



Sierra Forest Legacy
Protecting Sierra Nevada Forests and Communities



October 12, 2015

Alfred Watson
District Ranger
Kern River Ranger District
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P.O. Box 3810
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Sent via email to: comments-pacificsouthwest-sequoia@fs.fed.us

Re: Comments on the Proposed Summit Fuels Reduction and Forest Health Project Scoping Notice

Dear Alfred Watson:

We have reviewed the notice of scoping for the proposed Summit Fuels Reduction and Forest Health Project and other relevant project scoping documents. Based on our review of these documents, the proposed action has the potential to mechanically reduce forest canopy cover in one or more California spotted owl territories. Due to serious concerns for the long-term persistence and viability of the species throughout the Sierra Nevada, the Forest Service finalized the Interim Recommendations for the Management of California Spotted Owl Habitat on National Forest System Lands (IRs) on May 29, 2015 (Appendix A). **The IRs should be considered the best available science to maintain species viability when designing and implementing a timber harvest project after May 2015.**

Forest Service-wide Spotted Owl Decline

The U.S. Fish and Wildlife Service's (Service) 2006 finding that the California spotted owl did not warrant ESA protections relied heavily on a draft demographic meta-analysis conducted by Blakesley et al. (2006). Since 2006, several long-term demographic studies have been published that suggest the statistical methods of Blakesley et al. (2006) lacked the statistical power to detect the ongoing declines. These new studies affirm that declines have occurred on all Forest Service-managed lands with long-term survey data over the past 20-plus years, and the only stable or increasing population is in Sequoia-Kings Canyon National Park where logging does not occur and fire is the primary management tool used to reduce fuel loading. Specifically, between 1990 and 2012, the spotted owl population declined by 50 percent in the Eldorado demographic study area (Tempel et al. 2014b). From 1993 to 2010, spotted owl occupancy declined by 30 percent, territory extinction increased over time, and colonization rates were insufficient to maintain occupancy at its initial level on the Eldorado study area (Tempel and Gutiérrez 2013). Over the 18-year study period, the population declined by 21 to 22 percent in the Lassen and 11 to 16 percent in the Sierra demographic study areas, and increased by 16 to 27 percent in the Sequoia-Kings Canyon National Park demographic study area (Conner et al. 2013). It is important to note that from the early 1990s through 2012 there was very little to no

high severity wildfire activity within the four demographic study areas, suggesting that these observed declines were unrelated to the effects of wildfire or post-fire salvage logging.

Effects of Thinning on Spotted Owl Habitat

In the Service's 2006 finding that the species did not warrant protections under the ESA, the agency contended that high severity fire represented the greatest threat to the species and Forest Service thinning treatments were a short-term threat that ameliorated the long-term threat of high severity fire. We now know that spotted owls use forests that burn at all severities for foraging (Bond et al. 2009) and forests that burn at low and moderate severity have no effect on spotted owl occupancy and retain essential habitat characteristics (Roberts et al. 2011). In addition, recently published research has consistently documented a correlation between mechanical reductions in canopy cover and adverse effects to California spotted owl:

- Alteration of 50 acres or more of mature conifer forest (conifer forest with greater than 70 percent canopy cover dominated by medium and large trees) within a spotted owl territory increased dispersal probability (Seamans and Gutiérrez 2007).
- Home range size increased with the amount of fuels treatment within the home range (Gallagher 2010).
- Medium-intensity timber harvests, characteristic of proposed fuel treatments, were negatively related to reproduction of spotted owls, with reproduction appearing sensitive to modest amounts of medium-intensity harvests (Tempel et al. 2014a).
- Reductions in canopy cover were associated with reductions in spotted owl survival and territory colonization rates, as well as increases in territory extinction rates (Tempel et al. 2014a).
- Greater than 90% of medium intensity harvests converted high-canopy forests into lower-canopy vegetation classes, suggesting that landscape-scale fuel treatments could have negative impacts on populations of California spotted owls (Tempel et al. 2014a).
- The effects of implementing medium intensity timber harvests immediately decreased average habitat suitability, with a difference still present after 30 years of simulated forest growth (SNAMP 2015).

Trend to Federal Listing

On September 18, 2015, the Service issued a positive 90-day finding on a petition to list the California spotted owl. A positive 90-day finding indicates that the Service believes that substantial scientific or commercial information was provided by the petitioner and that the petitioned action may be warranted. It is clear that the foundation of the Service's 2006 not warranted determination has been eroded by the best available science and cannot again be used to justify not listing. It is scientifically baseless that the Forest Service can continue implementing thinning projects in spotted owl habitat that reduce canopy cover throughout a significant portion of territories and maintain species viability. The 1982 planning rule and the 2012 planning rule require that species viability be maintained in the planning area. FSM 2670.1 states that sensitive species of native plant and animal species must receive special management emphasis to ensure their viability and to preclude trends toward endangerment that would result in the need for Federal listing. As stated in the IRs, "These recommendations constitute a suite of measures that individually hold promise and support in scientific literature pertaining to owls and

forest ecology.” At this time, the best available science suggests that modifying canopy cover in a manner or to an extent not recommended by the IRs may significantly increase the probability of territory abandonment and reduce the probability of colonization and successful reproduction and perpetuate a trend to federal listing.

Providing Forest Resilience and Maintaining Spotted Owl Viability

There is relative scientific consensus that mechanical thinning treatments cannot be implemented to the extent necessary to provide forest resiliency at a landscape scale. North et al. (2015) concluded that a reliance on mechanical fuels reduction treatments is unlikely to effectively contain or suppress wildfire, because what is available for treatment is often too small and scattered to effectively alter landscape-level fire spread and intensity. Their analysis suggests that in many areas a wildfire policy focused on containment and suppression is unlikely to be effective if it relies primarily on mechanical fuels reduction methods. As suggested by North et al. (2015), mechanical fuel treatments should focus on providing anchor points for supporting a landscape-wide prescribed fire program.

There is rarely a need to remove any trees greater than 12-20 inches dbh for fuels purposes (North et al. 2009, Collins et al. 2011). The primary cause of passive and active crown fire and high fire spread rates are surface and ladder fuels. We are not aware of any data that suggest decreasing canopy cover across the landscape would increase landscape resilience to fire.

At this time, most lines of evidence suggest that spotted owls require high canopy cover forest stands or patches for nesting in burned (Bond 2009a, Roberts et al. 2011) and unburned forests (Verner et al. 1992), but the effects of fire on foraging and territory stability are more nuanced and complicated. Studies by Bond et al. (2009a) and Roberts et al. (2011), studies with little to no post-fire salvage logging, suggest that spotted owl home ranges that burn within the natural range of variation continue to provide essential habitat components and do not appear to affect occupancy as many as 14 years post-fire. It is also clear that forests that burn at high severity and are left unsalvaged provide spotted owl foraging habitat (Bond et al. 2009).

Because forest resilience at a landscape scale cannot be realized without using fire to treat fuels over a large proportion of the landscape and because spotted owl habitat is not affected by fire that burns within the natural range of variation, **the goals of increasing forest resilience to wildfire and ensuring spotted owl viability are mutually inclusive.** If the Forest Service has a true commitment to increasing forest resilience to wildfire and maintaining spotted owl viability, there must be a fundamental shift in agency priorities to increase the use prescribed fire and managing wildfire for resource benefit by several orders of magnitude. Spotted owls are not the cause of current forest conditions or the inability to increase wildfire resilience throughout much of the National Forest system in the Sierra Nevada (North et al. 2015).

Conclusion

At this time, the Forest Service is focused almost entirely on conducting mechanical fuel treatments to reduce fuels and harvest timber. Although many fuel treatment projects plan for the use of prescribed fire, for various reasons much of the prescribed fire is never completed. Thinning trees greater than 12-20 inches and reducing canopy cover cannot continue to occur in

spotted owl habitat at the levels observed over the last 20 years without continuing to push the species toward extinction throughout much of the Sierra Nevada. We are tracking all thinning projects that may affect spotted owls in the Sierra Nevada that are scoped after May 2015. Selecting an alternative that meets or exceeds the habitat protections afforded by the IRs is the only scientifically defensible way to justify that the activity does not result in a trend to federal listing.

To help aid in the development of forest management projects that incorporate the IRs and provides for spotted owl viability, we have translated and summarized the IRs for the southern Sierra Nevada (Appendix B). This translation is adapted from one prepared by Region 5 for the forest plan revision process in the southern Sierra Nevada.

Thank you for your time and attention. Please direct any questions or comments to Ben Solvesky (ben@sierraforestlegacy.org; 928-221-6102).

Sincerely,

A handwritten signature in blue ink, appearing to read "Ben Solvesky". The signature is fluid and cursive, with the first name "Ben" and last name "Solvesky" clearly distinguishable.

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