

Chapter 14

Population and Housing, Socioeconomics, and Environmental Justice

14.1 Affected Environment

This section discusses the regulatory setting for population and housing, socioeconomics, and environmental justice, identifying the laws and policies that govern the decision-making processes of relevant federal, state, and local agencies with a role in implementing the alternatives. This section also provides an overview of social and economic conditions, demographics, and the characteristics of minority and low-income populations in the Plan Area that are relevant for analysis of environmental justice effects.

14.1.1 Regulatory Setting

Federal

Population and Housing

There are no federal regulations pertaining to housing and population.

Socioeconomics

National Environmental Policy Act

NEPA requires an EIS to consider social and economic effects if they are related to effects on the natural or physical environment. The NEPA definition of effects includes social and economic factors (40 CFR 1508.8, 1508.14). However, the intent of NEPA is that social and economic effects alone should not trigger preparation of an EIS (40 CFR 1508.14).

Environmental Justice

Executive Order 12898

Environmental justice is rooted in the Civil Rights Act of 1964, which prohibited discrimination in federally assisted programs, and in Executive Order (EO) 12898 (*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*), issued February 11, 1994. EO 12898 was intended to ensure that federal actions and policies do not result in disproportionately high adverse effects on minority or low-income populations. It requires each federal agency to take “appropriate and necessary” steps to identify and address any such disproportionate effects resulting from its programs, policies, or activities, including those it implements directly, as well as those for which it provides permitting or funding.

Council on Environmental Quality Guidance

CEQ guidance (Council on Environmental Quality 1997) for performing environmental justice analyses as part of the NEPA process provides definitions, thresholds, and overall methodological guidance for environmental justice analyses. The analysis used the definitions of minority and low-income populations provided in CEQ's *Guidance for Agencies on Key Terms in Executive Order 12898* (Council on Environmental Quality 1997) as shown below.

Minority individuals are defined as members of the following population groups.

- American Indian or Alaskan Native.
- Asian or Pacific Islander.
- Black.
- Hispanic.

Minority populations are identified by the following factors.

- Where the minority population percentage of the affected area is meaningfully greater than the minority population percentage of the general population.
- Where the minority population percentage of the affected area exceeds 50% (Council on Environmental Quality 1997).

Low-income populations are identified on the basis of poverty thresholds provided by the U.S. Census Bureau (Council on Environmental Quality 1997), and identified as one of the following.

- The percentage of the population below the poverty level is meaningfully greater than the corresponding percentage in the general population.
- The percentage of the population below the poverty level in the affected area is 20% or more.

Significant concentrations of minority or low-income individuals are sometimes referred to as *environmental justice populations*. Historically, low-income and minority populations have suffered a greater share of the adverse environmental and health effects of industry and development relative to the benefits than has the general population. The identification and mitigation of this potentially disproportionate burden is referred to as *environmental justice* (Rechtchaffen and Gauna 2002). The current regulatory framework for environmental justice reflects the convergence of civil rights concerns and environmental review processes. In the 1980s community organizers and environmental regulators identified three interrelated concerns. First, these groups identified a significant correlation between hazardous waste and other polluting facilities and demographic concentrations of minority and low-income communities. Second, advocates noticed that minority and low-income communities incurred a greater burden of environmental consequences relative to the benefits of industry and development than did the population at large. Third, minority and low-income communities often suffered a relative lack of access and involvement in environmental decision making relative to the population at large (Rechtchaffen and Gauna 2002). Environmental justice is now regulated through federal policy, with the assessment of environmental justice effects occurring as part of the NEPA process.

Please refer to the Section 14.1.4, *Methods for Impact Analysis*, for additional overview of the CEQ guidance used in this analysis.

Environmental Compliance Memorandum No. ECM 95-3

Memorandum No. ECM 95-3 provides guidance for complying with EO 12898 for U.S. Department of the Interior (DOI or Department) actions and programs (U.S. Department of the Interior 1995a). It stipulates that environmental documents prepared by DOI agencies must analyze the impact of agency actions on minority and low-income populations. The memorandum directs agencies to evaluate the equity of the impacts imposed on these populations relative to the benefit of the action. The relevant environmental document should identify any such impacts, or the absence of impacts, on minority and low-income populations.

U.S. Department of Interior's Environmental Justice Strategic Plan

DOI has adopted a plan that governs the actions of all constituent agencies within the Department, including USFWS. The DOI Environmental Justice Strategic Plan—1995 provides the following goals (1995b).

Goal 1: The Department will involve minority and low-income communities as we make environmental decisions and assure public access to our environmental information.

Goal 2: The Department will provide its employees environmental justice guidance and with the help of minority and low-income communities develop training which will reduce their exposure to environmental health and safety hazards.

Goal 3: The Department will use and expand its science, research, and data collection capabilities on innovative solutions to environmental justice-related issues (for example, assisting in the identification of different consumption patterns of populations who rely principally on fish and/or wildlife for subsistence).

Goal 4: The Department will use our public partnership opportunities with environmental and grassroots groups, business, academic, labor organizations, and federal, Tribal, and local governments to advance environmental justice.

The plan in turn reflects DOI's early guidance implementing EO 12898 (U.S. Department of the Interior 1995a). This guidance indicates that constituent agencies within DOI should identify the effects of agency actions on minority and low-income communities and analyze the equity of the distribution of benefits and risks of agency actions, as described above (U.S. Department of the Interior 1995a). As an agency under DOI, USFWS is subject to this policy, and also refers to the text of EO 12898 in its NEPA guidance (U.S. Fish and Wildlife Service 1999).

State

Population and Housing

California Government Code Section 65302(c)

The state requires all local general plans to include a housing element. The discussion of local regulations below provides relevant descriptions for each local jurisdiction.

California Government Code Section 65584

The state requires Regional Housing Needs Plans (RHNP) to be developed by local jurisdictions based on countywide housing projections developed by the California Department of Housing and Community Development. See local regulations below for a description of the RHNA for Butte County.

Socioeconomics

California Environmental Quality Act

CEQA requires analysis of a proposed project's potential impacts on population growth and housing supply, but social and economic changes are not considered environmental impacts in and of themselves under CEQA. CEQA does not require a discussion of socioeconomic effects except where they would result in physical changes, and states that social or economic effects shall not be treated as significant effects on the environment (State CEQA Guidelines Sections 15064[f] and 15131).

Environmental Justice

California Senate Bill 115 (Solis)

Approved in 1999, California Senate Bill 115 (Solis) added Section 65040.12 to the Government Code and Part 3 to Division 34 of the Public Resources Code, both of which concern environmental justice. The bill provides that the Office of Planning and Research is the coordinating agency in California state government for environmental justice programs. The bill also defines environmental justice as “the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws and policies.”

California Government Code Section 65040.12

For the purposes of Government Code Section 65040.12, environmental justice is defined as “the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.”

Section 65040.12 requires the Office of Planning and Research to take the following actions.

1. Consult with the Secretaries of the California Environmental Protection Agency, the Resources Agency, and the Business, Transportation and Housing Agency; the Working Group on Environmental Justice established pursuant to Section 72002 of the Public Resources Code; any other appropriate state agencies; and all other interested members of the public and private sectors in this state.
2. Coordinate the office's efforts and share information regarding environmental justice programs with CEQ, EPA, the General Accountability Office, the Office of Management and Budget, and other federal agencies.
3. Review and evaluate any information from federal agencies that is obtained as a result of their respective regulatory activities under EO 12898, and from the Working Group on Environmental Justice established pursuant to Section 72002 of the Public Resources Code.

Section 65040.12 also requires the Office of Planning and Research to establish guidelines for addressing environmental justice issues in city and county general plans, including planning methods for the equitable distribution of public facilities and services, industrial land uses, and the promotion of more livable communities.

Public Resources Code Sections 71110–71116

Public Resources Code Sections 71110–71116 require the California Environmental Protection Agency (Cal/EPA) to develop a model environmental justice mission statement for boards, departments, and offices in the agency. Section 71113 requires Cal/EPA to convene a Working

Group in Environmental Justice to develop a comprehensive environmental justice strategy. The sections also require this strategy to be reviewed and updated. Finally, Section 71116 establishes a small grant program for nonprofit organizations and federally recognized tribal entities to research environmental justice issues in their community and address larger environmental justice issues.

California Resources Agency Environmental Justice Policy

This policy implements the requirements of California Government Code Section 65040.12 for California Resources Agency actions and programs. The policy states that these provisions apply to agency actions, which are defined as follows (California Resources Agency 2012).

- Adopting regulations.
- Enforcing environmental laws or regulations.
- Making discretionary decisions or taking actions that affect the environment.
- Providing funding for activities affecting the environment.
- Interacting with the public on environmental issues.

Collectively, these policies stand for the principle that California state agencies should analyze the effects of their actions on minority and low-income groups, and seek to avoid disproportionate effects on these groups where feasible.

Local

Population and Housing

Local governments are required to adopt and periodically update the housing elements of their general plans as stated in California Government Code Section 65302(c). The guidelines and requirements for housing elements are outlined by the California Department of Housing and Community Development (HCD).

Butte County

Regional Housing Needs Plan

The RHNP is for the cities of Biggs, Chico, Gridley, and Oroville; the town of Paradise; and Butte County. The purpose of the RHNP is to allocate to the cities and county their “fair share” of the region’s projected housing need by household income group over the seven-and-a-half year planning period covered by the plan. The RHNP ensures a fair distribution of housing among the cities and county, so that every community provides an opportunity for a mix of housing affordable to all economic segments. The housing allocation targets are not building requirements, but rather are goals for each community to accommodate through appropriate planning policies and land use regulations. They are not housing unit quotas that jurisdictions must achieve within the timeframe of their next housing element update.

The 2007 RHNP was adopted in 2008 and covers the 2007 through 2014 planning horizon (the time in which the Notice of Intent/Notice of Preparation for this EIS/EIR was released). BCAG prepared and approved a more recent RHNA in 2012, covering the 2014 through 2022 planning horizon.

Housing Element

The *Butte County Housing Element* (Butte County 2012a) identifies the County's goals, objectives, policies, and actions relative to the improvement, development, and maintenance of housing in the county. The Housing Element contains six overarching goals that range in topic from providing adequate and affordable housing to promoting energy efficiency. The objectives, policies, and actions are more specific and aim to help the County achieve its Housing Element goals.

City of Oroville

The City of Oroville's Housing Element (City of Oroville 2009a) contains five goals to enhance, increase, improve, and preserve the City's housing stock in a fair and equitable manner. These goals include increasing housing availability and providing housing free of discrimination. The Housing Element also contains objectives, policies, and actions with more specific information on how to obtain funding and other means to achieve the City's Housing Element goals.

City of Biggs

The City of Biggs' Housing Element (City of Biggs 2014) establishes goals, policies, and programs that concentrate on four specific aspects of the housing market: housing quality, housing quantity and affordability, equal housing opportunity, and natural resources and energy conservation. The purpose of these goals is to create a housing program that preserves, improves, and develops housing for the City, and to address the housing needs identified in BCAG's 2007 Draft Regional Housing Needs Program.

City of Chico

The City of Chico's Housing Element (City of Chico 2011a) contains seven goals that aim to meet the housing needs of existing and future city residents. The goals range in topic from increasing equal housing opportunities to reinvesting in existing neighborhoods. The associated policies and actions support the City's Housing Element goals.

City of Gridley

The City of Gridley's Housing Element (City of Gridley 2010) contains six goals that range in topic from housing quality and quantity to natural resources and energy conservation. The associated policies and actions support the City's Housing Element goals.

Socioeconomics

There are no local regulations pertaining to socioeconomics. However, California Government Code Section 65302 requires the preparation of general plans by local governments; these governments can include an economics element. Relevant elements are discussed below.

City of Biggs

The City's Economic Development Element contains six goals related to economic development. These goals range in topic from encouraging new development to revitalizing the City's core. The associated policies and actions support the City's Economic Development goals.

City of Chico

The City of Chico's Economic Development Element (City of Chico 2011a) guide's the City's use of resources. The Economic Development Element contains three goals that, along with associated policies and actions, are focused on maintaining long-term prosperity, increasing tourism, and creating a redevelopment strategy.

Environmental Justice

There are no local regulations pertaining to environmental justice.

14.1.2 Environmental Setting

Population and Demographics

As of 2010, Butte County's population was 220,000 with, according to the U.S. Census Bureau, a density of 124 persons per square mile, compared with a state average of 217 persons per square mile. Based on an evaluation of the 2010 census blocks, the population of the Plan Area is approximately 172,522.¹

Although the county population has been steadily increasing, the population of unincorporated areas has been declining as people move to urban areas and the annex areas of the cities to accommodate this growth (Butte County 2012a). Table 14-1 lists the populations of the cities of Biggs, Chico, Gridley, and Oroville and the population of the county as a whole (U.S. Census Bureau 2011).

Table 14-1. Butte County City/County Population Data

Jurisdiction	Population Total 2010
City of Biggs	1,707
City of Chico	86,187
City of Gridley	6,584
City of Oroville ^a	29,568
Butte County	220,000

Source: U.S. Census Bureau 2011.

^a Includes Census data collected for Oroville East and South Oroville census-designated places.

Butte County is a generally rural area, with more than 60% of the county area designated for agricultural uses. Much of this agricultural land is in the western portion of the county. As of January 2010, approximately 61% of the county's population resided in the incorporated cities of Biggs, Chico, Gridley, Oroville, and town of Paradise. Based on BCAG's population growth projections, the county's population is projected to grow at an average annual rate of 1.6%, and the unincorporated county is predicted to grow at an average annual rate of 1.3% (Table 14-2) (Butte County Association of Governments 2011). The median age in the county is 37.2, ranging from 27.4 in

¹ The entire population of census blocks more than 50% within the Plan Area is included in the population for the Plan Area.

Gridley to 35 in Biggs.² Table 14-3 shows racial characteristics for the county as reported in the 2010 census.

Table 14-2. Butte County Population and Growth Estimates for 2010-2035 (Medium Scenario)

Area/Jurisdiction	2010	2015	2020	2025	2030	2035	Total Increase	Percent Increase
Incorporated Cities								
Biggs	1,787	2,139	2,774	3,267	3,830	4,265	2,678	150
Chico	88,228	92,678	99,766	110,046	121,407	133,944	45,716	52
Gridley	6,454	7,890	9,986	11,633	13,556	15,428	8,974	139
Oroville	14,687	16,755	20,063	24,359	26,921	29,770	15,083	103
Unincorporated County	84,302	90,102	96,311	102,600	109,342	116,424	32,122	38
Butte County	221,768	236,800	257,266	281,558	306,047	332,459	110,691	50

Source: Butte County Association of Governments 2011. Butte County Long-Term Regional Growth Forecasts Available at:
< http://www.bcag.org/documents/demographics/pop_emp_projections/Growth_Forecasts_2010-2035.pdf > Accessed on: May 9, 2013.

Note: Paradise is not included in this table because it is not within the Plan Area.

Table 14-3. 2010 Census Data on Race in Butte County

Racial Group	California	Butte County	Percent of County Total
White	21,453,934	180,096	74.8
Hispanic origin (of any race)	14,013,719	31,116	13.0
Asian & Pacific Islander	5,005,393	9,509	4.0
Black or African American	2,299,072	3,415	1.4
American Indian & Alaska Native	362,801	4,395	1.8
Other races	6,317,372	12,141	5.0
Total	49,452,291	240,672	100

Sources: U.S. Census Bureau 2010a.

Housing

The number of housing units in Butte County has been growing steadily for the past decade. The California Department of Finance (2011) estimates that the county had a total of 96,623 housing units in January 2010, with 61,708 single-family homes and approximately 34,915 multifamily housing units and mobile homes (Table 14-4). The average household size in the county is approximately 2.45 people, ranging between 2.6 in Oroville and 3.16 in Gridley (U.S. Census Bureau 2009, 2010a). The county's vacancy rate was 6.44% in 2010. The vacancy rate in Biggs was 6.62%, while the vacancy rate in Gridley was 6.17% (California Department of Finance 2011). The vacancy rate in Chico was 6.1%, while the vacancy rate in Oroville was 8.8% in 2010 (U.S. Census Bureau

² Median age was not available in the 2010 Census for the cities of Biggs and Gridley. Therefore, the data represents the 2005-2009 American Community Survey.

2011). Vacancy rates are lower in the City of Chico, likely due to California State University, Chico's presence; housing is typically in higher demand near college campuses.

Housing stock also continues to grow in Biggs, Chico, Gridley, and Oroville. BCAG projects an annual growth rate for housing of 1.6% for the county and 3.7%, 1.7%, 3.5% and 2.9% for Biggs, Chico, Gridley, and Oroville, respectively. Table 14-5 shows the projected housing growth between 2010 and 2035 (Butte County Association of Governments 2011).

Table 14-4. Butte County City/County Housing Data (Housing Units)

City in Butte County	Total 2010	2010 Occupied	2010 Vacant
City of Biggs	617	556	52
City of Chico	37,050	34,805	2,245
City of Gridley	2,406	2,183	223
City of Oroville ^a	11,801	10,740	1,061
Butte County	95,835	87,618	8,217

Source: U.S. Census Bureau 2011.

^a Includes Census data collected for Oroville East CDP and South Oroville CDP.

Table 14-5. Butte County City/County Housing Data Projections (Medium Scenario, Number of Housing Units)

Area/Jurisdiction	2010	2015	2020	2025	2030	2035	Total Increase	Percent Increase
Incorporated Cities								
Biggs	634	759	984	1,159	1,359	1,584	950	150
Chico	37,159	39,034	42,019	46,349	51,134	56,414	19,255	52
Gridley	2,449	2,994	3,789	4,414	5,144	5,854	3,405	139
Oroville	6,393	7,293	8,733	10,603	11,718	12,958	6,565	103
Unincorporated County	37,199	39,759	42,499	45,274	48,249	51,374	14,175	38
Butte County	96,623	103,078	111,813	122,213	132,668	143,948	47,325	49

Source: Butte County Association of Governments 2011.

Note: Paradise is not included in this table since it is not within the Plan Area

Income and Employment

The county's annual median household income between 2007 and 2011 was \$57,911 (U.S. Census Bureau 2012). Median household incomes vary somewhat among the cities in the County (Table 14-6). The cities of Biggs, Gridley, and Oroville have per-capita incomes substantially lower than that of the county.

Table 14-6. Economic Data for Butte County and Incorporated Cities

	Butte County	Biggs	Chico	Gridley	Oroville
Median household income (dollars)	57,911	56,527	59,168	52,202	51,867
Income per capita (dollars)	23,431	18,690	24,418	18,262	19,488
Individuals below poverty level (percent)	19.8	22.6	21.1	20.1	22.9
Families below poverty level (percent)	12.4	16.8	12.2	13.9	15.7

Source: U.S. Census Bureau 2012.

In 2011, approximately 1,600 total wage and salary jobs were lost in the county, a decline of 2.2%. During this time, most industries were characterized by declining employment. Between 2012 and 2017 employment is expected generally to grow in professional service, retail trade, leisure and hospitality, and the public sector. These sectors are expected to account for more than 50% of all jobs created in the county. Total taxable sales are forecasted to rise by 3.5% between 2012 and 2017, and industrial production is anticipated to remain stable at approximately 3% per year. Table 14-7 presents the county's employment by industry (California Department of Transportation 2012).

Table 14-7. Butte County Employment (thousands of jobs)

Sector	2011	2012 Forecast	2017 Forecast	2030 Forecast
Farm	2.59	2.63	2.75	2.81
Construction	2.4	2.5	3.0	3.0
Manufacturing	3.6	3.7	4.0	4.2
Transportation & Utilities	1.6	1.6	1.8	2.1
Wholesale & Retail Trade	10.9	11.1	12.7	14.8
Financial Activities	3.0	3.2	3.7	4.1
Professional Services	5.2	5.5	6.7	8.5
Information	1.0	1.0	1.1	1.1
Health & Education	13.4	13.4	14.2	16.8
Leisure	7.0	7.1	8.0	9.3
Government	15.7	15.5	16.7	17.9
Total Wage and Salary	70.0	71.1	79.7	91.5

Source: California Department of Transportation 2012. Available at:
http://www.dot.ca.gov/hq/tpp/offices/eab/socio_economic_files/2012/Butte.pdf Accessed on:
May 13, 2013.

Labor force trends in Butte County show that over the past 10 years, the unincorporated county has generally maintained slightly lower unemployment rates than the total county (Butte County 2012a). While labor force trends are similar to statewide trends, the unemployment rates of both the county as a whole and the unincorporated portion were consistently higher than statewide unemployment rates (Butte County 2012a). Total wage and salary job growth is anticipated to be 1.6% in 2012 and is expected to grow an average of 2.2% per year between 2012 and 2017. The unemployment rate improved slightly in 2011 compared to previous years, dropping from 14.4% to 13.8% (California Department of Transportation 2012).

Agriculture

In 2010, the estimated gross value of agricultural production in all of Butte County was approximately \$622 million (Butte County 2010a). Specialty crops and industries, including organic farming and agricultural tourism, also contribute to the agricultural economy. As of 2010, registered organic producers and certified organic producers generated more than \$8 million dollars of revenue (Butte County 2010a). Table 14-8 identifies the value of the county's top ten crops in 2010 dollars.

Table 14-8. Butte County's Top Ten Crops (2010)

Commodity	Value (dollars)
Rice	182,248,000
Walnuts	173,392,000
Almonds	113,781,000
Dried Plums	42,566,000
Nursery stock	23,837,000
Cattle and calves	11,714,000
Rice seed	10,494,000
Fruit and nut (misc.)	10,494,000
Peaches—clingstone	9,690,000
Kiwis	8,177,000
Olives (all)	7,270,000
Apiary pollination	7,078,000

Source: Butte County 2010a.

Property Tax Revenues

Butte County property tax revenues for the 2011–2012 fiscal year totaled \$195 million (Butte County 2011). The average tax rate on property with a home is 0.6% of the home value, although actual tax rates vary between tax rate zones (Tax Rates.org 2013). Property tax revenues generated by the county are limited by Williamson Act contracts. Tax revenues generated by agriculture are generally lower than would be generated by other uses on the same land. (See Chapter 4, *Agricultural and Forestry Resources*, for additional information regarding the Williamson Act).

Environmental Justice Populations

The following discussion describes minority, Hispanic, and low-income communities in the Plan Area based on data from the 2010 decennial census. This section first identifies the census blocks with meaningfully greater total minority and Hispanic populations. A description of the overall distribution of minorities in the Plan Area follows. The section then describes block groups with meaningfully greater low-income populations as well as relevant employment characteristics associated with these populations.

The U.S. Census Bureau collects comprehensive demographic data every 10 years during the decennial census. This analysis uses data from the 2010 decennial census data (i.e., Census 2010). The U.S. Census Bureau collects demographic information on ethnicity at the level of census blocks

(the smallest geographic unit used by the U.S. Census Bureau). Generally, several census blocks make up block groups, which in turn make up census tracts. The population of a census block can vary, depending on the urban or rural character of the area. The U.S. Census Bureau considers Hispanic status to reflect a geographic place of origin rather than ethnicity; data on Hispanic status are collected at the block level.

Minority Populations

Total minority data include the constituent ethnic categories of Black/African-American, Asian, Native Hawaiian or Pacific Islander, and American Indian or Alaskan Native. Consistent with the CEQ's 1997 Guidance, census blocks with more than 50% total minority were identified within the Plan Area.

Figure 14-1 depicts the census blocks within the Plan Area with minority populations of greater than 50%. These data were generated based on census data collected for all minority and Hispanic populations within the Plan Area. In general, Figure 14-1 shows a wide distribution over the Plan Area of census blocks with meaningfully greater minority populations. Areas exhibiting high proportions of minority residents are present in both urban and rural areas. Tables 14-9a and 14-9b identify the minority populations per census block and UPA in the Plan Area.

Table 14-9a. Census Blocks with Greater than 50% Minority or Hispanic Populations by Local Jurisdiction within the Plan Area

Local Jurisdiction	Number of Census Blocks
Biggs	6
Chico	57
Gridley	31
Oroville	117
County	99
Total	310

Table 14-9b. Census Blocks with Greater than 50% Minority or Hispanic Populations by UPA within the Plan Area

UPA Name	Number of Census Blocks
Bangor	3
Chico	57
County	66
Dayton	1
Durham	2
Foothill Area	2
Gridley-Biggs	39
Honcut	2
Nord	1
Oroville	136
Rangor	1
Total	310

Hispanic Residents

Hispanic populations include persons originating in or descended from populations in Latin America and portions of the Caribbean. Consistent with CEQ's 1997 Guidance, census blocks with greater than 50% total Hispanic populations were identified within the Plan Area. Figure 14-1 and Tables 14-9a and 14-9b show the distribution of areas with meaningfully greater proportions of Hispanic residents in the study area. Of minority groups present in the study area, Hispanics are the most widely dispersed, being present in both urban and rural locations.

Low-Income Populations

The U.S. Census Bureau collects poverty status data at the level of census block groups, a geographic unit that includes census blocks but is smaller than census tracts. For purposes of this analysis, low-income populations consist of persons living below the 2010 poverty threshold as defined by the U.S. Census Bureau (U.S. Census Bureau 2010b). Low-income populations were identified as block groups that contained 20% or more low-income individuals (i.e., below the 2010 poverty threshold). Because the income required to sustain a household varies in relation to the number of individuals dependent on a given quantity of income, there is no single threshold for poverty status (U.S. Census Bureau 2010b). The 20% threshold was used because the cost of living in California is higher than elsewhere in the country, and thus the use of a 50% threshold might incorrectly under identify low-income populations in the study area.

Figure 14-2 shows the distribution of areas with meaningfully greater proportions of low-income households in the Plan Area. Low-income populations were identified based on the Federal poverty threshold in 2010 as defined by the U.S. Census Bureau (U.S. Census Bureau 2010b). Generally, there are three distinct areas of meaningfully greater proportions of low-income households: around Oroville and to the north of Oroville, around Chico and to the south of Chico, and north of Big Chico Creek. Table 14-10 identifies the low-income populations per census block and UPA in the Plan Area.

Table 14-10. Low Income Populations in the Plan Area

General Plan Area/UPA	Census Tracts with 20% or More of Households in Poverty
Chico GP Area/UPA	4
Oroville GP/UPA	2
County (outside UPAs)	2
Total	8

14.2 Environmental Consequences

This section incorporates by reference the impact determinations presented for population and housing in the Local Agencies' general plan EIRs (as described in more detail in Section 3.3, *Resource Chapter Organization and NEPA/CEQA Requirements*).³ The significance findings and mitigation

³ These previous CEQA documents are available collectively for public review at the BCAG offices (2580 Sierra Sunrise Terrace, Suite 100 Chico, CA 95928-8441). Individual general plans and EIRs are also available at each of the respective land use agencies.

measures of each of the general plan EIRs are compiled in Appendix C. The Lead Agencies have reviewed these analyses and found them to be appropriate for the purposes of this EIS/EIR.

14.2.1 Methods for Impact Analysis

The BRCP would not provide individual project approvals or entitlements for any private or public development or infrastructure projects. Accordingly, this EIS/EIR does not provide CEQA or NEPA coverage for individual covered activities and does not function as a *programmatic* or *umbrella* CEQA or NEPA document for regional development and infrastructure projects. The BRCP EIS/EIR evaluates only the adverse and beneficial environmental effects associated with the decisions of the Local Agencies, water and irrigation districts, and Caltrans to approve, permit, and implement the BRCP. Accordingly, the methods for analyzing direct impacts on population and housing, socioeconomics, and environmental justice are tailored to evaluate the decisions of the Local Agencies, water and irrigation districts, and Caltrans to approve, permit, and implement the BRCP. This EIS/EIR also incorporates the impact determinations of the Local Agencies' general plan EIRs to analyze indirect impacts on population and housing, socioeconomics, and environmental justice.

Population and Housing

The effects of the action alternatives on population and housing are evaluated qualitatively. Generally, population and housing impacts could occur if covered activities within the Local Agencies' jurisdictions (i.e., within the UPAs) cause substantial increases in population or growth or result in the substantial displacement of existing housing or people. These impacts could be caused by implementation of the general plan or future development within the jurisdictions of the Local Agencies.

In adopting the EIRs for their respective general plans, each Local Agency, except the Cities of Gridley and Oroville, determined that the programmatic impacts on population and housing would be less than significant or mitigated to a less-than-significant level through implementation of general plan policies and adoption of identified mitigation measures. The Cities of Gridley and Oroville have determined that significant and unavoidable impacts would result from substantial population growth in their respective plan areas. It is assumed that all covered activities approved by the Local Agencies would be consistent with the policies of their respective general plans and would be subject to any mitigation measures identified.

The covered activities associated with activities outside the Local Agencies' jurisdictions are analyzed qualitatively for their potential to affect population and housing. Population and housing impacts could be caused by infrastructure development by the water or irrigation districts if these types of covered activities result in substantial increases in population growth or displace existing housing or people.

Socioeconomics

The effects of the action alternatives on socioeconomics are evaluated qualitatively. Generally, socioeconomic effects could occur if the alternatives result in a substantial change in wages earned in the current employment sectors through the displacement of nonagricultural or agricultural businesses or in a substantial reduction in property tax revenue. Such a reduction could occur if land currently used for nonagricultural and agricultural businesses is converted into public uses as a result of the restoration activities identified in the BRCP that do not contribute to property taxes

(e.g., restored habitat). Accordingly, the analysis qualitatively addresses the potential conversion of agricultural lands to nonagricultural uses that do not generate tax revenue and estimates the degree to which implementing each alternative would reduce agricultural uses—affecting the agricultural economy of the region—or affect property tax revenues through acquisition of land for preserves. The analysis uses the potential loss of ricelands as a reference point for potential dollars lost, because rice is the county’s largest agricultural product. References to Chapter 4, *Agricultural and Forestry Resources*, are made where appropriate. Since socioeconomics analysis is not required by CEQA, only a NEPA determination is made in the analysis.

Environmental Justice

This subsection describes how disproportionately high and adverse effects on environmental justice populations were identified. This methodology follows the general guidance provided by EO 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, CEQ’s *Environmental Justice: Guidance under the National Environmental Policy Act* (Council on Environmental Quality 1997), and EPA’s *Toolkit for Assessing Potential Allegations of Environmental Injustice* (U.S. Environmental Protection Agency 2004).

The following definitions were used to identify relevant populations and guide analysis of environmental justice issues. These definitions come from the CEQ guidance and EPA *Toolkit for Assessing Potential Allegations of Environmental Injustice*.

- **Minorities:** individuals who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black (not of Hispanic origin); or Hispanic (Council on Environmental Quality 1997). Hispanic or Latino refers to a place of origin whereas American Indian, Alaskan Native, Asian, Pacific Islander, and Black or African-American (as well as White or European-American) refer to racial categories; thus, for census purposes, individuals classify themselves into racial categories as well as place of origin categories, including Hispanic/Latino and non-Hispanic/Latino. The U.S. Census 2010 allowed individuals to choose more than one race. For this analysis, consistent with guidance from CEQ and EPA (U.S. Environmental Protection Agency 2004), minority refers to people who are Hispanic/Latino of any race, as well as those who are non-Hispanic/Latino of a race other than White or European-American.
- **Low-income:** low-income populations are identified using the national poverty thresholds from the U.S. Census Bureau (Council on Environmental Quality 1997).
- **Disproportionately high and adverse effects:** effects that are adverse under NEPA and disproportionately affect a minority or low-income community as described below. Where minority or low-income individuals constitute a meaningfully greater population, a disproportionately high and adverse finding is made.

The EPA *Toolkit for Assessing Potential Allegations of Environmental Injustice* (U.S. Environmental Protection Agency 2004) provides a general roadmap and methodology for the assessment of environmental justice effects. In accordance with this guidance, environmental justice effects are identified in a phased process with the following steps.

- **Problem formulation:** identify the scope of the action or program that may have environmental justice consequences and integrate the environmental justice assessment with parallel environmental review processes (U.S. Environmental Protection Agency 2004). For this chapter, the scope of the problem subject to analysis consists of all the alternatives.
- **Data collection:** collect information about sources of environmental or health effects in environmental justice populations and identify minority and low-income groups as well as appropriate reference populations (U.S. Environmental Protection Agency 2004). In Section

14.1.2, *Environmental Setting*, of this chapter, information about the distribution of environmental justice populations in the Plan Area is presented.

- **Identification of adverse effects:** identify significant environmental effects associated with the agency action or program that may affect environmental justice populations (U.S. Environmental Protection Agency 2004). This environmental justice assessment is limited to effects that have been identified as adverse even after mitigation as described in Chapters 4 through 13 and Chapter 15 of this EIS/EIR that may affect environmental justice populations. These effects are included in this chapter and analyzed for their potential to result in disproportionate adverse effects on environmental justice populations. Effects determined not to be adverse in Chapters 4 through 13 and Chapter 15 are not considered in the analysis below because those effects would not result in disproportionate effects on minority and low-income populations. In addition, significant effects that would not result in direct or discernable indirect effects on environmental justice populations are not included in the analysis. These would include terrestrial and aquatic resources, as any significant environmental effects that may be disclosed in Chapter 6, *Biological Resources*, would not result in direct or discernable indirect effects on environmental justice populations. This approach is consistent with CEQ guidance (Council on Environmental Quality 1997).
- **Identification of disproportionate effects:** use the information gathered in the identification of adverse effects and determine if these environmental consequences may disproportionately affect an environmental justice population as shown in Figures 14-1 and 14-2. Where effects are identified as adverse under NEPA, this analysis further identifies whether the adverse effects would result in disproportionately high and adverse effects on minority or low-income populations.

Because analysis of environmental justice impacts is not required by CEQA, only a NEPA determination is made.

14.2.2 Significance Criteria

Population and Housing

In accordance with Appendix G of the State CEQA Guidelines, the action alternatives would be considered to have a significant effect if they would result in any of the conditions listed below.

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

Socioeconomics

For the purposes of this analysis, a socioeconomic impact is considered to be adverse if it would result in any of the following.

- Substantially change economic activity within the Plan Area.

- Substantially affect property tax revenue.

Environmental Justice

Federal CEQ guidance provides relevant thresholds for identification of environmental justice effects. The CEQ guidance identifies three factors to be considered to the extent practicable when determining whether environmental effects are disproportionately high and adverse (Council on Environmental Quality 1997).

- Whether there is or would be an impact on the natural or physical environment that significantly and adversely affects a minority population, or low-income population. Such effects may include ecological, cultural, human health, economic, or social impacts on minority communities, low-income communities, or Indian tribes when those impacts are interrelated to impacts on the natural or physical environment. For the purposes of this analysis a significant and adverse effect on a minority population is found where significant environmental effects would occur in a location where minorities constitute greater than 50% of the population or low-income individuals constitute 20% or more of the population.
- Whether the environmental effects are significant and are or may have an adverse impact on minority populations, or low-income populations, which appreciably exceeds or is likely to appreciably exceed those on the general population or other appropriate comparison group. For the purposes of this analysis an effect appreciably exceeds the effect on the general population if it would occur in a location where minorities constitute greater than 50% of the population or low-income individuals constitute 20% or more of the population.
- Whether the environmental effects occur or would occur in a minority population or low-income population affected by cumulative or multiple adverse exposures from environmental hazards that appreciably exceed the cumulative or adverse exposure of the population at large. For the purposes of this analysis an effect appreciably exceeds the effect on the general population if the affected population is greater than 50% minority or 20% or greater low-income.

These standards are consistent with the standards of the California Resources Agency Environmental Justice Policy. This policy states that the Resources Agency and the constituent departments shall (California Resources Agency 2012) undertake the following.

- Identify relevant populations that might be adversely affected by programs or projects submitted by outside parties, as appropriate.
- Work in conjunction with other federal, state, regional, and local agencies to ensure consideration of disproportionate impacts on relevant populations

The factors and standards described above have been summarized into the following significance criteria. Therefore, for the purposes of this analysis, an impact is considered to be adverse if it would result in any of the following:

- Substantially disproportionately affect minority or low-income populations

14.2.3 Impacts and Mitigation Measures

Alternative 1—No Action (No Plan Implementation)

As discussed in Chapter 2, Section 2.3.1, *Alternative 1—No Action (No Plan Implementation)*, project proponents would apply for permits on a project-by-project basis, without coordinated effort to minimize biological impacts through the BRCP. Under Alternative 1, urban development and public infrastructure projects would continue to occur pursuant to the approved general plans of the Local Agencies and BCAG's regional plans. These include residential, commercial, and industrial development as well as construction, maintenance, and use of urban infrastructure, parks, recreational facilities, public services, and similar types of urban land uses. Other activities that would occur under Alternative 1 are construction and maintenance of public infrastructure projects outside of urban areas, including public infrastructure projects in and over streams (e.g. bridge replacements). The primary impact mechanism for impacts on population and housing, socioeconomics, and environmental justice under Alternative 1 are implementation of the various general plans and the potential resulting increase in population, changes in tax base and employment, and the potential for disproportionate environmental effects on minority and low-income populations. No regional conservation strategy or conservation measures would be implemented; therefore, benefits to and impacts on population and housing, socioeconomic conditions, and environmental justice associated with implementation of the conservation strategy and conservation measures would not occur.

Impact SOC-1: Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure) (NEPA: significant and unavoidable; CEQA: significant and unavoidable)

As shown in Table 14-2, the Local Agencies expect a population increase between 50% and 150% through 2035. The County and the City of Chico determined that activities associated with implementation of the general plan would result in less-than-significant impacts (City of Chico 2011b; Butte County 2010b), because land use activities associated with the general plan would anticipate and accommodate the population growth. In addition, the levels of population growth anticipated to occur as a result of implementation of the County's general plan would be similar to that anticipated by BCAG in its population projections for the unincorporated portion of the county; consequently, it would be planned for and accommodated by the County General Plan 2030 goals, policies, and actions (Butte County 2010b).

The Cities of Gridley, Biggs, and Oroville determined that activities associated with implementation of their general plans would result in substantial population growth in an area by proposing new homes and businesses (City of Oroville 2009b; City of Gridley 2009; City of Biggs 2013). The EIRs for the Gridley, Biggs, and Oroville general plans concluded that, although implementation of the goals, plans, and policies of each general plan to accommodate and control the growth in each city's plan areas would limit impacts associated with population growth, they would not reduce impacts to a less-than-significant level. The permit term for the proposed action (Alternative 2) would extend past the implementation of the adopted general plans (horizon 2030); consequently, it is anticipated the local jurisdictions would revise their general plans for the period extending after 2030.

NEPA Determination: Under Alternative 1, the Cities of Gridley, Oroville, and Biggs would experience substantial increases in population growth as a result of implementation of the general

plan, and these Cities could not reduce impacts to less-than-significant levels through mitigation or general plan policies; therefore, the effect would be significant and unavoidable.

CEQA Determination: Under Alternative 1, the Cities of Gridley, Oroville, and Biggs concluded that implementation of the general plan goals, policies, and actions could reduce the impacts of population growth, but not to a less-than-significant level. Furthermore, Gridley determined that the purpose of the general plan is to provide a framework for governing future growth of the city's planning area and thus could not propose feasible mitigation to reduce the expected growth. These three local jurisdictions determined that impacts on population growth would be significant and unavoidable. Accordingly, the impact is considered significant and unavoidable.

Impact SOC-2: Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere (NEPA: less than significant; CEQA: less than significant)

As shown in Table 14-5, Butte County and the local jurisdictions are expected to experience an increase in housing of 49–150% through 2035. The County and the Cities of Biggs, Chico, and Oroville determined that implementation of their general plans would not result in the displacement of substantial amounts of housing and would generally allow an increase in the total number of housing units (City of Oroville 2009b; City of Chico 2011b; Butte County 2010b; City of Biggs 2013). Overall, these general plans would allow a net increase of housing and include policies and actions that preserve existing neighborhoods. Those general plans that include redevelopment, such as Chico and Oroville, could result in some displaced housing units. However, the proposed redevelopment is in underutilized areas and would be conducted a voluntary fashion such that substantial numbers of existing housing units would not be displaced (City of Oroville 2009b; City of Chico 2011b). The City of Gridley determined that implementation of the general plan would not result in the displacement of existing houses or residences because changes are not proposed that would require the removal or displacement of any existing housing or residences (City of Gridley 2009).

NEPA Determination: Under Alternative 1, implementation of the general plan would result in an increase in housing in undeveloped areas or underutilized areas of the various jurisdictions and that general plan implementation would not result in a substantial displacement of housing. The impact would be less than significant. No mitigation is required.

CEQA Determination: Under Alternative 1, determined that implementation of the general plan would result in an increase in housing in undeveloped areas or underutilized areas of the various jurisdictions and that general plan implementation would not result in a substantial displacement of housing. Accordingly, the impact would be less than significant. No mitigation is required.

Impact SOC-3: Displace a substantial number of people, necessitating the construction of replacement housing elsewhere (NEPA: less than significant; CEQA: less than significant)

As shown in Table 14-2, Butte County and the local jurisdictions are expecting an increase in population of 50–150% through 2035. The County and the Cities of Biggs, Chico, and Oroville determined that general plan buildout would not result in displacement of a substantial number of people (City of Oroville 2009b; City of Chico 2011b; Butte County 2010b; City of Biggs 2013) because general plan implementation would not entail the removal of existing housing or businesses that would result in the displacement of people. Overall, these general plans would increase housing where it does not presently exist, and would provide opportunities for infill residential and urban

development. The City of Gridley determined that general plan implementation would not result in the removal or displacement of existing residences or housing; therefore, it would not result in displacing a substantial number of people (City of Gridley 2009).

NEPA Determination: Under Alternative 1, the buildout of various general plans would not result in a substantial displacement of people because it would not result in the removal of existing housing and would generally increase housing in undeveloped or underutilized areas of the various jurisdictions. The impact would be less than significant. No mitigation is required.

CEQA Determination: Under Alternative 1, the buildout of various general plans would not result in a substantial displacement of people because it would not result in the removal of existing housing. The impact would be less than significant. No mitigation is required.

Impact SOC-4: Substantially change economic activity in the Plan Area (NEPA: beneficial)

It is anticipated that Alternative 1 would result in an overall projected increase in housing, employment, and income as shown in Tables 14-7 and 14-9 as a consequence of implementation of the general plan. This increase would constitute a beneficial effect on the economic activity resulting from employment and industry within the jurisdictions of the Local Agencies and the Plan Area. While some displacement of farms may result from expansion of urban land uses into agricultural areas, the general projection for the farm sector is expected to result in an increase from 259,000 jobs in 2011 to 281,000 jobs in 2030 (Table 14-7). Thus, it is expected that employment within the county, including the farm sector, would continue to increase.

NEPA Determination: Under Alternative 1, employment and jobs are expected to increase over the next few years and through 2030, including jobs in the farm sector. This would be a beneficial effect.

Impact SOC-5: Substantially affect property tax revenue (NEPA: beneficial)

Property values associated with urban uses are dependent on a wide range of site-specific and broad geographic considerations, such as size and shape of the property, accessibility and visibility, environmental conditions, legal constraints, utilities, zoning and regulation, land supply, and overall economic climate. Covered activities associated with general plan implementation could entail rezoning parcels, introducing new or substantially different uses, and altering or expanding support infrastructure (e.g., water service, transportation facilities) in support of planned development.

Housing in Butte County and the local jurisdictions is projected to increase by 49–150% through 2035. Jobs and employment are also anticipated to increase. The associated increase in urban property uses, the number of businesses, and the expansion of existing businesses are expected to positively contribute to the local tax base through the generation of property tax revenue. Because the County is able to collect more property taxes from urban uses (e.g., residential homes) than from other uses (e.g., agricultural uses) property taxes are expected to increase as urban uses increase. Displacement and overall reduction of farms and agricultural land are expected as urban land uses expand into existing agricultural areas (i.e., a total of approximately 9,000 acres shown in Table 4-7 in Chapter 4, *Agricultural and Forestry Resources*). However, farms typically generate lower levels of property taxes—and taxes in general—than do urban uses. Consequently, it is expected that overall property tax revenues would increase as a result of implementation of the general plan.

NEPA Determination: Under Alternative 1, property tax revenue is expected to increase with implementation of the general plan. This would be a beneficial effect.

Impact SOC-6: Substantially disproportionately affect minority or low-income populations (NEPA: significant and unavoidable)

The following resources, summarized in Table ES-2, were identified to have significant and unavoidable impacts: agricultural resources; air quality; hydrology and water quality; noise; public services and public utilities; recreation and visual resources; and transportation. The significant and unavoidable impacts related to these resources generally result because of the following impact mechanisms.

- Conversion of farmland to nonagricultural land uses as a result of implementation of the general plan in the Local Agencies' jurisdictions.
- Conversion of farmland to nonagricultural uses as a result of other changes in the existing environment in the Local Agencies' jurisdictions.
- Conflicts with applicable air quality plans and violation of air quality standards. Substantial contributions to existing or projected air quality violations as a result of construction emissions the Local Agencies' jurisdictions.
- Exposure of sensitive receptors to substantial pollutant concentrations and a cumulatively considerable net increase of criteria pollutants during construction in the Local Agencies' jurisdictions.
- Create objectionable odors affecting a substantial number of people during construction in the Local Agencies' jurisdictions.
- Generation of greenhouse gases in the Local Agencies' jurisdictions.
- Exposure of people or structures to a significant risk of loss, injury, or death involving flooding as a result of implementation of the general plan in flood zones in the Local Agencies' jurisdictions.
- A substantial permanent increase in ambient noise levels as a result of implementation of the general plan in the Local Agencies' jurisdictions.
- Reduced service ratios or standards for public services and facilities as a result of implementation of the general plan in Gridley.
- Exceedance of wastewater treatment requirements and inadequate capacity by a wastewater treatment provider to serve the projected demand, in addition to the provider's existing commitments, for Gridley.
- Construction of new water or wastewater treatment facilities, stormwater drainage facilities, additional water supplies, or need new landfill services as a result of implementation of the general plan in Gridley.
- Increased use of recreational facilities and a substantial change in visual character and quality, scenic views, and daytime and nighttime glare as a result of implementation of the general plan in Gridley.
- Substantial increases in traffic volumes as a result of regional and local roadways, resulting in exceedance of the capacity of the existing roadway system as a result of implementation of the general plan in the Local Agencies' jurisdictions.

- Safety hazards due to design features, incompatible uses (e.g., hazards to vehicular, pedestrian, and bicycle transit), or inadequate emergency access as a result of implementation of the general plan in Biggs.

As shown in Figure 14-1, minority individuals constitute a meaningfully larger percentage of the population (more than 50%) within and adjacent to Biggs, Gridley, Oroville, and Chico than in the general population. As shown in Figure 14-2, low-income individuals constitute a meaningfully larger percentage of the population (more than 20%) within and adjacent to Oroville and Chico than in the general population. As a result of the significant and unavoidable resource determinations summarized above and the locations of the meaningfully greater populations of minority and low-income persons, it is determined that minority and low-income persons would experience a disproportionately high and adverse effect associated with the impacts listed above.

NEPA Determination: Under Alternative 1, there would be significant and unavoidable impacts on agricultural resources, air quality, hydrology and water quality, noise, public services and public utilities, recreation and visual resources, and transportation and these impacts would occur in locations of the Plan Area with meaningfully larger populations of minority and low-income persons. Therefore, effects on these populations would be disproportionately high, and the impact would be significant and unavoidable.

Alternative 2—Proposed Action

Under Alternative 2, covered activities would include the existing, planned, and proposed land uses over which the Permit Applicants have land use authority; state and local transportation projects; maintenance of water delivery systems (e.g., WCWD canals and similar delivery systems); habitat restoration, enhancement, and management actions (conservation measures); and adaptive management and monitoring activities. Most covered activities would require individual permits and approvals pursuant to the Local Agencies' general plans and land use regulations or the requirements of the implementing agency (such as Caltrans and irrigation districts) and would undergo subsequent project-level CEQA review and relevant NEPA review for construction and operations-related impacts; some covered activities, however, may be exempted from environmental review requirements due to project characteristics, including small projects or infill projects.

It is anticipated that implementation of permanent development projects within the jurisdiction of the Local Agencies would result in the same impacts as those identified in the discussion of Impact SOC-1 through SOC- 6 under Alternative 1 activities associated with implementation of the general plans.

Alternative 2 includes a conservation strategy and conservation measures to preserve and restore habitat in the Plan Area. The exact locations of easements or fee-title acquisition for conservation areas within the Plan Area have not been determined, but an average transaction size of 160 acres to obtain land for the conservation strategy is a general presumption. In most instances, permanent conservation easement acquisitions are preferred, as they allow for continued land use practices in the working landscapes of the county (e.g., farming, ranching, and other land uses) and can be less costly to acquire and maintain than fee-title acquisitions. In some instances, fee-title acquisition will be necessary—for example, in areas where habitat will be restored, conservation lands that require frequent access and intensive habitat management, and instances where landowners are only interested in fee-title sale of the land (Butte County Association of Governments 2015). The

expected total costs for the conservation component or BRCP implementation over the 50-year implementation period are estimated at \$428.1 million. These costs, distributed over the 50-year implementation period, address implementation of conservation actions that contribute to the conservation of natural communities and the conservation and recovery of covered species (see Appendix F of the BRCP).

Impact SOC-1: Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure) (NEPA: significant and unavoidable; CEQA: significant and unavoidable)

Impacts associated with implementation of the general plans would be the same as under Alternative 1 and are significant and unavoidable.

Implementation of covered activities associated with water and irrigation districts and the conservation strategy is not anticipated to result in substantial population growth because these activities would not facilitate growth in the Plan Area beyond that planned by the Local Agencies. The water and irrigation districts would perform activities that they currently perform to upgrade and maintain their systems. These water and irrigation districts provide water for agricultural uses only and so these activities would only accommodate agricultural production growth in their service areas as needed. The conservation strategy and conservation measures—generally entailing such activities as conservation easements on agricultural lands and active restoration along streams—have no mechanism for inducing population growth. Therefore, impacts associated with these types of covered activities would not result in substantial population growth.

NEPA Determination: While the conservation strategy and conservation measures and the water and irrigation districts' activities would not result in substantial population growth, covered activities associated with implementation of the Gridley, Biggs, and Oroville general plans would result in substantial increases in population growth as identified in Alternative 1; therefore, this impact would be significant and unavoidable.

CEQA Determination: While the conservation strategy and conservation measures and the water and irrigation districts' activities would not result in substantial population growth, covered activities associated with implementation of the Gridley, Biggs, and Oroville general plans would result in substantial increases in population growth as identified in Alternative 1; therefore, this impact would be significant and unavoidable.

Impact SOC-2: Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere (NEPA: less than significant; CEQA: less than significant)

Impacts associated with implementation of the general plans would be the same as under Alternative 1. Implementation of covered activities associated with water and irrigation districts and the conservation strategy would have a very low potential to displace any existing housing because they would primarily take place along existing district roads or within existing pipeline rights of ways as described in Chapter 2, *Proposed Action and Alternatives*, and depicted in Figure 2-3 of the BRCP. Implementation of covered activities associated with the conservation strategy and conservation measures would similarly have a very low potential to displace existing housing because they would involve either placing easements on existing agricultural lands or restoring habitat in underutilized areas. Therefore, these activities would not displace a substantial number of existing housing units.

NEPA Determination: Under Alternative 2, housing implemented in the general plans would occur in undeveloped areas or underutilized areas of the various jurisdictions and would not result in a substantial displacement of housing. Furthermore, the other covered activities would have a very low potential to displace existing housing. Accordingly, impacts would be less than significant. No mitigation is required.

CEQA Determination: Under Alternative 2, housing implemented in the general plans would occur in undeveloped areas or underutilized areas of the various jurisdictions and would not result in a substantial displacement of housing and that the other covered activities would have a very low potential to displace housing. Accordingly, the impact would be less than significant. No mitigation is required.

Impact SOC-3: Displace a substantial number of people, necessitating the construction of replacement housing elsewhere (NEPA: less than significant; CEQA: less than significant)

Impacts associated with general plan buildout would be the same as under Alternative 1. As disclosed in the discussion of Impact SOC-2 under Alternative 2, implementation of covered activities associated with water and irrigation districts and the conservation strategy would have a very low potential to displace housing. Consequently, they are not expected to displace substantial numbers of people.

NEPA Determination: Alternative 2 would not result in substantial displacement of people as a result of general plan buildout. Furthermore, the other covered activities would have a very low potential to displace existing people. Accordingly, the impact would be less than significant. No mitigation is required.

CEQA Determination: Alternative 2 would not result in substantial displacement of people as a result of general plan bailout. And the other covered activities would have a very low potential to displace existing people. Accordingly, the impact would be less than significant. No mitigation is required.

Impact SOC-4: Substantially change economic activity within the Plan Area (NEPA: beneficial)

Impacts associated with implementation of the general plans would be the same as under Alternative 1.

Because the conservation plan and conservation measures are programmatic in nature and do not specify locations of actions, there is a high degree of uncertainty regarding the extent of Alternative 2's effects on economic activity within the Plan Area. However, the process of land development is complex and subject to a wide range of influences, and implementation of the proposed conservation strategy and issuance of take permits would change development conditions, which could in turn affect the overall economic activity in the Plan Area. Issuance of take permits to local authorities would streamline the permit process and clearly define project mitigation requirements for future projects. The streamlined process may allow for quicker completion of projects and greater efficiency in land development. Take authorization under Alternative 2 would be associated with specific costs in the form of fees or land dedications (summarized in Table 8-5, *Summary of BRCP Mitigation Implementation Costs by Cost Category*, and 8-6, *Summary of BRCP Conservation Component Implementation Costs by Cost Category*, of the BRCP).

More displacement of farms and agriculture is likely to occur under Alternative 2 than under Alternative 1 because the covered activities outside the Local Agencies' jurisdictions (conservation

strategy and conservation measures) are anticipated to remove a certain amount of land from agricultural production through conversion to different habitat types. Approximately 3,800 acres of three agricultural communities—rice, irrigated pasture, and irrigated cropland—are expected to be removed in the Plan Area (Table 4-5 of the BRCP). As shown in Table 4-9 in Chapter 4, *Agricultural and Forestry Resources*, 1.3% of the overall amount of rice in the Plan Area, the top crop in the county (Table 14-8) would be affected. When applying the 2010 total production value for rice—\$182,248,000 (Table 14-8)—this decrease in ricelands could result in a potential loss of approximately \$2,369,224. However, the estimated gross value of agricultural production in the county was \$622,414,000 in 2010 (Butte County 2010a); consequently, the potential loss would be equivalent to less than 0.4% of the gross value of the county’s agricultural production. Alternative 2 includes land purchase of conservation easements on agricultural lands that would permit continued agricultural use. The protection target for agricultural lands is approximately 26,000 acres of rice and irrigated pasture and irrigated cropland. Thus, this land would continue to be farmed. Changes in agricultural practices (e.g., use of pesticides or herbicides, schedule of activities) may be required as conditions of the proposed easements, but the conditions would be compatible with maintaining the ongoing economic viability of agricultural use.

NEPA Determination: Alternative 2 is expected to increase employment and jobs in the Plan Area associated with implementation of the general plans and preservation of existing agricultural lands under the conservation strategy would more than compensate for the potential loss of dollars from the reduction of ricelands. This would be a beneficial effect.

Impact SOC-5: Substantially affect property tax revenue (NEPA: beneficial)

Impacts associated with implementation of the general plans would be the same as under Alternative 1.

Land acquisition for the conservation strategy could indirectly affect property tax revenue by influencing a number of land valuation factors. Land acquisition would result in specific restrictions on the use of individual preserve properties. The extent and type of restrictions would be highly variable, depending on the current conditions and use of the property. For example, agricultural lands acquired may continue in agriculture use, but with minor conditions on use to enhance biological values. Restrictions on use of property could be perceived in the marketplace as detrimental to the value of adjacent agricultural properties because of the potential for endangered species relocation onto adjacent agricultural properties. Alternative 2 provides take coverage for adjacent agricultural parcels a half a mile from the reserve edges to prevent impacts on surrounding agricultural practices (see Chapter 6, Section 6.9 of the BRCP for additional information). Other more intensively managed lands—such as commercial or industrial uses—near preserves would not likely be affected to any measurable degree, because these lands offer little habitat value that would attract sensitive species.

Land acquisition under Alternative 2 could affect property tax revenue by removing agricultural lands from production and from County tax rolls. Lands acquired through conservation easement would continue to be taxed as agricultural lands. Land acquired in fee title would be broadly distributed throughout Plan Area and may have a lower tax rate than the same parcels under current conditions. Because Alternative 2 does not specify the amount of fee-title versus easement acquisition and has not yet identified specific parcels for acquisition, a detailed determination of impact on property tax revenue is not feasible. However, the conservation strategy’s priority is to

use conservation easements wherever feasible, thereby keeping the land in production and reducing the amount of land removed from the tax rolls.

In general, agricultural lands provide far less revenue from property taxes on a per-acre basis than urban uses. Agricultural lands tend to have a lower assessed value than urban and commercial land uses. Accordingly, the potential loss in property taxes associated with removal of agricultural lands from the tax rolls through implementation of the conservation strategy would be offset by higher tax rates—and, consequently, revenues—associated with planned urban development actions that are covered activities under Alternative 2.

NEPA Determination: The expected increase in property tax revenue associated with implementation of the general plans under Alternative 2 and the continued revenue from agricultural lands placed under conservation easement are anticipated to offset any potential losses from the removal of agricultural lands from the County's tax rolls through implementation of the conservation strategy and conservation measures. This would be a beneficial effect.

Impact SOC-6: Substantially disproportionately affect minority or low-income populations (NEPA: significant and unavoidable)

The effects associated with implementation of the general plans would be the same as under Alternative 1 and are significant and unavoidable.

Implementation of the conservation strategy and conservation measures was determined to have less-than-significant effects (after mitigation) on air quality, noise and transportation and significant and unavoidable impacts on air quality and agriculture. These conclusions are summarized below.

Agriculture

Implementation of the conservation strategy would result in the direct removal of important agricultural land and conversion of this land to nonagricultural uses. The conservation strategy would preserve approximately 26,000 acres of agricultural land; however, the removal of important agricultural land is considered significant and unavoidable.

Air Quality

Construction-related emissions produced as a result of implementing the conservation strategy and conservation measures would result in impacts on air quality by potentially conflicting with the Northern Sacramento Valley Planning Area 2006 Air Quality Attainment Plan; violating air quality standards; resulting in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard; exposing sensitive receptors to substantial pollutant concentrations; and creating objectionable odors affecting a substantial number of people. These impacts would be considered significant. However, BRCP AMMs, in addition to implementation of Mitigation Measures AQ-1a and AQ-1b, which would implement Butte County Air Quality Management District mitigation measures for construction equipment and fugitive dust, respectively, would reduce these air quality impacts to a less-than-significant level.

Greenhouse gas (GHG) emissions associated with implementing BRCP conservation measures could exceed applicable GHG thresholds and could conflict with GHG reduction planning efforts in the Plan Area. Mitigation Measure AQ-6, which would require the implementation of best construction

practices for minimizing GHG emissions, but not below threshold levels. Therefore, this impact is considered significant and unavoidable.

Noise

Implementation of the conservation strategy and conservation measures would likely result in the generation of noise levels in excess of standards established in local general plans or noise ordinances during construction, and would likely result in a temporary or periodic increase in ambient noise. Mitigation Measure NOI-1, which would employ noise-reducing construction practices during construction and initiate a complaint/response tracking program prior to construction, would reduce this impact.

Transportation

The conservation strategy and conservation measures could result in potential conflicts with transportation plans, programs, and planned projects. Mitigation Measure TRA-3 was incorporated to reduce this impact.

As a result of the impact determinations disclosed in the discussion of Impact SOC-6 under Alternative 1 and the locations of the meaningfully greater populations of minority and low-income persons, it is determined that minority and low-income persons would experience a disproportionately high and adverse effect associated with the impacts listed above.

NEPA Determination: Significant and unavoidable impacts on agricultural resources, air quality, hydrology and water quality, noise, public services and public utilities, recreation and visual resources, and transportation would occur in locations of the Plan Area with meaningfully larger populations of minority and low-income persons. Therefore, effects on these populations would be disproportionately high and adverse. The mitigation measures incorporated for the effects associated with air quality, noise, and transportation would reduce effects associated with implementation of the conservation strategy and conservation measures. However, overall, the impact would be significant and unavoidable to environmental populations.

Alternative 3—Reduced Development/Reduced Fill

Alternative 3 is similar to Alternative 2 except that it uses the various general plan EIR reduced development alternatives as described in Chapter 2, *Proposed Action and Alternatives*, to create a single reduced development footprint. Covered activities under this alternative would be similar to those described in the BRCP but would be limited to the reduced development footprint for a reduced permit term of 30 years. The reduced footprint and reduced land conservation would result in fewer built structures and less ground disturbance.

It is anticipated that under Alternative 3, fewer acres of natural communities would be conserved because reduced development would provide reduced funding for the conservation strategy. However, it is anticipated that the conservation measures would be the same because the reduction of fill would be achieved through the reduced development footprint of the Local Agencies' general plans rather than through modification of the conservation measures. Consequently, the impacts related to implementation of the conservation strategy and conservation measures would be very similar to those described under Alternative 2.

Impact SOC-1: Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure) (NEPA: significant and unavoidable; CEQA: significant and unavoidable)

According to the County's general plan EIR, this impact would be similar to that under the Alternatives 1 and 2: in other words, it would not result in substantial population growth in the County's planning area (Butte County 2010b). The impact would be less than significant. The City of Chico's general plan EIR determined that fewer population impacts would occur under Alternative 3 because less development would occur; however, that alternative is not expected to provide adequate residential or nonresidential development to meet future demands.

The general plan EIRs for the Cities of Gridley, Biggs, and Oroville concluded that population growth predicted under a reduced development alternative would be substantial (City of Oroville 2009b; City of Gridley 2009; City of Biggs 2013). Although population and growth in these cities would be less than that described under Alternative 1, Alternative 3 would still result in a larger buildout potential of residential units than the projections for Gridley's population growth; would still result in substantial growth in Oroville; and could result in growth beyond that anticipated by BCAG's population projections.

Implementation of covered activities outside the Local Agencies' jurisdictions (i.e., water and irrigation districts' activities and the conservation strategy) would result in impacts similar to those under Alternative 2. There is very low potential for these covered activities to result in a substantial population increase because they are not activities that facilitate growth beyond that planned by the Local Agencies.

NEPA Determination: While the conservation strategy and conservation measures and the water and irrigation districts' activities would not result in substantial population growth, covered activities associated with implementation of the Gridley, Oroville, and Biggs general plans would result in substantial increases in population growth as identified in Alternative 1; therefore, this impact would be significant and unavoidable.

CEQA Determination: The conservation strategy and conservation measures and the water and irrigation districts' activities would not result in substantial population growth, covered activities associated with implementation of the Gridley, Oroville, and Biggs general plans would result in substantial increases in population growth as identified in Alternative 1; therefore, the impact would be significant and unavoidable.

Impact SOC-2: Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere (NEPA: less than significant; CEQA: less than significant)

Impacts associated with implementation of the general plans would be the same as under Alternative 2. Because implementation of covered activities associated with water and irrigation districts and the conservation strategy would have the same—but slightly reduced—impacts as Alternative 2, this impact would be slightly less than that disclosed for Alternative 2.

NEPA Determination: Construction of housing under Alternative 3 (i.e., their Reduced Development Alternatives) would occur in undeveloped or underutilized areas of the various jurisdictions and would not result in a substantial displacement of housing. Furthermore, the other

covered activities would have a very low potential to displace existing housing. Accordingly, the impact would be less than significant. No mitigation is required.

CEQA Determination: Implementation of the general plans under Alternative 3 (e.g., their Reduced Development Alternatives) would not result in a substantial displacement of housing. Furthermore, the other covered activities would have a very low potential to displace housing. Accordingly, the impact would be less than significant. No mitigation is required.

Impact SOC-3: Displace a substantial number of people, necessitating the construction of replacement housing elsewhere (NEPA: less than significant; CEQA: less than significant)

Impacts associated with general plan buildout would be the same as under Alternative 1. As disclosed in the discussion of Impact SOC-2 under Alternative 2, implementation of covered activities associated with water and irrigation districts and the conservation strategy would have a very low potential to displace housing. Consequently, they are not expected to displace substantial numbers of people.

NEPA Determination: Substantial displacement of people would not occur as a result of general plan buildout under the Alternative 3. Furthermore, the other covered activities would have a very low potential to displace existing people. Accordingly, the impact would be less than significant. No mitigation is required.

CEQA Determination: Substantial displacement of people would not occur as a result of general plan buildout under Alternative 3 and that the other covered activities would have a very low potential to displace existing people. Accordingly, the impact would be less than significant. No mitigation is required.

Impact SOC-4: Substantially change economic activity within the Plan Area (NEPA: beneficial)

It is anticipated that Alternative 3 would result in a lesser benefit to economic activities in the Plan Area than described in Tables 14-2 and 14-7 because the covered activities within the Local Agencies' jurisdictions would be reduced. While development would still occur, it would be more highly concentrated and limited to certain areas. Consequently, Alternative 3 is anticipated to result in fewer positive effects on employment and businesses than Alternative 2.

The effects associated with implementation of the conservation strategy and conservation measures would be similar to those under Alternative 2, but would be reduced. Because the conservation plan and conservation measures are programmatic in nature and do not specify locations of actions, there is a high degree of uncertainty regarding the extent of Alternative 3's effects on economic activity in the Plan Area. It is anticipated that reduced development would lead to a decreased extent of conservation because of reduced development fees would be available to support habitat preservation and restoration, and because the lesser extent of impacts associated with development would require less mitigation.

Alternative 3 would likely result in less displacement of farms and agriculture than Alternative 2 because the conservation strategy would conserve fewer acres and fewer acres would be removed by urban development. Approximately 1,876 acres of three agricultural communities—rice, irrigated pasture and irrigated crop land—are expected to be removed in the Plan Area under this alternative. Approximately 1% of the overall amount of rice in the Plan Area, the top crop in the county (Table 14-8), would be affected. When applying the 2010 total production value for rice—\$182,248,000 (Table 14-8—this could result in a potential loss of approximately \$1,822,480.

However, the estimated gross value of agricultural production in the county was \$622,414,000 in 2010 (Butte County 2010a); consequently, the potential loss would be equivalent to less than 0.3% of the gross value of the county's agricultural production.

NEPA Determination: The expected increase in employment and jobs in the Plan Area associated with general plan implementation under Alternative 3 and preservation of existing agricultural lands under the conservation strategy would more than compensate for the potential loss of dollars from the reduction of ricelands. This would be a beneficial effect.

Impact SOC-5: Substantially affect property tax revenue (NEPA: beneficial)

Impacts associated with general plan implementation under the Reduced Development Alternatives would be less than those under Alternative 2 because the extent of development would be reduced, thereby generating reduced revenues.

The reduction of conserved lands associated with the reduction of urban development would have a minimal effect on tax revenues because lands currently in agricultural production would continue to generate tax revenue. Because Alternative 2 does not specify the amount of fee-title versus easement acquisition and has not yet identified specific parcels for acquisition, a detailed determination of impact on property tax revenue is not feasible. However, the conservation strategy's priority is to use conservation easements wherever feasible, thereby keeping the land in production and reducing the amount of land removed from the tax rolls.

Although both development and conservation would be reduced under this alternative, it is anticipated that the potential loss in property taxes associated with removal of agricultural lands from the tax rolls through implementation of the conservation strategy would be offset by higher tax rates—and, consequently, revenues—associated with planned urban development actions that are covered activities under Alternative 2.

NEPA Determination: Although Alternative 3 would result in a lesser increase in property tax revenue associated with general plan implementation under the Reduced Development Alternatives than would Alternative 2, it would still result in an overall increase above baseline. This would be a beneficial effect.

Impact SOC-6: Substantially disproportionately affect minority or low-income populations (NEPA: significant and unavoidable)

The effects associated with general plan implementation under the Alternative 3 would be similar to but less than those under Alternative 1 because less development is expected. The effects associated with the conservation strategy under the Alternative 3 would be similar to but less than those under Alternative 2 because there would likely be fewer conservation lands.

NEPA Determination: Significant and unavoidable impacts on agricultural resources, air quality, hydrology and water quality, noise, public services and public utilities, recreation and visual resources, and transportation would occur in locations of the Plan Area with meaningfully larger populations of minority and low-income persons. Therefore, effects on these populations would be disproportionately high and adverse. The mitigation measures incorporated for the effects associated with air quality, noise, and transportation would reduce effects associated with implementation of the conservation strategy and conservation measures. However, overall, the impact would be significant and unavoidable.

Alternative 4—Greater Conservation

Alternative 4 would be similar to Alternative 2 except that under Alternative 4, the conservation strategy would include the conservation of an additional 9,850 acres of grassland and 35,310 acres of riceland. Alternative 4 would include the same conservation measures as Alternative 2, and all other acreage protection targets for natural communities/land types would be the same as described under Alternative 2. The covered activities associated with water and irrigation districts and transportation projects would be the same under Alternative 4 as under Alternative 2. Therefore, impact mechanisms for population, socioeconomics, and environmental justice would be similar to those described for Alternative 2.

Impact SOC-1: Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure) (NEPA: significant and unavoidable; CEQA: significant and unavoidable)

Impacts associated with implementation of the general plans would be the same as under Alternative 2. The increase in conserved rielands and grasslands under Alternative 4 would have a low potential to cause substantial population growth because the conservation would primarily place conservation easements on existing agricultural lands or restore habitat in underutilized areas.

NEPA Determination: While the conservation strategy and conservation measures and the water and irrigation districts' activities would not result in substantial population growth, covered activities associated with implementation of the Gridley, Oroville, and Biggs general plans would result in substantial increases in population growth as identified in Alternative 2; therefore, this impact would be significant and unavoidable.

CEQA Determination: While the conservation strategy and conservation measures and the water and irrigation districts' activities would not result in substantial population growth, covered activities associated with implementation of the Gridley, Oroville, and Biggs general plans would result in substantial increases in population growth as identified in Alternative 2; therefore, this impact would be significant and unavoidable.

Impact SOC-2: Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere (NEPA: less than significant; CEQA: less than significant)

The increase in rielands and grasslands under Alternative 4 when compared to Alternative 2 is not anticipated to result in the demolition of existing housing. This is because conservation would primarily place conservation easements on existing agricultural lands or restore habitat in underutilized areas. These activities would not result in the demolition of substantial number of existing housing units because the land is already in agricultural production where few to no houses are located. Impacts of covered activities resulting from implementation of the general plans of the Local Jurisdictions would be the same as under Alternative 2, as described in the discussion of the Impact SOC-2 for Alternative 2.

NEPA Determination: Implementation of general plans under Alternative 4 would occur in undeveloped areas or underutilized areas of the various jurisdictions and would not result in a substantial displacement of housing. Furthermore, the other covered activities would have a very

low potential to displace existing housing. Accordingly, there the impact would be less than significant. No mitigation is required.

CEQA Determination: Implementation of the general plans under Alternative 4 would not result in a substantial displacement of housing and that the other covered activities would have a very low potential to displace housing. Accordingly, the impact would be less than significant. No mitigation is required.

Impact SOC-3: Displace a substantial number of people, necessitating the construction of replacement housing elsewhere (NEPA: less than significant; CEQA: less than significant)

Impacts associated with general plan buildout would be the same as under Alternative 1. As disclosed in the discussion of Impact SOC-2 under Alternative 2, implementation of covered activities associated with water and irrigation districts and the conservation strategy would have a very low potential to displace housing. Consequently, they are not expected to displace substantial numbers of people.

NEPA Determination: Under Alternative 4 substantial displacement of people would not occur as a result of general plan buildout. Furthermore, the other covered activities would have a very low potential to displace existing people. Accordingly, impacts would be less than significant. No mitigation is required.

CEQA Determination: Under Alternative 4 substantial displacement of people would not occur as a result of general plan buildout. Furthermore, the other covered activities would have a very low potential to displace existing people. Accordingly, the impact would be less than significant. No mitigation is required.

Impact SOC-4: Substantially change economic activity within the Plan Area (NEPA: beneficial)

Impacts associated with implementation of the general plans would be the same as under Alternative 2. The projected increase in housing, employment, and income would be a beneficial effect. Impacts associated with implementation of covered activities outside the Local Agencies' jurisdiction would be similar to those under Alternative 2. However, less displacement of farms and agriculture is likely to occur under Alternative 4 than under Alternative 2 because the conservation strategy would protect more acres of ricelands. It is anticipated the potential loss of ricelands would be less than anticipated under Alternatives 2 and 3. Moreover, Alternative 4 would entail increased land acquisition through conservation easements on agricultural lands that would ensure continued agricultural use. The conservation target of 35,300 additional acres of ricelands would aim to maintain production on these lands.

NEPA Determination: The expected increase in employment and jobs in the Plan Area associated with implementation of the general plans under Alternative 4 and preservation of existing agricultural lands under the conservation strategy would more than compensate for the potential loss of dollars from the loss of agricultural production, which would be less than that under Alternative 2. This effect would be beneficial.

Impact SOC-5: Substantially affect property tax revenue (NEPA: beneficial)

Impacts associated with implementation of the general plans would be the same as under Alternative 2. Impacts associated with implementation of the conservation strategy and conservation measures would be similar to those under Alternative 2. However, the targeted

protection of an additional 35,300 acres of ricelands is anticipated increase tax revenues generated by those lands compared to revenues under Alternative 2.

NEPA Determination: The expected increase in property tax revenue associated with implementation of the general plans and the continued revenue from agricultural lands placed under conservation easement under Alternative 4 are anticipated to offset any potential losses from the removal of agricultural lands from the County's tax rolls through implementation of the conservation strategy and conservation measures. This effect would be beneficial.

Impact SOC-6: Substantially disproportionately affect minority or low-income populations (NEPA: significant and unavoidable)

The effects associated with implementation of the general plans would be the same as under Alternative 2 and implementation of the conservation strategy and conservation measures would be the same as under Alternative 2. Significant and unavoidable impacts on agricultural resources, air quality, hydrology and water quality, noise, public services and public utilities, recreation and visual resources, and transportation would occur in locations of the Plan Area with meaningfully larger populations of minority and low-income persons. The mitigation measures incorporated for the effects associated with air quality, noise, and transportation would reduce effects associated with implementation of the conservation strategy and conservation measures. However, overall, the effects on these populations would be disproportionately high and adverse.

NEPA Determination: As with Alternative 2, the effects on populations of minority and low-income persons would be disproportionately high, and the impact would be significant and unavoidable under Alternative 4.

14.2.4 Cumulative Analysis

Methods and Approach

The cumulative analysis for population and housing, socioeconomics, and environmental justice is a qualitative evaluation using the past, present, and reasonably foreseeable future projects listed in Chapter 3, Section 3.3.2, under *Cumulative Impacts*. This analysis considered agricultural, urban development, and water supply development projects, including roadway projects; the general plan EIR impact determinations for cumulative impacts, where applicable; and the impact determinations identified above for the various alternatives.

This analysis determines whether the covered activities not analyzed in previous environmental documents (e.g., those activities not considered in the general plan EIRs) would result in cumulatively considerable incremental contribution that, when combined with the past, present, and reasonably foreseeable future projects, would result in a cumulatively significant impact.

Cumulative Impacts

Past, present, and reasonably foreseeable future projects are identified in Chapter 3, Section 3.3.2, under *Cumulative Impacts*. Past and present projects have resulted in an overall increase in population and housing in the Plan Area. Flood control activities have reclaimed land that can be developed for urban uses, and water supply projects have been developed to provide urban infrastructure with water. These projects have provided a beneficial cumulative effect on population

and housing by supporting and providing housing and development necessary for a growing population.

Past and present projects have also resulted in an overall growing market of employment and jobs in the Plan Area, providing a beneficial cumulative effect on socioeconomics. While agricultural resources in the Plan Area are experiencing a decline, the industry provides employment and is anticipated to continue doing so with future water supply infrastructure and irrigation efficiency projects.

There is a potential for disproportionate effects on minority and low-income populations to occur in the Plan Area as a result of past and present projects in the vicinity of the concentration of minority and low-income populations (Figures 14-1 and 14-2). It is surmised that some disproportionate effects on environmental justice populations have occurred because of the concentration of such populations in the Plan Area.

Alternative 1—No Action (No Plan Implementation)

Population and Housing

The Cities of Gridley, Oroville, and Biggs determined that cumulatively considerable and significant impacts on population and housing would result from implementation of their general plans. Consequently, past, present, and reasonably foreseeable future projects—including implementation of the general plans—would result in cumulatively considerable and significant impacts. Accordingly, Alternative 1 would result in an incremental contribution to cumulative impacts.

Socioeconomics

It is anticipated that implementation of the general plans would result in an overall increase in market activities as a result of urban development and would not substantially reduce expected agricultural production in the Plan Area, given the projections presented in Table 4-7. Accordingly, Alternative 1 would not result in an incremental contribution to cumulative socioeconomic effects.

Environmental Justice

It is anticipated that implementation of the general plans would result in overall disproportionate effects on environmental justice populations. Specifically, Alternative 1 would result in disproportionate effects as a result of significant and unavoidable impacts on agricultural resources, air quality, hydrology and water quality, noise, public services and public utilities, recreation and visual resources, and transportation. While mitigation measures are available to reduce some of these effects as discussed in the impact analyses, the effect would remain disproportionate. Accordingly Alternative 1 would result in an incremental contribution to cumulative environmental justice impacts.

Alternative 2—Proposed Action

Population and Housing

The Cities of Gridley, Oroville, and Biggs determined that cumulatively considerable and significant impacts on population and housing would result from implementation of their general plans, which is included in the covered activities. Accordingly, past, present, and reasonably foreseeable future projects—including general plan buildout—would result in cumulatively considerable and

significant impacts on population and housing. The covered activities associated with implementation of the conservation strategy and conservation measures would not result in a substantial increase in population or displace housing because these activities have a very low potential to affect population growth or housing. Overall, Alternative 2 would result in an incremental contribution to cumulative population and housing impacts.

Socioeconomics

It is anticipated that implementation of the general plans would result in an overall increase in market activities as a result of urban development. While the conservation strategy might result in a reduction of employment opportunities and tax base, the covered activities associated with implementation of the general plans would offset any potential reduction. Therefore, Alternative 2 would not result in an incremental contribution to cumulative socioeconomic effects.

Environmental Justice

It is anticipated that implementation of the general plans would result in overall disproportionate effects on environmental justice populations. Specifically, Alternative 2, like Alternative 1, would result in disproportionate effects as a result of significant and unavoidable impacts on agricultural resources, air quality, hydrology and water quality, noise, public services and public utilities, recreation and visual resources, and transportation. While mitigation measures are available to reduce some of these effects as discussed in the impact analyses, the effect would remain disproportionate. Accordingly, the Alternative 2 would result in an incremental contribution to cumulative environmental justice impacts.

Alternative 3—Reduced Development/Reduced Fill and Alternative 4—Greater Conservation

Although the extent of impacts on population and housing, socioeconomics, and environmental justice associated with implementation of the conservation strategy and conservation measures varies slightly between these alternatives, the mechanism and implications are the same as under Alternative 2. Both alternatives would result in a cumulatively considerable contribution to cumulative impacts on population and housing and environmental justice. Neither Alternative 3 nor Alternative 4 would result in a cumulatively considerable contribution to cumulative impacts on socioeconomics.

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