August 19, 2011

Mr. Dan Jiron, Deputy Regional Forester
USDA, Forest Service PSW Region 5
1323 Club Drive
Vallejo, CA

RE: California spotted owl population monitoring and habitat assessment

Dear Dan,

We are writing to ask that the Regional Office consider a comprehensive look at trends and conditions for the California spotted owl in the Sierra Nevada. This should include a wrap up meta-analysis of the latest five years of population demographic data, and couple that with updated vegetation maps that examine habitat change and spotted owl occupancy.

This effort would ensure the Region would have the ability to address the next round of forest plans with up to date, high quality information that would allow wildlife staff to draft recommendations, in consultation with key spotted owl scientists, for management of spotted owls in the upcoming forest plan revisions using the best available scientific information.

History

In the 1980s and early 1990s conservation groups began raising concerns over increased clear cutting on public lands in the Sierra Nevada and related impacts to old growth associated species such as the spotted owl and Pacific fisher. In July of 1992, PSW published *The California Spotted Owl: A Technical Assessment of Its Current Status*. Led by Dr. Jared Verner the “CASPO Report” or PSW-GTR-133 was the basis for the Forest Service in Region 5 halting clear cutting, placing a 30” d.b.h. limit on all live tree harvesting, initiating a thin-from-below treatment program and addressing the impacts of fire suppression, extensive grazing, and old growth logging in a science-based and courageous manner. Regional Forester Ron Stewart signed the CASPO Interim EA/FONSI in January 1993 which was based upon the information in the CASPO Technical Report. Although some in the Forest Service initially resisted this decision and the timber industry and at least one environmental group litigated this decision, it survived court challenge and remains the basis for much of the thinning logging done today.
Spotted Owl Issues to address in the new forest plans

1. Spotted owl protected activity centers (PACs). PACs comprise roughly 300 acres of high quality habitat around each owl activity center where management was to use under-burning to lower fuel loads. Both the 2001 and 2004 Framework decisions allowed exceptions to this prescription in a small number of PACs/year and per decade in the defense zone near communities.

Recently, some stakeholders have been seeking removal of these spotted owl PAC protections. Currently, the Plumas and Lassen National Forests (and the Sierraville District of the Tahoe NF) do not allow entry under the 1998 QLG Act. Others seek to remove most or all protections for PACs. SFL believes some treatment is acceptable and we note that the original spotted owl science team did not take a hands-off approach. They also supported the Defense Zone exceptions in the 2001 Framework in an adaptive management, learning context.

The FS should re-examine the desired conditions for spotted owls at multiple scales (PAC, Home Range Core Area, and Home Range) and after carefully examining new scientific information decide the best way to manage California spotted owls in the future. Since there have been several entries into Defense Zone PACs under the 2001 and 2004 Framework plans it would be good to assess specifically the occupancy and reproduction of the PACs that were entered under this exemption to characterize the effects of these higher intensity treatments on protected activity centers.

We believe it is important to protect suitable habitat in the short and long term inside PACs since this 300 acres is where these old forest associated birds spend 50% of their time and it is where nesting and fledging occurs. In a recent study in the central Sierra Nevada (Eldorado Spotted Owl Study area) it was demonstrated that owls select nesting areas in high quality habitat away from edges and in interior habitat (Phillips et al. 2010 in Journal of Raptor Research).

Those who wish to eliminate protected areas need to demonstrate how removing such protections will benefit at-risk species and meet the desired conditions for old forest dependent wildlife. Of course, building resilience into protected areas is also important. Special attention will be needed to design prescriptions that maintain key habitat features (large logs, large snags, higher canopy) in these protected areas while making them more resilient. Assurance that sufficient amounts of these key habitats are distributed across landscapes in order to replace PACs that will inevitably be lost to wildfires, is an equally important consideration for spotted owls in the Sierra Nevada.

2. Home Range Core Areas (HRCAs). The HRCA concept is an additional level of protection designated on best available habitat surrounding the activity center and including the PACs totaling approximately 600-2400 acres south to north in the Sierra Nevada (2001 Framework ROD A-43). The HRCA is a biologically critical area since 60 to
70 percent of breeding season habitat use occurs within this area (Bingham and Noon 1997 in Conservation Biology). The 2004 Framework effects analysis anticipated that approximately 20% of this HRCA habitat would be altered in the Framework planning period. In many cases the recent treatments exceed this 20% analysis threshold (cumulatively) and in some cases are reaching the 30-50% level potentially rendering the HRCA biologically unsuitable. The biological values, owl use and treatment impacts related spotted occupancy and reproduction should be addressed for the planning of current fuels reduction projects and for the next round of plan revisions. The Forest Service acknowledged scientific uncertainty about the response of spotted owls to forest thinning treatments in the Sierra Nevada Framework. Studies were initiated, and a synthesis of findings from these and other studies should now be undertaken. This needs to result in Regional guidance on the amount, composition, and quality of habitat that should be retained in spotted owl HRCA. The absence of this information currently prevents the Forest Service from determining whether planned vegetation treatment projects may individually or cumulatively pose a risk to spotted owl population persistence.

3. Revisiting Suitable Habitat Definitions. The effects analysis in the biologic evaluation for project level NEPA analysis relies, in part, on changes to California Wildlife Habitat Relationships Model (CWHR) type pre-and-post project treatments. While California Spotted owl suitable habitat has a range of conditions for nesting and foraging, the lower end of this stratum (4M = 12-24” diameter trees, 30-60% canopy cover) is less valuable for owls and yet often makes up a significant majority of the forest type characterized as suitable.

When effects evaluations lump large amounts of less valuable habitat (in the 12-16” range) with the usually limited levels of high quality habitat, the analysis can be skewed by suggesting that impacts are minimal based on the generalized suitability absent a closer look at site-specific habitat quality.

We need a better approach that actually considers the on-site quality of the habitat available and avoids characterizations that rely on CWHR lumping of poor quality habitat with limited higher quality conditions. CWHR 4M in the 20”-24” range is very different than suitable habitat in the 12”-16” range (which could be plantation type stands with 30% cover). The risks of this approach (relying on large amounts of poor quality habitat) should be limited by better definitions of suitable habitat and less reliance on CWHR typing absent closer scrutiny. Several other factors should inform the impacts analysis including: stand structure, acres of interior forest, acres of old forest, road levels, prey habitat, overall fragmentation across home ranges (including cumulative effect of habitat loss from private and public forest timber harvests and land conversion to non-forest), habitat quality of PACs and HRCA, presence of oaks, understory habitat, etc.
4. Loss of occupancy at historic spotted owl sites on the Eldorado NF. In recent years the spotted owl occupancy has dropped significantly on the Eldorado NF in the Eldorado Study Area (EDSA). The reasons for this change are unclear and must to be better understood to inform the forest plan revision process. One step would be to look closely at habitat change in these territories with new habitat maps to see if there is a correlation between amount, rate or intensity of treatments and the declined usage. These treatments are pre-GTR 220 and tend to have very open under-stories which may play a role in influencing occupancy.

![Graph showing % Territories Occupied on EDSA, 1990-2008](image)

5. Produce new habitat maps and review of past and currently known spotted owl occurrence with habitat change. As stated in #4 it will be most valuable to understand spotted owl occupancy and trends with improved vegetation maps at least within the spotted owl study areas. This new habitat mapping correlation is critical to informed forest planning for spotted owl management.

6. Conduct 5-year meta-analysis. It is time for the next spotted owl meta-analysis informed by roughly 15-20 years of population data from the owl study areas. This meta-analysis effort should include more than the meta-population review by charging the spotted owl researchers with reviewing the habitat associations (with new vegetation maps) and owl occupancy and reproduction. The owl research community
and Forest Service specialists could also be tasked with offering their professional opinions about the issues captured above (and issues yet to be framed).

7. An updated California Spotted Owl General Technical Report is the natural outcome of the review and “hard look” needed to inform forest plans in 2012 and beyond. Pulling together the remaining California Spotted Owl Science Team and PSW’s John Keane with new researchers (Seamans, Temple, Chatfield, Bond, Munton, Blakesley and others) would be the best approach to coordinate with Forest Service specialists to provide spotted owl management direction for the new forest plans.

Thank you for considering this request. I look forward to your response on how and when these issues may be addressed.

Sincerely,

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cc: Joe Stringer
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