

**California Environmental Quality Act Initial Study  
for the proposed  
Feather River College Watershed Improvement Project  
Plumas County, California**



Prepared for:

Feather River Resource Conservation District (FRRCD)  
The Lead Agency Pursuant to Section 21082.1 of the  
California Environmental Quality Act (CEQA)

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**January 2020**



# MITIGATED NEGATIVE DECLARATION

## Introduction and Regulatory Context

### Stage of CEQA Document Development

- ☐ **Administrative Draft.** This CEQA document is in preparation by Plumas Corporation for Feather River Resource Conservation District (FRRCD) staff.
- ☒ **Public Document.** This completed CEQA document has been filed by FRRCD at the State Clearinghouse on January 29, 2020 and is being circulated for a 30-day agency and public review period. The public review period ends on February 28, 2020. Instructions for submitting written comments are provided on Pages 5-6 of this document.
- ☐ **Final CEQA Document.** This Final CEQA document contains the changes made by Plumas Audubon and FRRCD 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 the Feather River RCD office at 159 Lawrence Street Quincy, CA 95971.

### Introduction

This Initial Study/ Mitigated Negative Declaration (IS/MND) describes the environmental impact analysis conducted for the proposed project. This document was prepared by Plumas Corporation and Feather River Resource Conservation District (FRRCD) staff utilizing information gathered from numerous sources including research and field review of the proposed project area and consultation with environmental planners and other experts on staff at other public agencies. Pursuant to Section 21082.1 of the California Environmental Quality Act (CEQA), the Lead Agency, FRRCD, has prepared, reviewed, and analyzed the IS/MND and declares that the statements made in this document reflect FRRCD's independent judgment as Lead Agency pursuant to CEQA. FRRCD 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 FRRCD 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 [PRC] §21000 *et seq.*) and current CEQA Guidelines (California Code of Regulations [CCR] §15000 *et seq.*).

An Initial Study (IS) is prepared by a lead agency to determine if a project may have a significant effect on the environment (14 CCR § 15063[a]), and thus, to determine the appropriate environmental document. In accordance with CEQA Guidelines §15070, a "public agency shall prepare ... a proposed negative declaration or mitigated negative declaration ... when: (a) The Initial Study shows that there is no substantial evidence ... that the project may have a significant impact upon the environment, or (b) The Initial Study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and

such revisions will reduce potentially significant effects to a less-than-significant level.” In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the proposed project will not have a significant effect on the environment and, therefore, does not require the preparation of an Environmental Impact Report (EIR). This IS/MND conforms to these requirements and to the content requirements of CEQA Guidelines Section 15071.

## **Purpose of the Initial Study**

The purpose of this IS/MND is to present to the public and reviewing agencies the environmental consequences of implementing the proposed project and describe the adjustments made to the project to avoid significant environmental effects or reduce them to a less-than-significant level. This disclosure document is being made available to the public, and reviewing agencies, for review and comment. The IS/MND is being circulated for public and agency review and comment for a review period of 30 days as indicated on the *Notice of Intent to Adopt a Mitigated Negative Declaration* (NOI). The 30-day public review period for this project begins on January 29, 2020 and ends on February 28, 2019.

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

FRRCD has elected to utilize notifying publishing the NOI in newspapers of general circulation in the area affected by the proposed project: Feather River Bulletin, Portola Reported, Indian Valley Record, and Chester Progressive. The NOI was also posted at:

1. The Feather River College Administration office at 570 Golden Eagle Avenue, Quincy, CA; and
2. The Feather River Resource Conservation District office at 47 Trilogy Lane Quincy, CA.

A complete copy of this CEQA document was made available for review by any member of the public requesting to see it at both locations above. An electronic version of the NOI and the CEQA document were made available for review for the entire 30-day review period through their posting on Feather River College’s and the Feather River Resource Conservation District’s Internet Web Pages at: <http://www.frc.edu/> and <https://www.frrcd.org/>

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 FRRCD’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:

Brad Graevs, District Manager, Feather River Resource Conservation District  
PO Box 3562 Quincy, CA 95971  
530-927-5299  
featherriverrrcd@gmail.com

After comments are received from the public and reviewing agencies, FRRCD 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.

## **Project Description and Environmental Setting**

### **Project Location**

The project area is located within the boundaries of lands owned by Feather River College, approximately 1 mile northwest of Quincy, CA. The project lies entirely within the 339-square mile Spanish Creek Watershed (HUC 10 1802012208), which is part of the HUC 8 (18020122) East Branch North Fork Feather River regional watershed. The respective legal location of the project area is: Township 24N Range 9E Sect. 9, 10, 15, and 16. USGS 7.5 Quincy Quadrangle, Mount Diablo Base Meridian (MDBM)

### **Background and Need for the Project**

The Feather River College Watershed Improvement Project (FRC-WIP) is a collaborative project aimed at reducing the risk of high-severity wildfire as well as taking steps toward restoring watershed and forest health through hand-thinning, hand piling, pile burning and broadcast burning of approximately 94 acres of forested land owned by the Feather River Community College District.

The Feather River College campus is surrounded by Sierra mixed conifer forests that are recovering from a stand-replacing wildfire that burned the area in 1946 (Feather River College 2014). The human-caused fire originated on the Quincy-Oroville Highway southwest of campus. Forests surrounding campus have not burned in 73 years and tree densities are as high as 610 trees per acre with an average of 259 trees per acre. Completed in 2014, the FRC Forest & Fire Management Plan (FFMP) identified threats to the 145-acre timbered portion of campus and the need to reduce tree densities and ground fuels. The FFMP established ten-year goals, objectives, and actions required to attain desired future conditions. The FFMP aims to restore fire as the primary long-term fuels reduction tool in Sierra mixed conifer forest stands surrounding campus.

The purpose of the project is to implement hand thinning and a prescribed burn to reduce fuel loading within the project area to the point that fuels would burn at low to moderate severity during future wildfires. This reduction of fuel loads would help to minimize the threat of future wildfires from burning at high severity therefore potentially protecting residents adjacent to the project area, protecting the watershed from degradation, and improving habitat values including late seral forest. Reintroducing fire to the landscape through controlled broadcast burning will also ensure that these areas are protected from high-severity wildfire for longer periods of time post-implementation and creates the opportunity to manage fuel loads with regular fire return intervals into the future.

### **Project Objectives**

1. Mimic natural ecological processes by returning fire to the landscape; promote native plant propagation by reducing fuel loading in the forest understory;
2. Increase watershed health, climate resiliency, and water yield by removing overstocked, small diameter trees;
3. Control the spread and introduction of invasive plants;
4. Enhance species diversity by increasing the proportion of shade-intolerant and/or fire-adapted tree species including sugar pine and black oak;
5. Create surface and ladder fuels conditions such that the potential for crown fire ignition is reduced;
6. Reduce threats to the nearby community of Quincy and wildlife habitat within and adjacent to

- the project area from large, severe wildfires and re-introduce fire into fire-adapted ecosystems;
7. Increase hands-on learning opportunities for FRC students and provide workforce development in fuels reduction and prescribed fire.

## Project Start Date

The project will commence after the necessary environmental review has been completed and implementation funds secured. Feather River College recently submitted a grant application to the Sierra Nevada Conservancy (SNC) Forest Health Program on October 17, 2019; grants are expected to be awarded beginning March 2020. If awarded funding, implementation start date for the FRC-WIP is scheduled for May 2020.

## Project Description

To achieve the desired objectives forest hand thinning, hand piling, pile burning, and prescribed burning will be utilized. Thinning of predominantly small diameter trees under 10 inches DBH, thinning of select 10 – 12 inch DBH conifer species where shading black oak, clearing ladder fuels, hand piling, and pile burning will take place within the 145-acre forest surrounding Feather River College. The project area has been divided into seven treatment units totaling 94 acres and an additional 17 acres that have intrinsic habitat value that will be retained in their existing condition. Intensity of hand-thinning within treatment units will range from light to heavy based on tree density, species composition, and tree diameter. Heavy hand-thinning will be implemented in units where existing tree density is estimated at 300-610 trees per acre (TPA)(determined using fixed radius plot analysis); moderate hand-thinning where existing tree density is approximately 200-300 TPA; and light hand-thinning where tree density is < 200 TPA. Sierra Mixed Conifer (SMC) and Montane Hardwood (MHW) are the dominant stand types, interspersed with Montane Riparian (MR) and Montane Chaparral (MC) stand types. SMC units are typified by a predominance of conifer species including ponderosa pine, Douglas fir, white fir, incense cedar, and sugar pine. Diameter of conifer species range from < 6 inches to > 24" DBH. Black oak is also common in the SMC units and are generally < 12" DBH. MHW units are dominated by black oak, primarily < 12" DBH, with pockets of conifer species interspersed.

For all treatment intensities, the goals are to:

- Reduce tree density to 100 - 150 TPA
- Remove 90% black oak < 6" DBH
- Remove 50% of black oak < 12" (multi-stem trees only)
- Remove white fir, ponderosa pine < 12" DBH
- Remove Douglas fir < 6"
- Retain all sugar pine, incense cedar and flagged Douglas fir

Underburning is planned where proximity to campus buildings and infrastructure, topographic features and project design allow. Approximately 5,000 ft of proposed trails will function as fuelbreaks and are strategically located to create manageable underburn units and complement the existing campus trail system. No product will be removed under this project, with the exception of a 20-acre unit where thinned material will be chipped and donated and burned as fuel at a biomass facility adjacent to the college.

Table 1. Feather River College Watershed Improvement Project Prescribed Treatments

<b>Treatment Unit</b>	<b>Acres</b>	<b>Unit Prescription*</b>
HTC-1	7.5	Heavy hand thin, chip
MTB-1	8.8	Moderate hand thin, hand pile & burn
HTC-2	12.6	Heavy hand thin, chip
MTB2	8.5	Moderate hand thin, hand pile & burn
MTB-3	11.0	Moderate hand thin, hand pile & burn
MTB-4	18.0	Moderate hand thin, hand pile & burn
SMC-3	25.0	Light hand thin, hand pile & burn

\* Thinning will remove and pile up to 12" dbh pole size conifers as well as mixed residual fuels. Oaks will be retained.

## Environmental Setting of the Project Region

Feather River College is situated in the Northern Sierra Nevada approximately 30 miles from where the Sierra Nevada meet the Cascades. The climate of the site vicinity is characterized by cold, wet winters and mild, dry summers. Average annual precipitation is 49.8 inches (USGS Stream Stats 2019).

## Description of the Local Environment

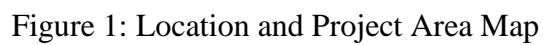
The project is on south, southeast, southwest, north, northwest, and northeast aspects at an elevation of about 3440 to 3760 feet with slopes 30 – 70%. The predominant soil unit is McGinnis-Mariposa families complex (Soil Map Unit 228), covering nearly 90% of the project area. These soils are typically well-drained shallow gravelly loams atop gravelly clay loam and unweathered bedrock. The southern perimeter of the project area includes minor portions of lower gradient (0-5%) riverwash fluvients (Soil Map Unit 36), Keddie gravelly loam (Soil Map Unit 29), Gansner mucky loam (Soil Map Unit 21), and Massack variant sandy loam (Soil Map Unit 31) (USDA 2019). The vegetation type is predominantly Sierra mixed conifer and montane hardwood, with some montane chaparral and montane riparian areas. The project area contains typical plant species composition of mid-elevation mixed conifer and Black Oak woodland ecosystems for western Plumas County.

## Current Land Use and Previous Impacts

The land within the FRC-WIP area is owned by the Feather River Community College District. The private lands are broken up into various land use zones described in the Plumas County General Plan and include: Commercial, Suburban Residential and Rural Residential. The forested uplands of the College campus have not experienced the level of impact that more easily accessed areas of campus have but previous impacts include: a human-caused stand-replacing fire in 1946, development of logging and haul roads, salvage logging, planting of ponderosa pine, spread of non-native invasive plants, vegetation thinning, and prescribed fire. The primary developments within the project area are two large redwood water tanks installed around 1970 which supply water to FRC and the Plumas County Annex, underground water and electrical lines, and access road.









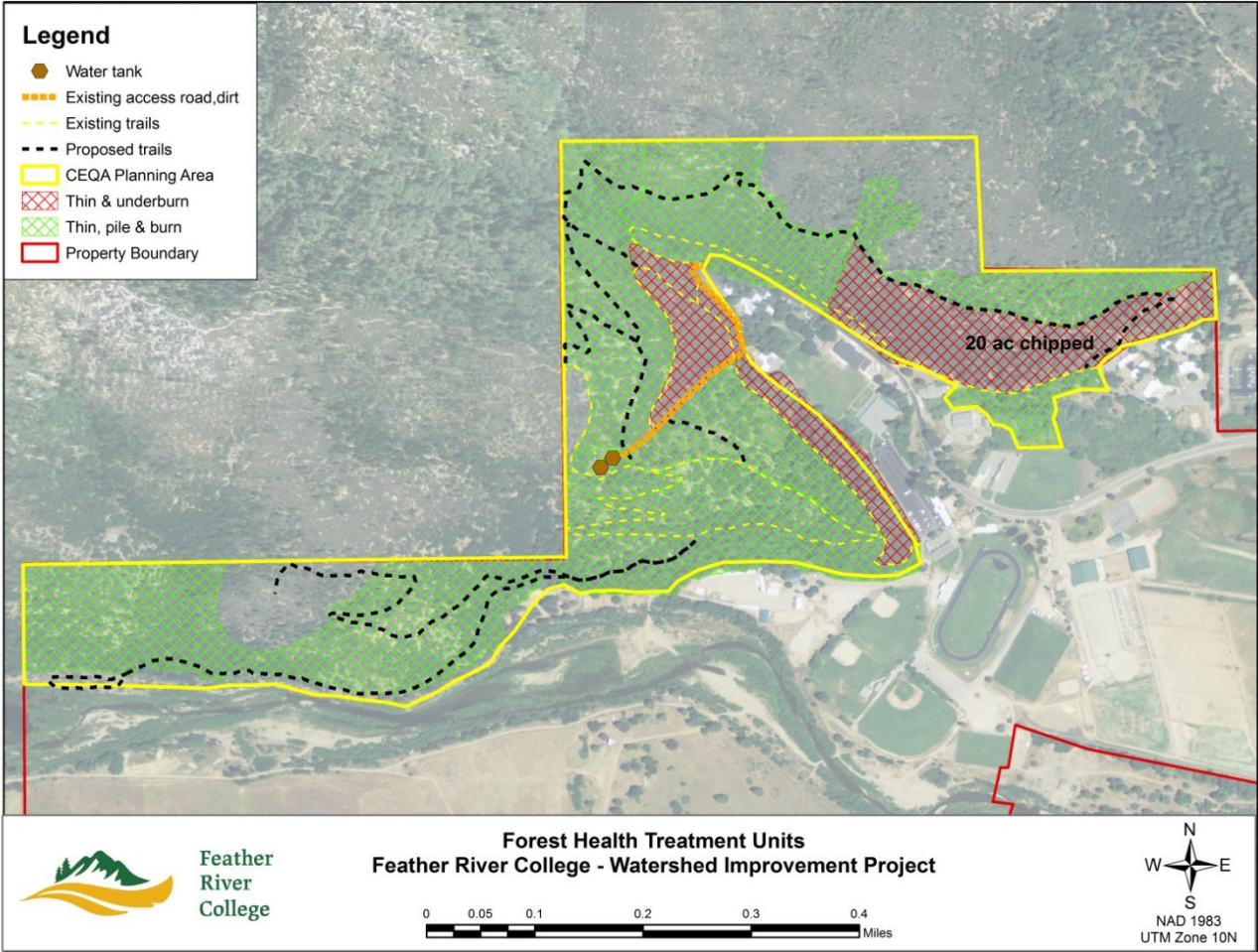


Figure 2: FRC-WIP Forest Treatments Map



## **Conclusion of the Negative Declaration**

### **Environmental Permits**

The proposed project may require the following environmental permits to comply with the following State regulations:

Air quality permits and Smoke Management Plans through Northern Sierra Air Quality Management District are expected for proposed burning activities and will be acquired by Feather River College or delegated contractors thereof. SE5 burn permits through the California Department of Forestry and Fire Protection may also be required if burning activities occur outside of annual open burn season.

No other permits are anticipated.

### **Project Revisions Following Circulation of the IS/MND**

*This section to be completed following 30-day comment period.*

### **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 impact related to Land Use Planning, Mineral Resources, Population and Housing, Public Services, and Utilities and Service Systems.
2. The proposed project will have a less than significant impact on Aesthetics, Agriculture and Forestry Resources, Air Quality, Hydrology and Water Quality, Geology and Soils, Greenhouse Gas Emissions, Recreation, Hazards and Hazardous Materials, Transportation and Traffic, and Noise.
3. The proposed project will have a less than significant impact with mitigation on Biological Resources, Cultural Resources, and Tribal Cultural Resources.

The Initial Study/Environmental Checklist included in this document discusses the results of resource-specific environmental impact analyses which were conducted by Plumas Corporation and Plumas Audubon Society for Feather River College (FRC). This Initial Study revealed that no significant environmental effects are expected to result from the proposed project as mitigation measures are to be adhered to. FRRCD has found, in consideration of the entire record, that there is no substantial evidence that the proposed project, as currently proposed, would result in a significant effect upon the environment. This IS/MND is therefore the appropriate document for CEQA compliance.

**PROJECT DESCRIPTION AND BACKGROUND**

PROJECT INFORMATION	
Project Title:	Feather River College Watershed Improvement Project
Lead Agency Name and Address:	Feather River Resource Conservation District 47 Trilogy Lane/PO Box 3562 Quincy, CA 95971
Contact Person and Phone Number:	Brad Graevs, District Manager, 530-927-5299
Project Location:	Feather River College, Quincy, Plumas County
Project Sponsor's Name and Address:	Feather River College 570 Golden Eagle Avenue Quincy, CA 95971
General Plan Designation:	Commercial, Rural Residential, Suburban Residential
Zoning:	Periphery Commercial (C-2), Suburban(S-1), Rural-10 (R-10)
Description of Project:	See Pages 4-8 of this document
Surrounding Land Uses and Setting:	Rural residential, ranching, recreation
Other agencies whose approval may be required:	None anticipated
Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?	Tribal consultation for this project has been ongoing, with project designs reflecting the requests of tribal members. There are no unmitigated concerns to date regarding Cultural resources, as Mountain Maidu have been active partners in this collaborative effort.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 3 for additional information.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry	<input type="checkbox"/>	Air Quality
<input type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Geology/Soils
<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards and Hazardous Materials	<input type="checkbox"/>	Hydrology/Water Quality
<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources	<input type="checkbox"/>	Noise
<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Transportation/Traffic	<input type="checkbox"/>	Tribal Cultural Resources	<input type="checkbox"/>	Utilities/Service Systems
<input type="checkbox"/>	Mandatory Findings of Significance	<input checked="" type="checkbox"/>	None With Mitigation		



**DETERMINATION:**

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	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.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_**Print:** \_\_\_\_\_**Title:** \_\_\_\_\_





## CEQA Environmental Checklist

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

### I. AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>I. AESTHETICS:</b> Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Discussion

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

Less Than Significant Impact. A temporary change in aesthetics is anticipated in the project area due to blackening of the ground and potential light scorching at tree bases in areas that are underburned. Similarly, piles of woody debris generated from thinning activities will be burned, leaving blackened circular patches. In both situations, the visual effect will be virtually unnoticeable in less than a year as herbaceous vegetation re-grows and leaf litter or needle cast covers the ground. Underburn areas will be easily visible from Feather River College upper campus buildings, but the effect will be temporary as described above. Pile burning will occur in the more remote areas of campus and would be visible temporarily, and only to hikers on the campus forest trails. Furthermore, as part of the proposed project, the underburn activities are intended to be an educational demonstration on the benefits of underburning as a long-term forest management tool. Prior to FRC ownership of the property, a catastrophic wildfire burned through this area in 1946 (Feather River College 2014) and severely burned parts of the college forested lands which, decades later, are still evident by the altered vegetation communities. Long-term management of fuels through underburning will reduce the risk of future high intensity wildfires and the adverse impacts they have on the landscape visually. The reduced risk of high-intensity wildfire provided by the proposed action would increase the long-term beneficial effects to the overall visual and scenic resources.

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

No Impact: The project area is located approximately ½ mile west of California State Highway 70/89, which are currently listed as “Eligible” for designation as State Scenic Highways. However, no designation date has been identified ([https://dot.ca.gov/-/media/dot-media/programs/design/documents/design-and-eligible-aug2019\\_all1y.xlsx](https://dot.ca.gov/-/media/dot-media/programs/design/documents/design-and-eligible-aug2019_all1y.xlsx)), and therefore, the project will have no impact on a State Scenic Highway.

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

Less Than Significant Impact: The project will not substantially degrade the existing visual character or quality of the site and its surroundings. See discussion a) above.

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

Less Than Significant Impact: The proposed project will not create a new source of light or glare, other than short durations from the flames of pile burning and prescribed burning activities. The light created by these proposed activities is not likely to be visible to the general public as burning generally occurs during the day and is not likely to carry over into the night, and the forest within and adjacent to the project area will diffuse most of the light created by the proposed activities.

## II. AGRICULTURE AND FOREST RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>II. AGRICULTURE AND FOREST RESOURCES:</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

**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 California Resources Agency, to non-agricultural use?**

No Impact: The project area does not contain any farmland included in the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency and will not convert any farmland.

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

No Impact: The proposed project area is not zoned for agricultural use; therefore, the project will not conflict with existing zoning or a Williamson Act contract, and there will be no impact.

**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 Production (as defined by Government Code §51104(g))**

No Impact: The project will not conflict with existing zoning or cause any rezoning of forest land or timberland.

***d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?***

Less Than Significant Impact: The project will not result in the loss of forest land or cause conversion of forest land to non-forest use. Hand thinning of small diameter trees will reduce the density of forested stands, resulting in a more balanced range of diameter classes. Prescribed underburns are designed and anticipated to be low to moderate intensity and severity, with occasional scorching of tree bases and mortality of some seedlings. This scorching is anticipated to mimic natural fire effects. Duff and litter accumulation will be raked away from the base of oak trees where deemed necessary to prevent scorching that may damage the thin cambium layer. Particular care will be taken in the oak-dominated areas of cultural significance as these were traditional acorn gathering sites. Reducing stand density and increasing variability in diameter class will exhibit greater vigor and growth as well as increased resiliency to disturbances such as insects, disease and fire. There would be no conflict with areas zoned as forest land or timberland, therefore the impact would be less than significant.

***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 or conversion of forest land to non-forest use?***

No Impact: The project will not involve any changes in the existing environment which could result in a conversion of allowable uses. See subsection d) above for forest land and subsection b) above for agricultural discussions.

### III. AIR QUALITY

**III. AIR QUALITY:** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Discussion

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

**Less Than Significant Impact:** The project is located in Plumas County, within the Mountain Counties Air Basin, which is regulated by the Northern Sierra Air Quality Management District (NSAQMD). There are no applicable air quality plans to evaluate consistency with, so this analysis relies on whether the project would contribute substantially to an existing air quality violation. Plumas County is designated as nonattainment for particulate matter with an aerodynamic diameter of 10 microns or less (PM10) with respect to the California Ambient Air Quality Standards (CAAQS). However, for particulate matter with an aerodynamic diameter of 2.5 microns or less, Plumas County is designated 'Unclassified' with the exception of the City of Portola which is a nonattainment area (ARB 2018). NSAQMD has mass emissions thresholds for ROG, NOx, and PM10, shown in Table 2.

Table 2. NSAQMD Air Pollution Mass Emissions Thresholds

NSAQMD Threshold Level	ROG lbs/day	NOx lbs/day	PM10 (lbs/day)
Level A	<24	<24	<79
Level B	24-136	24-136	79-136
Level C	>136	>136	>136

Notes: ROG = reactive organic gases; NOx = nitrogen oxides; PM10 = respirable particulate matter; lbs/day = pounds per day; because Plumas County is in attainment for ozone precursors, related emissions thresholds are not reported. Source: NSAQMD 2016

### FIRE-RELATED EMISSIONS

Emissions from prescribed fire are fundamentally different from general construction-related emissions and are treated through separate programs by local air districts. Construction emissions are subject to the mass emissions thresholds set forth for construction projects while prescribed fire emissions are managed by the

local air districts through burn permits and Smoke Management Plans (SMPs). Therefore, this analysis qualitatively evaluates emissions associated with prescribed burning. Prescribed burns and pile burning would emit air quality pollutants such as PM10. However, all burning would be completed under approved SMPs and permits to burn, which are required by NSAQMD. These plans and permits would describe acres by burn type, predominant vegetation, duration of burn, emissions estimates, identification of smoke sensitive areas, alternatives and contingencies, and the responsible parties. Emissions would be minimized through considerations such as weather conditions, wind direction, and burn pile size. The local air district is the ultimate arbiter in whether the activity can occur as proposed, in a limited capacity, or must be postponed based on the predicted transport and placement of pollutants from the activity relative to sensitive receptors that may be impacted by the activity. Prescribed fire treatments need not only an authorization from the local air district, but also must ensure that the conditions set forth in the approved SMP are met prior to ignition of a prescribed fire. That is, even with authorization from the local district to conduct the prescribed burn, if the conditions and requirements of the SMP are not met on site, ignition is prohibited (17 CCR Section 80160). The project would be required to meet all NSAQMD air quality requirements, which include measures to reduce PM10 emissions to the degree feasible; therefore, the fire-related emissions would not violate air quality standards or conflict with or obstruct implementation of air quality attainment plans. This impact would be less than significant.

#### NON-FIRE-RELATED EMISSIONS

Sources of non-fire-related PM10 emissions include vehicles and equipment associated with hand thinning, pile burning, and prescribed fire.

The project would result in temporary emissions of PM10 from project-related truck and engine trips, and worker commute trips during hand thinning, pile burning, and prescribed fire. These emissions have been modeled and are evaluated relative to the air district mass emissions thresholds, shown in Table 1. NSAQMD has developed a tiered approach to significance levels; a project with emissions meeting Level A thresholds would require the most basic emissions reduction requirements.

The Vegetation Treatment Program Environmental Impact Report (PEIR) prepared by the California Board of Forestry and Fire Protection for a statewide program provides typical air quality pollutant emission estimates for hand thinning and prescribed fire (Board of Forestry 2019). While these do not reflect exact emissions for the project, these air quality pollutant emissions estimates can be scaled-down to provide a reasonable estimate of emissions from treatment activities associated with the project. It is assumed that prescribed fire would occur over the 20 acres. Pile burning would occur over lands that have been thinned which is approximately 91.4 acres.

Table 3 summarizes the maximum daily non-fire related PM10 emissions, conservatively assuming all activities occur concurrently. Refer to Appendix B for a detailed description of all calculations and assumptions.

Table 3. Non-Fire Related Air Pollutant Emissions

Activity	PM10 (lbs/day)
Hand Thinning	1.152
Prescribed Fire for Tree Dominated Area	0.30
Total	1.45
NSAQMD Threshold – Level A	<79

As shown in Table 3, maximum daily project emissions would reach 1.45 lbs/day of PM10, which is well below NSAQMD's air pollutant emissions significance threshold of 79 lbs/day.

Over the long-term, thinning of the forest fuels in the project area would reduce the likelihood of a large-scale wildfire, which would improve regional air quality by reducing potential emissions of associated criteria air pollutants and precursors. Considering this, and that project emissions would be well below the applicable thresholds, impacts would be less than significant.

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

Less Than Significant Impact: The project area is within the Northern Sierra Air Quality Management District. A smoke management plan will be submitted prior to conducting prescribed burns. Burning will only occur on designated burn days and within the approved prescription. Burns will be conducted in small units which will minimize smoke impacts. These measures will ensure that smoke generated from the project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

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

Less Than Significant Impact: Past, present, and future development projects contribute to adverse air quality on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. Emissions from individual projects contribute to existing cumulatively significant adverse air quality impacts. Several air districts recommend using their mass emissions thresholds for evaluating whether construction-generated emissions of PM10 would be cumulatively considerable; that same approach has been adopted here.

As described under a) above, Plumas County is designated as nonattainment for PM10. As shown in Table 3, project emissions of PM10 would be 1.45 lbs/day, which is well below the mass emissions threshold of 79 lbs/day. Therefore, the project would not contribute a cumulatively considerable increase of those criteria pollutants; this impact is less than significant.

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

Less Than Significant Impact: Sensitive receptors near the project area include: recreational users, residents, and private land owners. However, as described above under a) and c), pollutant levels would not exceed significance thresholds and would not obstruct implementation of the applicable air quality plan. Furthermore, emissions-generating project activities would be temporary and dispersed throughout the project area, limiting the potential for substantial emissions to be in any one location for an extended period. As described in discussion a) above, prescribed burning would be implemented in accordance with a smoke management plan approved by NSAQMD. The smoke plan requires burning with wind directions that transport smoke away from communities and limiting the acres burned daily. Burns would be conducted during approved burn days when atmospheric conditions favor smoke dispersion. This would minimize the temporary impacts of smoke. Therefore, this impact would be less than significant.

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

Less Than Significant Impact: Equipment used in project activities and smoke from burn piles could result in temporary odors. As described in discussion a) and d) above, prescribed burning would be implemented in accordance with a smoke management plan approved by NSAQMD. The smoke plan requires burning with wind directions that transport smoke away from communities and limiting the acres burned daily. Burns

would be conducted during approved burn days when atmospheric conditions favor smoke dispersion. This would minimize the temporary impacts of smoke. In the long term, the project does not include new odor sources. The project would result in a less than significant impact.



## IV. BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>IV. BIOLOGICAL RESOURCES:</b> Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

The following discussion on biological resources is summarized from the following sources:

Feather River College Watershed Improvement Project Wildlife Resource Report (Plumas Audubon 2019)

Feather River College Watershed Improvement Project Botany Resource Survey (Plumas Cotrporation 2019)

A list of potential state- and federally-listed, special-status that may be present in the project area was compiled using information requested from the US Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife Biogeographic Information and Observation System (BIOS), and the USDA-Forest Service Plumas National Forest Sensitive Species List (2014). The evaluation of botanical impacts also included a review of Forest special-interest, or “watchlist” species, which includes rare plants on the California Rare Plant list that were identified in BIOS.

### Terrestrial Wildlife

Candidate, sensitive, and special status wildlife species (from CNDDDB and USFWS lists) were evaluated on their likelihood of occurring or having habitat on or adjacent to the project area, and if that habitat would be affected by the project (Table 4).

Table 4. Terrestrial wildlife species potentially occurring in the FRC-WIP Project Area.

<b>Table 3. Special Status Wildlife Species that Potentially Occur On or Adjacent to the Project Area (Scientific Name)</b>	<b>Species Status*</b>	<b>Habitat or Ecosystem Component</b>	<b>Category for Project Analysis**</b>	<b>Designation</b>
<b>Invertebrates</b>				
Valley Elderberry Longhorn Beetle ( <i>Desmocerus californicus dimorphus</i> )	FT	Elderberry trees ( <i>Sambucus</i> spp.)	1	NI
<b>Fish</b>				
Hardhead Minnow ( <i>Mylopharodon conocephalus</i> )	DFW : SSC	Riverine and Lacustrine	1	NI
<b>Amphibians</b>				
California Red-legged Frog ( <i>Rana aurora draytonii</i> )	FT	Riverine and Lacustrine	1	NI
Foothill Yellow-legged Frog ( <i>Rana boylei</i> )	DFW : SSC	Riverine and Lacustrine	2	LTSWM
Sierra Nevada Yellow-legged Frog ( <i>Rana sierrae</i> )	FE	Riverine and Lacustrine	1	NI
<b>Reptiles</b>				
Western Pond Turtle ( <i>Actinemys marmorata</i> )	DFW : SSC	Riverine and Lacustrine	2	LTSI
<b>Birds</b>				
Bald Eagle ( <i>Haliaeetus leucocephalus</i> )	USFWS : BCC	Large trees adjacent to riverine and lacustrine	2	NI
California Spotted Owl ( <i>Strix occidentalis occidentalis</i> )	DFW : SSC, USFWS : BCC	Late Seral Closed Canopy Coniferous Forest	2	LTSI
Northern Goshawk ( <i>Accipiter gentilis</i> )	DFW : SSC	Late Seral Closed Canopy Coniferous Forest	2	LTSI
Greater Sandhill Crane ( <i>Grus canadensis tabida</i> )	ST	Open habitats (grasslands and croplands), shallow lakes, fresh emergent wetlands	1	NI
Swainson's hawk ( <i>Buteo swainsoni</i> )	ST	Open habitats (dry grasslands, farmlands)	1	NI
<b>Mammals</b>				
California Wolverine ( <i>Gulo gulo luteus</i> )	FP	Late Seral Closed Canopy Coniferous Forest	1	NI
Pacific Fisher ( <i>Martes pennanti pacifica</i> )	DFW : SSC	Late Seral Closed Canopy Coniferous Forest	1	NI
Gray Wolf ( <i>Canis lupus</i> )	FE	Generalist: Forest, Grassland, Tundra, Desert	2	NI
Pallid Bat ( <i>Antrozous pallidus</i> )	DFW : SSC	Open, Dry Habitats with Rocky Area	3	LTSI
Townsend's Big-eared Bat ( <i>Corynorhinus townsendii</i> )	DFW : SSC	Mesic Habitats	3	LTSI

\*Species Status: FE = Federal Endangered, FT = Federal Threatened, FP = Federal Proposed, FC = Federal Candidate, SE = State Endangered, ST = State Threatened, DFW : FP = State Fully Protected, DFW : SSC = State Species of Special Concern, USFWS : BCC = U. S. Fish and Wildlife Service Birds of Conservation Concern, SOI = Species of Interest.

\*\*Category 1: Species whose habitat is not in or adjacent to the wildlife analysis area and would not be affected/ impacted by the project.

Category 2: Species whose habitat is in or adjacent to the wildlife analysis area, but would not be either directly or indirectly affected/impacted by the project.

Category 3: Species whose habitat would be either directly or indirectly affected/impacted by the project.

\*CEQA Determinations: NI = No Impact, LTSI = Less Than Significant Impact, LTSWM = Less than Significant Impact with Mitigation, PSI = Potentially Significant Impact

All species listed as a Category 1 Designation in Table 4 were determined to not have suitable habitat within or adjacent to the project area and would not be significantly adversely impacted by the project activities, therefore were not included in any further analysis. Surveys were conducted for Foothill Yellow-legged Frog, Western Pond Turtle, California Spotted Owl, Northern Goshawk, Hardhead Minnow and listed or sensitive carnivore species.

### Botanical Species

Candidate, sensitive, and special status plants that have potential to occur on or adjacent to the project area were surveyed in 2019 for following the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018). The surveys were floristic and focused on habitat that candidate, sensitive, and special status species were most likely to occur. Surveys were also directed at identifying invasive plant species and their locations as ground disturbing activities can cause their spread. No listed sensitive plant species were detected.

### Sensitive Natural Communities

CDFW and CNPS developed a statewide standard classification system for floristically describing vegetation communities, also known as ‘natural communities’, that is compiled in “A Manual of California Vegetation” (MCV), Second Edition (Sawyer et al. 2009). Natural communities are assigned global and state rarity ranks for plant and animal species. Natural Communities with ranks of S1 – S3 are considered Sensitive Natural Communities to be addressed in the environmental review processes of CEQA and its equivalents. No Sensitive Natural Communities at the Alliance level were identified within the Project Area.

**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 Fish and Wildlife or the U.S. Fish and Wildlife Service?***

Less Than Significant Impact with Mitigation: No special-status animal or special-status plant species are known to occur within the project area boundaries. However, the project area is adjacent to Spanish Creek where one State listed amphibian species, Foothill Yellow-legged frog (*Rayna boylei*) is known to occur. Best management practices, resource protection measures, and mitigation measures to avoid any potential impact to this or other aquatic species are included in Appendix A.

### Special Status Plants

Although no special status plant species were found in the project area, the following mitigation measures will protect any species that may be encountered during project implementation from significant adverse impact.

### **Mitigation Measure 1 - Sensitive Plant Protection.**

The following measures are designed to protect special-status plant species from any incidental take or degradation of habitat as a result of project activities. For more information on botanical survey results see Feather River College WIP Botany Report (Plumas Corporation 2019).

Management of botanical resources, special habitats, and noxious weeds would follow the guidelines below:

- Any new occurrences of sensitive plants identified within the project area would be flagged and avoided when necessary.
- Should any new threatened, endangered, sensitive (TES) or watchlist species be located during the proposed project, available steps will be taken to evaluate and mitigate effects.

- All off-road equipment would be cleaned to insure it is free of soil, seeds, vegetative matter or other debris that could contain seeds before entering the project area.
- Infestations of invasive plants that are discovered during project implementation would be documented and locations mapped.

### Special Status Wildlife

Surveys were conducted for Foothill Yellow-legged Frog, Western Pond Turtle, California Spotted Owl, Northern Goshawk, Hardhead Minnow and listed or sensitive carnivore species.

### Aquatic Species

Potentially suitable habitat for Foothill Yellow-legged frog (*Rana boylei*) and Western Pond Turtle (*Emys marmorata*) occurring within or less than ½ mile downstream of project activity was surveyed twice in 2019 following the protocol of Fellers and Freel (1995). During the 2019 aquatic surveys, Foothill yellow-legged frogs were detected adjacent to the project area. Though no Foothill yellow-legged frogs were found within the project boundary area, the close proximity to the southern boundary of the project area warrants the following mitigation measures be used to minimize the potential of negatively affecting any aquatic species or their habitat. These mitigation measures were designed for Sierra Nevada Yellow-legged Frogs, though they will provide protection for the same overlapping habitat for all aquatic species above.

Foothill Yellow-legged frog is a California Species of Special Concern (SSC) and is a California Candidate for Listing on the state threatened species list. Amphibian surveys were completed during July and August 2019. Surveys were conducted on suitable habitat within the project area (See Table 5 and Figure 3 below). Suitable habitat along intermittent and perennial streams were surveyed three times according to Fellers and Freel “A Standardized Protocol for Surveying Aquatic Amphibians”. Dry tributaries and areas determined as unsuitable habitat were not surveyed more than once - these included the stream sections between culverts running through campus, the dry main channel and tributaries above this stream, and the dry tributary to Spanish Creek.

Table 5. Surveyors recorded the following *R. boylei* detections:

Date	Location (UTM)	Detection Type
01 August 2019	673434 E; 4423778 N	Adult, visual
01 August 2019	673409 E; 4423743 N	Larvae, hand + visual (15 tadpoles observed)
01 August 2019	672612 E; 4423878 N	Larva, hand (1 tadpole observed)
01 August 2019	672590 E; 4423894 N	Larvae, hand + visual (3 tadpoles observed)
12 August 2019	673438 E; 4423783 N	Adult, visual
12 August 2019	673410 E; 4423731 N	Larvae, hand + visual (5 tadpoles observed)
12 August 2019	672596 E; 4423891 N	Larvae, hand + visual (13 tadpoles observed)

12 August 2019	672347 E; 4423929 N	Adults, visual (~3 adults detected)
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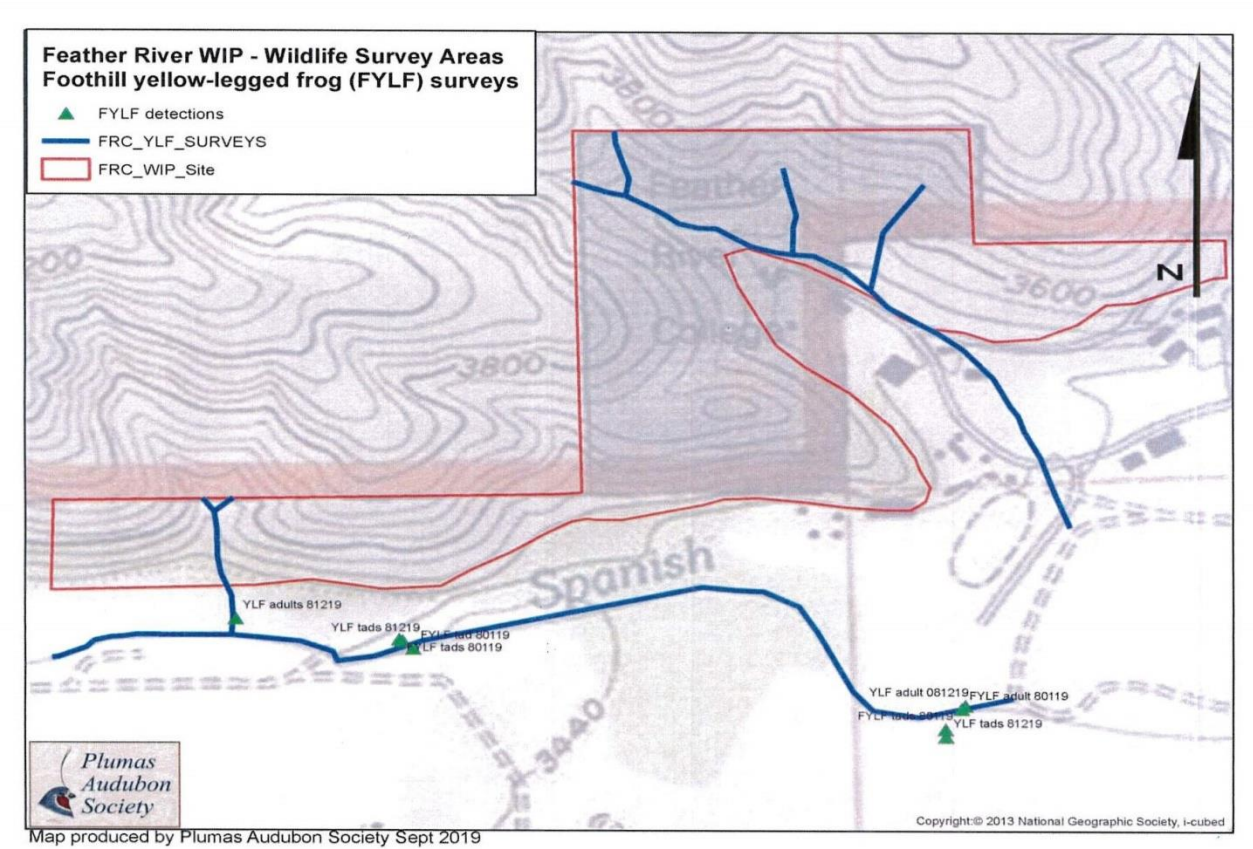


Figure 3. Map of Foothill Yellow-legged frog detections in 2019.

### **Mitigation Measure 2 – Yellow-Legged Frog and other Aquatic Species Protections.**

The following measures are designed to protect foothill yellow-legged frogs and other aquatic TESP species from any incidental take or degradation of habitat as a result of project activities. For locations of streams, buffer zones and more information on survey results see the Feather River College WIP wildlife report (Plumas Audubon 2019).

- No hand piling of woody debris allowed within 82 feet of perennial streams.
- No chainsaw thinning allowed within the riparian corridor, but at a minimum of 50 feet from active perennial streams.
- No piling of woody debris within 25 feet of intermittent streams.
- No prescribed fire ignited within 25 feet of streams.

Adhering to all Best Management Practices, Standard Operating Procedures, and the above minimum distances will prevent sediment from reaching streams as a result of all project activities.

### **Bald Eagle, *Haliaeetus leucocephalus***

The Bald Eagle was added to the federal list of endangered species in 1967, and to the California list of endangered species in 1971. The Fish and Wildlife Service removed the bald eagle from the list of threatened and endangered species 2007, but the species remains endangered in California. Potential habitat does exist for Bald Eagle, but due to lack of sightings during numerous avian surveys during the nesting season, and the marginal quality of nesting and foraging habitat within the proposed project area, effects to this species are not anticipated. Potential direct effects may result from construction noise disturbance of foraging birds. However, preferred fish prey is sparse within the proposed project area. Based on the lack of Bald Eagle detections, presence of marginal nesting habitat, and paucity of preferred prey within the project area, this species is not expected to be impacted on a short- or long-term basis by the proposed project actions.

### **California Spotted Owl, *Strix occidentalis***

Spotted Owl is a state and federally listed threatened species (California State Threatened status 2019; Federally Threatened status 1990). Protocol-level Spotted Owl surveys were conducted from April through July 2019. Two call stations were selected based on suitable habitat, acoustics and terrain, and ease of surveyor access. Each of three survey visits yielded no detections.

### **Northern Goshawk, *Accipiter gentilis***

Northern Goshawk is a Management Indicator Species. Goshawk surveys were conducted using the Woodbridge and Harris “Northern Goshawk Inventory and Monitoring Guide”. Broadcast call surveys were initiated and completed in June 2019. A survey plan was created that involved all suitable habitat within the project area with an additional ¼ mile buffer. Each point was called twice between June 3 and June 28, 2019. The survey area was limited to property owned by Feather River College and public land administered by the USFS. Adjacent private lands were excluded from surveys. Broadcast surveys were conducted at 200 meter intervals, with each point offset by 100 meters.

Table 6. *A. gentilis* flyover detection

<b>Date</b>	<b>Location (UTM)</b>	<b>Detection Type</b>
28 June 2019	673714 E; 4424549 N	Adult, vocal fly through

A subsequent intensive nest stand search yielded no results. No juveniles or fledglings were observed in the project area.

### Sensitive Carnivore Species

No sensitive carnivore species were detected during recent wildlife surveys nor have California Wolverine (*Gulo gulo lutens*), Pacific Fisher (*Martes pennant pacifica*), or Gray Wolf (*Canis lupus*) been recorded on the Feather River College campus. No sensitive carnivore species will be negatively affected by the project activities.

### Bats

Limited direct impacts of hand thinning would be expected due to the general lack of suitable habitat provided by small diameter trees. Disturbance associated with human presence and noise disturbance associated with chainsaw use would occur, potentially significant enough to cause temporary or permanent roost abandonment resulting in lowered reproductive success. These effects would be most severe during the breeding season (May 1 to August 15) when the potential exists for disturbance to active breeding females and maternity colonies. Due to the small size of bats, and the difficulty of surveying for them, it is hard to determine where they are roosting. However, if a roosting site is discovered prior to or during projects activities a limited operating period would be applied (Table 7).

Prescribed burns would consume logs and snags in the analysis area that provide potential roost sites. However, these same acres would likely recruit both snags and downed logs through the prescribed burning process, so effects are expected to be negligible. The prey base for bats (insects) may have some site-specific short-term reductions post underburning due to direct mortality of eggs, larvae, pupae and adults from fire. However, post-fire conditions have been shown, in many instances, to increase plant vigor (Lyon and Stickney 1976, DeByle 1984, Stein et al. 1992), and it has also been shown that many herbivorous insects preferentially feed on and have increased reproductive success and fitness on more vigorous plants and plant parts (Price 1991, Spiegel and Price 1996). Therefore, post fire conditions may increase the forage base available to bats. The proposed action may affect individual Pallid bats and Townsend's big-eared bats but overall is expected to have negligible effects to these species.

**Mitigation Measure 3 – Limited Operating Periods.** Limited Operating Periods will be adhered to where operations will be “limited” as described in Table 7.

Table 7. Limited Operating Periods for TES species.

<b>Table of Limited Operating Periods (LOPs) for the Feather River College Watershed Improvement Project</b>		
<b>Species</b>	<b>Location</b>	<b>Limited Operating Period</b>
Yellow-legged Frogs	Instream work	No perennial stream in project area
	Upland work and burning	October 01 – April 15
California Spotted Owl	Within 1/4 mile of nests or within protected activity center boundary	March 1 - August 15
Goshawk	Within 1/4 mile of nests or within protected activity center boundary	February 15 - September 15
Pallid Bat and Townsend's Big-eared Bat	W/in 1/4 mile of maternity and other roosts	May 1 – August 15

### Discussion

Due to the light nature of the proposed project activities, and the incorporated Mitigation Measures, it is not expected that any candidate, sensitive, or special status species would be significantly impacted by this project. Alterations to the understory will occur by removing many of the small trees and downed wood, but a certain amount of these understory components will remain as well as regenerate. Such attributes are important for wildlife species and can provide for needs such as forage and cover. It is also reasonable to expect an increase in the quality and quantity of browse availability following project activities. Understory flora could become more diverse as pyrophytic plants currently not common could increase in number, and post-thinning and burning more of the forest floor would be exposed to light creating suitable habitat for a more diverse array of understory species. An overall increase in biodiversity is expected within treated areas as a result of disturbance. Sedimentation of streams will be mitigated, protecting aquatic species from significant adverse impacts. Due to the low intensity of proposed treatments, and mitigation measures incorporated, the project would result in a less than significant impact on special-status species.

***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 Game or the U.S. Fish and Wildlife Service?***

Less Than Significant Impact with Mitigation: The above Mitigation Measures, Best Management Practices, and Standard Operating Protocols would prevent substantial adverse effect to any riparian habitat or sensitive natural community. Mitigation Measure 2, particularly, is designed to protect and aid in the enhancement of riparian habitat. Implementation of the fuels and forest health treatments would result in less-than-significant impacts on riparian habitat or other sensitive natural communities. Furthermore, it is anticipated that reduction of severe wildfire risk would be beneficial to sensitive habitats. Therefore, this impact would be less than significant.

***c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

No Impact: There are no federally protected wetlands in the project area. The project will not cause any significant changes in hydrology which could negatively impact wetlands outside the project area.

***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 nursery sites?***



**Less Than Significant Impact:** The project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species, will not interfere with any wildlife corridors, and will not impede the use of native wildlife nursery sites. The project includes hand thinning, pile burning, and prescribed underburn. These treatments would not result in a conversion of forested to non-forested land, or otherwise result in conditions that would impede the local or regional movements of wildlife or impede the use of native wildlife nursery sites. Therefore, the project would not substantially interfere with the use of nursery sites or the movement of migratory birds or other wildlife species. The impact 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?***

**Less Than Significant Impact:** The project will not conflict with any local policies or ordinances protecting biological resources, including tree preservation policies or ordinances. The 1984 Plumas County General Plan (and 2013 General Plan Update) contains directives to identify important wildlife habitats, important wildlife migration routes, and significant wetlands. As discussed in a) above, the project would not conflict with these policies. This impact would be less than significant.

***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?***

**No Impact:** The project will not conflict with a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. There are no proposed or approved habitat conservation plans or natural community conservation plans in Plumas County. There would be no impact.

## V. CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>V. CULTURAL RESOURCES:</b> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Thresholds of Significance:** The project would have a significant effect on Cultural Resources if it would cause a substantial adverse change in the significance of a historical resource as defined in '15064.5; cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5; directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or disturb any human remains, including those interred outside of formal cemeteries.

### Discussion

The Northeast Information Center (NEIC) of the California Historic Resources Information System (CHRIS) was contacted via a letter on August 30, 2017 by DZC Archaeology & Cultural Resource Management requesting a file search. The Record Search request included ¼-mile radius (Environmental Study Limits (ESL)) around the Area of Potential Effect (APE) for previously recorded archeological sites and previous surveys. Additionally, a location map with APE delineated was provided to the NEIC to determine if there was a level of sensitivity regarding historical and cultural resources. The record and literature search revealed one previously recorded resource within the APE, and eight recorded resources and thirteen identified, but not recorded resources within the ESL. The search also revealed that no surveys have been previously conducted within the APE, but that fourteen surveys have been previously conducted within the ESL. A review of the National Register of Historic Places, the California Register of Historical Resources, California Historical Resources Information System, California Historical Landmarks, and the Plumas County Historic Properties Data File did not identify any listed resources within the ESL. A review of the California Bridge Inventory and the Plumas County Bridge Inventory identified one bridge, Spanish Creek 02-PLU-070, within the ESL. As of 2017, Caltrans lists the bridge as “not eligible for NRHP.” As it is not in the APE and not eligible, this feature will receive no further consideration.

The Native American Heritage Commission (NAHC) was contacted by DZC on January 15, 2019, requesting a Sacred Lands File Search. The NAHC responded by email on January 16, 2019 stating that the Sacred Lands Search was negative and provided a list of individuals to be contacted regarding the project.

Based on the recommendation of the NAHC, DZC contacted persons on the designated contact list maintained by NAHC, providing each with a project description, location map, a request to respond to DZC with any relevant information, and a request to respond to the lead agency within 30 days, should the tribe wish to engage in formal government to government Consultation Email or hardcopy notifications were sent to all parties on the NAHC list January 29, 2019. As of June 19, 2019, no response had been received from the Chairperson or Cultural Directors of the Estom Yumeka Maidu Tribe of the Enterprise Rancheria, Greenville Rancheria, Mooretown Rancheria of Maidu Indians, the Susanville Indian Rancheria, the Washoe Tribe of

Nevada and California, Honey Lake Maidu, or the United Auburn Indian Community of the Auburn Rancheria. All correspondence regarding Native American coordination conducted by DZC is included in the FRC-WIP Cultural Resource Inventory Report (DZC, 2019).

On June 14, 2019, DZC contacted Beverly Ogle, a member of the Mountain Maidu Consortium. The specific topic of discussion was whether or not there was any cultural reason to prohibit the underburn within a particular Maidu affiliated site boundary. Ms. Ogle stated that low and slow burns would be good if no obvious wooden elements were observed, and that it would be especially good for the [black] oak trees. Ms. Ogle also recommended that a member of the Consortium should make a site visit with the Project Manager and Burn Boss prior to implementation. Ms. Ogle's recommendations for implementation are included in the FRC-WIP Cultural Resource Inventory Report (DZC, 2019).

A cultural resource survey and inventory was undertaken during May 2019. The work was overseen by a Secretary of the Interior qualified Registered Professional Archaeologist and a team of professional archaeologists. The survey team identified both new and previously recorded resources (seventeen) spanning both the pre-contact and historic eras. Site specific mitigations, referred to as Standard Resource Protection Measures (SRPMs) were prescribed for each resource based on the presence or absence of at-risk for fire constituents, and the type of cultural constituents present within the site.

***a) and b) Cause a substantial adverse change in the significance of a historical or archaeological resource?***  
Less Than Significant Impact with Mitigation: According to the Cultural Resources Inventory Report, there are locations within the project area identified as containing cultural resources. These resources should be treated as historically significant, and therefore protected, unless further investigations provide evidence to the contrary (PRC 5024.1, Title 14 CCR, Section 4850 et seq.).

***c) Directly or indirectly destroy a unique paleontological resource or unique geologic feature?***  
No Impact: Paleontological resources are the remains or traces of prehistoric animals and plants. Paleontological resources, which include fossil remains and geologic sites with fossil-bearing strata are non-renewable and scarce and are a sensitive resource afforded protection under environmental legislation in California. Under California PRC Section 5097.5, unauthorized disturbance or removal of a fossil locality or remains on public land is a misdemeanor. State law also requires reasonable mitigation of adverse environmental impacts that result from development of public land and affect paleontological resources (CPR Section 30244) (SVP 2010). The rock formations present within the project area do not contain potentially significant unique paleontological or geologic resources that project activities would impact, therefore there will be no impact.

***d) Disturb any human remains, including those interred outside of formal cemeteries?***  
Less Than Significant Impact: No human remains have been recorded, found in surveys or known to occur within the ESL. If human remains are discovered during project activities, impacts could be significant. As such, mitigation standards have been incorporated into this project to reduce this potential impact to less than significant by providing standard procedures in the event that human remains are encountered during project construction and adherence to PRC Section 5097.98 requiring Native American tribal notification.

***Supplementary from Tribal Resources Section - Cause a substantial adverse change in the significance of a tribal cultural resource?***

Less Than Significant Impact: Starting July 1, 2015, Lead Agencies are to consult with Tribes and initiate consultation prior to the release of a negative declaration, mitigated negative declaration or environmental impact report under the California Environmental Quality Act (CEQA). More specifically, AB 52 creates a new category of resources in CEQA called "tribal cultural resources" and seeks to engage the expertise of Native American tribes in the protection and preservation of those resources. To fulfill that purpose, the new law requires the lead agency to consult with a local Native American tribe as part of the environmental review

process. The law also requires that the details of the tribal cultural resource be kept confidential and provides examples of mitigation measures that focus on preserving tribal cultural resources. The Maidu Consortium (represented by Beverly Ogle) and Trina Cunningham, a direct Mountain Maidu descendant, were engaged early in the process and have expressed concern for cultural resources in the project area. In a cooperative dialogue they have disclosed areas of concern, which are now protected by project mitigation measures. If any incidental discoveries are made of potentially culturally significant resource, the tribes will be consulted on said resource.

**Mitigation Measure 4 – Protections for Cultural Sites**

A detailed index noting which mitigation measures – referred to here as SPMs - are applicable to which resources, is available for review in the specialist report (Zalarvis-Chase et al. 2019). The following items are the identified SPMs for this project.

- Site boundaries will be flagged for identification.
- No ground-disturbing activities will be allowed within site boundaries.
- No staging of heavy equipment will occur within 10 to 30 feet of site boundaries or designated features.
- Hand thinning (i.e. loppers, chainsaws) will be allowed within site boundaries, with minimal ground disturbance (i.e. hand bucking, hand carrying).
- Hand piles prohibited within 30 feet of sites.
- Low-intensity understory burns will be allowed across sites, provided they have no flammable (at-risk) features and a low fuel load.
- Fire containment lines are to be located such that they do not disturb archaeological sites.
- All at-risk for fire features will be protected from fire using a variety of methods, including: removing downed logs and heavy brush, constructing fire lines around structures, backfiring, and/or on-site monitoring during activities.
- Trees contributing to the setting or feeling of a site will not be impacted. This includes feature trees and large diameter trees located adjacent to linear features.
- Trees providing feature stability will not be harvested.
- If any unrecorded cultural resources (artifacts, features or sites) are encountered as a result of project operations, all activities in the vicinity of such finds will immediately cease pending an examination by a qualified archeologist and, if necessary, develop appropriate protection measures. The qualified archaeologist will follow accepted professional standards in recording any find including submittal of the standard Department of Parks and Recreation (DPR) Primary Record forms (Form DPR 523) and location information to the California Historical Resources Information Center office (North Central Information Center). The consulting archaeologist will also evaluate such resources for significance per California Register of Historical Resources eligibility criteria (PRC Section 5024.1; Title 14 CCR Section 4852). If the archaeologist determines that further information is needed to evaluate significance, the lead agency will be notified, and a resource preservation and data recovery plan will be prepared to ensure the resource is avoided, moved, recorded, or otherwise treated as deemed appropriate by the applicable federal, state, and/or local agency and in accordance with pertinent laws and regulations.
- Feather River RCD will consult with culturally affiliated Native American tribes regarding the disposition of recovered cultural items that are not burial associated.

The following process will be followed in the event that Native American human remains are discovered inadvertently:

- There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
  - a. The coroner of the county in which the remains are discovered is contacted and determines that no investigation of the cause of death is required, or
  - b. If the coroner determines the remains to be Native American:
    - 1. The coroner shall contact the Native American Heritage Commission within 24 hours.
    - 2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
    - 3. The most likely descendent may make recommendations to the Feather River RCD and Feather River College, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98.

To avoid significant effects to historic properties, DZC recommended the following stipulations be included as conditions of project approval and that these recommendations (CUL-#) be included on all project construction and design plans.

- **CUL-1:** A site visit to resource P-32-002334 shall occur prior to the burn implementation; the purpose of the site visit is to discuss the burn intensity approach to this area of the project boundary with regard to resource benefit and impacts. The Project Manager, Burn Boss, and a representative member from the Mountain Maidu Consortium shall be present during the visit.
- **CUL-2:** A Tribal Monitoring representing the Mountain Maidu Consortium shall be present during the burn at resource P-32-002334.
- **CUL-3:** Both Appendix E and Appendix F of the Cultural Resource Inventory Report (DZC et al. 2019) are to be provided to, and used by, the Burn Boss and each burn crew.

### ***Findings***

With implementation of the prescriptive SPMs, the Project will have No Impact on Cultural Resources.

## VI. GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>VI. GEOLOGY AND SOILS:</b> Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

The USDA NRCS WSS (Web Soil Survey) online tool was used to generate a soils map and report of the project area and surrounding sub-watershed. This information along with specifically referenced resources in this Section were used to make the following determinations regarding geology and soils and the potential for impact from project activities.

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

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

**ii) Strong seismic ground shaking?**

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

***iv) Landslides?***

No Impact: The project will not cause rupture of a known earthquake fault, will not cause seismic ground shaking, will not cause seismic-related ground failure, including liquefaction, and will not cause any landslides or increase landslide potential.

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

Less Than Significant Impact: The project consists of hand-thinning and low-intensity broadcast burning that will not result in substantial soil erosion or the loss of topsoil. The project will reduce the potential for significant soil loss often associated with uncontrolled high severity burns by reducing the risk of catastrophic wildfire. The project includes the building of trails/firebreaks which will be built following Trail Development Class 3 Guidelines of the US Forest Service and National Park Service (USDA 2016). Therefore, no project activities are expected to result in loss of topsoil or soil erosion.

***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, liquefaction, or collapse?***

No Impact: The project is not located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and will therefore not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

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

No Impact: The project is not located on an expansive soil, and will not create substantial risks to life or property.

***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 disposal of waste water?***

No Impact: The project will not require the use of septic tanks or waste water disposal systems.



## VII. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>VII. GREENHOUSE GAS EMISSIONS:</b> Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Discussion

***a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

Less Than Significant Impact: The project will generate greenhouse gas (GHG) emissions by broadcast burning of surface vegetation, pile burning, and the use of fuel by equipment (chainsaw) operation and vehicles traveling to and from the site. However, the project is intended to reduce existing moderate to heavy fuel loads such that fewer, less frequent, smaller, and shorter duration wildfires would occur, reducing GHG emissions over time. The Northern Sierra Air Quality Management District (NSAQMD) currently has no guidance concerning CEQA evaluation of GHG emissions. To evaluate whether the project would result in significant GHG emissions, this analysis uses an approach that is consistent with the approach used by the California Board of Forestry and Fire Protection to evaluate a statewide vegetation treatment program (Board of Forestry 2019 Chapter 3.8 pp 1-17). To evaluate the significance of the project's GHG emissions, the expected avoided GHG emissions from a catastrophic wildfire were compared to the GHG emissions expected from implementation of the project.

### FUELS REDUCTION AND FOREST HEALTH TREATMENTS

The GHG emissions from forest treatment activities vary depending on site conditions, timing and duration of treatments, treatment approach and equipment, and other factors. The Final Environmental Impact Report recently prepared by the California Board of Forestry and Fire Protection for a statewide vegetation treatment program provides typical GHG emission estimates for fuels reductions treatments (Board of Forestry 2019). While these do not reflect exact emissions from the project, these GHG estimates have been scaled down to provide a reasonable estimate of GHG emissions from hand thinning and prescribed fire activities associated with the project. As described in Section III, Air Quality, discussion a), use of chainsaws and worker commute trips during implementation project activities would be minor. Therefore, GHG emissions associated with these activities would be minimal, and are not quantitatively evaluated.

### HAND THINNING

Hand thinning is proposed for 94 acres of the project area. The Board of Forestry estimated equipment emissions from power tools like chainsaws and power brush saws used during manual treatments, as well as emissions from typical worker trips to and from a treatment site. Based on the estimated emissions per acre (0.69 MT CO<sub>2</sub>e) from 'Manual Treatment' in the Board of Forestry analysis, the 94 acres of hand thinning treatments in the project would result in approximately 64.9 MT CO<sub>2</sub>e emissions (Appendix B).

## PRESCRIBED FIRE

Prescribed fire treatments and pile burning, including site preparation activities such as fire line construction, are proposed on 20 of the 94 treated acres of the project area. The Board of Forestry estimated equipment emissions from power tools like chainsaws, as well as emissions from typical worker trips to and from a treatment site for prescribed fire treatments. The Board of Forestry modeled emissions from typical burning scenarios in a Sierra Nevada Mixed Conifer forest, which considered emissions from combustion of vegetation, associated equipment, and worker trips. This analysis provided estimated emissions of approximately 63.15 MT CO<sub>2</sub>e per acre (Board of Forestry 2019, Appendix AQ-1). For the 20 acres to be burned within the project site, this would result in estimated emissions of 1,263 MT CO<sub>2</sub>e (Appendix B).

## WILDFIRE EMISSIONS

The project is intended to reduce the risk for wildfire, but it is still possible that wildfires would occur on the site after treatment. Wildfires that occur after treatment would likely be smaller, of shorter duration, and less intense than under existing conditions, as a result of the reduction of understory biomass density after prescribed burning. The Board of Forestry EIR does not provide treated and untreated CO<sub>2</sub>e emission estimates from wildfires in Sierra Nevada forests, but these emission estimates are available from a USFS Region 5 modeling effort that evaluated a similar forest treatment project in the northern Sierra, just north of Lake Tahoe (USFS 2015). This modeling effort used the Forest Vegetation Simulator (FVS) model to produce emission estimates from wildfires occurring on a northern Sierra forest before and after a similar fuel reduction treatment. While emissions would vary based on stand characteristics and treatment type, this modeling effort provides a reasonable approximation of wildfire emissions within the project area. The FVS modeling predicted that an untreated northern Sierra mixed conifer stand would emit 79 MT CO<sub>2</sub>e per acre from a wildfire, and a treated stand would emit 17.6 MT CO<sub>2</sub>e per acre (USFS 2015). For the 94-acre project area, this would result in 7,426 MT CO<sub>2</sub>e from a wildfire under existing conditions. After project implementation, the area could be expected to produce approximately 1,654 MT CO<sub>2</sub>e from a smaller and reduced-intensity wildfire (Appendix B).

Table 8. Greenhouse Gas Emissions Summary

Activity	No Project – Untreated Emissions Scenario (MT CO <sub>2</sub> e)	Project Emissions - Treated Emissions Scenario (MT CO <sub>2</sub> e)
Hand Thinning	N/A	64.9
Prescribed Fire		1,263
Subtotal		1,327.90
Wildfire	7,426	1,654
Totals	7,426	2,981.90

As shown in Table 8, the combined emissions of project activities and a wildfire after project implementation are expected to produce approximately 2,982 MT CO<sub>2</sub>e, which is 4,444 MT CO<sub>2</sub>e, or 60%, less than the emissions produced by a wildfire without project implementation.

Both GHG estimation approaches result in different figures for emissions estimates, though the conclusion to both approaches is the same. Because the project would result in less GHG emissions than would likely occur without the project, the impact would be less than significant.

***b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

Less Than Significant Impact. In December 2017, CARB adopted its Climate Change Scoping Plan Update (Scoping Plan Update), which contains the main strategies California will use to reduce GHGs in order to reach the State's 2030 GHG emissions reduction target (CARB 2017b). This update builds upon the initial Scoping Plan with new strategies and recommendations. It defines CARB's climate change priorities required to meet the 2030 target, and also sets the groundwork to reach longer-term goals. The Scoping Plan Update recognizes the role of California's Natural and Working Lands in meeting California's GHG reduction goals. These lands include both forests and rangelands and can act as both source and sink. The Scoping Plan Update recognizes that some actions taken to address ecosystem health may result in temporary, short-term reductions in sequestration, but are necessary to maintain forest health and reduce losses due to wildfire. The goals set forward for these landscapes include reducing vegetative fuels.

California's overall plan for climate adaptation is expressed in the Draft Report Safeguarding California: 2017 Update (California Natural Resources Agency [CNRA] 2017). The plan provides policy guidance for state decision-makers and is part of continuing efforts to reduce impacts and prepare for climate risks. The Plan highlights climate risks in nine sectors in California, discusses progress to date, and makes realistic sector-specific recommendations. One of the key sectors is forestry, where the emphasis is on preparing for increased wildfire hazards, including treatment of hazardous fuels, and improving forest management approaches in a changing climate (CNRA 2017).

Plumas County and the NSAQMD currently do not have local plans, policies or regulations adopted to reduce GHG emissions. Because the project would reduce vegetative fuels and implement forest management treatments consistent with the First Update of the Climate Change Scoping Plan and Safeguarding California, the impact would be less than significant.

## VIII. HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS:</b> Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 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?***

No Impact: Drip torch fuel will be transported to the project area in containers designed for that use. Fuel and oil will also be routinely used during hand thinning operations to operate and maintain equipment. No other hazardous materials will be transported, used, or disposed of. The project will not create a significant hazard to the public or the environment through the transport, use, or disposal of hazardous materials.

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

No Impact: There are no reasonably foreseeable upset and/or accident conditions associated with the project that could release hazardous materials into the environment.

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

No Impact: See discussion a) for hazardous materials discussion.

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

No Impact: The project area is not included on any lists of hazardous material sites, and therefore, would not create a significant hazard to the public or environment.

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

Less Than Significant Impact: The proposed prescribed burns and burning of woody debris piles has the potential to create smoke that could impair visibility within the vicinity of Quincy-Gansner Airport. As described in the Air Quality section of this document, smoke emissions from prescribed fire and large-scale pile burning are regulated by local air districts through burn permits and Smoke Management Plans (SMPs). All burning would be completed under approved SMPs and permits to burn, which are required by NSAQMD. These plans and permits would describe acres by burn type, predominant vegetation, duration of burn, emissions estimates, identification of smoke sensitive areas, alternatives and contingencies, and the responsible parties. Emissions would be minimized through considerations such as weather conditions, wind direction, and burn pile size. The close proximity to a public airport would be incorporated into any approved SMP. By following an approved SMP, the project will not create a safety hazard for Quincy-Gansner Airport and, therefore, have a less than significant impact.

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

No Impact: There are no private airstrips within the vicinity of the project area, the project will not result in a safety hazard for people residing or working in the project area, and there will be no impact.

***g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

No Impact: In the event of an emergency, the Office of Emergency Services is charged with responding to the unincorporated areas of Plumas County, providing support to jurisdictions within Plumas County. The Office of Emergency Services also conducts ongoing evaluation of potential evacuation routes. There are no set evacuation routes; rather, they are established for particular events based on circumstances at the time. The main focus is on three operational concerns: 1) Local/community evacuation; 2) Area-wide evacuation; and 3) Large-scale traffic management during regional evacuations (Plumas County General Plan Update 2012). Since there are currently no adopted emergency response or emergency evacuation plans, this project will have no impact.

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

Less Than Significant Impact: The project involves prescribed underburns. Personnel carrying out the burn will be highly trained with prescribed burning and wildland firefighting, and will take all safety precautions necessary to avoid an escaped fire. Fire engines will be on-site during burning activities and patrols will be used once burning is complete to monitor the area. The project includes standard control practices that would protect people, structures, and infrastructure from negative effects from prescribed burning operations. Specific requirements for each burn will be described as a necessity for required burn plans/permits. The project will not expose people or structures to a significant risk of loss, injury or death involving wildland fires. The project would result in long-term benefits related to exposure of people or structures to a substantial risk of loss, injury, or death involving wildland fire due to reductions of existing fuel accumulations in the project area. The impact would be than significant impact.

## IX. HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>IX. HYDROLOGY AND WATER QUALITY:</b> Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

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

No Impact: The project will not violate any water quality standards or waste discharge requirements.

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

No Impact: The project will not substantially deplete groundwater supplies or interfere with groundwater recharge. By thinning the forest and opening the tree canopy, there is potential for increased filtration and enhanced groundwater recharge. There will be no negative effect on aquifer volume or groundwater table level as a result of the project.

**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, in a manner which would result in substantial on- or off-site erosion or siltation?***

Less Than Significant Impact: There is no excavation or significant ground disturbance associated with the project. Thinning work will be done by hand and fuel breaks/trails are designed so as to not impede or alter the existing natural flow. Trails will be built following Trail Development Class 3 Guidelines of the US Forest Service and National Park Service and will be located to avoid sensitive natural and cultural resources and designed to reduce erosion. The project will not substantially alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation.

**d) *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 substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?***

No Impact: There will be no excavation or ground disturbance associated with the project. Broadcast burning will be implemented using a low-intensity burn prescription that will not be hot enough to cause hydrophobic soil conditions which could affect runoff rates. The project will not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding.

**e) *Would the project 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?***

No Impact: The project will not contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

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

No Impact: The project will not substantially degrade water quality. See discussion c) and d) above.

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

No Impact: The project does not include the placement of any housing.

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

No Impact: The project does not include the placement of any structures.

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

No Impact: The project will not expose people or structures to a significant risk of loss, injury or death involving any type of flooding.

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

No Impact: The project will not result in inundation by seiche, tsunami or mudflow.



## X. LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>X. LAND USE AND PLANNING:</b> Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

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

No Impact: No communities will be physically divided by the project.

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

No Impact: The project does not conflict with any applicable land use plan, policy, or regulation.

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

No Impact: The project does not conflict with any applicable habitat conservation plan or natural community conservation plan. There are no proposed or approved habitat conservation plans or natural community conservation plans in Plumas County.

## XI. MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XI. MINERAL RESOURCES:</b> Would the project:				
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 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?***

No Impact: The project would not affect the availability of mineral resources, should they exist within the project area.

**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 plan?***

No Impact: There are no locally important mineral resource recovery sites within the project area.

## XII. NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XII. NOISE:</b> Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

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

Less Than Significant Impact: The only noise generated by the project will be from chainsaws, chippers, and vehicles operating for a limited duration. The operation of chainsaws and chippers for the proposed activities would be temporary and not create a permanent source of noise. This will not generate noise levels in excess of standards established in local plans, ordinances, or other applicable noise standards. Timing of use of chainsaws and chippers will be scheduled outside of times when classess are held. The impact would be less than significant.

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

No Impact: The project will not generate excessive groundborne vibration or noise levels.

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

No Impact: The project will not create any permanent sources of ambient noise.

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

No Impact: The only noise generated by the project will be from chainsaws, chippers, and vehicles operating for a short duration. The project area surrounds a Community College campus where there is constant vehicle noise, including larger diesel pick-up trucks that are used to transport livestock as part of the college Equine program and occasional heavy equipment use. This project will not create a substantial temporary or periodic increase in ambient noise levels in the project vicinity.

**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 expose people residing or working in the project area to excessive noise levels?***

No Impact: The project area is located within 2 miles of Quincy Gansner Field, a public use airport owned and located in Plumas County. The upper limit of generally acceptable Community Noise Equivalent Level (CNEL) is 60 decibels (db). According to analysis presented in the 1990 Draft Airport Master Plan, the area subject to 60 db CNEL generally stays within the airport boundaries or slightly beyond the runway ends for current and projected takeoff and landing operations at Gansner Airport. Therefore, the project would not expose or otherwise impact people working in the project area to excessive noise levels (Plumas County 2008).

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

No Impact: The project is not within the vicinity of a private airstrip.

### XIII. POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XIII. POPULATION AND HOUSING:</b> Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Discussion

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

No Impact: The project will not induce population growth. There are no new homes, businesses or expansion of infrastructure associated with the project.

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

No Impact: No homes will be affected by the project.

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

No Impact: There are no residents within or near the project area that will be displaced by the project.

## XIV. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XIV. PUBLIC SERVICES:</b>				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### *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? Police protection? Schools? Parks? Other public facilities?***

**No Impact:** The project will not result in any changes that would require expansion or creation of public services, including fire protection, police protection, schools, parks, or other public facilities.

## XV. RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XV. RECREATION:</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 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?***

Less Than Significant Impact: The project includes the construction of approximately 5,000 feet of trail and may slightly increase recreation use on the property. It is not anticipated that there will be an increase in the use of existing neighborhood and regional parks or other recreational facilities such that physical deterioration of the area will occur or be accelerated, and therefore, impacts from this project will be less than significant.

***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?***

Less Than Significant Impact: The project includes the construction of approximately 5,000 feet of trail, expanding upon the existing campus trail system. Trails will be designed to avoid adverse physical effects on the environment, such as erosion and impacts to water quality. Trails will be built following Trail Development Class 3 Guidelines of the US Forest Service and National Park Service and will be located to avoid sensitive natural and cultural resources and designed to reduce erosion. The project will not require the construction or expansion of any structural recreational facilities.

## XVI. TRANSPORTATION/TRAFFIC

### XVI. TRANSPORTATION/TRAFFIC: Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

### Discussion

**a) Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

Less Than Significant Impact: The project activities are primarily manual and will occur in forested, unroaded uplands and will not impact traffic circulation patterns.

**b) Would the project conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

No Impact: The project is located in a rural community that has experienced little to no population growth (< 1% average) since 1980 and this pattern is projected to remain through 2030. As such, it does not experience the traffic congestion and circulation patterns of more urbanized areas. The Plumas County Regional Transportation Plan – 2010 (Lumos & Assoc. 2011) was completed to assess and provide guidelines regarding regional transportation planning through 2030. The need for a congestion management program was not deemed necessary at the time, therefore, the project will not be in conflict with any regional congestion management program.



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

No Impact: The project will not impact air traffic patterns.

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

No Impact: The project does not include any design features that could affect traffic.

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

No Impact: The project will not affect emergency access.

**f) *Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?***

Less Than Significant Impact: See discussion under b). The project activities will predominantly occur in forested upland where there are existing foot and horse trails that are infrequently utilized. These trails may be temporarily closed for short periods during project implementation, but otherwise, will not impact public transit, bicycle, or pedestrian facilities, or safety of such facilities.

## XVII. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XVII. TRIBAL CULTURAL RESOURCES:</b> 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, and that is:				
a) 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), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) 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. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The Northeast Information Center (NEIC) of the California Historic Resources Information System (CHRIS) was contacted via a letter on August 30, 2017 by DZC Archaeology & Cultural Resource Management requesting a file search. The Record Search request included ¼-mile radius (Environmental Study Limits (ESL)) around the Area of Potential Effect (APE) for previously recorded archeological sites and previous surveys. Additionally, a location map with APE delineated was provided to the NEIC to determine if there was a level of sensitivity regarding historical and cultural resources. The record and literature search revealed one previously recorded resource within the APE, and eight recorded resources and thirteen identified, but not recorded resources within the ESL. The search also revealed that no surveys have been previously conducted within the APE, but that fourteen surveys have been previously conducted within the ESL. A review of the National Register of Historic Places, the California Register of Historical Resources, California Historical Resources Information System, California Historical Landmarks, and the Plumas County Historic Properties Data File did not identify any listed resources within the ESL. A review of the California Bridge Inventory and the Plumas County Bridge Inventory identified one bridge, Spanish Creek 02-PLU-070, within the ESL. As of 2017, Caltrans lists the bridge as “not eligible for NRHP.” As it is not in the APE and not eligible, this feature will receive no further consideration.

The Native American Heritage Commission (NAHC) was contacted by DZC on January 15, 2019, requesting a Sacred Lands File Search. The NAHC responded by email on January 16, 2019 stating that the Sacred Lands Search was negative and provided a list of individuals to be contacted regarding the project.

Based on the recommendation of the NAHC, DZC contacted persons on the designated contact list maintained by NAHC, providing each with a project description, location map, a request to respond to DZC with any relevant information, and a request to respond to the lead agency within 30 days, should the tribe wish to engage in formal government to government Consultation. Email or hardcopy notifications were sent to all parties on the NAHC list January 29, 2019. As of June 19, 2019, no response had been received from the Chairperson or Cultural Directors of the Estom Yumeka Maidu Tribe of the Enterprise Rancheria, Greenville Rancheria, Mooretown Rancheria of Maidu Indians, the Susanville Indian Rancheria, the Washoe Tribe of Nevada and California, Honey Lake Maidu, or the United Auburn Indian Community of the Auburn Rancheria. All correspondence regarding Native American coordination conducted by DZC is included in the FRC-WIP Cultural Resource Inventory Report (DZC, 2019).

On June 14, 2019, DZC contacted Beverly Ogle, a member of the Mountain Maidu Consortium. The specific topic of discussion was whether or not there was any cultural reason to prohibit the underburn within a particular Maidu affiliated site boundary. Ms. Ogle stated that low and slow burns would be good if no obvious wooden elements were observed, and that it would be especially good for the [black] oak trees. Ms. Ogle also recommended that a member of the Consortium should make a site visit with the Project Manager and Burn Boss prior to implementation. Ms. Ogle's recommendations for implementation are included in the FRC-WIP Cultural Resource Inventory Report (DZC, 2019).

A cultural resource survey and inventory was undertaken during May 2019. The work was overseen by a Secretary of the Interior qualified Registered Professional Archaeologist and a team of professional archaeologists. The survey team identified both new and previously recorded resources (seventeen) spanning both the pre-contact and historic eras. Site specific mitigations, referred to as Standard Resource Protection Measures (SRPMs) were prescribed for each resource based on the presence or absence of at-risk for fire constituents, and the type of cultural constituents present within the site.

**a) *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, 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)?***

Less Than Significant Impact with Mitigation: According to the Cultural Resources Inventory Report, there are locations within the project area identified as containing cultural resources. These resources should be treated as historically significant, and therefore protected, unless further investigations provide evidence to the contrary (PRC 5024.1, Title 14 CCR, Section 4850 et seq.). Starting July 1, 2015, Lead Agencies are to consult with Tribes and initiate consultation prior to the release of a negative declaration, mitigated negative declaration or environmental impact report under the California Environmental Quality Act (CEQA). More specifically, AB 52 creates a new category of resources in CEQA called "tribal cultural resources" and seeks to engage the expertise of Native American tribes in the protection and preservation of those resources. To fulfill that purpose, the new law requires the lead agency to consult with a local Native American tribe as part of the environmental review process. The law also requires that the details of the tribal cultural resource be kept confidential and provides examples of mitigation measures that focus on preserving tribal cultural resources.

On June 14, 2019, DZC contacted Beverly Ogle, a member of the Mountain Maidu Consortium. The specific topic of discussion was whether or not there was any cultural reason to prohibit the underburn within a particular Maidu affiliated site boundary. Ms. Ogle stated that low and slow burns would be good if no obvious wooden elements were observed, and that it would be especially good for the [black] oak trees. Ms. Ogle also recommended that a member of the Consortium should make a site visit with the Project Manager and Burn Boss prior to implementation. Ms. Ogle's recommendations for implementation are included in the FRC-WIP Cultural Resource Inventory Report (DZC, 2019). Trina Cunningham, a direct decent of Mountain Maidu from nearby Genesee Valley has been actively involved in the development of the FRC Forest and Fire Management Plan and forest treatment prescriptions for this project. In a cooperative dialogue, they have disclosed areas of concern, which are now protected by project mitigation measures. If any incidental discoveries are made of potentially culturally significant resource, the tribes will be consulted on said resource.

**b) *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, 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. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?***

**Less Than Significant Impact with Mitigation:** According to the Cultural Resources Inventory Report, there are locations within the project area identified as containing cultural resources. These resources should be treated as historically significant, and therefore protected, unless further investigations provide evidence to the contrary (PRC 5024.1, Title 14 CCR, Section 4850 et seq.). Starting July 1, 2015, Lead Agencies are to consult with Tribes and initiate consultation prior to the release of a negative declaration, mitigated negative declaration or environmental impact report under the California Environmental Quality Act (CEQA). More specifically, AB 52 creates a new category of resources in CEQA called “tribal cultural resources” and seeks to engage the expertise of Native American tribes in the protection and preservation of those resources. To fulfill that purpose, the new law requires the lead agency to consult with a local Native American tribe as part of the environmental review process. The law also requires that the details of the tribal cultural resource be kept confidential and provides examples of mitigation measures that focus on preserving tribal cultural resources.

On June 14, 2019, DZC contacted Beverly Ogle, a member of the Mountain Maidu Consortium. The specific topic of discussion was whether or not there was any cultural reason to prohibit the underburn within a particular Maidu affiliated site boundary. Ms. Ogle stated that low and slow burns would be good if no obvious wooden elements were observed, and that it would be especially good for the [black] oak trees. Ms. Ogle also recommended that a member of the Consortium should make a site visit with the Project Manager and Burn Boss prior to implementation. Ms. Ogle’s recommendations for implementation are included in the FRC-WIP Cultural Resource Inventory Report (DZC, 2019). Trina Cunningham, a direct decent of Mountain Maidu from nearby Genesee Valley has been actively involved in the development of the FRC Forest and Fire Management Plan and forest treatment prescriptions for this project. In a cooperative dialogue, they have disclosed areas of concern, which are now protected by project mitigation measures. If any incidental discoveries are made of potentially culturally significant resource, the tribes will be consulted on said resource.

### ***Mitigation Measures***

Mitigation measures to protect cultural resources in and adjacent to the project area have been outlined in Section V. Cultural Resources of this document. A detailed index noting which mitigation measures (Appendix A) – referred to here as SPMs - are applicable to which resources, is available for review in the specialist report. The mitigation measure items are the identified SPMs for this project

## XVIII. UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XVIII. UTILITIES AND SERVICE SYSTEMS:</b> Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

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

No Impact: The project will not generate any wastewater.

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

No Impact: The project will not require or result in the construction or expansion of water or wastewater facilities.

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

No Impact: The project will not require or result in the construction or expansion of storm water drainage facilities.

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

No Impact: The project will not require the use of water supplies from any existing entitlements or resources, and will not require new or expanded entitlements.

**e) *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 commitments?***

No Impact: The project will not require service from a wastewater treatment provider.

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

No Impact: The project will not require service by a landfill.

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

No Impact: The project will not generate any solid waste.

## XIX. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XIX. MANDATORY FINDINGS OF SIGNIFICANCE</b>				
a) Does the project have the potential to 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 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, 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?**

No Impact: The project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory.

**b) 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.)**

No Impact: The project will not have impacts that are individually limited, but cumulatively considerable.

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

No Impact: The project will not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.





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## Appendix A

### Mitigation Monitoring and Reporting Plan (MMRP) for the Feather River College Watershed Improvement Project Initial Study/Mitigated Negative Declaration

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

#### Potentially Significant Effects and Mitigation Measures

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

#### Mitigation Measure 1 - Sensitive Plant Protection.

The following measures are designed to protect special-status plant species from any incidental take or degradation of habitat as a result of project activities. For more information on the botanical survey results see Feather River College WIP Botany Report (Plumas Corporation 2019).

Management of botanical resources, special habitats, and noxious weeds would follow the guidelines below:

- 1.1 Any new occurrences of sensitive plants identified within the project area would be flagged and avoided when necessary.
- 1.2 Should any new threatened, endangered, sensitive (TES) or watchlist species be located during the proposed project, available steps will be taken to evaluate and mitigate effects.
- 1.3 All off-road equipment would be cleaned to insure it is free of soil, seeds, vegetative matter or other debris that could contain seeds before entering the project area.
- 1.4 Infestations of invasive plants that are discovered during project implementation would be documented and locations mapped.

**Schedule:** Occurrences shall be located and marked with flagging prior to operations and this protection measure shall apply for the duration of the project.

**Responsible Party:** Feather River College shall be responsible for carrying out this mitigation measure.

#### Verification of Compliance:

**Monitoring Party:** Feather River College Project Manager

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure 2 – Yellow-Legged Frog and other Aquatic Species Protections.**

The following measures are designed to protect foothill yellow-legged frogs and other aquatic TESP species from any incidental take or degradation of habitat as a result of project activities. For locations of streams, buffer zones and more information on survey results see the Feather River College WIP wildlife report (Plumas Audubon 2019).

- 2.1 - No hand piling of woody debris allowed within 82 feet of perennial streams.
- 2.2 - No chainsaw thinning allowed within the riparian corridor, but at a minimum of 50 feet from active perennial streams.
- 2.3 - No piling of woody debris within 25 feet of intermittent streams.
- 2.4 - No prescribed fire ignited within 25 feet of streams.

Adhering to all Best Management Practices, Standard Operating Procedures, and the above minimum distances will prevent sediment from reaching streams as a result of all project activities.

**Schedule:** Stream buffer zones shall be located and marked with flagging prior to operations and this protection measure shall apply for the duration of the project.

**Responsible Party for Mitigation Measures 2.1-2.4:** Feather River College Project Manager, contracted for the period(s) of implementation, shall be responsible for carrying out these mitigation measures.

**Verification of Compliance for Mitigation Measures 2.1-2.4:**

**Monitoring Party:** Feather River College Project Manager

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure 3 Limited Operating Periods.** Limited Operating Periods will be adhered to where operations will be “limited” as described in the table below:

Species	Location	Limited Operating Period	Mitigation ID
Yellow-legged Frogs	Instream work	No perennial stream in project area	3.1
	Upland work and burning	October 01 – April 15	3.2
California Spotted Owl	Within 1/4 mile of nests or within protected activity center boundary	March 1 - August 15	3.3
Goshawk	Within 1/4 mile of nests or within protected activity center boundary	February 15 - September 15	3.4
Pallid Bat and Townsend's Big-eared Bat	W/in 1/4 mile of maternity and other roosts	May 1 – August 15	3.5

**Schedule:** In the event that a bat roosting site is discovered prior to or during project activities a limited operating period would be applied.

**Responsible Party:** Feather River College Project Manager shall be responsible for ensuring that adequate surveys have been conducted or LOPs are implemented in order to carry out these mitigation measures 3.1-3.5.

**Verification of Compliance for Mitigation Measures 3.1-3.5:**

**Monitoring Party:** Feather River College Project Manager

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Mitigation Measure 4 – Protections for Cultural Sites**

A detailed index noting which mitigation measures – referred to here as SPMs - are applicable to which resources, is available for review in the specialist report (Zalarvis-Chase et al 2019). The following items are the identified SPMs for this project.

- 4.1 - Site boundaries will be flagged for identification.
- 4.2 - No ground-disturbing activities will be allowed within site boundaries.
- 4.3 - No staging of heavy equipment will occur within 10 to 30 feet of site boundaries or designated features.
- 4.4 - Hand thinning (i.e. loppers, chainsaws) will be allowed within site boundaries, with minimal ground disturbance (i.e. hand bucking, hand carrying).
- 4.5 - Hand piles prohibited within 30 feet of sites.
- 4.6 - Low-intensity understory burns will be allowed across sites, provided they have no flammable (at-risk) features and a low fuel load.
- 4.7 - Fire containment lines are to be located such that they do not disturb archaeological sites.
- 4.8 - All at-risk for fire features will be protected from fire using a variety of methods, including: removing downed logs and heavy brush, constructing fire lines around structures, backfiring, and/or on-site monitoring during activities.
- 4.9 - Trees contributing to the setting or feeling of a site will not be impacted. This includes feature trees and large diameter trees located adjacent to linear features
- 4.10 - Trees providing feature stability will not be harvested.
- 4.11 - If any unrecorded cultural resources (artifacts, features or sites) are encountered as a result of project operations, all activities in the vicinity of such finds will immediately cease pending an examination by a qualified archeologist and, if necessary, develop appropriate protection measures. The qualified archaeologist will follow accepted professional standards in recording any find including submittal of the standard Department of Parks and Recreation (DPR) Primary Record forms (Form DPR 523) and location information to the California Historical Resources Information Center office (North Central Information Center). The consulting archaeologist will also evaluate such resources for significance per California Register of Historical Resources eligibility criteria (PRC Section 5024.1; Title 14 CCR Section 4852). If the archaeologist determines that further information is needed to evaluate significance, the lead agency will be notified, and a resource preservation and data recovery plan will be prepared to ensure the resource is avoided, moved, recorded, or otherwise treated as deemed appropriate by the applicable federal, state, and/or local agency and in accordance with pertinent laws and regulations.
- 4.12 - Feather River College will consult with culturally affiliated Native American tribes regarding the disposition of recovered cultural items that are not burial associated.
- 4.13 - The following process will be followed in the event that any accessible areas proposed for treatment were not previously surveyed for cultural resources:
  - 4.13.1 - A cultural resources survey and inventory shall be conducted by a Secretary of the Interior qualified Registered Professional Archaeologist prior to treatment,
  - 4.13.2 - If any previously unrecorded cultural resources (artifacts, features or sites) are encountered during the survey, the resources will be inventoried and applicable Standard Protection Measures (SPMs) described in this mitigation measure will be applied to the resource.
- 4.14 - If any unrecorded cultural resources (artifacts, features or sites) are encountered as a result of project operations, all activities in the vicinity of such finds will immediately cease pending an examination by the forest or district archaeologist and, if necessary, develop appropriate protection measures. The qualified archaeologist will follow accepted professional standards in recording any find including submittal of the standard Department of Parks and Recreation (DPR) Primary Record forms (Form DPR

523) and location information to the California Historical Resources Information Center office (North Central Information Center). The consulting archaeologist will also evaluate such resources for significance per California Register of Historical Resources eligibility criteria (PRC Section 5024.1; Title 14 CCR Section 4852). If the archaeologist determines that further information is needed to evaluate significance, the lead agency will be notified, and a resource preservation and data recovery plan will be prepared to ensure the resource is avoided, moved, recorded, or otherwise treated as deemed appropriate by the applicable federal, state, and/or local agency and in accordance with pertinent laws and regulations.

The following process will be followed in the event that Native American human remains are discovered inadvertently:

4.15 - There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

- 4.15.1 The coroner of the county in which the remains are discovered is contacted and determines that no investigation of the cause of death is required, or
- 4.15.2 If the coroner determines the remains to be Native American.
  - a. The coroner shall contact the Native American Heritage Commission within 24 hours.
  - b. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
  - c. The most likely descendent may make recommendations to the Feather River RCD and Feather River College, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98.

To avoid significant effects to historic properties, DZC recommended the following stipulations be included as conditions of project approval and that these recommendations (CUL-#) be included on all project construction and design plans.

**CUL-1:** A site visit to resource P-32-002334 shall occur prior to the burn implementation; the purpose of the site visit is to discuss the burn intensity approach to this area of the project boundary with regard to resource benefit and impacts. The Project Manager, Burn Boss, and a representative member from the Mountain Maidu Consortium shall be present during the visit.

**CUL-2:** A Tribal Monitor representing the Mountain Maidu Consortium shall be present during the burn at resource P-32-002334.

**CUL-3:** Both Appendix E and Appendix F of the Cultural Resource Inventory Report (DZC et al. 2019) are to be provided to, and used by, the Burn Boss and each burn crew.

**Schedule:** Flagging site locations and boundaries (mitigation 4.1) shall be completed prior to operations and this protection measure shall apply for the duration of the project. Mitigations 4.2-4.13 shall be adhered to as applicable during project implementation.

**Responsible Party:** Feather River College Project Manager shall be responsible for carrying out mitigation measure 4.1 (flagging). A Secretary of the Interior qualified Registered Professional Archaeologist shall be responsible for carrying out mitigation measure 4.15 (survey and inventory) and CUL-1. The Project Manager shall be responsible for adhering to mitigation measures 4.2-4.15 and CUL-1, CUL-2, and CUL-3, and will not complete activities that are limited per mitigation measures 4.4 and 4.15 if an archaeologist is not present.

**Verification of Compliance for Mitigation Measure 4.1:**

**Monitoring Party:** Feather River College Project Manager

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Verification of Compliance for Mitigation Measure CUL-1:**

**Monitoring Party:** DZC Consulting (A Secretary of the Interior qualified Registered Professional Archaeologist)

Initials: \_\_\_\_\_

Date: \_\_\_\_\_

**Verification of Compliance for Mitigation Measures 4.2-4.15, CUL-1,CUL-2,CUL-3:**

**Monitoring Party:** Contractor and Feather River College Project Manager

Initials: \_\_\_\_\_

Date: \_\_\_\_\_





## Appendix B

### Air Quality and Greenhouse Gas Calculations

Feather River WIP Air Quality Calculations (VTPEIR calcs)					
Activity	Emission Source	ROG (lb/day)	NOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
Hand Thinning	Equipment Emissions	43.80	4.30	0.80	0.20
	Worker Trip Emissions*	0.025	0.10	0.85	0.19
	Hand Thinning Sub Total	43.83	4.41	0.80	0.41
Prescribed Fire for Tree Dominated Area	Equipment Emissions	0.23	2.17	0.34	0.20
	Worker Trip Emissions*	0.025	0.10	0.85	0.19
	Prescribed Fire equipment and worker Sub Total	0.41	2.47	0.95	0.36
	Fire Emissions**	10,933.00	830.00	7,101.50	7,101.50
Total Project Activity Emissions		11,023.20	846.76	7,103.70	7,103.70
Project Equipment and Worker Subtotal Emission		44.24	6.88	1.75	0.77

\* Assumes a 20-member crew (inclusive of Project Manager, Fire Boss (for prescribed burning)

\*\*Assumes 5 acres/day for prescribed burns

NSAQMD Threshold Level	ROG lbs/day	NOx lbs/day	PM10 (lbs/day)
Level A	<24	<24	<79
Level B	24-136	24-136	79-136
Level C	>136	>136	>136

The NSAQSM has developed a tiered approach to significance levels: a project with emissions meeting Level A thresholds will require the most basic mitigations; projects with projected emissions in the Level B range will require more extensive mitigations; and those projects which will exceed Level C thresholds will require the most extensive mitigations.

Feather River College WIP GHG Emissions Factors (USFS 2015 calcs)										
Activity	Emission Source	ROG lb/day	NOx lb/day	PM10 lb/day	PM2.5 lb/day	CO2e MT/yr	Treated Acres per Year	Calculated CO2e MT/acre	FRC- WIP Acres Treated	FRC-WIP GHG Emission (MT CO2e)
Hand Thinning	Equipment Emissions	0.005	0.00	0.00	0.00	0.01	2,256	0.0004	94	0.04
	Worker Trip Emissions	0.126	0.94	0.23	0.09	0.96				
	Sub Total	0.131	0.938	0.228	0.093	0.970				
Prescribed Fire for Tree Dominated Area Mediterranean Climate Mixed Forest. Sierra Nevada Mixed Conifer (Sugar Pine, Douglas Fir, Oak Forest)	Equipment Emissions	0.23	2.17	0.34	0.20	6.35	11,072	20.22	20	404.36
	Worker Trip Emissions	0.18	0.30	0.61	0.16	6.14				
	Sub Total	0.41	2.47	0.95	0.36	12.49				
	Fire Emissions	286,000	185	95,333	78,000	223,852				
Wildfire on Treatment Acres (Treated Scenario)	Fire Emissions	N/A	N/A	N/A	N/A	N/A	N/A	17.6	94	1,654.40
Wildfire on Treatment Acres (Untreated Scenario)	Fire Emissions	N/A	N/A	N/A	N/A	N/A	N/A	79	94	7,426.00