



CENTER *for* BIOLOGICAL DIVERSITY

March 27, 2014

Mr. Kevin Elliott – Forest Supervisor
Sequoia National Forest and
Giant Sequoia National Monument
1839 South Newcomb Street
Porterville, CA 93257



Subject: Request to Re-Evaluate Various Projects in the Sequoia National Forest in Response to Significant New Information about the Effects from Thinning and Burning on the Pacific Fisher

Mr. Elliott,

Please carefully consider the following on behalf of Sequoia ForestKeeper, the John Muir Project of Earth Island Institute, the Center for Biological Diversity, and the Kern-Kaweah Chapter of the Sierra Club. We request a written response by no later than the end of April, 2014.

New information from three recent scientific reports provides compelling evidence that:
a) thinning causes significant adverse effects on Pacific fisher resting habitat, finding that Pacific fisher avoid thinned areas, including treatments focused on fuel reduction, making these thinned areas unsuitable for Pacific fisher; and b) mixed-intensity wildland fire areas (that are not salvage logged after fire) provide suitable foraging habitat for fishers, contrary to previous assumptions upon which existing thinning projects are based.

These new scientific reports, discussed in detail below, are:

- **Truex and Zielinski (2013)** – Short-term effects of fuel treatments on fisher habitat in the Sierra Nevada, California; *Forest Ecology and Management* 293 (2013) 85–91 (attached as Exhibit A);
- **Garner (2013)** – Selection of Disturbed Habitat by Fishers (*Martes Pennanti*) in the Sierra National Forest; A Thesis Presented to the Faculty of Humboldt State University in Partial Fulfillment of the Requirements for the Degree Master of Science in Natural Resources: Environmental and Natural Resource Sciences *by* James D. Garner (attached as Exhibit B); and
- **Hanson (2013)** – Habitat Use of Pacific Fishers in a Heterogeneous Post-fire and Unburned Forest Landscape on the Kern Plateau, Sierra Nevada, California; *The Open Forest Science Journal* 6 (2013) 24-30 (attached as Exhibit C).

The findings in these studies have not yet been considered or analyzed in the various thinning projects in the Sequoia National Forest and Giant Sequoia National Monument in Pacific fisher habitat. Therefore, we request that the Forest Service delay its planned implementation of these projects until the Forest Service, with the public's oversight, can consider and analyze this significant new information through the National Environmental Policy Act (NEPA) process.

The Forest Service must prepare a supplemental NEPA analysis to evaluate "significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(1)(ii). The Forest Service has an ongoing duty to take a hard look at any significant new information, in a timely manner, to determine whether the thinning projects listed below, individually or cumulatively, could result in significant adverse effects on the Pacific fisher. *See Friends of the Clearwater v. Dombek*, 222 F.3d 552, 559 (9th Cir. 2000) ("[T]he Forest Service's failure to evaluate in a timely manner the need to supplement the original EIS in light of ... new information violate[s] NEPA.")¹

In light of the significant new information about effects from thinning activities on Pacific fishers, the analyses in environmental assessments for these thinning projects, which include findings that the projects will have no significant effect on the environment, are now obsolete, because they are contrary to the findings in these new scientific reports. An Environmental Impact Statement (EIS) "must be prepared if substantial questions are raised as to whether a project ... may cause significant degradation of some environmental factor." *Idaho Sporting Cong. v. Thomas*, 137 F.3d 1146, 1149 (9th Cir.1998) (emphasis in original); *see also id.* at 1150 (noting that a plaintiff need not show that "significant effects will in fact occur," but rather must show that there are "substantial questions whether a project may have a significant effect") (emphasis added). The U.S. Supreme Court has held that a supplemental EIS should be prepared if: (1) "there remains 'major Federal actio[n]' to occur," and (2) "if the new information is sufficient to show that the remaining action will 'affect[t] the quality of the human environment' in a significant manner or to a significant extent not already considered." *Marsh v. Oregon Nat. Res. Council*, 490 U.S. 360, 374 (1989). The manner and extent of the effects discussed in these new reports have not been considered. Moreover, major Federal actions remain that will occur through the implementation of the thinning projects, listed below.

Truex and Zielinski (2013)

In their new study, Truex and Zielinski found the following: "There were significant negative effects of [thinning] treatment on predicted resting habitat suitability at both study areas, and highly significant effects on canopy closure.... The influence of canopy reduction on

¹ An agency cannot rest on the conclusions made by an EIS or EA but instead maintains a continuing obligation to take a "hard look at the environmental effects of its planned action, even after a proposal has received initial approval." *Marsh v. Oregon Nat. Res. Council*, 490 U.S. 360, 374 (1989). That continuing duty further requires a federal agency to gather and evaluate new information relevant to the environmental impact of its actions and then "make a reasoned determination whether it is of such significance as to require implementation of formal NEPA filing procedures." *Warm Springs Dam Task Force v. Gribble*, 621 F.2d 1017, 1023, 1024 (9th Cir.1980).

resting habitat suitability likely accounted for the significant treatment effects at both areas. . . .” Exhibit A – Abstract, p. 85.

Based on this finding, the Forest Service must further evaluate and analyze the effects of fuels management on resting sites, home ranges, and at the landscape scale for each of the projects listed below. Moreover, the Forest Service must take a number of management actions to mitigate the potential negative short-term effects of fuels treatments on fisher habitat, consistent with Truex and Zielinski (2013) (and the Garner (2013) study, as discussed below).

Garner (2013)

Garner’s research “draws upon Sierra National Forest management records and data collected by the Kings River Fisher Project to investigate the long-term effects of past management actions on fisher habitat.” Exhibit B, p. ii. Garner used actual “location data for 36 individual fishers (27 female, 9 male) to study second-order (home range and core-use area) and third-order habitat selection (resting and foraging sites) of national forest lands treated with management activities between 1992 and 2006.” *Id.*

He found that “when selecting microsites within their home ranges, fishers tend to avoid using sites within 200 meters of a treated [thinned] area.” *Id.* Garner found that “as fishers are selecting foraging and resting sites within their home ranges (third-order selection), they tended to avoid treated areas in favor of sites within untreated forest, corroborating previous findings (Truex and Zielinski 2013).” *Id.*, p. 41.

“[T]he significance of third-order selection within 200 meters of a fisher location is a strong indication that there are structural differences between treated and untreated relevant to fishers. . . . [as the] data shows that there is less canopy cover in treated areas across all forest types. . . . [and a] decrease of three-dimensional structural complexity in treated areas of most forest types, represented by the lower understory and ground cover density, as well as a lower distribution of the vegetation in the vertical profile (increased skewness).” *Id.*

While the third-order selection in Montane Hardwood-Conifer and Montane Hardwood forests was not significant, “in the conifer forests, the harvest of intermediate and large sized conifers (>50 cm [20 inches] dbh) during treatment activities likely decreased the availability of what were already less common structures in those forest types.” *Id.* at 43.

These findings suggest that the Kings River Sustainable Forest Ecosystems Project, and the management actions that followed, have had a negative net impact on fisher habitat. This impact is most apparent within coniferous forest habitat, where the reduced canopy cover and loss of three-dimensional structure is sufficient to influence fisher selection preference. *These findings indicate that the short term negative impacts of management action reported by Truex and Zielinski (2013) continue to have lingering effects on habitat quality beyond the one year term reported in their study.*

Id. (emphasis added).

Garner (2013) also noted that removal of mature trees (common in current thinning projects) is a key factor in the degradation caused by thinning that results in fisher avoidance of thinned areas. *Id.*, pp. 45-46.

Hanson (2013)

In this recent study, using specially trained fisher scat-detecting dogs to determine patterns of habitat use, Hanson (2013) found that fishers preferentially select the within-fire side of mixed-intensity fire areas over the unburned side, when they are near fire perimeters, and that fishers select dense, mature/old forest in both its unburned and burned condition (i.e., dense, mature/old forest that experiences mixed-intensity fire).

Further, Hanson (2013) found that fishers are using moderate/higher-intensity fire areas in dense, mature/old mixed-conifer forest at the same level as their use of unburned, dense, mature/old mixed-conifer forest. Hanson (2013) concluded that the high levels of structural complexity in unlogged mixed-intensity fire areas (including an abundance of snags, downed logs, patches of montane chaparral, and natural conifer regeneration) creates rich habitat for small mammal prey species, and provides suitable fisher foraging habitat, contrary to past assumptions.

Hanson (2013) specifically noted that mechanical thinning and post-fire logging remove and reduce the very structural complexity and richness created by mixed-intensity fire.

Projects in the Sequoia National Forest and Giant Sequoia National Monument

In as much as the projects are similar to those in the Sierra National Forest's Kings River Project and the actions that followed, the Forest Service must analyze the new findings in these new reports as they relate to proposed actions in the Sequoia National Forest and Giant Sequoia National Monument, also considering the impacts from similar past projects that have already been implemented, such as the Ice Project and other treatments around the Alta Sierra community.

The following current or future projects within the Sequoia National Forest, the Giant Sequoia National Monument, and the Southern Sierra Fisher Conservation Area (SSFCA) are likely to have adverse effects similar to those discussed in these new reports because the treatment methods include thinning for fuel reduction, they will result in canopy cover reduction, they include the harvest of intermediate and large sized conifers (>50 cm [20 inches] dbh), and they will result in a decreased structural diversity. Moreover, the vast majority of the areas in these projects are located in conifer forest types where Garner found the effects most significant.

- Frog – currently under contract – implementation imminent
- Rancheria – currently under contract – implementation imminent
- Joey – implementation proposed for 2015
- Saddle – implementation timing unknown (currently enjoined)
- White River – implementation timing unknown (currently enjoined)

Further, because the Forest Service has already implemented various past treatments in the vicinity of these projects within the SSFCA and in other areas throughout the forest that may cumulatively add to potential adverse effects on the Pacific fisher, and there are plans to implement other future projects in the range of the Pacific fisher in the Sequoia National Forest, the following projects should also be included in the analysis:

Recent Projects with Potential Cumulative Effects:

- Ice
- Alta Sierra fuel treatments
- Ponderosa
- Camp Nelson
- Red Mountain
- Siretta Salvage

Future Projects with Potential Cumulative Effects:

- Tobias
- Tule River Reservation Protection

Please respond to our request, in writing, by no later than the end of April, 2014.

For Sequoia ForestKeeper, the John Muir Project or Earth Island Institute, the Center for Biological Diversity, and the Kern-Kaweah Chapter of the Sierra Club,



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