DRAFT Initial Study/Mitigated Negative Declaration for the proposed Ishi Conservation Camp Kitchen Replacement Project Tehama County, California





Prepared by: The California Department of Forestry and Fire Protection The Lead Agency Pursuant to Section 21082.1 of the California Environmental Quality Act

California Department of Forestry and Fire Protection P.O. Box 944246 Sacramento, CA 94244-2460 (916) 653-0839

December 1, 2020

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DRAFT MITIGATED NEGATIVE DECLARATION

Ishi Conservation Camp (CC) Kitchen Replacement Project

Lead Agency: State of California Department of Forestry and Fire Protection (CAL FIRE)

Project Location: The project is located on an approximately 110-acre site at 30500 Plum Creek Road, Paynes Creek, California, 96075 (Assessor's Parcel Number 011-270-002-000), in Tehama County.

Project Description: The Ishi CC Kitchen Replacement Project consists of the replacement of a kitchen and dining room that was destroyed by a fire on July 19, 2017. The project includes the following: 1) A new 55' by 87' single story kitchen (4,785 sf) and dining building, 2) A new 18' by 6' trash enclosure and 9'4" by 17'4" pumphouse/wash area (163 sf), 3) Approximately 7,400 sf of concrete pavement to replace existing asphalt and installation of 2,000 sf of sidewalk, 4) Installation of outdoor mechanical equipment, outdoor electrical transformer, switchgear and emergency generator, 5) Connection of site utilities to new building (sewer, water, gas, power, and telecommunications), 6) Installation of a 180,000-gallon fire water storage tank (approximately 40' in diameter and 32' high), 7) Trenching of approximately four and a half feet deep by six feet wide for approximately 1,025 feet from the kitchen side to the water tank for water pipeline and electrical/communication conduit installation, 8) Onsite construction staging area of approximately 120' by 120' on previously disturbed ground, 9) Dismantling and reassembling of an existing rock wall, 10) Replacement of a current 1,000-gallon grease interceptor with a 1,500-gallon interceptor.

Finding: Based on the information contained in the attached Initial Study, CAL FIRE finds that there will not be a significant effect to the environment because the mitigation measures will be incorporated as part of the proposed project.

Public Review Period: December 7, 2020 to January 5, 2021.

MITIGATION MONITORING AND REPORTING PLAN

Introduction

In accordance with CEQA, an MND that identifies adverse impacts related to the construction activity for the Ishi CC Kitchen Replacement project was prepared. Mitigation measures have been identified that would reduce or eliminate these impacts.

Section 21081.6 of the Public Resources Code and Sections 15091(d) and 15097 of the State CEQA Guidelines require public agencies to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. A MMRP is required for the proposed project, because the IS/MND identified potentially significant adverse impacts related to construction activity, and mitigation measures have been identified to mitigate these impacts. Adoption of the MMRP will occur along with the approval of the project.

Purpose of the Mitigation Monitoring and Reporting Plan

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed according to schedule and maintained in a satisfactory manner during the construction and operation of the proposed project. The MMRP may be modified by CAL FIRE during project implementation as necessary, in response to changing conditions or other project refinements. The following table has been prepared to assist the responsible parties in implementing the MMRP. This table identifies the category of significant environmental impact(s), individual mitigation measures, monitoring and mitigation timing, responsible person/agency for implementing the measure, monitoring and reporting procedures, and notation space to confirm implementation of the mitigation measures. The numbering of the mitigation measures follows the numbering sequence in the IS/MND.

Roles and Responsibilities

CAL FIRE, as lead agency, is responsible for oversight of compliance of the mitigation measures in the MMRP.

Ishi Conservation Camp Kitchen Replacement Project Mitigation and Monitoring Reporting Plan

Mitigation Measure Monitoring Activity/Timing/ Frequency/ Schedule		Implementation/ Responsibility/ Verification		Responsibility for Oversight of/ Compliance/ Verification		Outside Agency Coordination
Mitigation Measure AES-1: WATER STORAGE TANK PAINT COLOR Prior to the purchase of the water tank, a color palette of available tank colors shall be submitted by the contractor to CAL FIRE for approval. The color choices shall be muted and match existing vegetation as closely as possible.	AES-1 Activity: Contractor shall submit color palette	Contractor		Project Engineer		None
	of tank colors for approval. Timing: Prior to ordering water tank. Frequency: Once prior to construction.	Initials	Date	Initials	Date	
Mitigation Measure AQ-1: TEHAMA COUNTY AIR POLLUTION CONTROL DISTRICT CAL FIRE shall obtain an Authority to	AQ-1 Activity: Obtain Authority to Construct permit from TCAPCD.	CAL FIRE		CAL FIRE P	oject Director	TCAPCD
Construct permit and any other required permits from the Tehama County Air Pollution Control District (TCAPCD) prior to any ground disturbance.	Timing: Prior to ground disturbance.	Initials	Date	Initials	Date	
Mitigation Measure AQ-2: CONSTRUCTION EQUIPMENT All construction related equipment shall	prior to construction. AQ-2 Activity: Verification of construction	Contractor		Project Engi	neer	Possible TCAPCD coordination.
 Maintain all construction equipment in proper tune according to manufacturer's specifications. Maximize to the extent feasible, the use of diesel construction equipment meeting current CARB certification 	equipment Timing: Prior to construction work. Frequency: As required for each construction phase.	Initials	Date	Initials	Date	

Mitigation Measure	Monitoring Activity/Timing/ Frequency/ Schedule	Implementation/ Responsibility/ Verification	Responsibility for Oversight of/ Compliance/ Verification	Outside Agency Coordination
 standards for off-road heavy-duty diesel engines. Registration in the CARB DOORS program (www.arb.ca.gov/msprog/ordiesel/ordies el.htm) and meeting all applicable standards for replacement and/or retrofit. All portable equipment, including generators and air compressors rated over 50 brake horsepower, shall be registered in the Portable Equipment Registration Program (www.arb.ca.gov/portable/portable.htm), or permitted through the District as a stationary source. 				
Mitigation Measure AQ-3: LAND CLEARING/EARTH MOVING All ground disturbing activities shall be subject to the following:	AQ-3 Activity: Fugitive dust abatement.	Contractor	Project Engineer	Possible TCAPCD coordination.
 Water shall be applied by means of truck(s), hoses and/or sprinklers as needed prior to any land clearing or earth movement to minimize dust emission. Haul vehicles transporting soil into or out of the property shall be covered. Water shall be applied to disturbed areas a minimum of 2 times per day or more as necessary. On-site vehicles limited to a speed which minimizes dust emissions on unpaved roads. Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This 	Timing: During construction. Frequency: Continuous monitoring.	Initials Date	Initials Date	

Mi	tigation Measure	Monitoring Activity/Timing/ Frequency/ Schedule	Implementation/ Responsibility/ Verification	Responsibility for Oversight of/ Compliance/ Verification	Outside Agency Coordination
•	person shall respond and take corrective action within 24 hours. The telephone number of the District shall also be visible to ensure compliance with District Rule 4:1 & 4:24 (<i>Nuisance</i> and <i>Fugitive Dust Emissions</i>). Soil pile surfaces shall be moistened if dust is being emitted from the pile(s). Adequately secured tarps, plastic or other material may be required to further reduce dust emissions.				
CC	tigation Measure BIO-1: PRE- DNSTRUCTION NESTING SURVEY Conduct a pre-construction nesting bird survey of all suitable habitat on the project site within 7 days prior to the commencement of construction during the nesting season (March 1 through August 31). Pre-construction nesting surveys are not required for construction activity outside of the nesting season (September 1 through February 28).	 BIO-1 Activity: Conduct pre- construction nesting bird survey. Timing: 7 days prior to construction activity during March 1 through August 31. Frequency: Once prior to construction. 	Project Biologist/Forester	Project Engineer/Director	Possible coordination with CDFW.
2.	If active nests are found, a no- disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist (or forester) in accordance with buffer distances relative to the species identified). Once construction activities commence on-site, all nests will be continuously monitored by a qualified biologist (or forester) to detect any behavior changes resulting from construction of the proposed project. If behavioral changes are observed that				

may result in adverse effects to the success of breeding, the work causing the change shall cease and consultation with CDFW shall be initiated to identify potential avoidance and minimization measures. The buffer shall be maintained until the fledglings are				
capable of flight and become independent of the nest tree, to be determined by a qualified biologist (or forester). No ground-disturbing or construction activities can occur within the buffer until the fledglings are capable of flight and become independent of the nesting tree. Once the young are independent of the nest, no further measures are necessary, and construction may commence.				
Mitigation Measure CR-1: POST- REVIEW DISCOVERY In the event of discovery of cultural resources, work shall cease in that area	CR-1 Activity: If cultural resource materials are found, all ground	Contractor	Project Director	Possible coordination with tribal representatives.
while the CAL FIRE archeologist and tribal representative evaluate said find. Construction work may continue is other areas of the project, as determined by the CAL FIRE archaeologist, until the discovery is examined and evaluated.	disturbance shall cease, and the CAL FIRE archaeologists shall be notified. Timing: During	Initials Date Project Archaeologist	Initials Date	
The CAL FIRE archeologist shall notify the project director when work can continue in the area of the discovery.	construction. Frequency: As required.	Initials Date	_	
Mitigation Measure CR-2: HUMAN REMAINS In the event of discovery of human remains, whether intact, fragmentary, or displaced from their original context, the	CR-2 Activity: Unanticipated human remains discovery, determination, and	Contractor	Project Director/Engineer	Possible coordination with tribal representatives - and SHPO.

Mitigation Measure	Monitoring Activity/Timing/ Frequency/ Schedule	Implementation/ Responsibility/ Verification	Responsibility for Oversight of/ Compliance/ Verification	Outside Agency Coordination
County Coroner and the Native American Heritage Commission (NAHC), West Sacramento (916-373-3710), shall be notified of the discovery immediately, and all work in the vicinity of the find shall cease, as determined by the CAL FIRE archaeologist, and there shall be no further excavation or disturbance of the find site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of that county in which the remains are discovered has determined whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission. The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and Assembly Bill 2641 shall be implemented Upon request, the Native American Heritage Commission will provide the project director with the name and contact information of the tribe that is named the Most Likely Descendant (MLD). The identified MLD will make recommendations for the treatment and disposition of any Native American remains found within the area of potential effect of the project. Final disposition of the human remains is subject to approval of the landowner. Human remains and associated grave goods are protected under Public Resources Code § 5097.94 and Health and Safety Code § 7050.5. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that	relocation. Timing: During construction. Frequency: As required.	Project Archaeologist Initials Date		Possible coordination with Tehama County Coroner, SHPO, NAHC, and MLD.

Mitigation Measure	Monitoring Activity/Timing/ Frequency/ Schedule	Implementation/ Responsibility/ Verification	Responsibility for Oversight of/ Compliance/ Verification	Outside Agency Coordination
the treatment measures have been completed to their satisfaction.				
Mitigation Measure CR-3: MONITORING All ground-disturbing work occurring within the camp complex will be monitored by a	CR-3 Activity: Ground disturbance monitoring.	Contractor	Project Director/Engineer	
qualified professional archaeologist; additionally, local Native American	Timing: During ground disturbing	Initials Date	Initials Date	•
representatives will be invited to monitor ground-disturbing work conducted in association with the project.	construction work. Frequency: As required.	Project Archaeologist		
		Initials Date	—	

ATTACHMENTS

Attachment A

STATE OF CALIFORNIA -- NATURAL RESOURCES AGENCY

Gavin Newsom, Governor



DEPARTMENT OF FORESTRY AND FIRE PROTECTION P.O. Box 944246 SACRAMENTO, CA 94244-2460 (916) 653-7772 Website: www.fire.ca.gov



Notice Date: December 1, 2020

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

Project Name: Ishi Conservation Camp (CC) Kitchen Replacement

The State of California Department of Forestry and Fire Protection (CAL FIRE) is the Lead Agency for the proposed Ishi CC Kitchen Replacement Project (Project). In compliance with the California Environmental Quality Act (Public Resources Code § 21000 *et seq.*) and Department procedures, notification is hereby given to responsible and trustee agencies, interest groups and the general public, that the California Department of Forestry and Fire Protection proposes to adopt a Mitigated Negative Declaration for the project described below.

Project Location: The project is located at 30500 Plum Creek Road, Paynes Creek, California, 96075, in Tehama County.

Project Description: The Ishi CC Kitchen Replacement Project consists of the replacement of a kitchen and dining room that was destroyed by a fire on July 19, 2017. The project includes the following: 1) A new 55' by 87' single story kitchen and dining building, 2) A new 18' by 6' trash enclosure and 9'4" by 17'4" pumphouse/wash area, 3) Approximately 7,400 sf of concrete pavement to replace existing asphalt and installation of 2,000 sf of sidewalk, 4) Installation of outdoor mechanical equipment, outdoor electrical transformer, switchgear and emergency generator, 5) Connection of site utilities to new building (sewer, water, gas, power, and telecommunications), 6) Installation of a 180,000-gallon fire water storage tank (approximately 40' in diameter and 32' high), 7) Trenching of approximately four and a half feet deep by six feet wide for approximately 1,025 feet from the kitchen side to the water tank for water pipeline and electrical/communication conduit installation, 8) Onsite construction staging area of approximately 120' by 120' on previously disturbed ground, 9) Dismantling and reassembling of an existing rock wall (approximately 275 feet), 10) Replacement of a current 1,000-gallon grease interceptor with a 1,500-gallon interceptor, 11) Construction of a 125 feet long by 12 feet wide access road between the new water tank and the Ishi Conservation Camp.

Public Review Period: The draft Mitigated Negative Declaration will undergo a 30-day public review period during which comments may be submitted. The review period begins on December 7, 2020 to January 5, 2021. Written comments regarding the contents of the Mitigated Negative Declaration should be sent to:

Christina Snow, Senior Environmental Planner California Department of Forestry and Fire Protection Technical Services Section P.O. Box 944246 Sacramento, CA 94244-2460

Phone Number: (916) 324-1639

Written comments may also be sent via e-mail using the e-mail address provided below:

Email: christina.snow@fire.ca.gov

A copy of the Draft Mitigated Negative Declaration/Initial Study, and supporting documentation are available for review at the following locations:

- 1. CAL FIRE Tehama-Glenn Unit Headquarters, 604 Antelope Boulevard, Red Bluff, California, 96080.
- 2. CAL FIRE Ishi Conservation Camp, 30500 Plum Creek Road, in Paynes Creek, California, 96075.
- 3. CAL FIRE Technical Services, 1300 U Street, Sacramento, CA 95818.

The Notice of Intent is posted at the following locations:

- 1. CAL FIRE Tehama-Glenn Unit Headquarters, 604 Antelope Boulevard, Red Bluff, California 96080.
- 2. CAL FIRE Ishi Conservation Camp, 30500 Plum Creek Road, in Paynes Creek, California 96075.
- 3. Red Bluff United States Post Office, 447 Walnut Street, Red Bluff, California 96080.

The CEQA documents are also available on-line at: <u>https://ceqanet.opr.ca.gov/Search/Recent</u>

INTRODUCTION AND REGULATORY CONTEXT

Stage of CEQA Document Development

- Administrative Draft. This California Environmental Quality Act (CEQA) document is in preparation by California Department of Forestry and Fire Protection (CAL FIRE) staff.
- Public Document. This completed CEQA document has been filed by CAL FIRE at the State Clearinghouse and is being circulated for a 30-day agency and public review period. The public review period begins December 4, 2017 and ends on January 5, 2018.
- 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, and available for review, at CAL FIRE's Sacramento Headquarters, Environmental Protection Program, which is located in the Natural Resources Building, 1416 Ninth Street, 15th Floor, Sacramento, California.

Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND) describes the environmental impact analysis conducted for the proposed project. This document was prepared by CAL FIRE staff utilizing information gathered from a number of sources including research and field review of the proposed project area and consultation with environmental planners. Pursuant to Section 21082.1 of the CEQA, the lead agency, CAL FIRE, has prepared, reviewed, and analyzed the IS/MND and declares that the statements made in this document reflect CAL FIRE's independent judgment as lead agency pursuant to CEQA. CAL FIRE 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 CAL FIRE to evaluate potential environmental effects which could result following approval and implementation of the proposed project. This document has been prepared in accordance with current CEQA Statutes (Public Resources Code §21000 *et seq.*) and current CEQA Guidelines (California Code of Regulations [CCR] §15000 *et seq.*).

An initial study 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 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. This IS/MND conforms to these requirements and to the content requirements of CEQA Guidelines Section 15071.

Purpose of the Initial Study

CAL FIRE 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 requirements for providing an NOI are found in CEQA Guidelines §15072. These guidelines require CAL FIRE 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.

CAL FIRE has elected to utilize the second notification option. 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.

1. Notices were posted at the Ishi Conservation Camp, at the Tehama-Glenn Headquarters office, and the Tehama County United States Post Office.

A complete copy of this CEQA document was made available for review by any member of the public requesting to see it at the locations identified in the NOI. An electronic version of the NOI and the CEQA document are available for review for the entire 30-day review period on the State of California's CEQAnet site at:

https://ceqanet.opr.ca.gov/Search/Recent

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 CAL FIRE'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:

Christina Snow, Senior Environmental Planner California Department of Forestry and Fire Protection Technical Services P.O. Box 944246 Sacramento, CA 94244-2460 Phone: (916) 324-1639 Email: christina.snow@fire.ca.gov

After comments are received from the public and reviewing agencies, CAL FIRE 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, CAL FIRE could design and construct all or part of the project.

PROJECT BACKGROUND AND ENVIRONMENTAL SETTING

Background and Need for the Project

The Ishi Conservation Camp (CC) was purchased by the state in 1956 and was opened in April 1961. The Camp is jointly operated by the California Department of Corrections and Rehabilitation (CDCR) and the California Department of Forestry and Fire Protection (CDF). The Camp's primary mission is to provide inmate fire crews for fire suppression activities in the Tehama, Glenn, Shasta and Plumas County areas. In addition to fire suppression, inmate hand crews provide a work force for conservation and community services projects in the local area.

The area that the Ishi CC is located consists mainly of upland agriculture (grazing) grass lands and scattered oak woodlands mixed with pines. Topography in this area ranges from an elevation of 400 feet to over 5,000 feet, with Ishi CC at approximately 2,000 feet.

The area that the Ishi CC crews help protect includes 247,248 acres of State Responsibility Area (SRA). Development in the SRA served by the Ishi CC consists of rural ranch properties of 5 to 80 acres. The project site is located on flat slopes. Work is anticipated to last approximately sixteen months.

In July 2017, the outdated Ishi CC kitchen caught fire and was destroyed. Since that time, the camp has relied upon a temporary trailer kitchen which has been logistically difficult to maintain. This project proposes to construct a new permanent kitchen along with a new dining building.

Project Objectives

The new kitchen and dining facility will support CAL FIRE's mission to serve and safeguard the people and protect the property and resources within the State Responsibility Areas of the Tehama-Glenn Unit.

The following are the objectives of the proposed project:

- Replace the deteriorating temporary Ishi CC kitchen with a new, modern facility that meets operational requirements.
- To improve CAL FIRE's ability to meet peak demand emergency incident workload through providing necessary operational facilities for fire crews that enhance the statewide fire protection system.

Project Description

The Ishi CC Kitchen Replacement Project consists of the replacement of a kitchen and dining room that was destroyed by a fire on July 19, 2017. The project includes the following: 1) A new 55' by 87' single story kitchen and dining building, 2) A new 18' by 6' trash enclosure and 9'4" by 17'4" pumphouse/wash area, 3) Approximately 7,400 sf of concrete pavement to replace existing asphalt and installation of 2,000 sf of sidewalk, 4) Installation of outdoor mechanical equipment, outdoor electrical transformer, switchgear and emergency generator, 5) Connection of site utilities to new building (sewer, water, gas, power, and telecommunications), 6) Installation of a 180,000-gallon fire water storage tank (approximately 40' in diameter and 32' high), 7) Trenching of approximately four and a half feet deep by six feet wide for approximately 1,025 feet from the

kitchen side to the water tank for water pipeline and electrical/communication conduit installation, 8) Onsite construction staging area of approximately 120' by 120' on previously disturbed ground, 9) Dismantling and reassembling of an existing rock wall (approximately 275 feet), 10) Replacement of a current 1,000-gallon grease interceptor with a 1,500-gallon interceptor, 11) Construction of a 125 feet long by 12 feet wide access road between the new water tank and the Ishi Conservation Camp.

Project Region and Description of Local Environment

Tehama County is located approximately 120 miles north of the City of Sacramento and roughly midway between Sacramento and the Oregon state border. Approximately 2,951 square miles in size, the western boundary of the county is the eastern side of the Pacific Coast Range and the eastern boundary extends into the Cascade Mountains near Mount Lassen. Surrounding counties include Shasta County to the north, Plumas and Butte counties to the east, Glenn County to the south, and Trinity and Mendocino counties to the west. Tehama County is bisected by the Sacramento River, which meanders in a general north-south direction through the central portion of the county.

There are three incorporated cities within Tehama County: Red Bluff, Corning and Tehama. Red Bluff, which is the county seat, was established in 1856. The topography of Tehama County varies significantly from east to west. The highest point is in the southernmost portion of the Cascade Mountains at approximately 9,000 feet above sea level in the eastern portion of the county. Moving west, topography descends through the foothills and rangeland to the fertile valley floor and the Sacramento River at a lowest point of 341 feet above sea level. Continuing westward, the topography rises again through rangeland and foothills into the Coast Range at 8,092 feet.

The climate of Tehama County varies significantly between the valley and mountain areas, depending primarily on elevation. Hot, dry summers and temperate winters generally characterize the valley regions, while mountainous areas experience warm, dry summers and colder winters. In 2006, the average July maximum temperature was 98 degrees in the valley and City of Red Bluff and 80 degrees in the mountain town of Mineral.

The project site is located approximately 25 miles' northeast of Red Bluff off highway 36 in Paynes Creek, Tehama County, California. The approximate elevation of the subject site is 2,000 feet above mean sea level.

The subject site is designated as Public lands in the Tehama County General Plan, but lies within the area of Upland Agriculture. The land surrounding the project site is undeveloped. No largescale industrial facility, automobile salvage yard, livestock feed lot, or manufacturing facility operates on or immediately adjacent to the subject property.

The site lies in the Ishi wilderness area within the Lassen National Forest and comprises approximately 41,000 acres of low-elevation wilderness. In addition to providing for hiking, camping, fishing and swimming, this wilderness area provides an extensive array of wildlife habitat and wildlife viewing.

The site is developed with an active conservation camp consisting of a family visiting house, CDCR administrative building (±2,300 sf), temporary dining/storage building, refrigeration units,

inmate barracks, hobby building, CAL FIRE administration building (±2,300 sf), warehouse, storage building, water tanks, handball court and various small outbuildings.

Figure 1: Project Vicinity Map



Figure 2: Project Location Map

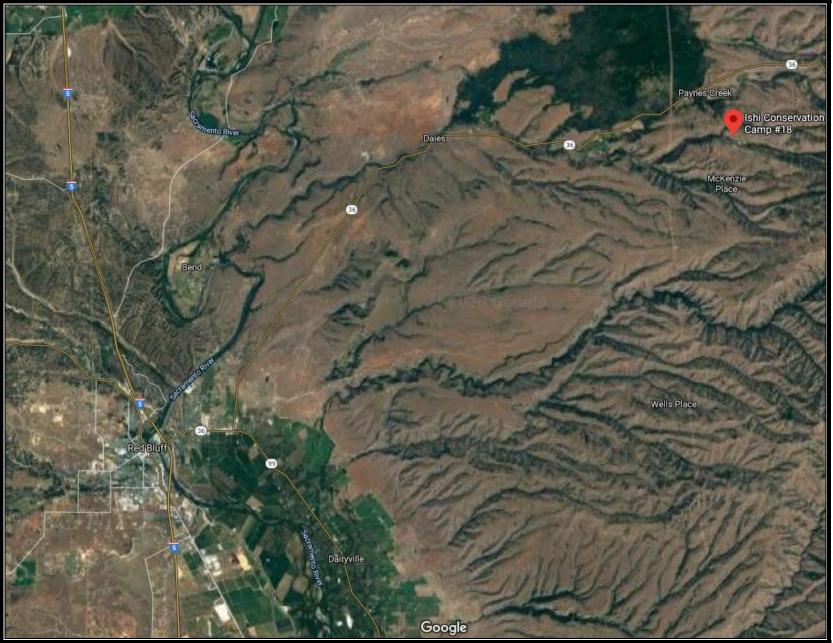


Figure 3: Current Site Layout



Figure 3: Proposed Improvements

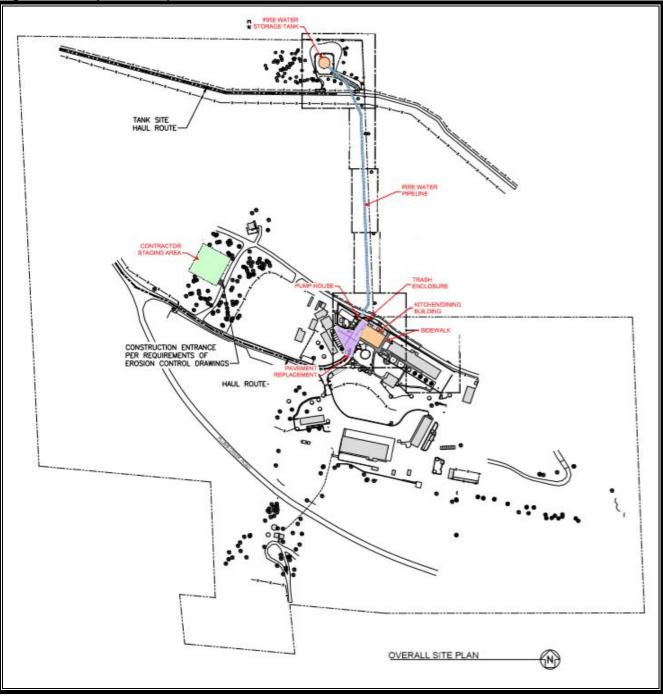


Figure 4: New Kitchen and Dining Room Location (Looking Southeast)



Figure 5: New Kitchen and Dining Room Location (Looking South)



Figure 6: New Kitchen and Dining Room Location (Looking North Towards Hill)



Figure 7: Rock Wall to The Southeast That Will Be Re-configured



Figure 8: Near the Proposed New Water Tank (Looking South)



Figure 9: Failing Asphalt That Will Be Replaced (Just South of New Kitchen)



Figure 11: Construction Staging Area (Northwest of New Kitchen)



CONCLUSION OF THE MITIGATED NEGATIVE DECLARATION

Regulatory Requirements, Permits and Approvals

The proposed Project may require the following environmental permits and CAL FIRE may be required to comply with the following state regulations:

- 1. National Pollutant Discharge Elimination System Permit (NPDES) issued by the State Water Resources Control Board (SWRCB).
- 2. Storm Water Construction General Permit (including the development and implementation of a Storm Water Pollution Prevention Plan issued by the SWRCB.
- 3. Authority to Construct permit and Permit to Operate (for the generator and fuel tanks) issued by the Tehama County Air Pollution Control District.
- 4. State Fire Marshal Review Approval.
- 5. State Architect Approval for Americans with Disabilities Act (ADA) and structural review by the Department of the State Architect (DSA).
- 6. Storm Water Pollution Control Plan (SWPCP) reviewed by San Diego County Department of Public Works.

Mitigation Measures

The following 8 mitigation measures will be implemented by CAL FIRE 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 AES-1: WATER STORAGE TANK PAINT COLOR

Prior to the purchase of the water tank, a color palette of available tank colors shall be submitted to CAL FIRE for approval. The color choices shall be muted and match existing vegetation as closely as possible.

Mitigation Measure AQ-1: TEHAMA COUNTY AIR POLLUTION CONTROL DISTRICT

CAL FIRE shall obtain an Authority to Construct permit and any other required permits from the Tehama County Air Pollution Control District prior to any ground disturbance.

Mitigation Measure AQ-2: CONSTRUCTION EQUIPMENT

All construction related equipment shall incorporate the following:

- Maintain all construction equipment in proper tune according to manufacturer's specifications.
- Maximize to the extent feasible, the use of diesel construction equipment meeting current CARB certification standards for off-road heavy-duty diesel engines.
- Registration in the CARB DOORS program (www.arb.ca.gov/msprog/ordiesel/ordiesel.htm) and meeting all applicable standards for replacement and/or retrofit.

• All portable equipment, including generators and air compressors rated over 50 brake horsepower, shall be registered in the Portable Equipment Registration Program (www.arb.ca.gov/portable/portable.htm), or permitted through the District as a stationary source.

Mitigation Measure AQ-3: LAND CLEARING/EARTH MOVING

All ground disturbing activities shall be subject to the following:

- Water shall be applied by means of truck(s), hoses and/or sprinklers as needed prior to any land clearing or earth movement to minimize dust emission.
- Haul vehicles transporting soil into or out of the property shall be covered.
- Water shall be applied to disturbed areas a minimum of 2 times per day or more as necessary.
- On-site vehicles limited to a speed which minimizes dust emissions on unpaved roads.
- Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours. The telephone number of the District shall also be visible to ensure compliance with District Rule 4:1 & 4:24 (*Nuisance* and *Fugitive Dust Emissions*).
- Soil pile surfaces shall be moistened if dust is being emitted from the pile(s). Adequately secured tarps, plastic or other material may be required to further reduce dust emissions.

Mitigation Measure BIO-1: PRE-CONSTRUCTION NESTING SURVEY

- 1. Conduct a pre-construction nesting bird survey of all suitable habitat on the project site within 7 days prior to the commencement of construction during the nesting season (March 1 through August 31). Pre-construction nesting surveys are not required for construction activity outside of the nesting season (September 1 through February 28).
- 2. If active nests are found, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist (or forester) in accordance with buffer distances relative to the species identified). Once construction activities commence on-site, all nests will be continuously monitored by a qualified biologist (or forester) to detect any behavior changes resulting from construction of the proposed project. If behavioral changes are observed that may result in adverse effects to the success of breeding, the work causing the change shall cease and consultation with CDFW shall be initiated to identify potential avoidance and minimization measures. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest tree, to be determined by a qualified biologist (or forester). No ground-disturbing or construction activities can occur within the buffer until the fledglings are capable of flight and become independent of the nest, no further measures are necessary, and construction may commence.

Mitigation Measure CR-1: POST-REVIEW DISCOVERY

In the event of discovery of cultural resources, work shall cease in that area while the CAL FIRE archeologist and tribal representative evaluate said find. Construction work may continue is other areas of the project, as determined by the CAL FIRE

archaeologist, until the discovery is examined and evaluated. The CAL FIRE archeologist shall notify the project director when work can continue in the area of the discovery.

Mitigation Measure CR-2: HUMAN REMAINS

In the event of discovery of human remains, whether intact, fragmentary, or displaced from their original context, the County Coroner and the Native American Heritage Commission (NAHC), West Sacramento (916-373-3710), shall be notified of the discovery immediately, and all work in the vicinity of the find shall cease, as determined by the CAL FIRE archaeologist, and there shall be no further excavation or disturbance of the find site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of that county in which the remains are discovered has determined whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission. The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and Assembly Bill 2641 shall be implemented._ Upon request, the Native American Heritage Commission will provide the project director with the name and contact information of the tribe that is named the Most Likely Descendant (MLD). The identified MLD will make recommendations for the treatment and disposition of any Native American remains found within the area of potential effect of the project. Final disposition of the human remains is subject to approval of the landowner. Human remains and associated grave goods are protected under Public Resources Code § 5097.94 and Health and Safety Code § 7050.5. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

Mitigation Measure CR-3: MONITORING

All ground-disturbing work occurring within the camp complex will be monitored by a qualified professional archaeologist; additionally, local Native American representatives will be invited to monitor ground-disturbing work conducted in association with the project.

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 Agriculture and Forestry Resources, Energy, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Wildfire.
- The proposed project will have a less than significant impact on Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, Utilities and Service Systems, and Mandatory Findings of Significance.

3. Mitigation is required to reduce potentially significant impacts related to Aesthetics, Air Quality, Biological Resources, 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, CAL FIRE revised its project plans and has developed mitigation measures that will eliminate impacts or reduce environmental impacts to a less than significant level. CAL FIRE 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:			Ishi Conservation Camp Kitchen Replacement Project				
			Prote P.O. 9	rnia Department ction 944246 mento, CA 94244-2		orestry and Fire	
	cy Name and Address: erson and Phone Number			ina Snow 916-324-1			
		•				a Crack California	
4. Project Loc			30500 96075	Plum Creek Road, F	ayne	s Creek, California,	
5. Project Spo	onsor's Name and Addres	SS:	CAL F	FIRE is project spon	sor ar	nd lead agency	
6. General Pla	an Designation:		Public	;			
7. Zoning:			Gove	rnment			
8. Description of Project: See Page 3 of this document							
9. Surrounding Land Uses and Setting: Upland Agriculture and Oak Woodlands						oodlands	
10: Other public agencies whose approval may be required:							
ENVIRONME	NTAL FACTORS POTEN	ITIAL	LY AFI	ECTED:			
this proposed	ental factors checked bel project and were more results of this analysis	rigor	ously a	analyzed than the f	actor	s which were not	
\boxtimes	Aesthetics		Agrico Reso	ulture and Forestry urces		Air Quality	
\square	Biological Resources	\square	Cultu	al Resources		Energy	
	Geology / Soils			nhouse Gas sions		Hazards & Hazardous Materials	
	Hydrology / Water Quality		Land Use / Planning Mineral Resources				
	Noise		Population / Housing Dublic Serv		Public Services		
	Recreation		Trans	portation / Traffic		Utilities / Service Systems	
	Wildfire		Mand	atory Findings of Sig	gnifica	ance	

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 would be prepared.
- I find that although the proposed project **COULD** have a significant effect on the environment, there **WOULD 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** would 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 **ENVIRONMENTAL IMPACT REPORT** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

11/25/2020

Matthew Reischman, Assistant Deputy Director Resource Protection and Improvement California Department of Forestry and Fire Protection Date

ANALYSIS OF POTENTIAL ENVIRONMENTAL IMPACTS

AESTHETICS

Environmental Setting

Tehama County can generally be described as three geographical parts. The eastern onethird of the county consists of the Cascade Mountains and foothills, the western third consists of the Pacific Coast Range and foothills, and the center third of the county consists of the Central Valley. The urbanized areas of the county such as Red Bluff, Corning, Tehama, and Los Molinos are all located within the Central Valley. Agricultural lands are located in the Central Valley and in the foothills.

The project site is within a portion of the Lassen National Forest, which encompasses approximately 1,200,000 acres that span portions of seven counties: Lassen, Shasta, Tehama, Butte, Plumas, Siskiyou and Modoc. The topography of the area consists of rolling hills covered in native grasslands and oak woodlands with scattered pines.

There are no residential development surrounding the project site. The nearest population resides in the town of Paynes Creek approximately two and a half miles north of the camp.

State Route 36 from Manton Road eastward to the County line is designated as a County Scenic Highway in Tehama County's General Plan (January 2009).

Discussion

a) Would the project have a substantial adverse effect on a scenic vista?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes

The project site is currently developed with an active conservation camp and ancillary structures. The new kitchen will be replacing a kitchen in the same space that was burned down in 2017. The replacement kitchen would not directly impact any public scenic resources or scenic vistas or obstruct the views of these visual resources. No impacts will occur.

 b) Would the project substantially damage scenic resources, including, but not limited trees, rock outcroppings, and historic buildings within a state scenic highway? 	Potentially Significant I to,	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes

Caltrans has designated certain highways throughout California as state scenic highways. In addition, Caltrans also identifies those highways that are eligible for state scenic designation throughout the state. State Route (SR) 36 in Tehama County is not designated and is not identified as eligible for designation. However, the county has designated the route as a county scenic highway from Manton Road (west of Ishi CC) eastward to the county line.

The construction of the replacement kitchen and other project components will not significantly change the visual character of the project site as it is currently developed with an active conservation camp and the project would not alter the surrounding visual character. Additionally, the area is not visible from SR-36. No impacts will occur.

c) Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
other regulations governing scenic quality?		\boxtimes		

The project consists of the replacement of a kitchen that was burned down in 2017, installation of a water tank, utilities and paving work. During project design, the California Office of State Fire Marshal required a 180,000-gallon water storage tank for fire suppression. The tank will be placed on top of the adjacent hill (Figure 6). The tank and utility lines will require some tree removal and will be situated along the tree line. The tank dimensions are approximately 40-feet in diameter by 32-feet high.

Although it may be partially visible from the campgrounds, the remaining tree cover is sufficient to screen most of the water tank and the project is not visible from an accessible vantage point. If the tank were a color that didn't blend with surrounding native vegetation it could potentially impact the visual quality of the surrounding woodlands.

To ensure that visual quality is not impacted, the following mitigation measure shall be implemented. With the implementation of this mitigation measure, impacts will be less than significant.

AES-1: WATER STORAGE TANK PAINT COLOR

Prior to the purchase of the water tank, a color palette of available tank colors shall be submitted to CAL FIRE for approval. The color choices shall be muted and match existing vegetation as closely as possible.

d)	Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes	

As indicated in the environmental setting above, the site is developed with an existing conservation camp and accessory structures which have nighttime lighting. Replacement of the kitchen will not create an adverse impact on day views in the area. Any new lighting will have nighttime lighting installed that will not be substantially different than current conditions. No residential uses are near the project site. All project lighting will adhere to Title 24, Building Energy Efficiency Standards for Residential and Nonresidential Buildings (Part 6) exterior lighting requirements which include:

- 1) All outdoor luminaries will follow the Backlight, Uplight and Glare requirements. In addition, all lighting areas luminaires (parking lot) will be provided with a full cut off house side shield.
- 2) All outdoor luminaries with bottoms less than 24 feet above finished grade will be controlled by a motion sensor so when the area is unoccupied there is a 40%-80% power reduction and will be equipped with auto functionality.

Project impacts with regard to lighting or glare will be less than significant.

AGRICULTURE AND FOREST RESOURCES

Environmental Setting

The area surrounding the project site to the west is designated as Upland Agriculture (UA). The project site has never been used for agricultural purposes. The area surrounding the project site and extending to the east has been designated as Public (P), with a zoning of Government (GOV).

The UA land use designation is used to preserve lands capable of supporting grazing activities; provide for areas of intensive and extensive agriculturally-compatible uses; identify and conserve areas of important open space, recreation, scenic, and natural value; and to accommodate the use of land for compatible non-agricultural uses to include commercial recreation, hunting and fishing, resource protection and management and habitat management.

Lands designated as P represents those lands under the jurisdiction of a federal or state agency such as Lassen National Forest, Lassen Volcanic National Park, U.S. Fish and Wildlife Service, Bureau of Land Management, Department of Fish and Game, Shasta-Trinity National Forest, and the Bureau of Reclamation.

The project site has not been used for agricultural or timber purposes.

a) Would 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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
California Resources Agency, to non- agricultural use?				\boxtimes

The project site is not mapped in the California Farmland Mapping and Monitoring Program (FMMP). The site has been developed as an active conservation camp since 1961. The proposed project will not convert any farmland that is mapped in the FMMP.

No Impacts will occur to designated farmlands.

b)	Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\boxtimes

The project site is not under a Williamson Act contract. No impact would occur.

c)	Would the project conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Production (as defined by Government Code §51104(g))?				\square

As described, the project is zoned as GOV and is not zoned as timberland. The site does not contain timberland resources and is not capable of timberland production. No impact would occur.

d)	Result in the loss of forest land or conversion of forest land to non-forest use?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\boxtimes

As indicated in the environmental setting above, the site is developed with an active conservation camp. The site does not contain forest land and the project will not result in the conversion of such land. No impact would occur.

e) Would 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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes

The project site is zoned GOV (Government) and is surrounded by national forest land. The proposed project will replace an existing use that has been onsite for approximately 60 years and will not result in the conversion of farmland to non-agricultural use. No impact would occur.

AIR QUALITY

Environmental Setting

The project site is located within the Northern Sacramento Valley Air Basin (NSVAB), which is one of the air "sub-basins" within the Sacramento Valley Air Basin. The other sub-basin is the Greater Sacramento Air region. The NSVAB encompasses Shasta, Tehama, Glenn, Butte, Colusa, Sutter, and Yuba counties. The basin's principal geographic features include a large valley bounded on the north and west by the Coastal Mountain Range and on the east by the southern portion of the Cascade Mountain Range and the northern portion of the Sierra Nevada. The basin is about 200 miles long in a north-south direction, and has a maximum width of about 150 miles, although the valley floor averages only about 50 miles in width. The mountain ranges reach heights in excess of 6,000 feet with peaks rising much higher.

The area climate is characterized by hot, dry summers and cool, wet winters. During the summer months from mid-April to mid-October, significant precipitation is unlikely, and temperatures range from daily maximums exceeding 100° Fahrenheit (°F) to evening lows in high 50s and low 60s. During the winter, highs are typically in the 60s with lows in the 30s. Wind direction is primarily along the valley due to the channeling effect of the mountains to either side of the valley. During the summer months, surface air movement is from the south,

particularly during the afternoon hours. During the winter months, wind direction is more variable.

The quantity of air pollutant emissions generated within the NSVAB is small compared to the more densely populated areas such as the Sacramento and the San Francisco Bay areas. Nevertheless, the following characteristics of the NSVAB make it susceptible for the build-up of air pollution:

- Pollution generated in the broader Sacramento area and San Francisco Bay area can be transported northward into the NSVAB.
- The mountain ranges to the west, north, and east of the NSVAB act as horizontal barriers which restrict the flow of pollution out of the basin.
- The valley portion of the NSVAB (those areas below 1,000 feet elevation) is often subjected to temperature inversions that typically occur during cool, calm nights that restrict vertical mixing and dilution of pollutants.
- The typical clear skies and warm temperatures in the summer months promote the formation of the photochemical pollutant ozone.

The federal and California state ambient air quality standards are summarized in Table 1.

Ambient Air Quality Standards							
Pollutant	Averaging	California St	tandards 1	Nat	tional Standards	2	
Pollutant	Time	Concentration ³	Method ⁴	Primary 3,5	Secondary 3,6	Method 7	
Ozone (O3)8	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet	-	Same as	Ultraviolet	
	8 Hour	0.070 ppm (137 µg/m ³)	Photometry	0.070 ppm (137 µg/m ³)	Primary Standard	Photometry	
Respirable Particulate	24 Hour	50 µg/m³	Gravimetric or	150 µg/m ³	Same as	Inertial Separation and Gravimetric	
Matter (PM10) ⁸	Annual Arithmetic Mean	20 µg/m ³	Beta Attenuation	_	Primary Standard	Analysis	
Fine Particulate	24 Hour	-	-	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric	
Matter (PM2.5) ⁹	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³	15 µg/m ³	Analysis	
Carbon	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive	35 ppm (40 mg/m ³)	_	Non-Dispersive	
Monoxide	8 Hour	9.0 ppm (10 mg/m ³)	Infrared Photometry (NDIR)	9 ppm (10 mg/m ³)	-	Infrared Photometry (NDIR)	
(CO)	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	(NDIR)	_	_	(NDIV)	
Nitrogen Dioxide	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase	100 ppb (188 µg/m ³)	-	Gas Phase	
(NO ₂) ¹⁰	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	Chemiluminescence	0.053 ppm (100 µg/m ³)	Same as Primary Standard	Chemiluminescence	
	1 Hour	0.25 ppm (655 µg/m ³)		75 ppb (196 µg/m ³)	_		
Sulfur Dioxide	3 Hour	_	Ultraviolet	_	0.5 ppm (1300 µg/m ³)	Ultraviolet Flourescence; Spectrophotometry	
(\$0 ₂) ¹¹	24 Hour	0.04 ppm (105 µg/m ³)	Fluorescence	0.14 ppm (for certain areas) ¹¹	_	(Pararosaniline Method)	
	Annual Arithmetic Mean	_		0.030 ppm (for certain areas) ¹¹	-		
	30 Day Average	1.5 µg/m³		-	-		
Lead ^{12,13}	Calendar Quarter	-	Atomic Absorption	1.5 μg/m ³ (for certain areas) ¹²	Same as	High Volume Sampler and Atomic Absorption	
	Rolling 3-Month Average	-		0.15 µg/m ³	Primary Standard		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No			
Sulfates	24 Hour	25 µg/m ⁸	Ion Chromatography	National			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence	Standards			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography				
See footnotes of	on next page						

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For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (5/4/16)

Under the federal Clean Air Act, Tehama County is currently considered in attainment or unclassified for all national ambient air quality standards, except for ozone. Previous to 2008, Tehama County was considered in attainment for ozone, however, in March 2008 the EPA revised the attainment standard for O3 to 75 parts per billion (ppb) from 84 ppb. The county is in a nonattainment area for the more stringent state ambient air quality standards for O3 and PM10.

Tehama County currently exceeds the State's ambient standards for O3 and particulates. Consequently, these pollutants are the focus of local air quality policy, especially when related to land use and transportation planning.

TEHAMA COUNTY AIR POLLUTION CONTROL DISTRICT

The Tehama County Air Pollution Control District (TCAPCD) is one of six air pollution control or air quality management districts that make up the NSVAB. The NSVAB consists of Shasta, Tehama, Glenn, Butte, Colusa, and Feather River districts. These six air districts work together to employ a regional approach to air pollution control. The TCAPCD boundaries are the same as Tehama County's.

Within Tehama County, the TCAPCD is the local air quality agency responsible for adopting and enforcing controls on stationary sources of air pollutants through its permit and inspection programs. Other District responsibilities include monitoring air quality, regulating agricultural burning, preparation of clean air plans, and responding to air quality complaints from citizens.

TEHAMA COUNTY AMBIENT AIR QUALITY ATTAINMENT STATUS(03/15)						
POLLUTANT	STATE	FEDERAL				
1-hour Ozone	Nonattainment	NA				
8-hour Ozone	Nonattainment	Nonattainment (Tuscan				
		Buttes)				
8-hour Ozone	Nonattainment	Attainment (all other areas of				
		Tehama County)				
Carbon Monoxide	Attainment	Attainment				
Nitrogen Dioxide	Attainment	Attainment				
Sulfur Dioxide	Attainment	Attainment				
Inhalable Particulates (PM10)	Nonattainment	Attainment				
Inhalable Particulates (PM2.5)	Unclassified	Unclassified				

Table 2. Tehama County Ambient Air Quality Attainment Status

Discussion

a)	Would the project conflict with or obstruct implementation of the applicable air quality plan?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes		

The primary way of determining consistency with the air quality plan's (AQPs) assumptions is determining consistency with the applicable general plan to ensure that the project's population density and land use are consistent with the growth assumptions used in the AQPs for the air basin.

As required by California law, city and county general plans contain a land use element that details types and quantities of land uses that the city or county estimates will be needed for future growth, and that designates locations for land uses to regulate growth. Existing and future pollutant emissions computed in the AQP are based on land uses from general plans. AQPs detail the control measures and emission reductions required for reaching attainment of the air standards.

The Tehama County Air Pollution Control District was contacted on 4/24/20 and an Authority to Construct permit and Operational Development Fee Application will need to obtained for the project.

The project is proposing to replace a kitchen that was destroyed by a fire and is not proposing any change in operations or staffing. Therefore, the project is consistent with the growth assumptions used in the applicable AQPs. As a result, the proposed project would not conflict with or obstruct implementation of any applicable AQPs. With the following mitigation measure, CAL FIRE will ensure that all required permits are obtained, and applicable air quality requirements are adhered to. Impacts will be less than significant.

AQ-1: TEHAMA COUNTY AIR POLLUTION CONTROL DISTRICT

CAL FIRE shall obtain an Authority to Construct permit and any other required permits from the Tehama County Air Pollution Control District prior to any ground disturbance.

co po at	Vould the project result in a cumulatively considerable net increase of any criteria collutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a				\boxtimes	

Tehama County currently exceeds the State's ambient standards for O3 and particulates.

Consequently, these pollutants are the focus of local air quality policy, especially when related to land use and transportation planning.

The proposed project's air quality impacts are attributed to short-term demolition and construction-related activities to replace the kitchen, paved area, grading and trenching for the utilities and tank installation.

Although emissions would occur from equipment, (Backhoe, high side dump truck, excavator, front-end loader, skid steer and mini excavator) all equipment would be CARB tier 4 compliant. The construction period is expected to last 14 months.

Dust will likely result from the use of heavy equipment to demolish the existing cement slab in preparation for the new slab, grading for a level area to erect the water tank, construction of the new metal building and trenching for utilities.

SHORT-TERM CONSTRUCTION IMPACTS

The Ishi CC Kitchen Replacement Project will generate short-term construction-related emissions although the amount of ROG, NOx, and PM10 emissions would be less than the TCAPCD Level A thresholds.

Construction equipment will be staged on the project site and will not be entering or exiting the site while the work is being conducted. In order to ensure that the short-term construction related emissions do not have a significant adverse impact, the following mitigation measures shall be implemented.

AQ-2: CONSTRUCTION EQUIPMENT

All construction related equipment shall incorporate the following:

- Maintain all construction equipment in proper tune according to manufacturer's specifications.
- Maximize to the extent feasible, the use of diesel construction equipment meeting current CARB certification standards for off-road heavy-duty diesel engines.
- Registration in the CARB DOORS program (www.arb.ca.gov/msprog/ordiesel/ordiesel.htm) and meeting all applicable standards for replacement and/or retrofit.
- All portable equipment, including generators and air compressors rated over 50 brake horsepower, shall be registered in the Portable Equipment Registration Program (www.arb.ca.gov/portable/portable.htm), or permitted through the District as a stationary source.

AQ-3: LAND CLEARING/EARTH MOVING

All ground disturbing activities shall be subject to the following:

- Water shall be applied by means of truck(s), hoses and/or sprinklers as needed prior to any land clearing or earth movement to minimize dust emission.
- Haul vehicles transporting soil into or out of the property shall be covered.

- Water shall be applied to disturbed areas a minimum of 2 times per day or more as necessary.
- On-site vehicles limited to a speed which minimizes dust emissions on unpaved roads.
- Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours. The telephone number of the District shall also be visible to ensure compliance with District Rule 4:1 & 4:24 (*Nuisance* and *Fugitive Dust Emissions*).
- Soil pile surfaces shall be moistened if dust is being emitted from the pile(s). Adequately secured tarps, plastic or other material may be required to further reduce dust emissions.

LONG-TERM OPERATIONAL EMISSIONS

Long-term operation of the Ishi CC Kitchen Replacement Project would not increase the level of long-term operational activity and would not substantially change the amount of operational emissions from the baseline.

The impact of the project on operational criteria pollutant emissions is less than significant. No mitigation measures are required.

Naturally Occurring Asbestos (NOA)

Asbestos is a term used for several types of naturally occurring fibrous minerals found in many parts of California. The most common type of asbestos is chrysotile, but other types are also found in California. Asbestos is commonly found in ultramafic rock and near fault zones. The amount of asbestos that is typically present in these rock ranges from less than 1% up to approximately 25% and sometimes more. It is released from ultramafic rock when it is broken or crushed. This can happen when cars drive over unpaved roads or driveways, which are surfaced with these rocks, when land is graded for building purposes, or at quarrying operations. Asbestos is also released naturally through weathering and erosion. Once released from the rock, asbestos can become airborne and may stay in the air for long periods of time. Asbestos is hazardous and can cause lung disease and cancer dependent upon the level of exposure. The longer a person is exposed to asbestos, the greater the intensity of the exposure, and the greater the chances for a health problem.

The site is not located within an area mapped as an ultramafic rock unit (Geotechnical Engineering Investigation, CTE CAL, INC., February 4, 2019,). No impacts with regard to NOA will occur as a result of the project.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes	

Sensitive receptors refer to those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality). Land uses that have the greatest potential to attract these types of sensitive receptors include schools, parks, playgrounds, daycare centers, nursing homes, hospitals, and residential communities.

From a health risk perspective, the Ishi CC Kitchen Replacement project is located within a rural area that does not have nearby sensitive receptors. However, during construction diesel-powered equipment would be used and can create diesel particulate matter. Construction would be temporary in nature and occurs within a rural area adjacent to protected lands. Impacts would be less than significant.

 Would the project result in other emissions (such as those leading to odors adversely affecting a substantial number of people? 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes	

Construction of the proposed project could result in minor amounts of odor associated with diesel heavy equipment exhaust. However, construction equipment will be operating at various locations throughout the project site, and no sensitive receptors are located within the vicinity. Additionally, long-term operations of the new facilities would not generate significant odorous emissions. Any odor produced by the Ishi CC Kitchen Replacement project operations would be minimal and be contained onsite. Therefore, a less than significant impact would occur.

BIOLOGICAL RESOURCES

A Biological Resources Assessment (BRA) was prepared for the proposed project by CAL FIRE staff in April through May 2020. The purpose of the assessment was to collect information on the biological resources that had potential to be present within the project area and to determine any biological constraints to site construction.

The BRA provided information on the potential for sensitive vegetation communities and special-status plants and wildlife species, including species listed as endangered or

threatened under the California or Federal Endangered Species Act (CESA and ESA), to occur onsite. Additional information was obtained from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) Rare Plant Ranking System. The results of the assessment are separated into two tables and presented below, (See Table 1 and 2).

After a review and analysis of the species potential to be present within the assessment area, further analysis was conducted to determine the necessity for field surveys. Botanical surveys were completed in May – June 2017 with a follow up botanical survey conducted on May 1, 2020. No plants recorded on the CNDDB query were detected during either survey efforts.

ENVIRONMENTAL SETTING

VEGETATION COMMUNITIES

The proposed site includes previously developed areas and an undeveloped area. The new building that will house the kitchen and related infrastructure will be constructed on the existing footprint of the kitchen that burned down in July 2017. North of this location a new trench will be dug, and it will terminate at the 180,000-gallon fire water tank approximately 1000 feet uphill.

The overstory vegetation consists of native and non-native oaks species and foothill pines; canyon live oak (Q. *chrysolepis*), scrub oak, (Q. berberidifolia), Blue Oak (Q. *douglasii*), Oregon white oak (Q. *garryana*), foothill pine (P. *sabiniana*). The understory consists of California native and non-native grassland species, including the grasses; slender wild-oat (*A.barbata*) six-weeks fescue, (V.*octoflora*), rattail fescue, (V.*myuros*), Annual ryegrass, (L.*perenne L*), Bottlebrush Squirrel tail (S.*hystrix*) and California brome (*B.carinatus*). Present in abundance are yellow star thistle (*C. solstitialis*), an invasive species, as well as barbed goat grass, (A. *triuncialis L*.) and medusa head, (T.caput-medusae). The shaded areas under native oak trees support several native shrubs and herbs, including California blackberry (*Rubus ursinus*), poison-oak (*Toxicodendron diversilobum*), and miner's-lettuce (*Claytonia perfoliata subsp. p.*). Non-native herbs include chickweed (*Stellaria media*), Filaree (*Erodium spp.*), and rose clover (T. hirtum).

POTENTIAL WATERS OF THE U.S.

No potential Waters of the U.S. were found within the project area, and there are no wetland features onsite identified on wetland maps. Plum Creek, a perennial Class I watercourse, is approximately 350 feet to the south.

WILDLIFE

Wildlife in the vicinity that have been seen onsite include black bear, coyote, deer, bobcat, several species of rabbits, turkeys, skunks, mice, grey and ground squirrels, kangaroo rats and pocket gophers. Riparian animals in the Plum Creek waterway include Pacific pond turtle, various mollusks, raccoons, and weasels. Several different types of bird species that are known to use the site include valley quail, woodpeckers, hummingbirds, finches,

sparrows, blue jays, crows, red-tailed hawks, and turkey vultures. Ishi conservation camp does lie in the winter range of the Tehama deer herd, a migratory population of black tailed deer. The Tehama deer herd is considered the largest migratory herd and is characterized by the longest migratory route of any California deer population (Ramsey 1981).

SPECIAL-STATUS WILDLIFE

No special-status animals have been observed by CAL FIRE Forester II, Dawn Pedersen (Unit Forester). However, several special status animals have been documented within the twelve-quadrangle search area of the project site. The special-status animals are provided in **Table 3**.

Table 3. Special-Status Wildlife Species Within Twelve Quadrangle Area ofProject Site.

Species Common Name	Species Scientific Name
foothill yellow-legged frog	Rana boylii
Southern long toed salamander	Ambystoma macrodactylum sigillatum
Northern goshawk	Accipiter gentilis
burrowing owl	Athene cunicularia
Western yellow-billed cuckoo	Coccyzus americanus occidentalis
Prairie falcon	Falco mexicanus
American peregrine falcon	Falco peregrinus anatum
Bald eagle	Haliaeetus leucocephalus
yellow-breasted chat	Icteria virens
Osprey	Pandion haliaetus
yellow warbler	Setophaga petechia
Least Bell's vireo	Vireo bellii pusillus
Vernal pool tadpole shrimp	Lepidurus packardi
Steelhead – Central Valley DPS	Oncorhynchus mykiss irideus pop. 11
Chinook salmon – Central Valley spring run ESU	Oncorhynchus tshawytscha pop. 6
Valley elderberry longhorn beetle	Desmocerus californicus dimorphus
pallid bat	Antrozous pallidous
Spotted bat	Euderma maculatum
Western mastiff bat	Eumops perotis californicus
California wolverine	Gulo gulo
Sierra Nevada snowshoe hare	Lepus americanus tahoensis
Sierra Nevada red fox	Vulpes Vulpes necator
Western pond turtle	Emys marmorata

<u>Amphibians</u>

Foothill yellow-legged frog (Rana boylii)

The Foothill yellow-legged frog (FYLF) is a candidate for listing by the US Fish and Wildlife Service (USFW) and the California Department of Fish & Wildlife (CDFW) has listed this

species of frog as threatened as well as a species of special concern. The FYLF is present in low gradient cobble and gravel streams in open sunlight. This species inhabits rocky streams and is highly aquatic, seldom venturing more than a few meters from the stream channel. Low-gradient stream reaches are preferred for breeding. The CNDDB identified one 1994 occurrence of this species approximately one mile east of the project area on Tehama wildlife property. Plum Creek is approximately 350 feet away at its closest point and while it does contain suitable habitat, it is unlikely that this frog would venture into the project area. No riparian habitat will be impacted by the project. No negative impact to *R*. *boylii* resulting from this project.

Southern long-toed salamander (Ambystoma macrodactylum sigillatum)

The Southern long-toed salamander is a CDFW species of special concern and is a member of the Mole Salamander family (Ambystomatidae) whose members are medium to large with heavy, stocky bodies. Ambystomatidae salamanders have two distinct life phases. Larvae hatch from eggs laid in water where they swim using an enlarged tail fin and breathe with filamentous external gills and then transform into four-legged salamanders that live on the ground and breathe air with lungs. Adults spend much of their lives underground, often utilizing the tunnels of burrowing mammals such as moles and ground squirrels. Transformed adults are rarely found outside of the breeding season. They are mostly found under wood, logs, rocks, bark and other objects near breeding sites which can include ponds, lakes, and streams. Adults and juveniles migrate to breeding sites in Winter and Spring, and again to wintering locations in the fall. Carnivorous, transformed adults eat small invertebrates, including worms, mollusks, insects, and spiders. Breeding occurs in permanent or temporary ponds, lakes and flooded meadows. Adults become sexually mature at 1 - 3 years, and migrate overland from wintering sites to the breeding site in spring and early summer or later in years with a heavy snowpack. Males enter the ponds before females. Females spend approximately three weeks at a breeding site, but individual females only stay at the site for 1 - 2 days at a time as they venture out to feed elsewhere. Males feed at breeding sites, so they can stay at the site for the entire breeding season, which may last 2 months or more. Suitable habitat is available in Plum Creek nearby but not in the project area. No negative impact to A. macrodactylum sigillatum resulting from this project would occur.

<u>Birds</u>

Northern goshawk (Accipiter gentilis)

The Northern Goshawk is a CDFW species of special concern and prefers middle and high elevations and mature dense conifer forest. The species feeds on birds and small mammals using snags and dead-topped trees for observation and prey-plucking. An individual's territory is estimated to be 0.6-15 square miles. They breed in north costal mountain ranges through Sierra Nevada, Klamath, Cascade, and Warner Mountains and nests in dense conifer patches close to openings. The project area and vicinity are open oak-woodland with an occasional overstory of foothill pine trees that provide marginal foraging habitat and breeding, or nesting habitat is not present. No negative impact to *A. gentilis* resulting from this project would occur.

Burrowing Owl (Athene cunicularia)

The burrowing owl is a CDFW species of special concern and is found in open dry grassland and mounds associated with vernal pools. A subterranean nester, dependent upon burrowing mammals or the provision of artificial burrows. The species feeds on small mammals and birds, and insects, spotted from a perch or mound, and generally caught on the ground. There are no vernal pools in the project area and no ground burrows were observed in the project area. The project area does not contain suitable habitat for this species. No negative impact to A. *cunicularia* resulting from this project would occur.

Western yellow billed cuckoo (Coccyzus americanus occidentalis)

The federal status for the yellow-billed cuckoo is threatened and state status is endangered. The yellow-billed cuckoo is a slim, long-tailed bird about 30 cm in length with a bill that is yellow on the bottom and black on top, with a grey head and back with white underparts. The species nest in riparian forests along the broad lower flood bottoms of large river systems in thickets of willow mixed with cottonwood, blackberry, and wild grape. Suitable habitat is not found in the project area. Although Plum Creek is adjacent to the project area and may contain seasonally wet upland riparian habitat it is not suitable breeding habitat. The remaining breeding populations of this species within the Central Valley are restricted to the dense riparian habitat along the Sacramento River. Riparian habitat will not be effected as part of this project, and no negative impact to C. *americanus occidentalis* resulting from this project would occur.

Prairie falcon (falco mexicanus)

The Prairie falcon is on the states' watch list. A resident along the inner coast and Sierra Nevada ranges and distributed from annual grasslands to alpine meadows. They are associated primarily with perennial grassland, savannahs, rangeland and some agriculture fields. The species feeds mostly on small mammals, some small birds, and reptiles and requires sheltered cliff ledges for cover and nesting. They nest in open terrain with canyons cliffs and escarpments uses the open terrain for foraging. The project area is situated in an oak-woodland/Foothill Pine habitat that does provide suitable foraging habitat but no suitable nesting. Although the project will disturb a portion of the oak-woodland/Foothill Pine due to the placement of the water tank and associated trenching, the footprint of the impacts is relatively small in nature and the surrounding expansive habitat will continue to provide foraging habitat if they are present. No significant impact would occur to *F. mexicanus* from the proposed project.

American peregrine falcon (Falco peregrinus anatum)

The American peregrine falcon is a fully protected species. This aviary species has the widest geographical distribution of any hunting bird in the world. Found throughout the United States and on every continent except Antarctica. The falcon feeds mostly on small birds such as pigeons and waterfowl which it takes by aerial capture, but will also occasionally take small mammals, reptiles or even insects. Nests on small scrapes on rocky cliff ledges and also known to nest on the ledges of tall buildings and bridges within urban areas. No nesting habitat exists within or near the project area although the project area is suitable for hunting. The project is unlikely to have any impact on the prey base for

this species. No negative impact to *F. peregrinus anatum* resulting from this project would occur.

Bald eagle (Haliaeetus leucocephalus)

The Bald eagle is a California endangered species and on the federally protected list. This species is a bird of prey found near large bodies of open water with an abundant food supply and old-growth trees for nesting. The bald eagle is an opportunistic feeder that subsists mainly on fish by swooping down and snatching from the water with its talons. It builds the largest nest of any North American bird and occurs in virtually any kind of during wetland habitat its breeding season such as seacoasts, rivers, large lakes, marshes, or other large bodies of open water with an abundance of fish. The bald eagle typically requires old-growth and mature stands of coniferous or hardwood trees for perching, roosting, and nesting. The required habitat elements for this species does not occur within or adjacent to the project area. No negative impact to H. leucocephalus resulting from this project would occur.

Yellow breasted chat (Icteria virens)

The yellow breasted chat is a CDFW species of special concern. Nesting yellow-breasted chats occupy early successional riparian habitats with a well-developed shrub layer and an open canopy. The vegetation structure, rather than age, appears to be the important factor in nest-site selection. Nesting habitat is usually restricted to the narrow border of streams, creeks, sloughs, and rivers and seldom forms extensive tracts. Blackberry, wild grape, willow, and other plants that form dense thickets and tangles are frequently selected as nesting strata. The project area is near Plum Creek which contains suitable riparian habitat for *I. virens*, however, there is no suitable habitat within the project footprint area. No riparian vegetation will be impacted by this project. No negative impact to *I. virens* resulting from this project would occur.

Osprey (Pandion haliaetus)

The Osprey is on the states' watch list. Ospreys are large birds of prey, with a wingspan ranging from 145 to 170 cm. The species requires large bodies of water (large ponds, lakes, or rivers) for foraging. Their diet specializes on fish, including the listed Chinook salmon. No suitable habitat lies within, or adjacent to the project area. No negative impact to P. *haliaetus* resulting from this project would occur.

Yellow warbler (Setophaga petechia)

The yellow warbler is a CDFW species of special concern. The species is found in riparian areas, preferring willow, cottonwoods, sycamores and alders for nesting and foraging. They Nest in low shrubs, usually riparian, but occasionally in open moist forests. Plum Creek is adjacent to the project area and does contain suitable riparian habitat and thin strips of seasonally wet upland habitat. However, this creek is outside of the project footprint. No riparian habitat will be impacted by this project. No negative impact to *S. petechia* resulting from this project would occur.

Least bell's vireo (Vireo bellii pusillus)

Federal and State status for the Least Bell's Vireo is listed as endangered. It is a summer resident and nests in low, dense riparian vegetation consisting of willow, mulefat, mugwort, with a dense, higher canopy consisting of cottonwood and other trees. Potential suitable

habitat may be found within the biologocal assessment area. Plum Creek is near the project area and contains suitable riparian habitat with thin strips of seasonally wet upland habitat. However, the creek is outside of the project footprint. There is no riparian habitat within the project footprint and none will be effected as a result of the project. No negative impact to V.*bellii pusillus* resulting from this project would occur.

Crustations

Vernal pool tadpole shrimp (Lepidurus packardi)

Federal status for the vernal pool tadpole shrimp is listed as endangered. The species inhabits vernal pools and swales in the Sacramento Valley that contain clear to highly turbid waters. May also be found in stock ponds created by dammed drainages and in roadside ditches. There are no vernal pools, stock ponds, or roadside ditches within or adjacent to the project area, and there is no suitable habit in the project area. No negative impact to *L. packardi* resulting from this project would occur.

<u>Fish</u>

Steelhead central valley DPS (Oncorhynchus mykiss irideus pop. 11)

These fish are federally listed as threatened (Distinct population segment which includes all naturally spawned populations of steelhead in the Sacramento and San Joaquin rivers and their tributaries). Steelhead is a name used for anadromous rainbow trout, a salmonid species native to western North America and the Pacific coast of Asia. Adult migration from the ocean to spawning grounds occurs during much of the year, with peak migration occurring in the fall or early winter. Migration through the Sacramento River mainstem begins in July, peaks at the end of September, and continues through February or March. Central Valley steelhead are mostly "winter steelhead" and may contain some "summer steelhead". Winter steelhead mature in the ocean and arrive on the spawning grounds nearly ready to spawn. Central Valley steelhead spawn primarily in upper stream reaches and smaller tributaries. No suitable habitat is present within the project area. No negative impact to *O. mykiss irideus* resulting from this project would occur.

Chinook salmon - Central Valley spring-run ESU (Oncorhynchus tshawytscha pop. 6)

Chinook salmon Central Valley spring run are federally and state listed as threatened. They are the largest species of the pacific salmon family and anadromous to the rivers of the west coast including the Sacramento and its tributaries. In the project area, they are found in Payne's Creek above the Dales Station Bridge and may have access to Plum Creek up to Meadowbrook Ranch, about 5.5 miles downstream from the project area. The project will not affect riparian vegetation or streamside shade-producing trees or shrubs. Soil disturbance is limited and will not be transported into watercourses. No negative impact to *O. tshawytscha* resulting from this project would occur.

<u>Insects</u>

Valley elderberry longhorn beetle (Desmocerus californicus dimorphus)

Federal status for the valley elderberry longhorn beetle is threatened. This insect is intimately associated with elderberry (Sambucus) trees and shrubs as it spends its larval stage within the canes of this woody species. Presence of the beetles is usually determined by discovery of quarter-inch exit holes in the canes or stems of plants though the lack of observable exit holes does not preclude their presence. Elderberries are rarely found in dense patches, more typically they occur as a few plants, or single specimen within a variety of habitat types including riparian scrub, oak woodland, and occasionally in grassland. The CNDDB identified one 1991 occurrence of an isolated Sambucus tree containing old exit holes, approximately 1.8 miles north of the project area on the south bank of Payne's Creek. No elderberry plants have been observed within any portion of the project area. No negative impact to *D. californicus dimorphus* resulting from this project would occur.

<u>Mammals</u>

Pallid bat (Antrozous pallidus)

The pallid bat is a CDFW species of concern. This bat commonly occurs at a wide variety of low elevation habitats including grasslands, woodlands, mixed conifer forests, and shrub lands. They prefer dry, open places, with rocky areas to provide roosting locations. The pallid bat roosts in caves, in hollowed trees, structures, or mine shafts. Habitat does not exist within the project area. However, it may exist within the biological assessment area in the form of old structures, hollow trees, bark fissures or other small cavities suitable for bats, either natural or manmade. No negative impact to A. *pallidus* resulting from the project would occur as a result of the project.

Spotted bat (Euderma maculatum)

The spotted bat is a CDFW species of special concern and is predominately found in the foothills and mountains of southern California, but can occasionally be found outside of this range. Habitat includes deserts, and grasslands to mixed conifer forest. The species prefers to roost in rock crevices and cliffs, although occasionally roosts in caves. The spotted bat feeds mainly on moths (possibly beetles) typically found over water and along washes. There are rock outcrops with suitable crevices present near the project and open water segments along Plum Creek that could provide foraging habitat. Rocks that are partially buried in the trench line will be excavated, though they do not provide adequate bat habitat. No mechanical disturbance of riparian vegetation will occur near water and all activities will be conducted during daylight hours. No negative impact to *E. maculatum* resulting from this project would occur.

Western mastiff bat (Eumops perotis californicus)

The Western mastiff bat is a CDFW species of special concern. The species is the largest bat species in California with a wingspan of 53 to 56 cm and is most frequently encountered in broad open areas. Generally, this bat is found in a variety of habitats, from dry desert washes, flood plains, chaparral, grassland, meadows, agricultural areas, oak woodland, and open ponderosa pine forest. *E. perotis californicus* is primarily a cliff-dwelling species, roosting under exfoliating rock slabs or within columnar basalt. Roosts

are generally high above the ground, usually allowing a clear vertical drop of at least three meters below the entrance for initiating flight. No suitable habitats are within, or adjacent to the project area. Although the project may contain foraging habitat for this species, it is a nocturnal forager and all activities will be conducted during daylight hours. No negative impact to *E. perotis californicus* resulting from this project would occur.

California wolverine (Gulo gulo)

The California wolverine is federally proposed as a threatened species and is on the state's threatened list as well as fully protected list. A scarce resident of north coast mountains and the Sierra Nevada. Observed in mixed conifer, red fir, lodgepole, subalpine conifer, alpine dwarf shrub, montane chaparral, and Jeffrey pine forests. They may travel extensively with a range up to 800 square miles and feeds primarily on small mammals and carrion. This species prefers areas with low human disturbance and uses caves, hollows in cliffs, logs, and rock outcrops for cover and nesting (generally in dense forest). Typical habitat for G. *gulo* is not present in or near the project area as the species prefers high altitude dense conifer sites with sparse human presence. But given this species' immense home range, foraging in the area is feasible. Project area does not include any denning habitat such as caves or hollow logs. The project is unlikely to have any measurable impact on prey base. No significant impact for *G. gulo* resulting from this project would occur.

Sierra Nevada snowshoe hare (Lepus americanus tahoensis)

The Sierra Nevada snowshoe hare is listed as a CDFW species of special concern. An uncommon resident at upper elevations in the Cascade mountains and Sierra Nevada. They are primarily found in montane riparian habitats with thickets of alders and willows and in stands of young conifers interspersed with chaparral. The early stages of mixed conifer are likely habitats that are primarily along edges and near meadows. They generally feed on grasses, forbs, sedges, and low shrubs, with needles and conifer bark utilized in the winter. Nests often consist of grass, fur, or needles located under a shrub, log or thicket. Generally, they are found at higher elevations, although Plum Creek contains suitable habitat. Plum Creek and the associated riparian habitat are outside the project footprint and there will be no disturbance to riparian zones associated with Plum Creek. No negative impact to *L. americanus tahoensis* is expected to occur.

<u>Reptiles</u>

Western pond turtle (Emys marmorata)

The Western pond turtle is listed as a CDFW species of special concern. The turtle's habitat is thoroughly aquatic, found in ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. In streams, they avoid fast-moving and shallow water, and tend to be concentrated in pools and backwater areas. Western pond turtles need basking sites and suitable (sandy banks or grassy open fields) upland habitat for egg laying and are uncommon in heavily shaded areas. Their nests may be excavated more than a quarter mile away from water and are generally located in exposed (unshaded) upland locations. The nesting season extends from April through August. The CNDDB identified one 1994 occurrence of this species approximately one mile east of the project area on Tehama wildlife property. Plum Creek is adjacent to the project area but lacks suitable

basking habitat. No negative impact to E.marmorata resulting from this project would occur.

SPECIAL-STATUS PLANTS

The following special-status plants were identified in the CNDDB as occurring within the twelve-quadrangle search of the project site. The special-status plants are provided in **Table 4.**

Project Site.	
Species Common Name	Species Scientific Name
Red-flowered birds-foot trefoil	Acmispon rubriflorus
Scalloped moonwort	Botrychium crenalatum
Mingan moonwort	Botrychium minganense
Western goblin	Botrychium montanum
Northwestern moonwort	Botrychium pinnatum
Watershield	Brasenia schreberi
Callahan's mariposa-lily	Calochortus syntrophus
Shasta clarkia	Clarkia borealis ssp. arida
White-stemmed clarkia	Clarkia gracilis ssp. albicaulis
Silky cryptantha	Cryptantha crinita
Stony creek spurge	Euphorbia ocellata ssp. rattanii
Adobe- Lilly	Fritillaria pluriflora
Boggs Lake hedge-hyssop	Gratiola heterosepala
finger rush	Juncus digitatus
Red Bluff dwarf rush	Juncus leiospermus var. leiospermus
Legenere	Leegenere limosa
broad-nerved hump moss	Meesia uliginosa
Baker's navarretia	Navarretia leucocephala spp.bakeri
Slender Orcutt grass	Orcuttia tenuis
Ahart's paronychia	Paronychia aharti
brownish beaked-rush	Rhynchospora capitellata
Hall's rupertia	Rupertia hallii
Sanford's arrowhead	Sagittaria sanfordii
long-stiped campion	Silene occidentalis ssp. longistipitata
maverick clover	Trifolium piorkowskii

Table 4. Special-Status Plant Species Within Twelve Quadrangle search of the Project Site.

Red-flowered birds-foot trefoil (Acmispon rubriflorus)

The CNPS rare plant rank for this species is 1B.1, (rare, threatened, or endangered in California and elsewhere; seriously threatened in California) and its habitat is grassland and woodland. This is a petite annual herb spreading in a small patch on the ground with slender branches lined with leaves and made up of about four hairy lance-shaped leaflets. Solitary magenta flowers appear in the leaf axils, with each minute pea-shaped bloom just a few millimeters wide. The fruit is a hairy legume pod which may approach a centimeter in length and blooms June through September. A single occurrence of this species was in oak-woodland, southeast of Dales Station, approximately five miles west of the project

area. This species was not observed on the project site and no negative impacts are expected to *A. rubriflorus* resulting from this project would occur.

Scalloped moonwort (Botrychium crenulatum)

The CNPS rare plant rank is 2B.2, rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California). This is a perennial herb (rhizomatous), with leaves appearing in mid to late spring that dies in late summer. Habitat includes wet, marshy, and springy areas, including marshy meadows, edges of marshes, saturated soils of seeps, bottoms, and stabilized margins of small streams, and (occasionally) wet roadside swales, ditches, and drainageways. Sites tend to be partly to heavily shaded and usually have a dense, diverse cover of forbs and graminoids with dominant plant species of spruce, alders, and dogwood. This species has also been reported in western red cedar habitats. They are often found on soils influenced by reprecipitated calcium, at mid to high elevations (montane zone), 1200 - 2500 m. Habitat is not present in the project area. No impacts would occur as a result of the project.

Mingan moonwort (Botrychium minganense)

The CNPS rare plant rank for this species is 2B.2, (rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California). The plant is a very small perennial herb (rhizomatous) with a single above ground frond that may reach about eight inches tall but is usually smaller and can be seen until middle or late summer. It is divided into two leaves above a common stalk. The sterile leaf is usually a deep, dull green and somewhat fleshy. It has up to 10 usually well separated pairs of leaflets (pinnae) that are variable but generally narrowly fan-shaped. The top edges are rounded and smooth but can be broader and may be lobed or have cut edges. The fertile leaf is longer than the sterile leaf with branches that bear grape-like sporangia. It is native to California and found elsewhere in North America and blooms from July to September. They are found in lower montane coniferous forest. Suitable habitat is not present in the project area and no impact would occur from the proposed project.

Western goblin (Botrychium montanum)

The CNPS rare plant ranking is 2B.1, (rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California). This plant can be found in lower old growth montane dark coniferous forest, usually near swamps and streams. It is a very small perennial herb (rhizomatous) with leaves appearing in late spring to late summer. The leaf is less than eight centimeters tall and divided into sterile and fertile part. The sterile part of the leaf has irregularly shaped angled leaflets. The fertile part of the leaf is very different in shape, with grapelike clusters of sporangia by which it reproduces. The plant blooms July to September. No suitable habitat is present in the project area and no impacts would occur.

Northwestern moonwort (Botrychium pinnatum)

The CNPS rare plant rank for this species is 2B.3, (rare, threatened, or endangered in California, but more common elsewhere; not very threatened in California). A perennial herb (rhizomatous), native to North America from Alaska to northern Canada and Arizona. Generally scattered and uncommon and grows in the dark understory of coniferous forests and other moist wooded areas. This is very small plant growing from an underground caudex that sends one thin shiny green leaf above the surface of the ground that is less

than eight centimeters tall and is divided into a sterile and a fertile part. The flat sterile part of the leaf has oval to widely lance shaped leaflets. The fertile part of the leaf is very different in shape, with grapelike clusters of sporangia by which it reproduces. The plant blooms July to October. No suitable habitat present in the project area and no impacts to *P. pinnatum* would occur.

Watershield (Brasenia schreberi)

The CNPS rare plant rank is 2B.3, (rare, threatened, or endangered in California, but more common elsewhere; not very threatened in California). This plant species is an aquatic, perennial herb with floating leaves that grows in ponds, lakes, and slow moving streams. It is widespread in North America and is found in South and Central America, the West Indies, eastern Asia, Africa, and eastern Australia. Easily recognized by its leaves, which are oval shaped, peltate (the leaf stem attached to the leaf in the middle of the blade, like a mushroom stalk), with the undersides covered with thick, jelly like slime. Leaf blades are small, ³/₄ to 2 ¹/₂ inches wide and 1 to 4 ¹/₂ inches long. The top of the leaves are green, while the undersides and leaf stems are reddish purple that produce small purple flowers that bloom from June through September. Suitable habitat is not present in the project area and no impacts would occur to *B. schreberi* from this project.

Callahan's mariposa-lily (Calochortus syntrophus)

The CNPS rare plant ranking for this species is 1B.1, (rare, threatened, or endangered in California and elsewhere; seriously threatened in California). A rare species of flowering plant in the lily family that is endemic to northern California, where it occurs in a remote area north of Montgomery Creek in Shasta County. It has also been spotted in Tehama County. Its habitat includes open, rocky areas with moist or wet soils in oak woodland territory and found in Cismontane woodland, valley and foothill grassland in vernally mesic areas. Habitat is not present in the project area but is available adjacent to project area. No negative impacts would occur to *C. syntrophus* from this project.

Shasta clarkia (Clarkia borealis ssp. arida)

The CNPS rare plant rank is 1B.1, (rare, threatened, or endangered in California and elsewhere; seriously threatened in California). An erect annual, little branched herb 15-40 inches tall found in foothill pine and black oak woodland (cismontane woodland) openings on southerly to western gentle slopes. The plant blooms June through August. The CNDDB identified two occurrences of this species approximately five miles west of the project area in the Lanes Valley/Inskip Hill area. Suitable habitat may be present in oak woodland areas adjacent to project area although no species were observed during the site visit. No negative impacts are expected to *C. borealis arida* from the proposed project.

White-stemmed clarkia (Clarkia gracilis ssp. albicaulis)

The CNPS rare plant rank is 1B.2, (rare, threatened, or endangered in California and elsewhere; fairly threatened in California). An annual herb that blooms May through June with an erect slender stem and a few sparse, narrow leaves several centimeters long. The plant is found in chaparral, cismontane woodland, with ultramafic soils and grows abundantly in open woodlands and grassy meadows that have been created by wildfire. Suitable habitat may be available outside the project area. No negative impacts are expected to occur *C. gracilis spp.albicaulis*.

Silky cryptantha (Cryptantha crinita)

The CNPS rare plant ranking for this species is 1B.2, (rare, threatened or endangered in Ca. and elsewhere; fairly threatened in California). An annual herb native and endemic to California that is 4 to 16 inches tall with coarse hairs throughout that bloom April through May. The flowering stems are shaped like fiddle necks. This plant can be found in sand and gravel deposits associated with seasonal, and less frequently, perennial steams within cismontane woodland, lower montane coniferous forest, riparian forest, riparian woodland, valley and foothill grassland. No suitable habitat is found within the project footprint or adjacent area, although suitable habitat is present within the larger biological assessment area. No negative impacts to *C. crinita* would occur as a result of this project.

Stony creek spurge (Euphorbia ocellata ssp. rattanii)

The CNPS rare plant rank is 1B.2, (rare, threatened or endangered in California and elsewhere; fairly threatened in California). An Annual herb with hairy prostrate stems that forms mats and blooms May through October. The plant is found in dry streambeds, outcrops, dry gravelly and grassy slopes, flats, and roadsides in valley and foothill grassland habitat types. This plant is endemic to Tehama County's west side although no suitable habitat is present within the project area. No negative impacts would occur to *C. ocellata rattanii* from the project.

Adobe-lily (Fritillaria plurifora)

The CNPS rare plant ranking for this species is 1B.2, (rare, threatened or endangered in CA and elsewhere; fairly threatened in California). A Perennial herb that is native to California and is a chaparral foothill grassland bulb species that is usually found in adobe clay soils of the foothills and low mountains in the area. *F. pluriflora* produces an erect stem reaching heights between ten and fifty centimeters and is usually readily observed during the flowering period. It has up to ten thick, long, oval-shaped leaves with wavy margins, most of which are clustered at ground level. The nodding flower has bright pink petals, each one to four centimeters long with a center that is pinkish to yellowish, nectary with bright yellow anthers. The plant is not expected to occur within the project area as heavy clay soils are not present. No negative impacts would occur to *F. pluriflora* from the project.

Boggs Lake hedge-hyssop (Gratiola heterosepala)

The CNPS rare plant rank for this species is 1B.2, (rare, threatened or endangered in CA and elsewhere; fairly threatened in California). It is listed by the state of California as "Endangered". An annual herb native to California that is found as scattered individuals in in shallow waters or on low-slope mudflats of vernal pools, ponds, and lake margins (between 5 and 2400 meters). Some occurrences have been found on recent man-made wetlands. Some light disturbance, like moderate grazing, may be beneficial by aiding in seed burial and dispersal. They bloom anywhere between April and August, depending on weather and elevation, and may last a month as the water recedes and exposes more habitat. The species typically self-pollinates and fruits mature 1-2 weeks after flowers open. No habitat is present within the project area and no impacts would occur to *G. heterosepala* from the project.

Finger rush (Juncus digitatus)

The CNPS rare plant rank is 1B.1, (rare, threatened, or endangered in California and elsewhere; seriously threatened in California). This plant is a rare species of rush, endemic to Shasta County, California, where it is known from only two occurrences near Shingletown. It occurs in spring-moist habitat such as vernal pools in sunny locations in the foothills. An annual herb forming small, dense clumps of thin, almost hair like stems which are red in color much of the time and measure up to 10 centimeters tall. The leaves have blades no more than about 2 centimeters long and are mostly limited to the base of the plant. The inflorescence is a single flower or a cluster of up to eight flowers at the tips of the stems with fruit a red or brownish color, containing a fingerlike capsule one to two centimeters long. Much of the suitable habitat has been reduced by the conversion of the land to agriculture although it could be established on suitable microsites within the following habitat types: cismontane woodland, lower montane coniferous forest, vernal pools, and wetlands. No suitable habitat is present in the project area. No impacts would occur to *J. digitatus*t.

Red Bluff dwarf rush (Juncus leiospermus var. leiospermus)

The CNPS rare plant rank is 1B.1 (rare, threatened or endangered in California and elsewhere; seriously threatened in California). An annual, flowering in March to May, that is found in chaparral, valley and foothill grassland, cismontane woodland, and vernal pool sites on clay soils and vernally mesic microsites. Endemic to California, this species is known from thirty-two occurrences comprising at least 30,000 individuals. The taxon occurs in Butte, Shasta, and Tehama Counties and is threatened by development, grazing, off-road vehicle activity, road construction, and land conversion to agriculture. Clay soils and vernal habitat is not present in the project area. No impacts would occur to *J. leiospermus*.

Legenere (Leegenere limosa)

The CNPS rare plant ranking for this species is 1B.1, (rare, threatened or endangered in California and elsewhere; seriously threatened in California). An annual herb native to and endemic to California that blooms April through June and is associated with vernal pools that grow along wet margins (can be present in artificial vernal pools). This habitat type is not present within the project area so this species is unlikely to be present. No negative impacts would occur to *L. limosa*.

Broad-nerved hump moss (Meesia uliginosa)

The CNPS rare plant rank is 2B.2, (rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California). There are scattered occurrences in California that are found primarily in the Sierra Nevada and southern Cascade Range. Occur on damp soils, bog and fens, meadow and seeps, upper montane coniferous forest, and wetlands. The species blooms from July to October. Suitable habitat is not present in the project area. No impacts would occur to *M. uliginosa* from the proposed project.

Baker's navarretia (Navarretia leucocephala spp. bakeri)

The CNPS rare plant ranking is 1B.1, (rare, threatened or endangered in Calfornia and elsewhere; seriously threatened in California). An annual herb that is native and endemic to California and found in Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest, vernal pools and swales on adobe

or alkaline soils. Suitable habitat is not present in the project area. No impacts would occur to *N. leucocephala spp. bakeri* from the proposed project.

Slender Orcutt grass (Orcuttia tenuis)

The CNPS rare plant ranking is 1B.1, (rare, threatened or endangered in California and elsewhere; seriously threatened in California). It is listed by the state of California as "Endangered" and by the federal government as "Threatened". An annual herb, native and endemic to California that is found locally on bed of shallow vernal ponds in oak woodland or grassland with soils consisting of inks cobbly loam with hardpan. The species blooms May through September. No suitable habitat is present within the project area. No impacts would occur to O. *tenuis*.

Ahart's paronychia (Paronychia ahartii)

The CNPS rare plant rank is 1B.1, (rare, threatened or endangered in California and elsewhere; seriously threatened in California). An annual herb native to California and endemic to the State. A small almost inconspicuous annual 3/16-1/2-inch-tall that is found on rocky, sterile, clay-rich terrace soils growing on the stoniest microsites within its habitat where the density of competing annual plants is low. The species blooms March through June and is found in cismontane woodland, valley and foothill grassland, vernal pool, and wetlands. Suitable habitat may be present in oak woodland although clay soils are not available on the project site. No impacts would occur *P. ahartii* from the project.

Brownish beaked-rush (*Rhynchospora capitellata*)

The CNPS rare plant ranking for this species is 2B.2, (rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California). A perennial grass like herb (rhizomatous) that produces clumps of stems 20 to 100 centimeters tall, each stem sheathed with several narrow pointed leaves. The inflorescence is a cluster of brown spikelet's each about 3 to 4 millimeters long. Native to California and found in lower montane coniferous forest, marsh and swamp, meadow and seep, upper montane coniferous forest, and wetlands. It blooms from July through August. The project area is outside of riparian zones and vegetation that supports this species does not occur on the project site. No impacts would occur to *R. capitellata* from the project.

Hall's repertia (Repertia hallii)

The CNPS rare plant rank 1B.2, (rare, threatened or endangered in California and elsewhere; fairly threatened in California). A perennial herb that blooms from July through August that can reach up to three feet with compound leaves. The species fruits are small rarely seen pods. They are found in Tehama County above 2,900 feet, on gentle slopes and woodland openings, and sometimes on disturbed sites such as roadsides. Found in cismontane woodland and lower montane coniferous forest. The project area is 2,00 feet in elevation and does not contain suitable habitat for this species. No impacts would occur to *R. hallii*.

Sanford's arrowhead (Sagittaria sanfordii)

The CNPS rare plant rank for this species is 1B.2, (rare, threatened or endangered in California and elsewhere; fairly threatened in California). A perennial herb (rhizomatous, emergent) native and endemic to California blooming from May through October. Habitats include marshes and swamps, in standing or slow moving water, ponds, marshes, and

ditches. They can colonizes disturbed areas and are thought to be threatened by grazing, development, recreational activities, non-native plants, road widening, and channel alteration and maintenance. There is suitable habitat in nearby Plum Creek, but no suitable habitat is present in the project area. No negative impacts would occur to S. *sanfordii*.

Long-stiped campion (Silene occidentalis ssp. longistipitata)

The CNPS rare plant rank is 1B.2 (rare, threatened or endangered in California and elsewhere; fairly threatened in California). A perennial herb endemic to California that blooms from July through August and found in chaparral, lower montane coniferous forest, and upper montane coniferous forest. No suitable habitat occurs in the project area. No impacts would occur to *S. occidentalis spp. Longistipitata* from the project.

Maverick clover (Trifolium piorkowskii)

The CNPS rare plant ranking for this species is1B.2 (rare, threatened or endangered in California and elsewhere; fairly threatened in California). An annual herb that is native to California which is extremely rare and appears to be endemic to Shasta County. Likely no habitat is found in the project area as the project is within Tehama County. No negative impacts to *T. piorkowski* is expected to occur from the proposed project.

Discussion

 a) Would 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 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fish and Wildlife or the U.S. Fish and Wildlife Service?		\boxtimes		

The proposed project will remove approximately 44 trees (38 are white oak, 4 sycamores and 2 ornamentals) and disturb a little over an acre in total. Most the tree removal is associated within the northern portion of the project site where the trench (approximately 1000-foot-long, four feet deep by six feet wide) and 180,000-gallon water tank will be located. Thirteen of these trees are at the tank site, twenty-five along the trench site and six at the kitchen site. At the kitchen site, two mature sycamores' will be removed in association with the sewer replacement pipe at the barracks which is adjacent to the new kitchen/dining room facility.

Tree removal could have an impact on birds that use the trees during nesting season (March 1 through August 31). All native birds, including raptors, are protected under the California Fish and Wildlife Code and the Federal Migratory Bird Treaty Act (MBTA). The following mitigation measure will be implemented to avoid a significant impact to native birds that may use the trees to nest. **Mitigation BIO-1** below shall be implemented to ensure impacts are less than significant.

Occurrences of special status plants and wildlife within five miles of the project area and identified in the CNDDB include western pond turtle, (*Emys marmorata*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), spotted bat (*Euderma maculatum*), foothill yellow legged frog, (*Rana boylii*) and Shasta clarkia, (*Clarkia borealis ssp. arida*).

The proposed project site is located approximately 350 feet north of Plum Creek. The slope between the project site and Plum Creek is well vegetated and provides the filter stripe needed to ensure sediment and or runoff is not transported down slope from the project site to the creek. Additionally, the proposed project is subject to the Construction Storm Water Program pursuant to California State Water Resources Control Board. Potential water quality impacts are present during demolition and grading and post project due to the increase in non-permeable surfaces and pollutants. Demolition activities would create debris and pollutants that could affect water quality and construction activities will disturb soils that can cause sedimentation during storm events. Steelhead trout are especially sensitive to sedimentation. The increase in impervious surfaces from the completed project could create additional runoff that could impact the watershed.

CAL FIRE will need to obtain a Construction General Permit from the Central Valley Regional Water Quality Control Board (National Pollutant Discharge Elimination System) as part of the Project. With implementation of best management practices and permit requirements to minimize contact with potential stormwater pollutants and decrease erosion, potential significant impacts to special status aquatic species would be reduced to a less than significant level (see *Hydrology and Water Quality*).

BIO-1 PRE-CONSTRUCTION NESTING SURVEY

- Conduct a pre-construction nesting bird survey of all suitable habitat on the project site within 7 days prior to the commencement of construction during the nesting season (March 1 through August 31). Pre-construction nesting surveys are not required for construction activity outside of the nesting season (September 1 through February 28).
- 2. If active nests are found, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist (or forester) in accordance with buffer distances relative to the species identified). Once construction activities commence on-site, all nests will be continuously monitored by a qualified biologist (or forester) to detect any behavior changes resulting from construction of the proposed project. If behavioral changes are observed that may result in adverse effects to the success of breeding, the work causing the change shall cease and consultation with CDFW shall be initiated to identify potential avoidance and minimization measures. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest tree, to be determined by a qualified biologist (or forester). No ground-disturbing or construction activities can occur within the buffer until the fledglings are capable of flight and become independent of the nest, no further measures are necessary and construction may commence.

With implementation of the above **BIO-1** mitigation measure, impacts would be less than significant.

 b) Would 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 Wildlife 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
or the U.S. Fish and Wildlife Service?				\boxtimes

The proposed project is not located within a riparian area or other sensitive natural community. Chapter 5 and Chapter 6 of Tehama County's General Plan defines sensitive habitats as:

Sensitive habitats in Tehama County include serpentine soils, rock outcrops, wetlands, lakes, rivers, vernal pools, and old growth forests. These habitats are likely to harbor special-status plant and animal species or provide the potential for these species.

Riparian Habitats are defined as:

Support numerous plants, fish, and wildlife species and are considered to be a sensitive resource. Riparian vegetation provides shade, bank stabilization, sediment control, organic litter, large woody debris, nutrient control, microclimate and wildlife habitat. Riparian zones also act as a flood buffer during high water events. All of these are required for a healthy, functioning ecosystem.

The General plan provides for the protection of sensitive habitats through implementation of several policies such as:

- 1. Policy ED-7.1 The County shall continue to preserve Tehama County's natural resources including agriculture, timberlands, water and water quality, wildlife resources, minerals, natural resource lands, recreation lands, scenic highways, and historic and archaeological resources. The protection of natural resources is of the utmost importance and promoting business expansion, retention, and recruitment should complement and enhance the natural resources while reducing negative impacts.
- 2. Policy OS-3.1 The County shall preserve and protect environmentally-sensitive and significant lands and water valuable for their plant and wildlife habitat, natural appearance, and character.
- Policy OS-3.2 The County shall protect areas identified by the California Department of Fish and Game and the California Natural Diversity Data Base as critical riparian zones
- b) The County shall support and coordinate County plans with inter-jurisdictional programs for Best Management Practices of riparian resources in the County.
- c) The County shall promote best management practices of natural resources that will enhance wildlife habitat.

The project site is not in conflict with the general plan policy requirements. No impact would occur.

c)	Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	means?				\boxtimes

No protected wetlands or waters will be impacted by the proposed project and there are no wetland features onsite identified on wetland maps. Plum Creek, a perennial Class I watercourse, is approximately 350 feet to the south and will not be impacted by the proposed project.

d)	Would 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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	nursery sites?			\boxtimes	

There are no wildlife corridors on or near the project site. Although not a wildlife corridor, the project area is in the winter range for the Tehama deer herd and they have been observed on the property. The surrounding landscapes provide ample opportunity for deer movement. Additionally, all native birds, including raptors are protected under the MTBA and the California Fish and Wildlife Code. Implementation of **Mitigation Measure BIO-1**, a pre-construction nesting survey, will avoid any potentially significant impacts for birds using the project site as nesting habitat. Impacts would be less than significant.

 e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes	

The proposed project will remove approximately 44 trees from the project site. Tree removal is necessary to accommodate the new upgraded facilities.

Tehama County Board of Supervisors adopted a Voluntary Oak Woodland Management Plan in 2005. The purpose of this document was to expand upon, refine, and improve voluntary oak protection guidelines that had been established by the County in 1994, and to provide a consistent policy for conservation and use of oak woodland habitats throughout the County.

Additionally, Senate Bill 1334 passed in 2004 added section 21083.4 to the Public Resources Code related to oak woodland conservation. The Act requires the consideration of oak woodland conservation as part of the California Environmental Quality Act. Specifically requires a determination as to whether a project may result in a conversion of oak woodlands that will have a significant effect on the environment. If such a determination of significance is made, then one or more specified alternatives to mitigate the effect of woodland conversion would need to be included. Mitigation options include the protection of existing oak woodland or the planting of trees.

The site is within a larger woodland area and the project proposes to remove 44 trees. Original site plans provided by the contractor to CAL FIRE staff had identified over 120 trees slated for removal in and adjacent to the proposed trench site, water tank site and a soil disposal site. Through pre-consultation and an on-site visit with the contractor, this list has been pared down to the 44 trees necessary to accommodate the infrastructure improvements. CAL FIRE staff have determined that limiting the removal to 44 trees mitigates the concern over whether this project would constitute an oak woodland conversion and will not result in a significant adverse effect on the environment and does not constitute an oak woodland conversion.

The project site is not located in a rural or urban service line, is not visible from a scenic road, and is not within a designated scenic resource area or located in a sensitive habitat. The proposed project would not conflict with Tehama County ordinances or policies.

f)	Would 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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\boxtimes

The project site is not located within an area subject to any adopted habitat conservation plan, natural community conservation plan or other local, regional, or state habitat conservation plan. No impact would occur.

CULTURAL RESOURCES

Environmental Setting

A Cultural Resources Assessment was prepared for the proposed Ishi Camp facility project to ascertain the presence of potentially significant historical resources in terms of their eligibility for listing on the *National Register of Historic Places* and/or

the *California Register of Historical Resources*, and to offer pertinent management recommendations for such resources (Velasquez, 2020).

The principal types of historical resources likely to be discovered in the project region include prehistoric and historical archaeological sites, features and artifacts. Prehistoric archaeological sites manifest evidence of human activity, usually disclosed by the presence, in surface or subsurface contexts, of features, artifacts and ecofacts, often but not invariably occurring on, or in, humanly affected sediment (anthropic deposits).

Prehistoric archaeological sites often contain animal bone, shell, charcoal and other refuse, as well as flaked, polished, and ground stone tools, potsherds, and culinary stones (or their counterpart, baked clay objects), as well as burials (inhumations). Prehistoric archaeological remains include but are not limited to isolated or associated artifacts, such as projectile points, knives, scrapers, awls, hammerstones, lithic debitage, beads, milling implements, potsherds, and culinary stones or baked clay objects; evidence of structural features; e.g., housepits, ceremonial lodges, sweathouses, fish traps, bedrock milling stations, hunting sites, rock art, quarries, trails and isolates; and subsurface remains, including inhumations, caches of artifacts, or buried features.

Archaeological and historical sites can be given a measure of protection if they are eligible for nomination to the *National Register of Historic Places* (36 CFR 600.4 and 36 CFR 800). The National Register criteria and other information issued by the Advisory Council on Historic Preservation, present the legal measures of significance relevant to historical resources. The National Register of Historic Places (NRHP) criteria are the following:

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

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or
- C. that embody the distinctive characteristics of a type, period, method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack distinction; or

D. that have yielded, or may be likely to yield, information important to prehistory or history [36 CFR 60.4 (a-d)].

Additionally, on September 27, 1992, Assembly Bill (AB) 2881 (Statutes of 1992, Chapter 1075) was signed into law amending the Public Resources Code as it affects historical resources (State of California Office of Historic Preservation 1998; State of California Public Resources Code 1992). This legislation, which became effective on January 1, 1993, also created the *California Register of Historical Resources* (CRHR).

An historical resource must be significant at the local, state or national level under one or more of the following four criteria:

- A. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
- B. It is associated with the lives of persons important to local, California or national history;
- C. It embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of a master or possesses high artistic values;
- D. It has yielded or has the potential to yield information important to the prehistory or history of the local area, California or the nation.

All resources nominated for listing on the *California Register of Historic Resources* must demonstrate integrity, which is the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance (Hardesty and Little 2000). Resources must retain sufficient historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling and association. It must also be judged with reference to the particular criteria under which a resource is proposed for eligibility. Alterations over time to a resource or historic changes in its use or function may themselves have historical, cultural, or architectural significance.

It is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the National Register but may yet be eligible for listing in the California Register. A resource that has lost its historic character or appearance may still retain sufficient integrity to qualify for the California Register if the resource maintains the potential to yield significant scientific or historical information.

PALEONTOLOGICAL RESOURCES

Paleontological resources include the remains and/or traces of prehistoric life (exclusive of human remains, artifacts or features), including the localities where fossils were collected and the sedimentary rock formations in which they were formed. The defining character of fossils is their geologic age. Fossils or fossil deposits are generally regarded as being older than

10,000 years, marking the end of the late Pleistocene and the beginning of the Holocene. A unique paleontological resource is any fossil or assemblage of fossils, paleontological resource site, or formation that meets any one of the following criteria:

- Is the best example of its kind locally or regionally,
- Illustrates a life-based geologic principle (e.g., faunal succession),
- Provides a critical piece of paleobiological data (illustrates a portion of geologic history or provides evolutionary, paleoclimatic, paleoecological, paleoenvironmental or biochronological data),
- Encompasses any part of a "type locality" of a fossil or formation,
- Contains a unique or particularly unusual assemblage of fossils,
- Occupies a unique position stratigraphically within a formation, and
- Occupies a unique position, proximally, distally or laterally within a formation's extent or distribution.

Discussion

a)	Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes	

The proposed Ishi Camp facility project footprint is adjacent to one previously documented prehistoric archaeological resource and contains historic era buildings and structures constructed in the 1960s. The complex includes a California Department of Forestry and Fire Protection (CDF) office, California Department of Corrections (CDC) office, mess-hall, barracks, CDF residence, CDC residence, an apparatus building, a warehouse/auto shop and gas house. A residence garage was constructed in 1962, a forestry residence in 1965 and three storage buildings in 1967 (California Department of Forestry and Fire Protection 2012:136-137; Foster and Thornton 2001:939). The original warehouse burned down and was rebuilt in 1993 (Jenkins 1993:2). The compound also has a ball field and a garden area. With metal lap siding and standing seam metal roofs, the buildings are constructed with a style, material and overall facility design common to other conservation camps of the era, such as the ca. 1962 Intermountain Camp in Lassen County, Deadwood Camp in Siskiyou County, and Alder Camp in Del Norte County.

The majority of the Ishi Camp complex buildings were constructed between 1960 and 1967 but have not been evaluated for National or California Register eligibility. Except for the destroyed kitchen and warehouse, the buildings generally maintain integrity of location,

design, setting, workmanship, material, and feeling; however, they do not appear to be associated with significant events or persons, they are common and do not embody the distinctive characteristics of a type, period, region, or method of construction, and they are not likely to yield information important in history. Although the camp complex is not anticipated to meet eligibility criteria set forth per PRC 5024.1(c)(1-4), designing the proposed Ishi Camp facility project to incorporate use of in-kind materials and style for the new kitchen facility, to rebuild the kitchen in its original footprint, to reconstruct the altered mortared stone wall in front of the barracks using the original wall's materials and design, and to trench under the external mortared stone wall is intended to maintain the integrity and aesthetics of the remaining camp complex buildings. The proposed fire water tank's location approximately 1000 feet upslope of the historic camp complex will not impact the facility's integrity.

b)	Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes		

In addition to reviewing in-house cultural resource data sets, records checks completed for recent projects on the Ishi Camp property were also reviewed. The Ishi Camp property has been the subject of one complete survey (Carmosino 1993), and various project-driven survey, testing and monitoring investigations since the initial survey. The proposed project footprint, including the water tank location, access road and trench alignment, was inventoried for cultural resources in January and April of 2020. Coverage intensity was complete, and surface visibility was excellent due to seasonal timing and previous prescribed fire activity. Sub-surface testing was proposed for the water tank location to determine presence/absence of subsurface cultural resources. This testing was completed in May 2020. No cultural resources were identified during the 2020 pedestrian inventory, Carmosino's 1993 inventory, or during the 2020 subsurface testing.

Extensive subsurface investigations of the adjacent prehistoric archaeological site and those conducted in advance of other ground disturbing projects on camp property, as well as subsequent subsurface impact monitoring in the site's vicinity, have established boundary extents for identified cultural materials. Actions associated with the proposed Ishi Camp facility project are located outside the established boundaries of the previously identified archaeological site, in an area with a low potential for buried cultural deposits to occur. However, there is always a potential for unknown resources to be discovered during project implementation. The following mitigation measures will ensure that impacts will be less than significant in the event that any unknown cultural resources are discovered.

CR-1 POST-REVIEW DISCOVERY

In the event of discovery of cultural resources, work shall cease in that area while the CAL FIRE archeologist and tribal representative evaluate said find. Construction

work may continue is other areas of the project, as determined by the CAL FIRE archaeologist, until the discovery is examined and evaluated. The CAL FIRE archeologist shall notify the project director when work can continue in the area of the discovery.

CR-2 HUMAN REMAINS

In the event of discovery of human remains, whether intact, fragmentary, or displaced from their original context, the County Coroner and the Native American Heritage Commission (NAHC), West Sacramento (916-373-3710), shall be notified of the discovery immediately, and all work in the vicinity of the find shall cease, as determined by the CAL FIRE archaeologist, and there shall be no further excavation or disturbance of the find site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of that county in which the remains are discovered has determined whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission. The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and Assembly Bill 2641 shall be implemented._ Upon request, the Native American Heritage Commission will provide the project director with the name and contact information of the tribe that is named the Most Likely Descendant (MLD). The identified MLD will make recommendations for the treatment and disposition of any Native American remains found within the area of potential effect of the project. Final disposition of the human remains is subject to approval of the landowner. Human remains and associated grave goods are protected under Public Resources Code § 5097.94 and Health and Safety Code § 7050.5. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

CR-3 MONITORING

All ground-disturbing work occurring within the camp complex will be monitored by a qualified professional archaeologist; additionally, local Native American representatives will be invited to monitor ground-disturbing work conducted in association with the project.

c)	Would the project disturb any human remains, including those interred outside of formal cemeteries?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes		

The cultural resource investigations did not indicate the presence of human remains or associated grave goods within the project area. Nonetheless, unknown remains could always be uncovered during ground disturbing activities. In the event human remains are discovered during project implementation, the requirements of Mitigation Measure CR-2

would be implemented. Incorporation of **Mitigation Measure CR-2** and **Mitigation Measure CR-3** will help ensure that potential impacts would be less than significant.

d)	Would the project cause a substantial adverse change in the significance of a tribal cultural resource pursuant to Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe,	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?				

AB 52 (2014) relating to Native Americans establishes a process for consulting with Native American tribes and groups regarding these resources. Tribal cultural resources are "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe....". A tribal cultural resource must be on, or eligible for, the CRHR for historical resources, or must be included in a local register of historical resources. AB 52 indicates that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource may have a significant effect on the environment (PRC Section 21084.2).

The bill requires a lead agency to begin consultation with a California Native American tribe traditionally and culturally affiliated with the geographic area of the proposed project and to inform the tribe, if requested, of proposed projects prior to determining what type of environmental document is required.

CAL FIRE's list of Native American Tribes requesting AB52 consultation was reviewed prior to cultural analysis and found to contain two Native American groups in the region: the Mechoopda Indian Tribe of Chico Rancheria and the Pit River Tribe in Burney, California. Traditional boundary maps provided by both groups were inspected and it was determined the Ishi Camp property does not fall within either Tribe's geographically identified consultation area. Per advisement from CAL FIRE's Cultural Resource Program Manager and consistent with CAL FIRE's Tribal Relations Policy, CAL FIRE's Northern Region Archaeologist sent project notification letters to Tribal representatives listed on CAL FIRE's Native American Contact List for Tehama County on April 28, 2020.

As part of the cultural resource investigation, the Enterprise Rancheria of Maidu Indians, Greenville Rancheria, Tasman Koyom Indian Foundation, Paskenta Band of Nomlaki Indians and the Redding Rancheria were notified. One response to this outreach was received.

In addition to Native American notification, a Sacred Lands File search was conducted with the Native American Heritage Commission on May 7, 2020.

The cultural resource investigations did not indicate the presence of Native American sites within the project area. Nonetheless, previously unidentified cultural materials could always be uncovered during ground disturbing activities. In the event cultural resources are discovered during project implementation, the requirements of Mitigation Measure CR-1 would be implemented. Incorporation of **Mitigation Measure CR-1** and **Mitigation Measure CR-3** will help ensure that potential impacts would be less than significant.

e)	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe,	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	and that is: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?				

As indicated in the previous sections, cultural resource investigations did not indicate the presence of Native American sites within the project area. Nonetheless, previously unidentified cultural materials could always be uncovered during ground disturbing activities. In the event cultural resources are discovered during project implementation, the requirements of Mitigation Measure CR-1 would be implemented. Incorporation of **Mitigation Measure CR-1** and **Mitigation Measure CR-3** will help ensure that potential impacts would be less than significant.

ENERGY

Environmental Setting

<u>STATE</u>

STATE OF CALIFORNIA ENERGY PLAN

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including providing assistance to public agencies and fleet operators, encouraging urban designs that reduce vehicle miles traveled, and accommodating pedestrian and bicycle access.

TITLE 24, ENERGY EFFICIENCY STANDARDS

The California Energy Code (Title 24, Part 6, of the California Code of Regulations, California's Energy Efficiency Standards for Residential and Nonresidential Buildings) establishes energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The provisions of the California Energy Code apply to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances; they also guide construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including appliances, water and space heating and cooling equipment, and insulation for doors, pipes, walls, and ceilings. The

CEC adopted the 2005 changes to the Building Efficiency Standards, which emphasized saving energy during peak periods and seasons, and improving the quality of installation of energy efficiency measures.

<u>LOCAL</u>

Tehama County has the following energy policies in the county general plan related to energy efficiency:

Policy OS-2.6

The County shall promote improved air quality benefits through energy conservation measures for new and existing development.

Implementation Measure OS-2.6a

Require energy-conserving features in the design and construction of new development. Many options exist for reducing pollution from energy- producing systems, including the following:

- Requiring the use of the best available technologies to reduce air pollution standards.
- Using building materials and methods that reduce emissions.
- Requiring that development projects be located and designed in a way that minimizes direct and indirect emission of air contaminants.
- Installing efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces, and boiler units.
- Utilizing automated time clocks or occupant sensors to control heating systems.

Implementation Measure OS-2.6d

Encourage the use of "EPA Energy Star"-certified appliances.

Implementation Measure OS-2.6f

Promote the incorporation of energy-conserving design and construction techniques in all facilities.

a)	Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	operation?				\boxtimes

The project would replace a kitchen that was recently destroyed by fire. The kitchen had been built prior to current energy efficiency standards and was not energy efficient. The construction of the new kitchen would use standard construction practices that would not require an unnecessary consumption of energy resources. Additionally, the new fire kitchen would implement energy efficient features as required by the California Energy Code (Title 24). The Building Energy Efficiency Standards are designed to ensure new and existing buildings achieve energy efficiency and preserve outdoor and indoor environmental quality. No impacts would occur.

 Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes

The project would not conflict or obstruct a state or local plan for renewable energy or energy efficiency. The conservation camp was constructed in the 1950's with several accessory structures built subsequently. The old structures are not energy efficient and the new kitchen will be constructed using new uniform building codes for energy efficiency and improving energy usage. No impact would occur.

GEOLOGY AND SOILS

Environmental Setting

<u>Geology</u>

A Geotechnical Engineering Investigation was conducted on the proposed site (CTE CAL, Inc., February 4, 2019).

The site lies within the southern section of the Cascade Range geomorphic province of California. The Cascade Range province is characterized by a chain of volcanic mountains from northern California to British Columbia. The predominant geological formations consist of quaternary and tertiary volcanic rocks overlain by a thin accumulation of Quaternary deposits.

Based on a published geologic map "Geologic Map of California (2010)" published by the California Department of Conservation, the site is indicated to be underlain by Tertiary volcanic flow rocks and pyroclastic deposits.

<u>Soils</u>

Earth materials encountered within the borings consisted of fill material to a depth of one foot below ground surface (bgs), underlain by a firm, low plasticity clay (CL). On the southeastern corner of the development, four (4) feet of silty sand (SM) at depths from 1 to 5 feet were encountered. Alluvial deposits extended to a depth of 9 feet bgs, at which point welded volcanic tuff "GP-GM" was encountered. Groundwater was encountered at a depth of 5 ft bgs.

Test pits excavated near the proposed tank location were generally characterized by volcanic welded tuff overlain by 1-5 feet of loose alluvial silty sand with clay. Alluvial deposits trended thicker in the northwesterly direction under the tank footprint.

Geologic Hazards

The site is not within a State of California-designated Alquist-Priolo Earthquake Fault Studies Zone, and no known active fault traces shown on published hazard mapping underlie or project toward the site. CGS Fault Map Activity of California shows that the site lies within a group of inactive, short, Pre-Quaternary faults (Older than 1.6 million years). The Battle Creek Fault, located 9.88 miles to the west, is the closest known active fault and is potentially capable of generating an earthquake moment magnitude of 6.7.

Fault Name	Approximate Distance from	Maximum Earthquake
	Site (miles)	Magnitude, M _w
Battle Creek 2011	9.88	6.7
Hat Creek-McArthur Mayfield	34.5	7.2
Great Valley I	48.84	6.8
Honey Lake	71.08	7.0
Great Valley 2	73.85	6.5
Bartlett Springs	79.3	6.0

Table 5. Nearest Faults

Discussion

- a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - No i) Rupture of a known earthquake fault, as Potentially Less Than Less Than Impact delineated on the most recent Alguist-Significant Significant Significant Priolo Earthquake Fault Zoning Map Impact Impact with issued by the State Geologist for the area Mitigation or based on other substantial evidence of Incorporated a known fault? (Refer to California Geological Survey Special Publication 42.) \square \square \boxtimes

ii) Strong seismic ground shaking?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes	
iii) Seismic-related ground failure, including liquefaction?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes	
iv) Landslides?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes	

Ground Rupture?

As with all of California, the site has experienced historic earthquakes from various regional faults. Based on the geotechnical review of available reports published by CGS and the United States Geological Survey (USGS), the site has not experienced reported ground failure due to past earthquakes. The site is not located within a currently designated State of California Earthquake Fault Zone (Bryant and Hart, 2007) and, based on regional geologic mapping, there does not appear to be any known active faults projecting toward or extending across the project site (Department of Conservation, California Geological Survey letter, May 2016). No impact would occur.

Strong seismic ground shaking?

As with most areas within California, the site could be subject to low to moderate ground shaking in the event of an earthquake.

This is common in California and the effects of ground shaking can be addressed by proper engineering design and construction in conformance with current building code requirements and sound engineering practices. The project will be designed by registered engineers that are required to adhere to the current California Building Code standards. Additionally, the plans will need to be approved by the California Division of State Architect and the Office of State Fire Marshall. This process would ensure that the potential impacts from ground shaking would be less than significant.

Seismic-related ground failure, including liquefaction?

Liquefaction is described as the sudden loss of soil shear strength due to a rapid increase in soil pore water pressures caused by cyclic loading from a seismic event. A liquefied soil acts more like a fluid than a solid when shaken during an earthquake. For liquefaction to occur during a seismic event, the following are needed:

- Granular soils (sand, silty sand, sandy silt, and some gravels);
- A high groundwater table; and,
- A low density in the granular soils underlying the site.

If those criteria are present and strong ground motion occurs, then those soils could liquefy, depending upon the intensity and duration of the strong ground motion. Liquefaction that produces surface effects generally occurs in the upper 50 feet of the soil column, thus, the potential for liquefaction to have an adverse effect would generally require the criteria above to persist within 50 feet below the surface.

The project site is not currently mapped for potential liquefaction hazard by the California Geological Survey (CGS) and there is no history of liquefaction at the site.

Based on the explorations of the subsurface soils at the site the types encountered consist of loose sands with silt (SM) and low plasticity clays (CL), which are underlain by the volcanic welded tuff "GP-GM". Investigation data indicates that groundwater is located at approximately 5 feet bgs. Based on the site location and relatively low intensity of ground shaking the possibility of large differential settlements due to seismic dry sand settlement or liquefaction is considered low and therefore the potential for catastrophic building collapse due to a seismic liquefaction event are not likely in an area of relatively shallow soil deposits and low seismicity.

Impacts will be less than significant.

Landslides?

Based on information available on the California Geological Survey (CGS) website the subject site is not currently mapped within a State of California Seismic Hazard Zone for seismically induced landslides. Due to the shallow depth of overlaying soils on the slope adjacent to the project site, seismically induced and/or other landslides are not considered a significant hazard at the site.

b)	Would the project result in substantial soil erosion or the loss of topsoil?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes	

Best management practices (BMPs) are included as part of the Storm Water Pollution Prevention Plan that will be prepared for the proposed project and will be implemented to manage erosion and the loss of topsoil during construction-related activities (see *Hydrology and Water Quality Section*). Soil impacts would be reduced to a less than significant impact.

c)	Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence,	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
	liquefaction, or collapse?			\boxtimes		

To evaluate earthquake induced settlement at the site, the total vertical settlement due to earthquake shaking was performed in accordance with the updated code-based ground motions. The data indicated no liquefaction hazard throughout the full 100 feet of explored subsurface.

Based upon the findings, impacts would be less than significant.

d)	Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes	

Surficial soils encountered at the site are described as silty sands and low plasticity clay which are underlain by rock. The soils should not be subjected to significant compression under anticipated loads. The soils encountered generally exhibited low plasticity characteristics within the depth of structure influence and therefore will not be subjected to significant expansion/shrinkage upon cyclic moisture exposure. Impacts will be less than significant.

e)	Would 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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
	disposal of waste water?				\boxtimes	

The project site currently has a septic tank and leach field that will continue to be used. The project site soils support the use of a septic tank and leach field. No impacts should occur.

f)	Directly or indirectly destroy a unique paleontological resource or site of unique geologic feature?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\boxtimes

No known paleontological resources are located within the compounds of the conservation camp and there are no unique geologic features within the area where the project will be constructed. No impacts will occur.

GREENHOUSE GAS EMISSIONS

Environmental Setting

Gases that trap heat in the atmosphere are often called greenhouse gases. Some greenhouse gases such as carbon dioxide occur naturally and are emitted to the atmosphere through natural processes and human activities. Other greenhouse gases (e.g., fluorinated gases) are created and emitted solely through human activities. The principal greenhouse gases that enter the atmosphere because of human activities are:

- **Carbon Dioxide (CO2):** Carbon dioxide enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and also as a result of other chemical reactions (e.g., manufacture of cement, asphalt paving, truck trips). Carbon dioxide is also removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.
- **Methane (CH4):** Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.
- Nitrous Oxide (N2O): Nitrous oxide is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.

 Fluorinated Gases: Hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are synthetic, powerful greenhouse gases that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances (i.e., CFCs, HCFCs, and halons). These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases, they are sometimes referred to as High Global Warming Potential gases ("High GWP gases").

Various statewide and local initiatives to reduce California's contribution to Greenhouse Gas (GHG) emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is occurring. Every nation emits GHGs; therefore, global cooperation will be required to reduce the rate of GHG emissions. There are currently no state regulations in California that establish ambient air quality standards for GHGs. However, the state of California has passed legislation directing CARB to develop actions to reduce GHG emissions.

ASSEMBLY BILL 32

The California Global Warming Solutions Act of 2006, also known as Assembly Bill (AB) 32, sets a target for the state to reduce its total GHG emission levels to 1990 levels by 2020. The AB 32 Scoping Plan, developed by the California Air Resources Board (CARB) and first released in 2008, identifies local governments as strategic partners to achieve this reduction and equates a GHG reduction of 15% below existing levels as being consistent with 1990 levels. Although "existing emission levels" is not formally defined by the Scoping Plan, agencies throughout California have often interpreted it as referring to emissions occurring between 2005 and 2008. AB 32 required the Scoping Plan be updated every five years. The 2013 Scoping Plan Update builds upon the initial Scoping Plan with new strategies and recommendations. The 2013 Update defines CARB's climate change priorities for the next five years and sets the groundwork to reach California's long-term climate goals.

SENATE BILL 97 AND THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

Senate Bill (SB) 97, which was signed in 2007 and went into effect in 2010, requires that projects estimate the GHG emissions that will result from the project as part of the environmental review process under the California Environmental Quality Act (CEQA). Jurisdictions that have adopted a Qualified GHG Reduction Strategy can streamline the GHG review if the project is shown to be compliant with the strategy by meeting the requirements in CEQA Guidelines Section 15183.5(b).

CALIFORNIA AIR POLLUTION CONTROL OFFICERS ASSOCIATION

CAPCOA, the California Air Pollution Control Officers Association (CAPCOA), is a non-profit association of the air pollution control officers from all 35 local air quality agencies throughout California. CAPCOA was formed in 1976 to promote clean air and to provide a forum for sharing of knowledge, experience, and information among the air quality regulatory agencies around the State.

The CAPCOA has established a significance quantitative threshold of 900 Metric Tons (MT) a year of CO2e emissions which Tulare County Air Pollution Control District (TCAPCD) and CAL FIRE have adopted.

TEHAMA COUNTY GENERAL PLAN

The Tehama County General Plan, adopted in March of 2009, is a comprehensive, long-term document to help guide future land use and development policy in the county through 2028. All cities and counties in California are required by state law to adopt a general plan which must contain seven mandatory sections known as elements. The Open Space element of the Tehama County General Plan contains Policy OS-2.7, which requires the county to address GHG emissions.

Discussion

a)	Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

The construction of the Ishi CC Kitchen Replacement Project would generate short-term emissions from the construction equipment. Construction is anticipated to last approximately 14 months. CAL FIRE will obtain the Authority to Construct permit (see *AIR QUALITY* section) from the Tehama County Air Pollution Control District (TCAPCD) and will adhere to permit requirements for construction related emissions.

Operations of the Ishi CC would not change as a result of the kitchen replacement, paving and installation of the water tank. The new kitchen will replace a temporary kitchen and will be constructed according to current California building standards that incorporate the newest construction materials and appliances. The new kitchen will be more efficient than the current temporary kitchen.

The impact of the project on GHG emissions is expected to be less than significant and no mitigation measures are required.

b)	Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes	

The project is proposing to replace a temporary kitchen that has been used for two years after the permanent kitchen was destroyed by fire. There will not be any change in operations or staffing. As a result, the project will not have a significant impact on GHG emissions.

HAZARDS AND HAZARDOUS MATERIALS

Environmental Setting

The site was developed with the fire station between 1948 and 1954 with the associated structures built throughout the years. The buildings currently onsite include barracks and mess hall, garage, fuel vault, 3-bay apparatus building and other site improvements including gravel areas and concrete and associated infrastructure improvements.

CAL FIRE recently purchased the project site and during that process a Phase I Environmental Site Assessment (ESA) of the property was conducted (SHN Engineers & Geologists, June 2016). The purpose of conducting a Phase I ESA is to assess the property, largely based on current circumstances, with respect to the presence or absence in the environment, of regulated or hazardous materials, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), and Department of Toxic Substances Control (DTSC) Title 22 of the California Code of Regulations.

An additional survey was conducted as part of the Asbestos, Lead-Containing Paint, and Universal Waste Survey Report (December 2018) prepared by Geocon Consultants, Inc.

Structures

The buildings onsite are over 50 years old and may contain the following hazardous materials that need to be considered.

ASBESTOS

The Code of Federal Regulations (CFR), 40 CFR 61, Subpart M, National Emissions Standards for Hazardous Air Pollutants (NESHAP) and Federal Occupational Safety and Health Administration classify asbestos-containing material (ACM) as any material or product that contains more than 1% asbestos. Non-Friable ACM (any material containing more than 1% that cannot be pulverized under hand pressure) is classified as either Category I or Category II.

- Category I asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products.
- Category II all remaining types of non-friable asbestos-containing material not included in Category I that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Activities that disturb materials containing any amount of asbestos are subject to certain requirements of the Cal/OSHA asbestos standard contained in Title 8, California Code of Regulations (CCR) § 1529. Typically, removal or disturbance of more than 100 square feet of material containing more than 0.1% asbestos must be performed by a registered asbestos abatement contractor. Materials containing more than 1% asbestos are also subject to NESHAP regulations (40 CFR Part 61, Subpart M).

LEAD PAINT

Construction activities (including demolition) that disturb materials or paints containing any amount of lead are subject to certain requirements of the Cal/OSHA lead standard contained in Title 8, CCR, §1532.1. For a solid waste containing lead, the waste is classified as California hazardous when: 1) the representative total lead content exceeds the respective total threshold limit concentration of 1,000 milligrams per kilogram; or 2) the representative soluble lead content exceeds the respective soluble threshold limit concentration of 5 milligrams per liter based on the standard waste extraction test.

UNIVERSAL WASTE

Universal wastes are common hazardous wastes that are generated by households and businesses and are generally not allowed to be disposed of in solid waste landfills. Universal wastes include such items as fluorescent light tubes and lamps (that contain mercury), mercury-containing switches and thermostats, polychlorinated biphenyls (PCB), chlorofluorocarbons, batteries, paints, oils, fuels, solvents, and some electronic equipment.

<u>Land</u>

As indicated CAL FIRE developed the Ishi CC in the mid-50's and the property has been used for firefighting services in the region. The camp is developed with various structures and portions of the property are graveled or are covered with cement and asphalt. Prior to the purchase of the land, the property was in its natural condition without development.

Discussion

a)	Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\boxtimes

The proposed project replaces a kitchen that was destroyed by fire. Additional improvements include paving and the installation of a water tank. Operational uses will

remain the same and would not create a significant hazard to the public or the environment.

b)	Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	materials into the environment?			\boxtimes	

Although diesel fuel and oil, will be used during construction, proper handling and storage will be implemented during the construction period. No other hazardous materials will be generated as a result of the proposed project. Impacts will be less than significant.

 c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one- quarter mile of an existing or proposed 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
school?				\boxtimes

The project site is not located within one-quarter mile of an existing or proposed school. The nearest school is Plum Valley Elementary School located approximately two and a half miles northwest of the site. No impact would occur.

d)	Would 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, would it create a significant hazard to the public or the	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	environment?				\boxtimes

The project is not located on a site which is included on a list of hazardous materials sites. No impact will occur.

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, would the project result in a safety hazard or excessive noise for people	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
residing or working in the project area?				\boxtimes

The project is not located within an airport land use plan or within two miles of a public airport or public use airport. The closest airport is the Red Bluff Municipal Airport located approximately 30 miles southwest of the project site. No impact would occur.

f)	Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\boxtimes

The proposed project will replace a kitchen, install a water tank and replace deteriorating asphalt. The project will not impair implementation of or physically interfere with an adopted emergency plan or evacuation plan. No impacts would occur.

•	Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\boxtimes

The Tehama County Fire Department (TCFD) is administered under contract by CAL FIRE and provides fire protection, emergency dispatching, specialized training, equipment repair and maintenance, fire prevention, fire safety education and emergency medical responses to the unincorporated areas of Tehama County with the exceptions of the Gerber/Las Flores Community Service District and the Capay Fire Protection District. Thus, in Tehama County, the Tehama County Fire Department and the California Department of Forestry and Fire Protection are integrated departments that mutually support each agency's fire suppression and emergency response efforts.

The project will replace a kitchen that is essential to camp members who provide services to decrease the loss of property and protect the population located in the fire service area. No impact would occur.

HYDROLOGY AND WATER QUALITY

Environmental Setting

Tehama County has a Mediterranean climate, typified by dry, hot summers and cool, wet winters. The driest portions of the county coincide with the lower elevations along the Sacramento River where 18 inches or less precipitation is received on average each year. Precipitation levels gradually increase with elevation with the highest precipitation zones receiving approximately 65 inches of precipitation per year along the crest of the Coast Range, and from 65 to 85 inches in the Cascade Mountains and the Sierra Nevada.

Rainfall is important for recharging aquifers and providing surface water for downstream users. In Tehama County, much of the rainfall tends to travel as surface water to streams and rivers immediately following each storm event and is then conducted to water storage facilities (reservoirs) or to the Pacific Ocean via the Sacramento River. Snowfall contributes to the county's water needs in a different and vital way because it accumulates throughout the winter and is stored as snowpack, melting gradually in spring and summer supplementing the surface water flow during the warm-dry period of year when the state is in its normal dry-weather phase. Therefore, in drainages where significant amounts of snowfall and snow pack accumulation occur, stream water flow tends to be more evenly distributed throughout the year than watersheds that are at lower elevations and have little or no snow pack.

Total annual precipitation, the sum of total mean precipitation and snow pack water content, suggests that the coast range portions of Tehama County receive considerably less annual precipitation than the upper elevations of the Cascades in the eastern fringe of the county.

SURFACE WATER

Cool season rains and melting snowpack flow in county streams to the Sacramento River. The larger streams draining eastward from the Coast Range include Cottonwood, Elder, and Thomes Creek. Larger streams that flow westward to the Sacramento River, from the Cascades and Sierra Nevada, include Battle, Paynes, Antelope, Mill, Deer, and Pine Creek.

The project site is within the Tehama East Watershed located in eastern Tehama County. This watershed includes nine individual drainages: Antelope Creek, Hoag Slough, Paynes Creek, Salt Creek, Toomes Creek, Dye Creek, Inks Creek, Pine Creek, and Seven Mile Creek. The project lies within the Paynes Creek drainage. The annual mean flow for Paynes Creek is 71 cfs. Paynes Creek flows roughly 28 miles from east to west toward its confluence with the Sacramento River. From Paynes Creek headwaters to the confluence with Plum Creek is approximately 15 miles.

The water quality is generally good within this drainage and the stream isn't listed as an impaired waterbody. Plum Creek runs through the project site and provides important habitat for several species including Chinook salmon, steelhead, rainbow trout, Sacramento sucker, hardhead, and threespine stickleback (see **BIOLOGICAL RESOURCES** section). The construction area is approximately 350 feet north of Plum Creek.

GROUNDWATER HYDROLOGY

The majority of Tehama County's groundwater resources come from the Sacramento Valley groundwater basin. The Sacramento Valley groundwater basin lies at the head of the Sacramento Valley and is defined to the north by the Red Bluff Arch, a geologic structure, extending in an east-northeast series of folds and faults immediately north of Red Bluff, which effectively separates groundwater conditions of Tehama County from areas to the north.

Groundwater movement in Tehama County generally flows from both the Coast Range and Cascades toward the Sacramento River. The Red Bluff Arch structure affects water flow north in the far northern extent of the county, with groundwater movement tending to flow to the northeast.

Most of Tehama County's wells are located in a north-south swath along either side of the Sacramento River. Over 10,000 wells exist in the county with approximately 78 percent classified as having domestic usage. Twelve percent are used for irrigation, four percent for monitoring purposes, one percent for municipalities, and six percent for miscellaneous uses.

WATER QUALITY

Surface water and groundwater within Tehama County are generally of high quality, with only a few exceptions. The only river with water quality concerns is the Sacramento River, which the Regional Water Quality Control Board has classified as impaired because of an unknown toxicity. The primary groundwater quality concern is in the Antelope area, just to the east of Red Bluff. In the Antelope area, recent groundwater testing has indicated increased levels of nitrate (a precursor to a condition that prevents blood from carrying oxygen to the body) and coliform (an indicator of wastewater in the groundwater). Area septic systems are the likely cause of the contamination, and the residents are examining options for cleaner drinking water and alternative wastewater treatment methods.

Regulatory setting

CLEAN WATER ACT

The Clean Water Act was amended in 1972 to prohibit discharge of pollutants to Waters of the U.S. from any point source unless it is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In 1987, further amendments to the CWA added Section 402(p), established a framework for regulating municipal and industrial storm water discharges under the NPDES Program. In November 1990, the EPA finalized regulations establishing storm water permit requirements for specific industries. These regulations provide that storm water discharges to waters of the U.S. from construction projects with five or more acres of soil disturbance are prohibited unless the discharge is in compliance with the NPDES Permit. Further regulations (titled the Phase II Rule) which became final on December 8, 1999 lowered the permitting threshold from five acres to one acre.

While EPA regulations allow two permitting options for storm water discharges (Individual Permits and General Permits), the California State Water Resources Control Board (SWRCB) has elected to adopt only one statewide General Permit that applies to the majority of storm water discharges associated with construction activities. On August 19, 1999, the State Water Board reissued the General Construction Storm Water Board amended Order 99-08-DWQ to apply to sites as small as one acre (SWRCB 2010).

The latest General Construction Permit (Order No. 2009-0009-DWQ), which the proposed project will comply with, was adopted on September 2, 2009. Order No. 2009-0009 DWQ created several new significant changes including, formal training requirements, online permitting and SWPPP documentation upload, minimum BMPs, Numeric Action Levels for pH and turbidity, as well as monitoring based on project risk to sediment loss and threat to receiving waters (SWRCB 2010).

THE SACRAMENTO VALLEY WATER MANAGEMENT AGREEMENT

With the adoption of the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, the various users of the drainage's water met to determine the responsibilities for meeting flow requirements. Each of the local parties is required to develop and implement a variety of local water management projects that will increase water supplies cumulatively, meeting both in-basin demands and Delta water quality requirements.

Under this agreement, regional water management efforts will emphasize groundwater planning, providing for unmet demands in the Sacramento Valley, providing for water use efficiency measures, and developing water management projects for local use.

COUNTY OF TEHAMA GENERAL PLAN

The Tehama County General Plan is used to guide future development in unincorporated areas of the county. State law requires that all local governments prepare a General Plan for future development in their jurisdictions. The county's General Plan is proposed for 2008 through 2028.

Numerous policies and implementation measures included in the Safety Element, Open Space and Conservation Element and the Public Services Element address hydrology and water quality issues throughout the county.

TEHAMA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT COORDINATED AB 3030 GROUNDWATER MANAGEMENT PLAN

The 3030 Groundwater Management Plan's purposes and goals are:

- To balance long-term annual replenishment with extraction, consistent with public interest of the Plan Area population.
- To prevent long-term overdraft of groundwater.

- To develop a comprehensive groundwater basin management program which protects the county's groundwater in order to provide local users with reliable long-term water supplies.
- To gain county-wide consensus whenever possible, while implementing the groundwater management plan.
- To develop a plan to protect basin groundwater quality.

Tehama County's 3030 Groundwater Management Plan includes three phases. In Phase I only non-intervening activities occur, including performing water level and water quality monitoring; coordinating efforts with other agencies; developing data inventory and evaluation; coordinating with the technical advisory committees; issuing reports; and promoting public outreach. Phase I will continue for the duration of plan implementation. Phase II and III will only be initiated if more directed groundwater management activities are deemed necessary and would require a separate agreement between the TCFCWCD and participating entities signatory to the MOU.

Phase II could include the identification and management of well head protection and recharge areas; development of procedures and processes to interface with land use planning agencies to protect against groundwater contamination; drought and overdraft mitigation planning; replenishment assessment; and protection of in-basin beneficial uses and promotion of conservation programs. Phase III would involve "active management", including control of saline water intrusion; regulation of migration of contamination; facilitation of conjunctive use operations; and assessment, construction, and operations of various groundwater management projects (i.e., contamination cleanup, recharge, storage, conservation, water recycling, or extraction projects) (TRCDWC 2003).

Discussion

a)	Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes	

During project construction, water quality impacts and discharge could occur during storm events if proper controls are not implemented. Loose soils, chemical and fuel spills from vehicles, and equipment or miscellaneous construction materials and debris could be transported off-site in overland flow, degrading surface and groundwater quality. During a heavy rainfall, runoff from construction areas could flow off-site and reach nearby surface water drainage facilities.

The proposed project is subject to the State Water Resources Control Board and the statewide NPDES stormwater permit for construction. CAL FIRE would obtain a general permit from the Central Valley Regional Water Quality Control Board (CVRWQCB) for storm water discharges associated with the construction and land disturbance activities (estimated at a little over an acre).

Specifically, CAL FIRE will submit a SWPPP to the CVRWQCB that will identify BMPs to prevent construction pollutants and products from violating any water quality standard or waste discharge requirements.

In addition to construction related BMPs, CAL FIRE will design and construct a postconstruction storm water conveyance system pursuant to federal, state, and county standards. A Stormwater Quality Management Plan (SWQMP) will be submitted for approval that identify onsite BMPs per all applicable regulations.

Although CAL FIRE does not need to obtain any discretionary permits from Tehama County, the county codes related to water quality standards and waste discharge requirements will be adhered to through the CVRWQCB process.

Implementation of best management practices required as part of the SWPPP and SWQMP will ensure that the proposed project does not create or contribute to any water quality violation. A less than significant impact would occur.

The proposed project will adhere to all state, federal and local regulations regarding water quality and will prevent discharge of any materials or substances that may degrade water quality. Adherence to the NPDES requirements as part of the permit obtained from the CVRWQCB will control any polluted sources of water that would have the potential to impact water quality. A less than significant impact would occur.

b)	Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	management of the basin?			\boxtimes	

The proposed project is replacing a kitchen within an existing conservation camp that obtains water from an existing well. The project will not increase water usage as the project will not increase the existing operations. The well has provided adequate water supply for many years and will continue to provide water to the camp and new replacement kitchen. Impacts are less than significant.

c) Would 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 through the addition of impervious surfaces, in a manner which would:

i.	Result in substantial erosion or siltation on- or off-site?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes	
ii.	Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes	
iii.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes	

The proposed project will require grading, trenching, and the replacement of existing paved areas with a slight increase in additional impervious surfaces. The new increase in impervious surfaces compared to the existing ground conditions of compacted dirt, gravel and paving would substantially alter the current runoff or drainage patterns. The proposed project includes the installation of a new grease interceptor as part of a permanent drainage system. In addition, a SWPPP and a SWPCP will be required and will provide BMPs to be incorporated during project construction and post-construction to prevent future erosion and siltation. Implementation of proper temporary and long-term post construction erosion and sediment control BMPs will minimize potential erosion or siltation on, or off-site, during and following construction. No alterations will occur to Plum Creek that would result in erosion or siltation. Impacts would be less than significant.

 d) In a flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes

Based on the Flood Insurance Rate Maps (FIRMs) prepared by the Federal Emergency Management Agency (FEMA), the site is located in Zone D, which is not designated as a high-risk flood area. According to the Tehama County Flood Mitigation Plan (October 2006), the project site is not located within any lake or dam inundation area and the site is located approximately 200 miles from the Pacific Ocean and is not located near any large body of water.

No impacts would occur.

e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\boxtimes

The project is proposing to replace a destroyed kitchen and deteriorating asphalt area on an existing fully operational conservation camp. Additionally, a water tank will be constructed for fire suppression purposes. These improvements will not have an impact on a water quality control plan or groundwater management plan. No impacts would occur as a result of the project.

LAND USE AND PLANNING

Environmental Setting

The State of California and state-owned land are not subject to local city or county land use development permits. However, the state is subject to the requirement under CEQA to assess project-related impacts that may occur due to conflicts between existing and proposed land uses. The project was reviewed to determine consistency with Tehama's County plans and policies.

The project site is designated as Public (UA) in the General Plan. The Public land use designation represents those lands under the jurisdiction of a federal or state agency such as Lassen National Forest, Lassen Volcanic National Park, U.S. Fish and Wildlife Service, Bureau of Land Management, Department of Fish and Game, Shasta-Trinity National Forest, and the Bureau of Reclamation (i.e. Black Butte Lake). These lands provide protection and recreational opportunities. The zoning designation is identified as Government (GOV) which is intended to recognize lands that are owned by a local, state or federal agency.

Surrounding properties are designated Upland-Agriculture to the west and Public to the east, south, and to the direct north. The project site is approximately 110 acres, with only a small portion developed as a conservation camp.

Discussion

a)	Would the project physically divide an established community?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\boxtimes

The project is located on a site that has been developed with an active conservation camp since 1961. The surrounding area is grassland and oak woodland that lies within the Lassen National Forest. The replacement kitchen will not create a division within a community. No impact would occur as a result of the project.

b)	Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	environmental effect?				\boxtimes

As indicated, the project site is designated as Public in the Tehama's County General Plan and zoned GOV. The project proposes to replace a temporary kitchen that has been used for two years due to the previous kitchen being destroyed by a fire in 2017. The project will not conflict with the designated use or zoning. No impact will occur.

MINERAL RESOURCES

Environmental Setting

According to Tehama County's General Plan Environmental Impact Report (January 2009) most of Tehama County's mineral wealth is derived from the extraction of non-metallic sand, gravel, and volcanic cinder, which are used primarily by local paving and construction industries. Other mineral resources found in the county include aragonite, borax, chalcopyrite, chromite, copper, cristobalite, galena, garnet, opal, pectolite, penninite, sassolite, and Wallstonite.

The Surface Mining and Reclamation Act of 1975 requires the identification and classification of mineral resources in areas within the state that are subject to urban development or other land uses that could otherwise prevent the extraction of important mineral resources. These Mineral Resource Zones (MRZs) are classified by the State Geologist by analyzing associated geologic and economic factors. There are four general classifications based upon the State Geologist's determination of identified mineral resource significance. The four classifications are as follows:

- **MRZ-1**: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2a**: Areas underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present. Land classified as MRZ-2a contain discovered mineral deposits that are either measured or indicated reserves as determined by such evidence as drilling records, sample analysis, surface exposure, and mine information.
- **MRZ-2b**: Areas underlain by mineral deposits where geologic data indicate that significant inferred resources are present. Land classified as MRZ-2b contain discovered mineral deposits that are inferred resources as determined by their lateral extension from proven deposits or their similarity to proven deposits.
- **MRZ-3**: Areas containing mineral deposits the significance of which cannot be evaluated from available data.
- **MRZ-4**: Areas where available information is inadequate for assignment to any other MRZ.

According to the *Mineral Land Classification of Concrete-Grade Aggregate Resources in Tehama County (2001)* lands that are recognized as significant mineral designations are classified as MRZ-2a or MRZ-2b.

Discussion

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes

The project site is within an area that is identified as MRZ-3a, Crushed Stone (CS). This designation is for areas containing known mineral occurrences of undetermined resource significance where the commodity is CS. The project site is not located within any of the areas that have been mapped as significant mineral resources by the California Department of Conservation, and no known mineral resources occur onsite. No impacts would occur.

b)	Would 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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	plan?				\boxtimes

As of May 1981, there were 32 mineral extraction operation permits granted in Tehama County. The project site is not designated in the Tehama County General Plan, or other land use plan, as having locally important mineral resources. No impact would occur.

NOISE

Environmental Setting

The proposed project will replace a kitchen that was burned down in 2017. As a result of the replacement, new codes required a new water tank for fire suppression and the existing failing asphalt will be replaced. The site occurs within an existing active conservation camp in a rural area in Tehama County and no operational changes will occur from project implementation. Development is minimal in the area and no residential development exists near the site. The proposed project is bordered by protected open space and mixed open woodland.

Noise is considered a subjective reaction and is a sound that is loud, unpleasant, unexpected or undesired. Noise is measured in A-weighted decibels, abbreviated dBA, which is an expression of the relative loudness of sounds in air as perceived by the human ear. The decibel is the unit used to measure the intensity of a sound. The A-weighted sound level has become the standard tool to measure environmental noise.

The noise for an area is described as ambient noise level and includes the noise level associated with a particular environment. A common way to measure the ambient noise level is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour).

The day-night average level (Ldn) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The additional decibels are added during the nighttime as people are more sensitive to nighttime noise exposures. The Community Noise Equivalent Level (CNEL) is similar to the Ldn, but with weighing factors placed on two time periods (7:00 am to 10:00 pm, and 10:00 pm to 7:00 am).

The existing ambient noise environment in the vicinity of the project site is characterized as oak woodland and open space area. Noise levels within these types of areas are typically below 40 dBA, which is considered low.

Discussion

a)	Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	standards of other agencies?			\boxtimes	

During the construction of the proposed project, noise from construction activities would add to the noise environment in the immediate vicinity around the project site. Activities involved in construction would generate maximum noise levels, as indicated in Table 8, ranging from 76 to 89 dBA at a distance of 50 feet.

Type of Equipment	Maximum Level, dBA at 50 feet from		
	source		
Air Compressor	81		
Backhoe	80		
Compactor	82		
Concrete Mixer	85		
Crane, Derrick	88		
Dozer	85		
Dump Truck	76		
Excavator	81		
Grader	85		
Jack Hammer	88		
Loader	85		
Paver	89		
Roller 80			
Trencher 81			
Scraper	89		
Truck	88		

Table 6. Construction Equipment Noise

Source: Construction Noise Handbook, U.S. Department of Transportation, Federal Highway Administration and EPA 1971.

During the project construction, the following types of equipment would be utilized: Backhoe, high side dump truck, excavator, front-end loader, skid steer, paver, roller, trencher, and mini excavator. During construction activities noise would also be generated by a slight increase in truck traffic on area roadways.

Although Tehama County has not adopted a noise ordinance, the following General Plan policies are applicable regarding noise:

Policy N-2.3

The county shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and the California Building code regarding the construction of new multipleoccupancy dwellings such as hotels, apartments, and condominiums.

Implementation Measure N-2.3a

Update the county's Building Codes to include the State Noise Insulation Standards of the California Building Code.

Policy N-2.4

The county shall restrict construction activities to the hours as determined in the countywide noise control ordinance, if such an ordinance is adopted.

Implementation Measure N-2.4a

Restrict construction activities to the hours as determined by the county's noise control ordinance unless an exemption is received from the county to cover special circumstances. Special circumstances may include emergency operations, short-duration construction, etc.

Implementation Measure N-2.4b

Require all internal combustion engines that are used in conjunction with construction activities be muffled according to the equipment manufacturer's requirements.

The operational noise levels will not change from the current conditions. The existing ambient noise in the area is approximately 30 to 40 dBA due to the rural nature of the area.

The noise increase during construction will be of short duration, will occur during daytime hours, will not create significant impacts to any nearby residences, and will not exceed noise standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards. Impacts are less than significant.

,	uld the project generate excessive undborne vibration or groundborne noise ls?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	_
					\boxtimes	

Some types of construction equipment can produce vibration levels that can cause architectural damage to structures and be annoying to nearby sensitive receptors. Vibration levels generated during construction of the proposed project would vary during the construction period, depending upon the construction activity and the types of construction equipment used. Groundborne vibration is measured in peak particle velocity (PPV).

No residential development is near the project site and the construction equipment that will be utilized would not create excessive groundborne vibration or noise levels. No impact would occur.

c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan had not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	excessive noise levels?				\boxtimes

The project is not located within an airport land use plan or within two miles of a public airport or public use airport. The closest airport is the Red Bluff Municipal Airport located approximately 30 miles southwest of the project site and the nearest private airport is located approximately 40 miles to the west in the community of Lake California Air Park. No impact would occur.

POPULATION AND HOUSING

Environmental Setting

According to the California Department of Finance, the estimated population for Tehama County was 64,039 in January 2018 with the unincorporated portion total population of 40,936. The proposed project is located in Paynes Creek at 30500 Plum Creek Road that is located within oak woodland. In 2010, the U.S. Census reported that Paynes Creek had a population of 57.

The median age in the county is 37.8 and the predominant race is white representing approximately 86 percent of the population. Educational, health and social services represent the biggest employment sector. Other large sectors include retail, manufacturing and agriculture, forestry, fishing, hunting and mining.

Discussion

unplanı directly and bu	the project induce substantial ned population growth in an area, either (for example, by proposing new homes sinesses) or indirectly (for example, n extension of roads or other	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
infrastr	ucture)?				\boxtimes

The project does not propose any new homes or businesses or change the existing capacity of the Ishi CC. The current maximum staffing levels for the camp include nine CDCR staff, 15 CAL FIRE staff and 110 inmates. The kitchen replacement will not increase this population.

The proposed project will be built to support existing uses onsite. No new homes, road extensions or other infrastructure are included as a part of the project that would induce population growth. No impact would occur.

numbe	d the project displace substantial ers of existing people or housing, ssitating the construction of replacement ng elsewhere?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\square

The proposed project will replace a kitchen within an existing facility that is located on state property within a rural oak woodland area. Project construction activities will occur onsite and will not extend beyond the property boundaries. The proposed project will not displace existing homes and no impact would occur as a result of project implementation.

PUBLIC SERVICES

Environmental Setting

FIRE PROTECTION

Within the unincorporated region's in Tehama County emergency services, fire and emergency medical services are provided by local fire service agencies, volunteer fire departments, the cities of Red Bluff and Corning, CAL FIRE, and the U.S. Forest Service. Twelve local fire departments are located throughout the county, including, Corning, Bend, Gerber, Los Molinos, Manton, Mineral, Paskenta, Paynes Creek, Richfield, Red Bluff, Cottonwood, and Vina. located throughout Tehama County. All are volunteer fire departments with the exception of the Red Bluff fire department. The Tehama County Emergency Command Center (ECC) coordinates emergency response in the county.

POLICE PROTECTION

The Tehama County Sheriff's Department provides law enforcement in the unincorporated areas of Tehama County and the City of Tehama. The Sheriff is the chief law enforcement officer of the county, with jurisdiction throughout the unincorporated county, the incorporated cities, and state-owned property. In Tehama County, the Sheriff's Department and the Office of Emergency Services are combined. The Sheriff's Department patrol services operate community resources and service centers, special tactical operations, criminal investigations, emergency operations, and specialized patrol units. Additional functions include prisoner transportation, narcotics enforcement, search and rescue, court security and boating enforcement. The Tehama County Sheriff's Department has a paid staff of 119, consisting of 78 officers, 13 Sheriff service officers, eight dispatch personnel, and 20 support personnel. The Sheriff's Department headquarters is located at 502 Oak Street in the City of Red Bluff (Sheriff's Department, 2006).

Level of Service may be measured by the ratio of sheriff's deputies to residents. The Tehama County Sheriff's Department attempts to maintain a minimum of one officer per 1,000 residents in the unincorporated areas of the county. The Tehama County Sheriff's Department currently employs 119 personnel, including 78 sworn deputies. The existing staffing ratio provides a higher level of service with approximately two deputies per 1,000 residents (Sheriff's Department, 2006).

PUBLIC SCHOOLS

Tehama County public schools include 21 elementary schools, four middle schools and five high schools. Additionally, there are three private elementary schools and one private Catholic high school in the county. There are also two charter schools in operation.

The total enrollment for Tehama County public schools, K-12, in 2004 was 10,274 with an average class size of 24 students. Information from the California Department of Education indicates that enrollment in all Tehama County schools has been consistent over the last five years.

PARKS

The Tehama County Parks and Recreation Department (TCPRD) has the primary responsibility for providing and maintaining recreation facilities and services within the General Plan Planning Area. TCPRD owns and maintains nine parks and two public access areas, all of which are maintained by the county parks and recreation staff.

No county parks are located near the project, although the Tehama Wildlife Area (TWA) is within the Lassen National Forest surrounding the project site and consists of 44,500 acres of grassland, oak woodland, and chaparral. The area provides for camping in one of its two campgrounds and various other recreational activities including fishing, wildlife viewing, birdwatching, and hunting.

TEHAMA COUNTY LIBRARY

The Tehama County Library system has three branches to serve the residents of the county with locations in Red Bluff, Los Molinos and Corning. The Tehama County Library system is affiliated with the North State Cooperative Library System (NSCLS), which serves 13 Northern California Counties.

MUNICIPAL WATER DISTRICTS

Communities within Tehama County have heavily depended upon surface water as municipal water source. Historically chronic flooding along the Sacramento River inhibited both agricultural and urban development in Tehama County. The desire to control flooding, along with the promise of large amounts of irrigation water, led to the 1935 authorization of the Central Valley Project (CVP).

Important elements of the CVP included the completion of Shasta Dam in 1945 and subsequent construction of the Tehama-Colusa and Corning Canals that distributed water through Tehama County and further to the south (Bureau of Reclamation, 2005). While two-thirds of Tehama County water needs were supplied by surface water in the 1970s, today it is only one-third (TCFCWCD, 1996). Of the total water used by Tehama County for all purposes during an "average" year, approximately 59 percent comes from groundwater sources. Local

surface water sources supply 28 percent of the county's demand, CVP projects provide 10 percent, and surface water reuse accounts for about 3 percent.

Most of Tehama County's wells are located in a north-south swath along either side of the Sacramento River. Over 10,000 wells exist in the county with approximately 78 percent classified as having domestic usage. Twelve percent are used for irrigation, four percent for monitoring purposes, one percent for municipalities, and six percent for miscellaneous uses. Some of the main suppliers of water in Tehama County include: Anderson-Cottonwood Irrigation District (ACID), Corning Water District, Deer Creek Irrigation District, El Camino Irrigation District, Gerber-Las Flores Community Service District, Los Molinos Community Services District (LMCSD), Mineral Water Company, Proberta Water District, Rancho Tehama Association, and Rio Alto Water District (RAWD).

Discussion

 a) Would 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? Potentially Potentially Less Than Significant Impact Less Than Significant With Mitigation Incorporated Impact 						
Police protection?	a)	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	Significant	Significant with Mitigation	Significant	
Schools? Parks? Other Public Facilities?		Police protection? Schools? Parks?				

FIRE PROTECTION

CAL FIRE provides this region with fire protection. The kitchen replacement will enhance these services and will not create a need for additional fire protection resulting in new facilities that would create adverse environmental impacts. No impacts would occur as a result of the proposed project.

POLICE PROTECTION

The Tehama County Sheriff's Department provides police protection services to the area. The office is located approximately 23 miles southwest of the project site at 22840 Antelope Boulevard in Red Bluff. CAL FIRE personnel are onsite and provide their own security protection measures working closely with law enforcement.

The proposed project will not require the need for additional police protection that would result in new facilities that would cause environmental impacts. No impacts would occur.

SCHOOLS

The Antelope School District serves the proposed project area with three schools. Plum Valley School is in Paynes Creek and serves 13 students (transitional kindergarten through fifth grade).

The proposed project replaces a temporary kitchen that has been used since the permanent kitchen was destroyed by a fire in 2017. The replacement kitchen will not result in additional staff. The project will not require new or altered schools or related facilities. No impact would occur.

Parks

The proposed project will not create additional demand on any nearby parks or recreational areas. The replacement of the kitchen will not add additional employees that will require new or altered park facilities. No impact would occur.

LIBRARIES AND OTHER PUBLIC FACILITIES

The Ishi CC kitchen replacement project will not create additional demand for public facilities within the area. The project will replace an existing use and will not add additional population to the area. No impact would occur.

RECREATION

Environmental Setting

The Tehama County Parks and Recreation Department (TCPRD) has the primary responsibility for providing and maintaining recreation facilities and services within the General Plan Planning Area. TCPRD owns and maintains nine parks and two public access areas, all of which are maintained by County Parks and Recreation staff.

Additionally, the surrounding area is within Lassen National Forest and the Tehama Wildlife Area (TWA). Both areas provide various recreational opportunities including fishing, hunting, hiking, wildlife and bird viewing, camping, and off-highway vehicle (OHV) opportunities.

Discussion

a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\boxtimes

The proposed project consists of a kitchen replacement within an existing conservation camp. The new kitchen will have the same capacity and will not increase the current staffing levels. The proposed project will not add residential uses or other activities that will

increase the use of existing neighborhood or regional parks or other recreational facilities. No impact would occur.

b)	Would the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\boxtimes

The proposed project does not include recreational facilities or require the construction or expansion of recreational facilities. The proposed project is replacing a kitchen and will not add additional staff or residential uses that would increase population. No impact would occur.

TRANSPORTATION/TRAFFIC

Environmental Setting

EXISTING ROADWAY NETWORK

The project will be constructed on the existing site on Plum Creek Road that is accessed via State Route 36 (SR 36) and Paynes Creek Loop. SR 36 links the site with Interstate 5 (I-5) in the City of Red Bluff west of the project, and SR 36 continues easterly into Plumas County and westerly to an intersection on US 101 in Humboldt County. Plum Creek Road continues easterly from the project site and terminates at Little Giant Mill Road in the Lyman Springs area in Tehama County.

State Route 36 (SR 36) is a two-lane 104-mile-long conventional highway that originates in Humboldt County and extends easterly across Northern California to its eastern terminus on US 395 in Lassen County. In the area of the project the roadway generally features two 12-foot wide travel lanes and paved shoulders that vary in width but are typically 1-2 feet wide. The posted speed limit is 55 mph in the immediate area of the station.

Plum Creek Road is a rural road that provides direct access to Ishi CC and to other property holdings in the area. In the area of the project Plum Creek Road features two travel lanes with no paved shoulders.

OTHER CONSIDERATIONS

Safety issues on highways in rural areas are often related to factors such as the availability of adequate sight distance and the need for auxiliary lanes at rural intersections. The Caltrans *Highway Design Manual (HDM)4* and the American Association of State Highway and Transportation Officials (AASHTO) publication *Policy on Design of Geometric Design of Streets and Highways* guide assessment of these issues.

Discussion

a)	Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\boxtimes

Because the site occupancy will not change as a result of the project, the project will not increase the volume of traffic on SR 36 or Plum Creek Road. The project will add a slight increase in traffic during construction. The existing traffic volumes are very low and although there may be a temporary increase during construction, most equipment will be staged on the project site and would not conflict with a program, ordinance or policy addressing the circulation system. Impacts are less than significant.

b)	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes	

See discussion for item (a). The proposed project will generate some traffic during construction but will not create a conflict or increase vehicle miles traveled. The kitchen replacement project will not increase operations and the temporary increase in traffic due to construction would not create a significant increase in vehicle miles traveled. Impacts are less than significant.

c) Would the project substantially increase hazards due to geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\square

The project proposes to replace a kitchen that was destroyed by a fire in 2017. As part of the kitchen replacement, a water tank and replacement paving will be included to adhere to state requirements and to replace failing asphalt on the site. No other improvements are proposed that would create a hazard for traffic operations. No impact would occur.

d) Result in inadequate emergency access?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes

The project will not result in inadequate emergency access. No impacts would occur.

UTILITIES AND SERVICE SYSTEMS

Environmental Setting

The Cities of Corning and Red Bluff each operate domestic water distribution systems that serve the residents of these communities. The remainder of the county is served by small community water systems and individual wells. Over 10,000 wells exist in the county with approximately 78 percent classified as having domestic usage. Twelve percent are used for irrigation, four percent for monitoring purposes, one percent for municipalities, and six percent for miscellaneous uses. The majority of Tehama County's groundwater resources come from the Sacramento Valley groundwater basin. The Ishi CC receives water from an existing well located on the project site.

WASTEWATER TREATMENT

Two methods of wastewater treatment and disposal are utilized within Tehama County. The first consists of community collection and treatment systems with discharge into the Sacramento River. The second method is individual treatment at the site with return to the ground, using either septic/leach-field systems or seepage pits. These are known as onsite wastewater treatment systems (OWTS). The Ishi CC is served by an OWTS.

Community wastewater disposal outside of these areas is handled primarily by septic tank and leach field systems or by seepage pits. Onsite wastewater systems are limited by soil conditions throughout the county. Percolation tests are required to test acceptability of soils for septic systems. Constraints upon the success of percolation tests include rocky soils, high water tables and extremely porous soil conditions.

ELECTRICAL SERVICES

Residents of the unincorporated regions of Tehama County obtain their electrical service from Pacific Gas and Electric (PG&E). PG&E owns and operates electricity infrastructure in the county and throughout Northern California that includes power lines, powerhouses, and substations. PG&E no longer owns all of its facilities, having sold some recently as a result of legislative deregulation. The Ishi CC receives electricity from PG&E.

NATURAL GAS

Pacific Gas and Electric Company (PG&E) provides natural gas to customers within the unincorporated portions of the Tehama County. The existing facilities in the area consist of 4½-inch to 16-inch pipelines delivering service to all residential, commercial, and industrial

customers that are not served by private propane tanks. The Ishi CC uses a propane tank that is located onsite.

CABLE TELEVISION SERVICE/TELEPHONE SERVICE

There are several purveyors providing cable television and other cable related services (i.e., internet) to areas in the county. Cable fibers are generally co-located and installed concurrently with other utility infrastructure. There are several purveyors (i.e., SBC, Comcast, etc.) providing telephone service to Tehama County.

Discussion

 a) Would the project result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electrical power, natural gas, or telecommunications facilities, the construction 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
or relocation of which could cause significant environmental effects?			\boxtimes	

The proposed project includes the installation of new drainage components (water and sewer) as part of the new kitchen and asphalt replacement. As required under the Clean Water Act, a SWPPP will be prepared to ensure that all applicable BMPs are implemented and to minimize the movement of sediment (see *Hydrology and Water Quality*).

The project would not change operations and would not result in the new or expanded facilities which would cause significant environmental effects. Impacts will be less than significant.

 b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes	

The proposed project will continue to receive water supply from an onsite well. A new 180,000-gallon water tank for fire suppression will be constructed onsite and filled, but additional entitlements will not be required as the proposed project will not increase capacity. Impacts would be less than significant.

c)	Would 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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	commitments?			\boxtimes	

As indicated in item (a) and (b), the project will replace the existing septic system on-site. The new septic system will be subject to all applicable county and state requirements. No impact would occur.

 d) Generate solid waste in excess of State or local standards, or in excess of the capacit local infrastructure, or otherwise impair the attainment of solid waste reduction goals? 	y of Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes	

Solid waste management in Tehama County includes one landfill, several transfer stations, and an extensive waste stream diversion program including recycling and composting programs. The Tehama County/Red Bluff Sanitary Landfill provides extensive services for waste diversion and offers recycling services.

The project would not change operational solid waste requirements and the waste from the asphalt and concrete demolition for replacement would not exceed the capacity of the local solid waste facility. Impacts will be less than significant.

e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\boxtimes

No changes in operations will occur as a result of the new facility and the landfill has capacity to accept operational disposal. No impacts would occur.

WILDFIRE

Environmental Setting

The project lies within an area that contains oak woodland intermixed with foothill pines within a CAL FIRE very high fire hazard State Responsibility Area (SRA) in Tehama County. The State Responsibility Area (SRA) is the land where the State of California is financially responsible for the prevention and suppression of wildfires. The SRA is comprised of over 31 million acres across the State and does not include lands within incorporated city boundaries or in federal ownership. CAL FIRE is responsible for protecting approximately 1,230,100 acres in Tehama County.

Discussion

a)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	or emergency evacuation plan?				\boxtimes

The proposed kitchen replacement project is located within a very high fire hazard severity zone. Cal Fire is responsible for fire suppression in this area and is therefore located within the fire hazard zone to respond to fire incidents and assist with emergency situations. The project would be beneficial to fire suppression services. No impact would occur as a result of the fire station replacement.

 b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
from a wildfire or the uncontrolled spread of a wildfire?				\boxtimes

The project is proposing to replace a kitchen within an existing conservation camp that lies within Cal Fire's state responsibility area that is classified as a very high fire hazard area. The conservation camp serves the surrounding SRA and would not have an impact with regard to increasing pollutant concentrations as the fire station supports the fire suppression efforts.

c)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	other utilities) that may exacerbate fire risk o that may result in temporary or ongoing impacts to the environment?			\boxtimes	

The proposed project replaces a kitchen that was destroyed by fire in 2017 within an active conservation camp that provides fire suppression services in the surrounding area within Tehama County. As part of the kitchen replacement, a water tank and associated utility and water lines will be installed for operational purposes. The installation of these components would not exacerbate fire risk or have a significant impact on the environment. Impacts are less than significant.

d)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	slope instability, or drainage changes?				\boxtimes

The project replaces a kitchen within an existing conservation camp that is within a very high fire hazard state responsibility area. Ishi CC is located within this area to provide fire suppression activities and to prevent significant loss of vegetation, structures, and life. The project would not have an impact.

MANDATORY FINDINGS OF SIGNIFICANCE

Discussion

a)	Would 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, substantially 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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

With mitigation measures described in this initial study, the proposed project will not have a significant impact on fish and wildlife species or their habitat or eliminate important examples of major periods of California history or prehistory.

b)	Would 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.)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes		

A search of the CEQAnet Database did not identify any current or proposed projects within the project area.

The project area is within an oak and pine woodland setting. The surrounding area is protected, and no development is planned for the area. The kitchen replacement would occur on an existing developed conservation camp and would not contribute to any cumulative impacts.

Implementation of mitigation measures listed in this initial study would reduce any potential adverse impacts to a less than significant level.

c)	Would the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes		

Direct and indirect impacts to human beings would be less than significant with the implementation measures listed in this initial study.

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