# Initial Study-Mitigated Negative Declaration for the proposed Shake Omo 2019 VMP (Rx-North-042-AEU) Project Amador and El Dorado Counties, California





## prepared by:

Patrick McDaniel, Registered Professional Forester #2679 The California Department of Forestry and Fire Protection The Lead Agency Pursuant to § 21082.1 of the California Environmental Quality Act

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> > **April 2020**

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## MITIGATED NEGATIVE DECLARATION

## Introduction and Regulatory Context

### STAGE OF CEQA DOCUMENT DEVELOPMENT

<b>Administrative Draft.</b> This California Environmental Quality Act (CEQA) document is in preparation by California Department of Forestry and Fire Protection (CAL FIRE) staff.
<b>Public Document.</b> This completed CEQA document has been filed by CAL FIRE at the State Clearinghouse.
<b>Final CEQA Document.</b> This final CEQA document contains the changes made by the Department following consideration of comments received during the public and agency review period. The CEQA administrative record supporting this document is on file, and available for review, at CAL FIRE's Sacramento Headquarters, Environmental Protection Program.

## INTRODUCTION

This initial study-mitigated negative declaration (IS-MND) describes the environmental impact analysis conducted for the proposed project. This document was prepared by CAL FIRE staff utilizing information gathered from a number of sources including research, field review of the proposed project area and consultation with environmental planners and other experts on staff at other public agencies. Pursuant to § 21082.1 of CEQA, the lead agency, CAL FIRE, has prepared, reviewed, and analyzed the IS-MND and declares that the statements made in this document reflect CAL FIRE's independent judgment as lead agency pursuant to CEQA. CAL FIRE further finds that the proposed project, which includes revised activities and mitigation measures designed to minimize environmental impacts, will not result in a significant effect on the environment.

#### REGULATORY GUIDANCE

This IS-MND has been prepared by CAL FIRE to evaluate potential environmental effects that could result following approval and implementation of the proposed project. This document has been prepared in accordance with current CEQA Statutes (Public Resources Code §21000 et seq.) and current CEQA Guidelines (California Code of Regulations [CCR] §15000 et seq.)

An initial study is prepared by a lead agency to determine if a project may have a significant effect on the environment (14 CCR § 15063(a)), and thus, to determine the appropriate environmental document. In accordance with CEQA Guidelines §15070, a "public agency shall prepare...a proposed negative declaration or mitigated negative declaration...when: (a) The initial study shows that there is no substantial evidence...that the project may have a significant impact upon the environment, or (b) The initial study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions will reduce potentially significant effects to a less-than-significant level." In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the proposed project will not have a significant effect on the environment and, therefore, does not require the preparation of an

environmental impact report. This IS-MND conforms to these requirements and to the content requirements of CEQA Guidelines § 15071.

### Purpose of the Initial Study

CAL FIRE has primary authority for carrying out the proposed project and is the lead agency under CEQA. The purpose of this IS-MND is to present to the public and reviewing agencies the environmental consequences of implementing the proposed project and to describe the adjustments made to the project to avoid significant 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 state agency review and comment for a review period of 30 days as indicated on the **Notice of Intent to Adopt a Mitigated Negative Declaration** (NOI).

The requirements for providing an NOI are found in CEQA Guidelines §15072. These guidelines require CAL FIRE to notify the general public by providing the NOI to the county clerk for posting, sending the NOI to those who have requested it, and utilizing at least one of the following three procedures:

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

CAL FIRE has elected to utilize **Posting the NOI on and off site in the area where the project is to be located**, the 2<sup>nd</sup> of the three notification options. 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 at the Governor's Office of Planning and Research State Clearinghouse (<u>link</u>).

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

Patrick McDaniel Forester I, Vegetation Management Program CAL FIRE, Amador El Dorado Unit 2840 Mt. Danaher Road Camino, CA 95709 Phone: (530) 647-5288

Email: Patrick.McDaniel@fire.ca.gov

After comments are received from the public and reviewing agencies, CAL FIRE will consider

those comments and may (1) adopt the mitigated negative declaration and approve the proposed

project; (2) undertake additional environmental studies; or (3) abandon the project.

## Project Description and Environmental Setting

## **PROJECT LOCATION**

Portions of Sections 1, 2, 3, T8N, R12E, MDB&M Portions of Sections 4, 5, 6, 9, 13, 16, 24, 25, 33, 34, 35, & 36, T8N, R13E, MDB&M Portions of Sections 16, 17, 18, 19, 20, 21, 29, & 30, T8N, R14E MDB&M

Portions of Section 36, T9N, R12E, MDB&M

Portions of Sections 31 & 32, T9N, R13E MDB&M

## BACKGROUND AND NEED FOR THE PROJECT

100+/- years of fire exclusion has created an environment that doesn't reflect the environment that the wildlife species of the area evolved with prior to modern settlement and contains dense pockets of undergrowth that pose a wildland fire hazard to human life and property. The intent of the project is to maintain shaded fuel breaks (encouragement of a well-developed overstory of larger diameter trees while removing the volatile vegetation that makes up the "fuel ladder"). that were established here 10-20 years ago establishment under prior CAL FIRE VMP's. This shaded fuel break is intended to create an environment that will provide adequate fire protection uses while encouraging forest development for wildlife resources.

The open and partially shaded conditions that are prescribed by the shaded fuel break prescription more closely reflect conditions that would have likely been present prior to modern settlement. Re-introduction of fire on a broad scale is logistically and operationally impossible. This shaded fuel break project has taken this fact into consideration and will be implemented to make the best effort possible to create an environment that not only assists with the protection of human life and private property; but will also improve the area for wildlife utilization.

#### PROJECT OBJECTIVES

- Create and maintain Defensible Fuel Zone Profiles (Shaded Fuel Breaks)
  as a part of the Community Fuel Break System which is designed to protect
  the community and the watershed values of the area from uncontrolled
  wildfire.
- 2. Provide a defensible location for firefighting operations and evacuations.
- 3. Preserve the conifer overstory.
- 4. Enhance wildlife habitat.

All of the treatments indicated above will be utilized individually or in combination to create the final desired condition. The final desired condition will be an open and park like condition of larger diameter trees with enough of the understory vegetation removed to prevent vertical fire spread in the event of wildland fire or defensive wildland fire fighting operations. Tree species that will be favored for retention will be Ponderosa Pine, Sugar Pine, California Incense Cedar, Black Oak, Douglas Fir, and True Fir.

## **PROJECT START DATE**

Spring/Summer 2020

## **PROJECT DESCRIPTION**

This project will be the establishment and maintenance of Defensible Fuel Zone Profiles (shaded fuel breaks) that are a part of the Community Fuel Break System in northern Amador County and southern El Dorado County. The project will consist of fuels reduction projects that will utilize fire crew brush cutting, mechanical treatments, pile burning, tractor mastication, and broadcast prescribed fire. The fuels treatment mechanism that is most favored is broadcast prescribed fire. The desired width of Defensible Fuel Zone Profiles is 500 feet however the width will be increased to a much as 1,400 feet where the topography remains under 30%.

## **ENVIRONMENTAL SETTING OF THE PROJECT REGION**

Project elevation ranges from 3000 to 5,000 feet. The aspect of the project is variable, but the dominant aspect is south to southwest. Slopes within the project area range from nearly flat to moderately steep (30% to 50%).

## **DESCRIPTION OF THE LOCAL ENVIRONMENT**

The dominant vegetation community represented by the project is Sierran Mixed Conifer which is an assemblage of conifer and hardwood species that form a multilayered forest if unaltered or if fire is excluded for extensive periods. Forest stands within the project area range from very open and park like to vegetation densities that are almost impenetrable by foot traffic. The dominant tree species is Ponderosa Pine however, Incense Cedar, White Fir, Douglas Fir, Sugar Pine, California Black Oak and other hardwoods can be found in smaller concentrations throughout.

## **CURRENT LAND USE AND PREVIOUS IMPACTS**

The dominant land use with the project area is the harvesting of timber by the primary underlying industrial landowner, Sierra Pacific Industries. Proposed treatments are maintenance of historical Amador El Dorado Unit VMP use of this ground between 1996 and 2008 that overlaps the proposed Shake Omo 2019 VMP. Past vegetation management treatments included hand crew and mechanical cutting and burning of piled vegetation, tractor mastication. In the years following initial treatment, needle cast and bear clover regrowth was used to carry broadcast prescribed fire to reduce deer brush regrowth on the ridgetop to protect timberlands and surrounding subdivisions by creating an open and park like condition of larger diameter trees with enough understory vegetation removed to prevent vertical fire spread in the event of wildland fire and to allow defensive wildland firefighting from uncontrolled wildfire.

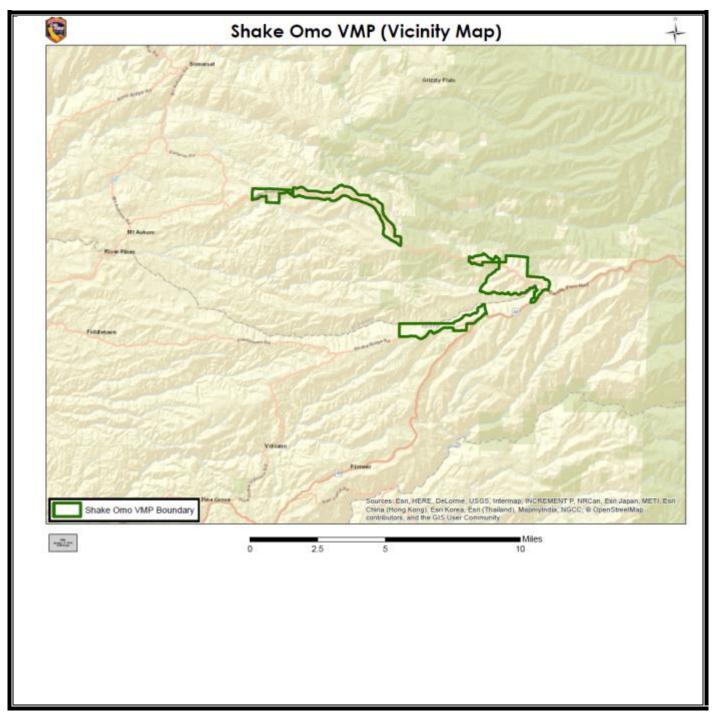


Figure 1. Project Location Map #1 of 1.

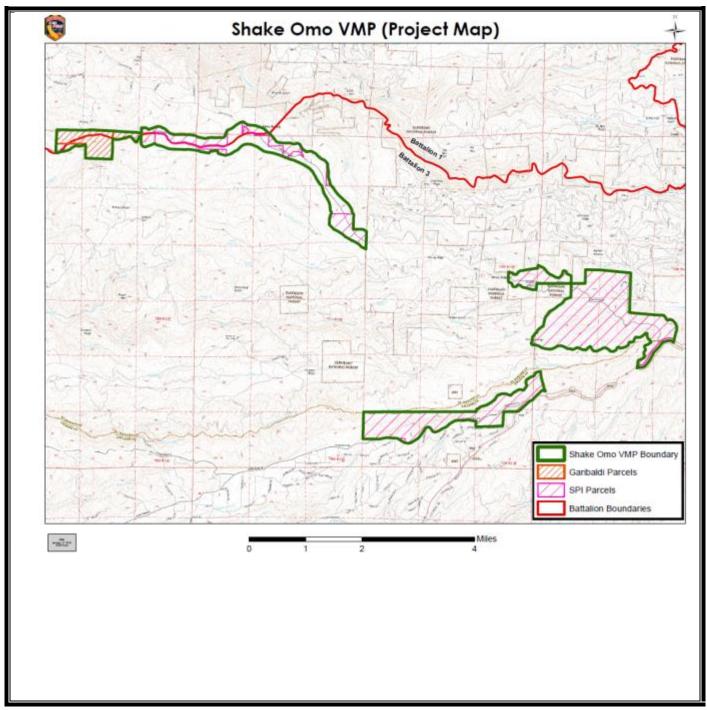


Figure 2. Project Map #1 of 1.

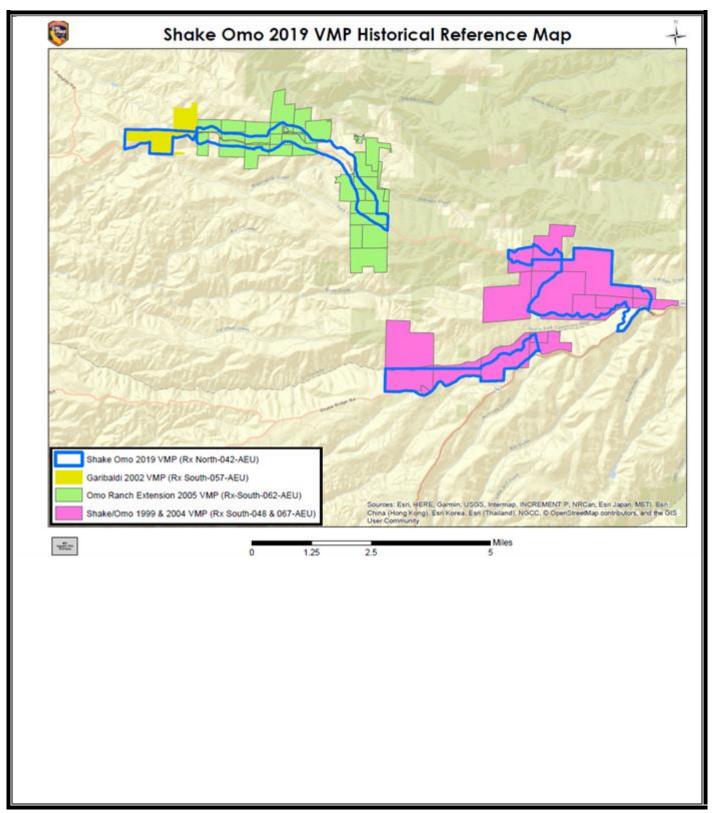


Figure 3. Historical reference map 1 or 1.



Figure 4. Typical project area in need of maintenance. Looking west from Omo Ranch Road.

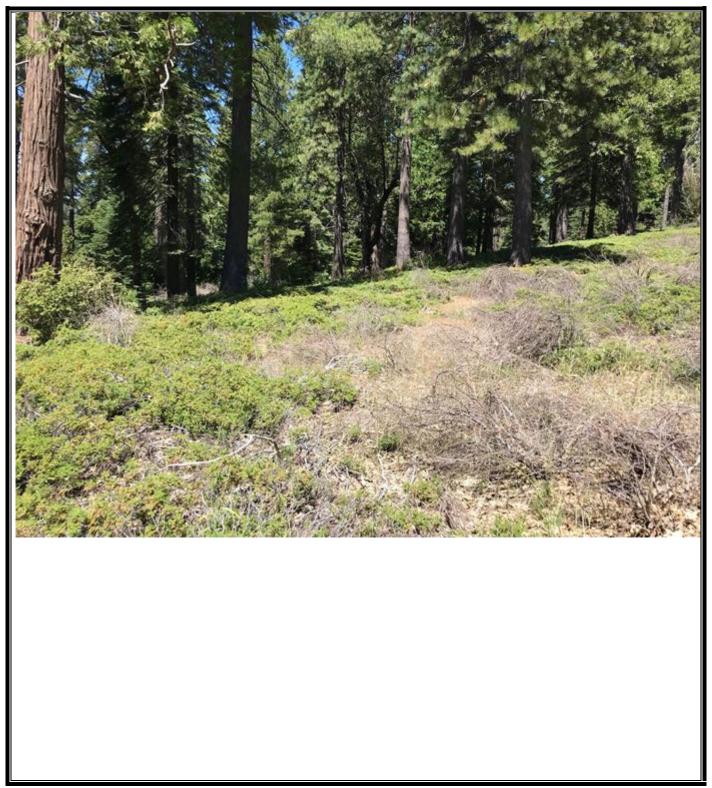


Figure 5. Project area looking north from Omo Ranch Road.

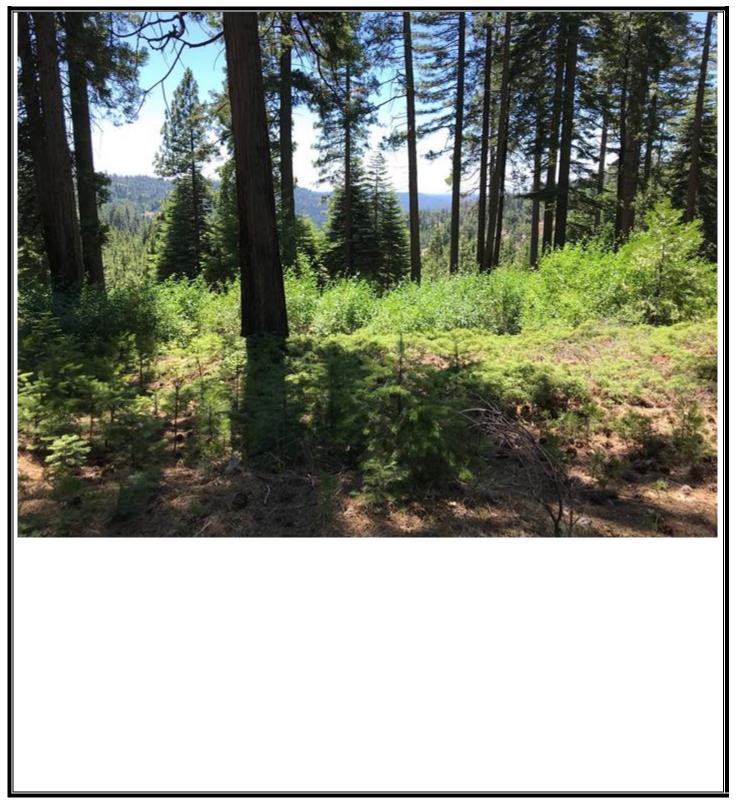


Figure 6. Typical project area in need of maintenance. Looking west from Omo Ranch Road.

## Conclusion of the Mitigated Negative Declaration

#### **ENVIRONMENTAL PERMITS**

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

## **MITIGATION MEASURES**

The following three mitigation measures will be implemented by CAL FIRE to avoid or minimize environmental impacts. Implementation of these mitigation measures will reduce the environmental impacts of the proposed project to a less than significant level.

## Mitigation Measure #1: Biological:

#### **Raptors**

A Sierra Pacific Industries biologist will determine occupancy status for all CA Spotted owls, Great Grey Owls and Goshawks nests known to occur within a ¼ mile of proposed VMP project activities prior to starting during the year of disturbance. If a nest is found to be occupied by brooding CA Spotted owls, Great Grey Owls and Goshawks than a disturbance buffer will be established around the nest.

- 1/4 mile radius circle for CA Spotted owls, Great Grey Owls and Goshawks for the period of March 1 to August 15<sup>th</sup>.
- Other distances to be determined by raptor response to proposed activities

If no occupied nest is found, then a protection zone will be established around the current activity center or the last know activity center. No VMP project activities will occur within the protection zone between March 1st and August 15th. Protection zones will vary in size and shape based on the species associated with that activity center. VMP project activities may occur outside the protection zone at any time there is no occupied nest, and may occur within the protection zone outside the March 1st to August 15th period.

#### CA Red Legged Frog

Habitat includes rivers, creeks, and coldwater ponds with emergent vegetation. Protection Measure Establish standard WLPZ buffer, no active firing or pile burning within WLPZ, however low intensity
backing fire will be allowed to enter WLPZ.

#### Parry's Horkelia

• No state or federal listing. Habitat – Grows in the Sierra Nevada Foothill. Protection - If it is observed, Parry's Horkelia will be flagged for avoidance with a 25' buffer.

All the standards set forth in the Forest Practice Rules for watercourse and lake protection will be incorporated into the project criteria. This will include the standards for watercourse classification, overstory retention standards, understory retention standards, identification requirements, and any other restrictive practice noted in the Title 14 of the California Code of Regulations.

## Mitigation Measure #2: Cultural:

As operational units are identified; archaeological survey protocol would be at a minimum to survey
intensively on any mid-slope benches, along watercourses and drainages and along the ridge tops. In
steeper areas, walking 1-200' transects. A phased survey approach will be used prior to operations in
areas not previously surveyed and shall be carried out in consultation with a CAL FIRE archaeologist.
Following archaeological survey of each operational unit, the project forester will summarize survey
design and survey results, propose protection measures for identified sites, record sites as needed,

- and submit this information to a CAL FIRE archaeologist. Operations may commence within phased areas after receiving clearance from a CAL FIRE archaeologist.
- Approximately 70% of the Shake Omo VMP search area has been previously surveyed for cultural
  resources and contains six (6) recorded prehistoric-period cultural resources and fifty-nine (59)
  recorded historic-period cultural resources listed within the California Historical Resources
  Information System (CHRIS). Given the extent of known cultural resources and the environmental
  setting, there is high potential for prehistoric-period cultural resources high potential for historicperiod cultural resources within the project area.
- When proposing to treat areas not covered by previously approved survey, survey strategy including appropriate intensity and time will be determined in consultation with a CAL FIRE archaeologist
- The dates that previous surveys were conducted are contained in the associated individual survey reports. As Units are proposed in areas that have not been previously surveyed, a phased survey approach will be utilized. The dates of those future surveys are not knowable at this time.
- Survey coverage intensity of previous surveys is contained within previous individual survey reports.
   A phased survey approach will be used prior to operations in areas not previously surveyed and shall be carried out in consultation with a CAL FIRE archaeologist. Archaeological survey protocol would be at a minimum to survey intensively on any mid-slope benches, along watercourses and drainages and along the ridge tops. In steeper areas, walking 1-200' transects.
- Due to the variable ground visibility limitations, inherent in a forested setting, boot scrapes will be utilized at a rate of one boot scrape per transect, as well as inspection of road cuts, and river banks.
- Within areas of the Shake Omo VMP previously surveyed for cultural resources, six prehistoric cultural sites have been recorded. Three of the six prehistoric sites are located along the south fork of the Cosumnes River within a class I watercourse and lake protection zone (WLPZ) and thus will not be impacted by VMP operations
- For the protection of the remaining three prehistoric sites not located within a WLPZ, landowner Sierra Pacific Industries (SPI) has agreed to meet on site with CAL FIRE and UAIC to come to an agreement on the site boundaries.
- SPI proposes to flag and avoid these three prehistoric sites as part of the mitigation for the Shake Omo VMP.
- SPI to accommodate UAIC's site survey/inspection after vegetation clearing to reassess the site boundary.
- CAL FIRE and SPI to ensure that any exposed cultural soils or cultural items are recorded and securely covered within the resource boundaries.
- CAL FIRE and SPI will extend an invitation to the UAIC to participate in post-work site inspection to assess and inform the condition of sites within their geographic area of cultural and traditional affiliation.
- Cut and pile any vegetation to be burned away from resource at such a distance so that no damage or degradation to site integrity will occur. Designate sites as Special Treatment Areas on field maps and flag 25' equipment exclusion zone with "Special Treatment Area" site mark flagging.
- Other relevant information Approximately 70% of the Shake Omo VMP search area has been
  previously surveyed for cultural resources. Ongoing discussions occur with and past archaeological
  surveys records were obtained from participating landowner Sierra Pacific Industries. Known impacts
  to area include multiple forest management / logging entries and the four previous Amador El Dorado
  Unit VMP's that overlap the proposed Shake Omo 2019 VMP.
- Previous VMP treatments included fire crew brush cutting, pile burning, tractor mastication, dozer piling, and broadcast prescribed fire.

## Mitigation Measure #3: Tribal Cultural Resources

As operational units are identified; archaeological survey protocol would be at a minimum to survey intensively on any mid-slope benches, along watercourses and drainages and along the ridge tops. In steeper areas, walking 1-200' transects. A phased survey approach will be used prior to operations in areas not previously surveyed and shall be carried out in consultation with a CAL FIRE archaeologist. Following archaeological survey of each operational unit, the project forester will summarize survey design and survey results, propose protection measures for identified sites, record sites as needed,

- and submit this information to a CAL FIRE archaeologist. Operations may commence within phased areas after receiving clearance from a CAL FIRE archaeologist.
- Approximately 70% of the Shake Omo VMP search area has been previously surveyed for cultural
  resources and contains six (6) recorded prehistoric-period cultural resources and fifty-nine (59)
  recorded historic-period cultural resources listed within the California Historical Resources
  Information System (CHRIS). Given the extent of known cultural resources and the environmental
  setting, there is high potential for prehistoric-period cultural resources high potential for historicperiod cultural resources within the project area.
- When proposing to treat areas not covered by previously approved survey, survey strategy including appropriate intensity and time will be determined in consultation with a CAL FIRE archaeologist
- The dates that previous surveys were conducted are contained in the associated individual survey reports. As Units are proposed in areas that have not been previously surveyed, a phased survey approach will be utilized. The dates of those future surveys are not knowable at this time.
- Survey coverage intensity of previous surveys is contained within previous individual survey reports.
   A phased survey approach will be used prior to operations in areas not previously surveyed and shall be carried out in consultation with a CAL FIRE archaeologist. Archaeological survey protocol would be at a minimum to survey intensively on any mid-slope benches, along watercourses and drainages and along the ridge tops. In steeper areas, walking 1-200' transects.
- Due to the variable ground visibility limitations, inherent in a forested setting, boot scrapes will be utilized at a rate of one boot scrape per transect, as well as inspection of road cuts, and river banks.
- Within areas of the Shake Omo VMP previously surveyed for cultural resources, six prehistoric cultural sites have been recorded. Three of the six prehistoric sites are located along the south fork of the Cosumnes River within a class I watercourse and lake protection zone (WLPZ) and thus will not be impacted by VMP operations
- For the protection of the remaining three prehistoric sites not located within a WLPZ, landowner Sierra Pacific Industries (SPI) has agreed to meet on site with CAL FIRE and UAIC to come to an agreement on the site boundaries.
- SPI proposes to flag and avoid these three prehistoric sites as part of the mitigation for the Shake Omo VMP.
- SPI to accommodate UAIC's site survey/inspection after vegetation clearing to reassess the site boundary.
- CAL FIRE and SPI to ensure that any exposed cultural soils or cultural items are recorded and securely covered within the resource boundaries.
- CAL FIRE and SPI will extend an invitation to the UAIC to participate in post-work site inspection to assess and inform the condition of sites within their geographic area of cultural and traditional affiliation.
- Cut and pile any vegetation to be burned away from resource at such a distance so that no damage or degradation to site integrity will occur. Designate sites as Special Treatment Areas on field maps and flag 25' equipment exclusion zone with "Special Treatment Area" site mark flagging.
- Other relevant information Approximately 70% of the Shake Omo VMP search area has been
  previously surveyed for cultural resources. Ongoing discussions occur with and past archaeological
  surveys records were obtained from participating landowner Sierra Pacific Industries. Known impacts
  to area include multiple forest management / logging entries and the four previous Amador El Dorado
  Unit VMP's that overlap the proposed Shake Omo 2019 VMP.
- Previous VMP treatments included fire crew brush cutting, pile burning, tractor mastication, dozer piling, and broadcast prescribed fire.

### SUMMARY OF FINDINGS

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

- 1. The proposed project will have no effect related to Agricultural Resources, Land Use Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation/Traffic, and Utilities and Service Systems.
- 2. The proposed project will have a less than significant impact on Aesthetics, Air Quality, Biological, Cultural, Geological, Greenhouse Gas Emissions, Hydrology and Water Quality, Hazards and Hazardous Materials, Noise, and Mandatory Findings of Significance.
- 3. Mitigation is required to reduce potentially significant impacts related to Biological, Cultural, Tribal Cultural.

The Initial Study-Environmental Checklist included in this document discusses the results of resource-specific environmental impact analyses that were conducted by the Department. This initial study revealed that potentially significant environmental effects could result from the proposed project. However, CAL FIRE revised its project plans and has developed mitigation measures that will eliminate impact or reduce environmental impacts to a less than significant level. CAL FIRE has found, in consideration of the entire record, that there is no substantial evidence that the proposed project as currently revised and mitigated would result in a significant effect upon the environment. The IS-MND is therefore the appropriate document for CEQA compliance.

## INITIAL STUDY-ENVIRONMENTAL CHECKLIST

The environmental factors checked below would be potentially affected by this project involving at least one impact that is a potentially significant impact as indicated by the checklist on the following pages.

Envi	ronmental Facto	ors Potentially Affected	
⊠ Ae	sthetics	Greenhouse Gas Emissions	Public Services
Ag	riculture Resources	Hazards & Hazardous Materials	Recreation
⊠ Aiı	Quality	☐ Hydrology and Water Quality	Transportation
	ological Resources	Land Use and Planning	Utilities and Service Systems
P. Control of the Con	ltural Resources		⊠ Wildfire
	ergy	⊠ Noise	
☐ Ge	ology and Soils	Population and Housing	
	rmination basis of this initial ev	valuation:	
	I find that the proposed propo	roject COULD NOT have a significant effect be prepared.	on the environment, and a NEGATIVE
	significant effect in this c		fect on the environment, there WOULD NOT be a made by or agreed to by the project proponent. A
	I find that the proposed particle REPORT is required.	project MAY have a significant effect on the en	nvironment, and an ENVIRONMENTAL IMPACT
	impact on the environment applicable legal standards	nt, but at least one effect 1) has been adequate s, and 2) has been addressed by mitigation me	apact" or "potentially significant unless mitigated" ly analyzed in an earlier document pursuant to asures based on the earlier analysis as described on red, but it must analyze only the effects that remain
	significant effects (a) hav NEGATIVE DECLARA earlier ENVIRONMENT.	we been analyzed adequately in an earlier ENV TION pursuant to applicable standards, and (b)	b) have been avoided or mitigated pursuant to that LARATION, including revisions or mitigation
Pa	t Mo Dan		4-3-20

California Department of Forestry and Fire Protection

Patrick McDaniel, RPF #2679

Forester I

Date

## **Environmental Checklist and Discussion**

in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

AES	THE	<b>TICS</b>
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a	Except as provided in Public Resources Code § 21099, would the project have a substantial adverse effect on a scenic vista?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	viola :				
aestho Shake and re	roject is not expected to have a substantial adversetics of the area is anticipated. Some scorching are Ridge and Omo Ranch Roads. However, within oregrowth of understory vegetation will lessen the violet project area will appear park like within one or	nd blackening ne growing se sual impacts	of the vegeta eason after bu along the pub	tion will be v rning, annua lic roads wit	isible from I needle cast
b)	Except as provided in Public Resources Code § 21099, would the project substantially damage scenic resources, including, but not limited to, trees, rock	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	outcroppings, and historic buildings within a state scenic highway?				
outcro he ar Omo l under	roject is not expected to substantially damage sceoppings, and historic buildings within a state scenea is anticipated. Some scorching and blackening Ranch Roads. However, within one growing seaso story vegetation will lessen the visual impacts alowill appear park like within one or two growing sea	ic highway. A of the vegeta n after burnir ng the public	A short-term clation will be vising, annual needs roads within	hange in the sible from Sh dle cast and	aesthetics of take Ridge ar regrowth of
c)	Except as provided in Public Resources Code § 21099, in non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	accessible vantage point.) If the project is			$\boxtimes$	

The project is not expected to substantially degrade the existing visual character or quality of the site and its surroundings A short-term change in the aesthetics of the area is anticipated. Some scorching and blackening of the vegetation will be visible from Shake Ridge and Omo Ranch Roads. However, within one growing season after burning, annual needle cast and regrowth of understory vegetation will lessen the visual impacts

	the public roads within the project area. The projens after burning.	ct area will a	ppear park lik	e within one	or two growin
d)	Except as provided in Public Resources Code § 21099, would the project create a new source of substantial light or glare which would adversely affect day or	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	nighttime views in the area?			$\boxtimes$	
day or scorch within lesser	roject is not expected to create a new source of sur nighttime views in the area. A short-term change hing and blackening of the vegetation will be visible one growing season after burning, annual needle in the visual impacts along the public roads within the one or two growing seasons after burning.	in the aesthe le from Shak cast and reg	etics of the are e Ridge and O prowth of unde	a is anticipat mo Ranch R rstory vegeta	ted. Some oads. Howeve ation will
Agr	ICULTURAL RESOURCES				
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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Program of the California Resources Agency, to non-agricultural use?				
Uniqu	No impacts to agricultural resources are expected e Farmland, or Farmland of Statewide Importance Farmland Mapping and Monitoring Program of the	(Farmland), a	as shown on t	he maps prep	oared pursuar
b)	Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Act contract:				
	No impacts to agricultural resources are expected g for agricultural use or a Williamson Act contract.		e project does	not conflict	with existing
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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	timberland zoned Timberland Production (as defined by Government Code §51104(g))?				

/A –	No impacts to agricultural resources are expected	to occur.			
d)	Would the project result in the loss of forest land or conversion of forest land to non-forest use?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					$\boxtimes$
oning efine	No impacts to agricultural resources are expected g for, or cause rezoning of forest land (as defined in d by Public Resources Code §4526), or timberland nament Code §51104(g))	n Public Res	ources Code	§12220(g)), ti	mberland (a
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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	use?		П		$\boxtimes$
the on-a	No impacts to agricultural resources are expected existing environment, which, due to their location gricultural use.				
the on-ag	existing environment, which, due to their location gricultural use.  QUALITY  Would the project conflict with or obstruct implementation of the applicable air quality				
the on-ag	existing environment, which, due to their location gricultural use.  QUALITY  Would the project conflict with or obstruct	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	Farmland t
a)	Would the project conflict with or obstruct implementation of the applicable air quality plan?  Ingeterm impact on air quality will result from this plant implementation of the applicable air quality platize short term impacts of smoke emissions from the tender of the applicable air quality platize short term impacts of smoke emissions from the tender of the approval to the Amador County Air Polluticartitioning burn units in small units (40 – 60 acres)  Would the project result in a cumulatively	Potentially Significant Impact  roject. The p n. Best availa he project. A on Control D will minimiz	Less Than Significant with Mitigation Incorporated  roject is not exable control managements, burning eshort term s	Less Than Significant Impact  Expected to colleasures will gement plant ng on design moke impact	No Impact  Onflict with obe utilized twill be ated burn d
a)	existing environment, which, due to their location gricultural use.  QUALITY  Would the project conflict with or obstruct implementation of the applicable air quality plan?  Ing-term impact on air quality will result from this plact implementation of the applicable air quality platize short term impacts of smoke emissions from the tender of the approval to the Amador County Air Polluticartitioning burn units in small units (40 – 60 acres)	Potentially Significant Impact  roject. The p n. Best availa he project. A on Control D will minimiz	Less Than Significant with Mitigation Incorporated  roject is not exable control managements, burning eshort term s	Less Than Significant Impact  Expected to colleasures will gement plant ng on design moke impact	No Impact  Onflict with obe utilized to will be ated burn done.

No long-term impact on air quality will result from this project. The project is not expected to 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). Best available control measures will be utilized to minimize short term impacts of smoke emissions from the project. A smoke management plan will be submitted for approval to the Amador County Air Pollution Control Districts, burning on designated burn days and partitioning burn units in small units (40 – 60 acres) will minimize short term smoke impacts.

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

No long-term impact on air quality will result from this project. The project is not expected to expose sensitive receptors to substantial pollutant concentrations. CAL FIRE will post signs along major road ways on the morning prior to the commencement of burning operations. The community around the project area is very accustomed to the project work however prior to each spring and fall burning seasons CAL FIRE will publish a public interest notification in the local newspapers describing project operations.

Best available control measures will be utilized to minimize short term impacts of smoke emissions from the project. A smoke management plan will be submitted for approval to the Amador County Air Pollution Control Districts, burning on designated burn days and partitioning burn units in small units (40 – 60 acres) will minimize short term smoke impacts.

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

No long-term impact on air quality will result from this project. The project is not expected to create objectionable odors affecting a substantial number of people. Best available control measures will be utilized to minimize short term impacts of smoke emissions from the project. A smoke management plan will be submitted for approval to the Amador County Air Pollution Control Districts, burning on designated burn days and partitioning burn units in small units (40 – 60 acres) will minimize short term smoke impacts. Burning operations will only occur in this area if wind conditions are favorable to smoke dispersion. This will typically be when winds are from the southwest. The desired wind condition for the Shake Ridge Road and Omo Ranch Road area will be southwest, however if atmospheric instability favors smoke dispersal, any wind with a western influence can be utilized. Test burning at the project site will be utilized to make the final determination. Public road ways will be signed warning traffic of the burning operations. Road signage will be posted the morning prior to the commencement of burning operations and will remain until all operations are completed.

## **BIOLOGICAL RESOURCES**

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
special-status species in local or regional		$\boxtimes$		

plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

The project is not expected to 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. CAL FIRE notified CDFW biologist Sarah Lose of VMP project by letter dated February 20, 2018 and in a series of emails between March 5th and March 12th, the following measures were developed and agreed to by her:

#### **Raptors**

A Sierra Pacific Industries biologist will determine occupancy status for all CA Spotted owls, Great Grey Owls and Goshawks nests known to occur within a ¼ mile of proposed VMP project activities prior to starting during the year of disturbance. If a nest is found to be occupied by brooding CA Spotted owls, Great Grey Owls and Goshawks than a disturbance buffer will be established around the nest.

- 1/4 mile radius circle for CA Spotted owls, Great Grey Owls and Goshawks for the period of March 1 to August 15<sup>th</sup>.
- Other distances to be determined by raptor response to proposed activities

If no occupied nest is found, then a protection zone will be established around the current activity center or the last know activity center. No VMP project activities will occur within the protection zone between March 1st and August 15th. Protection zones will vary in size and shape based on the species associated with that activity center. VMP project activities may occur outside the protection zone at any time there is no occupied nest, and may occur within the protection zone outside the March 1st to August 15th period.

### **CA Red Legged Frog**

Habitat includes rivers, creeks, and coldwater ponds with emergent vegetation. Protection Measure Establish standard WLPZ buffer, no active firing or pile burning within WLPZ, however low intensity
backing fire will be allowed to enter WLPZ.

#### Parry's Horkelia

• No state or federal listing. Habitat – Grows in the Sierra Nevada Foothill. Protection - If it is observed, Parry's Horkelia will be flagged for avoidance with a 25' buffer.

All the standards set forth in the Forest Practice Rules for watercourse and lake protection will be incorporated into the project criteria. This will include the standards for watercourse classification, overstory retention standards, understory retention standards, identification requirements, and any other restrictive practice noted in the Title 14 of the California Code of Regulations.

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?			Ш	Ш

The project is not expected to have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department

of Fish and Wildlife or the U.S. Fish and Wildlife Service. All the standards set forth in the Forest Practice Rules for watercourse and lake protection will be incorporated into the project criteria. This will include the standards for watercourse classification, overstory retention standards, understory retention standards, identification requirements, and any other restrictive practice noted in the Title 14 of the California Code of Regulations. Fuel reduction activities will occur within Watercourses Protection Zones (WLPZ's), however pile burning will only occur outside such zones. Ignitions will not occur within WLPZ's, however low intensity broadcast prescribed fire will be allowed to back burn (creep) into WLPZ's. ~90% of material > 1" generated within Class I and Class II watercourse and lake protection zones will be piled for burning outside of Watercourse and Lake Protection Zones.

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

The project is not expected to 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. All the standards set forth in the Forest Practice Rules for watercourse and lake protection will be incorporated into the project criteria. This will include the standards for watercourse classification, overstory retention standards, understory retention standards, identification requirements, and any other restrictive practice noted in the Title 14 of the California Code of Regulations. Fuel reduction activities will occur within Watercourses Protection Zones (WLPZ's), however pile burning will only occur outside such zones. Broadcast burning ignitions will not be occur within WLPZ's, however broadcast prescribed fire will be allowed to back burn (creep) into WLPZ's. ~90% of material > 1" generated within Class I and Class II watercourse and lake protection zones will be piled for burning outside of Watercourse and Lake Protection Zones.

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
wildlife corridors, or impede the use of native wildlife nursery sites?		$\boxtimes$		

The project is not expected to 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. CAL FIRE notified CDFW biologist Sarah Lose of VMP project by letter dated February 20, 2018 and in a series of emails between March 5th and March 12th, the following measures were developed and agreed to by her:

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- 1/4 mile radius circle for CA Spotted owls, Great Grey Owls and Goshawks for the period of March 1 to August 15<sup>th</sup>.
- Other distances to be determined by raptor response to proposed activities

If no occupied nest is found, then a protection zone will be established around the current activity center or the last know activity center. No VMP project activities will occur within the protection zone between March 1st and August 15th. Protection zones will vary in size and shape based on the species associated with that activity center. VMP project activities may occur outside the protection zone at any time there is no occupied nest, and may occur within the protection zone outside the March 1st to August 15th period.

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Habitat includes rivers, creeks, and coldwater ponds with emergent vegetation. Protection Measure -Establish standard WLPZ buffer, no active firing or pile burning within WLPZ, however low intensity backing fire will be allowed to enter WLPZ.

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All the standards set forth in the Forest Practice Rules for watercourse and lake protection will be incorporated into the project criteria. This will include the standards for watercourse classification, overstory retention standards, understory retention standards, identification requirements, and any other restrictive practice noted in the Title 14 of the California Code of Regulations.

e)	Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	policy or ordinance?				$\boxtimes$
ne pi	roject is not expected to conflict with any local pol	ici <del>c</del> a di diuli	idilices protect	9 5.5.59.54	
	roject is not expected to conflict with any local pol as a tree preservation policy or ordinance.	icles of ordin	iances protect	mg biologica	110000100
		Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impac

## **CULTURAL RESOURCES**

a)	Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	Potentially Significant Impact	Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	nistorical resource pursuant to § 10004.5:		$\boxtimes$		

The project is not expected to cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5. Archaeological procedures for CAL FIRE projects were undertaken in the preparation of this project. Notification letters were sent to groups listed on CAL FIRE's Native American

Contact List in El Dorado and Amador Counties. In addition, an Archaeological Records Check was conducted by the North Central Information Center resulting in Archaeological records check AMA-18-12 dated 3/1/18. An archaeological addendum was completed by RPF Patrick McDaniel. An AB52 consultation process was initiated and the United Auburn Indian Community (UAIC) requested formal consultation:

- As operational units are identified; archaeological survey protocol would be at a minimum to survey intensively on any mid-slope benches, along watercourses and drainages and along the ridge tops. In steeper areas, walking 1-200' transects. A phased survey approach will be used prior to operations in areas not previously surveyed and shall be carried out in consultation with a CAL FIRE archaeologist. Following archaeological survey of each operational unit, the project forester will summarize survey design and survey results, propose protection measures for identified sites, record sites as needed, and submit this information to a CAL FIRE archaeologist. Operations may commence within phased areas after receiving clearance from a CAL FIRE archaeologist.
- Approximately 70% of the Shake Omo VMP search area has been previously surveyed for cultural
  resources and contains six (6) recorded prehistoric-period cultural resources and fifty-nine (59)
  recorded historic-period cultural resources listed within the California Historical Resources
  Information System (CHRIS). Given the extent of known cultural resources and the environmental
  setting, there is high potential for prehistoric-period cultural resources high potential for historicperiod cultural resources within the project area.
- When proposing to treat areas not covered by previously approved survey, survey strategy including appropriate intensity and time will be determined in consultation with a CAL FIRE archaeologist
- The dates that previous surveys were conducted are contained in the associated individual survey reports. As Units are proposed in areas that have not been previously surveyed, a phased survey approach will be utilized. The dates of those future surveys are not knowable at this time.
- Survey coverage intensity of previous surveys is contained within previous individual survey reports.
   A phased survey approach will be used prior to operations in areas not previously surveyed and shall be carried out in consultation with a CAL FIRE archaeologist. Archaeological survey protocol would be at a minimum to survey intensively on any mid-slope benches, along watercourses and drainages and along the ridge tops. In steeper areas, walking 1-200' transects.
- Due to the variable ground visibility limitations, inherent in a forested setting, boot scrapes will be utilized at a rate of one boot scrape per transect, as well as inspection of road cuts, and river banks.
- Within areas of the Shake Omo VMP previously surveyed for cultural resources, six prehistoric cultural sites have been recorded. Three of the six prehistoric sites are located along the south fork of the Cosumnes River within a class I watercourse and lake protection zone (WLPZ) and thus will not be impacted by VMP operations
- For the protection of the remaining three prehistoric sites not located within a WLPZ, landowner Sierra Pacific Industries (SPI) has agreed to meet on site with CAL FIRE and UAIC to come to an agreement on the site boundaries.
- SPI proposes to flag and avoid these three prehistoric sites as part of the mitigation for the Shake Omo VMP.
- SPI to accommodate UAIC's site survey/inspection after vegetation clearing to reassess the site boundary.
- CAL FIRE and SPI to ensure that any exposed cultural soils or cultural items are recorded and securely covered within the resource boundaries.
- CAL FIRE and SPI will extend an invitation to the UAIC to participate in post-work site inspection to assess and inform the condition of sites within their geographic area of cultural and traditional affiliation.
- Cut and pile any vegetation to be burned away from resource at such a distance so that no damage or degradation to site integrity will occur. Designate sites as Special Treatment Areas on field maps and flag 25' equipment exclusion zone with "Special Treatment Area" site mark flagging.
- Other relevant information Approximately 70% of the Shake Omo VMP search area has been
  previously surveyed for cultural resources. Ongoing discussions occur with and past archaeological
  surveys records were obtained from participating landowner Sierra Pacific Industries. Known impacts
  to area include multiple forest management / logging entries and the four previous Amador El Dorado
  Unit VMP's that overlap the proposed Shake Omo 2019 VMP.

 Previous VMP treatments included fire crew brush cutting, pile burning, tractor mastication, dozer piling, and broadcast prescribed fire.

<ul> <li>b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §</li> </ul>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
15064.5?		$\boxtimes$		

The project is not expected to cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5. Archaeological procedures for CAL FIRE projects were undertaken in the preparation of this project. Notification letters were sent to groups listed on CAL FIRE's Native American Contact List in El Dorado and Amador Counties. In addition, an Archaeological Records Check was conducted by the North Central Information Center resulting in Archaeological records check AMA-18-12 dated 3/1/18. An archaeological addendum was completed by RPF Patrick McDaniel. An AB52 consultation process was initiated and the United Auburn Indian Community (UAIC) requested formal consultation:

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  Unit VMP's that overlap the proposed Shake Omo 2019 VMP.
- Previous VMP treatments included fire crew brush cutting, pile burning, tractor mastication, dozer piling, and broadcast prescribed fire.

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

The project is not expected disturb any human remains, including those interred outside of formal cemeteries. Archaeological procedures for CAL FIRE projects were undertaken in the preparation of this project. Notification letters were sent to groups listed on CAL FIRE's Native American Contact List in El Dorado and Amador Counties. In addition, an Archaeological Records Check was conducted by the North Central Information Center resulting in Archaeological records check AMA-18-12 dated 3/1/18. An archaeological addendum was completed by RPF Patrick McDaniel. An AB52 consultation process was initiated and the United Auburn Indian Community (UAIC) requested formal consultation:

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  Unit VMP's that overlap the proposed Shake Omo 2019 VMP.
- Previous VMP treatments included fire crew brush cutting, pile burning, tractor mastication, dozer piling, and broadcast prescribed fire.

### **ENERGY**

a)	Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	project construction or operation?				
	e project would not result in potentially significan essary consumption of energy resources, during				, inefficient
nnece					No Impact

N/A The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

## **GEOLOGY AND SOILS**

a)	Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)				
isk of Alquis	roject is not expected to directly or indirectly caus loss, injury, or death involving rupture of a know t-Priolo Earthquake Fault Zoning Map issued by the antial evidence of a known fault? (Refer to Californ	n earthquake ne State Geo	fault, as delin logist for the a	eated on the rea or based	most recent on other
b)	Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	death involving strong seismic ground shaking?				$\boxtimes$
	roject is not expected to directly or indirectly caus loss, injury, or death involving strong seismic gro			erse effects,	including the
c)	Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	failure, including liquefaction?				$\boxtimes$
	roject is not expected to directly or indirectly caus loss, injury, or death involving seismic-related gr				including the
d)	Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	The off the self-term factors of		•		
	death involving landslides?				

The project is not expected to directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.

e)	Would the project result in substantial soil erosion or the loss of topsoil?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				$\boxtimes$	
The p	roject is not expected to result in substantial soil e	rosion or the	e loss of topso	oil.	
f)	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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	landslide, lateral spreading, subsidence, liquefaction, or collapse?		П	$\boxtimes$	
	Would the project be located on expansive	Potentially	Less Than Significant	Less Than	No Impact
unstal	roject is not located on a geologic unit or soil that in ble because of the project, and potentially result in dence, liquefaction, or collapse.				
g)	soil, as defined in Table 18-1-B of the	Potentially Significant Impact	Significant with	Less Than Significant Impact	No Impact
	Uniform Building Code (1994, as updated), creating substantial direct or indirect risks	impact	Mitigation Incorporated	Шрасс	
	to life or property?			$\boxtimes$	
	not known to be located on expansive soil, as def as updated), creating substantial direct or indirect			Uniform Bui	lding Code
	Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
	systems where sewers are not available		Incorporated		
	systems where sewers are not available for the disposal of waste water?		Incorporated		$\boxtimes$
 N/A - <sup>-</sup>		☐ disposal sys		□ oposed for th	
<b></b> <b>N/A</b> - <sup></sup> i)	for the disposal of waste water?	disposal sys  Potentially Significant Impact		Doposed for the  Less Than Significant Impact	

The project is not expected to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

### **GREENHOUSE GAS EMISSIONS**

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

The project is not expected to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. On average, the combined aboveground carbon storage of California forests is about 40 tons/acre (Christensen et al. 2007). In California the largest forest carbon stock pools is in soil (45 percent), followed by biomass (30 percent), and forest floor and coarse woody debris (20 percent) (Birdsey and Lewis 2002). At some point the carbon stored in the above ground portion of the plants will be released through respiration, decay or combustion. Although some of the carbon will be added to the soil most will be released to the atmosphere.

Over time the carbon that is stored in vegetation will be released as part of the normal carbon cycle. Carbon will also be sequestered overtime as new vegetation grows if the land remains productive. Prescribed fire is a tool to help maintain those carbon stocks over time. By reducing the probability of catastrophic wildfire prescribed fire can increase the probability of survival of the overstory trees allowing them to continue to sequester carbon. The carbon released by the prescribed fire will be resequestered by the remaining living trees and new vegetation following the burn. This has the potential to reduce the massive increase in short term emissions from wildfire and spread the emissions over a longer period while allowing sequestration to occur in the remaining vegetation.

Prescribed burning is generally used to reduce the fuel load of the forest floor and coarse woody debris, as well as a portion of the above ground biomass. The purpose of the fire is to reduce the risk of large damaging fires by creating conditions that increase the effectiveness of fire suppression. Prescribed fire typically does not affect soil carbon due to lower burn temperatures than wildfire and limits carbon releases because it typically affects only understory plants and ladder fuels. Prescribed burning returns some carbon dioxide, methane, nitrous oxide, and particulate matter to the atmosphere. Combustion generally is more complete than wildfire, which releases higher concentrations of the other greenhouse gasses and particulate matter (Mader 2007). Actively managed forests with fuels management generally exhibit below-average fire frequency (Eckert 2007).

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

The project is not expected to conflict with an applicable plan, policy or regulation adopted for reducing the emissions of greenhouse gases.

## HAZARDS AND HAZARDOUS MATERIALS

a)	) Would the project create a significant hazard to the public or the environment through the routine transport, use, or	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	disposal of hazardous materials?			$\boxtimes$	
The p	roject is not expected to create a significant hazard port, use, or disposal of hazardous materials.	d to the publ	ic or the enviro	onment throu	igh the routing
b)	Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	release of hazardous materials into the environment?			$\boxtimes$	
	Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	proposed school?				
subst withir	roject is not expected to emit hazardous emissions ances, or waste within one-quarter mile of an exist none mile of the project area and burns will be cooon when burning occurs within ¼ mile of its location	ing or propo rdinated witl	sed school. In	dian Diggins	school is
d)	Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	result, would it create a significant hazard to the public or the environment?				

N/A - The project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 which thus, would create a significant hazard to the public or the environment.

No Impact   opted, with y hazard for
opted, with
No Impact
$\boxtimes$
emergency  No Impact
$\boxtimes$
significan
No Impact
$\boxtimes$
et d

addition of impervious surfaces, or

substantially increase the rate or amount

of surface runoff in a manner which would

create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or Significant

**Impact** 

with

Mitigation

Incorporated

Significant

Impact

 $\Box$ 

 $\boxtimes$ 

	provide substantial additional sources of polluted runoff?				
Februa drainag throug manne	difornia Regional Water Quality Control Board was bry 20, 2018 and did not provide any comment. The ge pattern of the site or area, including through th the addition of impervious surfaces, or substan r which would create or contribute runoff water w water drainage systems or provide substantial add	e project will e alteration o tially increas hich would e	not substantion the course of the course of the rate or a exceed the cap	ally alter the of a stream of mount of sur pacity of exist	existing r river or face runoff in a
f)	Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, or substantially increase the rate or amount of surface runoff in a manner which would	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact ⊠
includi surface	impede or redirect flows?  ne project is not expected to substantially alter the ng through the alteration of the course of a streames, or substantially increase the rate or amount of the flows.	n or river or	through the ac	ddition of imp	pervious
g)					d impede or
g)	In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
g) 		Significant	Significant with Mitigation	Significant	
	would the project risk release of pollutants	Significant Impact	Significant with Mitigation Incorporated	Significant	No Impact
 N/A – F	would the project risk release of pollutants due to project inundation?	Significant Impact	Significant with Mitigation Incorporated	Significant	No Impact

а

N/A - The project is not expected to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

# **LAND USE AND PLANNING**

a)	Would the project physically divide an established community?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					$\boxtimes$
I/A –	The project will not physically divide an establish	ned communit	y.		
b)	Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	avoiding or mitigating an environmental effect?				$\boxtimes$
•	The project is not expected to cause a significant an, policy, or regulation adopted for the purpose				
MINE	an, policy, or regulation adopted for the purpose RAL RESOURCES  Would the project result in the loss of availability of a known mineral resource		Less Than Significant with Mitigation		
MINE	an, policy, or regulation adopted for the purpose RAL RESOURCES  Would the project result in the loss of	Potentially Significant	Less Than Significant with	Less Than Significant	tal effect.
a)	RAL RESOURCES  Would the project result in the loss of availability of a known mineral resource that would be of value to the region and	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	ERAL RESOURCES  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?  The project is not expected to result in the loss of the project in the loss of the project is not expected to result in the loss of the project is not expected to the project in the project in the loss of the project in the project in	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

N/A - The project is not expected to 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.

Noise
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a)	Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	plan or noise ordinance, or in other applicable local, state, or federal standards?				
ambie	The project is not expected to result in generation nt noise levels in the vicinity of the project in exce se ordinance, or in other applicable local, state, or	ess of standa	rds established		
b)	Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	groundborne noise levels:		П		$\boxtimes$
n <u>oise l</u>	For a project located within the vicinity of a private airstrip or 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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	project expose people residing or working in the project area to excessive noise levels?				
plan h	project is not located within the vicinity of a private as not been adopted, within two miles of a public JLATION AND HOUSING				where such a
a)	Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	(for example, through extension of roads or other infrastructure)?				$\boxtimes$

-				
	D ( (' II	Less Than	 N	_,

N/A - The project will not induce substantial unplanned population growth in an area, either directly.

b)	Would the project displace substantial numbers of existing people or housing, necessitating the construction of	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	replacement housing elsewhere?				
const	The project will not displace substantial numbers or ruction of replacement housing elsewhere.	of existing pe	eople or housi	ng, necessita	ating the
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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection?				

N/A - The project would not 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 fire protection.

b) 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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection?				

N/A - The project will not 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 police protection.

c)	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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools?				
ohysic constr	The project will not result in substantial adverse plally altered governmental facilities, or the need fouction of which could cause significant environn response times, or other performance objectives	or new or phy nental impact	sically altered	government	al facilities, th
d)	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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks?				
ohysic constr atios,	The project will not result in substantial adverse plally altered governmental facilities, or the need for uction of which could cause significant environmental response times, or other performance objectives.  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	Potentially Significant	Less Than Significant with	government maintain acc Less Than Significant	al facilities, the eptable service
	facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other	Impact	Mitigation Incorporated	Impact	$\boxtimes$

N/A - The project will not 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 other public facilities.

# **RECREATION**

existing neighborhood and regional parks or other recreational facilities such that	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
facility would occur or be accelerated?				$\boxtimes$
facilities or require the construction or expansion of recreational facilities that	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
the environment?				
Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit,	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
roadway, bicycle and pedestrian facilities?		Incorporated		$\boxtimes$
ordinance or policy addressing the circulation system facilities.				No Impact
				$\boxtimes$
oject does not conflict nor is it inconsistent with (	CEQA Guidel	ines § 15064.3	6(b).	
Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g.,	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
farm equipment)?		moorpolatoa		$\boxtimes$
	or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?  the project will not increase the use of existing neities such that substantial physical deterioration of the substantial physical deterioration of the estate that substantial physical deterioration of the estate that substantial physical deterioration of the estate that substantial physical deterioration of expansion of recreational facilities that might have an adverse physical effect on the environment?  The project does not include recreational facilities tional facilities that might have an adverse physical effect on the environment?  Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?  Eximately 90% of the project is within industrial time ordinance or policy addressing the circulation system facilities.  Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3(b)?  Toject does not conflict nor is it inconsistent with Ceg., sharp curves or dangerous intersections) or incompatible uses (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g.,	existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?  The project will not increase the use of existing neighborhood are such that substantial physical deterioration of the facility 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?  The project does not include recreational facilities or require the tional facilities that might have an adverse physical effect on the environment?  The project does not include recreational facilities or require the tional facilities that might have an adverse physical effect on the environment?  Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?  The project conflict or be inconsistent with CEQA Guidelines §  Would the project conflict or be inconsistent with CEQA Guidelines §  15064.3(b)?  Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g.,	would the project include recreational facilities or expansion of recreational facilities that might have an adverse physical effect on the environment?  Would the project does not include recreational facilities or require the construction of the environment?  Would the project does not include recreational facilities or require the construction of the environment?  Would the project does not include recreational facilities or require the construction of the environment?  Would the project does not include recreational facilities or require the construction of the environment?  Would the project does not include recreational facilities or require the construction incorporated incorpor	would the project include recreation of the facility would occur or be accelerated?  Would the project include recreation of the substantial physical deterioration of the such that substantial physical deterioration of the facility would occur or be accelerated?  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?  Would the project does not include recreational facilities that might have an adverse physical effect on the environment.  Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?  Would the project conflict or be inconsistent with CEQA Guidelines §  Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g.,

Initial St	udy/Negative Declaration for the Proposed Shake Omo 2020 VM	AP Project			
N/A the	e project would not substantially increase hazard	s due to a ge	ometric desig	n feature.	
d)	Would the project result in inadequate emergency access?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					$\boxtimes$
TRIB/	AL CULTURAL RESOURCES				
a)	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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 § 5020.1(k)?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

The project is not expected to cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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 § 5020.1(k).

Archaeological procedures for CAL FIRE projects were undertaken in the preparation of this project. Notification letters were sent to groups listed on CAL FIRE's Native American Contact List in El Dorado and Amador Counties. In addition, an Archaeological Records Check was conducted by the North Central Information Center resulting in Archaeological records check AMA-18-12 dated 3/1/18. An archaeological addendum was completed by RPF Patrick McDaniel.:

As operational units are identified; archaeological survey protocol would be at a minimum to survey
intensively on any mid-slope benches, along watercourses and drainages and along the ridge tops. In
steeper areas, walking 1-200' transects. A phased survey approach will be used prior to operations in
areas not previously surveyed and shall be carried out in consultation with a CAL FIRE archaeologist.

Following archaeological survey of each operational unit, the project forester will summarize survey design and survey results, propose protection measures for identified sites, record sites as needed, and submit this information to a CAL FIRE archaeologist. Operations may commence within phased areas after receiving clearance from a CAL FIRE archaeologist.

- Approximately 70% of the Shake Omo VMP search area has been previously surveyed for cultural
  resources and contains six (6) recorded prehistoric-period cultural resources and fifty-nine (59)
  recorded historic-period cultural resources listed within the California Historical Resources
  Information System (CHRIS). Given the extent of known cultural resources and the environmental
  setting, there is high potential for prehistoric-period cultural resources high potential for historicperiod cultural resources within the project area.
- When proposing to treat areas not covered by previously approved survey, survey strategy including appropriate intensity and time will be determined in consultation with a CAL FIRE archaeologist
- The dates that previous surveys were conducted are contained in the associated individual survey reports. As Units are proposed in areas that have not been previously surveyed, a phased survey approach will be utilized. The dates of those future surveys are not knowable at this time.
- Survey coverage intensity of previous surveys is contained within previous individual survey reports.
   A phased survey approach will be used prior to operations in areas not previously surveyed and shall be carried out in consultation with a CAL FIRE archaeologist. Archaeological survey protocol would be at a minimum to survey intensively on any mid-slope benches, along watercourses and drainages and along the ridge tops. In steeper areas, walking 1-200' transects.
- Due to the variable ground visibility limitations, inherent in a forested setting, boot scrapes will be utilized at a rate of one boot scrape per transect, as well as inspection of road cuts, and river banks.
- Within areas of the Shake Omo VMP previously surveyed for cultural resources, six prehistoric cultural sites have been recorded. Three of the six prehistoric sites are located along the south fork of the Cosumnes River within a class I watercourse and lake protection zone (WLPZ) and thus will not be impacted by VMP operations
- For the protection of the remaining three prehistoric sites not located within a WLPZ, landowner Sierra
  Pacific Industries (SPI) has agreed to meet on site with CAL FIRE and UAIC to come to an agreement
  on the site boundaries.
- SPI proposes to flag and avoid these three prehistoric sites as part of the mitigation for the Shake Omo VMP.
- SPI to accommodate UAIC's site survey/inspection after vegetation clearing to reassess the site boundary.
- CAL FIRE and SPI to ensure that any exposed cultural soils or cultural items are recorded and securely covered within the resource boundaries.
- CAL FIRE and SPI will extend an invitation to the UAIC to participate in post-work site inspection to assess and inform the condition of sites within their geographic area of cultural and traditional affiliation.
- Cut and pile any vegetation to be burned away from resource at such a distance so that no damage or degradation to site integrity will occur. Designate sites as Special Treatment Areas on field maps and flag 25' equipment exclusion zone with "Special Treatment Area" site mark flagging.
- Other relevant information Approximately 70% of the Shake Omo VMP search area has been
  previously surveyed for cultural resources. Ongoing discussions occur with and past archaeological
  surveys records were obtained from participating landowner Sierra Pacific Industries. Known impacts
  to area include multiple forest management / logging entries and the four previous Amador El Dorado
  Unit VMP's that overlap the proposed Shake Omo 2019 VMP.
- Previous VMP treatments included fire crew brush cutting, pile burning, tractor mastication, dozer piling, and broadcast prescribed fire.

<ul> <li>b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site,</li> </ul>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
feature, place, cultural landscape that is		incorporated		

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

The project would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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 § 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Archaeological procedures for CAL FIRE projects were undertaken in the preparation of this project. Notification letters were sent to groups listed on CAL FIRE's Native American Contact List in El Dorado and Amador Counties. In addition, an Archaeological Records Check was conducted by the North Central Information Center resulting in Archaeological records check AMA-18-12 dated 3/1/18. An archaeological addendum was completed by RPF Patrick McDaniel.:

- As operational units are identified; archaeological survey protocol would be at a minimum to survey intensively on any mid-slope benches, along watercourses and drainages and along the ridge tops. In steeper areas, walking 1-200' transects. A phased survey approach will be used prior to operations in areas not previously surveyed and shall be carried out in consultation with a CAL FIRE archaeologist. Following archaeological survey of each operational unit, the project forester will summarize survey design and survey results, propose protection measures for identified sites, record sites as needed, and submit this information to a CAL FIRE archaeologist. Operations may commence within phased areas after receiving clearance from a CAL FIRE archaeologist.
- Approximately 70% of the Shake Omo VMP search area has been previously surveyed for cultural
  resources and contains six (6) recorded prehistoric-period cultural resources and fifty-nine (59)
  recorded historic-period cultural resources listed within the California Historical Resources
  Information System (CHRIS). Given the extent of known cultural resources and the environmental
  setting, there is high potential for prehistoric-period cultural resources high potential for historicperiod cultural resources within the project area.
- When proposing to treat areas not covered by previously approved survey, survey strategy including appropriate intensity and time will be determined in consultation with a CAL FIRE archaeologist
- The dates that previous surveys were conducted are contained in the associated individual survey reports. As Units are proposed in areas that have not been previously surveyed, a phased survey approach will be utilized. The dates of those future surveys are not knowable at this time.
- Survey coverage intensity of previous surveys is contained within previous individual survey reports.
   A phased survey approach will be used prior to operations in areas not previously surveyed and shall be carried out in consultation with a CAL FIRE archaeologist. Archaeological survey protocol would be at a minimum to survey intensively on any mid-slope benches, along watercourses and drainages and along the ridge tops. In steeper areas, walking 1-200' transects.

- Due to the variable ground visibility limitations, inherent in a forested setting, boot scrapes will be utilized at a rate of one boot scrape per transect, as well as inspection of road cuts, and river banks.
- Within areas of the Shake Omo VMP previously surveyed for cultural resources, six prehistoric cultural sites have been recorded. Three of the six prehistoric sites are located along the south fork of the Cosumnes River within a class I watercourse and lake protection zone (WLPZ) and thus will not be impacted by VMP operations
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- SPI proposes to flag and avoid these three prehistoric sites as part of the mitigation for the Shake Omo VMP.
- SPI to accommodate UAIC's site survey/inspection after vegetation clearing to reassess the site boundary.
- CAL FIRE and SPI to ensure that any exposed cultural soils or cultural items are recorded and securely covered within the resource boundaries.
- CAL FIRE and SPI will extend an invitation to the UAIC to participate in post-work site inspection to assess and inform the condition of sites within their geographic area of cultural and traditional affiliation.
- Cut and pile any vegetation to be burned away from resource at such a distance so that no damage or degradation to site integrity will occur. Designate sites as Special Treatment Areas on field maps and flag 25' equipment exclusion zone with "Special Treatment Area" site mark flagging.
- Other relevant information Approximately 70% of the Shake Omo VMP search area has been
  previously surveyed for cultural resources. Ongoing discussions occur with and past archaeological
  surveys records were obtained from participating landowner Sierra Pacific Industries. Known impacts
  to area include multiple forest management / logging entries and the four previous Amador El Dorado
  Unit VMP's that overlap the proposed Shake Omo 2019 VMP.
- Previous VMP treatments included fire crew brush cutting, pile burning, tractor mastication, dozer piling, and broadcast prescribed fire.

#### **UTILITIES AND SERVICE SYSTEMS**

aj	Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	facilities, the construction or relocation of which could cause significant environmental effects?				
				_	
iter,	The project is not expected to require or result in to wastewater treatment or storm water drainage, elements, the construction or relocation of which could to	ectric power	, natural gas, c	or telecommi	unications
iter, cilitie	wastewater treatment or storm water drainage, ele	ectric power	, natural gas, c	or telecommi	unications

The project is expected to have sufficient water supplies available to serve the project and reasonably
foreseeable future development during normal, dry and multiple dry years.

c)	Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	roject will not require the use of a wastewater treat der is expected	tment provid	er and thus, n	o determinat	ion by such a
d)	) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	attainment of solid waste reduction goals?				$\boxtimes$
e)	Would the project comply with federal, state, and local management and reduction statutes and regulations related	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	to solid waste?				$\boxtimes$
relate	roject will comply with federal, state, and local mand to solid waste.	nagement an	d reduction st	atutes and re	egulations
a					
	) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

The project aims to create and maintain a shaded fuel break which would aide firefighters in the control of wildfire. It would not substantially impair an adopted emergency response plan or emergency evacuation plan.

b)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to,	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
wildfir	oject aims to create and maintain a shaded fuel bee. It would not due to slope, prevailing winds, and toccupants to, pollutant concentrations from a w	other factor	s, exacerbate	wildfire risks	, expose
c)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
wildfir power	oject aims to create and maintain a shaded fuel bee. However, the project will not require the installatines or other utilities that may exacerbate fire risenvironment.	ation or main	tenance roads	s, emergency	water source
d)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				
	The project will not expose people or structures to stream flooding or landslides, because of runoff, p				
MANI	DATORY FINDINGS OF SIGNIFICANCE				
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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	fish or wildlife population to drop below self-sustaining levels, threaten to eliminate				

	a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?				
b)	Would the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Would the project have environmental effects that would cause substantial adverse effects on human beings, either	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	directly or indirectly?				

### **APPENDIX A**

# Mitigation Monitoring and Reporting Plan

In accordance with CEQA Guidelines § 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. CAL FIRE is the lead agency for the above-listed project and has developed this MMRP as a part of the final IS-MND supporting the project. This MMRP lists the mitigation measures developed in the IS-MND that 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: Biological Schedule: Prior to operations Responsible Party: CAL FIRE
<u>Verification of Compliance</u> : Monitoring Party: CAL FIRE
Initials:
Date:
Mitigation Measure #2: Cultural Schedule: Prior to operations Responsible Party: CALFIRE Verification of Compliance:  Monitoring Party: CAL FIRE Initials: Date:
Mitigation Measure #3: Tribal Cultural Schedule: Prior to operations Responsible Party: CAL FIRE Verification of Compliance: Monitoring Party: CAL FIRE Initials: Date:

A copy of the completed MMRP will be forwarded to: CAL FIRE Environmental Protection Program, P.O. Box 944246, Sacramento, CA 94244.

# PREPARERS OF THIS DOCUMENT

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### **EXPERTS CONSULTED**

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- Kevin Roberts, Sierra Pacific Industries Biologist.
- Paul Rendes, Assistant Coordinator North Central Information Center.
- Craig Ostergard, Registered Professional Forester, Sierra Pacific Industries.
- Chris Cochrane, California Regional Water Quality Control Board

### REFERENCES CITED

Birdsey, R.A. and G.M. Lewis. 2002. Carbon in United States Forests and Wood Products, 1987-1997: State-by-State Estimates. [Presented at the 5<sup>th</sup> State and Local Climate Changes Partners' Conference, Annapolis Maryland, November 22, 2002.] USDA Forest Service, Global Change Research Program, Newtown Square, PA.

Christensen, G.A., S. Campbell, J. Fried (Tech. Coords.). 2007 California's Forest Resources: Forest Inventory and Analysis, 2001-2005. USDA Forest Service, Pacific Northwest Research Station, Forest Inventory and Analysis Unit (PNW-FIA), Portland, OR. March 22, 2007 version.

Eckert, P. Jennings. 2007. Carbon Sequestration in Sierra Pacific Industries Forests: A Watershed Example. Tetra Tech EC, Inc., Bothell, WA. [Submitted to Forest Ecology and Management.]

Mader, S. 2007. Climate Project: Carbon Sequestration and Storage by California Forests and Forest Products. [Technical Memorandum prepared for California Forests for the Next Century] CH2M HILL, Sacramento, CA.