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## 5.6 Socioeconomics

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This section describes the effects of the Darden Clean Energy Project (Project) on socioeconomic resources and is based on the Socioeconomics Report prepared by ECONorthwest and available in Appendix M. Section 5.6.1 describes the existing regional conditions, including population and housing, income and unemployment, county fiscal resources, public service, and utilities. Section 5.6.2 provides an overview of the regulatory setting related to socioeconomics. Section 5.6.3 identifies potential socioeconomic impacts that may result from Project construction and operation (including maintenance), as well as mitigation measures that should be considered during Project construction and operation. Section 5.6.4 discuss cumulative impacts. Section 5.6.5 presents laws, ordinances, regulations, and standards (LORS) applicable to socioeconomics and the Project. Section 5.6.6 identifies regulatory agency contacts and Section 5.6.7 includes a description of the necessary permits to construct and operate the Project. Section 5.6.8 provides a list of references used in the preparation of this section.

### 5.6.1 Environmental Setting

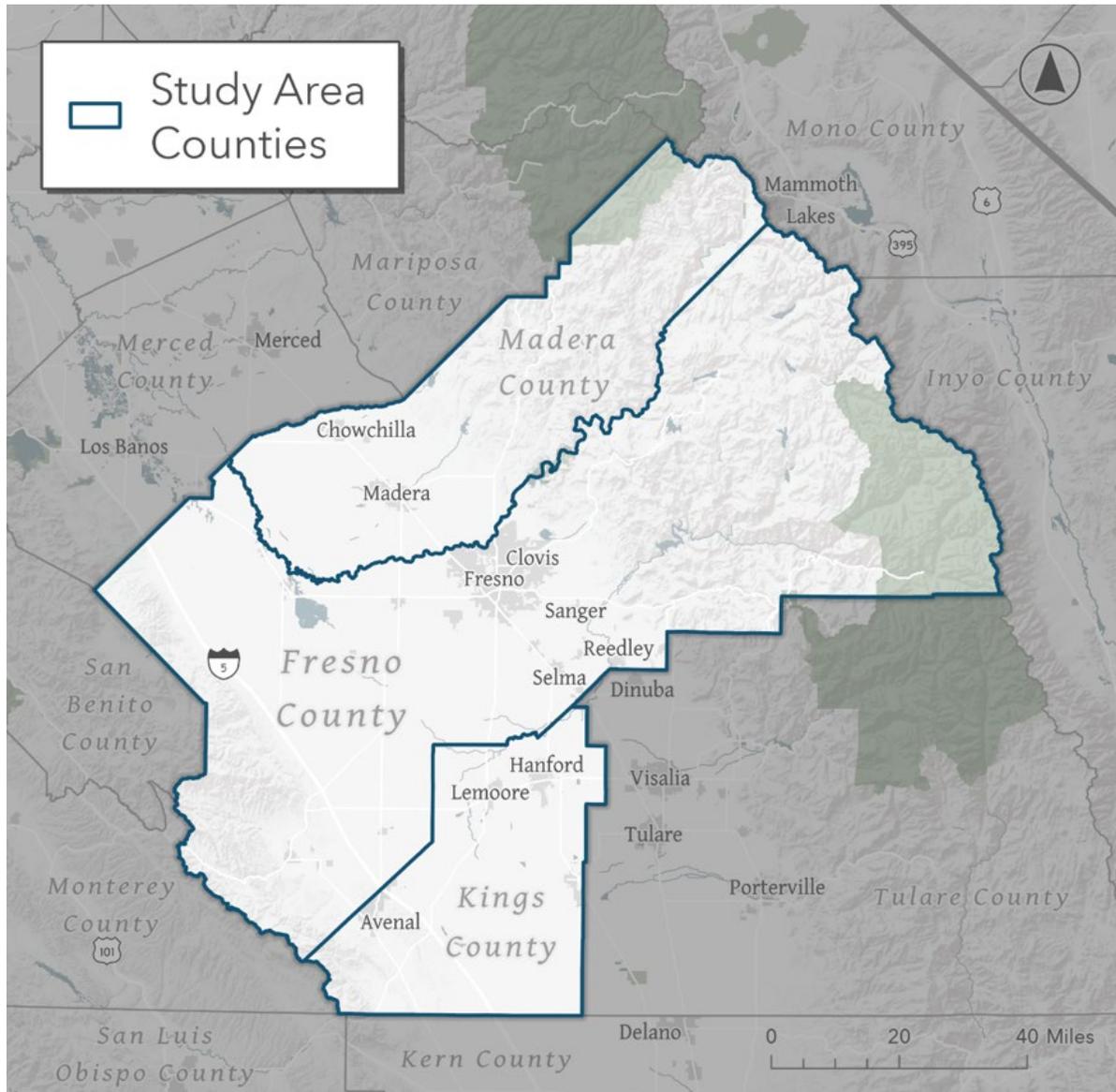
The Project site is located in an agricultural area of unincorporated western Fresno County south of the community of Cantua Creek. Fresno County shares its border with Madera and Merced counties to the north, Monterey and San Benito counties to the west, Inyo and Mono counties to the east, and Tulare and Kings counties to the south. For purposes of evaluating socioeconomic impacts, the study area for the Project includes the Fresno-Madera Metropolitan Statistical Area (MSA), which is Fresno and Madera counties, and also addresses adjacent counties as appropriate for capturing market and network relationships that extend beyond the borders of the MSA. The Fresno-Madera MSA encompasses the cities of Fresno and Madera, which represent the economic and demographic center of the region. The study area is shown in Figure 5.6-1.

#### 5.6.1.1 *Population and Community Character*

Fresno County had a total estimated population of 1,015,190 in 2022, ranking it 10th out of the 58 counties in California in terms of population (Appendix M). More than two-thirds of the county's population is concentrated in the cities of Fresno and Clovis, in the center of the county. Madera County's population was approximately 150,000 in 2022, much of which is in the city of Madera. The closest incorporated communities to the Project site are San Joaquin, located approximately 15 miles north-east of the Project site and Huron located approximately 20 miles south-east of the Project site. Table 5.6-1 provides the estimated populations of each community in the vicinity of the Project. Fresno County has a population density of almost 170 people per square mile, which is less dense than the California state average of roughly 250 people per square mile (Appendix M). The western part of Fresno County is considerably less densely populated than the central portion where the major population centers are.

Population in California declined during the COVID-19 pandemic; however, population grew in Fresno County. Annualized population growth in California was 0.6 percent prior to the COVID-19 pandemic (2010-2020). Over the period most affected by the pandemic (2020-2023), the annualized population growth rate in California fell to -0.4 percent. Conversely, Fresno and Madera counties saw population growth during the pandemic, though in Fresno County, the growth rate decreased when compared with the period prior to the pandemic (0.8 percent pre-pandemic to 0.3 percent during the pandemic). Table 5.6-2 provides historic and estimated population trends for Fresno, Madera, and Kings counties, as well as overall state trends.

**Figure 5.6-1 Study Area**



**Table 5.6-1 Population and Distance from Project Site**

Community	Population (2021)	Approximate Distance from Project Site (Driving Miles)
<b>Fresno County</b>		
Fresno	538,678	40
Clovis	118,488	50
Mendota	12,534	34
Kerman	15,817	27
Coalinga	17,560	26
Huron	6,222	22
Tranquility CDP*	645	20
San Joaquin	3,743	15

Community	Population (2021)	Approximate Distance from Project Site (Driving Miles)
Cantua Creek CDP*	471	10
<b>Madera County</b>		
Madera	66,173	45
<b>Kings County</b>		
Hanford	57,359	42
Lemoore Station CDP*	6,692	33

\*CDP = Census Designated Place  
Source: ACS 2021

**Table 5.6-2 Population Trends and Projections, 2010-2060**

Year	Fresno County		Madera County		Kings County		California	
	Population	AAGR*	Population	AAGR*	Population	AAGR*	Population	AAGR*
2010	930,450		150,865		152,982		37,253,956	
2020	1,007,344	0.8%	156,141	0.3%	152,200	-0.1%	39,520,071	0.6%
2023	1,015,793	0.3%	158,276	0.5%	152,340	0.0%	38,990,487	-0.4%
2030	1,047,382	0.4%	161,980	0.3%	157,531	0.5%	39,430,871	0.2%
2040	1,083,901	0.3%	163,345	0.1%	161,190	0.2%	40,106,449	0.2%
2050	1,098,206	0.1%	161,937	-0.1%	160,446	0.0%	40,049,519	0.0%
2060	1,095,205	0.0%	159,048	-0.2%	156,194	-0.3%	39,508,492	-0.1%

\* AAGR = Annual Average Growth Rate  
Source: (California Dept of Finance, 2023), (US Census Bureau, Accessed 2023)

Over the next few decades, population in California is expected to grow modestly at a 0.2 percent annualized rate (2023 to 2040). Similarly in Fresno, Madera, and Kings counties, the population is expected to grow modestly on an annualized basis between 2023 and 2040. In California and the three-county region, population is expected to slow, stagnate, and then decrease between 2040 and 2060 (Table 5.6-2).

The population in the three-county region of Fresno, Madera, and Kings counties is predominantly of Hispanic ethnicity (Table 5.6-3), higher in proportion than California as a whole. The largest population group within the three-county region is Hispanic, followed by White, then Black, then American Indian/Alaska Native (Appendix M).

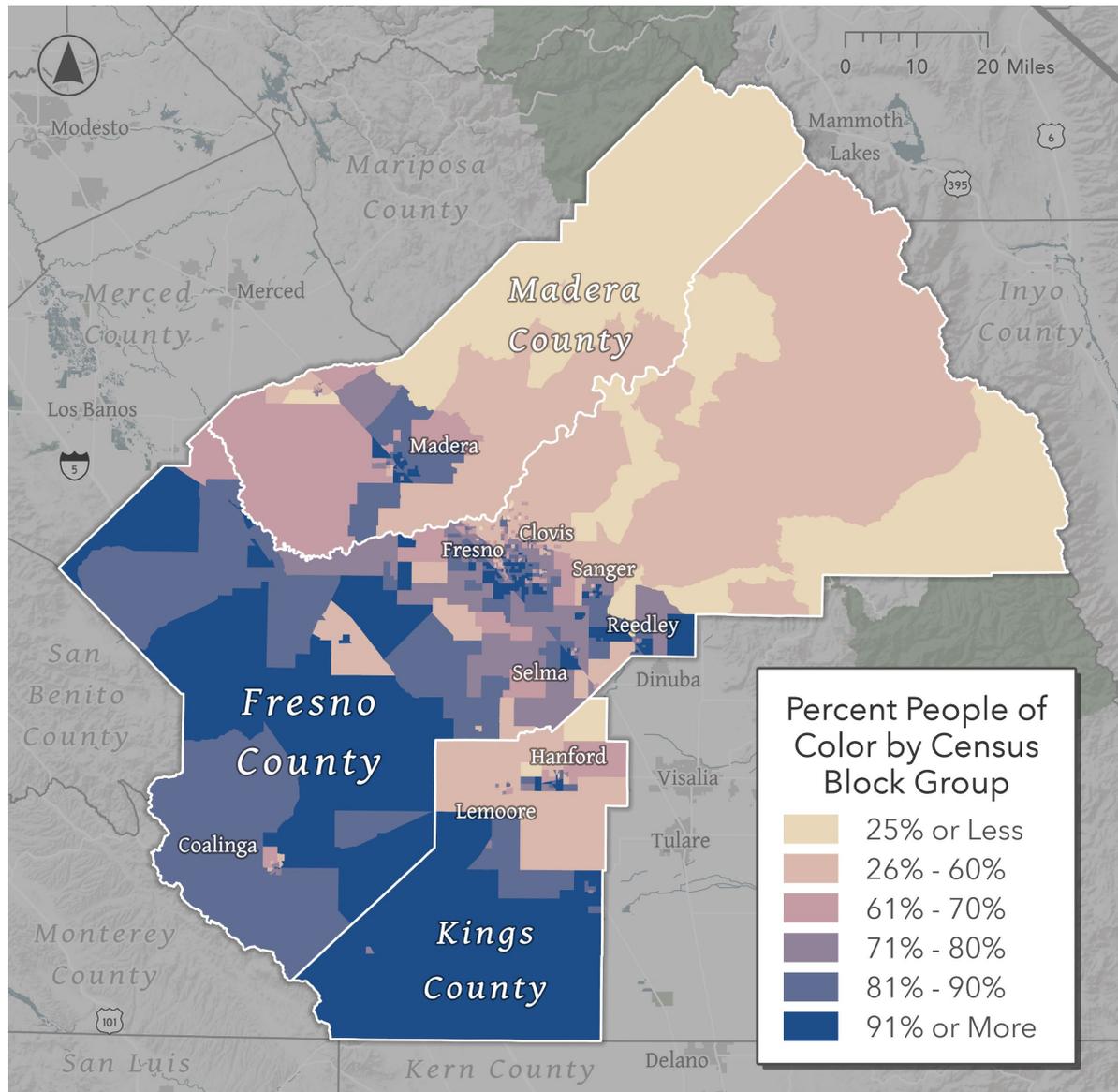
Communities of racially and ethnically diverse populations are prevalent throughout the study area. While this diversity is generally common, the counties are not universally diverse. The southwestern portion of Fresno and Kings counties are made up of populations that are up to 80 percent racially and ethnically diverse, as compared with the northeast portion of the counties that are significantly less diverse. While concentration of racially and ethnically diverse populations are among the highest in Fresno County’s western region, the population density is considerably less than in the urban areas of the Fresno-Madera MSA, meaning fewer people overall live in the large census tracts in the western part of the county shown in Figure 5.6-2.

**Table 5.6-3 Race and Ethnicity (2022)**

	Fresno County	Madera County	Kings County	California
<b>Total Population</b>	<b>1,012,350</b>	<b>157,382</b>	<b>151,337</b>	<b>39,028,571</b>
White	27.3%	31.7%	29.9%	35.3%
Black	4.6%	3.0%	6.2%	5.6%
American Indian/Alaska Native	0.6%	1.0%	0.9%	0.4%
Hispanic (any race)	54.6%	60.3%	56.7%	40.0%

Sources: Appendix M

**Figure 5.6-2 Racial and Ethnic Makeup of Fresno, Madera, and Kings Counties**



### 5.6.1.2 Housing

This review of housing supply focuses on an area that corresponds to approximately a 60-mile commute to the Project site and examines rental housing, transient lodging, and RV parks.<sup>1</sup> Rental housing and transient lodging are concentrated where the county’s population is concentrated (e.g., cities of Fresno and Clovis) while RV parks are more dispersed throughout the area.

#### Rental Housing

About 43 percent of the total housing stock in the study area is rental housing.<sup>2</sup> This proportion is slightly lower than the overall statewide percentage. The regional housing stock of available rental units is low in the three-county region of Fresno, Madera, and Kings counties as presented in Table 5.6-4.

The three-county region includes 432,166 total housing units, about three-quarters of which are in Fresno County. Although the rental share is about 44 percent in Fresno County as a whole, in many of the communities in the rural western part of the county the rate is higher, up to 80 percent of total housing units in San Joaquin for example (Table 5.6-4).

The vacancy rate for rental housing is relatively low over the entire area ranging from very low to no vacancy in many of the smaller communities to around three percent in urban parts of Fresno County. Overall, for the entire region, the rental vacancy rate is three percent of rental housing, translating into an aggregated 5,476 vacant rentals in the three-county region. Most of these rental units (4,621 units) are in Fresno County and specifically in the city of Fresno with 3,127 available rental units.

**Table 5.6-4 Regional Rental Housing Stock**

Location	Total Housing Units (Occupied or Vacant)	Rental Housing as % of Housing	Rental Vacancy Rate	Vacant Rental Units
<b>Fresno County</b>	<b>336,509</b>	<b>44%</b>	<b>3.1%</b>	<b>4,621</b>
Fresno	183,951	52%	3.3%	3,127
Clovis	40,815	34%	3.8%	521
Mendota	3,065	60%	1.6%*	29*
Kerman	4,492	51%	0.0%*	0*
Coalinga	4,812	40%	3.4%*	66*
San Joaquin	879	80%	3.2%*	22*
Tranquility CDP	218	32%	0.0%*	0*
Cantua Creek CDP	129	64%	0.0%*	0*
<b>Madera County</b>	<b>49,512</b>	<b>31%</b>	<b>3.5%</b>	<b>535</b>
Madera	18,588	48%	2.9%	258
<b>Kings County</b>	<b>46,145</b>	<b>43%</b>	<b>1.6%</b>	<b>320</b>
Hanford	19,215	38%	0.9%*	66*
Lemoore Station CDP	1,558	93%	0.0%*	0*
<b>Total</b>	<b>432,166</b>	<b>43%</b>	<b>3.0%</b>	<b>5,476</b>

Note: \* indicates estimate has a large margin of error (using a 90% confidence level) and there is uncertainty in this result.

Source: Appendix M

<sup>1</sup> Appendix M describes the data used to determine the Project’s labor-market geography as a drive time of 60 minutes to the Project site and provides a map of this area.

<sup>2</sup> Rental housing includes houses, apartments, mobile homes, groups of rooms, and single rooms meant for occupancy. It does not include dormitories, transient quarters like hotels and motels, or RVs (Appendix M).

The 2023 Fresno County Regional Housing Needs Assessment identifies that rental housing is in short supply, particularly rental housing accessible to many of the region's residents at lower income levels. Affordable housing comprises a large share of that deficit with 15,592 and 9,143 units needed for those households with incomes at or below 50 percent and 80 percent average median income (AMI), respectively (Appendix M).

These findings are generally consistent with county- and municipal-level trends in the region. A 2023 California Housing Partnership report identifies a need for affordable rental housing units to serve those households paying a high share of their income towards rent (Appendix M). In 2019, there was a gap of about 36,000 units needed for families with low incomes (Appendix M). Although there is a severe need for affordable units for lower-income households, there is a more general shortage of rental housing in Fresno, Madera, and Kings counties, indicating a tight rental housing market in the region.

## **Hotels/Motel Lodging**

The hotel overnight lodging market in the Fresno area is extensive. In July 2023 there were an aggregated 11,794 rooms in 168 different hotels. For the past 12 months the average daily rate (ADR) of room nights sold was \$122.59.<sup>3</sup> The average occupancy rate was 60.7 percent.<sup>4</sup>

Since January 2015, demand (i.e., number of room nights sold and occupied per day) grew at a rate of 0.95 percent per year. The supply of rooms (i.e., the number of rooms available in hotels each night) grew 0.7 percent, or less than demand and reflects some hotel closures associated with the COVID-19 pandemic. With demand growing faster than supply, real ADRs have been rising. Real ADR is the ADR after taking out the effects of inflation, which has been rising at an annual rate of 0.75 percent since January 2015.

The Fresno hotel market is very seasonal. Occupancy rates often fall below 50 percent in December and January when agricultural workers go home, tourism is weak, and demand from the business and meeting trades substantially declines (Appendix M).

Transient lodging availability and occupancy rates are not uniform across the region: communities in the western part of Fresno County have fewer transient lodging options and high local demand during the growing seasons (generally February through June). During this time most hotels/motels are fully booked (personal communication with J. Ramos, Fresno County Economic Development Corporation).

### *Natural Occupancy Rate*

Current market conditions are not predictive of future conditions. When considering hotel markets more than a year or two into the future, the relevant occupancy rate is the one at which long-run supply and demand are in balance, referred to as the natural occupancy rate. Economists calculate it using regression analysis of historical data.

In the Fresno MSA area, occupancy is highest from February through October, dropping off sharply in the short offseason, a pattern characteristic of an agricultural area. A regression analysis conducted for the Project reveals the Fresno MSA has a natural occupancy rate of about 65 percent. The current 12-month occupancy rate in the Fresno MSA is at about 61 percent. With the natural occupancy rate at 65 percent, Fresno MSA is over-supplied with hotel rooms by approximately 860

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<sup>3</sup> ADR is the average amount paid for a room night before taxes, amenities, and extras.

<sup>4</sup> Occupancy rate is the number of room nights sold as a percentage of rooms available.

rooms (7 percent). Historically, the average number of room vacancies in the Fresno MSA have fluctuated between about 3,000 and 6,000 since January 2015 (Appendix M).

**RV Parks**

There are at least 32 mobile home and RV parks in the Fresno area. Collectively, these parks provide about 2,600 individual RV sites (Appendix M).

Occupancy rates at RV parks that responded to an inquiry ranged from 50 percent to 100 percent. Respondents indicated that occupancy rates typically remain high throughout the year (Appendix M). At an average vacancy rate of 25 percent, at least 650 RV sites would be available in the region during the year. However, vacancy rates are likely closer to zero when agricultural labor demand in the region is high (typically February to June).

**Summary of Available Housing Supply**

The analysis of rental and transient lodging supply shows that transient lodging options are more plentiful in urban areas (Fresno, Madera) and during the fall and winter months when agricultural labor demand is lower. The total supply of rental and transient units (units, rooms, sites) within a 60-minute commuting distance from the Project area is likely around 9,000 (Table 5.6-5).

Hotel/motel and RV site vacancy fluctuations may increase this supply somewhat during the off-season months. Most of this supply is in the city of Fresno and its suburbs. All types of rental and transient lodging in smaller communities in western Fresno County are likely extremely limited, especially during the agricultural growing season (February through June).

**Table 5.6-5 Estimated Total Short-term and Transient Housing Supply**

Location	Rental Housing Units	Hotel/Motel Rooms	RV Sites	Total Vacant Housing Units <sup>3</sup>
Fresno County	4,600	--	400	5,000
Madera County	500	--	100	600
Kings County	300	--	20	320
Tulare and Merced Counties <sup>1</sup>	--	--	100	100
<b>Total</b>	<b>5,400</b>	<b>3,000<sup>2</sup></b>	<b>620</b>	<b>9,020</b>

<sup>1</sup> These counties include a small area within a 60-mile drive time to the Project area so are included in the housing supply analysis for RV sites.

<sup>2</sup> Lower range of average room vacancies in the study area.

<sup>3</sup> All values rounded.

Source: Appendix M

**5.6.1.3 Economy and Employment**

The local economy in the Fresno area has historically concentrated in agriculture and related industries. Today agriculture is still a leading producer and employer, supporting a variety of other industries. However, the economy is diversifying in Fresno County in particular, with transportation and warehousing a growing industry. Education and health services remains the leading sector from an employment perspective (Table 5.6-6)

**Table 5.6-6 Employment Distribution by Industry in the Study Area Counties**

Industry	Employment Share			
	Fresno County	Madera County	Kings County	California
Education & Health Services	29%	28%	27%	25%
Wholesale & Retail Trade	13%	8%	9%	13%
Professional & Business Services	10%	6%	4%	16%
Agriculture, Forestry, Fishing and Hunting	10%	22%	14%	2%
Leisure & Hospitality	8%	11%	12%	10%
Manufacturing	7%	6%	11%	8%
Public Administration	6%	6%	6%	6%
Construction	5%	4%	3%	5%
Transportation, Warehousing, & Utilities	5%	2%	4%	5%
Financial Activities	4%	1%	2%	5%
Other Services	3%	3%	3%	3%
Information	1%	1%	0%	4%

Source: Appendix M

There has been a recent decline in agricultural employment in the county. From 2016 to 2020 the share of employees employed in the agriculture sector declined by 2.1 percent. In 2015, Fresno County published an economic development plan that called for a diversification of the economy away from agriculture and into other higher paying sectors, including healthcare and information technology. It also called for an increase in manufacturing related to agricultural processing. While the manufacturing and information sectors have remained steady in their share of employment over the last four years, the number of healthcare jobs has increased by 1.3 percent (Appendix M).

Between Fresno, Kings, and Madera counties, Fresno County contributes the highest share to the three-county region’s employment, labor income, and gross domestic product (GDP). In 2021, employment in the three-county area totaled approximately 658,000 with an associated labor income of \$42.3 billion. That same year, the three-county area produced \$54.8 billion in GDP (Table 5.6-7).

**Table 5.6-7 Economic Indicators in Three-County Area**

Measure	Fresno	Kings	Madera	Regional Total
Employment	522,348	66,518	68,862	657,728
Labor Income	\$32,891,957,780	\$4,757,754,101	\$4,610,917,712	\$42,260,629,594
Gross Domestic Product	\$41,821,044,000	\$6,074,335,000	\$5,948,983,000	\$53,844,362,000

Source: Appendix M  
 Note: Dollar year 2021

## Agricultural Production Overview

The Central Valley agricultural production area is serviced by the Westlands Water District (WWD), the largest agricultural water district in the nation. WWD provides water from the Central Valley Project (CVP) to agricultural producers, businesses, and governments within their district boundaries. Agricultural production within WWD is directly responsible for roughly 25,240 jobs and over \$2.86 billion of economic impact. WWD serves parts of both Fresno and Kings counties. Fresno

County was the highest producing agricultural county in California by value in 2020 and second in 2021 with \$8.11 billion and \$7.97 billion in total agricultural production value, respectively (Appendix M).

Annual crop production in WWD varies significantly due to the availability of water delivered to farmers.<sup>5</sup> On average over the past decade, WWD only received 31 percent of its contracted allocation of CVP water. The share of water allocations received by WWD is directly and inversely related to the amount of acreage followed by WWD farmers. In 2019, crop production totaled \$1.95 billion on 409,507 acres planted.<sup>6</sup> Fruit and tree nuts accounted for the largest share of production at \$1.01 billion, with 204,507 acres planted that year. Vegetables were the second largest crop category produced in WWD by value and acreage. Vegetable production totaled \$770 million, roughly 40 percent of WWD’s total crop production value in 2019. Table 5.6-8 presents these data with comparable information from Fresno County and California. The data are not additive as WWD resides partially within Fresno County, and both WWD and Fresno County reside wholly within California.

**Table 5.6-8 Agricultural Crop Production Value, 2019**

	Westlands Water District	Fresno County	California
Tree Nut + Fruit	\$1,009,528,000	\$4,426,673,000	\$21,419,425,000
Vegetable	\$768,193,000	\$1,429,003,000	\$8,237,276,000
Grain	\$11,951,000	\$17,940,000	\$940,678,000
Other	\$157,221,000	\$336,738,000	\$6,783,093,000
<b>Total Crops</b>	<b>\$1,946,893,000</b>	<b>\$6,210,354,000</b>	<b>\$37,380,472,000</b>

Note: Figures may not sum due to rounding.

Note: Values are presented in 2019 dollars.

Source: Appendix M

In WWD, Fresno County, and California geographies in 2019, fruit and tree nut production accounted for the majority of total crop production value with 52 percent of WWD production value, 71 percent of Fresno County production value, and 57 percent of California production value. In Fresno County, crop production in 2019 totaled \$6.21 billion.<sup>7</sup> Within the county, fruit and tree nut production accounted for 71 percent of that value but only 35 percent of the agricultural crop acreage harvested. Overall, in California, fruit and tree nut production accounted for \$21.42 billion of the overall total agricultural production value of \$37.38 billion, or 57 percent of total crop production value in 2019. Within the state, 22 percent of the total crop production value was associated with vegetable production.

Crop yields and values for selected crops historically present in Fresno County are presented in Table 5.6-9. These figures are published in Fresno County crop reports from 2019 through 2021 with resulting values inflated into 2022 dollars using the Producer Price Index (Fresno County, 2019-2021). Yield and values vary annually based on market conditions as well as growing conditions in the county.

<sup>5</sup> Annual crop production includes grain, vegetable/melon, fruit, tree nut, and other farming.

<sup>6</sup> 2019 is the most recent year with data available.

<sup>7</sup> Including fruit & tree nut, vegetable, seed and field crops.

**Table 5.6-9 Agricultural Crop Yields and Values**

Crop	2019		2020		2021	
	Yield	Value Per Unit	Yield	Value Per Unit	Yield	Value Per Unit
Almonds	1.17	\$4,501	1.24	\$3,302	1.27	\$4,163
Cotton	1,536	\$2.07	1,749	\$2.09	1,449	\$2.78
Garlic	6.87	\$3,176	7.20	\$3,152	8.27	\$2,316
Lettuce	17.67	\$1,948	11.88	\$1,849	10	\$1,213
Onions	17.19	\$878	19.00	\$770	17.54	\$674
Pistachios	1.36	\$3,989	1.43	\$3,778	1.48	\$3,636
Tomatoes	52.10	\$80	52.50	\$65	45.92	\$107
Winter Wheat	3.08	\$468	2.49	\$411	3.13	\$310

Note: Values per unit are presented in 2022 dollars.

Note: Barley is represented in crop reports under field crops: other. Yield and values per unit are not given for this category, therefore value was derived from total value divided by harvested acreage. For year 2019 this value was \$157, for 2020 \$80, and for 2021 \$59.

Source: Appendix M

Employment requirements for agricultural production are presented in Table 5.6-10. Specific employment figures are not publicly available by crop type, so these figures are generated from published crop enterprise budgets for the crops historically present in Fresno County. Specific crop enterprise budgets were selected based on crop relevance, geographic relevance, and finally, the most recent timeframe (Appendix M). As displayed in the table, employment for crop production varies drastically by crop type. These hourly estimates were transformed into full-time equivalent (FTE) estimates assuming FTE employees work an average of 2,080 hours per year. Table 5.6-10 presents the FTEs required per 100 acres of production by crop type as well as the source of each employment assumption.

**Table 5.6-10 Agricultural Employment per 100 Acres by Crop Type**

Crop	Employment Hours Per Acre	FTEs per 100 Acres	Source
Almonds	28	1.33	(UC Davis, 2019)
Cotton	9	0.45	(UC Davis, 2012)
Garlic	190	9.13	(Missouri, 2020)
Lettuce	36	1.73	(UC Davis, 2023)
Onions	44	2.11	(UC Davis, 2016)
Pistachios	15	0.71	(UC Davis, 2020)
Tomatoes	23	1.09	(UC Davis, 2018)
Winter Wheat	4	0.19	(UC Davis, 2016 (2))

Sources: Appendix M

## Household Economic Status and Employment

Table 5.6-11 presents several indicators of household economic well-being. Across all of them, the study region’s population fares worse than that of the state of California as a whole. The poverty rate in Fresno, Madera, and Kings counties was considerably higher than the state in 2021. Similarly,

the median income in the three-county region is lower than the state median.<sup>8</sup> Further pointing at the economic decline in the three-county region, the unemployment rate in the counties was well above the state average. In 2022, the unemployment rate in Fresno, Madera, and Kings counties was between 6 and 7 percent, whereas the average unemployment rate in California the same year was 4.2 percent (Appendix M).

**Table 5.6-11 Household Income, Poverty, and Unemployment in the Three-County Region and State**

	Fresno County	Madera County	Kings County	California
Median Household Income	\$65,565	\$71,379	\$67,696	\$89,984
Persons in Poverty (percent)	19.4%	20.4%	17.7%	12.3%
Unemployment Rate	6.4%	6.1%	7.0%	4.2%

Figures is inflated into 2022 dollars using the CPI (Consumer Price Index)  
Source: Appendix M

#### 5.6.1.4 County Fiscal Resources

This section focuses on fiscal conditions in Fresno County, the relevant geography where most fiscal impacts of the Project would occur.

### County Revenues

The Fresno County General Fund serves as the County’s primary operational financing source. Total general fund revenue in fiscal year (FY) 2022-2023 was approximately \$4 billion. Of the total general fund financing categories of revenue, Fresno County taxes accounted for the largest share of revenues (39.8 percent), followed by federal aid (22.6 percent) and state aid (18.1 percent). General fund financing sources and associated shares are summarized in Table 5.6-12

**Table 5.6-12 Fresno County General Fund Sources, FY 2022-2023**

Financing Source	Revenue	Share of Total General Fund Financing
Fresno County Taxes	\$320.6M	39.8%
Federal Aid	\$182.2M	22.6%
State Aid	\$145.8M	18.1%
Fund Balance	\$70.8M	8.8%
Charges for Services	\$56.1M	7.0%
Licenses, Permits, & Franchises	\$11.1M	1.4%
Other Government Aid	\$6.8M	0.8%
Miscellaneous Revenues	\$6.4M	0.8%
Fines, Forfeitures, & Penalties	\$3.5M	0.4%
Use of Money & Property	\$2.5M	0.3%
<b>Total</b>	<b>\$805.7M<sup>1</sup></b>	

Sources: Appendix M

Note: <sup>1</sup> Excludes Intra-fund Revenues and Operating Transfers. Total General Fund Revenues in 2022-23 were \$3.75B

<sup>8</sup> Figures are inflated into 2022 dollars using the CPI

General fund appropriations in FY 2022-2023 totaled \$2.2 billion. General fund appropriations by broad service type are summarized in Table 5.6-13. Human services and justice services accounted for the largest share of appropriations, at 63.8 percent and 25.7 percent, respectively. The top five departments by value of appropriations were the Department of Social Services, the Department of Behavioral Health, the Sheriff - Coroner, and the Department of Public Health (Appendix M).

**Table 5.6-13 General Fund Appropriations by Service Type, FY 2022-2023**

Financing Source	Revenue	Share of Total Revenues
Human Services	\$1,395.5M	63.8%
Justice Services	\$561.2M	25.7%
Administration and Fiscal	\$114.0M	5.2%
Land Use and Development	\$87.6M	4.0%
Contingencies/Reserves Designations	\$28.0	1.3%
<b>Total</b>	<b>\$2.2B</b>	

Sources: Appendix M

### Property Tax

The County Assessor establishes the taxable value of property in Fresno County. Typically, this assessed value corresponds to the market value of the property at the time of transfer. It usually increases annually at a rate of no more than two percent until the property is sold or new construction is completed, at which point the value is reevaluated.

Once the Assessor determines the property's value, the Special Accounting Division within the Auditor-Controller/Treasurer–Tax Collector’s office applies the relevant tax rates. These rates encompass the general tax levy, along with special local taxes, and any city or district assessments. The general tax levy adheres to state law guidelines and is capped at \$1.00 per \$100.00 (1 percent) of a particular property's taxable value. Following the application of these tax rates, the total tax amount is calculated. The net assessed value of property in 2021-2022 FY was about \$90 billion.

In 1980, voters gave the legislature the authority to exclude construction of active solar energy systems from property tax assessment. Commercial, industrial, and utility-scale systems are covered by this exclusion if they are locally assessed and remain under ownership of the developer or first buyer. The new construction exclusion has been renewed through the 2023–2024 fiscal year. The statute is now scheduled to sunset on January 1, 2025 (Appendix M).

### Sales Tax

Retailers operating within California are required to register with the California Department of Tax and Fee Administration (CDTFA) and remit the state's sales tax, which applies to all retail transactions involving the sale of goods and merchandise, except for those specifically exempted by law. In Fresno County, the sales tax rate is 7.975 percent. Within the county, there are ten jurisdictions that impose rates ranging from 8.35 percent to 9.225 percent.

Fresno County’s annual budget includes line-item revenues associated with four sales taxes. A description of each sales tax is provided below (Appendix M):

- **Bradley-Burns Sales/Use Tax** is a one-percent local option tax that allows local jurisdictions like cities and counties to impose additional sales and use taxes on top of the statewide rate. In FY

2022-2023, revenues from the Bradley-Burnes Sales/Use Tax amounted to \$30 million representing the third largest contribution to the general fund.

- **Measure B Sales Tax** is a 0.125 percent sales tax that funds over half of the library's annual budget. In FY 2022-2023, revenues from the Measure B sales tax amounted to \$23 million, representing the largest contribution to the Library – Measure B Special Revenue Fund.
- **Measure C Sales Tax** of 0.5 percent and **Local Transportation Sales Tax** of 0.25 percent fund Fresno County's transportation. In FY 2022-2023, the Measure C Sales Tax and the Local Transportation Sales Tax contributed approximately \$4.1 million and \$9.6 million to Road Fund revenues, respectively.
- **Measure Z Sales Tax** of 0.1 percent is collected throughout the county for the support of the Fresno Chaffee Zoo. The county budget does not detail the revenues associated with this sales tax.

### *Lodging Taxes*

The city of Fresno charges a Transient Occupancy Tax (TOT) using its regulatory authority as granted by the State Constitution. In California, over 380 cities charge a TOT to individuals staying in hotels, inns, or other lodging facilities for 30 days or shorter. The city of Fresno imposes a 12-percent TOT rate. Revenues from TOT reached an estimated \$14 million in fiscal year 2022 (Appendix M).

### **School District Impact Fee**

Education Code Section 17620(a)(1) allows any school district to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities. State and local agencies are precluded from imposing additional fees or other required payments on development projects for mitigating possible enrollment impacts to schools.

The Project area is located within the boundaries of the Golden Plains Unified School District and Westside Elementary District. Both school districts are entitled to collect school impact fees for new construction within their district under the California Education Code Section 17620.

The one-time school development fee is calculated at \$0.78 per square foot of development on all categories of commercial or industrial development based on chargeable covered and enclosed space.

#### *5.6.1.5 Public Services and Facilities*

Public services and facilities assessed in this section include law enforcement, fire protection, emergency response, medical facilities, school districts, parks and recreation facilities, libraries, and other assessment districts.

### **Law Enforcement**

The Fresno County Sheriff's Office provides patrol services for four distinct patrol areas (Table 5.6-14), each of which is overseen by a lieutenant who supervises field services from a local substation. The Project site is situated within Area 1, which encompasses 2,400 square-miles and includes the incorporated communities of San Joaquin, Coalinga, Huron, Kerman, Mendota, and Firebaugh and the unincorporated communities of Tranquility, Biola, Five Points, Helm, Three Rocks, Cantua Creek and Dos Palos. The Area 1 substation is located in the community of San Joaquin. The level of staffing out of the Area 1 substation typically ranges between 12 and 16 staff members per

day working across three shifts. The Sheriff’s Office is currently understaffed, with officers regularly being asked to work overtime (Appendix M).

**Table 5.6-14 Fresno County Enforcement Area Substations**

Station/Substation	Address
Fresno County Sheriff’s Office	2200 Fresno Street, Fresno, CA 93721
Substation 1	21925 W. Manning Avenue, San Joaquin, CA 93660
Substation 2	1129 N Armstrong Avenue, Fresno, CA
Substation 3	Not applicable
Substation 4 Northeastern (Temporarily Closed)	33155 Auberry Road, Auberry, CA 93602
Substation 4 Southeastern (Temporarily Closed)	SR-180, Squaw Valley, CA

Source: Appendix M

According to a representative for the Sheriff’s Office, common law enforcement concerns in the region include industrial and agricultural theft, trespassing, vandalism, domestic violence, drug abuse, and other 911-related emergencies.

Fresno County is situated within Mutual Aid Region V. The California Office of Emergency Services (OES) coordinates statewide mutual aid systems for fire response, law enforcement, and telecommunications. Each region in the state has a designated coordinator—in the case of Region V, Sheriff Margaret Mims—who handles mutual aid requests from the state as well as from within the individual region. During emergencies, OES activates the State Operations Center in Sacramento and the Regional Emergency Operations Centers in areas impacted by the emergency to receive, process, and respond to local requests (Appendix M).

**Fire Protection and Emergency Response**

The Project site falls within the jurisdiction of the Fresno County Fire Protection District (FCFPD). FCFPD’s District Operations Division includes 15 full-time stations and 48 emergency response personnel consisting of four battalion chiefs, 14 two-to-three-person engine companies, and two three-person truck companies. Full-time stations also include water tenders and patrols. Response services provided by FCFPD include structural fire suppression, wildland fire suppression, response to hazardous materials incidents, urban search and rescue, water rescue, vehicle extrication, technical rescue, and basic life support medical services. Table 5.6-15 includes a list of relevant battalions and stations closest to the Project site.

Each year, FCFPD responds to approximately 14,000 incidents, about 68 percent of which are medical in nature. All FCFPD personnel are equipped to provide Basic Life Support (BLS) services. In response to emergency calls, FCFPD employs a closest-forces concept, where the closest engine company is dispatched along with an ambulance provider. Depending on the distance of the injured patient to medical facilities, FCFPD may deploy helicopters to facilitate transportation to hospitals (Appendix M).

**Table 5.6-15 Fresno County Fire Relevant Response District Operations**

Battalion	Station	Address
Battalion 14	Fresno County Fire Station 93	36421 S. Lassen, Huron, CA 93234
	Fresno County Fire Station 94	24125 W. Dorris, Coalinga, CA 93210
Battalion 15	Fresno County Fire Station 90	2701 W. Tahoe Avenue Caruthers, CA 93609
	Fresno County Fire Station 95	25101 Morton Street, Tranquility, CA 93668
	Fresno County Fire Station 96	101 McCabe Mendota, CA 93640

Source: Appendix M

The Central California Emergency Medical Services (EMS) Agency provides EMS services in Fresno, Kings, Madera, and Tulare counties. This agency is part of Fresno County Department of Public Health and provides planning implementation and evaluation of emergency medical services in the region. 9-1-1 calls are routed to a Public Safety Answering Point, all of which are operated by a designated regional law enforcement agency or by the California Highway Patrol dispatch center. Once a dispatcher has determined the nature of the emergency, they dispatch appropriate law enforcement personnel or transfer callers to a regional fire service or ambulance dispatch center. Table 5.6-16 provides a list of ambulance and helicopter provider agencies in the Fresno County area.

**Table 5.6-16 Ambulance and Helicopter Provider Agencies**

Agency	Address	Phone
<b>Ambulance Providers</b>		
American Ambulance	2911 E. Tulare Street, Fresno, CA 93721	(559) 443-5900
California Highway Patrol Helicopter	3770 N. Pierce, Fresno, CA 93727	(559) 488-4121
Coalinga City Fire	300 W. Elm Avenue, Coalinga, CA 93210	(559) 935-1652
Kingsburg City Fire	1880 Bethel, Kingsburg, CA 93631	(559) 897-5457
Sanger City Fire Department	1700 Seventh Street, Sanger, CA 93657	(559) 875-6568
Selma City Fire Department	2857 A Street, Selma, CA 93662	(559) 891-2211
Sequoia Safety Council	500 E. 11th Avenue, Reedley, CA 93654	(559) 406-8211
<b>Helicopter Providers</b>		
Air MethodsSkyLife (Air Ambulance)		(559) 346-1025
California Highway Patrol		(559) 550-8100

Source: Appendix M

## Hospitals

The city of Fresno’s Community Regional Medical Center is the only level-1 trauma center between Los Angeles and Sacramento, serving patients across multiple counties. It is the fifth largest and third busiest hospital in the state, with a capacity of 685 licensed beds and an average of approximately 663 inpatients a day. It is also the closest in proximity to the Project site. Table 5.6-17 provides the location, trauma levels, and capacity for all hospitals in Fresno County. The closest hospital in proximity to the Project site is Adventist Health Hanford in Kings County, followed closely by Community Regional Medical Center in Fresno County.

**Table 5.6-17 Hospitals**

Hospital	Address	Trauma Level	Beds
<b>Fresno County</b>			
Coalinga Medical Center	1191 Phelps Avenue, Coalinga, CA 93210	Standby	123
Community Medical Center - Clovis	2755 Herndon Avenue, Clovis, CA 93611	Basic	352
Community Regional Medical Center	2823 Fresno Street, Fresno, CA 93721	Level 1	685
Kaiser Foundation Hospital	7300 N. Fresno Street, Fresno, CA 93720	Basic	169
St. Agnes Medical Center	1303 E. Herndon Avenue, Fresno, CA 93711	Basic	436
Adventist Health- Selma	1141 Rose Avenue, Selma, CA 93662	Standby	62
Adventist Health- Reedley	372 W. Cypress Avenue, Reedley, CA 93654	Standby	49
VA Medical Center	2615 E. Clinton Avenue, Fresno, CA 93705	NA	174
<b>Kings County</b>			
Adventist Health Hanford	125 Mall Drive, Hanford, CA 93230	Basic	173
<b>Tulare County</b>			
Kaweah Health Medical Center	400 W Mineral King Avenue, Visalia, CA 93291	Basic	435
Adventist Health Tulare	869 N Cherry Street, Tulare, CA 93274	Basic	108

Source: Appendix M

**School Districts**

The Fresno County Office of Education serves 33 school districts and more than 200,000 students. The Project site falls within two unified school districts: Golden Plains Unified School District—which includes Cantua Elementary, Helm Elementary, Rio Del Rey High, San Joaquin Elementary, Tranquility Elementary and Tranquility High—and Westside Elementary District, which includes Crescent View South II, Westside Elementary, and Yosemite Valley Charter. The closest school to the Project site is Cantua Elementary, at 7.5 miles.

**Parks and Recreation Facilities**

There are no parks or recreational facilities in the Project area. The closest recreational area identified by the County of Fresno is the Three Rocks Fishing Access approximately 4.1 miles south of West Harlan Avenue at its intersection with the gen-tie line. Three Rocks Fishing Access provides fishing access to the California Aqueduct and picnic areas (County of Fresno 2023). The Project is not anticipated to impact use of parks or recreation facilities in Fresno County.

**Libraries**

There are no libraries in the Project area. The closest library identified is the San Joaquin Branch Library approximate 5.9 miles north of the W Stroud Avenue at its intersection with the solar facility. The Project is not anticipated to impact service or use of libraries within Fresno County.

**5.6.1.6 Utilities**

The Project would not be connected to natural gas service, municipal water, or wastewater systems. Project construction would generate solid waste that would be disposed of locally.

## **Gas**

Pacific Gas and Electric Company (PG&E) is the only provider of natural gas in Fresno County. The Project would not require gas service, so this utility is not assessed.

## **Water**

The Project area is outside of the service area of municipal water providers and would not be connected to a municipal water system. Though the Project would require water for operation, sourcing water for Project operations is ongoing and a specific source has not yet been identified. Additional information on water supply for the Project is presented in Appendix S Water Supply Assessment.

## **Wastewater Discharge**

The Project is outside of the service areas of municipal water providers. All domestic wastewater generated on site would be disposed of through septic systems located within the Project boundary. Thus, wastewater utilities are not examined as part of this analysis.

## **Solid Waste**

Recycling and solid waste disposal services in Fresno County fall under the jurisdiction of the Resources and Parks division. The County's Resource Guide for the Disposal of Construction and Demolition Debris identifies a number of transfer stations and disposal facilities that accept common construction and demolition materials, including but not limited to asphalt, concrete, cardboard, clean fill dirt, glass, green waste, metals, pallets, wallboard, gypsum, sheetrock, water heaters, wood, permitted construction and demolition processors, and freon (Appendix M). The county's regional landfill, American Avenue Disposal Site, and Mid-Valley Disposal & Transfer in Kerman accept construction and demolition materials. Additional information on waste management is presented in Section 5.11, *Waste Management* of this Opt-In Application.

### 5.6.2 Regulatory Setting

Federal, state, and local LORS related to socioeconomics were reviewed for applicability to the Project. These are detailed in Section 5.6.5, *Laws, Ordinances, Regulations, and Standards*.

### 5.6.3 Impact Analysis

The following subsections discuss the potential direct and indirect socioeconomic impacts from construction and operation (including maintenance) of the Project.

#### 5.6.3.1 Methodology

ECONorthwest prepared a Socioeconomic Impact Study (Appendix M) for the Project in which they prepared a local worker availability analysis, conducted economic and employment impact modeling, prepared an economy and employment impact analysis, and analyzed the Project's effects on agricultural production. ECONorthwest's methodology is described below, as well as in Appendix M. The results of the study informed this impact analysis.

## Economic Impact Modeling

IMPLAN is a regional input-output model widely used to assess the economic impacts of energy and many other types of projects. The IMPLAN model divides the economy into 546 sectors, including government, households, farms, and other industries, modeling the linkages between the various sectors. The linkages are modeled through input-output tables that account for all dollar flows across different sectors of the economy. The economic relationships modeled by IMPLAN allow the user to estimate the overall change in the economy that would result from construction and operation of a proposed project. The dollars spent on project construction and operation within the selected analysis area (Fresno, Madera, and Kings counties, in this case) are analyzed to determine the total economic impact within that area. The direct investments in project construction and operation trigger successive rounds of spending that result in an overall increase in employment, labor income, and economic output in the local economy.

Economic multipliers derived from the model are used to estimate total economic impacts. Total economic impacts consist of three components: direct, indirect, and induced impacts.

- The *direct* impact component consists of expenditures made specifically for the proposed project, such as construction labor and materials. These direct impacts generate economic activity elsewhere in the local economy through the multiplier effect, as initial changes in demand “ripple” through the local economy and generate indirect and induced impacts.
- *Indirect* impacts are generated by expenditures on goods and services by suppliers who provide goods and services to the construction project. Indirect effects are often referred to as “supply-chain” impacts because they involve interactions among businesses.
- *Induced* impacts are generated by the spending of households associated either directly or indirectly with the proposed project. Workers employed during construction, for example, would use their income to purchase groceries and other household goods and services. Workers at businesses that supply the project during construction or operation would do the same. Induced effects are also referred to as “consumption-driven” impacts.

Impacts are assessed using the following measures that are reported by the IMPLAN model:

- *Output* – the value of goods and services produced, which serves as a broad measure of economic activity.
- *Jobs* – measured as the average number of employees engaged in full- or part-time work. Model outputs are adjusted to FTEs using coefficients provided by IMPLAN.<sup>9</sup>
- *Personal income* (or labor income) – expressed as the sum of employee compensation and proprietary income.
  - Employee compensation (wages) includes workers’ wages and salaries, as well as other benefits such as health, disability, and life insurance; retirement payments; and non-cash compensation; expressed as total cost to the employer.
  - Proprietary income (business income) represents the payments received by small-business owners or self-employed workers.

Input-output models are static models that measure inputs and outputs of an economy at a point in time. With this information and the balanced accounting structure of an input-output model, an

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<sup>9</sup> Each FTE job equates to one full-time job for one year or 2,080-hour units of labor. Part-time or temporary jobs constitute a fraction of a job. For example, if an engineer works just 3 months on a solar project, that would be considered one-quarter of an FTE job.

analyst can: 1) describe an economy in a single time-period, 2) introduce a change to the economy, and then 3) evaluate the economy after it has accommodated that change.

This type of “partial equilibrium” analysis permits comparison of the economy in two separate states but does not describe how the economy moves from one equilibrium to the next. In partial equilibrium analysis, the researcher assumes that all other relationships in the economy remain the same (other than the initial changes in spending levels).

Contrary to dynamic models, static models assume that there are no changes in wage rates, input prices, and property values. In addition, underlying economic relationships in input-output models are assumed to remain constant; there are no changes in the productivity of labor and capital, and no changes in population migration or business location patterns.

Input-output models are best suited to understand the impacts of small to medium sized projects (relative to the size of the markets or sectors being affected), when projects are unlikely to affect the underlying supply or demand functions (Appendix M).

### **Key Informant Interviews**

ECONorthwest conducted key informant interviews with local agency staff and other local officials to supplement publicly available information on the public utilities and services. The interviews contributed to the analysis of existing conditions and the potential impacts of the Project and its alternatives on demand for public services and utilities and costs of providing services. Additional interviews informed other categories of the impact analysis (e.g., fiscal conditions, housing, and workforce availability).

ECONorthwest requested interviews with local law enforcement, fire response, EMS, waste management, and regional economic development and workforce experts and completed interviews with the Fresno County Sheriff, Fresno County EMS, Fresno County Fire District, and Fresno County Economic Development Corporation. Section 5.6.6 list the contacts consulted during key informant interviews.

#### *5.6.3.2 Impact Evaluation Criteria*

The potential for impacts to socioeconomics were evaluated using the criteria described in the California Environmental Quality Act (CEQA) Environmental Checklist (Appendix G of the CEQA Guidelines). As it relates to socioeconomics, the CEQA Checklist asks, would the project:

- Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere;
- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
  - Fire protection;
  - Police protection;
  - Schools;

- Parks; and/or
- Other public facilities

In addition, impacts to socioeconomics were evaluated by asking, would the project:

- Have adverse impacts on overall employment in the region;
- Change the distribution of employment opportunities in the region so some workers may benefit while others may lose out;
- Reduce income for local businesses;
- Induce changes in fiscal resources for local governments that result in a reduction of service levels, budget cuts, or other fiscally destabilizing effect;
- Impose additional costs on utilities or change capacity or service levels for existing or future customers of gas, water, wastewater, or solid waste;
- Change the character of nearby local communities or affect the ability of the local population to address its needs; or create a substantial change in community interaction patterns, social organization, social structure, or social institutions; substantial conflict with community attitudes, values or perception; or substantial inequalities in the distribution of the costs and benefits?

### Impact SOC-1

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<b>Threshold:</b> Would the project induce substantial unplanned population growth in an area, either directly or indirectly?
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### Solar Facility, Step-Up Substation, and Gen-Tie

#### *Construction*

**Less than Significant Impact.** Population in the study area would temporarily increase by less than one percent during construction of the solar facility, Option 1 and 2 step-up substation, and gen-tie. This would not produce a discernable change in population or represent unplanned population growth. ECONorthwest's local worker availability analysis (Appendix M) determined up to 26 workers could temporarily relocate to the study area from elsewhere for construction of the solar facility, Option 1 and 2 step-up substation, and gen-tie under the 18-month construction schedule. This assumes a high share of local workers are attracted to the Project due to labor contracts and the highest peak would occur under the 18-month construction schedule. Most of these workers are not expected to relocate with their families or stay in the area permanently; therefore, this estimate is representative of the likely temporary regional population change. The remaining workforce required for construction of the solar facility, Option 1 and 2 step-up substation, and gen-tie would come from within the study area and are already counted among the region's permanent population.

#### *Operation*

**Less than Significant Impact.** Operation of the solar facility, Option 1 and 2 step-up substation, and gen-tie would employ a workforce of 12 full-time permanent employees, most likely drawing from the existing population of the study area.

## **BESS**

### *Construction*

**Less than Significant Impact.** Population in the study area would temporarily increase by less than one percent during construction of the Option 1 and 2 BESS. This would not produce a discernable change in population or represent unplanned population growth. ECONorthwest’s local worker availability analysis (Appendix M) determined up to 8 workers could temporarily relocate to the study area from elsewhere for construction of the Option 1 and 2 BESS under the 18-month construction schedule. This assumes a high share of local workers are attracted to the Project due to labor contracts and the highest peak would occur under the 18-month construction timeline. Most of these workers are not expected to relocate with their families or stay in the area permanently; therefore, this estimate is representative of the likely temporary regional population change. The remaining workforce required for construction of the BESS would come from within the study area and are already counted among the region’s permanent population.

### *Operation*

**Less than Significant Impact.** Operation of the Option 1 and 2 BESS would employ a workforce of 4 full-time permanent employees, most likely drawing from the existing population of the study area.

## **Green Hydrogen Facility**

### *Construction*

**Less than Significant Impact.** Population in the study area would temporarily increase by less than one percent during construction of the Option 1 and 2 and alternate green hydrogen facility. This would not produce a discernable change in population or represent unplanned population growth. ECONorthwest’s local worker availability analysis (Appendix M) determined up to 18 workers could temporarily relocate to the study area from elsewhere for construction of the Option 1 and 2 and alternate green hydrogen facility under the 18-month construction schedule. This assumes a high share of local workers are attracted to the Project due to labor contracts and the highest peak would occur under the 18-month construction timeline. Most of these workers are not expected to relocate with their families or stay in the area permanently; therefore, this estimate is representative of the likely temporary regional population change. The remaining workforce required for construction of the hydrogen facility would come from within the study area and already are counted among the region’s permanent population.

### *Operation*

**Less than Significant Impact.** Operation of the Option 1 and 2 and alternate hydrogen facility would employ a workforce of 24 full-time permanent employees, most likely drawing from the existing population of the study area.

## **Utility Switchyard**

### *Construction*

**Less than Significant Impact.** Population in the study area would temporarily increase by less than one percent during construction of the utility switchyard. This would not produce a discernable change in population or represent unplanned population growth. ECONorthwest’s local worker

availability analysis (Appendix M) determined up to up to 5 workers could temporarily relocate to the study area from elsewhere for construction of the utility switchyard under the 18-month construction schedule. This assumes a high share of local workers are attracted to the Project due to labor contracts and the highest peak would occur under the 18-month construction timeline. Most of these workers are not expected to relocate with their families or stay in the area permanently; therefore, this estimate is representative of the likely temporary regional population change. The remaining workforce would come from within the study area for construction of the utility switchyard and already are counted among the region's permanent population.

### *Operation*

**No Impact.** Operation of the utility switchyard would not require any full-time on-site operational workforce. Following completion of construction of the utility switchyard, ownership would transfer to PG&E, who would assume responsibility for operation of the switchyard. It is anticipated that the switchyard would be remotely operated and maintained within PG&E's existing operations and maintenance (O&M) program.

### **Overall Project**

**Less than Significant Impact.** Population in the study area would temporarily increase by less than 1 percent during construction of the Project. This would not produce a discernable change in population or represent unplanned population growth. ECONorthwest's local worker availability analysis (Appendix M) determined that during peak construction of the Project up to 80 workers could temporarily relocate to the study area from elsewhere. This assumes a high share of local workers are attracted to the Project due to labor contracts and the highest peak would occur under the 18-month construction timeline. Most of these workers are not expected to relocate with their families or stay in the area permanently; therefore, this estimate is representative of the likely temporary regional population change. The remaining workforce would come from within the study area for construction of the Project and already are counted among the region's permanent population.

The peak combined local and non-local workforce under the 18-month scenario of approximately 1,500 present on-site would represent a substantial proportion of the resident population surrounding the Project site. This number is approximately three times the size of Cantua Creek's resident population and about half of San Joaquin's resident population, the two communities closest to the Project site. While this population would not contribute to unplanned permanent population growth in the area, the daytime presence of this many workers at one time could temporarily contribute to impacts on public services, as discussed in more detail below.

Population in the study area would not increase by any discernable amount during operation of the Project. The Project would employ a consistent workforce of 40 employees for operation, most likely drawing from the existing population of the study area.

## Impact SOC-2

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<b>Threshold:</b> Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?
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### Solar Facility, Step-Up Substation, and Gen-Tie

#### *Construction*

**Less than Significant Impact.** Construction of the solar facility, Option 1 and 2 step-up substation, and gen-tie would increase temporary housing demand in the study area; however, sufficient housing is available to meet this demand within commuting distance without displacing existing populations. As discussed under Impact SOC-1, during construction of the solar facility, Option 1 and 2 step-up substation, and gen-tie up to 26 workers would require temporary housing. This represents a tiny percent of the approximately 9,000 units of available vacant housing (much of which is in hotel/motels) discussed in Section 5.6.1.2. If these workers seek temporary housing in western Fresno County during the harvest season, vacancy rates are very low, and they could potentially displace migrant workers; however, due to the relatively small number of workers that would be in potential need of housing as a result of construction, impacts are considered less than significant.

#### *Operation*

**No Impact.** Housing demand in the study area would not increase by any discernable amount during operation of the solar facility, Option 1 and 2 step-up substation, and gen-tie. Operation of the solar facility, Option 1 and 2 step-up substation, and gen-tie would employ a workforce of 12 employees for operation, which would most likely draw from the existing population of the study area and would not require temporary housing.

### BESS

#### *Construction*

**Less than Significant Impact.** Construction of the Option 1 and 2 BESS would increase temporary housing demand in the study area; however, sufficient housing is available to meet this demand within commuting distance without displacing existing populations. As discussed under Impact SOC-1, during construction of the Option 1 and 2 BESS, up to 8 workers would require temporary housing. This represents a tiny percent of the approximately 9,000 units of available vacant housing (much of which is in hotel/motels) discussed in Section 5.6.1.2. If these workers seek temporary housing in western Fresno County during the harvest season, vacancy rates are very low, and they could potentially displace other migrant workers; however, due to the relatively small number of workers that would be in potential need of housing as a result of construction, impacts are considered less than significant.

#### *Operation*

**No Impact.** Housing demand in the study area would not increase by any discernable amount during operation of the Option 1 and 2 BESS. Operation of the Option 1 and 2 BESS would employ a workforce of 4 employees for operation, which would most likely draw from the existing population of the study area and would not require temporary housing.

## Green Hydrogen Facility

### *Construction*

**Less than Significant Impact.** Construction of the Option 1 and 2 and alternate green hydrogen facility would increase temporary housing demand in the study area; however, sufficient housing is available to meet this demand within commuting distance without displacing existing populations. . As discussed under Impact SOC-1, during construction of the Option 1 and 2 and alternate green hydrogen facility up to 18 workers would require temporary housing. This represents a tiny percent of the approximately 9,000 units of available vacant housing (much of which is in hotel/motels) discussed in Section 5.6.1.2. If these workers seek temporary housing in western Fresno County during the harvest season, vacancy rates are very low, and they could potentially displace other migrant workers; however, due to the relatively small number of workers that would be in potential need of housing as a result of construction, impacts are considered less than significant.

### *Operation*

**No Impact.** Housing demand in the study area would not increase by any discernable amount during operation of the Option 1 and 2 and alternate green hydrogen facility. Operation of the Option 1 and 2 and alternate green hydrogen facility would employ a workforce of 24 employees for operation, which would most likely draw from the existing population of the study area and would not require temporary housing.

## Utility Switchyard

### *Construction*

**Less than Significant Impact.** Construction of the utility switchyard would increase temporary housing demand in the study area; however, sufficient housing is available to meet this demand within commuting distance without displacing existing populations. As discussed under Impact SOC-1, during construction of the utility switchyard up to 5 workers would require temporary housing. This represents a tiny percent of the approximately 9,000 units of available vacant housing (much of which is in hotel/motels) discussed in Section 5.6.1.2. If these workers seek temporary housing in western Fresno County during the harvest season, vacancy rates are very low, and they could potentially displace other migrant workers; however, due to the relatively small number of workers that would be in potential need of housing as a result of construction, impacts are considered less than significant.

### *Operation*

**No Impact.** Operation of the utility switchyard would not require any full-time on-site operational workforce and would not require temporary housing.

## Overall Project

**Less than Significant Impact.** Construction of the Project would increase temporary housing demand in the study area; however, sufficient housing is available to meet this demand within commuting distance without displacing existing populations. As discussed under Impact SOC-1, during the peak of construction of the Project, up to 80 workers would require temporary housing.

<sup>10</sup> This represents a tiny percent of the approximately 9,000 units of available vacant housing (much of which is in hotel/motels) discussed in Section 5.6.1.2. If these workers seek temporary housing in western Fresno County during the harvest season, vacancy rates are very low, and they could potentially displace other migrant workers; however, due to the relatively small number of workers that would be in potential need of housing as a result of construction, impacts are considered less than significant.

Housing demand in the study area would not increase by any discernable amount during operation of the Project. The Project would employ a consistent workforce of 40 employees for operation, which would most likely draw from the existing population of the study area and would not require temporary housing.

**Impact SOC-3**

**Threshold:** Would the project have adverse impacts on overall employment in the region?

**Economy and Employment**

The results presented in this section rely on IMPLAN analyses to estimate Project impacts on employment and the economy. The full impact analyses and discussion is presented in Appendix M.

The results of ECONorthwest’s workforce analysis for direct employment impacts of the Project during construction and operation are presented in Table 5.6-18. Direct employment encompasses local and non-local on-site construction workers as well as the jobs supported by the non-local workforce per diem spending. For this reason, direct employment is larger than the peak construction workforce estimates described elsewhere in the Opt-In Application. The results of the IMPLAN modeling of indirect and induced (i.e., secondary) employment effects and employment impacts from changes in agricultural production are presented in Table 5.6-19. All estimates of employment and Project spending effects are estimated based on prior solar development experience and currently available information about Project design, which is preliminary. Actual Project effects may vary somewhat from the estimates presented in this section.

**Table 5.6-18 Estimated Direct Employment Impacts of the Project**

Impact	Direct Jobs <sup>2</sup>
Construction 18-Months	2,420
Construction 36-Months	2,660
Operations <sup>1</sup>	40

Source: Appendix M

Note: <sup>1</sup> Annual employment FTE

Note: <sup>2</sup> Direct jobs encompass local and non-local on-site construction workers, as well as the jobs supported by the non-local workforce per diem spending.

<sup>10</sup> The analysis of housing impacts was also run using the high non-local workforce assumptions detailed in Appendix A of Appendix M. Under this assumption, up to 645 workers would require temporary housing in the region at the peak of labor demand. While this is a significantly larger amount of housing than the lower estimates used here, it is less than 10 percent of the total vacant temporary housing supply of 9,000, even assuming every worker had individual accommodations (which is typically not the case, workers often share temporary accommodations, especially if they are in tight supply).

**Table 5.6-19 Secondary Employment Impacts of the Project**

Impact	Direct	Indirect	Induced	TOTAL Secondary
<b>Total Option 1</b>				
Construction 18-Months	N/A	1,680	1,150	2,830
Construction 36-Months	N/A	1,650	1,210	2,860
Operation	N/A	32	26	58
Agricultural Production	2	2	1	5
<b>Total Option 2</b>				
Construction 18-Months	N/A	1,660	1,140	2,800
Construction 36-Months	N/A	1,630	1,210	2,840
Operation	N/A	32	26	58
Agricultural Production	2	2	1	5
<b>Total Alternate Hydrogen</b>				
Construction 18-Months	N/A	1,680	1,150	2,830
Construction 36-Months	N/A	1,650	1,210	2,860
Operation	N/A	32	26	58
Agricultural Production	3	4	1	8

N/A: These impacts are captured in Direct Effects

Source: Appendix M

### Agricultural Production

The Project area is predominantly retired agricultural lands that have been irregularly farmed over the last 10 years and are seasonally or annually disked when not growing crops. Some active farming occurred in limited areas of the Project site during 2023. A small portion of the Project area includes permanent crops and annual field and vegetable crops that could be impacted by construction and operation of the Project.

WWD, which currently owns a majority of lands within the Project site, is actively pursuing retirement of 100,000 acres of agricultural land in order to reallocate water to agricultural lands which are not impaired, including 9,100 acres on which the Project is located. This retirement of agricultural land would occur with or without the Project. Another 500,000 acres of agricultural land in the San Joaquin Valley is expected to be retired in compliance with the Sustainable Groundwater Management Act. Thus, in the absence of the Project, agricultural production on the 9,100 acres is expected to be zero, and no agricultural production impacts are estimated on the 9,100 acres due to the Project.

The following assessment considers the conversion of the Project area from agricultural production/fallowed lands to solar development, estimating the direct impacts to the local economy in terms of harvested acres, agricultural value, and employment and estimates the secondary (indirect and induced) impacts that a corresponding reduction in farm spending would have on the local economy. The full agricultural production effects analysis and discussion is presented in Appendix M.

## Solar Facility, Step-Up Substation, and Gen-Tie

### *Construction*

**Less than Significant Impact.** Construction of the solar facility, Option 1 and 2 step-up substation, and gen-tie would result in positive direct and secondary employment impacts and would account for less than one percent of the study area workforce. Construction of the Project is expected to employ a workforce of both local and non-local workers. The solar facility, Option 1 and 2 step-up substation, and gen-tie would directly support a workforce of 1,520 employees under the 18-month construction period and 1,750 employees under the 36-month construction period. Non-local employees are assumed to make up 3.8 percent of the workforce for the 18-month construction period and 4.6 percent of the 36-month construction workforce.

The Option 1 Project design would support secondary employment of 1,390 jobs in the study area under the 18-month construction period and 1,410 jobs under the 36-month construction period. The Option 2 Project design would support secondary employment of 1,360 jobs in the study area under the 18-month construction period and 1,390 jobs under the 36-month period. The alternate green hydrogen Project design would support secondary employment of 1,380 jobs in the study area under the 18-month construction period and 1,410 jobs under the 36-month period.

Construction of the gen-tie would displace an insignificant amount of agricultural production and would have no measurable affect on agricultural employment in the study area. Approximately two acres of agricultural production would be displaced by construction and operation of the gen-tie line. Agricultural production generates indirect and induced employment impacts in the local economy. However, this production accounts for zero jobs (both indirect and induced employment impact), resulting in no jobs displaced.

### *Operation*

**Less than Significant Impact.** Operation of the solar facility, Option 1 and 2 step-up substation, and gen-tie would result in positive direct and secondary employment impacts and would account for less than one percent of the study area workforce. Operation of the solar facility, Option 1 and 2 step-up substation, and gen-tie is expected to employ a workforce of all local workers. The solar facility, Option 1 and 2 step-up substation, and gen-tie would employ a workforce of 12 full-time permanent employees for operation.

Operation of the solar facility, Option 1 and 2 step-up substation, and gen-tie would support secondary employment of 33 jobs in the study area.

## **BESS**

### *Construction*

**Less than Significant Impact.** Construction of the Option 1 and 2 BESS would result in positive direct and secondary employment impacts and would account for less than one percent of the study area workforce. The Option 1 and 2 BESS component would directly support a workforce of 100 employees under the 18-month construction period and 80 employees under the 36-month construction period. Non-local employees are assumed to make up 5.7 percent of the workforce for the 18-month construction period and 10.6 percent of the 36-month construction workforce.

Construction of the Option 1 and 2 BESS would support secondary employment of 230 jobs in the study area under the 18-month construction period and 220 jobs under the 36-month construction period.

### *Operation*

**Less than Significant Impact.** Operation of the Option 1 and 2 BESS would result in positive direct and secondary employment impacts and would account for less than one percent of the study area workforce. Operation of the Option 1 and 2 BESS is expected to employ a workforce of all local workers. The Option 1 and 2 BESS would employ a workforce of 4 full-time permanent employees.

Operation of the Option 1 and 2 BESS would support secondary employment of 11 jobs in the study area.

## **Green Hydrogen Facility**

### *Construction*

**Less than Significant Impact.** Construction of the Option 1 and 2 and alternate green hydrogen facility would result in positive direct and secondary employment impacts and would account for less than one percent of the study area workforce. The Option 1 and 2 and alternate green hydrogen facility would directly support a workforce of 160 employees under the 18-month construction period and 150 employees under the 36-month construction period. Non-local employees are assumed to make up 7.2 percent of the workforce for the 18-month construction period and 12.1 percent of the 36-month construction workforce.

Construction of the Option 1 and 2 and alternate green hydrogen facility would support secondary employment of 730 jobs in the study area under the 18-month construction period and the 36-month construction period.

Construction of the alternate green hydrogen facility would displace some agricultural production and could potentially reduce the agricultural workforce by a very small proportion of overall agricultural employment in the study area. Roughly 169 acres of agricultural production, some of which has been recently fallowed, would be displaced by construction and operation of the alternate green hydrogen facility. This agricultural production is associated with two jobs. Additionally, agricultural production generates indirect and induced employment impacts in the local economy. This production accounts for one job (indirect employment impact) and one job (induced employment impact), for a total of 4.5 jobs potentially displaced. This represents about 0.001 percent of total agricultural employment in the study area and is considered a less than significant impact.

### *Operation*

**Less than Significant Impact.** Operation of the Option 1 and 2 and alternate green hydrogen facility would result in positive direct and secondary employment impacts and would account for less than one percent of the study area workforce. Operation of the Option 1 and 2 and alternate green hydrogen facility is expected to employ a 24-person workforce of all local workers. Operation of the Option 1 and 2 and alternate green hydrogen facility would support secondary employment of 30 jobs in the study area.

## Utility Switchyard

### *Construction*

**Less than Significant Impact.** Construction of the utility switchyard would result in positive direct and secondary employment impacts and would account for less than one percent of the study area workforce. Construction of the utility switchyard would directly support a workforce of 80 employees under the 18-month construction period and 130 employees under the 36-month construction period. Non-local employees are assumed to make up 6.3 percent of the workforce for the 18-month construction period and 0.0 percent of the 36-month construction workforce.

Construction of the utility switchyard would support secondary employment of 120 jobs in the study area under the 18-month construction period and 130 jobs under the 36-month construction period.

Construction of the utility switchyard construction would displace some agricultural production and could potentially reduce the agricultural workforce by a very small proportion of overall agricultural employment in the study area. Roughly 132 acres of agricultural production would be displaced by construction and operation of the utility switchyard. This agricultural production is associated with three jobs. Additionally, agricultural production generates indirect and induced employment impacts in the local economy. This production accounts for one job (indirect employment impact) and one job (induced employment impact), for a total impact of five jobs potentially displaced. This represents about 0.001 percent of total agricultural employment in the study area and is considered a less than significant impact.

### *Operation*

**No Impact.** No operation employment in the study area would be directly required for the utility switchyard. Following completion of construction of the utility switchyard, ownership would transfer to PG&E, who would assume responsibility for operation of the switchyard. It is anticipated that the switchyard would be remotely operated and maintained within PG&E's existing O&M program.

## Overall Project

**Less than Significant Impact.** Direct and secondary employment impacts resulting from construction and operation of the Project would be positive and would account for less than one percent of the study area workforce. This would have a small but beneficial impact to overall employment in the region. The Project would directly support a workforce of 2,420 employees under the 18-month construction period and 2,660 employees under the 36-month construction period, as shown in Table 5.6-18. Non-local employees are assumed to make up 4.3 percent of the workforce for the 18-month construction period and 5.1 percent of the 36-month construction workforce. The operation and maintenance of the Project is expected to consistently employ 40 employees from the study area each year, with additional temporary employment for certain tasks, amounting to total operational employment of up to 58 individuals during the year.

The reduction in agricultural production jobs related to removing agricultural land from production would impact less than one percent of the study area workforce and is thus not considered a significant impact. The total number of jobs created by the Project for both the construction phase and operational phase is significantly greater than the total number of jobs potentially lost due to the Project. Overall distribution of workforce in the Project area would shift from agricultural

production workforce to construction workforce in the short term and operational workforce in the long term. Under the Option 1 and the alternate green hydrogen Project designs, construction of the Project would support secondary employment of 2,830 jobs in the study area under the 18-month construction period and 2,860 employees under the 36-month construction period. Under the Option 2 Project design, the Project would support secondary employment of 2,800 jobs in the study area under the 18-month construction period and 2,840 jobs under the 36-month period. The operation and maintenance of the Project would support secondary employment of 42 jobs annually, as shown in Table 5.6-19.

The Option 1 and Option 2 Project designs would lead to a reduction of two direct agricultural jobs, two indirect jobs, and one induced job for a total of five jobs impacted from the removal of agricultural land from production. The alternate hydrogen facility Project design would result in a total of eight jobs impacted: three direct agricultural jobs, four indirect jobs, and one induced job. Assuming the worst case scenario of eight jobs (three direct and five secondary) impacted from removal of agricultural land from production, operation of the Project would still result in a net increase of 92 jobs annually (55 direct and 37 secondary).

#### Impact SOC-4

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<b>Threshold:</b> Would the project reduce income for local businesses?
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This section presents the results of ECONorthwest’s economy and employment impact analysis, which rely on IMPLAN analyses to estimate Project impacts on employment and the economy. The full impact analyses and discussion is presented in Appendix M.

### Solar Facility, Step-Up Substation, and Gen-Tie

#### *Construction*

**Less than Significant Impact.** Direct construction spending impacts from construction of the solar facility, Option 1 and 2 step-up substation, and gen-tie would be positive and represent between 1.1 and 1.5 percent of the study area GDP (depending on design scenario). Under the Option 1 design scenario, direct output associated with the construction of the solar facility, step-up substation, and gen-tie would total approximately \$620.4 million under the 18-month construction period and \$621.8 million under the 36-month construction period. Under the Option 2 design scenario, direct output associated with these components would total \$606.8 million under the 18-month construction period and \$608.1 million under the 36-month period. Under the alternate green hydrogen facility design scenario, direct output associated with these components would total \$617.8 million under the 18-month construction period and \$619.1 million under the 36-month period.

Direct construction income impacts from construction of the solar facility, Option 1 and 2 step-up substation, and gen-tie would be positive and represent less than one percent of the study area total income. The direct income associated with the construction of the solar facility, Option 1 and 2 step-up substation, and gen-tie would total approximately \$144.1 million under the 18-month construction period and \$166.3 million under the 36-month construction period.

Secondary construction spending impacts from construction of the solar facility, Option 1 and 2 step-up substation, and gen-tie would be positive and represent less than one percent of the study area GDP. Under the Option 1 design scenario, secondary output associated with construction of the

solar facility, step-up substation, and gen-tie would total approximately \$305 million under the 18-month construction period and \$306.8 million under the 36-month construction period. Under Option 2, secondary output associated with these components would total \$298.6 million under the 18-month construction period and \$300.4 million under the 36-month period. Under the alternate green hydrogen facility design scenario, secondary output associated with these components would total \$303.7 million under the 18-month construction period and \$305.5 million under the 36-month period.

Secondary construction income impacts from construction of the solar facility, Option 1 and 2 step-up substation, and gen-tie would be positive and represent less than one percent of the study area total income. Under the Option 1 design scenario, secondary income associated with the construction of the solar facility, step-up substation, and gen-tie would total approximately \$87.97 million under the 18-month construction period and \$89.1 million under the 36-month construction period. Under the Option 2 design scenario, secondary income associated with these components would total \$86.2 million under the 18-month construction period and \$87.4 million under the 36-month period. Under the alternate green hydrogen facility design scenario, secondary income associated with these components would total \$87.6 million under the 18-month construction period and \$88.8 million under the 36-month period.

Construction of the gen-tie would reduce agricultural production and result in a secondary output impact from reduced spending on agricultural inputs. This loss would be insignificant and would account for less than one percent of the study area agricultural GDP. This agricultural production is associated with approximately \$10,000 in economic output. Additionally, agricultural production generates indirect and induced output impacts in the local economy. This production accounts for approximately \$3,000 (indirect output impact) and approximately \$3,000 (induced output impact), for a total impact of approximately \$16,000 in output.

Construction of the gen-tie would reduce agricultural production and result in a secondary income impact from reduced spending on agricultural labor. This loss would account for less than one percent of the study area agricultural GDP and would be insignificant. This agricultural production is associated with approximately \$4,000 in income. Additionally, agricultural production generates indirect and induced output impacts in the local economy. This production accounts for approximately \$1,000 (indirect income impact) and approximately \$1,000 (induced income impact), for a total impact of approximately \$6,000 in income.

### *Operation*

**Less than Significant Impact.** Direct operation spending impacts from operation of the solar facility, Option 1 and 2 step-up substation, and gen-tie would be positive and represent less than one percent of the study area GDP. The direct output associated with the operation of the solar facility, Option 1 and 2 step-up substation, and gen-tie would total \$12.1 million annually.

Direct operation income impacts from operation of the solar facility, Option 1 and 2 step-up substation, and gen-tie would be positive and represent less than one percent of the study area total income. The direct income associated with the operation of the solar facility, Option 1 and Option 2 step-up substation, and gen-tie would total \$2.3 million annually.

Secondary operation spending impacts from operation of the solar facility, Option 1 and 2 step-up substation, and gen-tie would be positive and represent less than one percent of the study area GDP. The secondary output associated with the operation of the solar facility, Option 1 and Option 2 step-up substation, and gen-tie would total \$24.8 million annually.

Secondary operation income impacts from operation of the solar facility, Option 1 and 2 step-up substation, and gen-tie would be positive and represent less than one percent of the study area total income. The secondary income associated with the operation of the solar facility, Option 1 and Option 2 step-up substation, and gen-tie would total \$1.4 million annually.

## **BESS**

### *Construction*

**Less than Significant Impact.** Direct construction spending impacts from construction of the Option 1 and 2 BESS would be positive and represent less than one percent of the study area GDP. The direct output associated with the construction of the Option 1 and Option 2 BESS would total approximately \$112.8 million under the 18-month construction period and \$112.9 million under the 36-month construction period.

Direct construction income impacts from construction of the Option 1 and 2 BESS would be positive and represent less than one percent of the study area total income. The direct income associated with the construction of the Option 1 and Option 2 BESS would total approximately \$10.1 million under the 18-month construction period and \$7.9 million under the 36-month construction period.

Secondary construction spending impacts from construction of the Option 1 and 2 BESS would be positive and represent less than one percent of the study area GDP. The secondary output associated with the construction of the Option 1 and 2 BESS would total approximately \$53.6 million under the 18-month construction period and \$53.2 million under the 36-month construction period.

Secondary construction income impacts from construction of the Option 1 and 2 BESS would be positive and represent less than one percent of the study area total income. The secondary income associated with the construction of the Option 1 and Option 2 BESS would total approximately \$15 million under the 18-month construction period and \$14.8 million under the 36-month construction period.

### *Operation*

**Less than Significant Impact.** Direct operation spending impacts from operation of the solar facility, Option 1 and 2 step-up substation, and gen-tie would be positive and represent less than one percent of the study area GDP. The direct output associated with the operation of the Option 1 and 2 BESS would total \$4.1 million annually.

Direct operation income impacts from operation of the Option 1 and 2 BESS would be positive and represent less than one percent of the study area total income. The direct income associated with the operation of the Option 1 and 2 BESS would total \$774,000 annually. Secondary operation spending impacts from operation of the Option 1 and 2 BESS would be positive and represent less than one percent of the study area GDP. The secondary output associated with the operation of the Option 1 and 2 BESS would total \$1.6 million annually.

Secondary operation income impacts from operation of the Option 1 and 2 BESS would be positive and represent less than one percent of the study area total income. The secondary income associated with the Option 1 and 2 BESS would total \$460,000 annually.

## Green Hydrogen Facility

### *Construction*

**Less than Significant Impact.** Direct construction spending impacts from construction of the Option 1 and 2 and alternate green hydrogen facility would be positive and represent less than one percent of the study area GDP. The direct output associated with the construction of the Option 1 and 2 and alternate green hydrogen facility would total approximately \$370.7 million under the 18-month construction period and \$371.2 million under the 36-month construction period.

Direct construction income impacts from construction of the Option 1 and 2 and alternate green hydrogen facility would be positive and represent less than one percent of the study area total income. The direct income associated with the construction of the Option 1 and 2 and alternate green hydrogen facility would total approximately \$14.9 million under the 18-month construction period and \$14.9 million under the 36-month construction period.

Secondary construction spending impacts from construction of the Option 1 and 2 and alternate green hydrogen facility would be positive and represent less than one percent of the study area GDP. The secondary output associated with the construction of the Option 1 and 2 and alternate green hydrogen facility would total approximately \$174.6 million under the 18-month construction period and \$174.2 million under the 36-month construction period.

Secondary construction income impacts from construction of the Option 1 and 2 and alternate green hydrogen facility would be positive and represent less than one percent of the study area total income. The secondary income associated with the construction of the Option 1 and 2 and alternate green hydrogen facility would total approximately \$48.1 million under the 18-month construction period and \$48.0 million under the 36-month construction period.

Construction of the alternate green hydrogen facility would reduce agricultural production and spending and would result in a reduced secondary output impact. This would represent a very small amount of the study area agricultural GDP. This agricultural production is associated with \$583,000 in economic output. Additionally, agricultural production generates indirect and induced output impacts in the local economy. This production accounts for \$148,000 (indirect output impact) and \$196,000 (induced output impact), for a total impact of \$927,000 in output.

Construction of the alternate green hydrogen facility would reduce agricultural production and spending and would result in a reduced secondary income impact. This would represent a very small amount of the study area agricultural income. This agricultural production is associated with \$229,000 in income. Additionally, agricultural production generates indirect and induced output impacts in the local economy. This production accounts for \$83,500 (indirect income impact) and \$64,000 (induced income impact), for a total impact of \$377,000 in income.

### *Operation*

**Less than Significant Impact.** Direct operation spending impacts from operation of the Option 1 and 2 and alternate green hydrogen facility would be positive and represent less than one percent of the study area GDP. The direct output associated with the operation of the Option 1 and 2 and alternate green hydrogen facility would total \$5.8 million annually.

Direct operation income impacts from operation of the Option 1 and 2 and alternate green hydrogen facility would be positive and represent less than one percent of the study area total

income. The direct income associated with the operation of the Option 1 and 2 and alternate green hydrogen facility would total \$1.7 million annually.

Secondary operation spending impacts from operation of the Option 1 and 2 and alternate green hydrogen facility would be positive and represent less than one percent of the study area GDP. The secondary output associated with the operation of the Option 1 and 2 and alternate green hydrogen facility would total \$7.7 million annually.

Secondary operation income impacts from operation of the Option 1 and 2 and alternate green hydrogen facility would be positive and represent less than one percent of the study area total income. The direct income associated with the operation of the Option 1 and 2 and alternate green hydrogen facility would total \$2.3 million annually.

## Utility Switchyard

### *Construction*

**Less than Significant Impact.** Direct construction spending impacts from construction of the utility switchyard would be positive and represent less than one percent of the study area GDP. The direct output associated with the construction of the utility switchyard would total approximately \$56.3 million under the 18-month construction period and \$56.0 million under the 36-month construction period.

Direct construction income impacts from construction of the utility switchyard would be positive and represent less than one percent of the study area total income. The direct income associated with the construction of the utility switchyard would total approximately \$8.6 million under the 18-month construction period and \$13.1 million under the 36-month construction period.

Secondary construction spending impacts from construction of the utility switchyard would be positive and represent less than one percent of the study area GDP. The secondary output associated with the construction of the utility switchyard would total approximately \$27.1 million under the 18-month construction period and \$27.97 million under the 36-month construction period.

Secondary construction income impacts from construction of the utility switchyard would be positive and represent less than one percent of the study area total income. The secondary income associated with the construction of the utility switchyard would total approximately \$7.7 million under the 18-month construction period and \$8.1 million under the 36-month construction period.

Construction of the utility switchyard would reduce agricultural production and spending and would result in a reduced secondary output impact. This would represent a very small amount of the study area agricultural GDP. This agricultural production is associated with \$645,000 in economic output. Additionally, agricultural production generates indirect and induced output impacts in the local economy. This production accounts for \$162,000 (indirect output impact) and \$216,000 (induced output impact), for a total impact of \$1.0 million in output.

Construction of the utility switchyard would reduce agricultural production and spending and would result in a reduced secondary income impact. This would represent a very small amount of the study area agricultural income. This agricultural production is associated with \$253,000 in income. Additionally, agricultural production generates indirect and induced output impacts in the local economy. This production accounts for \$92,000 (indirect income impact) and \$71,000 (induced income impact), for a total impact of \$416,000 in income.

*Operation*

**No Impact.** No operation spending, income, or employment within the study area would be directly required for operation the utility switchyard. At the completion of the switchyard, ownership would transfer to PG&E, who would assume responsibility for operation of the switchyard. It is anticipated that the switchyard would be remotely operated and maintained within PG&E’s existing O&M program.

**Overall Project**

**Less than Significant Impact.** Direct Project construction spending impacts would be positive and account for between 2.32 and 2.35 percent of the study area GDP (depending on design scenario). This spending is expected to increase income for local businesses. The direct output associated with the construction of the Project under Option 1 design scenario would total approximately \$1.263 billion under the 18-month construction period and \$1.265 billion under the 36-month construction period. Under the Option 2 design scenario, direct output would total \$1.250 billion under the 18-month construction period and \$1.251 billion under the 36-month period. Under the alternate green hydrogen facility design scenario, direct output would total \$1.261 billion under the 18-month construction period and \$1.263 billion under the 36-month period.

Direct Project construction income impacts would be positive and represent less than one percent of the study area total income. The direct income associated with the construction of the Project would total approximately \$220.95 million under the 18-month construction period and \$245.4 million under the 36-month construction period.

Direct Project operation spending impacts would be positive and represent less than one percent of the study area GDP. This spending is expected to increase income for local businesses. The direct output associated with the operation of the Project would total \$22 million annually.

Direct Project operation income impacts would be positive and represent less than one percent of the study area total income. The direct income associated with the operation of the Project would total \$4.8 million annually. Estimated direct output and income impact totals are provided in Table 5.6-20.

**Table 5.6-20 Estimated Direct Output and Income Impacts of the Project**

<b>Impact</b>	<b>Total Direct Output</b>	<b>Total Direct Income</b>
<b>Total Option 1</b>		
Construction 18-Mo	\$1,263,601,000	\$220,950,000
Construction 36-Mo	\$1,265,287,000	\$245,442,000
Operation	\$21,985,000	\$4,780,000
<b>Total Option 2</b>		
Construction 18-Mo	\$1,249,951,000	\$220,950,000
Construction 36-Mo	\$1,251,637,000	\$245,442,000
Operation	\$21,985,000	\$4,780,000
<b>Total Alternate Hydrogen</b>		
Construction 18-Mo	\$1,260,951,000	\$220,950,000
Construction 36-Mo	\$1,262,637,000	\$245,442,000
Operation	\$21,985,000	\$4,780,000

Source: Appendix M

Secondary Project construction spending impacts would be positive and represent between 1.14 and 1.15 percent of the study area GDP (depending on design scenario). The secondary output associated with the construction of the Project under the Option 1 design scenario would total approximately \$620.1 million under the 18-month construction period and \$621.8 million under the 36-month construction period. Under the Option 2 design scenario, secondary output would total \$613.7 million under the 18-month construction period and \$615.5 million under the 36-month period. Under the alternate green hydrogen facility design scenario, secondary output would total \$618.9 million under the 18-month construction period and \$620.6 million under the 36-month period.

Project operation spending secondary impacts would be positive and represent less than one percent of the study area GDP. The secondary output associated with the operation of the Project would total \$14 million annually.

The Project would reduce agricultural production and spending. These reductions would represent a very small amount of study area GDP (and less than one percent of agricultural output in WWD). Overall, the secondary output impacts related to the Project would be significantly greater than the output lost due to the cessation of agriculture on the Project site. The Option 1 design scenario, Option 2 design scenario, and alternate green hydrogen design scenario would reduce agricultural output by \$1.06 million, \$1.06 million, and \$1.92 million, respectively. Estimated secondary output impacts are provided in Table 5.6-21.

**Table 5.6-21 Estimated Secondary Output Impacts of the Project**

Impact	Direct Output	Indirect Output	Induced Output	Total Secondary Output
<b>Total Option 1</b>				
Construction 18-Month	N/A	\$422,163,000	\$197,955,000	\$620,118,000
Construction 36-Month	N/A	\$413,028,000	\$208,843,000	\$621,871,000
Operation	N/A	\$9,538,000	\$4,513,000	\$14,051,000
Agricultural production	\$676,00	\$238,000	\$143,000	\$1,057,000
<b>Total Option 2</b>				
Construction 18-Month	N/A	\$416,664,000	\$197,066,000	\$613,730,000
Construction 36-Month	N/A	\$407,530,000	\$207,954,000	\$615,484,000
Operation	N/A	\$9,538,000	\$4,513,000	\$14,051,000
Agricultural production	\$676,000	\$238,000	\$143,000	\$1,057,0009
<b>Total Alternate Hydrogen</b>				
Construction 18-Month	N/A	\$421,095,000	\$197,782,000	\$618,877,000
Construction 36-Month	N/A	\$411,961,000	\$208,670,000	\$620,631,000
Operation	N/A	\$9,538,000	\$4,513,000	\$14,051,000
Agricultural production	\$1,225,000	\$434,000	\$259,000	\$1,919,000

N/A: These impacts are captured in Direct Effects

Source: Appendix M

Secondary Project construction income impacts would be positive and represent less than one percent of the study area total income. The secondary income associated with the construction of the Project under the Option 1 design scenario would total approximately \$181.1 million under the 18-month construction period and \$182.3 million under the 36-month construction period. Under

the Option 2 design scenario, secondary income would total \$179.4 million under the 18-month construction period and \$180.6 million under the 36-month period. Under the alternate green hydrogen facility design scenario, secondary income would total \$180.8 million under the 18-month construction period and \$181.9 million under the 36-month period.

Secondary Project operation income impacts would be positive and represent less than one percent of the study area total income. The secondary income associated with the operation of the Project would total \$4.2 million annually.

Overall, the secondary income impacts related to the Project would be significantly greater than the income lost due to the cessation of agriculture on the Project site. However, potential losses of income, however minor, would be concentrated among agricultural workers, while gains would be concentrated in other occupations. It is not clear that agricultural workers would have access to the employment and income earning opportunities the Project would support. Annual income reduction associated with the removal of agricultural land from production for the Option 1 design scenario, Option 2 design scenario, and alternate green hydrogen design scenario is estimated at \$282,000, \$282,000, and \$513,000, respectively. This estimate accounts for less than 0.01 percent of total labor income in the three-county region. Estimated secondary income impacts of the Project are provided in Table 5.6-22.

**Table 5.6-22 Secondary Income Impacts of the Project**

<b>Impact</b>	<b>Direct Income</b>	<b>Indirect Income</b>	<b>Induced Income</b>	<b>Total Secondary Income</b>
<b>Total Option 1</b>				
Construction 18-Mo	N/A	\$115,884,000	\$65,236,000	\$181,120,000
Construction 36-Mo	N/A	\$113,506,000	\$68,826,000	\$182,332,000
Operation	N/A	\$2,685,000	\$1,488,000	\$4,173,000
Agricultural production	\$100,00	\$135,000	\$47,000	\$282,000
<b>Total Option 2</b>				
Construction 18-Mo	N/A	\$114,433,000	\$64,944,000	\$179,377,000
Construction 36-Mo	N/A	\$112,055,000	\$68,533,000	\$180,588,000
Operation	N/A	\$2,685,000	\$1,488,000	\$4,173,000
Agricultural production	\$100,00	\$135,000	\$47,000	\$282,000
<b>Total Alternate Hydrogen</b>				
Construction 18-Mo	N/A	\$115,602,298	\$65,179,639	\$180,781,937
Construction 36-Mo	N/A	\$113,225,000	\$68,769,000	\$181,994,000
Operation	N/A	\$2,685,000	\$1,488,000	\$4,173,000
Agricultural production	\$182,000	\$245,000	\$85,000	\$513,000

N/A: These impacts are captured in Direct Effects

Source: Appendix M

## Impact SOC-5

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**Threshold:** Would the project induce changes in fiscal resources for local governments that result in a reduction of service levels, budget cuts, or other fiscally destabilizing effects?

This section presents the results of ECONorthwest’s economy and employment impact analysis, which rely on IMPLAN analyses to estimate Project impacts on employment and the economy. The full impact analyses and discussion is presented in Appendix M.

### Solar Facility, Step-Up Substation, and Gen-Tie

#### *Construction*

**No Impact.** Construction of the solar Facility, Option 1 and 2 step-up substation, and gen-tie would result in positive fiscal impacts. Construction spending in solar facility, Option 1 step-up substation, and gen-tie would result in sales tax benefits in the study area amounting to \$16.7 million over the 18-month construction schedule and \$16.5 million over the 36-month construction schedule. The sales tax collections for the solar facility, Option 2 step-up substation, and gen-tie would total \$16.3 million over the 18-month construction schedule and \$16.1 million over the 36-month construction schedule (Appendix M).

#### *Operation*

**No Impact.** Operation of the solar Facility, Option 1 and 2 step-up substation, and gen-tie would result in positive fiscal impacts. Spending on operations and maintenance would result in sales tax benefits in the study area amounting to \$1.3 million annually.

School Districts in California are entitled to charge a school impact fee on new construction based on the total area of the Project’s covered and enclosed structures.<sup>11</sup> The Project owner would pay a one-time fee to the school districts. This analysis assumes that the only relevant structure within the Project area that this fee could potentially be applied to is the operation and maintenance building. The operation and maintenance building would have an approximately 18,400 square foot footprint, which would produce a one-time impact fee payment of approximately \$14,000. The actual determination would be made by the office issuing the building permit. The payment of the fee to the school districts would be made in compliance with Education Code Section 17620.

Any land in agricultural production and currently under contract to receive reduced property tax assessments through California’s Williamson Act may no longer be eligible once it is removed from agricultural production.<sup>12</sup> This may result in increased property tax revenues for Fresno County (and services that depend on property tax revenues, including the Fire Protection District). Improvements related to the solar facility may be partially exempt from property tax assessment based on the provisions of California’s assessment rules for new construction of solar facilities that are locally assessed. Over the life of the Project, operation of the solar facility, Option 1 and 2 step-up substation, and gen-tie are likely to contribute to an increase in property tax revenue collections to

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<sup>11</sup> Chargeable covered and enclosed space are defined as "the covered and enclosed space determined to be within the perimeter of a commercial or industrial structure, not including any storage areas incidental to the principal use of the construction, garage, parking structure, unenclosed walkway, or utility or disposal area." (California Legislative Information, 2015; Office of Public School Construction, 2023).

<sup>12</sup> The Project is not anticipated to require cancellation of any Williamson Act contracts due to uses being considered compatible with an agricultural preserve under Government Code Section 51238(a)(1). Refer to Section 5.2, *Land Use*.

Fresno County, although too many uncertainties exist to quantify the expected increase and when it would occur (Appendix M).

## **BESS**

### *Construction*

**No Impact.** Construction of the Option 1 and 2 BESS would result in positive fiscal impacts. Construction spending would result in sales tax benefits in the study area amounting to \$3.2 million.

### *Operation*

**No Impact.** Operation of the Option 1 and 2 BESS would result in positive fiscal impacts. Spending on operations and maintenance would result in sales tax benefits in the study area amounting to \$451,000 annually.

## **Green Hydrogen Facility**

### *Construction*

**No Impact.** Construction of the Option 1 and 2 and alternate green hydrogen facility would result in positive fiscal impacts. Construction spending would result in sales tax benefits in the study area amounting to \$10.8 million.

### *Operation*

**No Impact.** Operation of the Option 1 and 2 and alternate green hydrogen facility would result in positive fiscal impacts. Operation of the Option 1 and 2 and alternate green hydrogen facility could result in increased sales taxes from operation, although they are unquantifiable at this time. It could also potentially result in an increase in property tax revenue collections through assessment of improvement value, although too many uncertainties exist to quantify the expected increase and when it would occur.

## **Utility Switchyard**

### *Construction*

**No Impact.** Construction of the utility switchyard would result in positive fiscal impacts. Construction spending would result in sales tax benefits in the study area amounting to \$1.6 million.

### *Operation*

**No Impact.** Operation of the utility switchyard would result in positive fiscal impacts. Operation of the utility switchyard could result in an increase in property tax revenue collections through change in status of agricultural lands through the Williamson Act and potentially through assessment of improvement value, although too many uncertainties exist to quantify the expected increase and when it would occur. However, the Project is not anticipated to require cancellation of Williamson Act contracts, as the utility switchyard is an electric facility considered under Government Code Section 51238(a)(1) to be compatible with an agriculture preserve, as discussed in Section 5.2, *Land Use*.

## Overall Project

**No Impact.** Construction of the Project would result in positive fiscal impacts. The Project’s effects on fiscal resources for local governments—particularly Fresno County and the City of Fresno—would be positive. Spending on materials and labor during construction would generate taxes and fees in a variety of categories that would augment existing revenue collections. These taxes include sales tax and transient lodging tax. For state and local governments, sales tax generated from the construction of the Project with Option 1 components could total \$33.9 million across the 18-month construction schedule or \$33.6 million across the 36-month construction schedule. From the construction of the Project with Option 2 components, sales tax collections from construction spending could total \$33.5 million over the 18-month construction schedule or \$33.2 million over the 36-month construction schedule. Sales tax collections from construction of the Project with the alternate green hydrogen facility could total \$33.8 million over the 18-month construction schedule or \$33.5 million over the 36-month construction schedule. Table 5.6-23 summarizes the fiscal impacts of the Project based on construction scenario and schedule.

Operation of the Project would result in positive fiscal impacts. The indirect and induced effects of Project operation as the direct spending ripples through the economy would also produce sales tax revenue. Some offsetting revenue reductions may occur from displaced spending related to lost agricultural production. The net effect would be neutral to positive for county revenues depending on how much new spending occurs locally. Annual sales tax impacts for state and local governments are estimated to total \$1.8 million.

Operation of the Project could potentially result in an increase in property tax revenue collections through assessment of improvement value of Project components (some of which may be partially tax-exempt), although too many uncertainties exist to quantify the expected increase and when it would occur.

**Table 5.6-23 Fiscal Impacts of the Project**

Impact	Property Tax	Sales Tax	School Impact Fee
<b>Total Option 1</b>			
Construction 18-Mo	Not Calculated (Positive)	\$33.9M	N/A
Construction 36-Mo		\$33.6M	N/A
Operation		\$1,800,000/yr	\$14,000 (one-time)
Agricultural production		Small Loss	N/A
<b>Total Option 2</b>			
Construction 18-Mo	Not Calculated (Positive)	\$33.5M	N/A
Construction 36-Mo		\$33.2M	N/A
Operation		\$1,800,000/yr	\$14,000 (one-time)
Agricultural production		Small Loss	N/A
<b>Total Alternate Hydrogen</b>			
Construction 18-Mo	Not Calculated (Positive)	\$33.8M	N/A
Construction 36-Mo		\$33.5M	N/A
Operation		\$1,800,000/yr	\$14,000 (one-time)
Agricultural production		Small Loss	N/A

Source: Appendix M

## Impact SOC-6

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<b>Threshold:</b> Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: fire protection, police protection, schools, parks; and/or other public facilities?
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Construction and operation of the Project would not result in construction of new or physically altered governmental facilities; however, it could result in impacts related to maintaining acceptable service ratios and response times, as discussed in the following subsections.

### Solar Facility, Step-Up Substation, and Gen-Tie

#### *Construction*

**Less than Significant Impact with Mitigation.** Construction of the solar facility, Option 1 and 2 step-up substation, and gen-tie could result in increased demand on law enforcement, fire protection, and EMS services. It would not result in any adverse impacts on schools, parks and recreation facilities, libraries, or other public facilities. The increased concentration of workers in western Fresno County required to construct the solar facility, Option 1 and 2 step-up substation, and gen-tie would increase the risk of emergency incidents requiring public safety or medical attention and likely would increase the frequency of responses to the Project site. The number of workers commuting to the Project site may also increase the risk of traffic accidents and other travel and transportation issues on the rural roads of western Fresno County. Emergency response to the Project site—located in a relatively remote part of western Fresno County—would increase demand on County Sheriff resources, which are already operating at or beyond full capacity. The Project site is also located in one of the lowest-coverage zones for fire protection in the county: both Battalions 14 and 15 are centered away from the Project area, with no fire station near Cantua Creek. This means calls to the site would draw resources away from other emergencies for longer periods because travel times to the site and transport to medical facilities if needed would be greater. Implementation of Mitigation Measure SOC-1 would require the Applicant to prepare an agreement with Fresno County to support police and fire department personnel such that the demand on local sheriff, fire, and EMS providers would be minimized and their ability to respond to other emergencies would be maintained. In addition, to the agreement, Mitigation Measure SOC-1 would require the Applicant to implement a private security system with which local law enforcement could integrate and coordinate response and deterrent measures. With implementation of Mitigation Measure SOC-1, impacts would be less than significant.

#### *Operation*

**Less than Significant Impact with Mitigation.** Operation of the solar facility, Option 1 and 2 step-up substation, and gen-tie could result in increased demand on law enforcement, fire protection, and EMS services. It would not result in any adverse impacts on schools, parks and recreation facilities, libraries, or other public facilities. Once constructed, the solar facility, Option 1 and 2 step-up substation, and gen-tie could potentially increase demand for law enforcement, fire protection, and EMS services through increased risk of trespass, vandalism, and theft compared to current land uses. Similar facilities in Fresno County attract people looking for metal and other valuable materials

to sell. Although infrequent, sometimes trespass and theft can lead to accidents, injuries, and fire that require both law enforcement and medical response. This impact to public services would be mitigated through implementation of Mitigation Measure SOC-1. In addition, implementing and maintaining site design, vegetation management practices and security best practices would reduce the risk of fire and trespass and increase the ability of first responders to respond to incidents. This would minimize demand on local sheriff, fire, and EMS providers and preserve their capacity to respond to other emergencies. With implementation of Mitigation Measure SOC-1, impacts would be less than significant.

## **BESS**

### *Construction*

**Less than Significant Impact with Mitigation.** Construction of the Option 1 and 2 BESS could result in increased demand on law enforcement, fire protection, and EMS services. It would not result in any adverse impacts on schools, parks and recreation facilities, libraries, or other public facilities. The increased concentration of workers in western Fresno County required to construct the Option 1 and 2 BESS would increase the risk of emergency incidents requiring public safety or medical attention and likely would increase the frequency of responses to the Project site, as described above. However, with implementation of Mitigation Measure SOC-1, impacts would be less than significant.

### *Operation*

**Less than Significant Impact with Mitigation.** Operation of the Option 1 and 2 BESS could result in increased demand on law enforcement, fire protection, and EMS services. It would not result in any adverse impacts on schools, parks and recreation facilities, libraries, or other public facilities. Once constructed, the Option 1 and 2 BESS would increase the risk of fire compared to existing land use conditions. Similar facilities elsewhere in the county have experienced fires, which may require multiple fire resources and personnel. Fire response is already limited with longer response times than other locations in the county, which could reduce the effectiveness of response to a fire at the Project site and increase response times for other emergencies. However, as discussed in Section 5.10, *Worker Safety*, a Fire Protection and Prevention Plan would be implemented during both Project construction and operations and the BESS megapacks would be designed and in compliance with National Fire Protection Association Section 855. These factors, along with implementation of Mitigation Measure SOC-1, would reduce impacts to less than significant.

## **Green Hydrogen Facility**

### *Construction*

**Less than Significant Impact with Mitigation.** Construction of the Option 1 and 2 and alternate green hydrogen facility could result in increased demand on law enforcement, fire protection, and EMS services. It would not result in any adverse impacts on schools, parks and recreation facilities, libraries, or other public facilities. The increased concentration of workers in western Fresno County required to construct the utility switchyard would increase the risk of emergency incidents requiring public safety or medical attention and likely would increase the frequency of responses to the project site, as described above. However, with implementation of Mitigation Measure SOC-1, impacts would be less than significant.

### *Operation*

**Less than Significant Impact with Mitigation.** Operation of the Option 1 and 2 and alternate green hydrogen facility could result in increased demand on law enforcement, fire protection, and EMS services. It would not result in any adverse impacts on schools, parks and recreation facilities, libraries, or other public facilities. . This would likely represent a small impact for departments already stretched thin from a resource perspective (particularly the County Sheriff). The actual risk of an emergency event—natural or human-caused (e.g., terrorism)—is likely very low, but still higher than the existing land use and should they occur could draw resources away from responding to other emergencies.

These risks would be mitigated somewhat as the Applicant would develop a fire protection policy for the green hydrogen facility, considering the initial and final design, layout, and equipment required for the construction and operation of the Project. The policy would include a Project-specific strategy for fire prevention and protection, fire and gas detection, and personal safety. A related fire response plan would document how fire protection systems outlined in the strategy would be implemented with the support of the local fire department. These factors, along with implementation of Mitigation Measure SOC-1, would reduce impacts to less than significant.

## **Utility Switchyard**

### *Construction*

**Less than Significant Impact with Mitigation.** Construction of the utility switchyard could result in increased demand on law enforcement, fire protection, and EMS services. It would not result in any adverse impacts on schools, parks and recreation facilities, libraries, or other public facilities. The increased concentration of workers in western Fresno County required to construct the utility switchyard would increase the risk of emergency incidents requiring public safety or medical attention and likely would increase the frequency of responses to the project site, as described above. However, with implementation of Mitigation Measure SOC-1, impacts would be less than significant.

### *Operation*

**Less than Significant Impact with Mitigation.** Operation of the utility switchyard could result in increased demand on law enforcement, fire protection, and EMS services. It would not result in any adverse impacts on schools, parks and recreation facilities, libraries, or other public facilities. Once constructed, the utility switchyard could potentially increase demand for law enforcement, fire protection, and EMS services through increased risk of trespass, vandalism, and theft compared to current land uses. This would have a similar effect on response times and incident management at the Project site, as described for the other components described above. However, with implementation of Mitigation Measure SOC-1, impacts would be less than significant.

## Overall Project

**Less than Significant Impact with Mitigation.** Construction of the Project could result in increased demand on law enforcement, fire protection, and EMS services. It would not result in any adverse impacts on schools, parks and recreation facilities, libraries, or other public facilities. The increased concentration of workers in western Fresno County required to construct the Project would increase the risk of emergency incidents requiring public safety or medical attention and likely would increase the frequency of responses to the Project site. The number of workers commuting to the Project site may also increase the risk of traffic accidents and other travel and transportation issues on the rural roads of western Fresno County. Emergency response to the Project site—located in a relatively remote part of western Fresno County—would increase demand on County Sheriff resources, which are already operating at or beyond full capacity. Traffic issues are particularly pronounced during the winter months when the likelihood of road washout from storms and other natural hazards increases. The Sheriff’s Office does not currently have the capacity to respond to increased traffic-related incidents in the region, which may require increased response from Highway Patrol or other law enforcement and emergency management agencies.

The Project site is also located in one of the lowest-coverage zones for fire protection in the county: both Battalions 14 and 15 are centered away from the Project area, with no fire station near Cantua Creek. This means calls to the site would draw resources away from other emergencies for longer periods because travel times to the site and transport to medical facilities if needed would be greater.

Impacts could be mitigated somewhat through pre-construction coordination with emergency responders and detailed transportation planning to minimize traffic concerns arising from workers commuting to the Project site and develop emergency plans during storm or flood conditions that could occur during the construction period.

Operation of the Project could result in increased demand on law enforcement, fire protection, and EMS services. It would not result in any adverse impacts on schools, parks and recreation facilities, libraries, or other public facilities. Once constructed, the Project could potentially increase demand for law enforcement, fire protection, and EMS services through increased risk of trespass, vandalism, and theft compared to current land uses. Similar facilities in Fresno County attract people looking for metal and other valuable materials to sell. Sometimes trespass and theft can lead to accidents, injuries, and fire that require both law enforcement and medical response. Additional demands on first responders may come from an increased need for specialized training to understand risks and protocols to respond to risks posed by new technologies.

The impact to public services could be mitigated somewhat by implementing a private security system with active surveillance (either on-site or by video) with which local law enforcement can integrate and coordinate response and deterrent measures. Implementing and maintaining site design, vegetation management practices and security best practices can reduce the risk of fire and trespass and increase the ability of first responders to respond to incidents. This minimizes demand on local sheriff, fire, and EMS providers and maintains their ability to respond to other emergencies.

## Mitigation Measures

### *SOC-1 Emergency Service Agreement*

In coordination with Fresno County, the Applicant would prepare an agreement to support emergency services personnel in the Project area to minimize Project demand on local sheriff, fire,

and EMS providers and maintain their ability to respond to other emergencies. The agreement would allow for adequate training and coordination with local fire and law enforcement responders to become familiar with the risks and procedures needed to respond to potential emergencies associated with Project facilities. The Applicant would also develop and implement a private security system with which local law enforcement could integrate and coordinate response and deterrent measures.

### Impact SOC-7

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<b>Threshold:</b> Would the project impose additional costs on utilities or change capacity or service levels for existing or future customers of gas, water, wastewater, or solid waste?
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### Solar Facility, Step-Up Substation, and Gen-Tie

#### *Construction*

**Less than Significant Impact.** Construction of the solar facility, Option 1 and 2 step-up substation, and gen-tie would not result in adverse impacts to utilities. The solar facility, Option 1 and 2 step-up substation, and gen-tie would not require or rely on gas, municipal water, or wastewater services as discussed in Section 5.6.1.6. Construction waste would be adequately handled at appropriate local facilities.

#### *Operation*

**Less than Significant Impact.** Operation of the solar facility, Option 1 and 2 step-up substation, and gen-tie would not result in adverse impacts to utilities. Once constructed, the solar facility, Option 1 and 2 step-up substation, and gen-tie would not be connected to gas service. Domestic water and wastewater would be provided to the operations and maintenance building and any on-site employees through on-site resources.

### BESS

#### *Construction*

**Less than Significant Impact.** Construction of the Option 1 and 2 BESS would not result in adverse impacts to utilities. The Option 1 and 2 BESS would not require or rely on gas, municipal water, or wastewater services as discussed in Section 5.6.1.6. Construction waste would be adequately handled at appropriate local facilities.

#### *Operation*

**No Impact.** Operation of the Option 1 and 2 BESS would not result in adverse impacts to utilities. The Option 1 and 2 BESS would not require or rely on gas, municipal water, or wastewater services.

### Green Hydrogen Facility

#### *Construction*

**Less than Significant Impact.** Construction of the Option 1 and 2 and alternate hydrogen facility would not result in adverse impacts to utilities. The Option 1 and 2 and alternate hydrogen facility

would not require or rely on gas, municipal water, or wastewater services as discussed in Section 5.6.1.6. Construction waste would be adequately handled at appropriate local facilities.

#### *Operation*

**Less than Significant Impact.** Operation of the Option 1 and 2 and alternate hydrogen facility would not result in adverse impacts to utilities. The Option 1 and 2 and alternate hydrogen facility would not be connected to gas service. Water and wastewater processing would be required for operation. A water sources has yet to be identified, so a full evaluation of potential impacts of water use and disposal is not possible, although the source and disposal mechanism would not be a municipal water or wastewater system. Additional information on water supply for the Project is presented in Appendix S Water Supply Assessment.

### **Utility Switchyard**

#### *Construction*

**Less than Significant Impact.** Construction of the utility switchyard would not result in adverse impacts to utilities. The utility switchyard would not require or rely on gas, municipal water, or wastewater services as discussed in Section 5.6.1.6. Construction waste would be adequately handled at appropriate local facilities.

#### *Operation*

**No Impact.** Operation of the utility switchyard would not result in adverse impacts to utilities. The utility switchyard would not require or rely on gas, municipal water, or wastewater services.

### **Overall Project**

**Less than Significant Impact.** Construction of the Project would not result in adverse impacts to utilities. The Project would not be connected to natural gas, municipal water, or wastewater services during construction. All domestic wastewater would be processed onsite through septic or transported from the site in porta-potties. Construction waste would be adequately handled at appropriate local facilities. Thus, Project construction would have a less than significant effect on utility services providers.

Operation of the Project would not result in adverse impacts to utilities. The Project would not require or rely on gas, municipal water, or wastewater services. Water and wastewater processing would be required for the green hydrogen facility. A water source has yet to be identified, so a full evaluation of potential impacts of water use and disposal is not possible, although the source and disposal mechanism will not be a municipal water or wastewater system.

## Impact SOC-8

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**Threshold:** Would the project change the character of nearby local communities or affect the ability of the local population to address its needs?

Would the project create a substantial change in community interaction patterns, social organization, social structures, or social institutions; substantial conflict with community attitudes, values, or perceptions; or substantial inequities in the distribution of the costs and benefits?

### Overall Project

#### *Construction*

**Less than Significant Impact.** Construction of the Project could result in temporary changes to community character. The peak workforce present on site would represent a substantial proportion of the resident population surrounding the Project site (see population discussion above). This population could result in increased disruption and traffic, which could adversely affect nearby residents. However, the increase would be temporary, and the region is already accustomed to significant population fluctuations from migratory agricultural workers. Therefore, the effect of the influx of workers may not be as dramatic as it would be in other communities with a more consistent population. Project workers may also purchase goods and services in the local communities, resulting in beneficial impacts for nearby residents and businesses.

Prior to construction, the Applicant would develop a Community Benefits Agreement, which would outline a plan to invest financial resources in the region for the benefit of the local population. The scope and scale of this agreement is still under development and potential beneficiaries have not yet been identified. However, leading up to and during construction the Project would invest in resources that community leaders, in collaboration with the Applicant, identify as priority needs that could contribute to enhanced community character and quality of life for residents.

#### *Operation*

**Less than Significant Impact.** Operation of the Project could result in changes to community character. Public perception of the overall Project is variable, as some may perceive the Project as positive and others may perceived it as a cost arising from loss of rural and undeveloped character.

The Application would develop a Community Benefits Agreement, which would outline a plan to invest financial resources in the region for the benefit of the local population. The scope and scale of this agreement is still under development and potential beneficiaries have not yet been identified. However, leading up to and during construction the Project would invest in resources that community leaders, in collaboration with the Project developer, identify as priority needs that could contribute to enhanced community character and quality of life for residents, extending into operation of the Project.

## 5.6.4 Cumulative Impacts

### Overall Project

The impact analysis highlights that most of the Project's impacts would be beneficial to the local economy, or neutral to insignificant, as a share of total economic activity in the case of economic

changes related to lost agricultural production. Population and housing effects, while insignificant at the scale of the study area and 60-minute commute area, could put extra pressure on already scarce housing resources in the communities closest to the Project site. Other construction projects that require non-local labor and occur at the same time as the Project are likely to produce adverse cumulative effects on temporary housing resources in western Fresno County. This includes several energy production projects within 15 miles of the Project in western Fresno County. As with demands on housing, construction projects in western Fresno County that occur at the same time as this Project are likely to produce adverse cumulative impacts on response times for emergency responders. Projects not under construction at the same time are unlikely to produce cumulative impacts related to the construction labor force. These potential cumulative impacts should be assessed as more information about project timing (for this and other projects) becomes available and potential impacts discussed with public safety providers in the region.

The energy projects also in development in western Fresno County are likely to attract vandalism, trespass, and other issues that law enforcement and emergency responders must attend to; these incidences have increased in recent years at already-existing solar projects in the County. Coordination and ongoing monitoring and security response for each of these facilities is likely to contribute to cumulative adverse impacts on the Fresno County Sheriff's office, which is already operating at or over capacity (requiring mandatory overtime of existing staff). Without additional fiscal resources to hire new officers to patrol and coordinate security surveillance of these facilities, these demands may result in increased response times for other types of emergencies in the county. These potential cumulative impacts should be discussed with public safety providers in the region to identify potential opportunities to reduce demands on law enforcement. This may include additional investments in private security and ongoing coordination with local law enforcement officers. As discussed under Impact SOC-6, implementation of Mitigation Measure SOC-1 would require the Applicant to prepare an agreement with Fresno County to support police and fire department personnel such that the demand on local sheriff, fire, and EMS providers would be minimized and their ability to respond to other emergencies would be maintained. In addition, private security at the Project would prevent the Project from cumulatively contributing to strain on Fresno County's Sheriff's office. With implementation of Mitigation Measure SOC-1, cumulative impacts would be less than significant.

### **Utility Switchyard**

Construction and operation of the utility switchyard is considered in the cumulative impact analysis of the overall Project discussed above; therefore, similar to the overall Project, cumulative impacts related to socioeconomic resources would be less than significant with mitigation incorporated.

### **5.6.5 Environmental Justice**

In accordance California Code of Regulations Title 20 Division 2 §1704 Appendix B, this section provides a discussion of impacts to environmental justice populations to determine whether disproportionately high and adverse human health or environmental effects of the Project are likely to fall on minority and/or low-income populations.

### **Background and Methodology**

For the purposes of this analysis, populations that are located within the area potentially affected by the Project were examined and the analysis was prepared in compliance with Presidential Executive

Order (EO) 12898, Federal Actions to Address Environmental Justice (EJ) in Minority Populations and Low-Income Populations (EO 12898), dated February 11, 1994.

EO 12898 requires that “each Federal agency shall make achieving EJ part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations....” In his memorandum transmitting EO 12898 to federal agencies, President Clinton further specified that, “each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by the National Environmental Policy Act of 1969.”<sup>13</sup> Although EO 12898 was used to inform the EJ analysis, it is not applicable to the Project since the Project is located on private lands within the State of California and the County of Fresno.

This EJ analysis involved the evaluation of the following criteria.

*1. A determination is made as to which impacts of the project are high and adverse.*

The series of environmental analyses prepared for the Project Opt-In Application were reviewed, and discussions with the environmental professionals who prepared these sections were conducted to determine which environmental or human health impacts could reach the level of high and adverse after proposed mitigation measures were implemented. Neither EO 12898, nor any of the environmental justice guidance documents, contain official guidance on the definition of “high and adverse.” For purposes of this analysis, adverse impacts identified by the professional analysts working on this Opt-In Application as “significant and unmitigable” under CEQA are synonymous with high and adverse impacts as described in EO 12898.

*2. A determination is made as to whether minority or low-income populations exist within the high and adverse impact zones.*

For information on the distribution of minority and low-income populations in the project area, this EJ analysis reviewed the 2017-2021 American Community Survey (ACS) 5-year data. The analysis involved reviewing census tract level minority data and census tract income data. The analysis includes data on the distribution of the populations that intersect the 10-mile radius buffer by minority and income, respectively.

*3. The spatial distribution of high and adverse impacts is reviewed to determine if these impacts are likely to fall disproportionately on the minority or low-income population.*

As a result of there being no anticipated high and adverse human health or environmental effects from the implementation and operation of the Project, a final determination of impacts on low income and minority populations is not required. However, the subsection below presents a summary of the census tract data for the minority and low-income populations that intersect the 10-mile radius buffer.

## **Outreach to Minority and Low-Income Populations**

EO 12898 requires Federal agencies to ensure effective public participation and access to information. Consequently, a key component of compliance with EO 12898 is outreach to the potentially affected minority and/or low-income population to discover issues of importance that

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<sup>13</sup> The Project does not have a federal nexus and is not subject to the National Environmental Policy Act; however, EO 12898 is referenced for the purposes of discussing impacts on EJ communities.

may not otherwise be apparent. As part of the Opt-In Application process, the CEC will provide information to residents in the area and provide opportunities for their involvement. The CEC typically:

- Mails written notice to all property owners within 1,000 feet of the site and within 500 feet of the centerline of all linear corridors
- Publishes notice in the local newspaper announcing public workshops and hearings
- Provides access to information by submitting copies of key documents to local libraries and providing materials via a web page
- Holds hearings and workshops in the local community
- Assigns a public advisor to assist the public in participating in the process

## **Demographic Analysis**

### *Distribution of the Minority Population*

Based on the 2017-2021 ACS 5-year dataset used by the United States Environmental Protection Agency (USEPA) EJ Mapper, the total population within a 10-mile radius of the Project site is approximately 7,960 (USEPA 2023). The minority population in the Census Tracts that intersect the 10-mile radius buffer comprises approximately 95 percent of this total population.

All of the Census Tracts in the vicinity of the Project are above 50 percent minority populations (USEPA 2023). As such, all of the Census Tracts within the 10-mile radius of the Project site meet the Council of Environmental Quality (CEQ) guidance for identifying minority populations (CEQ 1997).

### *Distribution of the Low-Income Population*

Based on the 2017-2021 ACS 5-year estimates dataset, the total population within the Census Tracts that intersect the 10-mile radius buffer around the Project is approximately 7,960 (USEPA 2023). The low-income population in the Census Tracts that intersects the 10-mile radius buffer comprises about 64 percent of the total population, or approximately 5,095 residents.

Unlike the CEQ 1997 guidance on minority population, none of the environmental justice guidance documents contain a quantitative definition of how many low-income individuals it takes to comprise a low-income population. In the absence of guidance, for this analysis the density used to identify minority populations (i.e., 50 percent or greater) was also used to identify low-income populations. Census Tracts 076.00, 077.00, 082.00, 083.04, and 078.02 contain more than 50 percent low-income populations (USEPA 2023). Census Tract 076.00 is located near Raisin City, Census Tract 077.00 is located near Floyd, Census Tract 082.00 is located near Tranquility, Census Tract 083.04 is located near La Jolla Ranch, and Census Tract 078.02 is located near Colfax.

## **Results and Conclusion**

As discussed above, for purposes of this analysis, CEQA significant and unmitigable adverse impacts are synonymous with high and adverse impacts as described in EO 12898. As reported in the environmental analyses prepared for the Project Opt-In Application, no significant adverse impacts would occur after the Applicant implements proposed mitigation measures. Consequently, none of the impacts of this Project are high and adverse in the context of EO 12898. As such, no high and adverse human health or environmental effects will fall disproportionately on minority or low-

income populations. While the Project is located on private lands and not subject to EO 12898, the Project would nonetheless be consistent with the policy established in EO 12898.

### 5.6.6 Laws, Ordinances, Regulations, and Standards

This section lists and discusses the socioeconomic-related LORS that apply to the Project.

Table 5.6-24 summarizes the LORS relevant to the Project.

**Table 5.6-24 LORS Applicable to Socioeconomics**

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
Federal	EO 12898	Not applicable to the Project. However, was used to inform an analysis of impacts to environmental justice communities for the Project.	Section 5.6.3.3	Not applicable
State	Title 14 California Code, Section 15131 (CEQA)	CEQA identifies several environmental factors that are addressed or referenced in this analysis, including Population/Housing, Utilities/Service Systems, Public Services, and Agriculture Resources.  Economic/social effects of a project are not treated as significant effects on the environment, while they may be used to determine the significance of physical changes caused by the project.	Section 5.6.3	The CEC shall consider the social, economic, and housing factors along with presented in this Opt-In Application to determine whether changes to a project are necessary to avoid or reduce potentially significant effects on the environment, and would comply with Title 14 Section 15131 of the California Code.
State	Government Code Sections 65996-65997	Establishes the levying of a fee on construction of industrial facilities be considered as mitigating impacts on school facilities.	Impact SOC-6	The Project would pay applicable School District Impact fees, if determined to be required for the operations and maintenance building.
State	Education Code Section 17620	Allows school districts to levy a fee against any construction within district boundaries to fund the construction of school facilities as a one-time assessment fee to mitigate against potential school impacts of development.	Impact SOC-6	The Project would pay applicable School District Impact fees, if determined to be required for the operations and maintenance building.

Source: Appendix M

### 5.6.6.1 *Federal LORS*

#### **Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations**

EO 12898, issued by President Clinton in 1994, requires that “each Federal agency shall make achieving EJ part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations....” In his memorandum transmitting EO 12898 to federal agencies, President Clinton further specified that, “each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by the National Environmental Policy Act of 1969.” The CEQ has issued guidance on how to implement EO 12898 and conduct an EJ analysis.

Although EO 12898 was used to inform the EJ analysis, it is not applicable to the Project since the Project is located on private lands within the State of California and the County of Fresno. No federal laws and regulations concerning socioeconomic resources were identified that apply to the construction and operation of the Project.

### 5.6.6.2 *State LORS*

#### **California Code of Regulations Title 14, Section 15131**

California Code of Regulations Title 14, Section 15131 states that the potential social or economic effects of a project shall not be treated as significant effects on the environment, however they may be used to determine the significance of physical changes caused by the project. Additionally, the code states that social, economic, and housing factors shall be considered by public agencies along with environmental and technology factors to determine whether changes to a project are necessary to avoid or reduce potentially significant effects on the environment (California Code of Regulations, Accessed 2023).

#### **California Government Code Sections 65996 and 65997**

California Government Code Section 65996 and 65997 provide the method of mitigating the potential impacts of real property development on school facilities.

#### *Education Code Section 17620*

Education Code Section 17620 of California Government Code Section 65997 allows school districts to levy a fee against construction within school district boundaries for the purpose of constructing or reconstructing school facilities at a rate of \$0.78 per square foot of chargeable and enclosed space of new commercial and industrial development as mitigation for development within school district boundaries.

### 5.6.6.3 *Local LORS*

Local LORS relevant to the Project may include ordinances that dictate vegetation management and other best practices related to facility design that would reduce demand on emergency responders; however, no local LORS specific to socioeconomic resources have been identified.

### 5.6.7 Agencies and Agency Contact

Table 5.6-25 lists local agencies responsible for public services and economic development in the study area. No permits from these agencies are required.

**Table 5.6-25 Agency Contacts for Socioeconomics**

Issue	Agency	Contact
Law Enforcement	Fresno County Sheriff	Lt. Brandon Purcell
Fire Protection	Fresno County Fire Protection District	Assistant Chief Ryan Michaels
Emergency Management	Central California EMS Agency	Director Daniel J. Lynch Dale Dotson, Operations Coordinator
Economic Development	Fresno County Economic Development Corporation	Julian Ramos, Client Services Manager Spencer Bremer, Research Analyst

Source: ECONorthwest

### 5.6.8 Permits and Permit Schedule

No permits related to socioeconomics have been identified that would be required for construction and/or operation of the Project.

## 5.6.9 References

California Department of Finance. 2023. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2023. <https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/> (accessed October 2023).

Fresno, County of. 2023. "Three Rocks Fishing Access". <https://www.fresnocountyca.gov/Departments/Public-Works-and-Planning/divisions-of-public-works-and-planning/resources-and-parks-division/parks/three-rocks-fishing-access> (accessed October 2023).

United States Census Bureau. 2023. QuickFacts: Fresno County, California. <https://www.census.gov/quickfacts/fact/table/fresnocountycalifornia/PST045222> (accessed October 2023).

United States Environmental Protection Agency. 2023. EJScreen: Environmental Justice Screening and Mapping Tool. <https://www.epa.gov/ejscreen> (accessed October 2023).