



Shaping the future for birds

November 17, 2015

Scott Flaherty
Deputy Assistant Regional Director
Public Comments Processing
Attn: FWS-R8-2015-0139
U.S. Fish and Wildlife Service MS: BPHC
5275 Leesburg Pike, Falls Church, VA 22041

Dear Deputy Assistant Regional Director Flaherty,

American Bird Conservancy (ABC) is writing in regard to the status of the California Spotted Owl. ABC agrees that a review of the best science and current management practices reveals that based on Factors, A, D, and E, an endangered listing is warranted.

The listing petitions argue that current land management strategies in California Spotted Owl habitat under the 2004 Sierra Nevada Framework are at the root of continued population declines. The evidence from a significant number of scientific studies cited within the petitions is compelling and an indication there is currently a lack of adequate regulatory mechanisms in place to conserve the subspecies.

Recent findings indicate that low and moderate severity fires are not a threat to California Spotted Owl populations, and that owl populations are declining in areas where there is post-fire logging and mechanical fuels treatments. Post-fire logging has been shown to be particularly detrimental to all three owl subspecies' populations by causing abandonment of burned areas that might otherwise remain occupied.

Despite this evidence, the Forest Service continues to promote large-scale post-fire logging in California Spotted Owl habitat as demonstrated by the intensive logging of occupied owl habitats following the Rim Fire. The Forest Service's ongoing promotion of intensive logging in this area is evidence there is currently a lack of adequate regulatory mechanisms in place to conserve the species.

Another concern is the proposed Healthy Forests Restoration Act designation of treatment areas for forests in Region 5. Approximately 5.3 million acres of National Forest, apparently all lands outside of Wilderness, would become eligible for expedited logging procedures that limit public involvement, and also for a 3,000 acre categorical exclusion that could allow for logging without the site-specific analysis needed to conserve California Spotted Owl. This proposed designation is being made without any environmental analysis or opportunity for public comment and raises concern that the adequacy of regulatory mechanisms continues to deteriorate.

Information gathered for this assessment on the status of the California Spotted Owl should also be considered across the entire range of the species regarding the proposed up-listing of the Northern Spotted Owl and in determining management prescriptions for all three subspecies. Moreover, Recovery Action 12 in the Northern Spotted Owl recovery plan requires that snags and large woody debris should be left after fires, a standard that should also be applied to the California population.

Based on recent studies, we anticipate current management will lead to continued decline of the Northern Spotted Owl populations through direct take, habitat loss, and creating conditions more favorable to the ongoing incursion of Barred Owls. This comes at a critical population bottleneck for the northern subspecies resulting from historic and ongoing loss of habitat. The Northwest Forest Plan predicted it would be another 30 years for sufficient habitat to grow back into large blocks, allowing owl populations to recover.

The invasion of Barred Owl into Spotted Owl's range requires a higher level of protection than previously projected, and more than is being currently afforded by the critical habitat rule's adverse modification policy. Post-fire logging of mature and old-growth forests remove important biological legacies for owls and a host of prey species found in the ensuing complex early seral habitat. These activities threaten to undermine the functionality and future extent of the late-successional reserve network envisioned by President Clinton's Northwest Forest Plan.

Risk of fire to the Spotted Owl is being overstated in the Mexican Spotted Owl Recovery Plan, the Northern Spotted Owl Recovery Plan and Final Critical Habitat Rule and the Sierra Nevada Ecosystem Framework of 2004 and aggressive fuels treatments in owl habitat may be counterproductive to recovery. That is because projects now being undertaken in the name of fire prevention in Spotted Owl habitat are often harmful to the owls and require take.

For these reasons, we respectfully urge FWS to reexamine this policy and for the land management agencies to avoid Spotted Owl take pending completion of an updated analysis.

We look forward to working with you and the FWS staff to conserve and recover the Spotted Owl.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Holmer". The signature is fluid and cursive, with a long horizontal stroke at the end.

Steve Holmer
Senior Policy Advisor
American Bird Conservancy

Summary of Wild Nature Institute and John Muir Project Petition

A fundamental premise of the listing petition is that new information merits revisiting the 2006 FWS decision to not list the subspecies based on uncertainties over its population size and response to wildfire and forest management. As the petition notes: “The CSO was denied protection in 2006 based on the assertion that fire represented the primary threat to its survival, and the threat was being addressed by Forest Service actions.”

Analysis of demographic data of five California Spotted Owl populations concludes that since 2006 four out of the five populations’ studied are declining. The other population, which inhabits National Parks is stable. Other studies published since 2006 indicate the owls are well-adapted to low and moderate severity fire, and that post-fire logging is likely to be the driver of owl population declines.

There is only an estimated population of the CSO based on the number of known occupied sites. In 2006 there were approximately 1,200 – 1,700 pairs. The demographic study estimates a 10-15% decline since that time so ABC estimates the current population is approximately 1,100 – 1,600 pairs.

The demographic data collection was initiated in the late 1980s and early 90s to estimate the subspecies population. The petitioners reviewed the results of multiple analysis methods to determine population trends in each of the five study areas, Lassen, Eldorado, Sierra, Sequoia-Kings Canyon, and San Bernardino, which total 1.4 million acres.

In two of the study areas in Sierra Nevada national forests, populations have declined approximately 10 percent since 2003 (Conner et al 2013), and the other Sierra Nevada study area has a 20 percent decline (Tempel and Guitierrez 2013, Tempel 2014). Population trends for the Lassen study area showed population declines in 2001, 2010, and 2013 (Blakesley et al, 2001, Blakesley et al 2010, and Conner et al 2013) and Conner et al estimated a 21-22 percent decline over the past 18 years. The Tempel 2014 study found the decline in the El Dorado area was as high as 50 percent from 1990-2012.

Gutierrez et al 2012 confirmed this decline stating “there has been a clear decline in abundance over the last fifteen years.” Modeling also indicates that extinction is outpacing colonization leading to reduction in owl sites over time. Tempel and Guitierrez 2013 concluded areas are not being colonized due to habitat alternation.

Keane et al (2012) reported that the Meadow Valley fuels treatment project on the Plumas National Forest conducted from 2006-08. After the logging the number of territorial sites declined from 9 to 4 over a four year period (2007-2011). This was confirmed by Stephens et al (2014) which found a 43% loss of CSO within a few years of mechanical thinning. The authors noted that while the region’s overall population is declining, the steep rate of decline in the fuels treatment study area were of “a greater magnitude” than elsewhere on the landscape.

Conner et al 2013 found that the Sequoia-Kings Canyon area analysis indicates a population increase of 16-27 percent over the seventeen year study period. Blakesley et al 2010 reported that at a minimum their analysis showed a stable population with a higher adult survival rate than other study areas. The authors suggested the higher survival rate of adults in the National Park resulted from “differences in habitat quality resulting from differences in forest management both before and during the study period...”

The petitioner's conclude on page 92 that: "the only area in the Sierra Nevada in which California spotted owl populations are known to be stable or slightly increasing is an area with an active mixed-severity fire regime and no mechanical thinning or post-fire logging (Sequoia/Kings-Canyon National Park), while all study areas on national forests and private lands (characterized by aggressive reduction of fire due to fire suppression, landscape-level mechanical thinning, and common post-fire logging) have declining populations (Conner et al. 2013, Tempel and Gutiérrez 2013, Tempel 2014, Tempel et al. 2014a). These findings indicate that mixed-severity fire (which includes a high-severity fire component) is, on its own, not a significant threat to California spotted owls. Instead, management activities that follow mixed-severity fire (post-fire "salvage" logging), or are conducted ostensibly to "save" owls from higher-severity fire (mechanical thinning), are primary threats to the owl."

The San Bernardino population declined at a 9 percent rate from 1987 to 1998 (LaHaye et al 1999). The region had extensive logging on private lands and the San Bernardino National Forest in response to a bark beetle outbreak.

Other studies have looked into the effect of habitat alteration. Seamans and Guitierrez (2007a) found the probability of territory colonization decreased, and territory occupancy decreased in areas with as little as 40 acres of logging. Bias and Guitierrez (1992) attributed low use of private timberlands by roosting and nesting CSOs to sanitation and high-grade logging that removed potential nest trees.

Clark et al (2013) concluded: "Our results also indicated a negative impact of salvage logging on site occupancy by spotted owls. We recommend restricting salvage logging after fires on public lands within 2.2 km of spotted owl territories (the median home range size in this portion of the spotted owl's range) to limit the negative impacts of salvage logging."

A 2012 Forest Service study (Lee et al) examining 11 years of CSO breeding season survey data from burned and unburned forests found no significant effects of fire on probabilities of local extinction and colonization. Roberts (2008) and Robert et al. 2011 found many Spotted Owl sites continued to be occupied and reproduced successfully after fire burned portions of their home ranges and core area, and Roberts (2008) also found a higher reproduction rate in mixed-severity burn areas over unburned areas. Williams et al (2011) found that owl home ranges in burned areas are similar to unburned areas. Jenness et al (2004) found that numbers of successfully reproducing Mexican Spotted Owls territories did not statistically differ between burned and unburned forests.

In addition, management prescriptions to prevent fire, risk turning viable habitat into areas with less than 40 percent canopy cover which owls are likely to abandon. Under the Defensible Fuel Profile Zones and Strategically Placed Area Treatments, canopies are reduced the 40 percent cover, the minimum usable by Spotted Owls. Gallagher (2010) found owls avoided foraging in these treatment areas. Bond (2009) found that Spotted Owls forage in all burn severities, and that owls have a slight preference for feeding in burned areas over unburned areas, and unlogged areas over logged forests.

Under the 2004 Framework, the Forest Service is defining suitable habitat too narrowly, automatically disqualifying burned areas even if owls continue to occupy the site. Despite exposure of agency wrongdoing by an Associated Press expose by Scott Sonner in 2004, the agency continues to assume burned habitat, particularly high-severity burn areas, are a complete loss as owl habitat, and therefore, can be opened to logging. This is a result of the 2004 SFNPA that states areas with stand replacing fires can be removed from Protected Activity Centers.

On page 100 the petition notes: In the Power Fire area and the Freds Fire area, the 2004 Sierra Nevada Forest Plan Amendment allowed the Forest Service to treat the higher-severity fire areas within the pre-fire PAC boundaries as being lost/unsuitable, which not only opened the PACs to post-fire logging, but also allowed the Forest Service to misleadingly claim that “0” acres of “suitable habitat” within the PACs would be salvage logged (Bond 2011).

Current policy also promotes landscape level mechanical thinning in spotted owl habitat, even allowing such activities in PACs and HRCAs. As noted above, the 2004 plan also promotes post-fire logging of owl habitat, assuming that it no longer habitat, and mechanical thinning, despite evidence this is causing severe harm to California Spotted Owls. As the petitioners note on page 95:

“Tempel et al. (2014b) found that mechanical thinning is significantly harming California spotted owls. The authors found that the amount of mature forest with high canopy cover (70–100 percent) was a critical variable for California spotted owl viability (survival, territory extinction rates, and territory colonization rates), and determined that “medium-intensity” logging—mechanical thinning under the 2004 Amendment, and earlier prescriptions generally consistent with the 2004 Amendment—significantly adversely affects California spotted owls at all spatial scales by targeting dense, mature forests with high canopy cover, degrading the quality of such habitat by reducing it to moderate canopy cover. This is adversely affecting California spotted owl reproduction (Tempel et al. 2014b).”

The evidence of negative impacts to owls from post-fire logging is of particular concern. Lee et al. (2012) report that mixed-severity (averaging 32 percent high-severity fire effects) did not reduce CSO occupancy. However, sites that were also post-fire logged saw complete abandonment.

It is also important to consider the historic loss of CSO habitat as a result of reduced abundance of large, old trees, and a decline in snag density. It will take many decades to restore late-successional conditions, and a change in post-fire logging policy to restore snags and downed woody debris. A review of Sierra Nevada National Parks by the SNEP Report found 55 percent of forests are in late-successional condition, but on other federal lands such conditions are found on only 19 percent of forest lands. Beardsley et al (1999) estimated that old growth forests declined from 45 percent to 11 percent of the landscape since 1945.

There is concern that the Forest Service is ignoring the available scientific literature to continue this management direction which is harmful to CSO. The 2013 forest plan for the Lake Tahoe Basin Management Unit continues to claim still occupied habitat has been “lost” to fire, reduced canopy cover protection for owls, and allows clearcutting of owl habitat and cutting of large trees over 30-inches. Similarly the scoping document for the three early adapter forests in California promotes mechanical thinning and does not provide any significant protections for CSOs.

Negative Impact of Fire Risk Reduction Needs Further Analysis

There currently is a scientific debate about the role of mixed and high severity fires in providing habitat and nesting structures for Spotted Owls, and the degree to which fire is a threat to owl populations. This debate is a core issue for habitat management of all three subspecies, and aggressive management to reduce fire risk has been incorporated into recovery plans, forest plans, and critical habitat rules.

A number of recent studies (Bond et al, , Ganey et al 2014) indicate owls will forage in moderate and even in high severity burn areas due to an abundance of prey, and that these fires create future nest trees and snags and large wood debris beneficial to owl prey (Baker et al 2012).

Maintaining legacies is essential for future use by owls. North et al. (1999) notes "In our study area, stands with high use by owls typically included many "legacies" that survived a fire or windstorm that destroyed much of the previous stand." So, while fire risk reduction may be necessary to protect human lives and homes, scientific evidence is lacking that it is a critical conservation need of Spotted Owls.

Recovery Action 12 of the Northern Spotted Owl Recovery Plan recognizes this importance and recommends that ALL structures that take a long time to form such as legacies and large downed trees be retained. But post-fire logging projects such as the Douglass Fire Recovery and Westside Fire Recovery Projects propose to log extensive areas of suitable owl habitat and remove these legacies RA 12 says should be retained. In addition to removing suitable habitat, the Douglass Project proposes to directly take 24 Spotted Owls, and the Westside Fire Recovery project, still in scoping, contains over fifty owl activity centers within the proposed logging area.

A January 13, 2015 objection to the Four-Forest Restoration Initiative submitted by Dr. William Baker concludes that "...new science shows parts of the plan and Final EIS are not scientifically supported." Baker found that fire risks are overstated, in part because new habitat resulting from forest succession is not being considered, and recommended that the Final EIS suspend proposed treatments in MSO habitat until adequate analysis is completed.

"USFWS and the scientific community need to undertake needed analysis to accurately estimate fire risk to MOS relative to benefits of mixed- and high severity fire for MSO and rates at which new habitat is being produced by forest succession. During the suspension, it is important to conduct and complete small-scale experiments to determine the effects of thinning on MSO, since nothing is known about this."

Additional Resources

Conservation in the Sierra Nevada: Issues and Recommendations. Sierra Forest Legacy. 2012.

http://www.sierraforestlegacy.org/FC_ConservationStrategy/FC_ConservationStrategy2.php

Conservation Planning: Strategies for Fisher and California Spotted Owl Now In Development, The Sierra Forest Voice, Vol. 7, No. 4, December 9, 2014,

http://www.sierraforestlegacy.org/NR_SFVoiceNewsletter/SFVN_NewsletterCurrent.php

"*Biologist, others in way of logging plans*," Scott Sonner, Associated Press, August, 2004,

<http://www.nbcnews.com/id/5621409/print/1/displaymode/1098/>

Forest Brochure Misrepresents Science to Promote Logging Initiative, Union of Concerned Scientists,

http://www.ucsusa.org/center-for-science-and-democracy/scientific_integrity/abuses_of_science/a-to-z/forest-brochure.html#.VNPWHNLF9Fg

Managing Sierra Nevada Forests, Forest Service Technical Report (PSW-GTR-237)

http://www.fs.fed.us/psw/publications/documents/psw_gtr237/psw_gtr237.pdf

An Ecosystem Management Strategy for Sierran Mixed-Conifer Forests (PSW-GTR-220). A Forest Service report from Pacific Southwest Research Station (with addendum, February, 2010), http://www.fs.fed.us/r5/sequoia/gsnm/north_paper.pdf

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