# Initial Study/Mitigated Negative Declaration
# for the proposed
# Fawn Lodge Forest Fire Station Replacement Project
# Trinity County, California
# State Clearinghouse Number 2009092043

prepared by:


The California Department of Forestry and Fire Protection (CalFire)
The Lead Agency Pursuant to Section 21082.1 of the
California Environmental Quality Act (CEQA)

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**September 14, 2009**

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# MITIGATED NEGATIVE DECLARATION

## Introduction and Regulatory Context

### Stage of CEQA Document Development

☐ **Administrative Draft.** This CEQA document is in preparation by California Department of Forestry and Fire Protection (CalFire) staff.

☒ **Public Document.** This completed CEQA document has been filed by CalFire at the State Clearinghouse on September 14, 2009, and is being circulated for a 30-day agency and public review period. The public review period ends on October 13, 2009. Instructions for submitting written comments are provided on Pages 5-6 of this document.

☐ **Final CEQA Document.** This Final CEQA document contains the changes made by the Department following consideration of comments received during the public and agency review period. The changes are displayed in strike-out text for deletions and underlined text for insertions. The CEQA administrative record supporting this document is on file at CalFire's Sacramento Headquarters.

### Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND[1]) describes the environmental impact analysis conducted for the proposed Fawn Lodge Forest Fire Station (FFS) Replacement project. This document was prepared by California Department of Forestry and Fire Protection (CalFire) staff utilizing information gathered from a number of sources including research and field review of the proposed project area and consultation with environmental planners and other experts on staff at other public agencies. Pursuant to Section 21082.1 of the California Environmental Quality Act (CEQA), the Lead Agency, CalFire, has prepared, reviewed, and analyzed the IS/MND and declares that the statements made in this document reflect CalFire's independent judgment as Lead Agency pursuant to CEQA. CalFire further finds that the proposed project, which includes revised activities and mitigation measures designed to minimize environmental impacts, will not result in significant adverse effects on the environment.

### Regulatory Guidance

This IS/MND has been prepared by CalFire to evaluate potential environmental effects which could result following approval and implementation of the proposed Fawn Lodge FFS Replacement project. The proposed project is located approximately 30 miles west of Redding and 7 miles southeast of Weaverville in Trinity County, California. This document has been prepared in accordance with current CEQA Statutes (Public Resources Code [PRC] §21000 *et seq*.) and CEQA Guidelines (California Code of Regulations [CCR] §15000 *et seq*.).

An Initial Study (IS) is prepared by a lead agency to determine if a project may have a significant effect on the environment (14 CCR § 15063[a]), and thus, to determine the appropriate environmental document. In accordance with CEQA Guidelines §15070, a "public agency shall prepare … a proposed negative declaration or mitigated negative declaration … when: (a) The Initial Study shows that there is

[1] A list and definition of the acronyms and symbols used in this CEQA document is presented on pages 83-84.

no substantial evidence … that the project may have a significant impact upon the environment, or (b) The Initial Study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions will reduce potentially significant effects to a less-than-significant level." In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the proposed project will not have a significant effect on the environment and, therefore, does not require the preparation of an Environmental Impact Report (EIR). This IS/MND conforms to these requirements and to the content requirements of CEQA Guidelines Section 15071.

## Purpose of the Initial Study

CalFire has primary authority for carrying out the proposed project and is the lead agency under CEQA. The purpose of this IS/MND is to present to the public and reviewing agencies the environmental consequences of implementing the proposed project and describe the adjustments made to the project to avoid significant environmental effects or reduce them to a less-than-significant level. This disclosure document is being made available to the public, and reviewing agencies, for review and comment. The IS/MND is being circulated for public and agency review and comment for a review period of 30 days as indicated on the ***Notice of Intent to Adopt a Mitigated Negative Declaration*** (NOI). The 30-day public review period for this project begins on September 14, 2009 and ends on October 13, 2009.

The requirements for providing an NOI are found in CEQA Guidelines §15072. These guidelines require CalFire to notify the general public by utilizing at least one of the following three procedures:

- Publication in a newspaper of general circulation in the area affected by the proposed project,
- Posting the NOI on and off site in the area where the project is to be located, or
- Direct mailing to the owners and occupants of property contiguous to the project.

CalFire has elected to utilize the second of the three notification options. The NOI was posted at three prominent locations on and off site in the area where the project is located for the entire 30-day public review period. The three locations where the NOI was posted during the 30-day public review period are:

1. At the building marked "Office" within the Fawn Lodge FFS compound where it is prominently in view by any person visiting the station.

2. At a prominent location near the junction of Highway 299 and the access road leading into the station where it can readily be seen by anyone passing through this area.

3. At the public-greeting counter at CalFire's Shasta-Trinity Unit Headquarters in Redding.

A complete copy of this CEQA document was made available for review by any member of the public requesting to see it at Locations #1 and #3 above. An electronic version of the NOI and the CEQA document were made available for review for the entire 30-day review period through their posting on CalFire's Internet Web Pages at:
http://www.fire.ca.gov/resource_mgt/resource_mgt_EPRP_PublicNotice.php

If submitted prior to the close of public comment, views and comments are welcomed from reviewing agencies or any member of the public on how the proposed project may affect the environment. Written comments must be postmarked or submitted on or prior to the date the public review period will close (as indicated on the NOI) for CalFire's consideration. Written comments may also be submitted via email

(using the email address which appears below) but comments sent via email must also be received on or prior to the close of the 30-day public comment period. Comments should be addressed to:

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After comments are received from the public and reviewing agencies, CalFire will consider those comments and may (1) adopt the Mitigated Negative Declaration and approve the proposed project; (2) undertake additional environmental studies; or (3) abandon the project. If the project is approved and funded, CalFire could design and construct all or part of the project.

# Project Description and Environmental Setting

## Project Location

The CalFire Fawn Lodge FFS is a two-engine fire station located on 3.62 acres of State of California owned property, approximately 0.10 miles north of State Highway 299, and approximately 7 miles southeast of the community of Weaverville in Trinity County, California (see Figures 1-2). The proposed project area is situated within the SW ¼ of the NE ¼ of Section 36, T33N, R9W, Mount Diablo Base Meridian (MDBM), on the Lewiston, CA, USGS 7.5 minute topographic map (see Figure 3). The proposed project area includes the area occupied by the existing Fawn Lodge FFS and its immediately surrounding areas (see Figures 4-7).

## Background and Need for the Project

Fawn Lodge FFS was first established in 1953 as a two-engine station. Eight to twelve personnel live and work at this facility for six months of the year during fire season. Presently there are five buildings and structures located on the site. These include an apparatus building with office, barracks, messhall, CCC paymaster building, and gas house near the fueling station. Also located on site is a fully functioning Pelton Wheel that generates electric power. The current station has several deficiencies which have facilitated the need to modernize the facility. The facility is over 50 years old, lacks security, and does not meet current health and safety or building codes. The facility does not meet Essential Services Seismic Act standards, and has asbestos containing materials in the building siding and floor tiles.

The fire engine crew from Fawn Lodge FFS is the first CalFire ground-based fire protection resource to arrive at fires within the State Responsibility Area of eastern Trinity County, including the critically important Grass Valley Creek watershed. Even though this geographical area has a history of large fires, a rapid emergency response results in the suppression of most fires before they become large and damaging. Extinguishing fires when they are small results in much less damage to property, livestock, and watershed values while threatening fewer lives. Fire fuel types vary from grass and brush to timber in varying proportions. The terrain is moderate to steep.

To achieve CalFire's goal of containing 95% of all wildland fires to ten acres or less, CalFire must operate a fire station at this strategic location and the fire crew's response effectiveness must be

maintained at the highest levels. In addition to wildland fire protection, the crew also responds to structure fires, vehicle fires, traffic accidents, medical emergencies, rescues and hazardous materials incidents. They also provide a wide range of fire prevention programs to the surrounding communities of Lewiston and Douglas City as well as supporting other CalFire stations in the communities of Old Shasta, Weaverville, and Hayfork.

Most buildings on this site were constructed in 1935, 1953 and 1964 (Thornton 1994:141). There have been no major investments in improvements to the structures in the past 25 years. All of the buildings and structures are exhibiting symptoms of infrastructure breakdown and maintenance costs have risen sharply over the last several years. The buildings do not have wall insulation or energy efficient windows, which make heating and cooling a very expensive undertaking. Frame damage and warping make it nearly impossible to maintain the windows. The single pane windows are energy in-efficient. Winter moisture and summer heat have contributed to deterioration and failure of the wood siding. Dry rot and termite damage are evident in several areas especially in the bathroom and kitchen area around the sink. The electrical system is inadequate for today's energy demands and must be modernized for efficiency and to meet current codes. Insulation on some of the electrical wiring is deteriorated, increasing the risk of accidental fire or electrocution. Commercial power is often interrupted by outages and so emergency power generation is required.

The site's kitchen and pantry storage spaces are significantly undersized from the current standard. In addition, the restroom facilities are inadequate and are not designed for male/female crews, and are not accessible to the disabled. The facilities do not meet current American Disabilities Act (ADA) regulations.

The barracks/messhall heating, ventilating and air conditioning system is outdated and failing. Repair parts for this system are extremely difficult to find. In general, the living, bathing and kitchen quarters are cramped and provide neither a healthful nor a minimally accommodating living environment for the fire crews stationed at this site. The buildings do not meet current ADA standards for access or department standards for sleeping accommodations for both men and women fire-fighting personnel assigned to work at this facility.

## Project Objectives

The objective of the project is to continue to provide fire protection and emergency-response services in the Fawn Lodge FFS Initial Response Area (IRA) by constructing a new and updated facility at the existing fire station site.

In accordance with the CalFire Strategic Plan (1997), specific objectives include:

- Obtain and maintain high quality fire-fighting equipment, apparatus, and facilities to respond to California's changing fire protection needs; and
- Improve CalFire's ability to meet peak demand and emergency incident workload through enhancement of the statewide fire protection system.

## Project Start Date

CalFire is unable to accurately disclose when actual construction of this project might begin. The earliest start date will be sometime during the year 2011 after the completion of the CEQA process, followed by completion of Working Drawings which will take approximately one year to complete. The actual start will take place when project funding has been secured and all construction contracts have been put in place. It is possible this project could be further delayed pending resolution of issues related to funding.

CalFire will carefully re-assess the CEQA document just prior to construction to determine if any additional environmental review actions may be required to ensure compliance with all environmental requirements in place at that time.

## Project Description

The proposed project involves the complete replacement of the existing CalFire two-engine FFS. The old facility will be demolished and a new two-engine FFS will be constructed on approximately the same 3.62-acre site. Building and structure footprints will be altered and small areas adjacent to the existing facility will receive new improvements (see Figures 5-7).

The State will retain contractors to carry-out demolition of the buildings and facilities. Demolition will include abatement and disposal of hazardous materials that may be present in the old structures and buildings including asbestos tile. These materials will be transported to a nearby landfill which is licensed or permitted to receive them. Materials will be recycled as much as possible. For example, old concrete and asphalt paving will be crushed on-site and used as fill material where necessary. The existing leach field and old water and electrical conduits will be abandoned in place.

Following demolition the site will be graded and re-contoured to raise the elevation of the station above the 100-year floodplain to prevent future flooding. Fill material needed to raise the elevation will be obtained on-site from reusing crushed old concrete and asphalt and the soils obtained from cutting into the hill-slope at the north end of the station (see Figure 5). Additional materials needed to complete elevation changes will be engineered fill materials obtained from a County-permitted quarry. All fill used will have suitable engineering properties.

The following new buildings, structures, and improvements will be constructed:

- Barracks/Messhall –12 beds, 3753 square feet
- Apparatus building – Three-bays, 1999 square feet, drive-through style
- Generator/Pump/Storage Building - 565 square feet
- Above ground fuel vault
- A new pump and rehabilitation of the existing well (see Figure 6).
- New septic and leach field system
- Grading, paving, and sidewalks
- Underground routed utilities
- New water storage tank or tanks with total capacity at or exceeding 20,000 gallons.
- New hose wash rack
- Site lighting
- New footing for a new 40-foot radio tower
- Landscaping, irrigation and drainage
- Water system

A 1,000-gallon, split-tank, above-ground, gas/diesel fuel vault will be installed at the new facility. This vault will contain up to 750 gallons of diesel and 250 gallons of gasoline. Two 1000-gallon or smaller above-ground liquid propane gas (LPG) fuel tanks will also be installed. The old communication system will be removed and a standard FFS communication tower installed. The existing radio antenna is approximately 20 feet in height and is mounted to the exterior wall of the apparatus building. The new

tower will be approximately 40 feet tall and will provide needed improvements in radio transmissions, especially emergency response requests.

The driveway to the facility will be repaved from the frontage road to the bridge (see Figure 7). The main part of the station surrounding the new apparatus building will be repaved to better accommodate drive-through circulation around the site. The outer margin of this paved area will be curbed to control the flow of rain runoff to drainage points where the water will be collected, filtered, drained, and dispersed into the natural vegetation located between the station and Grass Valley Creek (see Figure 5).

Access to the site is currently provided by a paved road crossing a Bailey bridge[2] over Grass Valley Creek. Three options are feasible to make needed improvements to the bridge:

1. Remove the existing bridge to an off-site construction yard for repairs and rehabilitation (which may only require sandblasting and painting). The bridge will then be reinstalled on the existing abutments. This is the most feasible option. If structural flaws are detected in either the bridge or the abutments following its removal, the following two options are available.

2. Replace the bridge with a new bridge using the existing abutments, or

3. Replace the bridge with a new bridge and new abutments. If this occurs, the new abutments will be installed behind the existing abutments which will remain in place in order to avoid impact the stream bank or bed of Grass Valley Creek.

A preliminary evaluation by a structural engineer found the bridge and abutments to be in excellent condition. All of the welded joints visible were in very good condition and it is likely this existing bridge will be reused. A crane will be positioned on the paved access road on the south margin of the bridge to remove it, in sections, from its abutments for transport to an off-site construction yard for rehabilitation. This will include sandblasting, repainting, and replacement of any parts as necessary. Once the bridge is removed and either the bridge or existing abutments are found not to be structurally sound, option 2 or 3 will be used to replace the bridge.

A new septic tank and leachfield system will be constructed to support the new facility on a small flat area due east and slightly above the new generator/pump building (see Figure 5). A short segment of new graveled road will be built to provide vehicle access for construction and maintenance of the tank and leachfield. A few existing trees will need to be removed at this location to build an effective leachfield. The facility will be built in a manner which is consistent with the guidelines and recommendations provided by Trinity County.

A retaining wall on the south side of the station compound will be removed and replaced with an engineered wall in the same general location to further stabilize the re-contoured elevation. The new retaining wall will form the NE margin of the lower graveled parking area (Figure 5). The south side of the site adjacent to Grass Valley Creek will not receive any fill. All project activities will take place outside of the riparian zone and stream channel of Grass Valley Creek and its Philips Gulch tributary at the northwest margin of the project.

[2] A Bailey bridge is a type of steel bridge commonly used in WWII which is designed to be shipped in parts and assembled or repositioned rapidly. It is named after Sir Donald Bailey, a British Engineer who designed it.

The current facility contains a small ornamental waterwheel which serves as landscape decoration. This waterwheel, which has been in place for over 40 years, is driven by a small flow of water originating from the stream flowing through Phillips Gulch upstream from the station. Early in 2009 CalFire installed a small Pelton Wheel generator at the station to augment electrical power. This wheel is powered from a portion of the flow of water from Philips Gulch. The Pelton Wheel will be reinstalled in approximately the same place within the new facility. The ornamental waterwheel will be demolished (Figures 20-21).

As recommended by the Regional Water Quality Control Board (RWQCB) the lower parking area (Item #16 on Figure 5) will be graveled rather than paved to enhance infiltration of surface runoff and avoid direct peak flow discharges into Grass Valley Creek. Post-construction facility drainage will avoid surface runoff into Grass Valley Creek and avoid channeling and concentrating surface runoff. French drains, vegetated swales, and other landscaping devices will be used where feasible to enhance infiltration. Downspouts will be diverted to French drains to avoid piping run-off collected from the roofs of the buildings.

## Environmental Setting of the Project Region

The proposed project is located in Trinity County, a large, mountainous, heavily forested county in northwestern California (see Figure 1). The proposed project is approximately seven miles southeast of the community of Weaverville, the largest settlement in the county. The elevation at the project site is 1,960 feet. The project area is situated on the north side of a narrow canyon drained to the west by Grass Valley Creek, a tributary of the Trinity River. The region in which the proposed project is situated is part of the densely forested Salmon/Klamath Mountains, forming the southwestern flank of the Cascades (Fenneman 1931). Trinity County contains most of the Shasta-Trinity National Forest and the Trinity Alps, which rise to 9,002 feet. Vegetation is characterized by an overstory composed of a mixed hardwood/conifer with a locally dense understory of manzanita and chaparral and ground cover of native and introduced grasses/forbs. The principal watercourses within the proposed project area are Grass Valley Creek and its unnamed tributary flowing through Phillips Gulch. Grass Valley Creek flows southwest through the adjacent state-owned 80-acre property. This stream is a tributary of the Trinity River that flows southwest to join the Klamath River and the Pacific Ocean at the town of Klamath in Humboldt County (Beck and Haase 1974).

The project region is geologically complex as a result of a long sequence of sedimentary deposits and uplifting and subsequent erosion of granitic rock foundations associated with the Trinity Alps. The geological background of the Klamath Mountains is presented by several authors (Albers 1966:51-62; Alt 2000; Bailey 1966; Blake 1984; Davis 1966:39-50; Harden 1998; Hinds 1952; Hirt 1999; Irwin 1966:19-38; Macdonald 1966; McGeary 1974; and Norris 1990).

## Description of the Local Environment

The ecological setting of the project is typical of the Klamath Mixed Conifer (Benson 1988), Mixed Conifer Forest (Griffin 1972), and comparable to the Douglas-fir - Ponderosa Pine Forest (NDDB Natural Community Element Code 82.400) (Holland 1986:55). The overstory of the project consists of various species of conifers and hardwoods, notably Douglas-fir (*Pseudotsuga menziesii*), Ponderosa pine (*Pinus ponderosa*), Incense cedar (*Libocedrus decurrens*), White Fir (*Abies concolor*), black oak (*Quercus kelloggii*) and associated species, including California buckeye (*Aesculus californica*). The understory is composed of manzanita (*Arctostaphylos sp.),* deer brush (*Ceanothus integerrimus*), redbud (*Cercis occidentalis*), laurel (*Leucothoe davisiae*), and poison oak (*Rhus diversiloba*). Mesic vegetation includes White alder (*Alnus rhombifolia*) and willows (*Salix sp.)* (Anderson and Moratto 1996; Baumhoff 1963, 1978; Brown and Livezey 1962; Ingles 1965; Storer and Usinger 1963; Whitney 1985).

At the station itself a mixed conifer overstory consisting primarily of Douglas fir, ponderosa pine, and incense cedar provide shade to Grass Valley Creek and acts as a visual and sound buffer to adjacent neighbors. The station occupies a flat bench on the north side of the creek which encompasses about four acres of land. The developed station is bordered on the south and west by Grass Valley Creek which supports lush riparian habitat and vegetation. Grass Valley Creek banks are about 15 feet above the watercourse. The west side of the project area is characterized by a gentle slope to the edge of the stream. Precipitation in the area comes in the form of both rain and snow. The baseline environmental conditions at the Fawn Lodge FFS are depicted in several recent photographs taken of the facility and its immediate surroundings (see Figures 8-21).

## Current Land Use and Previous Impacts

The project area has been subject to moderate development, mostly in the form of private residences, vacation cabins and recreational facilities. Such rural development is one of the more obvious effects resulting from the ever-increasing population expansion throughout California (Chow 1970). One of the most significant impacts affecting the Fawn Lodge area has been logging. Since the 1880s the lumber industry has been the most important source of employment in the area. Most of the forest country around Fawn Lodge is within Shasta-Trinity National Forest or is privately owned and managed by commercial lumber companies. Today, visitors from nearby Redding journey to the mountain country to escape the intense heat of the summer months in the Sacramento River valley (Allen 1989; Cox 1858/1940; Thielemann 2000:29-54).

The Fawn Lodge FFS is located just north of Grass Valley Creek and just east of one of its major tributaries in a fairly steep river gorge. State Highway 299 is located approximately one tenth of a mile south of the station site. Access to the site is on a paved road which connects the station to Highway 299W. There is a Bailey bridge across Grass Valley Creek, a tributary to the Trinity River. This bridge is maintained by the State and will be rehabilitated as part of this project. The station is located on a southwest exposure. The nearest neighbor is a residence located just east of the Bailey bridge. The station is not visible from State Highway 299, but is visible to the nearest neighbor. The bridge is used only by persons traveling to and from the fire station. A total of seven dwellings are located within the immediate vicinity of the station and are all located on the opposite side of Grass Valley Creek. These dwellings include two single family and a mobile home that appear to be occupied year around, two seasonal cabins, and two abandoned cabins. The fire station setting is very rural. The existing fire station buildings are wood frame construction with either wood or asbestos shingle siding. None of the buildings are multi-storied. The roadway and parking areas are surfaced with asphalt or chip-seal. The Engine bay floors and parking aprons are concrete.

Figure 1. Project Vicinity Map. Map of California showing the location of the proposed project within Trinity County and its proximity to nearby Shasta County.

Figure 2. Project Location Map #1 of 2 – Portion of the Weaverville, CA (1950) USGS 15 Minute Topographic Quadrangle. The red arrow depicts the location of the proposed project area within Section 36 of Township 33 North, Range 9 West, MDBM. Its proximity to the Trinity County communities of Weaverville, Lewiston, and Douglas City, and to the Trinity River and State Highway 299, are shown. Map Scale: The numbered squares bordered by red lines are Sections which measure one square mile. Map orientation: True north is oriented at the top of this map.

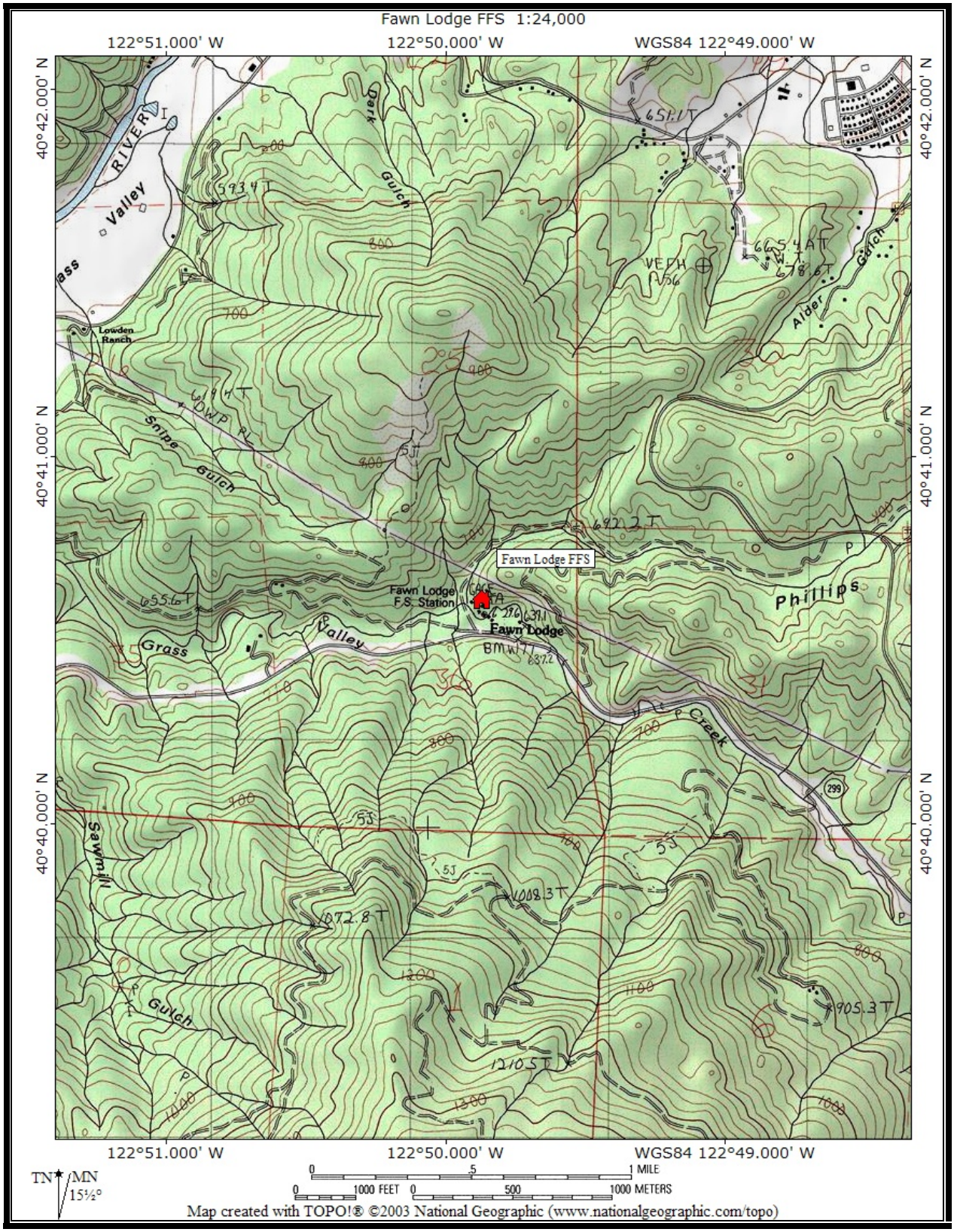


Figure 3. Project Location Map #2 of 2. Portion of the Lewiston, CA USGS 7.5 Minute Topographic Quadrangle. The red house symbol depicts the location of the proposed project area situated on the east side of the confluence of Phillips Gulch and Grass Valley Creek.

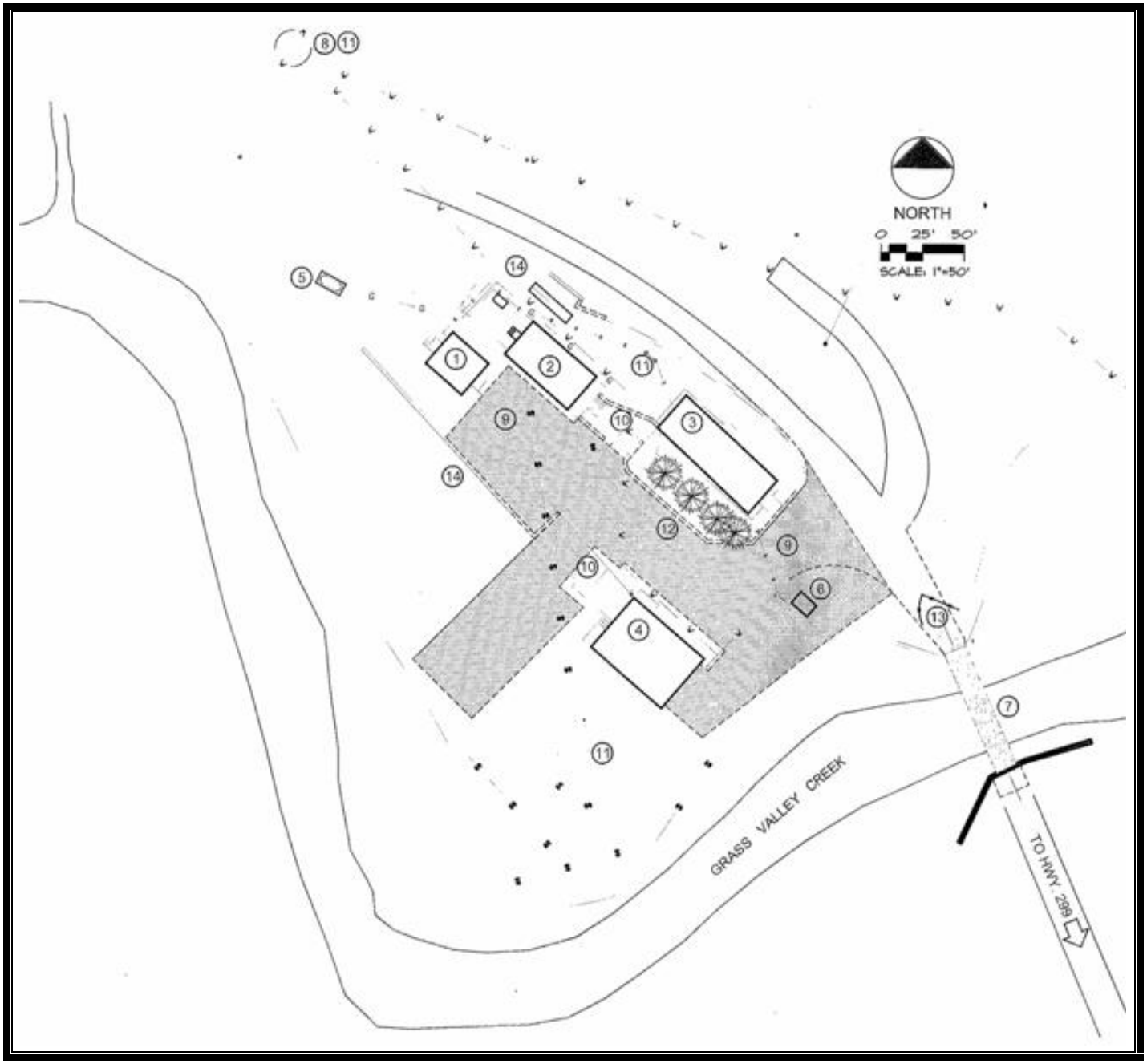


Figure 4. Fawn Lodge Demolition Site Plan prepared by CalFire's consultant Glass Architects in 2006. Demolition Keynotes: (1) Office to be demolished, (2) Messhall to be demolished, (3) Dorm to be demolished, (4) Apparatus building to be demolished, (5) Propane tank to be removed, (6) Fuel tank to be removed, (7) 60' Bailey bridge to be rehabilitated or replaced (abutments remain), (8) Concrete water tank to be replaced, (9) Asphalt paving to be removed, (10) Retaining walls to be demolished, (11) Utilities to be abandoned and capped, (12) two of these four large Sierra redwood trees may be retained (if possible), (13) Gate to be replaced, (14) Ornamental waterwheel to be demolished, Pelton Wheel to be retained.

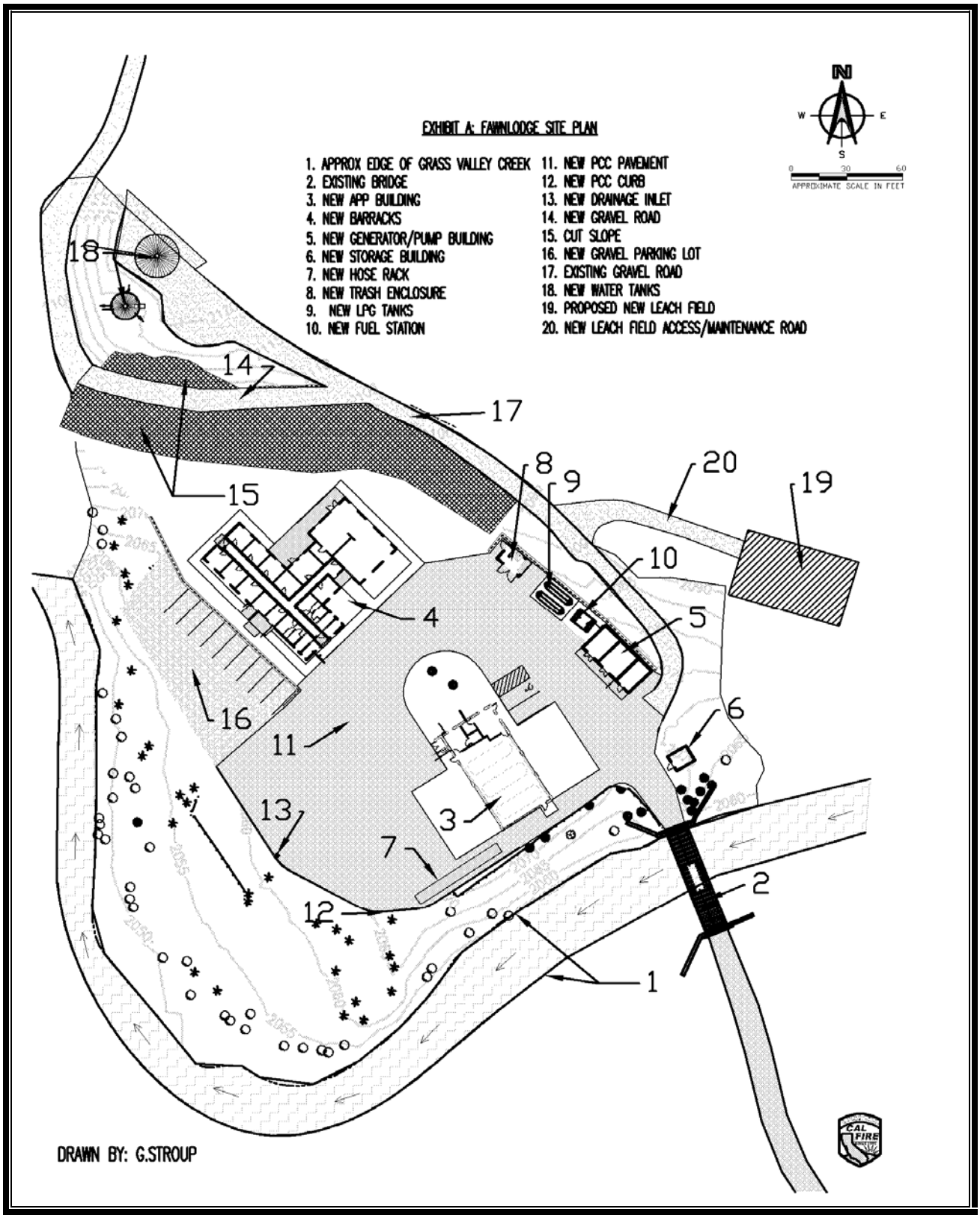


Figure 5. Proposed Site Plan of New Facility showing the primary Area of Potential Effect (APE). Two activities outside the area mapped are depicted on Figures 6-7. The hollow circles depict deciduous trees (mostly Alder), solid circles are cedar/redwoods, and asterisk symbols depict Douglas fir. The two retained trees shown north of the apparatus building are two of the four redwoods visible in the photo on the title page of this document.

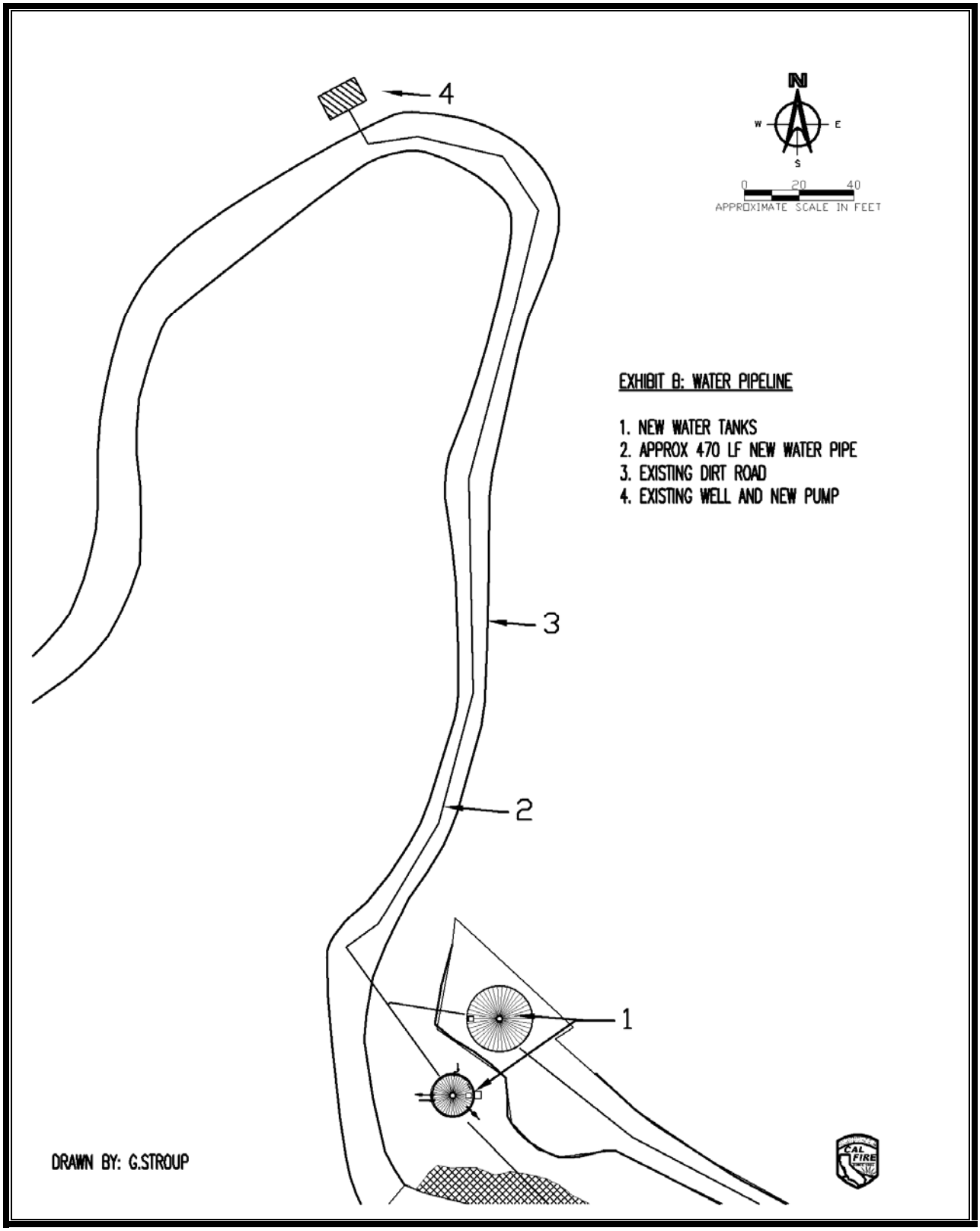


Figure 6. Proposed Water System Site Plan. This exhibit depicts proposed improvements to the station's water system. Approximately 470 linear feet of new water pipe will be undergrounded along the center of the existing access road to connect the well head to the new water tanks. The existing well pump will be replaced.

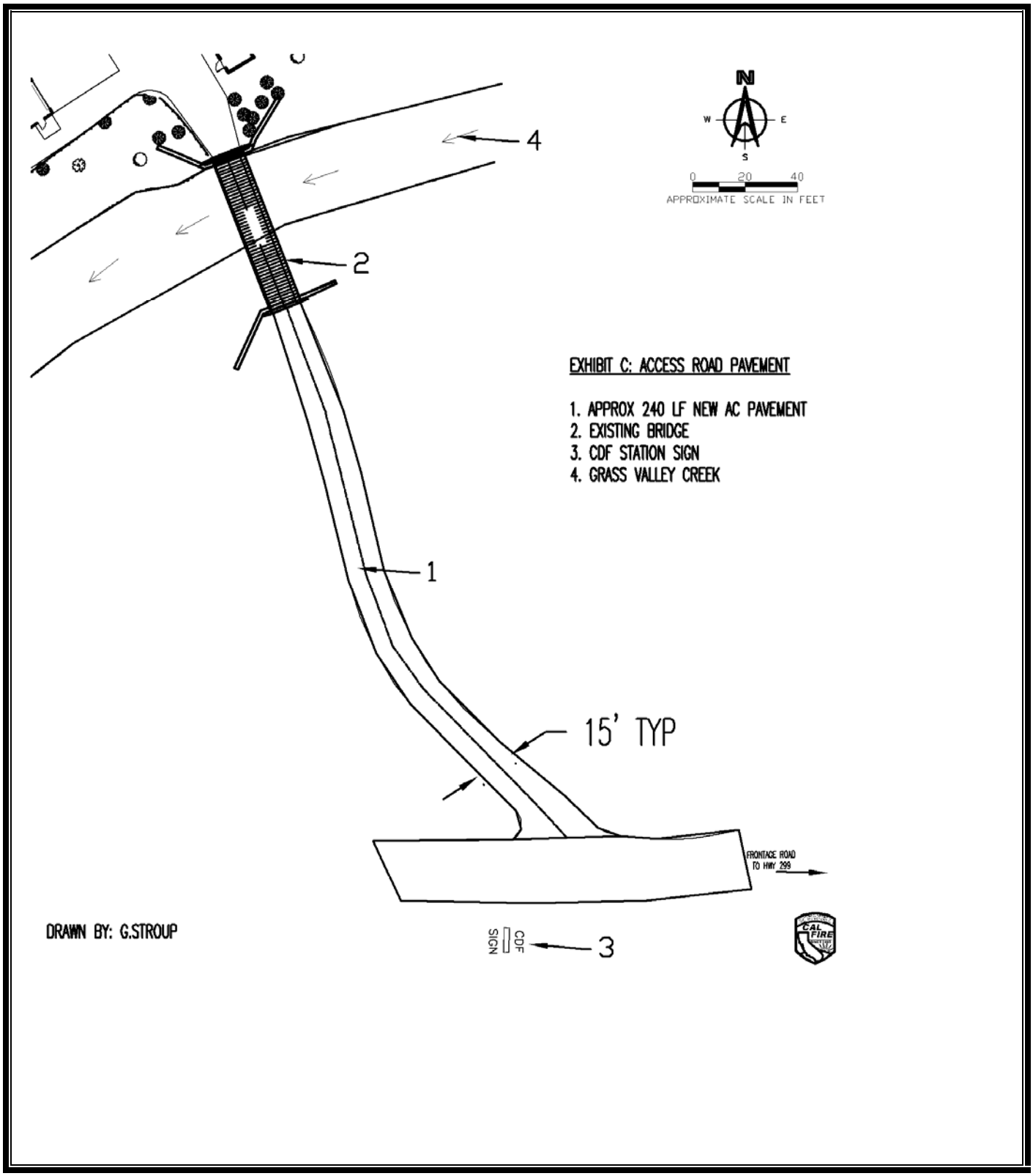


Figure 7. Proposed Access Road Site Plan. This exhibit depicts the location of the existing access road to the station. The proposed project will improve the surface of this road with approximately 240 linear feet of new pavement. The 60-foot Bailey bridge will be removed, transported to a site for sandblasting, painting and repairs, and replaced on its existing abutments.

Figure 8. Entrance to Fawn Lodge FFS - southern edge of project area.

Figure 9. Fawn Lodge FFS Barracks, eastern edge of project area.

Figure 10. Fawn Lodge FFS apparatus building.

Figure 11. Gas house and fuel vault.

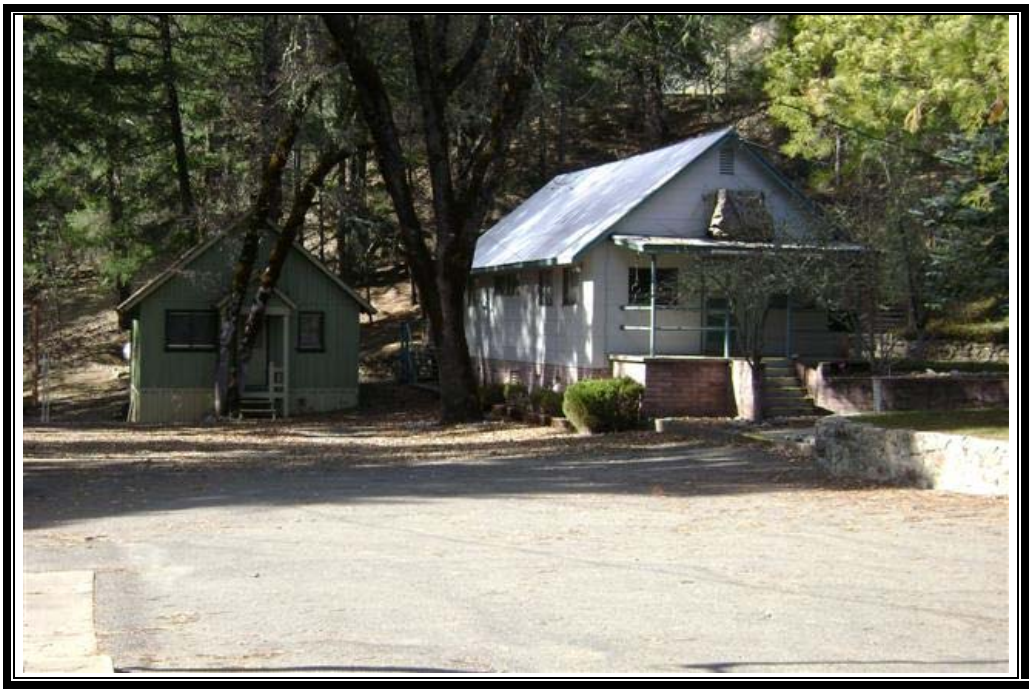

Figure 12. Two historic buildings from CCC Camp Fawn Lodge as they currently exist on the Fawn Lodge FFS facility. The (1935) Office (also known as Paymaster's Office or Guest House) on the left, and (1935) Kitchen/Messhall on the right. Compare this photo to the same scene photographed in 1935-36 (see Figure 24 on page 78). The distinctive two-stem oak tree appears in front of the office porch in both pictures.

Figure 13. Southwest edge of project area looking east.

Figure 14. Southeast edge of project area looking west.

Figure 15. Grass Valley Creek at project site looking east (upstream) to the Bailey bridge.

Figure 16. East edge of project area looking south, existing hose wash rack next to apparatus building.

Figure 17. Northern project boundary looking west, showing existing above-ground utilities. The area proposed for the new septic tank and leach field is on the right, just above the basketball backboard.

Figure 18. Existing Bailey bridge access to Fawn Lodge FFS crossing Grass Valley Creek. View looking north from south side of bridge.

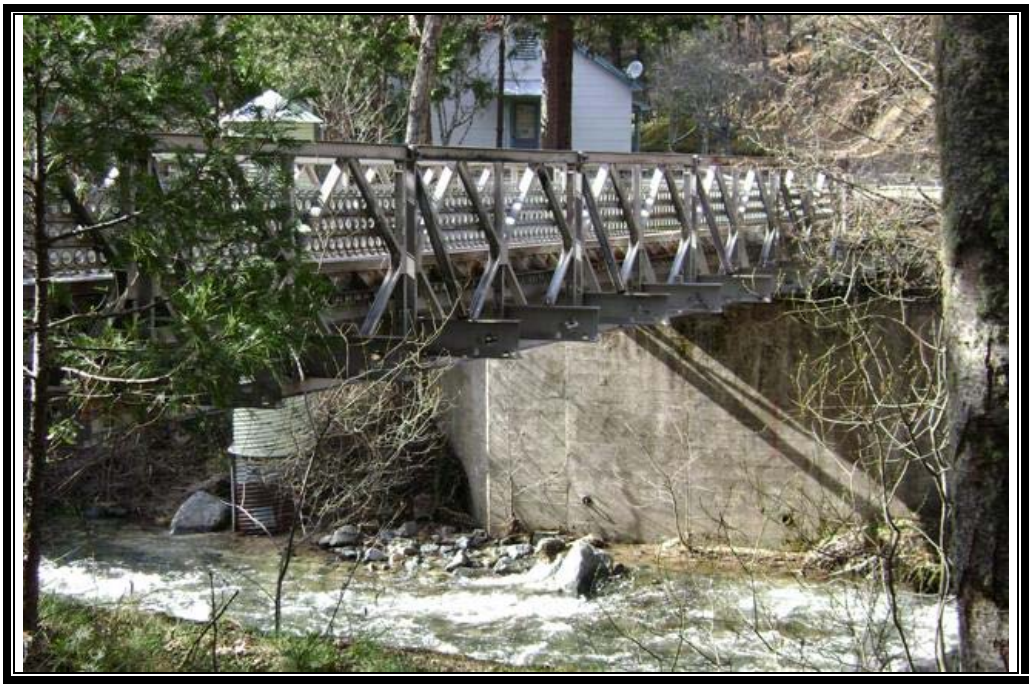

Figure 19. Existing Bailey bridge crossing Grass Valley Creek.

Figure 20. View of station looking south showing ornamental waterwheel positioned behind the messhall.

Figure 21. The small flow of water to drive the waterwheel was recently piped - the PVC pipe is visible in the trough. A portion of this flow is diverted to supply a small Pelton Wheel generator. That generator is housed below the small shed shown in the center of this photo, just to the right of the electrical pole. The current plan is to reinstall the power-generating Pelton Wheel at the new facility. The waterwheel will be demolished.

# Conclusion of the Mitigated Negative Declaration

## Environmental Permits

The proposed project may require the following environmental permits and CalFire may be required to comply with the following State regulations:

1. Erosion and Surface Water Quality - Regional Water Quality Control Board (RWQCB) National Pollution Discharge Elimination System (NPDES) permit, Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices.

2. Timber Operations – Approximately 25-30 confers will be cut for the project. A Registered Professional Forester (RPF) on staff at CalFire has determined that timberland will be converted to a non-timber use as a result of the project. The conversion meets the criteria of Section 1104.1 of the California Forest Practice Rules. The area to be converted is less than 3 acres in size. The Department has not filed a less than three acre conversion exemption on this parcel before. The CalFire Unit shall provide a staff RPF to prepare the conversion exemption documentation just prior to implementing the project[3], and the felling of trees will be done by a Licensed Timber Operator (LTO) in conformance with all applicable Forest Practice Rules.

3. Lake or Streambed Alteration Agreement (LSAA) pursuant to Section 1602 of the California Fish and Game Code. This permit and approval from the California Department of Fish and Game (CDFG) will be required if the proposed bridge rehabilitation activities will alter the bed, bank, or channel of Grass Valley Creek. The current proposal will be to remove the bridge from its abutments, transport it off site for repairs and rehabilitation, and replace the bridge back on its same abutments. During informal consultation with CDFG the necessity of the LSAA was specifically discussed. Kelly Dreesmann twice spoke with Kim Burns, on staff at CDFG's Streambed Alteration Agreement Program in Redding, who indicated that the LSAA will not be required for the project as currently planned since the bridge rehabilitation activities will not alter the bed, bank, or channel of either stream. It is possible, that once the abutments are exposed, state engineers may determine the abutments will need to be replaced. That activity may indeed require a LSAA to identify strategies to avoid or minimize impacts to the watercourses. If the project changes CalFire will consult with CDFG again regarding the need to obtain this permit. If CDFG determines the LSAA is now required, the CalFire Project Director shall contact the CalFire Unit to assign a Unit RPF to prepare the application and obtain the permit. The project will be carried out in a manner entirely consistent with any provisions, mitigations, or constraints contained in LSAA to authorize alterations along the bank and channel of Grass Valley Creek if the bridge is replaced. If the bridge rehabilitation is completed as currently planned the agreement will not be required.

4. Demolition Permit from Trinity County. CalFire and/or its demolition contractors will be required to follow the regulations enforced by the North Coast Unified Air Quality Management District (NCUAQMD). A certified consultant must make a survey to determine if asbestos-containing materials and work closely with the NCUAQMD to develop a disposal and abatement plan to obtain clearance from the NCUAQMD. The actual demolition permit will be issued by Trinity County

[3] Since , under this exemption, timber operations must be completed within one year from the date of acceptance by the CalFire Director, and all conversion activities must be completed within two years from the date of acceptance, this exemption will be submitted just prior to construction, as soon as the LTO is identified.

following approval by NCUAQMD. No permit will be required for the construction of the fueling station.

5. Road and Utilities Encroachment Permit from Trinity County. This project will include a resurfaced driveway connecting to the county frontage road and will require new hook-ups to power, phone, and possibly other utilities. CalFire will obtain any required permits from Trinity County Public Works, work closely with them, and follow all of their requirements related to encroachment, sewer system replacement, and utility connections.

The proposed project is located on State-owned property. As such, the property is not within permitting jurisdiction of Trinity County. CalFire shall consult with Trinity County to seek that agency's expertise and guidance pertaining to encroachment, grading, and septic system installation to ensure that standards utilized for this project are consistent with guidelines recommended by Trinity County.

## Mitigation Measures

The following five (5) mitigation measures will be implemented by CalFire to avoid or minimize environmental impacts. Implementation of these mitigation measures will reduce the environmental impacts of the proposed project to a less than significant level.

**Mitigation Measure #1: Measures to Reduce Short-Term Construction-Generated Emissions**

Reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including, but not limited to the following:

- Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust. The vehicles transporting soil to the site will be covered with tarps or other means to avoid generating significant quantities of dust on local roadways. A minimum of six (6) inches of freeboard will be maintained to minimize fugitive dust emissions.
- Installing and using hoods, fans, and fabric filters to enclose and vent dusty materials.
- Screening of all open-outdoor sandblasting and similar operations.
- Using water or chemicals to control dust during the demolition of existing buildings or structures.
- Areas of exposed bare mineral soil within the project area will be treated with water as needed to prevent excessive loss of native material and minimize fugitive dust emissions.
- Efforts will be taken to avoid tracking mud or soil onto the public roadways. If this occurs, the mud or soil will be promptly removed.
- All construction equipment shall be maintained in proper tune according to manufacturers' specifications to ensure minimum emissions under normal operations.

**Mitigation Measure #2: Measures to Protect Northwestern pond turtle**

Prior to tree or brush removal, or other ground disturbance such as that associated with removal and reconstruction of the retaining wall, a CalFire Wildlife Biologist or Registered Professional Forester shall conduct a visual survey of the area to be disturbed to search for turtle nesting site scrapes or overwintering sites. If any such evidence is located, the nest or overwintering sites shall be avoided until hatching or consultation with CDFG shall take place to consider the possibility to relocate the turtle to similar habitat within the state's parcel. Holland (1994) will be reviewed for examples of these features.

**Mitigation Measure #3: Measures to Ensure Protection of Raptors and Migratory Nesting Birds**

(a) Tree-felling to take place within the project area will occur during the non-nesting season for migratory birds. This period will be from September 1 through January 30.

OR

(b) Tree-felling to take place within the project area during the potential nesting period for migratory birds (February 1 through August 31), shall be preceded by a nesting bird survey no later than two weeks prior to vegetation removal and completed within the area of potential effect by a qualified biologist, forester, or ornithologist. If any nesting activity within the project area is identified, CalFire shall consult with CDFG to develop protection measures.

**Mitigation Measure #4: Archaeologist to Monitor Subsurface Excavation.**
CalFire shall ensure that a professional archaeologist is present to monitor subsurface excavations during the demolition and removal of the buildings (especially the two historic buildings, the bridge, and the gas house) and any excavations for underground utilities and foundations. Should any significant resources be encountered the archaeologist shall have authority to halt excavations pending an evaluation and development of appropriate recommendations for their conservation and management and CalFire shall carry out those recommendations.

**Mitigation Measure #5: Procedures for Inadvertent Discovery of Human Remains**
In accordance with the California Health and Safety Code, if human remains are discovered during ground-disturbing activities, CalFire and/or the project contractor(s) shall immediately halt potentially damaging excavation in the area of the burial and notify the Trinity County Coroner and a qualified professional archaeologist to determine the nature and significance of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050[c]). Following the coroner's findings, the archaeologist and the Most Likely Descendent (designated by the Native American Heritage Commission) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities of Trinity County and CalFire to act upon notification of a discovery of Native American human remains are identified in PRC § 5097.

## Summary of Findings

This IS/MND has been prepared to assess the project's potential effects on the environment and an appraisal of the significance of those effects. Based on this IS/MND, it has been determined that the proposed project will not have any significant effects on the environment after implementation of mitigation measures. This conclusion is supported by the following findings:

1. The proposed project will have no effect related to agricultural resources, land use and planning, mineral resources, population and housing, and recreation.

2. The proposed project will have a less than significant impact on aesthetics, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, public services, transportation and traffic, and utilities and service systems.

3. Mitigation is required to reduce potentially significant impacts related to air quality, biological resources, and cultural resources.

The Initial Study/Environmental Checklist included in this document discusses the results of resource-specific environmental impact analyses which were conducted by the Department. This Initial Study revealed that potentially significant environmental effects could result from the proposed project; however, CalFire revised its project plans and has developed mitigation measures which will eliminate

impact or reduce environmental impacts to a less than significant level. CalFire has found, in consideration of the entire record, that there is no substantial evidence that the proposed project as currently revised and mitigated would result in a significant effect upon the environment. The IS/MND is therefore the appropriate document for CEQA compliance.

# INITIAL STUDY/ENVIRONMENTAL CHECKLIST

| PROJECT INFORMATION | |
|---|---|
| 1. Project Title: | Fawn Lodge FFS Replacement Project |
| 2. Lead Agency Name: | California Department of Forestry and Fire Protection |
| 3. Contact Person and Phone Number: | Dan Foster (916) 653-0839 |
| 4. Project Location: | Fawn Lodge FFS, Trinity County |
| 5. Project Sponsor's Name and Address: | N/A (CalFire is project sponsor and lead agency) |
| 6. General Plan Designation: | R: Resource |
| 7. Zoning: | U: Unclassified/State-owned property |
| 8. Description of Project: See Pages 8-10 of this document | |
| 9. Surrounding Land Uses and Setting: | Refer to page 11 of this document |
| 10: Other public agencies whose approval may be required: | See pages 26-27 of this document |

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below will be potentially affected by this project involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

| | | | | | |
|---|---|---|---|---|---|
| ☐ | Aesthetics | ☐ | Agriculture Resources | ☐ | Air Quality |
| ☐ | Biological Resources | ☐ | Cultural Resources | ☐ | Geology / Soils |
| ☐ | Hazards & Hazardous Materials | ☐ | Hydrology / Water Quality | ☐ | Land Use / Planning |
| ☐ | Mineral Resources | ☐ | Noise | ☐ | Population / Housing |
| ☐ | Public Services | ☐ | Recreation | ☐ | Transportation / Traffic |
| ☐ | Utilities / Service Systems | ☐ | Mandatory Findings of Significance | ☒ | None With Mitigation |

DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared. ☐

I find that although the proposed project **COULD** have a significant effect on the environment, there **WILL NOT** be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared. ☒

I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required. ☐

I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. ☐

Daniel G. Foster

September 14, 2009

Daniel G. Foster, Senior Environmental Planner
Environmental Protection Program, Room #1516-37
Department of Forestry and Fire Protection
P.O. Box 944246
Sacramento, CA 94244-2460
(916) 653-0839

Date

## ANALYSIS OF POTENTIAL ENVIRONMENTAL IMPACTS

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **I. Aesthetics. Will the project:** | | | | |
| a) Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☐ | ☒ |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☐ | ☒ |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | ☐ | ☐ | ☒ | ☐ |
| d) Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area? | ☐ | ☐ | ☒ | ☐ |

### *Discussion*

#### *a) Will the project have a substantial adverse effect on a scenic vista?*

**No Impact:** The proposed project site occupies an existing CalFire FFS. The various buildings on site were constructed between 1935 and 1964 within a mixed-conifer setting. The station is not visible to traffic along Highway 299. The new communication tower is approximately 40 feet in height but will not be readily visible due to the forested and vegetated area between the station and the highway. The new buildings will not be configured in the exact same location as existing buildings resulting in changes to the overall facility layout of the site. The bridge on the access road will be rehabilitated (or possibly replaced) but this will not affect the aesthetic quality of any vista.

#### *b) Will the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

**No Impact:** State Highway 299 at this location is not designated a state scenic highway**.**

#### *c) Will the project substantially degrade the existing visual character or quality of the site and its surroundings?*

**Less-than-Significant Impact:** The demolition of the existing Fawn Lodge FFS, the removal of approximately 25-30 native conifers and oaks, and subsequent grading of the site will result in minor, temporary degradation to the visual quality of the site. Once all the new facilities are in place, approximately one year after demolition, the site's visual character and quality will be restored.

#### *d) Will the project create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?*

**Less-than-Significant Impact:** The proposed FFS will include new exterior and interior lighting for the operation of the apparatus building, barracks, messhall, and appurtenant facilities. However, lighting associated with the project will be limited to the project site. Mature vegetation throughout the project site will eliminate readily visible light from other areas. Lighting sources already exist at the project site.

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **II. Agricultural Resources.** | | | | |
| In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. | | | | |
| Will the project: | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☒ |
| b) Conflict with existing zoning for agricultural use or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use? | ☐ | ☐ | ☐ | ☒ |

### *Discussion*

***a) Will the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

**No Impact.** The proposed project site has never been used for agricultural operations. The proposed project will not involve the conversion of any existing agricultural lands, including grazing since it is already developed into an active FFS. The site contains no farmland or soil types considered to have agricultural potential.

***b) Will the project conflict with existing zoning for agricultural use or a Williamson Act contract?***

**No Impact.** Not applicable. The project site is currently used as a FFS that is not under a Williamson Act Contract.

***c) Will the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?***

**No Impact.** The project will be located on developed land that currently contains a FFS; therefore, there will be no changes to the existing environment that could result in the conversion of farmland to non-agricultural use.

| ENVIRONMENTAL ISSUES | Potentially Significant | Less Than Significant with | Less Than Significant | No Impact |
|---|---|---|---|---|

| | | Impact | Mitigation Incorporated | Impact | |
|---|---|---|---|---|---|
| **III.** | **Air Quality.** | | | | |
| | Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the following determinations. | | | | |
| | Will the project: | | | | |
| | a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☒ | ☐ |
| | b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ☐ | ☒ | ☐ | ☐ |
| | c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | ☐ | ☒ | ☐ | ☐ |
| | d) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☒ | ☐ | ☐ |
| | e) Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |

### *Information about Air Quality*

The project site is located in Trinity County which lies in the North Coast Air Basin and is under the jurisdiction of the North Coast Unified Air Quality Management District (NCUAQMD). Trinity County as a whole does not fully meet state health standards for clean air, although no specific data were available for the Fawn Lodge area. Ozone and particulate matter are the air pollutants of greatest concern. The county's climate and pollution-trapping mountains and valleys, along with recent wildfires, all contribute to the problem.

Ozone is an invisible pollutant formed by chemical reactions involving nitrogen oxides, reactive hydrocarbons and sunlight. It is a powerful respiratory irritant that can cause coughing, shortness of breath, headaches, fatigue and lung damage, especially among children, the elderly, and the sick. Particulate Matter is fine mineral, metal, soot, smoke and dust particles suspended in the air. For health reasons, the greatest concern is with inhalant particulate matter less than 10 microns in diameter (PM10), which can lodge in the most sensitive areas of the lungs, and cause respiratory and other health problems.

Air quality within Trinity County is regulated by the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB) at the federal and state levels, respectively, and locally by the NCUAQMD. In general, the air quality in Trinity County is good, but the NCUAQMD seeks to improve air quality conditions in the County through a comprehensive program of planning, regulation, enforcement, technical innovation and education to promote the understanding of air quality issues. The clean air strategy of the NCUAQMD includes the development of programs for attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. The NCUAQMD also inspects stationary sources, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements other programs and

regulations required by the federal Clean Air Act (CAA) federal Clean Air Act Amendments of 1990 (CAAA) and the California Clean Air Act (CCAA).

In compliance with the CCAA, air districts submit Air Quality Attainment Plans (AQAP) primarily to address ozone non-attainment. The CCAA also requires a triennial assessment of the extent of air quality improvements and emission reductions achieved through the use of control measures. As part of the assessment, the attainment plans must be reviewed and, if necessary, revised to correct for deficiencies in progress and to incorporate new data or projections. The AQAPs stress attainment of ozone standards and focuses on strategies for reducing reactive organic gas and nitrogen oxide emissions. It promotes active public involvement, enforcement of compliance with district rules and regulations, education in the public and private sectors, development and promotion of transportation and land use programs designed to reduce vehicle miles traveled within the region, and implementation of stationary and mobile source control measures. The AQAPs become part of the State Implementation Plan in accordance with the requirements of the CAAA. The NCUAQMD has not established quantitative thresholds of significance for the purpose of CEQA with respect to short-term construction emissions of criteria air pollutant or precursor emissions, but instead emphasizes comprehensive control measures which were reviewed for this Initial Study.

### *Discussion*

#### *a) Will the project conflict with or obstruct implementation of the applicable air quality plan?*

**Less-than-Significant Impact.** The NCUAQMD is designated as being either "unclassified" or attainment with all of the federal standards and all of the state standards with the exception of state PM10. The NCUAQMD has prepared an AQAP which it implements through its rules and permitting program with the goal of achieving compliance with the state PM10 standard and the maintenance of the other standards. This project will not obstruct implementation of the NCUAQMD's air quality plan. The continued long-term operation of this station will not require any additional employees, nor will the number of emergency response vehicle trips increase as a result of the project. Consequently, project implementation will not result in an increase in vehicle miles traveled and will not conflict with or obstruct implementation of NCUAQMD's air quality planning efforts. Furthermore, construction of the project will not result in the operation of any major stationary emission sources.

#### *b) Will the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

**Short-term Construction Emissions**

**Less-than-Significant with Mitigation.** Construction emissions are described as short-term or temporary in duration and have the potential to represent a significant impact with respect to air quality, especially fugitive PM10 dust emissions. Fugitive dust emissions are primarily associated with site preparation and transportation of fill. They vary as a function of such parameters as soil silt content, soil moisture, wind speed, acreage of disturbance area and vehicle miles traveled by construction vehicles on and off site. Organic gas and nitrogen oxide emissions are primarily associated with gas and diesel equipment exhaust and the application of architectural coatings. With respect to the proposed project, demolition of existing facilities, grading and import of engineered fill, compacting site, and construction of new facilities will result in the temporary generation of emissions. These will occur during demolition, excavation, grading, clearing,

material transport, employee commute trips, laying of concrete foundations, paving, frame erection, equipment installation, finishing, cleanup, landscaping and other miscellaneous activities.

The NCUAQMD has not developed quantitative significance thresholds for construction emissions. Instead the NCUAQMD emphasizes implementation of best available and technically feasible control measures rather than requiring a detailed evaluation of construction emissions. Without NCUAQMD-recommended mitigation measures, temporary construction emissions could violate or contribute substantially to an existing or projected air quality violation, especially considering the County's non-attainment status for PM10. As a result, this impact is considered potentially significant. Implementation of Mitigation Measure #1 (which is consistent with the NCUAQMD's standards) will reduce short-term construction-generated emissions to a less than significant level.

**Mitigation Measure #1: Measures to Reduce Short-Term Construction-Generated Emissions**
Reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including, but not limited to the following:

- Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust. The vehicles transporting soil to the site will be covered with tarps or other means to avoid generating significant quantities of dust on local roadways. A minimum of six (6) inches of freeboard will be maintained to minimize fugitive dust emissions.
- Installing and using hoods, fans, and fabric filters to enclose and vent dusty materials.
- Screening of all open-outdoor sandblasting and similar operations.
- Using water or chemicals to control dust during the demolition of existing buildings or structures.
- Areas of exposed bare mineral soil within the project area will be treated with water as needed to prevent excessive loss of native material and minimize fugitive dust emissions.
- Efforts will be taken to avoid tracking mud or soil onto the public roadways. If this occurs, the mud or soil will be promptly removed.
- All construction equipment shall be maintained in proper tune according to manufacturers' specifications to ensure minimum emissions under normal operations.

**Long-term Operational Emissions**

**Less-than-Significant Impact.** Operation of the project will not result in a net increase of long-term regional organic gas, nitrogen oxide, PM10, or local carbon monoxide emissions from area or mobile sources. The long-term operation of the proposed project will not require any additional employees, and will not result in any associated employee commute trip emissions. With respect to mobile source emissions, CalFire will continue to operate two engines out of this station and the average number of emergency calls will not change with project implementation. Area source emissions associated with landscaping and maintenance activities will take place at the same level as without the project. Project implementation will not result in the operation of any new major stationary emission sources.

The long-term facility operation will include a refueling facility, a source that currently exists on the project site and a backup generator, which will be a new source on this site. The backup generator will only be used during periods when there is a power outage and as such its use will be minimal. Operation of these stationary sources will be subject to NCUAQMD permitting and best

available control technology requirements. Long-term operational emissions will not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

***c) Will the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?***

**Less than Significant with Mitigation.** The station is an existing operation that will not substantially change following completion of the replacement facility. Construction of the project will generate short-term emissions of fugitive dust and mobile source emissions associated with the on-site equipment operation and off-site material and employee transport. This will only occur during a relatively short period when a variety of grading and trenching equipment will be used such as scrapers, bulldozers, excavators, compactors, front-end loaders, water trucks, back hoes, dump trucks, and other miscellaneous equipment. The numbers and types of equipment used during construction activities typically vary from day to day depending on the specific operations being conducted. The emissions produced during project construction are short-term in the sense that they will be limited to a short initial construction period and will only be experienced downwind of the project site. Open outdoor fires will not be set for any purpose without a valid permit from the NCUAQMD. Implementation of Mitigation Measure #1, as described above, will reduce short-term construction-generated emissions to a less than significant level.

The proposed project will replace the existing fire station and may result in the removal of approximately 25-30 mature conifer and hardwood trees. The long term operational and short term construction elements of the project have the potential to increase greenhouse gas (GHG) emissions affecting the air quality and climate change elements of the baseline environment. This potential effect was considered during the Initial Study. CalFire determined that environmental effects from emissions will be less than significant due to the following considerations:

1. Of the 25-30 conifer and hardwood trees to be removed, some of these wood products will be commercialized if feasible.

2. Landscape conifer trees will be replanted surrounding the new station facility. In the long term this will mitigate the impact of tree removal.

3. Baseline conditions at the project site include the operations of an existing two-engine FFS. The replacement of 1930-60's construction with modern, energy-efficient building design will greatly reduce emissions from existing conditions with respect to operational impacts. Project construction will result in short-term air quality impacts but this construction is relatively small in scope, and air quality impacts will be minimized through implementation of Best Management Practices and Mitigation Measure #1.

4. The replacement of this facility will reduce response time to fire incidents which also will reduce GHG emissions from current conditions.

***d) Will the project expose sensitive receptors to substantial pollutant concentrations?***

**Less than Significant with Mitigation.** Sensitive receptors in the vicinity of the proposed project include on-site CalFire personnel stationed at Fawn Lodge FFS. In the short-term, it also includes

construction workers, and the occupants of the residence located along the access road. The potential exists for significant impact from fugitive dust emissions, particularly considering the amount of engineered fill to be transported to the project site. Implementation of Mitigation Measure #1, as described above, will reduce this impact to a less than significant level.

***e) Will the project create objectionable odors affecting a substantial number of people?***

**Less than Significant Impact.** The occurrence and severity of odor impacts depend on numerous factors including the nature, frequency, and intensity of the source; wind speed and direction, and the presence of sensitive receptors. Although offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies. The NCUAQMD has established Rule 400(a) (Public Nuisance) to address odor issues. The rule states that air contaminants shall not be discharged in quantities sufficient to constitute a public nuisance to any considerable number of persons or the public or that will endanger the comfort or repose of any person or the public. Project implementation will not result in any major sources of odor and because the proposed facility is not one of the common types of facilities that are known to produce odors (e.g. landfill, wastewater treatment, cannery, etc.). In addition, the diesel exhaust from the use of on-site construction equipment will be intermittent and temporary, and will dissipate rapidly from the source with an increase in distance.

Project construction and operation will not involve the use of any materials that could create objectionable odors with the exception of diesel exhaust and fuel vapors that may be considered to be an objectionable odor by some individuals. However, these odors are common to fire stations and construction sites. Because of the anticipated rapid dissipation of gases in the air and the distance to the nearest potentially sensitive receptors, potential for the project to generate objectionable odors is minimal over the current baseline. As a result, this impact is considered less than significant.

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **IV. Biological Resources. Will the project:** | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service? | ☐ | ☒ | ☐ | ☐ |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service? | ☐ | ☐ | ☒ | ☐ |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through | ☐ | ☐ | ☐ | ☒ |

| | | | | | |
|---|---|---|---|---|---|
| | direct removal, filling, hydrological interruption, or other means? | | | | |
| d) | Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☒ | ☐ | ☐ |
| e) | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☒ | ☐ |
| f) | Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

### *Information about Biological Resources*

An inventory and assessment of biological resources was conducted, and informal consultations with the California Department of Fish and Game (CDFG) took place during this Initial Study. Staff at the Redding field office of CDFG visited the site during the environmental study and initially did not express any concerns and stated there does not appear to be any significant resource concerns with the exception of the bridge replacement.

The California Natural Diversity Database (CNDDB) was reviewed by CDFG for this project during the Initial Study. No identified resources within one-quarter mile of the station were identified; however, the following species were identified within a radius of approximately 3 miles of the station (*Actinemys marmorata* ssp. *marmorata* (western pond turtle), *Rana boylii* (foothill yellow-legged frog), and *Oncorhynchus tshawytscha* (spring-run chinook salmon), and *Carex vulpinoidea* (brown fox sedge). These species all utilize or are found in aquatic or adjacent riparian habitat outside of the project area with the exception of the western pond turtle which also makes use of terrestrial habitats for nesting and overwintering.

The proposed project includes actions that will take place in close proximity (within 20 feet) of riparian habitat adjacent to Grass Valley Creek but not within the riparian habitat itself. The riparian habitat that could potentially be affected by the project will be protected as discussed in subsection (b) below.

The proposed project will affect an area containing an existing fire station facility and its landscaped grounds. Approximately 25-30 conifers and/or oak trees will be harvested to allow for placement of buildings, driveway, bridge reconstruction, and other site improvements. These trees are either native to the site or were planted after the current fire station was constructed. Any areas that are disturbed and are not subsequently occupied by new buildings or other appurtenant facilities will be planted with appropriate vegetation. Native species will be used.

The scope of biological review for this project included an on site visit by the CDFG and a search of the CNDDB for sensitive resources. The biological review is considered adequate for a project of this type given the already highly developed condition of the project area, degree of expected project associated impacts to adjacent habitat types, and the practices to be used for project implementation.

### *Discussion*

***a) Will the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?***

**Less than Significant with Mitigation Incorporated.**

Northwestern pond turtle (*Actinemys marmorata marmorata*) CDFG Species of Special Concern

This species has been recorded within 3 miles of the project site and suitable habitat exists within and adjacent to the project site on Grass Valley Creek. This stream course borders the southern edge of the project area. Construction activities could result in loss of upland overwintering and nest sites. As described, the distance at which pond turtles will leave the aquatic environment for nesting or overwintering, successfully identifying those micro-sites used and possible turtle densities resulting from such movements are highly variable. The likelihood of impact to nesting habitat, adults, eggs, or young is considered low in occurrence but potentially high in terms of effect to the local population.

This turtle aestivates during summer droughts by burying itself in soft bottom mud. In some areas it inhabits streams that dry-out most years where it moves onto land to hibernate under dense brush or wood rat nests. Nests are typically dug in a substrate with a high clay or silt fraction. It inhabits permanent or nearly permanent bodies of water below 6000 feet in elevation. Most nest sites of this species occur on generally south or west facing micro-slopes. Most nesting areas are characterized by sparse vegetation, usually short grasses or forbs. Egg laying and nest site scrapes occur as early as late April in southern and central California (Rathbun et al. 1993 fide Holland 1994). Holland reports (1994:5-7) that the relative extent of nesting areas has not been and may not be possible to determine for most regions and is likely a very small percentage of total area available. Distance to water was determined for 252 nest sites (distribution wide *Clemmys marmorata*) and ranged from 3 to 402 meters (m) from the watercourse and averaged 49.2m. Movements within riverine (up to 1550 m) and other habitats can be extensive over the course of a summer season (Holland 1994). Terrestrial habitats are also used for overwintering and dispersal. Holland (1994) noted that, based on preliminary evidence, all or a majority of turtles in two rivers in Oregon and California overwintered on land (up to 500m from the watercourse). Turtles may move several times when overwintering in terrestrial habitats. Overland dispersal movements, while they can be considerable (up to 5km), the frequency of such movements appears limited and variable. See also: http://www.californiaherps.com/turtles/pages/a.m.marmorata.html

Project design elements which were designed to protect hydrology and water quality (see Section VIII, pages 53-56) will also provide protection for the turtle, nonetheless, the following mitigation has been included in the project avoid impacting this species.

**Mitigation Measure 2: Measures to Protect Northwestern pond turtle**

Prior to tree or brush removal, or other ground disturbance such as that associated with removal and reconstruction of the retaining wall, a CalFire Wildlife Biologist or Registered Professional Forester shall conduct a visual survey of the area to be disturbed to search for turtle nesting site scrapes or overwintering sites. If any such evidence is located, the nest or overwintering sites shall be avoided until hatching or consultation with CDFG shall take place to consider the possibility to relocate the turtle to similar habitat within the state's parcel. Holland (1994) will be reviewed for examples of these features.

***b) Will the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?***

**Less than Significant Impact.** As mentioned above, riparian habitat occurs in close proximity which could potentially be affected by the proposed project. The riparian area will be protected by avoidance.

**Grass Valley Creek:** The south margin of the proposed project is within 20 feet of Grass Valley Creek. Riparian habitat occurs just below the south edge of the project area and extends to the water's edge. This includes dense patches of willow and other shrubs and some tall native trees. The proposed project will include the removal of up to 25-30 conifer and hardwoods within the project area. These trees are either within the existing station perimeter, or slightly outside the developed area, but no project activity is proposed in the riparian areas along the stream and no trees will be removed from the riparian habitat adjacent to Grass Valley Creek. All trees removed will be felled away from the watercourses.

The proposed project will include the development of a Storm Water Pollution Prevention Plan (SWPPP). CalFire shall develop the SWPPP and submit it for review/approval to the Regional Water Quality Control Board (RWQCB). This plan will include a number of actions designed to prevent construction-related impacts to the watercourse and associated riparian habitat. Some of these actions may include the placement of barriers (such as hay-bales or sand-bags) along the south perimeter, the construction of drop-inlets with pre-filters to catch sediment, frequent inspection of drainage systems, best management practices, silt fencing, fibrous mats placed on slope bank, and other techniques developed in coordination with the RWQCB. By avoiding direct impacts and implementing these practices during construction impacts to riparian habitat are expected to be less than significant.

The proposed project includes a plan to remove, rehabilitate, and replace the existing bridge crossing Grass Valley Creek which provides access to the station. Although unlikely, it is also possible the bridge will need to be replaced with a new one of similar design. This plan was developed in consultation with the RWQCB. The RWCQB recommended that CalFire consider retaining and reusing the existing bridge abutments. If this was not possible they recommended constructing new abutments behind the existing ones to avoid impacts to Grass Valley Creek. These recommendations shall be followed and have been incorporated into a revised project description listing the options for the bridge replacement. The riparian vegetation at the location of the bridge crossing to Grass Valley Creek will receive very limited disturbance if the bridge is replaced. A crane will lift the bridge (it comes off in three sections). It may be necessary to trim some trees or limbs located along the south margin of the bridge, but these trees are well above the stream and are not within riparian habitat.

The project site has been routinely used as a public facility for many decades. The new facilities will be constructed entirely within the existing boundaries of the fire station's main area. As the use and function of the facility and the surrounding area is not changing, the impact to wildlife and habitat resulting from this project is expected to be less than significant.

***c) Will the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to,***

***marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

**No Impact.** No wetlands as defined by Section 404 of the Clean Water Act occur at the project site or will be affected by construction.

***d) Will the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

**Less than Significant with Mitigation.** Several raptor species are known to occur in the vicinity of the proposed project but have not been observed utilizing the site. No nest structures are visible in trees within or nearby the station. The proposed project is not likely to substantially interfere with raptors.

Neo-tropical migratory bird populations are declining throughout the United States. Lead agencies must consider impacts to those species potentially harmed by a proposed project. The Migratory Bird Treaty Act (MBTA) protects many species of migratory birds. Although this proposed project will not include actions intended to directly harm such birds, the removal of existing trees and other vegetation within the project site could result in harm to protected birds and/or their eggs or young. This impact will occur if migratory birds nested within the project site, nests were not identified, and construction activities were to take place during the nesting season.

**Mitigation Measure #3: Measures to Ensure Protection of Raptors and Migratory Nesting Birds**

(a) Tree-felling to take place within the project area will occur during the non-nesting season for migratory birds. This period will be from September 1 through January 30.

OR

(b) Tree-felling to take place within the project area during the potential nesting period for migratory birds (February 1 through August 31), shall be preceded by a nesting bird survey no later than two weeks prior to vegetation removal and completed within the area of potential effect by a qualified biologist, forester, or ornithologist. If any nesting activity within the project area is identified, CalFire shall consult with CDFG to develop protection measures.

Although raptors and other migratory nesting birds are known to utilize adjacent undeveloped habitat, and a mitigation measure has been developed to protect such birds, the proposed project is unlikely to disturb any native resident or migratory fish or wildlife species, migratory corridors, or impede the use of native wildlife nursery sites.

***e) Will the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

**Less than Significant Impact**. The proposed project includes the removal of a number of existing trees. Approximately 25-30 conifer and hardwood trees may need to be removed. Trees will be felled away from Grass Valley Creek and its tributary. To comply with the Forest Practice Rules and potentially utilize the timber products a less than three acre timberland conversion exemption and waiver will be filed. Other than the ones previously addressed in subsections IV a-d discussed above, there are no other local policies or ordinances protecting biological resources or trees.

### *f) Will the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

**No Impact.** The proposed project site is not within the boundaries of a Habitat Conservation Plan, Natural Community Conservation Plan, or other habitat conservation plan. The project does not conflict with implementation of any such plan in this part of Trinity County.

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **V. Cultural Resources. Will the project:** | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? | ☐ | ☒ | ☐ | ☐ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | ☐ | ☒ | ☐ | ☐ |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☐ | ☐ | ☒ |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☒ | ☐ | ☐ |

### *Information about Cultural Resources*

In response to California Executive Order W-26-92, issued in 1992, CalFire's Archaeology Program initiated cultural resource inventories upon most of its land parcels throughout the state in order to prepare a statewide management plan for historic buildings and archaeological sites. The management plan, and an associated Environmental Impact Report were completed in 2001 (Foster and Thornton 2001, Foster and Sosa 2001). As part of this work, two comprehensive, statewide inventories for historic buildings and structures were completed by CalFire's consulting historian Mark V. Thornton. The first of these was an inventory and assessment of all 77 of CalFire's fire lookout stations (Thornton 1993) followed by an inventory and assessment of all FFS compounds, conservation camps, and administrative sites containing buildings or structures which were constructed prior to 1946 (Thornton 1994). A total of 189 pre-1946 buildings and structures were identified at 73 CalFire facilities, including two buildings dating to 1935 located at Fawn Lodge FFS (Thornton 1994:141-145, 617-618).

Thornton visited the Fawn Lodge FFS facility on April 20, 1994 and recorded the following five historic buildings/structures at this station:

- (1935) Civilian Conservation Corps (CCC) Camp Paymaster's Office (Rated 3S[4])
- (1935) Kitchen/Messhall (Rated 5N[5])
- (1953) Barracks (not evaluated by Thornton)
- (1954) Gas and Oil House (not evaluated by Thornton)
- (1964) Apparatus Building/Office (not evaluated by Thornton)

[4] The National Register of Historic Places Code 3S means appears eligible for listing in the National Register as a separate property.
[5] The National Register of Historic Places Code 5N means not eligible for listing but needs special consideration for other reasons.

The CalFire Fawn Lodge FFS facility was identified as occupying the former location of a 1930s CCC camp. Subsequent investigations during this Initial Study revealed that CCC Camp Fawn Lodge actually was situated upon two separate localities less than 1/8 mile apart. One locality (lower camp), is the same place occupied by the current station. The Camp Paymaster's Office, Kitchen, Warehouse, and Equipment building once existed at lower camp. Only the Office and Kitchen exist at the present time. The other locality (upper camp) is where a series of 6-12 barracks were placed in parallel rows on terraces and a number of other large buildings and facilities (see Figure 27). The upper camp was reportedly severely damaged by fire in August 1936 (see Appendix A). The upper camp site, which consists of historic ruins, is outside the APE for this project and will not be affected.

Regarding the (1935) Camp Paymaster's Office, Thornton (1994:144) reports:

> A CCC camp was located at this site. In addition to their conservation improvement projects, the CCC enrollees were called upon to fight forest fires. A number of the CCC camps evolved into fire suppression stations. The subject building served as the CCC camp paymaster's office. After the close of the work relief programs most of the CCC facilities (at Fawn Lodge) were removed but a core group of buildings remained to serve as a fire station. The office became a fire captain's quarters, sometimes also referred to in the old records as a "guest house." The office building is based on the USFS-CCC "E" working plan series. It is the only 21' x 25' CCC era office in the CDF (now called CalFire) building collection. There are very few CCC offices left in the CDF property inventory. The building has a high degree of historical architectural integrity. The natural setting has changed little over the years.

Regarding the (1935) Kitchen/Messhall, Thornton (1994:145) reports:

> This and the associated guest house are the only surviving buildings from the CCC encampment. The building was remodeled in the 1960s which greatly changed its historic appearance. There are five other combination kitchen and messhall buildings in the CDF property inventory that date from the CCC era. They've all been modified to one extant or another. Despite the changes, the building still retains some of its historical character.

Three years after Thornton's work another cultural resource inventory/evaluation was conducted at Fawn Lodge FFS by CalFire's Senior Archaeologist Richard Jenkins. He was evaluating a proposal to replace the Kitchen/Messhall, Barracks, and Apparatus/Office buildings on the compound and included a review of the significance of those three buildings and an archaeological survey of the area which will be affected if that project was implemented[6]. The survey was conducted by Jenkins and then Division Chief Duane Shintaku on December 18, 1997. No evidence of prehistoric artifacts or features was found (Jenkins 1998:5).

The entire project area was subjected to intensive cultural resource investigations by professional archaeologists working for CalFire through an archaeological services contract with California State University Stanislaus (Napton and Greathouse 2008a, 2008b) (Napton 2008). These studies were conducted in accordance with ***Archaeological Review Procedures for CalFire Projects*** (Foster 2003). The work included a current archaeological records check at the California Historical Resource Information System (CHRIS) Northeast Information Center, other pre-field research, consultation with

[6] This project was never carried-out. It was essentially the same project being considered in this CEQA document although the current proposal includes demolition of all buildings and increasing the elevation with engineered fill to rise above the 100-year flood plain.

the Native American Heritage Commission and local Native American tribal groups listed on CalFire's Native American Contact List for Trinity County, and an intensive on-the-ground field survey. An overview of the cultural setting for this project area was also prepared by the archaeologists from Stanislaus State (Appendix A).

The cultural resource investigations by Napton and Greathouse[7] produced the following results and work products:

- No prehistoric archaeological sites, features, or artifacts were identified in the APE of the project.

- A comprehensive, 11-page site record was prepared for the Fawn Lodge FFS and CCC Camp. This record includes detailed recording and significance evaluation of the (1953) Barracks, the (1954) Gas and Oil House (and above-ground fuel storage tank), and the (1964) Apparatus Building/Office. This record supplements Thornton's 1994 record by including an evaluation of these three structures.

- Detailed documentation and historical significance evaluation of the (1957 or 1960) Bailey bridge crossing Grass Valley Creek. Rehabilitation of this historic bridge is part of the proposed project. Following his review of the eligibility criteria for the National Register of Historic Places and the California Register of Historical Resources, Napton concluded (2008:4) that the historic bridge is not eligible for listing and does not qualify as a significant historical resource as defined in PRC §5024.1. The California State Office of Historic Preservation (CSOHP) formally concurred with this finding. Napton concluded that recordation and comprehensive documentation, including archival photographic documentation, has fulfilled the research potential of this structure and has mitigated the impact if the bridge can not be rehabilitated and must be replaced with a new bridge.

- Management recommendations are included in the three archaeological reports prepared during the Initial Study (Napton and Greathouse 2008a:26, 2008b:3-4) (Napton 2008:5). These recommendations appear in this document and will be carried-out to ensure a less than significant impact to cultural resources.

### *Discussion*

#### *a) Will the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?*

**Less than Significant Impact with Mitigations.** The Fawn Lodge FFS/CCC Camp and surrounding environs contain three historic buildings and structures and one historic archaeological site which could potentially be considered significant historical resources. These include the (1935) CCC Camp Office, the (1935) Kitchen/Messhall, and the (1957 or 1960) Bailey

[7] The scope of the cultural resource investigations to be completed by Napton and Greathouse will include a survey of the entire 80-acre state owned property within which the Fawn Lodge FFS is located. Although their investigations of the 3.62-acre project area were completed during the Initial Study, as of this writing, their survey and investigation of the surrounding state property has only been partially completed. They have identified a cultural resource during the initial survey of the state land surround the station. This historical site consists of the overgrown foundations and materials constituting the remains of the former (upper) Fawn Lodge Civilian Conservation Corps camp, occupied during the late 1930s. This site will be recorded and reported upon at a later date. The site is located outside of the APE of this proposed project and therefore will not be impacted. Napton and Greathouse plan to complete their survey work of the entire 80 acre parcel, including additional documentation of CCC Camp Fawn Lodge, and produce a report sometime prior to the spring of 2010.

bridge and the upper CCC camp site (which is outside the APE and will be recorded at a later date). CalFire's evaluation of potential impacts to each of these four historic resources is presented individually below. The (1953) Barracks, the (1954) Gas and Oil House (and above-ground fuel tank), and the (1964) Apparatus Building/Office were not evaluated by Thornton but were evaluated for this Initial Study and found to be ineligible for listing on either the national or state registers (Napton and Greathouse 2008b).

**The (1935) CCC Camp Paymaster's Office**

This building was determined by Thornton (1994:141) to be potentially eligible for listing on the National Register of Historic Places. It therefore qualifies as a significant historical resource as defined in State Law (PRC § 5024.1). Its proposed demolition, therefore, could be considered a significant environmental impact. This impact is reduced to a less than significant level through mitigations developed for the Department's statewide Historic Building Management Plan (Plan) (Foster and Thornton 2001) and the Environmental Impact Report (EIR) (Foster and Sosa 2001) which was certified just prior to approval of the plan. In that EIR, CalFire anticipated the need to remove certain historic buildings during subsequent facility improvement projects including this one at Fawn Lodge FFS. A program of compensatory mitigation was developed whereby CalFire committed to preserving 29 of its significant historic buildings to compensate for the impact of having to demolish others which could not be saved including this (1935) camp office at Fawn Lodge. The EIR anticipated demolition of this building and included it in the project scope.

**The (1935) Kitchen/Messhall**

This building was determined by Thornton (1994:141) to be ineligible for consideration as a significant historical resource (rated as 5N) but he recommended it be given special consideration. The building's historical integrity was compromised when it was extensively remodeled in the 1960s which altered its historic architectural appearance. Nonetheless, its proposed demolition will result in an impact to historical resources. This impact has been mitigated by the compensatory mitigations contained in CalFire's Plan/EIR discussed above, and detailed recording completed during this Initial Study.

**The (1957 or 1960) Bailey bridge**

The bridge was evaluated by Napton (2008) and found to be ineligible for consideration as a significant historical resource. The CSOHP formally concurred with this finding (2008-documentation on file at CalFire). It is an interesting historic bridge and its removal will result in an impact to the historic character of the station. The current proposal is to save and restore the bridge resulting in no impact. It is possible that the bridge may need to be replaced with a new one of similar design if major structural failures are identified once it is removed for rehabilitation. If this occurs, the impact to historical resources will be less than significant because the bridge itself was found not to be a significant historical resource as defined in State Law (PRC 5024).

**The Upper (Main) CCC Camp Historical Site**

The Fawn Lodge CCC Camp was located in two separate areas. The main (upper) camp was situated just north of and outside the proposed project area. This site will be recorded and evaluated at a later date by CalFire's contract archaeologists. It will not be affected by the present project.

The survey by the contract archaeologists included an inventory and assessment of the historic values associated with the compound. The historic buildings and structures include a Guesthouse (1935) that was originally a CCC camp office, Kitchen/Messhall (1935), Barracks (1953), a Gas

and Oil House (1954), Apparatus Bay (1964) and Bailey bridge (1957) and associated landscaping. All of these features will be razed during the proposed project and this will result in an impact to historical cultural resources. This impact is considered to be less than significant because the historic fire station compound, while interesting, relevant, and very much worth recording in great detail, does not meet the significance eligibility criteria listed in State Law for historical resources (PRC 5024). The historic component of this site was determined to be ineligible for listing on the California Register, is not historically significant, and has been fully evaluated and recorded. This component is not a significant historical resource. Based on this conclusion the demolition of these buildings and related structures will not result in a significant effect to preservation of historical structures. No salvage of special architectural features is necessary as part of the demolition process. CalFire's Historic Preservation Officer (Foster) concurred with this finding as did the CSOHP. This analysis satisfies the requirements for historic building review specified in the Department's Management Plan for Historic Buildings and Archaeological Sites (2001) which was developed in cooperation with the CSOHP.

***b) Will the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?***

**Less than Significant Impact with Mitigations.** No prehistoric archeological resources were discovered at the Fawn Lodge FFS during inventories by CalFire archaeologists or by CalFire's contract archaeologists as part of the Initial Study for the proposed project. It is possible, however, that significant prehistoric or historic cultural resources could be unearthed during excavations for this project which could result in a significant impact without mitigation. Therefore the following mitigation measure will be included in the project.

**Mitigation Measure #4: Archaeologist to Monitor Subsurface Excavation.**
CalFire shall ensure that a professional archaeologist is present to monitor subsurface excavations during the demolition and removal of the buildings (especially the two historic buildings, the bridge, and the gas house) and any excavations for undergrounding utilities and foundations. Should any significant resources be encountered the archaeologist shall have authority to halt excavations pending an evaluation and development of appropriate recommendations for their conservation and management and CalFire shall carry out those recommendations.

***c) Will the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

**No Impact.** The field surveys found no evidence of any paleontological resources on this project site, therefore there will be no impact.

***d) Will the project disturb any human remains, including those interred outside of formal cemeteries?***

**Less than Significant with Mitigation.** No human remains or associated grave goods were encountered during the archaeological surveys completed during this Initial Study and none are expected to be encountered during project construction. The disturbed nature of the site and highly-acidic properties of the soil make it highly unlikely for human remains to be located within the area slated for construction. Nonetheless, because of the project's location adjacent to a year-round stream, the possibility exists for human remains to occur within the project area. If human remains were unearthed and not protected in accordance with procedures in State Law (see below), this could be a potentially significant impact. To prevent this impact, the following mitigation measure shall be implemented.

**Mitigation Measure #5: Procedures for Inadvertent Discovery of Human Remains**
In accordance with the California Health and Safety Code, if human remains are discovered during ground-disturbing activities, CalFire and/or the project contractor(s) shall immediately halt potentially damaging excavation in the area of the burial and notify the Trinity County Coroner and a qualified professional archaeologist to determine the nature and significance of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050[c]). Following the coroner's findings, the archaeologist and the Most Likely Descendent (designated by the Native American Heritage Commission) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities of Trinity County and CalFire to act upon notification of a discovery of Native American human remains are identified in PRC § 5097.

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **VI. Geology and Soils. Will the project:** | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.) | ☐ | ☐ | ☒ | ☐ |
| ii) Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☐ | ☒ |
| iv) Landslides? | ☐ | ☐ | ☐ | ☒ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☐ | ☒ |
| c) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☐ | ☐ | ☐ | ☒ |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property? | ☐ | ☐ | ☐ | ☒ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | ☐ | ☐ | ☐ | ☒ |

## *Discussion*

***a) Will the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:***

***i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)***

**Less than Significant Impact.** There are no Alquist-Priolo Earthquake Fault Zone maps for Trinity County. As of June 1, 1997, 543 Official maps of Earthquake Fault Zones have been issued. Thirty-six (36) counties and 97 cities are affected by the existing Earthquake Fault Zones, and of these 36 counties, Trinity County is not listed as being affected by potentially active faults. Geological maps for both adjacent counties, Shasta and Humboldt, have known faults. The Humboldt County area has frequent earthquakes. Cape Mendocino has the highest concentration of recorded earthquake events anywhere in the continental United States. The San Andreas Fault and the Mad River Fault zone (including the Falor and Korbel Faults) are two other major sources of earthquake activity. The seismic setting to the west of the project area has the potential to cause less than significant ground shaking.

The Division of the State Architect regulates construction standards of emergency services buildings pursuant to the Emergency Services Building Act of 1989 (ESBA). This act pertains to buildings at police stations, fire stations, and other types of facilities where emergency services are coordinated. The ESBA covers any emergency services building over 2000 square feet in size which houses emergency services apparatus such as engines, radios, base-stations, etc. It requires more stringent design criteria and frequent inspections. None of the buildings proposed for construction at Fawn Lodge will be subject to ESBA regulations. The facility structures are either under the 2,000 criteria or they do not house essential emergency apparatus or communications. However, all buildings are designed and constructed using the ESBA criteria. The implementation of these criteria in the design and construction of this facility will ensure safe operations.

The seismic risk exposure is potentially heightened at this proposed project since buildings will be constructed on imported fill. This risk will be managed, however, by construction design. Only high-quality, engineered fill will be used for this project. This fill will be compacted and frequently tested during construction in accordance with code requirements. These requirements are designed to ensure seismic safety.

***ii) Strong seismic ground shaking?***

**Less than Significant Impact.** As discussed in section VI(a)(i), the Fawn Lodge area is a place in California that is not listed as being affected by potentially active faults but seismic ground shaking could occur due to faults located in either Humboldt or Shasta Counties. The construction on fill material demands that consideration be given for seismic safety. The proposed buildings and structures will be constructed in compliance with the Uniform Building Code for seismic safety.

***iii) Seismic-related ground failure, including liquefaction?***

**No Impact.** See discussion in Section VI(a)(i)-(ii) above. Soil liquefaction occurs within relatively loose, cohesionless sands located below the water table that are subjected to ground accelerations from earthquakes. The filled material will be densely compacted.

***iv) Landslides?***

**No Impact.** The project site has no potential to be affected by local or regional landslides or other mass-wasting characteristics.

***b) Will the project result in substantial soil erosion or the loss of topsoil?***

**No Impact.** A large portion of the proposed project area is already covered by existing facilities and roads. While construction of the project will require grading and trenching, these activities will result in minor alterations to localized topography and disturbance of surface soils. These alterations are not expected to have significant adverse effect on preservation of soils. The project will be constructed in accordance with applicable state guidelines to minimize erosion and loss of topsoil.

***c) Will the project be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?***

**No Impact.** The proposed project will not cause any ground disturbance that will affect the geological stability of the area.

***d) Will the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?***

**No Impact.** The proposed project includes construction upon compacted fill which will be rigorously tested to ensure stability. No expansive soils issues have been identified, hence, the site is not believed to be located on expansive soils as defined in Table 18 18-1-B of the Uniform Building Code.

***e) Will the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?***

**No impact.** Existing sewage is treated via an on-site septic system. This system has functioned well with no major problems. The site's septic system will be upgraded and relocated uphill from the current system. Relocation of system will place it further away from Grass Valley Creek. There are no significant changes in the use of the site; therefore, no concerns are expected. A sand/oil separator will be installed to treat surface storm water, prior to it entering the adjacent river.

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **VII. Hazards and Hazardous Materials. Will the project:** | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☒ | ☐ |
| c) Emit hazardous emissions or handle hazardous | ☐ | ☐ | ☐ | ☒ |

| | | | | | |
|---|---|---|---|---|---|
| | or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | | |
| d) | Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ☒ |
| e) | For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f) | For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| g) | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ☒ |
| h) | Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☐ | ☐ | ☒ | ☐ |

### *Discussion*

#### *a) Will the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

**Less than significant Impact**. The proposed project involves the replacement of existing, 40 to 70-year-old buildings with modern buildings which will supply the same services provided by the existing station. Based upon the age of the existing buildings and consideration for the types of construction materials typically used during that time, it is possible that hazardous wastes (such as asbestos-containing-materials and/or lead-based paint) may be generated during demolition activities. If identified, these materials will be handled in accordance with all applicable regulations.

Current standards governing these types of stations allow for use and storage of only modest amounts of sensitive materials (paint, cleaning agents, etc.). The transport and storage of these materials meets all local, state, and federal regulations, licensing, and protocols. The proposed project will include a new building for the storage of flammable materials but this building will be designed and constructed to meet all respective code and flammable materials standards. All on-site petroleum storage tanks will also be designed and installed in accordance with current requirements. There will be no increase in volume of any sensitive materials currently stored in the existing building at the site. Two new propane tanks will replace the existing propane tank system serving the station.

***b) Will the project create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?***

**Less than Significant Impact.** See discussion in Section VII(a) above. Hazardous wastes, such as asbestos-containing-materials or materials containing lead-based paint may be generated during demolition activities. These materials will be abated by a licensed contractor in full compliance with all applicable regulations. Minor amounts of waste oils and other vehicle fluids may be generated as a result of the normal operations of the FFS; however, no other hazardous wastes will be generated as part of the project.

***c) Will the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

**No Impact**. There are no proposed or existing schools within one-quarter mile of the Fawn Lodge FFS.

***d) Will the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, will it create a significant hazard to the public or the environment?***

**No Impact.** The proposed project site is not included on any list of hazardous materials sites.

***e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project result in a safety hazard for people residing or working in the project area?***

**No Impact.** The proposed project site is not located within two miles of a public or private airport. The nearest airport is in Weaverville and is approximately 7 miles northwest of the project (see Figure 2).

***f) For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?***

**No Impact**. The proposed project site is not located in the vicinity of a private airstrip.

***g) Will the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

**No Impact.** The Site is not within or adjacent to any local designated evacuation routes.

***h) Will the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?***

**Less than Significant Impact.** The proposed project site is located within an area designated as a high fire severity area. The firefighters that will be assigned to this station upon project completion will be responding to emergency incidents including wildland fires. Such personnel will be exposed to risk of injury or death involving wildland fires, however these personnel are highly trained firefighters that utilize a number of techniques to ensure safety. These risks occur with the existing baseline conditions at the station which will not increase as a result of the project.

| ENVIRONMENTAL ISSUES | | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| **VIII.** | **Hydrology and Water Quality. Will the project:** | | | | |
| a) | Violate any water quality standards or waste discharge requirements? | ☐ | ☐ | ☒ | ☐ |
| b) | Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level that will not support existing land uses or planned uses for which permits have been granted)? | ☐ | ☐ | ☒ | ☐ |
| c) | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial on- or off-site erosion or siltation? | ☐ | ☐ | ☐ | ☒ |
| d) | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in on- or off-site flooding? | ☐ | ☐ | ☐ | ☒ |
| e) | Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | ☐ | ☐ | ☐ | ☒ |
| f) | Otherwise substantially degrade water quality? | ☐ | ☐ | ☒ | ☐ |
| g) | Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | ☐ | ☐ | ☐ | ☒ |
| h) | Place within a 100-year flood hazard area structures that will impede or redirect flood flows? | ☐ | ☐ | ☐ | ☒ |
| i) | Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? | ☐ | ☐ | ☒ | ☐ |
| j) | Result in inundation by seiche, tsunami, or mudflow? | ☐ | ☐ | ☐ | ☒ |

## *Discussion*

### *a) Will the project violate any water quality standards or waste discharge requirements?*

**Less than Significant Impact.** The project will not violate any water quality standards or waste discharge requirements. Storm water run-off drainage systems at the project site will be improved to create environmental benefits. The installation of a sand/oil separator is one such improvement

in the current project design. This separator will treat any surface run-off prior to discharge. The existing vehicle wash rack used to remove dirt or mud from apparatus will be removed and no new vehicle wash rack will be constructed at the new facility. If any steam cleaning, degreasing, etc, is needed to clean apparatus it will be performed at a designated location (at the Unit Auto Shop) where any run-off or waste can be collected. Construction at the site will be subject to requirements of the NPDES Construction Storm Water Permit, which will be developed in consultation with the RWQCB and implemented prior to any construction activities.

CalFire and/or its representatives and contractors shall be responsible for securing the General Construction Activity Storm Water Permit (SWPPP) from the RWQCB prior to the initiation of any ground-disturbing construction activities. CalFire will assure that all sediment and erosion control measures specified in this permit are implemented for the duration of the project. A copy of this permit will be retained on the construction site; copies will be provided to all contractors and other parties that will be responsible for implementing the permit's best management practices for water quality. Any necessary storm water quality sampling and reporting associated with the storm water permit shall be the primary responsibility of the project contractor.

***b) Will the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level that will not support existing land uses or planned uses for which permits have been granted)?***

**Less than Significant Impact.** A new well pump will be installed at the existing well site to supply water at the station (see Figure 6). This will enable the existing water well to continue to supply water to the station. The amount of water used is expected to be similar to that used prior to station reconstruction.

***c) Will the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial on- or off-site erosion or siltation?***

**No Impact.** The project will not substantially change any existing drainage patterns or create new drainage patterns.

***d) Will the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in on- or off-site flooding?***

**No Impact.** See Discussion VIII (c).

***e) Will the project create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?***

**No Impact.** See Discussion VIII (c). The proposed project was revised based on input from staff at the RWQCB. The lower parking lot will have a permeable surface (it will be graveled instead of paved). Downspouts will be disconnected, and water run-off from the central paved area will be collected and dissipated into a vegetated hill slope. Potential runoff water impacts will be reduced from current conditions as a result of these site improvements.

***f) Will the project otherwise substantially degrade water quality?***

**Less than significant impact.** The proposed project involves grading and filling to raise the station's elevation above the 100-year floodplain. CalFire's engineers estimate that most, if not all, of the needed fill material will be obtained from on-site sources. The material cut from the hill-slope will be harvested for use as fill, as will the crushed asphalt and concrete harvested during demolition. Fill will be imported from a nearby County-approved quarry if the quantity of on-site fill materials is insufficient. Due to the close proximity of the project site to Grass Valley Creek and its tributary, the potential exists for impacts to water quality, particularly short-term impacts during the construction period. This issue is discussed in Section VIII (a) above. The SWPPP and a number of other facilities incorporated into the proposed project are intended to minimize this impact. There is no expected adverse impact to water quality after the project is completed, in fact, as discussed above, some aspects (such as the installation of a sand/oil separator) will improve existing conditions.

***g) Will the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?***

**No Impact.** There are no known 100-year flood hazard maps for Grass Valley Creek at the Fawn Lodge FFS. Prior to construction, the site will be surveyed to determine the 100-year flood plain location.

***h) Will the project place within a 100-year flood hazard area structures that will impede or redirect flood flows?***

**No Impact.** See Discussion in VII (f and g).

***i) Will the project expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?***

**Less than significant impact**: The proposed project is located along Grass Valley Creek at its confluence with a major tributary to this stream. Buckhorn Dam/Grass Valley Creek Reservoir is located approximately one mile up stream. There are no known hydraulic models available to determine the extent to which the Fawn Lodge FFS will be impacted if the Buckhorn Dam suffered a catastrophic failure. It is highly unusual for a dam to experience a catastrophic failure without first showing warning signs of trouble. The construction of new buildings to replace currently existing buildings will not increase the risk above baseline conditions and may lower it given raise in elevation above 100 year flood hazard.

***j) Will the project result in inundation by seiche, tsunami, or mudflow?***

**No Impact.** The project site is not located within an area subject to seiche, tsunami, or mudflow.

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **IX. Land Use and Planning. Will the project:** | | | | |
| a) Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not | ☐ | ☐ | ☐ | ☒ |

| | | | | |
|---|---|---|---|---|
| limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | | | | |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | ☐ | ☐ | ☐ | ☒ |

### *Discussion*

***a) Will the project physically divide an established community?***

**No Impact.** Construction and operation of the project will occur within the boundaries of the existing fire station parcel. Reconstruction of the station will not physically divide an established community.

***b) Will the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?***

**No Impact.** The existing fire station is an allowable use under the current General Plan designation. Since the property is owned by the State further development of the parcel is not subject to conformance with the county general plan. The replacement project is consistent with the current uses of the site.

***c) Will the project conflict with any applicable habitat conservation plan or natural community conservation plan?***

**No Impact.** The project site is not located within a habitat conservation plan or natural community conservation plan area. Therefore, no potential conflicts with such plans will occur and no impact will occur.

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **X. Mineral Resources. Will the project:** | | | | |
| a) Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☒ |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | ☐ | ☐ | ☐ | ☒ |

### *Discussion*

***a) Will the project result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?***

**No Impact.** The property is already developed as the Fawn Lodge FFS so the area is not available for mineral withdrawal. The site is also not known to have a potential for mineral production.

***b) Will the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?***

**No Impact.** The site is not designated in the general plan as having locally-important mineral resources.

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XI. Noise. Will the project result in:** | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards? | ☐ | ☐ | ☒ | ☐ |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☐ | ☒ |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☐ | ☒ |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☒ | ☐ |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |
| f) For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |

### *Discussion*

***a) Will the project create exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?***

**Less than Significant Impact.** The proposed project will not result in a substantial increase in ambient noise levels since the project essentially replaces an existing facility. Operational noise generated by the project will be primarily associated with the operation of onsite equipment (i.e., compressors, pumps, heating, and ventilation and air conditioning units); as well as the occasional sounding of emergency sirens and radio traffic through exterior speakers, which already occurs. Construction activities, especially demolition, grading, framing, and paving, will cause a short-term increase in noise levels. These levels are not expected to be significant because they will be confined to regular weekday business hours, they will only be for short, non-reoccurring periods, and all equipment will be maintained in accordance with workplace standards.

***b) Will the project create exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?***

**No Impact.** Construction activities will not involve the use of explosives, pile driving or other intensive construction techniques that could generate vibration or noise.

***c) Will the project create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?***

**No Impact.** The replacement fire station will not have a substantially different noise profile than that of the existing station.

***d) Will the project create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?***

**Less than Significant Impact.** Although unlikely, there could be a substantial number of truck trips to haul-in fill material to the site if the quantity of on-site fill materials proves to be insufficient to raise the elevation of the new station above the 100-year flood plain. These trucks are louder than passenger cars or trucks which typically pass along this access road to the site. The occupants of the residence along the access road to the station are persons most likely to hear the frequent passing of the transport trucks. This residence is a vacation home and not occupied full time. This impact will be relatively short-term and only occur during the construction period. All construction activities will be limited to daytime hours of operation. No work activities will occur at night or on weekends. The construction activities at the actual project site will temporarily increase noise levels in the area, but the only persons likely to notice these noises are the construction workers themselves since there are no neighbors in close proximity. Noise levels could reach 85 dBA within the project site for short periods with the use of earthmoving and demolition equipment. Maximum noise level at the outer edge of the construction site is estimated to be 76 dBA.

***e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project expose people residing or working in the project area to excessive noise levels?***

**No Impact.** The project is not located within the immediate vicinity of a commercial or private airport. Due to the distance to the nearest airports, the project site will not be subject to high levels of aircraft noise and will, therefore, not result in a safety hazard for people residing or working in the area.

***f) For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?***

**No Impact.** See (e) above.

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XII. Population and Housing. Will the project:** | | | | |
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or | ☐ | ☐ | ☐ | ☒ |

| | | | | |
|---|---|---|---|---|
| indirectly (for example, through extension of roads or other infrastructure)? | | | | |
| b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |

### *Discussion*

***a) Will the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

**No Impact.** The replacement of a FFS will not, by itself, induce growth. The project will only result in the replacement of the existing facilities at the station. Staffing should remain at or near current levels.

***b) Will the project displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?***

**No Impact.** The project will not involve the displacement of housing or necessitate construction of replacement housing. The project will provide new barracks for firefighters.

***c) Will the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?***

**No Impact.** The development of the project will not remove or displace people, requiring the construction of replacement housing.

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XIII. Public Services. Will the project:** | | | | |
| a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: | | | | |
| Fire protection? | ☐ | ☐ | ☒ | ☐ |
| Police protection? | ☐ | ☐ | ☐ | ☒ |
| Schools? | ☐ | ☐ | ☐ | ☒ |
| Parks? | ☐ | ☐ | ☐ | ☒ |
| Other public facilities? | ☐ | ☐ | ☐ | ☒ |

### *Discussion*

***a) Will the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:***

### *Fire protection?*

**Less than Significant Impact.** The site is currently served by the existing fire protective infrastructure. Operations will be in accordance with the Uniform Fire Code, with inspections conducted by the State Fire Marshall and CalFire. The project will not result in any changes to the projected population of the area. Replacement of the FFS at the project site will not degrade existing levels of fire protection and emergency response.

Response times within the primary area of responsibility for initial attack may change slightly during the construction period. The existing engines and crews housed at this station will be temporarily reassigned to nearby stations during the 12-18 month construction period. This is necessary because demolition, grading, and bridge replacement work will temporarily render the facility out-of-service. Both engines from the station will be situated in Trinity County during daylight hours, in fire season, during the 12-18 month construction period to maintain response times to the greatest extent possible. Fire protection services will be maintained.

### *Police protection?*

**No Impact.** The FFS will provide its own security through the presence of personnel onsite when in operation. This project will result in a new facility being constructed on the same property where the existing facility is located.

### *Schools?*

**No Impact.** The project does not include any residential uses other than housing for fire fighting personnel, nor will increase the amount of residents or need for the construction of new facilities. The new station will not affect the nearby school.

### *Parks?*

**No Impact.** Parks or other recreational facilities will not be displaced by the proposed project since the project will be developed on state-owned property dedicated to fire protection. In addition, the FFS will not add residences to the project area that could result in increase demand for parks or other recreational opportunities.

### *Other public facilities?*

**No Impact.** The FFS will be maintained by permanent and seasonal CalFire staff located at the project site. No new public facilities (power, telephone, sewer, water) will be required, and existing facilities will not be affected. Therefore, the project will not result in the need for new public services.

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XIV. Recreation. Will the project:** | | | | |
| a) Increase the use of existing neighborhood and | ☐ | ☐ | ☐ | ☒ |

| | | | | |
|---|---|---|---|---|
| regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated? | | | | |
| b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | ☒ |

### *Discussion*

***a) Will the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?***

**No Impact.** The project will not generate demand or affect existing recreational facilities since the project will not generate any increase in population.

***b) Will the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?***

**No Impact.** The station will be constructed on the site of an existing station; the project will not displace existing recreational land uses.

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XV. Transportation/Traffic. Will the project:** | | | | |
| a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | ☐ | ☐ | ☒ | ☐ |
| b) Exceed, individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | ☐ | ☐ | ☐ | ☒ |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | ☐ | ☐ | ☐ | ☒ |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☐ | ☒ |
| e) Result in inadequate emergency access? | ☐ | ☐ | ☐ | ☒ |
| f) Result in inadequate parking capacity? | ☐ | ☐ | ☐ | ☒ |
| g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | ☐ | ☐ | ☐ | ☒ |

### *Discussion*

***a) Will the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?***

**Less than Significant Impact.** The site already has an operating fire station. The project will not result in a change in operations in that similar fire and rescue equipment will continue to be stationed at Fawn Lodge. Access to the existing fire station is from the Fawn Lodge Road to State Highway 299. The project will not change this access point to the property. The existing station does not have access problems with fire equipment to Highway 299 because of favorable grades and sightlines. All construction equipment and materials will enter the property from the existing driveway. No equipment or supplies will be stored in the state highway right-of-way. Implementation of the project will result in a temporary increase in vehicle traffic along State Highway 299 associated with short-term construction-related activities. Long-term operation of emergency response and employee vehicles will remain the same because of the replacement nature of the project.

Short-Term Construction Traffic

Potential short-term increases in traffic will be associated with construction of the project. The transport of engineered fill (if required) has the greatest potential for traffic-related impacts as the truck trips could create traffic issues. These trips will be completed during daylight hours and would be only short-term impacts during the construction period. These trips will end as soon as sufficient quantities of material have been transported to the site. This rural location in Trinity County does not have a significant traffic problem. This area of Highway 299 is not well-traveled during the weekday when the truck traffic will occur.

The short-term traffic impacts related to other construction vehicle traffic is also considered to be less than significant. Assuming that a maximum of ten construction workers will commute to the site daily over the course of project construction, construction activities will result in approximately 20 employee trips per day. Assuming an additional 10 trips per day for the transport of equipment and materials to and from the project site, construction of the project will result in a total of approximately 30 average daily trips (ADT). Because construction of the project will result in an increase in ADT of only 30 or less and because projected ADT will not exceed the estimated capacity of State Highway 299, impacts associated with the short-term increases in construction traffic attributable to the project are considered less-than-significant.

Long-Term Operational Traffic

Because the proposed project will replace an existing facility without any increase in staff or number of engines housed, the long-term operational traffic remains the same. The project will not introduce substantially different fire and rescue equipment to the station.

***b) Will the project exceed, individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?***

**No Impact**: This section of State Highway 299 generally has moderate traffic volumes. The existing entrance to the fire station is well designed and has good sightlines for departure under emergency conditions. The new station will not increase traffic congestion or the local level of service on the state highway. Although construction of the project will result in a slight, short-term increase in traffic, the increase is not considered significant.

***c) Will the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?***

**No Impact.** The project will not increase the population in the area, nor will it involve any changes in air traffic operation.

***d) Will the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

**No Impact.** The replacement facilities do not change the configuration of State Highway 299 resulting in any hazardous conditions. The station will continue to have the same or similar fire and rescue equipment already used at this facility.

***e) Will the project result in inadequate emergency access?***

**No Impact**. The project will not involve alteration of any roadways that will reduce emergency access. All construction activity will be contained on site and will not require the closure of any nearby roadways at any time during construction.

***f) Will the project result in inadequate parking capacity?***

**No Impact.** The project has been designed to provide adequate onsite parking for employee, visitor and emergency response vehicles. In addition, construction of the project will not result in the need for an off-site vehicle staging area.

***g) Will the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?***

**No Impact.** The project will not result in any permanent features that could affect regional transportation and will not result in alteration of any existing facilities nor interfere with construction of any future planning facilities that are intended to serve alternative modes of transportation (i.e., bus turnouts, bicycle lanes, etc.). No conflict with adopted alternative transportation plans for policies will occur in association with operation of the project.

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVI. Utilities and Service Systems. Will the project:** | | | | |
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | ☐ | ☐ | ☐ | ☒ |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ |

| | | | | | |
|---|---|---|---|---|---|
| c) | Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ |
| d) | Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | ☐ | ☐ | ☒ | ☐ |
| e) | Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments? | ☐ | ☐ | ☐ | ☒ |
| f) | Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | ☐ | ☐ | ☒ | ☐ |
| g) | Comply with federal, state, and local statutes and regulations related to solid waste? | ☐ | ☐ | ☐ | ☒ |

### *Discussion*

***a) Will the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?***

**No Impact.** The proposed project will not exceed wastewater treatment requirements of the RWQCB. CalFire will adhere to all applicable requirements.

***b) Will the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

**Less than Significant Impact.** The proposed project includes the replacement of the site's existing septic sewer system and leach field. The new sewer system will be reconstructed within the compound and will essentially duplicate the existing treatment facility. The modern system is less likely to cause environmental impacts because current standards have increased dramatically since the existing sewage treatment system was first constructed. There has not been a significant environmental impact associated with the existing system and the replacement system will not cause significant impacts.

***c) Will the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

**Less than Significant Impact.** The proposed project does include the construction of new storm water drainage facilities. Short-term adverse environmental impacts will be minimized through implementation of the SWPPP and other safeguards in place to minimize the movement of sediment during construction (see discussion in Section VIIIa above). The long-term impact is expected to reduce environmental impacts from existing conditions resulting from existing storm water drainage facilities. The area where construction of the new facilities will occur is already developed. Appropriate storm water drainage facilities will be constructed at the new station.

***d) Will the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?***

**Less than Significant Impact.** Potable water is currently supplied from a well just northeast of the site. A new well pump and water storage tanks will be installed. Water use levels post construction should be similar in volume to water use levels prior to construction.

***e) Will the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?***

**No Impact.** All wastewater service will be disposed of on site. See Item (a-b) above.

***f) Will the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?***

**Less than Significant Impact.** During the demolition and construction period, there will be a minor increase in the quantities of materials delivered to the local landfill. However, Best Management Practices for CalFire construction projects include provisions for recycling and salvaging materials to minimize impacts to landfills. The demolition materials generated from this proposed project will be separated, salvaged, and recycled, as feasible. There is no change in solid waste generation or disposal since there is already an operating fire station at this site.

***g) Will the project comply with federal, state, and local statutes and regulations related to solid waste?***

**No Impact.** The proposed project will comply with all applicable federal, state, and local statutes and regulations pertaining to disposal of solid waste. See Item (f) above.

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVII. Mandatory Findings of Significance.** | | | | |
| a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☐ | ☒ | ☐ |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | ☐ | ☐ | ☐ | ☒ |
| c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☐ | ☒ | ☐ |

Authority: Public Resources Code Sections 21083 and 21087.

Reference: Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21082.1, 21083, 21083.3, 21093, 21094, 21151; *Sundstrom v. County of Mendocino*, 202 Cal.App.3d 296 (1988); *Leonoff v. Monterey Board of Supervisors*, 222 Cal.App.3d 1337 (1990).

### *Discussion*

***a) Will the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?***

**Less than Significant Impact.** The proposed project consists of the demolition of the current CalFire facility and its reconstruction in the same location. Development of the project will not substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self sustaining levels; threaten to eliminate a plant or animal community; reduce or restrict the range of rare or endangered plants or animals or eliminate important examples of the major periods of California history or prehistory. Cultural resources at the site are limited to the existing structures which contain some historic components. Detailed analysis led to the conclusion that the impacts will not cause substantial adverse change to historical resources and the project will not eliminate important examples of the major period of California's history or prehistory.

***b) Will the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)***

**No Impact.** The project will not generate cumulative effects since the site already has an operating fire station. No past, current or probable future projects were identified in the project vicinity that when added with project-related impacts will result in a cumulatively considerable effect(s).

***c) Will the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?***

**Less than Significant Impact.** No project-related environmental effects were identified that will cause substantial adverse effects on human beings. As discussed herein, the proposed project has the potential to create impacts related to air quality, biological resources, and cultural resources during construction. However, with implementation of required mitigation measures, these impacts will be reduced to a less than significant level. The project will not have substantial adverse effect on humans. The project will, by contrast, provide a new fire station that will provide improved fire and rescue services to the community.

# Appendix A

## An Overview of the Archaeology, Ethnography, and History of the Fawn Lodge FFS Project Area Trinity County, California

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### Archaeological Background

***Trinity County:*** The Fawn Lodge FFS is situated near the coalescence of three archaeological regions depicted by Moratto (1984; Figure 1, Figure 10.4). Each of these three regions includes a subregion: North Coast Region, Northwest Coast subregion; Northeastern Region, Cascade subregion; Central Valley Region, Sacramento Valley subregion. Thus, the external relationships of the Native American tribes that occupied these regions and subregions are potentially quite complicated, a fact that may be appreciated by consulting regional overviews (Fredrickson 1969; 1984:471-528; Moratto 1984:193-216; Raven 1984:431469). The archaeology of most of the three subregions was poorly known until the 1950s, when intensive investigations were undertaken prior to construction of several reservoirs, including, locally, Lewiston and Trinity reservoirs (Moratto 1984:194).

The earliest chronological sequence for the North Coast region was revealed by investigations at Lake Mendocino and in Napa and Sonoma counties (Meighan 1955). Adjacent to the subject project area is the Cascade subregion, which reflects cultural elements from the Great Basin and Pacific Northwest (Raven 1984:431-469). Chronologies for the Sacramento Valley region pertain to the Central California Taxonomic sequence (Beardsley 1948, 1954; Bennyhoff and Fredrickson 1994; Ragir 1972).

In 1952, archaeological investigations were undertaken for seven projected reservoirs in Northern and Central California. Survey of the proposed Trinity Reservoir disclosed evidence of 120 village sites, which were identified by observation of obsidian debitage, thermally altered rock ("cooking rocks") and structural depressions ("house pits"). Various natural features influenced site locations, such as river terraces near productive fishing locations, the confluences of tributary streams, and near springs and shaded locations for summer camps (Treganza 1959:15; 1963; Treganza et al. 1967). Excavations were undertaken at four previously recorded village sites during the summer of 1957. It was apparent that many sites had been damaged or destroyed by placer mining, agriculture, logging, deep channel gold dredging, and reservoir construction. One result of reservoir data recovery was recognition of the "Gunther Barbed"

[8] The information presented in this appendix was gathered from the cultural resource investigation report written by Napton and Greathouse (2008a) for CalFire during the CEQA Initial Study for this proposed project. CalFire made only minor editorial changes to this text and inserted a brief reference to the Limekiln Gulch Site, CA-TRI-942. CalFire also inserted the two photos of TRI-942 and the eight historic photographs of CCC Camp Fawn Lodge which were provided by Bob Maxey – retired CDF. This appendix does not contain any confidential information and may be distributed to the general public.

projectile point, identified by Loud (1918:221-437), as an index artifact of the late prehistoric and historic periods (Treganza 1959:14-15). The largely homogeneous regional archaeological assemblage indicated a time depth of not more than 1000 years; many sites were attributed to the ancestral Wintu (Treganza 1959).

Investigation and analysis of four sites in the Sacramento River Canyon established an areal chronological sequence (Basgall and Hildebrandt 1989). Excavations at the Reading Creek East site (CA-TRI-1019) revealed a temporary habitation and burial site utilized during the Shasta Complex period (Gromacki and Hawkins 1972; Nilsson et al. 1991). Betts (1995) conducted an archaeological survey of the Ellen Pickett State Forest and produced a report of his findings, which was extremely useful during preparation of the archaeological studies supporting this CEQA document, since the Ellen Pickett State Forest is only two miles east of the proposed project.

Among the early archaeological investigations in the Central Valley are those of Schenck (1926), Schenck and Dawson (1929) and Hewes (1941). Other investigations are reported by Heizer (1949, 1974), Jones (1923:113-122), Lillard et al. (1939), Olsen and Wilson (1964), Ragir (1972), and Schulz and Johnson (1980). Most of these investigations focused on study of single sites, or testing of various sites. Excavations in the Mokelumne and American River drainages were conducted by Lillard et al. (1939), resulting in the identification of three major time periods of Central Valley prehistory: the "Early," "Transitional," and "Late" periods (later characterized as "horizons"). The California horizons, their salient cultural traits or characteristics, the time periods subsumed by each and many other aspects concerning them have been discussed extensively in the archaeological literature (Moratto 1984). The archaeological context of the Central Valley and the west slope of the Sierra Nevada has been summarized by several authorities, among whom are Elsasser (1960:1-93), Johnson (1967, 1970), Napton (1981), and Moratto (1972, 1984); the Southern Cascades and Northern San Joaquin Valley by Johnson (1984, n. d.).

***Lake Oroville Complexes:*** Archaeological investigations focused on prehistoric remains at Lake Oroville along the Feather River in the foothills of Butte County (Olsen and Riddell 1963; Ritter 1970). Ritter traced the development of the Mesilla, Bidwell, Sweetwater, Oroville and Historic complexes, collectively spanning some 3000 years, culminating in the ethnographically-known Maidu. The Mesilla Complex is known at sites CA-BUT-84, -98, and -157. Mesilla Complex remains are interpreted as indicating seasonal occupation of the foothills between 1000 B.C. and A.D. 1. Animals were hunted with atlatl and dart; vegetal foods were processed in bowl mortars and on millingstones. Contact with Sacramento Valley cultures is inferred by the presence of Haliotis and Olivella beads and charmstones, whereas contact with components of the Martis Culture may be indicated by use of basalt, slate, and chert to make projectile points.

The Bidwell Complex, dated circa A.D. 1 to A.D. 800, is characterized by relatively small, but apparently permanent villages. Residents of the villages hunted deer and smaller game, obtained fish (as indicated by the presence of grooved and notched sinker stones), and processed seeds and acorns on millingstones and, perhaps, in wooden mortars. Slate and basalt points were made; steatite vessels were used for cooking. The dead are buried in flexed, dorsal or lateral positions.

The succeeding Lake Oroville Sweetwater Complex, A.D. 800-1500, is identified at CA-BUT-90 and -131 by the presence of Olivella and Haliotis bead types accompanied by an industry heavily dependent on steatite. The bow and arrow was probably used, as shown by occurrence of small, lightweight projectile points, such as Eastgate, Rose Spring, and Gunther Barbed types (described below). Burials usually occur in flexed or extended attitudes. The Oroville Complex, considered by Ritter (1970) as representing the

protohistoric Maidu, flourished from A. D. 1500 until the epidemic of 1833. Bedrock mortars were used to process vegetal foods. Characteristic Oroville artifacts include incised bird bone tubes, gorge hooks, gaming bones, and clamshell disk beads. Several kinds of structures, including circular dance or assembly houses, were erected. Moratto (1984:300) notes that "the Lake Oroville sequence ends with the Historic Complex," but the Historic Complex is not well understood in this region due to the severe impacts suffered by the Maidu--the effects of the epidemic of 1833 (Cook 1955b) and severe deculturalization when gold miners arrived in their territory in the 1850s.

Gunther series points are small to medium-sized triangular points having straight to slightly convex edges and weighing less than 3 grams. Gunther points have tangs or barbs that extend downward and, depending on subtype, curve toward the stem. The classic "Gunther Barbed" type described by Loud (1918:221-437) has tangs that extend below the base of the stem. Subtypes include Gunther Short Barbed (tangs shorter than length of the stem), Gunther Abrupt (tangs extending laterally outward), and Gunther Round Shoulder (generally diamond-shaped with sloping rounded shoulders). Loud believed that these points date to late prehistoric times, whereas Pippin et al. (1979) date comparable examples to A.D. 335, while Elston et al. (1983) consider the series to be time markers from A.D. 500 to the late prehistoric period. Gunther series projectile points appear in the Redbud Phase (A.D. 500-1300) on the Stanislaus River (Moratto et al. 1988).

***Tehama County Archaeology:*** Several archaeological sites and survey projects in eastern Tehama County have been reported upon. Sundahl (1993a:154) states "Excavated sites in the Sacramento River-Southern Cascades region are relatively few, and reporting techniques vary considerably, making exact comparisons difficult." She states that sites located within a 20-mile radius of Bend that are reported in the literature, include CA-TEH-1 (Kingsley Cave) (Baumhoff 1955); CA-TEH-58 (Treganza 1954); CA-TEH-193 (Payne Cave) (Baumhoff 1957); CA-TEH-256- 261, and -262 (Thomes Creek sites) (Edwards 1970); CA-TEH-1432 (Spider Rockshelter) (Ritter 1987); CA-TEH-1488 (New Creek Site) (Nilsson et al. 1991); and CA-TEH-1490 (Bebensee Site) (Hamusek 1988, 1996). The Redding Office of the Bureau of Land Management, under the aegis of Archaeologist Eric Ritter, launched an active program of archaeological survey, testing and excavation of several sites in Shasta and Tehama counties.

*Figure 22. Don McGeein excavating in one of the archaeological test units placed at the Limekiln Gulch Site (CA-TRI-942) in 1993.*

*Figure 23. Another view of CalFire's 1993 site dig at the Limekiln Gulch Site (CA-TRI-942) located near Weaverville.*

CA-TRI-942 (Limekiln Gulch) is a multi-component site located less than five miles from the Fawn Lodge project area. It was discovered by BLM Archaeologist Eric Ritter in 1983 soon after timber operations authorized by THP #2-81-123-TRI (4) had just been completed upon lands owned at that time by Southern Pacific Land Company. Unfortunately, CalFire did not require an archaeological survey to be completed as part of the environmental review preceding approval of the proposed timber operations in

1981 and the site was damaged by the logging activity[9]. The Limekiln Gulch Site was recorded as a multi-component site occupying a south-facing bench overlooking the Trinity River containing a deep midden deposit with abundant fire-cracked rock, and chipped and ground stone artifacts. A soapstone boulder-outcrop at the SE margin of the site containing cupule petroglyphs and historic quarry marks and engravings was also recorded (Foster and Ritter 1983). In 1993, with the cooperation of the private landowner, CalFire sponsored a limited site investigation designed to test the depth, content, antiquity, and nature of the midden deposit and recover important information before additional post-logging site impacts took their toll (Figures 18 and 19). Regrettably, this effort came too late for the cupule boulder, which was destroyed by vandals sometime between 1983 and 1992. Although a final report documenting this site investigation has not yet been completed, CalFire is optimistic that a site report from this study will soon be produced.

***Shasta County Archaeology:*** In Shasta County, which adjoins Trinity County on the east, survey at Whiskeytown National Recreation Area located twelve prehistoric sites, two of which contained historic components (Johnson 1977). Further survey at Whiskeytown in 1993 located thirteen more sites, five of which are prehistoric, six historic, and two multi-component. Two environmental factors were identified as critical to the location of prehistoric sites: level terrain and the proximity to water (Griffin et al. 1994).

In general, the best available summary of prehistoric archaeology in Shasta County has been compiled by Moratto (1984:446), in his monumental but now outdated discussion of California prehistory. Moratto presents the results of investigations as of 1984, and the record, as he admits, is indeed a fragile tapestry. A map in his tome (Moratto 1984:442, Figure 9.5) shows the approximate location of but ten archaeological sites in Shasta County, and only six are discussed in text (CA-SHA-46, -47, -169, -170, -177, -and -475). Of these, site CA-SHA-46 was of some importance. Excavations by the ubiquitous and indefatigable Heizer (1936) apparently were undertaken to ascertain the northerly extent of the Central California "horizons" -- the Early, Transitional, and Late archaeological complexes of the Sacramento-San Joaquin delta region.

Since 1984 manifold archaeological investigations or excavations have been undertaken in Shasta County, including (but by no means limited to) the following projects: archaeological investigations in the Tower House District, Whiskeytown Unit of the Whiskeytown-ShastaTrinity National Recreation Area (Baker 1984); investigation of the prehistory of the Sacramento River Canyon and excavation at CA-SHA-1176, -1175, -1169, and -476 (Basgall and Hildebrandt 1989); archaeological research in the Clikapudi Archaeological District (Clewett and Sundahl 1982); archaeological explorations in Shasta Valley (Hamusek 1995); study of the history and prehistory of the Latour Demonstration State Forest (Hamilton and Neri 1997) and excavation of site CA-SHA-1486 at Latour (Huberland and Dwyer 2001); archaeology of the Shasta Dam area (Smith 1952); survey and excavation in the Squaw Creek drainage (Sundahl 1992a, 1992b); salvage archaeological investigations along Clear Creek and Cow Creek (Treganza and Heickson 1960); and archaeological investigations at a Sacramento River mining camp (CA-SHA-1450) (Vaughan 1985).

Huberland and Dwyer (2001) conducted excavations at an important site in the Latour State Demonstration Forest. They present a succinct account of regional prehistory. A basic cultural sequence for the Yana and their predecessors was postulated by Baumhoff (1957), based on his work at Kingsley and Paynes caves in Tehama County. Baumhoff discerned evidence of a two-phase sequence, the earliest

[9] The California Board of Forestry and Fire Protection adopted forest practice rules in 1991 which require an archaeological survey to be completed during Timber Harvesting Plan development. Since those rules were not in place in 1981, CalFire did not have clear authority to require an archaeological survey of the proposed Limekiln Gulch THP.

the Kingsley Complex; the later phase the Mill Creek Complex, which he regarded as representing the ethnographic Yana. Later, Johnson and Theodoratus (1984) proposed a five-phase cultural sequence for the Yana region (Johnson 1978:361-369).

Two prehistoric sites (CA-SHA-169 and -170) located on the Sacramento River north of Redding, excavated in the 1960s, yielded 40 inhumations and associated artifacts (Treganza and Heicksen 1960). Interpretation of these sites provided sufficient information to identify the "Shasta Complex," which is regarded as affiliated with cultures of comparable age in both northern and southern regions along the river.

An important site, perhaps one of the most important in Northern California, is site CA-SHA-475, excavated by Clewlett and Sundahl (1983) and Sundahl (1993b). The site, located on Squaw Creek, has been under investigation since 1970 (Sundahl 1992b), revealing the region's only lengthy chronological sequence, one that may extend to 8000 years BP. The deepest deposits yielded projectile points comparable to those found at Borax Lake (Raven 1984:449). Materials of the Borax Lake Pattern are also represented at South Fork Mountain and the Cox Bar site (CA-TRI-1008) in Trinity County: On South Fork Mountain, more than 120 prehistoric sites have been recorded that represent some 6000 to 8000 years of cultural activity (Sundahl 1993b). A limited survey near the Hayfork Divide located an extensive prehistoric chert quarry, lithic scatter and tool manufacturing area (CA-TRI-980) (Reinoehl 1984). The background of Shasta and Tehama county archaeology is reviewed by Napton and Greathouse (2000, 2007). Huberland and Dwyer (2001) summarize investigations at site CA-SHA-475 as follows:

> Extensive archaeological excavations at CA-SHA-475 established four site components. The earliest, between 8,000 and 5,000 BP, were marked by the presence of Borax Lake wide-stemmed projectile points, thought to be spear or atlatl points, and stratigraphically associated with unshaped manos and milling stones. Between 5,000 and 3,000 BP, Squaw Creek contracting stem points, McKee Uniface points, and manos, millingstones, cobble spalls, and other lithic tools characterize the prehistoric assemblage. CA-SHA-475 was also occupied during later time periods. Between 3,000 and 1,000 BP, occupations were marked by Clikapudi notched points, manos, milling stones, cobble spalls, and large concentrations of fire-cracked rock. The most recent site component, dating to approximately 1,000 BP, was associated with Gunther-barbed and other small, notched projectile points, manos, milling stones, and hopper mortar pestles.

Sundahl (1992a:89-112) discusses the broad picture of cultural patterns and chronology into the northern Sacramento River drainage, placing archaeological remains in this region in five patterns/aspects: Borax Lake, Squaw Creek, Whiskeytown, Tehama, and Augustine. She also summarizes the Southern Cascade prehistoric cultural sequence.

Other important archaeological research pertaining to Trinity County includes test excavations at sites in the Sacramento River Canyon: CA-SHA-1176, -1175, -1169, and -476. Three phases were identified by Basgall and Hildebrandt (1989). They are Pollard Flat, Vollmers, and the oldest, Mosquito Creek, dating to 1180 BP. Several individual archaeological sites and districts are listed on the National Register of Historic Places (NRHP). Sites include Benton Tract, Squaw Creek, SHA-786; districts Swasey and Tower House; and petroglyph sites, including Cow Creek, Dersch-Taylor, and Olsen. Sites in Trinity County listed in the NRHP include archaeological site CA-TRI-140, Hay Fork; Boweiman Barn, DE-NO-TO cultural district (Trinity Summit Area), Helena Historic District, Lewiston Historic District, and Weaverville Historic District.

**Ethnographic Background**

The Fawn Lodge project area is located within the former territory of the Wintu, members of the Penutian language group, who occupied an extensive part of present day California. Wintu speaking people settled the upper Sacramento and Trinity River country about 1000-1100 years ago, according to linguistic and archaeological data. Many Trinity and Hayfork Wintu place names were originally Chimariko, an older Hokan speaking group, indicating that the Wintu entered the Trinity River country relatively recently (Moratto 1984:562-563). Archaeologically, the late prehistoric expansion of the Wintu is identified with the Shasta Aspect of the Augustine Pattern (Fredrickson 1974; Moratto 1984:571).

There is an extensive ethnographic literature pertaining to the Wintu. One of the first descriptions, albeit flawed, is provided by Powers (1877). A brief discussion of Wintun geography and culture is presented by Kroeber (1925:351-356; 1962). However, the most detailed and authoritative ethnographic data were collected by Du Bois (1935). An excellent general account is presented by Merriam (1955:3-25), who also describes various aspects of "Wintoon" life along the McCloud River (Merriam 1957:40-43). A comprehensive summary of Wintu information is provided by LaPena (1978:324-340). Ethnogeographic information for various portions of Wintu territory has also been published (Guilford-Kardell 1980; Merriam 1957:40-43, 1966/67).

The *Native American Cultural Overview* prepared for the Shasta-Trinity National Forest summarizes archaeological, ethnographic, and ethnohistoric information pertaining to the region in which the Fawn Lodge project is located (Theodoratus 1981). She also provides an annotated list of Wintu place names. Wintu territory is subdivided into nine areas. The upper Trinity area was inhabited by the Nomsu's or "west-dwelling" people (Du Bois 1935:7; LaPena 1978:324). Merriam designates this group "Num-soos" and describes their territory as having been within the drainage basin of the Trinity River from its source south and west to Oregon Gulch, which is east of the mouth of Canyon Creek; thence into the mountains south of Douglas City (Merriam 1955:7, 1967:261). Du Bois (1935), however, believed their territory only extended as far south as Lewiston.

The Wintu of this region possessed several distinctive characteristics. For example, they constructed dwellings made of poles and bark, and used slings in warfare (Kroeber 1925:356, 358; Powers 1877:241). They utilized digger pine nuts and Wyethia seeds for food, and made arrow shafts from shoots of syringa. Several ethnogeographic place names are known along the Trinity River north of Fawn Lodge. The Wintu name of the Lewiston Valley was Wy-elte-potn, meaning "valley of the northland" (Merriam 1955:11-12). Kol'-lb was a large rancheria on the south side of the Trinity River on the Lowden Ranch, about three miles west of Lewiston (Merriam 1977:195). Still other villages were located in the general vicinity of Lewiston and Douglas City (Merriam 1977:199; Nilsson 1990:31), but none are identified as being located within the present project.

The ethnohistoric or contact period in central Trinity County is characterized by drastic impacts upon native cultures -- impacts that were unfortunately so characteristic of the mining era -- a dismal chronicle of impacts and atrocities that eventually led to the near extinction of the Wintu populations and their culture. In the 1830s a malaria epidemic took the lives of nearly 75 percent of the Indians in the upper Sacramento Valley. In 1850, the whites gave a "friendship feast." Poisoned food killed 100 Trinity Wintu (LaPena 1978:324). Conflict with white settlers resulted in the "Bridge Gulch Massacre" in 1852 (Hoover et al. 1958:378-382; Jones 1981:333). In 1858-1859 an official "Wintoon War" was launched against the Bald Hills and Trinity Wintu (LaPena 1978:325).

The arrival of gold seekers in California during the 1850s caused many tribes to suffer cultural collapse: for the Wintu it meant escalating violence. Atrocities were committed by both factions (Moak 1923), resulting, inevitably, in rapid, virtually complete extermination of the tribe and its cultural framework.

The destruction of Native American tribal cultures in the Central Valley, Coast Range, and Sierra Nevada from 1776 to modern times is discussed by Beals (1933), Cook (1943, 1955a, 1955b, 1960, 1962a, 1962b, 1968, 1970, 1972), Gray (1993), Hall (1978), Heizer and Almquist (1971), Heizer and Whipple (1951), Holterman (1920), Hurtado (1988), Leonard (1928) and in particular reference to Shasta and Trinity counties, Smith (1995).

**Historic Background of the Region**

***Trinity County:*** One of the original twenty-seven California counties, Trinity County was established in 1850. The County derives its name from Trinidad Bay on the coast, which was discovered by Captain Bruno Heceta on Trinity Sunday, 1775. The county was first explored by Anglo-Americans in April 1828, when the omnipresent Jedediah Smith and his party passed through the region on their way from the Sacramento Valley to Oregon (Hoover et al. 1958:378-382). In the early years the principal access to the county was via the Old Trinity Trail created by trappers and gold seekers. The Trinity River was named by Major Pierson B. Reading, who believed that it flowed to Trinidad Bay. Major Reading discovered gold in July, 1848, on the Trinity River at a point now known as Reading's Bar, just below Douglas City (Hoover et al. 1958:378-382), a few miles west of the Fawn Lodge project location.

The initial settlement of Trinity County was a direct result of the California Gold Rush (Cox 1858/1940). During 1850, hordes of gold seekers poured into the region, and by the end of 1851 the majority of gold bearing sections of the county had been explored and prospected. Most of the early mining activity was concentrated along the creeks and river bars. Numerous camps were situated on the Trinity River near the mouth of Grass Valley Creek (Hoover et al. 1958:378-382). From 1857 to 1858 the Buckhorn-Grass Valley Creek Toll Road was constructed. Its route is followed by present-day State Route 299. Approximately three miles east of Fawn Lodge along this pioneer route was Buckhorn Station, an early hotel and stage stop serving travelers and teamsters. None of the original buildings remain today; the present structures were constructed in the 1930s (Jones 1981:289,292-293).

Weaverville, a center of early mining activity, was named for John Weaver, a prospector who arrived there in 1849. The town became the county seat in 1850 (Hoover et al. 1958:378-382). In 1852 Weaverville had a large Chinese community composed of miners and tradesmen. The Chinese performed a great deal of the early-day mining around Weaverville; their cultural influence is represented today at the Joss House State Historic Park. Throughout the 1850s mining was a major activity along the streams of the Weaver Basin, conducted using gold panning, rockers, long toms, and ground sluicing. During the 1860s lengthy ditches were constructed to supply water to the mining operations. Hydraulic mining was introduced in the 1870s; the first use of a monitor was at Garden Gulch. Quartz hard rock mining became important in the 1880s, and a steam powered dredge began operation on Weaver Creek in the 1890s (Jones 1981:55-57).

The community of Lewiston, two miles northeast of Fawn Lodge, is one of the oldest settlements in Trinity County. In the 1850s it had a store, blacksmith shop, meat market, sawmill, numerous homes, and the first ferry for packhorses, permitting traffic to cross the Trinity River (Hoover et al. 1958:278-352). In 1889 dredging began, leaving mounds of tailings in their wake. This continued until dredging ceased during World War II. The construction of Trinity and Lewiston dams between 1956 and 1962 brought major changes to the community (Jones 1981:271).

Near Fawn Lodge is the Union Hill Mine, located at the confluence of the Trinity River and Weaver Creek (Ritter 1991). At its peak in the early 1900s it was one of the largest hydraulic mines in the county. Few remnants are visible today at this extensive site. Mining operations began here in 1862 and continued intermittently until abandonment in 1928. A large ditch was constructed to obtain water from Grass

Valley Creek. Beginning at a point about one mile above the present Odd Fellows Camp, the ditch extended approximately 15 miles to the mine (Goodyear 1979; Jones 1981:293-295). The upper portion of this ditch, a "head box" and the ruins of a flume, are located just outside Ellen Pickett State Forest (Betts 1995), and have been recorded as CA-TRI-1374H (Derby and Goodner 1992; Goodyear 1979; Ritter 1991).

Although the initial settlement of Trinity County by Europeans was due to gold mining, logging and recreation are now the county's economic mainstays. The Trinity Forest Reserve was established in 1905, with offices in Weaverville. The Trinity-Shasta National Forest was consolidated in 1954 (Jones 1981:57, 80). More than 70 percent of the county consists of National Forest land.

***Shasta County:*** The history of Shasta County, adjoining Trinity County on the east, begins, of course, with that of the Native Americans who occupied the present-day county. There were five tribes in the region: the Achomawi, Atsugewi, Okwanuchu, Wintu and Yana (Gifford and Klimack 1939:71-100). The first white men seen by Indians, probably about 1815, were Russians who ventured southward through the Sacramento River Canyon. The next white men were Spanish soldiers who traveled north from the southern missions. They were followed by Hudson's Bay Company trappers and explorers from the north, among them American, British, and French, arriving in the late 1820s.

Disaster overtook the Native Americans in 1832, when members of John Work's party, who were infected either with malaria or influenza, came in contact with the natives, who of course had no natural resistance to such exotic diseases, resulting in the death of thousands. This calamity was followed by settlement of parts of the valley by outsiders. In 1844, Pierson B. Reading, Lansford B. Hastings, and William Bennitz arrived in the region and applied for land grants from Mexico. The requests by Reading and Bennitz were granted, but Hastings request for all the upper Sacramento River Canyon area was denied because he refused to give up his United States citizenship to become a Mexican citizen, a condition of the land grant process. Pierson B. Reading received a grant of 26,632 acre (Rancho Buena Ventura; San Buenaventura, 26,632 acres [Beck and Haase 1974:28]). The rancho extended from Cottonwood Creek on the south to Salt Creek on the north, and from the Sacramento River west for three miles. Lansford Hastings (of “Hastings Cutoff” fame, an ill-starred route to California) settled at the foot of Castle Crags beside Lower Soda Springs in 1844.

Initial settlement of the Shasta County region was followed by the California Gold Rush in 1849, another major calamity for the Native Americans. The miners were quick to exploit the region's considerable gold deposits, and soon attacked the forests. Gold miner Abraham Cunningham, who arrived in Shasta County in 1849, observed that eastern Shasta County contained “a forest primeval consisting of the greatest stand of pine and sugar pine the world has ever known . . . stood from Manton to Fawn Lodge and from Inwood to the base of the high Sierra's.”

The miners and settlers relentlessly committed atrocities against the Indians. In 1850, the legislature passed the Indenture Act, which made it legal for white men to further exploit Indians who could be seized and sold, children as well as adults, or held as virtual slaves as vagrants. In 1854 the most disastrous atrocity was committed. Military reservations were established on the worst lands available in counties to the south, and soldiers and civilians banded together and began capturing every Indian that could be found and forcibly marched or transported to the reservations. The Nome Lackee Reservation was established in 1854 in Tehama County between Corning and Red Bluff on Stony Creek and Indians from Shasta were taken there, of course against their will.

Many small towns and settlements were established throughout Shasta County by the time the Indians were forcibly removed to the military reservations. The western side was the first to be permanently settled, the eastern side, which today includes the Fall River Valley was the last to be occupied because of determined but ultimately futile Indian resistance. Shasta, Horsetown, and Lower Springs were the principle early gold mining settlements. Others were Texas Springs, French Gulch, Quartz Hill, Tower House, Mad Ox Canyon, Grizzly Gulch, Muletown, Churntown, Buckeye, Newtown, Eagle Creek, Roaring River, Briggsville, Piety Hill, Janesville, Gas Point, Tuttle Town, and Whiskeytown.

Gold fever eventually diminished and many former miners turned their attention to farming, ranching and lumbering on the eastern side of the Sacramento River, gradually spreading further east (Johnson 1989). In 1862 the Homestead Act was enacted which enabled any citizen (except Indians) to claim 160 acres for $10, on the condition that he or she lived on the land for five years. Many did so; others sold their land at a pre-arranged price, and many of the early large ranches came into being in this way.

In 1872 the railroad arrived from the south and the first Shasta County railroad depot was built at Cottonwood. Tracks were laid northward and Anderson was founded. When the tracks reached what is today Redding, work stopped for ten years. The railroad named their temporary end-of-the-line terminal town "Redding" for B. B. Redding, a railroad land agent, and began laying out the new settlement, which quickly became the most important town in Shasta County (Colby 1982).

Copper replaced gold in 1897 as the principal mineral produced in Shasta County, a distinction (however dubious) it held until the 1950s. The principle copper deposits are located in a 30-mile crescent-shaped copper-zinc belt extending from Iron Mountain northeastward to Backbone Creek and east to Ingot (Schuldberg 2005). Copper was first mined at Copper City in 1862, inundated in recent years by Shasta Lake. The smoke and fumes from the copper smelters contained toxins. Almost overnight, vegetation for miles around the smelters was killed. In addition, fish were dying in all the streams, and rivers; fruit trees as far south as Anderson were affected. Farmers protested violently, and by 1919 all the smelters were closed by court order. Alternative methods were developed to process the ore but copper mining eventually ceased due to low prices and high costs of processing and shipping. Smith (2000:9) states:

> Looking back to the year 1844 when the first settler built the first building in Shasta County, and then ahead to the year 1900, A PERIOD OF ONLY 56 YEARS, an almost unbelievable change took place here....a change consisting of the complete takeover and habitation by a new race of people (whites) who established a totally new culture at the expense of unequalled brutality against the inhabitants, the Native Americans [emphasis in the original].

Shasta County history is treated by numerous authorities, among them Allen (1989), Bischoff (2005), Colby (1982), Frank (1881), Kraft (2005), Giles (1949), Hoover et al. 1958), Johnson (1989), Petersen (1965), Rocca (2000), Schuldberg (2005), Smith (1995, 1997, 2000), Sundahl (1997), and Vaughn and Ritter (1992). We have drawn heavily upon the work of Dottie Smith to prepare our overview of the rich history of the county.

***Tehama County:*** Spanish expeditions to the interior of California in the years 1776 to 1849 have been reviewed by Cook (1943, 1960, 1962a, 1962b). It is evident that most of their forays into the interior of central and southern California were undertaken to recapture Native American "converts" who had escaped from coastal missions (Heizer and Almquist 1971; McGruder 1950). Cooks detailed discussions of the Spanish expeditions to interior California are the best available accounts of stressful times during the late exploratory and early mission periods in central California.

The first Caucasian who entered the Tehama County region is said to have been one Louis Pickett who, starting from Hudson's Bay Company headquarters in the Willamette Valley, journeyed south into the upper reaches of the Sacramento River (Hitchcock 1982:154). The first recorded historic exploration of the Tehama County region began with the arrival in the Upper Sacramento River valley of Don Luis Arguello who, in 1821, accompanied by 55 soldiers, traversed the region with the objective of wresting the territory from English and Americans who were gradually infiltrating northern California. Arguello and his party followed the Sacramento River north, perhaps as far as Cottonwood Creek, where they turned west (Hoover et al. 1958:183-184). They were followed by a stream of trappers and hunters who came from Hudson's Bay Company establishments to the north, and explored and exploited the region during the years 1830-41. Notable among this group was Jedediah Smith (who seems to have been everywhere throughout the western frontier). Leaving Mission San Jose in 1828, Smith and 20 men headed up the Sacramento River, traveling during January; as a consequence enduring "incessant rain" and hostile Indians. Smith crossed the Sacramento just above the present site of Red Bluff. The party made their way with difficulty through the northern mountains and, via the Trinity River, reached to the Klamath, only to be involved (on the losing side) in the ensuing Umpqua massacre (Farquhar 1965; Morgan 1953:256-279).

The general route followed by Jedediah Smith was used by a succession of trappers and hunters, and soon became known as the California-Oregon Trail, which was followed by such notables as Ewing Young, Joseph Gale, and others. The trail followed the west side of the river, but a crossing was often made between Red Bluff and Tehama. In 1843 John Bidwell, Peter Lassen and John Burheim, chased a band of horse thieves north along the trail to Red Bluff, the excursion giving Lassen his first glimpse of country he will later claim under a Mexican land grant. The following year Bidwell returned with P. B. Reading, who settled in Shasta County, while J. F. Dye, W. G. Chard, R. H. Thomas, and A. G. Toomes took up grants in Tehama County; respectively Rancho de los Berrendos, Rancho de los Flores, Rancho de los Saucos, and Rancho de los Molinos.

Lassen obtained the 26,000-acre grant known as Rancho Bosquejo, establishing there a trading post (emulating Sutter) located near Vina, south of present-day Red Bluff. Not content with a mere trading post, Lassen laid out a town on his ranch, calling it Benton City, in honor of Thomas Hart Benton of Missouri, father of Jesse Benton Fremont (Sargent 1970).

Lassen journeyed to Missouri and organized a group of settlers to occupy his prospective town. The party came west over the Lassen Trail and in due course reached Lassen's ranch, but the whole enterprise came to naught, for when gold was discovered in the spring of 1848 the will-be settlers joined the mad rush to the Mother Lode. Part of the Lassen grant was purchased by Leland Stanford and later became the property of the University, eventually (and unfortunately) being sold off, bit by bit.

In 1845 William B. Ide came from New Hampshire to present-day Tehama County. Ide built a log cabin on the R. H. Thomas ranch, and eventually constructed an adobe on the river bank about two miles north of Red Bluff. Ide operated a ferry -- the Adobe ferry -- from the 1860s to the time when the first bridge was built in 1876.

During the early decades of the 1800s the Sacramento Valley was but thinly populated by Euroamericans, but that state of affairs did not long prevail: about the same time that land grants were being taken up, gold was discovered in the tail race at Sutter's sawmill. This was of course the discovery that sparked the rapid invasion of California by gold seekers and, in the larger perspective of the course of empire, set the stage for the future development of California and eventual in-filling of the entire American West. Marshall found gold in January 1848: by June of that year news of the discovery brought hordes of gold

seekers to California, especially to the Sierra Nevada "Mother Lode" region and the river country where gold could be panned, and later placered or dredged from gravel bar deposits. Two fascinating accounts of mining along the Trinity River near Douglas City are offered by Andre (1915/1957) and Hicks (1992).

In 1849 Tehama, located on the west side of the Sacramento River some 12 miles south of Red Bluff, was an important center for freight and stage operations on the California-Oregon Road, as well as being one of the principal crossings of the river. Stage lines from Colusa to Shasta and elsewhere converged at Tehama, which was a prosperous location until the arrival of the railroad. Across the river from Tehama was the town of Sesma. In 1851 Payne erected a sawmill on Mill Creek above the town: Payne's Creek is named for him. Tehama County was created in 1856 from parts of Colusa, Butte and Shasta counties, with the county seat, then Tehama, being transferred to Red Bluff in 1857. The name "Tehama" is thought to derive from an Indian word (Hoover et al. 1958:201; Kyle ed. 1990), but its meaning is unknown.

During the years following the California Gold Rush many emigrants took up farmland, realizing that a better living could be made by supplying miners with meat, horses, and other products than might be gained by seeking the all-too-elusive yellow metal. By 1865 the American Civil War and a changing economy created a demand for grain, and many cattle and sheepmen switched to wheat farming. As irrigation developed in the Sacramento River valley most of the former land-grant ranchos were broken up into numerous small fauns and with the coming of railroads, the valley began to take on its present densely settled, highly productive appearance. The history of Tehama County is presented by Chase (1945), Coffman (1880), Elliott and Moore (1880), Grimes (1983), Hitchcock (1982), Hoover et al. (1958:183-186), Johnson and Theodoratus (1984:247-301), Lingenfelter (1996), McCoy (1926), Read (1980), Smith (1997), Spann (1903), State of California, Division of Beaches and Parks (1959), Sweeney (1930), and Vaughn and Ritter (1992).

**Local Historical Background**

***Fawn Lodge and the Civilian Conservation Corps:*** The Civilian Conservation Corps (CCC) was founded in 1933 by President Franklin D. Roosevelt as a means of mitigating the problems caused by the depression and general unemployment. It was a way to put Americans to work in useful, even educational tasks. There were numerous CCC camps established throughout the United States; many of them were located in California. The history and operations of the CCC is discussed (often nostalgically) by several of its alumni (Cornebise 2004; Davis 2006; Hill 1990; Guthrie 1942; Dearborn 1936; Nolling 1964; Wilber 1990).

Camp Fawn Lodge was one of the more isolated CCC facilities in the 1930s, since the nearest settlement, Lewiston, was then very small, as indeed it is today. According to Berrien (2007:28) "Camp Fawn Lodge F-298 was active for only about a year and was the only State-sponsored Civilian Conservation Corps camp in Trinity County, from about April 1935 to the middle of 1936." The *Weekly Trinity Journal* (8-20-1936) reported that in mid-August 1936 Fawn Lodge Camp was swept by fire; six buildings were burned, most of the men were away on duty. "Fire broke out at midnight, caused by gas tank explosion. All equipment saved. Camp transferred to Whitmore." The *Weekly Trinity Journal* article states that "about half the camp buildings including two barracks, mess hall, recreation hall, gas house and washing and drying room were burned." Two of the CCC buildings at Fawn Lodge survived and have been in use to the present day as part of CalFire's Fawn Lodge FFS. These are the kitchen/mess hall and guest house (or CCC camp paymaster's office), as described and evaluated by Thornton (1994:141-145, 617-618) during his landmark historic building inventory project covering all pre-1946 constructions at CalFire facilities statewide, including the Fawn Lodge FFS.

Figure 24. Paymaster's Office at lower CCC Camp Fawn Lodge. 1930s photo courtesy of Bob Maxey.

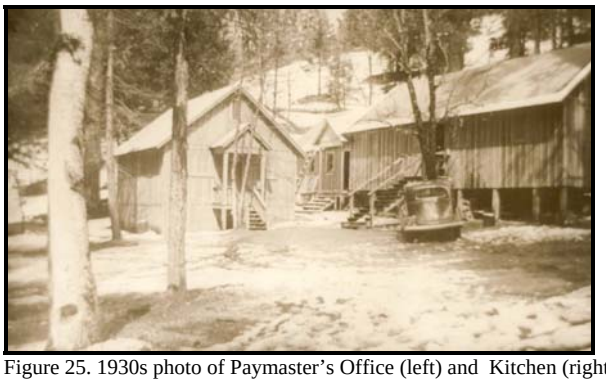

Figure 25. 1930s photo of Paymaster's Office (left) and Kitchen (right) at lower CCC Camp Fawn Lodge. Photo provided by Bob Maxey.

Figure 26. 1930s photo of the warehouse at lower CCC Camp Fawn Lodge along Grass Valley Creek. Photo courtesy of Bob Maxey.

Figure 27. 1930s photo of rows of barracks at upper CCC Camp Fawn Lodge, photo provided by Bob Maxey.

Figure 28. Tables, Barracks, and Car at CCC Camp Fawn Lodge Photo courtesy of Bob Maxey.

Figure 29. Burned fence after the fire at Upper CCC Camp Fawn Lodge, photo taken in circa 1936, provided by Bob Maxey.

Figure 30. Water spraying at CCC Camp Fawn Lodge. Photo courtesy of Bob Maxey.

Figure 31. Camp enrollees walking at CCC Camp Fawn Lodge. Photo provided by Bob Maxey.

Apparently, CCC Camp Fawn Lodge consisted of clusters of buildings which occupied two separate areas in the project vicinity. The majority of the camp buildings and structures were located on a small flat located approximately 1/8 mile north and slightly above the existing Fawn Lodge FFS. Numerous foundation remains discovered during the cultural resource survey of the state-owned property encompassing the Fawn Lodge FFS facility confirm this location. CCC Camp Fawn Lodge also included facilities at the site of the existing station. Additional information concerning the Fawn Lodge CCC camp will be presented as an addendum to Fawn Lodge cultural resource investigation (Napton and Greathouse 2008a) when the archaeological remains of the upper camp (located outside of the current project APE) are recorded at a later date. In addition to completing conservation improvement projects, CCC enrollees were occasionally called upon to fight fires and a number of the CCC camps evolved into fire suppression stations including this one at Fawn Lodge (Thornton 1994:144). The existing CalFire station was constructed in 1953, but two buildings from the lower original CCC camp were kept and re-used as part of the FFS. These are the (1935) camp paymaster's office and the (1935) kitchen/messhall. Unfortunately, efforts to save or relocate these two buildings were unsuccessful and both will be razed by the proposed station replacement project (see Figures 20-23).

# Appendix B
## Mitigation Monitoring and Reporting Plan (MMRP)
## for the
## Fawn Lodge FFS Replacement Project
## Initial Study/Mitigated Negative Declaration
## Trinity County, California

In accordance with CEQA Guidelines Section 15074(d), when adopting a mitigated negative declaration, the lead agency will adopt a Mitigation Monitoring and Reporting Plan (MMRP) that ensures compliance with mitigation measures required for project approval. The California Department of Forestry and Fire Protection (CalFire) is the lead agency for the above-listed project and has developed this MMRP as a part of the final Initial Study/Mitigated Negative Declaration (IS/MND) supporting the project. This MMRP lists the mitigation measures developed in the IS/MND which were designed to reduce environmental impacts to a less-than-significant level. This MMRP also identifies the party responsible for implementing the measure, defines when the mitigation measure must be implemented, and which party or public agency is responsible for ensuring compliance with the measure.

**Potentially Significant Effects and Mitigation Measures**
The following is a list of the resources that will be potentially affected by the project and the mitigation measures made part of the Initial Study/Mitigated Negative Declaration.

**Mitigation Measure #1: Measures to Reduce Short-Term Construction-Generated Emissions**
Reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including, but not limited to the following:

- Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust. The vehicles transporting soil to the site will be covered with tarps or other means to avoid generating significant quantities of dust on local roadways. A minimum of six (6) inches of freeboard will be maintained to minimize fugitive dust emissions.
- Installing and using hoods, fans, and fabric filters to enclose and vent dusty materials.
- Screening of all open-outdoor sandblasting and similar operations.
- Using water or chemicals to control dust during the demolition of existing buildings or structures.
- Areas of exposed bare mineral soil within the project area will be treated with water as needed to prevent excessive loss of native material and minimize fugitive dust emissions.
- Efforts will be taken to avoid tracking mud or soil onto the public roadways. If this occurs, the mud or soil will be promptly removed.
- All construction equipment shall be maintained in proper tune according to manufacturers' specifications to ensure minimum emissions under normal operations.

**Schedule**: During construction and soil transport.

**Responsible Party**: CalFire shall be responsible to carry-out this mitigation measure, and shall make sure these specific provisions are followed by any construction and soil transportation contractor working on the project. The state's contractors will be expected to carry-out the terms of these provisions.

**Verification of Compliance**:
Monitoring Party: CalFire
Initials: _____

Date: _____

**Mitigation Measure #2: Measures to Protect Northwestern pond turtle**
Prior to tree or brush removal, or other ground disturbance such as that associated with removal and reconstruction of the retaining wall, a CalFire Wildlife Biologist or Registered Professional Forester shall conduct a visual survey of the area to be disturbed to search for turtle nesting site scrapes or overwintering sites. If any such evidence is located, the nest or overwintering sites shall be avoided until hatching or consultation with CDFG shall take place to consider the possibility to relocate the turtle to similar habitat within the state's parcel. Holland (1994) will be reviewed for examples of these features.

**Schedule**: Just prior to construction.

**Responsible Party**: CalFire shall be responsible to carry-out this mitigation measure.

**Verification of Compliance**:
Monitoring Party: CalFire
Initials: _____
Date: _____

**Mitigation Measure #3: Measures to Ensure Protection of Raptors and Migratory Nesting Birds**
(a) Tree-felling to take place within the project area will occur during the non-nesting season for migratory birds. This period will be from September 1 through January 30.

OR

(b) Tree-felling to take place within the project area during the potential nesting period for migratory birds (February 1 through August 31), shall be preceded by a nesting bird survey no later than two weeks prior to vegetation removal and completed within the area of potential effect by a qualified biologist, forester, or ornithologist. If any nesting activity within the project area is identified, CalFire shall consult with CDFG to develop protection measures.

**Schedule**: Two Weeks Prior to Tree Removal.

**Responsible Party**: CalFire shall be responsible to carry-out this mitigation measure.

**Verification of Compliance**:
Monitoring Party: CalFire
Initials: _____
Date: _____

**Mitigation Measure #4: Archaeologist to Monitor Subsurface Excavation.**
CalFire shall ensure that a professional archaeologist is present to monitor subsurface excavations during the demolition and removal of the buildings (especially the two historic buildings, the bridge, and the gas house) and any excavations for undergrounding utilities and foundations. Should any significant resources be encountered the archaeologist shall have authority to halt excavations pending an evaluation and development of appropriate recommendations for their conservation and management and CalFire shall carry out those recommendations.

**Schedule**: When excavations will take place.

**Responsible Party**: CalFire shall be responsible to carry-out this mitigation measure.

**Verification of Compliance**:
Monitoring Party: CalFire
Initials: _____
Date: _____

**Mitigation Measure #5: Procedures for Inadvertent Discovery of Human Remains**
In accordance with the California Health and Safety Code, if human remains are discovered during ground-disturbing activities, CalFire and/or the project contractor(s) shall immediately halt potentially damaging excavation in the area of the burial and notify the Trinity County Coroner and a qualified professional archaeologist to determine the nature and significance of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050[c]). Following the coroner's findings, the archaeologist and the Most Likely Descendent (designated by the Native American Heritage Commission) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities of Trinity County and CalFire to act upon notification of a discovery of Native American human remains are identified in PRC § 5097.

**Schedule**: Immediately if human remains are discovered.

**Responsible Party**: CalFire shall be responsible to carry-out this mitigation measure.

**Verification of Compliance**:
Monitoring Party: CalFire
Initials: _____
Date: _____

## LIST AND DEFINITION OF ACRONYMS AND SYMBOLS USED IN THIS DOCUMENT

### Acronyms

| | |
|---|---|
| AC | Asphalt Concrete |
| A.D. | anno Domini (Latin) (it means “in the year of the Lord”) |
| ADA | American Disabilities Act |
| ADT | Average Daily Trips |
| AMA | Amador County, California |
| APE | Area of Potential Effect |
| APP | Apparatus |
| AQAP | Air Quality Attainment Plan |
| ARB | Air Resources Board |
| CSOHP | California State Office of Historic Preservation |
| BLM | Bureau of Land Management |
| BMPs | Best Management Practices |
| BP | Before Present |
| BUT | Butte County, California |
| CA | California |
| CAA | Clean Air Act |
| CalFire | California Department of Forestry and Fire Protection |
| CCAA | California Clean Air Act |
| CCC | Civilian Conservation Corps |
| CCR | California Code of Regulations |
| CDF | California Department of Forestry and Fire Protection (changed to CalFire in 2007) |
| CDFG | California Department of Fish and Game |
| CEQA | California Environmental Quality Act |
| CHRIS | California Historical Resources Information System |
| CNDDB | California Natural Diversity Data Base |
| dBA | decible |
| *et seq*. | *et sequens* (Latin) (it means “and the following”) |
| et al. | *et alii* (Latin) (it means “and others”) |
| EIR | Environmental Impact Report |
| EPA | Environmental Protection Agency |
| ESBA | Emergency Services Building Act |
| FFS | Forest Fire Station |
| GHG | Greenhouse Gas |
| H | Historic (As used in CA-TRI-1374H, means this is a historic site) |
| HWY | Highway |
| IRA | Initial Response Area |
| IS | Initial Study |
| IS/MND | Initial Study/Mitigated Negative Declaration |
| km | kilometer(s) |
| LAS | Lassen County, California |
| LF | Linear Feet |
| LPG | Liquid Propane Gas |
| LSAA | Lake or Streambed Alteration Agreement |
| LTO | Licensed Timber Operator |
| m | meter(s) |

| | |
|---|---|
| M.A. | Master of Arts |
| MBTA | Migratory Bird Treaty Act |
| MDBM | Mount Diablo Base Meridian |
| MN | Magnetic North |
| MND | Mitigated Negative Declaration |
| MMRP | Mitigation, Monitoring, and Reporting Plan |
| N/A | Not Applicable |
| NCUAQMD | North Coast Unified Air Quality Management District |
| n.d. | no date |
| NDDB | Natural Diversity Data Base |
| NE | Northeast |
| NPDES | National Pollution Discharge Elimination System |
| NRHP | National Register of Historic Places |
| NW | Northwest |
| NOI | Notice of Intent (to adopt a negative declaration or mitigated negative declaration) |
| PCC | Portland Cement Concrete |
| Ph.D. | Doctor of Philosophy |
| PM10 | Particulate Matter less than 10 microns in diameter |
| P.O. | Post Office |
| PRC | Public Resources Code |
| PVC | Poly-Vinyl Chloride |
| RPF | Registered Professional Forester |
| RWQCG | Regional Water Quality Control Board |
| SCH | State Clearinghouse |
| SE | Southeast |
| SHA | Shasta County, California |
| SJO | San Joaquin County, California |
| SW | Southwest |
| SWPPP | Storm Water Pollution Prevention Plan |
| TEH | Tehama County, California |
| THP | Timber Harvesting Plan |
| TN | True North |
| TRI | Trinity County, California |
| USGS | United States Geological Survey |
| W | West |
| WWII | World War II |

**Symbols**

| | |
|---|---|
| § | Section |
| # | Number |
| % | Percent |

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