

## 3.16 Population, Employment, and Housing

This section addresses population, employment, and housing that could be affected by implementation of the proposed program. This analysis includes information related to current population estimates and population projections, racial/ethnic demographics, employment characteristics, unemployment rates, income estimates, and housing units and housing type trends. This section is composed of the following subsections:

- Section 3.16.1, “Environmental Setting,” describes the physical conditions in the study area as they apply to population, employment, and housing.
- Section 3.16.2, “Regulatory Setting,” summarizes federal, State, and regional and local laws and regulations pertinent to evaluation of the proposed program’s impacts on population, employment, and housing.
- Section 3.16.3, “Analysis Methodology and Thresholds of Significance,” describes the methods used to assess the environmental effects of the proposed program and lists the thresholds used to determine the significance of those effects.
- Section 3.16.4, “Environmental Impacts and Mitigation Measures for NTMAs,” discusses the environmental effects of near-term management activities (NTMAs) and identifies mitigation measures for significant environmental effects.
- Section 3.16.5, “Environmental Impacts, Mitigation Measures, and Mitigation Strategies for LTMAs,” discusses the environmental effects of long-term management activities (LTMAs) and identifies mitigation measures for significant environmental effects.

NTMAs and LTMAs are described in detail in Section 2.4, “Proposed Management Activities.”

See Subsection 6.5, “Environmental Justice,” in Chapter 6.0, “Other CEQA-Required Sections and Additional Material,” for an evaluation of whether geographic areas within the CVFPP study area exhibit meaningfully greater proportions of minority and/or low-income residents.

### 3.16.1 Environmental Setting

#### ***Information Sources Consulted***

Sources of information used to prepare this section include data from the following:<sup>1</sup>

- U.S. Census Bureau American Community Survey
- The decennial U.S. Census (2000)
- “Population Projections by Race/Ethnicity for California and Its Counties 2000–2050,” California Department of Finance (DOF 2007)
- “E-5 Population with Housing Estimates for Cities, Counties and the State, 2001–2009, with 2000 Benchmark” (DOF 2009a)
- “E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change—January 1, 2009 and 2010” (DOF 2010a)
- “Employment by Industry Data, Historical Annual Average Data, All Areas,” an online database published by the Labor Market Information Division of the California Employment Development Department (EDD 2010a)
- “Labor Force and Unemployment Data, Seasonally-Adjusted Labor Force Data: Monthly 1990–Current” (EDD 2010b)

#### ***Geographic Areas Discussed***

Population, employment, and housing are discussed separately for the following geographic areas within the study area because of differences in population, employment, and housing trends and the potential effects of the program on those resources:

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<sup>1</sup> This document uses data from the 2000 U.S. Census and the California Department of Finance (DOF) for reasons of internal consistency. All current estimates and projections provided by DOF are based on a benchmark from the 2000 U.S. Census. Updates to key DOF demographic estimates and projects based on the 2010 U.S. Census benchmark are not anticipated until late in 2012 or in 2013. It is acknowledged that 2010 DOF estimates (based on a benchmark from the 2000 U.S. Census) differ substantially from U.S. Census 2010 figures. These differences are largely attributable to the methods used by the respective agencies to tabulate domestic migration and the effect of the nationwide recession (December 2007 through June 2009) on birth rates, domestic migration, and international migration. In addition, data from the 2010 U.S. Census are still being adjusted, as the Census Question Resolution process is ongoing (June 2010 through June 2012).

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- Extended systemwide planning area (Extended SPA) divided into the Sacramento and San Joaquin Valley and foothills and the Sacramento–San Joaquin Delta (Delta) and Suisun Marsh
- Sacramento and San Joaquin Valley watersheds
- SoCal/coastal Central Valley Project/State Water Project (CVP/SWP) service areas

None of the management activities included in the proposed program would be implemented in the SoCal/coastal CVP/SWP service areas. In addition, implementation of the proposed program would not result in long-term reductions in water deliveries to the SoCal/coastal CVP/SWP service areas (see Section 2.6, “No Near- or Long-Term Reduction in Water or Renewable Electricity Deliveries”). Given these conditions, little to no effect on population, employment, and housing are expected in the portion of the CVP/SWP service areas located outside of the Sacramento and San Joaquin Valley watersheds and Sacramento and San Joaquin Valley and foothills; therefore, that geographic area is not discussed in detail.

Many of the counties that make up the study area for the proposed program are located within more than one of the study area’s geographic areas, and only portions of some counties lie within the study area. To reduce duplication of data, tabular information for a county is presented only once (in the geographic area that is discussed first) and is incorporated through narrative only in the discussions of other, subsequent geographic areas. Furthermore, because all data were available countywide and not available specific to the geographic boundaries used in the PEIR, data presented in some counties necessarily include areas outside of the specific PEIR study area.

***Extended Systemwide Planning Area***

**Sacramento and San Joaquin Valley and Foothills** A total of 28 counties are located within the Sacramento and San Joaquin Valley and foothills portion of the Extended SPA: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tuolumne, Yolo, and Yuba. As described under “Delta and Suisun Marsh” and “Sacramento and San Joaquin Valley and Watersheds,” some of these counties are also partially located either in the Delta and Suisun Marsh portion of the Extended SPA or in the Sacramento and San Joaquin Valley and watersheds; they are discussed here to reduce duplication of data.

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*Population* Table 3.16-1 shows the population and population trends for the counties that are wholly or partially located within the Sacramento and San Joaquin Valley and foothills.

In both 2000 and 2010, Alameda, Sacramento, and Contra Costa counties were the most populated of the counties located wholly or partially within the Sacramento and San Joaquin Valley and foothills (Table 3.16-1). By 2030, Sacramento and Alameda counties are projected to remain the two most populated counties in the geographic area, with Fresno County having a slightly larger population than Contra Costa County. Between 2000 and 2010, the counties in this geographic area with the highest average annual growth rates were Placer, Sutter, and Madera (3.8 percent, 2.5 percent, and 2.3 percent, respectively). The counties experiencing the least average annual growth between 2000 and 2010 were Plumas, Modoc, and Tuolumne (-0.2 percent, 0.2 percent, and 0.2 percent, respectively) (Table 3.16-1). California as a whole experienced an average annual growth rate of 1.3 percent, which was less than the growth rates for 14 of the 28 counties within the Sacramento and San Joaquin Valley and foothills.

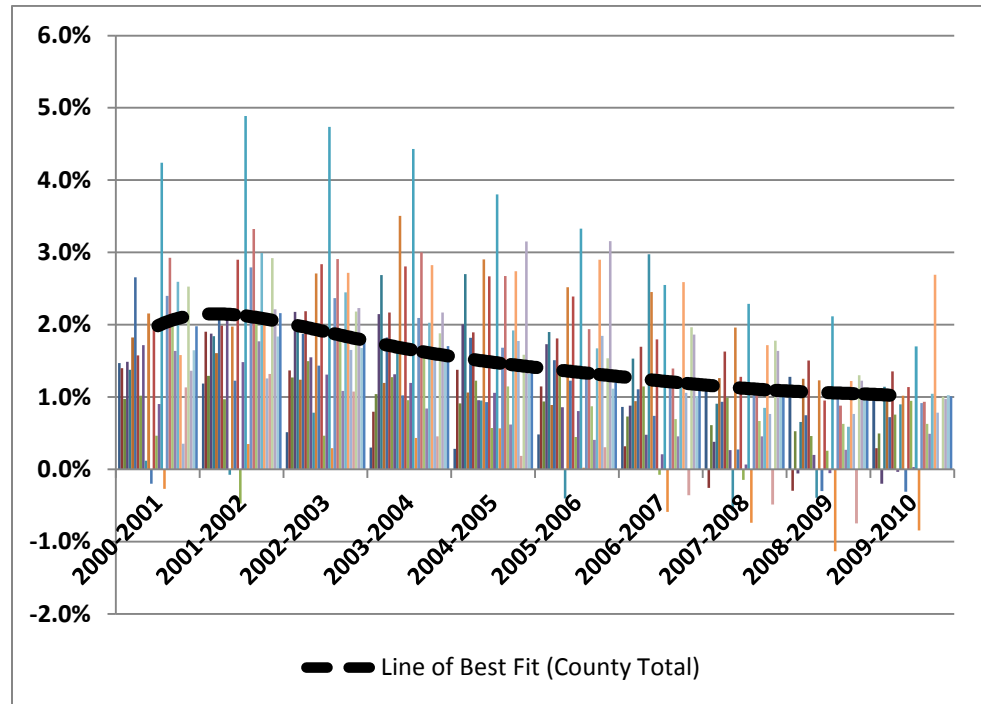
The growth rates for almost all counties in the Sacramento and San Joaquin Valley and foothills were much lower in the closing years of the 2000s than earlier in the decade, largely because of the national recession of December 2007 through June 2009. The recession substantially affected birth rates, domestic migration, and international migration. Figure 3.16-1 shows a graphic representation of the annual growth rates for all included counties, as well as a line of best fit that shows the overall annual average growth for all counties combined. The annual growth rates exceeded 2.0 percent early in the decade before ultimately falling to nearly 1.0 percent by 2010.

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**Table 3.16-1. Population and Growth Rates, 2000–2030—Counties in the Sacramento and San Joaquin Valley and Foothills and Statewide**

County	Population			Growth Rates (%)	
	2000	2010	2030 (Projected)	2000–2010	2010–2030 (Projected)
Alameda	1,453,078	1,574,857	1,791,721	0.8	0.7
Amador	35,357	38,022	54,788	0.8	2.2
Butte	204,065	221,768	334,842	0.9	2.5
Calaveras	40,870	45,870	64,572	1.2	2.0
Colusa	19,027	22,206	34,488	1.7	2.8
Contra Costa	956,497	1,073,055	1,422,840	1.2	1.6
El Dorado	158,621	182,019	247,570	1.5	1.8
Fresno	804,508	953,761	1,429,228	1.9	2.5
Glenn	26,764	29,434	45,181	1.0	2.7
Lake	58,724	64,053	87,066	0.9	1.8
Lassen	34,108	35,889	47,240	0.5	1.6
Madera	124,696	153,655	273,456	2.3	3.9
Mariposa	17,150	18,192	23,981	0.6	1.6
Merced	211,481	258,495	439,905	2.2	3.5
Modoc	9,628	9,777	16,250	0.2	3.3
Nevada	92,532	98,680	123,940	0.7	1.3
Placer	252,223	347,102	512,509	3.8	2.4
Plumas	20,868	20,428	24,530	-0.2	1.0
Sacramento	1,233,575	1,445,327	1,803,872	1.7	1.2
San Joaquin	569,083	694,293	1,205,198	2.2	3.7
Shasta	164,794	184,247	260,179	1.2	2.1
Solano	396,995	427,837	590,166	0.8	1.9
Stanislaus	451,190	530,584	857,893	1.8	3.1
Sutter	79,632	99,154	182,401	2.5	4.2
Tehama	56,130	63,100	93,477	1.2	2.4
Tuolumne	54,863	56,086	67,510	0.2	1.0
Yolo	170,190	202,953	275,360	1.9	1.8
Yuba	60,598	73,380	137,322	2.1	4.4
<b>California Total</b>	<b>34,105,437</b>	<b>38,648,090</b>	<b>49,240,891</b>	<b>1.3</b>	<b>1.4</b>

Sources: DOF 2007, 2010a



Source: *DOF 2010a*

**Figure 3.16-1. Annual Percentage Growth Rates, 2000–2010, with Line of Best Fit—Counties in the Sacramento and San Joaquin Valley and Foothills and County Total**

It is projected that California as a whole will experience a 1.4 percent average annual growth rate from 2010 to 2030. This rate is lower than the projected growth rates for 22 of the 28 counties located wholly or partially within the Sacramento and San Joaquin Valley and foothills (Table 3.16-1), suggesting that the population projected for California by 2030 may reside largely in counties in this geographic area. Counties projected to have average annual growth rates below the rate for the entire state are generally rural counties (e.g., Nevada County) or counties with an already present, relatively dense urban population (e.g., Sacramento County).

Figure 3.16-2 shows cities and other communities in the Sacramento and San Joaquin Valley and foothills with populations greater than 10,000 residents in 2000, and Table 3.16-2 shows the population and recent growth rates for these cities and other communities. Modesto, Sacramento, and Stockton—located in Stanislaus, Sacramento, and San Joaquin counties, respectively—are the largest of these cities. Almost all cities included in Table 3.16-2 experienced some amount of average annual growth between 2000 and 2010, with many experiencing growth between 1.0 and 4.0 percent. A handful of cities or other communities—Arden-Arcade, Marysville, and Rosemont—experienced a decline in population. The community with the fastest growth was the city of Elk Grove in

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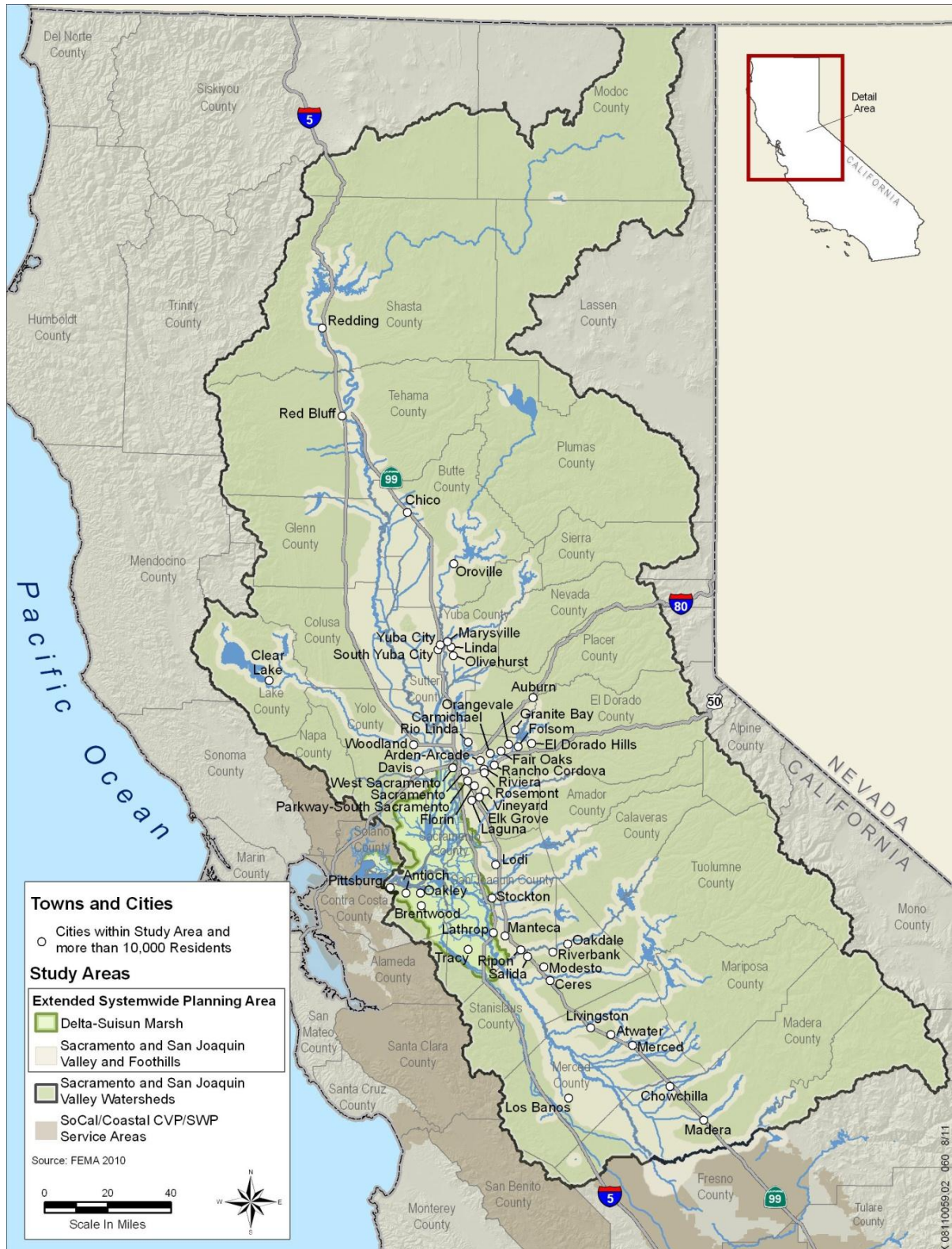
Sacramento County (15.5 percent), followed by Vineyard in Sacramento County (14.6 percent). Annual growth rates for those communities with significant portions of the community area in the 100-year floodplain between 2000 and 2010 were generally between 0.0 and 4.0 percent, with no clear trend indicating that these communities experienced higher growth rates over the decade than other communities outside of the 100-year floodplain. The communities of Lathrop and Oakley, however, did experience high growth rates between 2005–2007 and 2006–2007, respectively.

Table 3.16-3 shows the age distribution for the 28 counties located wholly or partially within the Sacramento and San Joaquin Valley and foothills. The 28 counties in this geographic area vary widely in their distribution of major age groupings; however, data suggest that more rural counties have a higher proportion of older residents, while counties with the highest proportions of young residents are those that are currently experiencing the most growth or otherwise have growing populations.

The counties within the Sacramento and San Joaquin Valley and foothills with the largest percentages of residents 5 years of age or younger are Merced, Fresno, and Yuba (8.9 percent, 8.5 percent, and 8.2 percent, respectively), all of which exceed the corresponding percentage for California as a whole (7.3 percent) (Table 3.16-3). Amador, Calaveras, and Mariposa counties have the smallest percentages of residents 5 years of age or younger (4.2 percent, 4.4 percent, and 4.4 percent, respectively). Conversely, these counties are among those with the largest percentages of residents more than 65 years of age, with percentages exceeding 17.1 percent. The counties in this geographic area with the largest percentage of senior citizens are Lake, Tuolumne, and Calaveras (19.5 percent, 18.5 percent, and 18.2 percent, respectively), all of which substantially exceed the corresponding percentage for California as a whole (10.6 percent) (Table 3.16-3). The median ages for counties in the Sacramento and San Joaquin Valley and foothills are generally older than the median age for the state as a whole, with 20 of the 28 counties exhibiting a median age older than 33.3. The counties with the oldest median ages are Calaveras and Plumas (44.6 and 44.2, respectively), while the county with the youngest median age is Merced (29.0) (Table 3.16-3).



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**Figure 3.16-2. Cities and Other Communities with More than 10,000 Residents**



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**Table 3.16-2. Population and Growth Rates, 2000–2010—Cities and Other Communities in the Sacramento and San Joaquin Valley and Foothills with More than 10,000 Residents**

City or Community	Population		Average Annual Growth Rate, 2000–2010 (%)
	2000	2010	
<b>Butte County</b>			
Chico	60,516	86,187	4.2
Oroville	13,004	15,546	2.0
<b>Contra Costa County</b>			
Antioch	90,532	102,372	1.3
Brentwood	23,302	51,481	12.1
Oakley	25,619	35,432	3.8
Pittsburg	56,769	63,264	1.1
<b>El Dorado County</b>			
El Dorado Hills*	18,016	42,108	13.4
<b>Lake County</b>			
Clearlake	13,174	15,250	1.6
<b>Madera County</b>			
Chowchilla	14,416	18,720	3.0
Madera	43,205	61,416	4.2
<b>Merced County</b>			
Los Banos	25,869	35,972	3.9
Atwater	23,113	28,168	2.2
Livingston	10,473	13,058	2.5
Merced	63,893	78,958	2.4
<b>Placer County</b>			
Auburn	12,462	13,330	0.7
Granite Bay*	19,388	20,402	0.5
<b>Sacramento County</b>			
Arden-Arcade*	96,025	92,186	-0.4
Carmichael*	49,742	61,762	2.4
Elk Grove	59,984*	153,015	15.5
Fair Oaks*	28,008	30,912	1.0
Florin*	27,653	47,513	7.2
Folsom	51,884	72,203	3.9
Laguna*	34,309	–	--
La Riviera*	10,273	10,802	0.5
Orangevale*	26,705	33,960	2.7
Parkway–South Sacramento*	36,468	–	--
Rancho Cordova	55,060*	64,776	1.8

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**Table 3.16-2. Population and Growth Rates, 2000–2010—Cities and Other Communities in the Sacramento and San Joaquin Valley and Foothills with More than 10,000 Residents (contd.)**

City or Community	Population		Average Annual Growth Rate, 2000–2010 (%)
	2000	2010	
Rio Linda*	10,466	15,106	4.4
Rosemont*	22,904	22,681	-0.1
Sacramento	407,018	466,488	1.5
Vineyard*	10,109	24,836	14.6
<b>San Joaquin County</b>			
Lathrop	10,445	18,023	7.3
Lodi	57,011	62,134	0.9
Manteca	49,255	67,096	3.6
Ripon	10,158	14,297	4.1
Stockton	243,771	291,707	2.0
Tracy	56,929	82,922	4.6
<b>Shasta County</b>			
Redding	80,865	89,861	1.1
<b>Stanislaus County</b>			
Ceres	34,609	45,417	3.1
Modesto	188,856	201,165	0.7
Oakdale	15,503	20,675	3.3
Riverbank	15,826	22,678	4.3
Salida*	12,560	13,722	0.9
<b>Sutter County</b>			
South Yuba City*	12,651	–	–
Yuba City	36,758	64,925	7.7
<b>Tehama County</b>			
Red Bluff	13,147	14,076	0.7
<b>Yolo County</b>			
Davis	60,308	65,622	0.9
West Sacramento	31,615	48,744	5.4
Woodland	49,151	55,468	1.3
<b>Yuba County</b>			
Linda*	13,474	17,773	3.2
Marysville	12,268	12,072	-0.2
Olivehurst*	11,061	13,656	2.3

Source: DOF 2011; \* denotes U.S. Census Bureau 2000a; U.S. Census Bureau 2011

Table 3.16-3. Population by Age of Residents, 2000—Counties in the Sacramento and San Joaquin Valley and Foothills and Statewide

County	Total Population	Ages of Residents								Median Age
		< 5 Years		5–19 Years		20–64 Years		65+ Years		
		Number of Residents	Percentage of Population (%)	Number of Residents	Percentage of Population (%)	Number of Residents	Percentage of Population (%)	Number of Residents	Percentage of Population (%)	
Alameda	1,443,741	98,378	6.8	293,865	20.4	903,907	62.6	147,591	10.2	34.5
Amador	35,100	1,478	4.2	6,726	19.2	20,567	58.6	6,329	18.0	42.7
Butte	203,171	11,637	5.7	45,214	22.3	114,264	56.2	32,056	15.8	35.8
Calaveras	40,554	1,791	4.4	8,294	20.5	23,096	57.0	7,373	18.2	44.6
Colusa	18,804	1,517	8.1	5,105	27.1	10,047	53.4	2,135	11.4	31.5
Contra Costa	948,816	66,128	7.0	208,172	21.9	567,244	59.8	107,272	11.3	36.4
El Dorado	156,299	8,946	5.7	35,742	22.9	92,277	59.0	19,334	12.4	39.4
Fresno	799,407	67,827	8.5	216,076	27.0	436,295	54.6	79,209	9.9	29.9
Glenn	26,453	1,992	7.5	6,898	26.1	14,132	53.4	3,431	13.0	33.7
Lake	58,309	3,074	5.3	12,182	20.9	31,694	54.4	11,359	19.5	42.7
Lassen	33,828	1,679	5.0	6,603	19.5	22,492	66.5	3,054	9.0	34.6
Madera	123,109	9,443	7.7	30,827	25.0	69,243	56.2	13,596	11.0	32.7
Mariposa	17,130	754	4.4	3,371	19.7	10,065	58.8	2,940	17.2	42.9
Merced	210,554	18,693	8.9	61,069	29.0	110,788	52.6	20,004	9.5	29.0
Modoc	9,449	528	5.6	2,081	22.0	5,177	54.8	1,663	17.6	41.8
Nevada	92,033	4,306	4.7	19,038	20.7	52,640	57.2	16,049	17.4	43.1
Placer	248,399	15,924	6.4	55,879	22.5	144,036	58.0	32,560	13.1	38.0
Plumas	20,824	929	4.5	4,253	20.4	11,917	57.2	3,725	17.9	44.2
Sacramento	1,223,499	88,922	7.3	282,239	23.1	716,463	58.6	135,875	11.1	33.8
San Joaquin	563,598	44,960	8.0	148,322	26.3	310,517	55.1	59,799	10.6	31.9
Shasta	163,256	9,643	5.9	37,743	23.1	91,009	55.7	24,861	15.2	38.9
Solano	394,542	28,784	7.3	93,879	23.8	234,453	59.4	37,426	9.5	33.9
Stanislaus	446,997	35,582	8.0	117,517	26.3	247,201	55.3	46,697	10.4	31.7
Sutter	78,930	5,728	7.3	19,356	24.5	44,091	55.9	9,755	12.4	34.1
Tehama	56,039	3,534	6.3	13,371	23.9	30,211	53.9	8,923	15.9	37.8
Tuolumne	54,501	2,466	4.5	10,130	18.6	31,838	58.4	10,067	18.5	42.9
Yolo	168,660	10,964	6.5	41,660	24.7	100,254	59.4	15,782	9.4	29.5
Yuba	60,219	4,960	8.2	15,621	25.9	33,228	55.2	6,410	10.6	31.4
<b>California Total</b>	<b>33,871,648</b>	<b>2,486,981</b>	<b>7.3</b>	<b>7,747,590</b>	<b>22.9</b>	<b>20,041,419</b>	<b>59.2</b>	<b>3,595,658</b>	<b>10.6</b>	<b>33.3</b>

Source: U.S. Census Bureau 2000a (SF1)

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*Employment* Table 3.16-4 shows the employment trends for counties located wholly or partially within the Sacramento and San Joaquin Valley and foothills. These data show the labor force and number of employed individuals for 2000 and 2009, as well as unemployment rates for 2000 and 2009. Of the counties in this geographic area, the labor force was largest in Alameda County in both 2000 and 2009, followed by Sacramento and Contra Costa counties. The labor force showed the most average annual growth in Placer County (3.9 percent), with Colusa and Madera counties (2.7 percent and 2.5 percent, respectively) close behind. Only Plumas County experienced flat growth in the labor force (0.0 percent) between 2000 and 2009. Plumas and Tehama counties experienced a negative rate of employed individuals from 2000 to 2009, with Plumas County leading all counties in the geographic area with -1.1 percent average annual growth (Table 3.16-4).

Employment rates decreased sharply nationally between 2000 and 2009, and California as a whole experienced an unemployment rate of 11.4 percent in 2009, an increase of 6.5 percent from 2000. Of the 28 counties located wholly or partially within in the Sacramento and San Joaquin Valley and foothills, 21 have unemployment rates higher than that of the state as a whole. Of these counties, Colusa, Yuba, and Merced (18.3 percent, 17.3 percent, and 17.2 percent, respectively) have the highest unemployment rates. The counties that experienced the greatest change in relative unemployment between 2000 and 2009 were Yuba, Plumas, and Shasta (9.4 percent, 9.3 percent, and 8.8 percent, respectively). All counties experienced some growth in relative unemployment, but Mariposa County had the lowest rate at 4.4 percent (Table 3.16-4).

Table 3.16-5 presents the employment percentages by major industry for counties located wholly or partially within the Sacramento and San Joaquin Valley and foothills. This table includes data for jobs in the agricultural, goods-producing, transportation, trade, information, financial, service, and governmental industries. There is a wide variation between counties; some counties show large proportions of jobs in agriculture, while others have large proportions in government. For example, Colusa, Glenn, and Madera counties each have proportions of agricultural jobs between 30.2 and 22.7 percent. The counties with the highest proportion of manufacturing and construction jobs are Stanislaus, Plumas, and Nevada (18.6 percent, 17.8 percent, and 17.3 percent, respectively). The transportation industries are of relative importance in San Joaquin and Modoc counties (19.5 percent and 14.8 percent, respectively). Trade industries are of the highest relative number in Sutter County (20.3 percent), but the greatest absolute number of jobs in the trade industries is present in Alameda County. In some small counties, government jobs make up a relatively high number of jobs

proportionally, including Lassen County, where 61.3 percent of all jobs are with the government.

Statewide, the industry with the highest proportion of workers is the service field. However, a handful of counties within the Sacramento and San Joaquin Valley and foothills have relative rates higher than that of California as a whole: Mariposa, El Dorado, and Shasta (49.2 percent, 44.2 percent, and 40.9 percent, respectively).

Table 3.16-6 presents key economic indicators for counties located wholly or partially within the Sacramento and San Joaquin Valley and foothills, and for California as a whole. Indicators shown are per capita income, median household income, and the number and proportion of residents living below the poverty level. Though based on 1999 data because county by county 2010 U.S. Census data were not available for all indicators at the time of writing, key economic indicators show that the counties with the lowest per capita incomes are Glenn, Yuba, and Merced, while the counties with the highest per capita incomes are Placer, El Dorado, and Nevada.

In general, counties with high per capita incomes have similarly high median household incomes. However, low median household incomes are present in Modoc, Lake, and Yuba counties, two of which have middling per capita incomes when compared to other counties in the Sacramento and San Joaquin Valley and foothills. The counties with the most people living in poverty are Fresno, Sacramento, and San Joaquin. The counties with the highest proportion of low-income residents are Fresno, Merced, and Modoc (22.9 percent, 21.7 percent, and 21.5 percent, respectively). The counties with the lowest percentage of low-income residents are Placer, El Dorado, and Nevada (5.8 percent, 7.1 percent, and 8.1 percent, respectively) (Table 3.16-6).

Table 3.16-4. Employment Trends, 2000 and 2009—Counties in the Sacramento and San Joaquin Valley and Foothills and Statewide

County	2000			2009			Average Annual Growth Rate, 2000–2009 (%)		Change in Unemployment 2000–2009 (%)
	Labor Force	Employed	Unemployment Rate (%)	Labor Force	Employed	Unemployment Rate (%)	Labor Force	Employed	
Alameda	769,100	741,300	3.6	762,600	681,300	10.7	-0.1	-0.9	7.1
Amador	15,270	14,480	5.2	17,940	15,830	11.8	1.9	1.0	6.6
Butte	93,100	87,400	6.2	104,800	91,700	12.5	1.4	0.5	6.3
Calaveras	18,150	17,140	5.6	20,400	17,520	14.1	1.4	0.2	8.5
Colusa	9,260	8,190	11.5	11,470	9,370	18.3	2.7	1.6	6.8
Contra Costa	500,900	483,200	3.5	526,000	471,700	10.3	0.6	-0.3	6.8
El Dorado	82,200	78,800	4.1	91,800	81,500	11.3	1.3	0.4	7.1
Fresno	388,300	347,900	10.4	438,700	372,500	15.1	1.4	0.8	4.7
Glenn	11,290	10,340	8.4	12,670	10,820	14.6	1.4	0.5	6.1
Lake	23,080	21,400	7.3	25,390	21,450	15.6	1.1	0.0	8.3
Lassen	11,350	10,540	7.1	13,540	11,800	12.9	2.1	1.3	5.8
Madera	54,900	50,100	8.7	67,100	57,900	13.7	2.5	1.7	5.1
Mariposa	7,980	7,490	6.2	9,500	8,500	10.6	2.1	1.5	4.4
Merced	90,300	81,600	9.6	105,700	87,500	17.2	1.9	0.8	7.6
Modoc	3,750	3,470	7.5	3,970	3,460	12.8	0.7	0.0	5.3
Nevada	45,460	43,580	4.1	50,470	45,080	10.7	1.2	0.4	6.5
Placer	132,100	127,400	3.6	179,000	160,100	10.6	3.9	2.9	7.0
Plumas	9,760	9,070	7.1	9,800	8,190	16.4	0.0	-1.1	9.3
Sacramento	608,800	582,400	4.3	687,600	609,600	11.3	1.4	0.5	7.0
San Joaquin	258,900	240,900	7.0	299,500	253,300	15.4	1.7	0.6	8.5
Shasta	74,800	70,300	6.1	84,300	71,800	14.8	1.4	0.2	8.8
Solano	194,200	185,200	4.6	214,200	190,900	10.9	1.1	0.3	6.2
Stanislaus	207,800	191,600	7.8	236,100	198,300	16.0	1.5	0.4	8.3
Sutter	37,900	34,300	9.4	42,100	34,900	17.0	1.2	0.2	7.6
Tehama	23,610	22,070	6.5	25,520	21,920	14.1	0.9	-0.1	7.6
Tuolumne	22,890	21,540	5.9	26,010	22,750	12.6	1.5	0.6	6.7
Yolo	86,200	81,800	5.0	99,200	88,000	11.2	1.7	0.8	6.2
Yuba	24,300	22,400	7.9	28,600	23,700	17.3	2.0	0.6	9.4
<b>California Total</b>	<b>16,857,600</b>	<b>16,024,300</b>	<b>4.9</b>	<b>18,250,200</b>	<b>16,163,900</b>	<b>11.4</b>	<b>0.9</b>	<b>0.1</b>	<b>6.5</b>

Source: EDD 2010a



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Table 3.16-5. Employment by Industry, 2008—Counties in the Sacramento and San Joaquin Valley and Foothills and Statewide

County	Agriculture		Manufacturing and Construction		Transportation, Utilities, and Warehousing		Trade		Information		Financial, Insurance, and Real Estate Services		Services		Government		Total	
	Number	Percentage of County (%)	Number	Percentage of County (%)	Number	Percentage of County (%)	Number	Percentage of County (%)	Number	Percentage of County (%)	Number	Percentage of County (%)	Number	Percentage of County (%)	Number	Percentage of County (%)	Number	Percentage of County (%)
Alameda	700	0.1	112,500	16.3	27,700	4.0	106,100	15.4	15,900	2.3	30,400	4.4	272,400	39.4	125,000	18.1	690,700	100.0
Amador	290	2.3	1,310	10.3	160	1.3	1,920	15.1	200	1.6	290	2.3	2,970	23.4	5,570	43.8	12,710	100.0
Butte	2,800	3.6	7,300	9.4	1,900	2.4	11,800	15.2	1,200	1.5	4,400	5.7	30,200	38.8	18,200	23.4	77,800	100.0
Calaveras	60	0.7	1,390	15.8	290	3.3	1,160	13.2	120	1.4	310	3.5	2,780	31.5	2,710	30.7	8,820	100.0
Colusa	2,400	30.2	1,010	12.7	250	3.1	930	11.7	0	0.0	170	2.1	1,020	12.8	2,180	27.4	7,960	100.0
Contra Costa	700	0.2	46,600	13.7	8,800	2.6	52,600	15.5	11,900	3.5	26,300	7.7	141,800	41.7	51,600	15.2	340,300	100.0
El Dorado	300	0.6	7,200	13.8	700	1.3	6,900	13.2	700	1.3	3,500	6.7	23,100	44.2	9,900	18.9	52,300	100.0
Fresno	48,900	13.9	45,100	12.8	11,000	3.1	48,300	13.7	4,700	1.3	14,800	4.2	109,400	31.1	70,000	19.9	352,200	100.0
Glenn	1,810	22.7	830	10.4	400	5.0	1,000	12.5	0	0.0	160	2.0	1,420	17.8	2,370	29.7	7,990	100.0
Lake	1,000	7.2	1,020	7.3	570	4.1	2,240	16.1	140	1.0	400	2.9	4,490	32.2	4,090	29.3	13,950	100.0
Lassen	420	4.0%	300	2.9	150	1.4	1,030	9.8	130	1.2	180	1.7	1,850	17.6	6,440	61.3	10,500	100.0
Madera	10,300	22.7	5,200	11.5	900	2.0	4,300	9.5	500	1.1	800	1.8	12,300	27.2	11,000	24.3	45,300	100.0
Mariposa	20	0.4	320	5.8	60	1.1	310	5.6	0	0.0	0	0.0	2,720	49.2	2,100	38.0	5,530	100.0
Merced	11,000	16.0	11,700	17.0	2,300	3.3	9,400	13.6	1,300	1.9	1,800	2.6	15,900	23.1	15,500	22.5	68,900	100.0
Modoc	360	12.7	160	5.6	420	14.8	0	0.0	0	0.0	0	0.0	550	19.4	1,350	47.5	2,840	100.0
Nevada	100	0.3	5,140	17.3	510	1.7	4,540	15.2	410	1.4	1,460	4.9	12,040	40.4	5,580	18.7	29,780	100.0
Placer	400	0.3	20,400	14.8	2,900	2.1	25,000	18.1	2,400	1.7	10,600	7.7	56,300	40.8	20,000	14.5	138,000	100.0
Plumas	50	0.7	1,220	17.8	320	4.7	720	10.5	70	1.0	230	3.3	1,800	26.2	2,460	35.8	6,870	100.0
Sacramento	2,900	0.5	57,400	9.6	13,600	2.3	76,800	12.8	14,900	2.5	39,900	6.7	222,100	37.1	171,700	28.7	599,300	100.0
San Joaquin	14,900	5.8	32,800	12.8	50,100	19.5	36,000	14.0	2,400	0.9	9,400	3.7	70,900	27.6	40,400	15.7	256,900	100.0
Shasta	700	1.1	6,700	10.7	1,900	3.0	11,000	17.5	800	1.3	2,700	4.3	25,700	40.9	13,400	21.3	62,900	100.0
Solano	1,600	1.3	19,000	15.0	4,800	3.8	21,800	17.3	1,600	1.3	5,000	4.0	45,600	36.1	26,900	21.3	126,300	100.0
Stanislaus	13,600	8.0	31,700	18.6	5,700	3.4	27,100	15.9	1,900	1.1	6,100	3.6	57,300	33.7	26,700	15.7	170,100	100.0
Sutter	3,500	12.5	3,100	11.0	700	2.5	5,700	20.3	200	0.7	1,000	3.6	9,100	32.4	4,800	17.1	28,100	100.0
Tehama	1,270	7.5	2,770	16.5	1,350	8.0	2,320	13.8	80	0.5	420	2.5	4,250	25.3	4,370	26.0	16,830	100.0
Tuolumne	60	0.3	1,940	11.1	270	1.6	2,530	14.5	280	1.6	600	3.4	6,290	36.1	5,430	31.2	17,400	100.0
Yolo	4,800	4.8	10,700	10.6	7,900	7.8	13,200	13.1	1,100	1.1	3,500	3.5	23,300	23.1	36,400	36.1	100,900	100.0
Yuba	1,000	6.0	1,600	9.6	600	3.6	1,500	9.0	300	1.8	300	1.8	4,500	26.9	6,900	41.3	16,700	100.0
<b>California Total</b>	<b>389,300</b>	<b>2.5</b>	<b>2,241,800</b>	<b>14.6</b>	<b>504,600</b>	<b>3.3</b>	<b>2,344,400</b>	<b>15.3</b>	<b>475,500</b>	<b>3.1</b>	<b>850,300</b>	<b>5.5</b>	<b>6,045,800</b>	<b>39.3</b>	<b>2,518,900</b>	<b>16.4</b>	<b>15,370,600</b>	<b>100.0</b>

Source: EDD 2010a

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### 3.0 Environmental Setting, Impacts, and Mitigation Measures

**Table 3.16-6. Income and Poverty Levels, 1999—Counties in the Sacramento and San Joaquin Valley and Foothills and Statewide**

County	Income Levels		Residents Living Below Poverty Line	
	Per Capita	Median Household	Number of Persons	Percentage of Population
Alameda	\$26,680	\$55,946	156,804	11.0
Amador	\$22,412	\$42,280	2,808	9.2
Butte	\$17,517	\$31,924	39,148	19.8
Calaveras	\$21,420	\$41,022	4,704	11.8
Colusa	\$14,730	\$35,062	2,964	16.1
Contra Costa	\$30,615	\$63,675	71,575	7.6
El Dorado	\$25,560	\$51,484	11,079	7.1
Fresno	\$15,495	\$34,725	179,085	22.9
Lake	\$16,825	\$29,627	10,081	17.6
Lassen	\$14,749	\$36,310	3,484	14.0
Madera	\$14,682	\$36,286	24,514	21.4
Mariposa	\$18,190	\$34,626	2,489	14.8
Merced	\$14,257	\$35,532	45,059	21.7
Modoc	\$17,285	\$27,522	1,962	21.5
Nevada	\$24,007	\$45,864	7,332	8.1
Placer	\$27,963	\$57,535	14,272	5.8
Plumas	\$19,391	\$36,351	2,686	13.1
Sacramento	\$21,142	\$43,816	169,784	14.1
San Joaquin	\$17,365	\$41,282	97,105	17.7
Shasta	\$17,738	\$34,335	24,556	15.4
Solano	\$21,731	\$54,099	31,344	8.3
Stanislaus	\$16,913	\$40,101	70,406	16.0
Sutter	\$17,428	\$38,375	12,031	15.5
Tehama	\$15,793	\$31,206	9,503	17.3
Tuolumne	\$21,015	\$38,725	5,690	11.4
Yolo	\$19,365	\$40,769	29,787	18.4
Yuba	\$14,124	\$30,460	12,205	20.8
<b>California Total</b>	<b>\$22,711</b>	<b>\$47,493</b>	<b>4,706,130</b>	<b>14.2</b>

Source: U.S. Census Bureau 2000b (SF3)

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*Housing* Table 3.16-7 presents the total number of housing units for the counties located wholly or partially within the Sacramento and San Joaquin Valley and foothills, along with the number of housing units for California as a whole. Of the counties in this geographic area, those with the most housing units in 2000 were Alameda, Sacramento, and Contra Costa counties. In 2009, the same counties still had the most housing units, with average annual growth between 0.7 and 1.9 percent. The counties with the fewest housing units in 2000 and 2009 were Modoc, Colusa, and Mariposa, with average annual growth rates for these counties at 0.9 to 2.0 percent. The counties with the lowest average annual rates of housing growth between 2000 and 2009 were Modoc and Tuolumne (0.9 percent); Placer County had the highest average annual rate of housing growth between 2000 and 2009 (4.3 percent). The rate for the state as a whole was 1.2 percent, and 22 of the 28 counties in the Sacramento and San Joaquin Valley and foothills experienced average annual growth rates higher than that between 2000 and 2009 (Table 3.16-7). In general, counties in rural areas experienced a lower amount of average annual growth.

**Table 3.16-7. Number of Housing Units and Growth Rates, 2000 and 2009—Counties in the Sacramento and San Joaquin Valley and Foothills and Statewide**

County	Housing Units		Average Annual Growth Rate, 2000–2009 (%)
	2000	2009	
Alameda	540,183	573,111	0.7
Amador	15,035	17,316	1.7
Butte	85,523	96,215	1.4
Calaveras	22,946	28,098	2.5
Colusa	6,774	7,864	1.8
Contra Costa	354,577	399,187	1.4
El Dorado	71,278	83,871	2.0
Fresno	270,767	312,559	1.7
Glenn	9,982	10,858	1.0
Lake	32,528	35,521	1.0
Lassen	12,000	13,130	1.0
Madera	40,387	49,746	2.6
Mariposa	8,826	10,453	2.0
Merced	68,373	85,215	2.7
Modoc	4,807	5,189	0.9
Nevada	44,282	50,788	1.6
Placer	107,302	149,265	4.3
Plumas	13,386	15,594	1.8
Sacramento	474,814	553,916	1.9

**Table 3.16-7. Number of Housing Units and Growth Rates, 2000 and 2009—Counties in the Sacramento and San Joaquin Valley and Foothills and Statewide (contd.)**

County	Housing Units		Average Annual Growth Rate, 2000–2009 (%)
	2000	2009	
San Joaquin	189,160	228,981	2.3
Shasta	68,810	77,609	1.4
Solano	134,513	152,743	1.5
Stanislaus	150,807	177,545	2.0
Sutter	28,319	33,681	2.1
Tehama	23,547	27,606	1.9
Tuolumne	28,336	30,614	0.9
Yolo	61,587	73,811	2.2
Yuba	22,636	28,016	2.6
<b>California Total</b>	<b>12,214,550</b>	<b>13,530,719</b>	<b>1.2</b>

Source: DOF 2009a

Table 3.16-8 shows the total housing units and housing growth rates for the cities and other communities located within the Sacramento and San Joaquin Valley and foothills. As was the case for total population, the cities of Sacramento, Fresno, and Stockton have the largest number of housing units. The average annual growth rates for these cities are 2.1, 1.5, and 2.0 percent, respectively. The cities with the smallest rates of average annual housing growth were spread throughout the area; Marysville in Yuba County was the city with the smallest amount of average annual growth. The largest average annual growth rate between 2000 and 2009 was in Elk Grove in Sacramento County, although eight other cities within the geographic area experienced housing unit growth rates of 5.0 percent or more between 2000 and 2009.

Table 3.16-9 shows the housing-type trends and growth rates for counties located wholly or partially within the Sacramento and San Joaquin Valley and foothills for 2000 and 2009. Alameda and Sacramento counties had the largest number of single-family homes in 2000 and 2009, respectively. In both 2000 and 2009, the largest number of multifamily homes was in Alameda County. For average annual growth rates between 2000 and 2009 for single-family homes, Placer County led all counties with 4.6 percent, followed by Yuba and Merced (3.6 percent and 3.3 percent, respectively).

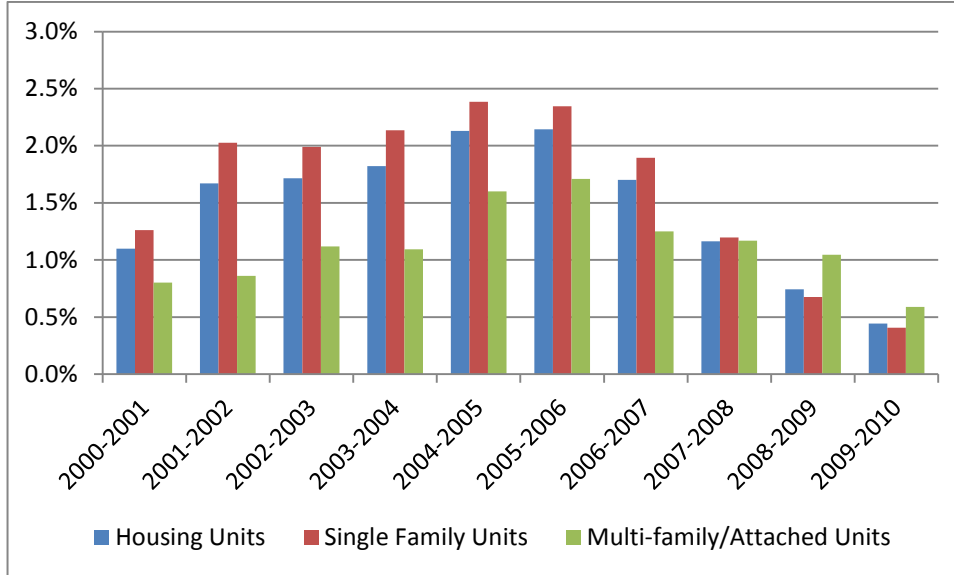
All counties wholly or partially within the Sacramento and San Joaquin Valley and foothills experienced at least a small amount of average annual growth in single-family housing, but several experienced little to no growth in multifamily housing between 2000 and 2009: Lassen, Mariposa, Modoc,

Plumas, and Yuba. Counties that experienced the highest average annual growth in multifamily housing were Placer (4.0 percent); Amador (2.8 percent); and Colusa, Lake, and Nevada (2.6 percent each) (Table 3.16-9).

Like annual population growth rates, housing growth rates for the counties in the Sacramento and San Joaquin Valley and foothills were much lower at the end of the 2000s than in the early to middle part of the decade. This, again, is largely attributable to the national recession of December 2007 through June 2009, which included a substantial increase in foreclosure rates, a substantial decrease in construction rates of new homes, and a widespread decline in the ability of individuals to purchase single-family residences. In August 2009, information from DOF showed that residential permits were down 34 percent from a year earlier. Permits were down 4 percent for single-family residences and 67 percent for multifamily residences. Permitting for new homes for the first 8 months of 2009 was down 49 percent from the same months in 2008. By June 2011, residential building activity was beginning to recover, with residential permits up 7.6 percent from a year earlier, with new home construction favoring multifamily units. At the end of 2008, the median number of days needed to sell a home was 46 days. That number had dropped to 35.2 days by August 2009; however, in the latest figures (June 2011), the median was up to 50.3 days. The pace of home sales in June 2011 was down 3.6 percent from a year earlier and the median price of existing, single-family homes sold was \$295,300—a drop of 5.9 percent from a year earlier (DOF 2009b, 2011).

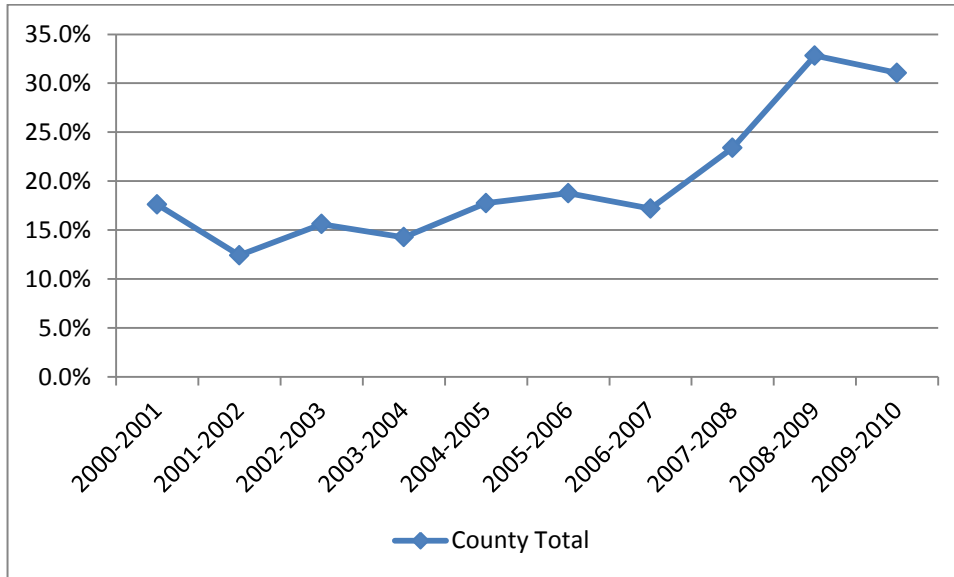
Figure 3.16-3 shows the annual rates for all housing units, single-family units, and multifamily/attached units for the years 2000 through 2010. The annual growth rates for all housing units combined and single-family units dropped from 2006 to 2010. The annual growth of multi-family/attached units also dropped during this time; however, Figure 3.16-4 shows the share of annual growth attributable to multifamily/attached units for the same years (for all counties combined). The increase in share since 2006–2007 is another indicator of overall variability in housing growth rates during the decade and how they have changed in more recent years.





Source: DOF 2010b

**Figure 3.16-3. Annual Percent Change in Housing Types, 2000 through 2010—All Counties in the Sacramento and San Joaquin Valley and Foothills (Total)**



Source: DOF 2010b

**Figure 3.16-4. Share of Annual Growth Attributable to Multifamily/Attached Housing Units, 2000 through 2010—All Counties in the Sacramento and San Joaquin Valley and Foothills (Total)**

Table 3.16-10 shows housing trends for 2000 and 2009 for the cities and other communities located wholly or partially within the Sacramento and San Joaquin Valley and foothills. As was the case for total housing units in general, cities with the highest numbers of single-family and multifamily units are Sacramento, Fresno, and Stockton. Sacramento and Fresno

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experienced average annual growth rates for single-family housing near 2.0 percent, while the average annual growth rate for Stockton was 2.8 percent. Stockton had a lower average annual growth rate for multifamily housing, however, at 0.4 percent. The city with the highest average annual growth rates for single-family housing was Brentwood, while the city with the highest average annual growth rates in multifamily housing was Oakley, with a rate of 26.8 percent. In general, however, average annual growth rates for single-family homes were generally between 0.5 and 6.0 percent, with only a handful of cities exhibiting rates greater than 6.0 percent. Growth of multifamily housing was similar, although most cities had smaller average annual growth rates for multifamily housing than for single-family housing. The cities of Folsom and Roseville (9.9 percent and 9.4 percent, respectively) had the second and third highest average annual growth rates for multifamily housing, behind Oakley (Table 3.16-10).

**Table 3.16-8. Number of Housing Units and Growth Rates, 2000 and 2009—Cities and Other Communities in the Sacramento and San Joaquin Valley and Foothills**

City or Community	Housing Units		Average Annual Growth Rate, 2000–2009 (%)
	2000	2009	
<b>Butte County</b>			
Chico	24,386	36,955	5.7
Oroville	5,419	6,372	2.0
<b>Contra Costa County</b>			
Antioch	30,116	33,982	1.4
Brentwood	7,788	17,671	14.1
Oakley	7,946	10,987	4.3
Pittsburg	18,300	20,848	1.5
<b>El Dorado County</b>			
El Dorado Hills*	6,071	–	–

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**Table 3.16-8. Number of Housing Units and Growth Rates, 2000 and 2009—Cities and Other Communities in the Sacramento and San Joaquin Valley and Foothills (contd.)**

City or Community	Housing Units		Average Annual Growth Rate, 2000–2009 (%)
	2000	2009	
<b>Lake County</b>			
Clearlake	7,605	8,294	1.0
<b>Madera County</b>			
Chowchilla	2,711	3,959	5.1
Madera	12,521	16,560	3.6
<b>Merced County</b>			
Los Banos	8,049	11,685	5.0
Atwater	8,114	9,533	1.9
Livingston	2,449	3,365	4.2
Merced	21,532	28,127	3.4
<b>Placer County</b>			
Auburn	5,457	6,034	1.2
Granite Bay*	6,626	–	–
<b>Sacramento County</b>			
Arden-Arcade*	44,818	–	–
Carmichael*	21,383	–	–
Elk Grove	18,894	48,040	17.1
Fair Oaks*	11,461	–	–
Florin*	9,606	–	–
Folsom	17,968	25,657	4.8
Laguna*	11,610	–	–
La Riviera*	4,488	–	–
Orangevale*	10,098	–	–
Parkway–South Sacramento*	11,779	–	–
Rancho Cordova	21,584	24,463	1.5
Rio Linda*	3,596	–	–
Rosemont*	8,584	–	–
Sacramento	163,957	194,316	2.1
Vineyard*	3,349	–	–

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**Table 3.16-8. Number of Housing Units and Growth Rates, 2000 and 2009—Cities and Other Communities in the Sacramento and San Joaquin Valley and Foothills (contd.)**

City or Community	Housing Units		Average Annual Growth Rate, 2000–2009 (%)
	2000	2009	
<b>San Joaquin County</b>			
Lathrop	2,991	4,992	7.4
Lodi	21,378	23,368	1.0
Manteca	16,937	22,961	4.0
Ripon	3,446	5,110	5.4
Stockton	82,042	96,854	2.0
Tracy	18,087	25,566	4.6
<b>Shasta County</b>			
Redding	33,802	38,238	1.5
<b>Stanislaus County</b>			
Ceres	10,773	13,392	2.7
Modesto	67,179	75,074	1.3
Oakdale	5,805	7,360	3.0
Riverbank	4,698	6,489	4.2
Salida*	3,740	–	–
<b>Sutter County</b>			
South Yuba City*	4,144	–	–
Yuba City	13,912	22,632	7.0
<b>Tehama County</b>			
Red Bluff	5,567	6,119	1.1
<b>Yolo County</b>			
Davis	23,617	25,975	1.1
West Sacramento	12,133	18,550	5.9
Woodland	17,120	19,659	1.6
<b>Yuba County</b>			
Linda*	4,483	–	–
Marysville	4,999	5,022	0.1
Olivehurst*	3,732	–	–

Source: DOF 2009a

\* Note: Data unavailable from California Department of Finance

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**Table 3.16-9. Housing Unit Types and Growth Rates, 2000 and 2009—Counties in the Sacramento and San Joaquin Valley and Foothills and Statewide**

County	2000		2009		Average Annual Growth Rate, 2000–2009 (%)	
	Single-Family Unit	Multi-family Unit	Single-Family Unit	Multi-family Unit	Single-Family Unit	Multi-family Unit
Alameda	329,366	203,167	343,859	221,590	0.5	1.0
Amador	12,627	922	14,563	1,155	1.7	2.8
Butte	54,041	17,287	61,461	18,931	1.5	1.1
Calaveras	19,859	850	24,374	893	2.5	0.6
Colusa	5,268	783	6,050	963	1.6	2.6
Contra Costa	261,990	85,008	297,319	94,240	1.5	1.2
El Dorado	58,692	8,213	69,965	9,552	2.1	1.8
Fresno	185,433	71,992	219,202	79,291	2.0	1.1
Glenn	7,168	1,427	7,816	1,487	1.0	0.5
Lake	20,609	1,701	23,080	2,098	1.3	2.6
Lassen	8,460	1,034	9,377	1,039	1.2	0.1
Madera	32,212	4,798	40,447	5,524	2.8	1.7
Mariposa	6,017	597	7,059	599	1.9	0.0
Merced	50,538	12,586	65,750	13,674	3.3	1.0
Modoc	3,362	257	3,604	256	0.8	0.0
Nevada	37,198	3,699	42,349	4,549	1.5	2.6
Placer	85,601	17,032	121,410	23,112	4.6	4.0
Plumas	10,581	771	12,489	771	2.0	0.0
Sacramento	329,308	130,022	390,733	147,396	2.1	1.5
San Joaquin	140,524	39,445	177,430	41,773	2.9	0.7
Shasta	47,628	10,573	54,597	11,659	1.6	1.1
Solano	101,974	27,913	116,397	31,655	1.6	1.5
Stanislaus	116,708	25,637	140,452	27,778	2.3	0.9
Sutter	20,961	5,666	26,028	5,934	2.7	0.5
Tehama	14,673	2,805	17,280	3,166	2.0	1.4
Tuolumne	22,370	2,236	24,056	2,295	0.8	0.3
Yolo	38,868	19,110	47,679	22,411	2.5	1.9
Yuba	15,168	3,963	20,131	3,958	3.6	0.0
<b>California Total</b>	<b>7,815,035</b>	<b>3,829,827</b>	<b>8,720,779</b>	<b>4,213,013</b>	<b>1.3</b>	<b>1.1</b>

Source: DOF 2009a

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**Table 3.16-10. Housing Unit Types and Growth Rates, 2000 and 2009—Cities and Other Communities in the Sacramento and San Joaquin Valley and Foothills**

City or Community	2000		2009		Average Annual Growth Rate, 2000–2009 (%)	
	Single-Family Unit	Multi-family Unit	Single-Family Unit	Multi-family Unit	Single-Family Unit	Multi-family Unit
<b>Butte County</b>						
Chico	12,819	10,934	20,451	14,669	6.6	3.8
Oroville	3,013	2,027	3,758	2,216	2.7	1.0
<b>Contra Costa County</b>						
Antioch	24,283	5,564	27,852	5,861	1.6	0.6
Brentwood	6,768	672	16,078	1,242	15.3	9.4
Oakley	7,363	164	10,006	560	4.0	26.8
Pittsburg	13,240	4,390	15,597	4,570	2.0	0.5
<b>El Dorado County</b>						
El Dorado Hills*	–	–	–	–	–	–
<b>Lake County</b>						
Clearlake	3,731	469	4,187	797	1.4	7.8
<b>Madera County</b>						
Chowchilla	2,174	501	3,248	675	5.5	3.9
Madera	8,900	3,319	12,435	3,823	4.4	1.7
<b>Merced County</b>						
Los Banos	6,591	1,184	10,177	1,231	6.0	0.4
Atwater	5,783	1,824	7,204	1,822	2.7	0.0
Livingston	1,940	473	2,813	511	5.0	0.9
Merced	13,400	7,424	19,129	8,290	4.8	1.3
<b>Placer County</b>						
Auburn	3,857	1,600	4,345	1,689	1.4	0.6
Granite Bay*	–	–	–	–	–	–
<b>Sacramento County</b>						
Arden-Arcade*	–	–	–	–	–	–
Carmichael*	–	–	–	–	–	–
Elk Grove*	–	–	44,685	3,082	–	–
Fair Oaks*	–	–	–	–	–	–
Florin*	–	–	–	–	–	–
Folsom	14,078	3,029	19,042	5,725	3.9	9.9
Laguna*	–	–	–	–	–	–

3.0 Environmental Setting, Impacts, and Mitigation Measures

**Table 3.16-10. Housing Unit Types and Growth Rates, 2000 and 2009—Cities and Other Communities in the Sacramento and San Joaquin Valley and Foothills (contd.)**

City or Community	2000		2009		Average Annual Growth Rate, 2000–2009 (%)	
	Single-Family Unit	Multi-family Unit	Single-Family Unit	Multi-family Unit	Single-Family Unit	Multi-family Unit
La Riviera*	–	–	–	–	–	–
Orangevale*	–	–	–	–	–	–
Parkway-South Sacramento*	–	–	–	–	–	–
Rancho Cordova	–	–	15,346	7,728	–	–
Rio Linda*	–	–	–	–	–	–
Rosemont*	–	–	–	–	–	–
Sacramento	107,257	53,029	127,295	63,335	2.1	2.2
Vineyard*	–	–	–	–	–	–
<b>San Joaquin County</b>						
Lathrop	2,536	104	4,535	106	8.8	0.2
Lodi	14,675	6,242	16,621	6,282	1.5	0.1
Manteca	12,622	3,445	18,373	3,737	5.1	0.9
Ripon	3,008	431	4,457	642	5.4	5.4
Stockton	55,680	25,074	69,601	25,965	2.8	0.4
Tracy	15,076	2,536	21,997	3,093	5.1	2.4
<b>Shasta County</b>						
Redding	22,651	8,725	26,131	9,488	1.7	1.0
<b>Stanislaus County</b>						
Ceres	8,472	1,589	10,848	1,832	3.1	1.7
Modesto	49,926	15,310	57,011	16,004	1.6	0.5
Oakdale	4,438	1,156	5,908	1,209	3.7	0.5
Riverbank	4,094	362	5,834	366	4.7	0.1
Salida*	–	–	–	–	–	–
<b>Sutter County</b>						
South Yuba City*	–	–	–	–	–	–
Yuba City	8,486	4,982	16,199	5,479	10.1	1.1
<b>Tehama County</b>						
Red Bluff	3,496	1,711	3,802	1,951	1.0	1.6



**Table 3.16-10. Housing Unit Types and Growth Rates, 2000 and 2009—Cities and Other Communities in the Sacramento and San Joaquin Valley and Foothills (contd.)**

City or Community	2000		2009		Average Annual Growth Rate, 2000–2009 (%)	
	Single-Family Unit	Multi-family Unit	Single-Family Unit	Multi-family Unit	Single-Family Unit	Multi-family Unit
<b>Yolo County</b>						
Davis	12,925	10,307	13,995	11,595	0.9	1.4
West Sacramento	7,585	3,017	12,666	4,307	7.4	4.8
Woodland	11,899	4,541	13,760	5,218	1.7	1.7
<b>Yuba County</b>						
Linda*	–	–	–	–	–	–
Marysville	3,105	1,886	3,129	1,885	0.1	0.0
Olivehurst*	–	–	–	–	–	–

Source: DOF 2009a

Note:

\* Data unavailable from California Department of Finance

**Delta and Suisun Marsh** The Delta and Suisun Marsh geographic area consists of a smaller number of counties than the Sacramento and San Joaquin Valley and foothills. This geographic area includes the counties that immediately surround the Delta and Suisun Marsh: Alameda, Contra Costa, Sacramento, San Joaquin, Solano, and Yolo. All of these counties are also partially located within the Sacramento and San Joaquin Valley and foothills area of the Extended SPA; therefore, the tabular information summarized below is included in Tables 3.16-1 through 3.16-10 under “Sacramento and San Joaquin Valley and Foothills,” above.

*Population* Of the six counties located within the Delta and Suisun Marsh, Alameda, Sacramento, and Contra Costa counties were the most populated counties in 2000 and 2010. By 2030, these counties are projected to remain the three most populated in this geographic area, although Contra Costa County is projected to experience a higher growth rate than Sacramento and Alameda counties. Between 2000 and 2010, the counties with the highest average annual growth rates were San Joaquin, Yolo, and Sacramento (2.2 percent, 1.9 percent, and 1.7 percent, respectively). The counties within the Delta and Suisun Marsh that experienced the lowest average annual growth rate between 2000 and 2010 were Alameda and Solano, both at 0.8 percent (Table 3.16-1). California as a whole experienced an average annual growth rate of 1.3 percent, which was less than the growth rates of San Joaquin, Yolo, and Sacramento counties.

It is projected that California as a whole will experience a 1.4 percent average annual growth rate from 2010 to 2030 (Table 3.16-1). This rate is higher than the projected growth rates for Alameda and Sacramento counties, but lower than those for the other four counties that compose the Delta and Suisun Marsh (Contra Costa, San Joaquin, Solano, and Yolo).

Table 3.16-2 (presented above under “Sacramento and San Joaquin Valley and Foothills”) shows the population for cities and communities in the Sacramento and San Joaquin Valley and foothills that had populations of more than 10,000 residents in 2000. Several of those cities—the cities in Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties—are in counties that are also partially located within the Delta and Suisun Marsh. As described previously, all of those cities experienced some amount of average annual growth between 2000 and 2010.

The six counties located within the Delta and Suisun Marsh vary slightly in their distribution of major age groupings, all exhibiting distributions similar to the statewide average (Table 3.16-3). San Joaquin (8.0 percent) and Sacramento and Solano counties (7.3 percent each) have the highest percentages of residents 5 years of age or younger; these percentages are either higher than or equal to the corresponding percentage for California as a whole (7.3 percent). Yolo and Alameda counties have the smallest percentages of residents 5 years of age or younger, at 6.5 percent and 6.8 percent, respectively. In contrast with the trends for other geographic areas, these counties are not necessarily the counties with the largest percentages of residents more than 65 years of age. The county with the largest percentage of senior citizens is Contra Costa (11.3 percent), followed by Sacramento and San Joaquin (11.1 percent and 10.6 percent, respectively); all of these percentages are similar to the corresponding percentage for California as a whole (10.6 percent).

The median ages for the six counties within the Delta and Suisun Marsh are generally near that for the state as a whole; the median age in four of these six counties is older than 33.3. Of the counties within this geographic area, the counties with the oldest median ages are Contra Costa and Alameda (36.4 and 34.5, respectively); Yolo County has the lowest median age (29.5) (Table 3.16-3).

*Employment* Of the six counties located within the Delta and Suisun Marsh (Alameda, Contra Costa, Sacramento, San Joaquin, Solano, and Yolo), Alameda County had the largest labor force in both 2000 and 2009, followed closely by Sacramento and Contra Costa counties. The average annual growth rate for the labor force has been highest in San Joaquin County (1.7 percent) and Yolo County (also 1.7 percent), with Sacramento County (1.4 percent) close behind. Only Alameda County experienced a

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loss in labor force between 2000 and 2009, at -0.1 percent. Alameda County also experienced a negative rate of employment from 2000 to 2009, at -0.9 percent (Table 3.16-4).

Employment rates sharply decreased nationally between 2000 and 2009, and California as a whole experienced an unemployment rate of 11.4 percent in 2009, an increase of 6.5 percent from 2000. Of the six counties located within the Delta and Suisun Marsh, only one (San Joaquin County) has an unemployment rate higher than that of the state as a whole (Table 3.16-4). The counties in this geographic area that experienced the greatest change in relative unemployment between 2000 and 2009 were San Joaquin, Alameda, and Sacramento (8.5 percent, 7.1 percent, and 7.0 percent, respectively). All counties experienced some growth in relative unemployment, but Solano and Yolo counties had the lowest rates at 6.2 percent (Table 3.16-4).

With regard to industries present within the Delta and Suisun Marsh, there is a slight variation between counties; the six counties show industry distributions similar to that of the state as a whole. For example, Solano, Yolo, and San Joaquin counties each have proportions of agricultural jobs between 1.3 and 5.8 percent, which is similar to the statewide percentage of 2.5 percent (Table 3.16-5). The counties with the largest percentages of manufacturing and construction jobs are Alameda, Solano, and Contra Costa (16.3 percent, 15.0 percent, and 13.7 percent, respectively). These percentages are similar to the statewide percentage of 14.6 percent. The transportation industries are of relative importance in San Joaquin County (19.5 percent), which has a substantially higher percentage of jobs in these industries than are seen elsewhere within the Delta and Suisun Marsh and in the state as a whole (3.3 percent). Trade industries are of the highest relative number in Solano County (17.3 percent), but the greatest absolute number of jobs in the trade industries is present in Alameda County. In Yolo County, government jobs make up a relatively high number of jobs proportionally (36.1 percent) (Table 3.16-5).

Statewide, the industry with the highest proportion of workers is the service field. However, four of the six counties within the Delta and Suisun Marsh have relative rates higher than that of the state: Contra Costa, Alameda, Sacramento, and Solano (47.1 percent, 39.4 percent, 37.1 percent, and 36.1 percent, respectively) (Table 3.16-5).

Though based on 1999 data because 2010 U.S. Census data were not available at the time of writing, key economic indicators show that the counties within the Delta and Suisun Marsh with the highest per capita incomes are Contra Costa and Alameda, and the counties with the lowest per capita incomes are San Joaquin and Yolo (Table 3.16-6). In general,

counties with high per capita incomes have similarly high median household incomes and counties with low per capita incomes have similarly low median household incomes. The counties in this geographic area with the most people living in poverty are Sacramento, Alameda, and San Joaquin. The counties with the highest proportions of low-income residents are Yolo, San Joaquin, and Sacramento (18.4 percent, 17.7 percent, and 14.1 percent, respectively). The proportions of low-income residents in Yolo and San Joaquin counties exceed the statewide average of 14.2 percent (Table 3.16-6).

*Housing* The counties within the Delta and Suisun Marsh that had the most housing units in 2000 were Alameda, Sacramento, and Contra Costa. In 2009, the same counties still had the most housing units, with average annual growth rates ranging between 0.7 and 1.9 percent. The counties in this geographic area with the fewest housing units in 2000 and 2009 were Yolo, Solano, and San Joaquin, with average annual growth rates of 1.5 to 2.3 percent. The county with the lowest average annual rate of housing growth between 2000 and 2009 was Alameda (0.7 percent); San Joaquin County had the highest average annual rate of housing growth between 2000 and 2009 (2.3 percent) (Table 3.16-7). The rate for the state as a whole was 1.2 percent, and five of the six counties in the Delta and Suisun Marsh experienced average annual growth rates higher than that between 2000 and 2009.

Table 3.16-8 (presented above under “Sacramento and San Joaquin Valley and Foothills”) shows the total housing units and housing growth rates for the cities and other communities within the Sacramento and San Joaquin Valley and foothills. Several of those cities—the cities in Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties—are in counties that are also partially located within the Delta and Suisun Marsh. Of those cities, the lowest average annual growth rates were mainly in Contra Costa County, although Citrus Heights in Sacramento County had the smallest growth rate overall. Folsom (Sacramento County) and Tracy (San Joaquin County) had the highest growth rates, at 4.8 and 4.6 percent, respectively.

Of the six counties in this geographic area, Alameda and Sacramento counties had the largest number of single-family homes in 2000 and 2009, respectively. In both 2000 and 2009, the largest number of multifamily homes was in Alameda County. With regard to average annual growth rates between 2000 and 2009 for single-family homes, San Joaquin led all counties in the Delta and Suisun Marsh area with 2.9 percent, followed by Yolo and Sacramento (2.5 percent and 2.1 percent, respectively) (Table 3.16-9).

All counties located within the Delta and Suisun Marsh experienced at least a small amount of average annual growth in not only single-family housing, but also multifamily housing. This contrasts with other geographic areas within the study area, where some counties did not experience much growth in multifamily housing. The counties within the Delta and Suisun Marsh that experienced the highest average annual growth rate in multifamily housing were Yolo (1.9 percent) and Sacramento and Solano (1.5 percent each) (Table 3.16-9).

Table 3.16-10 (presented above under “Sacramento and San Joaquin Valley and Foothills”) shows housing trends for the cities and other communities within the Sacramento and San Joaquin Valley and foothills. Some of those cities are in counties also located within the Delta and Suisun Marsh. Of those cities, Sacramento had the largest number of both single-family and multifamily units in both 2000 and 2009. Average annual growth rates for single-family homes generally ranged between less than 1 percent and 3.9 percent, with only one city (Tracy) exceeding 5 percent growth. The average annual growth rate for multifamily homes reached 9.9 percent in Folsom, but otherwise did not exceed 3 percent in this geographic area.

**Sacramento and San Joaquin Valley Watersheds** The Sacramento and San Joaquin Valley watersheds comprise 34 counties in central and northern California. Most (28) of these counties are also partially located within the Sacramento and San Joaquin Valley and foothills, described previously. For the purposes of this analysis, counties within the Sacramento and San Joaquin Valley watersheds were defined as those areas that may be affected socioeconomically by impacts on this region.

*Population* Table 3.16-11 shows the population and population trends for the counties considered part of the Sacramento and San Joaquin Valley watersheds that are not also partially located within the Sacramento and San Joaquin Valley and foothills. See Table 3.16-1 for population and population trends for the counties that are partially located within both geographic areas.

**Table 3.16-11. Population and Growth Rates, 2000–2030—Counties in the Sacramento and San Joaquin Valley Watersheds and Statewide\***

County	Population			Growth Rates (%)	
	2000	2010	2030 (Projected)	2000–2010	2010–2030 (Projected)
Alpine	1,261	1,189	1,462	-0.6	1.1
Kings	130,202	156,289	250,516	2.0	3.0
Napa	125,146	138,917	191,734	1.1	1.9
San Benito	53,927	58,388	103,340	0.8	3.8
Sierra	3,701	3,303	3,290	-1.1	0.0
Siskiyou	44,634	46,010	55,727	0.3	1.1
<b>California Total</b>	<b>34,105,437</b>	<b>38,648,090</b>	<b>49,240,891</b>	<b>1.3</b>	<b>1.4</b>

Sources: *DOF 2007, 2010a*

Note:

\* Twenty-eight of the 34 counties within the Sacramento and San Joaquin Valley watersheds are also located within the Sacramento and San Joaquin Valley and foothills: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tuolumne, Yolo, and Yuba counties. See Table 3.16-1 for population statistics and growth rates for those counties.

Of the counties in the Sacramento and San Joaquin Valley watersheds (including the counties that are also partially located within the Sacramento and San Joaquin Valley and foothills), Alameda, Sacramento, and Contra Costa counties were the most populated in both the year 2000 and 2010 (Tables 3.16-1 and 3.16-11). By 2030, Sacramento and Alameda counties are projected to remain the two most populated counties in the Sacramento and San Joaquin Valley watersheds, although Fresno County is expected to slightly pass Contra Costa County in terms of population by 2030. Sacramento County is projected to experience a higher growth rate growth than Alameda County, ultimately having a higher total population by 2030 (Table 3.16-1). Between 2000 and 2010, the counties with the highest average annual growth rates were Placer, Sutter, and Madera counties (3.8 percent, 2.5 percent, and 2.3 percent, respectively). The counties with the lowest average annual growth rates between 2000 and 2010 were Sierra, Alpine, and Plumas counties (-1.1 percent, -0.6 percent, and -0.2 percent, respectively) (Table 3.16-1). California as a whole experienced an average annual growth rate of 1.3 percent, which was less than the growth rates for 13 of the 34 counties in the Sacramento and San Joaquin Valley watersheds (Tables 3.16-1 and 3.16-11). The same growth patterns described above are present here as well.

It is projected that California as a whole will experience a 1.4 percent average annual growth rate from 2010 to 2030. This rate is lower than the projected growth rates for 26 of the 34 counties in the Sacramento and San

Joaquin Valley watersheds (Tables 3.16-1 and 3.16-11), suggesting that the population projected for California may reside largely in the counties located within the Sacramento and San Joaquin Valley watersheds. The counties projected to have average annual growth rates below the rate of the entire state of California are generally rural counties (e.g., Sierra), or counties with an already present, relatively dense urban population (e.g., Sacramento).

Table 3.16-2 (presented above under “Sacramento and San Joaquin Valley and Foothills,” above) shows the population for cities and other communities in the Sacramento and San Joaquin Valley watersheds that had populations of more than 10,000 residents in 2000. All of these cities are located within counties that are partially located within both the Sacramento and San Joaquin Valley and foothills and the Sacramento and San Joaquin Valley watersheds. Fresno, Sacramento, and Stockton—located in Fresno, Sacramento, and San Joaquin counties, respectively—are the largest of these cities. All cities included in Table 3.16-2 experienced some amount of average annual growth between 2000 and 2010, with many experiencing growth between 1.0 and 2.0 percent. The cities that experienced the slowest growth were Citrus Heights (0.4 percent) and the cities of Vacaville and Davis (both at 1.0 percent). The city with the fastest growth, by far, was Elk Grove (14.0 percent), located in Sacramento County.

Table 3.16-12 shows the age distribution for the six counties located within the Sacramento and San Joaquin Valley watersheds that are not also partially located within the Sacramento and San Joaquin Valley and foothills. See Table 3.16-3 for the age distribution for the counties that are partially located within both geographic areas.

The counties within the Sacramento and San Joaquin Valley watersheds vary widely in their distribution of major age groupings; however, the data show rural counties with a higher proportion of older residents, while counties with the highest proportions of young residents experienced the most growth or otherwise have growing populations. Of the counties in this geographic area (including the counties that are also partially located within the Sacramento and San Joaquin Valley and foothills), the counties with the largest percentages of residents 5 years of age or younger are Merced, San Benito, and Fresno (8.9, 8.8, and 8.5 percent, respectively), all of which exceed the corresponding percentage for California as a whole (7.3 percent) (Tables 3.16-3 and 3.16-12). The counties with the smallest percentages of residents 5 years of age or younger are Sierra, Amador, Calaveras, and Mariposa (4.1, 4.2, 4.4, and 4.4 percent, respectively) (Table 3.16-3). Conversely, these counties are among those with the largest percentages of residents more than 65 years of age, with percentages



exceeding 17.0 percent. The counties with the largest percentages of senior citizens are Lake, Tuolumne, and Calaveras (19.5 percent, 18.5 percent, and 18.2 percent, respectively), all of which substantially exceed the corresponding percentage for California as a whole (10.6 percent) (Table 3.16-3).

The median ages for counties in the Sacramento and San Joaquin Valley watersheds are generally older than that for the state as a whole, with 25 of the 34 counties exhibiting a median age older than 33.3 (Tables 3.16-3 and 3.16-12). The county with the oldest median age is Calaveras (44.6), while the county with the youngest median age is Merced (29).

**Employment** Table 3.16-13 shows the employment trends for the six counties within the Sacramento and San Joaquin Valley watersheds that are not also partially located within the Sacramento and San Joaquin Valley and foothills. See Table 3.16-4 for the employment trends for the counties that are partially located within both geographic areas. These data show the labor force and number of employed individuals for 2000 and 2009, as well as unemployment rates for 2000 and 2009. The labor force was largest in Alameda County in both 2000 and 2009, followed by Alameda and Contra Costa counties (Table 3.16-4). The labor force has shown the most average annual growth in Placer County (3.9 percent), with Colusa and Kings counties close behind (2.7 percent each). A handful of counties experienced a loss in labor force between 2000 and 2009, however; among them were Alpine, San Benito, Sierra, and Alameda counties (-1.8 percent, -1.0 percent, and -1.0 percent, and -0.1 percent, respectively) (Tables 3.16-4 and 3.16-13). Each one of these counties also experienced a negative rate of employment from 2000 to 2009, with Alpine County leading all counties in the Sacramento and San Joaquin Valley watersheds with average annual growth of -2.4 percent (Table 3.16-13).

Employment rates sharply decreased nationally between 2000 and 2009, and California as a whole experienced an unemployment rate of 11.4 percent in 2009, an increase of 6.5 percent from 2000. In 2009, of the 34 counties in the Sacramento and San Joaquin Valley watersheds, 24 had unemployment rates higher than that of the state as a whole (Tables 3.16-4 and 3.16-13). Of these, Colusa, Yuba, and Merced counties (18.3 percent, 17.3 percent, and 17.2 percent, respectively) had the highest unemployment rates (Table 3.16-4). The counties that experienced the greatest change in relative unemployment between 2000 and 2009 were Sierra, Yuba, and Plumas counties (9.4 percent, 9.4 percent, and 9.3 percent, respectively). All counties experienced some growth in relative unemployment, but Mariposa County had the lowest rate at 4.4 percent.

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**Table 3.16-12. Population by Age of Residents, 2000—Counties in the Sacramento and San Joaquin Valley Watersheds and Statewide\***

County	Total Population	Ages of Residents								Median Age
		< 5 Years		5–19 Years		20–64 Years		65+ Years		
		Number of Residents	Percentage of Population (%)	Number of Residents	Percentage of Population (%)	Number of Residents	Percentage of Population (%)	Number of Residents	Percentage of Population (%)	
Alpine	1,208	61	5.0	252	20.9	775	64.2	120	9.9	39.3
Kings	129,461	10,437	8.1	31,151	24.1	78,316	60.5	9,557	7.4	30.2
Napa	124,279	7,563	6.1	25,760	20.7	71,870	57.8	19,086	15.4	38.3
San Benito	53,234	4,705	8.8	13,933	26.2	30,281	56.9	4,315	8.1	31.4
Sierra	3,555	147	4.1	752	21.2	2,027	57.0	629	17.7	43.7
Siskiyou	44,301	2,260	5.1	9,518	21.5	24,483	55.3	8,040	18.1	43.0
<b>California Total</b>	<b>33,871,648</b>	<b>2,486,981</b>	<b>7.3</b>	<b>7,747,590</b>	<b>22.9</b>	<b>20,041,419</b>	<b>59.2</b>	<b>3,595,658</b>	<b>10.6</b>	<b>33.3</b>

Source: U.S. Census Bureau 2000a (SF1)

Note:

\* Twenty-eight of the 34 counties within the Sacramento and San Joaquin Valley watersheds are also located within the Sacramento and San Joaquin Valley and foothills: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tuolumne, Yolo, and Yuba counties. See Table 3.16-3 for the distribution of residents' ages for those counties.

**Table 3.16-13. Employment Trends, 2000 and 2009—Counties in the Sacramento and San Joaquin Valley Watersheds and Statewide\***

County	2000			2009			Average Annual Growth Rate, 2000–2009 (%)		Change in Unemployment, 2000–2009 (%)
	Labor Force	Employed	Unemployment Rate (%)	Labor Force	Employed	Unemployment Rate (%)	Labor Force	Employed	
Alpine	560	520	6.3	470	410	14.0	-1.8	-2.4	7.7
Kings	49,200	44,300	10.0	61,200	52,200	14.6	2.7	2.0	4.6
Napa	66,600	64,200	3.6	75,600	69,100	8.7	1.5	0.8	5.1
San Benito	27,500	25,800	6.0	25,100	21,500	14.4	-1.0	-1.9	8.4
Sierra	1,800	1,700	5.8	1,630	1,380	15.2	-1.0	-2.1	9.4
Siskiyou	19,140	17,700	7.5	19,660	16,750	14.8	0.3	-0.6	7.3
<b>California Total</b>	<b>16,857,600</b>	<b>16,024,300</b>	<b>4.9</b>	<b>18,250,200</b>	<b>16,163,900</b>	<b>11.4</b>	<b>0.9</b>	<b>0.1</b>	<b>6.5</b>

Source: EDD 2010a

Note:

\* Twenty-eight of the 34 counties within the Sacramento and San Joaquin Valley watersheds are also located within the Sacramento and San Joaquin Valley and foothills: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tuolumne, Yolo, and Yuba counties. See Table 3.16-4 for population statistics and growth rates for those counties.

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Table 3.16-14 presents the employment percentages by major industry for the six counties in the Sacramento and San Joaquin Valley watersheds that are not also partially located within the Sacramento and San Joaquin Valley and foothills. See Table 3.16-5 for the employment percentages by major industry for the counties that are partially located within both geographic areas. For each county, these data show the number and percentage of jobs in the agricultural, goods-producing, transportation, trade, information, financial, service, and governmental industries. There is a wide variation between counties; some counties show large proportions of jobs in agriculture, while others have large proportions in government. For example, Colusa, Glenn, and Madera counties each have proportions of agricultural jobs between 30.2 and 22.7 percent (Table 3.16-5).

Of the counties that are wholly or partially located within the Sacramento and San Joaquin Valley watersheds, the counties with the highest proportions of manufacturing and construction jobs are San Benito, Napa, and Stanislaus counties (24.4 percent, 22.9 percent, and 18.6 percent, respectively). The transportation industries are of relative importance in San Joaquin and Modoc counties (19.5 percent and 14.8 percent, respectively) (Tables 3.16-5 and 3.16-14). Trade industries are of the greatest relative importance in Sutter County (20.3 percent), but the greatest absolute number of jobs in the trade industries is present in Alameda County (Table 3.16-5). In some small counties, government jobs account for a relatively large portion of jobs, including Lassen County, where 61.3 percent of all jobs are with the government (Table 3.16-14).

Statewide, the industry with the largest proportion of workers is the service field, although many counties within the Sacramento and San Joaquin Valley watersheds have percentages greater than that of the state as a whole. These counties include several of those with small overall populations: Alpine, Sierra, and Mariposa (69.0 percent, 64.3 percent, and 49.2 percent, respectively) (Tables 3.16-5 and 3.16-14).

Table 3.16-15 presents key economic indicators for the six counties within the Sacramento and San Joaquin Valley watersheds that are not also partially located within the Sacramento and San Joaquin Valley and foothills, as well as economic indicators for California as a whole. See Table 3.16-6 for the employment percentages by major industry for the counties that are partially located within both geographic areas. Indicators shown are per capita income, median household income, and the number and proportion of residents living below the poverty level. Though based on 1999 data because 2010 U.S. Census data were not available at the time of writing, Tables 3.16-6 and 3.16-15 show that the counties wholly or partially within this geographic area with the highest per capita incomes are

Contra Costa, Placer, and Alameda; the counties with the lowest per capita incomes are Glenn, Yuba, and Merced.

In general, counties with high per capita incomes have similarly high median household incomes. However, low median household incomes are present in Modoc and Lake counties, both of which have middling per capita incomes when compared to other counties in the Sacramento and San Joaquin Valley watersheds (Tables 3.16-6 and 3.16-15).

The counties with the most people living in poverty are Fresno, Sacramento, and Alameda. The counties with the highest proportions of low-income residents also include Fresno, as well as Merced and Modoc (22.9 percent, 21.7 percent, and 21.5 percent, respectively). The counties with the lowest percentages of low-income residents are Placer, El Dorado, and Contra Costa (5.8 percent, 7.1 percent, and 7.6 percent, respectively).

**Housing** Table 3.16-16 presents the total number of housing units and growth rates for the six counties within the Sacramento and San Joaquin Valley watersheds that are not also partially located within the Sacramento and San Joaquin Valley and foothills, as well as the number of housing units for the State of California as a whole. See Table 3.16-7 for the number of housing units and growth rates for the counties that are partially located within both geographic areas. Of the counties wholly or partially located within the Sacramento and San Joaquin Valley watersheds, the counties with the most housing units in 2000 were Alameda, Sacramento, and Contra Costa. In 2009, the same counties still had the most housing units, with average annual growth between 0.7 and 1.9 percent (Table 3.16-7). The counties with the fewest housing units in 2000 and 2009 were Alpine, Sierra, and Modoc, with average annual growth rates for these counties at 0.5 to 2.0 percent (Table 3.16-16). The county with the slowest average annual rate of housing growth between 2000 and 2009 was Sierra (0.5 percent); Placer County had the fastest average annual rate of housing growth between 2000 and 2009 (4.3 percent). The rate for the state as a whole was 1.2 percent, and 25 of the 34 counties in the Sacramento and San Joaquin Valley watersheds experienced average annual growth rates higher than that between 2000 and 2009 (Tables 3.16-7 and 3.16-16). In general, counties in rural areas experienced a smaller amount of average annual growth, although there were some exceptions (e.g., Alameda County).

**Table 3.16-14. Employment by Industry, 2008—Counties in the Sacramento and San Joaquin Valley Watersheds and Statewide\***

County	Agriculture		Manufacturing and Construction		Transportation, Utilities, and Warehousing		Trade		Information		Financial, Insurance, and Real Estate Services		Services		Government		Total	
	Number	Percentage of County (%)	Number	Percentage of County (%)	Number	Percentage of County (%)	Number	Percentage of County (%)	Number	Percentage of County (%)	Number	Percentage of County (%)	Number	Percentage of County (%)	Number	Percentage of County (%)	Number	Percentage of County (%)
Alpine	0	0.0	30	3.0	0	0.0	0	0.0	0	0.0	0	0.0	690	69.0	280	28.0	1,000	100.0
Kings	6,700	15.1	6,300	14.2	900	2.0	4,700	10.6	300	0.7	1,100	2.5	8,900	20.0	15,500	34.9	44,400	100.0
Napa	4,900	7.0	16,000	22.9	1,700	2.4	7,700	11.0	700	1.0	2,600	3.7	25,600	36.7	10,600	15.2	69,800	100.0
San Benito	2,300	14.0	4,000	24.4	200	1.2	2,100	12.8	100	0.6	400	2.4	4,300	26.2	3,000	18.3	16,400	100.0
Sierra	20	1.4	50	3.5	0	0.0	0	0.0	0	0.0	0	0.0	920	64.3	440	30.8	1,430	100.0
Siskiyou	620	4.5	1,420	10.3	520	3.8	1,970	14.3	220	1.6	390	2.8	4,530	32.8	4,140	30.0	13,810	100.0
<b>California Total</b>	<b>389,300</b>	<b>2.5</b>	<b>2,241,800</b>	<b>14.6</b>	<b>504,600</b>	<b>3.3</b>	<b>2,344,400</b>	<b>15.3</b>	<b>475,500</b>	<b>3.1</b>	<b>850,300</b>	<b>5.5</b>	<b>6,045,800</b>	<b>39.3</b>	<b>2,518,900</b>	<b>16.4</b>	<b>15,370,600</b>	<b>100.0</b>

Source: EDD 2010a

Note:

\* Twenty-eight of the 34 counties within the Sacramento and San Joaquin Valley watersheds are also located within the Sacramento and San Joaquin Valley and foothills: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tuolumne, Yolo, and Yuba counties. See Table 3.16-5 for employment by industry for those counties.

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**Table 3.16-15. Income and Poverty Levels, 1999—Counties in the Sacramento and San Joaquin Valley Watersheds and Statewide\***

County	Income Levels		Residents Living Below Poverty Line	
	Per Capita	Median Household	Number of Persons	Percentage of Population
Alpine	\$24,431	\$41,875	232	19.5
Glenn	\$14,069	\$32,107	4,729	18.1
Kings	\$15,848	\$35,749	21,307	19.5
Napa	\$26,395	\$51,738	9,913	8.3
San Benito	\$20,932	\$57,469	5,241	10.0
Sierra	\$18,815	\$35,827	397	11.3
Siskiyou	\$17,570	\$29,530	8,109	18.6
<b>California Total</b>	<b>\$22,711</b>	<b>\$47,493</b>	<b>4,706,130</b>	<b>14.2</b>

Source: U.S. Census Bureau 2000b (SF3)

Note:

\* Twenty-eight of the 34 counties within the Sacramento and San Joaquin Valley watersheds are also located within the Sacramento and San Joaquin Valley and foothills: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tuolumne, Yolo, and Yuba counties. See Table 3.16-6 for income and poverty levels for those counties.

**Table 3.16-16. Number of Housing Units and Growth Rates, 2000 and 2009—Counties in the Sacramento and San Joaquin Valley Watersheds and Statewide\***

County	Housing Units		Average Annual Growth Rate, 2000–2009 (%)
	2000	2009	
Alpine	1,514	1,790	2.0
Kings	36,563	42,484	1.8
Napa	48,554	54,180	1.3
San Benito	16,499	17,780	0.9
Sierra	2,202	2,292	0.5
Siskiyou	21,947	24,126	1.1
<b>California Total</b>	<b>12,214,550</b>	<b>13,530,719</b>	<b>1.2</b>

Source: DOF 2009a

Note:

\* Twenty-eight of the 34 counties within the Sacramento and San Joaquin Valley watersheds are also located within the Sacramento and San Joaquin Valley and foothills: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tuolumne, Yolo, and Yuba counties. See Table 3.16-7 for the number of housing units and growth rates for those counties.

Table 3.16-8 (presented under “Sacramento and San Joaquin Valley and Foothills,” above) shows the total housing units and the rate of housing unit increase for the cities and communities with greater than 10,000 residents within the Sacramento and San Joaquin Valley watersheds, all of which are also located within the Sacramento and San Joaquin Valley and foothills. As was the case for total population, the cities of Sacramento, Fresno, and Stockton have the largest number of housing units. The average annual growth rates for these cities were found to be 2.1, 1.5, and 2.0 percent, respectively. The cities with the lowest average annual housing growth rates were generally concentrated in Contra Costa County, with the city of Antioch exhibiting a rate of 1.4 percent, although the city with the lowest average annual growth rate overall was Citrus Heights in Sacramento County. The largest average annual growth rate between 2000 and 2009 was in Chico, located in Butte County, although five other cities within the geographic area experienced housing unit growth rates of 4.0 percent or more between 2000 and 2009.

Table 3.16-17 shows the housing-type trends for 2000 and 2009 for the six counties in the Sacramento and San Joaquin Valley watersheds that are not also partially located within the Sacramento and San Joaquin Valley and foothills. See Table 3.16-9 for the number of housing units and growth rates for the counties that are partially located within both geographic areas. Of the counties wholly or partially located within the Sacramento and San Joaquin Valley watersheds, Alameda and Sacramento counties had the largest number of single-family homes in 2000 and 2009, respectively.

In 2000 and 2009, the largest numbers of multifamily homes were in Alameda County. With regard to average annual growth rates between 2000 and 2009 for single-family homes, Placer County led all counties with 4.6 percent, followed by Yuba and Merced counties (3.6 percent and 3.3 percent, respectively) (Table 3.16-9).

All counties in the Sacramento and San Joaquin Valley watersheds experienced at least a small amount of average annual growth in single-family housing, but several counties experienced little to no growth in multifamily housing between 2000 and 2009: Lassen, Mariposa, Modoc, Plumas, Sierra, and Yuba (Tables 3.16-9 and 3.16-17). The counties that experienced the largest average annual growth rates in multifamily housing were Placer (4.0 percent); Amador (2.8 percent); and Colusa, Lake, and Nevada counties (2.6 percent each) (Table 3.16-9). The same growth patterns described above are present for these counties as well.

Table 3.16-10 (presented under “Sacramento and San Joaquin Valley and Foothills,” above) shows housing trends for the cities and communities in the Sacramento and San Joaquin Valley watersheds for 2000 and 2009. All

of the cities are located within counties that are partially located within both the Sacramento and San Joaquin Valley and foothills and the Sacramento and San Joaquin Valley watersheds. As was the case for total housing units in general, cities with the highest numbers of single-family and multifamily units are Sacramento, Fresno, and Stockton. Sacramento and Fresno experienced average annual growth rates for single-family housing near 2.0 percent, and the average annual growth rate for Stockton was 2.8 percent. Stockton had a lower average annual growth rate for multifamily housing, however, at 0.4 percent. The city with the highest average annual growth rates for single-family housing was Chico, while the city with the highest average annual growth rates in multifamily housing was Folsom, with a rate of 9.9 percent. In general, however, average annual growth rates for single-family homes were generally between 0.5 and 5.0 percent, with only a handful of cities exhibiting rates greater than 5.0 percent. Growth of multifamily housing was similar, although most cities had smaller growth rates for multifamily housing than for single-family housing. The cities of Roseville and Chico (6.0 percent and 3.8 percent, respectively) had the second and third highest average annual growth rates for multifamily housing, behind Folsom.

#### ***SoCal/Coastal CVP/SWP Service Areas***

The SoCal/coastal CVP/SWP service areas are generally located west and south of the other geographic areas within the study area. There is substantial overlap of county boundaries across the proposed program's geographic study areas. Eight counties within the Sacramento and San Joaquin Valley watersheds are also part of the SoCal/coastal CVP/SWP service areas: Alameda, Contra Costa, Fresno, Kings, Napa, San Benito, Sierra, and Solano counties. (Some of those counties—Alameda, Contra Costa, Fresno, and Solano—are also partially located within the Sacramento and San Joaquin Valley and foothills.) Population, employment, and housing data for these counties are presented in the previous section on the Sacramento and San Joaquin Valley watersheds are not duplicated herein. The SoCal/coastal CVP/SWP service areas also include another 14 counties that are not located within any other geographic area within the study area: Imperial, Kern, Los Angeles, Monterey, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Santa Clara, Santa Cruz, Tulare, and Ventura.

As stated previously at the beginning of this section of the PEIR, none of the management activities included in the proposed program would be implemented in the SoCal/coastal CVP/SWP service areas, and implementation of the proposed program would not result in long-term reductions in water deliveries to these service areas. Given these conditions, the program would not have any substantial effects on population, employment, and housing in the counties of the SoCal/coastal

CVP/SWP service areas, and the indirect effects would be minor; therefore, fewer data and a less rigorous analysis are presented below.

**Table 3.16-17. Housing Unit Types and Growth Rates, 2000 and 2009—Counties in the Sacramento and San Joaquin Valley Watersheds and Statewide\***

County	2000		2009		Average Annual Growth Rate, 2000–2009 (%)	
	Single-Family Unit	Multi-family Unit	Single-Family Unit	Multi-family Unit	Single-Family Unit	Multi-family Unit
Alpine	887	565	1,087	641	2.5	1.5
Kings	27,537	6,948	32,704	7,507	2.1	0.9
Napa	35,778	8,845	39,994	10,195	1.3	1.7
San Benito	13,674	1,951	14,845	2,058	1.0	0.6
Sierra	1,859	110	1,950	110	0.5	0.0
Siskiyou	15,889	2,348	17,317	2,640	1.0	1.4
<b>California Total</b>	<b>7,815,035</b>	<b>3,829,827</b>	<b>8,720,779</b>	<b>4,213,013</b>	<b>1.3</b>	<b>1.1</b>

Source: DOF 2009a

Note:

\* Twenty-eight of the 34 counties within the Sacramento and San Joaquin Valley watersheds are also located within the Sacramento and San Joaquin Valley and foothills: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tuolumne, Yolo, and Yuba counties. See Table 3.16-9 for housing unit types and growth rates for those counties.

**Population** Table 3.16-18 shows the population and growth rates for the 14 counties in the SoCal/coastal CVP/SWP service areas that are not located within any other geographic area within the study area. See Tables 3.16-1 and 3.16-11 for population and growth rates for counties in the SoCal/coastal CVP/SWP service areas that are also partially located within other geographic areas.

**Table 3.16-18. Population and Growth Rates, 2000–2030—Counties in the SoCal/Coastal CVP/SWP Service Areas and Statewide\***

County	Population			Average Annual Growth Rates (%)	
	2000	2010	2030 (Projected)	2000–2010	2010–2030 (Projected)
Imperial	143,763	183,029	283,693	2.7	2.7
Kern	665,519	839,587	1,352,627	2.6	3.1
Los Angeles	9,578,960	10,441,080	11,920,289	0.9	0.7
Monterey	404,031	435,878	529,145	0.8	1.1
Orange	2,863,834	3,166,461	3,705,322	1.1	0.9
Riverside	1,559,039	2,139,535	3,507,498	3.7	3.2
San Bernardino	1,721,942	2,073,149	2,958,939	2.0	2.1
San Diego	2,836,303	3,224,432	3,950,757	1.4	1.1
San Luis Obispo	248,322	273,231	316,613	1.0	0.8
Santa Barbara	401,115	434,481	484,570	0.8	0.6
Santa Clara	1,693,128	1,880,876	2,192,501	1.1	0.8
Santa Cruz	256,695	272,201	304,465	0.6	0.6
Tulare	369,873	447,814	742,969	2.1	3.3
Ventura	758,884	844,713	1,049,758	1.1	1.2
<b>California Total</b>	<b>34,105,437</b>	<b>38,648,090</b>	<b>49,240,891</b>	<b>1.3</b>	<b>1.4</b>

Sources: *DOF 2007, 2010a*

Note:

\* Eight of the 22 counties within the SoCal/coastal CVP/SWP service areas are also located within either the Sacramento and San Joaquin Valley and foothills or the Sacramento and San Joaquin Valley watersheds area, or both: Alameda, Contra Costa, Fresno, Kings, Napa, San Benito, Sierra, and Solano counties. See Tables 3.16-1 and 3.16-11 for population statistics and average annual growth rates for those counties.

Key:

CVP = Central Valley Project

SWP = State Water Project

**Employment** Table 3.16-19 shows the employment trends for the 14 counties within the SoCal/coastal CVP/SWP service areas that are not located within any other geographic area within the study area. See Tables 3.16-4 and 3.16-13 for counties in the SoCal/coastal CVP/SWP service areas that are also partially located within other geographic areas.

Table 3.16-20 presents key economic indicators for the 14 counties within the SoCal/coastal CVP/SWP service areas that are not located within any other geographic area within the study area. See Tables 3.16-6 and 3.16-15 for counties in the SoCal/coastal CVP/SWP service areas that are also partially located within other geographic areas.

**Housing** Table 3.16-21 presents the total number of housing units for the 14 counties within the SoCal/coastal CVP/SWP service areas that are also partially located within other geographic areas. See Tables 3.16-7 and

3.16-16 for counties in the SoCal/coastal CVP/SWP service areas that are also partially located within other geographic areas.

### **3.16.2 Regulatory Setting**

The following text summarizes federal, State, and regional and local laws and regulations pertinent to evaluation of the proposed program's impacts on population, employment, and housing.

#### ***Federal***

#### **The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970**

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 establishes a policy for the fair treatment of persons and businesses displaced as a result of federal actions (or action undertaken with federal financial assistance). This act is meant to ensure that no displaced persons suffer disproportionately and to minimize the hardship people may experience as a result of displacement.

#### ***State***

**California Government Code** Section 7260 of the California Government Code outlines the relocation benefits provided to persons and businesses if they are permanently displaced by the actions of a public entity. This section, also known as the California Relocation Statute, outlines the amount provided to renters that are displaced, as well as the kinds of businesses that are eligible for relocation assistance.

All California localities are required by Article 10.6 of the California Government Code (Sections 65580–65590) to adopt housing elements as part of their general plans and to submit draft and adopted elements to the California Department of Housing and Community Development (HCD) for review to ensure compliance with State law. HCD is required to review housing elements and to report its written findings within 60 days for a draft housing element (California Government Code, Section 65585(b)) and within 90 days for an adopted element (California Government Code, Section 65585(h)).

**Table 3.16-19. Employment Trends, 2000 and 2009—Counties in the SoCal/Coastal CVP/SWP Service Areas and Statewide\***

County	2000			2009			Average Annual Growth Rate, 2000–2008		Change in Unemployment, 2000–2009 (%)
	Labor Force	Employed	Unemployment Rate (%)	Labor Force	Employed	Unemployment Rate (%)	Labor Force	Employed	
Imperial	56,100	46,300	17.4	76,200	54,700	28.2	4.0	2.0	10.8
Kern	293,600	269,400	8.2	366,900	314,100	14.4	2.8	1.8	6.1
Los Angeles	4,677,300	4,424,900	5.4	4,896,100	4,328,600	11.6	0.5	-0.2	6.2
Monterey	203,200	188,200	7.4	216,600	190,900	11.9	0.7	0.2	4.5
Orange	1,481,100	1,429,100	3.5	1,594,200	1,451,000	9.0	0.8	0.2	5.5
Riverside	680,700	644,200	5.4	913,900	790,000	13.6	3.8	2.5	8.2
San Bernardino	739,400	704,000	4.8	864,300	751,600	13.0	1.9	0.8	8.3
San Diego	1,376,000	1,322,200	3.9	1,557,400	1,406,100	9.7	1.5	0.7	5.8
San Luis Obispo	122,500	117,500	4.0	137,600	125,300	9.0	1.4	0.7	4.9
Santa Barbara	202,400	193,600	4.4	221,200	202,700	8.4	1.0	0.5	4.0
Santa Clara	940,700	911,600	3.1	877,800	781,400	11.0	-0.7	-1.6	7.9
Santa Cruz	148,300	140,800	5.1	149,800	133,000	11.2	0.1	-0.6	6.1
Tulare	171,800	154,000	10.4	205,400	174,100	15.3	2.2	1.5	4.9
Ventura	392,700	374,900	4.5	431,300	388,200	10.0	1.1	0.4	5.5
<b>California Total</b>	<b>16,857,600</b>	<b>16,024,300</b>	<b>4.9</b>	<b>18,250,200</b>	<b>16,163,900</b>	<b>11.4</b>	<b>0.9</b>	<b>0.1</b>	<b>6.5</b>

Source: EDD 2010a

Note:

\* Eight of the 22 counties within the SoCal/coastal CVP/SWP service areas are also located within either the Sacramento and San Joaquin Valley and foothills or the Sacramento and San Joaquin Valley watersheds area, or both: Alameda, Contra Costa, Fresno, Kings, Napa, San Benito, Sierra, and Solano counties. See Tables 3.16-4 and 3.16-13 for employment trends for those counties.

Key:

CVP = Central Valley Project

SWP = State Water Project

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### 3.0 Environmental Setting, Impacts, and Mitigation Measures

**Table 3.16-20. Income and Poverty Levels, 1999—Counties in the SoCal/Coastal CVP/SWP Service Areas and Statewide\***

County	Income Levels		Residents Living Below Poverty Line	
	Per Capita	Median Household	Number of Persons	Percentage of Population
Imperial	13,239	31,870	29,681	22.6
Kern	15,760	35,446	130,949	20.8
Los Angeles	20,683	42,189	1,674,599	17.9
Monterey	20,165	48,305	51,692	13.5
Orange	25,826	58,820	289,475	10.3
Riverside	18,689	42,887	214,084	14.2
San Bernardino	16,856	42,066	263,412	15.8
San Diego	22,926	47,067	338,399	12.4
San Luis Obispo	21,864	42,428	29,775	12.8
Santa Barbara	23,059	46,677	55,086	14.3
Santa Clara	32,795	74,335	124,470	7.5
Santa Cruz	26,396	53,998	29,383	11.9
Tulare	14,006	33,983	86,572	23.9
Ventura	24,600	59,666	68,540	9.2
<b>California Total</b>	<b>\$22,711</b>	<b>\$47,493</b>	<b>4,706,130</b>	<b>14.2</b>

Source: U.S. Census Bureau 2000b (SF3)

Note:

\* Eight of the 22 counties within the SoCal/coastal CVP/SWP service areas are also located within either the Sacramento and San Joaquin Valley and foothills or the Sacramento and San Joaquin Valley watersheds area, or both: Alameda, Contra Costa, Fresno, Kings, Napa, San Benito, Sierra, and Solano counties. See Tables 3.16-6 and 3.16-15 for income and poverty levels for those counties.

Key:

CVP = Central Valley Project

SWP = State Water Project

**Table 3.16-21. Number of Housing Units and Growth Rates, 2000 and 2009—Counties in the SoCal/Coastal CVP/SWP Service Areas and Statewide\***

County	Housing Units		Average Annual Growth Rate, 2000–2009 (%)
	2000	2009	
Imperial	43,891	56,237	3.1
Kern	231,567	279,769	2.3
Los Angeles	3,270,906	3,418,698	0.5
Monterey	131,708	140,980	0.8
Orange	969,484	1,035,491	0.8
Riverside	584,674	780,112	3.7
San Bernardino	601,369	690,234	1.6
San Diego	1,040,149	1,149,647	1.2
San Luis Obispo	102,275	117,319	1.6
Santa Barbara	142,901	156,221	1.0
Santa Clara	579,329	626,659	0.9
Santa Cruz	98,873	104,749	0.7
Tulare	119,639	141,509	3.2
Ventura	251,711	277,895	1.2
<b>California Total</b>	<b>12,214,550</b>	<b>13,530,719</b>	<b>1.2</b>

Source: DOF 2009a

Note:

\* Eight of the 22 counties within the SoCal/coastal CVP/SWP service areas are also located within either the Sacramento and San Joaquin Valley and foothills or the Sacramento and San Joaquin Valley watersheds area, or both: Alameda, Contra Costa, Fresno, Kings, Napa, San Benito, Sierra, and Solano counties. See Tables 3.16-9 and 3.16-16 for housing units and average annual growth rates for those counties.

Key:

CVP = Central Valley Project

SWP = State Water Project

HCD’s Division of Housing Policy Development is responsible for administering the State housing element law, including reviewing local general plan housing elements (HCD 2011).

The California State Housing Element Law requires regional councils of governments to determine the existing and projected housing needs for people of all income levels. Many regional government councils conduct a regional housing needs assessment (RHNA) to determine the level of housing stock and to determine anticipated need based on projected growth. The purpose of the RHNA, in part, is to ensure that an adequate amount of low-income housing is available for low-income residents.

**Regional and Local**

Each of California’s counties, including those within the study area, has its own plans, ordinances, and other policies designed to protect and improve a

wide range of socioeconomic conditions. Specifically addressed in these plans, ordinances, and policies are employment opportunities for minorities and low-income populations and others, housing, economic diversification, and business activity in general. Should a place-based project be defined and pursued as part of the proposed program, and should the CEQA lead agency be subject to the authority of local jurisdictions, the applicable county and city policies and ordinances would be addressed in a project-level CEQA document as necessary.

#### **3.16.3 Analysis Methodology and Thresholds of Significance**

This section provides a program-level evaluation of the direct and indirect effects on population, employment, and housing of implementing management actions included in the proposed program. These proposed management actions are expressed as NTMAs and LTMA. The methods used to assess how different categories of NTMAs and LTMA could affect population, employment, and housing are summarized in “Analysis Methodology”; thresholds for evaluating the significance of potential impacts are provided in “Thresholds of Significance.” Potential effects related to each significance threshold are discussed in Section 3.16.4, “Environmental Impacts and Mitigation Measures for NTMAs,” and Section 3.16.5, “Environmental Impacts, Mitigation Measures, and Mitigation Strategies for LTMA.”

##### ***Analysis Methodology***

Impact evaluations were based on a review of the management actions proposed under the CVFPP, expressed as NTMAs and LTMA in this PEIR, to determine whether these actions could result in impacts on population, employment, and/or housing. NTMAs and LTMA are described in more detail in Section 2.4, “Proposed Management Activities.” The overall approach to analyzing the impacts of NTMAs and LTMA and providing mitigation is summarized below and described in detail in Section 3.1, “Approach to Environmental Analysis.”

NTMAs are evaluated at a greater level of specificity than LTMA for the following reasons:

- NTMAs are better defined and less conceptual than LTMA, are more likely to be implemented in the short term (within the first 5 years after approval of the CVFPP), and are generally less complex.
- NTMAs have more secure funding sources than LTMA.
- Environmental impacts of NTMAs can generally be evaluated more accurately than impacts of LTMA.

NTMAs can consist of any of the following types of activities:

- Improvement, remediation, repair, reconstruction, and operations and maintenance of existing facilities
- Construction, operation, and maintenance of small setback levees
- Purchase of easements and/or other interests in land
- Operational criteria changes to existing reservoirs that stay within existing storage allocations
- Implementation of the vegetation management strategy included in the CVFPP
- Initiation of conservation elements included in the proposed program
- Implementation of various changes to DWR and Statewide policies that could result in alteration of the physical environment

All other types of CVFPP activities fall within the LTMA category. However, NTMA-type activities (e.g., remediation of existing levees) would continue to be implemented in the CVFPP study area into the longer term time frame of the LTMAs.

NTMAs are evaluated using a typical “impact/mitigation” approach. Where impact descriptions and mitigation measures identified for NTMAs also apply to LTMAs, they are also attributed to LTMAs, with modifications or expansions as needed. Implementation of the proposed program would result in construction-related, operational, and maintenance-related impacts that would generate employment opportunities and land use changes that may displace existing population centers, businesses, and housing. This analysis evaluates potential construction and operation/maintenance activities that could affect population clusters, places of employment, and/or housing land uses. Construction activities can affect population, employment, and housing by temporarily displacing people or housing as a result of construction staging or other temporary activities. Employment may increase temporarily as a result of construction activities, but such activities may also relocate employees. Operations and maintenance activities resulting from project activities would not be expected to change relative to existing conditions as they do not require extensive staff and are carried out by a comparatively small number of full-time employees who operate and maintain many miles of levees and other flood control facilities. Construction and operation and maintenance could displace

people and housing, requiring people to relocate or additional housing to be built elsewhere.

#### ***Thresholds of Significance***

The following applicable thresholds of significance have been used to determine whether implementing the proposed program would result in a significant impact. These thresholds of significance are based on Appendix G of the CEQA Guidelines, as amended, with slight modifications. An impact on population and housing is considered significant if implementation of the proposed program would do any of the following when compared against existing conditions:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)
- Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere

In addition, an impact on employment is considered significant if implementation of the proposed program would do the following when compared against existing conditions:

- Induce substantial unemployment in an area, either directly (for example, by displacing places of business in areas where no adequate relocation possibilities exist) or indirectly, by affecting land uses closely tied to regional economic output and employment (for example, by affecting recreational areas)

#### **3.16.4 Environmental Impacts and Mitigation Measures for NTMAs**

This section describes the physical effects of NTMAs on population, employment, and housing. For each impact discussion, the environmental effect is determined to be either less than significant, significant, potentially significant, or beneficial compared to existing conditions and relative to the thresholds of significance described above. These significance categories are described in more detail in Section 3.1, “Approach to Environmental Analysis.”

#### ***Impact PEH-1 (NTMA): Inducement of Population Growth, Either Directly or Indirectly, through an Increase in Regional Economic Output Resulting from Construction or Operations Activities***

Socioeconomic activity may increase within portions of the program study area if NTMAs would require substantial amounts of construction or

substantial increases in operations and maintenance activities. Both mechanisms have the potential to generate new jobs that could increase economic activity, as well as increase economic output by generating increased demand for goods and services (e.g., fuel for construction, food service for employees). This increase in economic activity could translate into population growth as individuals relocate to an area to fill available jobs. For construction activities, increases in socioeconomic activity would be localized and short term, lasting as long as a particular project's construction period. In many instances, construction jobs would be filled by local employees, with projects needing to be particularly large or particularly remote to require employees from outside a reasonable daily commute distance.

As indicated above in Tables 3.16-5 and 3.16-14, most counties in the Extended SPA and Sacramento and San Joaquin Valley watersheds have established manufacturing and construction industries and labor pools. Counties with few manufacturing and construction employees (typically rural counties with significant federal lands and low populations) are bordered by counties with established manufacturing and construction industries. As indicated in Tables 3.16-4 and 3.16-13 above, most counties in the Extended SPA and Sacramento and San Joaquin Valley watersheds are experiencing high unemployment rates, indicating the availability of local employees to construct NTMAs. Even if some construction workers from outside the region were employed at a particular project site, construction workers typically do not change residences when assigned to a new construction site, and it is not anticipated that there would be any substantial permanent relocation of construction workers resulting from implementation of NTMAs.

Multiple NTMA projects could be implemented concurrently, but projects would be implemented throughout the Central Valley, and economic activity (and thereby growth) would likely not be concentrated in any one area. The sizes of construction crews would vary by project, but even if multiple NTMAs were implemented in one area, crews would not be expected to be large enough to exhaust local labor markets.

It should also be noted that often the availability of construction equipment is a limiting factor to construction activity before the availability of equipment operators. The availability of equipment suitable of completing conveyance and other NTMAs, and that also meets California emissions and other standards, could limit the number and size of NTMAs that could be constructed concurrently.

Operation and maintenance of NTMAs could also generate new jobs, economic activity, and therefore, population growth. However, NTMAs

would not require extensive staff for operations and maintenance. A handful of full-time employees can operate and maintain many miles of levees and other flood control facilities included within the NTMAs. In addition, most NTMAs would not alter operations and maintenance requirements relative to existing conditions. Actions such as constructing slurry cutoff walls and modifying levee slopes do not increase maintenance requirements for existing levees. In many instances, repairing, reconstructing, and improving flood control facilities could decrease maintenance requirements. For the reasons described above for construction, any increases in operations and maintenance jobs could be filled by local employee pools, resulting in little to no change in population growth in the area.

For this population growth impact to be considered significant, the population growth would have to exceed planned growth for the region; thus, based on the projected growth rates for 2010–2030 shown in Table-3.16-1, annual population growth in any one county and/or planning area exceeding 2.0 to 3.0 percent would likely result in a significant impact. However, given the conditions described above, it is not expected that NTMA construction and operational activities would generate sufficient population growth to exceed this growth rate. Therefore, this impact would be **less than significant**. No mitigation is required.

#### **Impact PEH-2 (NTMA): *Displacement of Existing Housing or People through Changes in Land Use or Policy Changes***

Ultimately, the NTMAs are meant to protect housing stock from floods and flood damage, providing a beneficial impact with regard to existing housing for the entire region. However, implementing NTMAs could displace housing and/or people if levee construction and rehabilitation would be required in residential areas and would change land uses so dramatically that homes would have to be destroyed to make way for flood management structures. A limited number of residences may be displaced in both urban and rural settings if, for example, they were located on the waterside of a setback levee or adjacent to a levee segment where constructing a seepage berm or widening the levee would be the only available repair methods; however, these types of scenarios would be rare. It is much more difficult to implement flood protection projects that would require displacing, and therefore purchasing, substantial numbers of existing residences. It would be financially challenging to conduct large-footprint levee projects (e.g., constructing setback levees or seepage berms) in urban/suburban areas where multiple homes or otherwise developed parcels would need to be purchased to accommodate the project footprint and relocation expenses would need to be paid to residents and businesses.

Some policies associated with the proposed program may affect housing and population, at least in certain local areas. Mandatory compliance with the National Flood Insurance Program or other policy changes requiring homeowners to pay for additional flood insurance may create a financial hardship for some families. Those families may find it more financially prudent to move out of the flood zone and avoid the requirement for flood insurance altogether. This scenario is not anticipated to result in substantial numbers of displacements and relocations; rather, it would likely occur only in limited cases.

In the limited cases in which residences and people would be displaced by NTMAs, because of the small number of people who might require new housing, this demand could be met by available housing stock in each project area. Construction of new housing would not be required.

Because NTMAs would not result in the displacement of a substantial number of people or homes that would require construction of new housing elsewhere, this impact would be **less than significant**. No mitigation is required.

***Impact PEH-3 (NTMA): Changes in Employment, Either Directly or Indirectly, through Changes in Land Use or Policy Changes***

As described above in Impact PEH-1 (NTMA), the various proposed NTMAs that would result in construction, operations, and maintenance activities are expected to create a modest level of new employment (although temporary employment for construction jobs). The proposed program is also expected to include purchases of easements and development of habitat that could take agricultural land out of production (see Section 3.3, "Agriculture and Forestry Resources"), thereby reducing local agriculture-related employment to some degree. Purchasing easements could also result in the preservation of agricultural land and restoring habitat could increase recreational opportunities, thereby increasing the availability of jobs serving the recreation sector. Even in the unlikely event that implementing NTMAs were to result in a net decrease in jobs, the decrease would not be considered substantial, especially if considered on a countywide or regional level. It should be noted that the proposed program will provide increased flood protection and therefore support greater economic stability.

This impact would be **less than significant**. No mitigation is required.



#### 3.16.5 Environmental Impacts, Mitigation Measures, and Mitigation Strategies for LTMA

This section describes the physical effects of LTMA on population, employment, and housing. LTMA include a continuation of activities described as part of NTMA and all other actions included in the proposed program, and consist of all of the following types of activities:

- Widening floodways (through setback levees and/or purchase of easements)
- Constructing weirs and bypasses
- Constructing new levees
- Changing operation of existing reservoirs
- Achieving protection of urban areas from a flood event with 0.5 percent risk of occurrence
- Changing policies, guidance, standards, and institutional structures
- Implementing additional and ongoing conservation elements

Actions included in the LTMA are described in more detail in Section 2.4, “Proposed Management Activities.”

Impacts identified above for NTMA would also be applicable to many LTMA and are identified below. The NTMA impact discussions are modified or expanded where appropriate to address conditions unique to LTMA.

***Impact PEH-1 (LTMA): Inducement of Population Growth, Either Directly or Indirectly, through an Increase in Regional Economic Output Resulting from Construction or Operations Activities***

This impact would be similar to Impact PEH-1 (NTMA), described above. LTMA include activities that would be of a larger size and scope than NTMA (e.g., constructing new flood bypasses and new dams); however, as with NTMA, construction jobs would be temporary and newly generated jobs could still be filled by existing employees in the region. In addition, implementing habitat conservation efforts could create more opportunities for recreation, which in turn could require additional employees and may induce a small amount of population growth. However, these new positions would also likely be filled by current residents of the region, and substantial population growth is not anticipated.

Therefore, although a small amount of population growth may result from constructing, operating, and maintaining LTMA's, the growth would not be considered substantial. This impact would be **less than significant**. No mitigation is required.

**Impact PEH-2 (LTMA): *Displacement of Existing Housing or People through Changes in Land Use or Policy Changes***

This impact would be similar to Impact PEH-2 (NTMA), described above. Although the LTMA's include larger projects with a greater potential to result in housing displacement, removing large numbers of houses to support flood protection infrastructure would remain financially challenging. Larger projects would be located in rural areas with the potential for small numbers of rural residences to be displaced, and displaced individuals could be accommodated within existing available housing stock. Therefore, displacement of substantial numbers of housing or people would not occur, and any displacements that would occur would not result in the need to construct new housing. This impact would be **less than significant**. No mitigation is required.

**Impact PEH-3 (LTMA): *Changes in Employment, Either Directly or Indirectly, through Changes in Land Use or Policy Changes***

This impact would be similar to Impact PEH-3 (NTMA), described above. Various proposed LTMA's could both increase or decrease employment opportunities through mechanisms such as creating demand for construction jobs, increasing or decreasing operations and maintenance demands, preserving or reducing the number of agricultural jobs, and increasing or decreasing recreational opportunities. However, even in the unlikely event that implementing LTMA's were to result in an overall net decrease in jobs, this decrease would not be of sufficient size to result in substantial unemployment. It should be noted that the proposed program will provide increased flood protection and therefore support greater economic stability. This impact would be **less than significant**. No mitigation is required.

***LTMA Impact Discussions and Mitigation Strategies***

Impacts of the proposed program's NTMA's and LTMA's related to population, employment, and housing are thoroughly described and evaluated above. The general narrative descriptions of additional LTMA impacts and mitigation strategies for those impacts that are included in other sections of this draft PEIR are not required for population, employment, and housing.