

APPENDIX 5.10A

# Screening-level Environmental Justice Analysis

# Environmental Justice

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## Introduction

This report was prepared in compliance with Presidential Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (EO 12898), dated February 11, 1994. The purpose of this report is to determine whether or not disproportionately high and adverse human health or environmental effects of the proposed Mariposa Energy Project (MEP) are likely to fall on minority and/or low-income populations. This report focuses on the populations that are located within the area potentially affected by the MEP project. In accordance with EO 12898, this report documents where minority and low-income populations reside and examines if there are high and adverse impacts identified (as reported in the various environmental analysis sections of this AFC) where these impacts fall relative to these populations. This report also discusses the specific outreach efforts made to involve minority and low-income populations in the decision-making process. No high and adverse impacts are expected as a result of this project; therefore, no high and adverse human health or environmental effects of this project are expected to fall disproportionately on minority or low-income populations.

## Studies Performed and Coordination Conducted

### Overview of Executive Order 12898

EO 12898, issued by President Clinton in 1994, requires that “each Federal agency shall make achieving environmental justice 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.” Guidance on how to implement EO 12898 and conduct an Environmental Justice analysis has been issued by the President’s Council on Environmental Quality (CEQ, 1997).

### Methodology and Approach

The MEP project was evaluated for compliance with EO 12898. For this type of analysis, three fundamental evaluation measures are used.

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

The series of environmental analyses prepared for the MEP AFC 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 AFC as “significant” under CEQA were considered to be 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 MEP project area, 2000 Census data were used. Race/ethnicity and income data were reviewed at the finest level available from the Census (i.e., Census Block Groups for race/ethnicity and income). Tables 5.10A-1 and 5.10A-2 show the distribution of the population within the 6-mile radius by race/ethnicity and income, respectively. These tables are located at the end of this appendix.

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.*

Since there is no specific guidance in EO 12898, the test of disproportionately is made on the basis described in the U.S. Environmental Protection Agency’s (USEPA) *Draft Revised Guidance for Investigating Title VI Administrative Complaints Challenging Permits* (USEPA, June 2000). This guidance suggests using two to three standard deviations above the mean as a quantitative measure of disparate effect.

While the first two elements of this approach were conducted, no detailed distribution analysis was required to make a final determination. This was because professional analysts in each environmental and human health discipline reviewed for this AFC determined that no high and adverse (i.e., CEQA significant) human health or environmental effects were expected to remain after implementation of proposed mitigation measures.

## **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 may not otherwise be apparent.

As part of the AFC process, the California Energy Commission will provide information to residents in the area and provide opportunities for their involvement.

The California Energy Commission 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 2000 Census, the total population within a 6-mile radius of the MEP site is approximately 4,211. The racial minority population, in the Census Blocks within the 6-mile radius of the MEP site, comprises approximately 22 percent of this total population while the ethnic minority (as represented by individuals of Hispanic origin) comprises about 21 percent (see Table 5.10A-1). Figure 5.10A-1 (figures are at the end of this appendix) identifies the non-White racial and ethnic minority population percentages of Census Blocks in the vicinity of the MEP based on 2000 Census data. As shown in Figure 5.10A-1, about a 15 of the Census Blocks in the vicinity of the MEP are above 50 percent minority. These Census Blocks have minority population densities high enough (i.e., greater than 50 percent) to be considered minority populations based on the guidance contained in CEQ (1997).

### Distribution of the Low-Income Population

Based on the 2000 Census, the total population for whom poverty status is determined within a 6-mile radius of the MEP site was approximately 18,551. The low-income population, in the Census Block Groups within the 6-mile radius of the MEP site, comprised about nine percent of this total population (see Table 5.10A-2). Figure 5.10A-2 identifies the low-income population percentages of Census Block Groups in the vicinity of MEP based on 2000 Census data. 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. As shown on Figure 5.10A-2, there are no Census Block Groups in the project vicinity with 50 percent or more low-income population.

## Results and Conclusion

As discussed in the *Methodology and Approach* section above, for purposes of this analysis, CEQA-significant adverse impacts are considered synonymous with high and adverse impacts as described in EO 12898. As reported in the series of environmental analyses prepared for the MEP AFC, and further confirmed through discussions with the environmental professionals who prepared those sections, no significant adverse impacts are expected as a result of this project after proposed mitigation measures are implemented. Consequently, none of the impacts of this project can be described as high and adverse in the context of EO 12898. As there are no high and adverse impacts expected as a result of this project, this analysis concludes that no high and adverse human health or environmental effects of this project are expected to fall disproportionately on minority or low-income populations. The MEP project can, therefore, be considered to be consistent with the policy established in EO 12898.

## Bibliography and References

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U.S. Environmental Protection Agency. 1998. *Draft Title VI Guidance for EPA Assistance Recipients Administering Environmental Permitting Programs (Draft Recipient Guidance) and Draft Revised Guidance for Investigating Title VI Administrative Complaints Challenging Permits (Draft Revised Investigation Guidance)*. Federal Register Volume 65, Number 124, pages 39649-39701. Washington, D.C. June 27, 2000.

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# APPENDIX

## Table 5.10A-1

2000 Census Racial/Ethnic Data by Census Blocks  
Mariposa Energy Project 6-mile Radius

Census Block	Population	White	Minority	Percent Minority	Hispanic Origin*	Percent Hispanic
060014511011000	91	89	2	2.2	2	2.2
060014511011036	3	3	0	0.0	0	0.0
060014511011039	2	2	0	0.0	2	100.0
060014511012002	27	25	2	7.4	0	0.0
060014511012003	38	31	7	18.4	18	47.4
060014511012004	7	7	0	0.0	0	0.0
060014511012007	2	2	0	0.0	0	0.0
060014511012009	2	2	0	0.0	0	0.0
060014511012018	4	4	0	0.0	0	0.0
060014511012020	1	0	1	100.0	0	0.0
060014511012021	2	2	0	0.0	0	0.0
060014511012023	1	1	0	0.0	0	0.0
060014511012030	32	28	4	12.5	11	34.4
060014511012031	8	8	0	0.0	0	0.0
060014511012034	2	2	0	0.0	0	0.0
060014511012037	1	1	0	0.0	0	0.0
060014511012047	2	2	0	0.0	0	0.0
060014511012049	1	1	0	0.0	0	0.0
060014511012050	11	8	3	27.3	7	63.6
060014511012053	5	5	0	0.0	0	0.0
060014511012055	6	6	0	0.0	0	0.0
060014511012080	16	15	1	6.3	0	0.0
060014511012082	5	0	5	100.0	0	0.0
060014511012083	38	33	5	13.2	3	7.9
060014511012088	2	0	2	100.0	0	0.0

Census Block	Population	White	Minority	Percent Minority	Hispanic Origin*	Percent Hispanic
060014511012089	5	5	0	0.0	0	0.0
060014511012091	8	8	0	0.0	0	0.0
060014511012098	4	1	3	75.0	0	0.0
060014511012104	3	3	0	0.0	0	0.0
060014511012111	12	12	0	0.0	3	25.0
060014511012116	12	12	0	0.0	1	8.3
060014511012121	1	0	1	100.0	0	0.0
060014511012128	10	10	0	0.0	0	0.0
060014511012131	5	5	0	0.0	0	0.0
060014511012147	8	0	8	100.0	3	37.5
060014511012148	20	19	1	5.0	0	0.0
060014511012149	29	17	12	41.4	6	20.7
060014511012150	6	3	3	50.0	0	0.0
060014511012152	4	4	0	0.0	0	0.0
060014511012153	2	2	0	0.0	0	0.0
060014511012154	5	4	1	20.0	0	0.0
060014511012171	2	2	0	0.0	0	0.0
060014511012177	11	11	0	0.0	0	0.0
060014511012183	1	1	0	0.0	0	0.0
060014511012375	34	34	0	0.0	2	5.9
060133040003000	41	35	6	14.6	6	14.6
060133040003002	2	2	0	0.0	0	0.0
060133040003011	123	52	71	57.7	23	18.7
060133040003012	231	197	34	14.7	34	14.7
060133040003013	31	23	8	25.8	2	6.5
060133040003015	81	64	17	21.0	21	25.9
060133040003018	36	36	0	0.0	19	52.8
060133040003019	17	17	0	0.0	4	23.5
060133040003020	55	53	2	3.6	8	14.5
060133040003022	6	3	3	50.0	0	0.0
060133040003023	5	5	0	0.0	5	100.0
060133040003024	2	2	0	0.0	0	0.0

<b>Census Block</b>	<b>Population</b>	<b>White</b>	<b>Minority</b>	<b>Percent Minority</b>	<b>Hispanic Origin*</b>	<b>Percent Hispanic</b>
060133040003025	2	2	0	0.0	0	0.0
060133040003026	67	57	10	14.9	9	13.4
060133040004008	20	13	7	35.0	7	35.0
060133040004009	14	13	1	7.1	2	14.3
060133040004010	160	121	39	24.4	51	31.9
060133040004011	596	485	111	18.6	97	16.3
060133040004038	36	32	4	11.1	5	13.9
060133040004047	15	13	2	13.3	3	20.0
060133040004048	30	15	15	50.0	18	60.0
060133040004052	12	9	3	25.0	3	25.0
060133040004053	15	15	0	0.0	0	0.0
060133040004054	6	6	0	0.0	0	0.0
060133040004060	8	6	2	25.0	0	0.0
060770039001040	62	31	31	50.0	47	75.8
060770039001110	21	11	10	47.6	10	47.6
060770039001111	60	16	44	73.3	48	80.0
060770039001114	110	88	22	20.0	61	55.5
060770039001115	3	2	1	33.3	1	33.3
060770039001117	47	23	24	51.1	22	46.8
060770052032000	60	57	3	5.0	5	8.3
060770052032006	45	17	28	62.2	29	64.4
060770052032007	71	62	9	12.7	1	1.4
060770052032014	7	7	0	0.0	0	0.0
060770052032015	65	64	1	1.5	21	32.3
060770052032016	2	2	0	0.0	0	0.0
060770052032017	154	136	18	11.7	26	16.9
060770052032018	101	95	6	5.9	6	5.9
060770052032019	22	18	4	18.2	3	13.6
060770052032020	166	140	26	15.7	12	7.2
060770052032021	196	162	34	17.3	24	12.2
060770052033000	8	7	1	12.5	0	0.0
060770052033002	28	18	10	35.7	22	78.6

Census Block	Population	White	Minority	Percent Minority	Hispanic Origin*	Percent Hispanic
060770052033004	26	24	2	7.7	0	0.0
060770052033007	4	3	1	25.0	0	0.0
060770052033008	4	0	4	100.0	4	100.0
060770052033009	17	6	11	64.7	11	64.7
060770052033010	61	44	17	27.9	12	19.7
060770052033011	2	2	0	0.0	0	0.0
060770052033012	5	5	0	0.0	3	60.0
060770052033013	24	24	0	0.0	1	4.2
060770052033014	3	0	3	100.0	3	100.0
060770052033016	64	29	35	54.7	12	18.8
060770052033017	102	72	30	29.4	8	7.8
060770052033018	1	0	1	100.0	0	0.0
060770052033019	230	135	95	41.3	83	36.1
060770052033020	25	15	10	40.0	8	32.0
060770052033021	212	162	50	23.6	24	11.3
060770052033022	28	16	12	42.9	0	0.0
060770052033023	13	13	0	0.0	0	0.0
060770052033024	2	2	0	0.0	0	0.0
060770052033025	3	3	0	0.0	0	0.0
060770052033029	4	4	0	0.0	2	50.0
060770052033034	7	7	0	0.0	0	0.0
060770052033035	37	37	0	0.0	4	10.8
060770052033049	7	7	0	0.0	0	0.0
<b>TOTAL</b>	<b>4,211</b>	<b>3,272</b>	<b>939</b>	<b>22.3</b>	<b>888</b>	<b>21.1</b>

Source: 2000 Census.

\* Hispanics or Latinos are those people who classified themselves in one of the specific Spanish, Hispanic, or Latino categories listed on the Census 2000 questionnaire—"Mexican, Mexican Am., Chicano," "Puerto Rican," or "Cuban"—as well as those who indicate that they are "other Spanish/Hispanic/Latino." People who identify their origin as "other Spanish/Hispanic/Latino" may be of any race. Thus, the percent Hispanic should not be added to percentages for racial (i.e., minority) categories.

# APPENDIX

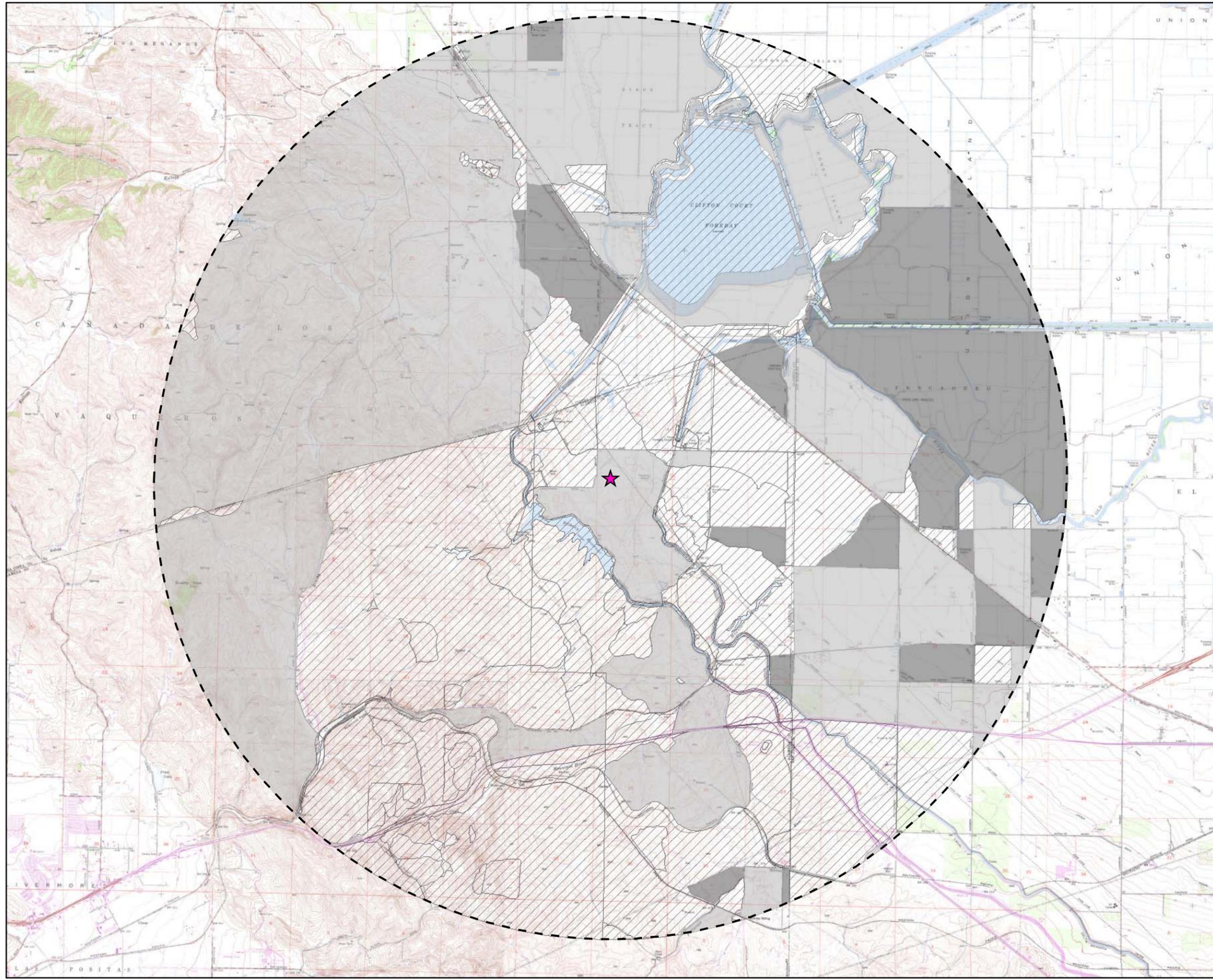
## Table 5.10A-2

2000 Census Low Income Data by Census Block Groups  
Mariposa Energy Project 6-mile Radius

<b>Census Block Group</b>	<b>Total Population*</b>	<b>Population below Poverty Level</b>	<b>Percent Low-Income</b>
060014511011	3,501	65	1.9
060014511012	1,078	61	5.7
060133040003	959	206	21.5
060133040004	2,310	237	10.3
060133551044	6,400	141	2.2
060770039001	1,549	698	45.1
060770052031	479	46	9.6
060770052032	1,263	57	4.5
060770052033	1,012	71	7.0
<b>TOTAL</b>	<b>18,551</b>	<b>1,582</b>	<b>8.5</b>

Source: 2000 Census.

\* Population numbers are only those for whom poverty was determined and exclude full-time college students.



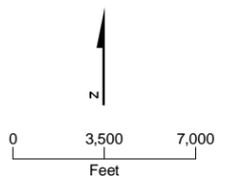
**LEGEND**

- ★ PROJECT LOCATION
- ⊖ SIX MILE BUFFER

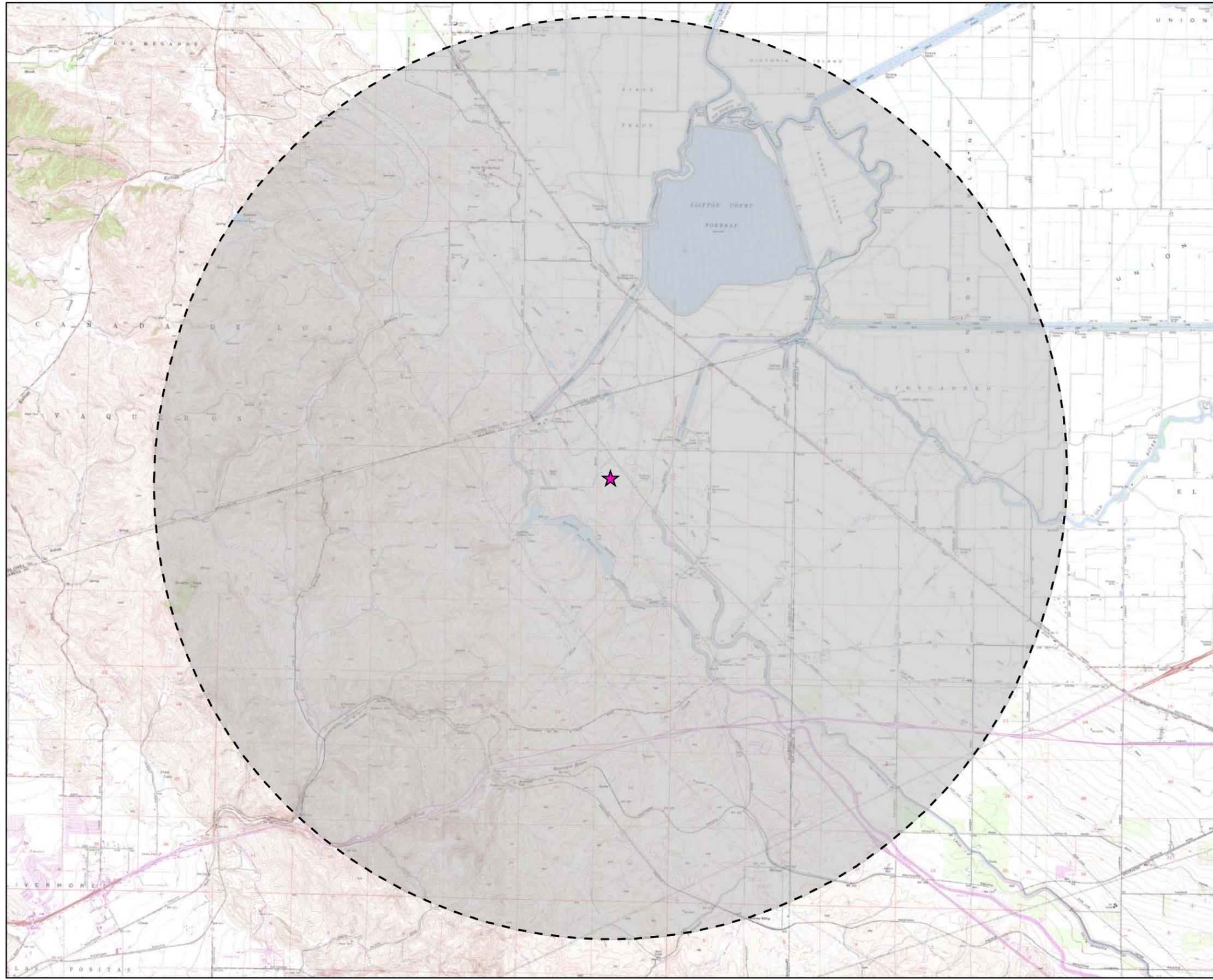
**PERCENTAGE OF MINORITY POPULATION**

- ▨ NO MINORITY
- 0- 50%
- 50 - 100%

Notes:  
 1. Source: American Fact Finder, Census 2000 Summary File 1 (SF1) 100 - Percent Data, U.S. Census Bureau, 2009.



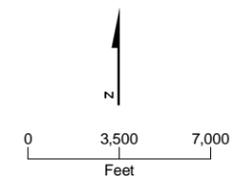
**FIGURE 5.10A-1**  
**MINORITY POPULATION**  
**DISTRIBUTION BY CENSUS BLOCK**  
**GROUPS WITHIN SIX MILES**  
 MARIPOSA ENERGY PROJECT  
 ALAMEDA COUNTY, CALIFORNIA



**LEGEND**

- ★ PROJECT LOCATION
- ⊖ SIX MILE BUFFER
- LOW INCOME POPULATION DISTRIBUTION**
- NO LOW INCOME POPULATION REPORTED
- 0 - 50%

Notes:  
 1. Source: American Fact Finder, Census 2000 Summary File 3 (SF3) 100 - Percent Data, U.S. Census Bureau, 2009.



**FIGURE 5.10A-2**  
**LOW INCOME POPULATION**  
**DISTRIBUTION BY CENSUS BLOCK**  
**GROUPS WITHIN SIX MILES**  
 MARIPOSA ENERGY PROJECT  
 ALAMEDA COUNTY, CALIFORNIA