



United States Department of the Interior

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In Reply Refer to:
2022-0072726

January 18th, 2023

Memorandum

To: Clayton Jordan, Superintendent, Sequoia and Kings Canyon National Parks,
Three Rivers, California, Clayton_Jordan@nps.gov
RICHARD KUYPER
Digitally signed by RICHARD KUYPER
Date: 2023.01.18 11:32:22 -08'00'

From: Richard Kuyper, Sierra-Cascades Division Supervisor, Sacramento Fish and
Wildlife Office, Sacramento, California

Subject: Informal Consultation on the KNP Complex Wildfire Tree Hazard Mitigation in
Sequoia and Kings Canyon National Parks Project, Tulare and Fresno Counties,
California

Dear Clayton Jordan,

This letter is in response to Sequoia and Kings Canyon National Parks' (Park) December 14, 2022 request for concurrence from the U.S. Fish and Wildlife Service (Service) that the proposed KNP Complex Wildfire Tree Hazard Mitigation in Sequoia and Kings Canyon National Parks Project (proposed project) may affect but is not likely to adversely affect the federally endangered Southern Sierra Nevada Distinct Population Segment of fisher (*Pekania pennanti*; fisher). The Service received your letter on December 21, 2022. The proposed project is located in Tulare and Fresno Counties, California and intends to remove hazard trees and woody debris alongside roads within the Park. The proposed project is within the proposed critical habitat for fisher, but the Park did not request to conference on potential effects to the proposed critical habitat. This response is provided under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act), and in accordance with the implementing regulations pertaining to interagency cooperation (50 CFR 402).

We have reviewed the proposed project, including: (1) the December 14, 2022 letter from the Park to the Service requesting informal consultation; (2) the Project Documentation Form for the KNP Complex Wildfire Tree Hazard Mitigation in Sequoia and Kings Canyon National Parks Project; and (3) the best available science on the species and its habitat.

Project Description

The Park proposes to mitigate approximately 12,000-15,000 roadside hazard trees within the 2021 KNP Complex Wildfire footprint and treat resultant debris within 80-ft from the road's edge. A tree hazard is defined as a tree with a recognizable potential for mechanical failure and/or uprooting and one which has potential for impacting a target (i.e. person, property,

facility) in the event of failure. The action area is 17,777 acres in order to account for potential sound disturbance; project activities will only occur on 2,120 acres (project area). The Park proposes to remove hazard trees generally within 150 feet from the road's edge and treat resultant woody debris within 80 feet from the road's edge. Some taller trees may be beyond the 150-ft buffer but still considered a hazard. The sound disturbance zone was calculated with a ¼ mile buffer of the project area. Areas subject to hazard tree mitigation include 42 miles of Generals Highway, 3 miles of Mineral King Road, 8 miles of Crystal Cave Road, 6 miles of Crescent Meadow Road, 2 miles of Redwood Mountain Road, and the Clover Creek Wastewater Treatment Plant. Given the amount and density of hazard trees that would be removed, the Park also proposes to treat resultant excess fuels within 80 feet of the road's edge. Debris treatment may consist of chipping material and spreading it onsite to a depth no greater than two inches, chipping and hauling material from the Park, or hauling the material from the Park whole. Logs may also be made available for public use with a permit. Trees slated to remain onsite would be directionally felled perpendicular away from roads to the maximum extent feasible to prevent logs from rolling downhill, limit roadside fuels, and break up fuel continuity. Slash (branches, limbs, or trees under 8" diameter at breast height) within 80-ft of the road's edge will be piled and burned. Hazard tree mitigation is expected to occur in 2023 and may potentially extend into 2024 depending on weather and accessibility. Pile burning will occur in the fall/winter of 2023-2025.

Proposed Conservation Measures

To ensure that impacts to the fisher will be less than significant the Park is proposing to implement the following conservation measures:

1. The Park Wildlife Biologist (or trained wildlife technician) would teach NPS work crews how to identify high quality potential den trees and cavities based on characteristics (e.g., dbh, decay, tree species) documented in previous studies (Green et al. 2019).
2. The Wildlife Biologist (or trained wildlife technician) would provide NPS and contracted work crews with materials to instruct them how to identify fisher and provide additional training when feasible and/or as needed.
3. KNP tree hazard mitigation would be conducted outside the fisher denning LOP (March 1 – June 30) to the maximum extent feasible.
4. KNP tree hazard mitigation proposed to occur during the fisher denning LOP (March 1- June 30) would be conducted only in areas where the Wildlife Biologist determines fisher are unlikely to be present (e.g., pre-determined high severity burn areas, or areas outside of suitable habitat) with the exception that high priority trees may be removed in other areas under the following conditions:
 - If trees identified as having denning characteristics were proposed for removal during the LOP in areas where the Wildlife Biologist determines fisher are potentially present, NPS crews would evaluate the tree for recent fisher "sign" (e.g., fresh scat, tracks in snow, squirrel tail, hairs at cavity entrance) and contact the Wildlife Biologist for a secondary assessment prior to the individual tree's removal.

- Crews would provide relevant information regarding the tree to the Wildlife Biologist including a photo showing scale. Assessment of individual trees could occur in person or using the photo and information provided (with subsequent follow-up if needed).
 - If a tree is confirmed as a potential den tree, it would not be removed during the LOP unless it posed an immediate safety risk that could not otherwise be mitigated through safety signage or other measures.
 - If active dens were identified in the course of project work, work crews would be immediately notified, and all work would cease, following, at a minimum, the restricted work guidelines near den clusters outlined in the Programmatic Biological Opinion.
 - If work is proposed during the LOP in 2024, in addition to the above measures, Wildlife Biologists would use any new monitoring data gathered during 2023 that might confirm fisher presence in the project area or likelihood of fisher use prior to authorizing work.
 - If work is conducted during the LOP near any potential den trees, it would not occur during early morning and evening to avoid disturbing fisher when they are likely to be leaving or returning to a den tree containing kits. Hours would vary depending on time of season and would be determined in consultation with the Wildlife Biologist.
5. If a fisher is spotted moving through the forest, work crews would be instructed to stop work until the animal moves on without harassment. The Wildlife Biologist will be notified, and the Service and Park will determine if reinitiation of Section 7 consultation is necessary.
6. If a fisher is spotted in, on the trunk of, or near a hazard tree that is marked to be felled (i.e., may have just climbed down, remains in area, or appears interested in climbing up), work would cease until the animal moves on without harassment. The Wildlife Biologist should be contacted for guidance as this could indicate a den tree with kit(s) inside (remote cameras could potentially be used to confirm presence/absence). The Service will be notified to determine if reinitiation of Section 7 consultation is necessary.
7. Chipping activities, which would cause consistent noise (more than 4 hours each day for more than one day, particularly if completed before 10:00AM or after 3:00PM) in areas where human disturbance is not already present (e.g., in areas that have been closed to the public for an extended period of time) would not occur between March 15 and April 30, and would largely be avoided between May 1 and June 30, except where the Wildlife Biologist has determined in advance that impacts to fisher are not likely based on site specific conditions (e.g. high severity burn areas, or areas outside of suitable habitat).

Fisher Occupancy, Habitat, and Effects of the Proposed Action

The Park has monitored fishers using remote camera surveys since July 2021. Camera surveys are conducted in small watersheds across the Park and neighboring Sequoia National Forest, including in the vicinity of Cedar Grove, Grant Grove, Redwood Canyon, and Crystal Cave. The Park also traps and attaches radio collars to fisher to track and monitor fisher movement. These efforts began in Fall 2021 and continued through 2022. These efforts allow the Park to understand fisher use in the area and find denning locations. These recent monitoring efforts

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have not observed any reproductive dens in or immediately adjacent to the project area, although camera detections and movement data from GPS collars show fisher use in the area. Trapping and collaring research will continue through 2023.

Other monitoring efforts, such as the US Forest Service Carnivore Monitoring Program, yielded 65 positive detections of fisher within a 5-mile radius of the project area. However, these monitoring efforts were prior to the 2021 KNP Complex Wildfire, which has impacted fisher habitat and use within the Park. Of the 2,120 acres where proposed project activities will occur, 382 acres burned at high severity, 422 acres burned at moderate severity, and 792 acres burned at low severity. The remaining 524 acres showed no change post-KNP Complex Wildfire. Of the project area, 1,207 acres are considered to be reproductive fisher habitat; 279 acres of which burned at high severity. Reproductive habitat was determined using the 2021 Conservation Biology Institute Fisher Habitat Suitability Model and previous iterations of the pre- and post-drought models. High severity fire typically removes the canopy cover and habitat characteristics necessary for fishers require for use, while foraging and dispersal may persist in low burn severity patches and unburned islands (Thompson et al. 2021b). Fisher monitoring will continue throughout the project area to understand fisher movement and use.

An LOP will be implemented from March 1 to June 30th to the maximum extent possible. While the Park may operate during the recommended LOP, exceptions to the LOP will be in areas where the Wildlife Biologist determines fisher are unlikely to be present (e.g. pre-determined high severity burn areas from the KNP Complex Wildfire, areas outside of suitable habitat). If a tree with denning characteristics is deemed as a high priority hazard within suitable habitat during the LOP, further assessment will be conducted to determine that fisher are not denning in the area. This may be determined by examining GPS movement of collared fishers or physical evidence of fisher in the area. Considering the hazard trees proposed for removal are generally within 150-ft of the road, fisher denning in the project area is unlikely. Tree removal will occur along roads where female fishers are less likely to den (Spencer et al. 2017) and likely will not remove preferred fisher structures. Because hazard tree removal during the LOP will only occur in areas that are unsuitable for fisher use and dispersal or if the Wildlife Biologist determines a high priority individual hazard tree in suitable habitat is not in use for denning, direct injury or mortality from the removal of active dens is not anticipated.

Additionally, while the proposed project accounts for potential noise disturbance with a ¼ mile buffer around the project area, noise levels from human activity and operations will be alongside roads where ambient noise levels are typically high. Because most work will occur adjacent to roads with high human activity and visitation, it is reasonable to assume that fishers in the area are accustomed to high levels of noise. In areas where ambient noise levels may be lower due to public use limitations, chipping, which may cause consistent noise, will not occur between March 15 and April 30th. Moreover, although the 2,120-acre action area consists of a 150-ft buffer from the edge of the road, not all areas alongside the road will undergo hazard tree removal. Mitigation will only occur where trees are determined to be hazards along the proposed miles of roads. Additionally, fishers have large home ranges (>2,500 acres, Spencer et al. 2016). Fishers may also use adjacent habitat during implementation. Therefore, based on fisher's general preference for trees away from human development and the conservation measures proposed by the Park, the proposed project's effects to fisher are considered to be discountable.

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Conclusion

After reviewing all available information, the Service concurs with the Park's determination that the proposed project *may affect but is not likely to adversely affect* the fisher. We came to this conclusion based on the following reasons: (1) fishers are less likely to den within the action area due to its proximity to the road; (2) the proposed project occurs alongside roads, and fishers are likely habituated to moderate levels of noise along these roads; (3) the proposed project is within the KNP Complex Wildfire footprint and is less likely to be used by fisher for denning; (4) research to monitor fisher movement and use in the Park will be ongoing during the proposed project's duration; (5) the Park will implement additional conservation measures to avoid negative impacts as described above. Therefore, unless new information reveals effects of the proposed action that may affect the listed species in a manner or to an extent not considered, or a new species is listed or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Act is necessary.

If you have any questions regarding this correspondence for the proposed KNP Complex Wildfire Tree Hazard Mitigation Project, please contact Emily Leung, Fish and Wildlife Biologist, (emily_leung@fws.gov) at (916) 414-6495 or me (richard_kuyper@fws.gov) at (916) 414-6621 or at the letterhead address.

ec:

Rebecca Green, Sequoia & Kings Canyon National Park, California

Literature Cited

- Green, R.E., Purcell, K.L., Thompson, C.M., Kelt, D.A. and Wittmer, H.U., 2019. Microsites and Structures Used by Fishers (*Pekania pennanti*) in the Southern Sierra Nevada: A Comparison of Forest Elements Used For Daily Resting Relative to Reproduction. *Forest Ecology and Management*, 440, pp.131-146.
- Spencer, W.D., S.C. Sawyer, H.L. Romsos, W.J. Zielinski, C.M. Thompson, and S.A. Britting. 2016. Southern Sierra Nevada Fisher Conservation Strategy. Version 1.0. Unpublished report produced by Conservation Biology Institute.
- Thompson, C.M., H. Romsos, W. Spencer, S. Sawyer, J. Tucker, and R. Green. 2021. Southern Sierra Nevada Fisher Conservation Strategy Supplemental Report – Fisher Reproductive Habitat Model Following Severe Drought. Unpublished report produced by the Conservation Biology Institute. 19 pp.
- Thompson, C., H. Smith, R. Green, S. Wasser, and K. Purcell. 2021b. Fisher use of postfire landscapes: implications for habitat connectivity and restoration. *Western North American Naturalist* 81(2):225–242.