



Forest Service
U.S. DEPARTMENT OF AGRICULTURE

Pacific Southwest Region, Sequoia National Forest and Giant Sequoia National Monument
Western Divide Ranger District

Castle Fire Ecological Restoration Project

Decision Notice

December 2023



Castle Fire Ecological Restoration Project - Decision Notice

For More Information Contact:
Red (Sarah) Dezelin
Western Divide Ranger District, District Planner
Sequoia National Forest
32588 Highway 190
Springville, CA 93265
Sarah.Dezelin@usda.gov
559-539-2607

We make every effort to create documents that are accessible to individuals of all abilities; however, limitations with our word processing programs may prevent some parts of this document from being readable by computer-assisted reading devices. If you need assistance with any part of this document, please contact the Sequoia National Forest at 559-784-1500.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.

Decision Notice

Castle Fire Ecological Restoration Project

USDA Forest Service
Sequoia National Forest and Giant Sequoia National Monument
Western Divide and Kern River Ranger Districts
Tulare County, California

The Decision Notice incorporates all information in the Castle Fire Ecological Restoration Project (Project) Environmental Assessment (EA) and Finding of No Significant Impact (FONSI), as well as information included in the project record.

Decision and Rationale

I have decided to authorize the activities described in the Proposed Action section of the EA, except for the hand fuels work conducted in the Belknap Complex Grove. That work was approved in July 2022 by the Chief of the Forest Service under the Giant Sequoia Emergency Response, and the EA analyzes effects of the actions taken in that grove.

My decision includes the design features identified during environmental analysis and review of legal and regulatory compliance. I have decided to implement 4,979 acres of dead tree removal; 2,902 acres of mechanical fuels reduction treatments that include thinning stands from below; 2,056 acres of managed fire; and 11,362 acres of reforestation with additional site preparation, as needed. We will complete an estimated 37,279 acres of hand prepped prescribed burning along with the treatments described above. In the EA, approximately 2,056 acres in the Moses Mountain Inventoried Roadless Area (IRA), proposed for designation as wilderness under the 2012 Giant Sequoia National Monument (GSNM) Land Management Plan Record of Decision, were included in the prescribed burning acreage. I am changing the treatment of those acres in that IRA from prescribed burn to managed wildfire to better maintain wilderness characteristics.

The Project analysis area encompasses approximately 79,397 acres of National Forest System (NFS) lands outside of designated wilderness that burned in the Castle Fire. The Castle Fire burned through all or portions of ten giant sequoia groves: Alder Creek, Mountain Home, Belknap Complex, Burro Creek, Dillonwood, Freeman, Middle Tule, Silver Creek, Upper Tule, and Wishon; and resulted in approximately 15 percent loss of old growth giant sequoia (defined here as greater than 4-foot diameter) trees. The Castle Fire resulted in over 37,000 acres of high severity fire on NFS land, resulting in 100 percent tree mortality, including giant sequoia trees. Approximately 78,300 acres (about 90 percent) of the analysis area is within the Giant Sequoia National Monument (Monument) in the Western Divide Ranger District, and the remainder of the analysis area is in Kern River Ranger District, managed under the 1988 Sequoia National Forest Land and Resource Management Plan, as amended.

The following information provides my rationale for approving these treatments and locations of treatment units. I reviewed public comments and associated scientific references that provide different perspectives on the appropriate response to

addressing post fire fuels conditions and post fire restoration and recovery in the Castle Fire burn area. The treatment activities would occur on about 25 percent of the NFS lands within the Castle Fire burn perimeter. The project is focused on the highest priority treatment areas in the most accessible areas where they would benefit ecosystem health and promote fire resilience. Congress and the Chief of the Forest Service have issued a clear mandate to the Sequoia National Forest to manage the Monument for future generations through removal of fuels to restore the natural fire regime of low severity fire across the landscape.

Dead tree removal and fuels reduction

The project would reduce fuels through a combination of dead tree removal and mechanical treatment within $\frac{1}{4}$ mile of existing roads and on slopes less than 35 percent. Prescribed pile burning and broadcast burning is focused on breaking up the contiguous surface and ladder fuels up to $\frac{1}{2}$ mile from existing roads. The combination of treatments will move the project area toward desired conditions for fuel loading as identified in the Monument Plan and reduce the potential for a return of high severity wildfire and associated resource damage.

The treatment locations also focus on managing the Wildland Urban Intermix Defense and Threat Zones, where fuels reduction activities will reduce potential damage to homes, utility lines, and other infrastructure by reducing the potential for high severity wildfires.

We will use prescribed fire and hand treatment in Dennison Peak, Moses Mountain, Rincon and Slate Mountain inventoried roadless areas, the Freeman Creek Botanical Area, and portions of Alder, Belknap, Freeman, Middle Tule, Mountain Home, and Silver Creek sequoia groves. We will also use managed wildfire in a portion of the Moses Mountain Proposed Wilderness. In compliance with the inventoried roadless rule, only prescribed burning and managed wildfire will be used in these areas. Fuels reduction in the sequoia groves is critical to maintaining this fire adapted species and protecting the groves from another stand-replacing fire event. In the next few years, we will manage the groves with hand work and pile burning. Once the natural regeneration is old enough to withstand a low severity fire and new fuels have accumulated, we will use prescribed burning to maintain the groves and will take care to protect the regenerating forest.

Reforestation and site prep

The acres burned at high severity in the Castle Fire created large expanses of landscape without trees. This resulted in the loss of important forest habitat for a diverse array of old growth dependent wildlife species. These burned acres were also critical for soil stability and watershed health (evidenced from the March 2023 storms) and recreation use. The 11,362 acres identified for reforestation are high severity burned areas within $\frac{1}{2}$ mile of a road and are on slopes less than 50 percent. Field surveys of these acres show there is a lack of natural tree species regeneration since the Castle Fire. Generally, natural tree regeneration occurs within 600 feet of live cone bearing giant sequoia and 90 to 150 feet of live cone bearing from other conifer species. Treatment units will be reforested using a mix of tree species from local seed gathered

previously in the applicable seed zones and per Forest Service guidelines. If feasible, we may plant at least 1,000 acres each year. Where field surveys show the burned forested areas have become dominated by shrubs, we may include herbicide use for site preparation and seedling release within five feet of a live pine or sequoia to reduce shrub competition. We may also include herbicide if there is risk of large areas being converted to persistent shrubland. Application would only occur where hand treatments are ineffective, forest restoration is important for wildlife habitat, and is unlikely to occur without treatment. Herbicide treatment for reforestation units would be dependent on shrub response and density, especially where bear clover is growing on 50 percent or more of the planting site.

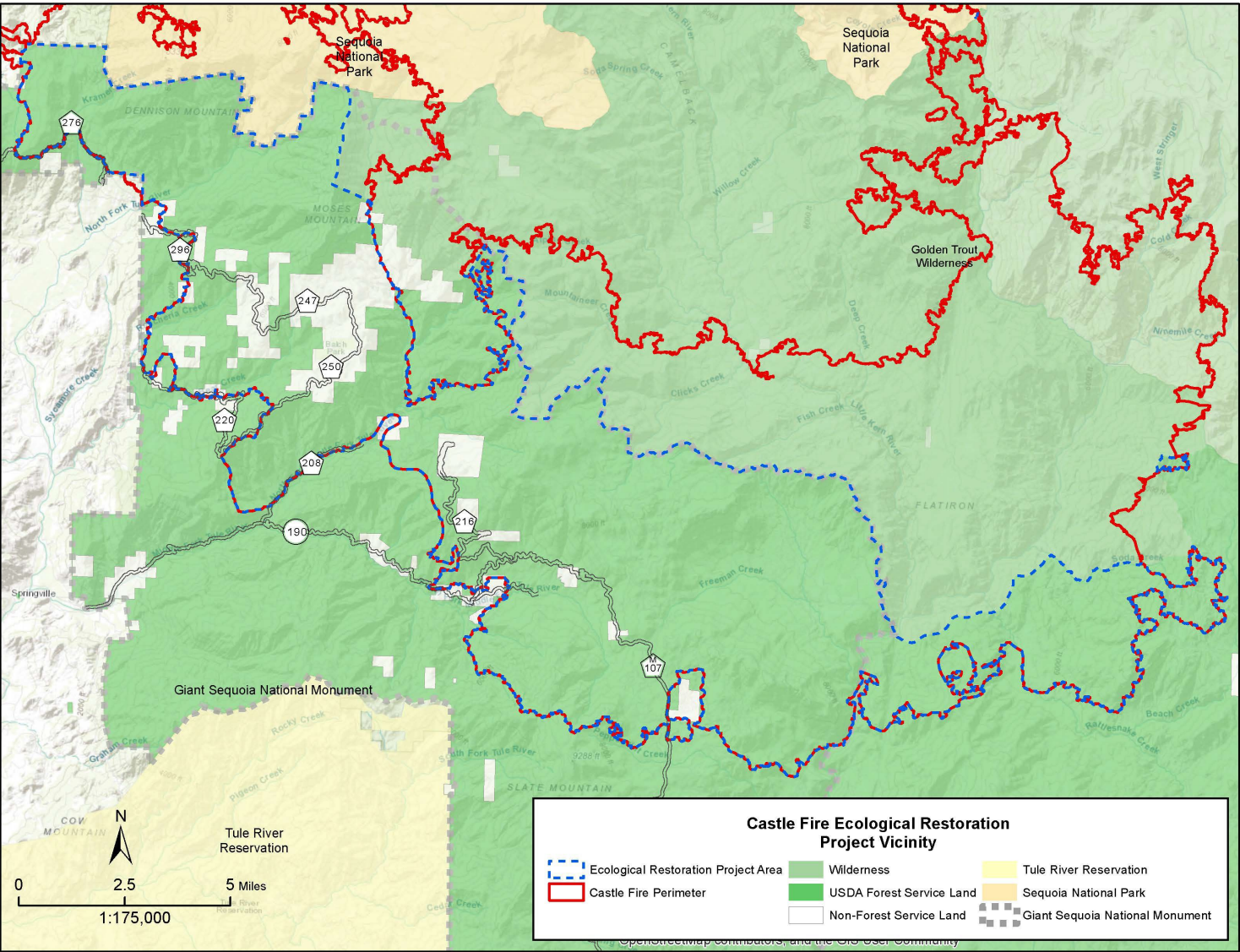
Effects of project treatments

The combination of fuels reduction activities will have short term effects to old forest trees dependent wildlife species' habitat avoidance due to noise, disturbance, and fire. The project *may affect but is not likely to adversely affect* fisher, an endangered species, and its proposed critical habitat. The direct, indirect, and cumulative effects of the project would reduce some snags and large down woody material but would result in no change to the number of acres classified as high-quality reproductive habitat in the analysis area. Mitigation measures would maintain critical habitat elements at the levels recommended by the Southern Sierra Nevada Fisher Conservation Strategy and The Southern Sierra Nevada Fisher Conservation Strategy Interim Recommendations (2020) for fisher habitat. Other than incidental hazard tree felling and torching during prescribed fire, none of the cumulative effects would measurably affect overstory canopy cover or the abundance of medium and large trees in "high quality fisher reproductive habitat." The project would not threaten the survival of either individuals or the viability of the endangered fisher population at the watershed or core area scales.

The short-term effects to fisher and the Forest Service sensitive plant and animal species habitat are expected to be minimized through limited operating periods, retention of large snags and large down woody debris, best management practices for aquatic areas, and other mitigation measures as described in Appendix C of the EA. Fuels reduction activities would break up the abundant and contiguous extent of the fuels. Subsequent reforestation, focused on key habitat travel corridors and large acreage high severity burn patches, would help maintain and improve native plant and wildlife habitat in the long term and reduce potential of widespread damage to habitat from high severity wildfires.

Castle Fire Ecological Restoration Project - Decision Notice

Figure 1 Castle Fire Ecological Restoration Project Vicinity



Monitoring

The project includes monitoring and research plots in the treatment areas to provide comparison of treatment efficacy and success of seedling establishment between treated and untreated areas. Monitoring in several groves in 2021 and 2022 found limited areas of natural regeneration and survival of seedlings in high severity burn areas where parent trees were killed, no seedlings sprouted, or the seedlings died, and no current seed source is available. High severity fire that results in 100 percent giant sequoia mortality is unprecedented in human history. Monitoring will continue in the areas with natural sequoia regeneration and giant sequoia seedlings would be protected during management activities.

The project would move the landscape toward desired conditions and objectives by reducing and separating surface and ladder fuels, resulting in a more resilient and fire-resistant landscape. Subsequent reforestation will begin restoring ecological processes in medium and high severity burned areas within the Castle Fire footprint.

I find the project meets the clear need for felling and removal of trees where fuel loading is above desired conditions for ecological restoration and maintenance or public safety, as described in the Clear Need Assessment (EA, Appendix A).

Summary of Public Involvement

This project was originally listed on the Sequoia National Forest Schedule of Proposed Actions and updated periodically during the analysis period. We initiated scoping on January 26, 2021, with a letter sent to 245 potentially interested parties regarding the proposed action and received 17 responses. Public field trips were held on June 17 and 24, 2021, to the proposed project area to provide an opportunity to see the forest conditions, discuss the proposed action, and answer questions. We consulted Federal, State, tribal, and local agencies during the development of this EA. The complete scoping list is found in the project record.

We initiated informal consultation with the U.S. Fish and Wildlife Service (USFWS) regarding the project on December 23, 2022. They concurred the project *may affect but is not likely to adversely affect* the fisher and its proposed critical habitat, the mountain yellow-legged frog, and the Little Kern golden trout on March 23, 2023.

We initiated a 30-day public comment period on February 1, 2023, resulting in five responses. Respondents raised several of the same concerns as they did during scoping, resulting in several clarifications to this EA and the project record. No significant issues were identified.

Findings Required by Other Laws and Regulations

Findings required by other laws and regulations applicable to the proposal can be found in the Environmental Impacts section of the EA.

Administrative Review

The project was subject to pre-decisional administrative review pursuant to 36 CFR 218, Subparts A and B, also known as the “objection process.” We placed a legal notice in

the *Porterville Recorder* on May 19, 2023, seeking public comment. The objection comment period ended July 3, 2023.

We received one objection response with joint comments from Sequoia ForestKeeper and the John Muir Project. The Reviewing Officer, the Forest Supervisor, and other Forest staff met with the objectors on August 8, 2023. We discussed the objectors' concerns and provided clarification regarding the project's consistency with the GSNM Plan diameter limits, the range of alternatives, and questions around natural regeneration.

To allow the objectors to visit the project area, we provided them a permit authorizing access to the fire area to collect information on natural regeneration possibly occurring there. We also provided regeneration survey data recently collected in a portion of the project area.

In a subsequent meeting with the objectors on September 7, 2023, we provided clarification regarding our use of regeneration survey data to ground truth where tree planting is needed prior to reforestation implementation. We and the objectors did not come to a resolution of their concerns during the meeting.

Per 36 CFR 218.11(b)(1), the Reviewing Officer issued a written response to the objectors on September 12, 2023. This response concludes I am authorized to proceed with the final decision, following the execution of instruction to "Clarify how the project complies with the GSNM Plan with respect to the diameter limits outlined in Table 46."

To clarify per the instruction above, the GSNM Plan was written for a green forest not severely impacted by wildfire, with the term "trees" describing live, green trees and "snags" describing dead trees. The term "snag" has been used synonymously with "dead trees" in the environmental assessment. Table 46 (Plan, p. 79) states there are no diameter limits for the cutting or removal of dead trees/snags. In the GSNM Plan's FEIS, there are several references to the cutting and removal of dead trees/snags to manage for wildlife habitat and ecological restoration (p. 446 and 502). The Plan does not have a diameter limit for dead trees/snags, stating simply, "In areas burned by wildfire, including high- and mid- severity patches, manage snag levels to meet ecological restoration objectives, with consideration for the spatial arrangement and density of snags for wildlife needs" (p. 89). This clarifying language was added to the EA's Response to Comments section with the change documented in the errata.

Summary of New Gray Wolf Information

In August 2023, the California Department of Fish and Wildlife (CDFW) announced the sighting of the new Tulare County wolf pack. The pack has been sighted within and around the project area. My staff has reviewed this new information, updated the effects analysis concerning the gray wolf in an addendum to the Biological Assessment (BA), and reinitiated informal consultation with the USFWS for this project on October 27, 2023, in compliance with the Endangered Species Act under 50 CFR §402.16(a). The BA addendum found the project "*may affect, but is not likely to adversely affect*" the wolf pack of Tulare County. We received a letter from USFWS on December 27, 2023, concurring with our determination and adding additional design criteria to follow during

implementation. These documents will be made publicly available on the project webpage.

Implementation of design criteria pertaining to gray wolf, including consistent coordination with CDFW, would prevent direct effects on gray wolf by protecting natal dens and rendezvous sites. Design features were added in the BA addendum to provide additional protection measures for the gray wolf pack.

The Council for Environmental Quality regulations require environmental analysis supplementation when one of the following situations occur:

1. "There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts" 40 CFR § 1502.9(c)(ii).
2. "The agency makes substantial changes in the proposed action that are relevant to environmental concerns." 40 CFR § 1502.9(c)(i).

The discovery of a gray wolf pack did not significantly alter the circumstances or the impacts of this project, nor did it cause a substantial change. While some project design features have been added, the project treatments and expected effects are the same as those evaluated in the original NEPA documentation. See, e.g., *Tri-Valley CAREs v. U.S. Dept. of Energy*, 671 F.3d 1113, 1125–26 (9th Cir. 2012). Supplementation to the EA is, therefore, not required.

Implementation

I intend to implement this decision in spring 2024, depending on site conditions.

Contact

For additional information concerning this decision, contact Red (Sarah) Dezelin, District Planner, Western Divide Ranger District, Sarah.dezelin@usda.gov, 559-539-2607.

TERESA BENSON

Forest Supervisor, Sequoia National Forest