

AMENDED ENVIRONMENTAL ASSESSMENT
MIDPINES FIRE STATION
MARIPOSA COUNTY
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FEMA

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AMENDED ENVIRONMENTAL ASSESSMENT MIDPINES FIRE STATION MARIPOSA COUNTY

For submittal to:

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SECTION 1.0

INTRODUCTION

SECTION 1.0

INTRODUCTION AND PURPOSE AND NEED

1.1 INTRODUCTION

This Environmental Assessment (EA) has been prepared for a proposal by Mariposa County (County) to construct a fire station for an existing volunteer engine company in the central region of the County in the unincorporated community of Midpines (Proposed Project). Under the American Recovery and Reinvestment Act of 2009 (ARRA), the Federal Emergency Management Agency (FEMA) may provide grant funding for the Proposed Project through its Fire Station Construction Grant Program (SCG) (Proposed Action). In accordance with the National Environmental Policy Act (NEPA), an environmental review is required to assess the environmental impacts to the quality of the human environment should FEMA provide funding to the County for the new fire station.

This EA has been prepared in accordance with NEPA, the President's Council on Environmental Quality regulations to implement NEPA (40 CFR Parts 1500-1508), and FEMA's regulations for the implementation of NEPA (44 CFR Part 10). FEMA is required to consider potential environmental impacts before funding or approving actions and projects. This document provides a description of the Proposed Action and an analysis of the potential environmental consequences associated with the release of the funds to the County, which would result in the development of the Proposed Project. This EA also includes a discussion of alternatives, impact avoidance, and mitigation measures. Consistent with the requirements of NEPA, FEMA will use the findings in this EA to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

1.2 LOCATION AND SETTING

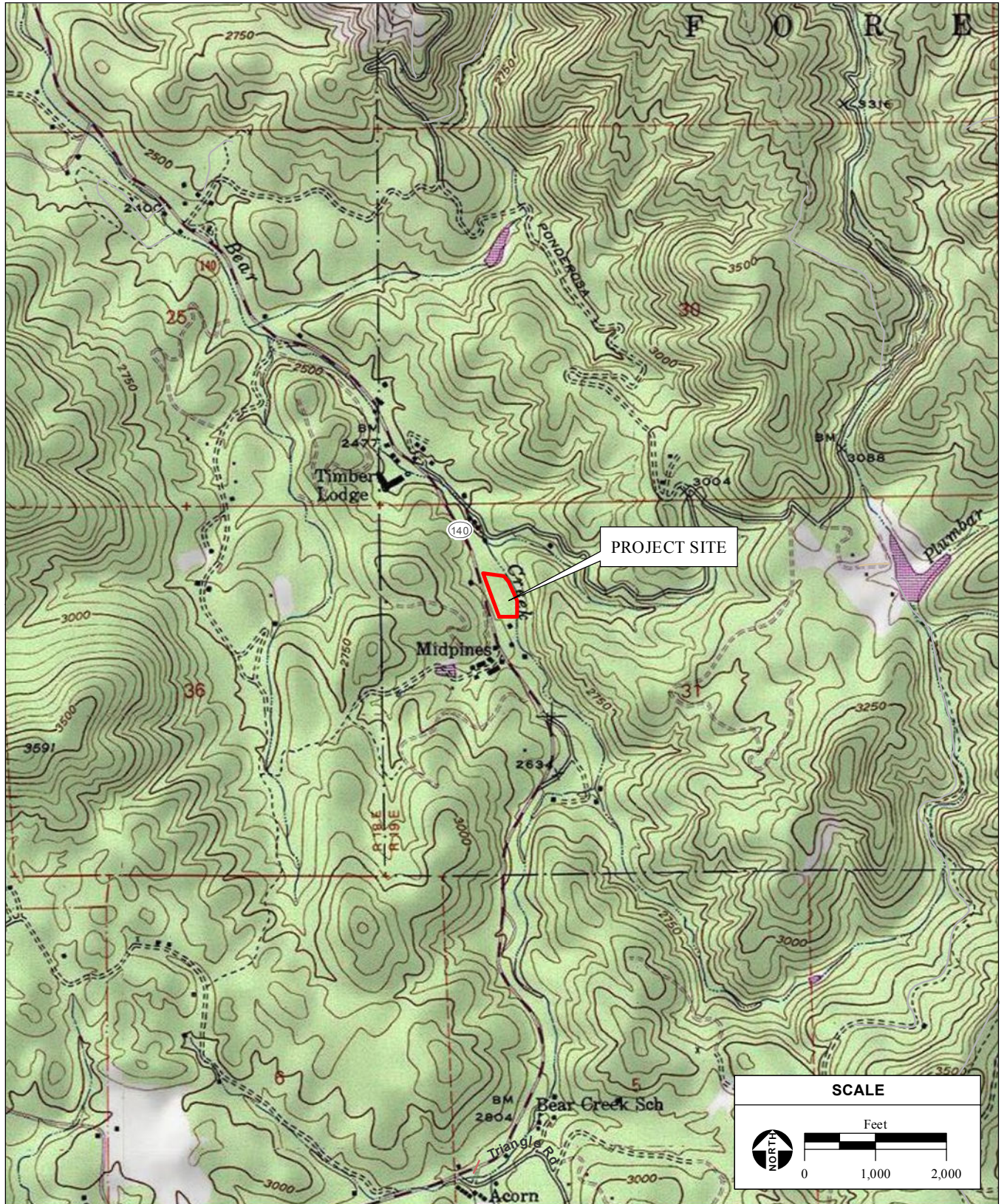
The project site addressed in this EA is located in the unincorporated community of Midpines, Mariposa County, California, roughly 5.0 miles northeast of the community of Mariposa (**Figures 1 and 2**) within the Sierra National Forest. The project site, which covers approximately 7,400 square feet (0.17 acres), is located within the 4 acre Midpines Park parcel (Assessor's Parcel No. 009-170-019) owned by Mariposa County (**Figure 3**). The Proposed Project site is located within Section 31 of Township 4 South, Range 19 East, Mount Diablo Baseline and Meridian (MDBM), as depicted on the "*Feliciano Mountain, Calif.*" United States Geological Survey (USGS) 7.5-minute topographic quadrangle (USGS, 1992). Currently the project site is occupied by the existing Midpines fire station and is surrounded by a parking lot and community hall.



SOURCE: ESRI Data, 2007; AES 2011

Midpines Fire Station Revised EA / 209560 ■

Figure 1
Regional Location Map



SOURCE: "Feliciano Mountain, CA" USGS 7.5 Minute Topographic Quadrangle, Section 31 T4S R19E, Mt. Diablo Baseline & Meridian; AES, 2011

Midpines Fire Station Revised EA / 209560 ■

Figure 2
Site and Vicinity

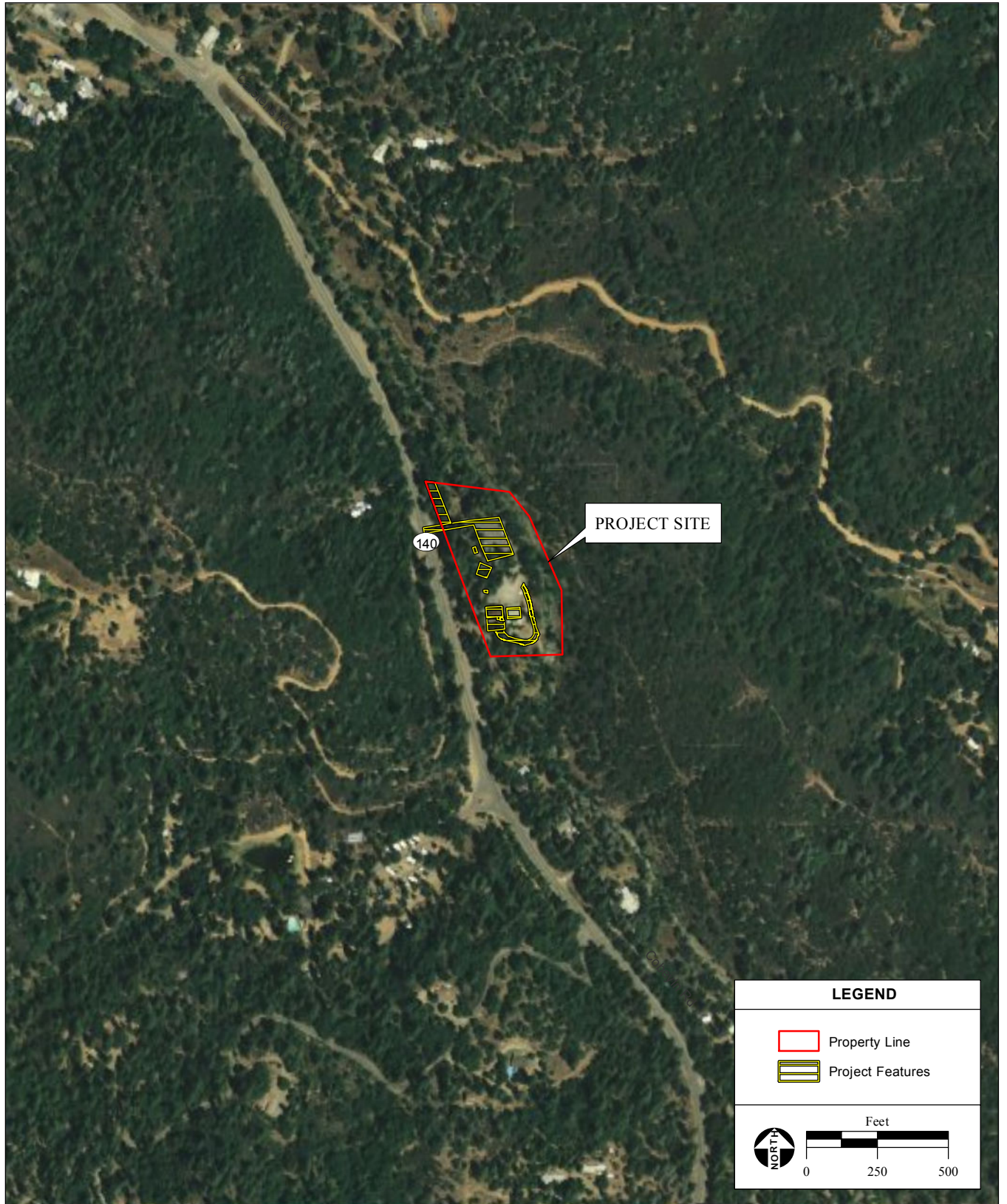


Figure 3
Aerial Photograph

Regional and direct access is provided by State Route 140 (SR-140), which runs in a general east-west direction, but travels in a more north to south direction approximately 50 feet west of the western boundary of the project site (**Figure 3**). The parcel contains the existing Midpines Fire Station and the parcel would continue to serve the above referenced functions with implementation of the Proposed Project. Surrounding land uses consist primarily of open space and scattered rural residences. The project site is currently zoned Rural Economic in the Midpines Community Planning Study Area (Mariposa County, 2005).

1.3 PURPOSE AND NEED FOR THE PROPOSED ACTION

The Mariposa County Fire Department (MCFD) is an all-risk volunteer fire department serving a rural population dispersed over 1,451 square miles from twelve community-based fire stations. All of MCFD's fire stations were built using funds raised in the local communities which they serve, prior to the adoption of current building codes, often using substandard building materials and volunteer labor not particularly adept in the building trades. As a result, MCFD's fire stations are decades old, unsafe for firefighters to occupy during major storms and seismic events, and poorly located to effectively and efficiently provide service to portions of the service area that have experienced growth over the past few decades.

The community of Midpines is located in the central portion of Mariposa County within the Sierra National Forest. The existing Midpines fire station (Station 21) was built in 1975 by volunteer labor with donated materials and does not currently meet applicable building codes. It features balloon construction with limited cross bracing. Despite attempts to make the building structurally sound, Station 21 is unsafe and will most likely not survive a heavy storm or seismic event. Even in moderate wind storms the building shakes, to the point where the volunteer members of the fire department must vacate the building during frequent thunderstorms. In addition to the potential for loss of fire fighting apparatus and equipment, firefighting personnel occupying the building during a catastrophic storm or seismic event will be in peril. Currently, two emergency response vehicles assigned to Station 21 cannot be accommodated in the station. They are parked outdoors and unsecured at volunteer firefighters' homes. The only solution to these problems available to the County is demolition and construction of a new stable building that meets modern building codes that provides adequate capacity for firefighting equipment and emergency response vehicles.

The current site is part of the County Park, has adequate room, and would be located on land currently graded for the existing fire station and properly zoned for the land use. Station 21 is the closest facility to the western (central) entrance to Yosemite National Park and is the first mutual aid engine called to support the Wild and Scenic Merced River area, Sierra National Forest, and Yosemite National Park. Nearly two million visitors pass this station annually.

MCFD's purpose in applying for SCG grant funding is to demolish the existing substandard building and construct a new fire station at the project site in order to provide a safe environment for the County's volunteer fire fighting service in Midpines, improve emergency preparedness, and protect essential fire-fighting equipment and emergency response vehicles.

1.4 ENVIRONMENTAL ISSUES ADDRESSED

In accordance with NEPA, and based on a review of the approximately 0.11-acre project site, the following environmental issue areas are evaluated in this EA:

- Geology, Soils, and Seismicity
- Water Resources
- Air Quality
- Biological Resources/Invasive Species
- Historic Properties
- Socioeconomic Conditions / Environmental Justice
- Transportation and Circulation
- Land Use and Agriculture
- Public Services
- Noise
- Hazardous Materials
- Aesthetics
- Growth-Inducing and Cumulative Effects
- Agency Coordination and Permits

SECTION 2.0

ALTERNATIVES CONSIDERED

SECTION 2.0

ALTERNATIVES CONSIDERED

The Proposed Action and project alternatives are described in this section. This section also summarizes the protective measures and Best Management Practices (BMPs) incorporated into the project and provides a comparison of the project alternatives. A discussion of alternatives eliminated from further consideration is also included. Alternatives were selected by considering the economic viability, potential environmental impacts, and viability of implementation. The project alternatives evaluated in this EA are:

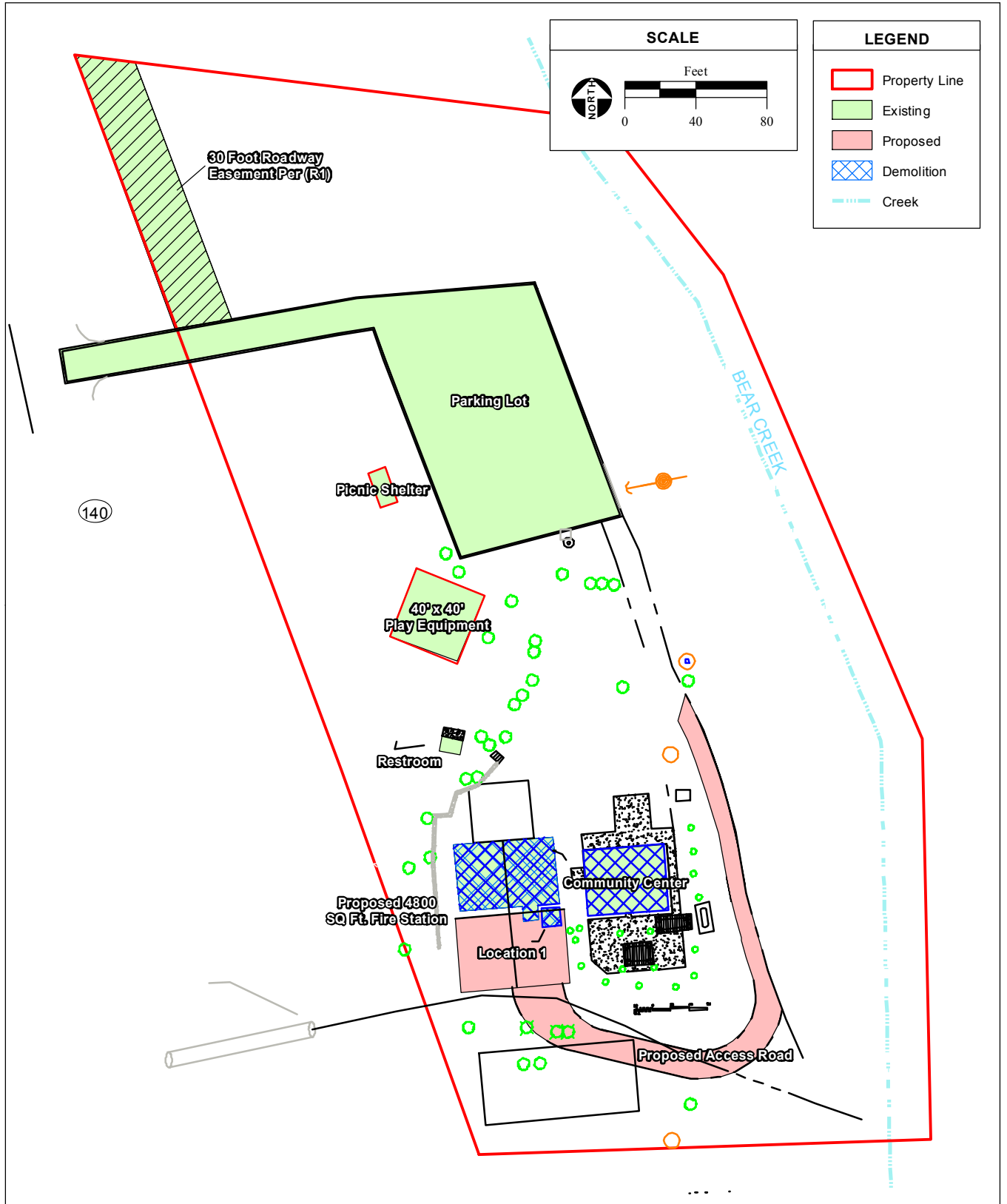
- 1) Alternative A – Proposed Action
- 2) Alternative B –No-Action Alternative
- 3) Other sites eliminated from consideration

The project alternatives evaluated in the Environmental Assessment (EA) consist of:

- Alternative A – (Proposed Action) The Federal Emergency Management Agency (FEMA) would release funds to Mariposa County (County) under FEMA’s Fire Station Construction Grant (SCG) Program. The foreseeable consequence of the release of FEMA funds to the County would be the construction of a 4,800 square foot steel building erected within an approximately 4 acre parcel that includes the existing substandard fire station, a community hall, parking lot, and paved access road from State Route 140 (SR-140).
- Alternative B – (No-Action Alternative) FEMA would not provide funds to the County and the project site would continue to be used in its current state and the existing fire station would continue in operation. No foreseeable construction or other improvements would be undertaken on the project site related to the fire station.

2.1 ALTERNATIVE A - PROPOSED ACTION

Alternative A (**Figure 4**) consists of the release of SCG Program funds from FEMA to the County and the resulting construction of a 4,800 square foot pre-engineered fire station with four engine bays and associated office space/training facilities. The existing Midpines fire station would be demolished and the new building would be erected on the area previously graded for the existing fire station. Existing utility drops would be used for the new building. No improvements are planned for the existing access road from SR-140. A new on-site access road would be constructed, extending from the southeastern portion of the existing parking lot,



circumventing the existing community hall to improve access and egress to the proposed fire station by emergency response vehicles. No other road improvements are planned. The footprint of the new fire station and on-site access road would cover approximately 7,400 square feet (0.17 acres).

An “engineered” septic system is currently handling wastewater on-site from the existing fire station and would handle the sewage from the proposed station. Wastewater disposal would consist of the existing leach fields that extend north from the septic system along the western parcel boundary.

The fire station would be constructed of approximately 60 percent recycled steel while meeting engineering standards as required of essential public service buildings. The fire station would include gender-specific and American Disabilities Act-compliant sleeping and bathroom facilities for up to four personnel. Auxiliary components of the fire station would include a new concrete driveway and a septic system. All development associated with Alternative A would be restricted to the southern area of the parcel.

Mariposa County is a member of United States Green Building Council (USGBC). Construction of the fire station would, to the greatest extent possible within budget constraints, utilize materials and systems to qualify for the maximum number of LEED points. The new fire station would feature Energy Star-certified appliances and would meet or exceed California Title 24 of the State Building Code for insulation value and LEED energy conservation systems. Mariposa County Department of Public Works would ensure compliance with their adopted and federally-approved Quality Assurance Plan. The fire station would feature renewable energy systems through solar collection panels that would ensure the station is as close to energy neutral as reasonable and feasible. The solar generating system would interface with the PG&E distribution system to ensure peak efficiency.

PUBLIC SERVICES

Potable water is already provided to the project site via an onsite groundwater well located southeast of the paved parking lot (**Figure 4**). On-site waste disposal would be handled by a new septic system. Stormwater would continue to be conveyed to Bear Creek and new impervious surfaces at the project site would be limited, thus eliminating the need for increased stormwater conveyance. Telephone service currently exists at the project site.

SITE PLAN SPECIFICATIONS

The following protective measures and BMPs have been incorporated into the project site plans for Alternative A:

AIR QUALITY

1. Water all active construction areas at least three times daily during dry weather.
2. Cover all trucks hauling soil and other loose materials or require all trucks to maintain at least two feet of freeboard.
3. Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.
4. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
5. Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.).
6. Limit traffic speeds on unpaved roads to 15 miles per hour.

WATER QUALITY

1. Straw wattle shall be erected around the perimeter of the project site during construction.
2. The SR-140 frontage shall be swept as needed to remove silt and other fugitive dirt related to construction activities.
3. Erosion and sediment control provisions shall be in place prior to the onset of any storm event. The construction contractor shall have all erosion and sediment control features in place for the winter months prior to October 1.
4. All erosion and sediment control measures shall be maintained until disturbed areas are stabilized.
5. All erosion and sediment control measures shall be checked before and after all storm events to ensure measures are functioning properly.
6. A stabilized construction entrance shall be installed prior to commencement of grading. The construction entrance shall be constructed of washed, well-graded gravel, crushed rock, or equivalent.

BIOLOGICAL RESOURCES

1. Landscaping associated with the proposed fire station shall include native species.

TRANSPORTATION

1. Traffic shall be maintained in each direction on the adjacent roadway network at all times during the peak traffic hours of 7:00 A.M. to 8:00 A.M. and 3:30 P.M. to 5:30 P.M.

2.2 ALTERNATIVE B – NO-ACTION ALTERNATIVE

Under the No-Action Alternative, FEMA would not grant funds to the County under the SCG Program and the project site would not be developed with a new fire station as identified under the Proposed Action. The existing fire station would remain in operation for the near term, while the other existing on-site uses of the parcel (community hall) would continue unabated. The existing safety concerns regarding the structural stability of Station 21 would not be addressed and Company 21's emergency response vehicles would continue to be stored at volunteer firefighter's residences.

2.3 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

The only reasonable alternative actions available to FEMA are to either grant the funds for the proposed project or for another site location under the SCG Program or deny funding. Both these alternatives are assessed within this EA. For the County's project, alternative sites were dismissed due to economic and operational factors. Mariposa County currently owns the parcel considered under Alternative A, which contains the existing fire station. Critical infrastructure and utilities are already in place at the project site, thus requiring minimal additional costs to serve the proposed fire station. The costs associated with purchasing new land would prevent Mariposa County from developing the project.

2.4 COMPARISON OF THE PROPOSED ACTION AND ALTERNATIVE

Among the project alternatives evaluated in **Section 3.0**, the Proposed Action would potentially result in new impacts (all fully mitigatable), while no development would occur on the project site for the foreseeable future under Alternative B, the No-Action Alternative.

Impacts to land resources under Alternative A would result from the limited earthwork and construction required to develop the proposed fire station. Erosion control and other best management practices would mitigate potential impacts. Alternative B would have no effect on land resources.

Alternative A would introduce a limited amount of impermeable surfaces to the project site, generating more runoff than existing conditions. At full build-out, Alternative A would have negligible potable water demand and wastewater generation; therefore, potential impacts to water resources would be minimal. With the incorporation of the BMPs described above, impacts to water resources would be less than significant. No impacts to water resources would result from Alternative B.

Construction and operational emissions of criteria air pollutants and greenhouse gases would be generated under Alternative A, but would be reduced through the incorporation of the BMPs above and those recommended as mitigation in **Section 3.0**. Operational emissions under Alternative A, the vast majority of which would be related to mobile sources (vehicle trips), would be similar to existing conditions (and therefore similar to Alternative B) since Company 21 would still be required to respond to requests for emergency assistance from the project site. Under Alternative B, no new impacts to air quality would occur.

Alternative A and B would not result in any impacts to biological or historic properties. In accordance with Executive Order 13112, invasive species would be excluded from any landscaping plans and would not be introduced to the project site. Under Alternative B, no invasive species would be introduced to the project site.

Construction and operation of Alternative A would provide for enhanced public safety and emergency preparedness, resulting in beneficial impacts related to public services. Under Alternative B, a negative impact to public services related to the substandard construction of the existing fire station would continue to be experienced.

Alternatives A and B would not result in any impacts to socioeconomics or environmental justice.

Construction of Alternative A would generate a small number of vehicle trips resulting in minimal impacts to the local transportation network. BMPs have been proposed above and mitigation has been recommended in **Section 3.0** to reduce transportation and circulation impacts associated with construction. Vehicle trips during the operation of Alternative A would be equal to the existing number of trips generated by the existing fire station. Alternative B would not generate a net sum of new vehicle trips, and therefore would not cause impacts to transportation and circulation.

Alternatives A and B would not result in impacts to land use.

Construction and operation of Alternative A would not generate noise at levels that would result in adverse impacts to the ambient noise environment in the project area. The existing fire station is operational and is considered a component of the existing noise environment of the project site. No noise-related impacts would occur under Alternative B.

Impacts related to hazardous materials would be minimal under Alternative A. No hazardous material impacts would occur under Alternative B.

Aesthetic impacts would be less than significant under Alternative A since implementation would result in a new fire station in place of the existing structure. No aesthetic impacts would occur under Alternative B.

Alternative A would meet Mariposa County's objectives of providing a suitable and safe working environment for Company 21, improving emergency preparedness, and protecting essential fire apparatus. Alternative B would result in continued forced evacuation of the existing fire station during strong storm events and emergency vehicles being stored at the homes of the volunteer fire service. Implementation of Alternative B would not meet the objectives of the Proposed Action.

SECTION 3.0

***AFFECTED ENVIRONMENT, IMPACTS, AND MITIGATION FOR THE
ALTERNATIVES CONSIDERED***

SECTION 3.0

AFFECTED ENVIRONMENT, IMPACTS, AND MITIGATION FOR THE ALTERNATIVES CONSIDERED

This section presents relevant information about existing resources and other values that may be affected by the Proposed Action and alternative, an analysis of potential impacts associated with the implementation of the alternatives, and mitigation to reduce identified impacts. The following resources and issue areas are addressed:

- Geology, Soils, and Seismicity
- Water Resources
- Air Quality and Climate Change
- Biological Resources/Invasive Species
- Historic Properties
- Socioeconomic Conditions / Environmental Justice
- Transportation and Circulation
- Land Use and Agriculture
- Public Services
- Noise
- Hazardous Materials
- Aesthetics
- Growth Inducing and Cumulative Impacts
- Agency Coordination and Permits

3.1 GEOLOGY, SOILS, AND SEISMICITY

3.1.1 GEOLOGICAL SETTING AND TOPOGRAPHY

The project site is composed of previously graded terrain at an elevation of approximately 2,530 feet above mean sea level. The topography of the subject parcel has been slightly altered through grading to provide level surfaces for the existing fire station, community hall, and parking lot and to promote drainage. The project site falls within Climate Zones 7 through 9, “Great Valley and Surrounding Low Mountains.” Specifically the climate regimes on-site are more typical of Climate Zone 7, which is characterized by marked seasons of hot summers and moderately cold winters.

The underlying geology is generally composed of metavolcanic and granitic formations east of the New Melones Fault and date to the Jurassic Period (Krauskopf, 1985). Geological structures

related to the Calaveras Formation, including beds of slate, mica schist, and quartzite, may be found near the project site. There are a number of fine to medium grained dioritic and aplitic dikes, some of which are associated with the gold-quartz veins. In places, these rocks are overlain by Tertiary channel gravels capped by rhyolite and andesite. Soils within the project area consist of Josephine gravelly loam (JcFma), which consists of soils found on 30-50 percent slopes and have a moderate to high erosion potential (NRCS, 2009).

The elevation of the subject parcel is highest along the western boundary and slopes towards the east.

3.1.3 SOILS

Soil survey reports for the project site, are available online through the Natural Resources Conservation Service (NRCS), an agency within the United States Department of Agriculture (USDA). Soil types within the project site were determined using the on-line NRCS soil survey. Each survey maps soil units (soils exhibiting similar physical and chemical characteristics) and provides a summary of major physical characteristics with recommendations based on the soil characteristics. The project site consists entirely of Josephine gravelly loam. This loam is classified as Hydrologic Group C, which exhibit slow infiltration rates when wet and high runoff rate. These soils do not exhibit episodes of ponding or flooding. A customized soil report for the project parcels is included as **Appendix A**.

SOIL HAZARDS

SOIL EROSION

Erosion potential on the project site is low because the project site is relatively flat, the potential for erodibility of the soils is considered low (**Appendix A**), annual precipitation levels are low, and wind velocity averages and peaks are low in the region.

LIQUEFACTION

Soil liquefaction can occur in seismic conditions. Liquefaction is the temporary transformation of saturated, non-cohesive material from a relatively stable, solid condition to a liquefied state as a result of increased soil pore water pressure. Soil pore water pressure is the water pressure between soil particles. Liquefaction can occur if three factors are present: seismic activity, loose sand or silt, and shallow ground water. Liquefaction potential has been found to be greatest where the ground water is within a depth of 50 feet or less, and submerged loose, fine sands occur within that depth. Liquefaction potential decreases with increasing grain size and clay and gravel content, but increases with increasing ground acceleration and duration of shaking.

Although soils on the project site are mainly sandy soils, the nearest active fault is approximately 47 miles east of the project site. Therefore, the project site is not subject to liquefaction.

EXPANSIVE SOILS

The potential for soils to demonstrate expansive properties is primarily dependent upon clay content. Clay particles can swell by absorbing large amounts of water relative to their volume. When these particles dry out, they shrink. Conversely, when rain falls on dried clays, the clays swell and the ground can rise several inches. There are no expansive soils on the project site (**Appendix A**).

LANDSLIDES

Landslides are defined as rock falls, topples, slides, spreads, and debris flows, which are more commonly referred to as mudslides. Landslides can occur as a result of seismic events, periods of heavy rainfall, dramatic changes in groundwater levels, or land disturbances during construction activities. Based on the lack of extreme elevation change and soil types (**Appendix A**), there are no landslide hazards on the project site.

3.1.4 SEISMICITY

SEISMIC INTENSITY: THE MODIFIED MERCALLI INTENSITY SCALE

The Modified Mercalli Intensity (MMI) scale is a common measure of earthquake effects due to ground shaking intensity. The MMI values for intensity range from I (earthquake not felt) to XII (damage nearly total), and intensities ranging from IV to X could cause moderate to significant structural damage. The damage level represents the estimated overall level of damage that will occur for various MMI intensity levels. The damage, however, will not be uniform. Some buildings will experience substantially more damage than this overall level, and others will experience substantially less damage. Not all buildings perform identically in an earthquake. The age, material, type, method of construction, size, and shape of a building all affect its performance. Maximum peak ground acceleration intensities at the site are expected to cause MMI (VII) ground shaking. Ground shaking effects of this intensity include moderate structural damage to ordinary buildings, but negligible damage to buildings of good design and construction.

MAGNITUDE

On a Richter scale, the magnitude of an earthquake is determined from the logarithm of the amplitude of waves recorded by seismographs. Adjustments are included for the variation in the distance between the various seismographs and the epicenter of the earthquakes. Magnitude is expressed in whole numbers and decimal fractions. For example, a magnitude 5.3 might be computed for a moderate earthquake, and a strong earthquake might be rated as magnitude 6.3. Because of the logarithmic basis of the scale, each whole number increase in magnitude represents a tenfold increase in measured amplitude; as an estimate of energy, each whole number step in the magnitude scale corresponds to the release of about 31 times more energy than the amount associated with the preceding whole number value.

Earthquakes with magnitude of about 2.0 or less are usually called microearthquakes; they are not commonly felt by people and are generally recorded only on local seismographs. Events with magnitudes of about 4.5 or greater are strong enough to be recorded by sensitive seismographs all over the world. Great earthquakes, such as the 1964 Good Friday earthquake in Alaska, have magnitudes of 8.0 or higher. The Richter scale is not used to express damage.

REGIONAL SEISMICITY

No active faults are located near the project region. The closest active fault zone to the project site is the Hartley Spring fault zone, located approximately 47 miles east of Midpines, on the east side of the Sierra Nevada. The next closest active fault complex is the Ortigalita fault zone located roughly 73 miles west of the project site in rural Alameda County. Several dormant fault zones are present in the western Sierra Nevada foothills, including the Foothills and Melones fault zones located one and four miles west of the project site, respectively. These geologic features are of pre-Quaternary age (≥ 1.6 million years) and have not been active for at least 10,000 years (County of Mariposa, 2006).

The California Geological Survey (CGS), in coordination with the United States Geological Survey (USGS), maintains a model of seismic shaking hazards throughout California based on the physical and mechanical properties of the Earth's crust. Using this model, the peak horizontal ground acceleration, the fastest measured change in speed for a particle at ground level, is given for a selected site using a latitude and longitude search engine. Shaking intensity at a particular site can vary depending on the overall magnitude of a regional earthquake, the distance from the epicenter, and the type of geologic material. According to CGS, the project site is located within an area of mild potential shaking intensity (ground shaking motion of 0.116 percent force of gravity). This corresponds to a value of VII on the Modified Mercalli Intensity Scale. Shaking of this intensity generally results in negligible damage to buildings of good design and construction (CGS, 2010; Bolt, 1988).

3.1.5 IMPACTS TO GEOLOGY, SOILS, AND SEISMICITY

ALTERNATIVE A

TOPOGRAPHY

While development of the site would involve a small amount of grading and other earthwork, it would not result in slope instability or landform impacts given the site's flat topography and that the site has been previously mechanically leveled for the existing fire station. Development would not adversely affect the previously disturbed topography of the project site.

SOILS

The soil properties on the site pose no geologic or soil hazard limitations for development (**Appendix A**). The soils are not prone to shrink-swell, subsidence, or landslides. Although

erosion potentials on the project site are low, construction would involve soil disturbance, increasing the potential for adverse effects during rainfall. Erosion control practices have been incorporated into the project description to reduce impacts from construction. The project construction area of disturbance is less than one acre and coverage under the Clean Water Act National Pollution Discharge Elimination System permitting process is not required.

FAULTS

Under the authority of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. §§7701-7709 as amended) and Executive Order 12699 [44 CFR §206.226(d) as amended)], all new construction must use appropriate seismic design and construction standards and practices. This includes the construction of new buildings for the replacement of seriously damaged or destroyed buildings, such as the previous fire station. Accordingly, seismic design and construction standards and practices should meet or exceed the most recent edition of the *NEHRP Recommended Provisions of Seismic Regulations for New Buildings or Other Structures*. The interagency Committee on Seismic Safety in Construction (ICSSC) has recommended that the provisions of the *International Building Code and International Residential Code*, National Fire Protection Association 5000: *Building Construction and Safety Code*, and American Society of Civil Engineers *Minimum Design Loads for buildings and Other Structures* meet the requirements. The California Building Code (CBC) details design and construction requirements for new construction within California. Current standards in the CBC include safety precautions for the anticipated seismic shaking intensity that would prevent any structural damage. The codified provisions also meet the above requirements. Construction under the Proposed Project would be required to follow the California Building Code (CBC). The site's location, soils, and topography indicate a negligible risk of major damage from secondary effects such as landslides, subsidence, liquefaction, and other related seismic-shaking hazards. With the design and construction criteria established in concert with the requirements under the CBC, development of the Proposed Project would not result in impacts to the environment or human health and safety as a result of seismic events.

MITIGATION

Impacts to geology, soils, and seismicity are less than significant; no mitigation is required.

ALTERNATIVE B

Under the No Action Alternative, the project site would remain undeveloped and would continue to experience minimal erosion. The topography would remain consistent with existing conditions. The seismic shaking hazard of 0.116 percent of the force of gravity would have the potential to cause structural damage in the existing fire station that could be hazardous to occupants. There is no mitigation for this impact.

3.2 WATER RESOURCES

3.2.1 SURFACE WATER

The project site is located within the Upper Merced River Watershed adjacent to Bear Creek, a tributary of the Merced River. Bear Creek runs along the eastern edge of the project site, approximately 175 feet east of the existing fire station, following State Route 140 north towards the Merced River. The creek discharges into the Merced River near the community of Briceburg, approximately five miles to the north of the project site. Surface water resources present on the project site are further addressed under waters of the U.S. in **Section 3.5.3**.

DRAINAGE

Storm water runoff generated on the project site flows as sheet flow along the topography to the east across the relatively level project parcel, and then along a 5 percent grade into Bear Creek. There are no stormwater sewers, roadside collection curbs, or drainage ditches associated with the proposed 0.17 acres of disturbance. An 18-inch corrugated metal pipe culvert underneath SR-140 conveys runoff from the open areas west of the highway into Bear Creek across the southern portion of the project parcel. As previously noted, the project site and surrounding parcel have been significantly graded and the project site has been leveled to accommodate the existing fire station. Impermeable surfaces within the parcel are limited to footprints of the existing fire station, community building, restroom outbuilding, and the paved access roads and parking lot. Otherwise, the surface of the subject parcel is native soil or permeable surfaces such as crushed aggregate gravel.

FLOODING

The Federal Emergency Management Agency (FEMA) is responsible for predicting the potential for flooding in most areas. FEMA routinely performs this function through the update and issuance of Flood Insurance Rate Maps (FIRMs), which show various levels of predicted flood inundation. The project site is depicted in FIRM number 06043C0600C. According to the FIRM, the project site is located in Zone D, which is defined by the FIRM as an area where floods are undetermined, but possible (FEMA, 2008). Because a flood zone has not been determined for the project site, a Hydrologic and Hydraulic Study (HH Study) was conducted by the County (**Appendix F**). The results of the study indicated that modeled surface water elevations of Bear Creek during the 100- and 500-year flood events are approximately 4.7 and 3.3 feet, respectively, below the elevation of the lowest elevation at the proposed fire station site.

3.2.2 GROUNDWATER

In the many mountainous areas in California, groundwater is stored within deep fractures of bedrock underlying soil layers. Availability of groundwater in such formations can vary widely,

even over a distance of a few yards. Conditions that affect availability of water within fractured rock include:

- Density of fractures within a given area;
- Connectivity between fractures;
- Fracture size and shape; and
- Recharge source.

As a result, interference between neighboring wells is difficult or impossible to predict in advance. Currently there are no identified maps of the many groundwater basins that exist within Mariposa County. As a result, groundwater profiles are difficult to characterize. The project site is not located within a specified groundwater basin. Much of the groundwater in the county is recovered from hard rock wells drilled into fractures within the granite of the Sierra Nevada. Granitic groundwater basins in the county have not been studied in depth to date. Groundwater levels in the County wells range from 1.7 to 48 feet below ground surface elevation (County of Mariposa, 2006). Groundwater from one on-site well is the source of potable water for the existing fire station, community hall, and restroom. The well has an anticipated capacity of 20 gallons per minute (gpm).

3.2.4 WATER QUALITY

SURFACE WATER QUALITY

In 1972, Congress passed the Federal Clean Water Act (CWA), which sets forth national goals for the quality of surface waters, applying to both point and non-point sources of pollution (33 USC Sections 402 and 319 respectively). These goals include maintaining waters safe for fishing and swimming, eliminating harmful discharges of pollution, and the protection of the nation's wetlands. The CWA also requires states to establish beneficial uses and set water quality standards for all contaminants in the surface waters and to review and update them on a triennial basis (Section 303(c)).

As a result of the 1987 CWA amendments, the United States Environmental Protection Agency (USEPA) established the National Pollutant Discharge Elimination System (NPDES), pursuant to the CWA (Sections 1251 to 1387). NPDES is a national program for regulating and administering permits for discharges to receiving waters. In some states, including California, the USEPA has delegated permitting authority to the state water quality management agencies; however, the USEPA continues to regulate discharges originating on Tribal lands into receiving waters. Under the CWA, Indian Tribes can be treated as states, implying the use of Tribal Government Regulations, for the purpose of NPDES program [33 USC § 1377(e)].

Section 303(d) of the CWA requires states to periodically prepare a list of all surface waters in the state for which beneficial uses of the water are impaired by pollutants. These are estuaries, lakes, streams, and groundwater basins that fall short of state surface water quality standards, and are not expected to improve within the next two years. States are also required to establish a priority ranking of these impaired waters for purposes of developing plans that include Total Maximum Daily Loads (TMDLs). A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards and an allocation of that amount to the pollutant's sources. These plans describe how an impaired water body will meet water quality standards through the use of TMDLs.

Complying with the anti-degradation provision of the CWA, the Central Valley Regional Water Quality Control Board (CVRWQCB) has established water quality objectives for all inland surface waters to protect designated beneficial uses. Water quality objectives limit the impact of discharges to surface waters. There are no impaired water bodies listed by the Central Valley Regional Water Quality Control Board in accordance with Section 303(5) of the CWA within the project region.

GROUNDWATER QUALITY

Groundwater quality within the Merced River basin is generally good and is suitable for use in the potable water supply. However, little is known about general groundwater conditions. The relatively scarce number of wells in Mariposa County does little to contribute more information on groundwater quality, levels, and recharge behavior (County of Mariposa, 2006).

3.2.5 IMPACTS TO WATER RESOURCES

ALTERNATIVE A

Bear Creek is located 75 feet east of the proposed access road and therefore would not be physically impacted by the implementation of Alternative A, either through alteration of the stream bank or of upstream drainages. Alternative A includes BMPs to protect water quality in Bear Creek during construction. The construction disturbance footprint is approximately 7,400 square feet (0.17 acres). Impervious surfaces would increase by approximately 1,000 square feet (0.02 acres) upon completion of Alternative A as the access road would not be paved. Projects that disturb less than 1 acre during construction are not required to apply for coverage under a National Pollution Discharge Elimination System permitting program of the Clean Water Act. The construction of Alternative A would result in a minimal increase in impervious surfaces on the project site; thus with the implementation of the BMPs described in **Section 2.0**, impacts to surface water drainage and water quality would be less than significant.

In order to assess the potential impacts from flooding in the area, a Hydrologic and Hydraulic Study (HH Study) was conducted by the county (**Appendix F**). The results of the study indicated that modeled surface water elevations of Bear Creek during the 100- and 500-year flood events are approximately 4.7 and 3.3 feet, respectively, below the elevation of the lowest elevation at the proposed fire station site. Based on the HH Study, flooding of the project is not anticipated and implementation of the Proposed Action would comply with the provisions of Executive Order 11988, Floodplain Management.

Potable water would be provided by the existing groundwater well. There would be no increase in potable water demand, as the Proposed Project would replace the existing station currently served by the well. Impacts to groundwater supply and groundwater quality would be less than significant.

MITIGATION

Impacts to water resources are less than significant; no mitigation is required.

ALTERNATIVE B

Under the No-Action Alternative, the proposed fire station would not be developed. No additional impervious surfaces would be created on the project site. Drainage would remain as sheet flow with some infiltration through the native soils as well as discharge to Bear Creek. No adverse impacts to water resources would occur under the No-Action Alternative, and no mitigation would be required.

MITIGATION

No mitigation is required for Alternative B.

3.3 AIR QUALITY

3.3.1 REGULATORY CONTEXT

The Federal Clean Air Act (CAA) was enacted for the purpose of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. Basic components of the CAA and its amendments include national ambient air quality standards (NAAQS) for criteria air pollutants (CAPs) and, under 40 CFR Part 51, development of state implementation plans (SIPs) to meet the NAAQS. The EPA is the federal agency responsible for identifying CAPs, establishing the NAAQS, and approving and overseeing state air quality programs as they relate to the CAA.

The EPA has identified six CAPs [ozone (O₃), carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), particulate matter (PM₁₀ and PM_{2.5}), and lead (Pb)] that are used as

indicators of regional air quality. Regulation of air pollution is achieved through both the NAAQS and emission limits for individual sources of CAPs outlined in each SIP (40 CFR Part 51). The NAAQS CAPs are presented in **Table 3-1**. For some of the pollutants, the EPA has identified air quality standards expressed in more than one averaging time in order to address the typical exposures times.

TABLE 3-1
NATIONAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	Standard		Violation Criteria
		parts per million	microgram per cubic meter	
Ozone	8 hours	0.075	-	If exceeded on more than 3 days in 3 years
CO	8 hours	9	10,000	If exceeded on more than 1 day per year
	1 hour	35	40,000	If exceeded on more than 1 day per year
NO _x	Annual average	0.053	100	If exceeded
SO _x	Annual average	0.03	80	If exceeded
	24 hours	0.14	365	If exceeded on more than 1 day per year
PM ₁₀	24 hours	N/A	150	If exceeded on more than 1 day per year
PM _{2.5}	Annual arithmetic mean	N/A	15	If exceeded
	24 hours	N/A	35	If exceeded on more than 1 day per year

Source: CARB, 2010.

The EPA, in conjunction with the California Air Resource Board (CARB), identifies areas throughout California that meet the NAAQS. These areas are labeled either *attainment* or *unclassifiable* for each CAP that is in compliance with the NAAQS. Areas that do not meet the NAAQS are labeled either nonattainment or *maintenance* for the CAP that is non-compliant with the NAAQS. The EPA further classifies nonattainment areas according to the level of pollution in each. There are five classes of nonattainment areas: *maintenance* (recently became compliant with the NAAQS); *marginal* (relatively easy to obtain levels below the NAAQS); *serious*, *severe*,

and *extreme* (will be difficult to reach levels below NAAQS). The EPA uses these classifications to design clean-up requirements appropriate for the severity of the pollution and set realistic deadlines for reaching those clean-up goals.

Under 40 CFR Part 6, federal projects are required to show conformity with the applicable SIP. Conformity is outlined in 40 CFR Part 51, Subpart W, which requires any project that is located in a area where any CAP is in nonattainment to show that the total project-related emissions of that particular CAP is less than the *de minimus* level provided in 40 CFR Part 51, Subpart W. The *de minimus* level for Mariposa County is 100 tons per year.

3.3.2 EXISTING AIR QUALITY CONDITIONS

The project site lies at the southern margin of the Mountain Counties Air Basin (MCAB). The MCAB covers the mountainous areas of the central and northern Sierra Nevada, from Plumas County on the north to Mariposa County on the south. Elevation varies from several hundred feet in the foothills to over 10,000 feet at the crest of the Sierra Nevada. The large range in elevation is the most dominate feature of the MCAB with respect to air quality.

ATTAINMENT STATUS

Table 3-2 shows the attainment status for pollutants in the MCAB. Attainment and nonattainment areas are identified through monitoring. Unclassifiable areas are those for which air monitoring has not been conducted, but which are assumed to be in attainment under the NAAQS. **Table 3-3** provides a three-year summary of the MCAB, listing the highest annual concentration observed for federal pollutants of concern.

TABLE 3-2
NATIONAL AMBIENT AIR ATTAINMENT STATUS FOR MCAB

Pollutants	NAAQS
	Designation/Classification
Ozone 8-hour	Nonattainment
PM ₁₀	Unclassified/Attainment
PM _{2.5}	Unclassified/Attainment
Carbon Monoxide	Unclassified/Attainment
Nitrogen Dioxide	Unclassified/Attainment
Sulfur Dioxide	Unclassified/Attainment
Lead	Unclassified/Attainment

Source: CARB, 2009a.

TABLE 3-3
FEDERAL AIR MONITORING DATA FOR MCAB

Pollutant	Standard	2006	2007	2008
Ozone				
Highest	0.75 (ug/L)	0.092	0.092	0.093
Days Exceeded		13	12	17
Source: CARB, 2009b.				

POLLUTANTS OF CONCERN

CAPs which are in nonattainment under the NAAQS are considered pollutants of concern. The following discussion summarizes the pollutant of concern for Mariposa County, which is ozone.

Ozone

Ozone is created in the presence of sunlight through a photochemical reactions involving reactive organic gas (ROG) and NO_x. ROG and NO_x are a result of incomplete combustion of fossil fuels, which is the largest source of ground-level ozone (O₃). Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, ozone is primarily a summer air pollution problem. As a photochemical pollutant, O₃ is formed only during daylight hours under appropriate conditions, but is destroyed throughout the day and night. O₃ is considered a regional pollutant, as the formation takes place over time and is often most noticeable downwind from the sources of the emissions.

SENSITIVE RECEPTORS

Sensitive receptors are generally defined as land uses that house or attract people who are susceptible to experience adverse impacts from air pollution emissions and, as such, should be given special consideration when evaluating air quality impacts from projects. Sensitive receptors include facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent homes, parks and recreational facilities, and residential areas are examples of sensitive receptors. As illustrated in **Figure 3**, the community hall is located adjacent the project site.

3.3.3 IMPACTS TO AIR QUALITY

ALTERNATIVE A

Under 40 CFR Part 9, if a federal project is in a nonattainment area, than project-related emissions must be below the de minimua level of 100 tons per year to show conformity with the applicable SIP. The MCAB is in nonattainment for ozone (refer to **Table 3-2**); therefore, ozone

precursors NO_x and ROG emission are required to be below 100 tons per year for the project to show conformity with the applicable ozone SIP.

CONSTRUCTION

Construction of Alternative A would generate criteria air pollutants through the use of construction machinery (primarily diesel operated), construction worker automobiles (primarily gasoline operated), and through land disturbance. Construction of the fire station would proceed in distinct phases, beginning with grading and installation of below-ground utilities, followed by the erection of structure, and finally the finishing of fire station. The generation of construction-related emissions is considered a short-term impact, especially in regard to fugitive dust generation. Alternative A has been designed to incorporate BMPs that would reduce the potential for short-term dust impacts. Short-term construction impacts would be minimal even without the implementation of these measures due to the size of the project (less than 1 acre); however, they are included to reduce impacts by the maximum amount feasible. Implementation of the construction BMPs would reduce impacts of the construction of the proposed Fire Station on regional air quality and on the nearest sensitive receptor (community hall).

OPERATION

Operation of Alternative A would result in no new vehicle traffic (refer to **Section 3.8**); therefore, no indirect mobile NO_x or ROG emission would occur. The proposed Fire Station would have emissions (i.e. gas heating and cooking) similar to emissions from the existing fire station. Alternative A emission from area sources would be offset or reduced with the use of Energy Star-certified appliances and the exceedance of CA Title 24 State Building Code for insulation value and LEED energy conservation systems. Operation of the proposed Fire Station would have no adverse affect on regional air quality as the minor increase in emissions from the larger fire station would be below de minimis levels and therefore a conformity determination is not required under the CAA.

MITIGATION

Impacts to air quality are less than significant; no mitigation is required.

ALTERNATIVE B

Under the No-Action Alternative the existing fire station would continue to operate and none of the construction air quality impacts identified for Alternative A would occur. Operation emissions would be similar to Alternative A.

3.4 CLIMATE CHANGE

3.4.1 REGULATORY SETTING

On February 23, 2010 the Council on Environmental Quality (CEQ) provided for public comment its Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions (NEPA Guidance). The draft NEPA Guidance provides Federal agencies guidance on how analyzing the environmental impacts of greenhouse gas (GHG) emissions and climate change when evaluating the environmental impacts of a proposed action under NEPA. The draft NEPA Guidance provides practical tools for agency reporting, including a presumptive threshold of 25,000 metric tons (MT) of direct carbon dioxide equivalent emissions from the proposed action to trigger a quantitative analysis, and instructs agencies how to assess the effects of climate change on the proposed action and its design. CEQ recommends quantification of GHG emissions, assessment of the significance of any impact on climate change, and, identification of mitigation or alternatives that would reduce GHG emissions. Public comment on the draft NEPA Guidance will be taken until May 9, 2010, it is anticipated that CEQ will approve the final NEPA Guidance after the comment period.

The following are recent federal regulatory actions related to climate change:

- On July 23, 2009, EPA published a rule which proposes to establish the criteria for including sources or sites in a Registry of Recoverable Waste Energy Sources (Registry), as required by Energy Independence and Security Act of 2007. Waste energy can be used to produce clean electricity. The clean electricity produced by waste energy would reduce the need for non-renewable forms of electricity production; thus, reducing GHG emissions.
- On September 15, 2009, EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) proposed a new national program that would reduce greenhouse gas emissions and improve fuel economy for all new cars and trucks sold in the United States. EPA proposed the first-ever national GHG emissions standards under the CAA, and NHTSA proposed an increase in the Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act.
- In response to the FY2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110-161), EPA has issued the Final Mandatory Reporting of GHG Rule. Signed by the Administrator on September 22, 2009, the rule requires in general that suppliers of fossil fuels and industrial GHGs, manufacturers of vehicles and engines outside of the light duty sector, and facilities that emit 25,000 metric tons or more of GHGs per year to submit annual reports to EPA. The rule is intended to collect accurate and timely emissions data to guide future policy decisions on climate change.

- On September 30, 2009, the EPA proposed new thresholds for GHG emissions that define when a CAA permit under the New Source Review and Title V operating permit programs would be required.
- On December 15, 2009, the EPA issued a finding that the changes in the climate caused by GHG emissions endanger the public health and welfare (74 Fed. Reg. 66496).
- Executive Order (EO) 13514, “Federal Leadership in Environmental, Energy, and Economic Performance,” was signed on October 5, 2009 and contains various sustainability and efficiency goals for federal agencies. Central to EO 13514 are new requirements for federal Agencies to establish GHG emissions reductions by 2020 relative to a 2008 baseline.

3.4.2 EXISTING CLIMATE CHANGE CONDITIONS

The extent to which human activities affect global climate change is a subject of considerable scientific debate. It is anticipated that the average global temperature could rise 0.6 (33.0) to 4.0 °C (39.2 °F) between the years 2000 and 2100 (IPCC, 2007). The *Intergovernmental Panel on Climate (IPCC) Change Fourth Assessment Report* (IPCC, 2007) identifies anthropogenic GHGs as a contributing factor to changes in the Earth’s climate.

The U.S. Supreme Court has held that CO₂ (a GHG) falls under the CAA’s definition of an “air pollutant”, such that the EPA has statutory authority to regulate the emissions of this gas (CO₂). *Massachusetts v. Environmental Protection Agency* concluded that GHG emissions from human activities would result in an additional warming of the Earth’s surface. The U.S. Court of Appeals stated succinctly that the potential for greenhouse gas emissions must be analyzed in NEPA documents (*Center for Biological Diversity v. National Highway Safety Administration*, 508 F.3d 508 [9th Cir. 2007]).

The Greenhouse Effect and Climate Change

The Earth’s temperature is regulated by a system known as the “greenhouse effect.” GHGs are primarily water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) that trap the heat of the sun, preventing radiation from dissipating into space. Water vapor is the most abundant GHG and CO₂ is a distant second. Without the effect of these GHGs, which are both naturally occurring and from anthropogenic sources, the average temperature on the Earth would be approximately –18 °C (-64.4 °F), instead of the current average of 15 °C (59 °F).

PCC modeling estimates that anthropogenic CO₂ in the lower atmosphere has increased by approximately 31 percent since 1750. At the same time, average temperature in the lower atmosphere has increased approximately 0.6 °C (33.0 °F) to 0.8 °C (33.4 °F). Due to the challenges inherent in modeling the complexities of the Earth’s climate, the proportional

importance of anthropogenic activities as opposed to natural feedback systems is exceptionally difficult to establish. Nonetheless, the IPCC concludes that the observed increase in globally-averaged temperatures since the mid-20th century is likely associated with the observed increase in anthropogenic GHG emissions.

IPCC theorizes that a continuation of this warming trend could have profound implications, including flooding, erratic weather patterns, increased sea levels, and reduced arctic ice. The IPCC projects a number of future GHG emissions scenarios leading to a varying severity of impacts on the environment and the global economy. According to the 2007 IPCC report, if anthropogenic emissions continue to increase there will be a point at which the above impacts would become irreversible. This point is commonly referred to as the “tipping point.” Although the 2007 IPCC Report states the tipping point may be as far off as 20 years, some experts contend the tipping point has already been reached.

GHG Inventory

GHG sources are both anthropogenic and natural. Some examples of anthropogenic sources are combustion of fossil fuel, evaporation of man-made chemicals, agriculture, and combustion of coal. Natural sources include water vapor and naturally occurring N₂O, CO₂, O₃, and methane (CH₄). **Table 3-4** shows the 2010 projected global GHG emissions, as well as a global estimation of GHGs captured by the earth, the atmosphere, and biological processes. Processes that capture GHGs are called “sinks.”

Table 3-4
GLOBAL GREENHOUSE GAS EMISSIONS AND SINKS

Gas	Sources			Sink
	Natural	Anthropogenic	Total	
(Million tons CO ₂ e)				
CO ₂	848,779	33,467	882,246	861,345
CH ₄	263	659	923	635
NO ₂	10	8	18	14

Source: DOE, 2006

Because GHGs are relatively stable in the atmosphere and essentially uniformly dispersed throughout the troposphere and stratosphere, the climatic impact of GHG emissions does not depend on the location of the emissions. GHGs will continue to accumulate in the atmosphere as long as the total anthropogenic output of GHGs is greater than 12,566 million tons of GHGs per year (IPCC, 2007).

To provide a comparative analysis between sources of GHGs, the carbon dioxide equivalent (CO₂e) of each GHG is assessed. CO₂e is a method by which emissions of individual GHGs are

normalized in relation to heat-capturing abilities. As shown in **Table 3-5**, CO₂ is used as the baseline for GHG inventories and is given a CO₂e value of 1. Other significant GHGs are assigned a CO₂e ratio based on their ability to trap heat in comparison with that of CO₂. For example, CH₄ has the ability to capture 21 times more heat than CO₂ and therefore is given a CO₂e value of 21. To calculate total GHG emissions for a source, estimated emissions for each GHG are multiplied by the corresponding CO₂e value and then the converted values are summed for a total CO₂e emissions rate. Establishing a comparable total emissions rate provides a means for comparing emissions sources and presenting the relative overall effectiveness of emission reduction measures for reducing project contributions to global climate change.

TABLE 3-5
GREENHOUSE GAS CO₂ EQUIVALENT

Gas	CO ₂ e Value
CO ₂	1
CH ₄	21
N ₂ O	310
HFCs/PFCs ¹	6,500
SF ₆ ¹	23,900

Notes: CO₂e = Carbon dioxide equivalent
¹ High-global warming potential pollutants
 CH₄ = methane, N₂O = nitrous oxide
 HFCs/PFCs = hydroflourocarbons/perflourocarbons
 SF₆ = sulfur hexaflouride
 Source: BAAQMD, 2006; AES, 2010.

Table 3-6 presents the estimated global GHG emissions in 1990 and projected in 2020 and illustrates the State’s contribution to the global increase in GHG emissions. The 2020 estimates assume current GHG emission practices and do not account for mandated reductions. Accordingly, without modifications in human activities or the introduction of new technologies, GHG emissions are anticipated to increase.

3.4.3 IMPACTS TO CLIMATE CHANGE

ALTERNATIVE A

Alternative A related GHG emission would be minimal, because the project generates no new mobile source emissions and construction emission would be minimal due to the use of a prefabricated metal building and one acre site. Alternative A would emit a small amount of GHG emissions per year through area sources (gas heating and cooking) and indirect sources (water conveyance, electricity usage, waste disposal). These GHG emissions would be small in comparison to state or regional GHG emissions and would not exceed the Draft NEPA guidance of 25,000 metric tons and therefore quantitative analysis is not required. Alternative A’s GHG emission would have a minimal adverse effect on climate change. Project-related GHG emission would be reduced with the addition of renewable energy systems through solar collection panels

that would ensure the station is as close to energy neutral as reasonable and feasible. The solar generating system would interface with the PG&E distribution system to ensure peak efficiency.

TABLE 3-6
GLOBAL GREENHOUSE GAS EMISSIONS

Regions	Estimated GHG Emissions
	Million metric tons per year of CO ₂ e ¹
1990	
Global Emissions	626,395
California Emissions	427
2020	
Global Emissions	882,246
California Emissions	600

¹Carbon Dioxide Equivalent
Source: CARB, 2007b; IPCC, 2007

ALTERNATIVE B

Under the No-Action Alternative the existing fire station would continue to operate and operation emissions and climate change impacts would be similar to Alternative A.

3.5 BIOLOGICAL RESOURCES/INVASIVE SPECIES

3.5.1 REGULATORY SETTING

FEDERAL ENDANGERED SPECIES ACT

The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) enforce the provisions stipulated within the Endangered Species Act (ESA) of 1973 (16 USC Section 1531 *et seq.*). USFWS administers ESA for all terrestrial species while NMFS administers ESA for marine species, including anadromous salmonids. Threatened and endangered species on the federal list (50 CFR Section 17.11, 17.12) are protected from take, defined as direct or indirect harm, unless a Section 10(a) Incidental Take Permit is granted or a Biological Opinion with incidental take provisions is rendered.

Pursuant to the requirements of the ESA, a Federal agency reviewing a proposed project within its jurisdiction must determine whether any federally listed species may be present within the study area/project site and determine whether the proposed project would jeopardize their continued existence or modify any critical habitat likely jeopardizing the continued existence of any listed species or species that is proposed for listing under the ESA or to result in the destruction or adverse modification of critical habitat proposed to be designated for such species

(16 USC Section 1536[3], [4]). Therefore, project-related impacts to these species or their habitats would be considered significant and would require compensatory mitigation.

PROTECTION OF WETLANDS

Under Executive Order No. 11990 (Order) FEMA is required to avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands whenever a practical alternative exists (42 FR 26961). As such, FEMA is required to avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds 1) that there is no practical alternative to such construction, and 2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use. Applicants for federal funding shall indicate if proposed actions would be located in wetlands and agencies shall consider factors relevant to a proposal's effect on the survival and quality of wetlands.

INVASIVE SPECIES

Under Executive Order 13112, FEMA is required to identify actions that may affect the status of invasive species and may not fund actions that are likely to cause or promote the introduction or spread of invasive species unless the actions clearly outweigh the potential harm caused by the invasive species and all feasible and prudent measures to minimize the risk of harm will be incorporated into the action.

3.5.2 ENVIRONMENTAL SETTING

The study area (study area) is situated on T 4 S, R 19 E, Section 22 of the Feliciano Mountain, California U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (quad). The centroid of the study area is 37° 32' 46.8" North, 119° 55' 11.1" West.

METHODOLOGY

A Biological Resource Assessment (BRA) was prepared for the Proposed Action and is included as **Appendix B**. The BRA presents a summary of special-status species in the vicinity of the study area based on the USFWS file data and CNPS and CNDDB queries and provides a rationale as to whether the species has the potential to occur within the study area (refer to **Table 3-7**). Presence of species or their habitat was evaluated during the field surveys. Analytical Environmental Services (AES) biologist Kelly Buja, M.S. conducted a general biological survey and an informal delineation on February 2, 2010. The biological survey consisted of evaluating biological communities and documenting potential habitat for special status species with the potential to occur within the study area. Photographs of the study area are presented in the BRA. A summary of the results of the BRA is provided below.

TABLE 3-7
FEDERAL, STATE, AND CNPS POTENTIALLY OCCURRING SPECIAL-STATUS SPECIES

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION
Plants				
<i>Allium yosemitense</i> Yosemite onion	--/CR/1B	Known from Mariposa and Tuolumne counties (CNPS, 2010).	Bulbiferous herb usually found on rocky, metamorphic, or granitic soils in broadleafed upland, chaparral, cismontane woodland, and lower montane coniferous forest from 535 to 2, 200 meters (CNPS, 2010).	April-July
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i> big scale balsamroot	--/--/1B	Known from Alameda, Butte, Colusa, El Dorado, Lake, Mariposa, Napa, Placer, Santa Clara, Solano, Sonoma, Tehama counties (CNPS, 2010).	Found in chaparral, cismontane woodland, Valley and foothill grassland, sometimes on serpentinite, from 90 to 1,555 meters (CNPS, 2010).	Mar-June
<i>Calyptridium pulchellum</i> Mariposa pussypaws	FT/--/1B	Known from Fresno, Madera, and Mariposa counties (CNPS, 2010).	Annual herb usually found on rocky, sandy, or granitic soils in cismontane woodland and chaparral from 400 to 1,220 meters (CNPS, 2010).	April-August
<i>Carex arcta</i> Northern clustered sedge	--/--/2	Known from Del Norte, Humboldt, Mendocino, Mariposa, and Tulare counties in California (CNPS, 2010).	Perennial herb occasionally found in mesic areas in bogs and fens and North Coast coniferous forest from 60 to 1,400 meters (CNPS, 2010).	June-September
<i>Clarkia australis</i> Small's southern clarkia	--/--/1B	Known from Calaveras, Madera, Mariposa, and Tuolumne counties (CNPS, 2010).	Annual herb found in cismontane woodland and lower montane coniferous forest from 800 to 2,075 meters (CNPS, 2010).	May-August
<i>Clarkia biloba</i> ssp. <i>australis</i> Mariposa Clarkia	--/--/1B	Known from El Dorado, Mariposa, and Tuolumne counties (CNPS, 2010).	Annual herb usually found on serpentinite soils in chaparral and cismontane woodland from 300 to 985 meters (CNPS, 2010).	May-July
<i>Clarkia lingulata</i> Merced clarkia	--/CE/1B	Known from Mariposa County (CNPS, 2010).	Annual herb found in chaparral and cismontane woodland from 400 to 455 meters (CNPS, 2010).	May-June
<i>Cryptantha mariposae</i> Mariposa cryptantha	--/--/1B	Known from Calaveras, Mariposa, Stanislaus, and Tuolumne counties (CNPS, 2010).	Found in chaparral, occasionally on serpentinite, rocky soils, from 200 to 650 meters (CNPS, 2010).	Apr-Jun
<i>Entosthodon kochii</i> Koch's cord moss	--/--/1B	Known from Mendocino, Mariposa, Marin, and San Luis Obispo (CNPS, 2010).	Moss found occasionally on soil in cismontane woodland from 180 to 1,000 meters (CNPS, 2010).	Unknown
<i>Erigeron mariposanus</i> Mariposa daisy	--/--/1A	Known from Mariposa County (CNPS, 2010).	Perennial herb found in cismontane woodland from 600 to 800 meters (CNPS, 2010).	June-July

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION
<i>Eriophyllum congdonii</i> Congdon's woolly sunflower	--/CR/1B	Known from Fresno, Madera, Merced, Stanislaus, Tulare, and Tuolumne counties (CNPS, 2010).	Annual herb usually found on rocky, metamorphic soil in chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland from 500 to 1,900 meters (CNPS, 2010).	April-June
<i>Eriophyllum nubigenum</i> Yosemite woolly sunflower	--/--/1B	Known from Madera, Mariposa, and Tuolumne counties (CNPS, 2010).	Annual herb usually found on gravelly, granitic soils in chaparral and lower and upper montane coniferous forest from 1,525 to 2,750 meters (CNPS, 2010).	May-August
<i>Horkelia parryi</i> Parry's horkelia	--/--/1B	Known from Amador, Calaveras, El Dorado, and Mariposa counties (CNPS, 2010).	Found on igneous formation and other soils in chaparral and cismontane woodland from 80 to 1,035 meters (CNPS, 2010).	April-September
<i>Leptosiphon serrulatus</i> Madera leptosiphon	--/--/1B	Known from Fresno, Kern, Madera, Mariposa, and Tulare counties (CNPS, 2010).	Annual herb found in cismontane woodland and lower montane coniferous forest from 300 to 1,300 meters (CNPS, 2010).	April-May
<i>Lomatium congdonii</i> Congdon's lomatium	--/--/1B	Calaveras, Mariposa, and Tuolumne counties (CNPS, 2010).	Found on serpentinite soils in chaparral and cismontane woodland from 300 to 2,100 meters (CNPS, 2010).	March-June
<i>Lupinus citrinus</i> var. <i>deflexus</i> Mariposa lupine	--/CE/1B	Known from Mariposa County (CNPS, 2010).	Annual herb usually found on granitic, sandy soil in chaparral and cismontane woodland from 400 to 610 meters (CNPS, 2010).	April-May
<i>Mielichhoferia elongata</i> elongate copper moss	--/--/2	Known from Fresno, Humboldt, Lake, Mariposa, Marin, Nevada, Placer, Santa Cruz, Trinity, and Tulare counties in California (CNPS, 2010).	Moss usually found on metamorphic, rocky, vernal mesic soil in cismontane woodland from 500 to 1,300 meters (CNPS, 2010).	Unknown
<i>Mimulus filicaulis</i> slender-stemmed monkeyflower	--/--/1B	Known from Mariposa and Tuolumne counties (CNPS, 2010).	Found in vernal mesic areas in cismontane woodland, lower montane coniferous forest, meadows and seeps, and upper montane coniferous forest from 900 to 1,750 meters (CNPS, 2010).	April-August
<i>Mimulus gracilipes</i> Slender-stalked monkeyflower	--/--/1B	Known from Fresno, Madera, and Mariposa counties (CNPS, 2010).	Annual herb usually found on decomposed granitic, often in burned or disturbed areas, in chaparral, cismontane woodland, and lower montane coniferous forest from 500 to 1,300 meters (CNPS, 2010).	April-June

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION
<i>Mimulus pulchellus</i> yellow-lip pansy monkeyflower	--/--/1B	Known from Calaveras, Mariposa, and Tuolumne counties (CNPS, 2010).	Found in vernal mesic, often disturbed areas, on clay, in lower montane coniferous forest and meadows and seeps from 600 to 2,000 meters (CNPS, 2010).	April-July
<i>Schizymerium shevockii</i> Shevock's copper moss	--/--/1B	Known from Fresno, Mariposa, Riverside, and Tulare counties (CNPS, 2010).	Moss usually found on mesic, metamorphic rock in cismontane woodland from 750 to 1,400 meters (CNPS, 2010).	Unknown
Animals				
Invertebrates				
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	FT	Known from Amador, Butte, Calaveras, Colusa, El Dorado, Fresno, Glenn, Kern, Madera, Mariposa, Merced, Napa, Placer, Fresno, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Yolo, and Yuba counties (NatureServe, 2010).	Found in riparian forest communities from 0 to 762 meters. Exclusive host plant is elderberry (<i>Sambucus</i> species), which must have stems at least one inch in diameter for the beetle.	Year round
<i>Hydromantes brunus</i> Limestone salamander	--/CT/--	Known along the Merced River from Lake McClure to about 4 miles NE of Briceburg, Mariposa County. Also occurs along the Merced River tributaries including Bear Creek and its feeder creeks, south of Briceburg (CaliforniaHerps.com, 2010).	Inhabits mossy limestone crevices and talus in Grey Pine/Oak/Buckeye/ Chaparral belt of the lower Merced Canyon (CaliforniaHerps.com, 2010).	Rain events in fall, winter, and spring during moderate temperatures
Fish				
<i>Hypomesus transpacificus</i> Delta smelt	FT/CT/--	Known almost exclusively in the Sacramento-San Joaquin estuary, from the Suisun Bay upstream through the Delta in Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties. May also occur in the San Francisco Bay.	Found in estuarine waters. Majority of life span is spent within the freshwater outskirts of the mixing zone (saltwater-freshwater interface) within the Delta.	Consult Agency

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION
<i>Oncorhynchus mykiss</i> steelhead Central Valley Steelhead	FT/--/--	Spawn in the Sacramento and San Joaquin rivers and tributaries before migrating to the Delta and Bay Area.	Found in cool, clear, fast-flowing permanent streams and rivers with riffles and ample cover from riparian vegetation or overhanging banks. Spawning: streams with pool and riffle complexes. For successful breeding, require cold water and gravelly streambed.	Consult Agency
Amphibians				
<i>Rana aurora draytonii</i> California red-legged frog	FT/CSC/--	Known along the Coast from Mendocino County to Baja California, and inland through the northern Fresno Valley into the foothills of the Sierra Nevada mountains, south to eastern Tulare County, and possibly eastern Kern County. Currently accepted range excludes the Central Valley (USFWS, 2005).	Found in permanent and temporary pools of streams, marshes, and ponds with dense grassy and/or shrubby vegetation from 0 to 1,500 meters (NatureServe, 2010).	November - June
<i>Rana boylei</i> Foothill yellow-legged frog	--/CSC/--	Known from northern Oregon west of the Cascades south along the foothills of the western side of the Sierra Nevada Mountains to the Tehachapi Mountains, with an isolated population in the San Pedro Martir Mountains of Baja California (CaliforniaHerps.com, 2010).	Found in rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands from sea level to 2,040 meters. Sometimes found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools (CaliforniaHerps.com, 2010).	March - June (breeding) July - September (non-breeding)
<i>Rana sierrae</i> Sierra Nevada yellow-legged frog	FC/CSC/--	Known from southern Plumas County to southern Tulare County (Center for Biological Diversity, 2010).	Inhabits lakes, ponds, meadow streams, isolated pools, and sunny riverbanks in the Sierra Nevada Mountains from 370 to 3,660 meters. Waters that do not freeze to the bottom are required. Open stream and lake edges with a gentle slope up to a depth of 5 to 8 cm seem to be preferred (CaliforniaHerps.com, 2010).	April-August (breeding)
Reptiles				

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATIO N
<i>Actinemys marmorata</i> western pond turtle	--/CSC/--	Known along the west coast of North America from southern Washington to northern Baja California, Mexico. Many populations have been extirpated and others continue to decline throughout the range, especially in southern California.	Requires aquatic habitats with suitable basking sites. Nest sites most often characterized as having gentle slopes (<15%) with little vegetation or sandy banks.	All year
Birds				
<i>Strix nebulosa</i> Great gray owl	--/CE/--	Known throughout Canada. In the U.S., known from Alaska, Washington, Idaho, Montana south through the Cascade and Sierra Nevada ranges to central-eastern California, central- western Nevada, and northwestern Wyoming (Cornell Laboratory of Ornithology, 2010).	In California, prefers pine and fir forests adjacent to montane meadows between 750 and 2,250 meters in California (Cornell Laboratory of Ornithology, 2010).	All Year
Mammals				
<i>Antrozous pallidus</i> pallid bat	--/CSC/--	Locally common species at low elevations. It occurs throughout California except for the high Sierra Nevada from Shasta to Kern counties, and the northwestern corner of the state from Del Norte and western Siskiyou counties to northern Mendocino County (NatureServe, 2010).	Inhabits grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests, generally below 2,000 meters. The species is most common in open, dry habitats with rocky areas for roosting. Roosts also include cliffs, abandoned buildings, bird boxes, and under bridges (NatureServe, 2010).	All Year
<i>Euderma maculatum</i> Spotted bat	--/CSC/--	Known from southern California (NatureServe, 2010).	Found mostly in foothills, mountains, and desert regions with vegetation types ranging from desert to sub-alpine meadows including desert scrub, pinyon juniper woodland, ponderosa pine, mixed conifer forest, canyon bottoms, rim of cliffs, riparian areas, fields, and open grassland from 0 to 3,000 meters (NatureServe, 2010).	All year

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION
<i>Lasiurus blossevillii</i> Western red bat	--/CSC/--	Occurs from Shasta County to the Mexican border, west of the Sierra Nevada/Cascade crest and deserts (NatureServe, 2010).	The winter range includes western lowlands and coastal regions south of San Francisco Bay. Roosting habitat includes forests and woodlands from sea level up through mixed conifer forests. Roosts primarily in trees (less often in shrubs) along the edge of habitats adjacent to streams, fields or urban areas. Foraging habitats occurs in open areas. They may be found in unusual habitats during migration (NatureServe, 2010).	Year Round (spring migrations March to May AND autumn migrations September to October)
<i>Martes pennanti</i> Fisher	FC/CSC/--	Distributed along the Sierra Nevada, Cascades and Klamath Mountains and in a few areas in the north Coast Ranges (NatureServe, 2010).	Found in intermediate to dense mature stands of trees (coniferous forests) and deciduous riparian habitats with a high percent canopy closure. Utilizes cavities in large trees, snags, logs, rock areas, or shelters provided by slash or brush piles (NatureServe, 2010).	Year Round

STATUS CODES

FEDERAL: United States Fish and Wildlife Service

- FE Federally Endangered
- FT Federally Threatened
- FC Federal Candidate for Listing

STATE: California Department of Fish and Game

- CE California Listed Endangered
- CR California Listed Rare
- CT California Listed Threatened
- CSC California Species of Special Concern
- CFP California Fully-Protected

CNPS: California Native Plant Society

- List 1A Plants Presumed Extinct in California
- List 1B Plants Rare, Threatened, or Endangered in California and Elsewhere
- List 2 Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

SOURCE: CDFG, 2003; CNPS, 2010; USFWS, 2010.

Definition of Special-Status

For the purposes of this assessment, federally-listed special-status species has been defined to include those species that are listed as endangered or threatened under the ESA (or formally proposed for, or candidates for, listing).

For consideration within this assessment, state-listed special-status species has been defined to include those species that are:

- Listed as endangered or threatened under the California Endangered Species Act (or proposed for listing);
- Designated as endangered or rare, pursuant to California Fish and Game Code (§1901);
- Designated as fully protected, pursuant to California Fish and Game Code (§3511, §4700, or §5050);
- Designated as species of concern to the California Department of Fish and Game (CDFG);
- Defined as rare or endangered under California Environmental Quality Act (CEQA); or,
- Considered rare, threatened, or endangered in California, according to the California Native Plant Society (CNPS) (Lists 1A, 1B, and 2).

Standard references used for the biology and taxonomy of plants include: Abrams (1951, 1960), CNPS (2010), CDFG (2003), Hickman, ed. (1993), Mason (1957), Munz (1959), and Sawyer and Keeler-Wolf (1995). Standard references used for the biology and taxonomy of wildlife include Ehrlich et al. (1988), Jennings and Hayes (1994), Peterson (1990), Sibley (2000), and Stebbins (2003).

Potential to Occur

To assess the potential for federally-listed special-status species to occur within the study area, and to consider state-listed special-status species, preliminary information on biological resources in the vicinity of the study area was obtained from the following sources prior to conducting a field survey:

- USFWS list, last updated December 1, 2009, of federally- listed special status species with the potential to occur on or by affected by projects on the Feliciano Mountain quad (USFWS, 2010).
- California Natural Diversity Database (CNDDDB) query, updated January 4, 2010, of special-status species known to occur within the Feliciano Mountain quad and the eight surrounding quads (Buckhorn Peak, Kinsley, El Portal, Bear Valley, Buckingham Mountain, Cathey's Valley, Mariposa, and Stumpfield Mountain quads).

- CNPS query of special-status species known to occur within the Feliciana quad and the eight surrounding quads.
- Special-status species occurrences within five miles of the study area.
- Aerial photographs and topographic maps of the study area.
- Soil data from the Web Soil Survey.

RESULTS

HABITAT TYPES

Proposed Area of Disturbance

The following habitat types are located within the 0.17 acre proposed area of disturbance:

Annual grassland occurs on the south side of the study area (CWHR, 2005). This habitat lacks overstory vegetation. Dominant vegetation observed within this habitat type includes: hedgehog dogtail (*Cynosurus echinatus*), brome (*Bromus* sp.), and oat (*Avena* sp.).

Ponderosa pine habitat occurs on the west side of the study area (CWHR, 2005). The ground is uneven as a result of remnant mine tailings. Dominant overstory vegetation observed within this habitat type includes: Ponderosa pine (*Pinus ponderosa*), black oak (*Quercus kelloggii*), incense cedar (*Calocedrus decurrens*), and interior live oak (*Quercus wislizenii* ssp. *wislizenii*). Dominant understory vegetation observed within this habitat type includes: Manzanita (*Arctostaphylos* sp.), mountain misery (*Chamaebatia foliolosa*), geranium (*Geranium molle*), hedgehog dogtail, wedgeleaf ceanothus (*Ceanothus cuneatus*), and California buckthorn (*Frangula californica*).

The ruderal/disturbed areas occur on the east side of the study area. This habitat type includes existing buildings and associated infrastructure and the graded driveway and parking lot.

Outside Study Area

The following habitat was identified outside of the 0.17 acre area of disturbance:

Riparian habitat, which surrounds Bear Creek, runs south-to-north outside of the eastern boundary of the study area. Dominant overstory vegetation observed within this habitat type includes: willow (*Salix* sp.), interior live oak, and incense cedar. Dominant understory vegetation observed within this habitat type includes: Himalayan blackberry (*Rubus discolor*), dock (*Rumex crispus*), and greater periwinkle (*Vinca major*).

Waters of the U.S.

A small, approximately 6-inch wide ephemeral drainage occurs on the southwest side of the project parcel, outside of the 0.17 acre area of disturbance. The ephemeral drainage has formed

as a result of high-volume precipitation events. The ephemeral drainage receives water through direct precipitation and via a culvert that drains runoff from Highway 140. The ephemeral drainage extends from the culvert outfall eastward for approximately 50 feet where it terminates becoming sheet flow (Figure 5: Photograph 2 of **Appendix B**). No other wetland features were observed during the biological survey of the study area.

Bear Creek flows northward approximately 75 feet east of the proposed 0.17 acre area of disturbance along the eastern boundary of the project parcel. Bear Creek is mapped as an intermittent stream on the Feliciana Mountain quad (USGS, 1992). Water was observed flowing within Bear Creek during the February 2, 2010 survey of the study area. Bear Creek is comprised of a sand and cobble bed, defined banks, and an approximately 30-foot wide ordinary high water mark. Bear Creek is a potentially jurisdictional waters of the U.S.

FEDERALLY LISTED SPECIAL-STATUS SPECIES

For the purposes of this EA, federally-listed species include those plant and animal species that are listed as endangered or threatened under the ESA, formally proposed for listing, or candidates for listing. Regionally occurring federally-listed species were evaluated for their potential to occur on the project site.

There are no federally-listed special-status plants that have the potential to occur within the 0.17 acre area of disturbance. There are two federally-listed candidate wildlife special-status species with the potential to occur on the project site:

Fisher (*Martes pennanti*)

Federal Status – Candidate for Listing

Fishers occur in intermediate to large tree stages of coniferous forests and deciduous riparian habitats with greater than 50 percent canopy cover. Within California, they are found in the Sierra Nevada, Klamath, and Cascades Mountains and within a few areas along the North Coast Ranges. Fishers require cavities in large trees, snags, logs, rock areas, or shelters created by slash or brush piles for dens and protection. Fishers are primarily nocturnal and crepuscular foragers with some diurnal behavior (NatureServe, 2010). There are no CNDDDB occurrences of this species within 5 miles of the study area. The riparian habitat outside the study area provides habitat for this species. The trees within the Ponderosa pine forest provide denning habitat for this species. This species was not observed during the biological survey within the study area. This species has the potential to occur within the study area.

SIERRA NEVADA YELLOW-LEGGED FROG (*RANA SIERRAE*)

Federal Status – Candidate

Sierra Nevada yellow-legged frog inhabits lakes, ponds, meadows, streams, isolated pools, and sunny riverbanks in the Sierra Nevada Mountains from 370 to 3,660 meters. This species requires waters that do not freeze to the bottom and prefers open stream and lake edges with a gentle slope to a depth of 5 to 8 centimeters (CaliforniaHerps.com, 2010). There are no CNDDDB records for this species within 5 miles of the study area. The study area does not provide habitat for this species, although Bear Creek to the east of the study area provides habitat. This species was not observed during the biological survey of the study area. This species has the potential to occur in the vicinity of the study area.

MIGRATORY BIRDS AND BIRD OF PREY

Migratory birds and other birds of prey, protected under 50 CFR 10 of the MBTA, have the potential to nest in the trees within the ruderal/disturbed habitat. Migratory birds and other birds of prey have the potential to nest in the trees and the existing buildings within the study area. No birds were observed nesting during the biological surveys of the study area, however, the biological survey was conducted outside of the nesting season (February 1 to October 1).

3.5.3 IMPACTS TO WETLANDS AND WATERS OF THE U.S.

ALTERNATIVE A

There are no wetland features that occur within the project site; therefore, no impact would occur.

MITIGATION

No wetland or waters of the U.S. mitigation is required for Alternative A.

ALTERNATIVE B

There are no wetland features that occur within the project site; therefore, no impact would occur.

MITIGATION

No wetland or waters of the U.S. mitigation is required for Alternative B.

3.5.4 IMPACTS TO SPECIAL-STATUS SPECIES

ALTERNATIVE A

Grading and construction activities associated with the Proposed Action have the potential to result in the disturbance of denning habitat for the federal listed fisher, upland habitat of the Sierra Nevada yellow-legged frog, and nesting habitat for migratory birds and other birds of prey. The mitigation measures below would ensure that adverse impacts to federally-listed special-

status species would be avoided through preconstruction surveys, identification, and safety awareness training.

The following mitigation shall be implemented for Alternative A to avoid adverse impacts to Fisher:

1. A qualified biologist shall survey whether any fishers or their dens occur within the Ponderosa pine forest or adjacent riparian corridor no more than two weeks prior to commencement of construction activities. If surveys show that there is no evidence of fishers or their dens, then no additional mitigation is be required.
2. Should the biologist determine that fisher dens occur within the project site, consultation with the USFWS would occur within one day following the preconstruction survey. No construction activities would commence until consultation between FEMA and the USFWS has been completed. Otherwise, federal funding could be jeopardized..

The following mitigation shall be implemented for Alternative A to avoid adverse impacts to Sierra Nevada yellow-legged frogs:

3. A qualified biologist shall conduct a pre-construction survey within 14 days prior to initiation of construction activities. The USFWS will be notified should Sierra Nevada yellow-legged frog be observed within the project site.
4. A “Species Sensitivity Training” program will be established for Sierra Nevada yellow-legged frog prior to commencement of construction activities. This program will be designed to educate construction personnel about the mitigation measures required for the execution of the project. All construction personnel will attend the sensitivity training that will provide instruction on Sierra Nevada yellow-legged frog identification, status and detailed protocol of the actions that should be taken in the event that a Sierra Nevada yellow-legged frog is encountered onsite during construction activities.
5. Construction crew shall be trained during the “Species Sensitivity Training” to check beneath the staging equipment each morning prior to commencement of daily construction activities. Should Sierra Nevada yellow-legged frog occur within the staging areas, construction activities shall be halted until the Sierra Nevada yellow-legged frog vacates the project site.
6. A qualified biologist shall be present during grading activities. Should Sierra Nevada yellow-legged frog be observed within the project site, the USFWS shall be notified and construction shall be halted until either the Sierra Nevada yellow-legged frog exits the site or until a biologist with a USFWS Recovery Permit for Sierra Nevada yellow-legged frog relocates the Sierra Nevada yellow-legged frog.

7. For construction of the access roadway that occurs within 100 feet of the riparian corridor of Bear Creek, temporary exclusionary fencing will be established to prevent Sierra Nevada yellow-legged frog from entering construction areas (**Figure 5**). The fencing shall be marked by highly visible signs indicating that human activity is prohibited within these areas and will remain intact until construction is complete.

The following mitigation shall be implemented for Alternative A to avoid adverse impacts to migratory birds and other birds of prey:

8. If construction begins during the nesting season for migratory birds and other birds of prey (between February 1 and October 1), a qualified biologist shall conduct a preconstruction survey for nests no more than two weeks prior to construction. If surveys show that there is no evidence of nests, then no additional mitigation is required.
9. If any active nests are located within the project site, a buffer zone shall be established around the nests. A qualified biologist shall monitor nests weekly during construction to evaluate potential nesting disturbance by construction activities. The biologist shall delimit the buffer zone with construction tape or pin flags within an appropriate buffer of the active nest and maintain the buffer zone until the end of breeding season or the young have fledged. Guidance from USFWS will be requested if establishing a buffer zone is impractical.

ALTERNATIVE B

Under the No-Action Alternative the existing fire station would remain in operation. Therefore, there would be no adverse impacts to biological resources within the project site.

3.5.5 IMPACTS FROM INVASIVE SPECIES

ALTERNATIVE A

The funding for the replacement of an existing fire station would not result in the introduction of invasive animal, invertebrate, or fish species to the region. The inclusion of best management practices (Section 2.0) which would require any landscaping to include native species, would prevent the introduction of invasive plant species to the project site. Funding of the proposed fire station would be consistent with Executive Order 13112.

ALTERNATIVE B

No action would be taken by FEMA and therefore implementation of Alternative B would not require consistency with Executive Order 13112.

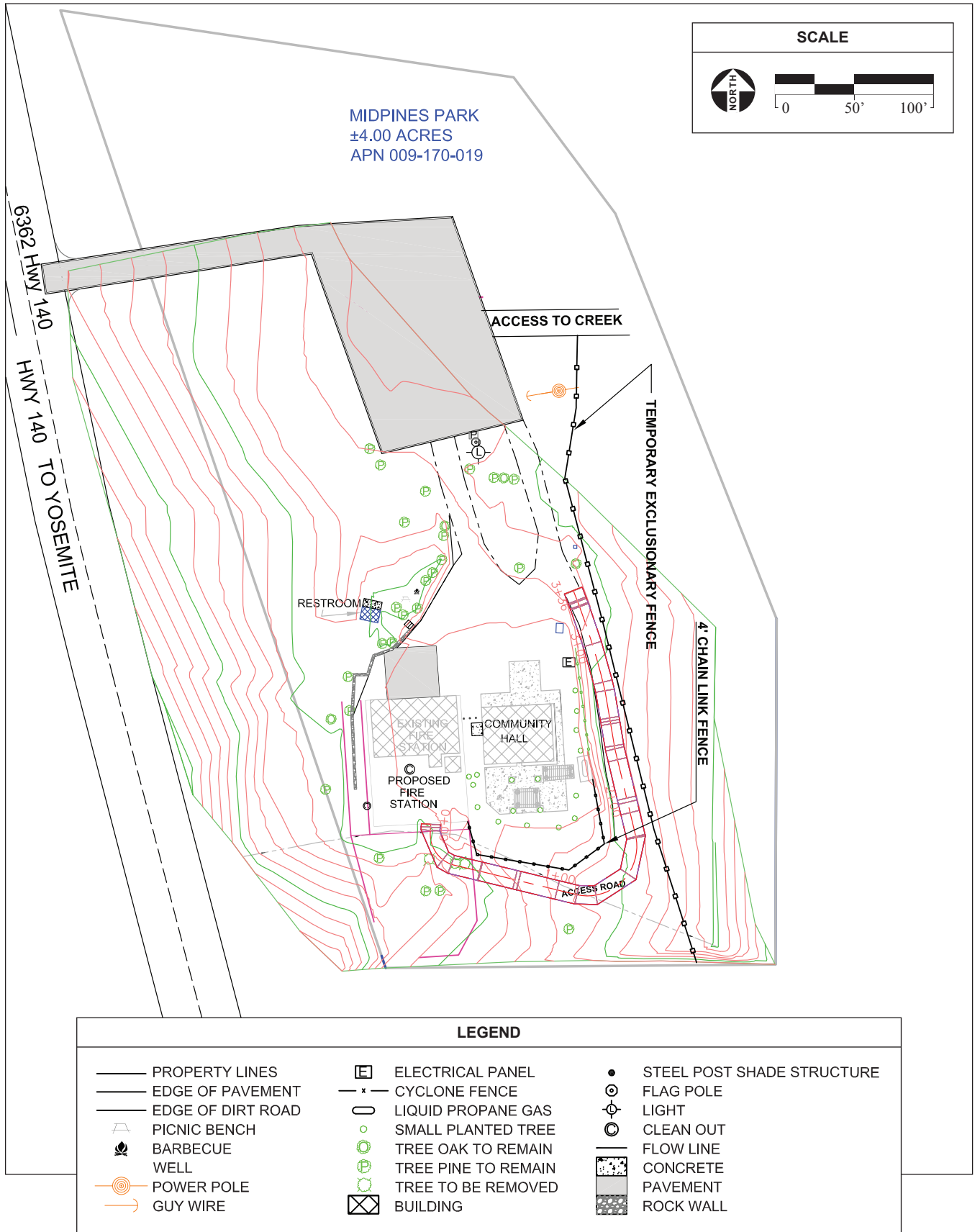


Figure 5
Exclusionary Fencing

3.6 HISTORIC PROPERTIES

An archaeological survey was conducted by AES in February of 2010. A Historic Properties Study was prepared and is included as **Confidential Appendix C**. The cultural resources technical memorandum included a literature search, field survey, and Native American consultation to identify and evaluate any prehistoric and historic-period resources within or adjacent to the project site that may be impacted by the Proposed Action.

3.6.1 REGULATORY SETTING

NATIONAL HISTORIC PRESERVATION ACT

Section 106 of the National Historic Preservation Act (NHPA) as amended, and its implementing regulations found in 36 CFR 800, require federal agencies to identify historic properties that may be affected by undertakings involving federal lands, funds, or permitting. The significance of historic properties must be evaluated using established criteria outlined in 36 CFR 60.4, as described below.

If a resource is determined to be a historic property, Section 106 of the NHPA requires that effects of the undertaking on the property be determined. A historic property is defined as:

“...any prehistoric or historic district, site, building, structure or object included in, or eligible for inclusion in the National Register of Historic Places, including artifacts, records, and material remains related to such a property...”(NHPA Section 301[5]).

If a historic property would be adversely affected by an agency undertaking, then prudent and feasible measures to avoid or reduce adverse impacts must be taken. The ACHP must be provided an opportunity to review and comment on undertakings prior to the expenditure of federal funds.

The criteria for listing on the National Register of Historic Places (NRHP), defined in 36 CFR 60.4, are as follows:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history;
- B. That are associated with the lives of persons significant in our past;

- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important to prehistory or history.

Typically, properties younger than 50 years, unless of exceptional importance, are not eligible for listing in the NRHP.

In addition to meeting at least one of the criteria listed above, the property must also retain enough integrity to convey its historic significance. The National Register recognizes seven aspects or qualities that, in various combinations, define integrity (NPS, 1990). These seven elements of integrity are: location, design, setting, materials, workmanship, feeling, and association. To retain integrity, a property will always possess several, and usually most, of these aspects.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

NEPA requires that federal agencies take all practical measures to “preserve important historic, cultural, and natural aspects of our national heritage” (NHPA, Section 800.8(a)). NEPA’s mandate for considering the impacts of a federal project on important historic and cultural resources is similar to that of Section 106 of the NHPA, and the two processes are generally coordinated when applicable. Moreover, NEPA’s requirement that federal agencies take all practical measures to “preserve important historic, cultural, and natural aspects of our national heritage” has been widely interpreted to cover paleontological resources potentially impacted by federal projects. Thus, whenever possible, mitigation measures are recommended to lessen impacts to historic properties as a result of federal projects. Section 800.8(a) of NHPA’s implementing regulations provides guidance on coordination with NEPA.

3.6.2 HISTORIC PROPERTIES SETTING

PREHISTORY

Mariposa County is located in the western Sierra Nevada Foothill archaeological region. The earliest residents of Central California are represented by the Fluted Point and Western Pluvial Lakes Traditions, which date from about 11,500 to 7,500 years before present (B.P.) (Moratto, 1984). These early peoples are thought to have subsisted using a combination of generalized hunting and exploitation of plants and animals in nearby lakes and streams (Moratto, 1984). Archaeological assemblages attributed to these early cultures are exceedingly rare in the Sierra, but have been documented, nonetheless.

Following the initial occupation of central California, various regionalized cultural traditions and sequences emerged throughout the San Joaquin Valley, Sierra Foothills, and Coast Range areas. Early attempts to categorize the chronology and cultural attributes of the numerous prehistoric manifestations into a single scheme led to the development of the Central California Taxonomic System (CCTS). The CCTS was a tripartite division of Early, Middle, and Late Periods, that was based upon artifact types, burial patterns, and the condition of human bones (Moratto, 1984). Later recast by Heizer and Fenega (1939) as the Early, Middle, and Late Horizons, the CCTS assumed a basically uniform cultural succession for all of central California and soon became the dominate paradigm in California prehistory.

Given what is known of sites in the region, prehistoric archaeological remains may include flaked stone scatters, baked-clay objects, groundstone milling tools, as well as habitation sites. Remains of historical resources may include fragments of glass and ceramic, historic nails and foundation pads. Further, as this project site is proximal to Bear Creek

ETHNOGRAPHY

The project area lies within the ethnographic territory of the Eastern Miwok, specifically speakers of the Mariposa-Chowchilla dialect of the Southern Sierra Miwok (Kroeber, 1925; Levy, 1978). Southern Sierra Miwok territory occupied the upper foothills and upper drainages of the Merced and Chowchilla Rivers. Their western boundary bordered the Southern Valley Yokuts, with the Central Sierra Miwok to the north, the Monache to the south, and Washoe to the east.

As with other Native Californians, the Sierra Miwok population was reduced significantly during the nineteenth century. Events such as increased population due to valley tribes seeking refuge in the foothills, the malaria epidemic of 1833, and the dynamic transformations wrought by the Gold Rush between 1848-1860 contributed to the decline of the Sierra Miwok.

HISTORY

Mariposa County is one of the original 27 counties (Hoover et al., 1990:186). It is known as the “Mother of California Counties” because when it was created it was the largest county in California and 11 central California counties were formed entirely or in part from it. The county developed differently from other Mother Lode counties. Due to the long legal entanglements of John Fremont and the lack of easy access to abundant water, mining in Mariposa County soon evolved into industrial pursuits. While the placer period lasted only a few years, hard-rock quartz mining conducted underground quickly became the order of the day. This meant that men no longer held individual claims but worked for the ‘company,’ often living in company housing, and buying in the company store. They relied on the availability of company capital and resolved to have successful employment. Towns sprang up which were more orderly than their neighbors

outside of the Fremont grant. Mariposa, Bunction (Mt. Bullion), and Bear Valley were laid out on properly surveyed grids with developers bringing in a diverse array of activities needed for settlement. After 1850, many settlers were more interested in grazing and farming than mining. Today, the county prospers from livestock, farming, tourism, and occasional mining.

METHODOLOGY

As part of the study, a records search was conducted at the Central California Information Center (CCIC) of the California Historical Resources Information System by CCIC staff, on July 17, 2009 (NWIC File No. 08-1191). The CCIC, an affiliate of the State of California Office of Historic Preservation, is the official state repository of archaeological and historic records and reports for a 7-county area that includes Mariposa County, and is housed at Stanislaus State University, Turlock, California. Additional research was conducted using the files and literature maintained at AES.

The records search and literature review for this study were done to (1) determine whether known historic properties had been recorded within or adjacent to the study area and determine if the APE was subject to survey in the past; (2) assess the likelihood of unrecorded historic properties based on archaeological, ethnographic, and historical documents and literature; and (3) to review the distribution of nearby archaeological sites in relation to their environmental setting.

Other sources reviewed included the *California Inventory of Historical Resources* (California Office of Historic Preservation, 1976), the California Office of Historic Preservation's *Five Views: An Ethnic Historic Site Survey for California* (1988), California Historical Landmarks (1990), *California Points of Historical Interest* (1992), and the *Historic Properties Directory Listing for Mariposa County* (2009). The Historic Properties Directory includes the National Register of Historic Places, the California Register of Historical Resources, and the most recent listings (through February, 2009) of the California Historical Landmarks and California Points of Historical Interest.

The records search revealed that one historic property had been previously recorded within the project site and two historic properties have been recorded within ¼-mile of the project site. All three properties are historical in age and consist of a mining related feature, a historical district and a road. The property located within the project area was designated P-22-2645 and described as a series of mining tailings (Leach-Palm, 2003). The two properties located beyond the project area are described as Camp Midpines (P-22-2489), which is a historical district, and Highway 140 or P-22-2668 (Larson and Johnston, 2003; Mendershausen, 1982; Office of Historic Preservation, 2009).

The record search indicated the project area had not been the subject of a historic property investigation that had been formally reported to the CCIC. However, five previous historic

properties studies have been conducted within ¼-mile of the APE resulting in the completion of seven documents (Mendershausen, 1982; Potter 1994; Potter, 1994; Caltrans, 1980; Leach-Palm, et al, 2004; Rosenthal and Meyer, 2004, Leach-Palm et al. 2004).

Site indicators for the presence of prehistoric sites in this area may include, but are not limited to, ground depressions; darkened soil areas indicative of middens; fire scorched and/or cracked rock; modified obsidian, chert, or other vitreous materials; and grinding stones including manos and metates. Historic era artifacts may include, but are not limited to, metal objects including nails; containers or miscellaneous hardware; glass fragments; ceramic or stoneware objects or fragments; milled or split lumber; trenches; feature or structure remains such as buildings or building foundations; mining features, and trash dumps.

On December 28, 2009, the State of California Native American Heritage Commission (NAHC) was asked to review the Sacred Lands file for information concerning significant Native American cultural resources within the project area. On January 4, 2010 the NAHC responded stating they have no knowledge of any Native American cultural resources or sacred sites within or adjacent to the APE. However, they did provide a list of individuals and groups for further consultation. Letters to these individuals and groups were sent on June 21, 2010 (**Appendix E**). To date, no response has been received.

On February 2, 2010, a pedestrian survey and visual inspection of the entire parcel of the proposed Midpines Fire Station was conducted with Mariposa County personnel. The entire parcel was examined in transects of 20-meters or less. At the time of the survey the majority of the parcel was covered in heavy vegetation and leaf litter, which lowered the visibility to poor in most areas. The ground surface was examined for archaeological remains, while rodent burrow backdirt piles and road cuts were examined for indicators of buried archaeological deposits.

During the course of the pedestrian survey, historical resource P-22-2645 was relocated. This resource was likely resulted from mining activity that occurred on Bear Creek. This portion of the resource located within the parcel was contained within an area of approximately 72 meter (north/south) and 28 meters (east/west). The resource was observed to be a series of linear irregular depressions and tailing that were oriented north/south. The depressions were roughly four meters in depth. Numerous oak trees and Ponderosa Pine trees were present upon the tailings. No historical or prehistoric artifacts were observed in association with P-22-2645. The southern part of the parcel contains the project footprint and is dominated by the existing fire station building and a community center. To the south of the structures vegetation was less dense which improved the visibility to roughly 40 percent. According to the Mariposa County personnel the existing fire station was built in the 1970s. The existing community center was constructed after the fire station. Therefore, neither structure meets the minimum age criteria to

be considered eligible for the NRHP. No historic properties were observed within the southern part of parcel.

3.6.3 PALEONTOLOGICAL SETTING

The presence of paleontological resources at any particular site is influenced by geological composition resulting from formation processes occurring over long periods of time. Fossils typically reside in sedimentary layers, and may or may not become mineralized dependent upon the mineral composition within their depositional environment.

The region's geologic history is characterized by volcanic eruptions, tectonic uplift and tilting, and erosion. Locally, the dominant geologic feature is the Sierra Nevada Batholith, a massive Mesozoic-era grano-dioritic structure, which underlies the project area and is visible at the surface to the east. Within the project area a thin soil mantle is present, which consists mostly of well drained sandy loams and very rocky coarse sandy loams, derived from quartz diorite and granitic alluvium. Significant fossil resources generally do not occur within the very shallow sediments overlying the western edge of the Sierra Nevada Batholith, and none are present within the batholith itself. Areas along the western edge of the San Joaquin Valley and adjacent southern Coast Range have the highest frequency of fossils in Central California.

A search of the University of California Paleontology Museum's (UCMP) database indicates that only 15 paleontological specimens have been reported in Mariposa County (UCMP, 2009) dating from the Jurassic (205 – 145 million years ago) through Quaternary Periods (1.8 million years ago to present).

Regionally, significant fossil discoveries have been made within the deep alluvial fans within the San Joaquin Valley. Of particular importance is the Fairmead fossil bed in Madera County, located roughly 45 miles south of the project area. The Fairmead locale, discovered in 1993 at the Madera County Landfill, contains a wide variety of Pleistocene fauna including mammoth, birds, reptiles, and large cats, among others (Dundas et al., 1996).

Several sources were consulted to identify unique geologic formations within the project site. Sources reviewed include: the California Geotour Index maintained by the California Geologic Survey (CA Geologic Survey, 2007); California Geology (Harden, 2004); California Landscape (Hill, 1984); Roadside Geology of Northern and Central California (Alt and Hyndman, 2000); California Fossils for the Field Geologist (Schenck and Keen, 1955); and A Natural History of California (Schoenherr, 1992). A review of the above-referenced sources did not identify the presence of any unique geologic features or known deposits of significant fossils within the project area.

3.6.4 IMPACTS TO HISTORIC PROPERTIES/PALEONTOLOGICAL RESOURCES

ALTERNATIVE A

Under the proposed Alternative A, construction would take place within the southeastern portion of the project site. One cultural resource was identified in the area (P-22-2645). Although no historical or prehistoric artifacts were observed in association with P-22-2645, construction activities could disturb this historical resource. The implementation of the mitigation below would avoid such impacts and construction would not adversely impact Historical Resource P-22-2645. Based on the results of the historical properties evaluation, FEMA requested concurrence from SHPO regarding FEMA's finding of No Historic Properties Affected by the implementation of the Proposed Project with incorporated mitigation and FEMA's subsequent undertaking of providing financial assistance (**Appendix E**). SHPO responded with a letter concurring with the finding of No Historic Properties Affected (**Appendix E**).

There is the possibility that subsurface archaeological deposits may exist in the area of potential effect (APE), as archaeological sites may be buried with no surface manifestation. As currently designed, all ground disturbance associated with Alternative A will occur within the areas already disturbed. In the event that concentrations of prehistoric or historic-period materials are encountered during ground-disturbing work, the following procedures will be followed.

MITIGATION

The following mitigation will be implemented for Alternative A:

Cul-1 Protection of Resource P-22-2645

Under Alternative A, mitigation measures must be enacted in order to protect the previously recorded cultural resource (P-22-2645) that is located within the parcel just south of the footprint of the new fire station. Prior to beginning construction activities, an orange construction fencing must be erected around all four boundaries of P-22-2645 by a qualified archaeologist. The fencing will accommodate a buffer area of at least 15 feet around the periphery of the resource. This will prevent any inadvertent impacts to the resources during construction activities. The fencing will remain in place until the project construction is completed. Vehicles are prohibited from parking within the fencing and machinery or construction equipment is prohibited from being stored within the fencing.

Cul-2 Inadvertent Discovery

Should any buried archeological materials be uncovered during project activities, such activities shall cease within 100 feet of the find. Prehistoric archeological indicators include: obsidian and chert flakes and chipped stone tools; bedrock outcrops and boulders with mortar cups; ground stone implements (grinding slabs, mortars and pestles) and

locally darkened midden soils containing some of the previously listed items plus fragments of bone and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic and metal objects; milled and split lumber; and structure and feature remains such as building foundations, privy pits, wells and dumps; and old trails. The County shall be notified of the discovery and a professional archeologist shall be retained to evaluate the find and recommend appropriate treatment measures. Project-related activities shall not resume within 100 feet of the discovery until all approved mitigation measures have been completed.

Cul-3 Encountering Human Remains

There is a remote possibility that an unanticipated discovery of human remains could occur. Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human grave. If human graves are encountered, work shall halt in the vicinity and the Mariposa County Coroner shall be notified immediately. At the same time, an archaeologist shall be contacted to evaluate the discovery. If human remains are of Native American origin, the Mariposa County Coroner will notify the Native American Heritage Commission within 24 hours of this identification.

ALTERNATIVE B

Under the No-Action Alternative the existing fire station would remain in operation. Therefore, there would be no adverse impacts to any unknown archaeological or paleontological resources on the site.

3.7 SOCIOECONOMIC CONDITIONS / ENVIRONMENTAL JUSTICE

3.7.1 SOCIOECONOMIC CHARACTERISTICS OF MARIPOSA COUNTY

Historically, the mining, timber, and tourism industries fueled the Mariposa County economy. Today, one of the largest industries is tourism and recreation. Demographic data for the town of Mariposa and Mariposa County were gathered from a variety of sources including the 2000 Census, the annual American Community Survey (U.S. Census Bureau), the U.S. Bureau of Labor Statistics, and the California Employment Development Department's Labor Market Information. Each of the above-referenced sources presented limitations related to the age, scope, and ability to verify the data. For example, the 2000 Census provides the most up to date demographic information available for Mariposa, whereas the U.S. Census Bureau has provided updated statistics for the County as a whole as part of the annual American Community Survey. Unfortunately, the annual American Community Survey is only completed for communities with a population of 65,000 or more, thus the immediate vicinity of the project site is not covered.

Nonetheless, the most recent and reliable information was culled from the various sources to sketch the demographic profile provided below.

Mariposa County has a total population of approximately 18,297 (Department of Finance, 2009). According to the United States Bureau of Labor Statistics, the county-wide estimated labor force in September 2008 was 9,237. The population of Mariposa County has remained relatively constant, with a 6.8 percent increase in population since 2000. The U.S. Census Bureau estimates the population within Mariposa was approximately 17,130 persons in 2000.

The project site is located within Mariposa County Census Tract 1, which had a median household income of \$30,645 and an average household size of 2.28 (U.S. Census Bureau, 2000). This figure is much higher than for the town of Mariposa, which reported a median household income of \$18,144 in 2000. Approximately 28 percent of families within Mariposa were below the poverty level (US Census Bureau, 2000). According to the 2000 Census, the median household income for Mariposa County was \$34,626 (U.S. Census Bureau, 2000). Average annual unemployment rates for Mariposa County, California, and the United States are provided in **Table 3-8**.

TABLE 3-8
COUNTY, STATE, AND NATIONWIDE EMPLOYMENT (ANNUAL AVERAGE)

Unemployment Rate (%)	2004	2005	2006	2007	2008
Mariposa County	6.7	6.4	5.6	6.0	7.5
California	6.2	5.4	4.9	5.4	7.2
United States	5.5	5.1	4.6	4.6	5.8

SOURCE: California Employment Development Department, Labor Market Information, 2009; Bureau of Labor Statistics, 2009

3.7.2 ENVIRONMENTAL JUSTICE COMMUNITIES

All projects involving a federal action (funding, permit, or approval) must comply with Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, as amended, which directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority, low-income, and Native American populations to the greatest extent practicable and permitted by law. Low income is defined based on U.S. Census Bureau established poverty thresholds and is discussed further below.

The following six principles are provided as guidance for the analysis of impacts under NEPA (Council on Environmental Quality [CEQ], 1997:9):

- Agencies should consider the composition of the affected area, to determine whether minority populations, low-income populations, or Indian tribes are present in the area affected by the proposed action.

- Agencies should consider relevant public health data and industry data concerning the potential for multiple or cumulative exposure to human health or environmental hazards in the affected population and historical patterns of exposure to environmental hazards.
- Agencies should recognize the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed agency action.
- Agencies should, as appropriate, acknowledge and seek to overcome linguistic, cultural, institutional, geographic, and other barriers to meaningful participation, and should incorporate active outreach to affected groups.
- Agencies should assure meaningful community representation in the process.
- Agencies should seek tribal representation in the process.

The EPA's Final Guidance for Incorporating Environmental Justice Concerns in the EPA's NEPA Compliance Analysis, (April 1998) provides the following guidance for defining and assessing impacts to minority and/or low-income populations:

- A minority population may be present if the minority population percentage of the affected area is 'meaningfully greater' than the minority population percentage in the general population or other 'appropriate unit of geographic analysis'.
- The NEPA analysis should also make every effort to identify the presence of distinct minority communities residing both within, and in close proximity to, the proposed project, and to identify those minority groups which utilize or are dependent upon natural resources that could be potentially affected by the proposed project.
- Pursuant to the CEQ guidance, low-income populations in an affected area (that area in which the proposed project will or may have an effect) should be identified with the statistical poverty thresholds from the U.S. Census Bureau on Income and Poverty.

In identifying low-income populations, agencies may consider as a community a group of individuals living in geographic proximity to one another or set of individuals (such as migrant workers or Native Americans) where either type of group experiences common conditions of environmental exposure.

Mariposa County has a predominately Caucasian ethnic composition, with individuals identifying themselves as "white" making up more than 88 percent of the overall single-ethnicity population. This is considerably higher than California as a whole. American Indians and Alaskan Natives compose the next highest group, among one-race individuals, accounting for 3.5 percent of the County's population (County of Mariposa, 2006). This too is higher than the rest of California. The project site is not located in a low-income or minority-populated neighborhood.

3.7.3 IMPACTS TO SOCIOECONOMICS/ENVIRONMENTAL JUSTICE

ALTERNATIVE A

Implementation of Alternative A would enhance existing emergency services within the community. With the implementation of Alternative A, any identified minority and low-income populations would not be subjected to disproportionately high or adverse human health or environmental impacts.

MITIGATION

No mitigation is required for Alternative A.

ALTERNATIVE B

Under the No-Action Alternative, the existing fire station would continue to operate. The community would not receive any of the slight socioeconomic benefits associated with replacing the sub-standard existing fire station. The environmental justice setting would remain similar to the existing setting.

3.8 TRANSPORTATION AND CIRCULATION

3.8.1 ENVIRONMENTAL SETTING

Mariposa County is considered a rural, low-density region. Major trip attractors are dispersed throughout the County; therefore, the dominant mode of transportation is by automobile. The roadway network that would be affected by the Proposed Action is located in the central portion of the County, near the central entrance to the Yosemite National Park. Regional Access to the project site is provided by SR-140.

SR-140 is a minor arterial state route extending 120 miles from Merced County in the west to the central entrance to the Yosemite National Park near El Portal to the east. In 2008, SR-140 experienced an average of approximately 2,000 vehicle trips per day, at an average rate of approximate 240 peak hour trips per day. The resulting average trips indicate the roadway operates under capacity and at an acceptable level of service (LOS) rating of “B” (Caltrans, 2010). LOS is a qualitative measure that includes factors such as speed, travel time, delay, freedom to maneuver, driving comfort, and convenience. LOS ratings are represented as letters ranging from A to F, whereby LOS A represents the best traffic flow driving conditions and LOS F represents the worst traffic flow driving conditions.

PUBLIC TRANSIT, BICYCLE, AND PEDESTRIAN CIRCULATION

Mariposa Transit provides a transit service with designated routes. While there are scheduled routes by day of week and hours of operation, passengers must call the Mariposa Transit office to

arrange a ride. The service is essentially a “lifeline” service providing most residents with one day of service each week for both local and regional travel. Mariposa Transit operates and maintains their own bus equipment, which includes vehicles equipped for wheelchair access. The service is divided into two service areas: northside and southside. The project area is located within the southside service area.

The project site includes amenities for pedestrian use (picnic tables and restrooms); however, pedestrian circulation is limited to the park area and the community hall. There are no bicycle circulation facilities on the project site. There are no pedestrian or bicycle facilities along SR-140 adjacent to the project site.

3.8.2 IMPACTS TO TRANSPORTATION AND CIRCULATION

ALTERNATIVE A

CONSTRUCTION

Construction activities during the implementation of Alternative A have the potential to result in traffic-related impacts associated with employee trips, heavy equipment deliveries, and construction material importation/exportation. Adverse impacts to transportation and circulation resulting from the construction of Alternative A would be minimal given the scope of the project, temporary nature of construction, and limited existing traffic in the project area. With the incorporation of the best management practice discussed in **Section 2.1** project construction would result in a minimal adverse impact to transportation and circulation.

OPERATION

Fire fighting activities are currently being conducted from the project site and along the regional roadway network serving the project site. Therefore, operation of the proposed fire station would not add new trips to the roadway network. Additionally, the pedestrian areas on the project site are currently affected by the existing fire station. Operation of the proposed fire station would not result in new impacts to the on-site pedestrian facilities. There would be no adverse impact to transportation with the implementation of Alternative A.

MITIGATION

No mitigation is required for Alternative A.

ALTERNATIVE B

Under the No-Action Alternative, the existing fire station would continue in operation and no impacts would occur to transportation and circulation because the status quo of operating out of the present facility would remain unchanged.

3.9 LAND USE AND AGRICULTURE

3.9.1 LAND USE

Surrounding land uses consist of vacant lands to the north, south, and east and vacant land and SR-140 to the west. The project site is currently zoned Rural Economic (County of Mariposa, 2005) and consists of the existing Midpines Fire Station and Midpines Park that includes a community hall.

3.9.2 AGRICULTURE

FARMLAND PROTECTION POLICY ACT

The Agriculture and Food Act of 1981 (Public Law 97-98) contained the Farmland Protection Policy Act (FPPA) (Subtitle I of Title XV, Section 1539-1549). The purpose of the FPPA is to minimize the impact of federal programs on the unnecessary and irreversible conversion of farmland to nonagricultural uses. The Farmland Mapping and Monitoring Program (FMMP), maintained by the California Department of Conservation (CDC), maps activity from the U.S. Department of Agriculture (USDA) on a continuing basis. The FMMP produces maps and statistical data used for analyzing impacts on California's agricultural resources.

The FPPA created the farmland classification system which consists of five specific farmland categories. However, there are no designated farmlands subject to protection under the FPPA located within Mariposa County (CDOC, 2009).

3.9.3 IMPACTS TO LAND USE AND AGRICULTURE

ALTERNATIVE A

LAND USE

The development of Alternative A is consistent with the zoning of the project parcels and would replace an existing fire station. No adverse impacts to land use would occur as a result of the implementation of Alternative A.

AGRICULTURE

There would be no impacts to agricultural lands as a result of the implementation of Alternative A.

MITIGATION

No mitigation is required for Alternative A.

ALTERNATIVE B

LAND USE

Under the No-Action Alternative, the existing fire station would continue to operate. No land use consistency or compatibility impacts would occur under this alternative.

AGRICULTURE

There would be no impacts to agricultural lands as a result of the no action alternative.

3.10 PUBLIC SERVICES

3.10.1 ENVIRONMENTAL SETTING

There are no public water or wastewater systems serving the project site. On-site waste disposal would be currently handled by a septic system, which includes a leach field along the west and down slope portion of the proposed fire station. Solid waste would be collected by the County. Electricity is provided by Pacific Gas and Electric. There are no known limiting factors for power delivery to the project site. Telephone services are currently provided to the project site.

3.10.2 IMPACTS TO PUBLIC SERVICES

ALTERNATIVE A

Implementation of Alternative A would result in the similar demands on public services as the existing setting. Implementation of the Proposed Project would not generate new demands for public services, as the existing operations are currently conducted on site. With adequate existing water supply connections, wastewater facilities, solid waste disposal, electricity connections, and telephone service within the area, no physical impacts to the environment would occur.

MITIGATION

No mitigation is required for Alternative A.

ALTERNATIVE B

Under the No-Action Alternative, the existing fire station would continue to operate and public service impacts would be similar to Alternative A.

3.11 NOISE

3.11.1 AMBIENT NOISE SETTING

EXISTING NOISE LEVELS AND SOURCES

Pressure variations occurring frequently enough (at least 20 times per second) that the human ear can detect them are called sound. Noise is often defined as unwanted sound. The decibel scale measures sound levels using the hearing threshold (20 micropascals of pressure) as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum (20 hertz to 20,000 Hz). As a result, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 Hz and above 5,000 Hz to represent the human ear's better sensitivity to mid-range frequencies. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). Frequency A-weighting follows an international standard method of frequency de-emphasis and is typically applied to community noise measurements. In practice, the level of a sound source is measured using a sound level meter that includes an electrical filter corresponding to the A-weighting curve.

The area surrounding the project site is considered rural. Rural areas are generally considered to have an ambient noise level of approximately 55 dBA (Caltrans, 2009).

SENSITIVE RECEPTORS

Some land uses are considered more sensitive to ambient noise levels than others, sensitivity being a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. Residential land uses are generally more sensitive to noise than commercial and industrial land uses. As illustrated in **Figure 3**, the area immediately adjacent to the project site is a community hall, which is considered a sensitive receptor.

3.11.2 IMPACTS TO AMBIENT NOISE

ALTERNATIVE A

Table 3-5 provides the Federal noise abatement criteria, which were developed by the Federal Highway Administration in accordance with the *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (23 CFR 772). The noise abatement criterion in **Table 3-9** were developed to be used as absolute values which, when approached or exceeded, require the consideration of traffic/construction noise abatement measures.

**TABLE 3-9
FEDERAL NOISE ABATEMENT CRITERIA (HOURLY- dBA SOUNDLEVEL)**

Activity Category	Leq (h), dBA	Activity Category Description
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D	---	Undeveloped Lands.
E	52 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

SOURCE: Federal Highway Administration, 2009.

Construction of Alternative A would temporarily introduce noise from heavy construction equipment, additional vehicle trips to the project area from construction employees, and material and equipment delivery. Heavy equipment operation would dominate the noise environment during construction. Heavy equipment used in the construction of Alternative A would emit an ambient noise level of approximately 85 Leq, dBA at 50 feet from the project site. The nearest sensitive noise receptor is located adjacent to the proposed area of disturbance. Implementation of best management practices, which would restrict construction hours to typical commute and business hours, would reduce the temporary noise impacts to a minimal level.

Traffic noise would dominate the noise environment during operation of Alternative A. A doubling of the traffic volume would result in an audible increase in the ambient noise level. A three dBA increase in noise is considered audible (Caltrans, 2009). Since, operation would not increase the traffic volume on area roads compared to existing conditions, there would be no increase in the ambient noise level (refer to **Section 3.8**). Additionally, the existing fire station, and associated noise conditions, are components of the existing setting. Construction of a new fire station would not noticeably alter the ambient noise level on the project site. There would be a minimal adverse impact to the ambient noise level during operation of Alternative A.

ALTERNATIVE B

Under the No-Action Alternative, the existing fire station would remain in operation. No construction noise related impacts would be experienced by operations at the adjacent community hall. With regard to operational noise, the ambient noise level would be the same as existing conditions and similar to Alternative A. No noise impacts would occur under the No-Action Alternative.

MITIGATION

No mitigation is required.

3.12 HAZARDOUS MATERIALS

Hazardous materials are those materials that may pose a material risk to human health or the environment. These materials are subject to numerous laws and regulations at several levels of government. At the Federal level, human exposure to chemical agents, and in some cases environmental and wildlife exposure to such agents is regulated primarily by four agencies: the EPA, the Food and Drug Administration (FDA), the Occupational Safety and Health Administration (OSHA), and the Consumer Product Safety Commission (CPSC). The CPSC plays a limited role in regulating hazardous substances; it deals primarily with the labeling of consumer products. The FDA also plays a limited role in regulating hazardous substances; it primarily regulates food additives and contaminants, human drugs, medical devices, and cosmetics. In addition to these regulatory agencies, the U.S. Department of Transportation (DOT) regulates the interstate transport of hazardous materials.

3.12.1 ENVIRONMENTAL SETTING

A site reconnaissance was conducted on February 2, 2010 of the project site to determine if any Recognized Environmental Conditions (RECs) exist. RECs refer to the presence or likely presence of conditions on a property that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products on the property or into the ground, groundwater, or surface water of the property.

The project site currently functions as a County public area including an existing fire station and community hall. The fire station includes an equipment garage where equipment and fire-fighting materials are stored. There were no signs of gross contamination on the project parcel. No RECs were observed on the project site.

ENVIRONMENTAL DATABASE REPORT

Database searches were conducted for records of known storage tank sites and known sites of hazardous materials generation, storage, and/or contamination within the vicinity of the proposed project. The environmental database review was accomplished by using the services of the computerized search firm *Environmental Data Resources, Inc.* (EDR). EDR uses a geographical information system to plot locations of past and/or current hazardous materials involvement. The analysis determines if hazards/hazardous materials on adjacent sites would impact surface and/or subsurface conditions on the project site. EDR indicated that there are no listed sites within a mile of the project site. The EDR Report is provided as **Appendix D**.

3.12.3 IMPACTS TO HAZARDOUS MATERIAL MANAGEMENT

ALTERNATIVE A

The results of the site visit and databases searches did not identify any RECs on or adjacent to the project site that could limit development of Alternative A.

MITIGATION

No mitigation is required for Alternative A.

ALTERNATIVE B

The results of the Phase I ESA did not identify any RECs on or adjacent to the project site.

MITIGATION

No mitigation is required for Alternative B.

3.13 AESTHETICS

The project site is currently disturbed and contains an existing fire station, paved parking lot, and community hall building. The project site is located adjacent to a scenic highway, SR-140.

3.13.2 IMPACTS TO AESTHETICS

ALTERNATIVE A

Development of Alternative A would result in the construction of a four-bay fire station, consistent with the existing aesthetics of the site, which is defined by the existing fire station and community center. The development of the fire station may increase the aesthetic image of the project site by removing the aged fire station and developing a new building, the development of which would be consistent with the Rural Economic land use designation of the site. The new fire station would replace a 40 year old structure, maintaining the aesthetics of the site by replacing one building with another. The replacement of the existing fire station would not adversely affect the adjacent scenic highway. Implementation of Alternative A would result in a beneficial impact to aesthetics.

ALTERNATIVE B

Under the No-Action Alternative, the project site would remain under existing conditions. The existing fire station, community hall, and paved parking lot would continue to define the aesthetics of the project parcels.

MITIGATION

No mitigation is required.

3.13 GROWTH-INDUCING AND CUMULATIVE IMPACTS

3.13.1 GROWTH-INDUCING IMPACTS

Under NEPA, growth-inducing effects of a Proposed Action must be analyzed (40 CFR §1508.8[b]). Growth-inducing effects are defined as effects that foster economic or population growth, either directly or indirectly. Direct growth inducement could result, for example, if a project included the construction of a new residential development. Indirect growth inducement could result if a project established substantial new permanent employment opportunities (e.g., new commercial, industrial, or governmental enterprises) or if it removed obstacles to population growth (e.g., expansion of a wastewater treatment plant to increase the service availability).

Growth inducement may constitute an adverse impact if the increased growth is not consistent with or accommodated by the land use and growth management plans and policies for the area affected. Local land use plans provide for development patterns and growth policies that allow for orderly development supported by adequate public services and utilities such as water supply, roadway infrastructure, sewer services, and solid waste disposal services. A project that would induce “disorderly” growth (i.e., would conflict with local land use plans) could indirectly cause adverse environmental or public service impacts.

The Proposed Action would provide facilities for fire fighting operations already conducted on the project site. The result of the implementation of the Proposed Project would not provide new services to the region, and would therefore not result in additional growth to the region outside of forecast growth within the area-specific plan.

Analyses of the adequacy of local infrastructure and services are included in the discussion of environmental consequences for each proposed Alternative. No significant, unmitigatable impacts have been identified that would result from the Proposed Action. No indirect impacts are expected, as no long-term or permanent employment opportunities would be created. Utility infrastructure would not be improved or expanded to increase service availability to any surrounding areas. No growth-inducing impacts would occur as a result of the implementation of either of the proposed alternatives.

3.13.2 CUMULATIVE IMPACTS

Potential cumulative impacts for each environmental issue area are discussed below. Cumulative impacts are defined in 40 CFR §1508.7 as the impacts:

... on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts

can result from individually minor but collectively significant actions taking place over a period of time.

No specific development projects are known to have been approved in the vicinity that would cause cumulative impacts when considered in conjunction with the Proposed Action and past and present projects in the vicinity of the project site are assessed in the previous sections. Midpines is not located within a special study area and the County has not developed an area plan or land use plan for Midpines. The following analysis is based on the cumulative impacts associated with other future projects that may ultimately be approved in the project area.

LAND RESOURCES

Potential project impacts to land resources (topography, soils, seismicity, and mineral resources) are related to measures required to ensure proper design for site conditions. Future development projects would be required to comply with the County General Plan, County ordinances, and state regulations concerning land resources. No potential cumulative impacts would be relevant to this issue area.

WATER RESOURCES

The Proposed Action and other cumulative projects that may be constructed in the vicinity would be required to comply with the CWA as it relates to stormwater and point-source discharges. Compliance with USEPA and/or State stormwater pollution prevention requirements would prevent off-site development, in combination with the Proposed Action, from causing cumulatively significant stormwater related impacts.

Impacts to the groundwater basin would not be cumulatively significant as there are no proposed projects within the immediate area that could result in overdraft of the groundwater basin. Therefore, no cumulatively significant impact would occur.

With the implementation of the protective measures listed in **Section 2.0**, impacts to water resources would be less than significant. None of the cumulative projects would have an individually significant impact on groundwater quality, and no cumulatively significant impact would occur.

AIR QUALITY

Cumulative impacts to the air basin are addressed within the requirements of the Clean Air Act and the General Conformity Rule. Using the significance thresholds in the General Conformity Rule, the Proposed Action is presumed to conform with the State Implementation Plan and would not result in changing the basin's air quality designation. The Proposed Action does not reach the emissions *significance criteria* of the MCAB. Therefore the Proposed Action would not result in a change in the basin's air quality designation. Alternative A, when considered in combination

with other potential future actions, would not lead to a cumulatively significant impact to air quality.

BIOLOGICAL RESOURCES

Potential impacts to biological resources on the project site, including sensitive habitats, special-status species, and migratory birds, would be reduced to a less-than-significant level through mitigation measures in **Section 3.5.4**. Any cumulative developments affecting jurisdictional waters of the U.S. or special-status species would be required to mitigate according to the applicable provisions of the CWA and the ESA, and migratory birds would be protected from take subject to the Migratory Bird Treaty Act. No cumulatively significant impacts to biological resources would occur.

HISTORIC PROPERTIES

Cumulative effects to historic properties typically occur when sites that contain cultural features or artifacts are disturbed by development. As these properties are destroyed or displaced, important information is lost and connections to past events, people and culture is diminished. As discussed in **Section 3.6**, one previously recorded historic property was identified within the project site; this property was relocated and remains in good condition. Implementation of the mitigation measure presented in **Section 3.6** would prevent any impacts to the resource; the implementation of this measure would also prevent any cumulative impacts to the resource.

Additionally, the Proposed Action may impact previously unknown historic properties, as archaeological sites may be buried with no surface manifestation. Significant cumulative impacts to unknown historic properties could occur if sites continued to be lost, damaged, or destroyed without appropriate recordation or data recovery. Mitigation for potential cumulative impacts to unknown historic properties has been specified in **Section 3.6** and similar measures are required for all development in Mariposa County in accordance with Federal regulations and the California Environmental Quality Act (CEQA). Implementation of these measures would prevent cumulatively considerable impacts to historic properties.

SOCIOECONOMIC CONDITIONS/ENVIRONMENTAL JUSTICE

Alternative A, when considered in combination with other planned and reasonable foreseeable future actions, would not lead to a significant cumulative impact to socioeconomic conditions or environmental justice. As discussed above, the implementation of Alternative A would result in beneficial socioeconomic and environmental justice impacts by providing enhanced emergency services to the region.

TRANSPORTATION AND CIRCULATION

Alternative A, when considered in combination with other planned and reasonable foreseeable future actions, would not lead to a significant cumulative impact to the transportation network. The existing transportation network adequately operates within acceptable LOS for the roadways serving the project area. Additional development within the transportation network has been accounted for in the growth projections in the area specific plan.

BICYCLE, PEDESTRIAN, AND TRANSIT NETWORKS

The Proposed Action would not adversely affect a pedestrian or bicycle networks under the Cumulative plus Proposed Action conditions. None of the known cumulative scenario projects are expected to affect these networks. No cumulatively significant impacts would occur.

LAND USE

Any surrounding cumulative projects would be subject to local land use regulations. Since Alternative A is consistent with the existing and proposed land uses in the vicinity, no cumulatively significant land use impacts would occur.

AGRICULTURE

The retention or development of agricultural land is largely a policy consideration for governmental entities. Important farmlands are considered a limited and valuable resource. The project site does not contain important farmland and is located within a region that is classified as Rural Economic. Considering that the Proposed Action site is not used for agriculture, and no known agricultural lands are located in the immediate area, cumulatively significant impacts to agricultural land would not occur.

PUBLIC SERVICES

Public services for Alternative A would be accommodated by existing public services. As development of other areas continues, the combined need for public services may create a cumulative impact. However, all future land uses in the region would be subject to approval by local governments, and would include provisions for public services. As a result, Alternative A would not result in cumulatively significant impacts to public services.

NOISE

Traffic noise would dominate the noise environment in the area surrounding the project site during cumulative conditions. Alternative A would not result in a noticeable increase in the ambient noise environment. No cumulatively significant impacts to noise would occur.

HAZARDOUS MATERIALS

Any new developments would be required to adhere to State and municipal regulations regarding the delivery, handling, and storage of hazardous materials, thereby reducing the risk to the public's health and welfare due to accidental exposure. Therefore, there are no cumulatively significant hazardous materials impacts associated with Alternative A.

AESTHETICS

Development of the project site would be an improvement over the existing fire station and would be consistent with the existing community hall. Any future development in the vicinity would be subject to County review and approval, and potentially significant impacts to visual resources would require mitigation such as landscaping shielding and specific design provisions. Therefore, Alternative A, when considered in combination with other planned and reasonably foreseeable future actions, would not lead to a cumulatively significant impact to aesthetics.

3.15 AGENCY COORDINATION AND PERMITS

3.15.1 AGENCY COORDINATION REQUIREMENTS

All necessary permits and coordination with governing agencies would be the responsibility of Mariposa County coordinated through the County's architects and contractors selected for site construction. All construction and required regulatory permits would be maintained and posted at the construction site. In accordance with applicable local, state, and federal regulations, the County would be responsible for acquiring any necessary permits and completing compliance with the California Environmental Quality Act prior to commencing construction at the project site.

SECTION 4.0

PUBLIC INVOLVEMENT

SECTION 4.0

PUBLIC INVOLVEMENT

4.1 PUBLIC COMMENT PERIOD

An EA for the proposed FEMA funding of the construction of the Midpines Fire Station was submitted to the State Clearinghouse and released to the public and agencies for a 15-day review period beginning on March 24, 2011 and ending on April 8, 2011. During the review period, FEMA received one comment letter on the EA and Proposed Project. In response to the comments received, this Revised EA was developed and will be recirculated for public review. The responses to the comment received on the EA are addressed in detail in the Supplement to Revised EA Midpines Fire Station, Mariposa County, May 2011 published under separate cover.

SECTION 5.0

CONSULTATION, COORDINATION, AND LIST OF PREPARERS

SECTION 5.0

CONSULTATION, COORDINATION, AND LIST OF PREPARERS

5.1 FEDERAL AGENCIES CONSULTED

U.S. Fish and Wildlife Service

5.2 STATE AGENCIES CONSULTED

California Department of Parks and Recreation, Office of Historic Preservation

Native American Heritage Commission

California Department of Fish and Game

5.3 TRIBES CONSULTED

Southern Sierra Miwuk Nation

Anthony Brochini, Chairperson

Jay Johnson, Spiritual Leader

Les James, Spiritual Leader

Buena Vista Rancheria

Rhonda Morningstar Pope

5.4 PREPARERS OF ENVIRONMENTAL ASSESSMENT

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