

## 4.7 Community Resources

### 4.7.1 Overview

The analysis of community resources considers effects related to land resources (agricultural resources and mineral resources); socioeconomics, including environmental justice; hazardous materials and other hazards; and public services and utilities. This section describes the regulatory setting applicable to community resources and the potential effects of the alternatives on community resources in the study area. As discussed in Section 3.7, Community Resources, the study area is considered concurrent with the Covered Lands with the exception of demographic data pertaining to socioeconomics and environmental justice, which are presented in the context of Kern County.

#### 4.7.1.1 Regulatory Setting

Activities proposed in the study area would be required to conform to Federal, state, and local laws and regulations relating to land resources, socioeconomics, public safety, and public services, as described below. While the Service has direct authority and jurisdiction over the biological resources, with respect to secondary effects related to community resources, other agencies have primary jurisdiction.

##### **Federal Resource Conservation and Recovery Act**

The Federal Resource Conservation and Recovery Act (RCRA) provides the U.S. Environmental Protection Agency (EPA) with the authority to regulate the generation, transportation, treatment, storage, and disposal of hazardous wastes (from the 'cradle to grave') (42 United States Code [U.S.C.] 6901 *et seq.*).

##### **Environmental Justice**

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations (1994), requires that all Federal agencies consider environmental justice concerns when evaluating the potential effects of a proposed action. In general, Executive Order 12898 seeks to ensure that environmental effects potentially associated with a Federal action will not disproportionately generate high and/or adverse human health or environmental effects on minority and low-income populations and communities. The U.S. Environmental Protection Agency (EPA) has summarized environmental justice concerns as follows:

Environmental justice is the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies (U.S. Environmental Protection Agency 1998).

In 1997, the Council on Environmental Quality (CEQ) issued guidance regarding the analysis of environmental justice issues by Federal agencies (Council on Environmental Quality 1997). This environmental justice guidance defines *minority* to mean people of African, Asian, American Indian

and Alaskan Native, Native Hawaiian or other Pacific Islander, or Hispanic origin.<sup>1</sup> The guidance states that, for purposes of assessing potential environmental justice effects,

...minority populations should be identified [by a Federal action agency] when either (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographical analysis.

According to the environmental justice guidance, “low-income populations in an affected area should be identified with the annual statistical poverty thresholds from the Bureau of the Census’ Current Population Reports, Series P-60 on Income and Poverty.” The Census Bureau’s 2000 poverty thresholds set the poverty level for an individual at \$8,794 and for a family of four at \$17,603.

As shown by the demographic information provided in Section 3.7, Community Resources, the population in the study area, in Census Designated Places near the study area, and within Kern County as a whole does not meet environmental justice criteria for identifying either a minority population or a low-income population that may be affected by the proposed action.

### **California Department of Toxic Substances Control Regulations**

The California Department of Toxic Substances Control (DTSC) hazardous waste regulations are located in the California Code of Regulations (CCR) at Title 22 Social Security, Division 4.5, Environmental Health Standards for Management of Hazardous Waste. These regulations govern the storage, treatment, and disposal of hazardous waste.

### **State Fire Protection Code**

Statewide fire protection standards are located in Public Resources Code, Section 4291, Chapter 47 of the 2007 California Fire Code, Section 4701–4713; and in CCR including Title 14 (CalFire State Responsibility Area Fire Safe Regulations) Chapter 7, Section 1270–1299, and Title 24, Part 2 (California Building Codes), Chapter 7A, Section 701A–704A.5. These codes and regulations address fire protection standards for buildings and structures located within a wildland-urban interface fire area and in areas that are within the state's responsibility for fire protection.

### **State School Funding and Mitigation**

There are several state mechanisms that fund mitigation for effects on schools from new developments. The Leroy F. Green State School Building Lease-Purchase Law of 1976 (California Education Code, Section 17000–17009.5) raises money through the sale of state bonds to fund the construction of schools. The Mello-Roos Community Facilities Act of 1982 allows for the creation of Community Facilities Districts that may issue bonds and collect special taxes to finance school projects (California Government Code, Sections 53311–53368.3). The Schools Facilities Act of 1977 allows cities or counties to require new development to provide interim school facilities for up to five years. California Government Code Section 65995 limits the development fees that cities or counties may charge to fund school construction or reconstruction associated with residential or commercial construction approvals. California Government Code 65996(b) stipulates that the payment of the development fees authorized by Section 65996 constitutes “full and complete school facilities mitigation” for new projects.

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<sup>1</sup> As defined by the U.S. Census Bureau, the term *Hispanic* is considered to indicate an ethnic and cultural identity and not a category of race. As a result, tabulations that include Hispanic responses on census questionnaires do not add up to 100% because respondents may describe themselves as both Hispanic and as a member of a specific racial category.

## **Williamson Act**

As stated in Section 3.7, Community Resources, certain portions of the study area are subject to the agricultural conservation agreements of the California Land Conservation Act, also known as the Williamson Act (Figure 3.7-3). These agreements reduce the tax basis of the affected property in exchange for the owner's commitment to maintain agricultural or grazing activities for a minimum period of 10 years. The contract term automatically renews every year for a new 10-year period until the owner elects to terminate the agreement pursuant to the act. In such an event, the agreement will expire 10 years after a notice of nonrenewal has been properly filed in accordance with the act.

## **California Health and Safety Laws and Regulations**

State law regulates health and safety matters, including vector control and sanitation in Division 104, Environmental Health of the State Health and Safety Code. CCR Title 27 addresses environmental protection, including solid waste.

## **Kern County General Plan**

The Kern County General Plan, which was adopted in 2004, was last updated in 2009 with changes to certain land use designations made together with Kern County's approval of the TMV Project in 2009 (Kern County 2009a). Chapter 1, Section 1.4 Public Facilities and Services of the Kern County General Plan includes policies that intended to ensure that public facilities and services are maintained within Kern County.

## **Kern County Building Code**

Kern County has adopted building regulations that include a Wildland-Urban Interface Code (Kern County Code of Regulations, Chapter 17.34) that is intended to reduce the risk of wildfires in Kern County.

## **Kern County Animal Control and Health and Safety Code**

Chapter 7 of Kern County Code addresses animal control. Chapter 8 of Kern County Code addresses health and safety, including land application of biosolids, dangerous excavations, and solid waste.

### **4.7.1.2 Methods**

The analysis of the effects and the magnitude of direct, indirect, and cumulative effects on community resources are considered in terms of whether each alternative would result in the loss of amounts of land resources, defined as high-value agricultural or mineral resources; cause adverse socioeconomic effects, including disproportionate effects on environmental justice populations; result in exposure to hazardous materials or other hazards that would violate Federal, state, or local laws, regulations, or policies; or result in an inability to maintain appropriate public service levels and facilities or adequate utilities.

## **Socioeconomics**

The analysis of socioeconomics considered the potential effects of the proposed action on the generation of tax revenue (property and sales) and job generation. This analysis uses following assumptions to determine a basis upon which to compare tax revenue and job creation for each alternative.

- **Tax Revenue.** Although tax revenue would vary depending on the specific activities and development project proposed, the following general assumptions were developed and applied to each alternative to provide a basis for comparison. Actual revenues would vary from estimates provided as a result of this method, and this analysis is intended to provide a stable basis for comparison only.
  - Property tax revenue was determined by multiplying the number of dwelling units proposed for each alternative by the median value of owner-occupied housing in Kern County (\$226,800) (U.S. Census Bureau 2010). This provided the total estimated property value for residential property under each alternative. A 1% property tax levy was applied to this figure, which was then multiplied by the Kern County General Fund property tax levy of 20.21%. This provided the amount of tax revenue that would go into the Kern County General Fund for each alternative.
  - Sales tax was determined by multiplying the total estimated property value determined above by 15%, as an approximation of total household income (i.e., income can be expected to be roughly 15% of the value of one's home). This provided the total estimated aggregate income. This figure was multiplied by 34%, to estimate the percentage of income spent on taxable goods, to determine the total expenditure on taxable goods. This figure was multiplied by 50% to estimate the proportion of expenditure in Kern County. This figure was multiplied by 32% to estimate the proportion of purchases made in unincorporated Kern County. This provided the total taxable sales made in unincorporated Kern County, which was then multiplied by 1% to determine the Kern County General Fund portion of the sales tax.
- **Job Generation.** Although job generation would vary depending on the specific activities and development project proposed, the following general assumptions were applied to each alternative to provide a basis for comparison. Actual job generation would vary from estimates provided as a result of this method, and this analysis is intended to provide a stable basis for comparison only.
  - Construction worker job generation was determined on a per-dwelling-unit and per-commercial-square-foot basis. The exact number of jobs resulting from construction of a commercial and residential development can vary depending on specific development and product type. In order to determine an average number that could be applied across the alternatives, this analysis considered the construction trips generated for residential and commercial development by the TMV Project. The TMV Traffic Study (Austin Foust 2009, p. 5-28) determined that, on an average day, the TMV Project would require approximately 210 construction workers. An estimated 160 of these workers would work on residential construction, and 52 would work on commercial construction. Dividing the 160 residential construction workers by the 3,450 dwelling units in the TMV Project yields 0.046 worker per dwelling unit. Dividing the 52 commercial construction workers by the 160,000 square feet of commercial development in the TMV Project yields 0.000325 worker per dwelling unit. These factors were then applied to the dwelling unit and commercial square footage amounts of each alternative.
  - Operations worker generation would be associated with the commercial square footage of each alternative. In order to estimate how many workers would be associated with the commercial development under each alternative, a worker-generated number was based on parking requirements specified in Section 19.82.020 of the Kern County Code of Ordinances for each type of land use. This number served as a proxy for how many jobs would be generated by the various land use categories. Because the precise type of commercial development that would occur under each alternative is not known, it was assumed that this development would vary from business or professional offices (requiring one parking space

per 250 square feet of development) to warehouse uses (requiring one parking space per 1,000 square feet of development). The average of these two uses—one space per 650 square feet of development—was applied to the commercial square footage of each alternative. Of these required parking spaces, 75% were assumed to be used by employees, with the remainder used as customer and visitor parking, for an estimate of one worker per 870 square feet.

## 4.7.2 No Action Alternative

### 4.7.2.1 Land Resources

#### Commercial and Residential Development Activities

No Commercial and Residential Development Activities would occur under the No Action Alternative. Therefore, there would be no direct or indirect effects on land resources under this alternative.

#### Existing Ranch Uses

Under the No Action Alternative, Existing Ranch Uses would continue similar to existing conditions, subject to the best management practices (BMPs) and use restrictions required by the Ranchwide Agreement (as currently set forth in the Interim RWMP). Such measures include a commitment to preserve and protect conservation values, including land resources. The Ranchwide Agreement requires that all subsequent RWMPs must similarly reflect BMPs that protect the conservation values of the land and that such management standards and use restrictions are carried through in the conservation easements required by the Ranchwide Agreement.

In addition, the majority of the Covered Lands would be permanently preserved in open space (106,317 acres), and remaining Covered Lands would continue to be limited to existing uses (no Commercial and Residential Development Activities).

As described in Section 3.7.2.1, Agricultural Resources, the study area does not contain high-value farmland, which is defined as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the FMMP or mineral resource areas (Figures 3.7-2 and 3.7-4). In addition, large-scale grazing is not listed as an important agricultural commodity in Kern County.

Mineral resource extraction operations are an existing use (not a Covered Activity) and these uses would continue at the permitted mining operations. However, the expansion of mineral extraction would not be allowed within the study area outside of existing mineral leases as restricted by the Ranchwide Agreement. Because there is a long-term supply remaining in the existing permitted mining operations, restricting mineral extraction activities to areas prescribed in the existing mining leases would not result in the substantial loss of high-value mineral resources.

Other Existing Ranch Uses, such as filming, recreational use, and construction and maintenance of roads, utilities, ancillary ranch structures, and back-country cabins, would continue and would have a low potential to affect agricultural and mineral resources.

Therefore, Existing Ranch Uses would not result in the substantial loss of high-value agricultural resources and continuation of the permitted mineral extraction operations within existing mining leases would not result in substantial loss of high-value mineral resources. The potential effects on land resources would be minor, similar to effects under existing conditions.

### 4.7.2.2 Socioeconomic Effects and Environmental Justice

#### Commercial and Residential Development Activities

No Commercial and Residential Development Activities would occur under the No Action Alternative. Therefore, there would be no direct or indirect effects on community resources related to socioeconomics or environmental justice conditions.

#### Existing Ranch Uses

Existing Ranch Uses would continue under the No Action Alternative similar to existing conditions. Some Existing Ranch Uses, such as grazing and Lebec/Existing Headquarters Uses generate a limited amount of tax revenue. Existing Ranch Uses would also continue to generate some employment opportunities. However, tax revenue and job creation from Existing Ranch Uses are generally low and do not result in a substantial socioeconomic effect. As discussed above, the population in the study area does not meet environmental justice criteria to be considered either a minority or low-income population. Therefore there would be no direct or indirect adverse socioeconomic or environmental justice effects associated with Existing Ranch Uses under the No Action Alternative.

### 4.7.2.3 Hazardous Materials and Other Hazards

#### Commercial and Residential Development Activities

No Commercial and Residential Development Activities would occur under the No Action Alternative. Therefore, there would be no direct or indirect effects related to increased risk of exposure to hazardous materials or other hazards.

#### Existing Ranch Uses

As described in Section 3.7, Community Resources, existing and past land uses in the study area may have resulted in exposure to hazardous materials from agricultural chemicals, underground pipelines, lead from past hunting activities, lead contamination from soil adjacent to major highways, and other such uses. Hazardous materials such as polychlorinated biphenyls (PCBs) may also be present in electrical transformers. However, Existing Ranch Uses would have a limited potential to result in exposure to hazardous materials or other hazards. Potential exposure could occur as a result of activities involving the storage and use of chemicals, such as pesticides, fuels, and other solvents associated with pest and vegetation management, agricultural, filming, or construction and maintenance activities. Activities requiring grading or soil disturbance could result in exposure to soil-borne contaminants from past land uses. Some activities associated with vehicle use and construction activities could result in a low risk of fires.

As mentioned previously, Existing Ranch Uses would continue under the No Action Alternative similar to existing conditions, subject to the use restrictions and BMPs required by the Ranchwide Agreement (as currently set forth in the Interim RWMP). This includes minimizing effects associated with exposure to hazardous materials and other hazards in open space. For example, no smoking is allowed in the ranch to reduce the potential for wildfires. Additionally, visitors to the ranch are required to limit campfires to designated areas and are prohibited from bringing in toxic substances. Additional BMPs to manage chemical use in the Covered Lands would be implemented to reduce potential risk.

In addition, Existing Ranch Uses would be subject to applicable regulations to Federal, state, and local regulations of hazardous materials and other hazards. For example, the storage and use of hazardous materials would be subject to DTSC regulations requiring safe storage and handling of chemicals. Additionally, the ranch is subject to the jurisdiction of California Department of Forestry, the Kern County Fire Department, and the Los Angeles County Fire Department. Land uses would be implemented consistent with the policies of these agencies to minimize risks associated with wildfire and other safety hazards.

Even with implementation of mitigation, some minor effects associated with exposure to hazardous materials or other hazards would remain. However, because the risk of substantial exposure to levels that would exceed applicable Federal, state, or local laws, regulations, or policies is low, the potential effects of the No Action Alternative would be minor, similar to effects under existing conditions.

#### **4.7.2.4 Public Services and Utilities**

##### **Commercial and Residential Development Activities**

No Commercial and Residential Activities would occur under the No Action Alternative. Therefore, there would be no direct or indirect effects on public services or utilities.

##### **Existing Ranch Uses**

Existing Ranch Uses would continue under the No Action Alternative similar to existing conditions, subject to use restrictions and BMPs required by the Ranchwide Agreement (as currently set forth in the Interim RWMP). Existing Ranch Uses would have a limited potential to result in an inability to maintain appropriate public service levels and facilities or adequate utilities. Existing Ranch Uses such as grazing, recreational use, ancillary ranch activities, road and utility repair and maintenance, and film production, do not rely on public services and utilities and have only minimal effects on such resources. For example, grazing, which is the largest Existing Ranch Use, relies on onsite surface and groundwater and does not rely on public water. Due to the very low residential population, Existing Ranch Uses create only incidental and minimal demand for fire and police services and schools. Fire, police, and school services are currently adequate to provide service to Existing Ranch Uses. Therefore, potential effects on public services and utilities under the No Action Alternative would be minor, similar to effects under existing conditions.

### **4.7.3 Proposed TU MSHCP Alternative**

#### **4.7.3.1 Land Resources**

##### **Commercial and Residential Development Activities**

Commercial and Residential Development Activities would result in conversion of existing land uses to residential and commercial uses in the 5,533-acre Disturbance Area, which has the potential to affect agricultural or mineral resources in the study area. As described in Section 3.7.2.1, Agricultural Resources, the study area does not contain high-value farmland, which is defined as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the FMMP or mineral resource areas (Figures 3.7-2 and 3.7-4). In addition, large-scale grazing is not listed as an important agricultural commodity in Kern County. Therefore, there would be no loss of high-value agricultural or mineral resources as a result of Commercial and Residential Development Activities under the Proposed TU MSHCP Alternative.

All mineral extraction zones are located outside of areas planned for Commercial and Residential Development under the Proposed TU MSHCP Alternative. Therefore, the potential effects on mineral resources under the Proposed TU MSHCP Alternative are discussed in greater detail under Plan-Wide Activities.

### **Plan-Wide Activities**

Under the Proposed TU MSHCP Alternative, Plan-Wide Activities would occur in a manner similar to Existing Ranch Uses under the No Action Alternative with the exception that permanent ground disturbance would be limited to 200 acres. Similar to Existing Ranch Uses, Plan-Wide Activities would be subject to use restrictions and BMPs required by the Ranchwide Agreement (as set forth in the Interim RWMP), such as prohibiting smoking within the ranch to reduce the potential for wildfires.

In addition, the TU MSHCP calls for the development and implementation of an integrated pest management plan (IPMP), public access plan, fuel management plan, and grazing management plan that would be subject to approval by the Service. These plans are intended to preserve and protect land resources in open space areas and would require implementation of BMPs to further limit potential exposure to hazardous materials and other hazards.

As indicated in Section 3.7.2.1, Agricultural Resources, and mentioned above, there are no designated areas of high-value agricultural lands in the study area, but agricultural operations do occur, primarily associated with grazing. Plan-Wide Activities would include continuation of grazing; however, under the Proposed TU MSHCP Alternative, large-scale livestock grazing and range management activities would be excluded from open space portions of the TMV Planning Area. Conservation measures included in the TU MSHCP require that a grazing management plan be prepared and followed that limits grazing to 14,500 head of cattle to protect the landscape. This limit, however, is consistent with historical grazing, so grazing uses would continue at the same level as the No Action Alternative.

Under the Proposed TU MSHCP Alternative, operation of the National Cement and La Liebre Mines are an existing use (not a Covered Activity) and these operations would continue. Therefore, there would be no disruption to or loss of resources associated with operation of these facilities. The remaining areas currently designated for mineral and extractive uses are located outside the TMV Planning Area and in designated open space areas. Although these areas would not be developed, they would be subject to the provisions of the Ranchwide Agreement, which preclude future extraction of mineral resources outside of existing mineral leases. Because there is a long-term supply remaining in the existing permitted mining operations, restricting mineral extraction activities to areas prescribed in the existing mining leases would not result in the substantial loss of high-value mineral resources.

Other Plan-Wide Activities, such as filming, recreational use, and construction and maintenance of roads, utilities, ancillary ranch structures, and back-country cabins, would continue to be implemented consistent with the provisions of the Ranchwide Agreement and approvals required as part of the Federal, state, and local permitting processes. Therefore, Plan-Wide Activities would not result in the substantial loss of high-value agricultural or mineral resources. The potential effects on land resources would be minor, similar to effects under the No Action Alternative.

### 4.7.3.2 Socioeconomic Effects and Environmental Justice

#### Commercial and Residential Development Activities

Under the Proposed TU MSHCP Alternative, Commercial and Residential Development Activities in the study area would result in a total of 3,632 dwelling units and 1,804,390 square feet of commercial space. The population of the study area would be increased by 11,441 new residents. This increase in population and residential and commercial uses would have a beneficial effect on housing, tax revenue, and employment opportunities in the study area compared to the No Action Alternative, under which no Commercial and Residential Development would occur.

Based on the method set forth in Section 4.7.1.2, Methods, above, the Proposed TU MSHCP Alternative would result in an addition to the Kern County General Fund of approximately \$1,664,773 in property tax revenue and \$67,216 in sales tax revenue. Some of this revenue would be offset by the expenditures for Kern County services and facilities incurred as a result of the Proposed TU MSHCP Alternative. However, prior to Kern County approval of a particular development project, the project applicant would have to undertake a fiscal impact analysis demonstrating that its contribution to the Kern County General Fund would surpass its expenditures.

In addition, jobs would be generated by both construction and operations activities associated with Commercial and Residential Development. This alternative would result in approximately 753 construction jobs on an average day (167 associated with residential construction, and 586 with commercial construction), and 2,165 operations jobs.

Given the tax revenue that would contribute to the Kern County General Fund, and the short-term and long-term jobs that would result from the Proposed TU MSHCP Alternative, this alternative would have a net beneficial socioeconomic effect.

As discussed in Section 3.7, Community Resources, the population in the study area, in Census Designated Places near the study area, and in Kern County as a whole does not meet environmental justice criteria for identifying either a minority population or a low-income population that may be affected by the proposed action. Therefore, there would be no direct or indirect adverse socioeconomic effects from the Proposed TU MSHCP Alternative, including effects on environmental justice populations.

#### Plan-Wide Activities

Plan-Wide Activities would continue under the Proposed TU MSHCP Alternative similar to Existing Ranch Uses under the No Action Alternative with the exception permanent ground disturbance would be limited to 200 acres. Some Plan-Wide Activities, such as grazing and Lebec/Existing Headquarters Uses generate a limited amount of tax revenue. Plan-Wide Activities would also continue to generate some employment opportunities. Tax revenue and job creation from Plan-Wide Activities are generally low and would not result in a substantial socioeconomic effect. As discussed above, the population in the study area does not meet environmental justice criteria for identifying either a minority or low-income population. Therefore, similar to the No Action Alternative, there would be no direct or indirect adverse socioeconomic effects from the Proposed TU MSHCP Alternative, including effects on environmental justice populations.

### 4.7.3.3 Hazardous Materials and Other Hazards

#### Commercial and Residential Development Activities

Under the Proposed TU MSHCP Alternative, Commercial and Residential Development Activities would result in the development of approximately 5,533 acres for commercial and residential land uses. This would involve the construction of approximately 3,632 dwelling units and up to 1,804,390 square feet of commercial development. These activities have the potential to result in exposure to hazardous materials from past land uses or exposure to additional hazards or sources of hazardous materials from construction or operations associated with Commercial and Residential Development Activities.

The potential for encountering hazardous materials associated with past land uses could occur during grading for construction. Grading could release particulate contaminants into the air that could result in health risks to humans. Known hazardous materials sites located in the study area, including but not limited to the California Highway Patrol Facility located at 4459 Lebec Road, and the old Post Office located at 1777 Lebec Road (Kern County 2009b, pp. 4.7-5 to 4.7-8). It is anticipated that these areas would be avoided during construction.

Commercial and Residential Development Activities would require the use of hazardous materials during construction, such as gasoline, paint, and other solvents. Accidental spills of these materials could expose humans to these chemicals either directly or through contamination from stormwater runoff. In addition, construction could result in exposure to other hazards, including blasting.

As indicated in Section 4.7.3.5, Mitigation Measures, Commercial and Residential Development Activities would be required to comply with all applicable Federal, state and local requirements. For example, Federal and state laws require safe handling and storage of hazardous materials by certified personnel. Any ground disturbance greater than 1 acre would require an NPDES Permit and the development and implementation of spill and countermeasures plan. Ground-disturbing activities would be required to obtain a grading or building permit. Prior to issuing a permit, it is anticipated the local jurisdiction would require implementation of BMPs to minimize exposure to risks. For example, Kern County's approval of the TMV Project requires the implementation of a blasting safety plan (Appendix J, MM 4.7-1) (Kern 2009b).

Land uses associated with Commercial and Residential Development could include operations that require the storage or use of hazardous materials, such as gas stations and dry cleaning facilities. These land uses would also be required to comply with Federal, state, and local laws and regulations, including RCRA and California DTSC regulations, as indicated in Section 4.7.3.5, Mitigation Measures.

The Proposed TU MSHCP Alternative would include residential land uses located in the vicinity of transmission lines, which represent a substantial source of electromagnetic fields. However, land use densities and parcel sizes in the vicinity of these transmission lines would allow appropriate setbacks of habitable structures and few residential or commercial uses result in substantial electromagnetic field generation. Conservation measures as presented in Tables 2-3 and 2-4 in Chapter 2, Proposed TU MSHCP and Alternatives, included in the TU MSHCP would further reduce risks by restricting the placement and location of utilities such that most overhead electrical utilities would be placed underground.

There are additional utility easements throughout the study area, some of which could pose a safety risk to humans associated with leaks or pipeline ruptures. However, these utilities are located in easements that could not be developed, ensuring adequate safety. In addition, there are safety features built into many of the utility facilities, such as the high-pressure gas line crossing the study area, that allow the system to be automatically shut down in case of a leak or rupture. Therefore, the

likelihood of the additional development in the vicinity of the utility easements is low. As indicated in Section 4.7.3.5, Mitigation Measures, any new construction would be required to comply with applicable Federal, state, and local regulations governing safety for utilities. Additional measures would likely be required during local project-level approval. For example, Kern County's approval of the TMV Project requires design measures to minimize risks to new critical utilities that cross active fault traces.

The Proposed TU MSHCP Alternative would include development in areas with severe or very severe fire hazards. The implementation of conservation measures included in the TU MSHCP (Tables 2-3 and 2-4 in Chapter 2, Proposed TU MSHCP and Alternatives) would further reduce risks by requiring conformance with the County-approved Fire Protection Plan as well as Service review and approval of a fuel management plan to control potential fire risk from the open space. Furthermore, Commercial and Residential Development would be concentrated in two areas, the TMV Planning Area and the Lebec/Existing Headquarters Area, which would also limit the wildland-urban interface. The planned development approach under the Proposed TU MSHCP would allow the incorporation of safety features such as evacuation routes, appropriate road geometrics, fuel management zones, an integrated fire protection plan, and a location for fire stations.

In addition, Commercial and Residential Development would be subject to all applicable Federal, state, and local regulations. For example, Kern County's approval of the TMV Project requires an environmental education program for residents prior to occupation that addresses fire safety; consistency with the requirements of the Kern County Fire Department, including the development of a project-wide fire protection plan; and approval of a proposed development tract by the Kern County Fire Department. All structures, vegetation, and roads would be constructed consistent with applicable fire code (Appendix J, MMs 4.2-3, 4.4-21, 4.7-10, and 4.7-11 through 4.7-14) (Kern County 2009b).

New development under the Proposed TU MSHCP Alternative could introduce disease vectors more often associated with populated areas. These may be related to solid waste, additional stagnant water sources, and food storage. Conservation measures included in the TU MSHCP (Tables 2-3 and 2-4 in Chapter 2, Proposed TU MSHCP and Alternatives), would reduce the risk of introducing disease vectors by requiring trash storage and disposal controls, implementing amphibian fieldwork practices to prevent the spread of disease during construction, and developing and implementing an IPMP. Increase in risk of disease is typical of any populated area and would be further controlled through compliance with Federal, state, and county laws and regulations as indicated in Section 4.7.3.5, Mitigation Measures. For example, prior to issuing a grading permit associated with any proposed golf courses, Kern County's approval of the TMV Project requires consultation with and incorporation of measures recommended by the Kern Vector Control District (Appendix J, MM 4.7-17) (Kern County 2009b).

Even with implementation of mitigation, some minor effects associated with exposure to hazardous materials or other hazards would remain and would be greater compared to the No Action Alternative. However, because the risk of substantial exposure to levels that would exceed applicable Federal, state, or local laws, regulations, or policies is low, the potential effects of the Proposed TU MSHCP Alternative would be minor.

## Plan-Wide Activities

As described above and in Section 3.7, Community Resources, existing and past land uses in the study area may have resulted in exposure to hazardous materials from agricultural chemicals, underground pipelines, lead from past hunting activities, lead contamination from soil adjacent to major highways, and other such uses. Hazardous materials such as PCBs may also be present in electrical transformers. Plan-Wide Activities would have a limited potential to result in exposure to hazardous materials or other hazards. Potential exposure could occur as a result of activities

involving the storage and use of chemicals, such as pesticides, fuels, and other solvents associated with pest and vegetation management, agricultural, filming, or construction and maintenance activities. In addition, activities requiring grading or soil disturbance could result in exposure to soil-borne contaminants from past land uses. Some activities associated with vehicle use and construction activities could result in a low risk of fires.

Plan-Wide Activities would continue under the Proposed TU MSHCP Alternative similar to Existing Ranch Uses with the exception that permanent ground disturbance would be limited to 200 acres. Plan-Wide Activities would be implemented consistent with the provisions of the BMPs and use restrictions, required by the Ranchwide Agreement (as currently set forth in the Interim RWMP), to minimize effects associated with exposure to hazardous materials and other hazards. For example, no smoking is allowed within the ranch to reduce the potential for wildfires. Additionally, visitors to the ranch are required to limit campfires to designated areas and are prohibited from bringing in toxic substances.

In addition, conservation measures included in the TU MSHCP (Tables 2-3 and 2-4 in Chapter 2, Proposed TU MSHCP and Alternatives) would further reduce risks by requiring enforcement of the ranchwide lead ban, implementation of amphibian fieldwork code practices to prevent the spread of amphibian diseases, implementation of BMPs listed in the IPMP to reduce potential risk of exposure to chemicals, and implementation of the provisions of a fuel management plan to minimize risk of wildfire.

In addition to the measures and BMPs listed above, Plan-Wide Activities would be subject to applicable Federal, state, and local regulations governing hazardous materials and other hazards. For example, the storage and use of hazardous materials would be subject to DTSC regulations requiring safe storage and handling of chemicals. Additionally, the ranch is subject to the jurisdiction of California Department of Forestry, the Kern County Fire Department, and the Los Angeles County Fire Department. Land uses would be implemented consistent with the policies of those agencies to minimize risks associated with wildfire and other safety hazards.

Even with implementation of mitigation, some minor effects associated with exposure to hazardous materials or other hazards would remain. However, because the risk of substantial exposure to levels that would exceed applicable Federal, state, or local laws, regulations, or policies is low, the potential effects of the Proposed TU MSHCP Alternative would be minor, similar to effects under the No Action Alternative.

#### **4.7.3.4 Public Services and Utilities**

##### **Commercial and Residential Development Activities**

Commercial and Residential Development Activities associated with the Proposed TU MSHCP Alternative would provide for a population increase of 11,441 new residents. This increase in population would correspondingly increase the demand for fire protection, police services, schools, libraries, water, waste disposal, sewer treatment and other services and utilities that could exceed existing capacity.

Population increases associated with the Proposed TU MSHCP Alternative would be expected to generate the following additional calls annually. This information is based on per capita data for the Kern County Fire Department.

- 793 total emergency calls (0.07 call per person)
- 66 fire calls (0.01 fire per person), including 18 structural fires, 21 wildfires, and 26 other fires, such as car fires. It should be noted that this is the average for the entire county. Because fire

risk within the study area is higher than other parts of Kern County, wildfire calls within the study area are expected to be higher.

- 423 emergency medical or rescue calls (0.04 per person)

Commercial and Residential Development associated with the Proposed TU MSHCP Alternative would also require 12 additional police officers compared to the No Action Alternative. This estimate is based on existing service ratios of 1 officer per 1,000 individuals.

With respect to the provision of education services, the Proposed TU MSHCP Alternative is anticipated to result in the need to accommodate approximately 2,469 school-age children compared to the No Action Alternative. This estimate is based on 2010 U.S. Census data for population by age in Kern County (U.S. Census Bureau 2010) and the projected increase in population of the 11,441 new residents. Therefore, the Proposed TU MSHCP Alternative would require an expansion of the current schools or new schools to meet this demand. Similarly, it is anticipated additional library services would be required to meet increased demands.

Commercial and Residential Development Activities associated with the Proposed TU MSHCP Alternative would also increase the demand for water supply, wastewater treatment, and waste disposal. Tejon Castac Water District (TCWD) would obtain, treat, and distribute water to the newly developed areas. Potable water demand under this alternative is expected to be 2,721 acre-feet per year based on the following duty factors and assumptions: 0.66 acre-feet per year per dwelling unit for the 3,633 dwelling units and 160 gallons per day per thousand square feet for the 1,804,390 square feet of commercial/office space under this alternative, which converts to 323 acre-feet per year. Duty factors used are based on those from TCWD water supply assessments, and may be different based on actual land use and conservation practices.

Wastewater disposal would be handled with sewer service and waste treatment plants, which would have the potential added benefit of supplying recycled water for use in irrigation. Electricity would be provided by the Pacific Gas & Electric Company and the Southern California Edison Company.

As mentioned previously, Commercial and Residential Development under the Proposed TU MSHCP Alternative would consist primarily of planned development. This would allow for planning to take advantage of funding opportunities to provide additional public services and to coordinate design plans to provide optimal siting of fire stations, other public service facilities, and utility infrastructure.

In addition, as indicated in Section 4.7.3.5, Mitigation Measures, Commercial and Residential Development Activities would be required to comply with applicable Federal, state, and local laws governing public service and utility provision. For example, ground-disturbing activities would require a grading or building permit from the local jurisdiction. Prior to issuing the permit, it is anticipated the local jurisdiction would require implementation of mitigation and BMPs to reduce the potential for Commercial and Residential Development Activities to exceed the capacity of public service and utility providers. For example, Kern County's approval of the TMV Project requires providing for additional public services, through the creation, purchase of equipment, and/or payment of fees for fire stations, police offices, schools, and libraries to ensure adequate provision of public services (Appendix J, MMs 4.13-2 through 4.13-13) (Kern County 2009b). With respect to the provision of utilities, Kern County's approval of the TMV Project requires the implementation of water conservation and waste reduction measures and requirements to ensure adequate provision of water, sewage treatment, and waste disposal exist (Kern County 2009b, MMs 4.16-1 through 4.16-7).

Even with implementation of mitigation, there would be increased demand compared with the No Action Alternative. However, because Commercial and Residential Development Activities would be

required to ensure that appropriate levels of public service and utilities are provided via the local approval process, the effects on public services and utilities would be minor.

### Plan-Wide Activities

Plan-Wide Activities would continue under the Proposed TU MSHCP Alternative similar to the No Action Alternative, with the exception that permanent ground disturbance would be limited to 200 acres. Plan-Wide Activities would have a limited potential to result in an inability to maintain appropriate public service levels and facilities or adequate utilities. Plan-Wide Activities such as grazing, recreation, ancillary ranch activities, road and utility repair and maintenance, and film production, typically have only minor public services or utility needs. For example, grazing, which is the largest activity, relies on onsite surface and groundwater and does not rely on public water. Plan-Wide Activities would create only incidental and minimal demand for fire and police services and schools. Fire services are currently adequate to provide service to the ranch. Therefore, potential effects on public services and utilities under the Proposed TU MSHCP Alternative would be minor, similar to effects under the No Action Alternative.

#### 4.7.3.5 Mitigation Measures

As described above, BMPs and use restrictions required pursuant to the Ranchwide Agreement (as currently set forth in the Interim RWMP), would reduce the effects of the Proposed TU MSHCP Alternative on community resources. The Proposed TU MSHCP Alternative would also include species-specific conservation measures (Tables 2-3 and 2-4 in Chapter 2, Proposed TU MSHCP and Alternatives) that would minimize effects on land resources (e.g., a grazing management plan), and hazards (e.g., fire protections, fuel management plan, overhead utility risk protections, protection against chemicals and contaminants, enforcement of a ranchwide lead ammunition ban, and protection against disease vectors). If the Service issues an ITP to TRC for incidental take of the 27 species covered under the TU MSCHP, these measures would be enforceable under the ESA through the ITP and applicable conservation easements. In addition, the following mitigation measures are proposed to reduce potential effects on community resources that may be associated with the Proposed TU MSHCP Alternative.

- **Comply with Applicable Federal, State, and Local Regulations Governing Hazardous Materials and Other Hazards.** Commercial and Residential Development Activities and Plan-Wide Activities will comply with applicable Federal, state, and local laws and regulations related to the use of hazardous materials and other hazards and will comply with the minimum standards for safe storage and handling of hazardous materials consist with DTSC requirements and applicable state code and policies as outlined above.
- **Comply with Applicable Federal, State, and Local Regulations Governing the Provision of Public Services and Utilities.** Commercial and Residential Development Activities and Plan-Wide Activities will comply with applicable Federal, state, and local laws and regulations related to the adequate provision of public services and utilities.

### 4.7.4 Condor Only HCP Alternative

#### 4.7.4.1 Land Resources

##### Commercial and Residential Development Activities

The Condor Only HCP Alternative would result in the same effects as the Proposed TU MSHCP Alternative from Commercial and Residential Development Activities.

### **Plan-Wide Activities**

The Condor Only HCP Alternative would result in the same effects as the Proposed TU MSHCP Alternative from Plan-Wide Activities.

#### **4.7.4.2 Socioeconomic Effects and Environmental Justice**

##### **Commercial and Residential Development Activities**

The Condor Only HCP Alternative would result in the same effects as the Proposed TU MSHCP Alternative from Commercial and Residential Development Activities.

##### **Plan-Wide Activities**

The Condor Only HCP Alternative would result in the same effects as the Proposed TU MSHCP Alternative from Plan-Wide Activities.

#### **4.7.4.3 Hazardous Materials and Other Hazards**

##### **Commercial and Residential Development Activities**

The Condor Only HCP Alternative would result in the same effects as the Proposed TU MSHCP Alternative from Commercial and Residential Development Activities.

##### **Plan-Wide Activities**

The Condor Only HCP Alternative would result in the same effects as the Proposed TU MSHCP Alternative from Plan-Wide Activities.

#### **4.7.4.4 Public Services and Utilities**

##### **Commercial and Residential Development Activities**

The Condor Only HCP Alternative would result in the same effects as the Proposed TU MSHCP Alternative from Commercial and Residential Development Activities.

##### **Plan-Wide Activities**

The Condor Only HCP Alternative would result in the same effects as the Proposed TU MSHCP Alternative from Plan-Wide Activities.

#### **4.7.4.5 Mitigation Measures**

As described above, the BMPs and use restrictions required pursuant to the Ranchwide Agreement (as currently set forth in the Interim RWMP), would reduce the effects of the Condor Only HCP Alternative on community resources. However, only the species-specific conservation measures for California condor (Table 2-3 in Chapter 2, Proposed TU MSHCP and Alternatives) would be implemented under this alternative. The proposed mitigation measures listed above in Section 4.7.3.5, Mitigation Measures, would also be implemented under the Condor Only HCP Alternative.

## 4.7.5 CCH Avoidance MSHCP Alternative

### 4.7.5.1 Land Resources

#### Commercial and Residential Development Activities

The CCH Avoidance MSHCP Alternative would result in the same effects as the Proposed TU MSHCP Alternative from Commercial and Residential Development Activities.

#### Plan-Wide Activities

The CCH Avoidance MSHCP Alternative would result in the same effects as the Proposed TU MSHCP Alternative from Plan-Wide Activities.

### 4.7.5.2 Socioeconomic Effects and Environmental Justice

#### Commercial and Residential Development Activities

Under the CCH Avoidance MSHCP Alternative, Commercial and Residential Development Activities in the study area would result in a total of 3,161 dwelling units and 1,804,390 square feet of commercial space. The population of the study area would be increased by 9,957 new residents. This increase in population and residential and commercial uses would have a beneficial effect on housing, tax revenue, and employment opportunities in the study area compared to the No Action Alternative.

Based on the method set forth in Section 4.7.1.2, Methods, the CCH Avoidance MSHCP Alternative would result in an addition to the Kern County General Fund of approximately \$1,448,884 in property tax revenue and \$58,500 in sales tax revenue. Some of this revenue would be offset by the expenditures for Kern County services and facilities incurred as a result of the Commercial and Residential Development Activities. However, prior to Kern County approval of a particular development project, the project applicant would have to undertake a fiscal impact analysis demonstrating that its contribution to the Kern County General Fund would surpass its expenditures. Thus, it is not anticipated that expenditures from the General Fund would exceed the tax revenue generated by this alternative.

As with the other proposed action alternatives, the CCH Avoidance MSHCP Alternative would result in both construction and operations-related job creation. This alternative would result in approximately 731 construction jobs (145 associated with residential construction, and 586 with commercial construction), and 2,165 operations jobs.

Given the tax revenue to the Kern County General Fund, and the short-term and long-term jobs that would result from the CCH Avoidance MSHCP Alternative, this alternative would have a net beneficial socioeconomic effect.

As discussed above, the population in the study area, in Census-Designated Places near the study area, and in Kern County as a whole does not meet environmental justice criteria for identifying either a minority population or a low-income population. Therefore, there would be no direct or indirect adverse socioeconomic effects from the CCH Avoidance MSHCP Alternative, including effects on environmental justice populations.

## **Plan-Wide Activities**

Plan-Wide Activities would continue under the CCH Avoidance MSHCP similar to Existing Ranch Uses under the No Action Alternative. Some Plan-Wide Activities, such as grazing and Lebec/Existing Headquarters Uses, generate a limited amount of tax revenue. Plan-Wide Activities would also continue to generate some employment opportunities. Tax revenue and job creation from Plan-Wide Activities are generally low and would not result in a substantial socioeconomic effect. As discussed above, the population in the study area does not meet environmental justice criteria for identifying either a minority or low-income population. Therefore, similar to the No Action Alternative, there would be no direct or indirect adverse socioeconomic effects from the CCH Avoidance MSHCP Alternative, including effects on environmental justice populations.

### **4.7.5.3 Hazardous Materials and Other Hazards**

#### **Commercial and Residential Development Activities**

The CCH Avoidance MSHCP Alternative would result in the same effects as the Proposed TU MSHCP Alternative from Commercial and Residential Development Activities.

#### **Plan-Wide Activities**

The CCH Avoidance MSHCP Alternative would result in the same effects as the Proposed TU MSHCP Alternative from Plan-Wide Activities.

### **4.7.5.4 Public Services and Utilities**

#### **Commercial and Residential Development Activities**

The CCH Avoidance MSHCP Alternative would result in the same effects as the Proposed TU MSHCP Alternative from Commercial and Residential Development Activities; however, the projected demand for additional public services and utilities would be slightly less because less Commercial and Residential Development is proposed.

#### **Plan-Wide Activities**

The CCH Avoidance MSHCP Alternative would result in the same effects as the Proposed TU MSHCP Alternative from Plan-Wide Activities.

### **4.7.5.5 Mitigation Measures**

As described above, the BMPs and use restrictions required pursuant to the Ranchwide Agreement (as currently set forth in the Interim RWMP) would reduce the effects of the CCH Avoidance MSHCP Alternative on community resources. Species-specific conservation measures, similar to those provided in Tables 2-3 and 2-4 in Chapter 2, Proposed TU MSHCP Alternative, would also be implemented that would help to reduce effects on community resources and would be enforceable under the ESA. In addition, the mitigation measures listed above in Section 4.7.3.5, Mitigation Measures, for the Proposed TU MSHCP Alternative would also be implemented under the CCH Avoidance MSHCP Alternative.

## 4.7.6 Kern County General Plan Buildout Alternative

### 4.7.6.1 Land Resources

#### Commercial and Residential Development Activities

As previously mentioned, there are no high-value agricultural lands designated within the study area and mineral resource areas are located outside of areas that would be proposed for development. Therefore, the Kern County General Plan Buildout Alternative would result in the same effects as the Proposed TU MSHCP Alternative from Commercial and Residential Development Activities. Potential effects on mineral resources are discussed further under Existing Ranch Uses.

#### Existing Ranch Uses

Existing Ranch Uses would continue under the Kern County General Plan Buildout Alternative similar to the No Action Alternative. As described in Chapter 2, Proposed TU MSHCP and Alternatives, the limitations of the Ranchwide Agreement would not apply under this alternative. However, even in the absence of the Ranchwide Agreement, historic ranch practices as reflected in the Interim RWMP are anticipated to continue (although they cannot be assured).

As mentioned previously, there are no high-value agricultural lands within the study area. However, ongoing agricultural uses, primarily ranching, would continue under this alternative. Existing Ranch Uses, such as filming; recreational use; and construction and maintenance of roads, utilities, ancillary ranch structures, and back-country cabins, would continue and would have a low potential to affect ongoing agricultural activities.

Under the Kern County General Plan Buildout Alternative, Existing Ranch Uses would also continue to include ongoing mining operations (not a Covered Activity). Although the Kern County General Plan allows for 5,141 acres of mineral and petroleum uses, because there are currently no specific proposals for mineral extraction activities on the study area, mining of this additional acreage is considered speculative and existing acreages (2,636 acres) for these uses are assumed under this alternative. Because there is a long-term supply remaining in the existing permitted mining operations, restricting mineral extraction operations to areas within the existing leases would not result in the substantial loss of high-value mineral resources.

Therefore, Existing Ranch Uses would not result in the substantial loss of high-value agricultural or mineral resources. The potential effects on land resources would be minor, similar to effects under the No Action Alternative.

### 4.7.6.2 Socioeconomic Effects and Environmental Justice

#### Commercial and Residential Development Activities

Under the Kern County General Plan Buildout Alternative, Commercial and Residential Development Activities in the study area would result in a total of 7,238 dwelling units and 2,144,810 square feet of commercial space. The population of the study area would be increased by 22,800 new residents. This increase in population and residential and commercial uses would have a beneficial effect on housing, tax revenue, and employment opportunities in the study area compared to the No Action Alternative.

Based on the method set forth in Section 4.7.1.2, Methods, the Kern County General Plan Buildout Alternative would result in an addition to the Kern County General Fund of approximately \$3,358,882 in property tax revenue and \$135,618 in sales tax revenue. Some of this revenue would be offset by the expenditures for Kern County services and facilities incurred as a result of the Commercial and

Residential Development Activities. Although development under this alternative would not occur as part of a planned development (at least 250 units) that would necessarily require a fiscal impacts analysis, it is not anticipated that expenditures from the Kern County General Fund would exceed the tax revenue generated by this alternative.

As with the other proposed action alternatives, the Kern County General Plan Buildout Alternative would result in both construction and operations-related job creation. This would include approximately 1,030 construction jobs (333 associated with residential construction and 697 with commercial construction), and 2,573 operations jobs.

Given the tax revenue that would contribute to the Kern County General Fund and the short-term and long-term jobs that would result from the Kern County General Plan Buildout Alternative, this alternative would have a net beneficial socioeconomic effect.

As discussed above, the population in the study area, in Census-Designated Places near the study area, and in Kern County as a whole does not meet environmental justice criteria for identifying either a minority population or a low-income population. Therefore, there would be no direct or indirect adverse socioeconomic effects, including on environmental justice populations.

### **Existing Ranch Uses**

Existing Ranch Uses would continue under the Kern County General Plan Buildout Alternative similar to Existing Ranch Uses under the No Action Alternative. Some Existing Ranch Uses, such as grazing and Lebec/Existing Headquarters Uses generate a limited amount of tax revenue. Existing Ranch Uses would also continue to generate some employment opportunities. Tax revenue and job creation from Existing Ranch Uses are generally low and do not result in a substantial socioeconomic effect. As discussed above, the population in the study area does not meet environmental justice criteria for identifying either a minority or low-income population. Therefore, there would be no direct or indirect adverse socioeconomic effects, including on environmental justice populations.

## **4.7.6.3 Hazardous Materials and Other Hazards**

### **Commercial and Residential Development Activities**

Commercial and Residential Development Activities under the Kern County General Plan Buildout Alternative would result in similar effects from exposure to hazardous materials and other hazards as the Proposed TU MSHCP Alternative. Similarly, ESA-related conservation measures, such as requiring a fuel management plan or IPMP, would likely be implemented on a project-by-project basis that would mitigate the risks from exposing people to hazardous materials and other hazards. However, the potential risk of wildfires would be greater because there would be a greater area of Commercial and Residential Development that would also be more dispersed throughout the Covered Lands. Most of this development would occur parcel-by-parcel instead of as part of a planned development. Logistics for adequate fire stations to cover the developed area would be difficult. The combination of higher fire potential with logistically challenging fire protection operations would result in a moderate effect associated with increased fire hazard compared with the Proposed TU MSHCP Alternative.

### **Existing Ranch Uses**

The Kern County General Plan Buildout Alternative would result in the same effects as the No Action Alternative from Existing Ranch Uses.

#### 4.7.6.4 Public Services and Utilities

##### Commercial and Residential Development Activities

Commercial and Residential Development Activities associated with the Kern County General Plan Buildout Alternative would provide for a population increase of 22,800 new residents. This increase in population would correspondingly increase the demand for fire protection, police services, schools, libraries, water supply, waste disposal, sewer treatment, and the provision of other public services and utilities that could exceed existing capacity.

Population increases associated with the Kern County General Plan Buildout Alternative would be expected to generate the following additional calls annually. This information is based on per capita data for the Kern County Fire Department.

- 1,580 total emergency calls (0.07 call per person)
- 132 fire calls (0.01 fire per person), including 37 structural fires, 42 wildfires, and 52 other fires, such as car fires. It should be noted that this is the average for the entire county. Most of the county lands are not located in areas with severe fire risk, as is the case within the Covered Lands; therefore, wildfire calls within the Covered Lands is expected to be higher.
- 844 emergency medical or rescue calls (0.04 per person)

Commercial and Residential Development associated with the Kern County General Plan Buildout Alternative would require 23 additional police officers compared to the No Action Alternative. This estimate is based on existing service ratios of 1 officer per 1,000 individuals. However, there is a potential that a 1:1,000 ratio should be higher for the dispersed development compared to other proposed action alternatives.

With respect to education services, the Kern County General Plan Buildout Alternative is anticipated to result in the need to accommodate approximately 4,920 school-age children compared to the No Action Alternative. This estimate is based on 2010 U.S. Census data for population by age in Kern County (U.S. Census Bureau 2010) and the projected increase in population. The Kern County General Plan Buildout Alternative would require a substantial expansion of current schools or new schools to meet this demand. Similarly, it is anticipated additional library services would be required to meet increased demand.

Commercial and Residential Development Activities associated with the Kern County General Plan Buildout Alternative would also increase the demand for water supply, wastewater treatment, and waste disposal. It is presumed that TCWD would obtain, treat, and distribute water to the newly developed areas under this alternative. Potable water demand under this alternative is expected to be 5,162 acre-feet per year based on the following duty factors and assumptions: 0.66 acre-feet per year per dwelling unit for the 7,238 dwelling units and 160 gallons per day per thousand square feet for the 2,144,810 square feet of commercial/office space, which converts to 384 acre-feet per year. Duty factors used are based on those from TCWD water supply assessments, and may be different based on actual land use and conservation practices.

For new developments with more than 500 dwelling units (or equivalent water demand), California law requires a comprehensive assessment and assured adequate water supply and storage as part of the environmental review and subdivision process. For example, Kern County's approval of the TMV Project requires ensuring that adequate water supply and storage could be met (Appendix J, MMs 4.16-3 through 4.16-5) (Kern County 2009b). This process is not triggered by parcelization and development of large-lot subdivisions that occur on a sequential or project-by-project basis over time. Because much of the Commercial and Residential Development under this alternative would occur outside planned community areas, this comprehensive demonstration of adequate water

supplies would not be required for this development. For the parcel-by-parcel development, landowners would need to drill individual wells or be served by TCWD; however, it is still expected that similar requirements would be imposed on applicants by the local jurisdiction.

To serve the demand projected under the Kern County General Plan Buildout Alternative, with its State Water Project allotment, TCWD would be required to install many miles of new water supply pipelines and pumping stations across the study area. As indicated in Section 4.2.6.1, Surface Water Flow and Groundwater Recharge, it is possible that individual landowners could attempt to exercise riparian, appropriative, or groundwater rights to meet water demand, which could adversely affect surface flows and groundwater supplies. In addition, individual parcels would likely require septic systems (septic tanks and/or leach fields).

As noted in Section 4.7.3.5, Mitigation Measures, all Commercial and Residential Development Activities must comply with applicable Federal, state, and local regulations, and it is anticipated that individual permit applications would still be required to demonstrate adequate the provision of adequate water supply and that applicants would be required to implement mitigation and BMPs to ensure the adequate provision of other services and utilities. For example, ground-disturbing activities would require a grading or building permit from the local jurisdiction. Prior to issuing the permit, it is anticipated the local jurisdiction would require implementation of mitigation and BMPs. For example, Kern County's approval of the TMV Project requires providing for additional public services, through the creation, purchase of equipment, and/or payment of fees for fire stations, police offices, schools, and libraries a to ensure adequate provision of public services (Appendix J, MMs 4.13-2 through 4.13-13) (Kern County 2009b). With respect to utilities, Kern County's approval of the TMV Project requires the implementation of water conservation and waste reduction measures and requirements to ensure adequate provision of water, sewage treatment, and waste disposal exist (Appendix J, MMs 4.16-1 through 4.16-7) (Kern County 2009b).

Even with implementation of mitigation, there would be increased demand compared with the No Action Alternative. However, because Commercial and Residential Development Activities would be required to ensure that appropriate levels of public service and utilities are provided via the local approval process, the effects on public services and utilities would be minor.

### **Existing Ranch Uses**

The Kern County General Plan Buildout Alternative would result in the same effects as the No Action Alternative from Existing Ranch Uses.

#### **4.7.6.5 Mitigation Measures**

As described above, the limitations of the Ranchwide Agreement would not apply under the Kern County General Plan Buildout Alternative. However, even in the absence of the Ranchwide Agreement, BMPs (as currently set forth in the Interim RWMP) are anticipated to continue (although they cannot be assured). Restrictions imposed by the TMV Project Approvals and by easement language in the Existing Conservation Easement Areas would apply under the Kern County General Plan Buildout Alternative. Comparable measures to those provided in Tables 2-3 and 2-4 would likely be implemented to avoid, mitigate, and minimize effects on special-status species (i.e., state or federally listed species, species protected as 'special-status' under CEQA); would be anticipated as part of either the CESA or CEQA processes; or would be required through a project-specific consultation with the Service completed in accordance with either ESA Section 10 or Section 7. In addition, the proposed mitigation measures listed in Section 4.7.3.5, Mitigation Measures, would also be implemented under the Kern County General Plan Buildout Alternative.

## 4.7.7 Cumulative Effects

The approach for analyzing cumulative effects on community resources is described in Section 4.0.4, Methods for Assessing Cumulative Effects, which includes a list of reasonably foreseeable projects considered in this assessment. Specific to community resources considerations, the potential cumulative effects are assessed in the context of the criteria discussed in Section 4.7.1.2, Methods, which includes each alternative's potential to result in the loss of substantial amounts of land resources, defined as high-value agricultural or mineral resources; cause adverse socioeconomic effects, including causing disproportionate effects on environmental justice populations; result in exposure to hazardous materials or other hazards that would violate Federal, state, or local laws, regulations, or policies; or result in an inability to maintain appropriate public service levels and facilities or adequate utilities. As discussed above, the cumulative effects analysis area is concurrent with the Covered Lands, with the exception of demographic data, which are presented in the context of Kern County with respect to cumulative effects on socioeconomics or environmental justice.

Cumulative effects related to community resources are indirect or secondary effects related to the future development that would be facilitated by issuance of an incidental take permit (ITP) by the Service. Whether or not such effects would be substantial cumulatively is primarily dependent on the mitigation measures put in place by other Federal, local, and state authorities pursuant to their project approval process.

### 4.7.7.1 Land Resources

As noted in Section 3.7.2.1, Agricultural Resources, although no designated high-value agricultural lands exist in the immediate vicinity of the Covered Lands, some agricultural operations occur throughout the Covered Lands and surrounding area. Past development in the cumulative effects analysis area has resulted in the conversion of some agricultural land to nonagricultural uses or has indirectly affected agricultural operations.

The No Action Alternative would not include any Commercial and Residential Development Activities and would not affect agricultural resources associated with these activities. Therefore, the No Action Alternative would not contribute to a cumulative effect on agricultural resources. Existing Ranch Uses or Plan-Wide Activities associated with any of the alternatives would not result in the substantial loss of high-value agricultural land. Therefore, these activities would not combine with any of the reasonably foreseeable projects as discussed in Section 4.0.4, Methods for Assessing Cumulative Effects, to result in cumulative effects on agricultural resources.

Commercial and Residential Development Activities would occur under the proposed action alternatives. As discussed above, Commercial and Residential Development Activities would convert land in the Disturbance Areas for the alternatives from its existing land uses to residential and commercial land uses, which has the potential to result in cumulatively substantial effects on land resources. However, while important agricultural resources may be present in the cumulative effects analysis area, none of the alternatives would adversely affect high-value farmland. Thus, none of the alternatives would result in a cumulative effect on agricultural resources.

As noted in Section 3.7.2.2, Mineral Resources, some areas are zoned for mineral resource extraction within the Covered Lands and two mines are currently in operation. The No Action Alternative would not include any Commercial and Residential Development Activities and would not affect mineral resources associated with these activities. Therefore, the No Action Alternative would not contribute to a cumulative effect on mineral resources. The remaining proposed action alternatives would result in Commercial and Residential Development that could develop lands otherwise designated for mineral resource extraction; however, these lands are zoned for mineral resource extraction and Commercial and Residential Development would be an inconsistent land use per

Kern County zoning. Therefore, it is not expected that Commercial and Residential Development Activities would affect mineral resources under any of the alternatives. Furthermore, the two existing mines would continue to operate under all the alternatives.

Existing Ranch Uses and Plan-Wide Activities would have the potential to conflict with mineral resources to the extent that all the alternatives, with the exception of the Kern County General Plan Buildout Alternative would preclude future extraction of mineral resources outside of existing mining leases per the provisions of the Ranchwide Agreement. However, because adequate long-term supply would remain in the existing permitted mining operations, this effect would be considered minor. Therefore, none of these alternatives would contribute to a cumulative effect on mineral resources.

#### **4.7.7.2 Socioeconomic Effects and Environmental Justice**

The Existing Ranch Uses and Plan-Wide Activities associated with the various alternatives would not result in meaningful tax revenue or job creation, and because the uses are expected to continue consistent with current operations, an adverse effect is not expected from these activities. All proposed action alternatives would generate tax revenue and create short- and long-term jobs. Other projects in the region would similarly be expected to result in beneficial economic effects. All proposed action alternatives, therefore, would have a beneficial cumulative socioeconomic effect when considered with the other projects listed in Section 4.0.4, Methods for Assessing Cumulative Effects.

As mentioned previously, the population in the study area, in Census-Designated Places near the study area, and in Kern County as a whole does not meet environmental justice criteria for identifying either a minority population or a low-income population that may be affected by the proposed action. Therefore, no direct or indirect effects would contribute to a cumulative effect on environmental justice populations.

#### **4.7.7.3 Hazardous Materials and Other Hazards**

As described in Section 3.7, Community Resources, existing and past land uses in the study area may have resulted in exposure to hazardous materials from agricultural chemicals, underground pipelines, lead from past hunting activities, lead contamination from soil adjacent to major highways, and other such uses. Hazardous materials such as PCBs may also be present in electrical transformers. Future growth and associated land uses could also contribute to the development of additional land uses that could also increase the risk of exposure to hazardous materials or other hazards during either construction activities or operations.

The No Action Alternative would not include any Commercial and Residential Development Activities and would not expose people to increased risk of exposure to hazardous materials or other hazards. Therefore, the No Action Alternative would not contribute to a cumulative effect. Existing Ranch Uses or Plan-Wide Activities associated with any of the alternatives would not result in substantial increases in exposure that could exceed applicable standards. Therefore, these activities would not combine with any of the reasonably foreseeable projects as discussed in Section 4.0.4, Methods for Assessing Cumulative Effects, to result in cumulative effects associated with hazardous materials or other hazards.

Commercial and Residential Development Activities under the proposed action alternatives would have the potential to result in increased exposure to hazardous materials or other hazards. However, these risks vary depending on project location and are site-specific. Like all development under any of the proposed action alternatives, each project in the region must individually meet the standards and requirements specific to hazardous materials (such as safe handling, disposal, and cleanup of hazardous materials) and other hazards (such as implementing BMPs to minimize risk of

wildfire). It is anticipated that other future development would also meet these requirements. Therefore, no additive effect would occur and no cumulatively substantial effect related to risks from exposure to hazardous materials or other hazards would occur.

#### 4.7.7.4 Public Services and Utilities

The No Action Alternative would not include any Commercial and Residential Development Activities and would not increase the demand for public services or utilities. Therefore, the No Action Alternative would not contribute to a cumulative effect. Existing Ranch Uses or Plan-Wide Activities associated with any of the alternatives would not result in substantial increases in the demand for public services and utilities. Therefore, these activities would also not combine with any of the reasonably foreseeable projects as discussed in Section 4.0.4, Methods for Assessing Cumulative Effects, to result in cumulative effects.

Commercial and Residential Development Activities under the proposed action alternatives would have the potential to result in increased demand for public services and utilities that could result in a cumulative effect. Like all development under any of the proposed action alternatives, each project in the region must individually meet the standards and requirements specific to the provision of public services and utilities. It is anticipated that other future development would also meet these requirements. Therefore, these activities would not combine with any of the reasonably foreseeable projects as discussed in Section 4.0.4, Methods for Assessing Cumulative Effects, to result in cumulative effects associated with public services or utilities.

### 4.7.8 Comparison of Alternatives

The exact contours, locations, and building designs of the commercial and residential areas are not known. Therefore, the comparison of alternatives is based on population, Disturbance Area, and proposed development (expressed in dwelling units and square footage) as presented in Table 4.7-1.

**Table 4.7-1. Comparison of Development Effects for each Alternative**

	No Action Alternative	Proposed TU MSHCP/Condor Only HCP Alternatives	CCH Avoidance MSHCP Alternative	Kern County General Plan Buildout Alternative
Population	0	11,441	9,957	22,800
Residential Development (dwelling units)	0	3,632	3,161	7,238
Commercial Development (square footage)	0	1,804,390	1,804,390	2,144,810
Ground Disturbance (acres)	0	5,553	4,496	12,142

## Land Resources

Because there is no high-value agricultural land within the study area, none of the alternatives would result in the loss of high-value agricultural land. However, grazing under the Proposed TU MSHCP, Condor Only HCP, and CCH Avoidance MSHCP Alternatives would be limited in the TMV Planning Area compared with the No Action and Kern County General Plan Buildout Alternative.

None of the alternatives would affect mineral resource areas as a result of Commercial and Residential Development Activities because no such areas are designated within the areas to be developed. Mineral extraction operations are subject to existing leases and are not a Covered Activity and these uses would continue to occur under the No Action Alternative and Plan-Wide Activities under the Proposed TU MSHCP, Condor Only HCP, and CCH Avoidance MSHCP Alternatives although mineral extraction outside of existing permitted operations would be restricted per the provisions of the Interim RWMP. It is assumed these provisions would not be implemented under the Kern County General Plan Buildout Alternative. Regardless, prohibitions under the other proposed action alternatives are not considered to result in a substantial loss of high-value mineral resources. Thus, the No Action Alternative would have the least effect to land resources, but effects under all alternatives are minor, and none of the alternatives would result in a contribution to a cumulative effect on land resources.

## Socioeconomics and Environmental Justice

Because the study area does not meet criteria for environmental justice populations, none of the alternatives would result in adverse environmental justice effects. All alternatives would result in beneficial socioeconomic effects as a result of construction with the effect being proportional to the extent of the proposed development. The No Action Alternative would have the least socioeconomic benefit, followed by the CCH Avoidance MSHCP Alternative, the Proposed TU MSHCP and Condor Only HCP Alternatives, then the Kern County General Plan Buildout Alternative. None of the alternatives would result in result in a contribution to an adverse cumulative socioeconomic effect.

## Hazardous Materials and Other Hazards

Existing and Plan-Wide Activities under all the alternatives would result in minor effects associated with the risk of exposure to hazardous materials or other hazards for all the alternatives. The No Action Alternative would not result in any adverse effects associated with Commercial and Residential Development. The potential effects associated with Commercial and Residential Development Activities under the proposed action alternatives would increase with the extent of the proposed development; however, none of the alternatives would be expected to result in the exposure of people or structures to hazardous materials or other hazards that would exceed applicable Federal, state, or local standards. Therefore, the No Action Alternative would have the least effect associated with the risk of exposure to hazards or hazardous materials, and the proposed action alternatives would all have minor effects after mitigation.

## Public Services and Utilities

Existing and Plan-Wide Activities under all the alternatives would result in minor effects on public services and utilities for all the alternatives. The No Action Alternative would not result in any adverse effects on public services or utilities associated with Commercial and Residential Development. By comparison, for the proposed action alternatives, the potential effects for Commercial and Residential Development Activities to exceed capacity for the provision of public services and utilities would increase with the extent of the proposed development; however, after mitigation and compliance with the local permitting process, none of the alternatives would be expected to result in demand for public services or utilities that would exceed capacity.