

File Code: 1950/2350

Date: November 21, 2017

Subject: Arterial Routes Hazard Tree Mitigation Project

To: Kevin B. Elliott, Forest Supervisor

From: Eric G. La Price, Western Divide District Ranger



The purpose of the Arterial Routes Hazard Tree Mitigation Project is to mitigate the imminent safety hazards presented by dead and dying trees and reduce the additional fuel loading created by felled hazard trees along highly traveled routes on the Western Divide Ranger District, within the Giant Sequoia National Monument (Monument).

This project is needed because the ongoing tree mortality epidemic has affected trees along the roadways. The roadways covered by this decision are:

- County M56, Parker Pass Drive
- County M50, Parker Pass Road
- County M107, Western Divide Highway
- State Highway 190
- County M99, Kern River Highway
- Forest Road 20S03, Fox Farm Road
- County M220, Bear Creek Road
- County J37, Balch Park Road
- County M208, Wishon Drive
- County M216, Redwood Drive
- County M276, Blue Ridge Drive.

Refer to the attached map for locations of the above roadways.

This project is needed because these dead and dying trees have the potential to fall and injure visitors or damage vehicles and the road infrastructure.

Once on the ground, these hazard trees would also present excessive fuel loading, which would be a fire hazard. None of the hazard trees are giant sequoias. No giant sequoia trees will be cut.

We are working collaboratively with Tulare County, CAL FIRE and Caltrans on this project. Tulare County, CAL FIRE and Caltrans will assist the Forest Service in mitigating the safety hazards presented by the dead and dying trees by supplying personnel and equipment. Tulare County and CAL FIRE crews will be felling trees only within the road right-of-way (ROW) unless they are able to follow mountain yellow-legged frog and cultural guidelines. The road ROW encompasses 15 feet from the road edge on either side of the road. The design criteria, described below, for mountain-yellow legged frog and cultural sites would not apply within the ROW. Caltrans may work up to 300 feet on either side of State Highway 190. Caltrans will be required to adhere to mountain-yellow legged frog and cultural resource site guidelines.



I have determined this action is in compliance with land management plan direction.

Land Management Plan Conformance	
Name of Plan	<i>Giant Sequoia National Monument Management Plan</i>
Date Published	2012
Applicable and Specific Language	<p><i>Develop and manage opportunities for public enjoyment (pg. 56.)</i></p> <p><i>Provide for wide and varied public use of monument resources and opportunities, while protecting sensitive resources and objects of interest (p. 56).</i></p> <p><i>Removal of trees, except for personal use fuelwood, from within the monument area may take place only if clearly needed for ecological restoration and maintenance or public safety (p. 80).</i></p> <p><i>Any projects which propose the felling of trees inside the Monument will be subject to the following five criteria... (p. 81). (See Table 1 in this document)</i></p> <p><i>Fell and/or remove snags as needed to address imminent safety hazards (p. 89).</i></p>

Pages 81-82 of the Monument Plan presents five criteria to apply when evaluating the need for tree felling within the Monument. The following table shows the evaluation of the criteria.

Table 1: Tree Felling Criteria		
Criteria	Language	Evaluation
F1 Resiliency	If maintaining one or more standing trees on a site would deplete moisture, light or nutritional resources critical to the health and survival of the plant community or forest	This criterion does not apply to this project. The trees are dead or dying.
F2 Regeneration	If maintaining one or more standing trees on a site would adversely affect the regeneration, longevity, or growth of giant sequoias and other desired species.	This criterion does not apply to this project. The trees are dead or dying.
F3 Heterogeneity	If maintaining one or more standing trees on a site would adversely affect the desired diversity or structure of a stand or forest.	This criterion does not apply to this project. The trees are dead or dying.
F4 Public Safety	If maintaining one or more standing trees on site would create a public safety hazard. Forest Service policy is to mitigate safety hazards from recreation sites, administrative sites and the public transportation system of roads and trails, including trees or tree limbs identified as hazardous (FSM	<p>The consequences of leaving these hazard trees to fall are threats to public safety.</p> <p>None of the trees to be felled are giant sequoias.</p>

	2330.6(a))	
F-5 Recreation and Administrative Sites	Other projects that may be proposed in the Monument that could require tree felling include recreation or administrative site development and maintenance, scenic vistas and road access and parking for these sites.	This criterion does not apply. This decision pertains specifically to main travel routes.

Page 83 of the Monument Plan describes a decision tree used to determine which methods of forest restoration and maintenance should apply at different locations. The following table evaluates the four considerations shown in the decision tree for this project.

Table 2: Decision Tree for Site-Specific Projects in the Monument	
Decision Point	Evaluation Related to Project
1 – Use of Managed Wildfire	Managed wildfire is not feasible for eliminating the dead trees because of the uncertainty of when a wildfire may occur in this specific area. The trees represent a clear and present danger that must be addressed in the short-term.
2 – Use of Prescribed Burning	Prescribed burning would not be feasible due to the fuel loading along the roads. Additionally, burning the trees adds uncertainty regarding how they may fall. The trees need to be felled away from the roads.
3 – Use of Mechanical Treatment without Tree Removal	Mechanical treatment is feasible. Mechanical treatment without tree removal would not meet the purpose and need. Some logs would eventually fall into the road and some would interfere with safe maintenance of the road and right of way. Leaving all the felled trees would create unacceptable levels of fuels, which would threaten public safety as a fire hazard. This would also increase the amount of surface fuel to a level incompatible with historic fire return intervals.
4 – Use of Mechanical Treatments with Tree Removal	It is necessary to remove trees to meet the purpose and need. Some trees are so positioned that they will eventually fall into the road if left. Some have to be removed so the road and the right of way can be safely maintained. Some of the cut hazards would need to be removed to reduce the fuel loading to a level compatible with historic fire return intervals once the hazard trees are felled. Removal would be a combination of burning in place, reducing to chips, and hauling off the monument for disposal.

Resource specialists have evaluated the potential impacts of this proposed action. No outstanding resource concerns have been identified. Although no impacts are expected, emergency consultation with the US Fish and Wildlife Service will occur to determine if any follow-up actions are needed.

Any hazard trees felled within 82 feet of perennial or intermitted streams within historic mountain yellow-legged frog habitat are to be recorded on the form in Appendix A. This information will be used for emergency consultation.

For cultural resources, the Emergency Heritage Resource Guidelines will be followed. Refer to pages 9-11 of the archaeology report for these guidelines.

In addition, page 89 of the Monument Plan states the following design criteria:
Retain felled trees on the ground where needed to achieve down woody material standards of 10 to 20 tons per acre in logs greater than 12 inches in diameter.

To ensure this design criteria is met, personnel would do a visual estimate of the amount of downed woody material in logs greater than 12 inches in diameter using tables that estimate tonnage based on log size.

I have determined there is a clear need to remove the trees from Giant Sequoia National Monument, using the criteria on page 81 of the Monument Plan, which states:

Plan Criteria	Determination
<p>Protection of Objects of Interest If keeping one or more trees on site would cause unacceptable fuels accumulation and fire severity effects; if removing trees would reduce the risk of wildfire to the giant sequoia groves, sensitive wildlife habitat, and adjacent communities at risk</p>	<p>I have determined the number of felled trees, if left in place, would present unacceptable fuels accumulation.</p> <p>I have determined removing the felled trees would reduce the risk of wildfire along the roads</p>
<p>Public Safety If keeping one or more trees on site would create a public safety hazard or attractive nuisance.</p>	<p>I have determined the number of felled trees, if left in place, would present unacceptable fuels accumulation along the roads, which would threaten public safety in the event of a wildfire. The roads need to be passable for emergency equipment and evacuations.</p>

Based on there being no resource concerns and my familiarity with projects similar in nature, I have determined that no extraordinary circumstances exist, and a higher level of analysis is not necessary.

As the Responsible Official, I decided to fall the hazard trees using chainsaws and other hand tools to remediate the safety hazard. Hazard trees are to be felled if they are within 300 feet of the roads.

Once the trees are felled, a variety of actions will be performed:

- Some sections of the larger trees will be left on site as downed woody debris.
- Some trees and limbs will be chipped on site.
- Some material will be cut-up and moved to the side of the road where it can be picked up by the public (those with a valid permit) and used as firewood.
- Some material will be piled and burned.
 - No material will be piled and burned within mountain yellow-legged frog habitat. A map showing this habitat is in the project file.
 - No material will be piled and burned within streamside management zones. Refer to map on file prepared by the hydrologist.
- Excess material may be relocated to clearings for firewood gatherers or chipped or sold commercially.

This decision also approves additional entries into these areas to fell additional hazard trees as long as the tree mortality epidemic continues.

I determined this project falls within a category of actions listed at 36 CFR 220.6 that may be excluded from documentation in an Environmental Impact Statement or Environmental Assessment. This particular category is found at 36 CFR 220.6(d) (4), *Repair and maintenance of roads, trails and landline boundaries*.

This is not a project or activity implementing a land and resource management plan that is documented in a decision memo, decision notice, or record of decision. There are no extraordinary circumstances that would necessitate an environmental impact statement or an environmental assessment. This project may be implemented immediately.