101	247	0.276
1989	3.57	6,459	115	116	65	196	175	335	400	370	408	190	150	125	221	0.247
1990	3.59	6,500	104	115	94	169	258	226	347	407	333	293	200	124	223	0.250
AVERAGE			109	129	108	163	237	329	397	426	385	250	165	118	235	0.263

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059348

COUNTY..SACRAMENTO
CITY....CARMICHAEL/CITRUS HTS.
SYSTEM #..... 34024
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTAL BASIN EAST
DAU # 173

CITY CENSUS POPULATION
1980..... 51,200
1990..... 66,897

WATER AGENCY.....NORTHRIDGE WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 97
WELLS AND SPRINGS.. 3

SOURCE OF WATER (in percent):
PURCHASED..... 97
SELF SUPPLIED..... 3

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	411	Metered.....	1,368	Metered.....	NA	Metered.....	NA
Flat Rate.....	18,033	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	11,156	11,156	150.0	134.0	160.0	223.0	347.0	444.0	474.0	446.0	404.0	302.0	203.0	174.0	3461.0
1981	13,135	13,135	135.0	146.0	170.0	257.0	302.0	579.0	567.0	630.0	402.0	230.0	178.0	159.0	3755.0
1982	13,100	13,100	160.0	158.0	180.0	198.0	431.0	473.0	497.0	521.0	329.0	234.0	180.0	173.0	3534.0
1983	13,100	13,100	171.0	154.0	172.0	199.0	344.0	461.0	557.0	578.0	446.0	302.0	190.0	185.0	3759.0
1984	15,000	15,000	196.0	178.0	235.0	316.0	519.0	543.0	670.0	584.0	469.0	330.0	201.0	202.0	4443.0
1985	15,000	15,000	203.0	201.0	213.0	362.0	522.0	590.0	780.0	568.0	420.0	373.0	242.0	231.0	4705.0
1986	15,987	15,987	208.0	192.0	237.0	329.0	496.0	640.0	676.0	594.0	480.0	379.0	361.0	363.0	4955.0
1987	18,316	18,316	275.0	254.0	334.0	502.0	620.0	803.0	812.0	789.0	653.0	495.0	305.0	280.0	6122.0
1988	19,550	19,550	274.0	338.0	420.0	423.0	533.0	657.0	771.0	806.0	662.0	523.0	326.0	312.0	6045.0
1989	19,771	19,771	275.0	225.0	235.0	392.0	834.0	713.0	702.0	766.0	525.0	272.0	295.0	262.0	5496.0
1990	19,813	19,813	307.0	254.0	315.0	447.0	481.0	525.0	740.0	775.0	631.0	608.0	392.0	341.0	5816.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.59	51,200	95	90	101	145	219	289	299	281	263	190	132	110	185	0.207
1981	4.47	58,689	74	89	93	146	166	329	312	346	228	126	101	87	175	0.196
1982	4.35	56,944	91	99	102	116	244	277	282	295	193	133	105	98	170	0.190
1983	4.23	55,355	100	99	100	120	200	278	325	337	269	176	114	108	186	0.208
1984	4.10	61,564	103	100	123	171	272	294	351	306	254	173	109	106	198	0.221
1985	3.98	59,744	110	120	115	202	282	329	421	307	234	201	135	125	216	0.242
1986	3.86	61,736	109	111	124	178	259	346	353	310	259	198	195	190	220	0.246
1987	3.74	68,508	129	132	157	244	292	391	382	372	318	233	148	132	245	0.274
1988	3.62	70,752	125	165	191	199	243	310	352	367	312	238	154	142	234	0.262
1989	3.50	69,153	128	116	110	189	389	344	327	357	253	127	142	122	218	0.244
1990	3.38	66,897	148	136	152	223	232	262	357	374	314	293	195	164	238	0.267
AVERAGE			110	114	124	176	254	313	342	332	263	190	139	126	208	0.233

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
*Northridge WD purchased Arvin WC in 10/86.

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C-059349

COUNTY.. LAKE
CITY....BUCKINGHAM PARK
SYSTEM #..... 17011
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SOUTHWEST
DAU # 174

WATER AGENCY.....BUCKINGHAM PARK COUNTY WATER DIST.
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 50
WELLS AND SPRINGS.. 50

SOURCE OF WATER (in percent):
PURCHASED..... 50
SELF SUPPLIED..... 50

ESTIMATED POPULATION
1980..... 800
1990..... 1,110

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	363	Metered.....	4	Metered.....	0	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	NA

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	277	277	6.0	5.5	5.2	5.5	5.1	3.3	3.8	3.7	2.4	1.7	1.8	1.8	45.6
1981	291	291	1.8	1.7	2.1	2.5	2.6	3.5	4.2	4.3	3.7	1.8	1.4	1.9	31.5
1982	/6		-	-	-	-	-	-	-	-	-	-	-	-	-
1983	305	305	-	-	-	-	-	-	5.5	5.3	4.0	2.5	2.1	1.6	-
1984	312	312	1.9	2.1	2.3	2.8	4.7	5.0	6.3	5.6	4.0	3.0	2.4	2.2	42.2
1985	329	329	3.8	1.7	2.3	2.3	4.2	5.3	4.0	4.1	2.4	2.6	2.1	2.0	36.8
1986	330	330	2.7	1.9	2.5	2.6	4.9	5.8	5.3	5.6	3.2	2.7	2.2	2.1	41.5
1987	348	348	2.2	1.8	2.0	2.9	4.2	5.1	5.2	6.4	4.1	3.6	1.8	0.7	40.0
1988	367	367	2.0	1.7	2.4	3.6	4.5	4.7	6.3	5.7	4.0	2.9	1.8	1.9	41.5
1989	357	357	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	367	367	2.5	2.1	2.5	3.0	3.1	3.3	5.8	5.9	5.6	2.2	2.3	2.1	40.4

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.89	800	242	236	208	228	207	136	151	149	99	70	74	72	156	0.175
1981	2.90	844	69	72	80	99	99	138	160	164	146	69	55	73	102	0.114
1982	2.92		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.93	893	-	-	-	-	-	-	199	191	149	90	78	58	-	-
1984	2.94	918	66	79	80	101	164	180	220	198	143	106	87	77	126	0.141
1985	2.96	973	126	62	76	79	139	182	133	136	82	86	72	66	104	0.116
1986	2.97	980	89	69	82	88	161	197	174	184	109	89	75	69	116	0.130
1987	2.98	1,038	68	62	62	93	130	164	162	199	132	112	58	22	106	0.118
1988	3.00	1,100	59	53	70	109	132	142	185	167	121	85	55	56	103	0.116
1989	3.01	1,075	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	3.02	1,110	73	68	73	90	90	99	169	171	168	64	69	61	100	0.112
AVERAGE			99	88	92	111	140	155	173	173	128	86	69	62	114	0.128

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
6/ Missing data unavailable
Note: Jan. to May 1980 production values include old system leak

COUNTY.. LAKE
CITY....CLEARLAKE OAKS
SYSTEM #..... 17001
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SOUTHWEST
DAU # 174

WATER AGENCY.....CLEARLAKE OAKS COUNTY WATER DIST.
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ESTIMATED POPULATION
1980..... 2,270
1990..... 2,550

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,505	Metered.....	70	Metered.....	0	Metered.....	8
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,420	1,420	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981	1,499	1,499	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	1,500	1,500	-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984	1,514	1,514	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	1,550	1,550	9.0	8.3	9.8	11.3	13.3	15.8	17.9	16.5	13.1	11.1	9.8	8.6	144.6
1986			-	-	-	-	-	-	-	-	-	-	-	-	-
1987	1,581	1,581	8.5	7.8	8.4	10.4	13.3	15.0	15.9	16.3	13.5	10.8	8.5	8.3	136.7
1988	1,632	1,632	8.7	8.4	10.2	9.8	11.3	12.2	17.6	15.6	14.4	12.6	10.1	10.1	140.9
1989	1,602	1,602	9.4	10.2	9.2	11.1	12.8	15.1	-	-	-	-	-	-	-
1990	1,595	1,595	9.0	8.0	11.0	12.0	13.0	16.0	19.0	19.3	16.0	12.0	10.0	15.0	160.3

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	1.60	2,270	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	1.60	2,396	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	1.60	2,398	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	1.60		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	1.60	2,420	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	1.60	2,478	117	120	128	153	173	213	233	215	176	145	131	112	160	0.179
1986	1.60		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	1.60	2,528	109	110	107	137	170	198	203	208	178	137	112	106	148	0.166
1988	1.60	2,609	107	111	126	125	139	156	218	193	184	156	129	125	148	0.166
1989	1.60	2,561	118	142	116	144	161	197	-	-	-	-	-	-	-	-
1990	1.60	2,550	114	112	139	157	164	209	240	244	209	152	131	190	172	0.193
AVERAGE			113	119	123	143	162	195	224	215	187	147	126	133	157	0.176

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

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C-059351

COUNTY.. LAKE
CITY.... COBB
SYSTEM #..... 17012
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SOUTHWEST
DAU # 174

WATER AGENCY.....COBB MUTUAL WATER COMPANY
TYPE OF AGENCY.....WATER ASSOCIATION

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 40
WELLS AND SPRINGS.. 60

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

ESTIMATED POPULATION
1980..... 1,490
1990..... 1,790

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	469	Metered.....	12	Metered.....	0	Metered.....	3
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	425	425	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983	460	460	-	-	-	-	-	-	6.3	-	-	-	-	-	-
1984			-	-	-	-	-	-	-	-	-	-	-	-	-
1985			-	-	-	-	-	-	-	-	-	-	-	-	-
1986			-	-	-	-	-	-	-	-	-	-	-	-	-
1987	484	484	4.6	4.2	3.6	6.4	6.8	9.8	8.7	8.7	10.1	5.9	3.6	5.4	77.8
1988			-	-	-	-	-	-	-	-	-	-	-	-	-
1989			-	-	-	-	-	-	-	-	-	-	-	-	-
1990	510	510	-	-	-	-	-	-	-	-	-	-	-	-	-

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.51	1,490	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.51		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3.51		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3.51	1,613	-	-	-	-	-	-	127	-	-	-	-	-	-	-
1984	3.51		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	3.51		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	3.51		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	3.51	1,698	87	88	68	126	129	192	165	165	198	112	71	103	126	0.141
1988	3.51		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	3.51		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	3.51	1,790	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AVERAGE			87	88	68	126	129	192	146	165	198	112	71	103	126	0.141

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

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C-059352

COUNTY.. LAKE
CITY.... FINLEY
SYSTEM #..... 17019
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SOUTHWEST
DAU # 174

WATER AGENCY.....FINLEY COUNTY SERVICE AREA #6
TYPE OF AGENCY.....PUBLIC WATER AGENCY

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

ESTIMATED POPULATION
1980..... 400
1990..... 503

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	200	Metered.....	NA	Metered.....	1	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	160	160	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984			-	-	-	-	-	-	-	-	-	-	-	-	-
1985			-	-	-	-	-	-	-	-	-	-	-	-	-
1986	191	191	1.1	1.1	1.1	1.4	2.0	2.8	3.4	3.6	2.1	1.9	1.5	1.3	23.3
1987	186	186	1.2	1.2	1.4	1.9	2.6	3.0	3.6	3.7	2.9	2.4	1.8	1.3	27.0
1988	195	195	1.4	1.2	1.7	1.7	2.2	2.6	3.7	3.4	2.9	2.3	1.5	1.4	26.0
1989	198	198	1.5	1.7	1.4	1.8	2.4	2.7	3.5	3.3	2.2	2.0	1.6	1.5	25.6
1990	201	201	1.4	1.3	1.6	2.1	2.4	2.8	3.8	3.5	2.7	1.9	1.5	1.8	26.8

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.50	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.50		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	2.50		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.50		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2.50		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	2.50		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	2.50	478	74	82	74	98	135	195	230	243	147	128	105	88	134	0.150
1987	2.50	465	83	92	97	136	180	215	250	256	208	166	129	90	159	0.178
1988	2.50	488	93	85	112	116	145	178	245	225	198	152	102	93	146	0.164
1989	2.50	495	98	123	91	121	156	182	228	215	148	130	108	98	142	0.159
1990	2.50	503	90	92	103	139	154	186	244	224	179	122	99	115	146	0.163
AVERAGE			87	95	95	122	154	191	239	233	176	140	109	97	145	0.163

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C—0 5 9 3 5 3

C-059353

COUNTY.. LAKE
CITY....KELSEYVILLE
SYSTEM #..... 17007
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SOUTHWEST
DAU # 174

ESTIMATED POPULATION
1980..... 2,925
1990..... 3,120

WATER AGENCY.....KELSEYVILLE CO. WW DIST.#3
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	804	Metered.....	14	Metered.....	1	Metered.....	3
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	665	665	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984	709		-	-	-	-	-	-	22.8	22.7	16.0	9.3	7.1	7.5	-
1985	720		7.3	6.6	7.2	10.6	14.9	19.5	-	-	-	-	-	-	-
1986	748		7.9	7.0	7.8	9.5	13.3	19.3	21.3	22.5	12.4	10.0	7.9	7.2	146.1
1987	725		7.3	6.4	7.2	11.7	16.2	19.8	22.6	25.1	17.7	13.9	8.6	8.2	164.7
1988	805		8.3	8.0	10.5	11.2	12.8	16.8	22.0	22.6	18.6	13.7	9.0	8.8	162.3
1989	810		-	-	-	-	-	-	21.9	24.4	15.4	11.0	9.0	8.5	-
1990	822	822	8.2	7.8	9.4	12.2	14.5	16.8	22.8	22.5	16.6	13.9	9.3	10.8	164.8

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.40	2,925	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	4.34		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	4.28		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	4.22		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	4.16	2,948	-	-	-	-	-	-	250	248	181	102	80	82	-	-
1985	4.10	2,950	80	80	79	120	163	220	-	-	-	-	-	-	-	-
1986	4.04	3,020	84	83	83	105	142	213	228	240	137	107	87	77	133	0.148
1987	3.98	2,883	82	79	81	135	181	229	253	281	205	156	99	92	157	0.175
1988	3.92	3,153	85	88	107	118	131	178	225	231	197	140	95	90	141	0.158
1989	3.86	3,123	-	-	-	-	-	-	226	252	164	114	96	88	-	-
1990	3.80	3,120	85	89	97	130	150	179	236	233	177	144	99	112	145	0.162
AVERAGE			83	84	89	122	153	204	236	248	177	127	93	90	144	0.161

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

C—0 5 9 3 5 4

C-059354

COUNTY.. LAKE
CITY....CLEARLAKE HIGHLANDS
SYSTEM #..... 17006
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SOUTHWEST
DAU # 174

WATER AGENCY.....KONOCTI COUNTY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY..... X
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

ESTIMATED POPULATION
1980..... 3,660
1990..... 4,930

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,643	Metered.....	4	Metered.....	0	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	NA

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,370	1,370	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981	1,450	1,450	-	-	-	-	-	-	12.5	11.2	9.1	5.4	4.5	4.5	-
1982	1,500	1,500	4.5	4.1	4.8	5.1	9.7	10.5	12.5	12.9	8.3	6.3	5.0	4.7	88.5
1983	1,419	1,419	4.8	4.0	4.6	5.0	8.2	10.7	16.6	15.6	13.0	9.1	6.4	6.6	104.6
1984	1,441	1,441	6.7	6.5	8.0	9.4	14.5	16.4	-	-	-	-	-	-	-
1985			-	-	-	-	-	-	-	-	-	-	-	-	-
1986	1,591	1,591	7.3	6.0	6.7	8.5	11.7	14.6	16.3	17.8	10.4	10.2	8.8	7.8	125.9
1987			-	-	-	-	-	-	-	-	-	-	-	-	-
1988	1,647	1,647	8.7	8.1	9.4	9.7	11.3	13.6	16.9	16.2	13.9	12.0	8.8	8.3	136.8
1989			-	-	-	-	-	-	-	-	-	-	-	-	-
1990	1,700	1,700	-	-	-	-	-	-	-	-	-	-	-	-	-

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.67	3,660	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.69	3,907	-	-	-	-	-	-	103	92	78	45	39	37	-	-
1982	2.72	4,076	36	36	38	42	77	86	99	102	68	50	41	37	59	0.067
1983	2.74	3,888	40	36	38	43	68	92	138	129	111	75	55	55	74	0.083
1984	2.76	3,981	54	56	65	79	117	137	-	-	-	-	-	-	-	-
1985	2.79		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	2.81	4,469	53	48	48	63	84	109	117	128	78	74	66	56	77	0.086
1987	2.83		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	2.85	4,701	59	59	65	69	78	96	116	111	99	83	62	57	80	0.089
1989	2.88		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	2.90	4,930	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AVERAGE			48	47	51	59	85	104	115	113	87	65	53	48	73	0.081

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C—0 5 9 3 5 5

C-059355

COUNTY.. LAKE
CITY....LAKEPORT
SYSTEM #..... 17004
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SOUTHWEST
DAU # 174

WATER AGENCY.....LAKEPORT, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 12
WELLS AND SPRINGS.. 88

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

ESTIMATED POPULATION
1980..... 3,675
1990..... 4,390

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,399	Metered.....	394	Metered.....	NA	Metered.....	11
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,884	1,838	11.3	15.2	13.6	14.0	23.2	19.2	26.7	30.7	23.5	17.2	13.4	13.2	221.2
1981	1,803	1,759	12.6	19.2	11.9	14.7	19.1	25.1	27.8	26.3	20.7	13.7	11.5	11.9	214.5
1982	1,830	1,782	12.1	10.4	11.4	11.5	16.9	24.4	26.3	27.0	20.1	16.1	12.1	13.0	201.3
1983	1,844	1,796	11.2	12.1	10.9	12.6	18.2	24.9	27.0	28.4	22.0	16.5	21.1	11.6	216.5
1984	1,874	1,826	12.1	10.7	12.6	14.0	22.4	26.4	32.8	31.4	26.2	18.0	13.0	14.0	233.6
1985	2,193	2,145	13.4	12.4	13.8	17.3	24.0	30.1	35.0	32.4	22.1	20.4	16.2	15.4	252.5
1986	2,245	2,200	15.3	13.9	13.7	16.4	20.9	29.3	33.9	35.6	24.2	20.5	15.8	15.5	255.0
1987	2,178	2,127	13.5	12.8	12.7	17.8	26.9	32.2	31.6	38.4	30.7	26.2	17.9	17.2	277.9
1988	1,867	1,822	17.1	17.1	21.2	20.5	29.5	30.6	39.8	34.2	32.4	16.0	19.3	17.4	295.1
1989	1,938	1,893	16.5	15.6	16.6	19.5	25.7	13.2	36.2	34.1	25.3	20.5	16.0	15.2	254.4
1990	2,040	1,999	17.4	13.9	14.4	14.3	22.8	26.5	33.6	32.4	24.9	17.9	21.4	18.0	257.5

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.00	3,767	97	139	116	124	199	170	229	263	208	147	119	113	161	0.180
1981	2.02	3,640	112	188	105	135	169	230	246	233	190	121	105	105	161	0.181
1982	2.04	3,731	105	100	99	103	146	218	227	233	180	139	108	112	148	0.166
1983	2.06	3,796	95	114	93	111	155	219	229	241	193	140	185	99	156	0.175
1984	2.08	3,894	100	95	104	120	186	226	272	260	224	149	111	116	164	0.184
1985	2.10	4,600	94	96	97	125	168	218	245	227	160	143	117	108	150	0.168
1986	2.12	4,754	104	104	93	115	142	205	230	242	170	139	111	105	147	0.165
1987	2.14	4,655	94	98	88	127	186	231	219	266	220	182	128	119	164	0.183
1988	2.16	4,027	137	146	170	170	236	253	319	274	268	128	160	139	201	0.225
1989	2.18	4,218	126	132	127	154	197	104	277	261	200	157	126	116	165	0.185
1990	2.20	4,480	125	111	104	106	164	197	242	233	185	129	159	130	157	0.176
AVERAGE			108	120	109	126	177	206	249	249	200	143	130	115	161	0.181

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 3 5 6

C-059356

COUNTY.. LAKE
CITY....CLEAR LAKE RIVIERA
SYSTEM #..... 17014
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SOUTHWEST
DAU # 174

WATER AGENCY.....MT. KONOCTI MUTUAL WATER COMPANY
TYPE OF AGENCY.....WATER ASSOCIATION

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

ESTIMATED POPULATION
1980..... 600
1990..... 950

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	0	Metered.....	19	Metered.....	0	Metered.....	2
Flat Rate.....	680	Flat Rate...	5	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	490	490	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981	509	509	3.3	3.1	3.8	5.6	7.3	9.8	11.4	11.4	8.4	5.7	4.1	4.1	77.8
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983	537	537	4.6	4.1	4.3	4.6	6.6	7.8	8.0	7.4	4.5	3.9	3.7	4.5	64.0
1984			-	-	-	-	-	-	-	-	-	-	-	-	-
1985			-	-	-	-	-	-	-	-	-	-	-	-	-
1986			-	-	-	-	-	-	-	-	-	-	-	-	-
1987			-	-	-	-	-	-	-	-	-	-	-	-	-
1988	706	706	7.1	6.8	8.7	9.0	10.2	12.0	16.4	15.4	13.6	10.8	7.1	6.9	124.0
1989			-	-	-	-	-	-	-	-	-	-	-	-	-
1990	775	775	-	-	-	-	-	-	-	-	-	-	-	-	-

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	1.22	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	1.22	623	168	175	196	299	379	524	587	587	449	293	221	212	342	0.383
1982	1.22		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	1.22	658	226	223	211	233	324	395	392	363	228	191	188	221	267	0.299
1984	1.23		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	1.23		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	1.23		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	1.23		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	1.23	865	266	272	325	347	379	462	612	573	524	404	272	257	393	0.440
1989	1.23		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	1.23	950	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AVERAGE			220	223	244	293	360	460	531	508	400	296	227	230	334	0.374

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

C—0 5 9 3 5 7

C-059357

COUNTY.. LAKE
CITY....RIVIERA HEIGHTS
SYSTEM #..... 17017
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SOUTHWEST
DAU # 174

WATER AGENCY.....RIVIERA HEIGHTS MUTUAL WATER Co.
TYPE OF AGENCY.....WATER ASSOCIATION

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

ESTIMATED POPULATION
1980..... 250
1990..... 492

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	176	Metered.....	0	Metered.....	0	Metered.....	NA
Flat Rate.....	3	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	125	125	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984	160	160	-	-	-	-	-	-	-	2.7	2.4	1.7	0.8	0.9	-
1985	170	170	0.8	0.8	1.0	1.5	2.2	3.3	-	-	-	-	-	-	-
1986	179	179	1.0	1.0	1.1	1.7	2.5	3.5	3.9	3.7	2.6	1.5	1.3	1.3	25.1
1987	182	182	1.5	1.2	1.4	2.4	2.7	3.3	2.6	2.6	2.1	3.0	2.0	2.0	26.7
1988			-	-	-	-	-	-	-	-	-	-	-	-	-
1989			-	-	-	-	-	-	-	-	-	-	-	-	-
1990	205	205	1.4	1.0	1.6	2.0	3.2	3.4	3.9	3.9	3.2	2.0	2.0	2.6	30.2

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.00	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.04		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	2.08		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.12		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2.16	346	-	-	-	-	-	-	-	255	233	157	80	81	-	-
1985	2.20	374	69	76	84	134	185	290	-	-	-	-	-	-	-	-
1986	2.24	401	83	89	88	141	201	291	314	298	216	121	108	105	172	0.192
1987	2.28	415	115	102	108	196	209	263	198	198	169	234	163	152	176	0.197
1988	2.32		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	2.36		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	2.40	492	92	73	105	136	210	230	256	256	217	131	136	170	168	0.188
AVERAGE			90	85	96	152	201	268	256	252	209	161	122	127	172	0.193

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data is unavailable

C—0 5 9 3 5 8

C-059358

COUNTY.. LAKE
CITY....SPRING VALLEY
SYSTEM #..... 17018
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SOUTHWEST
DAU # 174

WATER AGENCY.....SPRING VALLEY CO. SERV. AREA #12
TYPE OF AGENCY.....PUBLIC WATER AGENCY

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

ESTIMATED POPULATION
1980..... 320
1990..... 660

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	264	Metered.....	1	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	140	140	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984	190	190	-	-	-	-	-	-	2.6	2.2	1.2	1.3	1.1	1.2	-
1985	198	198	1.2	1.1	1.1	1.5	2.2	2.6	-	-	-	-	-	-	-
1986	219	219	1.2	0.9	1.6	1.6	2.3	3.3	2.9	3.7	2.9	2.7	2.2	2.3	27.4
1987	221	221	2.1	1.7	2.0	2.5	2.7	3.3	3.6	3.6	3.0	2.7	1.8	1.8	30.7
1988	233	233	2.1	2.1	2.5	2.5	2.9	3.2	4.1	4.1	3.9	3.1	2.2	2.2	34.8
1989	237	237	2.3	2.1	1.9	2.4	2.9	3.4	4.0	3.5	2.9	2.6	2.3	2.1	32.4
1990	265	265	2.0	1.7	2.0	2.5	2.3	3.1	4.1	4.2	3.2	2.7	2.2	2.5	32.5

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.29	320	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.31		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	2.33		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.35		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2.37	450	-	-	-	-	-	-	187	158	88	91	80	86	-	-
1985	2.39	473	80	81	75	106	151	183	-	-	-	-	-	-	-	-
1986	2.41	527	71	63	95	102	138	206	175	225	185	166	139	139	142	0.160
1987	2.43	537	129	115	120	154	163	203	215	215	183	162	112	107	157	0.176
1988	2.45	571	116	124	140	147	164	185	232	231	228	175	130	124	167	0.187
1989	2.47	585	127	128	105	137	160	194	220	193	165	143	131	116	152	0.170
1990	2.49	660	98	92	98	126	112	157	200	205	162	132	111	122	135	0.151
AVERAGE			103	101	105	129	148	188	205	204	168	145	117	116	151	0.169

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

C—0 5 9 3 5 9

C-059359

COUNTY.. LAKE
CITY....STARVIEW
SYSTEM #..... 17021
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....SOUTHWEST
DAU # 174

WATER AGENCY.....STARVIEW COUNTY SERVICE AREA #18
TYPE OF AGENCY.....PUBLIC WATER AGENCY

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ESTIMATED POPULATION
1980..... 190
1990..... 293

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	0	Metered.....	1	Metered.....	0	Metered.....	NA
Flat Rate.....	116	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	100	100	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984			-	-	-	-	-	-	-	-	-	-	-	-	-
1985			-	-	-	-	-	-	-	-	-	-	-	-	-
1986			-	-	-	-	-	-	-	-	-	-	-	-	-
1987	107	107	0.8	0.7	0.8	1.1	1.4	1.6	1.9	1.9	1.7	1.4	1.0	1.1	15.4
1988	108	108	-	-	-	-	-	-	1.5	1.5	1.4	1.0	0.8	0.9	-
1989	109	109	0.9	1.1	1.0	1.0	1.0	1.3	1.7	1.3	1.3	1.1	1.0	1.1	13.8
1990	117	117	1.2	1.1	1.1	1.7	1.1	1.1	-	-	-	-	-	-	-

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	1.90	190	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	1.96		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	2.02		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.08		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2.14		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	2.20		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	2.26		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	2.32	249	104	101	104	148	182	215	247	247	228	182	134	143	170	0.190
1988	2.38	257	-	-	-	-	-	-	188	188	181	125	104	113	-	-
1989	2.44	266	109	147	121	125	121	163	206	157	163	133	125	133	142	0.159
1990	2.50	293	132	134	121	193	121	125	-	-	-	-	-	-	-	-
AVERAGE			115	127	115	155	141	167	213	197	191	147	121	130	156	0.175

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

C—0 5 9 3 6 0

C-059360

COUNTY..SACRAMENTO
CITY.... ISLETON
SYSTEM #..... 34012
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....DELTA SERVICE AREA
DAU # 186

WATER AGENCY.....CITIZENS UTILITY CO. OF CALIF.
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 914
1990..... 833

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	320	Metered.....	40	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	300	300	/5 -	-	-	-	-	-	-	-	-	-	-	-	-
1981	325	325	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	354	354	6.0	5.0	5.0	5.0	6.0	10.0	9.0	10.0	9.0	6.0	6.0	6.0	83.0
1983	355	355	5.0	6.0	5.0	4.0	6.0	7.0	12.0	10.0	9.0	7.0	5.0	5.0	81.0
1984	352	352	4.0	4.0	4.0	5.0	7.0	9.0	11.0	10.0	11.0	12.0	11.0	9.0	97.0
1985	341	341	7.0	5.0	6.0	6.0	7.0	9.0	12.0	9.0	9.0	9.0	8.0	6.0	93.0
1986	359	359	6.0	6.0	6.0	6.0	7.0	11.0	11.0	11.0	10.0	7.0	8.0	7.0	96.0
1987	359	359	7.0	7.0	7.0	6.0	8.0	9.0	10.0	10.0	10.0	8.0	6.0	6.0	94.0
1988	361	361	6.0	5.0	11.0	7.0	7.0	8.0	10.0	11.0	10.0	8.0	7.0	7.0	97.0
1989	356	356	8.0	7.0	7.0	8.0	9.0	10.0	11.0	10.0	7.0	6.0	6.0	4.0	93.0
1990	353	353	4.0	4.0	5.0	6.0	5.0	8.0	7.0	11.0	11.0	8.0	7.0	7.0	83.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.05	914	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.98	968	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	2.91	1,030	188	173	157	162	188	324	282	313	291	188	194	188	221	0.247
1983	2.84	1,008	160	212	160	132	192	231	384	320	297	224	165	160	220	0.246
1984	2.77	976	132	141	132	171	231	307	364	331	376	397	376	298	272	0.305
1985	2.70	922	245	194	210	217	245	325	420	315	325	315	289	210	276	0.310
1986	2.63	946	205	227	205	211	239	388	375	375	352	239	282	239	278	0.311
1987	2.57	921	245	271	245	217	280	326	350	350	362	280	217	210	280	0.313
1988	2.50	901	215	191	394	259	250	296	358	394	370	286	259	250	295	0.330
1989	2.43	865	299	289	261	308	336	386	410	373	270	224	231	149	295	0.330
1990	2.36	833	155	171	194	240	194	320	271	426	440	310	280	271	273	0.306
AVERAGE			205	208	217	213	239	323	357	355	343	274	255	219	268	0.300

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

C—0 5 9 3 6 1

C-059361

COUNTY.. SOLANO
CITY....RIO VISTA
SYSTEM #..... 48004
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....DELTA SERVICE AREA
DAU # 186

WATER AGENCY.....RIO VISTA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 3,142
1990..... 3,316

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	0	Metered.....	190	Metered.....	NA	Metered.....	NA
Flat Rate.....	1,221	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	2

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,260	1,260	15.0	16.0	19.0	27.0	40.0	47.0	56.0	52.0	40.0	36.0	27.0	18.0	393.0
1981	1,347	1,347	13.0	15.0	17.0	29.0	45.0	61.0	59.0	57.0	44.0	28.0	19.0	20.0	407.0
1982	1,318	1,318	15.0	18.0	17.0	24.0	45.0	41.0	55.0	52.0	39.0	29.0	16.0	21.0	372.0
1983	1,305	1,305	17.0	17.0	17.0	23.0	38.0	51.0	58.0	71.0	62.0	67.0	16.0	34.0	471.0
1984	1,320	1,320	17.0	17.0	20.0	25.0	45.0	55.0	65.0	70.0	60.0	80.0	20.0	20.0	494.0
1985	1,341	1,341	24.0	26.0	35.0	43.0	55.0	67.0	83.0	81.0	53.0	43.0	32.0	23.0	565.0
1986	1,337	1,337	15.0	15.0	17.0	30.0	44.0	58.0	64.0	51.0	37.0	30.0	17.0	18.0	396.0
1987	1,319	1,319	15.0	14.0	17.0	38.0	46.0	50.0	55.0	54.0	26.0	33.0	18.0	16.0	382.0
1988	1,360	1,360	14.0	23.0	36.0	29.0	38.0	48.0	49.0	54.0	45.0	29.0	19.0	16.0	400.0
1989	1,377	1,377	7.0	16.0	8.0	25.0	42.0	51.0	58.0	52.0	34.0	24.0	19.0	13.0	349.0
1990	1,403	1,403	16.0	13.0	18.0	31.0	35.0	42.0	55.0	51.0	34.0	33.0	21.0	21.0	370.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.49	3,142	154	176	195	286	411	499	575	534	424	370	286	185	343	0.384
1981	2.48	3,341	126	160	164	289	434	609	570	550	439	270	190	193	334	0.374
1982	2.47	3,252	149	198	169	246	446	420	546	516	400	288	164	208	313	0.351
1983	2.45	3,203	171	190	171	239	383	531	584	715	645	675	166	342	403	0.451
1984	2.44	3,223	170	182	200	259	450	569	651	701	621	801	207	200	420	0.470
1985	2.43	3,257	238	285	347	440	545	686	822	802	542	426	328	228	475	0.532
1986	2.42	3,230	150	166	170	310	439	599	639	509	382	300	175	180	336	0.376
1987	2.40	3,169	153	158	173	400	468	526	560	550	273	336	189	163	330	0.370
1988	2.39	3,250	139	244	357	297	377	492	486	536	462	288	195	159	337	0.378
1989	2.38	3,272	69	175	79	255	414	519	572	513	346	237	194	128	292	0.327
1990	2.36	3,316	156	140	175	312	340	422	535	496	342	321	211	204	306	0.342
AVERAGE			152	188	200	303	428	534	594	584	443	392	210	199	354	0.396

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
NOTE: 1984 water production was estimated by DWR district office.

C—0 5 9 3 6 2

C-059362

COUNTY.. SOLANO
CITY.... DIXON
SYSTEM #..... 48002
HYDROLOGIC REGION .....SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN WEST
DAU # 191

WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 7,541
1990..... 10,401

SERVICE CONNECTIONS: 2/

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,255	Metered.....	265	Metered.....	133	Metered.....	26
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS 3/ SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2310	2310	20.2	19.3	23.6	34.7	49.6	57.3	66.6	61.0	49.5	42.3	31.3	22.4	477.8
1981	2373	2373	22.4	20.8	23.2	39.0	58.1	74.8	70.6	62.7	46.3	32.2	21.9	21.2	493.2
1982	2393	2393	22.7	19.9	21.9	27.5	57.4	60.4	66.4	63.8	41.3	34.9	23.0	24.2	463.4
1983	2419	2419	22.1	19.8	22.9	28.7	47.6	62.1	67.5	62.9	53.2	36.6	23.2	22.9	469.5
1984	2469	2469	23.2	22.3	30.6	43.4	61.7	61.5	66.5	62.3	55.8	33.6	23.6	24.5	509.0
1985	2514	2514	24.8	24.7	30.0	46.3	59.1	73.5	76.0	67.4	48.9	45.8	30.8	20.7	548.0
1986	2535	2535	28.1	24.1	27.3	40.9	59.1	71.5	72.0	66.6	45.5	42.3	37.4	26.8	541.6
1987	2563	2563	27.0	25.8	30.2	49.4	64.4	68.6	72.2	71.1	60.0	48.1	28.4	25.7	570.9
1988	2575	2575	27.3	29.4	40.8	40.2	49.4	62.7	74.1	65.4	57.1	45.8	28.7	27.7	548.6
1989	2578	2578	27.6	26.1	28.9	42.6	59.5	67.0	72.5	65.3	46.9	37.6	33.4	29.0	536.4
1990	2583	2583	27.1	24.3	33.3	46.4	50.4	61.6	70.8	65.6	56.6	50.2	34.7	30.7	551.7

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.26	7,541	86	88	101	153	212	253	285	261	219	181	138	96	174	0.194
1981	3.34	7,928	91	94	94	164	236	315	287	255	195	131	92	86	170	0.191
1982	3.42	8,177	90	87	86	112	226	246	262	252	168	138	94	95	155	0.174
1983	3.49	8,450	84	84	87	113	182	245	258	240	210	140	92	87	152	0.170
1984	3.57	8,813	85	87	112	164	226	233	243	228	211	123	89	90	158	0.177
1985	3.65	9,165	87	96	106	168	208	267	267	237	178	161	112	73	164	0.183
1986	3.72	9,435	96	91	93	144	202	253	246	228	161	145	132	92	157	0.176
1987	3.80	9,734	89	95	100	169	213	235	239	236	205	159	97	85	161	0.180
1988	3.87	9,976	88	102	132	134	160	209	240	211	191	148	96	90	151	0.169
1989	3.95	10,184	87	92	92	139	188	219	230	207	154	119	109	92	144	0.162
1990	4.03	10,401	84	83	103	149	156	197	220	203	181	156	111	95	145	0.163
AVERAGE			88	91	101	146	201	243	252	233	188	145	106	89	157	0.176

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059363

COUNTY.. SOLANO
CITY....VACAVILLE
SYSTEM #..... 48008
HYDROLOGIC REGION..... SACRAMENTO RIVER
PLANNING SUBAREA #.....CENTRAL BASIN WEST
DAU # 191

WATER AGENCY.....VACAVILLE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 53
WELLS AND SPRINGS.. 47

SOURCE OF WATER (in percent):
PURCHASED..... 53
SELF SUPPLIED..... 47

CITY CENSUS POPULATION
1980..... 43,367
1990..... 71,479

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	19,033	Metered.....	564	Metered.....	38	Metered.....	2,778
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	11,158	11,158	121.0	83.0	138.0	171.0	240.0	269.0	371.0	361.0	317.0	247.0	178.0	122.0	2618.0
1981	12,376	12,316	129.0	116.0	130.0	101.0	293.0	379.0	404.0	398.0	337.0	235.0	149.0	139.0	2810.0
1982	12,501		145.0	133.0	154.0	170.0	331.0	352.0	407.0	421.0	303.0	291.0	177.0	161.0	3045.0
1983	12,702		159.0	142.0	153.0	173.0	280.0	385.0	432.0	432.0	380.0	293.0	186.0	172.0	3187.0
1984	13,157		174.0	167.0	210.0	253.0	406.0	432.0	492.0	461.0	378.0	238.0	197.0	226.0	3634.0
1985	13,159	13,129	183.0	178.0	202.0	277.0	341.0	442.0	457.0	474.0	354.0	299.0	214.0	198.0	3619.0
1986	13,405	13,375	186.0	168.0	220.0	281.0	408.0	461.0	521.0	528.0	352.0	340.0	289.0	217.0	3971.0
1987	14,736	14,706	211.0	196.0	240.0	356.0	447.0	498.0	525.0	515.0	435.0	350.0	226.0	228.0	4227.0
1988	16,451	16,421	231.0	249.0	311.0	321.0	378.0	443.0	553.0	512.0	456.0	354.0	223.0	231.0	4262.0
1989	16,915	16,885	215.0	201.0	220.0	316.0	454.0	526.0	591.0	569.0	417.0	322.0	279.0	251.0	4361.0
1990	20,412	20,382	235.0	209.0	274.0	380.0	434.0	488.0	598.0	572.0	490.0	435.0	328.0	277.0	4720.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.89	43,367	90	66	103	131	179	207	276	269	244	184	137	91	165	0.185
1981	3.85	47,631	87	87	88	71	198	265	274	270	236	159	104	94	162	0.181
1982	3.81	47,638	98	100	104	119	224	246	276	285	212	197	124	109	175	0.196
1983	3.77	47,921	107	106	103	120	188	268	291	291	264	197	129	116	182	0.204
1984	3.73	49,138	114	117	138	172	267	293	323	303	256	156	134	148	203	0.227
1985	3.70	48,646	121	131	134	190	226	303	303	314	243	198	147	131	204	0.228
1986	3.66	49,047	122	122	145	191	268	313	343	347	239	224	196	143	222	0.248
1987	3.62	53,357	128	131	145	222	270	311	317	311	272	212	141	138	217	0.243
1988	3.58	58,942	126	146	170	182	207	251	303	280	258	194	126	126	198	0.222
1989	3.54	59,963	116	120	118	176	244	292	318	306	232	173	155	135	199	0.223
1990	3.51	71,584	106	104	123	177	196	227	269	258	228	196	153	125	181	0.202
AVERAGE			111	112	125	159	224	271	299	294	244	190	141	123	192	0.215

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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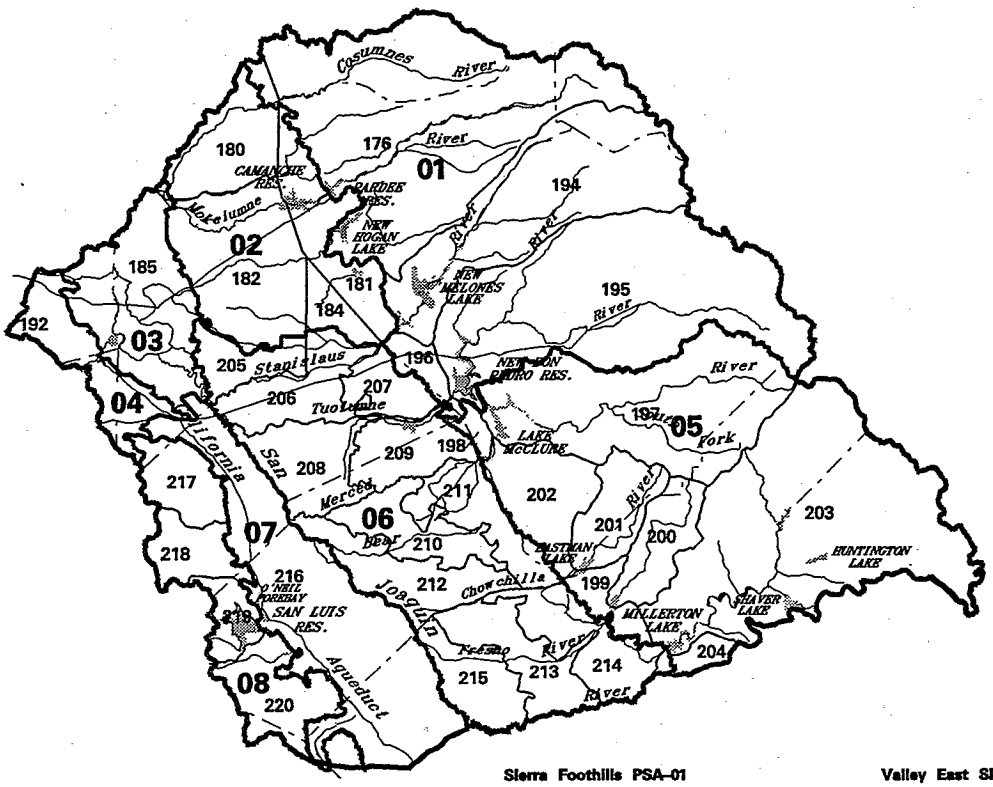
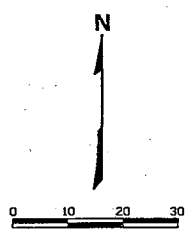
Figure A-8. San Joaquin River Region





Sierra Foothills PSA-01
- Cosumnes–Mokelumne–Calaveras (176)
- Stanislaus River (194)
- Tuolumne River (195)
- Stanislaus–Tuolumne Interstream (196)

Eastern Valley Floor PSA-02
- Elk Grove (180)
- Ione–Jenny Lind (181)
- Lodi (182)
- Bachelor Valley (184)

Delta Service Area PSA-03
- San Joaquin Delta (185)

Western Uplands PSA-04
- Antioch–Corral Hollow (192)

East Side Uplands PSA-05
- Merced River (197)
- Tuolumne–Merced Interstream (198)
- Chowchilla–Fresno River Interstream (199)
- Fresno River (200)
- Chowchilla River (201)
- Mariposa (202)
- San Joaquin River (203)
- Little Dry Creek (204)

Valley East Side PSA-06
- South San Joaquin ID (205)
- Modesto–Oakdale (206)
- Modesto Reservoir (207)
- Turlock (208)
- Turlock Lake (209)
- Merced (210)
- Merced Stream Group (211)
- El Nido–Stevinson (212)
- Madera–Chowchilla (213)
- Adobe (214)
- Gravelly Ford (215)

Valley West Side PSA-07
- West Side (216)

West Side Uplands PSA-08
- Del Puerto Creek (217)
- Orestimba Creek (218)
- San Luis Creek (219)
- Los Banos Creek (220)

PLANNING SUBAREAS
AND DETAILED ANALYSIS UNITS

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C-059365

Table A-8. San Joaquin River Region Water Production and Per Capita Water Use

COUNTY..SAN JOAQUIN
CITY....STOCKTON
SYSTEM #..... 39001
HYDROLOGIC REGION..... SAN JOAQUIN RIVER
PLANNING SUBAREA #.....EAST VALLEY FLOOR
DAU # 182

CITY CENSUS POPULATION
1980..... 149,779
1990..... 210,943

WATER AGENCY.....CAL WTR SERVICE/CITY OF STOCKTON
TYPE OF AGENCY.....INVESTOR OWNED/MUNICIPAL WATER DEPT.

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 52
WELLS AND SPRINGS.. 48

SOURCE OF WATER (in percent):
PURCHASED..... 52
SELF SUPPLIED..... 48

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	59,350	Metered.....	4,850	Metered.....	102	Metered.....	850
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	54,771	43,897	623.0	590.0	647.0	825.0	1118.0	1494.0	1449.0	1425.0	1323.0	1247.0	892.0	651.0	12284.0
1981	55,972	45,327	625.0	536.0	630.0	865.0	1250.0	1646.0	1972.0	1707.0	1484.0	1003.0	643.0	651.0	13012.0
1982	56,750	46,167	634.0	606.0	666.0	854.0	1417.0	1473.0	1783.0	1701.0	1348.0	917.0	666.0	706.0	12771.0
1983	57,569	46,993	652.0	605.0	668.0	823.0	1204.0	1615.0	1833.0	1849.0	1602.0	1072.0	739.0	724.0	13386.0
1984	59,295	48,680	670.0	679.0	971.0	1137.0	1775.0	1640.0	2140.0	2129.0	1693.0	1006.0	781.0	677.0	15298.0
1985	60,250	49,581	729.0	713.0	769.0	1100.0	1650.0	1871.0	2095.0	2148.0	1450.0	1248.0	788.0	775.0	15336.0
1986	60,784	50,112	871.0	749.0	888.0	1120.0	1711.0	1846.0	2224.0	1960.0	1440.0	1335.0	1074.0	917.0	16135.0
1987	61,567	50,798	960.0	856.0	944.0	1543.0	1801.0	1931.0	2227.0	2050.0	1820.0	1480.0	892.0	880.0	17384.0
1988	62,524	51,724	858.0	953.0	1348.0	1287.0	1497.0	1912.0	2164.0	2042.0	1934.0	1375.0	1023.0	1040.0	17433.0
1989	63,279	52,433	923.0	889.0	996.0	1288.0	1905.0	1881.0	2226.0	2226.0	1532.0	1259.0	1163.0	949.0	17237.0
1990	64,179	52,842	882.0	835.0	1089.0	1354.0	1526.0	1731.0	2109.0	2109.0	1838.0	1542.0	1129.0	986.0	17130.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.41	186,882	108	109	112	147	193	266	250	246	236	215	159	112	180	0.202
1981	3.47	194,225	104	99	105	148	208	282	328	284	255	167	110	108	184	0.206
1982	3.53	200,216	102	108	107	142	228	245	287	274	224	148	111	114	175	0.196
1983	3.59	206,444	102	105	104	133	188	261	286	289	259	168	119	113	178	0.199
1984	3.64	216,072	100	108	145	175	265	253	319	318	261	150	120	101	194	0.217
1985	3.70	223,046	105	114	111	164	239	280	303	311	217	180	118	112	188	0.211
1986	3.76	228,548	123	117	125	163	241	269	314	277	210	188	157	129	193	0.217
1987	3.82	235,062	132	130	130	219	247	274	306	281	258	203	126	121	203	0.227
1988	3.88	242,342	114	136	179	177	199	263	288	272	266	183	141	138	197	0.221
1989	3.93	248,937	120	128	129	172	247	252	288	288	205	163	156	123	190	0.212
1990	3.99	256,200	111	116	137	176	192	225	266	266	239	194	147	124	183	0.205
AVERAGE			111	115	126	165	223	261	294	282	239	178	133	118	188	0.210

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

NOTE: Data from Cal Water Service and the City of Stockton was combined.

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C-059366

COUNTY..SAN JOAQUIN | WATER AGENCY.....LODI, CITY OF | ORIGIN OF WATER (in percent):
CITY.... LODI | TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT
SYSTEM #..... 39004 | SURFACE WATER..... 0
HYDROLOGIC REGION..... SAN JOAQUIN RIVER | SYSTEM SERVES: | WELLS AND SPRINGS.. 100
PLANNING SUBAREA #.....EASTERN VALLEY FLOOR
DAU # ..... 182 | ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X | SOURCE OF WATER (in percent):
CITY CENSUS POPULATION | PORTION OF THE CITY.....
1980..... 34,400 | OTHER..... | PURCHASED..... 0
1990..... 50,328 | SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:	COMMERCIAL:	INDUSTRIAL:	GOVERNMENTAL:
Metered..... 22	Metered..... 713	Metered..... 50	Metered..... 37
Flat Rate..... 20,062	Flat Rate... 376	Flat Rate... 2	Flat Rate... 42

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	16,154	16,148	164.0	150.0	182.0	320.0	415.0	654.0	544.0	579.0	477.0	345.0	235.0	168.0	4233.0
1981	16,598	16,592	162.0	158.0	160.0	275.0	378.0	520.0	550.0	586.0	475.0	312.0	189.0	157.0	3922.0
1982	16,758	16,752	162.0	162.0	153.0	171.0	237.0	450.0	607.0	583.0	474.0	279.0	173.0	158.0	3609.0
1983	17,406	17,400	161.0	152.0	175.0	232.0	362.0	494.0	546.0	573.0	400.0	287.0	169.0	172.0	3723.0
1984	17,802	17,796	175.0	168.0	255.0	346.0	499.0	544.0	566.0	524.0	423.0	318.0	183.0	170.0	4171.0
1985	19,690	19,684	197.0	206.0	230.0	394.0	515.0	622.0	754.0	658.0	480.0	374.0	244.0	201.0	4875.0
1986	20,819	20,813	202.0	180.0	248.0	352.0	679.0	495.0	659.0	709.0	447.0	383.0	357.0	202.0	4913.0
1987	21,906	21,900	217.0	223.0	222.0	468.0	553.0	575.0	646.0	706.0	548.0	366.0	256.0	207.0	4987.0
1988	22,053	22,047	220.0	210.0	220.0	390.0	525.0	550.0	682.0	661.0	565.0	418.0	258.0	216.0	4915.0
1989	22,053	22,047	225.0	206.0	221.0	389.0	495.0	565.0	704.0	694.0	458.0	315.0	269.0	210.0	4751.0
1990	22,002	21,990	210.0	219.0	270.0	440.0	456.0	541.0	659.0	650.0	595.0	433.0	292.0	249.0	5014.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.13	34,413	154	150	171	310	389	633	510	543	462	323	228	157	337	0.377
1981	2.15	35,622	147	158	145	257	342	487	498	531	444	283	177	142	302	0.338
1982	2.16	36,230	144	160	136	157	211	414	540	519	436	248	159	141	273	0.306
1983	2.18	37,907	137	143	149	204	308	434	465	488	352	244	149	146	269	0.301
1984	2.19	39,051	145	148	211	295	412	464	468	433	361	263	156	140	293	0.328
1985	2.21	43,505	146	169	171	302	382	477	559	488	368	277	187	149	307	0.344
1986	2.23	46,329	141	139	173	253	473	356	459	494	322	267	257	141	291	0.325
1987	2.24	49,095	143	162	146	318	363	390	424	464	372	240	174	136	278	0.312
1988	2.26	49,774	143	145	143	261	340	368	442	428	378	271	173	140	271	0.303
1989	2.27	50,123	145	147	142	259	319	376	453	447	305	203	179	135	260	0.291
1990	2.29	50,355	135	155	173	291	292	358	422	416	394	277	193	160	273	0.306
AVERAGE			143	153	160	264	348	433	476	477	381	263	185	144	287	0.321

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059367

COUNTY..CONTRA COSTA
CITY....BRENTWOOD
SYSTEM #..... 7004
HYDROLOGIC REGION..... SAN JOAQUIN
PLANNING SUBAREA #.....DELTA SERVICE AREA
DAU # 185

WATER AGENCY.....BRENTWOOD, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 4,434
1990..... 7,563

SERVICE CONNECTIONS /1

RESIDENTIAL:
Metered..... 2,400
Flat Rate..... 0

COMMERCIAL:
Metered..... 148
Flat Rate... 0

INDUSTRIAL:
Metered..... NA
Flat Rate... 0

GOVERNMENTAL:
Metered..... 10
Flat Rate... 0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,189	1,189	15.0	13.0	16.0	20.0	28.0	32.0	34.0	34.0	28.0	24.0	19.0	15.0	278.0
1981	1,286	1,286	15.0	14.0	16.0	25.0	33.0	39.0	39.0	36.0	32.0	22.0	16.0	16.0	303.0
1982	1,310	1,310	15.0	14.0	15.0	17.0	32.0	34.0	40.0	37.0	31.0	25.0	17.0	17.0	294.0
1983	1,319	1,319	14.0	13.0	15.0	18.0	27.0	35.0	38.0	35.0	30.0	24.0	16.0	9.0	274.0
1984	1,537	1,537	16.0	16.0	21.0	27.0	37.0	38.0	45.0	37.0	28.0	32.0	17.0	15.0	329.0
1985	1,582	1,582	15.0	15.0	16.0	21.0	31.0	35.0	44.0	36.0	28.0	27.0	20.0	17.0	305.0
1986	1,923	1,923	17.0	15.0	20.0	25.0	33.0	43.0	34.0	33.0	25.0	24.0	25.0	17.0	311.0
1987	2,094	2,094	20.0	18.0	22.0	32.0	40.0	40.0	41.0	42.0	37.0	36.0	22.0	20.0	370.0
1988	2,122	2,122	19.0	21.0	29.0	31.0	37.0	40.0	48.0	53.0	38.0	30.0	23.0	20.0	389.0
1989	2,150	2,150	20.0	25.0	21.0	32.0	41.0	49.0	49.0	57.0	51.0	39.0	27.0	25.0	436.0
1990	2,278	2,278	23.0	22.0	30.0	40.0	46.0	49.0	66.0	65.0	61.0	58.0	40.0	32.0	532.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.73	4,434	109	101	116	150	204	241	247	247	210	175	143	109	172	0.192
1981	3.69	4,743	102	105	109	176	224	274	265	245	225	150	112	109	175	0.196
1982	3.65	4,778	101	105	101	119	216	237	270	250	216	169	119	115	169	0.189
1983	3.61	4,757	95	98	102	126	183	245	258	237	210	163	112	61	158	0.177
1984	3.57	5,480	94	101	124	164	218	231	265	218	170	188	103	88	164	0.184
1985	3.52	5,576	87	96	93	126	179	209	255	208	167	156	120	98	150	0.168
1986	3.48	6,699	82	80	96	124	159	214	164	159	124	116	124	82	127	0.142
1987	3.44	7,209	89	89	98	148	179	185	183	188	171	161	102	89	141	0.157
1988	3.40	7,219	85	100	130	143	165	185	214	237	175	134	106	89	148	0.165
1989	3.36	7,226	89	124	94	148	183	226	219	254	235	174	125	112	165	0.185
1990	3.32	7,563	98	104	128	176	196	216	282	277	269	247	176	136	193	0.216
AVERAGE			94	100	108	145	192	224	238	229	198	167	122	99	160	0.179

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059368

COUNTY..SAN JOAQUIN
CITY.... TRACY
SYSTEM #..... 39011
HYDROLOGIC REGION..... SAN JOAQUIN RIVER
PLANNING SUBAREA #.....DELTA SERVICE AREA
DAU # 185

WATER AGENCY.....TRACY, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 42
WELLS AND SPRINGS.. 58

SOURCE OF WATER (in percent):
PURCHASED..... 42
SELF SUPPLIED..... 58

CITY CENSUS POPULATION
1980..... 18,000
1990..... 33,000

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	9,745	Metered.....	679	Metered.....	16	Metered.....	17
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,966	5,965	126.0	110.0	121.0	195.0	196.0	243.0	310.0	351.0	304.0	184.0	133.0	123.0	2396.0
1981	6,416	6,415	127.0	115.0	127.0	262.0	183.0	264.0	276.0	341.0	313.0	195.0	147.0	130.0	2480.0
1982	5,955	5,954	125.0	105.0	114.0	128.0	209.0	222.0	349.0	361.0	295.0	172.0	118.0	116.0	2314.0
1983	7,668	7,667	125.0	105.0	114.0	128.0	210.0	223.0	282.0	355.0	240.0	154.0	119.0	118.0	2173.0
1984	8,043	8,042	117.0	115.0	184.0	177.0	234.0	259.0	314.0	342.0	298.0	180.0	133.0	103.0	2456.0
1985	8,715	8,714	128.0	140.0	142.0	260.0	290.0	303.0	342.0	415.0	306.0	205.0	138.0	128.0	2797.0
1986	8,858	8,858	128.0	113.0	138.0	171.0	189.0	265.0	374.0	372.0	263.0	209.0	168.0	160.0	2550.0
1987	9,410	9,410	131.0	131.0	161.0	188.0	223.0	266.0	362.0	404.0	313.0	223.0	153.0	145.0	2700.0
1988	9,662	9,562	134.0	149.0	184.0	204.0	257.0	266.0	350.0	436.0	363.0	236.0	138.0	130.0	2847.0
1989	9,750	9,600	163.0	163.0	204.0	230.0	275.0	301.0	405.0	442.0	346.0	240.0	174.0	157.0	3100.0
1990	9,964	9,703	191.0	176.0	223.0	255.0	292.0	336.0	459.0	447.0	329.0	244.0	209.0	184.0	3345.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.02	18,003	226	211	217	361	351	450	555	629	563	330	246	220	365	0.408
1981	3.06	19,607	209	209	209	445	301	449	454	561	532	321	250	214	347	0.388
1982	3.09	18,426	219	204	200	232	366	402	611	632	534	301	213	203	344	0.385
1983	3.13	24,021	168	156	153	178	282	309	379	477	333	207	165	158	248	0.278
1984	3.17	25,504	148	155	233	231	296	339	397	433	389	228	174	130	264	0.295
1985	3.21	27,969	148	179	164	310	334	361	394	479	365	236	164	148	274	0.307
1986	3.25	28,768	144	140	155	198	212	307	419	417	305	234	195	179	243	0.272
1987	3.29	30,921	137	151	168	203	233	287	378	421	337	233	165	151	239	0.268
1988	3.32	32,120	135	160	185	212	258	276	352	438	377	237	143	131	243	0.272
1989	3.36	32,786	160	178	201	234	271	306	398	435	352	236	177	154	259	0.290
1990	3.40	33,888	182	185	212	251	278	331	437	426	324	232	206	175	270	0.303
AVERAGE			170	175	190	259	289	347	434	486	401	254	191	170	281	0.315

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059369

COUNTY..CALAVERAS
CITY....ANGELS CAMP
SYSTEM #..... 5003
HYDROLOGIC REGION..... SAN JOAQUIN RIVER
PLANNING SUBAREA #.....SIERRA FOOTHILLS
DAU # 194

CITY CENSUS POPULATION
1980..... 2,302
1990..... 2,409

WATER AGENCY.....ANGLES CAMP, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	899	Metered.....	166	Metered.....	2	Metered.....	15
Flat Rate.....	8	Flat Rate...	0	Flat Rate...	0	Flat Rate...	11

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	995	992	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984			-	-	-	-	-	-	-	-	-	-	-	-	-
1985			-	-	-	-	-	-	-	-	-	-	-	-	-
1986	1,055	1,048	12.0	11.0	24.0	16.0	23.0	34.0	38.0	37.0	26.0	19.0	16.0	15.0	271.0
1987	1,084	1,077	15.0	14.0	16.0	21.0	30.0	36.0	37.0	44.0	43.0	28.0	16.0	14.0	314.0
1988	1,094	1,105	14.0	15.0	19.0	18.0	23.0	32.0	38.0	38.0	31.0	26.0	15.0	13.0	282.0
1989			-	-	-	-	-	-	-	-	-	-	-	-	-
1990	1,108	1,100	11.0	10.0	12.0	16.0	21.0	25.0	35.0	34.0	26.0	23.0	13.0	14.0	240.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.32	2,309	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.31		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	2.29		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.28		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2.27		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	2.26		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	2.24	2,366	164	166	327	225	314	479	518	505	366	259	225	205	314	0.352
1987	2.23	2,416	200	207	214	290	400	497	494	587	593	374	221	187	356	0.399
1988	2.22	2,424	186	213	253	247	306	440	506	506	426	346	206	173	319	0.357
1989	2.20		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	2.19	2,427	146	147	160	220	279	343	465	452	357	306	179	186	271	0.303
AVERAGE			174	183	238	246	325	440	496	512	436	321	208	188	315	0.353

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

C—059370

C-059370

COUNTY..TUOLUMNE
CITY....GROVELAND
SYSTEM #..... 55009
HYDROLOGIC REGION..... SAN JOAQUIN
PLANNING SUBAREA #.....SIERRA FOOTHILLS
DAU # 195

WATER AGENCY.....GROVELAND COMMUN. SERVS.DIST.
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 2,050
1990..... 2,753

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,480	Metered.....	93	Metered.....	0	Metered.....	8
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,381	1,381	4.0	5.0	4.0	5.0	6.0	9.0	11.0	12.0	8.0	8.0	4.0	5.0	81.0
1981	1,501	1,501	5.0	5.0	5.0	6.0	8.0	12.0	14.0	14.0	9.0	6.0	5.0	4.0	93.0
1982	1,595	1,595	6.0	5.0	5.0	6.0	10.0	11.0	11.0	14.0	10.0	7.0	5.0	7.0	97.0
1983	1,656	1,656	5.0	5.0	5.0	5.0	9.0	11.0	14.0	14.0	10.0	7.0	6.0	5.0	96.0
1984	1,742	1,742	5.0	5.0	6.0	7.0	11.0	12.0	16.0	15.0	12.0	8.0	6.0	7.0	110.0
1985	1,819	1,819	6.0	6.0	6.0	8.0	12.0	13.0	18.0	16.0	11.0	9.0	7.0	6.0	118.0
1986	1,877	1,877	6.0	6.0	6.0	8.0	12.0	16.0	18.0	19.0	12.0	10.0	9.0	8.0	130.0
1987	2,047	2,047	10.0	7.0	7.0	11.0	14.0	16.0	20.0	21.0	16.0	13.0	8.0	9.0	152.0
1988	2,116	2,116	8.0	8.0	9.0	10.0	11.0	12.0	15.0	14.0	12.0	10.0	8.0	9.0	126.0
1989	2,284	2,284	8.0	11.0	7.0	9.0	11.0	15.0	20.0	20.0	11.0	15.0	9.0	10.0	146.0
1990	2,480	2,480	8.0	8.0	9.0	12.0	12.0	11.0	15.0	14.0	12.0	10.0	8.0	14.0	133.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	1.48	2,050	63	84	63	81	94	146	173	189	130	126	65	79	108	0.121
1981	1.45	2,172	74	82	74	92	119	184	208	208	138	89	77	59	117	0.131
1982	1.41	2,248	86	79	72	89	143	163	158	201	148	100	74	100	118	0.132
1983	1.37	2,272	71	79	71	73	128	161	199	199	147	99	88	71	116	0.130
1984	1.33	2,325	69	74	83	100	153	172	222	208	172	111	86	97	130	0.145
1985	1.30	2,360	82	91	82	113	164	184	246	219	155	123	99	82	137	0.153
1986	1.26	2,365	82	91	82	113	164	226	246	259	169	136	127	109	151	0.169
1987	1.22	2,502	129	100	90	147	180	213	258	271	213	168	107	116	166	0.186
1988	1.18	2,507	103	110	116	133	142	160	193	180	160	129	106	116	138	0.154
1989	1.15	2,621	98	150	86	114	135	191	246	246	140	185	114	123	153	0.171
1990	1.11	2,753	94	104	105	145	141	133	176	164	145	117	97	164	132	0.148
AVERAGE			87	95	84	109	142	176	211	213	156	126	95	102	133	0.149

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059371

COUNTY..TUOLUMNE
CITY.... SONORA
SYSTEM #..... 55022
HYDROLOGIC REGION..... SAN JOAQUIN
PLANNING SUBAREA #.....SIERRA FOOTHILLS
DAU # 195

CITY CENSUS POPULATION
1980..... 3,247
1990..... 4,153

WATER AGENCY.....TUOLUMNE UTILITIES DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,902	Metered.....	609	Metered.....	0	Metered.....	25
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,012	1,955	20.0	19.0	20.0	25.0	32.0	49.0	62.0	64.0	51.0	45.0	31.0	21.0	439.0
1981	2,030	1,959	18.0	18.0	18.0	25.0	20.0	32.0	70.0	67.0	55.0	32.0	24.0	28.0	407.0
1982	2,030	1,959	23.0	24.0	26.0	30.0	59.0	68.0	78.0	80.0	53.0	38.0	32.0	34.0	545.0
1983	2,030	1,959	29.0	27.0	29.0	28.0	43.0	67.0	69.0	71.0	48.0	38.0	28.0	28.0	505.0
1984	2,029	1,972	23.0	16.0	20.0	24.0	41.0	47.0	65.0	59.0	48.0	27.0	21.0	20.0	411.0
1985	2,082	2,014	15.0	15.0	15.0	25.0	44.0	53.0	63.0	57.0	33.0	28.0	20.0	19.0	387.0
1986	2,135	2,057	24.0	21.0	25.0	29.0	39.0	53.0	58.0	61.0	47.0	39.0	34.0	27.0	457.0
1987	2,188	2,099	23.0	20.0	23.0	35.0	46.0	55.0	62.0	63.0	53.0	46.0	29.0	28.0	483.0
1988	2,241	2,141	26.0	25.0	31.0	30.0	32.0	47.0	63.0	62.0	55.0	46.0	33.0	30.0	480.0
1989	2,389	2,289	28.0	25.0	26.0	33.0	44.0	55.0	69.0	65.0	53.0	43.0	37.0	32.0	510.0
1990	2,536	2,436	28.0	29.0	31.0	37.0	46.0	50.0	68.0	67.0	55.0	51.0	37.0	39.0	538.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	1.66	3,342	193	196	193	249	309	489	599	618	509	434	309	203	360	0.403
1981	1.67	3,380	172	190	172	247	191	316	668	639	542	305	237	267	330	0.369
1982	1.67	3,389	219	253	247	295	562	669	742	761	521	362	315	324	441	0.493
1983	1.67	3,398	275	284	275	275	408	657	655	674	471	361	275	266	407	0.456
1984	1.68	3,406	218	162	189	235	388	460	616	559	470	256	206	189	331	0.370
1985	1.68	3,504	138	153	138	238	405	504	580	525	314	258	190	175	303	0.339
1986	1.69	3,602	215	208	224	268	349	490	519	546	435	349	315	242	348	0.389
1987	1.69	3,701	200	193	200	315	401	495	540	549	477	401	261	244	358	0.400
1988	1.70	3,801	221	227	263	263	272	412	535	526	482	390	289	255	346	0.388
1989	1.70	4,062	222	220	206	271	349	451	548	516	435	341	304	254	344	0.385
1990	1.70	4,323	209	240	231	285	343	385	507	500	424	381	285	291	341	0.382
AVERAGE			207	211	213	267	362	484	592	583	462	349	271	246	355	0.398

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059372

COUNTY..SAN JOAQUIN
CITY.... ESCALON
SYSTEM #..... 39003
HYDROLOGIC REGION..... SAN JOAQUIN
PLANNING SUBAREA #.....VALLEY EAST SIDE
DAU # 205

WATER AGENCY.....ESCALON, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 3,127
1990..... 4,437

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,151	Metered.....	54	Metered.....	NA	Metered.....	5
Flat Rate.....	303	Flat Rate...	10	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	650	650	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983	700	700	-	-	-	18.0	31.0	44.0	29.0	52.0	42.0	30.0	22.0	14.0	-
1984	1,121	1,121	12.0	11.0	18.0	25.0	38.0	38.0	45.0	40.0	34.0	23.0	15.0	15.0	314.0
1985	1,168	1,168	15.0	15.0	16.0	24.0	29.0	34.0	44.0	37.0	34.0	33.0	25.0	16.0	322.0
1986	1,234	1,234	15.0	16.0	18.0	30.0	39.0	52.0	56.0	47.0	36.0	29.0	23.0	21.0	382.0
1987	1,309	1,309	19.0	19.0	19.0	33.0	41.0	49.0	46.0	46.0	40.0	28.0	16.0	15.0	371.0
1988	1,326	1,326	12.0	21.0	28.0	26.0	38.0	45.0	51.0	52.0	42.0	33.0	18.0	16.0	382.0
1989	1,383	1,383	16.0	15.0	17.0	30.0	45.0	51.0	57.0	51.0	33.0	29.0	20.0	17.0	381.0
1990	1,450	1,450	17.0	16.0	21.0	34.0	41.0	48.0	60.0	54.0	45.0	38.0	25.0	21.0	420.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.81	3,127	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	4.64		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	4.46		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	4.29	3,000	-	-	-	200	333	489	312	559	467	323	244	151	-	-
1984	4.11	4,608	84	82	126	181	266	275	315	280	246	161	109	105	187	0.209
1985	3.94	4,597	105	117	112	174	204	247	309	260	247	232	181	112	192	0.215
1986	3.76	4,640	104	123	125	216	271	374	389	327	259	202	165	146	226	0.253
1987	3.59	4,693	131	145	131	234	282	348	316	316	284	192	114	103	217	0.243
1988	3.41	4,522	86	160	200	192	271	332	364	371	310	235	133	114	231	0.259
1989	3.24	4,474	115	120	123	224	324	380	411	368	246	209	149	123	233	0.261
1990	3.06	4,437	124	129	153	255	298	361	436	393	338	276	188	153	259	0.290
AVERAGE			107	125	138	209	281	351	357	359	299	229	160	126	221	0.247

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/Missing data unavailable.

C—0 5 9 3 7 3

C-059373

COUNTY..SAN JOAQUIN
CITY.... MANTECA
SYSTEM #..... 39005
HYDROLOGIC REGION..... SAN JOAQUIN RIVER
PLANNING SUBAREA #.....VALLEY EAST SIDE
DAU # 205

CITY CENSUS POPULATION
1980..... 25,125
1990..... 40,914

WATER AGENCY.....MANTECA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	8,362	Metered.....	491	Metered.....	49	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	6,996	6,996	85.0	59.0	82.0	155.0	188.0	217.0	278.0	248.0	225.0	172.0	114.0	91.0	1914.0
1981	7,160	7,160	62.0	92.0	75.0	150.0	213.0	285.0	325.0	279.0	224.0	186.0	99.0	72.0	2062.0
1982	7,309	7,309	81.0	76.0	99.0	118.0	232.0	301.0	309.0	308.0	181.0	178.0	69.0	98.0	2050.0
1983	7,678	7,678	74.0	91.0	52.0	134.0	214.0	353.0	298.0	339.0	204.0	186.0	105.0	77.0	2127.0
1984	8,290	8,290	97.5	96.3	154.5	226.2	327.6	314.6	400.3	344.0	338.2	146.5	107.2	100.1	2653.0
1985	8,961	8,961	102.5	118.5	124.2	257.1	303.6	334.5	440.0	410.0	276.0	215.0	135.0	100.0	2816.4
1986	9,169	9,169	107.0	98.0	136.0	234.0	316.0	403.0	422.0	350.0	305.0	216.0	211.0	136.0	2934.0
1987	9,423	9,423	123.0	118.0	145.0	279.0	325.0	405.0	405.0	398.0	336.0	245.0	149.0	129.0	3057.0
1988	9,697	9,697	80.0	202.0	218.0	217.0	308.0	305.0	361.0	390.0	320.0	281.0	68.0	147.0	2897.0
1989	10,104	10,104	148.0	126.0	155.0	297.0	420.0	394.0	455.0	417.0	323.0	240.0	179.0	135.0	3289.0
1990	10,367	10,367	158.0	132.0	196.0	279.0	415.0	341.0	402.0	379.0	347.0	281.0	202.0	167.0	3299.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.59	25,125	109	81	105	206	241	288	357	318	299	221	151	117	209	0.234
1981	3.63	25,968	77	127	93	193	265	366	404	347	288	231	127	89	218	0.244
1982	3.66	26,768	98	101	119	147	280	375	372	371	225	215	86	118	210	0.235
1983	3.70	28,393	84	114	59	157	243	414	339	385	239	211	123	87	205	0.230
1984	3.73	30,950	102	107	161	244	341	339	417	359	364	153	115	104	235	0.263
1985	3.77	33,774	98	125	119	254	290	330	420	392	272	205	133	96	228	0.256
1986	3.80	34,883	99	100	126	224	292	385	390	324	291	200	202	126	230	0.258
1987	3.84	36,184	110	116	129	257	290	373	361	355	310	218	137	115	231	0.259
1988	3.88	37,581	69	185	187	192	264	271	310	335	284	241	60	126	211	0.237
1989	3.91	39,517	121	114	127	251	343	332	371	340	272	196	151	110	228	0.255
1990	3.95	40,914	125	115	155	227	327	278	317	299	283	222	165	132	221	0.247
AVERAGE			99	117	125	214	289	341	369	348	284	210	132	111	221	0.247

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059374

COUNTY..STANISLAUS
CITY.... MODESTO
SYSTEM #..... 50010
HYDROLOGIC REGION..... SAN JOAQUIN
PLANNING SUBAREA #.....VALLEY EAST SIDE
DAU # 206

CITY CENSUS POPULATION
1980..... 107,200
1990..... 170,300

WATER AGENCY.....MODESTO, CITY OF & DEL ESTE W.CO.
TYPE OF AGENCY.....MUNI. W. DEPT. & INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... NA
SELF SUPPLIED..... NA

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	NA	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	NA	Flat Rate...	NA	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	35,175	33,876	573.0	558.0	702.0	1050.0	1380.0	1603.0	1757.0	2106.0	1462.0	1224.0	869.0	678.0	13962.0
1981	36,565	35,242	692.0	597.0	667.0	1129.0	1562.0	1991.0	2194.0	2000.0	1641.0	1075.0	639.0	610.0	14797.0
1982	37,763	36,240	615.0	595.0	601.0	859.0	1521.0	1700.0	1931.0	2003.0	1409.0	1080.0	679.0	629.0	13622.0
1983	37,998	36,448	623.0	564.0	613.0	741.0	1367.0	1866.0	2098.0	2135.0	1900.0	1349.0	865.0	777.0	14898.0
1984	43,231	36,558	680.0	623.0	1029.0	1365.0	1968.0	2057.0	2329.0	2219.0	1951.0	1244.0	803.0	715.0	16983.0
1985	48,464	42,314	716.0	786.0	907.0	1338.0	1799.0	2022.0	2388.0	2101.0	1743.0	1356.0	881.0	753.0	16790.0
1986	50,521	48,014	683.0	626.0	842.0	1289.0	1793.0	2126.0	2366.0	2285.0	1715.0	1411.0	1101.0	852.0	17089.0
1987	51,048	48,541	849.0	742.0	941.0	1667.0	2024.0	2227.0	2411.0	2437.0	2132.0	1609.0	911.0	839.0	18789.0
1988	51,575	49,068	890.0	1060.0	1484.0	1406.0	1798.0	2132.0	2778.0	2437.0	2138.0	1743.0	925.0	946.0	19737.0
1989	52,506	49,773	897.0	816.0	985.0	1612.0	2074.0	2338.0	2798.0	2719.0	1304.0	1738.0	1307.0	1068.0	19656.0
1990	56,162	53,212	1027.0	900.0	1254.0	1643.0	1863.0	2039.0	2527.0	2540.0	2171.0	1141.0	1047.0	1812.0	19964.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.16	111,311	166	173	203	314	400	480	509	610	438	355	260	196	344	0.385
1981	3.17	115,841	193	184	186	325	435	573	611	557	472	299	184	170	350	0.392
1982	3.17	119,772	166	177	162	239	410	473	520	539	392	291	189	169	312	0.349
1983	3.18	120,654	167	167	164	205	365	516	561	571	525	361	239	208	338	0.379
1984	3.18	137,425	160	156	242	331	462	499	547	521	473	292	195	168	339	0.379
1985	3.18	154,234	150	182	190	289	376	437	499	439	377	284	190	157	298	0.334
1986	3.19	160,962	137	139	169	267	359	440	474	458	355	283	228	171	291	0.326
1987	3.19	162,824	168	163	186	341	401	456	478	483	436	319	186	166	316	0.354
1988	3.19	164,690	174	222	291	285	352	432	544	477	433	341	187	185	328	0.368
1989	3.20	167,852	172	174	189	320	399	464	538	523	259	334	260	205	321	0.359
1990	3.20	179,741	184	179	225	305	334	378	454	456	403	205	194	325	304	0.341
AVERAGE			167	174	201	293	390	468	521	512	415	306	210	193	322	0.361

1/Number of service connections unavailable.
2/Excludes services for agriculture, fire hydrants,
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059375

COUNTY..STANISLAUS
CITY.... OAKDALE
SYSTEM #..... 50014
HYDROLOGIC REGION..... SAN JOAQUIN RIVER
PLANNING SUBAREA #.....VALLEY EAST SIDE
DAU # 206

WATER AGENCY.....OAKDALE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 8,400
1990..... 11,961

SERVICE CONNECTIONS /1

RESIDENTIAL:
Metered..... 4,196
Flat Rate..... 0

COMMERCIAL:
Metered..... 121
Flat Rate... 28

INDUSTRIAL:
Metered..... 23
Flat Rate... 0

GOVERNMENTAL:
Metered..... 27
Flat Rate... 0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,000	3,000	41.5	31.5	39.7	57.0	76.2	95.4	112.4	107.0	83.8	67.6	52.0	38.1	802.2
1981	3,100	3,100	33.7	30.1	33.3	59.8	88.8	118.0	123.5	110.6	85.7	51.4	37.6	33.5	806.0
1982	3,200	3,200	31.9	28.8	32.7	54.9	94.2	100.2	111.6	107.4	65.0	49.0	31.4	31.2	738.3
1983	3,360	3,360	32.7	26.3	27.6	43.6	72.9	104.8	105.5	106.0	79.6	60.1	33.3	38.8	731.2
1984	3,423	3,423	39.6	38.7	54.8	64.8	104.0	115.8	134.0	122.0	106.0	62.0	43.0	42.0	926.7
1985	3,575	3,532	42.0	42.0	46.0	78.0	109.0	127.0	136.0	123.0	88.0	76.0	49.0	43.0	959.0
1986	3,683	3,635	43.0	39.0	50.0	74.0	108.0	122.0	138.0	127.0	84.0	78.0	67.0	50.0	980.0
1987	3,825	3,777	49.0	45.0	54.0	93.0	116.0	123.0	128.0	126.0	107.0	81.0	48.0	48.0	1018.0
1988	4,109	4,066	48.0	56.0	79.0	71.0	99.0	119.0	141.0	129.0	112.0	90.0	54.0	47.0	1045.0
1989	4,437	4,387	47.0	49.0	51.0	88.0	121.0	124.0	150.0	133.0	96.0	77.0	63.0	57.0	1056.0
1990	4,458	4,413	50.0	47.0	66.0	90.0	105.0	121.0	142.0	135.0	117.0	101.0	75.0	61.0	1110.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.80	8,400	159	129	152	226	293	379	432	411	333	260	206	146	262	0.293
1981	2.79	8,652	126	124	124	230	331	455	460	412	330	192	145	125	255	0.286
1982	2.78	8,903	116	116	118	206	341	375	404	389	243	178	118	113	227	0.254
1983	2.77	9,318	113	101	96	156	252	375	365	367	285	208	119	134	215	0.241
1984	2.76	9,462	135	141	187	228	355	408	457	416	373	211	151	143	268	0.301
1985	2.76	9,850	138	152	151	264	357	430	445	403	298	249	166	141	267	0.299
1986	2.75	10,114	137	138	159	244	344	402	440	405	277	249	221	159	265	0.297
1987	2.74	10,470	151	153	166	296	357	392	394	388	341	250	153	148	266	0.298
1988	2.73	11,211	138	172	227	211	285	354	406	371	333	259	161	135	255	0.286
1989	2.72	12,066	126	145	136	243	323	343	401	356	265	206	174	152	240	0.269
1990	2.71	12,083	133	139	176	248	280	334	379	360	323	270	207	163	252	0.282
AVERAGE			134	137	154	232	320	386	417	389	309	230	165	142	252	0.282

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 3 7 6

C-059376

COUNTY..STANISLAUS
CITY....RIVERBANK
SYSTEM #..... 50018
HYDROLOGIC REGION..... SAN JOQUIN RIVER
PLANNING SUBAREA #.....VALLEY EAST SIDE
DAU # 206

CITY CENSUS POPULATION
1980..... 5,625
1990..... 8,960

WATER AGENCY.....RIVERBANK, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,298	Metered.....	155	Metered.....	1	Metered.....	19
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,500	1,500	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981	1,675	1,575	-	-	-	-	-	-	44.0	57.0	52.0	359.0	240.0	-	-
1982	1,850	1,655	20.0	19.0	21.0	31.0	39.0	58.0	45.0	52.0	48.0	40.0	26.0	16.0	415.0
1983	1,805	1,655	15.0	21.0	18.0	23.0	36.0	36.0	60.0	53.0	53.0	19.0	19.0	16.0	369.0
1984	1,893	1,741	22.0	22.0	29.0	43.0	58.0	70.0	72.0	71.0	63.0	32.0	22.0	22.0	526.0
1985	1,994	1,839	22.0	23.0	25.0	39.0	59.0	70.0	71.0	65.0	49.0	36.0	20.0	19.0	498.0
1986	2,071	1,916	21.0	20.0	23.0	35.0	58.0	75.0	79.0	69.0	52.0	28.0	28.0	23.0	511.0
1987	2,128	1,973	33.0	33.0	29.0	29.0	69.0	69.0	60.0	59.0	49.0	49.0	21.0	21.0	521.0
1988	2,198	2,043	20.0	25.0	46.0	33.0	52.0	69.0	65.0	71.0	60.0	49.0	27.0	21.0	538.0
1989	2,442	2,306	14.0	14.0	38.0	38.0	38.0	42.0	42.0	42.0	29.0	29.0	29.0	17.0	372.0
1990	2,531	2,412	25.0	32.0	32.0	64.0	64.0	79.0	79.0	42.0	29.0	29.0	25.0	25.0	525.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.75	5,625	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.75	6,275	-	-	-	-	-	-	226	293	276	1,845	1,275	-	-	-
1982	3.74	6,924	93	98	98	149	182	279	210	242	231	186	125	75	164	0.184
1983	3.74	6,750	72	111	86	114	172	178	287	253	262	91	94	76	150	0.168
1984	3.74	7,072	100	107	132	203	265	330	328	324	297	146	104	100	204	0.228
1985	3.73	7,442	95	110	108	175	256	314	308	282	219	156	90	82	183	0.205
1986	3.73	7,722	88	92	96	151	242	324	330	288	224	117	121	96	181	0.203
1987	3.73	7,928	134	149	118	122	281	290	244	240	206	199	88	85	180	0.202
1988	3.72	8,181	79	105	181	134	205	281	256	280	244	193	110	83	180	0.202
1989	3.72	9,080	50	55	135	139	135	154	149	149	106	103	106	60	112	0.126
1990	3.71	9,402	86	122	110	227	220	280	271	144	103	99	89	86	153	0.171
AVERAGE			89	106	118	157	217	270	261	250	217	314	220	83	168	0.188

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missinf data unavailable.

C—0 5 9 3 7 7

C-059377

COUNTY..STANISLAUS
CITY.... CERES
SYSTEM #..... 50028
HYDROLOGIC REGION..... SAN JOAQUIN RIVER
PLANNING SUBAREA #.....VALLEY EAST SIDE
DAU # 208

CITY CENSUS POPULATION
1980..... 13,281
1990..... 26,314

WATER AGENCY.....CERES, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	83	Metered.....	365	Metered.....	57	Metered.....	NA
Flat Rate.....	5,771	Flat Rate...	241	Flat Rate...	0	Flat Rate...	1

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,508	4,508	32.0	32.0	40.0	52.0	103.0	120.0	137.0	125.0	94.0	74.0	44.0	50.0	903.0
1981	4,307	4,307	37.0	40.0	56.0	85.0	130.0	171.0	176.0	128.0	111.0	84.0	48.0	45.0	1111.0
1982	4,644	4,644	35.0	46.0	62.0	63.0	118.0	166.0	169.0	173.0	120.0	90.0	58.0	54.0	1154.0
1983	4,566	4,566	57.0	51.0	53.0	73.0	149.0	179.0	185.0	209.0	149.0	95.0	62.0	56.0	1318.0
1984	4,720	4,720	61.0	56.0	84.0	130.0	180.0	178.0	195.0	207.0	170.0	103.0	74.0	63.0	1501.0
1985	5,041	5,041	63.0	50.0	64.0	118.0	170.0	181.0	240.0	203.0	159.0	125.0	71.0	74.0	1518.0
1986	5,336	5,336	63.0	59.0	80.0	129.0	209.0	215.0	241.0	216.0	180.0	131.0	107.0	85.0	1715.0
1987	5,547	5,547	79.0	74.0	78.0	159.0	208.0	251.0	182.0	209.0	178.0	159.0	92.0	80.0	1749.0
1988	6,255	6,165	75.0	93.0	195.0	131.0	160.0	204.0	243.0	258.0	205.0	162.0	109.0	79.0	1914.0
1989	6,460	6,377	88.0	75.0	110.0	147.0	189.0	232.0	275.0	251.0	188.0	160.0	129.0	97.0	1941.0
1990	6,772	6,651	52.0	84.0	117.0	186.0	203.0	203.0	284.0	275.0	233.0	227.0	128.0	106.0	2098.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.95	13,281	78	83	97	131	250	301	333	304	236	180	110	121	186	0.209
1981	3.05	13,124	91	109	138	216	320	434	433	315	282	206	122	111	232	0.260
1982	3.15	14,620	77	112	137	144	260	378	373	382	274	199	132	119	216	0.242
1983	3.25	14,836	124	123	115	164	324	402	402	454	335	207	139	122	243	0.273
1984	3.35	15,813	124	122	171	274	367	375	398	422	358	210	156	129	260	0.291
1985	3.45	17,398	117	103	119	226	315	347	445	376	305	232	136	137	239	0.268
1986	3.55	18,955	107	111	136	227	356	378	410	368	317	223	188	145	248	0.278
1987	3.65	20,265	126	130	124	262	331	413	290	333	293	253	151	127	236	0.265
1988	3.75	23,483	103	137	268	186	220	290	334	354	291	223	155	109	223	0.250
1989	3.86	24,906	114	108	142	197	245	311	356	325	252	207	173	126	214	0.239
1990	3.96	26,793	63	112	141	231	244	253	342	331	290	273	159	128	215	0.240
AVERAGE			102	114	144	205	294	353	374	360	294	219	147	125	228	0.256

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059378

COUNTY..STANISLAUS
CITY.... TURLOCK
SYSTEM #..... 50019
HYDROLOGIC REGION..... SAN JOAQUIN RIVER
PLANNING SUBAREA #.....VALLEY EAST SIDE
DAU # 208

WATER AGENCY.....TURLOCK, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 26,291
1990..... 42,198

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	134	Metered.....	319	Metered.....	26	Metered.....	20
Flat Rate.....	9,926	Flat Rate...	438	Flat Rate...	0	Flat Rate...	11

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	8,072	7,852	148.0	132.0	116.0	223.0	290.0	392.0	446.0	387.0	396.0	280.0	251.0	155.0	3216.0
1981	8,390	8,090	165.0	131.0	149.0	301.0	379.0	509.0	469.0	529.0	651.0	290.0	126.0	156.0	3855.0
1982	8,514	8,314	162.0	149.0	157.0	221.0	323.0	387.0	493.0	372.0	306.0	273.0	157.0	149.0	3149.0
1983	7,821	7,694	149.0	128.0	145.0	211.0	325.0	391.0	502.0	457.0	331.0	264.0	174.0	171.0	3248.0
1984	8,216	8,086	213.0	141.0	226.0	321.0	414.0	460.0	505.0	419.0	514.0	254.0	171.0	269.0	3907.0
1985	8,497	8,356	251.0	191.0	201.0	384.0	440.0	507.0	526.0	456.0	397.0	284.0	267.0	156.0	4060.0
1986	8,497	8,285	155.0	120.0	155.0	244.0	329.0	418.0	441.0	628.0	387.0	359.0	294.0	206.0	3736.0
1987	8,879	8,879	201.0	237.0	208.0	300.0	334.0	542.0	528.0	536.0	429.0	347.0	230.0	226.0	4118.0
1988	9,746	9,604	191.0	240.0	331.0	309.0	392.0	476.0	524.0	561.0	471.0	415.0	331.0	218.0	4459.0
1989	10,104	9,971	238.0	206.0	223.0	381.0	439.0	674.0	557.0	581.0	446.0	371.0	323.0	271.0	4710.0
1990	10,873	10,718	227.0	229.0	370.0	407.0	472.0	488.0	641.0	577.0	482.0	463.0	362.0	301.0	5019.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.35	27,028	177	168	138	275	346	483	532	462	488	334	310	185	326	0.365
1981	3.41	28,586	186	164	168	351	428	594	529	597	759	327	147	176	369	0.414
1982	3.47	29,510	177	180	172	250	353	437	539	407	346	298	177	163	292	0.327
1983	3.52	27,569	174	166	170	255	380	473	587	535	400	309	210	200	323	0.362
1984	3.58	29,445	233	165	248	363	454	521	553	459	582	278	194	295	364	0.407
1985	3.64	30,952	262	220	209	414	459	546	548	475	428	296	288	163	359	0.402
1986	3.70	31,452	159	136	159	259	337	443	452	644	410	368	312	211	325	0.364
1987	3.76	33,389	194	254	201	299	323	541	510	518	428	335	230	218	338	0.378
1988	3.82	37,223	166	222	287	277	340	426	454	486	422	360	296	189	328	0.368
1989	3.88	39,186	196	188	184	324	361	573	459	478	379	305	275	223	329	0.369
1990	3.94	42,808	171	191	279	317	356	380	483	435	375	349	282	227	321	0.360
AVERAGE			190	187	201	308	376	492	513	500	456	324	247	205	334	0.374

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059379

COUNTY.. MADERA
CITY.... MADERA
SYSTEM #..... 2002
HYDROLOGIC REGION..... SAN JOAQUIN
PLANNING SUBAREA #.....VALLEY EAST SIDE
DAU # 213

WATER AGENCY.....CITY OF MADERA
TYPE OF AGENCY.....MUNICIPAL WATER DEPT.

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 50
WELLS AND SPRINGS.. 50

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 21,100
1990..... 29,400

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	19	Metered.....	105	Metered.....	12	Metered.....	6
Flat Rate.....	7,759	Flat Rate...	685	Flat Rate...	24	Flat Rate...	60

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	7,040	7,040	51.0	75.0	74.0	81.0	105.0	210.0	229.0	181.0	226.0	186.0	120.0	124.0	1662.0
1981	7,254	7,254	124.0	84.0	72.0	129.0	304.0	359.0	475.0	346.0	206.0	206.0	104.0	102.0	2511.0
1982	7,589	7,589	87.0	78.0	94.0	148.0	232.0	278.0	324.0	353.0	226.0	142.0	90.0	89.0	2141.0
1983	7,637	7,637	86.0	84.0	80.0	89.0	304.0	222.0	257.0	278.0	238.0	196.0	98.0	87.0	2019.0
1984	7,685	7,685	92.0	89.0	91.0	88.0	194.0	200.0	239.0	194.0	216.0	171.0	170.0	129.0	1873.0
1985	7,734	7,734	108.0	193.0	254.0	243.0	279.0	266.0	289.0	270.0	210.0	160.0	159.0	131.0	2562.0
1986	7,739	7,739	105.0	161.0	179.0	189.0	191.0	280.0	248.0	269.0	350.0	171.0	170.0	140.0	2453.0
1987	7,744	7,744	190.0	153.0	180.0	200.0	219.0	291.0	248.0	296.0	250.0	171.0	170.0	141.0	2509.0
1988	7,750	7,750	140.0	111.0	156.0	368.0	330.0	275.0	572.0	483.0	571.0	174.0	177.0	311.0	3668.0
1989	7,782	7,782	83.0	90.0	70.0	81.0	200.0	265.0	556.0	457.0	443.0	510.0	318.0	352.0	3425.0
1990	7,790	7,790	155.0	160.0	236.0	144.0	236.0	491.0	488.0	497.0	311.0	319.0	214.0	144.0	3395.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.00	21,100	78	123	113	128	161	332	350	277	357	284	190	190	216	0.242
1981	3.07	22,305	179	134	104	193	440	537	687	500	308	298	155	148	308	0.345
1982	3.15	23,925	117	116	127	206	313	387	437	476	315	191	125	120	245	0.275
1983	3.23	24,669	112	122	105	120	398	300	336	364	322	256	132	114	224	0.251
1984	3.31	25,421	117	121	115	115	246	262	303	246	283	217	223	164	202	0.226
1985	3.39	26,184	133	263	313	309	344	339	356	333	267	197	202	161	268	0.300
1986	3.46	26,803	126	215	215	235	230	348	298	324	435	206	211	168	251	0.281
1987	3.54	27,421	224	199	212	243	258	354	292	348	304	201	207	166	251	0.281
1988	3.62	28,045	161	136	179	437	380	327	658	556	679	200	210	358	358	0.401
1989	3.70	28,765	93	112	78	94	224	307	624	512	513	572	369	395	326	0.365
1990	3.77	29,400	170	194	259	163	259	557	535	545	353	350	243	158	316	0.354
AVERAGE			137	158	166	204	296	368	443	407	376	270	206	195	270	0.302

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059380

COUNTY.. MERCED
CITY.... MERCED
SYSTEM #..... 2430
HYDROLOGIC REGION..... SAN JOAQUIN RIVER
PLANNING SUBAREA #.....VALLEY EAST SIDE
DAU # 210

CITY CENSUS POPULATION
1980..... 37,000
1990..... 56,216

WATER AGENCY.....MERCED, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	151	Metered.....	2,660	Metered.....	47	Metered.....	0
Flat Rate.....	1,160	Flat Rate...	0	Flat Rate...	0	Flat Rate...	7

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	11,256	10,130	170.0	164.0	206.0	322.0	446.0	567.0	703.0	705.0	540.0	385.0	267.0	203.0	4678.0
1981	11,291	10,162	208.0	171.0	199.0	445.0	631.0	774.0	945.0	856.0	754.0	400.0	235.0	178.0	5796.0
1982	11,325	10,193	188.0	205.0	223.0	308.0	630.0	723.0	909.0	948.0	618.0	431.0	245.0	240.0	5668.0
1983	11,405	10,265	227.0	196.0	218.0	274.0	503.0	742.0	899.0	911.0	688.0	405.0	248.0	229.0	5540.0
1984	11,700	10,530	238.0	225.0	375.0	487.0	748.0	807.0	996.0	920.0	720.0	389.0	220.0	216.0	6341.0
1985	12,605	11,345	203.0	209.0	248.0	399.0	564.0	684.0	804.0	748.0	576.0	400.0	219.0	219.0	5273.0
1986	12,983	11,695	217.0	200.0	263.0	391.0	610.0	792.0	869.0	835.0	579.0	357.0	274.0	238.0	5625.0
1987	13,025	11,708	208.0	196.0	217.0	412.0	550.0	620.0	652.0	662.0	529.0	380.0	213.0	211.0	4850.0
1988	13,680	14,224	219.0	265.0	341.0	345.0	471.0	577.0	791.0	709.0	600.0	456.0	287.0	239.0	5300.0
1989	14,340	14,343	239.0	220.0	259.0	428.0	575.0	603.0	850.0	790.0	539.0	361.0	276.0	250.0	5390.0
1990	15,000	14,462	232.0	237.0	327.0	450.0	532.0	644.0	785.0	657.0	514.0	418.0	291.0	257.0	5344.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.65	41,113	133	138	162	261	350	460	552	553	438	302	216	159	312	0.349
1981	3.68	41,505	162	147	155	357	490	622	734	665	606	311	189	138	383	0.428
1982	3.70	41,896	145	175	172	245	485	575	700	730	492	332	195	185	371	0.415
1983	3.72	42,460	172	165	166	215	382	583	683	692	540	308	195	174	357	0.400
1984	3.75	43,833	175	177	276	370	550	614	733	677	548	286	167	159	396	0.444
1985	3.77	47,519	138	157	168	280	383	480	546	508	404	272	154	149	304	0.341
1986	3.79	49,248	142	145	172	265	400	536	569	547	392	234	185	156	313	0.350
1987	3.82	49,713	135	141	141	276	357	416	423	430	355	247	143	137	267	0.299
1988	3.84	52,534	134	174	209	219	289	366	486	435	381	280	182	147	276	0.310
1989	3.86	55,405	139	142	151	257	335	363	495	460	324	210	166	146	267	0.299
1990	3.89	58,307	128	145	181	257	294	368	434	363	294	231	166	142	251	0.281
AVERAGE			146	155	177	273	392	489	578	551	434	274	178	154	318	0.356

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059381

COUNTY..STANISLAUS
CITY.... NEWMAN
SYSTEM #..... 50015
HYDROLOGIC REGION..... SAN JOAQUIN
PLANNING SUBAREA #.....VALLEY EAST SIDE
DAU # 216

CITY CENSUS POPULATION
1980..... 2,900
1990..... 4,151

WATER AGENCY.....NEWMAN, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,373	Metered.....	111	Metered.....	4	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	966	961	11.0	10.0	13.0	14.0	24.0	27.0	33.0	34.0	24.0	19.0	14.0	13.0	236.0
1981	1,030	1,025	13.0	13.0	22.0	19.0	28.0	34.0	36.0	33.0	20.0	16.0	12.0	9.0	255.0
1982	1,088	1,088	7.0	7.0	10.0	14.0	28.0	28.0	34.0	33.0	15.0	17.0	13.0	11.0	217.0
1983	1,088	1,088	10.0	13.0	10.0	20.0	21.0	32.0	38.0	29.0	25.0	18.0	14.0	10.0	240.0
1984	1,090	1,090	10.0	10.0	25.0	29.0	28.0	37.0	40.0	40.0	24.0	20.0	19.0	13.0	295.0
1985	1,100	1,100	9.0	15.0	11.0	26.0	34.0	38.0	44.0	42.0	32.0	24.0	17.0	15.0	307.0
1986	1,100	1,100	13.0	14.0	18.0	24.0	37.0	46.0	43.0	38.0	38.0	20.0	14.0	16.0	321.0
1987	1,143	1,143	15.0	14.0	20.0	28.0	33.0	40.0	43.0	38.0	38.0	20.0	14.0	16.0	319.0
1988	1,137	1,137	12.0	18.0	27.0	20.0	31.0	36.0	37.0	39.0	38.0	27.0	19.0	18.0	322.0
1989	1,287	1,287	15.0	14.0	20.0	31.0	39.0	32.0	32.0	35.0	20.0	29.0	25.0	20.0	312.0
1990	1,399	1,399	18.0	18.0	14.0	34.0	40.0	45.0	50.0	55.0	38.0	38.0	27.0	22.0	399.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.02	2,915	122	118	144	160	266	309	365	376	274	210	160	144	222	0.248
1981	3.01	3,103	135	150	229	204	291	365	374	343	215	166	129	94	225	0.252
1982	3.01	3,272	69	76	99	143	276	285	335	325	153	168	132	108	182	0.203
1983	3.00	3,267	99	142	99	204	207	327	375	286	255	178	143	99	201	0.225
1984	3.00	3,267	99	106	247	296	276	377	395	395	245	197	194	128	247	0.277
1985	2.99	3,292	88	163	108	263	333	385	431	412	324	235	172	147	256	0.286
1986	2.99	3,286	128	152	177	243	363	467	422	373	385	196	142	157	268	0.300
1987	2.98	3,409	142	147	189	274	312	391	407	360	372	189	137	151	256	0.287
1988	2.98	3,385	114	183	257	197	295	354	353	372	374	257	187	172	261	0.292
1989	2.97	3,825	126	131	169	270	329	279	270	295	174	245	218	169	223	0.250
1990	2.97	4,151	140	155	109	273	311	361	389	427	305	295	217	171	263	0.295
AVERAGE			115	138	166	230	296	355	374	360	280	212	166	140	237	0.265

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 3 8 2

C-059382

COUNTY.. MERCED
CITY....DOS PALOS
SYSTEM #..... 24002
HYDROLOGIC REGION..... SAN JOAQUIN RIVER
PLANNING SUBAREA #.....VALLEY WEST SIDE
DAU # 216

WATER AGENCY.....DOS PALOS, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 3,125
1990..... 4,196

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,492	Metered.....	100	Metered.....	NA	Metered.....	5
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,344	1,306	12.0	11.0	13.0	20.0	26.0	30.0	35.0	27.0	32.0	19.0	15.0	13.0	253.0
1981	1,350	1,316	14.0	12.0	13.0	20.0	29.0	35.0	36.0	33.0	28.0	17.0	13.0	12.0	262.0
1982	1,188	1,171	9.0	11.0	11.0	14.0	30.0	31.0	33.0	32.0	23.0	20.0	14.0	14.0	242.0
1983	1,221	1,204	14.0	13.0	15.0	18.0	30.0	32.0	36.0	33.0	25.0	17.0	14.0	12.0	259.0
1984	1,279	1,262	14.0	14.0	21.0	24.0	35.0	34.0	39.0	33.0	28.0	20.0	14.0	13.0	289.0
1985	1,277	1,261	14.0	14.0	17.0	24.0	31.0	36.0	37.0	33.0	27.0	21.0	16.0	15.0	285.0
1986	1,350	1,317	15.0	13.0	15.0	22.0	32.0	36.0	37.0	35.0	24.0	21.0	17.0	14.0	281.0
1987	1,362	1,330	15.0	13.0	15.0	26.0	31.0	34.0	33.0	30.0	25.0	21.0	19.0	14.0	276.0
1988	1,455	1,423	12.0	14.0	19.0	21.0	27.0	32.0	34.0	30.0	25.0	20.0	15.0	12.0	261.0
1989	1,465	1,435	15.0	15.0	20.0	26.0	34.0	39.0	39.0	38.0	30.0	23.0	18.0	16.0	313.0
1990	1,469	1,435	16.0	15.0	15.0	20.0	26.0	34.0	46.0	44.0	35.0	30.0	22.0	23.0	326.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.39	3,216	120	118	130	207	261	311	351	271	332	191	155	130	216	0.241
1981	2.45	3,302	137	130	127	202	283	353	352	322	283	166	131	117	217	0.243
1982	2.50	2,969	98	132	120	157	326	348	359	348	258	217	157	152	223	0.250
1983	2.55	3,116	145	149	155	193	311	342	373	342	267	176	150	124	228	0.255
1984	2.61	3,332	136	145	203	240	339	340	378	319	280	194	140	126	238	0.266
1985	2.66	3,395	133	147	162	236	295	353	352	314	265	200	157	143	230	0.258
1986	2.71	3,661	132	127	132	200	282	328	326	308	219	185	155	123	210	0.236
1987	2.76	3,765	129	123	129	230	266	301	283	257	221	180	168	120	201	0.225
1988	2.82	4,100	94	118	149	171	212	260	268	236	203	157	122	94	174	0.195
1989	2.87	4,206	115	127	153	206	261	309	299	291	238	176	143	123	204	0.228
1990	2.92	4,295	120	125	113	155	195	264	345	330	272	225	171	173	208	0.233
AVERAGE			124	131	143	200	275	319	335	304	258	188	150	130	214	0.239

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059383

COUNTY.. MERCED
CITY.... GUSTINE
SYSTEM #..... 2403
HYDROLOGIC REGION .....SAN JOAQUIN
PLANNING SUBAREA #.....VALLEY WEST SIDE
DAU # 216

WATER AGENCY.....GUSTINE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 3,100
1990..... 3,931

SERVICE CONNECTIONS: 2/

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	15	Metered.....	190	Metered.....	0	Metered.....	0
Flat Rate.....	4,617	Flat Rate...	246	Flat Rate...	13	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS 3/ SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1190	1184	13	12	16	24	34	37	43	45	34	26	19	15	318.0
1981	1290	1283	14	11	13	29	35	38	47	42	34	22	14	12	311.0
1982	1301	1294	12	12	13	18	35	38	48	43	31	22	14	12	298.0
1983	1187	1178	13	12	13	17	33	44	44	39	30	21	14	14	294.0
1984	1204	1195	13	12	15	22	37	45	47	43	31	19	14	13	311.0
1985	1212	1205	13	13	17	29	40	42	47	43	32	19	14	13	322.0
1986	/5	----	--	--	--	--	--	--	--	--	--	--	--	--	-
1987	1279	1272	11	8	18	27	20	30	31	26	13	9	9	4	206.0
1988	1337	1330	14	17	25	25	34	41	51	44	38	30	19	15	353.0
1989	1395	1388	14	14	18	30	39	44	50	48	33	35	32	17	374.0
1990	1410	1403	15	13	21	31	40	46	58	53	40	34	22	20	393.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.62	3,116	135	133	166	257	352	396	445	466	364	269	203	155	280	0.313
1981	2.64	3,401	133	116	123	284	332	372	446	398	333	209	137	114	251	0.281
1982	2.65	3,454	112	124	121	174	327	367	448	402	299	205	135	112	236	0.265
1983	2.67	3,173	132	135	132	179	335	462	447	396	315	213	147	142	254	0.284
1984	2.69	3,241	129	128	149	226	368	463	468	428	319	189	144	129	263	0.294
1985	2.71	3,285	128	141	167	294	393	426	462	422	325	187	142	128	269	0.301
1986	2.73		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	2.75	3,513	101	81	165	256	184	285	285	239	123	83	85	37	161	0.180
1988	2.77	3,697	122	159	218	225	297	370	445	384	343	262	171	131	262	0.293
1989	2.78	3,883	116	129	150	258	324	378	415	399	283	291	275	141	264	0.296
1990	2.80	3,951	122	118	171	262	327	388	474	433	338	278	186	163	273	0.305
AVERAGE			123	126	156	241	324	391	433	397	304	219	163	125	251	0.281

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
5/Missing data unavailable.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059384

COUNTY.. MERCED
CITY....LOS BANOS
SYSTEM #..... 24005
HYDROLOGIC REGION..... SAN JOAQUIN RIVER
PLANNING SUBAREA #.....VALLEY WEST SIDE
DAU # 216

WATER AGENCY.....LOS BANOS, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 10,700
1990..... 14,519

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5,113	Metered.....	773	Metered.....	5	Metered.....	2
Flat Rate.....	34	Flat Rate...	61	Flat Rate...	0	Flat Rate...	15

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,500	3,485	42.0	36.0	44.0	56.0	83.0	100.0	117.0	112.0	86.0	67.0	42.0	40.0	825.0
1981	3,540	3,529	39.0	36.0	42.0	64.0	100.0	137.0	147.0	133.0	100.0	50.0	39.0	38.0	925.0
1982	3,568	3,556	40.0	41.0	44.0	56.0	111.0	131.0	175.0	135.0	91.0	78.0	62.0	43.0	1007.0
1983	3,669	3,657	42.0	38.0	42.0	56.0	99.0	129.0	141.0	134.0	96.0	65.0	44.0	41.0	927.0
1984	3,716	3,704	56.0	44.0	68.0	90.0	118.0	152.0	155.0	146.0	116.0	74.0	33.0	44.0	1096.0
1985	3,788	3,776	42.0	43.0	59.0	100.0	116.0	153.0	140.0	135.0	101.0	80.0	55.0	40.0	1064.0
1986	3,848	3,839	43.0	38.0	55.0	83.0	115.0	158.0	155.0	138.0	115.0	85.0	68.0	58.0	1111.0
1987	3,923	3,914	56.0	47.0	60.0	96.0	109.0	150.0	138.0	130.0	120.0	94.0	55.0	45.0	1100.0
1988	4,119	4,110	47.0	54.0	88.0	79.0	130.0	128.0	143.0	129.0	148.0	87.0	69.0	52.0	1154.0
1989	4,567	4,558	50.0	42.0	73.0	92.0	109.0	170.0	149.0	172.0	82.0	59.0	67.0	51.0	1116.0
1990	4,978	4,969	46.0	49.0	84.0	101.0	140.0	131.0	156.0	189.0	126.0	104.0	92.0	67.0	1285.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.07	10,746	126	116	132	174	249	310	351	336	267	201	130	120	210	0.236
1981	3.06	10,816	116	119	125	197	298	422	438	397	308	149	120	113	234	0.262
1982	3.04	10,849	119	135	131	172	330	402	520	401	280	232	190	128	254	0.285
1983	3.03	11,102	122	122	122	168	288	387	410	389	288	189	132	119	229	0.256
1984	3.01	11,189	161	136	196	268	340	453	447	421	346	213	98	127	268	0.301
1985	3.00	11,349	119	135	168	294	330	449	398	384	297	227	162	114	257	0.288
1986	2.98	11,472	121	118	155	241	323	459	436	388	334	239	198	163	265	0.297
1987	2.97	11,637	155	144	166	275	302	430	383	360	344	261	158	125	259	0.290
1988	2.95	12,158	125	153	233	217	345	351	379	342	406	231	189	138	260	0.291
1989	2.94	13,412	120	112	176	229	262	423	358	414	204	142	167	123	228	0.255
1990	2.92	14,545	102	120	186	231	310	300	346	419	289	231	211	149	242	0.271
AVERAGE			126	128	163	224	307	399	406	387	306	210	160	129	246	0.276

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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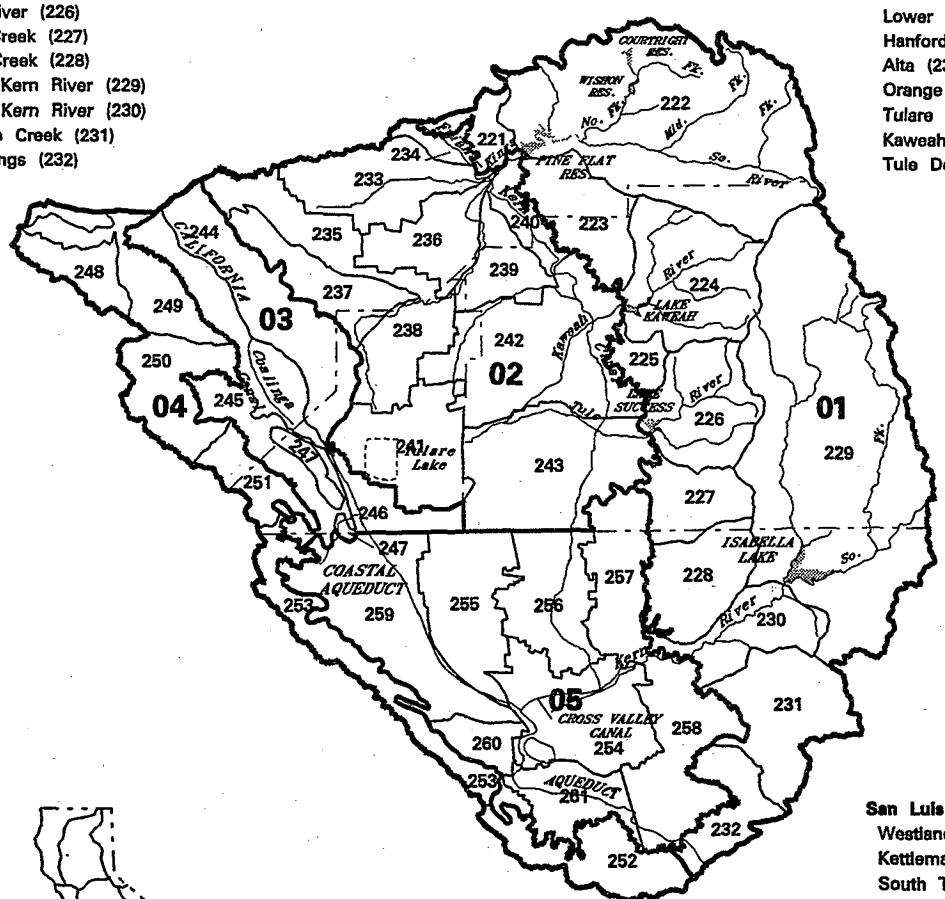
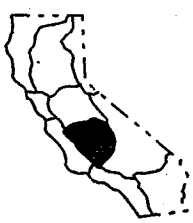
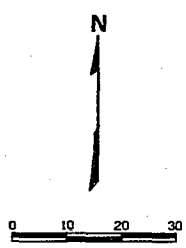
Figure A-9. Tulare Lake Region

Uplands PSA–01
- San Joaquin–Kings Interstream (221)
- Kings River (222)
- Kings–Kaweah Interstream (223)
- Kaweah River (224)
- Kaweah–Tule Interstream (225)
- Tule River (226)
- Deer Creek (227)
- Poso Creek (228)
- Upper Kern River (229)
- Lower Kern River (230)
- Caliente Creek (231)
- Cummings (232)

Kings–Kaweah–Tule Rivers PSA–02
- Fresno (233)
- Academy (234)
- Raisin (235)
- Consolidated (236)
- Lower Kings River (237)
- Hanford–Lemoore (238)
- Alta (239)
- Orange Cove (240)
- Tulare Lake (241)
- Kaweah Delta (242)
- Tule Delta (243)







San Luis West Side PSA–03
- Westlands (244)
- Kettleman Plain (245)
- South Tulare Lake (246)
- Kettleman Hills (247)

Western Uplands PSA–04
- Panoche Creek (248)
- Ciervo Hills (249)
- Los Gatos Creek (250)
- Reef Ridge (251)
- Grapevine (252)
- Temblor (253)

Kern Valley Floor PSA–05
- Kern Delta (254)
- Semitropic (255)
- North Kern (256)
- Northeastern Kern (257)
- Arvin–Edison (258)
- Antelope Plain (259)
- Buena Vista Valley (260)
- Wheeler Ridge–Maricopa (261)

PLANNING SUBAREAS
AND DETAILED ANALYSIS UNITS

C—059386

C-059386

Table A-9. Tulare Lake Region Water Production and Per Capita Water Use

COUNTY.. KERN
CITY....TEHACHAPI
SYSTEM #..... 15020
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....UPLANDS
DAU # 231

WATER AGENCY.....TEHACHAPI, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 4,080
1990..... 5,791

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,718	Metered.....	152	Metered.....	50	Metered.....	20
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,355	1,355	13.0	13.0	14.0	20.0	24.0	40.0	24.0	66.0	34.0	27.0	20.0	30.0	325.0
1981	1,380	1,380	15.0	12.0	13.0	20.0	31.0	43.0	50.0	47.0	37.0	20.0	16.0	36.0	340.0
1982	1,392	1,392	40.0	11.0	14.0	16.0	37.0	42.0	50.0	47.0	37.0	20.0	16.0	36.0	366.0
1983	1,400	1,400	13.0	11.0	13.0	14.0	29.0	42.0	46.0	36.0	34.0	22.0	14.0	13.0	287.0
1984	1,423	1,423	14.0	14.0	19.0	23.0	39.0	40.0	44.0	42.0	37.0	23.0	16.0	15.0	326.0
1985	1,422	1,422	15.0	14.0	15.0	26.0	35.0	41.0	48.0	47.0	30.0	25.0	18.0	16.0	330.0
1986	1,505	1,505	18.0	13.0	17.0	21.0	42.0	45.0	45.0	52.0	35.0	28.0	21.0	18.0	355.0
1987	1,600	1,600	18.0	16.0	16.0	30.0	39.0	49.0	56.0	55.0	35.0	69.0	19.0	20.0	422.0
1988	1,645	1,645	18.0	18.0	24.0	28.0	35.0	59.0	52.0	54.0	45.0	38.0	24.0	20.0	415.0
1989	1,766	1,766	19.0	20.0	23.0	37.0	43.0	53.0	61.0	74.0	43.0	36.0	27.0	25.0	461.0
1990	1,874	1,874	21.0	19.0	24.0	35.0	53.0	46.0	61.0	74.0	43.0	36.0	27.0	25.0	464.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.01	4,080	103	110	111	163	190	327	190	522	278	213	163	237	218	0.244
1981	3.02	4,166	116	103	101	160	240	344	387	364	296	155	128	279	224	0.250
1982	3.03	4,213	306	93	107	127	283	332	383	360	293	153	127	276	238	0.267
1983	3.03	4,249	99	92	99	110	220	330	349	273	267	167	110	99	185	0.207
1984	3.04	4,330	104	111	142	177	291	308	328	313	285	171	123	112	206	0.231
1985	3.05	4,338	112	115	112	200	260	315	357	350	231	186	138	119	208	0.233
1986	3.06	4,603	126	101	119	152	294	326	315	364	253	196	152	126	211	0.237
1987	3.07	4,906	118	116	105	204	256	333	368	362	238	454	129	131	236	0.264
1988	3.07	5,057	115	123	153	185	223	389	332	344	297	242	158	128	225	0.252
1989	3.08	5,443	113	131	136	227	255	325	361	439	263	213	165	148	232	0.260
1990	3.09	5,791	117	117	134	201	295	265	340	412	248	201	155	139	220	0.246
AVERAGE			130	110	120	173	255	327	337	373	268	214	141	163	218	0.245

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059387

COUNTY.. FRESNO
CITY.... CLOVIS
SYSTEM #..... 10003
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....KINGS-KAWEAH-TULE RIVERS
DAU # 233

CITY CENSUS POPULATION
1980..... 33,425
1990..... 50,564

WATER AGENCY.....CLOVIS, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	12,058	Metered.....	646	Metered.....	48	Metered.....	19
Flat Rate.....	1,361	Flat Rate...	2	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	8,249	8,249	82.0	99.0	109.0	185.0	236.0	314.0	378.0	326.0	288.0	250.0	155.0	116.0	2538.0
1981	8,562	8,562	132.0	127.0	112.0	172.0	274.0	301.0	406.0	383.0	315.0	244.0	153.0	141.0	2760.0
1982	8,683	8,683	114.0	116.0	133.0	176.0	316.0	336.0	406.0	379.0	289.0	217.0	130.0	128.0	2740.0
1983	8,878	8,878	133.0	112.0	124.0	167.0	275.0	274.0	395.0	354.0	319.0	220.0	149.0	137.0	2659.0
1984	9,450	9,450	125.0	141.0	201.0	252.0	375.0	373.0	423.0	368.0	329.0	217.0	151.0	132.0	3087.0
1985	9,729	9,729	133.0	135.0	179.0	265.0	335.0	400.0	424.0	366.0	288.0	241.0	165.0	149.0	3080.0
1986	10,148	10,148	145.0	112.0	172.0	246.0	367.0	385.0	460.0	446.0	312.0	236.0	269.0	159.0	3309.0
1987	10,751	10,751	167.0	124.0	185.0	297.0	386.0	371.0	427.0	395.0	313.0	289.0	172.0	156.0	3282.0
1988	11,330	11,330	142.0	176.0	210.0	270.0	301.0	438.0	433.0	446.0	436.0	326.0	259.0	153.0	3590.0
1989	12,264	11,584	171.0	214.0	193.0	319.0	438.0	438.0	504.0	602.0	392.0	330.0	279.0	200.0	4080.0
1990	14,134	12,771	195.0	200.0	206.0	329.0	407.0	464.0	574.0	583.0	515.0	401.0	330.0	220.0	4424.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.05	33,425	79	102	105	184	228	313	365	315	287	241	155	112	208	0.233
1981	4.04	34,614	123	131	104	166	255	290	378	357	303	227	147	131	218	0.245
1982	4.03	35,023	105	118	123	168	291	320	374	349	275	200	124	118	214	0.240
1983	4.02	35,727	120	112	112	156	248	256	357	320	298	199	139	124	204	0.228
1984	4.01	37,941	106	128	171	221	319	328	360	313	289	184	133	112	223	0.250
1985	4.01	38,971	110	124	148	227	277	342	351	303	246	199	141	123	217	0.243
1986	4.00	40,555	115	99	137	202	292	316	366	355	256	188	221	126	224	0.250
1987	3.99	42,865	126	103	139	231	290	289	321	297	243	217	134	117	210	0.235
1988	3.98	45,069	102	135	150	200	215	324	310	319	322	233	192	110	218	0.244
1989	3.97	48,670	113	157	128	218	290	300	334	399	268	219	191	133	230	0.257
1990	3.96	55,961	112	128	119	196	235	276	331	336	307	231	197	127	217	0.243
AVERAGE			110	122	131	197	267	305	350	333	281	213	161	121	217	0.243

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

NOTE: System served city only from 1980-1989.
From 1989 to present system served city of Clovis plus outside.

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C-059388

COUNTY.. FRESNO
CITY.... FRESNO
SYSTEM #..... 10007
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....KINGS-KAWEAH-TULE RIVERS
DAU # 233

WATER AGENCY.....FRESNO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 223,400
1990..... 354,020

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	9,968	Metered.....	8,934	Metered.....	134	Metered.....	270
Flat Rate.....	78,957	Flat Rate...	191	Flat Rate...	1	Flat Rate...	528

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	63,120	59,812	946.0	899.0	1111.0	1739.0	2414.0	2903.0	3460.0	3226.0	2557.0	2080.0	1446.0	1112.0	23893.0
1981	64,544	62,378	1109.0	996.0	1058.0	1771.0	2641.0	3428.0	3739.0	3487.0	2874.0	1842.0	1217.0	1077.0	25239.0
1982	65,301	63,266	985.0	1054.0	1050.0	1619.0	2803.0	3034.0	3529.0	3497.0	2524.0	1755.0	1163.0	1137.0	24150.0
1983	66,547	65,156	1070.0	1040.0	1051.0	1347.0	2501.0	3257.0	3606.0	3462.0	2874.0	1907.0	1262.0	1175.0	24552.0
1984	67,300	66,553	1158.0	1166.0	1596.0	2231.0	3349.0	3411.0	4094.0	3713.0	3229.0	1857.0	1426.0	1180.0	28410.0
1985	68,264	67,562	1156.0	1233.0	1357.0	2420.0	3075.0	3603.0	4024.0	3726.0	2658.0	2083.0	1376.0	1245.0	27956.0
1986	70,011	69,164	1192.0	1142.0	1435.0	2124.0	3198.0	3792.0	4074.0	4023.0	2841.0	2179.0	1784.0	1380.0	29164.0
1987	71,389	70,410	1304.0	1240.0	1537.0	2527.0	3197.0	3767.0	4014.0	3984.0	3239.0	2373.0	1601.0	1345.0	30128.0
1988	77,093	76,593	1312.0	1662.0	2025.0	2144.0	2756.0	3988.0	4345.0	4240.0	3648.0	3083.0	2044.0	1688.0	32935.0
1989	89,592	83,411	1643.0	1775.0	1946.0	3027.0	3615.0	4274.0	5117.0	4577.0	3896.0	2919.0	2385.0	2045.0	37219.0
1990	99,049	88,427	1599.0	1560.0	2353.0	3137.0	3756.0	4336.0	5151.0	4451.0	4086.0	3683.0	2549.0	2050.0	38711.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.74	235,756	129	131	152	246	330	410	473	441	362	285	204	152	278	0.311
1981	3.76	242,807	147	147	141	243	351	471	497	463	395	245	167	143	285	0.319
1982	3.79	247,408	128	152	137	218	365	409	460	456	340	229	157	148	267	0.300
1983	3.82	253,916	136	146	134	177	318	428	458	440	377	242	166	149	265	0.297
1984	3.84	258,596	144	155	199	288	418	440	511	463	416	232	184	147	301	0.337
1985	3.87	264,133	141	167	166	305	376	455	491	455	335	254	174	152	290	0.325
1986	3.90	272,772	141	150	170	260	378	463	482	476	347	258	218	163	293	0.328
1987	3.92	280,058	150	158	177	301	368	448	462	459	386	273	191	155	295	0.330
1988	3.95	304,504	139	188	215	235	292	437	460	449	399	327	224	179	296	0.332
1989	3.98	356,279	149	178	176	283	327	400	463	414	365	264	223	185	286	0.321
1990	4.00	396,545	130	140	191	264	306	364	419	362	343	300	214	167	267	0.300
AVERAGE			140	156	169	256	348	429	471	444	370	264	193	158	284	0.318

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059389

COUNTY.. FRESNO
CITY.... SELMA
SYSTEM #..... 10024
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....KINGS-KAWEAH-TULE RIVERS
DAU # 236

WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

CITY CENSUS POPULATION
1980..... 11,000
1990..... 14,757

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,942	Metered.....	396	Metered.....	12	Metered.....	55
Flat Rate.....	2,731	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,324	3,324	42.0	42.0	57.0	99.0	133.0	165.0	190.0	177.0	132.0	101.0	66.0	50.0	1254.0
1981	3,361	3,361	50.0	42.0	50.0	94.0	139.0	187.0	199.0	186.0	141.0	81.0	58.0	54.0	1281.0
1982	3,377	3,377	51.0	52.0	54.0	83.0	159.0	162.0	177.0	181.0	124.0	87.0	52.0	51.0	1233.0
1983	3,429	3,429	52.0	46.0	51.0	77.0	154.0	186.0	201.0	191.0	154.0	98.0	65.0	61.0	1336.0
1984	3,441	3,441	63.0	65.0	102.0	131.0	191.0	190.0	221.0	200.0	170.0	100.0	61.0	61.0	1555.0
1985	3,458	3,458	64.0	66.0	70.0	133.0	170.0	194.0	211.0	209.0	156.0	115.0	72.0	61.0	1521.0
1986	3,784	3,784	62.0	50.0	69.0	118.0	191.0	221.0	224.0	223.0	149.0	120.0	91.0	68.0	1586.0
1987	3,835	3,835	64.0	62.0	79.0	148.0	192.0	217.0	227.0	224.0	180.0	128.0	72.0	75.0	1668.0
1988	3,899	3,899	68.0	81.0	120.0	120.0	166.0	203.0	242.0	215.0	180.0	139.0	85.0	66.0	1685.0
1989	3,948	3,948	65.0	63.0	82.0	140.0	164.0	200.0	232.0	221.0	162.0	130.0	104.0	91.0	1654.0
1990	4,556	4,556	85.0	70.0	97.0	131.0	145.0	170.0	200.0	186.0	151.0	127.0	87.0	82.0	1531.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.31	11,000	123	132	167	300	390	500	557	519	400	296	200	147	312	0.350
1981	3.30	11,099	145	135	145	282	404	562	578	541	423	235	174	157	316	0.354
1982	3.30	11,128	148	167	157	249	461	485	513	525	371	252	156	148	304	0.340
1983	3.29	11,275	149	146	146	228	441	550	575	546	455	280	192	175	325	0.364
1984	3.28	11,291	180	199	291	387	546	561	631	571	502	286	180	174	377	0.423
1985	3.27	11,322	182	208	199	392	484	571	601	595	459	328	212	174	368	0.412
1986	3.27	12,363	162	144	180	318	498	596	584	582	402	313	245	177	351	0.394
1987	3.26	12,502	165	177	204	395	495	579	586	578	480	330	192	194	366	0.409
1988	3.25	12,684	173	220	305	315	422	533	615	547	473	354	223	168	364	0.408
1989	3.25	12,815	164	176	206	364	413	520	584	556	421	327	271	229	354	0.396
1990	3.24	14,757	186	169	212	296	317	384	437	407	341	278	197	179	284	0.318
AVERAGE			162	170	201	320	443	531	569	542	430	298	204	175	338	0.379

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY.. FRESNO
CITY.... SANGER
SYSTEM #..... 10029
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....KINGS-KAWEAH-TULE RIVERS
DAU # 236

WATER AGENCY.....SANGER, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 12,700
1990..... 17,025

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	3,906	Metered.....	216	Metered.....	10	Metered.....	2
Flat Rate.....	0	Flat Rate...	8	Flat Rate...	1	Flat Rate...	1

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,465	3,465	65.0	68.0	114.0	113.0	120.0	151.0	170.0	134.0	146.0	94.0	93.0	55.0	1323.0
1981	3,536	3,536	56.0	53.0	82.0	88.0	114.0	171.0	155.0	188.0	124.0	83.0	68.0	52.0	1234.0
1982	3,629	3,629	46.0	48.0	62.0	70.0	127.0	141.0	143.0	159.0	131.0	87.0	50.0	69.0	1133.0
1983	3,721	3,721	58.0	50.0	56.0	34.0	125.0	128.0	148.0	147.0	139.0	90.0	91.0	63.0	1129.0
1984	3,824	3,824	66.0	31.0	76.0	100.0	120.0	149.0	186.0	181.0	148.0	101.0	77.0	70.0	1305.0
1985	3,848	3,848	66.0	57.0	64.0	109.0	135.0	146.0	191.0	166.0	128.0	88.0	59.0	53.0	1262.0
1986	4,000	4,000	52.0	56.0	58.0	91.0	141.0	159.0	205.0	150.0	110.0	93.0	68.0	56.0	1239.0
1987	4,000	4,000	54.0	54.0	68.0	83.0	173.0	152.0	184.0	187.0	158.0	119.0	68.0	73.0	1373.0
1988	4,000	4,000	77.0	78.0	90.0	101.0	129.0	157.0	193.0	190.0	145.0	120.0	84.0	65.0	1429.0
1989	4,000	4,000	66.0	60.0	80.0	106.0	127.0	160.0	177.0	167.0	128.0	100.0	87.0	71.0	1329.0
1990	4,149	4,149	72.0	59.0	82.0	104.0	121.0	151.0	178.0	172.0	142.0	121.0	78.0	70.0	1350.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.67	12,700	165	185	290	297	305	396	432	340	383	239	244	140	285	0.320
1981	3.71	13,115	138	144	202	224	280	435	381	462	315	204	173	128	258	0.289
1982	3.75	13,619	109	126	147	171	301	345	339	377	321	206	122	163	228	0.255
1983	3.80	14,127	132	126	128	80	285	302	338	336	328	206	215	144	219	0.245
1984	3.84	14,686	145	73	167	227	264	338	409	398	336	222	175	154	243	0.273
1985	3.88	14,947	142	136	138	243	291	326	412	358	285	190	132	114	231	0.259
1986	3.93	15,713	107	127	119	193	289	337	421	308	233	191	144	115	216	0.242
1987	3.97	15,888	110	121	138	174	351	319	374	380	331	242	143	148	237	0.265
1988	4.02	16,063	155	167	181	210	259	326	388	382	301	241	174	131	244	0.273
1989	4.06	16,238	131	132	159	218	252	328	352	332	263	199	179	141	224	0.251
1990	4.10	17,025	136	124	155	204	229	296	337	326	278	229	153	133	217	0.243
AVERAGE			134	133	166	204	283	341	380	363	307	215	168	137	237	0.265

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059391

COUNTY.. KINGS
CITY.... HANFORD
SYSTEM #..... 16003
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....KINGS-KAWEAH-TULE RIVERS
DAU # 238

CITY CENSUS POPULATION
1980..... 21,025
1990..... 31,350

WATER AGENCY.....HANFORD, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,539	Metered.....	1,068	Metered.....	15	Metered.....	91
Flat Rate.....	5,717	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	7,650	6,432	89.0	87.0	103.0	168.0	239.0	294.0	330.0	300.0	221.0	175.0	129.0	100.0	2235.0
1981	7,781	6,556	108.0	85.0	98.0	172.0	259.0	340.0	363.0	316.0	258.0	162.0	101.0	96.0	2358.0
1982	7,929	6,699	88.0	88.0	90.0	132.0	280.0	297.0	323.0	325.0	174.0	180.0	97.0	122.0	2196.0
1983	8,122	6,892	106.0	86.0	92.0	125.0	255.0	322.0	329.0	308.0	265.0	159.0	110.0	106.0	2263.0
1984	8,300	7,055	102.0	112.0	190.0	246.0	349.0	354.0	391.0	340.0	200.0	161.0	111.0	93.0	2649.0
1985	8,405	7,168	108.0	110.0	147.0	255.0	233.0	385.0	395.0	360.0	258.0	193.0	124.0	110.0	2678.0
1986	8,590	7,360	111.0	100.0	135.0	203.0	332.0	374.0	396.0	357.0	268.0	222.0	164.0	130.0	2792.0
1987	8,700	7,470	124.0	108.0	133.0	245.0	317.0	357.0	379.0	375.0	313.0	235.0	126.0	126.0	2838.0
1988	8,700	8,400	120.0	138.0	182.0	201.0	291.0	341.0	391.0	346.0	294.0	232.0	148.0	110.0	2794.0
1989	9,003	8,703	106.0	99.0	147.0	254.0	284.0	349.0	379.0	343.0	352.0	195.0	150.0	131.0	2789.0
1990	9,340	8,912	123.0	113.0	169.0	209.0	266.0	314.0	370.0	349.0	285.0	237.0	173.0	140.0	2748.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.27	25,006	115	120	133	224	308	392	426	387	295	226	172	129	245	0.274
1981	3.29	25,628	136	118	123	224	326	442	457	398	336	204	131	121	252	0.282
1982	3.32	26,313	108	119	110	167	343	376	396	398	220	221	123	150	229	0.256
1983	3.34	27,156	126	113	109	153	303	395	391	366	325	189	135	126	228	0.256
1984	3.37	27,958	118	138	219	293	403	422	451	392	238	186	132	107	260	0.291
1985	3.39	28,520	122	138	166	298	264	450	447	407	302	218	145	124	257	0.288
1986	3.42	29,362	122	122	148	230	365	425	435	392	304	244	186	143	261	0.292
1987	3.44	29,955	134	129	143	273	341	397	408	404	348	253	140	136	260	0.291
1988	3.47	30,171	128	158	195	222	311	377	418	370	325	248	164	118	254	0.284
1989	3.49	31,446	109	112	151	269	291	370	389	352	373	200	159	134	243	0.272
1990	3.52	32,856	121	123	166	212	261	319	363	343	289	233	176	137	229	0.257
AVERAGE			122	126	151	233	320	397	416	383	305	220	151	130	247	0.277

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 3 9 2

C-059392

COUNTY.. FRESNO
CITY.... REEDLEY
SYSTEM #..... 10027
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....KINGS-KAWEAH-TULE RIVERS
DAU # 239

CITY CENSUS POPULATION
1980..... 11,225
1990..... 15,791

WATER AGENCY.....REEDLEY, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5	Metered.....	112	Metered.....	24	Metered.....	1
Flat Rate.....	3,372	Flat Rate...	187	Flat Rate...	11	Flat Rate...	12

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,299	3,395	45.0	44.0	55.0	83.0	117.0	149.0	169.0	167.0	123.0	109.0	65.0	59.0	1185.0
1981	3,350	3,342	60.0	47.0	51.0	75.0	115.0	162.0	168.0	160.0	135.0	86.0	50.0	51.0	1160.0
1982	3,379	3,367	44.0	43.0	51.0	64.0	110.0	129.0	154.0	164.0	117.0	83.0	54.0	53.0	1066.0
1983	3,406	3,395	53.0	45.0	50.0	61.0	121.0	154.0	172.0	165.0	130.0	83.0	58.0	51.0	1143.0
1984	3,497	3,487	54.0	52.0	74.0	100.0	147.0	167.0	191.0	177.0	153.0	90.0	61.0	55.0	1321.0
1985	3,410	3,401	50.0	49.0	58.0	98.0	145.0	168.0	194.0	178.0	121.0	95.0	65.0	56.0	1277.0
1986	3,489	3,489	52.0	51.0	65.0	95.0	158.0	185.0	193.0	187.0	133.0	107.0	78.0	62.0	1366.0
1987	3,498	3,498	57.0	52.0	64.0	114.0	147.0	179.0	192.0	184.0	144.0	105.0	64.0	59.0	1361.0
1988	3,526	3,526	61.0	68.0	88.0	96.0	129.0	160.0	201.0	187.0	156.0	127.0	79.0	64.0	1416.0
1989	3,546	3,546	65.0	61.0	70.0	108.0	138.0	171.0	189.0	175.0	131.0	97.0	80.0	67.0	1352.0
1990	3,724	3,724	66.0	57.0	79.0	103.0	126.0	157.0	178.0	180.0	142.0	124.0	88.0	77.0	1377.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.31	10,908	133	139	163	254	346	455	500	494	376	322	199	174	298	0.333
1981	3.40	11,389	170	147	144	220	326	474	476	453	395	244	146	144	279	0.313
1982	3.49	11,803	120	130	139	181	301	364	421	448	330	227	152	145	247	0.277
1983	3.59	12,216	140	132	132	166	320	420	454	436	355	219	158	135	256	0.287
1984	3.68	12,869	135	139	185	259	368	433	479	444	396	226	158	138	281	0.315
1985	3.77	12,867	125	136	145	254	364	435	486	446	313	238	168	140	272	0.305
1986	3.87	13,491	124	135	155	235	378	457	461	447	329	256	193	148	277	0.311
1987	3.96	13,853	133	134	149	274	342	431	447	428	347	245	154	137	269	0.301
1988	4.05	14,293	138	164	199	224	291	373	454	422	364	287	184	144	271	0.304
1989	4.15	14,705	143	148	154	245	303	388	415	384	297	213	181	147	252	0.282
1990	4.24	15,791	135	129	161	217	257	331	364	368	300	253	186	157	239	0.268
AVERAGE			136	139	157	230	327	415	451	434	346	248	171	146	267	0.300

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059393

COUNTY.. TULARE
CITY.... VISALIA
SYSTEM #..... 54035
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....KINGS-KAWEAH-TULE RIVERS
DAU #..... 242

WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 49,729
1990..... 70,460

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4,323	Metered.....	2,520	Metered.....	14	Metered.....	214
Flat Rate.....	17,401	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	16,297	16,297	186.0	172.0	224.0	328.0	470.0	600.0	710.0	653.0	506.0	410.0	285.0	224.0	4768.0
1981	16,514	16,514	234.0	190.0	223.0	355.0	554.0	706.0	742.0	678.0	541.0	343.0	229.0	213.0	5008.0
1982	16,732	16,732	207.0	203.0	218.0	298.0	578.0	607.0	673.0	674.0	472.0	343.0	228.0	219.0	4720.0
1983	17,206	17,206	222.0	193.0	219.0	281.0	542.0	670.0	726.0	681.0	546.0	383.0	268.0	238.0	4969.0
1984	17,968	17,968	249.0	258.0	378.0	471.0	715.0	739.0	846.0	739.0	644.0	399.0	279.0	260.0	5977.0
1985	18,548	18,548	260.0	248.0	309.0	514.0	659.0	792.0	845.0	750.0	536.0	421.0	302.0	271.0	5907.0
1986	19,446	19,446	276.0	250.0	324.0	458.0	704.0	812.0	855.0	838.0	615.0	508.0	406.0	322.0	6368.0
1987	19,938	19,938	307.0	268.0	337.0	564.0	765.0	852.0	868.0	843.0	677.0	528.0	308.0	300.0	6617.0
1988	20,826	20,826	290.0	327.0	445.0	446.0	607.0	764.0	893.0	818.0	670.0	549.0	372.0	316.0	6497.0
1989	21,264	21,264	309.0	292.0	360.0	551.0	649.0	765.0	860.0	793.0	600.0	507.0	390.0	339.0	6415.0
1990	21,741	21,741	312.0	289.0	424.0	534.0	623.0	740.0	877.0	835.0	680.0	578.0	416.0	358.0	6666.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.05	49,729	121	119	145	220	305	402	461	424	339	266	191	145	263	0.294
1981	3.07	50,704	149	134	142	233	352	464	472	431	356	218	151	136	271	0.303
1982	3.09	51,690	129	140	136	192	361	391	420	421	304	214	147	137	250	0.280
1983	3.11	53,481	134	129	132	175	327	418	438	411	340	231	167	144	255	0.285
1984	3.13	56,190	143	158	217	279	410	438	486	424	382	229	166	149	291	0.326
1985	3.15	58,355	144	152	171	294	364	452	467	415	306	233	173	150	277	0.311
1986	3.17	61,548	145	145	170	248	369	440	448	439	333	266	220	169	283	0.317
1987	3.18	63,483	156	151	171	296	389	447	441	428	355	268	162	152	286	0.320
1988	3.20	66,705	140	169	215	223	294	382	432	396	335	265	186	153	267	0.299
1989	3.22	68,511	145	152	170	268	306	372	405	373	292	239	190	160	257	0.287
1990	3.24	70,460	143	146	194	253	285	350	402	382	322	265	197	164	259	0.290
AVERAGE			141	145	169	244	342	414	443	413	333	245	177	151	269	0.301

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059394

COUNTY.. TULARE
CITY.... LINDSAY
SYSTEM #..... 54006
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....KINGS-KAWEAH-TULE RIVERS
DAU # 242

WATER AGENCY.....LINDSAY, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 49
WELLS AND SPRINGS.. 51

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 6,938
1990..... 8,338

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,893	Metered.....	189	Metered.....	38	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,022	2,015	60.0	61.0	69.0	70.0	53.0	73.0	88.0	96.0	75.0	90.0	64.0	53.0	852.0
1981	2,022	2,015	57.0	49.0	49.0	65.0	86.0	102.0	94.0	86.0	77.0	72.0	54.0	45.0	836.0
1982	2,039	2,032	49.0	40.0	46.0	45.0	71.0	76.0	69.0	74.0	62.0	81.0	58.0	50.0	721.0
1983	2,039	2,032	51.0	48.0	54.0	58.0	88.0	95.0	97.0	82.0	86.0	73.0	41.0	43.0	816.0
1984	2,039	2,032	47.0	50.0	59.0	64.0	89.0	85.0	95.0	99.0	88.0	87.0	49.0	52.0	864.0
1985	2,038	2,035	42.0	50.0	59.0	70.0	76.0	84.0	95.0	91.0	71.0	72.0	53.0	44.0	807.0
1986	2,205	2,200	47.0	47.0	54.0	72.0	104.0	48.0	93.0	100.0	81.0	75.0	58.0	46.0	825.0
1987	2,205	2,200	49.0	60.0	47.0	76.0	93.0	88.0	93.0	84.0	81.0	77.0	53.0	49.0	850.0
1988	2,204	2,199	48.0	58.0	50.0	76.0	93.0	88.0	93.0	85.0	79.0	77.0	53.0	50.0	850.0
1989	2,133	2,128	46.0	38.0	49.0	52.0	69.0	83.0	101.0	95.0	85.0	64.0	64.0	67.0	813.0
1990	2,132	2,127	73.0	57.0	65.0	78.0	86.0	70.0	101.0	80.0	92.0	79.0	63.0	59.0	903.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.44	6,962	278	302	320	335	246	350	408	445	359	417	306	246	335	0.376
1981	3.49	7,059	260	248	224	307	393	482	430	393	364	329	255	206	324	0.363
1982	3.54	7,215	219	198	206	208	317	351	308	331	286	362	268	224	274	0.307
1983	3.59	7,312	225	234	238	264	388	433	428	362	392	322	187	190	306	0.342
1984	3.63	7,410	205	233	257	288	387	382	414	431	396	379	220	226	319	0.358
1985	3.68	7,503	181	238	254	311	327	373	408	391	315	310	235	189	295	0.330
1986	3.73	8,223	184	204	212	292	408	195	365	392	328	294	235	180	275	0.308
1987	3.78	8,328	190	257	182	304	360	352	360	325	324	298	212	190	280	0.313
1988	3.82	8,430	184	237	191	301	356	348	356	325	312	295	210	191	276	0.309
1989	3.87	8,260	180	164	191	210	269	335	394	371	343	250	258	262	270	0.302
1990	3.92	8,358	282	244	251	311	332	279	390	309	367	305	251	228	296	0.332
AVERAGE			217	233	230	285	344	353	387	370	344	324	240	212	295	0.331

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059395

COUNTY.. TULARE
CITY.... TULARE
SYSTEM #..... 54015
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....KINGS-KAWEAH-TULE RIVERS
DAU # 242

WATER AGENCY.....TULARE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 22,650
1990..... 33,100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	0	Metered.....	1,205	Metered.....	NA	Metered.....	NA
Flat Rate.....	8,572	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	6,801	6,801	72.0	94.0	102.0	139.0	160.0	306.0	268.0	234.0	191.0	140.0	72.0	56.0	1834.0
1981	7,300	7,300	98.0	83.0	97.0	166.0	241.0	330.0	312.0	239.0	238.0	161.0	115.0	107.0	2187.0
1982	7,628	7,628	97.0	98.0	122.0	140.0	281.0	327.0	337.0	342.0	229.0	207.0	154.0	52.0	2386.0
1983	7,956	7,956	106.0	84.0	106.0	122.0	216.0	306.0	357.0	368.0	305.0	178.0	115.0	101.0	2364.0
1984	8,284	8,284	143.0	189.0	239.0	247.0	293.0	355.0	408.0	347.0	286.0	233.0	114.0	95.0	2949.0
1985	8,615	8,615	96.0	121.0	149.0	274.0	320.0	396.0	446.0	363.0	285.0	153.0	120.0	114.0	2837.0
1986	8,725	8,725	140.0	109.0	121.0	203.0	320.0	441.0	417.0	403.0	353.0	235.0	152.0	114.0	3008.0
1987	8,960	8,960	132.0	128.0	163.0	265.0	358.0	501.0	370.0	494.0	570.0	265.0	177.0	112.0	3535.0
1988	9,200	9,200	113.0	161.0	157.0	284.0	281.0	510.0	443.0	416.0	405.0	325.0	250.0	99.0	3444.0
1989	9,500	9,500	118.0	99.0	139.0	249.0	346.0	387.0	443.0	417.0	290.0	239.0	166.0	159.0	3052.0
1990	9,442	9,442	163.0	146.0	183.0	249.0	294.0	344.0	471.0	440.0	332.0	281.0	230.0	192.0	3325.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.33	22,650	103	143	145	205	228	450	382	333	281	199	106	80	222	0.248
1981	3.35	24,440	129	121	128	226	318	450	412	315	325	213	157	141	245	0.275
1982	3.37	25,672	122	136	153	182	353	425	423	430	297	260	200	65	255	0.285
1983	3.38	26,915	127	111	127	151	259	379	428	441	378	213	142	121	241	0.270
1984	3.40	28,170	164	231	274	292	336	420	467	397	338	267	135	109	287	0.321
1985	3.42	29,446	105	147	163	310	351	448	489	398	323	168	136	125	264	0.296
1986	3.44	29,975	151	130	130	226	344	490	449	434	393	253	169	123	275	0.308
1987	3.45	30,939	138	148	170	286	373	540	386	515	614	276	191	117	313	0.351
1988	3.47	31,929	114	174	159	296	284	532	448	420	423	328	261	100	296	0.331
1989	3.49	33,137	115	107	135	250	337	389	431	406	292	233	167	155	252	0.283
1990	3.51	33,100	159	158	178	251	287	346	459	429	334	274	232	187	275	0.308
AVERAGE			130	146	160	243	315	443	434	411	363	244	172	120	266	0.298

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059396

COUNTY.. TULARE
CITY....PORTERVILLE
SYSTEM #..... 54010
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....KINGS-KAWEAH-TULE RIVERS
DAU # 243

CITY CENSUS POPULATION
1980..... 20,400
1990..... 29,850

WATER AGENCY.....PORTERVILLE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	9,122	Metered.....	908	Metered.....	12	Metered.....	63
Flat Rate.....	514	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,170	5,170	76.0	69.0	71.0	103.0	143.0	186.0	219.0	284.0	210.0	165.0	121.0	81.0	1728.0
1981	5,362	4,900	65.0	47.0	39.0	106.0	138.0	181.0	266.0	219.0	216.0	154.0	90.0	68.0	1589.0
1982	5,450	4,910	76.0	90.0	77.0	123.0	216.0	213.0	252.0	235.0	171.0	111.0	76.0	69.0	1709.0
1983	5,600	5,000	75.0	70.0	74.0	96.0	170.0	239.0	263.0	244.0	192.0	125.0	97.0	76.0	1721.0
1984	5,806	5,106	88.0	86.0	115.0	144.0	232.0	238.0	323.0	250.0	238.0	139.0	87.0	78.0	2018.0
1985	6,845	5,645	79.0	80.0	106.0	156.0	248.0	254.0	298.0	253.0	199.0	147.0	94.0	75.0	1989.0
1986	8,075	6,672	80.0	80.0	103.0	151.0	214.0	289.0	300.0	258.0	228.0	173.0	140.0	91.0	2107.0
1987	8,023	6,579	94.0	89.0	108.0	181.0	254.0	284.0	287.0	300.0	245.0	180.0	100.0	88.0	2210.0
1988	8,369	6,867	83.0	98.0	141.0	134.0	206.0	260.0	337.0	382.0	283.0	234.0	169.0	107.0	2434.0
1989	9,653	7,553	108.0	123.0	104.0	194.0	292.0	306.0	322.0	311.0	218.0	185.0	155.0	129.0	2447.0
1990	9,966	8,016	106.0	104.0	128.0	262.0	299.0	333.0	427.0	386.0	324.0	294.0	212.0	158.0	3033.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.95	20,400	120	117	112	168	226	304	346	449	343	261	198	128	232	0.260
1981	3.92	21,039	100	80	60	168	212	287	408	336	342	236	143	104	207	0.232
1982	3.90	21,263	115	151	117	193	328	334	382	357	268	168	119	105	220	0.247
1983	3.88	21,724	111	115	110	147	252	367	391	362	295	186	149	113	217	0.243
1984	3.86	22,394	127	132	166	214	334	354	465	360	354	200	129	112	247	0.277
1985	3.83	26,249	97	109	130	198	305	323	366	311	253	181	119	92	208	0.233
1986	3.81	30,787	84	93	108	163	224	313	314	270	247	181	152	95	188	0.210
1987	3.79	30,410	100	105	115	198	269	311	304	318	269	191	110	93	199	0.223
1988	3.77	31,536	85	107	144	142	211	275	345	391	299	239	179	109	211	0.237
1989	3.75	36,160	96	121	93	179	260	282	287	277	201	165	143	115	185	0.208
1990	3.72	37,111	92	100	111	235	260	299	371	336	291	256	190	137	224	0.251
AVERAGE			102	112	115	182	262	313	362	342	287	206	148	110	213	0.238

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059397

COUNTY.. FRESNO
CITY.... HURON
SYSTEM #..... 10044
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....SAN LUIS WEST SIDE
DAU # 244

CITY CENSUS POPULATION
1980..... 2,765
1990..... 4,766

WATER AGENCY.....HURON, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	576	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	NA	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	550	550	10.0	10.0	13.0	21.0	22.0	29.0	33.0	29.0	26.0	21.0	15.0	12.0	241.0
1981	550	550	9.0	8.0	10.0	17.0	22.0	27.0	31.0	28.0	23.0	19.0	14.0	11.0	219.0
1982	560	560	10.0	9.0	10.0	16.0	24.0	26.0	28.0	27.0	22.0	25.0	19.0	15.0	231.0
1983	588	588	13.0	13.0	12.0	14.0	19.0	24.0	28.0	35.0	21.0	21.0	14.0	14.0	228.0
1984	594	594	13.0	14.0	18.0	23.0	25.0	27.0	36.0	29.0	26.0	21.0	16.0	13.0	261.0
1985	650	650	11.0	12.0	14.0	25.0	22.0	27.0	32.0	27.0	21.0	18.0	15.0	10.0	234.0
1986	664	660	11.0	10.0	15.0	22.0	25.0	41.0	31.0	32.0	26.0	24.0	21.0	13.0	271.0
1987	692	660	10.0	11.0	16.0	27.0	26.0	29.0	33.0	31.0	27.0	25.0	19.0	14.0	268.0
1988	619	619	14.0	16.0	18.0	23.0	24.0	28.0	34.0	32.0	28.0	26.0	20.0	15.0	278.0
1989	574	574	13.0	12.0	17.0	30.0	26.0	30.0	36.0	34.0	27.0	24.0	22.0	13.0	284.0
1990	621	621	12.0	12.0	18.0	27.0	26.0	29.0	35.0	32.0	26.0	28.0	22.0	17.0	284.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	5.03	2,765	117	125	152	253	257	350	385	338	313	245	181	140	239	0.267
1981	5.29	2,911	100	98	111	195	244	309	344	310	263	211	160	122	206	0.231
1982	5.56	3,112	104	103	104	171	249	279	290	280	236	259	204	155	203	0.228
1983	5.82	3,423	123	136	113	136	179	234	264	330	204	198	136	132	182	0.204
1984	6.09	3,615	116	134	161	212	223	249	321	259	240	187	148	116	198	0.222
1985	6.35	4,128	86	104	109	202	172	218	250	211	170	141	121	78	155	0.174
1986	6.62	4,393	81	81	110	167	184	311	228	235	197	176	159	95	169	0.189
1987	6.88	4,761	68	83	108	189	176	203	224	210	189	169	133	95	154	0.173
1988	7.15	4,423	102	125	131	173	175	211	248	233	211	190	151	109	172	0.193
1989	7.41	4,253	99	101	129	235	197	235	273	258	212	182	172	99	183	0.205
1990	7.67	4,766	81	90	122	189	176	203	237	217	182	190	154	115	163	0.183
AVERAGE			98	107	123	193	203	255	278	262	220	195	156	114	184	0.206

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059398

COUNTY.. FRESNO
CITY....COALINGA
SYSTEM #..... 10004
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....SAN LUIS WEST
DAU # 245

CITY CENSUS POPULATION
1980..... 6575
1990..... 8450

WATER AGENCY.....COALINGA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	361	Metered.....	172	Metered.....	14	Metered.....	34
Flat Rate.....	2940	Flat Rate...	43	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,705	2,692	13.0	13.0	42.0	82.0	76.0	98.0	122.0	93.0	82.0	52.0	65.0	28.0	766.0
1981	2,825	2,811	24.0	21.0	35.0	58.0	103.0	129.0	148.0	134.0	111.0	70.0	31.0	15.0	879.0
1982	2,858	2,842	33.0	30.0	18.0	34.0	107.0	115.0	135.0	133.0	89.0	60.0	28.0	18.0	800.0
1983	2,784	2,748	50.0	19.0	27.0	35.0	96.0	137.0	130.0	121.0	99.0	58.0	38.0	33.0	843.0
1984	2,882	2,825	30.0	33.0	68.0	72.0	118.0	128.0	148.0	131.0	113.0	66.0	37.0	29.0	973.0
1985	2,944	2,875	28.0	38.0	44.0	84.0	112.0	137.0	147.0	130.0	92.0	76.0	49.0	46.0	983.0
1986	3,018	2,948	44.0	38.0	51.0	72.0	120.0	139.0	144.0	144.0	95.0	73.0	47.0	31.0	998.0
1987	2,439	2,376	34.0	27.0	45.0	84.0	115.0	128.0	143.0	132.0	103.0	77.0	33.0	31.0	952.0
1988	2,847	2,791	34.0	42.0	61.0	69.0	93.0	128.0	142.0	132.0	98.0	69.0	37.0	38.0	943.0
1989	2,847	2,791	24.0	27.0	53.0	89.0	102.0	130.0	134.0	125.0	94.0	62.0	47.0	40.0	927.0
1990	2,665	2,601	33.0	36.0	68.0	81.0	110.0	126.0	152.0	149.0	103.0	78.0	48.0	48.0	1032.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.44	6,607	63	68	205	414	371	494	596	454	414	254	328	137	318	0.356
1981	2.52	7,128	109	105	158	271	466	603	670	606	519	317	145	68	338	0.378
1982	2.60	7,441	143	144	78	152	464	515	585	577	399	260	125	78	295	0.330
1983	2.68	7,473	216	91	117	156	414	611	561	522	442	250	169	142	309	0.346
1984	2.76	7,969	121	143	275	301	478	535	599	530	473	267	155	117	335	0.375
1985	2.85	8,377	108	162	169	334	431	545	566	501	366	293	195	177	321	0.360
1986	2.93	8,831	161	154	186	272	438	525	526	526	359	267	177	113	310	0.347
1987	3.01	7,334	150	131	198	382	506	582	629	581	468	339	150	136	356	0.398
1988	3.09	8,790	125	165	224	262	341	485	521	484	372	253	140	139	294	0.329
1989	3.17	9,020	86	107	190	329	365	480	479	447	347	222	174	143	282	0.315
1990	3.25	8,658	123	149	253	312	410	485	566	555	397	291	185	179	327	0.366
AVERAGE			128	129	187	290	426	533	573	526	414	274	177	130	317	0.355

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059399

COUNTY.. KERN
CITY....BAKERSFIELD
SYSTEM #..... 15003
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....KERN VALLEY FLOOR
DAU # 254

CITY CENSUS POPULATION
1980..... 145,390
1990..... 172,800

WATER AGENCY.....CALIFORNIA WATER SERVICE COMPANY
TYPE OF AGENCY.....INVESTOR OWNED

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 15
WELLS AND SPRINGS.. 85

SOURCE OF WATER (in percent):
PURCHASED..... 15
SELF SUPPLIED..... 85

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5,905	Metered.....	6,266	Metered.....	47	Metered.....	335
Flat Rate.....	39,079	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	45,482	45,482	663.0	634.0	783.0	1253.0	1558.0	2063.0	2476.0	2306.0	1773.0	1450.0	1002.0	777.0	16738.0
1981	46,156	46,156	775.0	689.0	769.0	1226.0	1858.0	2408.0	2637.0	2442.0	1976.0	1130.0	951.0	807.0	17668.0
1982	46,420	46,420	718.0	759.0	774.0	1105.0	1200.0	2119.0	2446.0	2398.0	1631.0	1228.0	824.0	749.0	15951.0
1983	46,846	46,846	703.0	633.0	708.0	1034.0	1953.0	2343.0	2529.0	2190.0	1967.0	1412.0	879.0	812.0	17163.0
1984	47,995	47,995	822.0	943.0	1299.0	1385.0	2259.0	2433.0	2837.0	2565.0	2158.0	1463.0	1047.0	831.0	20042.0
1985	48,826	48,826	799.0	876.0	1149.0	1803.0	2104.0	2494.0	2764.0	2505.0	1784.0	1520.0	997.0	818.0	19613.0
1986	50,077	50,077	820.0	780.0	1073.0	1495.0	2247.0	2599.0	2766.0	2738.0	1939.0	1552.0	1130.0	834.0	19973.0
1987	50,784	50,784	802.0	781.0	1024.0	1696.0	2197.0	2493.0	2590.0	2578.0	2036.0	1650.0	880.0	841.0	19568.0
1988	50,927	50,927	821.0	970.0	1365.0	1438.0	1961.0	2248.0	2783.0	2550.0	2158.0	1701.0	1116.0	859.0	19970.0
1989	51,082	51,082	848.0	842.0	1211.0	1805.0	2017.0	2361.0	2639.0	2527.0	2121.0	1621.0	1273.0	1067.0	20332.0
1990	51,641	51,641	944.0	859.0	1300.0	1655.0	1998.0	2315.0	2689.0	2518.0	1972.0	1688.0	1239.0	1045.0	20222.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.20	145,390	147	150	174	287	346	473	549	512	406	322	230	172	315	0.353
1981	3.21	148,235	169	166	167	276	404	541	574	531	444	246	214	176	327	0.366
1982	3.23	149,777	155	181	167	246	258	472	527	516	363	264	183	161	292	0.327
1983	3.24	151,852	149	149	150	227	415	514	537	465	432	300	193	172	310	0.347
1984	3.26	156,294	170	208	268	295	466	519	586	529	460	302	223	172	351	0.393
1985	3.27	159,730	161	196	232	376	425	520	558	506	372	307	208	165	336	0.377
1986	3.29	164,571	161	169	210	303	440	526	542	537	393	304	229	163	333	0.372
1987	3.30	167,654	154	166	197	337	423	496	498	496	405	317	175	162	320	0.358
1988	3.32	168,888	157	198	261	284	375	444	532	487	426	325	220	164	324	0.363
1989	3.33	170,166	161	177	230	354	382	462	500	479	415	307	249	202	327	0.367
1990	3.35	172,800	176	178	243	319	373	447	502	470	380	315	239	195	321	0.359
AVERAGE			160	176	209	300	392	492	537	503	409	301	215	173	323	0.362

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY.. KERN
CITY....BAKERSFIELD /5
SYSTEM #..... 15006
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....KERN VALLEY FLOOR
DAU # 254

CITY CENSUS POPULATION
1980..... 13,795
1990..... 21,273

WATER AGENCY.....EAST NILES COMMUNITY SERIVCES DIST.
TYPE OF AGENCY.....COMMUNITY SERVICES DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 87
WELLS AND SPRINGS.. 13

SOURCE OF WATER (in percent):
PURCHASED..... 63
SELF SUPPLIED..... 37

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	5,815	Metered.....	231	Metered.....	4	Metered.....	10
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,919	4,909	64.0	54.0	56.0	91.0	135.0	183.0	256.0	288.0	204.0	192.0	143.0	75.0	1741.0
1981	4,910	4,909	81.0	66.0	68.0	91.0	202.0	237.0	379.0	289.0	230.0	168.0	120.0	70.0	2001.0
1982	5,055	5,045	78.0	68.0	72.0	84.0	194.0	252.0	279.0	287.0	232.0	129.0	107.0	66.0	1848.0
1983	5,294	5,294	61.0	67.0	64.0	83.0	180.0	335.0	368.0	173.0	206.0	155.0	118.0	81.0	1891.0
1984	5,304	5,304	79.0	101.0	134.0	173.0	261.0	341.0	345.0	300.0	248.0	161.0	95.0	70.0	2308.0
1985	5,499	5,489	58.0	83.0	119.0	193.0	228.0	321.0	205.0	210.0	188.0	172.0	114.0	79.0	1970.0
1986	5,720	5,710	83.0	80.0	92.0	143.0	242.0	283.0	417.0	303.0	199.0	168.0	201.0	98.0	2309.0
1987	5,746	5,736	73.0	81.0	123.0	186.0	314.0	340.0	241.0	235.0	240.0	249.0	130.0	76.0	2288.0
1988	5,817	5,807	59.0	94.0	124.0	201.0	186.0	285.0	292.0	337.0	333.0	253.0	188.0	128.0	2480.0
1989	5,901	5,891	103.0	89.0	131.0	182.0	227.0	316.0	341.0	323.0	347.0	220.0	202.0	133.0	2614.0
1990	6,016	6,006	109.0	99.0	100.0	175.0	229.0	283.0	340.0	334.0	299.0	209.0	180.0	103.0	2460.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.81	13,823	149	135	131	219	315	441	597	672	492	448	345	175	345	0.386
1981	2.88	14,157	185	166	155	214	460	558	864	659	542	383	283	160	387	0.434
1982	2.96	14,945	168	162	155	187	419	562	602	619	517	278	239	142	339	0.379
1983	3.03	16,039	123	149	129	172	362	696	740	348	428	312	245	163	323	0.362
1984	3.10	16,458	155	212	263	350	512	691	676	588	502	316	192	137	384	0.430
1985	3.18	17,465	107	170	220	368	421	613	379	388	359	318	218	146	309	0.346
1986	3.25	18,586	144	154	160	256	420	508	724	526	357	292	360	170	340	0.381
1987	3.32	19,091	123	152	208	325	531	594	407	397	419	421	227	128	328	0.368
1988	3.40	19,752	96	164	203	339	304	481	477	550	562	413	317	209	344	0.385
1989	3.47	20,469	162	155	206	296	358	515	537	509	565	347	329	210	350	0.392
1990	3.54	21,308	165	166	151	274	347	443	515	506	468	316	282	156	316	0.354
AVERAGE			143	162	180	273	404	555	593	524	474	349	276	163	342	0.383

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Serves a part of Bakersfield

C—0 5 9 4 0 1

C-059401

COUNTY.. KERN
CITY.... OILDALE
SYSTEM #..... 15015
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....KERN VALLEY FLOOR
DAU # 254

WATER AGENCY.....OILDALE MUTUAL WATER CO.
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 98
WELLS AND SPRINGS.. 2

SOURCE OF WATER (in percent):
PURCHASED..... 98
SELF SUPPLIED..... 2

CITY CENSUS POPULATION
1980..... 23,382
1990..... 26,482

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	372	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	6,000	Flat Rate...	NA	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	6,146	6,146	75.0	69.0	84.0	132.0	169.0	224.0	217.0	251.0	190.0	152.0	103.0	80.0	1746.0
1981	6,153	6,153	86.0	72.0	75.0	128.0	199.0	291.0	306.0	296.0	223.0	129.0	99.0	81.0	1985.0
1982	6,212	6,212	74.0	72.0	79.0	115.0	216.0	234.0	299.0	276.0	183.0	132.0	84.0	79.0	1843.0
1983	6,218	6,218	80.0	68.0	79.0	113.0	209.0	248.0	271.0	229.0	208.0	136.0	285.0	79.0	2005.0
1984	6,290	6,290	76.0	97.0	141.0	149.0	246.0	264.0	324.0	277.0	232.0	151.0	113.0	93.0	2163.0
1985	6,311	6,311	94.0	95.0	109.0	184.0	210.0	249.0	287.0	249.0	177.0	146.0	97.0	86.0	1983.0
1986	6,336	6,336	88.0	82.0	97.0	141.0	239.0	264.0	279.0	281.0	192.0	153.0	116.0	87.0	2019.0
1987	6,359	6,359	84.0	76.0	106.0	179.0	235.0	256.0	267.0	256.0	201.0	166.0	86.0	81.0	1993.0
1988	6,363	6,363	81.0	86.0	132.0	133.0	233.0	249.0	305.0	292.0	239.0	193.0	123.0	90.0	2156.0
1989	6,367	6,367	88.0	95.0	138.0	197.0	216.0	291.0	314.0	263.0	213.0	171.0	122.0	108.0	2216.0
1990	6,372	6,372	99.0	90.0	130.0	184.0	216.0	240.0	306.0	268.0	214.0	182.0	124.0	123.0	2176.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.80	23,382	103	102	116	188	233	319	299	346	271	210	147	110	205	0.229
1981	3.84	23,625	117	109	102	181	272	411	418	404	315	176	140	111	230	0.258
1982	3.87	24,070	99	107	106	159	289	324	401	370	253	177	116	106	210	0.235
1983	3.91	24,312	106	100	105	155	277	340	360	304	285	180	391	105	226	0.253
1984	3.95	24,814	99	135	183	200	320	355	421	360	312	196	152	121	239	0.267
1985	3.98	25,119	121	135	140	244	270	330	369	320	235	187	129	110	216	0.242
1986	4.02	25,441	112	115	123	185	303	346	354	356	252	194	152	110	217	0.244
1987	4.05	25,757	105	105	133	232	294	331	334	321	260	208	111	101	212	0.237
1988	4.09	25,997	101	114	164	171	289	319	378	362	306	239	158	112	227	0.254
1989	4.12	26,237	108	129	170	250	266	370	386	323	271	210	155	133	231	0.259
1990	4.16	26,482	121	121	158	232	263	302	373	326	269	222	156	150	225	0.252
AVERAGE			108	116	136	200	280	341	372	345	275	200	164	115	222	0.248

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059402

COUNTY.. KERN
CITY.... DELANO
SYSTEM #..... 15005
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....KERN VALLEY FLOOR
DAU # 256

WATER AGENCY.....DELANO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 16,625
1990..... 22,762

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,268	Metered.....	32	Metered.....	1	Metered.....	13
Flat Rate.....	4,252	Flat Rate...	388	Flat Rate...	22	Flat Rate...	48

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,938	4,931	99.0	84.0	97.0	157.0	186.0	202.0	294.0	264.0	187.0	166.0	114.0	95.0	1945.0
1981	5,238	5,230	82.0	78.0	85.0	146.0	210.0	287.0	268.0	275.0	204.0	142.0	111.0	94.0	1982.0
1982	5,476	5,467	75.0	94.0	93.0	136.0	215.0	235.0	270.0	350.0	149.0	117.0	87.0	99.0	1920.0
1983	4,747	4,727	71.0	73.0	90.0	126.0	212.0	260.0	278.0	213.0	150.0	124.0	87.0	88.0	1772.0
1984	4,785	4,764	80.0	114.0	139.0	161.0	265.0	216.0	303.0	253.0	208.0	125.0	101.0	86.0	2051.0
1985	4,952	4,796	87.0	126.0	108.0	211.0	199.0	237.0	285.0	246.0	163.0	150.0	108.0	105.0	2025.0
1986	5,053	4,896	83.0	87.0	99.0	152.0	245.0	246.0	265.0	270.0	188.0	176.0	114.0	102.0	2027.0
1987	5,123	4,912	87.0	93.0	111.0	187.0	235.0	265.0	270.0	237.0	209.0	176.0	92.0	105.0	2067.0
1988	5,125	4,194	83.0	108.0	163.0	134.0	208.0	241.0	284.0	259.0	227.0	167.0	126.0	100.0	2100.0
1989	5,400	5,145	100.0	94.0	137.0	184.0	223.0	257.0	253.0	245.0	202.0	152.0	126.0	108.0	2081.0
1990	5,623	5,413	88.0	92.0	143.0	169.0	211.0	237.0	255.0	263.0	174.0	175.0	135.0	111.0	2053.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.37	16,649	192	174	188	314	360	404	570	512	374	322	228	184	320	0.358
1981	3.45	18,097	146	154	152	269	374	529	478	490	376	253	204	168	300	0.336
1982	3.54	19,375	125	173	155	234	358	404	450	583	256	195	150	165	271	0.304
1983	3.62	17,192	133	152	169	244	398	504	522	400	291	233	169	165	282	0.316
1984	3.70	17,728	146	222	253	303	482	406	551	460	391	227	190	156	317	0.355
1985	3.79	18,760	150	240	186	375	342	421	490	423	290	258	192	181	296	0.331
1986	3.87	19,563	137	159	163	259	404	419	437	445	320	290	194	168	284	0.318
1987	3.96	20,261	139	164	177	308	374	436	430	377	344	280	151	167	279	0.313
1988	4.04	20,697	129	180	254	216	324	388	443	404	366	260	203	156	278	0.311
1989	4.12	22,257	145	151	199	276	323	385	367	355	303	220	189	157	256	0.287
1990	4.21	23,645	120	139	195	238	288	334	348	359	245	239	190	151	238	0.266
AVERAGE			142	173	190	276	366	421	462	437	323	252	187	165	284	0.318

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059403

COUNTY.. KERN
CITY.... SHAFTER
SYSTEM #..... 15019
HYDROLOGIC REGION..... TULARE LAKE
PLANNING SUBAREA #.....KERN VALLEY FLOOR
DAU # 256

WATER AGENCY.....SHAFTER, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 6,975
1990..... 8,409

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	10	Metered.....	9	Metered.....	NA	Metered.....	NA
Flat Rate.....	2,836	Flat Rate...	214	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,048	2,048	28.0	28.0	38.0	67.0	94.0	118.0	135.0	119.0	91.0	73.0	48.0	36.0	875.0
1981	2,080	2,080	40.0	34.0	37.0	73.0	108.0	138.0	138.0	123.0	100.0	56.0	41.0	35.0	923.0
1982	2,250	2,250	34.0	35.0	38.0	56.0	113.0	121.0	132.0	124.0	84.0	59.0	36.0	33.0	865.0
1983	2,492	2,492	32.0	29.0	33.0	54.0	107.0	121.0	129.0	110.0	95.0	59.0	38.0	34.0	841.0
1984	2,501	2,501	34.0	42.0	69.0	81.0	120.0	120.0	140.0	125.0	88.0	65.0	43.0	35.0	962.0
1985	2,516	2,516	34.0	38.0	55.0	88.0	105.0	122.0	137.0	122.0	79.0	69.0	39.0	34.0	922.0
1986	2,613	2,602	35.0	33.0	48.0	77.0	115.0	131.0	129.0	127.0	88.0	69.0	46.0	36.0	934.0
1987	2,700	2,691	35.0	33.0	47.0	86.0	111.0	122.0	120.0	115.0	93.0	71.0	35.0	36.0	904.0
1988	2,774	2,765	37.0	44.0	63.0	64.0	93.0	107.0	128.0	116.0	96.0	70.0	43.0	34.0	895.0
1989	2,934	2,925	34.0	32.0	48.0	83.0	95.0	108.0	107.0	113.0	83.0	66.0	49.0	39.0	857.0
1990	3,009	3,000	36.0	34.0	56.0	78.0	92.0	109.0	120.0	113.0	87.0	76.0	51.0	42.0	894.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.41	6,975	129	138	176	320	435	564	624	550	435	338	229	166	344	0.385
1981	3.35	6,959	185	175	172	350	501	661	640	570	479	260	196	162	363	0.407
1982	3.29	7,392	148	169	166	253	493	546	576	541	379	257	162	144	321	0.359
1983	3.22	8,037	128	129	132	224	429	502	518	442	394	237	158	136	287	0.321
1984	3.16	7,915	139	183	281	341	489	505	571	509	371	265	181	143	333	0.373
1985	3.10	7,811	140	174	227	376	434	521	566	504	337	285	166	140	323	0.362
1986	3.04	7,954	142	148	195	323	466	549	523	515	369	280	193	146	322	0.360
1987	2.98	8,056	140	146	188	356	444	505	480	460	385	284	145	144	307	0.344
1988	2.92	8,110	147	187	251	263	370	440	509	461	395	278	177	135	302	0.339
1989	2.86	8,401	131	136	184	329	365	429	411	434	329	253	194	150	279	0.313
1990	2.80	8,434	138	144	214	308	352	431	459	432	344	291	202	161	290	0.325
AVERAGE			143	157	199	313	434	514	534	493	383	275	182	148	316	0.354

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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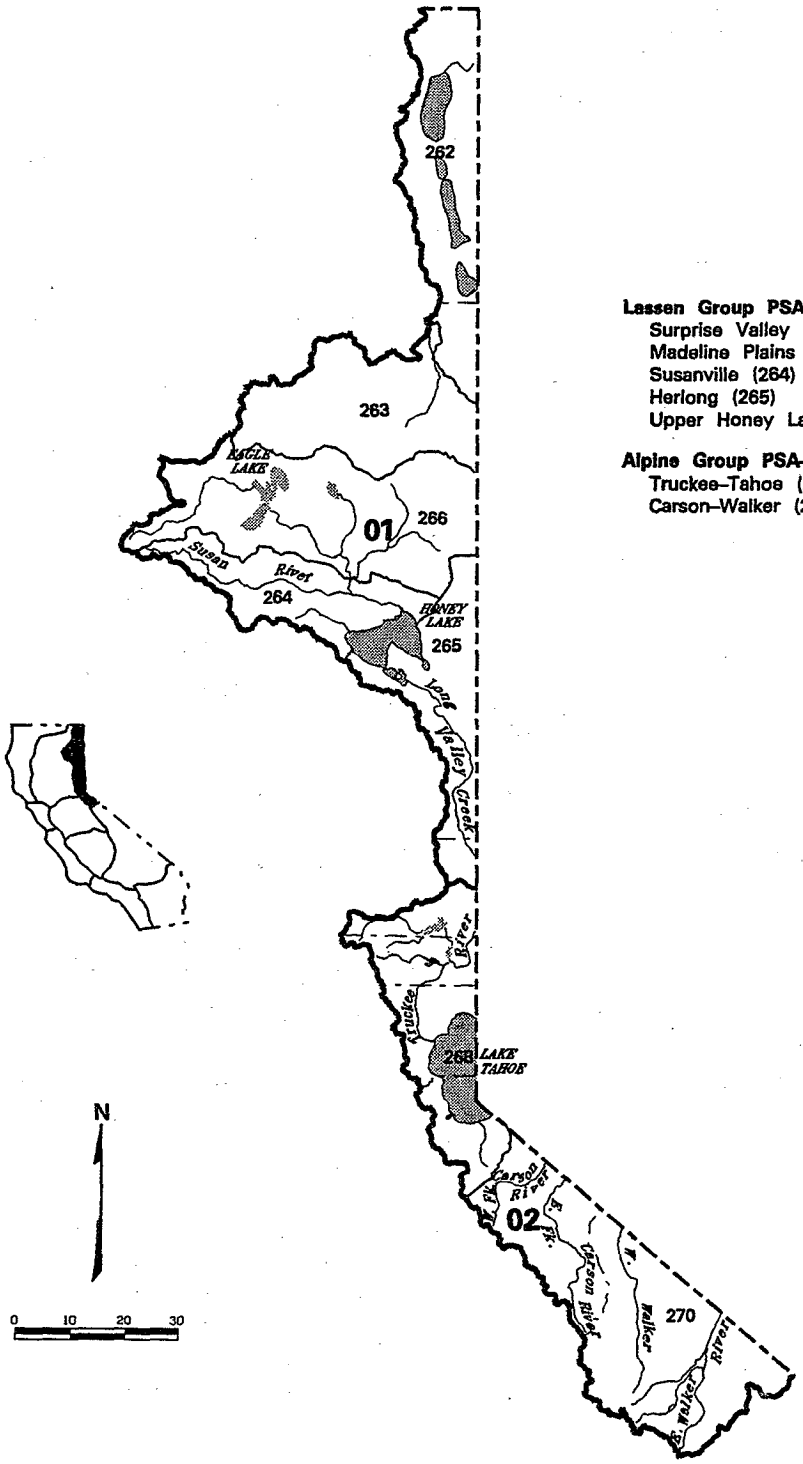
C-059404

Figure A-10. North Lahontan Region



Lassen Group PSA–01
- Surprise Valley (262)
- Madeline Plains (263)
- Susanville (264)
- Herlong (265)
- Upper Honey Lake (266)

Alpine Group PSA–02
- Truckee–Tahoe (268)
- Carson–Walker (270)

PLANNING SUBAREAS
AND DETAILED ANALYSIS UNITS

C—059405

C-059405

Table A-10. North Lahontan Region Water Production and Per Capita Water Use

COUNTY.. LASSEN
CITY....SUSANVILLE
SYSTEM #..... 18001
HYDROLOGIC REGION..... NORTH LAHONTAN
PLANNING SUBAREA #.....LASSEN GROUP
DAU # 264

CITY CENSUS POPULATION
1980..... 6,520
1990..... 7,279

WATER AGENCY.....SUSANVILLE, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,736	Metered.....	285	Metered.....	6	Metered.....	49
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) 7/ JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,600	2,564	23.8	36.2	31.2	27.2	70.0	67.8	77.0	107.0	63.3	71.2	39.8	36.5	651.0
1981	2,675	2,635	66.8	53.0	52.3	70.4	65.4	94.9	140.9	100.8	81.5	64.2	58.4	52.6	901.2
1982	/5		-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984			-	-	-	-	-	-	-	-	-	-	-	-	-
1985	2,798	2,724	-	-	-	-	-	-	-	-	71.4	55.9	51.6	69.1	-
1986	2,737	2,665	55.3	59.8	64.2	61.7	84.0	75.3	89.2	85.3	63.2	70.0	62.1	55.9	826.0
1987	2,853	2,597	63.6	55.8	55.6	55.0	82.3	86.9	93.6	64.4	60.2	70.0	59.2	53.7	800.3
1988	2,826	2,540	61.2	53.4	53.3	68.1	66.0	93.5	99.8	61.6	90.2	58.1	58.1	58.1	821.4
1989	2,826	2,540	56.2	55.0	63.4	55.7	62.8	84.7	100.5	88.6	91.4	54.9	59.2	53.7	826.1
1990	3,090	2,784	54.5	54.6	66.9	62.3	69.1	96.4	95.2	116.2	75.8	58.9	69.0	61.2	880.1

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.54	6,612	116	189	152	137	341	342	375	522	319	347	201	178	270	0.302
1981	2.55	6,821	316	277	247	344	309	464	666	477	398	304	285	249	362	0.405
1982	2.56		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.56		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2.57		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	2.58	7,215	-	-	-	-	-	-	-	-	330	250	238	309	-	-
1986	2.59	7,078	252	302	293	291	383	355	407	389	298	319	292	255	320	0.358
1987	2.59	7,398	277	269	242	248	359	392	408	281	271	305	267	234	296	0.332
1988	2.60	7,348	269	251	234	309	290	424	438	270	409	255	264	255	306	0.343
1989	2.61	7,369	246	267	278	252	275	383	440	388	413	240	268	235	307	0.344
1990	2.61	8,079	218	241	267	257	276	398	380	464	313	235	285	244	298	0.334
AVERAGE			242	257	245	263	319	394	445	399	344	282	262	245	309	0.346

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

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C-059406

COUNTY.. PLACER
CITY....DOLLAR COVE ET AL /5
SYSTEM #..... 31001
HYDROLOGIC REGION .....NORTH LAHONTAN
PLANNING SUBAREA #.....ALPINE GROUP
DAU # 268

CITY CENSUS POPULATION
1980..... 5,471
1990..... 6,400

WATER AGENCY.....NORTH TAHOE PUBLIC UTILITY DIST.
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS: 2/

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	3,098	Metered.....	212	Metered.....	NA	Metered.....	NA
Flat Rate.....	29	Flat Rate...	1	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS 3/ SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,963	2,963	61.4	70.3	68.4	60.9	54.3	49.8	47.9	48.2	43.4	48.0	49.2	52.9	654.7
1981	/6		-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984			-	-	-	-	-	-	-	-	-	-	-	-	-
1985	3,306		52.8	59.8	49.2	38.7	34.7	42.9	43.0	42.7	42.0	39.9	48.0	52.9	546.6
1986			-	-	-	-	-	-	-	-	-	-	-	-	-
1987	3,250		37.5	33.0	32.6	30.3	35.8	37.2	49.5	51.5	43.6	34.7	29.0	35.1	449.8
1988			-	-	-	-	-	-	-	-	-	-	-	-	-
1989			-	-	-	-	-	-	-	-	-	-	-	-	-
1990	3,340	3,340	31.9	32.9	31.5	29.8	34.4	41.0	52.0	51.7	43.4	34.8	28.3	35.0	446.5

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	1.85	5,471	362	443	403	371	320	303	282	284	264	283	300	312	328	0.367
1981	1.85		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	1.86		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	1.87		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	1.87		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	1.88	6,220	274	343	255	207	180	230	223	221	225	207	257	274	241	0.270
1986	1.89		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	1.90	6,160	196	191	171	164	187	201	259	270	236	182	157	184	200	0.224
1988	1.90		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	1.91		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	1.92	6,400	161	184	159	155	173	213	262	260	226	175	147	176	191	0.214
AVERAGE			248	290	247	224	215	237	257	259	238	212	215	237	240	0.269

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Data is a combination of Carnelian Woods, Dollar Cove and and North Tahoe PUD Main.
6/ Missing data is unavailable.

C—0 5 9 4 0 7

C-059407

COUNTY..EL DORADO — WATER AGENCY.....SOUTH TAHOE PUBLIC UTILITY DIST. — ORIGIN OF WATER (in percent):

CITY....SOUTH LAKE TAHOE /5 — TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM #.....09002 — SURFACE WATER..... 0

HYDROLOGIC REGION .....NORTH LAHONTAN — SYSTEM SERVES: — WELLS AND SPRINGS.. 100

PLANNING SUBAREA #.....ALPINE GROUP

DAU # ..... 268 — ENTIRE CITY.....

ENTIRE CITY PLUS OUTSIDE..... X — SOURCE OF WATER (in percent):

CITY CENSUS POPULATION — PORTION OF THE CITY.....

1980..... 21,000 — OTHER..... — PURCHASED..... 0

1990..... 36,090 — SELF SUPPLIED..... 100

SERVICE CONNECTIONS: 2/

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	0	Metered.....	536	Metered.....	NA	Metered.....	NA
Flat Rate.....	11,094	Flat Rate...	416	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS 3/ SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	7,301	7,301	183.4	187.5	139.1	120.1	91.0	101.8	98.9	96.6	105.9	108.9	135.5	191.3	1560.0
1981	/6		-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984	9,443	9,443	192.1	171.1	137.6	111.0	98.0	103.7	112.2	122.5	114.2	117.8	180.5	197.6	1658.3
1985	9,481	9,481	241.2	233.0	184.7	117.0	92.2	119.3	120.2	119.6	118.2	127.4	166.3	214.9	1854.0
1986	11,848	11,848	112.0	110.0	124.0	121.0	173.0	221.0	247.0	247.0	169.0	120.0	111.0	119.0	1874.0
1987	11,848	11,848	291.0	321.0	247.0	197.0	123.0	159.0	145.0	130.0	143.0	143.0	205.0	208.0	2312.0
1988	11,913	11,913	145.0	130.0	143.0	143.0	205.0	208.0	286.0	261.0	218.0	182.0	136.0	152.0	2209.0
1989	11,817	11,817	156.6	161.2	146.3	148.5	188.1	235.1	318.2	266.1	201.8	146.7	131.5	135.0	2235.1
1990	12,046	11,480	168.0	148.0	142.0	144.0	172.0	220.0	265.0	265.0	214.0	188.0	132.0	173.0	2231.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.88	21,000	282	308	214	191	140	162	152	148	168	167	215	294	204	0.228
1981	2.90		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	2.93		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.96		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2.98	28,171	220	209	158	131	112	123	128	140	135	135	214	226	161	0.181
1985	3.01	28,538	273	292	209	137	104	139	136	135	138	144	194	243	178	0.199
1986	3.04	35,980	100	109	111	112	155	205	221	221	157	108	103	107	143	0.160
1987	3.06	36,296	259	316	220	181	109	146	129	116	131	127	188	185	175	0.195
1988	3.09	36,814	127	122	125	129	180	188	251	229	197	159	123	133	164	0.184
1989	3.12	36,833	137	156	128	134	165	213	279	233	183	128	119	118	166	0.186
1990	3.14	37,869	143	140	121	127	147	194	226	226	188	160	116	147	161	0.181
AVERAGE			193	206	161	143	139	171	190	181	162	141	159	182	169	0.189

1/ Number of services

2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.

3/ gpcd - gallons per capita daily

4/ afpca - acre-feet per capita annually

5/Data is a combination of So.Tahoe PUD, Main and So. Tahoe PUD, Echo View Estates.

6/Missing data is unavailable.

C—059408

C-059408

COUNTY.. PLACER — WATER AGENCY.....TAHOE CITY PUBLIC UTILITY DIST. — ORIGIN OF WATER (in percent):

CITY....TAHOE CITY — /5 TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM #..... 31010 — SURFACE WATER..... 41

HYDROLOGIC REGION .....NORTH LAHONTON — SYSTEM SERVES: — WELLS AND SPRINGS.. 59

PLANNING SUBAREA #.....ALPINE GROUP

DAU # ..... 268 — ENTIRE CITY.....

ENTIRE CITY PLUS OUTSIDE..... X — SOURCE OF WATER (in percent):

CITY CENSUS POPULATION — PORTION OF THE CITY.....

1980..... 10,000 — OTHER..... — PURCHASED..... 0

1990..... 13,940 — SELF SUPPLIED..... 100

SERVICE CONNECTIONS: 2/

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	0	Metered.....	339	Metered.....	NA	Metered.....	1
Flat Rate.....	6,181	Flat Rate...	1	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS 3/ SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,206	3,206	53.1	65.1	38.5	31.0	19.9	25.2	18.0	22.0	28.0	26.5	32.5	57.4	417.2
1981	/6		-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984			-	-	-	-	-	-	-	-	-	-	-	-	-
1985			-	-	-	-	-	-	-	-	-	-	-	-	-
1986			-	-	-	-	-	-	-	-	-	-	-	-	-
1987			62.7	61.2	59.2	60.0	59.5	65.9	115.4	127.9	87.0	70.0	43.6	63.2	-
1988	3,170	3,170	29.4	29.8	28.9	27.4	40.3	57.4	73.5	80.2	48.5	50.4	29.3	36.5	531.5
1989			-	-	-	-	-	-	-	-	-	-	-	-	-
1990	6,522	6,522	44.9	47.6	52.2	30.5	46.0	66.0	95.1	78.4	64.6	41.8	40.8	55.1	662.9

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.12	10,000	171	224	124	103	64	84	58	71	93	85	108	185	114	0.128
1981	3.02		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	2.92		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.82		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2.73		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	2.63		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	2.53		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	2.43		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	2.33	7,398	128	139	126	124	176	259	321	350	218	220	132	159	197	0.220
1989	2.24		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	2.14	13,940	104	122	121	73	106	158	220	181	155	97	98	128	130	0.146
AVERAGE			134	162	124	100	115	167	200	201	155	134	113	157	147	0.165

1/ Number of services

2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.

3/ gpcd - gallons per capita daily

4/ afpca - acre-feet per capita annually

5/ Data is a combination of Tahoe City, Quail Lake, Lake Forest Tahoe City Main, Alpine Peaks, Mckinney Shores and Rubicon.

6/ Missing data is unavailable.

C—059409

C-059409

COUNTY.. MONO
CITY....BRIDGEPORT
SYSTEM #..... 26003
HYDROLOGIC REGION..... NORTH LAHONTAN
PLANNING SUBAREA #.....ALPINE GROUP
DAU # 270

WATER AGENCY.....BRIDGEPORT PUBLIC UTILITY DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 500
1990..... 800

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	200	Metered.....	28	Metered.....	0	Metered.....	8
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	200	200	3.0	3.0	3.0	5.0	8.0	10.0	13.0	10.0	8.0	4.0	3.0	3.0	73.0
1981	203	203	3.0	2.6	3.0	4.9	8.4	10.4	11.8	11.1	7.9	4.3	3.3	3.1	73.8
1982	210	210	3.2	2.7	3.4	4.3	8.2	8.5	15.8	9.3	6.3	3.9	2.6	3.3	71.5
1983	213	213	3.8	3.4	3.2	3.3	7.5	9.6	12.0	7.8	7.7	4.7	2.8	1.7	67.5
1984	221	221	3.4	3.1	3.0	3.1	4.6	6.5	11.0	8.4	6.9	4.8	2.9	3.2	60.9
1985	225	225	2.7	4.7	4.2	5.1	9.7	11.5	12.8	13.8	7.0	4.5	2.8	2.6	81.4
1986	216	216	2.5	2.2	2.7	4.1	9.3	11.7	13.4	12.5	8.6	4.4	2.8	2.9	77.1
1987	219	219	4.7	2.3	2.7	5.2	7.5	10.0	13.0	14.0	9.0	5.0	2.0	3.0	78.4
1988	218	218	3.0	2.0	3.0	5.0	10.0	10.0	14.0	11.0	7.0	5.0	3.0	3.0	76.0
1989	225	225	3.0	4.0	4.0	8.0	10.0	10.0	15.0	12.0	7.0	5.0	3.0	3.0	84.0
1990	228	228	3.0	2.0	3.0	6.0	9.0	12.0	12.0	12.0	9.0	5.0	3.0	3.0	79.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.50	500	194	207	194	333	516	667	839	645	533	258	200	194	400	0.448
1981	2.60	528	183	176	183	309	513	657	721	678	499	263	208	189	383	0.429
1982	2.70	567	182	170	193	253	466	499	898	529	370	222	153	188	345	0.387
1983	2.80	597	205	203	173	184	405	536	648	421	430	254	156	92	310	0.347
1984	2.90	642	171	167	151	161	231	338	553	422	358	241	151	161	260	0.291
1985	3.00	676	129	248	200	251	463	567	611	659	345	215	138	124	330	0.369
1986	3.11	671	120	117	130	204	447	581	644	601	427	212	139	139	315	0.353
1987	3.21	702	216	117	124	247	345	475	597	643	427	230	95	138	306	0.343
1988	3.31	721	134	96	134	231	447	462	626	492	324	224	139	134	289	0.323
1989	3.41	767	126	186	168	348	421	435	631	505	304	210	130	126	300	0.336
1990	3.51	800	121	89	121	250	363	500	484	484	375	202	125	121	271	0.303
AVERAGE			162	161	161	252	420	520	659	553	399	230	149	146	319	0.357

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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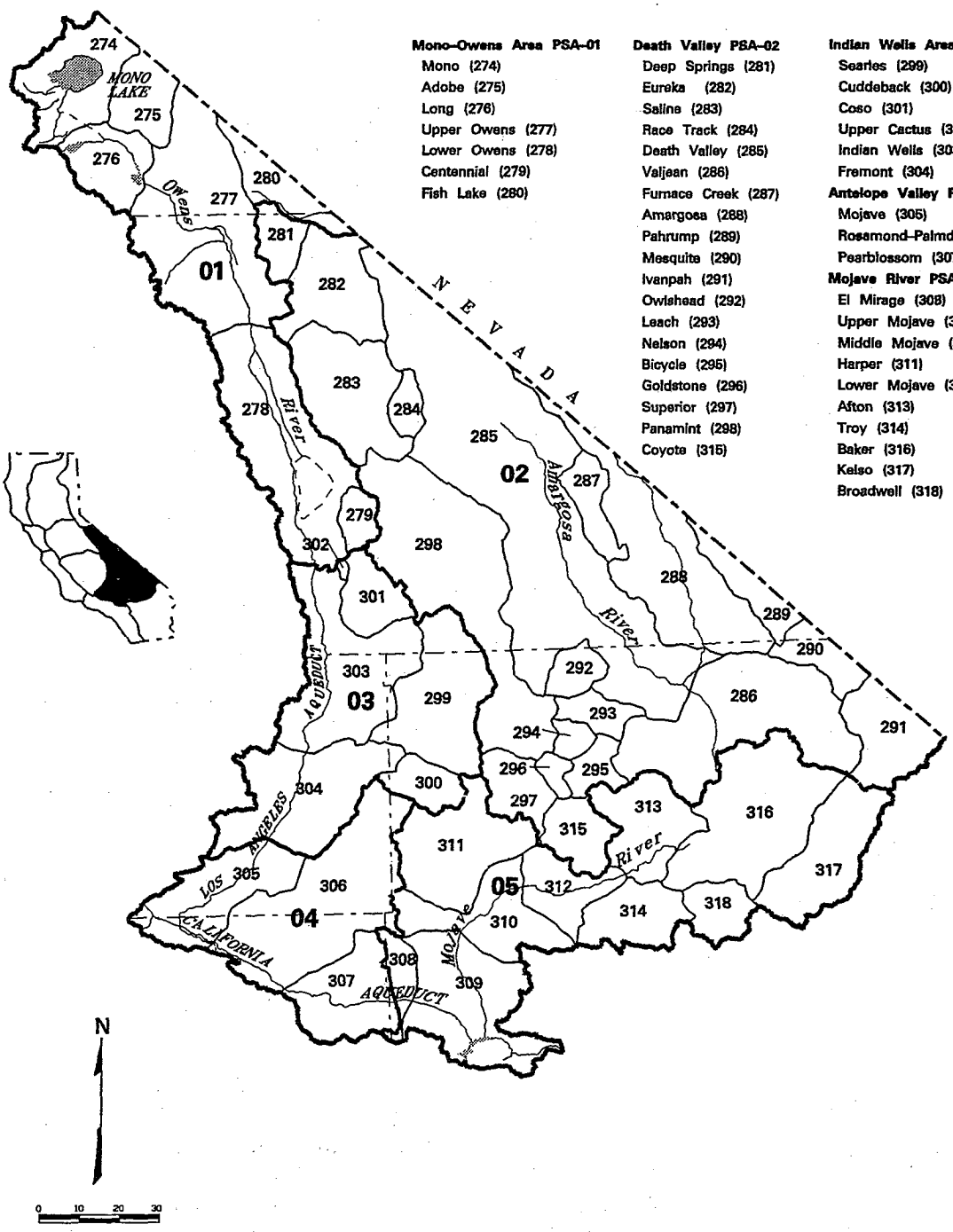
C-059410

Figure A-11. South Lahontan Region



PLANNING SUBAREAS
AND DETAILED ANALYSIS UNITS

C—059411

C-059411

Table A-11. South Lahontan Region Water Production and Per Captia Water Use

COUNTY.. MONO
CITY....MAMMOTH LAKES
SYSTEM #..... 26001
HYDROLOGIC REGION..... SOUTH LAHONTAN
PLANNING SUBAREA #.....MONO-OWENS AREA
DAU # 276

WATER AGENCY.....MAMMOTH COUNTY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 60
WELLS AND SPRINGS.. 40

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 3,095
1990..... 4,785

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	2,657	Metered.....	200	Metered.....	2	Metered.....	3
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,310	2,310	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984			-	-	-	-	-	-	-	-	-	-	-	-	-
1985	2,620	2,620	64.0	57.0	68.0	55.0	81.0	101.0	105.0	98.0	49.0	38.0	42.0	59.0	817.0
1986	2,680	2,680	59.0	54.0	60.0	51.0	67.0	88.0	103.0	106.0	67.0	55.0	38.0	42.0	790.0
1987	2,740	2,740	54.0	50.0	56.0	51.0	53.0	67.0	81.0	58.0	57.0	48.0	37.0	55.0	667.0
1988	2,860	2,860	68.0	54.0	56.0	47.0	63.0	70.0	84.0	79.0	51.0	55.0	40.0	56.0	723.0
1989	2,862	2,862	62.0	63.0	63.0	55.0	76.0	93.0	123.0	113.0	85.0	59.0	43.0	59.0	894.0
1990	2,923	2,923	63.0	64.0	63.0	52.0	72.0	86.0	95.0	94.0	75.0	47.0	42.0	57.0	810.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	1.34	3,095	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	1.37		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	1.40		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	1.43		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	1.46		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	1.49	3,900	529	522	562	470	670	863	869	811	419	314	359	488	574	0.643
1986	1.52	4,069	468	474	476	418	531	721	817	840	549	436	311	333	532	0.596
1987	1.55	4,241	411	421	426	401	403	527	616	441	448	365	291	418	431	0.483
1988	1.58	4,512	486	413	400	347	450	517	601	565	377	393	296	400	439	0.492
1989	1.61	4,600	435	489	442	399	533	674	863	792	616	414	312	414	532	0.596
1990	1.64	4,785	425	478	425	362	485	599	640	634	522	317	293	384	464	0.519
AVERAGE			459	466	455	399	512	650	734	681	488	373	310	406	495	0.555

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable

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C-059412

COUNTY.. KERN
CITY....RIDGECREST
SYSTEM #..... 15027
HYDROLOGIC REGION..... SOUTH LAHONTAN
PLANNING SUBAREA #.....INDIAN WELLS AREA
DAU # 303

CITY CENSUS POPULATION
1980..... 15,929
1990..... 27,725

WATER AGENCY.....INDIAN WELLS VALLEY WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	9,197	Metered.....	470	Metered.....	NA	Metered.....	83
Flat Rate.....	600	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,000	5,000	53.0	48.0	120.0	134.0	82.0	95.0	133.0	160.0	150.0	109.0	98.0	62.0	1244.0
1981	5,200	5,200	58.0	58.0	52.0	92.0	107.0	207.0	258.0	219.0	137.0	144.0	78.0	58.0	1468.0
1982	5,400	5,400	53.0	58.0	82.0	93.0	128.0	168.0	166.0	178.0	132.0	105.0	74.0	63.0	1300.0
1983	5,600	5,600	67.0	53.0	66.0	107.0	147.0	179.0	212.0	214.0	160.0	115.0	97.0	68.0	1485.0
1984	5,711	5,711	79.0	92.0	119.0	110.0	177.0	185.0	177.0	185.0	205.0	191.0	84.0	74.0	1678.0
1985	5,916	5,916	69.0	72.0	84.0	146.0	180.0	189.0	214.0	200.0	158.0	138.0	88.0	88.0	1626.0
1986	7,054	7,054	82.0	75.0	120.0	157.0	217.0	239.0	239.0	224.0	202.0	135.0	112.0	82.0	1884.0
1987	7,597	7,597	88.0	95.0	134.0	191.0	185.0	266.0	284.0	299.0	221.0	179.0	106.0	90.0	2138.0
1988	9,829	9,829	94.0	129.0	153.0	183.0	240.0	310.0	339.0	352.0	261.0	236.0	164.0	128.0	2589.0
1989	9,609	9,609	128.0	114.0	186.0	190.0	322.0	326.0	389.0	367.0	282.0	240.0	162.0	137.0	2843.0
1990	10,350	10,350	132.0	125.0	180.0	231.0	258.0	330.0	386.0	347.0	278.0	249.0	168.0	140.0	2824.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.19	15,929	107	104	243	280	166	199	269	324	314	221	205	126	214	0.240
1981	3.14	16,302	115	127	103	188	212	423	511	433	280	285	159	115	247	0.276
1982	3.08	16,656	103	124	159	186	248	336	322	345	264	203	148	122	214	0.240
1983	3.03	16,989	127	111	125	210	279	351	403	406	314	218	190	129	239	0.268
1984	2.98	17,036	150	186	225	215	335	362	335	350	401	362	164	140	270	0.302
1985	2.93	17,347	128	148	156	281	335	363	398	372	304	257	169	164	257	0.288
1986	2.88	20,327	130	132	190	257	344	392	379	355	331	214	184	130	254	0.284
1987	2.83	21,506	132	158	201	296	277	412	426	448	343	268	164	135	272	0.305
1988	2.78	27,326	111	163	181	223	283	378	400	416	318	279	200	151	260	0.291
1989	2.73	26,227	157	155	229	241	396	414	478	451	358	295	206	169	297	0.333
1990	2.68	27,725	154	161	209	278	300	397	449	404	334	290	202	163	279	0.313
AVERAGE			129	143	184	241	289	366	397	391	324	263	181	140	255	0.285

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
* Number of service connections are estimated.

C—0 5 9 4 1 3

C-059413

COUNTY.. KERN
CITY.... MOJAVE
SYSTEM #..... 15014
HYDROLOGIC REGION..... SOUTH LAHONTAN
PLANNING SUBAREA #.....ANTELOPE VALLEY
DAU # 305

CITY CENSUS POPULATION
1980..... 4,000
1990..... 4,500

WATER AGENCY.....MOJAVE PUBLIC UTILITY DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 20
WELLS AND SPRINGS.. 80

SOURCE OF WATER (in percent):
PURCHASED..... 20
SELF SUPPLIED..... 80

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	925	Metered.....	253	Metered.....	7	Metered.....	27
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	2	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	948	948	22.4	15.9	18.3	35.1	34.1	39.4	55.9	56.3	52.0	38.2	25.9	31.5	425.0
1981	978	978	22.4	15.5	17.9	33.6	46.1	53.4	64.0	62.2	51.0	35.1	28.7	21.0	450.9
1982	964	964	16.4	14.6	18.7	19.6	34.4	49.9	46.2	52.2	50.0	31.6	21.1	17.7	372.4
1983	982	982	17.3	14.5	14.1	19.3	24.2	51.4	51.0	42.1	44.6	28.8	25.1	18.7	351.1
1984	1,001	1,001	18.5	21.7	25.0	34.1	37.3	47.4	52.8	45.0	49.0	37.8	25.7	23.0	417.3
1985	1,067	1,067	14.9	17.6	24.9	40.5	37.9	51.8	62.5	62.6	49.8	43.3	25.7	20.0	451.5
1986	1,140	1,140	20.6	17.1	20.9	35.6	41.3	54.9	66.1	63.4	55.0	34.7	31.2	19.9	460.7
1987	1,140	1,140	20.5	20.9	24.7	40.0	43.9	54.7	67.3	68.3	61.5	43.9	24.6	23.4	493.7
1988	1,189	1,189	18.9	19.9	29.6	37.7	48.3	59.6	69.0	71.6	63.8	52.8	45.1	31.8	548.1
1989	1,228	1,228	22.2	23.5	32.0	48.7	54.5	53.9	68.4	80.5	60.5	47.3	34.5	26.2	552.2
1990	1,250	1,250	27.4	26.0	33.4	42.6	52.2	66.3	71.2	63.1	43.8	39.9	31.9	28.4	526.2

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.22	4,000	181	137	148	293	275	328	451	454	433	308	216	254	291	0.326
1981	4.16	4,066	178	136	142	275	366	438	508	493	418	278	235	167	304	0.340
1982	4.10	3,948	134	132	153	165	281	421	377	427	422	258	178	145	258	0.289
1983	4.03	3,961	141	131	115	162	197	433	415	343	375	235	211	152	243	0.272
1984	3.97	3,976	150	188	203	286	303	397	428	365	411	307	215	187	288	0.322
1985	3.91	4,172	115	151	193	324	293	414	483	484	398	335	205	155	297	0.332
1986	3.85	4,386	151	139	154	271	304	417	486	466	418	255	237	146	288	0.322
1987	3.79	4,316	153	173	185	309	328	422	503	510	475	328	190	175	313	0.351
1988	3.72	4,428	138	155	216	284	352	449	503	522	480	385	340	232	339	0.380
1989	3.66	4,497	159	187	230	361	391	400	491	577	448	339	256	188	336	0.377
1990	3.60	4,500	196	206	239	316	374	491	510	452	324	286	236	204	320	0.359
AVERAGE			154	158	180	277	315	419	469	463	419	301	229	182	298	0.334

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059414

COUNTY..LOS ANGELES
CITY....PALMDALE
SYSTEM #..... 19102
HYDROLOGIC REGION..... SOUTH LAHONTAN
PLANNING SUBAREA #.....ANTELOPE VALLEY
DAU # 307

WATER AGENCY.....PALMDALE WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 44
WELLS AND SPRINGS.. 56

SOURCE OF WATER (in percent):
PURCHASED..... 43
SELF SUPPLIED..... 57

CITY CENSUS POPULATION
1980..... 12,277
1990..... 68,842

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	18,555	Metered.....	836	Metered.....	NA	Metered.....	232
Flat Rate.....	0	Flat Rate...	3	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	6,151	6,151	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981	6,576	6,576	91.0	82.0	95.0	153.0	216.0	271.0	314.0	303.0	299.0	140.0	120.0	89.0	2173.0
1982	6,666	6,666	79.0	87.0	91.0	109.0	185.0	230.0	271.0	260.0	184.0	159.0	99.0	82.0	1836.0
1983	7,585	7,585	87.0	74.0	85.0	114.0	222.0	244.0	287.0	234.0	244.0	146.0	129.0	88.0	1954.0
1984	8,419	8,419	90.0	128.0	161.0	192.0	260.0	273.0	307.0	277.0	229.0	196.0	133.0	103.0	2349.0
1985	9,935	9,935	106.0	111.0	151.0	229.0	264.0	328.0	352.0	375.0	243.0	184.0	154.0	130.0	2627.0
1986	11,675	11,675	136.0	122.0	174.0	227.0	349.0	817.0	424.0	461.0	326.0	247.0	218.0	156.0	3657.0
1987	13,862	13,862	154.0	159.0	188.0	303.0	348.0	425.0	448.0	567.0	442.0	364.0	199.0	155.0	3752.0
1988	16,048	16,048	136.0	150.0	212.0	294.0	511.0	560.0	619.0	544.0	485.0	415.0	300.0	234.0	4460.0
1989	17,709	17,709	215.0	216.0	342.0	421.0	515.0	607.0	712.0	657.0	544.0	482.0	368.0	308.0	5387.0
1990	19,626	19,484	195.0	169.0	713.0	456.0	529.0	595.0	617.0	727.0	800.0	732.0	301.0	239.0	6073.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.00	12,277	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	2.15	14,136	208	207	217	361	493	639	717	691	705	319	283	203	421	0.472
1982	2.30	15,354	166	202	191	237	389	499	569	546	399	334	215	172	328	0.367
1983	2.46	18,637	151	142	147	204	384	436	497	405	436	253	231	152	287	0.322
1984	2.61	21,981	132	201	236	291	382	414	451	407	347	288	202	151	293	0.328
1985	2.76	27,466	124	144	177	278	310	398	413	440	295	216	187	153	262	0.293
1986	2.92	34,071	129	128	165	222	330	799	401	436	319	234	213	148	294	0.329
1987	3.07	42,585	117	133	142	237	264	333	339	430	346	276	156	117	241	0.270
1988	3.23	51,768	85	100	132	189	318	361	386	339	312	259	193	146	236	0.264
1989	3.38	59,848	116	129	184	234	278	338	384	354	303	260	205	166	247	0.276
1990	3.53	69,344	91	87	332	219	246	286	287	338	385	341	145	111	240	0.269
AVERAGE			132	147	192	247	339	450	444	439	385	278	203	152	285	0.319

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ data for 1980 is unavailable.

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C-059415

COUNTY..SAN BERNARDINO
CITY....HESPERIA
SYSTEM #..... 36024
HYDROLOGIC REGION..... SOUTH LAHONTAN
PLANNING SUBAREA #.....MOJAVE RIVER
DAU # 309

CITY CENSUS POPULATION
1980..... 30,000
1990..... 53,200

WATER AGENCY.....HESPERIA WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	16,556	Metered.....	672	Metered.....	NA	Metered.....	64
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	10,000	10,000	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984	11,651	11,651	-	-	-	-	-	-	237.0	262.0	234.0	182.0	127.0	105.0	-
1985	11,651	11,651	98.0	113.0	172.0	287.0	232.0	287.0	215.0	262.0	234.0	182.0	127.0	99.0	2308.0
1986	13,079	13,079	125.0	110.0	163.0	231.0	276.0	318.0	325.0	334.0	254.0	195.0	166.0	131.0	2628.0
1987	15,073	15,073	133.0	128.0	156.0	242.0	273.0	327.0	360.0	367.0	295.0	231.0	147.0	149.0	2808.0
1988	16,259	16,259	123.0	155.0	216.0	215.0	304.0	351.0	417.0	336.0	324.0	305.0	204.0	163.0	3113.0
1989	17,035	17,035	158.0	160.0	240.0	307.0	339.0	391.0	471.0	437.0	347.0	283.0	252.0	200.0	3585.0
1990	17,476	17,476	187.0	165.0	272.0	335.0	362.0	417.0	501.0	451.0	407.0	331.0	254.0	217.0	3899.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.00	30,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3.01		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3.01		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	3.02	35,159	-	-	-	-	-	-	217	240	222	167	120	96	-	-
1985	3.02	35,210	90	115	158	272	213	272	197	240	222	167	120	91	180	0.201
1986	3.03	39,584	102	99	133	195	225	268	265	272	214	159	140	107	182	0.204
1987	3.03	45,685	94	100	110	177	193	239	254	259	215	163	107	105	168	0.189
1988	3.04	49,352	80	108	141	145	199	237	273	220	219	199	138	107	173	0.194
1989	3.04	51,782	98	110	150	198	211	252	293	272	223	176	162	125	190	0.212
1990	3.04	53,200	113	111	165	210	220	261	304	273	255	201	159	132	201	0.225
AVERAGE			96	107	143	199	210	255	258	254	224	176	135	109	182	0.204

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

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C-059416

COUNTY..SAN BERNARDINO
CITY....LAKE ARROWHEAD
SYSTEM #..... 36005
HYDROLOGIC REGION..... SOUTH LAHONTAN
PLANNING SUBAREA #.....MOJAVE RIVER
DAU # 309

WATER AGENCY.....LAKE ARROWHEAD CSD
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 10,000
1990..... 15,000

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	6,737	Metered.....	55	Metered.....	0	Metered.....	7
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,500	5,500	/5	-	-	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983			-	-	-	-	-	-	-	-	-	-	-	-	-
1984	5,809	5,809	35.0	32.0	36.0	39.0	68.0	72.0	87.0	75.0	69.0	42.0	38.0	38.0	631.0
1985	5,895	5,895	51.0	49.0	33.0	38.0	60.0	75.0	91.0	96.0	69.0	55.0	43.0	45.0	705.0
1986			-	-	-	-	-	-	-	-	-	-	-	-	-
1987			-	-	-	-	-	-	-	-	-	-	-	-	-
1988	6,216	6,216	38.0	28.0	29.0	41.0	53.0	69.0	88.0	85.0	70.0	65.0	44.0	36.0	646.0
1989	6,426	6,426	40.0	49.0	33.0	54.0	64.0	73.0	94.0	92.0	77.0	57.0	39.0	35.0	707.0
1990	6,801	6,801	44.0	32.0	34.0	33.0	47.0	65.0	79.0	81.0	75.0	64.0	38.0	37.0	629.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	1.82	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	1.86		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	1.90		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	1.93		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	1.97	11,462	99	96	101	113	191	209	245	211	201	118	111	107	151	0.169
1985	2.01	11,860	139	148	90	107	163	211	248	261	194	150	121	122	163	0.182
1986	2.05		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	2.09		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	2.13	13,228	93	73	71	103	129	174	215	207	176	159	111	88	134	0.150
1989	2.17	13,924	93	126	76	129	148	175	218	213	184	132	93	81	139	0.156
1990	2.21	15,000	95	76	73	73	101	144	170	174	167	138	84	80	115	0.129
AVERAGE			103	104	82	105	147	183	219	213	184	139	104	96	140	0.157

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

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C-059417

COUNTY..SAN BERNARDINO
CITY....VICTORVILLE
SYSTEM #..... 36052
HYDROLOGIC REGION..... SOUTH LAHONTAN
PLANNING SUBAREA #.....MOJAVE RIVER
DAU # 309

CITY CENSUS POPULATION
1980..... 14,220
1990..... 40,674

WATER AGENCY.....VICTOR VALLEY CO. WTR. DIST.
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	11,643	Metered.....	823	Metered.....	4	Metered.....	340
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

TOTAL WATER INTO SYSTEM (MILLION GALLONS)

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,368	5,368	71.0	61.0	66.0	118.0	135.0	218.0	266.0	245.0	223.0	192.0	189.0	105.0	1889.0
1981	5,587	5,587	92.0	89.0	108.0	189.0	244.0	304.0	322.0	301.0	285.0	172.0	139.0	116.0	2361.0
1982	6,203	6,203	96.0	94.0	110.0	157.0	235.0	267.0	317.0	304.0	236.0	191.0	110.0	92.0	2209.0
1983	6,933	6,933	101.0	85.0	109.0	163.0	247.0	296.0	330.0	287.0	276.0	179.0	147.0	119.0	2339.0
1984	8,000	8,000	122.0	139.0	199.0	233.0	314.0	331.0	335.0	342.0	304.0	231.0	170.0	123.0	2843.0
1985	8,306	8,306	122.0	137.0	192.0	259.0	319.0	378.0	413.0	401.0	301.0	273.0	166.0	137.0	3098.0
1986	9,291	9,291	147.0	135.0	193.0	245.0	354.0	412.0	433.0	440.0	337.0	253.0	207.0	150.0	3306.0
1987	10,763	10,763	139.0	148.0	191.0	276.0	339.0	398.0	455.0	453.0	360.0	284.0	179.0	169.0	3391.0
1988	10,728	10,728	154.0	174.0	265.0	285.0	372.0	425.0	506.0	463.0	396.0	360.0	248.0	191.0	3839.0
1989	11,411	11,411	165.0	168.0	282.0	373.0	415.0	478.0	555.0	515.0	425.0	371.0	281.0	234.0	4262.0
1990	12,810	12,810	199.0	189.0	301.0	351.0	418.0	477.0	558.0	497.0	457.0	380.0	295.0	231.0	4353.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.65	14,220	161	148	150	277	306	511	603	556	523	436	443	238	364	0.408
1981	2.70	15,094	197	211	231	417	521	671	688	643	629	368	307	248	429	0.480
1982	2.75	17,085	181	197	208	306	444	521	599	574	460	361	215	174	354	0.397
1983	2.81	19,460	167	156	181	279	409	507	547	476	473	297	252	197	329	0.369
1984	2.86	22,876	172	210	281	340	443	482	472	482	443	326	248	173	340	0.381
1985	2.91	24,188	163	202	256	357	425	521	551	535	415	364	229	183	351	0.393
1986	2.96	27,545	172	175	226	296	415	499	507	515	408	296	250	176	329	0.368
1987	3.02	32,476	138	163	190	283	337	409	452	450	370	282	184	168	286	0.320
1988	3.07	32,934	151	182	260	288	364	430	496	453	401	353	251	187	319	0.358
1989	3.12	35,632	149	168	255	349	376	447	502	466	398	336	263	212	328	0.367
1990	3.18	40,674	158	166	239	288	332	391	443	394	375	301	242	183	293	0.328
AVERAGE			164	180	225	316	397	490	533	504	445	338	262	194	338	0.379

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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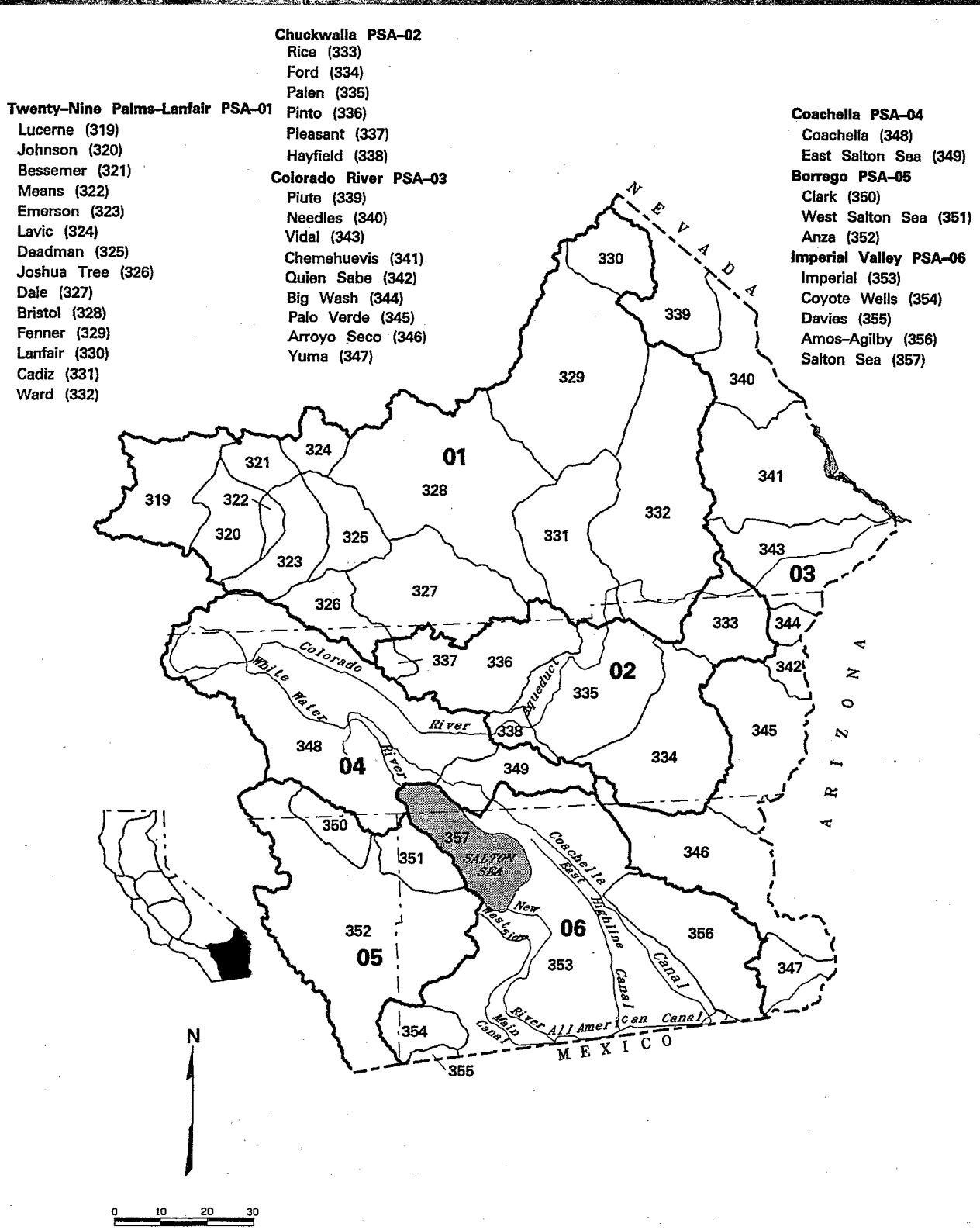
C-059418

Figure A-12. Colorado River Region



PLANNING SUBAREAS
AND DETAILED ANALYSIS UNITS

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C-059419

Table A-12. Colorado River Region Water Production and Per Capita Water Use

COUNTY..SAN BERNARDINO
CITY....TWENTYNINE PALMS
SYSTEM #..... 36049
HYDROLOGIC REGION..... COLORADO RIVER
PLANNING SUBAREA #.....TWENTYNINE PALMS-LANFAIR
DAU # 327

CITY CENSUS POPULATION
1980..... 9,600
1990..... 11,821

WATER AGENCY.....TWENTYNINE PALMS WATER DISTRICT
TYPE OF AGENCY.....PUBLIC WATER DISTRICT

SYSTEM SERVES:
ALL IN THE CITY.....
ALL IN THE CITY PLUS OUTSIDE... X
PARTLY IN THE CITY ONLY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS: 1/

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4,626	Metered.....	742	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS: 2/ SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	3,000	3,000	/5	-	/6	-	-	-	-	-	-	-	-	-	-
1981			-	-	-	-	-	-	-	-	-	-	-	-	-
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3,838	3,838	-	-	-	-	-	-	77	69	70	57	44	37	-
1984	4,002	4,002	42	40	54	52	61	70	77	69	70	57	44	37	673.0
1985	4,215	4,215	45	41	54	70	77	85	98	86	62	63	50	39	770.0
1986	4,271	4,271	60	45	45	60	70	68	87	85	81	73	59	53	786.0
1987	4,316	4,316	39	45	53	58	78	103	99	86	91	70	47	49	818.0
1988	5,539	4,892	56	47	62	68	83	80	109	96	84	69	64	62	880.0
1989	6,088	5,136	51	54	63	76	96	102	110	95	90	67	55	40	899.0
1990	6,212	5,401	36	42	65	71	92	102	112	103	82	80	68	55	908.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.20	9,600	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	3.10		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	3.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	2.90	11,117	-	-	-	-	-	-	223	200	210	165	132	107	-	-
1984	2.80	11,187	121	123	156	155	176	209	222	199	209	164	131	107	165	0.185
1985	2.69	11,357	128	129	153	205	219	249	278	244	182	179	147	111	186	0.208
1986	2.59	11,076	175	145	131	181	204	205	253	248	244	213	178	154	194	0.218
1987	2.49	10,756	117	149	159	180	234	319	297	258	282	210	146	147	208	0.233
1988	2.39	13,243	136	122	151	171	202	201	266	234	211	168	161	151	182	0.204
1989	2.29	13,940	118	138	146	182	222	244	255	220	215	155	132	93	177	0.198
1990	2.19	13,596	85	110	154	174	218	250	266	244	201	190	167	130	183	0.205
AVERAGE			126	131	150	178	211	240	257	231	219	181	149	125	185	0.207

1/ Number of services.
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ 1980 Connections are estimated.
6/ Missing data unavailable.

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C-059420

COUNTY..SAN BERNARDINO
CITY.... NEEDLES
SYSTEM #..... 36032
HYDROLOGIC REGION..... COLORADO RIVER
PLANNING SUBAREA #.....COLORADO RIVER
DAU # 340

CITY CENSUS POPULATION
1980..... 4,288
1990..... 5,777

WATER AGENCY.....NEEDLES, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER.....
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED.....
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	1,437	Metered.....	274	Metered.....	NA	Metered.....	NA
Flat Rate.....	75	Flat Rate...	NA	Flat Rate...	2	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,521	1,491	/5	-	-	-	-	-	131.0	145.0	118.0	96.0	62.0	50.0	-
1981	1,521	1,491	41.0	40.0	37.0	63.0	95.0	114.0	147.0	148.0	118.0	81.0	63.0	56.0	1003.0
1982			-	-	-	-	-	-	-	-	-	-	-	-	-
1983	1,598	1,569	-	-	-	-	-	-	131.0	130.0	104.0	68.0	57.0	37.0	-
1984	1,598	1,569	37.0	44.0	56.0	76.0	106.0	120.0	145.0	138.0	114.0	96.0	103.0	60.0	1095.0
1985	1,621	1,593	61.0	70.0	43.0	64.0	82.0	119.0	-	-	-	-	-	-	-
1986	1,528	1,528	38.0	38.0	43.0	61.0	97.0	123.0	137.0	131.0	108.0	76.0	59.0	36.0	947.0
1987	1,636	1,636	34.0	36.0	42.0	64.0	92.0	112.0	141.0	134.0	127.0	99.0	57.0	41.0	979.0
1988	1,636	1,636	35.0	38.0	48.0	77.0	69.0	123.0	144.0	151.0	115.0	97.0	77.0	50.0	1024.0
1989	1,734	1,734	40.0	41.0	53.0	86.0	106.0	124.0	143.0	151.0	141.0	108.0	67.0	51.0	1111.0
1990	1,752	1,752	45.0	43.0	41.0	87.0	112.0	128.0	127.0	155.0	114.0	89.0	72.0	55.0	1068.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.88	4,374	-	-	-	-	-	-	966	1,069	899	708	472	369	-	-
1981	2.92	4,438	298	322	269	473	690	856	1,068	1,076	886	589	473	407	619	0.693
1982	2.96		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	3.00	4,798	-	-	-	-	-	-	881	874	723	457	396	249	-	-
1984	3.04	4,865	245	312	371	521	703	822	961	915	781	637	706	398	617	0.691
1985	3.09	5,003	393	500	277	426	529	793	-	-	-	-	-	-	-	-
1986	3.13	4,781	256	284	290	425	655	858	924	884	753	513	411	243	543	0.608
1987	3.17	5,188	211	248	261	411	572	720	877	833	816	616	366	255	517	0.579
1988	3.21	5,257	215	249	295	488	423	780	884	927	729	595	488	307	534	0.598
1989	3.26	5,645	229	259	303	508	606	732	817	863	833	617	396	291	539	0.604
1990	3.30	5,777	251	266	229	502	625	739	709	866	658	497	415	307	506	0.567
AVERAGE			262	305	287	469	600	787	899	923	786	581	458	314	554	0.620

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/ Missing data unavailable.

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C-059421

COUNTY..RIVERSIDE
CITY.... BANNING
SYSTEM #..... 33006
HYDROLOGIC REGION..... COLORADO RIVER
PLANNING SUBAREA #.....COACHELLA
DAU # 348

CITY CENSUS POPULATION
1980..... 14,020
1990..... 20,570

WATER AGENCY.....BANNING, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY..... X
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	6,221	Metered.....	571	Metered.....	NA	Metered.....	29
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	NA	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,630	4,630	126.0	94.0	127.0	142.0	137.0	188.0	250.0	233.0	212.0	206.0	179.0	153.0	2047.0
1981	4,850	4,850	88.0	70.0	64.0	77.0	119.0	138.0	198.0	192.0	170.0	123.0	96.0	86.0	1421.0
1982	4,911	4,911	64.0	54.0	57.0	65.0	83.0	111.0	152.0	166.0	133.0	100.0	88.0	65.0	1138.0
1983	5,358	5,358	123.0	109.0	126.0	112.0	132.0	151.0	187.0	201.0	195.0	247.0	222.0	155.0	1960.0
1984	5,220	5,220	121.0	141.0	115.0	188.0	234.0	220.0	205.0	208.0	210.0	167.0	214.0	118.0	2141.0
1985	5,226	5,226	87.0	117.0	142.0	135.0	204.0	217.0	265.0	253.0	219.0	206.0	169.0	116.0	2130.0
1986	5,264	5,264	124.0	113.0	137.0	180.0	203.0	231.0	221.0	182.0	222.0	159.0	147.0	160.0	2079.0
1987	5,800	5,800	127.0	122.0	128.0	195.0	232.0	272.0	253.0	285.0	281.0	198.0	129.0	142.0	2364.0
1988	6,150	6,150	134.0	164.0	210.0	204.0	217.0	246.0	293.0	264.0	223.0	238.0	145.0	129.0	2467.0
1989	6,500	6,500	110.0	111.0	133.0	189.0	195.0	267.0	325.0	323.0	266.0	243.0	164.0	149.0	2475.0
1990	6,829	6,829	140.0	119.0	150.0	168.0	217.0	252.0	336.0	292.0	240.0	239.0	168.0	150.0	2471.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.03	14,020	290	231	292	338	315	447	575	536	504	474	426	352	400	0.448
1981	3.03	14,678	193	170	141	175	262	313	435	422	386	270	218	189	265	0.297
1982	3.02	14,855	139	130	124	146	180	249	330	360	298	217	197	141	210	0.235
1983	3.02	16,199	245	240	251	230	263	311	372	400	401	492	457	309	331	0.371
1984	3.02	15,773	247	308	235	397	479	465	419	425	444	342	452	241	372	0.417
1985	3.02	15,783	178	265	290	285	417	458	542	517	463	421	357	237	370	0.414
1986	3.02	15,890	252	254	278	378	412	485	449	369	466	323	308	325	358	0.401
1987	3.02	17,498	234	249	236	371	428	518	466	525	535	365	246	262	370	0.415
1988	3.02	18,544	233	305	365	367	377	442	510	459	401	414	261	224	364	0.408
1989	3.01	19,589	181	202	219	322	321	454	535	532	453	400	279	245	346	0.388
1990	3.01	20,570	220	207	235	272	340	408	527	458	389	375	272	235	329	0.369
AVERAGE			219	233	242	298	345	414	469	455	431	372	316	251	338	0.378

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059422

COUNTY..RIVERSIDE
CITY....COACHELLA
SYSTEM #..... 33004
HYDROLOGIC REGION..... COLORADO RIVER
PLANNING SUBAREA #.....COACHELLA
DAU # 348

CITY CENSUS POPULATION
1980..... 9,129
1990..... 16,896

WATER AGENCY.....COACHELLA, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:
Metered..... NA
Flat Rate..... NA

COMMERCIAL:
Metered..... NA
Flat Rate... NA

INDUSTRIAL:
Metered..... NA
Flat Rate... NA

GOVERNMENTAL:
Metered..... NA
Flat Rate... NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1,900	1,900	48.0	40.0	42.0	58.0	58.0	75.0	87.0	101.0	86.0	63.0	86.0	82.0	826.0
1981	1,905	1,905	45.0	45.0	45.0	60.0	60.0	75.0	82.0	97.0	90.0	60.0	82.0	135.0	876.0
1982	1,910	1,910	52.0	53.0	61.0	75.0	82.0	72.0	102.0	100.0	73.0	64.0	56.0	46.0	836.0
1983	1,912	1,912	55.0	56.0	65.0	79.0	87.0	87.0	115.0	117.0	102.0	90.0	66.0	62.0	981.0
1984	2,012	2,012	65.0	60.0	60.0	81.0	102.0	112.0	98.0	82.0	86.0	70.0	63.0	52.0	931.0
1985	2,510	2,506	67.0	53.0	76.0	95.0	97.0	120.0	129.0	125.0	92.0	60.0	57.0	79.0	1050.0
1986	2,500	2,500	45.0	42.0	62.0	77.0	110.0	130.0	138.0	142.0	96.0	66.0	47.0	43.0	998.0
1987	2,627	2,627	77.0	76.0	83.0	105.0	122.0	134.0	132.0	135.0	113.0	90.0	77.0	70.0	1214.0
1988	2,654	2,654	48.0	45.0	89.0	57.0	74.0	81.0	85.0	92.0	92.0	88.0	86.0	85.0	922.0
1989	2,681	2,681	83.0	59.0	78.0	94.0	97.0	94.0	95.0	88.0	75.0	57.0	53.0	50.0	923.0
1990	2,700	2,700	/5	-	-	-	-	-	-	-	-	-	-	-	-

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.80	9,129	170	151	148	212	205	274	307	357	314	223	314	290	248	0.278
1981	4.95	9,430	154	170	154	212	205	265	281	332	318	205	290	462	255	0.285
1982	5.10	9,732	172	194	202	257	272	247	338	331	250	212	192	152	235	0.264
1983	5.24	10,020	177	200	209	263	280	289	370	377	339	290	220	200	268	0.300
1984	5.39	10,837	193	191	179	249	304	345	292	244	265	208	194	155	235	0.264
1985	5.53	13,883	156	136	177	228	225	288	300	290	221	139	137	184	207	0.232
1986	5.68	14,191	102	106	141	181	250	305	314	323	225	150	110	98	193	0.216
1987	5.82	15,294	162	177	175	229	257	292	278	285	246	190	168	148	217	0.244
1988	5.97	15,837	98	98	181	120	151	170	173	187	194	179	181	173	160	0.179
1989	6.11	16,388	163	129	154	191	191	191	187	173	153	112	108	98	154	0.173
1990	6.26	16,896	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AVERAGE			155	155	172	214	234	267	284	290	252	191	191	196	217	0.243

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
5/Missing data unavailable.

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C-059423

COUNTY..RIVERSIDE
CITY....PALM SPRINGS
SYSTEM #..... 33005
HYDROLOGIC REGION..... COLORADO RIVER
PLANNING SUBAREA #.....COACHELLA
DAU # 348

WATER AGENCY.....DESERT WATER AGENCY
TYPE OF AGENCY.....PUBLIC AGENCY

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 4
WELLS AND SPRINGS.. 96

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

CITY CENSUS POPULATION
1980..... 37,000
1990..... 46,200

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	16,133	Metered.....	2,298	Metered.....	NA	Metered.....	NA
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	18,363	18,363	564.0	402.0	462.0	681.0	729.0	881.0	1023.0	977.0	1093.0	896.0	856.0	809.0	9373.0
1981	17,677	17,677	663.0	597.0	579.0	789.0	984.0	1075.0	1257.0	1274.0	1225.0	993.0	1017.0	636.0	11089.0
1982	16,991	16,991	582.0	471.0	576.0	652.0	854.0	979.0	1038.0	1083.0	1015.0	944.0	758.0	607.0	9559.0
1983	17,152	17,152	634.0	518.0	543.0	765.0	896.0	1278.0	1193.0	1154.0	993.0	895.0	911.0	725.0	10505.0
1984	17,486	17,486	680.0	719.0	771.0	920.0	1076.0	1264.0	1235.0	1254.0	1188.0	1138.0	1062.0	729.0	12036.0
1985	17,809	17,809	598.0	698.0	739.0	979.0	1107.0	1294.0	1428.0	1435.0	1243.0	1056.0	1064.0	665.0	12306.0
1986	18,101	18,101	733.0	674.0	718.0	957.0	1146.0	1277.0	1340.0	1437.0	1354.0	998.0	1067.0	815.0	12516.0
1987	18,375	18,375	763.0	793.0	724.0	988.0	1253.0	1334.0	1456.0	1456.0	1368.0	1112.0	977.0	1150.0	13374.0
1988	18,255	18,255	705.0	732.0	993.0	1067.0	1326.0	1399.0	1505.0	1455.0	1217.0	1280.0	987.0	843.0	13509.0
1989	18,523	18,523	782.0	759.0	1013.0	1182.0	1358.0	1586.0	1598.0	1415.0	1241.0	1281.0	1071.0	907.0	14193.0
1990	18,686	18,686	785.0	733.0	927.0	1115.0	1301.0	1303.0	1609.0	1497.0	1184.0	1250.0	1082.0	882.0	13668.0

YEAR OF RECORD	PERSONS PER CONNEC-TION	AVERAGE POPULA-TION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	2.01	37,000	492	375	403	614	636	794	892	852	985	781	771	705	694	0.777
1981	2.06	36,427	587	585	513	722	871	984	1,113	1,128	1,121	879	931	563	834	0.934
1982	2.11	35,790	525	470	519	607	770	912	936	976	945	851	706	547	732	0.820
1983	2.15	36,914	554	501	475	691	783	1,154	1,043	1,008	897	782	823	634	780	0.873
1984	2.20	38,433	571	645	647	798	903	1,096	1,037	1,053	1,030	955	921	612	858	0.961
1985	2.24	39,958	483	624	597	817	894	1,079	1,153	1,158	1,037	853	888	537	844	0.945
1986	2.29	41,441	571	581	559	770	892	1,027	1,043	1,119	1,089	777	858	634	827	0.927
1987	2.34	42,909	574	660	544	768	942	1,036	1,095	1,095	1,063	836	759	865	854	0.956
1988	2.38	43,464	523	581	737	818	984	1,073	1,117	1,080	933	950	757	626	852	0.954
1989	2.43	44,950	561	603	727	877	975	1,176	1,147	1,015	920	919	794	651	865	0.969
1990	2.47	46,200	548	567	647	804	908	940	1,123	1,045	854	873	781	616	811	0.908
AVERAGE			544	563	579	753	869	1,025	1,063	1,048	989	860	817	635	814	0.911

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually
* High values due to tourism industry and large number of golf courses and landscape areas.

C—059424

C-059424

COUNTY..RIVERSIDE
CITY.... INDIO
SYSTEM #..... 33020
HYDROLOGIC REGION..... COLORADO RIVER
PLANNING SUBAREA #.....COACHELLA
DAU # 348

CITY CENSUS POPULATION
1980..... 21,611
1990..... 36,793

WATER AGENCY.....INDIO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPT.

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 0
WELLS AND SPRINGS.. 100

SOURCE OF WATER (in percent):
PURCHASED..... 0
SELF SUPPLIED..... 100

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	NA	Metered.....	NA	Metered.....	NA	Metered.....	NA
Flat Rate.....	NA	Flat Rate...	NA	Flat Rate...	NA	Flat Rate...	NA

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,966	5,966	149.0	126.0	156.0	172.0	261.0	334.0	389.0	362.0	399.0	292.0	217.0	188.0	3045.0
1981	5,785	5,785	166.0	157.0	176.0	236.0	301.0	361.0	402.0	388.0	336.0	257.0	219.0	186.0	3185.0
1982	5,873	5,873	171.0	172.0	197.0	255.0	313.0	343.0	392.0	359.0	305.0	275.0	215.0	172.0	3169.0
1983	6,092	6,092	194.0	160.0	193.0	246.0	335.0	376.0	422.0	327.0	315.0	262.0	232.0	197.0	3259.0
1984	6,453	6,453	194.0	204.0	251.0	279.0	371.0	395.0	387.0	379.0	339.0	296.0	239.0	174.0	3508.0
1985	6,696	6,696	189.0	194.0	248.0	310.0	379.0	437.0	468.0	460.0	348.0	322.0	243.0	213.0	3811.0
1986	6,813	6,441	216.0	191.0	269.0	318.0	404.0	447.0	457.0	473.0	372.0	323.0	273.0	243.0	3986.0
1987	6,849	6,477	234.0	237.0	263.0	346.0	420.0	452.0	479.0	403.0	387.0	334.0	224.0	228.0	4007.0
1988	7,076	6,776	223.0	226.0	301.0	298.0	414.0	451.0	489.0	466.0	400.0	378.0	291.0	273.0	4210.0
1989	7,417	7,117	246.0	242.0	325.0	388.0	457.0	482.0	479.0	468.0	387.0	335.0	225.0	228.0	4262.0
1990	7,338	6,960	207.0	243.0	320.0	364.0	443.0	289.0	528.0	480.0	422.0	356.0	325.0	269.0	4246.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.62	21,611	222	201	233	265	390	515	581	540	615	436	335	281	386	0.432
1981	3.79	21,918	244	256	259	359	443	549	592	571	511	378	333	274	398	0.446
1982	3.96	23,229	237	264	274	366	435	492	544	499	438	382	309	239	374	0.419
1983	4.12	25,109	249	228	248	327	430	499	542	420	418	337	308	253	356	0.398
1984	4.29	27,670	226	254	293	336	433	476	451	442	408	345	288	203	347	0.389
1985	4.45	29,826	204	232	268	346	410	488	506	498	389	348	272	230	350	0.392
1986	4.62	31,481	221	217	276	337	414	473	468	485	394	331	289	249	347	0.389
1987	4.79	32,787	230	258	259	352	413	460	471	396	393	329	228	224	335	0.375
1988	4.95	35,051	205	222	277	283	381	429	450	429	380	348	277	251	329	0.369
1989	5.12	37,975	209	228	276	341	388	423	407	398	340	285	198	194	307	0.344
1990	5.29	38,791	172	224	266	313	368	248	439	399	363	296	279	224	300	0.336
AVERAGE			220	235	266	330	410	459	496	461	423	347	283	238	348	0.390

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—0 5 9 4 2 5

C-059425

COUNTY..IMPERIAL
CITY.... BRAWLEY
SYSTEM #..... 13001
HYDROLOGIC REGION..... COLORADO RIVER
PLANNING SUBAREA #.....IMPERIAL VALLEY
DAU # 353

CITY CENSUS POPULATION
1980..... 14,946
1990..... 18,923

WATER AGENCY.....BRAWLEY, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:
Metered..... 0
Flat Rate..... 6,451

COMMERCIAL:
Metered..... 54
Flat Rate... 382

INDUSTRIAL:
Metered..... NA
Flat Rate... NA

GOVERNMENTAL:
Metered..... 5
Flat Rate... 50

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4,541	4,541	89.0	87.0	98.0	156.0	182.0	230.0	254.0	248.0	207.0	183.0	142.0	114.0	1990.0
1981	4,712	4,712	96.0	94.0	112.0	147.0	177.0	237.0	265.0	248.0	217.0	172.0	133.0	130.0	2028.0
1982	4,855	4,855	131.0	123.0	139.0	181.0	217.0	245.0	259.0	258.0	216.0	190.0	141.0	110.0	2210.0
1983	4,963	4,963	135.0	121.0	139.0	175.0	218.0	247.0	270.0	210.0	219.0	202.0	177.0	165.0	2278.0
1984	5,119	5,119	134.0	119.0	143.0	163.0	209.0	228.0	193.0	214.0	198.0	156.0	102.0	60.0	1919.0
1985	5,137	5,137	85.0	101.0	141.0	193.0	237.0	273.0	284.0	293.0	234.0	177.0	155.0	129.0	2302.0
1986	5,207	5,207	135.0	122.0	161.0	173.0	239.0	252.0	263.0	268.0	226.0	164.0	114.0	99.0	2216.0
1987	5,924	5,924	100.0	109.0	148.0	189.0	229.0	256.0	281.0	261.0	222.0	191.0	121.0	110.0	2217.0
1988	6,131	6,131	115.0	108.0	157.0	161.0	216.0	238.0	251.0	230.0	227.0	208.0	169.0	136.0	2216.0
1989	6,540	6,540	123.0	118.0	185.0	230.0	266.0	270.0	290.0	286.0	251.0	215.0	167.0	160.0	2561.0
1990	6,942	6,942	145.0	149.0	184.0	195.0	229.0	249.0	272.0	243.0	215.0	199.0	164.0	145.0	2389.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	3.29	14,946	192	201	212	348	393	513	548	535	462	395	317	246	365	0.409
1981	3.23	15,242	203	220	237	321	375	518	561	525	475	364	291	275	365	0.408
1982	3.18	15,430	274	285	291	391	454	529	541	539	467	397	305	230	392	0.439
1983	3.12	15,493	281	279	289	377	454	531	562	437	471	421	381	344	403	0.451
1984	3.07	15,691	275	262	294	346	430	484	397	440	421	321	217	123	335	0.375
1985	3.01	15,455	177	233	294	416	495	589	593	612	505	369	334	269	408	0.457
1986	2.95	15,371	283	283	338	375	502	546	552	562	490	344	247	208	395	0.442
1987	2.90	17,153	188	227	278	367	431	497	528	491	431	359	235	207	354	0.397
1988	2.84	17,406	213	214	291	308	400	456	465	426	435	385	324	252	349	0.391
1989	2.78	18,197	218	232	328	421	472	495	514	507	460	381	306	284	386	0.432
1990	2.73	18,923	247	281	314	343	390	439	464	414	379	339	289	247	346	0.387
AVERAGE			232	247	288	365	436	509	521	499	454	371	295	244	372	0.417

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

COUNTY..IMPERIAL
CITY....CALEXICO
SYSTEM #..... 13002
HYDROLOGIC REGION..... COLORADO RIVER
PLANNING SUBAREA #.....IMPERIAL VALLEY
DAU # 353

WATER AGENCY.....CALEXICO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE..... X
PORTION OF THE CITY.....
OTHER.....

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... NA
SELF SUPPLIED..... NA

CITY CENSUS POPULATION
1980..... 14,412
1990..... 18,633

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	3,274	Metered.....	288	Metered.....	7	Metered.....	60
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	2,877	2,833	88.0	66.0	81.0	107.0	114.0	139.0	131.0	125.0	123.0	116.0	112.0	102.0	1304.0
1981	2,905	2,861	79.0	90.0	93.0	85.0	105.0	132.0	140.0	134.0	130.0	119.0	110.0	65.0	1282.0
1982	2,960	2,915	80.0	78.0	85.0	108.0	125.0	122.0	155.0	148.0	106.0	50.0	41.0	37.0	1135.0
1983	3,013	2,967	40.0	36.0	64.0	89.0	99.0	127.0	147.0	118.0	115.0	111.0	92.0	83.0	1121.0
1984	3,123	3,077	77.0	87.0	112.0	113.0	149.0	146.0	199.0	142.0	128.0	115.0	90.0	74.0	1432.0
1985	3,331	3,271	77.0	83.0	94.0	111.0	134.0	145.0	156.0	165.0	126.0	107.0	99.0	84.0	1381.0
1986	3,407	3,360	91.0	83.0	113.0	116.0	131.0	153.0	144.0	137.0	127.0	107.0	94.0	85.0	1381.0
1987	3,442	3,395	92.0	89.0	105.0	113.0	127.0	138.0	156.0	154.0	135.0	109.0	93.0	88.0	1399.0
1988	3,494	3,449	89.0	87.0	104.0	105.0	129.0	170.0	180.0	175.0	163.0	141.0	111.0	92.0	1546.0
1989	3,531	3,486	78.0	82.0	112.0	129.0	141.0	153.0	169.0	161.0	152.0	130.0	110.0	105.0	1522.0
1990	3,629	3,584	95.0	91.0	113.0	123.0	149.0	167.0	177.0	164.0	153.0	137.0	134.0	139.0	1642.0

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	5.09	14,636	194	155	179	244	251	317	289	276	280	256	255	225	244	0.273
1981	5.10	14,811	172	217	203	191	229	297	305	292	293	259	248	142	237	0.266
1982	5.11	15,124	171	184	181	238	267	269	331	316	234	107	90	79	206	0.230
1983	5.12	15,429	84	83	134	192	207	274	307	247	248	232	199	174	199	0.223
1984	5.13	16,027	155	187	225	235	300	304	401	286	266	231	187	149	245	0.274
1985	5.14	17,132	145	173	177	216	252	282	294	311	245	201	193	158	221	0.247
1986	5.15	17,560	167	169	208	220	241	290	265	252	241	197	178	156	215	0.241
1987	5.17	17,779	167	179	191	212	230	259	283	279	253	198	174	160	216	0.241
1988	5.18	18,087	159	166	185	194	230	313	321	312	300	251	205	164	234	0.262
1989	5.19	18,318	137	160	197	235	248	278	298	284	277	229	200	185	228	0.255
1990	5.20	18,867	162	172	193	217	255	295	303	280	270	234	237	238	238	0.267
AVERAGE			156	168	188	218	246	289	309	285	264	218	197	166	226	0.253

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

C—059427

C-059427

COUNTY..IMPERIAL
CITY....EL CENTRO
SYSTEM #..... 13004
HYDROLOGIC REGION..... COLORADO RIVER
PLANNING SUBAREA #.....IMPERIAL VALLEY
DAU # 353

CITY CENSUS POPULATION
1980..... 23,996
1990..... 31,384

WATER AGENCY.....EL CENTRO, CITY OF
TYPE OF AGENCY.....MUNICIPAL WATER DEPARTMENT

SYSTEM SERVES:
ENTIRE CITY.....
ENTIRE CITY PLUS OUTSIDE.....
PORTION OF THE CITY.....
OTHER..... X

ORIGIN OF WATER (in percent):
SURFACE WATER..... 100
WELLS AND SPRINGS.. 0

SOURCE OF WATER (in percent):
PURCHASED..... 100
SELF SUPPLIED..... 0

SERVICE CONNECTIONS /1

RESIDENTIAL:		COMMERCIAL:		INDUSTRIAL:		GOVERNMENTAL:	
Metered.....	4,600	Metered.....	2,100	Metered.....	350	Metered.....	33
Flat Rate.....	0	Flat Rate...	0	Flat Rate...	0	Flat Rate...	0

YEAR OF RECORD	ACTIVE SERVICE CONNECTIONS /2 SYSTEM	CITY	TOTAL WATER INTO SYSTEM (MILLION GALLONS) JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	5,608	5,608	114.7	101.1	135.1	168.8	196.4	231.1	238.5	214.2	216.8	191.5	143.7	127.4	2079.3
1981	5,970	5,970	117.2	117.4	138.6	178.9	205.1	241.2	256.3	229.7	213.3	177.1	142.2	126.7	2143.7
1982	6,021	6,021	118.8	121.9	137.2	173.8	203.4	227.2	246.8	232.7	178.5	178.5	133.9	108.7	2061.4
1983	6,500	6,500	121.0	100.4	127.3	155.5	205.2	236.8	257.1	190.5	200.6	185.8	151.1	128.1	2059.4
1984	6,164	6,164	125.1	134.6	162.9	174.5	218.5	234.5	219.7	225.4	215.8	184.9	142.6	112.9	2151.4
1985	6,229	6,229	119.1	120.9	157.6	190.4	219.9	248.4	259.2	249.3	187.9	157.4	135.3	115.2	2160.6
1986	6,490	6,490	128.5	122.1	170.4	190.0	230.4	253.3	252.7	248.9	222.2	169.2	145.6	140.7	2274.0
1987	6,534	6,534	138.0	134.7	167.9	198.6	231.5	257.5	276.1	256.8	235.0	190.7	151.6	140.1	2378.5
1988	6,776	6,776	143.5	144.6	181.4	194.1	238.7	261.7	281.0	259.2	244.8	215.5	178.0	160.9	2503.4
1989	6,800	6,800	145.7	154.6	198.0	221.1	254.6	276.5	294.2	271.6	252.3	222.6	180.1	166.2	2637.5
1990	7,083	7,083	163.1	159.4	201.2	215.1	258.5	278.7	292.8	263.0	250.7	214.9	180.2	160.3	2637.9

YEAR OF RECORD	PERSONS PER CONNECTION	AVERAGE POPULATION SERVED	PER CAPITA WATER USE (gpcd)/3 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUALLY gpcd /3	afpca /4
1980	4.28	23,996	154	145	182	234	264	321	321	288	301	257	200	171	237	0.266
1981	4.29	25,636	147	164	174	233	258	314	323	289	277	223	185	159	229	0.257
1982	4.31	25,946	148	168	171	223	253	292	307	289	229	222	172	135	218	0.244
1983	4.32	28,109	139	128	146	184	235	281	295	219	238	213	179	147	201	0.225
1984	4.34	26,750	151	174	196	217	263	292	265	272	269	223	178	136	220	0.247
1985	4.35	27,127	142	159	187	234	261	305	308	296	231	187	166	137	218	0.244
1986	4.37	28,362	146	154	194	223	262	298	287	283	261	192	171	160	220	0.246
1987	4.39	28,653	155	168	189	231	261	300	311	289	273	215	176	158	227	0.255
1988	4.40	29,818	155	167	196	217	258	293	304	280	274	233	199	174	230	0.258
1989	4.42	30,027	157	184	213	245	274	307	316	292	280	239	200	179	241	0.270
1990	4.43	31,384	168	181	207	228	266	296	301	270	266	221	191	165	230	0.258
AVERAGE			151	163	187	225	260	300	303	279	264	221	183	156	225	0.252

1/ Number of services
2/ Excludes services for agriculture, fire hydrants, fire protection, and other agencies.
3/ gpcd - gallons per capita daily
4/ afpca - acre-feet per capita annually

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C-059428

Appendix B
Glossary

C-059429

Appendix B. Glossary

Account: The fiscal status of one customer. For billing purposes, one account may include several apartment complex structures, and more than one connection, but under a single ownership.

Acre-foot (AF): a quantity or volume of water covering one acre to a depth of one foot; equal to 43,560 cubic feet or 325,851 gallons.

Applied Water Demand: the quantity of water delivered to the intake to a city's water system or factory, the farm headgate, or a marsh or other wetland, either directly or by incidental drainage flows (this is water for wildlife areas). For instream use, it is the portion of the stream flow dedicated to instream use or reserved under the federal or State Wild and Scenic Rivers acts.

Best Management Practice (BMP): an urban water conservation measure that the California Urban Water Conservation Council agrees to implement among signatory agencies.

Commercial Water Use: A broad class of urban water use including water deliveries to non-governmental office buildings, restaurants, retail services, and other business establishments and private golf courses and recreational facilities including transient lodging.

Connection: Customer service line through which water is delivered to a structure or other urban user (e.g., park, cemetery, golf course) from a water service agency.

Delivered Water: A part of total **Applied Water Demand** which is received by the end user.

Demand Hardening: A concept used to describe how rationing programs during periods of water shortage become less effective and/or more costly over time as established conservation practices such as BMPs reduce the potential for demand reduction.

Depletion: The water consumed within a service area or no longer available as a source of supply. For urban water use, it is evapotranspiration of applied water (ETAW) (water applied to landscaping or home gardens), sewage effluent that flows to a salt sink, and incidental evapotranspiration (ET) losses. For agriculture and wetlands, it is ETAW (and ET of flooded wetlands) plus irrecoverable losses. For instream use, it is the amount of dedicated flow that proceeds to a salt sink.

Detailed Analysis Unit (DAU): The smallest study area used by Department of Water Resources analyzing water demand and supply, generally defined by hydrologic features or boundaries of organized water service agencies. In the major agricultural areas, a DAU typically includes 100,000 to 300,000 acres.

Distribution Uniformity: The ratio of the average low-quarter depth of irrigation to the average depth of irrigation, for the entire farm field, expressed as a percentage.

Effluent: Waste water or other liquid, partially or completely treated or in its natural state, flowing from a treatment plant.

Effective Precipitation: That portion of precipitation that contributes to satisfying the evapotranspiration and/or leaching requirement of a crop, expressed as a depth in inches or feet. It includes the evapotranspiration provided by precipitation during the growing season or that which is carried over into the following growing season as stored soil moisture.

Evapotranspiration (ET): The quantity of water transpired (given off), retained in plant tissues, and evaporated from plant tissues and surrounding soil surfaces. Quantitatively, it is expressed in terms of depth of water per unit area during a specified period of time. As used in this report, evapotranspiration is synonymous with consumptive use.

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Evapotranspiration of Applied Water (ETAW): The portion of the total evapotranspiration which is provided by irrigation.

Explanatory Variable: An independent variable (e.g., price, income, population) found through statistical analysis to be useful for explaining variation in a dependent variable (e.g., water consumption).

Flat-rate (unmetered) water deliveries: Unmeasured water delivered to residences, business establishments, and other urban water customers.

Governmental Water Use: A broad class of urban water use including water deliveries to all public facilities including military, educational, civic, publicly owned recreational facilities, and office buildings.

Gray Water: Waste water from a household or small commercial establishment. Gray water does not include water from a toilet, kitchen sink, dishwasher, or water used for washing diapers.

Gross Water Use: The total water produced and introduced into the system of a water service agency, as opposed to **Delivered Water** that includes losses due to line leakage, undocumented water use, back flushing on filters and lines, defective meters, and other diverted uses.

Hydrologic Region: A study area, consisting of one or more Planning Subareas.

Industrial Water Use: Intake water use applied for all manufacturing and other industrial plant uses as defined in the Standard Industrial Classification Manual.

Institutional Water Use: Water supplied to buildings housing organizations that are important in the life of a community or society, especially those dedicated to public service, as a university or place of confinement such as a mental or penal institution. Such water is variously classified as commercial or governmental. The Department of Water Resources classifies institutional water use as governmental.

Irrigation Efficiency: The efficiency of water application and use. Computed by dividing the evapotranspiration of applied water by the applied water and converting the result to a percentage.

Isohyet: A line drawn on a map connecting points receiving equal rainfall.

Net Water Demand: The amount of water needed in a water service area to meet all requirements. It is the sum of evapotranspiration of applied water (ETAW) in an area, the irrecoverable losses from the distribution system, and the outflow leaving the service area.

Normalized Data: Estimated values over time resulting from smoothing the graph of actual data points to minimize skewing. For example, the graph of per capita water use between 1980 and 1990 (Figure 2-2, Trends in Urban Per Capita Water Use) plots the statewide average of 183 gpcd in 1982, whereas a smoothed trend line passing through 1982 would show a normalized statewide value of nearly 200 gpcd.

Per-Capita Water Use: The water produced by or introduced into the system of a water supplier divided by the total residential population; normally expressed in gallons per-capita-per-day (gpcd).

Planning Subarea (PSA): An intermediate size study area consisting of one or more Detailed Analysis Unit(s).

Population: A water agency service area population includes permanent residents living within the service area. This excludes transient visitors, such as campers and vacationers.

Probabilistic: Involving a random variable; involving chance or probability; stochastic.

Produced Water: Water developed by a water supplier either from ground water or stream diversion, or purchased water; each source of which is introduced into the water supplier's water system.

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Reclaimed Waste Water: Waste water that becomes suitable for a specific beneficial use as a result of treatment. See also **Waste Water.**

Reference Crop Evapotranspiration (ETo): The ET rate of healthy grass, completely covering the ground to a uniform height of 3 to 6 inches, and having an adequate supply of water and extensive fetch. ETo is estimated by using the University of California modified Penman equation developed for use in the California Irrigation Management Information System.

Residential Water Use: One of the four major classes of urban water use, and includes water service to single family and usually multiple-family dwelling structures and manufactured homes occupied by full time residents. This excludes hotel, motel, transient and recreational visitor water use, which are grouped in the broad **Commercial Water Use** category. See also **Standard Industrial Classification.**

Return Flow: The portion of withdrawn water not consumed by evapotranspiration or system losses which returns to its source or to another body of water.

Reuse: The additional use of water that has previously met an end use.

Salt Sink: A body of water too salty for most freshwater uses, generally the ocean or an inland basin with salty surface and/or ground water.

Self-produced Water: A water supply developed and used by an individual or entity. Also called "self-supplied."

Service Area: The geographical land area served by a distribution system of a water agency.

Standard Industrial Classification (SIC), defines the following categories:

> **Industrial**, or Manufacturing, Division D, Major Group 20 to 39, includes establishments engaged in the mechanical or chemical transformation of materials or substances into new products. Industrial water use means intake water use applied to all manufacturing and plant uses, including cooling, processing, and sanitary.
>
> **Commercial** includes all other establishments (Divisions C through I, excluding Divisions A (Agriculture), B (Mining), and J (Public administration).
>
> **Governmental**, or Institutional (Division J) includes the executive, legislative, judicial administrative and regulatory activities of federal, state, local, international governments, and includes schools and military activities.

Transpiration: The process in which plant tissues give off water vapor to the atmosphere as an essential physiological process.

Type of Water Use: The four generally recognized types of urban water use: residential, commercial, industrial, and governmental. Also referred to as Sectors of Urban Water Use, or Classes of Water Use.

Unaccounted Water: The difference between the measured amount of water produced and introduced into the system, and the measured amount delivered to customers. Unaccounted water may be "authorized" or "unauthorized" losses. Authorized uses include fire-fighting, main and sewer flushing, street cleaning, and public uses such as irrigation for parks and golf courses, schools and cemeteries (some agencies measure these uses). Unauthorized uses may include distribution system leaks, metering errors, theft, and inaccurate system control.

Urban Applied Water Demand: The quantity of water delivered to the intake to a community water system or factory.

Urban Water Use: The use of water for urban purposes, including, but not limited to residential, commercial, industrial, and governmental classes. The term is applied in the sense that it is a type of use rather than a place of use; i.e., although most urban use occurs within a city or town, it also occurs outside of city boundaries, adjoining cities, and in rural areas.

Waste Water: The water remaining after use, liquid waste, or drainage from a community, industry, or institution.

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Water Agency (or supplier, or purveyor): An entity (publicly or privately owned) that develops or purchases a supply of water for distribution and delivery to customers within its service area. A wholesale agency delivers water to other water suppliers for their customers.

Water Audit: A process of accounting for an agency's water from the source of supply, through the distribution system, to delivery.

Water Demand: The quantity of water required to support a given level and kind of land use.

Water Demand Schedule: A time distribution of the demand for prescribed quantities of water for specified purposes. It is usually a monthly tabulation of the total quantity of water that a particular water user intends to use during a specified year.

Water Meter: A device for measuring the amount of water delivered into a water distribution system, or to residences and business establishments.

Water Quality: Used to describe the chemical, physical, biological, and bacteriological characteristics of water usually in regard to its suitability for a particular purpose.

Water Reclamation: The planned reuse of waste water for specific beneficial purposes.

Water Requirement: The quantity of water required for a specified use under a predetermined or prescribed situation.

(Water) Withdrawals: A quantity of water produced or developed from surface and ground water sources. In this Bulletin, water withdrawn for retail or wholesale delivery to urban customers.

Weighted Mean: Averaged quantities expressed as sets of numbers to take into account numerically their weight (relative importance) to the total. When weights are all equal, the weighted mean reduces to that of the ordinary (arithmetic) mean.

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Appendix C
Bibliography

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Appendix C. Bibliography

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Appendix D
Water Use and Depletions

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Appendix D. Water Use and Depletions

Chapter 2 discussed population growth and its relationship to per capita water use. Population density is another factor influencing per capita water use. As population per acre increases, per capita landscape area tends to decrease. Table D-1 shows changes in population density by county between 1980 and 1990. The historical urban water use trends shown in Table 2-1 indicate a recent leveling off of per capita water use in most areas of California, possibly due in part to higher population densities and water conservation efforts.

Chapter 1 introduced the terms *net water use* and *depletion*, represented graphically in Figure D-1. The interaction of net water use and depletion varies geographically. For example, along the coast, depletions are nearly equal to net water use since wastewater is discharged into the ocean and is lost or *depleted* from the fresh water system. Inland, less water is depleted because it is reused to recharge ground water or adds to instream flow available for reuse downstream.

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Table D-1. Comparison of Population Densities of California Counties, 1980 to 1990					
County	July Population[1]		Density (pop/sq mi)		Land Area[2] (sq miles)
	1980	1990	1980	1990	
Alameda	1,109,500	1,282,400	1,504.40	1,738.84	737.50
Alpine	1,100	1,100	1.49	1.49	738.65
Amador	19,500	30,600	32.91	51.64	592.57
Butte	144,900	183,900	88.38	112.16	1,639.60
Calaveras	20,900	32,500	20.49	31.86	1,020.19
Colusa	12,900	16,400	11.21	14.25	1,150.78
Contra Costa	658,500	810,300	914.22	1,124.97	720.29
Del Norte	18,300	24,500	18.16	24.31	1,007.89
El Dorado	86,500	128,200	50.54	74.91	1,711.48
Fresno	517,400	673,900	86.77	113.01	5,963.21
Glenn	21,500	25,000	16.35	19.01	1,314.88
Humboldt	108,900	119,800	30.48	33.53	3,572.80
Imperial	92,500	110,400	22.16	26.44	4,175.05
Inyo	17,900	18,400	1.76	1.81	10,192.07
Kern	406,100	549,800	49.88	67.53	8,141.60
Kings	74,200	102,500	53.40	73.77	1,389.49
Lake	36,800	51,100	29.24	40.61	1,258.46
Lassen	21,800	27,800	4.78	6.10	4,557.49
Los Angeles	7,500,300	8,897,500	1,847.38	2,191.52	4,059.98
Madera	63,900	89,800	29.88	41.99	2,138.43
Marin	222,700	231,200	428.45	444.81	519.78
Mariposa	11,200	14,500	7.72	9.99	1,451.21
Mendocino	67,000	81,000	19.09	23.08	3,509.28
Merced	135,500	180,600	70.25	93.63	1,928.89
Modoc	8,700	9,700	2.21	2.46	3,944.36
Mono	8,700	10,200	2.86	3.35	3,044.49
Monterey	292,100	358,800	87.93	108.01	3,321.94
Napa	99,300	111,700	131.72	148.17	753.86
Nevada	52,500	79,600	54.82	83.12	957.66
Orange	1,944,800	2,424,100	2,462.77	3,069.72	789.68
Placer	118,400	175,600	84.31	125.03	1,404.41
Plumas	17,400	19,900	6.81	7.79	2,553.96
Riverside	669,800	1,195,400	92.92	165.84	7,208.15
Sacramento	787,900	1,051,400	815.89	1,088.75	965.69
San Benito	25,200	37,000	18.14	26.64	1,389.13

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Table D-1 (continued). Comparison of Population Densities of California Counties, 1980 to 1990					
County	July Population[1]		Density (pop/sq mi)		Land Area[2] (sq miles)
	1980	1990	1980	1990	
San Bernardino	902,200	1,440,700	44.97	71.81	20,061.78
San Diego	1,873,300	2,520,500	445.55	599.48	4,204.48
San Francisco	680,500	723,900	14,571.42	15,500.74	46.70
San Joaquin	350,200	483,800	250.24	345.71	1,399.44
San Luis Obispo	156,600	219,500	47.39	66.42	3,304.50
San Mateo	588,100	652,100	1,309.48	1,451.98	449.11
Santa Barbara	300,000	371,400	109.55	135.62	2,738.47
Santa Clara	1,300,200	1,502,200	1,006.95	1,163.40	1,291.22
Santa Cruz	189,100	230,800	424.19	517.73	445.79
Shasta	116,600	148,800	30.80	39.31	3,785.66
Sierra	3,100	3,400	3.25	3.57	953.43
Siskiyou	40,000	43,800	6.36	6.97	6,287.26
Solano	237,200	345,700	286.42	417.43	828.17
Sonoma	301,400	392,000	191.22	248.70	1,576.21
Stanislaus	267,700	376,100	179.12	251.65	1,494.56
Sutter	52,600	65,100	87.27	108.02	602.69
Tehama	39,100	50,100	13.25	16.98	2,951.05
Trinity	12,000	13,100	3.77	4.12	3,178.87
Tulare	247,400	314,600	51.28	65.21	4,824.32
Tuolumne	34,200	49,000	15.30	21.92	2,235.65
Ventura	532,200	671,600	288.31	363.82	1,845.95
Yolo	113,900	142,500	112.50	140.75	1,012.44
Yuba	49,800	58,700	78.99	93.11	630.45
Total	**23,782,000**	**29,976,000**	**152.48**	**192.19**	**155,973.09**

Source:
[1] Population—Department of Finance, Report I 80-90, Intercensal Estimates of the Population of California: State and Counties 1980-1990, June 1991.
[2] Land area—Sacramento Area Council of Governments, 1990 Census Geographic Areas Reference List, Part A, October 1991.

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Figure D-1. Urban Water Net Use and Depletion

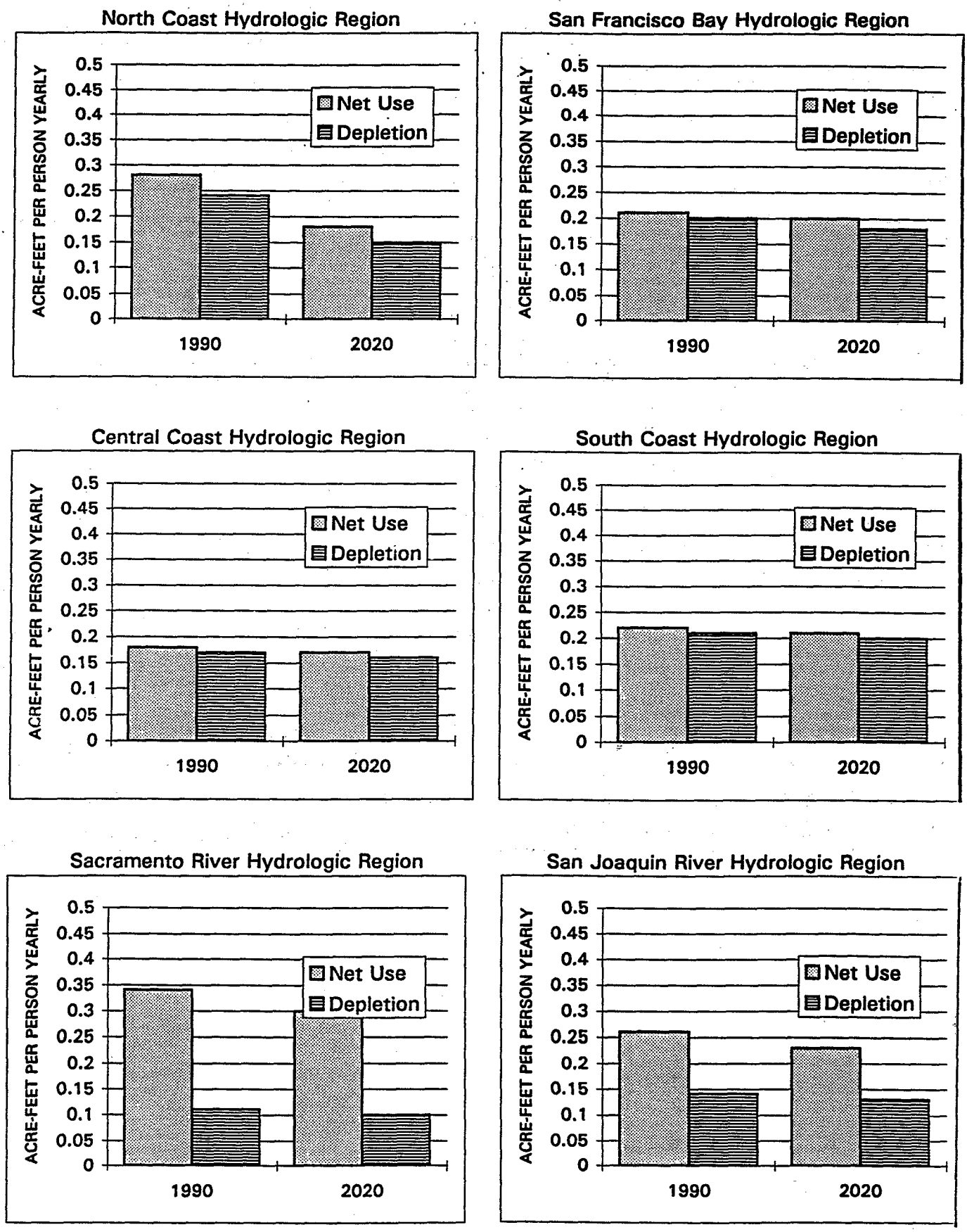

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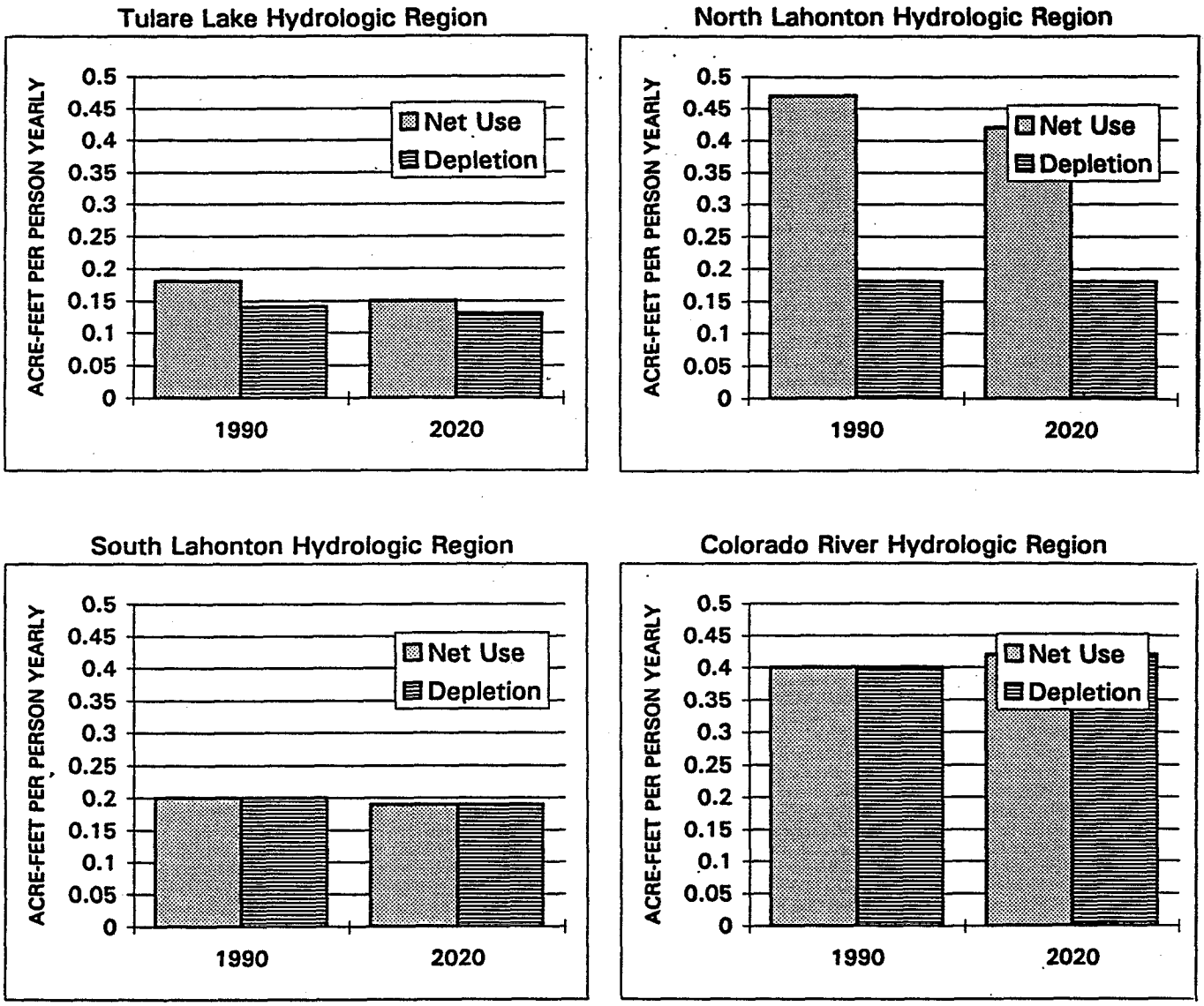
Figure D-1 (continued). Urban Water Net Use and Depletion



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Appendix E
Precipitation and Urban Landscaping

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Appendix E. Precipitation and Urban Landscaping

Variance in per capita water use is affected by a number of factors, as discussed in Chapter 3. Figure E-1 shows daily per capita water use of 20 communities relative to precipitation (see also Figure 3-1). Figure E-2 shows per capita use relative to July temperatures.

The concept of *effective precipitation* is related to soil moisture deficits (See definition in Appendix B). The Department used the concept of effective precipitation in estimates of vegetative water use in Bulletin 113-3 (1974). More recently, a study of effective precipitation on bare soil in the Central Valley developed a relationship between rainfall and soil moisture changes during the winter months as is shown in Figure E-3 (DWR, February 1989). The relationship illustrates that small amounts of rainfall (less than 1 inch per month) are ineffective and rainfall that is effective is never equal to the measured precipitation. The time when rainfall exceeds evaporative demand occurs during November through February in most of California (in some desert areas this never occurs). Most plants extract the stored soil moisture in the spring and early summer.

The concepts of effective precipitation and soil-moisture deficit have been used effectively in agriculture but are more difficult to apply to urban landscaping. Irrigation management on a farm is optimized because the fields are normally large, planted to one variety of crop, and evenly spaced in rows. A similar situation exists in landscapes only on large playing fields. While individual homeowners cannot be expected to apply such concepts, urban water managers can use them to analyze and project monthly and yearly demands.

Tables E-1 and E-2 show some results of the application of the Department Agricultural Mobile Lab Program irrigation system evaluation techniques to urban landscape. See also Chapter 3.

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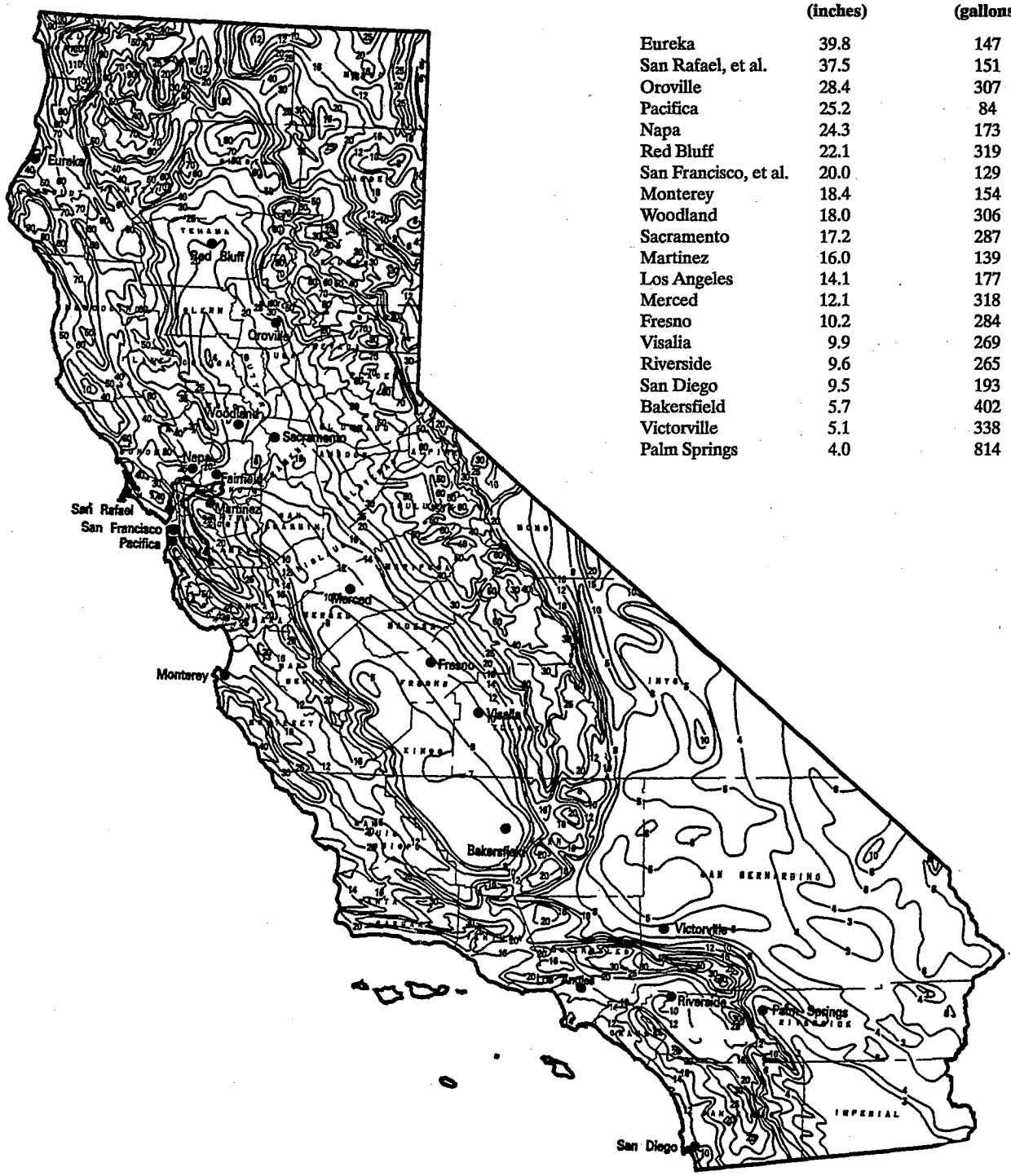
Figure E-1. Annual Precipitation and Per Capita Water Use

Area	Average Annual Precipitation* (inches)	Average Daily Per Capita Water Use (gallons)
Eureka	39.8	147
San Rafael, et al.	37.5	151
Oroville	28.4	307
Pacifica	25.2	84
Napa	24.3	173
Red Bluff	22.1	319
San Francisco, et al.	20.0	129
Monterey	18.4	154
Woodland	18.0	306
Sacramento	17.2	287
Martinez	16.0	139
Los Angeles	14.1	177
Merced	12.1	318
Fresno	10.2	284
Visalia	9.9	269
Riverside	9.6	265
San Diego	9.5	193
Bakersfield	5.7	402
Victorville	5.1	338
Palm Springs	4.0	814



*Source: DWR Bulletin 113-3 based on 1969 U.S. Geological Survey map

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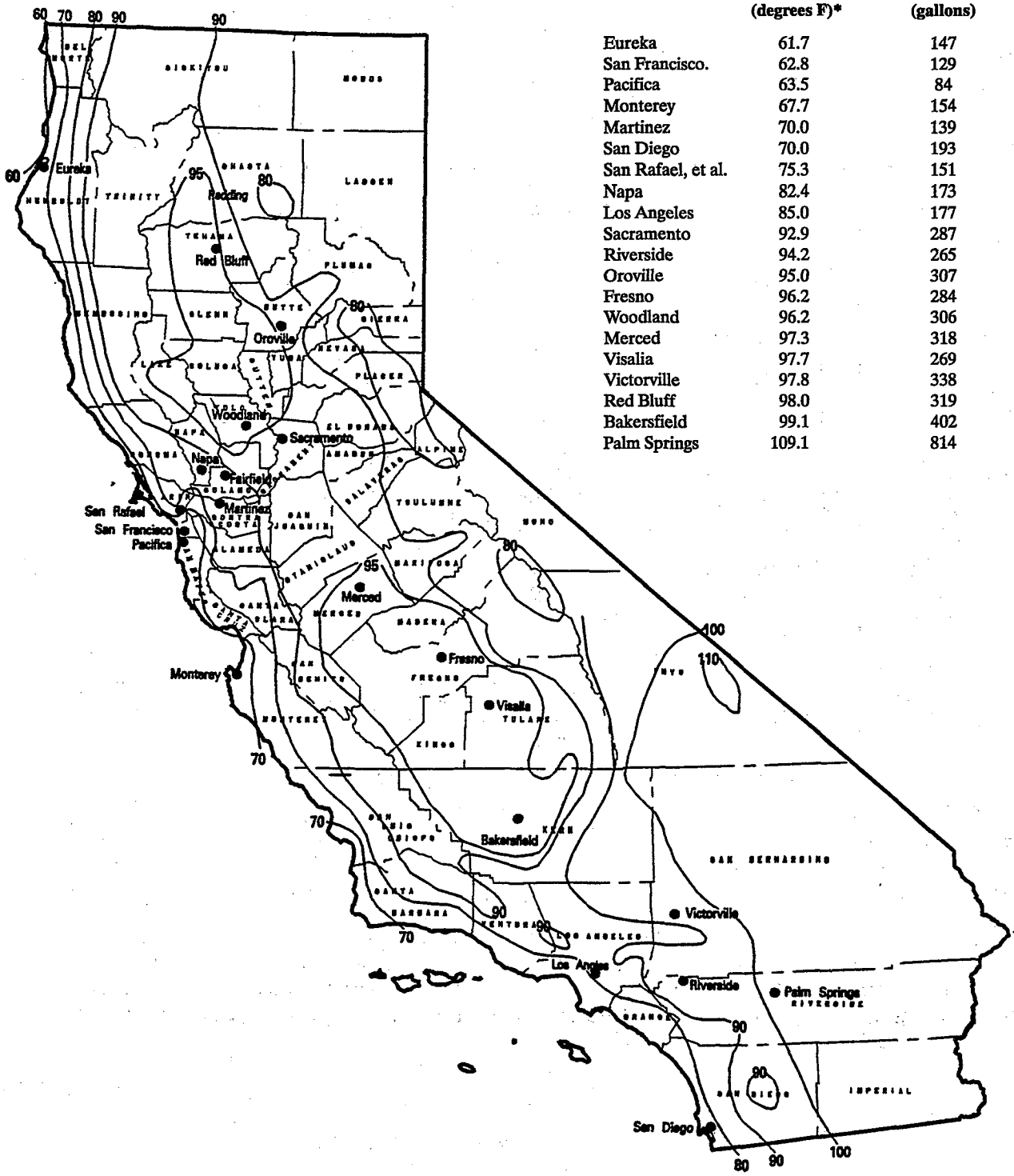
Figure E-2. Average Maximum July Temperatures and Per Capita Water Use

Area	Average Max. Mean Temperature (degrees F)*	Average Daily Per Capita Water Use (gallons)
Eureka	61.7	147
San Francisco.	62.8	129
Pacifica	63.5	84
Monterey	67.7	154
Martinez	70.0	139
San Diego	70.0	193
San Rafael, et al.	75.3	151
Napa	82.4	173
Los Angeles	85.0	177
Sacramento	92.9	287
Riverside	94.2	265
Oroville	95.0	307
Fresno	96.2	284
Woodland	96.2	306
Merced	97.3	318
Visalia	97.7	269
Victorville	97.8	338
Red Bluff	98.0	319
Bakersfield	99.1	402
Palm Springs	109.1	814



*Source: National Climatic Center, Ashville, NC 28801, as shown in DWR California Temperature Data Maps, January 27, 1982.

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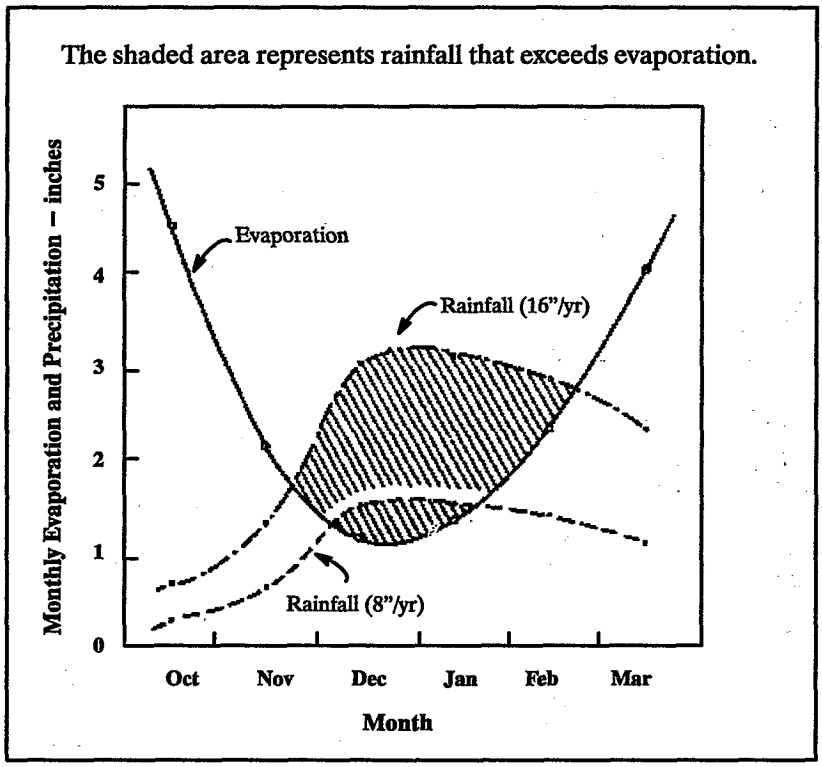
Figure E-3. Normal Monthly Evaporation and Rainfall for Two Precipitation Zones in the Central Valley



Evaporation

The period of greatest rainfall coincides with the period of lowest evaporative demand. Figure E-3 shows normal monthly rainfall and corresponding evaporation rates for two precipitation zones in the Central Valley. The shaded areas represent rainfall that exceeds evaporation. Although precipitation varies widely, evaporation rates are relatively constant throughout the Valley. Therefore, rainfall in excess of evaporation varies with the total amount of precipitation.

Source: *Effective Precipitation* (DWR Report, February 1989)

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Table E-1. Distribution Uniformity Statistics for Landscapes Evaluated by the Mobile Irrigation Laboratory					
District	**N**	**Mean**	**Min**	**Max**	**Range**
Riverside	107	61.9 a	35	90	55
Coachella	170	61.9 a	35	85	50
Mission	46	54.9 b	21	80	59
Ventura	37	52.0 b	27	77	50

Source: *An Analysis of Mobile Laboratory Irrigation System Evaluation Data: Urban Systems*, University of California, Davis, 1993

Table E-2. Estimated Values for Species, Density, and Microclimate Factors Used to Determine the Landscape Coefficient (K_L) for Selected Vegetation Types[1]

Vegetation Type	Species Factor (K_s)			Density Factor (K_d)			Microclimate Factor (K_{mc})		
	high	avg	low	high	avg	low	high	avg	low
Trees[2]	0.9	0.5	0.2	1.3	1.0	0.5	1.4	1.0	0.5
Shrubs	0.7	0.5	0.2	1.1	1.0	0.5	1.3	1.0	0.5
Groundcovers	0.7	0.5	0.2	1.1	1.0	0.5	1.2	1.0	0.5
Mixed[3]- trees, shrubs, groundcovers	0.9	0.5	0.2	1.3	1.1	0.6	1.4	1.0	0.5
Turfgrass[4]	0.8	0.7	0.6	1.0	1.0	0.6	1.2	1.0	0.8

[1] Species factor values for trees are estimates based on research from agricultural tree crops while groundcover estimates are based on preliminary research findings in California.
[2] The tree, shrub, and groundcover categories listed are for landscapes composed solely or predominantly of one of these vegetation types.
[3] Mixed plantings are composed of two or all three vegetation types (i.e., where a single vegetation type does not predominate).
4 A low K_s value (0.6) should be assigned to warm-season turf and a high value (0.8) to cool-season turf. Turfgrass values are included to provide irrigation managers with a complete table of coefficients used to estimate landscape water use.
Note: It is assumed that there is no bare soil surface within the landscape planting. Otherwise K_d should be increased 10 to 20 percent, especially for trees and shrubs due to soil surface evaporation.
Source: Estimating Water Requirements of Landscape Plantings: The Landscape Coefficient Method, UC Cooperative Extension Leaflet 21493, July 1991.

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Appendix F
Urban Retail Water Costs

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Appendix F. Urban Retail Water Costs

This appendix presents results of a 1990-91 survey of retail water costs for many agencies located throughout the State. Because of drought conditions at the time, many of these costs are higher than what would have been expected during a non-drought year.

Computing total water costs requires two types of information for each customer class: water use and rate structure. For single family residential customers, DWR compiled actual 1990-91 water use and rate structure information. The monthly service charge for a single family residential customer is based on either a 5/8 inch or 3/4 inch size meter, depending on the agency's rate structure.

Table F-1 summarizes single family residential seasonal monthly use and water cost information for 59 selected agencies. For each agency, the table shows the county and hydrologic region (See Figure 2-1 in Chapter 2), average summer water use per customer, average winter use, typical monthly summer and winter bills, and an equivalent cost per acre-foot estimate (which includes service and commodity charges). Also shown is the effective date of rates used in the computation.

Table F-1 shows that some of the higher bills are found in agencies located along the coast, such as Marin Municipal Water District, the City of Santa Barbara, Goleta Water District, and Monterey Peninsula Water Management District. Some of the lower bills are found in agencies located in the Central Valley, such as the cities of Sacramento and Fresno. Figure 4-2 in Chapter 4 compares residential retail water costs for eight selected cities.

Table F-2 gives average monthly residential water use and cost information of an additional 26 water agencies. For these agencies, seasonal water use information was not available. Hence, the table presents only average monthly water use and cost information.

Table F-3 and Table F-4 summarize average monthly water use and cost information for commercial and industrial customers for selected cities. In contrast to single family residential customers, which as a group tend to have similar water uses, it is difficult to define a *typical* commercial or industrial customer. This is particularly true for the industrial sector, which includes bakeries as well as oil refineries. Table F-3 and Table F-4 indicate that some of the higher commercial and industrial water costs are also found along the coast. Some of the lower costs are found in the Central Valley.

Figure F-1 illustrates how total water use costs are charged to single family residential users. The graphs show a comparison of total water use costs of selected agencies based on differing rate structures (excluding monthly service charges). Since rate strategies differ by agency, water costs for some accelerate faster for higher usage in some agencies. For example, the total water use costs for Los Angeles (LADWP) increase at a constant rate for additional water use; this represents a constant block structure.[1] But the use costs for Pasadena switch to a higher rate after 15 ccf reflecting an increasing block structure. In addition, both cities have different water costs between summer and winter use, reflecting seasonal rate structures.

The remaining cities shown in Figure F-1 do not have seasonal rate structures. Water use costs for the City of Long Beach switch to a higher rate after 5 ccf, but the use costs for the City of Burbank increase at a constant rate. Water use costs for Santa Barbara switch after 4, 12, and 32 ccf due to the increasing block rate structure. In contrast, Goleta's water rate starts at a higher level than Santa Barbara but increases at a constant rate. For the City of San Jose, the water use costs switch to a higher rate after 4 ccf, but the additional water costs for the City of San Francisco increase at a constant rate.

Figure F-2 shows how retail commercial and industrial water costs (for a hypothetical monthly use of 100 ccf) are broken into the monthly service charge and the actual use charge. For example, the City of Sacramento does not levy a charge based on water use. The monthly water cost is based on the fixed service charge alone. In comparison, the City of Santa Barbara collects a greater proportion of the water bill through water use charges.

Since many complex factors influence water prices, definitive conclusions concerning water uses and water costs among cities cannot be derived solely from these tables and graphs.

[1] Since completion of DWR's survey, LADWP adopted an increasing block structure.

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Table F-1. Single Family Residential Summer and Winter Water Use and Retail Costs (1991)							
Name of Agency	County	Summer Use (CCF)[1]	Winter Use (CCF)[1]	Typical Summer Bill ($)[2]	Typical Winter Bill ($)[2]	Cost ($/AF)[2]	Rate Effective Date
North Coast Hydrologic Region							
City of Arcata	Humboldt	12	10	9	7	374	7/90
City of Crescent City	Del Norte	10	8	8	7	369	1/91
City of Eureka	Humboldt	28	15	17	12	293	9/83
City of Rohnert Park	Sonoma	17	10	13	13	419	6/89
City of Santa Rosa	Sonoma	15	9	12	8	371	7/90
City of Ukiah	Mendocino	30	16	14	9	583	9/87
San Francisco Hydrologic Region							
City of Hayward	Alameda	13	8	12	8	435	6/91
City of Livermore	Alameda	28	8	33	14	561	1/91
City of Morgan Hill	Santa Clara	26	9	40	15	802	6/89
City of Redwood City	San Mateo	11	6	18	12	757	7/91
City of San Jose	Santa Clara	23	18	35	28	664	7/91
East Bay MUD	Alameda	10	7	17	13	731	7/91
Marin MWD	Marin	9	7	34	28	1,688	5/91
San Francisco WD	San Francisco	6	6	7	7	484	7/91
Central Coast Hydrologic Region							
California Water Service Co., Salinas	Monterey	20	14	22	18	508	3/91
Monterey Peninsula WMD	Monterey	11	8	31	24	1,160	1/91
City of Morro Bay	San Luis Obispo	6	5	14	12	1,040	5/91
City of San Luis Obispo	San Luis Obispo	10	6	18	11	890	7/90
City of Santa Barbara	Santa Barbara	7	6	22	18	1,364	5/91
City of Santa Cruz	Santa Cruz	7	5	9	8	601	2/91
Goleta Water District	Santa Barbara	15	9	47	30	1,381	6/91
South Coast Hydrologic Region							
City of Beverly Hills	Los Angeles	24	20	28	24	525	4/91
City of Burbank	Los Angeles	23	17	16	13	311	7/91
City of Escondido	San Diego	43	23	37	23	396	10/88
City of Glendale	Los Angeles	20	18	14	13	312	8/91
City of Hemet	Riverside	15	12	17	15	515	6/91
City of Long Beach	Los Angeles	20	12	22	14	498	3/91
City of Oceanside	San Diego	14	11	28	22	875	7/91
City of Pasadena	Los Angeles	21	18	16	13	331	1/91
City of Riverside	Riverside	27	21	17	12	268	11/90
City of San Diego	San Diego	15	12	20	16	576	1/90
City of Thousand Oaks	Ventura	20	18	23	22	515	7/91
Lake Arrowhead Co. SD	San Bernardino	14	7	36	23	1,233	1/91

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Table F-1 (continued) Single Family Residential Summer and Winter Water Use and Retail Costs (1991)							
Name of Agency	County	Summer Use (CCF)[1]	Winter Use (CCF)[1]	Typical Summer Bill ($)[2]	Typical Winter Bill ($)[2]	Cost ($/AF)[2]	Rate Effective Date
South Coast Hydrologic Region (continued)							
Los Angeles DWP	Los Angeles	20	10	20	12	462	1/91
San Bernardino MWD	San Bernardino	28	16	23	15	379	5/91
Sacramento River Hydrologic Region							
California Water Service Co., Chico	Butte	17	9	15	15	518	6/91
City of Alturas	Modoc	30	28	32	31	478	5/91
City of Folsom	Sacramento	36	11	12	12	230	6/87
City of Redding	Shasta	28	13	15	9	254	10/91
City of Sacramento	Sacramento	34	18	10	10	165	7/91
Konocti Co. WD	Lake	11	8	29	24	1,204	3/90
Nevada Irrigation Dist.	Nevada	26	13	26	17	484	1/91
San Joaquin Hydrologic Region							
City of Merced	Merced	37	19	14	14	223	5/90
City of Modesto	Stanislaus	39	16	8	8	131	3/91
City of Oakdale	Stanislaus	23	14	8	4	152	6/91
City of Stockton	San Joaquin	22	13	14	11	311	5/90
City of Tracy	San Joaquin	18	12	18	15	485	6/91
Tulare Lake Hydrologic Region							
City of Bakersfield	Kern	35	25	20	16	263	7/91
City of Clovis	Fresno	22	14	9	6	182	5/83
City of Corcoran	Kings	30	15	12	12	231	8/84
City of Fresno	Fresno	28	12	9	9	193	7/91
City of Tulare	Tulare	40	18	11	11	165	8/89
North Lahontan Hydrologic Region							
City of Susanville	Lassen	29	11	27	13	434	10/91
South Tahoe PUD	El Dorado	24	16	17	17	372	6/91
Truckee Donner PUD	Placer	20	13	17	17	451	1/91
South Lahontan Hydrologic Region							
City of Bishop	Inyo	18	6	10	10	369	1/90
Palmdale WD	Los Angeles	40	23	43	28	488	11/90
Southern California Water Co., Barstow	San Bernardino	35	25	29	23	379	1/91
Colorado River Hydrologic Region							
City of El Centro	Imperial	40	30	22	17	244	9/80
Desert Water Agency	Riverside	20	10	16	10	378	8/91

[1] ccf = 100 cubic feet = 748 gallons
[2] includes service and commodity charges

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Table F-2. Single Family Residential Average Monthly Water Use and Retail Costs (1991)					
Name of Agency	**County**	**Monthly Water Use (CCF)[1]**	**Typical Monthly Bill ($)[2]**	**Cost ($/AF)[2]**	**Rate Effective Date**
North Coast Hydrologic Region					
Humboldt CSD	Humboldt	10	13	545	7/86
San Francisco Hydrologic Region					
Belmont CWD	San Mateo	9	15	766	7/89
City of Burlingame	San Mateo	10	12	536	9/90
City of Daly City	San Mateo	9	19	922	7/89
City of Mountain View	Santa Clara	10	13	571	7/90
City of Sunnyvale	Santa Clara	11	11	447	5/90
Contra Costa WD	Contra Costa	13	23	761	1/90
Palo Alto Utilities	San Mateo	14	22	696	7/89
Valley of the Moon WD	Sonoma	13	18	614	12/83
South Coast Hydrologic Region					
Capistrano Valley WD	Orange	21	22	465	7/89
City of Anaheim	Orange	10	14	296	9/89
City of Buena Park	Orange	25	18	309	3/89
City of Camarillo	Ventura	17	18	459	6/89
City of Fullerton	Orange	22	18	356	10/89
City of Lakewood	Los Angeles	15	11	614	10/89
City of Poway	San Diego	26	15	258	7/89
East Valley WD	San Bernardino	25	23	405	5/89
Moulton Niguel WD	Orange	17	14	347	7/86
Otay WD	San Diego	25	34	584	1/90
San Bernardino VMWD	San Bernardino	29	20	344	11/89
Sweet Water Authority	San Diego	16	21	567	7/89
Ventura CWD #1	Ventura	24	32	588	2/89
Sacramento River Hydrologic Region					
Paradise ID	Butte	24	14	250	1/90
San Joaquin Hydrologic Region					
City of Manteca	San Joaquin	24	7	224	8/86
South Lahontan Hydrologic Region					
Victor Valley County WD	San Bernardino	28	14	295	10/87
Colorado River Hydrologic Region					
Twenty-Nine Palms WD	San Bernardino	17	20	551	8/90

[1] ccf = 100 cubic feet = 748 gallons
[2] includes service and commodity charges

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Table F-3. Commercial Average Monthly Water Use and Retail Costs (1991)					
Name of Agency	County	Monthly Water Use (CCF)[1]	Typical Monthly Bill ($)[2]	Cost ($/AF)[2]	Rate Effective Date
North Coast Hydrologic Region					
City of Arcata	Humboldt	44	46	460	7/91
City of Crescent City	Del Norte	73	48	286	1/91
City of Santa Rosa	Sonoma	61	54	263	7/90
San Francisco Hydrologic Region					
City of Hayward	Alameda	40	46	500	7/91
City of Livermore	Alameda	48	75	682	1/91
City of Petaluma	Sonoma	41	42	446	4/91
City of Redwood City	San Mateo	27	45	722	7/91
City of San Jose	Santa Clara	93	136	637	7/91
East Bay MUD	Alameda	74	1,872	918	7/91
Palo Alto Utilities	Santa Clara	52	132	1,104	6/90
San Francisco WD	San Francisco	49	53	471	7/91
Central Coast Hydrologic Region					
California Water Service Co., Salinas	Monterey	51	59	501	4/91
City of Morro Bay	San Luis Obispo	38	84	1,141	5/91
City of Santa Barbara	Santa Barbara	26	154	2,581	5/91
City of Santa Cruz	Santa Cruz	33	76	1,003	2/91
South Coast Hydrologic Region					
City of Beverly Hills	Los Angeles	62	112	790	4/91
City of Burbank	Los Angeles	46	29	271	7/91
City of Glendale	Los Angeles	58	46	348	8/91
City of Hemet	Riverside	67	77	503	6/91
City of Oxnard	Ventura	68	85	545	7/91
City of Pasadena	Los Angeles	85	115	588	1/91
City of San Diego	San Diego	51	105	896	1/90
Los Angeles DWP	Los Angeles	30	40	582	2/91
San Bernardino MWD	San Bernardino	80	84	457	2/91
Sacramento River Hydrologic Region					
California Water Service Co., Chico	Butte	62	46	324	6/91
City of Alturas	Modoc	121	58	211	5/91
City of Redding	Shasta	76	37	213	3/91
City of Sacramento	Sacramento	99	72	316	7/91
San Joaquin Hydrologic Region					
City of Oakdale	Stanislaus	122	63	224	6/91
City of Stockton	San Joaquin	48	35	316	5/90
City of Tracy	San Joaquin	41	60	637	6/91

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Table F-3 (continued) Commercial Average Monthly Water Use and Retail Costs (1991)					
Name of Agency	County	Monthly Water Use (CCF)[1]	Typical Monthly Bill ($)[2]	Cost ($/AF)[2]	Rate Effective Date
Tulare Lake Hydrologic Region					
City of Bakersfield	Kern	145	77	231	7/91
City of Clovis	Fresno	99	372	137	5/83
City of Fresno	Fresno	70	30	187	7/91
North Lahontan Hydrologic Region					
City of Susanville	Lassen	159	146	400	10/91
South Tahoe PUD	Placer	64	96	653	1/91
Truckee Donner PUD	Placer	64	96	653	1/91
South Lahontan Hydrologic Region					
Southern Cal. WC, Barstow	San Bernardino	27	25	393	1/91
Colorado River Hydrologic Region					
City of Calexico	Imperial	46	73	696	10/88
City of El Centro	Imperial	90	51	245	9/80
City of Needles	San Bernardino	320	160	218	7/91
Desert Water Agency	Riverside	160	105	287	7/88

[1] ccf = 100 cubic feet = 748 gallons
[2] includes service and commodity charges

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Table F-4. Industrial Average Monthly Water Use and Retail Costs (1991)					
Name of Agency	**County**	**Monthly Water Use (CCF)[1]**	**Typical Monthly Bill ($)[2]**	**Cost ($/AF)[2]**	**Rate Effective Date**
North Coast Hydrologic Region					
City of Crescent City	Del Norte	73	48	286	1/91
San Francisco Hydrologic Region					
City of Hayward	Alameda	60	61	439	7/91
City of Livermore	Alameda	28	57	880	1/91
City of Petaluma	Sonoma	41	42	446	4/91
City of Redwood City	San Mateo	83	123	643	7/91
City of San Jose	Santa Clara	248	344	603	7/91
East Bay MUD	Alameda	713	1,415	864	7/91
Palo Alto Utilities	Santa Clara	288	793	1,199	6/90
San Francisco WD	San Francisco	253	208	358	7/91
Central Coast Hydrologic Region					
City of Morro Bay	San Luis Obispo	72	220	135	5/91
City of Santa Barbara	Santa Barbara	272	1,473	2,358	5/91
City of Santa Cruz	Santa Cruz	462	655	618	2/91
South Coast Hydrologic Region					
City of Beverly Hills	Los Angeles	41	79	839	4/91
City of Burbank	Los Angeles	207	117	247	7/91
City of Glendale	Los Angeles	49	41	363	8/91
City of Oxnard	Ventura	625	781	545	7/91
City of San Diego	San Diego	275	497	787	1/90
Los Angeles DWP	Los Angeles	103	104	441	2/91
San Bernardino MWD	San Bernardino	321	258	349	2/91
Sacramento River Hydrologic Region					
California Water Service Co., Chico	Butte	122	68	244	6/91
City of Redding	Shasta	38	22	252	3/91
San Joaquin Hydrologic Region					
City of Stockton	San Joaquin	1,479	672	198	5/90
City of Tracy	San Joaquin	7,528	7,574	438	6/91
Tulare Lake Hydrologic Region					
City of Bakersfield	Kern	686	199	126	7/91
City of Fresno	Fresno	251	78	136	7/91
North Lahontan Hydrologic Region					
City of Susanville	Lassen	1,888	398	92	10/91
South Lahontan Hydrologic Region					
Southern California Water Co., Barstow	San Bernardino	2,017	1,179	255	1/91
Colorado River Hydrologic Region					
City of Calexico	Imperial	46	73	696	10/88

[1] ccf = 100 cubic feet = 748 gallons
[2] includes service and commodity charges

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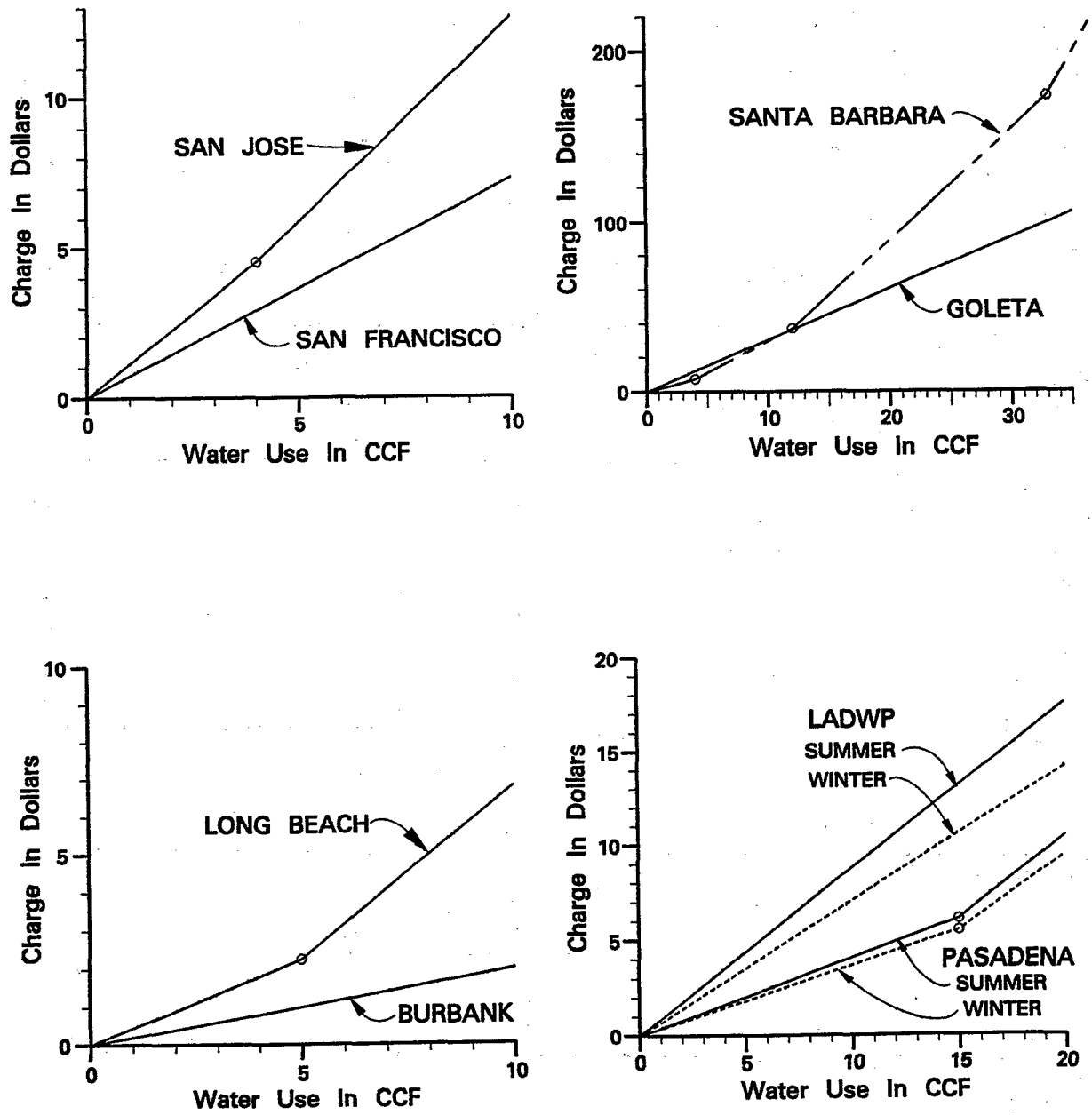
Figure F-1. Water Use Charge for Selected Agencies



The above water charges are based on 1991 rates and do not include monthly service charge.
(1 CCF=100 cubic feet)

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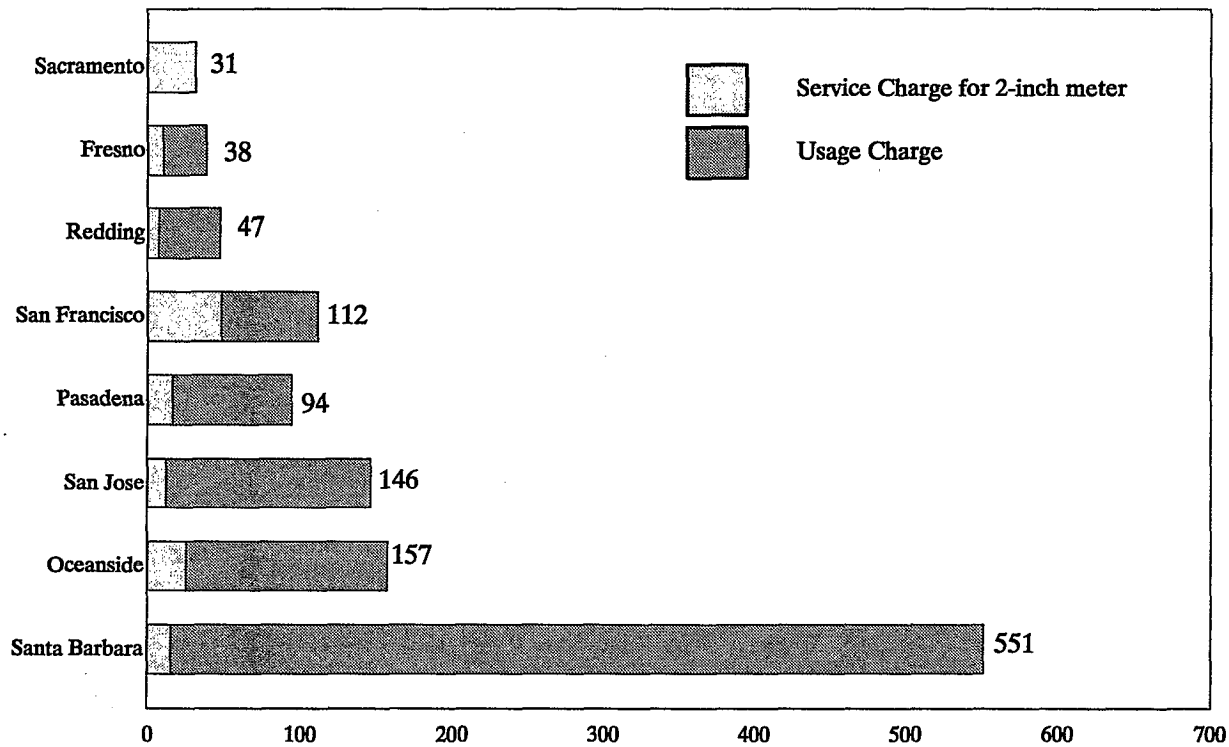
Figure F-2. Commercial/Industrial Monthly Retail Water Costs
(Hypothetical Use of 100 ccf)
(in dollars)



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Appendix G
Water Savings Simulation Program

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Appendix G. Water Savings Simulation Program

Forecasts of urban water use are often based on *point estimates* of one or more random variables. Each point estimate approximates the central tendency of a probability distribution. However, many forecasting methods fail to acknowledge the random nature of the model inputs and cannot account for the compounding of errors in the combination of point estimates. The resultant forecasts are misleadingly precise, implying a much greater degree of accuracy than the uncertain nature of the input data actually allows. To remedy this problem, the Water Savings Simulations Program (WSSP) system employs simulation techniques to make random draws of each uncertain quantity used in the calculation of water use and savings. The resulting forecasts are presented in the form of point estimates *and* confidence intervals to convey the uncertainty inherent in the forecasting process.

Basic Methodology

The WSSP system uses simulation techniques to produce multiple estimates of future water consumption for each year of the forecast period. Each estimate is based on randomly selected values from user-defined distributions of each of the uncertain ingredients in the forecast and savings formulas. The selected values are combined according to the forecasting model to produce a single estimate of water use for each forecast year. The process is repeated until, at present, 500 simulations are generated and saved for each year of the forecast period. Program output can be displayed either in tabular form or as line plots of various percentiles of the distributions of the 500 water use estimates (i.e., confidence intervals). Figure G-1 illustrates how the confidence intervals increase in width the further one forecasts into the future, indicating the range of possible values for each year of the forecast.

The WSSP system estimates future values of water use according to the following general relationship:

$$U_{t,w} = f(H, N, I, V, P, E, C)$$

where

$U_{t,w}$ = average water use in year t, and water use category w, a function (f) of random variables
H = number and type of housing units
N = number of persons per household
I = income
V = building vintage
P = price of water
E = employment
C = conservation

First, water use is forecasted under existing laws and current level of conservation (baseline use). Then, an estimate is made of the expected water savings due to implementation of increasingly intensive conservation efforts such as the Best Management Practices. The expected savings are subtracted from the baseline to estimate future water use.

The relationships between water consumption and the various explanatory variables were estimated on the basis of Department studies, water agency data, and literature review. Subsets of these explanatory variables are combined to forecast water use in each defined water use category. The separate estimates are combined by summation to give overall water use.

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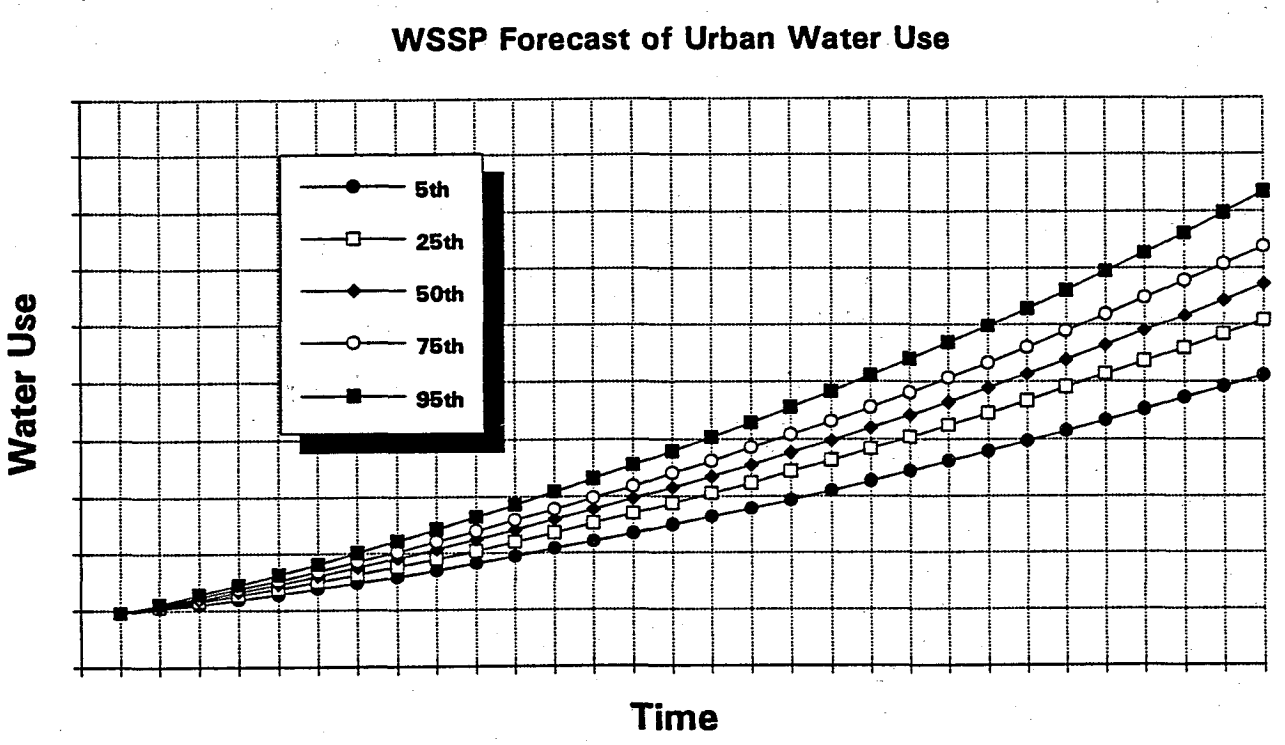
Figure G-1. Presentation of WSSP Forecast Results



Water Savings Simulation Program forecast results in the form of the 5th, 25th, 50th, 75th, and 95th percentiles of the distribution of simulation estimates. The 50th percentile plot represents the most likely value for each year of the forecast period under the given assumptions.

Baseline Water Consumption

The WSSP system forecasts baseline water consumption using a variation of the water use coefficient method, modified to account for the effects of certain explanatory variables. Water consumption for each category is estimated by multiplying the appropriate water use coefficient by the number of end users in the category. The end user is specified according to the user category. A resident of the water service area is the end user for the residential water use categories, while an employee in the commercial, industrial, or governmental sectors is specified for the non-residential categories.

Water use coefficients are modeled to change to reflect the influence of various explanatory variables on water consumption. Residential water use coefficients vary according to the number of persons per household, conservation efforts, personal income, and water price. Commercial and industrial coefficients are influenced by conservation and water price. The governmental coefficients are affected by conservation efforts.

Conservation Savings

The WSSP system evaluates water savings due to the set of water conservation efforts known collectively as the BMPs. Forecasts of water savings are specified by BMP and water use category. The potential reduction in consumption due to each BMP is estimated according to the following relationship:

$$S_{c,w,t} = U_{w,t} * R_{c,w} * P_{c,w,t}$$

where

$S_{c,w,t}$ = water savings resulting from the implementation of conservation measure c, in water use category w, at time t, expressed in gallons per day

$U_{w,t}$ = base year water use in water use category w at time t, expressed in gallons per capita daily

$R_{c,w}$ = reduction in water consumption resulting from the implementation of conservation measure c, in water use category w, expressed as a proportion of base year water use.

$P_{c,w,t}$ = population affected by conservation measure c, in water use category w, at time t

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The BMPs were drafted by the California Urban Water Conservation Council to speed implementation of urban water conservation measures and to estimate the market penetration and consumption reduction factors for certain BMPs. At present, these estimates have been adopted as the default basis of water savings calculations by WSSP. As with the other input parameters to the WSSP system, these assumptions can be modified by the user as appropriate. Forecasts of water savings can be prepared for each BMP, or aggregated to estimate savings by water use category or overall.

Data Requirements

The WSSP system forecasts water use as a function of a defined set of explanatory variables. The current and future values of the explanatory variables are supplied by the user. Three general kinds of data are required: the actual values of base year water and socioeconomic variables, the projected values of the socioeconomic explanatory variables for the forecast year, and savings assumptions for each demand management technique. Alternate futures can be considered by preparing separate sets of input data to represent differing scenarios of socioeconomic growth and conservation effectiveness. Data specific to each water service area are required for population, household size, housing units, building vintage, employment, income, water consumption, and price. Table G-1 lists the menu of input variables to be specified for each water service area. Basic data were obtained from a number of sources, including federal, State, regional, and local agencies. Table G-2 lists the major sources of input data to the WSSP system.

Table G-1. WSSP Water Use and Socioeconomic Input Variables

Water Use
Water use by sector, base year
Single family
Multi family
Commercial
Industrial
Governmental, other
Seasonal water use, base year
Socioeconomic
Population, base year and forecast
Total water service area population
Population by dwelling type
Persons per household by dwelling type
Group quarters population
Housing, base year and forecast
Number of housing units by dwelling type
Growth rate of housing stock by dwelling type
Employment, base year and forecast
Commercial
Industrial
Governmental
Income, forecast
Water price, forecast

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Table G-2. Sources of Input Data
Water Use
Survey of Urban Water utility Statistics, California Department of Water Resources Urban water management plans Regional and local water agency reports on water use and conservation
Socioeconomic
Census of Population and Housing, U.S. Department of Commerce *Survey of Current Business*, U.S. Department of Commerce *Statistical Abstract of the United States*, U.S. Department of Commerce *California Statistical Abstract*, California Department of Finance *California Population Characteristics*, Center for the Continuing Study of the California Economy *Population Projections by Race and Ethnicity for California and Its Counties 1990-2040*, California Department of Finance Regional and local planning agencies

Pilot Forecasting Project

DWR is currently using WSSP in a pilot study to forecast urban water consumption in several areas of the State. Ten water service areas were selected for study, one in each hydrologic region of California (Table G-3). The purpose of the pilot study is to evaluate the accuracy of the WSSP forecasting system, define potential enhancements to the program, and test the feasibility of using WSSP to forecast urban water use statewide.

Table G-3. Water Service Areas of WSSP Pilot Study by Hydrologic Region

Hydrologic Region	Water Service Area
North Coast	Eureka, City of
San Francisco Bay	East Bay Municipal Utility District
Central Coast	Santa Barbara, City of
South Coast	San Diego County
Sacramento River	Sacramento, City of
San Joaquin River	Stockton, City of
Tulare Lake	Fresno, City of
North Lahontan	Susanville, City of
South Lahontan	Victorville, City of
Colorado River	El Centro, City of

Preliminary Forecast of Urban Water Use in San Diego County

The WSSP system was used to forecast urban water consumption within DAU 120, which comprises the urbanized coastal plains and inland valleys of San Diego County and includes about 97 percent of the county population.

Figure G-2 shows the forecast of urban applied water demand for DAU 120, in thousand acre-feet per year. This forecast considers the effect of existing laws and level of conservation (including the 1992 plumbing code revision) and the BMPs on urban water demand. The output is displayed as line plots of various percentiles of the distribution of 500 water use estimates for each year of the forecast period. The best point estimate of water use for a given year is shown in the form of the 50th percentile of the distribution. Urban applied water use is shown to increase through the period, mainly due to increased population.

Figure G-3 illustrates the forecasts of urban applied water demand for DAU 120 by end-user category. The growth paths are depicted by the 50th percentile of the simulation results for each category (single family residential, multi-family residential, commercial, industrial, and governmental/other). According to the forecast, the single-family residential category will remain the largest of these five components of overall water use, and will grow at the fastest rate in the long term. Commercial water use is also expected to grow quickly relative to the other categories, while industrial water use shows little growth over the forecast period.

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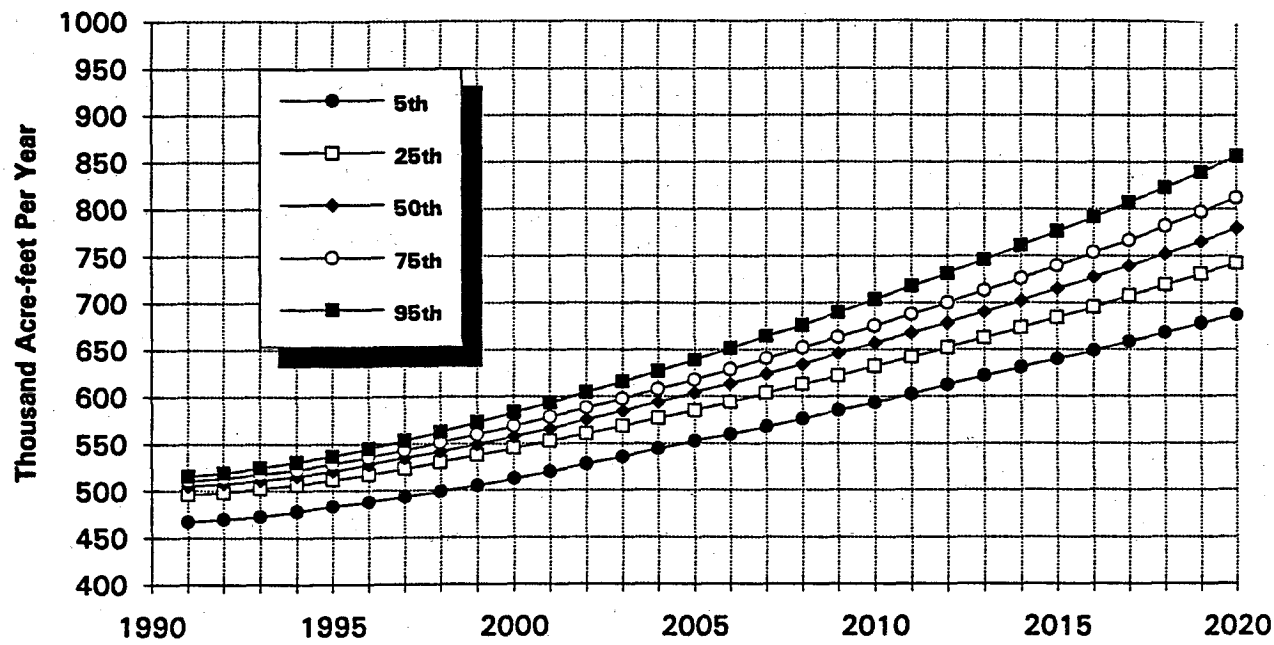
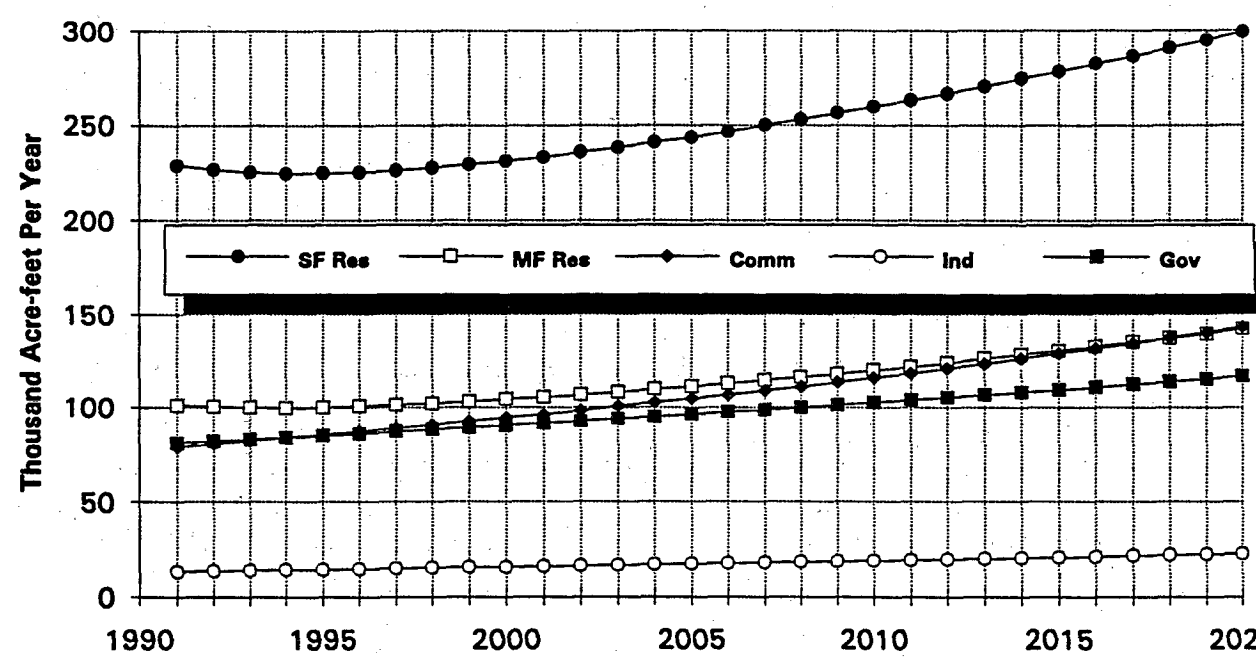
Figure G-2. Forecast of Urban Applied Water Demand



Forecast of urban applied water demand in DAU 120 under full implementation of BMPs; simulation results in the form of the 5th, 25th, 50th, 75th, and 95th percentiles of the distribution of 500 simulation estimates.

Figure G-3. Forecast of Urban Water Consumption by End-User Category



Forecast of water use by end-user sector (single family residential, multifamily residential, commercial, industrial, and governmental/other) shown as median values of 500 simulation estimates

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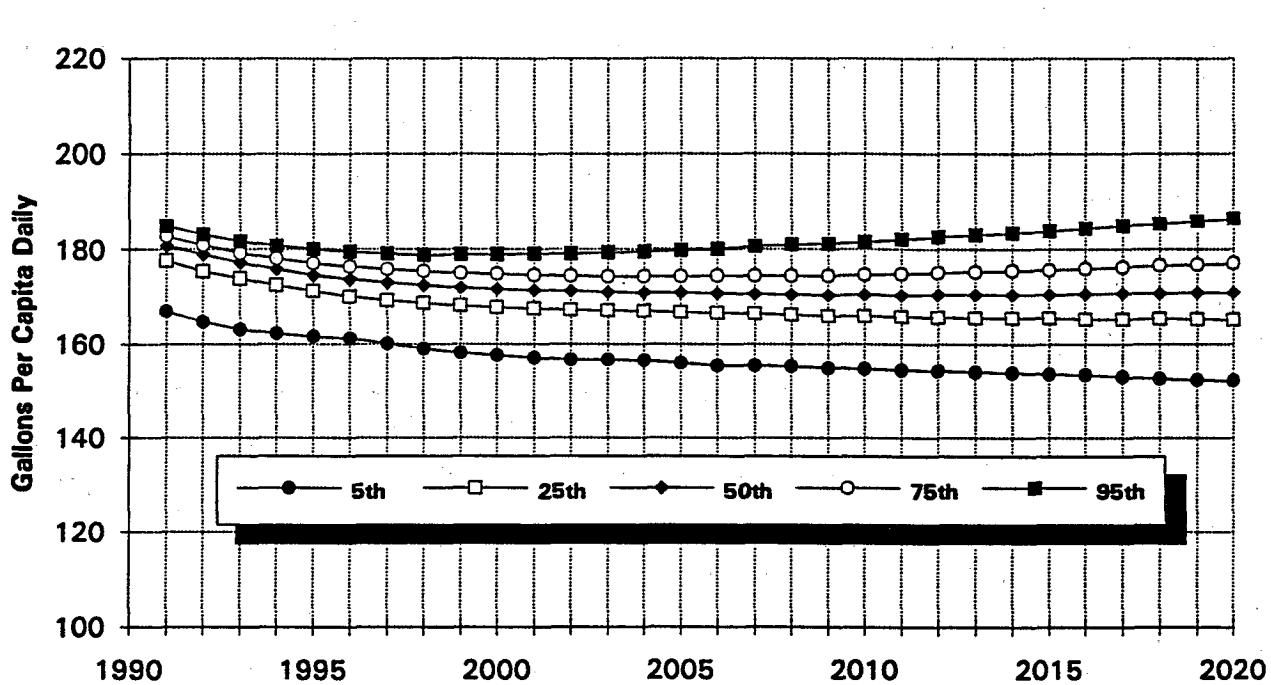
For any planning period, the rate of growth in urban applied water demand will differ from the rate of population growth. The result is variation in per capita water use over the period. Figure G-4 shows the forecast of per capita water use for DAU 120. According to the forecast, per capita use can be expected to decline until about 2010, then level off. The initial decline shows the affect on water demand of many variables, including the 1992 plumbing code revision, implementation of the BMPs, and an increase in the proportion of multi-family to single family housing units. The relatively level long-term trend reflects an expected reduction in household size in DAU 120 and full implementation of the BMPs.

Figure G-5 illustrates the expected annual water savings over the forecast period due to the BMPs. These totals do not include the reduction in demand owing to changes in laws or regulations such as the 1992 plumbing code revision. Annual savings are shown to grow quickly over the near term as efforts to implement the BMPs are intensified. The growth in annual savings levels off in the long term as full implementation of the BMPs is approached.

The forecast of water savings varies by end-user category, as shown in Figure G-6. Annual savings in the residential categories are expected to grow in the short term, but decrease over time. The expected annual savings in the non-residential categories ranges from nearly constant over the forecast period in the governmental/other category to steadily increasing in the industrial and commercial categories. The disparity in the growth paths of residential and non-residential water savings is based on the definition of savings. As mentioned previously, the WSSP does not count demand reduction due to laws or regulations as savings. A large portion of the demand reduction in the residential categories is expected to stem from the 1992 plumbing code revision, whereas reductions in the non-residential categories is assumed to depend primarily on voluntary demand reduction programs and efforts to comply with increasingly strict discharge requirements.

Figure G-4. Forecast of Per Capita Water Use



Forecast of per capita water use in DAU 120 under full implementation of BMPs; simulation results in the form of the 5th, 25th, 50th, 75th, and 95th percentiles of the distribution of 500 simulation estimates.

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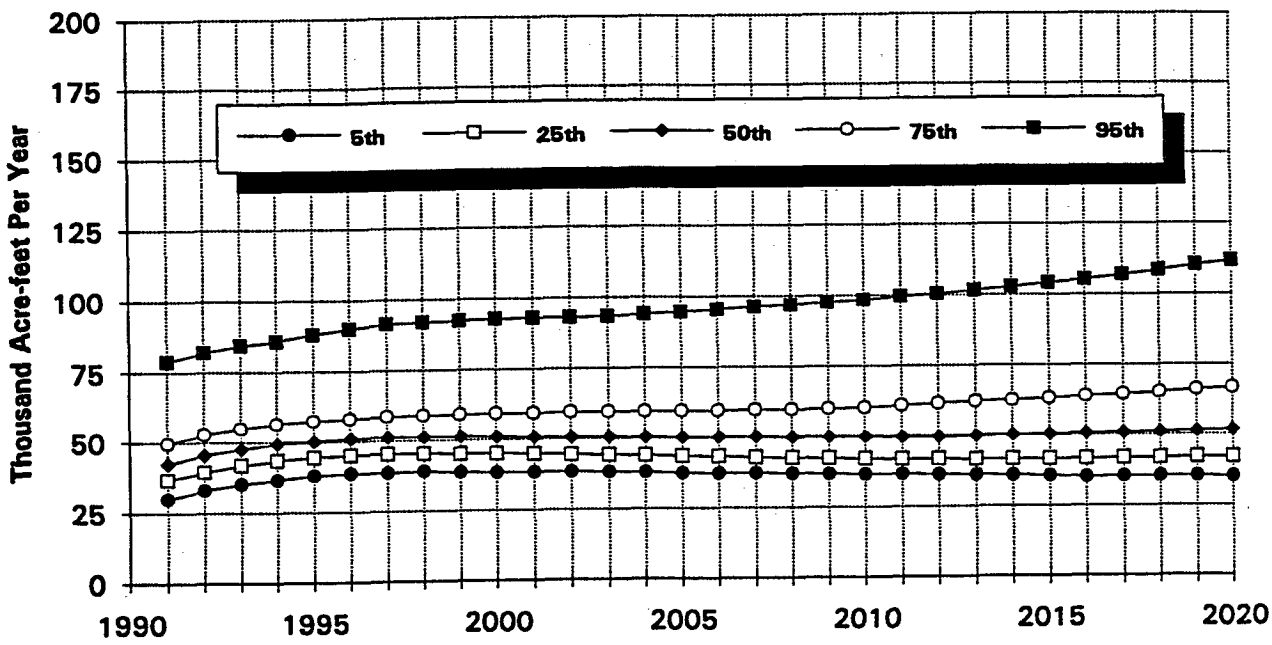
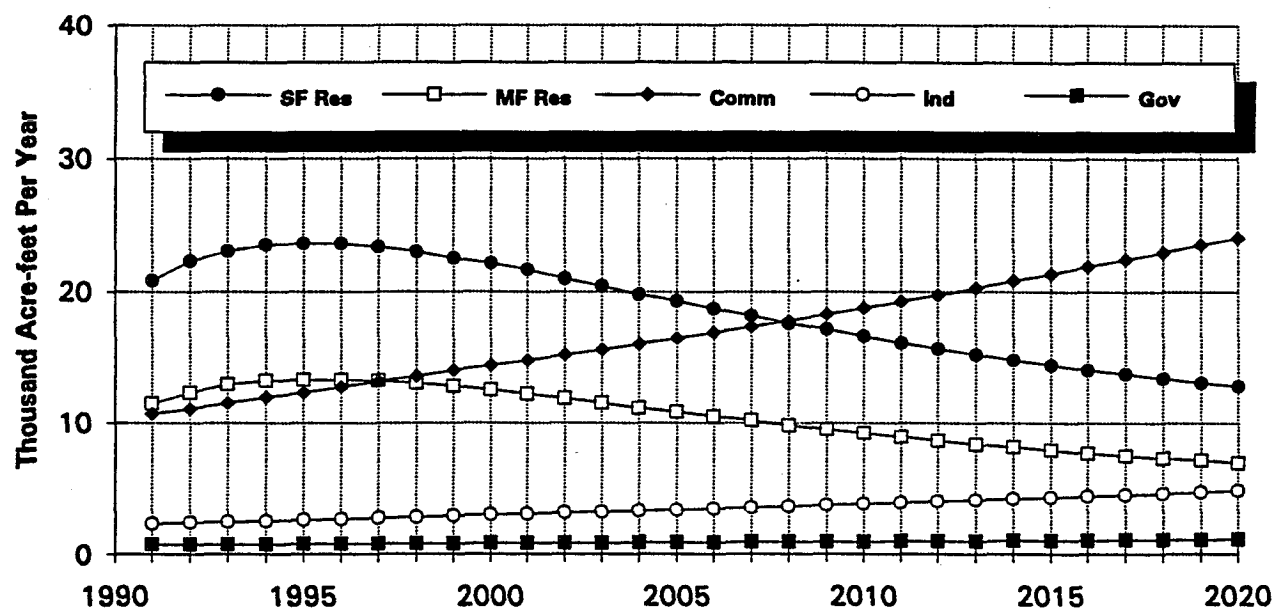
Figure G-5. Forecast of Water Savings Due to BMPs



Forecast of total water savings due to BMPs in DAU 120 under full implementation of BMPs; simulation results in the form of the 5th, 25th, 50th, 75th, and 95th percentiles of the distribution of 500 simulation estimates.

Figure G-6. Forecast of Water Savings Due to BMPs by User Sector



Forecast of water savings due to BMPs by end-user sector (single family residential, multifamily residential, commercial, industrial, and governmental/other) shown as median values of 500 simulation estimates

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Application of WSSP

The Department of Water Resources is currently working to complete preliminary forecasts for the remaining water service areas in the pilot study (Table G-3). Upon completion and validation of the pilot study forecasts, the WSSP will be modified to forecast water use within larger geographic areas such as detailed analysis units and planning subareas. The results will be used to forecast urban applied water demand by hydrologic region and statewide in future updates to the *California Water Plan*.

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