

4.10 POPULATION, EMPLOYMENT, AND HOUSING

4.10.1 INTRODUCTION TO POPULATION, EMPLOYMENT, AND HOUSING RESOURCES

This section provides baseline data on the existing population and housing characteristics of the counties contained within each regional bundle. The scope of potentially significant population and housing changes resulting from implementation of the hydrodivestiture project are evaluated in the impact analysis discussion of this section. The description of existing conditions provides an overview of each county's population growth trends and related changes in the housing needs of the county and the cities contained within.

4.10.2 SYSTEM-WIDE REGULATORY CONTEXT

Population projections prepared by the California Department of Finance for each regional bundle are included in the environmental settings for each regional bundle. California Department of Finance population projections take into consideration local goals and objectives for population growth for each county in the five regional bundles.

General Plans for each relevant county were reviewed for applicable plans and policies directly relating to population projections and future housing needs. No plans or policies were found to relate to these issues in the context of the project. Therefore, regulatory context for the entire project is not discussed further at the regional level.

4.10.3 SYSTEM-WIDE SETTING

4.10.3.1 Population

System-wide population is characterized in each regional bundle discussion under the Regional Setting discussion.

4.10.3.2 Pacific Gas and Electric Company Employment

The majority of Project Lands do not contain hydroelectric features. Pacific Gas and Electric Company has different types of employees who operate and maintain its hydroelectric facilities such as dams, canals and powerhouses, and monitor automated powerhouses and facilities. Pacific Gas and Electric Company's hydroelectric generating facilities are primarily sited at remote locations on major waterways of the Sierra Nevada. As such, most generation facilities within a regional bundle are remotely operated from another location (known as a switching center, which is usually a centrally-located powerhouse).

Employees at Pacific Gas and Electric Company's hydroelectric facilities make up a very small component of local and regional populations in the areas where the facilities are located. The current number of employees necessary to perform day-to-day operations at the hydroelectric facilities in a regional bundle typically ranges from 50 to 70 people. This number varies from

region to region depending on the number, size, age of the facilities, ease of access to them and their geographic extent. The number of permanent employees needed does not vary seasonally. Employees are typically headquartered at centralized facilities, such as service centers and switching centers, with a very small number of employees headquartered at remote facilities.

Following are categories of typical Pacific Gas and Electric Company employees utilized in each regional bundle:

- **Clerical.** These employees perform clerical functions at headquarter facilities;
- **Maintenance.** These employees report to the headquarters facilities and perform routinely scheduled maintenance on powerhouse and other equipment, as well as major maintenance work for scheduled outages;
- **Water Crew.** These employees maintain the water system, including inspection and repairs of canals, flumes, and other water-related structures. They also maintain access roads to water system components;
- **Operators.** These employees include roving operators who inspect and maintain powerhouses and system operators who control generation and manage water at the powerhouses and switching centers;
- **Supervisors.** These employees supervise all of the classifications covered in the Operation and Maintenance agreement;
- **Land Agents.** These employees are responsible for managing all the project lands, and are based in field offices and manage the recreational, grazing, and other associated leases. Company-wide, there are about five land agents who manage one or more leases or agreements associated with the project lands in addition to their other responsibilities. This translates into less than one full-time equivalent staff person per regional bundle for the project lands;
- **Pacific Gas and Electric Company Forester.** Where timber harvesting occurs on project lands, additional personnel are required. For each area encompassed by an active Timber Harvest Plan (THP), these personnel typically consist of one Pacific Gas and Electric Company forester assigned to manage the timber harvest, one contract forester to assist in the management, up to five contract registered professional foresters to mark the timber, and additional technical professionals (such as a wildlife biologist, fisheries biologist, geologist, and archaeologist) to oversee any specific resource issues associated with the THP. For specific activities related to harvesting and other fieldwork, Pacific Gas and Electric Company contracts with outside companies; and
- **Other Staff.** For the most part, Pacific Gas and Electric Company's hydroelectric employees perform functions exclusively related to the hydroelectric facilities. One exception to this are certain groups of construction personnel that are employed by Pacific Gas and Electric Company's hydroelectric "business unit," but also support other Pacific Gas and Electric Company business units performing utility functions related to transmission, distribution, and grid maintenance;

Pacific Gas and Electric Company Employee Housing

Because many of the facilities are located in relatively unpopulated and remote areas, Pacific Gas and Electric Company historically built and maintained employee residences at its powerhouses and reservoirs. Over time, as powerhouses have been retrofitted with automated operations equipment and employees have chosen to commute longer distances due to improvements in vehicles and

highways, most of the employee housing has been demolished or vacated, or converted to storage facilities.

4.10.4 REGIONAL AND LOCAL SETTING AND REGULATORY CONTEXT

The following discusses the population, employment, and housing characteristics for each regional bundle.

4.10.4.1 Shasta Regional Bundle

Total Population

Table 4.10-1 shows that in 1990, all of the counties (Shasta and Tehama) within the Shasta Regional Bundle contained a total population of 196,661 persons, a total household number of 74,644, and an average of 2.63 persons per household.

A household is defined by the U.S. Census as a group of people who occupy a housing unit, also referred to as a dwelling unit (du). Therefore, households differ from dwelling units because the dwelling units may be vacant. Also, it is important to note that not all of the population lives in households; a portion of the population lives in group quarters, such as board and care facilities, while others are homeless.

Table 4.10-1 Shasta Regional Bundle Population

Persons	196,661
Households	74,644
Persons Per Household	2.63
Persons in Households	
1	16,597
2	27,557
3	12,257
4	10,604
5	5,031
6	1,670
7+	969

Source: U.S. Census, 1990

Total Housing

In 1990, the total number of dwelling units in the Shasta Regional Bundle was 80,955. Table 4.10-2 identifies the total number of housing units by type within all counties in the Shasta Regional Bundle.

Table 4.10-2 Shasta Regional Bundle Housing

Housing Units	80,955
Occupancy Status	
Occupied	74,670
Vacant	6,285
Units in Structure	
1	58,281
2	1,505
3-9	6,830
10-50	2,606
50 or more	914
Mobile Home or Trailer	16,289
Other	530
Year Structure Built	
1980-1990	22,251
1970-1979	24,631
1960-1969	13,508
1950-1959	10,220
1940-1949	5,072
1939 and Earlier	15,559
Value	
<\$100,000	20,124
\$100,000-\$249,999	10,751
\$250,000-\$499,999	676
>\$500,000	63

Source: U.S. Census, 1990

Total Employment

In general, there is a large percentage of retail, manufacturing, and service jobs within the Shasta Regional Bundle. Table 4.10-3 identifies employment for the workforce living in the counties contained within the Shasta Regional Bundle, and the associated jobs.

Table 4.10-3 Employment Within Shasta Regional Bundle

Industry – Jobs within Regional Bundle	
Agriculture, Forestry, & Mining	4,043
Construction	6,683
Manufacturing	9,767
Transportation, Communications, & Utilities	5,675
Wholesale Trade	2,230

Table 4.10-3 Employment Within Shasta Regional Bundle

Industry – Jobs within Regional Bundle	
Retail Trade	15,181
Finance, Insurance, & Real Estate	4,223
Services	25,215
Public Administration	3,459
Occupation – Residents within Regional Bundle (Jobs not Necessarily within Regional Bundle)	
Professional & Management	17,188
Technical, Sales & Administrators	22,655
Crafts, Trades, & Operations	21,774
Service	11,275
Farming, Forestry, & Fishing	3,584

Source: 1990 U.S. Census.

Population Projections

As seen in Tables 4.10-1 and 4.10-4, population growth in the Shasta Regional Bundle represents a 12 percent increase between 1990 and 1999 and is projected to increase by 28 percent over the next ten years. It should be noted that a considerable amount of the Shasta County population growth is expected to be in the City of Redding.

Table 4.10-4 Shasta Regional Bundle Population Projections

County	1999 Population	2010 Population Projection
Shasta	165,400	212,947
Tehama	55,700	70,567
Total	221,110	283,514

Source: All data and projections from California Department of Finance, April 2000.

4.10.4.2 DeSabra Regional Bundle

Total Population

Table 4.10-5 shows that in 1990, all of the counties (Plumas, Butte, Tehama, and Lassen) within the DeSabra Regional Bundle contained a total population of 201,859 persons, a total household number of 79,955, and an average of 2.52 persons per household.

Table 4.10-5 DeSabra Regional Bundle Population

Persons	201,859
Households	79,955
Persons Per Household	2.52
Persons in Households	
1	19,893
2	30,786
3	11,741
4	10,420
5	4,457
6	1,732
7+	932

Source: U.S. Census, 1990

Total Housing

In 1990, the total number of dwelling units in the DeSabra Regional Bundle was 80,057. Table 4.10-6 identifies the total number of housing units by type within all counties in the DeSabra Regional Bundle.

Table 4.10-6 DeSabra Regional Bundle Housing

Housing Units	88,057
Occupancy Status	
Occupied	79,790
Vacant	8,267
Units in Structure	
1	55,309
2	2,705
3-9	7,921
10-50	4,523
50 or more	1,192
Mobile Home or Trailer	15,298
Other	1,109
Year Structure Built	
1970-1979	24,701
1960-1969	12,943
1950-1959	11,161
1940-1949	7,140

Table 4.10-6 DeSabra Regional Bundle Housing

1939 and Earlier	9,052
Value	
<\$100,000	18,585
\$100,000-\$249,999	13,347
\$250,000-\$499,999	1,032
>\$500,000	69

Source: U.S. Census, 1990

Total Employment

In general, there is a large percentage of retail, manufacturing, and service jobs within the DeSabra Regional Bundle. Table 4.10-7 identifies employment for the workforce living within the counties contained within the DeSabra Regional Bundle, and the jobs located within.

Table 4.10-7 DeSabra Regional Bundle Employment

Industry – Jobs within Regional Bundle	
Agriculture, Forestry, & Mining	5,108
Construction	5,914
Manufacturing	8,182
Transportation, Communications, & Utilities	4,416
Wholesale Trade	2,114
Retail Trade	15,650
Finance, Insurance, & Real Estate	4,460
Services	29,916
Public Administration	2,903
Occupation – Residents within Regional Bundle (Jobs not Necessarily within Regional Bundle)	
Professional & Management	20,594
Technical, Sales & Administrators	23,422
Crafts, Trades, & Operations	18,453
Service	12,105
Farming, Forestry, & Fishing	4,089

Source: 1990 U.S. Census.

Population Projections

As seen in Tables 4.10-5 and 4.10-8, population growth in the DeSabra Regional Bundle represents a 27 percent increase between 1990 and 1999 and is projected to increase by 26 percent over the next ten years. It should be noted that a considerable amount of the Butte County population growth is expected to be in the City of Chico.

Table 4.10-8 DeSabra Regional Bundle Projections

County	1999 Population	2010 Population Projection
Plumas	20,450	22,261
Butte	201,900	258,630
Lassen	34,050	43,286
Total	256,400	324,177

Source: All data and projections from California Department of Finance, April 2000

4.10.4.3 Drum Regional Bundle

Total Population

Table 4.10-9 shows that in 1990, all of the counties (Placer, Nevada, El Dorado, Mendocino, and Lake) within the Drum Regional Bundle contained a total population of 508,277 persons, a total household number of 193,529, and an average of 2.63 persons per household.

Table 4.10-9 Drum Regional Bundle Population

Persons	508,277
Households	193,529
Persons Per Household	2.63
Persons in Households	
1	40,412
2	73,016
3	31,999
4	29,498
5	12,515
6	3,957
7+	2,132

Source: U.S. Census, 1990

Total Housing

In 1990, the total number of dwelling units in the counties of the Drum Regional Bundle was 239,213. Table 4.10-10 identifies the total number of housing units by type within all counties comprising the Drum Regional Bundle.

Table 4.10-10 Drum Regional Bundle Housing

Housing Units	239,213
Occupancy Status	
Occupied	192,928
Vacant	46,285
Units in Structure	
1	180,867
2	3,134
3-9	9,838
10-50	19,968
Mobile Home or Trailer	23,676
Other	1,730
Year Structure Built	
1980-1990	57,536
1970-1979	51,802
1940-1969	114,316
1939 and Earlier	15,559
Value	
<\$100,000	161,634
\$100,000-\$249,999	62,353
\$250,000-\$499,999	13,759
>\$500,000	1,467

Source: U.S. Census, 1990

Total Employment

In general, there are a large percentage of retail, manufacturing, and construction jobs within the Drum Regional Bundle. Table 4.10-11 identifies employment for the workforce living within the counties contained within the Drum Regional Bundle, and the jobs located within.

Table 4.10-11 Drum Regional Bundle Employment

Industry – Jobs within Regional Bundle	
Agriculture, Forestry, & Mining	9,387
Construction	23,485
Manufacturing	25,053
Transportation, Communications, & Utilities	15,294
Wholesale Trade	7,230

Table 4.10-11 Drum Regional Bundle Employment

Industry – Jobs within Regional Bundle	
Retail Trade	40,068
Finance, Insurance, & Real Estate	15,451
Services	76,068
Public Administration	15,113
Occupation – Residents within Regional Bundle (Jobs not Necessarily within Regional Bundle)	
Professional & Management	61,186
Technical, Sales & Administrators	68,853
Crafts, Trades, & Operations	56,317
Service	33,501
Farming, Forestry, & Fishing	7,292

Source: 1990 US Census.

Population Projections

As seen in Tables 4.10-9 and 4.10-12, the 1999 population for the Drum Regional Bundle shows a 20 percent increase in the total population since 1990. The total population is expected to grow an additional 36 percent by the year 2010 (California Department of Finance).

Table 4.10-12 Drum Regional Bundle Projections

County	1999 Population	2010 Population Projection
El Dorado	150,800	205,700
Lake	55,300	80,900
Mendocino	87,100	110,200
Nevada	89,600	128,400
Placer	225,900	301,900
TOTAL	608,700	827,100

Source: All data and projections from California Department of Finance, April 2000

4.10.4.4 Motherlode Regional Bundle

Total Population

As illustrated by Table 4.10-13, all of the counties (Amador, Alpine, Tuolumne, Mariposa, Merced, and Calaveras) within the Motherlode Regional Bundle contained a total population of 304,311 persons, a total household number of 102,722, and an average of 2.96 persons per household.

Table 4.10-13 Motherlode Regional Bundle Population

Persons	304,311
Households	102,722
Persons Per Household	2.96
Persons in Households	
1	20,213
2	35,104
3	16,606
4	15,578
5	8,212
6	3,448
7+	3,561

Source: 1990 U.S. Census

Total Housing

In 1990, the total number of dwelling units in the Motherlode Regional Bundle was 124,571. Table 4.10-14 identifies the total number of housing units by type within all counties comprising the Motherlode Regional Bundle.

Table 4.10-14 Motherlode Regional Bundle Housing

Housing Units	124,571
Occupancy Status	
Occupied	102,511
Vacant	22,060
Units in Structure	
1	93,666
2	2,837
3-9	7,896
10-50	4,624
Mobile Home or Trailer	14,188
Other	1,360
Year Structure Built	
1980-1990	38,099
1970-1979	35,159
1940-1969	40,244
1939 and Earlier	11,069
Value	
<\$100,000	101,282
\$100,000-\$249,999	21,807

Table 4.10-14 Motherlode Regional Bundle Housing

\$250,000-\$499,999	1,382
>\$500,000	100

Source : 1990 U.S. Census

Total Employment

In general, there are a large percentage of services, retail, and agricultural jobs within the counties of the Motherlode Regional Bundle. Table 4.10-15 identifies employment for the workforce living within the counties contained within the Motherlode Regional Bundle, and the jobs located therein.

Table 4.10-15 Motherlode Regional Bundle Employment

Industry – Jobs within Regional Bundle	
Agriculture, Forestry, & Mining	14,585
Construction	9,287
Manufacturing	13,638
Transportation, Communications, & Utilities	6,317
Wholesale Trade	3,905
Retail Trade	19,350
Finance, Insurance, & Real Estate	5,981
Services	33,619
Public Administration	6,194
Occupation – Residents within Regional Bundle (Jobs not Necessarily within Regional Bundle)	
Professional & Management	23,573
Technical, Sales & Administrators	30,043
Crafts, Trades, & Operations	32,625
Service	15,697
Farming, Forestry, & Fishing	10,938

Source: 1990 US Census.

Population Projections

As seen in Tables 4.10-13 and 4.10-16, are 1999 population for the Motherlode Regional Bundle shows a 15 percent increase in the total population since 1990. The total population is expected to grow an additional 46 percent by the year 2010.

Table 4.10-16 Motherlode Regional Bundle Population Projections

County	1999 Population	2010 Population Projection
Amador	34,050	51,500
Alpine	1,190	1,600
Calaveras	38,150	69,200

County	1999 Population	2010 Population Projection
Mariposa	16,100	22,600
Merced	206,900	294,300
Tuolumne	53,100	72,600
TOTAL	349,490	511,800

Source: All data and projections from California Department of Finance, April 2000.

4.10.4.5 Kings Crane-Helms Regional Bundle

Total Population

Table 4.10-17 shows that in 1990, all of the counties (Madera, Fresno, Tulare, Kern) within the Kings Crane-Helms Regional Bundle contained a total population of 1,610,978 persons, a total household number of 529,292, and an average of 3.04 persons per household.

Table 4.10-17 Kings Crane-Helms Regional Bundle Population

Persons	1,610,978
Households	529,292
Persons Per Household	3.04
Persons in Households	
1	103,835
2	156,479
3	88,821
4	86,309
5	48,717
6	22,490
7+	22,641

Source: 1990 U.S. Census

Total Housing

In 1990, the total number of dwelling units in the counties of the Kings Crane-Helms Regional Bundle was 570,043. Table 4.10-18 identifies the total number of housing units by type within all counties comprising the regional bundle.

Table 4.10-18 Kings Crane-Helms Regional Bundle Housing

Housing Units	570,043
Occupancy Status	
Occupied	528,644
Vacant	41,399
Units in Structure	
1	390,166
2	17,278
3-9	60,260
10-50	48,101
Mobile Home or Trailer	49,301
Other	4,937
Year Structure Built	
1980-1990	152,858
1970-1979	140,712
1940-1969	232,827
1939 and Earlier	43,646
Value	
<\$100,000	171,718
\$100,000-\$249,999	69,076
\$250,000-\$499,999	5,521
>\$500,000	576

Source: 1990 U.S. Census

Total Employment

In general, there are a large percentage of services, retail, and agricultural jobs within the Kings Crane-Helms Regional Bundle. Table 4.10-19 identifies employment for the workforce living within the counties contained within the Kings Crane-Helms Regional Bundle, and the jobs located within.

Table 4.10-19 Kings Crane-Helms Regional Bundle Employment

Industry – Jobs within Regional Bundle	
Agriculture, Forestry, & Mining	91,776
Construction	41,216
Manufacturing	59,259
Transportation, Communications, & Utilities	39,875
Wholesale Trade	30,839

Table 4.10-19 Kings Crane-Helms Regional Bundle Employment

Industry – Jobs within Regional Bundle	
Retail Trade	102,339
Finance, Insurance, & Real Estate	33,665
Services	199,377
Public Administration	38,375
Occupation – Residents within Regional Bundle (Jobs not Necessarily within Regional Bundle)	
Professional & Management	143,916
Technical, Sales & Administrators	186,468
Crafts, Trades, & Operations	87,599
Service	79,676
Farming, Forestry, & Fishing	68,728

Source: 1990 US Census.

Population Projections

As seen in Tables 4.10-17 and 4.10-20, the 1999 population for the Kings Crane-Helms Regional Bundle shows a 19 percent increase in the total population since 1990. The total population is expected to grow an additional 44 percent by the year 2010.

Table 4.10-20 Kings Crane-Helms Population Projections

County	1999 Population	2010 Population Projection
Madera	115,800	162,000
Fresno	793,800	1,163,100
Tulare	363,300	491,900
Kern	648,400	958,300
TOTAL	1,921,300	2,775,300

Source: All data and projections from California Department of Finance, April 2000

4.10.5 STANDARDS OF SIGNIFICANCE

Impacts to population, employment, and housing resulting from the project would be considered significant if the project induces substantial population growth beyond current projections, which could result in associated increases in employment in the area, thereby necessitating additional housing. A substantial increase in population would be one that, when added to current population, exceeds projected population which has been planned for and approved in each regional bundle. Associated increases in employment and housing would only be discussed if population attributed to the project were expected to exceed current projections.

4.10.6 ANALYTICAL METHODS

Data was gathered and impacts evaluated at a regional bundle level versus a project bundle level due to the large undeveloped nature of the majority of Project Lands. Project impacts to population, employment, and housing are more accurately assessed at a regional level where urbanized areas and larger populations could be evaluated. Impacts of the project were evaluated in the context of the population, workforce, and housing inventory currently existing within the entire system. Where applicable, future projections were incorporated into the impact analysis.

According to the California Environmental Quality Act (CEQA) Section 15131(a), economic or social effects of a project shall not be treated as significant effects on the environment. However, a chain of cause and effect may be traced from the project through anticipated economic or social changes resulting from the project to physical changes caused in turn by economic or social changes. In other words, CEQA requires the focus of population and housing analyses to be on the physical changes caused by the project, such as: (1) the inducement of substantial population growth in an area; or (2) displacement of a substantial number of people or housing.

The transfer of hydroelectric facilities would contain contractual obligations limiting the new owner to continue the service and other conditions imposed by the Federal Energy Regulatory Commission (FERC) licenses. It is not anticipated that divestiture of the hydroelectric facilities would result in a change in population over that which currently exists on the FERC-licensed lands. Consequently, this increase in population and associated changes in housing and employment will not be further evaluated in this Environmental Impact Report (EIR). The impact analysis will therefore focus on changes in population and associated changes in housing and employment attributed to development of the Watershed Lands.

4.10.7 INTRODUCTION TO IMPACTS AND MITIGATION MEASURES

For Population, Employment, and Housing, one impact has been identified: the potential for development of Project Lands to induce population growth.

4.10.8 IMPACT 10-1: IMPACT, ANALYSIS, AND MITIGATION MEASURES

Impact 10-1: Development of Project Lands would result in population growth.

4.10.8.1 Impact 10-1: Shasta Regional Bundle

The assumed development potential for Project Lands (see Table 4.10-21) could result in an increase in population in the regional bundle.

Table 4.10-21 Population Projections for the Shasta Regional Bundle Based on Development Potential

Land Area	Potential Development (in EDUs)	County ^a	Population Projection Based on Current County Population per Household ^a
Bundle 1: Hat Creek			
Hat Creek	594 units	Shasta	1,485
Bundle 2: Pit River			
Pit River 1	714 units	Shasta	1,785
McArthur Swamp (Shasta County)	17 units	Shasta	43
Lake Britton	264 units	Shasta	660
Pit 3	736 units	Shasta	1,840
McCloud & Pit 4, 5, 6, 7	95 units	Shasta	238
Bundle 3: Kilarc-Cow Creek			
Kilarc-Cow Creek	20 units	Shasta	50
Bundle 4: Battle Creek			
Shingletown	558 units	Shasta	1,395
Inskip Powerhouse	38 units	Tehama	95
TOTAL DEVELOPMENT	3,036 units		7,591

a. The 1999 Department of Finance Population Per Household for Shasta County is 2.46 (2.5), Tehama County 2.5.

Using the Department of Finance 1999 estimates of 2.5 persons per household, the project could result in approximately 7,591 new residents upon buildout. It is assumed that a large percentage of these homes would be seasonal residences and the actual population increase would be much less. However, permanent full-time resident projections have been used to provide a conservative scenario.

The addition of 7,591 people is based on the estimated potential increase in land development. As shown in Table 4.10-22, this project-related population increase would represent a 12 percent increase from the 1999 population, and is well below the 2010 population projections. Therefore, impacts associated with project-related population growth are considered *less than significant*. Because the potential growth is within California Department of Finance projections, it is assumed that any increase in employment and housing demand would be accommodated by planned increases in employment and housing supply generated by current population projections.

Table 4.10-22 Shasta Regional Bundle Projected Population Increase Based on Development Potential

Regional Bundle	Population Increase According to Development Potential Scenario	1999 Population	Percentage of Estimated Population Growth	Projected Population 2010
Shasta	7,591	221,100	228,691 (12 percent)	283,514

Source: 1990 U.S. Census

4.10.8.2 DeSabra Regional Bundle

The development potential for Project Lands (see Table 4.10-23) could result in an increase in population in the regional bundle.

Using the Department of Finance 1999 estimates to determine persons per household, the project could result in approximately 4,718 new residents upon buildout. It is assumed that a large percentage of these homes would be seasonal residences and the actual population increase would be much less. However, permanent full-time resident projections have been used to provide a conservative scenario.

Table 4.10-23 Population Projections for the DeSabra Regional Bundle Based on Development Potential

Land Area	Potential Development (in EDUs)	County ^a	Population Projection Based on Current County Population per Household ^a
Bundle 5: Hamilton Branch			
Mt. Meadows (Lassen County)	19 units	Lassen	49
Hamilton Branch	16 units	Plumas	35
Bundle 6: Upper North Fork Feather River			
North Lake Almanor	87 units	Plumas	191
West Lake Almanor/Prattville	276 units	Plumas	607
Southeast Lake Almanor	615 units	Plumas	1,353
Butt Valley Reservoir	92 units	Plumas	202
Caribou to Belden	16 units	Plumas	35
Humbug Valley	240 units	Plumas	528
Rock Creek-Cresta	19 units	Plumas	42
Poe (Butte County)	31 units	Butte	74
Bundle 7: Bucks Creek			
Bucks Creek/Bucks Lakes	244 units	Plumas	537
Bundle 8: Butte Creek			
DeSabra-Centerville (Butte County)	66 units	Butte	158
Coal Canyon (Butte County)	378 units	Butte	907
TOTAL	2,099 units		4,718

a. The 1999 Department of Finance Population Per Household for Lassen County is 2.611 (2.6), Plumas County is 2.17 (2.2), and Butte County is 2.418 (2.4).

The addition of 4,718, people is based on the estimated potential increase in land development. The potential population growth resulting from the project represents a seven percent increase from the 1999 population (see Table 4.10-24), and would not exceed 2010 population projections. Therefore, impacts associated with population growth are considered *less than significant*. Because the potential growth is within California Department of Finance projections, it is assumed that any increase in employment and housing demand would be accommodated by planned increases in employment and housing supply generated by current population projections.

Table 4.10-24 DeSabra Regional Bundle Projected Population Increase Based on Development Potential^a

Regional Bundle	Population Increase According to Development Potential Scenario	1999 Population	Estimated Population Growth	Projected Population 2010
DeSabra	4,718	256,400	261,118 (7 percent)	324,177

a. The 1999 Department of Finance Population Per Household for Lassen County is 2.611 (2.6), Plumas County is 2.17 (2.2), and Butte County is 2.418 (2.4).

4.10.8.3 Drum Regional Bundle

The development potential for Project Lands (see Table 4.10-25) could result in an increase in population growth in the regional bundle.

Table 4.10-25 Drum Regional Bundle Population Projections Based on Development Potential

Land Area	Potential Development (in EDUs)	County ^a	Population Projection Based on Current County Population per Household ^a
Bundle 9: North Yuba River			
Narrows	3 units	Nevada	8
Bundle 10: Potter Valley			
Potter Valley	13 units	Mendocino	34
Lake Pillsbury	188 units	Lake	451
Bundle 11: South Yuba River			
Kidd Lake/Cascade Lake	38 units	Placer	103
Lake Sterling/White Rock Lake	7 units	Nevada	18
Rock Lake/Lindsley Lakes	5 units	Nevada	13
Lake Valley Reservoir	329 units	Placer	888
Lake Spaulding/Drum Penstock	2,396 units	Placer/Nevada	6,230
Dutch Flat-Bear River	517 units	Placer/Nevada	1,344
Rollins Reservoir	12 units	Placer	32
Halsey Forebay/Lake Arthur	357 units	Placer	964
Rock Creek Lake	198 units	Placer	535
Folsom Lake	4 units	Placer	11
Bundle 12: Chili Bar			
American River-Chili Bar	4 units	El Dorado	11
TOTAL DEVELOPMENT	4,071 units		10,642

a. The 1999 Department of Finance Population Per Household for Nevada County is 2.5, Mendocino County is 2.6, Lake County is 2.4, Placer County is 2.7, and El Dorado County is 2.7.

Utilizing the Department of Finance 1999 persons per household estimates, the project could result in approximately 10,642 new residents. It is assumed that a large percentage of these homes would be seasonal residences and the actual population increase would be much less. However, permanent full-time resident projections have been used to provide a conservative scenario.

4.10 Population, Employment, and Housing

The addition of 10,642 people is based on the estimated potential increase in land development. The potential population growth resulting from the project represents a two percent increase from the 1999 population (see Table 4.10-26), and would not exceed 2010 population projections. Therefore, impacts associated with population growth are considered *less than significant*. Because potential growth is within California Department of Finance population projections, it is assumed that any increase in employment and housing demand would be accommodated by planned increases in employment and housing supply generated by current population projections.

Table 4.10-26 Drum Regional Bundle Projected Population Increase Based on Development Potential^a

Regional Bundle	Population Increase According to Development Potential Scenario	Current Population	Estimated Population Growth	Projected Population 2010
Drum	10,642	608,700	619,342 (2 percent)	827,100

a. The 1999 Department of Finance Population Per Household for Nevada County is 2.5, Mendocino County is 2.6, Lake County is 2.4, Placer County is 2.7, and El Dorado County is 2.7.

4.10.8.4 Motherlode Regional Bundle

The development potential for Project Lands (see Table 4.10-27) could result in an increase in population growth in the regional bundle.

Table 4.10-27 Motherlode Regional Bundle Population Projections Based on Development Potential

Land Area	Potential Development (in EDUs)	County ^a	Population Projection Based on Current County Population per Household ^a
Bundle 13: Mokulumne River			
Tiger Creek	11 units	Amador/Calaveras	30
Electra Tunnel	5 units	Amador/Calaveras	14
Lake Tabeaud	150 units	Amador/Calaveras	405
Lower Bear River Reservoir	38 units	Amador	106
Upper and Lower Blue Lake	67 units	Alpine	161
Bundle 14: Stanislaus River			
Stanislaus River	37 units	Tuolumne	100
Lyons Reservoir	10 units	Tuolumne	27
Bundle 15: Merced River			
Merced Falls	1 unit	Mariposa/Merced	1
TOTAL DEVELOPMENT	319 units		843

a. The 1999 Department of Finance Population Per Household for Amador County is 2.8, Calaveras County is 2.5, Alpine County is 2.4, Tuolumne County is 2.7, Mariposa County is 2.5, and Merced County is 3.2.

Using the Department of Finance 1999 persons per household estimates, the project could result in approximately 843 new residents. It is assumed that a large percentage of these homes would be seasonal residences and the actual population increase would be much less. However, permanent full-time resident projections have been used to provide a conservative scenario.

The addition of 843 people is based on the estimated potential increase in land development. The potential population growth resulting from the project (see Table 4.10-28) represents a less than one percent increase from the 1999 population and would not exceed 2010 population projections. Therefore, impacts associated with population growth are considered *less than significant*. Because the potential growth is within California Department of Finance projections, it is assumed that any increase in employment and housing demand would be accommodated by planned increases in employment and housing supply generated by current population projections.

Table 4.10-28 Motherlode Regional Bundle Projected Population Increase Based on Development Potential

Regional Bundle	Population Increase According to Development Potential Scenario	1999 Population	Estimated Population Growth	Projected Population 2010
Motherlode	843	349,490	350,333 (<1 percent)	511,800

a. The 1999 Department of Finance Population Per Household for Amador County is 2.8, Calaveras County is 2.5, Alpine County is 2.4, Tuolumne County is 2.7, Mariposa County is 2.5, and Merced County is 3.2.

4.10.8.5 Kings Crane-Helms Regional Bundle

The development potential of Project Lands (see Table 4.10-29) could result in an increase in population in the regional bundle.

Table 4.10-29 Kings Crane-Helms Regional Bundle Population Projections Based on Development Potential

Land Area	Potential Development (in EDUs)	County ^a	Population Projection Based on Current County Population per Household ^a
Bundle 16: Crane Valley			
Bass Lake	104 units	Madera	312
Manzanita Lake (San Joaquin PH#3)	246 units	Madera	738
San Joaquin PH#2	24 units	Madera	72
A.G. Wishon Power House	6 units	Madera	18
Bundle 17: Kerckhoff			
Kerckhoff Reservoir	91 units	Madera/Fresno	282
Auberry Service Center	2 units	Madera/Fresno	6
Bundle 18: Kings River			
Wishon Reservoir	150 units	Fresno	480
Keller Ranch	3 units	Fresno	10
Bundle 19: Tule River			
Tule River	45 units	Tulare	144
Bundle 20: Kern Canyon			
Kern Canyon	30 units	Kern	87
TOTAL DEVELOPMENT	701 units	---	2149

a. The 1999 Department of Finance Population Per Household for Madera County is 3.0, Fresno County is 3.14, Tulare County is 3.2, and Kern County is 2.9.

4.10 Population, Employment, and Housing

Using the Department of Finance 1999 persons per household estimates, the project could result in approximately 2,149 new residents. It is assumed that a large percentage of these homes would be seasonal residences and the actual population increase would be much less. However, permanent full-time resident projections have been used to provide a conservative scenario.

The addition of 2,149 people is based on the estimated potential increase in land development. The potential population growth from the project represents a less than one percent increase from the 1999 population, and would not exceed 2010 population projections. Therefore, impacts associated with population growth are considered *less than significant*. Because the potential growth is within California Department of Finance projections, it is assumed that any increase in employment and housing demand would be accommodated by planned increases in employment and housing generated by current population projections.

Table 4.10-30 Kings Crane-Helms Projected Population Increase Based on Development Potential^a

Regional Bundle	Population Increase According to Development Potential Scenario	1999 Population	Percentage of Estimated Population Growth	Projected Population 2010
Kings Crane-Helms	2,149	1,921,300	1,923,449 (<0.1 percent)	2,775,300

a. The 1999 Department of Finance Population Per Household for Madera County is 3.0, Fresno County is 3.14, Tulare County is 3.2, and Kern County is 2.9.

4.10.8.6 Evaluation of Impact 10-1 to Entire System

Population projections calculated using the development potential for each regional bundle indicate that even with a conservative population growth scenario, project impacts to population would be well within regional population projections. Population projection calculations indicate that there would be no population increase in any of the regional bundles that is more than 12 percent of total population projections for the region as a result of project land development. In the majority of project land areas, population increase based on maximum development potential is seven percent or less. Although the potential development of Project Lands would contribute to the overall population increases expected for the affected counties, this contribution would represent a minor incremental increase in the system's overall population. In addition, it should be noted that the buildout of these development potential scenarios is unknown at this time. Therefore, although population increases due to development of Project Lands are a possibility, projecting the exact number, location, and timing of these increases would be speculative at this time. This impact is considered *less than significant*.

4.10.9 REFERENCES

State of California. Department of Finance, Sacramento, California. January 1999.

United States Bureau of the Census. 1990.