

4 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This Chapter consists of 12 sections, each of which presents the analysis of the impacts of the proposed General Plan within a specific environmental discipline. The twelve environmental disciplines are: land use, population and housing, traffic and transportation, public services and utilities, biological resources, geology and seismicity, hydrology and water quality, air quality, historic and cultural resources, noise, public health and safety, and visual resources. Each section includes the following information.

- *A short Introduction.*
- *Affected Environment (Setting):* A reference to the appropriate section or sections of Volume III of the General Plan that describe the existing conditions for each environmental discipline. The setting acts as a baseline to which the analysis compares the effects of the alternatives and components.
- *Evaluation Criteria with Points of Significance:* A table presenting the criteria used to determine specific impacts, measurements used to determine whether an impact is “significant,” and the point at which the impact becomes significant. The source and justification for each criterion is also identified in the table.
- *General Plan Policies and Implementation Measures:* A listing of the policies and implementation measures in the draft General Plan that are relevant to evaluation of the impacts for the environmental discipline. The full text of all policies and implementation measures in the draft General Plan are provided in Appendix A of this document (Volume IV of the General Plan).
- *Environmental Consequences (Impacts) and Recommended Mitigation:* A presentation of the results of the environmental analysis for each discipline, including the identification of impacts, the determination regarding significance, the description of mitigation measures proposed to avoid or lessen impacts, and whether mitigation will reduce the effects to less than significant. The complete text of each mitigation measure is presented in Chapter 2. No mitigation is proposed for impacts of the “No Project” Alternative because CEQA requires mitigation only upon approval of a project.

4.1 LAND USE

This section addresses potential land use impacts associated with implementation of the draft General Plan. Specific topics include impacts related to: division of established communities, conflicts with other adopted plans, conversion of important farmland or agricultural/working landscape to non-agricultural uses, cancellation of Williamson Act contracts or conflicts with agricultural zoning, conversion of private timberlands, and conversion of private mineral-producing lands.

4.1.1 AFFECTED ENVIRONMENT (SETTING)

This is an integrated General Plan and Program EIR which is comprised of Volumes I, II, III and IV of the Draft General Plan November 2006. The description of the affected environment that provides a basis for this evaluation of land use impacts may be found in the following sections of Volume III: Section 4.1 Land Use; Section 9 Agriculture; and Section 10.4 Minerals. These sections provide information on general land use patterns, agricultural uses, and mineral resources within Mariposa County.

4.1.2 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The evaluation criteria for Land Use are presented in Table 4.1-1. These criteria are drawn primarily from local plans and CEQA requirements.

**Table 4.1-1
Evaluation Criteria with Points of Significance
Land Use**

Evaluation Criteria	As Measured by	Point of Significance	Justification
LU-1. Will the project physically divide an established community?	Projects or facilities that would have the potential to divide an established community.	Physical division of an established community.	CEQA Checklist Item IX (a).
LU-2. Will the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project, including but not limited to the general plan, area plans, specific plans, airport master plan, zoning, or environmental impact mitigation measures?	Projects that would be in conflict with identified plans.	Conflict with any applicable plans, measures, or zoning.	Mariposa County General Plan. Mariposa County Area Plans. CEQA Checklist Item IX (b).

**Table 4.1-1
Evaluation Criteria with Points of Significance
Land Use**

Evaluation Criteria	As Measured by	Point of Significance	Justification
LU-3. Will the project convert or induce the conversion of Agricultural/Working lands or Prime, Unique or Farmland of Statewide Importance to non-agricultural use?	Number of acres converted.	No net loss of Prime, Unique or Farmland of Statewide Importance.	CEQA Checklist Items II (a) and (c). California Department of Conservation Farmland Mapping and Monitoring Program. Mariposa County General Plan.
LU-4. Will the Project increase the potential for cancellation or non-renewal of any existing Land Conservation Act (Williamson Act) contracts or interfere with existing zoning for agricultural use?	Number of existing contracts not renewed or cancelled or number of acres of zoning conflict.	No net loss of contracts or acres of agricultural/working lands	Mariposa County General Plan. CEQA Checklist Item Section II (b).
LU-5. Will the Project induce the conversion of any private timberlands subject to the California Forest Practice Rules under the Z’Berg-Nejedly Forest Practice Act (Title 14 CCR Chapters 4, 4.5 and 10) to nontimber growing uses?	Number of Timberland Conversion Permits issued.	No net loss of timberlands.	Title 14, CCR Chapters 4, 4.5 and 10. Mariposa County General Plan.
LU-6. Will the Project induce the conversion of any private mineral-producing lands into non-mineral production use?	Number of conversions of mineral-producing lands to non-mineral production uses.	No net loss of mineral producing lands.	Mariposa County General Plan.

Source: Parsons, 2005.

4.1.3 GENERAL PLAN POLICIES AND IMPLEMENTATION MEASURES

The following goals, policies and implementation measures of the draft General Plan are relevant to the evaluation of land use impacts. The full text of each policy and implementation measure is provided in Appendix A in this document (Volume IV of the General Plan).

LAND USE POLICIES AND IMPLEMENTATION MEASURES

- Policy 5-1a and Implementation Measures 5-1a(1), 5-1a(2) and 5-1a(3)
- Policy 5-2a and Implementation Measures 5-2a(1), 5-2a(2), 5-2a(3), and 5-2a(4)
- Policy 5-4a and Implementation Measures 5-4a(1), 5-4a(2), and 5-4a(3)
- Policy 5-4b and Implementation Measures 5-4b(1) and 5-4b(2)
- Policy 5-5a and Implementation Measure 5-5a(1)
- Policy 5-6a and Implementation Measure 5-6a(1)
- Policy 5-8a and Implementation Measure 5-8a(1)
- Policy 5-9a and Implementation Measure 5-9a(1)
- Policy 5-10a and Implementation Measure 5-10a(1)
- Policy 5-11a and Implementation Measure 5-11a(1)
- Policy 5-12a and Implementation Measure 5-12a(1)

ECONOMIC DEVELOPMENT POLICIES AND IMPLEMENTATION MEASURES

- Policy 6-3a and Implementation Measure 6-3a(1)

AGRICULTURE POLICIES AND IMPLEMENTATION MEASURES

- Policy 10-1b and Implementation Measures 10-1b(1) and 10-1b(2)
- Policy 10-1c and Implementation Measure 10-1c(1)
- Policy 10-2a and Implementation Measures 10-2a(1) and 10-2a(2)
- Policy 10-6a and Implementation Measures 10-6a(1) and 10-6a(2)

CONSERVATION AND OPEN SPACE POLICIES AND IMPLEMENTATION MEASURES

- Policy 11-1b and Implementation Measure 11-1b(1)
- Policy 11-3a and Implementation Measures 11-3a(1) and 11-3a(2)

SAFETY POLICIES AND IMPLEMENTATION MEASURES

- Policy 16-10a and Implementation Measure 16-10a(1)

4.1.4 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION

Impact LU-1. Will the project physically divide an established community?

Analysis: *Less than Significant impact*

The countywide General Plan Land Use diagram indicates that the County land use classifications include Plan Areas, Agriculture/Working Landscape, Natural Resources, Residential, Yosemite National Park, and Rural Economic. The Plan Areas include town planning areas, community planning areas, and special planning areas. There are no incorporated cities in Mariposa County. The established communities in the County include Mariposa Town, Lake Don Pedro, Coulterville, Hornitos, Catheys Valley, Bootjack, Fish Camp, Wawona, Greeley Hill, Buck Meadows, El Portal, Midpines, Bear Valley, Mt. Bullion, Foresta, and Yosemite West. Each of these areas is a town, community, or special planning area.

The potential for physical divisions of established communities from General Plan implementation would result from any divisions of communities between or among land use or area plan classifications.

Land Use Policies 5-1a, 5-2a, 5-3a 5-4a, 5-7a, 5-9a, and 5-10a separately and together guide future residential, commercial and industrial development to established communities, reinforcing their viability and preserving outlying lands.

The Mariposa Town Planning Study Area is proposed by the General Plan update for an increase to approximately 11 square miles. The General Plan requires that the Planning Study Area be considered when amending the Town Plan. An update of the Town Plan will need to address land use, circulation, and other issues in the Planning Study Area. The update of the Town Plan also will need to incorporate policies to develop water sources. The General Plan, Section 5.4.01 includes land use diagrams and designates land use classifications for Planning Study Areas.

The General Plan land use diagram does not physically divide an established community. The General Plan goals, policies and implementation measures require that the future updates of an Area Plan require development to occur in established communities. The General Plan Implementation Measure 52a(3) and 5-2a(4) prevent premature urbanization in the Mariposa Town Planning Study Area and require development to have water and sewage disposal available from a centrally coordinated and managed system.

Mitigation: None required.

Impact LU-2. Will the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project, including but not limited to the general plan, area plans, specific plans, airport master plan, zoning, or environmental impact mitigation measures?

Analysis: *Less than significant impact*

There are no incorporated cities located in Mariposa County. The County's Town Planning Areas, Community Planning Areas, Special Planning Areas, and Yosemite National Park Planning Areas are incorporated into the General Plan (Volume II – Area Plan Descriptions and Interim Land Use Maps). The General Plan is internally consistent and has been written to incorporate the policies and regulations of existing community plans. Town, Community and Special plans prepared subsequent to adoption of the General Plan must be consistent with the General Plan's policies.

The Mariposa-Yosemite Airport is located near the community of Mariposa. General Plan Policy 16-10a implements the Mariposa-Yosemite Airport Comprehensive Land Use Plan and Implementation Measure 16-10a(1), which specifies that no land development incompatible with the airport land use plan shall be permitted within the airport's area of influence.

Mitigation: *None required*

Impact LU-3. Will the project convert or induce the conversion of Agricultural/Working lands or Prime, Unique, or Farmland of Statewide Importance to non-agricultural use?

Analysis: *Significant impact*

The California Department of Conservation, Division of Land Resource Protection (2002) reports that Mariposa County has a total of 406,639 acres designated agricultural land. The majority of this land is grazing land; however, 215 acres are designated important farmland; 49 acres are prime farmland, 129 acres are unique, and 37 acres are of statewide importance.

The General Plan Countywide Land Use diagram and 11 out of 16 proposed Community Planning Areas within the County include a classification of Agriculture/Working Landscape (Bear Valley, Catheys Valley, Coulterville, Lake Don Pedro, El Portal, Foresta, Greeley Hill, Hornitos, Mariposa Town, Mt. Bullion, and Midpines). Land Use Policies 5-1a; 5-2a; and 5-5a, and Agriculture Policies 10-1b; 10-1c; and 10-2a serve to guide growth away from the agricultural/working landscape lands to the town, community, and special planning areas, and preserve the agricultural/working landscape lands.

Implementation Measure 10-2a(1) allows for the conversion of Agriculture/Working Landscape land to another land use classification if the following findings are adopted by the Mariposa County Board of Supervisors.

- The subject property is not within an area in which the majority of the surrounding parcels are currently being used or historically have been used for agriculture, timber or mineral purposes.
- The soils, water rights, topography, terrain, and location are not suitable as an economic production unit of sufficient quality for commercial agricultural production.
- There are no other lands within the proposed land use classification available for the proposed or similar project.
- The characteristics and size of the subject properties make it unsuitable for open space, conservation easements, or other preservation opportunities which further implement the goals and policies of the General Plan.
- The subject property has not been identified in the County General Plan or any area plan as a location with characteristics worthy of preservation within the Agriculture/Working Landscape land use classification.

This implementation measure, although requiring adoption of these findings by the Board of Supervisors, allow for the conversion of Agriculture/Working Landscape land to non-agricultural uses, and therefore, does not fully protect agricultural land and agricultural production from conversion. Implementation of the draft General Plan protects agricultural lands to a greater extent than the existing General Plan but continues to be a significant impact because it allows the conversion of prime, unique, or farmland of statewide importance to non-agricultural use.

Mitigation: **LU-3. Prevent the Loss of Prime, Unique, or Farmland of Statewide Importance**

Implementation Measure: Implement Measure 10-2a(4) that requires no net loss of like kind agricultural lands (type and quality) and that demonstrates a benefit to agricultural lands in Mariposa County.

After

Mitigation: *Less than significant impact*

Impact LU-4. Will the Project increase the potential for cancellation or non-renewal of any existing Land Conservation Act (Williamson Act) ?

Analysis: *Less than Significant impact*

The Williamson Act is the common term for a State law which allows a private landowner and the County to enter into a long-term contract to preserve agricultural and open space lands from development in exchange for the incentive of property tax reductions during the life of the contract. A contract runs for 20 years in Mariposa County and is renewable annually at the County or property owner's option. If a landowner wishes to non-renew a contract, the contract would thus run for an additional 20 years from the year of that request. Mariposa County makes active use of Williamson Act contracts to conserve agricultural lands and encourages the retention of existing contracts.

Land Use Policy 10-6a and Implementation Measure 10-6a(1) prohibit the construction of residences on parcels subject to a Williamson Act contract unless they comply with the terms of the contract.

Land Use Policies 5-2a, 5-4a, 5-7a, and Agricultural Policies 10-1c and 10-2a create land use densities that manage growth and avoid sprawl and loss of agricultural lands in the Agriculture/Working Landscape land use classification. These policies focus growth to the planned development areas and place strong findings that the Board of Supervisors must adopt to change the land use designation to a non-agricultural use. The General Plan reduces the potential for cancellation or non-renewal of existing Land Conservation Act contracts.

Impact LU-5. Will the Project induce the conversion of any private timberlands subject to the California Forest Practice Rules under the Z'Berg-Nejedly Forest Practice Act (Title 14 CCR Chapters 4, 4.5 and 10) to nontimber growing uses?

Analysis: *Less than Significant impact*

Most of the timberlands in Mariposa County are under federal ownership in the Stanislaus and Sierra National Forests, although, Mariposa County does have some private timberlands. The General Plan Conservation and Open Space Element addresses the conservation and development of the County's resources as economic assets while maintaining compatibility with the County's natural environmental character, including protecting significant timberlands and providing for sustainable development of timber resources.

Implementation Measure 5-5a(1) provides for the identification within the Land Use Element of lands which can be used for economic uses (e.g., production, extraction, or harvesting of food, fiber, timber, or minerals) of which shall be the primary land use. Goal 5-12, Policy 5-12a, and Implementation Measure 5-12a(1) provide for the sustainable management and harvesting of timber resources and require the County to protect significant timberland from

conversion to non-timber related uses. The General Plan will not induce the conversion of any private timberlands subject to the California Forest Practice Rules.

Impact LU-6. Will the Project induce the conversion of any private mineral-producing lands into non-mineral production use?

Analysis: *Significant impact*

Historically, mineral production was an important part of Mariposa County's economy. Currently, mineral production is a relatively small part of the County's overall economy. Still, some mineral production operations remain viable and are necessary for the County's continuing development. Among the mineral operations that remain viable is the extraction of gravel, and there is a significant area of land classified by the State as MR-1 for gravel resources in the County.

Land Use Policy 5-5a and accompanying Implementation Measure 5-5a(1) states the General Plan Land Use Element will identify lands within the Agriculture/Working Landscape land use classification for the primary purpose of production, extraction, or harvesting of food, fiber, timber, and minerals. Conservation and Open Space General Plan Policy 11-3a and Implementation Measures 11-3a(1) and 11-3a(2) provide for reasonable development of mineral resources with standards of use where sitings are compatible with adjoining uses.

Existing residential development exists within the State classified MR-1 gravel resource area, and the proposed Residential land use classification in the draft General Plan would allow residential development that would not be compatible with gravel resource production. Therefore, mineral resources would not necessarily be protected in these areas.

Mitigation: No feasible mitigation has been identified to fully mitigate the significant impact. Once committed to non-mineral producing uses, land containing mineral resources cannot be replaced.

After
Mitigation: *Significant and unavoidable impact*

4.2 POPULATION AND HOUSING

This section addresses potential population and housing impacts associated with implementation of the draft General Plan. Specific topics include impacts related to: conversion or demolition of homes occupied by low- or moderate-income households, conversion or demolition of multifamily rental housing, and displacement of people that would necessitate construction of replacement housing.

4.2.1 AFFECTED ENVIRONMENT (SETTING)

This is an integrated General Plan and Program EIR which is comprised of Volumes I, II, III and IV of the General Plan. The County adopted the Housing Element in January 2004. The Housing Element is not evaluated in this EIR. The description of the affected environment that provides a basis for this evaluation of housing and population impacts may be found in Section 7 Population and Housing of Volume III. This section provides information on population and housing characteristics in Mariposa County.

4.2.2 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The evaluation criteria for Population and Housing are presented in Table 4.2-1. These criteria are drawn primarily from local plans and CEQA requirements.

**Table 4.2-1
Evaluation Criteria with Points of Significance
Population and Housing**

Evaluation Criteria	As Measured by	Point of Significance	Justification
PH-1. Will the Project result in a net loss, through conversion or demolition, of homes occupied by low- or moderate-income households?	Number of year-round dwelling units occupied by low- or moderate-income households or seasonal worker housing units lost.	No net loss of dwelling units occupied by low- or moderate-income household or seasonal workers.	Mariposa County General Plan. California Health & Safety Code, Section 33413 (for redevelopment areas). CEQA Checklist Item XI (b).
PH-2. Will the project result in a net loss, through conversion or demolition, of multifamily rental housing?	Number of multifamily rental housing units lost or converted.	No net loss of multifamily rental housing units.	Mariposa County General Plan. CEQA Checklist Item XI (b).
PH-3. Will the project result in the displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere?	Number of units lost or converted which would require replacement.	No net loss of housing units requiring replacement.	Mariposa County General Plan. CEQA Checklist Item XI(C).

Source: Parsons, 2005.

4.2.3 GENERAL PLAN POLICIES AND IMPLEMENTATION MEASURES

The following goals, policies and implementation measures of the draft General Plan are relevant to the evaluation of population and housing impacts. The full text of each policy and implementation measure is provided in Appendix A in this document (Volume IV of the General Plan).

HOUSING POLICIES AND IMPLEMENTATION MEASURES

- Housing Policy 2.1
- Housing Policy 2.2
- Housing Policy 2.3

Housing Policy 2.4
Housing Policy 2.5
Housing Policy 2.6
Housing Policy 2.7
Housing Policy 3.1
Housing Policy 3.2
Housing Policy 3.3
Housing Policy 4.1
Housing Policy 4.2
Housing Policy 4.3
Housing Policy 4.5
Housing Policy 5.2
Housing Policy 5.3

4.2.4 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION

Impact PH-1. Will the Project result in a net loss, through conversion or demolition, of homes occupied by low- or moderate-income households?

Analysis: *Less than significant impact*

Households with incomes ranging from very low to moderate total 60 percent of the County's total households. The Housing Element of the General Plan applies to all parts of the County, including all planning areas and specific plans. The Plan conforms to State of California requirements as administered by the state's Department of Housing and Community Development (HCD). The Housing Element analyzes the County's housing market, assesses housing needs and constraints, identifies housing issues, and establishes housing goals, policies, and programs.

General Plan Housing Policy 2.1 continues the County's support of the Mariposa County Housing and Community Development Agency (HCDA). Housing Policy 2.2 specifies that the County will encourage, support and assist agencies and developers to apply for funds from state and federal programs to provide low- to moderate-income housing. Policy 2.2 states that the County will provide support services, including the following.

- Help identify sites where low/moderate income housing will not conflict with existing development policies, and expedite the processing of permits for the housing.
- Apply for state and federal funds on behalf of housing providers when funding sources require public agency involvement.
- Support funding applications by housing providers.
- Offer County regulatory incentives, such as density bonuses, for projects that include affordable housing for very low-and/or low-income households.

Other General Plan policies bearing upon the availability of housing for low- and moderate-income households include Housing Element Policy 2.3, which provides for a 25 percent density bonus for projects incorporating at least 25 percent units affordable to low- and/or very low-income households; Policy 2.4, which allows second units in conjunction with single-family residences; Policy 2.5, which allows manufactured housing and mobile homes on single-family lots in residentially zoned areas, maintains mobile home park zoning and would not unreasonably restrict the use of such housing in those areas, and; Policy 4.1, which requires that housing units assisted by the County will include restrictive covenants to ensure that they remain affordable.

The above policies, when viewed individually and together, encourage and facilitate the provision of low- and moderate-income housing throughout Mariposa County. Although there may be the potential for some future demolition or conversion of housing units currently occupied by low- or moderate-income households to higher income housing or other uses, such losses would be more than compensated by the provision of new low- and moderate-income units under the County's policies, resulting in a less than significant impact.

Mitigation: *None required*

Impact PH-2. Will the project result in a net loss, through conversion or demolition, of multifamily rental housing?

Analysis: *Less than significant impact*

The 2000 U.S. Census data show that, countywide, 70 percent of the occupied housing units in Mariposa County are owner occupied, and 30 percent are renter occupied. This is a relatively high home ownership ratio as compared to a statewide average of 57 percent owner occupied units. Multifamily housing rental units comprise just 7 percent of all housing units in the County. Of these rental units, approximately one-half are publicly owned or assisted rental developments.

Many subsidized units are multi-family rental units that provide below-market rental housing. When the subsidies on these units terminate, the owners may increase the rents of these units to market rates, diminishing the availability of low-income housing.

In Mariposa County there are five subsidized multifamily rental housing developments representing approximately 50 percent of the total multifamily rental housing stock. These five subsidized multifamily rental housing developments represent 2 percent of the County's total housing stock. The remaining 98 percent of the County's total housing stock are market rate single-family homes (65 percent) and mobile homes (23 percent).

Housing Policy 4.1 addresses rental housing rehabilitation. The policy specifies that rental housing units assisted by the County will include restrictive covenants to ensure that they remain affordable (as defined by HCD) for either the initial term of the rehabilitation loan, or five years, whichever is longer.

Policies 5.2 and 5.3 address housing for special needs individuals and employee housing by providing assistance in accessing state and federal funds and through regulatory incentives. Because the housing needs many of these special needs

individuals, such as the elderly, and employees can be met by multifamily housing, Policies 5.2 and 5.3 could serve to preserve and increase multifamily housing stock.

The General Plan does not include the demolition or conversion of any multifamily housing units. Implementation of the above policies would serve to reduce or prevent the conversion or demolition of existing multifamily rental units, and encourage the construction of new units for low- and moderate-income households, and for special needs groups. The overall net change in the number of multifamily units resulting from implementation of the General Plan cannot be quantified at this time. However, it is determined that implementation of the General Plan would result in a less than significant impact with the application of the above policies.

Mitigation: *None required*

Impact PH-3. Will the project result in the displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Analysis: *Less than significant impact*

Mariposa County has a total of over 20,000 acres of buildable vacant land designated residential on the Land Use diagram for future development capable of supporting approximately 3,100 new dwelling units. Lands designated Natural Resources and Agriculture/Working Landscape have the potential for residential uses. Of the total acreage potentially available in Mariposa County for residential use, the 20,000 acres designated residential have the most immediate development potential over the next 10 to 15 years. These are properties within designated planning areas or are parcels that are relatively unconstrained with respect to slope, roadway access, existing improvements, and sewer/water infrastructure. In addition, of the total residential buildable vacant land, 90 acres of land is capable of supporting approximately 1,350 multifamily units and/or emergency shelters.

The California Department of Finance reports the County's population is projected to grow from an estimated 17,991 in 2005 to approximately 20,600 in 2020. Mariposa County projects a countywide population of 28,000 persons at build-out of the General Plan. This is a potential ultimate increase of approximately 198 percent over the planning period. Assuming a future average household size of 2.37 persons (2000 Census), approximately 4,300 new dwelling units would result as a function of build-out (Table 2-4).

The availability of sufficient land for residential development, and implementation of housing preservation and rehabilitation policies identified in Impacts PH-1 and PH-2 above, would result in no net loss in housing units requiring replacement.

Mitigation: *None required*

4.3 TRAFFIC AND CIRCULATION

This section addresses potential traffic and transportation impacts associated with implementation of the draft General Plan. Specific topics include impacts related to: public transit service levels or accessibility, use of bicycle and/or pedestrian travel ways, existing parking or access to

existing parking; volume of traffic on state highways or county arterial roads, intersections in the Mariposa County town or community planning areas, air traffic patterns, and emergency access.

4.3.1 AFFECTED ENVIRONMENT (SETTING)

This is an integrated General Plan and Program EIR which is comprised of Volumes I, II, III and IV of the General Plan. The description of the affected environment that provides a basis for this evaluation of traffic and transportation impacts may be found in Section 8.1 of Volume III. This section provides information on the existing transportation and circulation system in Mariposa County.

4.3.2 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The evaluation criteria for Traffic and Transportation are presented in Table 4.3-1. These criteria are drawn primarily from local plans and CEQA requirements.

**Table 4.3-1
Evaluation Criteria with Points of Significance
Traffic and Transportation**

Evaluation Criteria	As Measured by	Point of Significance	Justification
TT-1. Will the Project create adverse vehicular impacts on state highways or county arterial roads?	Change in level of service.	Decline from existing LOS to LOS E or worse.	Mariposa County Regional Transportation Plan. CEQA Checklist Item XV (a).
TT-2. Will the Project create adverse vehicular impacts for intersections in Mariposa County, town or community planning areas?	Change in level of service and critical movement delay.	Decline from existing LOS to LOS E or worse.	Mariposa County Regional Transportation Plan. CEQA Checklist Item XV (b).
TT-3. Will the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	Change in air traffic patterns that create a substantial safety risk.	Any change in air traffic patterns that creates a substantial safety risk.	Mariposa County Regional Transportation Plan. CEQA Checklist Item I (c).
TT-4. Will the project substantially increase hazards due to design features or incompatible uses?	Increase in hazards to vehicular or non-vehicular traffic.	Hazards that would substantially increase the accident rate.	CEQA Checklist Item I (d).

**Table 4.3-1
Evaluation Criteria with Points of Significance
Traffic and Transportation**

Evaluation Criteria	As Measured by	Point of Significance	Justification
TT-5. Will the Project result in inadequate emergency access?	Reduction in access for emergency services personnel or equipment to inadequate levels.	Any reduction in emergency access that would result in inadequate emergency response times.	Mariposa County Regional Transportation Plan. CEQA Checklist Item I (e).
TT-6. Will the Project create adverse impacts to existing parking or access to existing parking?	Increased demand for parking versus the parking supply.	Increased demand greater than the proposed supply.	Mariposa County Regional Transportation Plan. CEQA Checklist Item XV (f).
TT-7. Will the Project conflict with adopted policies, plans, or programs supporting alternative transportation (transit, bicycle and pedestrian paths)	Inability to implement policies, plans or programs supporting alternative transportation.	Any conflict with adopted policies, plans or programs.	Mariposa County Regional Transportation Plan. CEQA Checklist Item XV (g).

Source: Parsons, 2005.

4.3.3 GENERAL PLAN POLICIES AND IMPLEMENTATION MEASURES

The following goals, policies and implementation measures of the draft General Plan are relevant to the evaluation of traffic and transportation impacts. The full text of each policy and implementation measure is provided in Appendix A in this document (Volume IV of the General Plan).

LAND USE POLICIES AND IMPLEMENTATION MEASURES

- Policy 5-1a and Implementation Measures 5-1a(1), 5-1a(2), and 5-1a(3)
- Policy 5-2a and Implementation Measures 5-2a(1) and 5-2a(2)
- Policy 5-3a and Implementation Measure 5-3a(1) and 5-3a(3)
- Policy 5-3b and Implementation Measure 5-3b(1)
- Policy 5-4a and Implementation Measure 5-4a(1), 5-4a(2), and 5-4a(3)
- Policy 5-10a and Implementation Measure 5-10a(1)

CIRCULATION, INFRASTRUCTURE, AND SERVICES POLICIES AND IMPLEMENTATION MEASURES

- Policy 9-1a and Implementation Measures 9-1a(1) and 9-1a(2)
- Policy 9-1b and Implementation Measure 9-1b(1)
- Policy 9-1c and Implementation Measures 9-1c(1), 9-1c(2), and 9-1c(3)

Policy 9-1d and Implementation Measure 9-1d(1)
Policy 9-1e and Implementation Measure 9-1e(1)
Policy 9-2a and Implementation Measures 9-2a(1), 9-2a(2), and 9-2a(3)
Policy 9-3a and Implementation Measures 9-3a(1) and 9-3a(2)
Policy 9-4a and Implementation Measure 9-4a(1)
Policy 9-4b and Implementation Measure 9-4b(1)

4.3.4 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION

Impact TT-1. Will the Project create adverse vehicular impacts on state highways or county arterial roads?

Analysis: *Significant impact*

In 2001, according to the Mariposa County Regional Transportation Plan (RTP), only one of the County's state highways, S.R. 140 through the Town of Mariposa, had a level of service (LOS) "D." Other state highway segments typically had LOS of "C" or "B," while county roads typically had LOS of "B" or "A." Without major improvements, state highways and county roads are projected to operate at LOS "D" or better through 2010, although two additional state highway segments and one County road (S.R. 140 from Hornitos Road to the Town of Mariposa; S.R. 49 from the Town of Mariposa to Ben Hur Road; and Greeley Hill Road) would be operating at LOS "D."

Without improvements by 2025, the horizon year for the RTP, S.R. 140 from Hornitos Road to the Town of Mariposa and S.R. 140/S.R. 49 through the Town of Mariposa are projected to operate at LOS "E," and additional state highway segments are projected to operate at LOS "D" (including S.R. 140 from Merced County to Hornitos Road and from S.R. 49 north to Midpines; S.R. 49 from the Town of Mariposa to Triangle Road; and S.R. 41 north of Miami Mountain Road). The reduction in level of service to "E" on the state highways in the County beyond 2010 is a significant impact. The impact on the county roads, however, would be less than significant. Greeley Hill Road is projected to continue to operate at LOS "D" by 2025, although most county roads would continue to operate at LOS "B" or "A."

The RTP identifies long-range improvements to state highways needed to improve LOS in the period 2015-2025 with a total estimated cost of \$48.4 million. Under current funding expectations, only \$15 million in state funds under the Regional Improvement Program (RIP) will be available to Mariposa County. In addition, capacity-increasing projects are primarily funded through the State Transportation Improvement Program (STIP), which are programmed annually for a five-year period. The current STIP is for 2002-2007, and therefore the earliest that a project for the 2015 to 2025 timeframe could be included in the STIP would be 2010. Given the competing priorities and limited funding for state transportation improvements, there is no assurance that the highway improvements needed in the County will be included in future STIPs, and therefore, without the improvements there will be long-range significant impacts to State Routes 140 and 49. However, the Board of Supervisors recently took initial steps to engage an engineering consulting firm to prepare a long-term

Countywide Capital Improvements Program and Impact Fee analysis. The resulting Development Impact Fee program will focus on transportation improvements related to new population growth and identify needed fire, sheriff, library, parks, and administrative facilities.

Although the General Plan would increase the likelihood that needed long-range improvements to increase the capacity of state highways would be accomplished in the needed timeframe in order to provide an acceptable level of service, the ability to commit state funding for improvements under the STIP is beyond the control of the County. Therefore, the improvements cannot be assured and the potential for significant impacts to the state highway system would remain.

Impact TT-2. Will the Project create adverse vehicular impacts for intersections in the Mariposa County town or community planning areas?

Analysis: *Significant impact*

LOS data is generally not available for intersections in Mariposa County. According to a 1999 study for the County's Visitor Center, the intersection of Highway 140 and Highway 49 at the north end of the Town of Mariposa had a LOS of "C" in the morning peak hour and "D" in the evening peak hour. This LOS would appear to be consistent with the LOS data in the 2001 Regional Transportation Plan for the route segments on Highways 140 and 49 leading into this intersection. No other intersection LOS data is available. However, as this is one of the two busiest intersections in the County (the intersection of Highways 140 and 49 at the south end of the Town of Mariposa being the other), it is likely that all of the intersections in the County are operating at or above the standard of LOS "D."

Future LOS at the County's intersections are likely to follow the pattern of LOS for the route segments as discussed above under Impact TT-1, that is, remaining at or above LOS "D" through 2010 with a deterioration in LOS at major intersections on state routes in the Town of Mariposa after 2010, while other intersections would remain at or above LOS "D." As is the case for the through routes, the competing priorities and limited funding for state transportation improvements, would affect the ability to make needed improvements to the Highway 140/49 intersections in the Town of Mariposa, and there is no assurance that these improvements would be included in future STIPs; however, the Board of Supervisors recently took initial steps to develop a Capital Improvements Program and Development Impact Fee Program that would help provide and facilitate intersection improvements. Without the guaranteed improvements, there would be potential long-range significant impacts to the intersections of S.R. 140 and S.R. 49 in the Town of Mariposa.

The proposed mitigation would increase the likelihood that needed long-range improvements to intersections of state highways in the Town of Mariposa would be accomplished in the needed timeframe in order to provide an acceptable level of service. However, the ability to commit state funding for improvements under the STIP is beyond the control of the County. Therefore, the improvements cannot be assured and the potential for significant impacts to the intersections on the state highways in the Town of Mariposa would remain.

Impact TT-3. Will the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Analysis: *Less than significant impact*

The draft General Plan could result in increased traffic levels at the Mariposa County Airport. However, policy 9-4b and implementation measure 9-4b(1) require that no projects shall be approved within the Mariposa County Airport Land Use Planning Area unless they are consistent with the Airport Land Use Plan, which defines appropriate land uses to avoid safety hazards from airport operations. Therefore, because future development in the vicinity of the airport would be consistent with the safety zones defined in the Airport Land Use Plan, the impacts due to increased air traffic would be less than significant.

Mitigation: *None required*

Impact TT-4. Will the project substantially increase hazards due to design features or incompatible uses?

Analysis: *Less than significant impact*

All road improvements under the draft General Plan would be required to conform to a new County road policy that would incorporate standards and specifications for new roads (Policy 9-1e and Implementation Measure 9-1e(1)). In addition, Policy 9-1d and its implementation measure would require road improvements based on road capacity if the traffic generated by the Proposed Project exceeds the capacity of the road system that provides access. These policies and implementation measures would result in new roads constructed to contemporary design standards and in existing roads being brought up to contemporary design standards where needed to provide adequate capacity, and therefore development would not increase hazards due to design features or incompatible uses, and over time, could decrease hazards as existing roads are improved.

Mitigation: *None required*

Impact TT-5. Will the Project result in inadequate emergency access?

Analysis: *Less than significant impact*

All road improvements under the draft General Plan would be required to conform to a new County road policy that would incorporate standards and specifications for new roads (Policy 9-1e and Implementation Measure 9-1e(1)). One of the standards for this Measure is that road circulation within a road system shall be interconnecting and cul-de-sac or dead-end roads shall be designed to be safe. Policy 9-1d and its implementation measure would require, where new development exceeds the capacity of the existing road system,, improvements of all roads lacking capacity from the project site to the nearest major collector or arterial. In addition, Policy 9-1b and 9-1c would ensure that roads have adequate capacity to serve respective road needs and that road capacity would be the basis for determining the adequacy of access for all new development. These policies and implementation measures would improve

emergency access within the County by interconnecting existing roads and requiring that all roads serving road systems shall have an all-weather surface.

Mitigation: *None required*

Impact TT-6. Will the Project create adverse impacts to existing parking or access to existing parking?

Analysis: *Less than significant impact*

Off-street parking requirements are established by the Mariposa County Zoning Ordinance, Title 17. All new development under the draft General Plan would have to conform to the minimum requirements of the Ordinance. Because off-street parking would be provided for all new development, the impact on existing parking would be less than significant.

Mitigation: *None required*

Impact TT-7. Will the Project conflict with adopted policies, plans, or programs supporting alternative transportation (transit, bicycle and pedestrian paths)?

Analysis: *Less than significant impact*

Policy 9-2a of the draft General Plan and its implementation measures require that an effective transit system be maintained under the County's Transit Plan, and that the Plan be updated concurrently with the County Regional Transportation Plan. Implementation Measures 9-3a(1) and 9-3a(2) under Policy 9-3a requires that the County adopt, implement, and update the Bicycle, Pedestrian, and Equestrian Facilities Plan to create a comprehensive system of transportation and recreation trails. Therefore, the draft General Plan would not be in conflict with the adopted plans and policies supporting transit and bicycle and pedestrian paths in the County.

Mitigation: *None required*

4.4 PUBLIC SERVICES AND UTILITIES

This section addresses potential impacts on public services and utilities associated with implementation of the draft General Plan. Specific topics include impacts related to: demand for law enforcement, ambulance, fire protection, water supply, sewage treatment and disposal, solid waste removal, or recreation; and demand for additional school capacity.

4.4.1 AFFECTED ENVIRONMENT (SETTING)

This is an integrated General Plan and Program EIR which is comprised of Volumes I, II, III and IV of the General Plan. The description of the affected environment that provides a basis for this evaluation of public services and utilities impacts may be found in the following sections of Volume III: Section 8.2 Public Services and Facilities; and Section 8.3 Utilities. These sections provide information on the availability of existing utilities and services within Mariposa County.

4.4.2 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The evaluation criteria for Public Services and Utilities are presented in Table 4.4-1. These criteria are drawn primarily from local plans and CEQA requirements.

**Table 4.4-1
Evaluation Criteria with Points of Significance
Public Services and Utilities**

Evaluation Criteria	As Measured by	Point of Significance	Justification
PS-1. Will the Project increase demand for law enforcement, ambulance, fire protection, water supply, sewage treatment and disposal, solid waste removal, or recreation to such a degree that accepted service standards are not maintained?	Capacity available to support increased demand	Demand in excess of available capacity.	CCR Title 14, Division 1.5, Chapter 7, Subchapter 2, Articles 1-5. Mariposa County Fire Protection Standards. Mariposa County General Plan. CEQA Checklist Item XII(a).
PS-2. Will the project create a demand for additional school capacity that cannot be met by existing or planned capacity?	Projections of new school age children associated with additional housing and employment on campus.	Project demand exceeding planned capacity.	Mariposa County General Plan. CEQA Checklist Item XII (a).

Source: Parsons, 2005.

4.4.3 GENERAL PLAN POLICIES AND IMPLEMENTATION MEASURES

The following goals, policies and implementation measures of the draft General Plan are relevant to the evaluation of public services and utilities impacts. The full text of each policy and implementation measure is provided in Appendix A in this document (Volume IV of the General Plan).

LAND USE POLICIES AND IMPLEMENTATION MEASURES

- Policy 5-2a and Implementation Measures 5-2a(1), 5-2a(2), 5-2a(3), and 5-2A(4)
- Policy 5-4a and Implementation Measure 5-4a(3)
- Policy 5-7a and Implementation Measure 5-7a(1)
- Policy 5-8a and Implementation Measure 5-8a(1)
- Policy 5-9a and Implementation Measure 5-9a(1)
- Policy 5-10a and Implementation Measure 5-10a(1)

ECONOMIC DEVELOPMENT POLICIES AND IMPLEMENTATION MEASURES

- Policy 6-4a and Implementation Measure 6-4a(1)

HOUSING POLICIES AND IMPLEMENTATION MEASURES

Housing Policy 3.3

CIRCULATION, INFRASTRUCTURE, AND SERVICES POLICIES AND IMPLEMENTATION MEASURES

- Policy 9-5a and Implementation Measure 9-5a(1)
- Policy 9-6a and Implementation Measure 9-6a(1)
- Policy 9-7a and Implementation Measures 9-7a(1), 9-7a(2), and 9-7a(3)
- Policy 9-8a and Implementation Measure 9-8a(1)
- Policy 9-9a and Implementation Measures 9-9a(1) and 9-9a(2)

CONSERVATION AND OPEN SPACE POLICIES AND IMPLEMENTATION MEASURES

- Policy 11-2a and Implementation Measures 11-2a(1), 11-2a(2), and 11-2a(3)

LOCAL RECREATION POLICIES AND IMPLEMENTATION MEASURES

- Policy 12-1a and Implementation Measure 12-1a(1)
- Policy 12-1b and Implementation Measures 12-1b(1) and 12-1b(2)
- Policy 12-2a and Implementation Measure 12-2a(1)
- Policy 12-3a and Implementation Measures 12-3a(1) and 12-3a(2)
- Policy 12-4a and Implementation Measures 12-4a(1), 12-4a(2), and 12-4a(3)
- Policy 12-5a and Implementation Measure 12-5a(1)

REGIONAL TOURISM POLICIES AND IMPLEMENTATION MEASURES

- Policy 13-1a and Implementation Measure 13-1a(1)
- Policy 13-1b and Implementation Measure 13-1b(1)
- Policy 13-3a and Implementation Measure 13-3a(1)
- Policy 13-5a and Implementation Measure 13-5a(1)

SAFETY POLICIES AND IMPLEMENTATION MEASURES

- Policy 16-1a and Implementation Measure 16-1a(1)
- Policy 16-2a and Implementation Measure 16-2a(1)
- Policy 16-3a and Implementation Measures 16-3a(1) through 16-3a(4)
- Policy 16-3b and Implementation Measure 16-3b(1)

4.4.4 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION

Impact PS-1. Will the Project increase demand for law enforcement, ambulance, fire protection, water supply, sewage treatment and disposal, solid waste removal, or recreation to such a degree that accepted service standards are not maintained?

Analysis: *Less than significant impact*

New development in the County, with a County holding capacity of 28,000 population compared with a year 2000 population of just over 17,000, will result in increased demand for public services, including law enforcement, ambulance, fire protection, water supply, sewage treatment and disposal, solid waste removal, and recreation. The available capacity to support the increased demand for each of these services is discussed in the following paragraphs.

Law Enforcement. The Mariposa County Sheriff's Department provides law enforcement services for the County, including visitor population as well as County residents. At present, to meet service standards, the Department would need to add 8 staff to the Department's 140 personnel. The demand generated by additional population and visitor growth under the draft General Plan would further exceed the available capacity to provide service, and in order to maintain the service standard some 150 additional personnel could be required.

The Mariposa County Sheriff's Office operates out of eight facilities, with the main office and five of the facilities located in the Town of Mariposa. The facilities located in the Town of Mariposa consist of Administration/Operations, Dispatch Center, Property/Records, Investigations, Animal Control, Volunteer Programs Facility, and the Adult Detention Facility on Highway 49 North, two miles from the Main Office. There are 16 personnel employed at the detention facility. The Lake Don Pedro facility houses the boating safety program and consists of three employees. There is also a store front office in Greeley Hill with three deputies for the North County area. The Greeley Hill also serves as a base for the SCOPE (Sheriff's Community Organized Policing Effort) program (approximately 100 volunteers) in the North County. Deputies from the main office supplement the North County area. The headquarters and detention facilities would need to be expanded with the population growth in the County, and additional storefront offices would be required to provide the desirable response times within the different areas of the County.

Ambulance. Mercy Ambulance provides primary ambulance service in Mariposa County under contract with the County. At present, 5 ambulances and 35 personnel provide service in the County, and because of the large coverage area, more units are in operation than would be justified solely on the basis of the number of persons served. While this means that Mercy Ambulance would likely have additional service capacity available, the additional capacity would not be sufficient to serve a potential three-fold increase in population based upon the holding capacity of the draft General Plan.

Fire Protection. Fire protection services are provided in Mariposa County by 1) the California Department of Forestry (CDF), which operates five stations in the County and serves as the central dispatch agency for fire protection in the County; 2) the Mariposa County Fire Department, which operates 14 stations; and 3) the Mariposa Public Utility District (MPUD) Fire Department, which provides fire protection within the MPUD boundaries. The County Fire Department has over 165 trained personnel, with eleven volunteer fire departments operating under the Department's direction. There are 14 County fire stations countywide and one fire station under construction; these include Co# 21 Midpines, Co# 23 Catheys Valley, Co# 24 Don Pedro, Co# 25 Mt. Bullion Airport, Co# 26 Coulterville, Co # 27 Mormon Bar, Co# 28 Bridgeport (planning for construction, 2005), Co# 29 Lushmeadows, Co# 31 Greeley Hill, Co# 32 Ponderosa Basin, Co# 33 Fish Camp, Co# 34 El Portal, Co# 36 Hunters Valley, and Co# 37 Bootjack. In addition, the MPUD has two fire stations: Station #1 is located at 527 Highway 49 North and houses two MPUD engines and one Mariposa County rescue vehicle; Station #2 is located at the MPUD administrative offices at 4992 Seventh Street and houses one fire engine.

Within planning areas, the Insurance Services Office (ISO) rating for fire protection is ISO 5 (Mariposa County Fire Department, 2005). In rural portions of the County outside planning areas, the ratings range from ISO 8 to ISO 10 (ISO 1 is the highest rating, while ISO 10 is the lowest).

As additional development occurs under the draft General Plan, the existing facilities and manpower levels would be inadequate to serve the County's holding capacity population of 28,000, and the County Fire Department's existing fire stations are generally inadequate for existing service levels. Impacts on fire protection for wildland fires are addressed in the Public Health and Safety section (Section 4.11) in this EIR.

Water Supply. Mariposa Public Utility District (MPUD) provides water and sewer services to a portion of the Mariposa Town Planning Area. The District currently has 702 service connections and serves a population of approximately 1,800. The existing sources of water have the potential to provide an adequate supply for the next 10 to 20 years within the Town Planning Area, depending on growth and water quality/quantity requirements. The treatment facility operates at nearly peak capacity during peak water use days; and therefore, will require expansion to serve future development. The MPUD wastewater treatment plant has the capability to serve additional development. However, portions of the collection system are in need of repair or are at capacity and need to be replaced. The impacts on water supply are addressed in the Hydrology and Water Quality section (Section 4.7) of this EIR.

The Lake Don Pedro Community Services District (LDPCSD), as of October 2004, supplies potable water to 1,250 customer connections for much of the Lake Don Pedro Town Planning Area, but does not operate a wastewater facility. The water treatment plant operates at 85 to 90 percent of capacity. The LDPCSD reserves 5,160 acre-feet per year from the Merced Irrigation District (MID) from Lake McClure, but uses approximately 600 acre-feet of water, leaving an unused allocation that could serve additional connections.

Other portions of the County are served by small public systems. Three public water systems provide domestic water to portions of the Fish Camp area through surface springs and groundwater wells (including the Silver Tip Lodge served by the Yosemite Properties system). Although expansion of the Yosemite Properties system capacity is proposed to meet the needs for a proposed expansion of the Lodge, the three systems would not have significant additional capacity to support new development. Sewage disposal in the Fish Camp area relies on individual septic tanks and underground leach field systems. Water and sewer service is provided to residents of Coulterville by the Coulterville service area. Water is drawn from a local well system. The system is near capacity at the present time. Mariposa Pines has community sewer service, while Ponderosa Basin has community water service. Wawona and El Portal have community sewer and water service. Within Yosemite National Park, 20 public water systems and 5 wastewater treatment plants serve the needs of visitors and park employees.

Sanitary Sewer. Central sanitary sewer collection and treatment systems in Mariposa County are operated by the Mariposa Public Utility District (MPUD) for their service area in the Town of Mariposa, Don Pedro Sewer Zone #1,

Coulterville, Mariposa Pines Sewer Zone, Yosemite West Maintenance District, Wawona, and El Portal. All other parts of the County rely upon individual on-site systems (septic tanks or other systems) for sewage treatment and disposal. The impacts on sewage treatment in these areas are addressed in the Hydrology and Water Quality section (Section 4.7) of this EIR.

The MPUD wastewater treatment plant operates at approximately 40 percent of its capacity of 610,000 million gallons per day, and therefore would have additional capacity available to support new development within its boundaries.

Solid Waste Removal. The Mariposa County Department of Public Works operates solid waste disposal facilities in the County. In addition to the County landfill, there are four solid waste transfer stations and one auto dismantling station in the County. Based on current and projected rates of solid waste generation, the County estimates that the remaining life of the landfill is seven to eight years. The co-composting facility to be located at the landfill is expected to increase the useful life of the landfill to between 30 and 35 years. Therefore, with the inclusion of the co-composting facility active, there would be adequate capacity available to serve development under the draft General Plan.

Recreation. Local recreation services are provided by the County Park and Recreation Department, which has 60.5 acres of recreation facilities. Based upon the accepted standard of 5 acres of park area for each 1,000 population served, 85 acres of parkland would be required for the County's current population of approximately 17,000. Therefore, the local recreation facilities would not have capacity available to support additional population, and 24.5 acres of additional parkland would be required to meet the service standard for the existing population.

The draft General Plan includes policies that address the coordination of development with future provision of public services and utilities. Policy 5-2a and its Implementation Measures require that development grows outward from where services are located in planning areas, and that regulations for performance standards for close-to-services development be established. Policy 5-10a requires new subdivisions to have necessary infrastructure to enable all parcels to be "Ready to Build."

With respect to utilities, Policy 9-5a and Implementation Measure 9-5a(1) require that new projects and subdivisions shall not be approved unless they have access to basic water and wastewater infrastructure, including wastewater treatment and disposal and potable water supply. Because application of this policy and implementation measure to new development would not allow development to be approved without adequate water supply and sewage disposal, it would reduce the impacts of the draft General Plan on water supply and sewage collection and treatment facilities to less than significant.

Policy 9-6a and Implementation Measure 9-6a(1) provide for construction of a co-composting facility serving the County, which is currently under construction and will further extend the useful life of the County landfill to between 30 and 35 years. Therefore, impacts of the draft General Plan on solid waste removal would be less than significant.

The draft General Plan includes policies and implementation measures that would require that the County approve recreation projects to maintain service

levels; that performance standards for maintenance of park and recreation facilities be adopted; and that a capital and operational funding program be included for short-, intermediate-, and long-term needs (Policies 12-1a, 12-1b, 12-5a and their respective Implementation Measures). By ensuring that application of these policies and implementation measures would reduce the impacts of the draft General Plan on recreation facilities to less than significant.

Policy 16-1a and its implementation measure require that residential and non-residential development be within acceptable fire response time limits and coverage areas; or a development project shall provide its own on-site fire protection facilities and firefighters as approved by the County Fire Department, while Policy 16-3a and its implementation measures would require that the County adopt a strategic plan for fire safety, including long-term capital improvements along with thresholds and capital facilities for each of the service areas. Policy 9-9a and Implementation Measure 9-9a(1) require that the County develop a comprehensive plan, with service standards, to attain and maintain service delivery for emergency services, including fire protection, law enforcement and ambulance service. Implementation Measure 9-9a(2) requires that the County fully implement the services delivery plan. These policies and implementation measures would reduce the impacts on emergency services including fire protection, law enforcement and ambulance services to a less than significant level.

Mitigation: *None required*

Impact PS-2. Will the project create a demand for additional school capacity that cannot be met by existing or planned capacity?

Analysis: *Significant impact*

The Mariposa County Unified School District provides K–12 educational services for children in Mariposa County. The following elementary and middle schools are under the jurisdiction of the school district: Catheys Valley Elementary, Jessie Benton Fremont School, Coulterville-Greeley Elementary, El Portal Elementary, Lake Don Pedro Elementary, Mariposa Elementary, Mariposa Middle School, Woodland Elementary, and Yosemite Valley School. The four district high schools are Coulterville High School, Mariposa County High School, Spring Hill High School, and Yosemite Park High School.

Much of the County’s population growth is anticipated to occur in areas in which schools are already over-enrolled, at capacity, or nearing capacity (that is, those where enrollment equals 75 percent or more of capacity). The schools primarily affected are those that serve students from the Town of Mariposa, Bootjack, Catheys Valley, and Lake Don Pedro.

In October, 2001, Mariposa County Unified School District’s (MUSD) enrollment was 2,613. In October 2002, enrollment was 2,560. By October 2003, enrollment declined four percent to 2,488. District enrollment status was 2,447 students at the beginning of the 2004–2005 academic year. Of the total enrollment, 1,593 students were enrolled in kindergarten through grade eight, and 854 students were enrolled in grades nine through 12. These enrollment figures do not include 44 students enrolled in alternative schools or programs through the Mariposa County Office of Education. Although Mariposa County Unified

School District's enrollment has decreased by approximately 166 K-12 students over the past three years, and 232 students over the past ten years, total available capacity would not be sufficient to accommodate the number of students that would be generated with a holding capacity population of 51,000 for the County.

Policy 9-7a and its implementation measures provide that the County will work with the school district on siting facilities and assist in facilities development. However, application of this policy and implementation measures would not assure that adequate school facilities would be available to serve the students generated by development under the draft General Plan, and therefore the impact on school capacity would be significant.

Even with the General Plan policies, funding for future school facilities necessary to serve new development would not be assured. With limited state funds available for new school construction, the MUSD would have to rely on local funding sources to assure adequate school facilities. These sources might include voter-approved General Obligation bonds, Mello-Roos Bonds or Mello-Roos Community Facilities Districts, as well as developer impact fees.

State law restricts the ability of Mariposa County to mitigate for insufficient school facility capacity, even in consideration of permissible school impact fees that MUSD may charge developers and the potential availability of state funds for school construction. California Government Code section 65995 states that cities and counties may not condition approval of development on the payment of school impact fees in excess of the amount permissible under state law. This section of state law also prohibits cities and counties from requiring additional mitigation, such as the establishment of a community facilities district, to fund school facilities in excess of the permissible school impact fee.

The Legislature, in pre-empting additional mitigation measures, has determined that payment of the state-allowed school impact fee is full and complete mitigation, regardless of whether the fee provides sufficient funding for the construction of needed school facilities.

4.5 BIOLOGICAL RESOURCES

This section addresses potential impacts on biological resources associated with implementation of the draft General Plan. Specific topics include impacts related to: endangered, threatened or rare wildlife or plant species; active raptor nests, migratory bird nests, or native wildlife nursery sites; habitat for sensitive wildlife species; sensitive native plant communities; wildlife migration or travel corridors; conflicts with habitat conservation plans; and wetlands, vernal pools, or other waters of the U.S. or State of California.

4.5.1 AFFECTED ENVIRONMENT (SETTING)

This is an integrated General Plan and Program EIR which is comprised of Volumes I, II, III and IV of the General Plan Update 2005. The description of the affected environment that provides a basis for this evaluation of biological resources impacts may be found in Section 10.1 of Volume III. This section provides information on plant communities, wildlife habitats, and special-status species that occur within Mariposa County.

4.5.2 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The evaluation criteria for Biological Resources are presented in Table 4.5-1. These criteria are drawn primarily from local plans and CEQA requirements.

**Table 4.5-1
Evaluation Criteria with Points of Significance
Biological Resources**

Evaluation Criteria	As Measured by	Point of Significance	Justification
BR-1. Will the Project cause a net loss of individuals, occupied habitat, or restrict the reproductive capacity of endangered, threatened, or rare wildlife or plant species? ¹	a. Number of individuals of a plant or wildlife species that would be lost.	a. No net loss of endangered, threatened or rare wildlife or plant species.	FESA, CESA (Sections 2062 and 2067). CEQA (Article 5, Section 15065). CEQA Checklist Item IV (a).
	b. Acres of occupied or designated critical habitat.	b. No net loss of occupied or designated endangered, threatened or rare species habitat.	CDFG Code Sections 1900-1913.
BR-2. Will the Project cause a net loss of individuals of CNPS List 2, 3, or 4 plant species?	Number of plant species or populations that would experience a loss of individuals.	Net loss of greater than 15 percent of known occurrences of populations in Mariposa County.	CDFG Code Sections 1900-1913. CEQA (Article 5, Section 15065). CEQA Checklist Item IV (a).
BR-3. Will the Project cause a net loss of active raptor nests, migratory bird nests, or native wildlife nursery sites?	Number of potential active nesting or breeding sites.	No net loss of raptor nests, migratory bird nests, or native wildlife nursery sites.	CEQA (Article 5, Section 15065). CEQA Checklist Item IV (d). CDFG Wildlife Habitat Relationships model - (Version 5.2). Fish and Game Code - (Section 3503.5).
BR-4. Will the Project cause a permanent net loss of habitat for sensitive wildlife species? ²	Acres of sensitive wildlife habitat lost.	Loss of greater than 25 percent of each habitat type on site.	CEQA (Article 5, Section 15065). CEQA Checklist Item IV (b). CDFG Wildlife Habitat Relationships model - (Version 5.2).

**Table 4.5-1
Evaluation Criteria with Points of Significance
Biological Resources**

Evaluation Criteria	As Measured by	Point of Significance	Justification
BR-5. Will the Project cause a permanent loss of sensitive native plant communities? ³	Acres of sensitive native plant community lost.	Loss of greater than 25 percent of each sensitive native plant community on site.	CEQA (Article 5, Section 15065). CEQA Checklist Item IV (b). CDFG (Fish and Game Code, Sections 1900-1913). CDFG Interim Wildlife/Hardwood Management Guidelines (February 1, 1989). CDFG (CNDDDB 1994, 1995).
BR-6. Will the Project substantially block or disrupt wildlife migration or travel corridors? ⁴	Number of corridors substantially blocked or disrupted.	No corridors blocked more than 50%.	CEQA Checklist Item IV (d).
BR-7. Will the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, state or federal habitat conservation plan?	Number of plans under which a conflict would result.	Any such conflicts.	CEQA Checklist Item IV (e).
BR-8. Will the project result in a net loss of wetlands, vernal pools, or other waters of the U.S. or State of California?	Acreage of permanent discharge to or placement of fill in potential jurisdictional wetlands or other waters of the U.S. or State of California	No net loss of wetlands, vernal pools, or other waters of the U.S.	Clean Water Act, 40 CFR 230 Section 404(b)(1), U.S. Army Corps of Engineers, U.S. EPA, and State of California no net loss policies. CEQA Checklist Item IV (c).

Source: Parsons, 2005.

Biological Resources Notes:

CDFG California Department of Fish and Game	CNPS California Native Plant Society
CEQA California Environmental Quality Act	FESA Federal Endangered Species Act
CESA California Endangered Species Act	USFWS United States Fish and Wildlife Service
CNDDDB California Natural Diversity Data Base	

1. Endangered, threatened, or rare is defined here as:
 - federally listed endangered, threatened, or proposed plant or wildlife species;
 - state listed endangered, threatened, or proposed plant or wildlife species or rare plant species;
 - federal candidates for listing; and
 - CNPS List 1B plant species.
2. Sensitive terrestrial wildlife are defined here as:
 - wildlife designated as “species of special concern” by the CDFG or USFWS;
 - wildlife listed as “fully protected” in California; or
 - wildlife species or communities that are not endangered, threatened, or rare, but which are considered to be a quality example or unique species within the County or region.
3. Sensitive native terrestrial plant community is defined here as:
 - any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS; or
 - A plant community that is considered to be a quality example characteristic of or unique to the County or region.
4. A migration corridor is defined as any habitat that experiences recurrent wildlife movement for a given species or population and that is essential to dispersal or completion of their life cycle.

4.5.3 GENERAL PLAN POLICIES AND IMPLEMENTATION MEASURES

The following goals, policies and implementation measures of the draft General Plan are relevant to the evaluation of biological resources impacts. The full text of each policy and implementation measure is provided in Appendix A in this document (Volume IV of the General Plan). The County is required to comply with Federal and State law. The General Plan goals, policies and implementation measures support these laws.

AGRICULTURE POLICIES AND IMPLEMENTATION MEASURES

Policy 10-2a and Implementation Measure 10-2a(1)

CONSERVATION AND OPEN SPACE POLICIES AND IMPLEMENTATION MEASURES

Policy 11-2d and Implementation Measures 11-2d(1) and 11-2d(2)

Policy 11-4a and Implementation Measures 11-4a(1), 11-4a(2), 11-4a(3), 11-4a(4), 11-4a(5), 11-4a(6), 11-4a(7), and 11-4a(8)

SAFETY POLICIES AND IMPLEMENTATION MEASURES

Policy 16-6a and Implementation Measures 16-6a(1) and 16-6a(2)

4.5.4 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION

Impact BR-1. Will the Project cause a net loss of individuals, occupied habitat, or restrict the reproductive capacity of endangered, threatened, or rare wildlife or plant species?

Analysis: *Less than Significant impact*

Mariposa County contains potentially suitable habitat for a number of rare, threatened, or endangered wildlife and plant species. The special-status wildlife and plant species that may occur within Mariposa County are listed in Tables 10-2 and 10-3 of Volume III of the General Plan (Conservation and Open Space Technical Background Report). Existing mapping available through the State delineates locations of special status species within Mariposa County. If special-status wildlife or plant species are determined to occur within proposed

development areas, the loss of individuals or occupied or designated critical habitat of these species could be a significant impact.

General Plan Policies 11-2d and 11-4a have been developed to protect special status species and their habitats. These policies call for the conservation of a diverse range of water-dependent species and the continuity of riparian habitats, and the conservation of diverse habitats from intrusion and encroachment by incompatible uses.

Implementation Measures supporting Policy 11-4 specifically address the protection of rare, threatened, endangered species, sensitive habitat, breeding and nesting areas, special status species, riparian habitat, and sensitive plant communities including oak woodlands and heritage trees.

Impact BR-2. Will the Project cause a net loss of individuals of CNPS List 2, 3, or 4 plant species?

Analysis: *Less than Significant impact*

Mariposa County contains potentially suitable habitat for a number of CNPS List 2, 3, or 4 plant species. CNPS plant species that may occur within Mariposa County are listed in Table 10-2 of Volume III of the General Plan (Conservation and Open Space Technical Background Report). Existing mapping should be enhanced to identify locations of CNPS plant species within Mariposa County. If CNPS plant species are determined to occur within proposed development areas, the net loss of more than 15 percent of the known occurrences of the populations in Mariposa County would be a significant impact.

General Plan Policies 11-2d and 11-4a have been developed to protect special status species and their habitats. These policies call for the preservation of a diverse range of water-dependent species and vegetation types (including native vegetation), and the continuity of riparian habitats, and the protection of significant and sensitive habitats from intrusion and encroachment by incompatible uses.

The General Plan includes policies that specifically address the protection of CNPS plant species. The net loss of greater than 15 percent of the known occurrences of the affected CNPS populations in Mariposa County would be a significant impact.

Impact BR-3. Will the Project cause a net loss of active raptor nests, migratory bird nests, or native wildlife nursery sites?

Analysis: *Less than Significant impact*

Potential nesting raptors within the Mariposa County include those birds listed in Table 10-3 of Volume III of the General Plan (e.g., Northern goshawk, bald eagle). A number of migratory birds also nest in the County (e.g., Ferruginous hawk, Short-eared owl, Willow flycatcher). If active nest sites occur within a development area, noise and visual disturbance associated with construction activities occurring during the nesting season may lead to nest abandonment and nest failure. Construction activities could destroy active nest sites. This impact would be significant.

The General Plan requires:

Pre-construction surveys for breeding raptors and migratory birds within development areas will be conducted to determine if active nest sites exist on the site. As part of the CEQA review, if active nest sites are located, the County and project proponent will consult with the CDFG to determine appropriate construction setbacks from the nest sites. No construction activities shall occur within the construction setback during the nesting season of the affected species.

Impact BR-4. Will the Project cause a permanent net loss of habitat for sensitive wildlife species?

Analysis: *Less than Significant impact*

Sensitive wildlife habitats are defined as habitats that provide high suitability for foraging and breeding for state or federal species of special concern and California fully protected species; and important resting, foraging, and breeding habitat for migratory birds and other native wildlife. Mariposa County provides 21 distinct habitat types as identified by the habitat classification system developed by the CDFG for the California Wildlife Habitat Relationships (CWHR) program. These habitat types all fall within one of the six general vegetation communities that are present within the County (see Figure 10-1 in Volume III of the General Plan). Sensitive wildlife species associated with these habitats are identified in Table 10-3 in Volume III of the General Plan.

Implementation of General Plan Implementation Measure 11-4a(1) through 11-4a(8) will minimize the loss of habitats for sensitive species through providing development standards and programs in the Mariposa County Environmental Conservation Program that would conserve, protect, and mitigate impacts on the following:

- significant and sensitive habitat including wildlife migration corridors;
- breeding and nesting areas (as seasonally appropriate);
- riparian habitat around bodies of water and along watercourses and seasonal drainages.

Implementation Measure 11-4a(7) requires the documentation of site survey data on a comprehensive map. Loss of greater than 25 percent of a given habitat type in a proposed project area would be a significant impact.

Impact BR-5. Will the Project cause a permanent loss of sensitive native plant communities?

Analysis: *Less than Significant impact*

A sensitive native plant community is defined here as any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS; or a plant community that is considered to be a quality example characteristic of or unique to the County or region.

Implementation of General Plan Implementation Measures 11-4a(1) through 11-4a(8) would minimize the loss of habitats for sensitive species through providing development standards and programs in the Mariposa County Environmental Conservation Program that would conserve, protect, and mitigate impacts on the following:

- significant and sensitive plant communities.

Loss of greater than 25 percent of sensitive native plant communities would be a significant impact.

Impact BR-6. Will the Project substantially block or disrupt wildlife migration or travel corridors?

Analysis: *Less than Significant impact*

A migration corridor is defined as any habitat that experiences recurrent wildlife movement for a given species or population and that is essential to dispersal or completion of their life cycle. There is no existing mapping of wildlife migration or travel corridors in Mariposa County.

The following General Plan Policy relates to the protection of wildlife migration or travel corridors:

Policy 11-2d: Conserve water sources for water-dependent species and the continuity of riparian habitats. This policy would help preserve creeks, streams and other waterways in their natural state whenever possible. Riparian environments may serve as dispersal and/or migration corridors for some wildlife species.

Implementation of General Plan Implementation Measure 11-4a(1) through 11-4a(8) will minimize the loss of habitats for sensitive species through providing development standards and programs in the Mariposa County Environmental Conservation Program that would conserve, protect, and mitigate impacts on the following:

- significant and sensitive habitat including wildlife migration corridors.

If more than 50 percent of a migration or travel corridor is disrupted or blocked, the proposed development would result in a significant impact.

If migration or travel corridors are found at the prospective project site they will be avoided to the extent feasible. If avoidance of more than 50 percent of the corridor is not feasible, the project proponent will work in conjunction with CDFG to determine the best means to protect, restore, or replace the portion of the corridor impacted.

Impact BR-7. Will the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, state or federal habitat conservation plan?

Analysis: *Less than significant impact*

Under General Plan Implementation Measure 11-4a(1), the Mariposa County Planning Department during the intermediate-term planning period would review the preparation of a Mariposa County Environmental Conservation Program. This Program would include development standards, conservation programs, and mitigation measures for impacts on:

- significant and sensitive habitat including wildlife migration corridors,
- breeding and nesting areas (as seasonally appropriate);

- known occurrences of special status animal species;
- riparian habitat around bodies of water and along watercourses and seasonal drainages;
- known occurrences of special status plant species, and
- significant and sensitive plant communities.

The General Plan would not conflict with the provisions in the Mariposa County Environmental Conservation Program. The Program review by the County would occur after the adoption of the General Plan.

Mitigation: *None required*

Impact BR-8. Will the project result in a net loss of wetlands, vernal pools, or other waters of the U.S.?

Analysis: *Less than Significant impact*

Any development project that will result in a net loss of wetlands or other waters of the U.S. will be subject to the U.S. Army Corps of Engineers Section 404 permit process, pursuant to the Clean Water Act, and to RWQCB Section 401 Water Quality Certification.

The following General Plan policies relate to the protection of wetlands and other water resources:

Policy 11-2d: Conserve water sources for water-dependent species and the continuity of riparian habitats. Implementation Measure 11-2d(1): Implement requirements for minimum building and grading setback lines from all waters of the State (i.e., perennial streams and environmentally significant wetlands), that are adequate to protect stream, riparian, and wetland resource values.

Policy 11-4a: Conserve the diversity of native ecosystems, plant communities, wildlife habitat, and plant and animal species in the County. Policy 16-6a: Retain flood plains within project design in such a way as to ensure that no net change or loss occurs upstream or downstream

However, these General Plan policies do not specifically address a no net loss of wetlands or other waters of the U.S. policy. A net loss of greater than zero acres of wetlands or other waters of the U.S. would be a significant impact.

Implementation Measures that support Policy 11-4a require site-specific surveys to determine if a project will impact a jurisdictional wetland or other waters of the U.S.

Where impacts are found to occur, the project proponent will work in conjunction with the U.S. Army Corps of Engineers, pursuant to the requirements of the Section 404 permit, and with the RWQCB, pursuant to the requirements of the Section 401 Water Quality Certification permit, to establish a means of protecting, restoring, or replacing the wetland or waterway, such that a no net loss of wetland functions or values is achieved.

4.6 GEOLOGY AND SEISMICITY

This section addresses potential geologic and seismic impacts associated with implementation of the draft General Plan. Specific topics include impacts related to: effects of seismic activity (such as ground surface rupture; ground shaking; ground deformation; or liquefaction of soils); unstable slope conditions; and expansive soils or soils with moderate to high erosion potential.

4.6.1 AFFECTED ENVIRONMENT (SETTING)

This is an integrated General Plan and Program EIR which is comprised of Volumes I, II, III and IV of the General Plan Update 2005. The description of the affected environment that provides a basis for this evaluation of geology and seismicity impacts may be found in Section 10.2 and Section 15.5 of Volume III. This section provides information on geologic and seismic conditions in Mariposa County.

4.6.2 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The evaluation criteria for Geology and Seismicity are presented in Table 4.6-1. These criteria are drawn primarily from local plans and CEQA requirements.

**Table 4. 6-1
Evaluation Criteria with Points of Significance
Geology and Seismicity**

Evaluation Criteria	As Measured by	Point of Significance	Justification
GS-1. Will project facilities be damaged by ground surface rupture?	Hazards associated with location of facilities within an Alquist-Priolo earthquake fault zone.	One or more structures without appropriate seismic design features located within an earthquake fault zone.	Mariposa County Hazard Zone Maps. Alquist-Priolo (earthquake fault zone) Act. CDMG mapping of fault zones CEQA Checklist Item VI (a)(i).
GS-2. Will earthquake-induced strong ground shaking damage Project facilities?	Structural design and construction not in conformance with requirements of seismic design standards.	One or more structures not in compliance with the provisions of the Uniform Building Code. One or more structures of unique design not covered by the ordinary provisions of the Uniform Building Code.	Mariposa County Plan Review Uniform Building Code (1997) with California amendments (1998). CEQA Checklist Item VI (a)(ii).
GS-3. Will project facilities be damaged by co-seismic ground deformation?	Hazards associated with location of facilities within the Bear Mountain and Melones faults of the Foothills Fault System.	One or more structures without appropriate seismic design features located within a designated zone of potential co-seismic deformation.	Mariposa County Hazard Zone Maps. CEQA Checklist Item VI (a)(iii).
GS-4. Will project facilities be damaged by liquefaction or settlement during an earthquake?	Hazards associated with CDMG rating of potential for liquefaction, or more detailed geotechnical assessment of liquefaction potential.	One or more structures without appropriate seismic design features located within an area of high risk for liquefaction or settlement.	Mariposa County Hazard Zone Maps. CEQA Checklist Item VI (a)(iii).

**Table 4. 6-1
Evaluation Criteria with Points of Significance
Geology and Seismicity**

Evaluation Criteria	As Measured by	Point of Significance	Justification
GS-5. Will project facilities be damaged by unstable slope conditions?	Hazards associated with location in an area of moderate to high landslide risk, defined by Mariposa County, including roads with slopes greater than 20% and buildings on slopes greater than 30%.	One or more structures located within an area of moderate to high landslide risk without appropriate slope stabilization.	Mariposa County Hazard Zone Maps. CEQA Checklist Item VI (a) (iv), and (c).
GS-6. Will Project facilities be exposed to damage due to expansive soils or soils with moderate to high erosion potential?	Shrink-swell potential and erosion potential as rated in Mariposa County Soil Survey (Soil Conservation Service).	One or more structures not covered by the Uniform Building Code located on soils with a rating of moderate to high for shrink-swell or high for erosion potential.	Mariposa County Hazard Zone Maps. USDA Soil Conservation Service (SCS) Report. CEQA Checklist Item VI (b) and (d).

Source: Parsons, 2005.

4.6.3 GENERAL PLAN POLICIES AND IMPLEMENTATION MEASURES

The following goals, policies and implementation measures of the draft General Plan are relevant to the evaluation of geology and seismicity impacts. The full text of each policy and implementation measure is provided in Appendix A in this document (Volume IV of the General Plan).

LAND USE POLICIES AND IMPLEMENTATION MEASURES

Policy 5-7a and Implementation Measure 5-7a(1)

SAFETY POLICIES AND IMPLEMENTATION MEASURES

Policy 16-7a and 16-7b and Implementation Measures 16-7a and b(1) and 16-7a and b(2)
Policy 16-8a and Implementation Measure 16-8a(1)
Policy 16-8b and Implementation Measure 16-8b(1)
Policy 16-9a and Implementation Measure 16-9a(1)

4.6.4 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION

Impact GS-1. Will project facilities be damaged by ground surface rupture?

Analysis: *Less than significant impact*

The Foothills Fault System crosses Mariposa County from the northwest to southeast in two major parallel fault and fracture zones. The westernmost is the Bear Mountain Fault Zone and the easternmost is the Melones Fault Zone. The width of the zones of associated faults and fractures is several miles.

The probability of an earthquake occurrence on the Foothills Fault System is rated as low – the fault zone is classified as a “C” zone under the Universal Building Code (UBC). From the two known historic earthquakes that have occurred in Mariposa County, indications are that the area could experience rare earthquakes up to magnitude 6.5 on the Richter scale in the future.

In 1972, the state adopted the Alquist-Priolo Earthquake Fault Zoning Act, which requires delineation of regulatory zones on active earthquake faults in the state. Under this program, the Melones and Bear Mountain Fault Zones are identified, but are not considered to be active. However, even though no active faults are known, there is a risk of ground surface rupture from unrecognized or dormant faults that could be reactivated. The possibility of ground surface rupture would create a potentially significant impact to structures located within the fault zone.

General Plan Policy 16-8a requires the development and enforcement of standards to reduce risks of injury or property damage from seismic activity. Specifically, policy implementation would require that new development projects in or near fault zones or geologic hazard areas be discouraged or designed to such standards as to minimize or eliminate risks to the satisfaction of Mariposa County. Implementation Measure 16-8b(1) requires that public facilities be sited and constructed to meet state and UBC seismic safety requirements, while Implementation Measure 16-9a(1) requires the review of development and subdivision proposals to avoid building sites in areas subject to secondary seismic effects.

Implementation of the proposed policies identified above would ensure that impacts are less than significant.

Mitigation: *None required*

Impact GS-2. Will earthquake-induced strong ground shaking damage Project facilities?

Analysis: *Less than significant impact*

The potential for earthquake-induced ground shaking to damage property is addressed under Impact GS-1 above. Potential effects from strong ground shaking would be mitigated to less than significant through implementation of the same draft General Plan policies as described above.

Mitigation: *None required*

Impact GS-3. Will project facilities be damaged by co-seismic ground deformation?

Analysis: *Less than significant impact*

The potential for earthquake-induced co-seismic ground shaking to damage property is addressed under Impact GS-1 above. Co-seismic events are those events occurring on two separate but nearby faults, such as on the Bear Mountain and Melones faults of the Foothills Fault system. Potential effects from co-seismic ground deformation would be mitigated to less than significant through implementation of the same draft General Plan policies as described above.

Mitigation: *None required*

Impact GS-4. Will project facilities be damaged by liquefaction or settlement during an earthquake?

Analysis: *Less than significant impact*

Ground failures are caused by loss of strength of the ground surface resulting from ground shaking during an earthquake. This shaking can be initiated by a fault that does not directly underlie the ground failure. Ground failures include landslides and rockfalls (discussed under Impact GS-5 below), liquefaction (a sudden temporary loss of soil cohesiveness), and differential settlement. The latter two hazards can occur in fine-grained, water-saturated valley sediments having high water tables.

Areas having conditions leading to potential liquefaction and settling have not been extensively mapped in Mariposa County. Liquefiable soils occur both in relatively small lenses as well as in more extensive areas.

The draft General Plan policies mitigating geologic hazards described in Impact GS-1 above would also protect against liquefaction and settling caused by earthquakes, reducing the impact potential to less than significant.

Mitigation: *None required*

Impact GS-5. Will project facilities be damaged by unstable slope conditions?

Analysis: *Less than significant impact*

Mariposa County has extensive areas of steep slopes in the mountainous eastern half of the County. The situation is accentuated in local areas where slopes are made even steeper during development of roads and structures. Impacts from unstable slope conditions include landslides and rockfalls on steep, unstable slopes. These mass movements can be initiated by earthquakes, heavy rainfall, new excavation in areas of active or inactive sliding, in isolated pockets of steep slopes, or in otherwise instable slope areas. Human-related landslide activity generally involves disturbance or excavation of the toe or overloading the head of a slope or slide during foundation preparation, road construction, or utility trenching. For this reason, the draft General Plan Land Use Element provides for Planning Commission review of subdivisions with slopes on parcels in excess of 15 percent. Further, to reduce risk from construction on steep slopes, development sites with slopes over 15 percent would incorporate landform grading engineered for stability and be designed to match the natural contours and topography, blending in with the natural environment.

General Plan Policy 16-7a reduces risk from landslides and rockfalls by continued enforcement of the County grading code ensuring proper site preparation, road construction, and vegetation removal. Policy 16-7b and its implementation measures require additional site inspections, engineering studies, and reviews of new construction in geologic hazard areas prior to approvals. Policy 16-8a and Implementation Measure 16-8a(1) discourages development in geologic hazard areas or requires that such development be designed to reduce or eliminate risks.

Implementation of the proposed policies would reduce the impact to a level of less than significant.

Mitigation: *None required*

Impact GS-6. Will Project facilities be exposed to damage due to expansive soils or soils with moderate to high erosion potential?

Analysis: *Less than significant impact*

Soils are created primarily from the disintegration and decomposition of mineral rocks, mixed with decomposed organic matter. The shrink-swell potential of soil affects development costs and capacity due to the potential for damage to foundations and structures as the soil expands and contracts. In Mariposa County, soils of the Trabuco-San Andreas-Coarsegold Association and the Blasingame-Las Posas Association contain clay loams associated with high shrink-swell potential. These soils are found on gently sloping to steep slopes throughout the County, including the Mariposa, Catheys Valley and Coulterville Town and Community Plan Areas.

Areas of high erosion hazard generally correspond to areas of steep slopes. Soil erosion creates siltation on ponds, streams and lakes, modifies existing topography, decreases vegetation diversity and coverage, and interferes with groundwater recharge. Areas with slopes of 15 percent or greater are concentrated in the central and eastern portions of the County, with large areas of steep slopes in the Mariposa and Coulterville planning areas, and to a lesser extent in the Catheys Valley planning area.

The draft General Plan policies described in Impact GS-5 above would also protect against damage from soil expansion and erosion, reducing the impact potential to less than significant.

Mitigation: *None required*

4.7 HYDROLOGY AND WATER QUALITY

This section addresses potential hydrologic and water quality impacts associated with implementation of the draft General Plan. Specific topics include impacts related to: increased off-site runoff, degradation of surface runoff quality, groundwater quantity and quality, locating housing or structures within a 100-year flood hazard area, impedance or redirection of flood flows, and exposure of people or structures to significant risk from flooding (including flooding from failure of a levee or dam, or due to inundation by seiche, tsunami, or mudflow).

4.7.1 AFFECTED ENVIRONMENT (SETTING)

This is an integrated General Plan and Program EIR which is comprised of Volumes I, II, III and IV of the General Plan Update 2005. The description of the affected environment that provides a basis for this evaluation of hydrology and water quality impacts may be found in Section 10.3 of Volume III. This section provides information on hydrologic conditions and existing water quality in Mariposa County.

4.7.2 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The evaluation criteria for Hydrology and Water Quality are presented in Table 4.7-1. These criteria are drawn primarily from local plans and CEQA requirements.

**Table 4.7-1
Evaluation Criteria with Points of Significance
Hydrology and Water Quality**

Evaluation Criteria	As Measured by	Point of Significance	Justification
HW-1. Will the Project cause increased off-site runoff?	Increase in the peak 100-year storm runoff to streams.	No net increase in runoff from the site in excess of the capacity of natural drainage courses receiving runoff from the site	CEQA Checklist Items VIII (d) and (e).
HW-2. Will the Project result in a degradation of surface runoff quality?	Compliance with local and state storm water quality regulations requiring implementation of Best Management Practices.	Any failure to implement effective, reasonable and appropriate measures.	State of California General NPDES Permits for Discharges of Stormwater Associated with Construction and Industrial Activities. CEQA Checklist Items VIII (a), (c), and (d).
HW-3. Will the Project reduce groundwater quantity?	Number of documented wells presenting lower groundwater levels.	Conflict with Mariposa County Health Department standards for groundwater quantity or quality.	CEQA Checklist Item VIII (b). Mariposa County Health Department standards.

**Table 4.7-1
Evaluation Criteria with Points of Significance
Hydrology and Water Quality**

Evaluation Criteria	As Measured by	Point of Significance	Justification
HW-4. Will the Project degrade groundwater quality?	Presence of any land use that would contribute to groundwater degradation in an area that has a conduit for such degradation.	Conflict with Mariposa County Health Department standards for groundwater quality.	Model Mountain County Development Program, Chapter 3. CEQA Checklist Items VIII (a) and (f).
HW-5. Will the project place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, place structures in the 100-year flood hazard area that would impede or redirect flood flows or expose people or structures to a significant risk of loss, injury, or death involving flooding?	Presence of planned future housing in a flood hazard area, or structures in a flood hazard area that would impede or redirect flood flows or other risks in flood hazard areas.	Conflict with Federal flood insurance maps or other flood hazards delineation maps.	CEQA Checklist Items VIII (g) and (h). Federal Flood Hazard Boundary maps. Flood insurance rate maps.
HW-6. Will the project expose people or structures to significant risk from flooding, including flooding from failure of a levee or dam, or due to inundation by seiche, tsunami, or mudflow?	Presence of planned future housing or commercial and industrial land uses in a hazard area.	Conflict with identified risk areas.	CEQA Checklist Items VIII (i) and (j).

Source: Parsons, 2005.

4.7.3 GENERAL PLAN POLICIES AND IMPLEMENTATION MEASURES

The following goals, policies and implementation measures of the draft General Plan are relevant to the evaluation of hydrology and water quality impacts. The full text of each policy and implementation measure is provided in Appendix A in this document (Volume IV of the General Plan).

LAND USE POLICIES AND IMPLEMENTATION MEASURES

- Policy 5-2a and Implementation Measures 5-2a(1) and 5-2a(2)
- Policy 5-7a and Implementation Measure 5-7a(1)
- Policy 5-10a and Implementation Measure 5-10a(1)

CIRCULATION, INFRASTRUCTURE, AND SERVICES POLICIES AND IMPLEMENTATION MEASURES

Policy 9-5a and Implementation Measure 9-5a(1)

CONSERVATION AND OPEN SPACE POLICIES

Policy 11-2a and Implementation Measures 11-2a(1), 11-2a(2), and 11-2a(3)

Policy 11-2b and Implementation Measure 11-2b(1)

Policy 11-2c and Implementation Measures 11-2c(1) and 11-2c(2)

Policy 11-4a and Implementation Measures 11-4a(6) and 11-4a(8)

Policy 11-5a and Implementation Measures 11-5a(1) and 11-5a(2)

SAFETY POLICIES AND IMPLEMENTATION MEASURES

Policy 16-4a and 16-4b and Implementation Measures 16-4a and b(1)

Policy 16-4c and Implementation Measure 16-4c(1)

Policy 16-5a and Implementation Measures 16-5a(1) and 16-5a(2)

Policy 16-5b and Implementation Measure 16-5b(1)

Policy 16-5c and Implementation Measure 16-5c(1)

Policy 16-6a and Implementation Measures 16-6a(1) and 16-6a(2)

Policy 16-7a and 16-7b and Implementation Measures 16-7a and b(1) and 16-7a and b(2)

Policy 16-11a and Implementation Measure 16-11a(1)

4.7.4 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION

Impact HW-1. Will the Project cause increased off-site runoff?

Analysis: *Less than significant impact*

New development under the draft General Plan would potentially increase off-site runoff. General Plan Policy 11-5a and Implementation Measure 11-5a(1) would minimize the effects of grading activities on all development projects for erosion control. However, Implementation Measure 16-5a(2) requires on-site detention for all storm water flows in excess of the capacity of natural drainage courses receiving runoff from the development. Further, Policy 16-5c requires the construction of water retention facilities that would prevent flooding and would ensure that pre-development off- and on-site surface flows are maintained with no net increase flow. The implementation of these measures would reduce the impact to less than significant.

Mitigation: *None required*

Impact HW-2. Will the Project result in a degradation of surface runoff quality?

Analysis: *Significant impact*

New development under the draft General Plan could result in increased contaminants in surface runoff due to the introduction of additional paved surfaces as well as landscaping fertilization and irrigation. Grading, construction, and inadequate revegetation also can contribute to increased

sediment flowing to streams. Domestic wastewater from improperly located septic systems could also degrade surface runoff.

The draft General Plan includes policies and implementation measures that would reduce the potential for increased contaminants in runoff. Policy 11-2b and Implementation Measure 11-2b(1) provide for the preservation of surface water quality by reviewing development designs to ensure developments do not discharge contaminated water. Policy 11-5a and Implementation Measure 11-5a(1) would minimize the effects of grading activities on all development projects for erosion control. Policy 11-2c and its implementation measures provide for maintaining low intensities of development and other measures to protect watersheds that provide a potable water source. Policy 11-2d and its implementation measures provide for minimum building and grading setbacks from all waters of the State (i.e., perennial streams and environmentally significant wetlands), which would decrease the potential for contamination from roadways and structures. In addition, certain construction and industrial activities undertaken in the County would require compliance with the National Pollution Discharge Elimination System (NPDES), under which a Storm Water Pollution Prevention Plan (SWPP) would be prepared, implemented and monitored.

Implementation of the policies and implementation measures in the draft General Plan, along with the NPDES requirements would reduce the amount of pollutants in runoff from new development, but would not necessarily reduce the impacts to less than significant, because not all development would be required to conform to storm water pollution control best management practices (BMPs).

Mitigation: None required.

Impact HW-3. Will the Project reduce groundwater quantity?

Analysis: *Less than significant impact*

Much of the groundwater in Mariposa County is recovered from hard rock wells drilled into granitic rock. The water-bearing characteristics of most crystalline rocks, such as granite, are controlled by weathering and structure, which controls the permeability of the rock and varies considerably within the County. Drilling in crystalline rocks encounters highly variable amounts of water. This variability in yield from place to place (even on adjacent properties), particularly at a feasible economic cost, rather than any limits on overall quantity of the groundwater resource, is the controlling factor in providing adequate water supply to support development in the County.

Policy 11-2c of the draft General Plan and its supporting implementation measures provide for the preservation of existing or potential sources of a sustainable water supply through maintaining low intensities of development in order to protect the capacity of watersheds and would designate watershed areas of surface water systems where such systems and their proposed watershed areas serve or are capable of serving as a potable water source. . In addition, Policy 9-5a and Implementation Measure 9-5a(1) require that new projects and subdivisions in the County have access to basic water and wastewater infrastructure, including a potable water supply meeting health department

requirements and access to an approved source for wastewater treatment and disposal.

Application of the above policies and implementation measures, by preserving the function of watersheds and recharge areas to provide a groundwater supply, and by requiring that new development have a water supply system of proven quantity, will reduce impacts on groundwater quantity to less than significant.

Mitigation: *None required*

Impact HW-4. Will the Project degrade groundwater quality?

Analysis: *Less than significant impact*

Development that relies upon on-site sewage disposal systems rather than central sewage collection, treatment and disposal facilities creates the potential for groundwater quality impacts if not properly installed, particularly where soils are not conducive to septic systems. Less than 10 percent of Mariposa County's lands have soils with minimal depth or permeability constraints. While much of the County has only moderate constraints due to permeability, 90 percent of the county's lands have severe constraints because of soil depth.

The draft General Plan addresses the constraints for on-site sewage disposal systems in several ways. Higher intensity uses are directed to develop within planning areas, where access to public sewage systems would be available. Policy 5-4a and its implementation measures provide for clustering commercial and service development, particularly commercial, healthcare, financial, and other service businesses, as well as primary job-based development in industries and services in planning areas. In addition, these measures provide for clustering of local commercial and service activities in Rural Economic centers, which would facilitate the use of small community disposal systems rather than individual septic fields. General Plan land use classifications outside the planning areas, where development would use on-site disposal systems, show that the minimum parcels sizes are intended to allow adequate area to locate the disposal system in suitable soils. New parcels must have approved areas for onsite sewage disposal if sewer connections are not available and would be required to obtain an approval from the County Health Department. In addition, community on-site sewage systems that exceed 5,000 gallons per day, or community systems that rely on advanced sewage treatment (e.g., via wastewater package plant), are potentially subject to RWQCB regulations.

For non-domestic sources of waste discharges (i.e., wineries, gravel or mining operations), the County may approve projects that discharge waste to land that may degrade waters of the state for, at minimum, salt constituents and potentially with pathogens, oxygen-demanding substances, nutrient waste constituents, metals, and other waste constituents. Projects that propose to discharge waste, pursuant to Section 13260 of the California Water Code, will comply with adopted California regulations.

With the application of the proposed policies, implementation measures and land use classifications of the draft General Plan, the potential for improperly located or designed on-site sewage disposal would be minimized and the impacts on ground water quality would be reduced to less than significant.

Mitigation: *None required*

Impact HW-5. Will the project place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, place structures in the 100-year flood hazard area that would impede or redirect flood flows or expose people or structures to a significant risk of loss, injury, or death involving flooding?

Analysis: *Less than significant impact*

Due to the amount of steep terrain in the County, flood hazard areas in Mariposa County are not extensive, although there has been flooding in areas of low elevation, as well as in areas where stream channels are not well defined. In addition, the January 1997 flood on the Merced River demonstrated the potential for devastation within flood hazard areas.

The draft General Plan provides for the adoption of a comprehensive County Flood Protection Ordinance that includes the following requirements at a minimum:

- All structures in flood hazard areas are constructed with materials and equipment resistant to flood damage.
- All mobile homes shall be anchored by providing over-the-top and frame ties to ground anchors.
- All new and replacement water systems shall be designed to prevent infiltration of floodwaters into the system.
- On-site sewage disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

A flood plain encompasses the 100-year flood hazard area. Policy 16-6a states retention of a flood plain within project design would be done in such a way as to ensure that no net change in flow occurs upstream or downstream. With no net change in upstream or downstream flow, development within a 100-year flood hazard area would not impede or redirect flood flows or expose people or structures to a significant risk.

Other policies and implementation measures provide for controlling development in flood hazard areas (Policy 16-4a and Implementation Measure 16-6a(2)); flood proofing of all new construction in flood hazard areas (Policy 16-4b); and ensuring that flood flow capacity is maintained (Policy 16-5a and Implementation Measures 16-5a(1) and (2)). All of these policies would reduce the impacts of development on flood hazard areas to a less than significant level.

Mitigation: *None required*

Impact HW-6. Will the project expose people or structures to significant risk from flooding from failure of a levee or dam, or to inundation by seiche, tsunami, or mudflow?

Analysis: *Less than significant impact*

There are numerous dams in Mariposa County that could potentially expose people and structures to risk from dam failure, including Exchequer Dam, which is the largest with a capacity of 1,000,000 acre-feet, as well as Green Valley

Dam, Hendricks Dam, Mariposa Pines Dam, McMahan Dam, McSwain Dam, Metzger Dam and the Stockton Creek Dam, and flood control dams on Mariposa, Owens, Bear and Burns Creeks. In addition to the dams located in Mariposa County, failure of the dam on Lake Don Pedro, although not within Mariposa County, nonetheless would impact portions of the County. Also, because the County is within a seismically active area, all of major reservoirs would present some degree of risk of damage from a seiche caused by seismic activity, although in most cases there is little development along the immediate shoreline of the reservoirs. Mariposa County is not subject to the effects of tsunamis.

In California, dams are subject to review and approval by the Division of Safety of Dams (except for dams less than 6 feet in height or with a reservoir capacity of less than 15 acre-feet). The Division controls the construction and alteration of dams as well as approving the impoundment of water behind a dam. The review and approval process would significantly reduce the potential for dam failures and seiches. Policy 16-4c and Implementation Measure 16-4c(1) would control development in dam inundation areas and would amend the County Zoning Ordinance to include a dam inundation overlay district. This policy would reduce the number of people and structures exposed to risk from inundation due to dam failure.

Policy 16-7a and 16-7b and their implementation measures provide for the reduction of risk of injury or property damage from landslides and rockfalls and for avoiding development in high-risk geologic hazard areas. Policy 11-5a and Implementation Measure 11-5a(1) minimize the impacts of grading activities and provide for continued review of the County's Grading Ordinance provisions for erosion control on all development projects.

Mariposa County manages and coordinates its emergency response activities in conjunction with the California Standardized Emergency Management System (SEMS). The draft Evacuation Plan of Mariposa County provides guidance for initial response to emergencies to standardize emergency response procedures. In addition, the Evacuation Plan provides an evacuation procedure including the establishment of evacuation staging areas and provides Emergency Alert System (EAS) Guidelines to standardize the format for communicating basic information needed by the public in an emergency. Policy 16-12a and Implementation Measure 16-12a(1) and (2) provide for updating the County's Emergency Management Plan every five years and for periodic full operation emergency situation drills and training.

The regulatory activities of the Division of Safety of Dams, along with the County's evacuation plan and the above policies of the draft General Plan would reduce the risk of flooding from failure of a levee or dam, or to inundation by seiche or mudflow to less than significant.

Mitigation: *None required*

4.8 AIR QUALITY

This section addresses potential air quality impacts associated with implementation of the draft General Plan. Specific topics include impacts related to: construction-period emissions; emission growth factors and emission thresholds; odors; changes in air movement, moisture, temperature, or climate; and exposure of people to toxic air contaminants.

4.8.1 AFFECTED ENVIRONMENT (SETTING)

This is an integrated General Plan and Program EIR which is comprised of Volumes I, II, III and IV of the General Plan Update 2005. The description of the affected environment that provides a basis for this evaluation of air quality impacts may be found in Section 10.5 of Volume III. This section provides information on meteorologic conditions, emissions, and air quality in Mariposa County.

4.8.2 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The evaluation criteria for Air Quality are presented in Table 4.8-1. These criteria are drawn primarily from local plans and CEQA requirements.

**Table 4.8-1
Evaluation Criteria with Points of Significance
Air Quality**

Evaluation Criteria	As Measured by	Point of Significance	Justification
AQ-1. Will there be adequate mitigation for potential construction-period emissions?	Compliance with Mariposa County, state and federal air quality standards.	Any failure to include required mitigation.	CEQA Checklist Item III (b), (d), and (e). Mariposa County APCD Rules 202 and 205.
AQ-2. Is the Project inconsistent with emission growth factors contained in any air quality plans or will the project result in emissions greater than the listed significance thresholds?	Emissions of NO _x , CO, and PM ₁₀ .	Emissions in excess of 100 tons per year of any criteria air contaminant or precursor.	CEQA Checklist Item III (b) and (d). Mariposa County APCD Rules 419 and 420.
AQ-3. Will the Project create objectionable odors?	Establishment of new odor sources (e.g., waste water treatment plants, composting, etc.).	Proposed uses with a record of verified odor complaints in a one-year period resulting in a Notice of Violation at another location.	CEQA Checklist Item III (e). Mariposa County APCD Rule 205.
AQ-4. Will the Project significantly alter air movement, moisture, or temperature, or change in climate, either locally or regionally?	Development of new sources that modify climate (e.g., large power plants, etc.).	Project sources emitting large quantities of CO ₂ or methane on the order of 500 tpy.	CEQA Guidelines, Global Climate Agreements. CEQA Checklist Item III (a).

**Table 4.8-1
Evaluation Criteria with Points of Significance
Air Quality**

Evaluation Criteria	As Measured by	Point of Significance	Justification
AQ-5. Will the Project expose sensitive receptors or the general public to substantial levels of toxic air contaminants?	Creation of new sources with potential to emit substantial amounts of toxic air contaminants (including past history as basis).	Mariposa County APCD risk significance thresholds.	CEQA Checklist Item III (a). Mariposa County APCD Regulation IX.

Source: Parsons, 2005.

4.8.3 GENERAL PLAN POLICIES AND IMPLEMENTATION MEASURES

The following goals, policies and implementation measures of the draft General Plan are relevant to the evaluation of air quality impacts. The full text of each policy and implementation measure is provided in Appendix A in this document (Volume IV of the General Plan).

LAND USE POLICIES AND IMPLEMENTATION MEASURES

- Policy 5-2a and Implementation Measures 5-2a(1) and 5-2a(2)
- Policy 5-4a and Implementation Measures 5-4a(1), 5-4a(2), and 5-4a(3)
- Policy 5-7a and Implementation Measure 5-7a(1)
- Policy 5-10a and Implementation Measure 5-10a(1)

CIRCULATION POLICIES AND IMPLEMENTATION MEASURES

- Policy 9-1a and Implementation Measure 9-1a(1)
- Policy 9-2a and Implementation Measures 9-2a(1), 9-2a(2), and 9-2a(3)
- Policy 9-1d and Implementation Measure 9-1d(1)
- Policy 9-3a and Implementation Measures 9-3a(1) and 9-3a(2)

ECONOMIC DEVELOPMENT POLICIES AND IMPLEMENTATION MEASURES

- Policy 6-3a and Implementation Measure 6-3a(1)
- Policy 6-4a and Implementation Measure 6-4a(1)

CONSERVATION AND OPEN SPACE POLICIES AND IMPLEMENTATION MEASURES

- Policy 11-1c and Implementation Measures 11-1c(1), 11-1c(2), 11-1c(3), and 11-1c(4)
- Policy 11-5a and Implementation Measures 11-5a(1) and 11-5a(2)

4.8.4 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION

Impact AQ-1. Will there be adequate mitigation for potential construction-period emissions?

Analysis: *Less than Significant impact*

Construction of buildings, roads, and infrastructure creates air pollutant emissions during the period of construction. The actual amounts of these emissions depends on the type of construction being performed, its magnitude and, to some extent, weather and soil moisture conditions. Construction emissions are of three basic types: exhaust emissions from construction equipment engines, delivery vehicles, and construction worker vehicles; dust raised by motor vehicle and equipment tires operating on paved and unpaved surfaces; and general fugitive dust emissions eroding from areas such as unpaved construction sites and material stockpiles.

The Mariposa County Air Pollution Control District (APCD) has two prohibitory rules that can address construction phase emissions. These include Rule 202, which prohibits visible emissions in excess of Number 1 on the Ringlemann Chart, as published by the United States Bureau of Mines, and Rule 205, which is a general nuisance prevention rule. The APCD does not have a quantified construction emissions significance threshold.

Construction emissions can be reduced by a number of techniques, including:

- maintaining construction vehicles and equipment according to manufacturers specifications;
- limiting equipment idling time;
- scheduling construction truck work trips to non-peak traffic hours;
- minimizing the length of construction truck trips;
- using water or chemicals to control dust from demolition, construction, or grading;
- applying asphalt, oil, water, or suitable chemicals on unpaved roads, material stockpiles or other surfaces;
- installation of hoods, fans and filters to enclose and vent the handling of dusty materials;
- using water, chemicals, chuting, venting, or other precautions when handling dusty materials in open stockpiles and mobile equipment; and
- maintaining paved roadways in a clean condition.

The use of the above emissions control measures, or others as appropriate, during construction can be expected to reduce emissions to a level of less than significant.

Policy 11-1c and its implementation measures implement standards that minimize impacts and/or improve air quality. These include compliance with Federal and State air quality regulations, establishment of land use patterns that minimize impacts, a program that encourages solar access, road improvement

projects, and cooperation with the Air Pollution Control District to improve air quality. Policy 11-5a requires proper grading practices under the County Grading Ordinance for erosion control, and requires periodic review of the ordinance. The Grading Ordinance does not directly address dust emissions from grading, but in general, the provision for Best Management Practices (BMPs) for erosion control contained in the ordinance would also have a beneficial effect on dust emissions.

Mitigation: None required

Impact AQ-2. Is the Project inconsistent with emission growth factors contained in any air quality plans or will the project result in emissions greater than the listed significance thresholds?

Analysis: *Less than Significant impact*

Mariposa County is classified as either “attainment” or “unclassified” for the federal ambient air quality standards for carbon monoxide (CO), nitrogen dioxide (NO₂), and sulfur dioxide (SO₂). Mariposa County is classified as non-attainment for ozone (O₃) and particulate matter of 10 microns or less (PM₁₀) under federal standards due to transport issues beyond the control of the Mariposa County APCD. Since this reclassification is due to air quality pollution transported into the County from the San Joaquin Valley and San Francisco Bay Area, it is unsure at this time what effect this designation will have on Mariposa County with regard to the Mariposa County APCD being required to develop a federal air quality attainment plan. Therefore, potential impacts associated with air quality planning would be significant.

Build-out of the proposed General Plan land uses and associated population growth will incrementally increase emissions from mobile, stationary, and area sources. The California Air Resources Board URBEMIS 2002 model was used to calculate order-of-magnitude emissions estimates from implementation of the General Plan in its horizon year. While there is no specific information available concerning future motor vehicle use, the URBEMIS 2002 model is useful in estimating emissions for use on a comparative basis to determine whether the significance threshold of 100 tons per year of any criteria air contaminant or its precursor would be exceeded.

The URBEMIS 2002 model utilizes algorithms specific to the mountain counties to estimate stationary and area source emissions. Statewide motor vehicle emissions factors for 2000 were used for the year 2000 estimate, and motor vehicle emissions factors for 2040 were used for the horizon year emissions estimate. The URBEMIS 2002 forecast emissions estimates are shown on the following table.

Current and Horizon Year Emissions Estimates (tons per year)

Pollutant	Year 2000	Horizon Year 2040	Change
Reactive Organic Gases (ROG)	330	215	(115)

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Nitrogen Oxides (NO_x)	447	97	(350)
Carbon Monoxide (CO)	3,172	614	(2,558)
Small Particulate Matter (PM₁₀)	190	358	168

Source: California Air Resources Board, 2005.

Note: Data rounded to the nearest whole number.

The table above shows two results. First, emissions of all pollutants except for PM₁₀ decline by 2040. This result is due to the improving emissions characteristics of the motor vehicle fleet from 2000 to 2040, which partially overcomes emissions increases resulting from increases in the total number of vehicles in use and miles driven, and from increased area sources. Second, the net PM₁₀ emissions increase results almost entirely from the increased number of motor vehicles anticipated in the future – PM₁₀ emissions from area sources alone are less than 1 ton per year. The increase in PM₁₀ emissions is greater than 100 tons per year and is therefore significant.

Implementation of draft General Plan policies is expected to minimize increases in air contaminant emissions from future County growth. These include:

- Policies 5-2a, 5-4a, and 5-4b which together serve to guide future growth to areas where services are currently located in the planning areas, minimizing sprawl and inefficient land use, and provide nearby services for rural area residents, thus reducing motor vehicle miles traveled and emissions, and some area source emissions.
- Policies 5-3a, 5-3b and 6-4a which together serve to provide safe and appropriate access roads, and encourage home business and improved telecommunications facilities, thereby reducing growth in motor vehicle emissions by lessening miles driven.
- Policies 9-1b, 9-1c, 9-1d, 9-2a, and 9-3a which together work to increase the efficiency of the roadways, maintain an effective transit system, and encourage alternate forms of transportation, thus increasing vehicle operating efficiencies and reducing overall vehicle miles traveled.

Mitigation: None required.

After

Mitigation: *Significant and unavoidable*

Given the unknown future parameters of detailed growth data, specified locations of future urban land uses, detailed mobile and area source emission characteristics, and the specifics of future mitigation measures, the effectiveness of the General Plan cannot be quantified with certainty. Potential for significant impacts to air quality from emissions greater than the listed significance thresholds would remain.

Impact AQ-3. Will the Project create objectionable odors?

Analysis: *Less than significant impact*

Certain future land uses and activities, such as wastewater treatment plants, solid waste landfills, and composting facilities, can be significant odor sources. Mariposa County APCD Rule 205, which controls nuisance impacts, is in effect to deal with any odor complaints that may arise in the future. Operation of this rule, along with other APCD stationary source emissions control rules, will serve to reduce any potential impacts to a level of less than significant.

Mitigation: *None required*

Impact AQ-4. Will the Project significantly alter air movement, moisture, or temperature, or change in climate, either locally or regionally?

Analysis: *Less than significant impact*

No planned projects or growth is expected to be of sufficient magnitude to cause changes in local climates. Major projects that would emit greenhouse gases at rates of 500 tons per year or more, such as power plants or major wastewater treatment plants, are likewise not anticipated. In the event that such a project is proposed, it would be subject to the current national and international regulations and agreements on the control of greenhouse gases, and thus beyond the control of local government.

Mitigation: *None required*

Impact AQ-5. Will the Project expose sensitive receptors or the general public to substantial levels of toxic air contaminants?

Analysis: *Less than significant impact*

Toxic air contaminants from non-motor vehicle sources include those from retail gasoline service stations, metal plating and anodizing, chromate cooling towers, medical sterilizers and aerators, and the mining and use of asbestos-containing serpentine rock.

Air toxics can impact both the general public and sensitive receptors that are located near them, usually within one-quarter mile. Sensitive receptors are defined as residences, schools, hospitals, convalescent homes, and other facilities where people spend significant amounts of time.

Sources of air toxics are under the authority of Mariposa County APCD Regulation IX. This regulation controls air toxics emissions and concentrations from existing and future sources to a level of less than significant.

Mitigation: *None required*

4.9 HISTORIC AND CULTURAL RESOURCES

This section addresses potential impacts on historic and cultural resources associated with implementation of the draft General Plan. Specific topics include impacts related to: known or potentially eligible National or California Register properties, including archaeological, historical, architectural, and Native American/traditional heritage resources; unknown archaeological resources; paleontologic resources; and disturbance of human remains, including those interred outside of formal cemeteries.

4.9.1 AFFECTED ENVIRONMENT (SETTING)

This is an integrated General Plan and Program EIR which is comprised of Volumes I, II, III and IV of the General Plan Update 2005. The description of the affected environment that provides a basis for this evaluation of historic and cultural resources impacts may be found in Section 13 of Volume III. This section provides information on the prehistory, ethnography, and history of Mariposa County.

4.9.2 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The evaluation criteria for Historic and Cultural Resources are presented in Table 4.9-1. These criteria are drawn primarily from local plans and CEQA requirements.

**Table 4.9-1
Evaluation Criteria with Points of Significance
Historic and Cultural Resources**

Evaluation Criteria	As Measured by	Point of Significance	Justification
HC-1. Will the project disturb known or potentially eligible National or California Register properties, including archaeological, historical, architectural, and Native American/traditional heritage resources?	Number of sites affected by project activities.	No loss or disturbance of known or potentially eligible resources.	36CFR800, NHPA Sections 106 and 110. CEQA § 15064.5. PRC § 5024.1, § 5031, and 21084.1. CEQA Checklist Item V (e).
HC-2. Will the project disturb unknown archaeological resources?	Sensitivity analysis.	No loss or disturbance of unknown archaeological resources.	36CFR800, NHPA Sections 106 and 110. CEQA § 15064.5. PRC § 5024.1, § 5031, and 21084.1. CEQA Checklist Item IV (b).
HC-3. Will the project disturb unknown important paleontologic resources?	Underground construction within geologic units with the potential to contain important fossils.	No loss or disturbance of unknown important paleontologic resources.	CEQA § 15064.5. PRC § 5097.5. CEQA Checklist Item IV (c).
HC-4. Will the project disturb any human remains, including those interred outside of formal cemeteries?	Number of sites affected by project activities.	No loss or disturbance of human remains.	CEQA § 15064.5. PRC § 5097.5. CEQA Checklist Item V (d).

Source: Parsons, 2005.

4.9.3 GENERAL PLAN POLICIES AND IMPLEMENTATION MEASURES

The County is required to comply with Federal and State law. The following goals, policies and implementation measures of the draft General Plan are relevant to the evaluation of historic and cultural resource impacts. The full text of each policy and implementation measure is provided in Appendix A in this document (Volume IV of the General Plan).

HISTORIC AND CULTURAL RESOURCES POLICIES AND IMPLEMENTATION MEASURES

- Policy 14-1a and Implementation Measures 14-1a(1) through 14-1a(3)
- Policy 14-2a and Implementation Measures 14-2a(1) through 14-2a(3)
- Policy 14-3a and Implementation Measure 14-3a(1)
- Policy 14-4a and Implementation Measures 14-4a(1) through 14-4a(3)
- Policy 14-5a and Implementation Measure 14-5a(1)
- Policy 14-6a and Implementation Measure 14-6a(1)
- Policy 14-7a and Implementation Measure 14-7a(1)

4.9.4 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION

Impact HC-1. Will the project disturb known or potentially eligible National or California Register properties, including archaeological, historical, architectural, and Native American/traditional heritage resources?

Analysis: *Less than significant impact*

As discussed in Volume III, Section 13, Cultural and Historic Resources, Mariposa County has a rich cultural and historic heritage, ranging from the original Native American settlements through the early Spanish and Mexican explorations, the Gold Rush and American pioneer eras, the contributions of Chinese immigrants, and the establishment of Yosemite National Park. Build-out of the proposed General Plan land uses could occur either on or in the proximity of known or potentially eligible National or California Register properties. Such development and associated grading could result in disturbance of the properties or resources depending on the specific siting of individual projects. Additionally, the planned increase in County residents and visitors may exacerbate the problems of destruction of cultural sites by vandalism.

The draft General Plan has a number of policies intended to protect cultural resources. These include:

- Policy 14-1a and its corresponding implementation measures, which seek to reorganize the current historic preservation commission as a new “Historic Sites and Records Preservation Commission,” and potentially obtain recognition from the Department of the Interior as a Certified Local Government Program;
- Policy 14-2a and its corresponding implementation measures, which provides for the update of the County’s historic sites inventory, the establishment of a list of Mariposa County Historic Sites, and for the

analysis of the newly listed sites according to the standards of the State Historic Preservation Office and National Trust for Historic Preservation;

- Policy 14-3a and its corresponding implementation measure, which establishes funding mechanisms and procedures to add sites and structures to the Mariposa County Register of Historic Places;
- Policy 14-4a and its corresponding implementation measures, which establishes and implements guidelines for historic design review and preservation;
- Policy 14-5a and its corresponding implementation measure, which provides for the identification, establishment, and preservation of historic districts in the County;
- Policy 14-6a and its corresponding implementation measure, which provides for alternatives to the demolition or destruction of historic resources; and
- Policy 14-7a and its corresponding implementation measure, which has measures to increase cooperation and communication between County officials and the Native American community to facilitate the preservation of Native American heritage resources.

Taken together, implementation of the above policies and implementation measures will reduce potential impacts to a level of less than significant.

Mitigation: *None required*

Impact HC-2. Will the project disturb unknown archaeological resources?

Analysis: *Less than Significant impact*

Because of Mariposa County’s rich history, it is probable that both the existing inventories of cultural and historic resources, and the enhanced inventories that would be developed as part of the implementation of the draft General Plan policies, will not uncover all previously unknown archaeological resources. Therefore, there is a strong likelihood that development leading to build-out of the General Plan will disturb or otherwise adversely impact unknown archaeological resources. This disturbance would cause a significant impact.

Federal and State law require that if previously unknown and unrecorded archaeological resources are discovered during ground-disturbing activity, the County will require the builder or contractor to suspend work in the vicinity of the discovery and immediately notify the County’s historic preservation officer. The County shall require that a qualified archaeologist redirect the ground-disturbing activity in the vicinity of the discovery, and/or implement such other measures as may be necessary to avoid or minimize harm to the discoveries, pending the results of evaluation. Suspension of ground disturbance in the vicinity of the discovery shall not resume until a qualified archaeologist has evaluated the discoveries to determine whether it may be a historical resource pursuant to CEQA, and has developed an appropriate recordation, preservation and/or removal and curation program.

Impact HC-3. Will the project disturb unknown important paleontologic resources?

Analysis: *Less than Significant impact*

Most of Mariposa County is undeveloped, and may have a high sensitivity for paleontological resources. While no studies on the County's paleontological resources are available, there may be the potential to unearth important paleontological resources during excavation or other construction activities.

Federal and State law require that in the event that fossils are encountered during development, work shall cease in the vicinity and the findings examined by a qualified paleontologist who shall assess their significance, and offer recommendations for any further investigation or mitigation measures. As provided in the CEQA Guidelines, Section 15064.5(f) for archaeological resources, work could continue on other parts of the project site while unique resource mitigation (if necessary) takes place.

Impact HC-4. Will the project disturb any human remains, including those interred outside of formal cemeteries?

Analysis: *Less than Significant impact*

Native Americans, most recently the Miwok tribe, have lived in Mariposa County for thousands of years. It is likely that there are a number of unknown burial sites throughout the County, which may be disturbed by the development allowed under the draft General Plan. Disturbance of human remains would be a significant impact.

The draft General Plan policies provide for ongoing coordination between the County and the Miwok Indians (Policy 14-7a). Federal and State law require that if human remains are encountered during excavation or other site construction activities, work shall be halted in the vicinity of the remains and the Mariposa County Coroner contacted to determine whether or not investigation of the cause of death is required. In the event that the remains are Native American in origin, the Native American Heritage Commission shall be contacted to determine the necessary procedures for protection and preservation of remains, including reburial, as provided in CEQA Guidelines, Section 15064.5(e).

4.10 NOISE

This section addresses potential noise impacts associated with implementation of the draft General Plan. Specific topics include impacts related to exposure to high noise levels and disturbance due to vibration.

4.10.1 AFFECTED ENVIRONMENT (SETTING)

This is an integrated General Plan and Program EIR which is comprised of Volumes I, II, III and IV of the General Plan Update 2005. The description of the affected environment that provides a basis for this evaluation of noise impacts may be found in Section 14 of Volume III. This section provides information on the existing noise environment of Mariposa County.

4.10.2 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The evaluation criteria for Land Use are presented in Table 4.10-1. These criteria are drawn primarily from local plans and CEQA requirements.

**Table 4.10-1
Evaluation Criteria with Points of Significance
Noise**

Evaluation Criteria	As Measured by	Point of Significance	Justification
NO-1. Will the Project expose the public to high noise levels?	Projected outdoor noise levels, L_{eq} or L_p , at noise sensitive land uses.	Greater than noise standards in the General Plan Noise Element.	Mariposa County General Plan. CEQA Checklist Items XI (a), (c), and (d).
NO-2. Will vibration cause any disturbance?	Route Means Square (RMS) for humans or Peak Particle Velocity (PPV) for building structures.	Annoys normal activities or endangers real properties.	CEQA Checklist Item XI (b).

Source: Parsons, 2005.

4.10.3 GENERAL PLAN POLICIES AND IMPLEMENTATION MEASURES

The following goals, policies and implementation measures of the draft General Plan are relevant to the evaluation of noise impacts. The full text of each policy and implementation measure is provided in Appendix A in this document (Volume IV of the General Plan).

LAND USE POLICIES AND IMPLEMENTATION MEASURES

- Policy 5-1a and Implementation Measures 5-1a(1), (2), and (3)
- Policy 5-2a and Implementation Measures 5-2a(1) 5-2a(2), 5-2a(3), and 5-2a(4)
- Policy 5-7a and Implementation Measure 5-7a(1)

CIRCULATION, INFRASTRUCTURE AND SERVICES POLICIES AND IMPLEMENTATION MEASURES

- Policy 9-4b and Implementation Measure 9-4b(1)

CONSERVATION AND OPEN SPACE POLICIES AND IMPLEMENTATION MEASURES

- Policy 11-3a and Implementation Measures 11-3a(1) and 11-3a(2)

NOISE POLICIES AND IMPLEMENTATION MEASURES

- Policy 15-1a and Implementation Measures 15-1a(1), 15-1a(2), and 15-1a(3)
- Policy 15-2a and Implementation Measure 15-2a(1)
- Policy 15-2b and Implementation Measures 15-2b(1), 15-2b (2), and 15-2b (3)
- Policy 15-2c and Implementation Measure 15-2c(1)

4.10.4 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION

Impact NO-1. Will the Project expose the public to high noise levels?

Analysis: *Less than significant impact*

Build-out of the General Plan would result in the generation of noise from temporary (construction) sources, stationary sources such as industrial and mining operations, and from transportation facilities including roadways and airports/heliports. There are no railroads or water transportation facilities in the County. Increased noise levels in excess of County standards could cause significant impacts if they affect sensitive receptors.

The draft General Plan contains policies that would mitigate noise impacts resulting from implementation of the Plan. These policies include:

Land Use Policies

- Policy 5-1a preserves the rural character of Mariposa County with rural-compatible new development.
- Policy 5-7a allows public facilities to be sited in all General Plan land use classifications with due consideration for area-specific issues.

Circulation, Infrastructure, and Services Policy

- Policy 9-4b requires coordination of development permit decisions with the Airport Land Use Plan.

Noise Policies

- Policy 15-2a requires that siting and construction of noise sensitive uses shall comply with the noise reduction standards of applicable State building codes.
- Policy 15-2b and its implementation measures incorporate mitigation for new projects that have excessive noise potential. The first implementation measure requires that new non-residential land uses that are likely to produce noise exceeding County standards have an acoustical analysis prepared and incorporate noise mitigation measures into the project design if needed to conform to the Noise Element. The second implementation measure requires new transportation noise sources to be mitigated to meet County noise standards. The last implementation measure requires appropriate noise reduction for outdoor public events that might exceed the County's noise standards.
- Policy 15-2c requires that the County ensure that new development does not produce noise levels that create an unacceptable noise environment in existing areas of the County where the noise environment is deemed acceptable, and also in locations deemed noise sensitive. Implementation Measure 15-2c(1), requires that the County assess development activities to determine whether the Noise Element is to be updated or whether to undertake studies to create noise contours and noise exposure indices.

Implementation of the above draft General Plan policies will mitigate noise impacts to a level of less than significant.

Mitigation: *None required*

Impact NO-2. Will vibration cause any disturbance?

Analysis: *Less than Significant impact*

Implementation Measure 15-1a(3) requires the County develop and implement standards that will reduce vibration from construction activities to a level that is less than perceptible at adjacent property lines.

4.11 PUBLIC HEALTH AND SAFETY

This section addresses potential public health and safety impacts associated with implementation of the draft General Plan. Specific topics include impacts related to: hazardous materials and hazardous waste, emergency evacuation, wildland fire hazards, and vector control.

4.11.1 AFFECTED ENVIRONMENT (SETTING)

This is an integrated General Plan and Program EIR which is comprised of Volumes I, II, III and IV of the General Plan Update 2005. The description of the affected environment that provides a basis for this evaluation of public health and safety impacts may be found in Section 15 of Volume III. This section provides information on hazardous materials and hazardous waste; emergency evacuation; and wildland fire hazards in Mariposa County.

4.11.2 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The evaluation criteria for Public Health and Safety are presented in Table 4.11-1. These criteria are drawn primarily from local plans and CEQA requirements.

**Table 4.11-1
Evaluation Criteria with Points of Significance
Public Health and Safety**

Evaluation Criteria	As Measured by	Point of Significance	Justification
PHS-1. Will the Project comply with Federal, State and local laws, regulations, ordinances and policies intended to protect the public from exposure to hazardous materials at concentrations detrimental to human health?	Proposed measures governing the onsite storage and use of hazardous chemical, radioactive, and biological materials.	Measures not adequately protecting public health due to non-compliance with existing Federal, California and Mariposa County laws, regulations, ordinances and policies	Laws, regulations, ordinances, and policies governing the management of hazardous materials – Federal RCRA – Federal EPRCA – Federal and California OSHA regulations. – California Hazardous

**Table 4.11-1
Evaluation Criteria with Points of Significance
Public Health and Safety**

Evaluation Criteria	As Measured by	Point of Significance	Justification
		governing the management of hazardous materials.	Waste Control Law – California Proposition 65 – California Accidental Release Prevention Law CEQA Checklist Items VII (a), (b), (c), and (d).
PHS-2. Will the Project comply with Federal, State and local laws, regulations, ordinances and policies intended to protect the public from exposure to hazardous waste at concentrations detrimental to human health?	a. Proposed measures governing the on-site storage and off-site disposal of hazardous chemical, radioactive, and biological waste.	a. Measures not adequately protecting public health because of non-compliance with existing Federal, California and Mariposa County laws, regulations, ordinances and policies governing the on-site storage and off-site disposal of hazardous waste.	Laws, regulations, ordinances, and policies governing the management of hazardous waste – Federal CERCLA – Federal RCRA – California Superfund Law – California Hazardous Waste Control Law CEQA Checklist Items VII (a), (b), (c), and (d).

**Table 4.11-1
Evaluation Criteria with Points of Significance
Public Health and Safety**

Evaluation Criteria	As Measured by	Point of Significance	Justification
	b. Proposed measures governing the on-site disposal (incineration) of low-level radioactive waste.	b. Measures not adequately protecting public health because of non-compliance with existing Federal, California and Mariposa County laws, regulations, ordinances and policies governing the on-site disposal of low-level radioactive waste.	Laws, regulations, ordinances, and policies governing the on-site disposal of low-level radioactive waste <ul style="list-style-type: none"> – California Department of Health Services – Mariposa County APCD – SCC Hazardous Waste Management Plan – SCC General Plan CEQA Checklist Items VII (a), (b), (c), and (d).
PHS-3. Will the project interfere with implementation of an adopted emergency response plan or emergency evaluation plan?	Project compliance with Mariposa County emergency response plans and procedures.	Any project elements not in conformance with the County’s plans and procedures.	CEQA Checklist Item VII (g).
PHS-4. Will the project expose people or structures to a risk of loss, injury or death involving wildland fires?	Construction of project facilities adjacent to or intermixed with unmanaged combustible vegetation.	Any construction greater than ISO 9, or that does not conform to California fire safety standards.	CEQA Checklist Item VII (h).
PHS-5. Will the project provide breeding grounds for vectors?	Creation of water bodies that do not meet Vector Control District design criteria for preventing mosquito habitat.	Any creation of new mosquito habitat.	California Health and Safety Code Sections 2270-2294.

Source: Parsons, 2005.

4.11.3 GENERAL PLAN POLICIES AND IMPLEMENTATION MEASURES

The following goals, policies and implementation measures of the draft General Plan are relevant to the evaluation of public health and safety impacts. The full text of each policy and implementation measure is provided in Appendix A in this document (Volume IV of the General Plan).

LAND USE POLICIES AND IMPLEMENTATION MEASURES

- Policy 5-2a and Implementation Measures 5-2a(1), 5-2a(2), 5-2a(3), and 5-2a(4)
- Policy 5-3b and Implementation Measure 5-3b(1)
- Policy 5-7a and Implementation Measure 5-7a(1)
- Policy 5-10a and Implementation Measure 5-10a(1)

SAFETY POLICIES AND IMPLEMENTATION MEASURES

- Policy 16-1a and Implementation Measure 16-1a(1)
- Policy 16-1b and Implementation Measure 16-1b(1), and 16-1b(2)
- Policy 16-1c and Implementation Measure 16-1c(1)
- Policy 16-2a and Implementation Measure 16-2a(1)
- Policy 16-2b and Implementation Measure 16-2b(1)
- Policy 16-3a and Implementation Measures 16-3a(1) through 16-3a(4)
- Policy 16-3b and Implementation Measure 16-3b(1)
- Policy 16-11a and Implementation Measure 16-11a(1)
- Policy 16-12a and Implementation Measures 16-12a(1) and 16-12a(2)

4.11.4 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION

Impact PHS-1. Will the Project comply with Federal, State and local laws, regulations, ordinances and policies intended to protect the public from exposure to hazardous materials at concentrations detrimental to human health?

Analysis: *Less than significant impact*

The Mariposa County Health Department is responsible for enforcing the County's hazardous waste programs and related laws. This activity is guided by the Mariposa County Comprehensive Hazardous Waste Management Plan and EIR prepared in 1988. This plan guides the reduction, treatment, recycling and disposal of hazardous wastes generated in the County.

Most of the hazardous waste generated in the County is used motor oil, which is collected and then recycled in Richmond, California. There are several businesses and facilities in Mariposa County that produce hazardous materials. Over 123 Hazardous Material Business Plans have been developed for these small producers. Other hazardous waste sources include small quantity generators, one large quantity generator (Yosemite Concession Services), and household hazardous waste. At this time, household hazardous waste is collected twice-annually during County-sponsored events. The waste is exported from Mariposa County to a landfill in Merced County. Merced County has four transfer stations and one landfill, but none accept hazardous waste; however, during the time of the County-sponsored events, Merced County landfill collects hazardous

waste from the small quantity generations as well. A small portion of the waste disposed in the County's landfills can be considered hazardous, such as paint thinner cans and waste oil. No high-level radioactive materials or wastes are handled or generated in Mariposa County, although some low-level radioactive device, such as smoke detectors may be improperly disposed of in the County landfill by unknowing residents.

Mariposa County has developed a Hazardous Material Business Plan, as required by state law. Under this program, the County tracks businesses and facilities that handle hazardous materials in excess of 500 pounds of solids, 55 gallons of liquid or 200 cubic feet of compressed gas. The County Fire Department uses the plans to inform its personnel of any hazards.

Mariposa is not located along major hazardous waste transportation routes, and because of terrain and lack of secondary access, that will likely remain the case in the future. In addition, there are no contaminated sites that are on EPA's Superfund National Priority List located in the County; however, there are two low-priority CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Act Information Site) sites in the County – one located near Coulterville (Solambo Mine) and one located near Merced Falls (USDOJ BLM).

The draft General Plan Policy 16-11a and Implementation Measure 16-11a(1) maintain the effectiveness and require the continued enforcement of the County's Comprehensive Hazardous Waste Management Program. This continued activity will result in an impact that is less than significant.

Mitigation: *None required*

Impact PHS-2. Will the Project comply with Federal, State and local laws, regulations, ordinances and policies intended to protect the public from exposure to hazardous waste at concentrations detrimental to human health?

Analysis: *Less than significant impact*

The handling and disposal of hazardous wastes and hazardous materials, including low-level radioactive materials, are discussed under Impact PH-1 above. Implementation of draft Policy 16-11a will mitigate any impacts to a level of less than significant.

Mitigation: *None required*

Impact PHS-3. Will the project interfere with implementation of an adopted emergency response plan or emergency evaluation plan?

Analysis: *Less than significant impact*

The draft Evacuation Plan of Mariposa County, which is part of the County's draft Emergency Plan (August 2003); and also includes initial response operations, extended response operations, and recovery operations, provides guidance for field responders for initial response to emergencies. The Evacuation Plan includes a general response checklist for the initial response operations at the field level in order to standardize emergency response procedures. The County General Response (Field) Checklist standardizes emergency response procedures, and establishes evacuation staging areas at 14

locations. Mariposa County has established a detailed system for handling evacuees in case of emergency or disaster.

The County Health Department is responsible for enforcing State and Federal hazardous waste regulations and for implementing the County's Comprehensive Hazardous Waste Management Plan. The Management Plan is a guide for the reduction, treatment, recycling, and disposal of hazardous waste generated in Mariposa County.

Draft General Plan Policy 16-12a requires that the County coordinate local and State emergency response efforts, including updating the Mariposa County Emergency Management Plan every five years, and undertaking full emergency situation drills and training periodically.

Draft General Plan Policies 5-1a and 5-2a require that development take place where services are located, such as water for fire fighting and emergency services, and that public facilities be sited with due consideration for area-specific issues, which would include safety issues. Draft Goal 9-1 and Policies 9-1c, 9-1e, and 16-1b require that all new subdivisions have safe and maintained access roads and are developed in areas with appropriate fire safety

Development governed by the General Plan would be taken into account during the periodic plan updates and drills/training sessions, thus the plan would be kept current with the changing needs of the County as it grows. Therefore, this pre-planning process for emergencies would mitigate any impacts from build-out under the General Plan to a level of less than significant. Implementation of General Policies requiring proper location of new developments, safe access, and provision for fire protection will likewise mitigate the effects of growth on emergency response and evacuation plans to a level of less than significant.

Mitigation: *None required*

Impact PHS-4. Will the project expose people or structures to a risk of loss, injury or death involving wildland fires?

Analysis: *Less than Significant impact*

Uncontrolled wildfires can cause extensive damage to property and natural resources, and kill or injure civilians and fire fighters. The risk of wildfires is high over a large portion of Mariposa County, which is covered with a mix of vegetation that becomes very flammable during the summer fire season, and to a lesser extent in the winter.

Fires are a natural part of the County's ecosystem. Lightning is the most common natural cause of fire, but humans cause by far the most fires in the County. In 1999-2000, for example, a total of seven large wildfires (over 300 acres) occurred in the County, of which, at least six were caused by human activities. The element of risk arises when people choose to live and work in fire-prone areas. The southwestern and southern parts of the County have the greatest fire risk. These areas are also the most developed in the County.

The 2002 Standards of Coverage prepared by Mariposa County Fire Department create a system to increase fire prevention and protection opportunities for property owners. The Standards of Coverage ensure the County is able to maintain its Insurance Services Office (ISO) ratings. As the ISO ratings number

decreases (improvement to fire protection services), the cost of property insurance costs also decrease. Further implementation of the concentric development pattern policies of the General Plan implement the Standards.

Residential development needs to occur in areas where fire protection can be supplied. The County has standards of response time and coverage for fire protection. There are 14 county fire stations countywide and one fire station under construction; these include Co# 21 Midpines, , Co# 23 Catheys Valley, Co# 24 Don Pedro, Co# 25 Mt. Bullion Airport, Co# 26 Coulterville, Co # 27 Mormon Bar, Co# 28 Bridgeport (planning for construction, 2005), Co# 29 Lushmeadows, Co# 31 Greeley Hill, Co# 32 Ponderosa Basin, Co# 33 Fish Camp, Co# 34 El Portal, Co# 36 Hunters Valley, and Co# 37 Bootjack. In addition, the MPUD has two fire stations: Station #1 is located at 527 Highway 49 North, and houses two MPUD engines and one Mariposa County rescue vehicle; Station #2 is located at the MPUD administrative offices at 4992 Seventh Street and houses one fire engine.

To maintain quality fire protection and not lose ISO ratings, development potential is tempered by the available ISO rating, which is periodically updated and affected by changes in development and growth. Communities with hydrant systems are classed as ISO Rural 5 or 6. Outlying rural areas are classified as ISO Rural 8, 9, or 10. ISO 8 is within the coverage response time of a fire station. ISO 9 areas have fire protection, but longer response times. Areas rated as ISO 10 are considered unprotected. In 2005, the County had an ISO rating of “5.”

The draft General Plan contains a number of policies regarding fire protection. Those discussed under Impact PH-3 above include Policies 5-1a, 5-2a, 9-1c, 9-1e, 16-1b, and 16-12a, which encourage concentric development patterns, implementing policies of the 2002 Standards of Coverage.

Specific draft fire protection policies contained in the draft General Plan include the following:

- Policy 16-1a requires that non-residential developments be located within acceptable fire department response time limits and coverage areas; or a development project shall provide its own on-site fire protection facilities and firefighters as approved by the County Fire Department.
- Policy 16-1b requires the establishment of attainable standards for new subdivisions and developments for fire safety.
- Implementation Measure 16-1b(1) requires that new construction use fire safe practices, such as fire resistant building materials and design, and revisions to the County building codes to incorporate fire safe practices.
- Policy 16-1c requires that all subdivisions and development projects conform to adopted fire code and other fire prevention regulations. This would include Fire Department review and recommendation on proposed projects, adoption and implementation of the most recent Uniform Fire Codes, and adoption of a fuel load management ordinance for private property.

- Policy 16-2a and its implementation measure requires that the County cooperate with California Department of Forestry (CDF) programs and develop and maintain cooperative agreements with the CDF to maximize the efficient deployment of fire prevention and protection resources.
- Policy 16-2b requires support programs to involve and educate County residents in fire protection.
- Policy 16-3a requires the adoption of a strategic plan for fire safety. This plan would incorporate the Standards of Cover for the County Fire Department to use in identifying current and future fire service areas and standards; identify long-term capital improvements, rolling stock, equipment and supplies, and other major purchase items needed to maintain and improve fire safety; and identify thresholds and capital facility needs for each of the existing and future service areas.
- Policy 16-3b and its implementation measure requires increased emergency response training for fire and emergency personnel, and the facilitation of “heavy” fire suppression helicopter operations at Mariposa Yosemite Airport.
- Implementation Measure 16-1b(2) requires the implementation of a countywide Wildfire Hazard Safety Plan, which includes standards for fire prevention, fuel management, and fire suppression, including but not limited to the following:
 - Requirements for development in areas with high and very high fuel hazards, including adequate emergency access and water supply; “defensible space” standards; and the use of fire-resistant exterior construction materials, such as fire safe roofing and fire-resistant plants.
 - Wildland fire management activities such as controlled burning, fuel removal, vegetation management, and firebreaks.
 - Specific fire protection and prevention requirements for hillside, open space, and rural area development.
 - Public wildfire safety education through the Mariposa County Fire Safe Council (MFSC).
 - Standards specific to geographic areas in the County based on fire hazard potential.

Wildfires are a natural part of Mariposa County’s ecological heritage, and will likely remain so in the foreseeable future. The General Plan deals directly with reducing the risk to people and structures as a result of wildland fires.

Mitigation: None required

Impact PHS-5. Will the project provide breeding grounds for vectors?

Analysis: *Less than significant impact*

The County has no known infestations of rats, mice, insects, or other vectors beyond those populations normally found in rural areas. According to the

Mariposa County Environmental Health Department (August 2005), no known human infections of the West Nile Virus have been reported. Like most counties in California, there are several water impounds throughout Mariposa that could facilitate mosquito breeding. The County's current vector control efforts include the creation of a West Nile Task Force, monitoring of suspect areas, surveillance and trapping of suspect populations, and public outreach/education.

Continued implementation of the County's vector control efforts, grading ordinance, flood control and drainage design requirements, and waste collection and disposal programs will mitigate any increases in vectors brought about by build-out under the General Plan including, specifically, the creation of new mosquito habitat in improperly drained areas in and around new developments. Therefore, the potential for this impact will be mitigated to a level of less than significant.

Mitigation: *None required*

4.12 VISUAL RESOURCES

This section addresses potential impacts to visual resources associated with implementation of the draft General Plan. Specific topics include impacts related to: designated scenic routes or scenic vistas, the existing visual character and quality of Mariposa County, and light or glare that would adversely affect day or nighttime views.

4.12.1 AFFECTED ENVIRONMENT (SETTING)

This is an integrated General Plan and Program EIR which is comprised of Volumes I, II, III and IV of the General Plan Update 2005. The description of the affected environment that provides a basis for this evaluation of visual resources impacts may be found in Section 4.2 Community Character and Section 12 Regional Tourism of Volume III. These sections provide information on scenic resources and the visual character of communities in Mariposa County.

4.12.2 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

The evaluation criteria for Visual Resources are presented in Table 4.12-1. These criteria are drawn primarily from local plans and CEQA requirements.

**Table 4.12-1
Evaluation Criteria with Points of Significance
Visual Resources**

Evaluation Criteria	As Measured by	Point of Significance	Justification
VR-1. Will the Project adversely affect designated scenic routes or scenic vistas?	a. Level of visual contrast (change in form, line, color, texture, scale of landscape).	a. Strong visual contrast ¹ caused by non-single family dwelling units.	Mariposa County General Plan. CEQA Checklist Items I (a), (b), and (c).
	b. Obstruction (loss of view) of middle or foreground views.	b. Obstruction in viewed area ² caused by non-single family dwelling units.	CEQA Checklist Items I (a) and (b).
	c. Degradation in visual quality of a specific scenic resource ³ .	c. Any loss or alteration caused by non-single family dwelling units.	CEQA Checklist Items I (a) and (b).
VR-2. Will the project substantially degrade the existing visual character or quality of Mariposa County?	a. Level of visual contrast (change in form, line, color, texture, scale of landscape).	a. Strong visual contrast ¹ caused by non-single family dwelling units.	Mariposa County General Plan. CEQA Checklist Items I (a), (b), and (c).
	b. Obstruction (loss of view) of middle or foreground views.	b. Obstruction in viewed area ² caused by non-single family dwelling units.	CEQA Checklist Items I (a) and (b).
VR-3. Will the Project create new sources of substantial light or glare that would adversely affect day or nighttime views?	Interference with dark sky viewing opportunities or . interference with vision due to reflective glare.	Any interference with nighttime skies from ground level light and glare or interference with vision due to reflective glare.	Mariposa County General Plan CEQA Checklist Item I (d).

Source: Parsons, 2005.

Notes:

1. Strong Visual Contrast (one or more of the following) regarded landforms are flat with little or no contour line. Major ridgeline is altered and not consistent with surrounding ridgelines or minor ridgelines are eliminated. Inconsistent color with adjacent landscape character; elimination of landscape texture created by exposed soil or removal of vegetation. Form of Project grossly exceeds scale of natural landforms.

2. Viewed area defined as area of landscape (i.e., everything except sky) as shown in a photograph from the closest sensitive viewpoint, taken with a normal (50 mm) lens.
3. Specific Scenic Resource – (one or more of the following): landscape component that creates striking feature. Landform–steep (>60 percent) undulating/dissected slopes, distinctive rock outcrops, or pronounced ridgelines. Water – major bodies of water that provide reflective qualities and irregular shorelines, or major/permanent streams/rivers with diversity of meanders, flows, rapids, rock outcrops, or riverbanks. Vegetation – mature stands of native or cultural species (oaks and eucalyptus) in natural groves or distinct planted patterns (i.e. eucalyptus along roads or as planted windbreaks); Man-made development – historic structures.

4.12.3 GENERAL PLAN POLICIES AND IMPLEMENTATION MEASURES

The following goals, policies and implementation measures of the draft General Plan are relevant to the evaluation of visual resources impacts. The full text of each policy and implementation measure is provided in Appendix A in this document (Volume IV of the General Plan).

LAND USE POLICIES AND IMPLEMENTATION MEASURES

- Policy 5-1a and Implementation Measures 5-1a(1), 5-1a(2), and 5-1a(3)
- Policy 5-4a and Implementation Measures 5-4a(1), 5-4a(2), and 5-4a(3)
- Policy 5-4c and Implementation Measures 5-4c(1) and 5-4c(2)
- Policy 5-5a and Implementation Measure 5-5a(1)
- Policy 5-6a and Implementation measure 5-6a(1)
- Policy 5-7a and Implementation Measure 5-7a(1)
- Policy 5-10a and Implementation Measure 5-10a(1)

ARTS AND CULTURE POLICIES AND IMPLEMENTATION MEASURES

- Policy 7-2d and Implementation Measure 7-2d(1)

AGRICULTURE POLICIES AND IMPLEMENTATION MEASURES

- Policy 10-1b and Implementation Measures 10-1b(1) and 10-1b(2)
- Policy 10-1c and Implementation Measure 10-1c(1)
- Policy 10-2a and Implementation Measure 10-2a(1)
- Policy 10-6a and Implementation Measures 10-6a(1) and 10-6a(2)

CONSERVATION AND OPEN SPACE POLICIES AND IMPLEMENTATION MEASURES

- Policy 11-1a and Implementation Measures 11-1a(1), 11-1a (2), 11-1a (3), and 11-1a (4)
- Policy 11-2c and Implementation Measures 11-2c(1) and 11-2c(2)
- Policy 11-1d and Implementation Measure 11-1d(1)
- Policy 11-2d and Implementation Measures 11-2d(1) and 11-2d(2)
- Policy 11-4a and Implementation Measure 11-4a(1)

HISTORIC AND CULTURAL RESOURCES POLICIES AND IMPLEMENTATION MEASURES

- Policy 14-3a and Implementation Measure 14-3a(1)
- Policy 14-4a and Implementation Measures 14-4a(1), (2), and (3)
- Policy 14-5a and Implementation Measure 14-5a(1)
- Policy 14-6a and Implementation Measure 14-6a(1)

4.12.4 ENVIRONMENTAL CONSEQUENCES (IMPACTS) AND RECOMMENDED MITIGATION

Impact VR-1. Will the Project adversely affect designated scenic routes or scenic vistas?

Analysis: *Less than Significant Impact*

Within Mariposa County, there is one designated State Scenic Highway (Route 140 from Mariposa to Yosemite National Park), one designated National Scenic Byway (Highway 120 in Yosemite National Park), and two state highway segments that are eligible for designation as State Scenic Highways under Caltrans guidelines (Highway 49 through the County and Highway 41 from Yosemite National Park to Oakhurst where only a short portion of the latter route is located in Mariposa County). In addition to scenic vistas along scenic routes, other scenic views occur throughout the County along other state routes and county roads. The gateways to the County from the south and west (including Highway 140 and Highway 132) are important for their scenic value, as are the views across the agricultural/working landscape in the western part of the County. In the central part of the County, the vistas of forested rolling hills and valleys are also part of the County's scenic character.

The General Plan contains policies and implementation measures that provide for the establishment of measures for the protection of scenic routes, large-scale views, and viewsheds through comprehensive development standards to be adopted by the County. Policy 11-1a of the draft General Plan requires the conservation of natural and scenic resources through programs and development standards, while Implementation Measures 11-1a(1), (2), (3), and (4) support this policy through establishing guidelines to ensure complementary development, taking into account the scenic aspects of the County; developing subdivision design standards for placement of structures on ridgelines and open hillsides; and developing flexible site standards for clustering of new development to conserve designated scenic routes, views, and viewsheds. These measures would protect scenic routes, vistas, and viewsheds from incompatible development, thereby reducing impacts along the designated routes (Highways 140 and 120) to less than significant.

Mitigation: None required

Impact VR-2. Will the project substantially degrade the existing visual character or quality of Mariposa County?

Analysis: *Less than Significant impact*

The visual character and quality of Mariposa County is defined by its scenery—natural and constructed—and its overall rural character. Mariposa provides a rural lifestyle within reasonable commutes of Fresno, Merced, and Modesto. At the same time, the County boasts a working landscape of ranching, flower raising, vineyards, herb farms, and other unique specialty agricultural uses.

The western edge of the County, characterized by gentle terrain and rolling hills blending into the San Joaquin Valley, is sparsely populated grazing land. In the

central part of the county, the visual character is defined by communities within foothill valleys and low mountain regions, or seasonal communities west and south of Yosemite National Park. Within the eastern, high Sierra region are several small recreation and seasonal communities.

Goal 5-2 seeks to create land use density and development patterns to manage growth in patterns that avoid sprawl. Complementing Policy 5-2a encourages development to occur first where services are located presently. Policy 5-1a of the draft General Plan provides that “New development shall be in keeping with the County’s rural character.” Implementation Measure 5-1a(3) provides that land development regulations should define thresholds within uses that are complementary to the concept of rural character as defined by the General Plan or in regulations in the Area Plans. Other policies provide for the preservation of the agricultural/working landscape of the County (Policies 5-5a, 10-1b, 10-1c, and 10-2a) and for the preservation of riparian areas (Policies 11-2d and 11-4a).

Application of these policies, together with their respective implementation measures would reduce the potential impacts on the existing visual character and quality of the County. Implementation measures under Policy 5-4c (Policies 5-4-c(1 and 5-4c(2)) provide siting and development criteria be developed for recreation and resort development, the measures address criteria to protect visual quality which reduces the impacts for these uses to less than significant.

Mitigation: None required

Impact VR-3. Will the Project create new sources of substantial light or glare that would adversely affect day or nighttime views?

Analysis: *Less than Significant impact*

One of the characteristics of new development that could potentially affect the rural quality of life in Mariposa County is the introduction of new sources of light and glare. Policy 5-1a and its implementation measures require that land development regulations define thresholds within which uses are compatible with the concept of rural character.

The General Plan Policy 5-4c (Implementation Measures 5-4c(1) and 5-4c(2)) Policy 11-1d (Implementation Measure 11-1d(1) address effects from new sources of light and glare which mitigate glare from reflective surfaces interfering with vision.

Mitigation: None required