

**BEFORE THE REGIONAL FORESTER, USDA FOREST SERVICE, PACIFIC
SOUTHWEST REGION OF THE UNITED STATES FOREST SERVICE**

**In Re: Objection of draft Decision Notice,)
FONSI and accompanying)
Environmental Assessment)
for the Porcupine Vegetation and)
Road Management Project)
on the Shasta-Trinity National Forest.)**

**Conservation Congress
Denise Boggs
P.O. Box 2076
Livingston, MT 59047
Phone # (406) 222-2723**

OBJECTORS

OBJECTION NO. ____

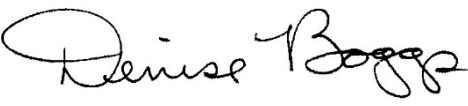
INTRODUCTION

STATEMENT OF FACTS

ARGUMENTS

REQUEST FOR RELIEF

DATED this 11th day of July 2014

By 

**Denise Boggs, Executive Director
On behalf of all appellants**

INTRODUCTION

By means of this letter and pursuant to 36 CFR 218, Conservation Congress is objecting to the Porcupine Vegetation and Road Management Project, as proposed for approval in the Draft Decision Notice (DDN) issued by Shasta-Trinity National Forest Supervisor David R. Myers in May 2014. The official notice of opportunity for objection to the project was published on May 28, 2014 in the Redding Record Searchlight.

Conservation Congress has previously submitted comments on the proposed project, most recently on the March, 2014 Environmental Assessment for the project. Those comments were dated April 4, 2014.

Habitat for northern spotted owl (NSO) has been systemically destroyed and degraded for many years throughout the species' range, leading to the species' listing as threatened under the Endangered Species Act. To recover to full viable populations, NSO will need to expand into new habitat and historic territories must be protection for future recolonization. Thus existing habitat, even if not of the very highest quality and not currently occupied, should still be conserved as recommended in the 2011 Revised Recovery Plan.

According to the EA, much of the project area is not likely to support suitable habitat for NSO. EA at 96. However, the northernmost portion of the project area, containing several treatment units, is adjacent, or in close proximity, to the Porcupine Late Successional Reserve and near the Six-shooter home range, an historic NSO territory. See EA Figures 8 and G-3 at pp. 92 and G-3, respectively.

With most of the project area currently not providing NSO habitat, the units that are in NSO habitat could have been deleted from the project and there would still have been a sizable project area over which to meet the purpose and need. However, the Forest Service refused to seriously consider this most reasonable option.

While we are glad to see that there will be no treatment within the late successional reserve, we are disappointed that the project is not designed to promote, or even allow, the recovery of northern spotted owl (NSO). Specifically, we disagree with the Forest Service's decisions to: 1) approve treatments in capable and suitable foraging habitat for NSO that will degrade this species' habitat; 2) discontinue full protocol surveys for NSO; 3) not seriously analyze in detail an alternative that would stay out of NSO capable and suitable habitat; 4) not conduct a sufficient cumulative effects analysis; and 5) not use some relevant and best available science in the analysis of fire and fuels. Thus we feel the need to file this objection.

The Conservation Congress (CC) is a non-profit 501 (c) (3) organization incorporated in the state of California, dedicated to maintaining, protecting, and restoring the native ecosystems of northern California. The CC has an organizational interest in the proper and lawful management of National Forests located in northern California, especially the Shasta-Trinity National Forest. The CC's members, staff, and board members participate in a wide range of wildlife viewing, bird watching, and other recreational activities on the Shasta-Trinity National Forest and the McCloud Ranger District, including the Porcupine project area and the surrounding lands in the Shasta McCloud Management Unit.

STATEMENT OF FACTS

In the DDN, alternative 3b is proposed for approval. This alternative would

treat a total of 3,965 acres by reducing forest stocking levels to target basal areas depending on stand objectives... and/or fuel loading on approximately 3,913 acres, restore approximately 48 acres of meadow and natural opening habitat, and release aspen stands on 21 acres. Of the 3,965 acres, 3,761 acres would be thinned from below.

DDN at 3.

Four units containing 201 acres of designated critical habitat for northern spotted owl (NSO) would be cut (EA at 88), 137 acres of which would be in foraging habitat (id. at 94). Overall, the project would allow cutting of 329 acres of suitable foraging habitat, 23 acres of dispersal habitat, and 202 acres of capable habitat for NSO. EA at 93.

The project would occur on the Shasta McCloud Management Unit, Shasta-Trinity National Forest, in Siskiyou County, California.

ARGUMENTS IN SUPPORT OF OBJECTION

I. THE PORCUPINE PROJECT DOES NOT CONFORM TO THE RECOVERY PLAN FOR THE NORTHERN SPOTTED OWL, NOR TO THE NORTHWEST FOREST PLAN OR THE SHASTA-TRINITY NATIONAL FOREST PLAN.

Objectors addressed NSO and its habitat issues in our April 4, 2014 comments on pages 6 - 12.

A. REQUIREMENTS OF THE RECOVERY PLAN. Northern spotted owl (NSO), listed as a threatened species under the Endangered Species Act, requires a certain type of habitat. This habitat needs to be conserved, as described below:

Recovery Action 32: Because spotted owl recovery requires well distributed, older and more structurally complex multi-layered conifer forests on Federal and non-federal lands across its range, land managers should work with the Service as described below to maintain and restore such habitat while allowing for other threats, such as fire and insects, to be addressed by restoration management actions. These high-quality spotted owl habitat stands are characterized as having large diameter trees, high amounts of canopy cover, and decadence components such as broken-topped live trees, mistletoe, cavities, large snags, and fallen trees....

high-quality spotted owl habitat stands are characterized as having large diameter trees, high amounts of canopy cover, and decadence components such as broken-topped live trees, mistletoe, cavities, large snags, and fallen trees. ...

Forest stands or patches meeting the described conditions are a subset of [nesting-roosting-foraging] habitat and actual stand conditions vary across the range. These stands or patches may be relatively small but important in a local area, may not be easily discernable (sic) using remote sensing techniques, and likely require project-level analysis and field verification to identify.

FWS, 2011 at III-67. The project area has relatively small areas of NSO habitat that could improve and expand with time if left alone.

The Fish and Wildlife Service's Revised Recovery Plan (FWS, 2011) contains further recommendations for conserving older, late-successional forest and existing NSO habitat, as is demonstrated by the following quotes:

Extant, high-quality spotted owl habitat must be managed, restored, and conserved in the face of a declining population and the potential threats from barred owls.

Id. II-11.

Because barred owls compete with spotted owls for habitat and resources for breeding, feeding and sheltering, ongoing loss of habitat has the potential to intensify the competition by reducing the total amount of these resources available to the spotted owl and bringing barred owls into closer proximity with the spotted owl. In order to reduce or not increase this potential competitive pressure while the threat from barred owls is being addressed, this Revised

Recovery Plan now recommends conserving and restoring older, multi-layered forests across the range of the spotted owl.

Id. at I-9.

The Recovery Plan recommends prioritizing treatment in areas that are not NSO habitat nor likely to become habitat:

Restoration activities conducted near spotted owl sites should first focus on areas of younger forest less likely to be used by spotted owls and less likely to develop late-successional forest characteristics without vegetation management.

Id. at III-17.

Emphasize vegetation management treatments outside of spotted owl core areas or high value habitat where consistent with overall landscape project goals. ...

Retain and restore key structural components, including large and old trees, large snags and downed logs.

Id. at III-34.

Conserve spotted owl sites and high-value spotted owl habitat where possible in addition to Federal conservation blocks to provide additional demographic support to the spotted owl population (see Recovery Action 10, below).

a. This recommendation includes currently occupied as well as historically occupied sites...

Id. at III-42.

Recovery Action 10 - Conserve spotted owl sites and high value spotted owl habitat to provide additional demographic support to the spotted owl population.

Id. at III-43.

In the McCloud Flats there have been many large timber sales in owl habitat (see cumulative effects argument and SMMU map). Each and every project claims the project won't harm owls or their habitat and will be beneficial in the long term. Late-successional habitat takes at least 80 years to develop. The Forest continually looks at owl populations at the population level range-

wide and fails to consider the loss of individuals at the local level. Considering the population of owls continues to decline range-wide and at an even faster rate in N CA, and Barred owls are in the SMMU, the Forest has a duty under the ESA to conserve owl habitat that is being used now. Recovery will never be achieved under the current management on the STNF.

B. MODERATE QUALITY AND SUITABLE NSO HABITAT EXISTS IN THE PROJECT AREA AND SHOULD NOT BE DEGRADED OR DESTROYED PER THE RRP.

Objectors addressed this issue in in our April 4, 2014 comments.

The EA states that some of the areas proposed for treatment are at least moderate quality NSO habitat, with some approaching nest/roost habitat:

Within treatment units, the hazard reduction and mature stand thin areas represent the moderate quality foraging habitat in the assessment area, and some portions are approaching nesting/roosting conditions. These are multi-layered (more than 3 layers) mixed-conifer stands ranging from 145 to 340 square feet/acre basal area with relic overstory trees, larger snags and CWD. There are varying densities of mid and understory white fir. Canopy cover ranges from 45 to 55 percent

EA at 90; emphasis added. See also Biological Assessment Update, September 7, 2012 at 4 (EA at A-058). (At the latter, the habitat is described as “higher quality foraging habitat”, not moderate quality. The Biological Evaluation for Sensitive Wildlife, dated May 21, 2014, says that the mature stand thin units “represent the higher quality habitat in the project area for late-successional dependent species”. BE at 10.)

Considering the needs of NSO would strongly suggest that this remaining habitat should not be degraded according to the revised recovery plan (RRP). But under all action alternatives, 329 acres of foraging habitat would be degraded, which is 24 percent of the available foraging habitat within the assessment area. EA at 96. And 9% of the available foraging habitat within the Action Area. DDN at 13.

Forsman et al 2011, recommends that *ALL* potential NSO habitats should be considered for protection, not just high quality habitat. In 2011, a team of leading NSO biologists issued a comprehensive analysis of the Owl’s status, titled “Population Demography of Northern Spotted Owls,” (Forsman et al. 2011). The 2011 Recovery Plan relies heavily on the Forsman 2011 data and analysis to conclude that NSOs need sufficient and additional habitat protections “to address the threats the spotted owl faces from a loss of habitat due to harvest, loss or alteration of habitat from stand replacing fire, loss of genetic diversity, and barred owls.” As Forsman et al. explain:

The fact that Barred Owls are increasing and becoming an escalating threat to the persistence of Spotted Owls does not diminish the importance of habitat conservation for Spotted Owls and their prey. In fact, the existence of a new and potential competitor like the Barred Owl makes the protection of habitat even more important, since any loss of habitat will likely increase competitive pressure and result in further reductions in Spotted Owl populations.

What this means in terms of the Porcupine Project is that, based on this new science, USFS should reexamine its conclusion that the Project's impacts are insignificant because it will only degrade low to moderate quality NSO foraging and dispersal habitat. Although low to moderate quality habitat is not defined by the agencies in the Porcupine documents, the recommendations in Forsman et al. (2011)... counsel that [USFS] should re-evaluate what it considers high quality habitat to be more inclusive, meaning the agency should use its new habitat modeling techniques as described in Appendix C of the 2011 recovery plan to determine whether some of the low and moderate quality foraging habitat for spotted owls should instead be treated like high quality habitat in this part of the owls' range. Moreover, if this more inclusive definition includes some of the moderate and some low quality foraging habitat, then this additional habitat should not be degraded in the short-term and instead be treated like high quality, until the agency refines its habitat modeling. Finally, the protection of this more inclusive definition of high quality habitat should also result in reducing competitive pressure from barred owls to assist in the conservation and recovery of spotted owls as implied in Dugger et al. (2011).

In other words, until the Forest Service has refined its habitat modeling, it should not degrade any foraging habitat, regardless of the level of quality previously categorized, as this could result in irreparable harm to owl's prey and/or foraging habitat.

C. PROPOSED TREATMENTS WOULD DEGRADE OR DESTROY NSO HABITAT, INCLUDING CRITICAL HABITAT IN VIOLATION OF THE RRP.

Objectors discussed this issue extensively in our comment letter of April 4, 2014.

In general, thinning can be harmful to NSO. Notably, the Preamble to the 2012 Critical Habitat Rule for NSO cites numerous studies showing this harm from "commercial thinning and other conventional forestry practices" on both NSO and its prey. See 77 Fed Reg 71882, December 4, 2012.

Notably, stands proposed for mature stand thinning and hazardous reduction thinning currently have canopy 45-55 percent cover. EA at 90. Thus treatments could easily reduce the canopy cover below 40 percent, said to be the minimum needed for foraging habitat (id. at 94). Alternatively, treatments that did not reduce the cover below 40 percent would be very light and

would do little to reduce standing woody fuels. Indeed, there would be no reduction in canopy cover on the 63 acres of hazardous reduction thin implemented in NSO habitat. EA at 95.

Similarly, a very slight reduction in biomass in treatment units would not reduce vegetation competition much, and certainly not enough to “accelerate development of capable habitat toward suitable conditions at a faster rate than no action”. EA at 100. It would also not “accelerate the development of resilient late-successional habitat within current suitable habitat”. EA at 59.

Under mature stand thins, basal area (BA), which is now 145-340 square feet per acre (EA at 90) would be reduced to 120 in areas with a wildlife habitat management prescription under the Forest Plan. EA at 29. For areas with a commercial wood production designation, the BA target would be 160. Ibid. Some codominant trees could be removed to meet the basal area objectives, and there appears to be no diameter limit on the size of trees that could be cut. Ibid.

For hazard reduction thins (they have the same existing BA as the mature stand areas – EA at 90), the BA target would be 160. Also, trees over 13 inches in diameter could cut and “[m]inimum spacing between leave trees is 16 feet”. Id. at 30, emphasis added.

Implementing the 120 BA under mature stand thinning and the wide spacing under hazard reduction thinning would degrade or destroy NSO habitat. Thinning stands in the upper part of the existing BA range down to the target BAs under either treatment would cause a major change in stand structure, likely discouraging or preventing NSO use. Conversely, some stands are already at or below the target BA and thus do not need to be treated.

One of the four critical habitat units [East Cascades South Unit 8, subunit ECS-3], in the project area would be treated with mature stand thin, and another would be treated with hazardous reduction thin. Supplemental Biological Assessment, August 1, 2013 at 8, EA at A-075. The other two treatment units in critical habitat would be treated with a biomass thin (ibid.), which would: reduce the BA to 120, leave at least a 16-foot spacing between residual trees, and cut trees greater than 13 inches in diameter if necessary to meet the target BA. Id. at 30. These treatments are especially inappropriate in critical habitat.

Cuts in the four critical habitat units would violate the whole concept of having critical habitat, which is defined as

land on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection...

16 U. S. C. 1532 (5).

Retaining small untreated areas in two proposed treatment units that are in critical habitat, as stated in the Resource Protection Measures¹ (EA at 45) would not compensate for the loss of habitat from application of the treatment prescriptions, as described above.

The NSO Recovery Plan recommends prioritizing treatment in areas that are not NSO habitat nor likely to become habitat:

Restoration activities conducted near spotted owl sites should first focus on areas of **younger** forest less likely to be used by spotted owls and less likely to develop late-successional forest characteristics without vegetation management.

FWS, 2011. at III-17. Stands proposed for mature stand thinning are likely to be used now and/or in the future by NSO, and to further develop their late successional character, and thus become high quality NSO habitat, since some of them already have at least some of the character of high quality habitat.

High quality habitat for NSO is defined as:

Older, multi-layered structurally complex forests that are characterized as having large diameter trees, high amounts of canopy cover, and decadence components such as broken-topped live trees, mistletoe, cavities, large snags, and fallen trees.

FWS, 2011 at G-2.

Foraging habitat has the following characteristics:

foraging activity is positively associated with tree height diversity (North et al. 1999), canopy closure ..., snag volume, density of snags greater than 20" dbh..., density of trees greater than or equal to 31" dbh ..., volume of woody debris ... and young forests with some structural characteristics of old forests.

Biological Assessment Update, September 7, 2012 at 3 (EA at A-057); citations omitted. Under selected alternative 3b, 329 acres of foraging habitat would be adversely affected. EA at 96. Given the possible intensity of the treatments discussed above (wide tree spacing and possible major reduction in BA), the effects to NSO foraging habitat are not likely to minor, as asserted at EA p. 96.

¹ The DDN incorporates the Resource Protection Measures in Chapter 2 of the EA into the proposed decision. DDN at 3.

Since the stands proposed for mature stand thinning and hazardous reduction thinning have many of the characteristics of high quality NSO habitat and foraging habitat (see EA at 90 and BAU II at 4), the proposed project would cut the best NSO habitat within the project area. That is in direct violation of the RRP.

Furthermore, according to the Silvicultural Report (p. 2-3) the prescription for stands in critical habitat is to correspond to maximum Stand Density Indices for Ponderosa pine and White fir. This is a violation of recovery goals since designated critical habitat is to be managed specifically for the conservation of the NSO – not for SDI timber production.

We believe the proposed action would result in adverse modification of critical habitat. Therefore, the determination that the proposed project is not likely to affect NSO or its critical habitat (Supplemental Biological Assessment, August 1, 2013 at 18) is not warranted. If the Forest Service intends to proceed with any of the action alternatives, it must first issue a “likely to adversely affect” determination and re-initiate full consultation with the Fish and Wildlife Service as required under 16 U. S. C. 1536.

The STNF Forest Plan has direction as well as standards and guidelines for following recovery plans for T&E species.

T&E species will continue to be managed under existing recovery goals identified in individual species recovery plans (3-27&28).

Maintain and/or enhance habitat for TE&S species consistent with individual species recovery plans. (4-30).

D. THE PROPOSED ACTION WOULD ALSO DAMAGE AND DESTROY HABITAT NEEDED BY NSO PREY FOR UP TO 20 YEARS IN CONTRADICTION TO THE RRP.

Objectors addressed this issue in our April 4, 2014 comments.

The EA states that

Residual understory trees would still provide and continue to contribute to existing and future vertical structure.

Id. at 94.

However, the slash treatment known as “slashing”, described below, would be done in some NSO habitat. See EA Figure G-4 at p. G-4.

Sub-merchantable damaged conifer trees and conifer trees less than four inches dbh left after harvest activities, along with remaining natural fuels and slash in excess of coarse woody debris requirements, would be cut, lopped, and scattered. Slashing may be accomplished by hand with chainsaws or other hand-held power equipment, or mechanically through machine mastication or mulching of residual logging slash, damaged and excess seedlings and saplings and grinding of excess woody debris up to 10 inches in diameter, as appropriate for post-harvest slash characteristics and unit conditions.

EA at 30-31. See also *id.* at 96.

Other slash treatments, such as whole tree yarding, which would be done in all the northern units of the project area (see EA Figure G-4), would damage or destroy understories, as skidding trees with branches to landings would break or uproot young trees, and damage larger ones.

Such actions would remove most or all of the small-tree (less than four inch diameter) understory and also grind up some small, medium-sized, and large woody debris, thus degrading or destroying habitat for NSO prey. With or without slashing, the acceptable mortality of trees less than four inches in diameter is 50-100 percent. EA at 34. In other words, all or most of this understory component could be destroyed. For trees between four and nine inches in diameter, acceptable mortality would be 30-50 percent (*ibid.*), which might add to the damage to NSO prey habitat by making the understory too open.

Cutting only trees at least 10 inches in diameter in one treatment unit containing NSO habitat, as provided in the Resource Protection Measures (EA at 45) would not compensate for the destruction of much of the understory that would be likely to occur under alternative 3b.

E. THE THREAT OF FIRE TO OWL HABITAT IS NOT SUPPORTED BY THE BEST AVAILABLE SCIENCE.

Objectors addressed this issue in our April 4, 2014 comments.

Throughout the EA, a concern about fire destroying NSO habitat is expressed. See, e. g., *id.* at 102, 103. However, recent research shows that California spotted owls, a relative of NSO, forage in burned areas, even areas that burned severely. Bond et al, 2009. This is acknowledged at pp. 102 of the EA. Further research by Lee et al, 2012, showed the NSO use of burned versus unburned areas did not differ, even with up to 32 percent of an area severely burned.

It's no secret that all NSO habitat could burn under the right conditions (prolonged very dry conditions) because the relatively dense, multi-layered stands have a considerable amount of fuel in them. Thus the fact that NSO habitat could burn is not a reason to log it now.

In addition, the recent Rim Fire in CA burned 46 NSO territories. Recent surveys show thus far 32 of these sites are still occupied (personal comm. M. Bond) after the fire, and surveys of all sites has not yet been completed. This demonstrates once again that owl's evolved with fire in western forests and have adapted to using burned habitat.

F. THE EA VIOLATES THE NWFP & STNF Forest Plan Requirements.

Objectors raised this issue in our April 4, 2014 comments beginning on page 22.

A standard and guideline in the Northwest Forest Plan (also in the Shasta-Trinity National Forest Plan) requires retention of late successional forests in landscapes in Matrix lands, like the Porcupine Project area, that have small amounts of this type of habitat:

Provide for retention of old-growth fragments in watersheds where little remains. ...

Landscape areas where little late-successional forest persists should be managed to retain late-successional patches. This standard and guideline will be applied in fifth field watersheds (20 to 200 square miles) in which federal forest lands are currently comprised of 15 percent or less late-successional forest. This assessment should include all allocations in the watershed. Within such an area, all remaining late-successional stands should be protected. Protection of these stands could be modified in the future, when other portions of the watershed have recovered to the point where they could replace the ecological roles of these stands.

Attachment A to the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl at C-44; Forest Plan at 4-63. Only 1.8 percent of the Porcupine fifth-field watershed is in old growth late successional forest. (2012 EA at 9).

We could not find where the FS even addressed this issue in the environmental documents.

II. COMPLIANCE WITH PROTOCOL SURVEYS HAVE NOT BEEN CONDUCTED IN VIOLATION OF USFWS DIRECTION.

Objectors addressed this issue in our April 4, 2014 comments beginning on p. 12.

According to the EA,

Per discussion and agreement with the FWS, suitable NSO habitat within the project assessment area will be surveyed at night, as well as the stand searches described in the Resource Protection Measures, per the 2012 NSO Survey Protocol.

Id. at 89.

However, searches to date have apparently not used the most recent survey protocols. See EA at 89. Full searches would not even be required under the project, in spite of the above quote (and see also id. at 93), because the Resource Protection Measures only require daytime searches for NSO in four proposed treatment units, if feasible. EA at 44.

Nighttime searches are needed because NSO are known to be primarily nocturnal FWS, 2011, at A-9. Thus day searches may not detect NSO if they are present. The February 7, 2011 cover letter from the Fish and Wildlife Service for the 2011 NSO survey protocol states: “deviation in methodologies may be insufficient for detecting NSOs for the purposes of Section 7 consultation with the Service.”

Full surveys using the 2011 state-of-the-art protocol prior to treatment are required by the USFWS, given the likely adverse effect to foraging habitat from the project, as described above. They must be done prior to approval of any treatment in areas with suitable or capable NSO habitat. A 2-year 6-visit minimum for any known activity centers or historic locations is required; it must include a daytime ground search of the core area. Thus even if surveys were done as stated on EA p. 93 (three nighttime visits, two stand searches of the Six Shooter activity center, and daytime searches per EA RPMs), it would not be sufficient under the most recent survey protocols to confirm the absence of NSO, if none were detected.

A recovery action under the 2011 Recovery Plan states:

Continue annual monitoring of the population trend of spotted owls to determine if the population is decreasing, stationary or increasing.

FWS, 2011 at III-4.

III. THE CUMULATIVE IMPACTS ANALYSIS IS STILL INSUFFICIENT UNDER NEPA, AS WELL AS THE ESA.

Objectors raised this issue beginning on page 19 of our April 4, 2014 comments.

The CEQ Regulations require consideration of cumulative impacts. *Id.* at 1508.7. These regulations provide the following definition:

"Cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

40 CFR 1508.25(a) (2).

The "cumulative effects spatial boundary" for NSO is 1.3 miles from the project boundary. EA at D-3. NSO need large areas of habitat to be able to disperse, forage, and reproduce. Therefore, the cumulative effects area must be a sizable area that includes areas where owls might breed and/or roost and later visit the project area. This would have to include an area much larger than 1.3 miles around the project area, as NSO are known to disperse 10-15.5 miles, on average. FWS, 2011 at A-8.

There is no analysis of past or reasonably foreseeable future impacts outside of the 1.3 mile area around the project area, even though EA Figure D-1 (*id.* at D-7) shows many areas of past activity near the Porcupine project area in the past 30 years, with a good portion of that occurring in the last decade (2005-2014). It is hard to imagine that these projects had no or only minimal effect on NSO habitat.

There are a multitude of proposed timber sale projects in and outside the 1.3 mile boundary close enough to affect, or have affected, NSO habitat and possible use and occupancy of the project area, that have already been implemented. Impacts of these projects have not been considered under NEPA other than to state no effects have occurred, and for future projects none are anticipated. See EA Table D-2 at pp. D-3 through D-6, and *id.* at 99. This is not an analysis of impacts and therefore the cumulative impacts analysis is incomplete and insufficient.

Regulations implementing the Endangered Species Act require a solid cumulative impacts analysis:

Effects of the action refers to the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline. The environmental baseline includes the past and present

impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process.

50 CFR 402.02.

Note that “*Action area* means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action”. Ibid. The CEA states cumulative effects under the ESA (which is different than under NEPA) were assessed in the 2008 BA for critical habitat and no new private actions are proposed and therefore there are no cumulative effects to critical habitat. There are two things wrong with this ‘analysis.’ First, critical habitat was changed in 2012 and boundaries may differ from that of 2008. The CEA doesn’t address this issue. Second, under the ESA the Forest must also include current projects. The CEA admits there are six ongoing projects in the area but fails to state if they are in critical habitat.

The cumulative effects analysis in the EA under the ESA does not comply with this regulation.

The Forest states it is not analyzing past projects and considers the current forest conditions to be an aggregate of past activities. CEA, March 2014 at 2.

In a recent court win by Conservation Congress (E. District of CA 2013) the court found:

“There is much wrong with the Forest Services’ argument. First, the use of this aggregate procedure refers only to “past” activities. Defendant (FS) cites no case stating that current (or foreseeable) activities overlapping the proposed project may be considered in the aggregate with past activities.

The Forest chose a cumulative effects watershed analysis boundary of 468,432 acres (CEA, Mar. 2014 [hereafter CEA] at 2), which is a huge area covering three different watersheds. Yet for the owl it chose only a 1.3 mile radius (3,400 acres). Direct and indirect effects to NSO were evaluated only at the treatment unit and project area scale. CEA at 3. As previously mentioned the Forest continues to only look at habitat impacts project by project rather than taking a larger view of past, present, and foreseeable activities over the owl’s habitat on the SMMU. One example is the CEA states the Harris projects doesn’t overlap with the Porcupine project and therefore was not included in the CEA. The CEA states spatial and temporal boundaries are two critical elements to consider when deciding which actions to include in a CEA. Yet the Harris units join (side-by-side) and overlap the Porcupine units and therefore are spatially critical to the analysis. We mapped the township & range of the project area as well as the units using GIS and it clearly shows the Harris and Porcupine units overlapping. The FS failed to include the Harris project in the CEA.

The Forest considers short term impacts to be up to 20 years, and long term impacts to be over 20 years. CEA at 3. Project implementation for the Porcupine project is expected to take five to seven years to implement and some burning/underburning could occur after that (9 to 10 years after project start). CEA at 4. There are currently five reasonably foreseeable actions proposed for some level of implementation within the next two to five years within the Action Area. Yet the CEA states future projects will be bounded by a reasonably foreseeable five years. This is not reasonable under any measure considering projects take years to implement and therefore may have significant cumulative effects during implementation (up to 10 years), in the “short” term for up to 20 years, and in the “long” term for over 20 years. Considering there are six ongoing projects, five foreseeable projects, and Porcupine equals 12 projects in the action area that could all be ongoing simultaneously for years. In addition there have been nine projects already implemented in the action area in the past 20 years that “could affect” NSO habitat. Therefore a total of 21 projects in the action areas are not substantively analyzed in the CEA. The CEA also states to fail which of these 21 projects are in designated critical habitat for the NSO. CEA at 4, 6. The CEA continues that “numerous” salvage projects, plantation and timber stand improvement, and meadow restoration activities have occurred affecting 100 acres of foraging habitat. Yet the CEA fails to state how much N/R, foraging and dispersal habitat has been or will be affected by the 21 major timber projects previously mentioned. This is a fatal flaw in the CEA. As we demonstrate below there is an infinitesimal amount of owl habitat in the entire action area, yet the Porcupine project will continue to log even some of it. Maintenance activities may fall trees/snags that are providing suitable habitat for NSO and/or their prey.

There are also 50 acres of ongoing timber stand improvement units within the Porcupine project area itself, and 1,450 acres within the Action Area. CEA at 8. There are also underburning projects that haven’t been implemented in the action area that may have cumulative effects to the owl and “short” term impacts to prey in the Action Area.

One of the foreseeable projects mentioned is the Lava Fuelbreak on the Modoc NF. We have been to this project area and it is entirely within designated critical habitat. This issue was not analyzed in the CEA. The fuelbreak is 900 acres and maintenance would be spread out over the next 10 or more years. CEA at 12.

The CEA also states prey species for owls may be displaced in the short term (up to 20 years), and then makes the bold statement that in summary “none” of these aforementioned projects (21 as well as numerous ongoing activities) are expected to cumulatively affect NSO’s or their suitable habitat. It states cumulative effects are limited to noise, burning, and the disruption of prey base in the “short” term. Where are owls supposed to find prey if it is disrupted for 20 years? The EA is silent on this issue. The Forest and FWS simply never considered, at any level beyond the superficial, the conclusive scientific literature describing the adverse effects of commercial thinning and burning on the NSO’s prey.

The CEA states that in the 88,176 acre action area there is only .0005% nesting/roosting habitat (less than ½ percent); 04% foraging habitat; and .009% dispersal habitat. Yet, the Porcupine project would log 329 acres of foraging habitat, 23 acres of dispersal habitat, and about 200 acres of capable habitat. CEA at 13. Six additional acres of foraging habitat may be removed for new landing construction, and 8 to 12 acres may be affected by construction of temporary roads. CEA at 14. It should come as no surprise that owls haven't been recorded at the Six-Shooter territory since the 1990's (although required protocol surveys have not been done). Due to all the past logging, five ongoing projects, and six future projects, it would appear the Forest is doing nothing to protect the historic territory as required under the revised recovery plan, and continues to remove and degrade owl habitat project by project.

The CEA is also flawed because it states barred owls haven't been detected in surveys since 2006. In the revised recovery plan the FWS "assumes barred owls now occur at some level in all areas used now or in the past by spotted owls." The Forest is obligated to analyze potential impacts from Barred owls.

The BA shows the Six-Shooter Territory at the Core Area level and Home Range has ZERO nesting/roosting habitat, and only 525 acres of foraging habitat in the core and 1,369 acres in the home range. These levels are below threshold and at 'take' level. The Forest claims that the FWS recommendations of 500 acres in the Core Area and 1,336 acres in the Home Range are not "hard thresholds" to maintain or not treat. That statement is irrelevant because the FWS recommendations for these acreages refers to reproductive success and state that when the acreage falls below these levels NSO are generally not reproductively successful. It is clear that with past, current and future management the NSO will have extreme difficulty recolonizing the Six-Shooter Territory and the FS is doing absolutely nothing to maintain habitat or works towards recovery goals for the NSO in violation of the ESA.

The conclusions made in the CEA are absurd and not supported by the best available science for NSO or their habitat. It claims that there is no adverse modification of habitat yet landings and roads may remove up to 18 acres of foraging habitat that is also designated critical habitat. The 329 acres of foraging habitat slated for logging in the project area (total modification of about 430 acres) is expected to recover in about 20 to 30 years. This is an adverse impact considering the paltry amount of foraging habitat in the entire action area, not to mention project area, to begin with. Then it states the majority of the project is not near the Six-Shooter Territory and therefore significant impacts aren't assumed. Does the Forest's biologists believe owls never leave their home ranges? And considering the home range is severely depleted this is an arrogant and scientifically unsupported conclusion.

The ultimate conclusion in the CEA is the Porcupine project may have short term (up to 20 years) impacts to NSO foraging habitat and prey species, but these impacts would not be adverse

or significant. It is difficult to believe that any biologist would make this claim much less believe it.

Failure to take a hard look (these are also LRMP Violations)

Failure to take a hard look at the snag deficit. The Forest Service concedes that snags will be affected by thinning. The watershed assessment acknowledges that snag conditions are not meeting forest plan standards and guidelines, but the EA fails to explain why the project is meeting forest plan standards and guidelines. In addition, the EA fails to account for lost snags within the 6 miles of temporary roads and landings, of which there are over 130 at a ½ mile apiece. The Forest Service generally disregards these effects, though they are significant. The agencies failure to identify the location of over a hundred landings clearly violates NEPA's disclosure requirements. It is well known that not all of the tree is consumed during a wildfire, ("most of the C[arbon] stored in forest biomass (stem, wood, branches, coarse woody debris) remains unconsumed even by high-severity wildfires," (Mitchell (2009))), leaving behind snags. Here, however, what would otherwise be snags are entirely removed, leaving a CWD and snag deficit to an already lacking such features. By precluding the retention of such features, the forest cannot somehow catchup with business as usual. The lack of snags is affecting not only sensitive species but also threatened and endangered species.

Failure to adequately define the existing baseline for snags

The Forest Service failed to take a hard look at the baseline condition for snags throughout the project area. It concedes large snags will be removed thereby impacting NSO habitat, three different bat species, Northern goshawk habitat, and American marten habitat.

Failure to satisfy Forest Plan Standards for Cavity-Nesting Birds

The Forest Service failed to retain sufficient snags 40 percent of potential population levels based on published guidelines or an average of 1.5 snags per acre greater than 15 inches in diameter and 20 feet in height.

Significant effects from the Porcupine timber sale

The impacts may be both beneficial and adverse. A significant effect may exist even the Federal agency believes that on balance the effect will be beneficial. The Forest Service argues that no effects will be long-term, but this fails to accurately or adequately account for the impacts of the federal action. Impacts will occur to threatened and endangered species and habitat, critical habitat, water quality, and soils.

The project is significant because unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or

ecologically critical areas. The project proposes to log within critical habitat, and, therefore, there will be significant effects that must be analyzed in an EIS.

The timber sale is also significant because the possible effects on the human environment are highly uncertain or involve unique or unknown risks. Here, the project will remove trees that would otherwise become snags and log throughout areas that would otherwise attract NSOs after a fire. The Bond study creates significant uncertainty or unique or unknown risks.

The timber sale is related to other actions is cumulatively significant. As noted above, the timber sale in conjunction with the additive effects with other nearby timber sales is cumulatively significant.

The timber sale may adversely affect an endangered or threatened species or its habitat that has been determined to be critical. Here, the Forest Service is expressly logging within critical habitat.

IV. A REASONABLE RANGE OF ALTERNATIVES WAS NOT ANALYZED IN VIOLATION OF NEPA.

Objectors raised this issue on page 21 of our April 4, 2014 comments.

Under the CEQ Regulations implementing the National Environmental Policy Act, “agencies shall...rigorously explore and objectively evaluate all reasonable alternatives”. 40 CFR 1502.4(a). Reasonable alternatives are those that are viable, feasible, meet the stated goals of the project, or are reasonably related to the purposes of the project. *Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1519 (9th Cir. 1992); *City of Carmel-By-The-Sea v. U.S. Dept. of Transp.*, 123 F.3d 1142, 1155 (9th Cir. 1997); *Trout Unlimited v. Morton*, 509 F.2d 1276, 1286 (9th Cir. 1974). An agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action, sufficient to permit a reasoned choice.

Objectors addressed this issue in our April 4, 2014 comments, at pp. 21-22.

According to EA p. 93, all action alternatives treat the same types and amounts of habitat with the same thinning prescriptions; only the fuels treatments differ. In other words, the Forest Service did not seriously consider not treating in NSO habitat, even though approximately 86 percent of proposed treatments are not in NSO habitat. EA at 59. In other words, a relatively minor adjustment would eliminate all NSO habitat from treatment, resulting in a project that treated only in areas that are not currently suitable NSO habitat.

Alternative 6, which eliminated treatment in NSO habitat, was considered but not in detail, even though it

would provide a clear comparison of treatment effects and provide an option to forego management treatments within capable and suitable NSO habitat, while proceeding with management activities within the assessment area.

EA at 21.

It is clear that there will be degradation of foraging habitat. EA at 96. Thus an alternative that would not treat in any NSO habitat, like alternative 6, would not have the same effects as the action alternatives considered in detail in the EA. Effect of any project on NSO habitat is a significant public and legal issue, which the Forest Service could have easily eliminated by designing an alternative that simply did not treat any NSO habitat.

Such an alternative is very reasonable under any standard. And under the Council on Environmental Quality Regulations Implementing the National Environmental Policy Act, “agencies shall...rigorously explore and objectively evaluate all reasonable alternatives”. 40 CFR 1502.14(a).

An alternative like alternative 6 would meet the purpose and need, detailed at EA p. 8, over most of the area. An alternative which would only partially satisfy the purpose and need of the proposed project must be considered by agencies if it is "reasonable." Natural Resources Defense Council v. Callaway, 524 F.2d 79, 93 (2nd Cir. 1975); North Buckhead Civic Ass’n v. Skinner, 903 F.2d 1533, 1542 (11th Cir. 1990).

[A] discussion of alternatives that would only partly meet the goals of a project may allow the decisionmaker to conclude that meeting part of the goal with less environmental impact may be worth a tradeoff with a preferred alternative that has greater environmental impact.

Skinner at 1542.

The Forest Service’s failure to fully consider an alternative like alternative 6 that would not treat NSO habitat is arbitrary and capricious, and thus not in accordance with NEPA and its implementing regulations.

In addition, the Forest Service should have considered an alternative that manipulates understory vegetation, consistent with the recommendation from the Porcupine Watershed Assessment. See Watershed Assessment (“Control stocking levels and fuel loads in late-successional forest stands by manipulating understory vegetation through thinning and fuel treatments”; “Late-successional forest stands in the watershed are susceptible to catastrophic loss of insect attack or wildfire when dense understory vegetation is allowed to develop”). The STNF is justifying its decision

not to include a diameter limit on the need to go after certain overstory trees, and the watershed recommendation says you really need to go after the understory – it doesn't say anything about going after overstory trees.

The Forest Service should have also considered an alternative to “maintain dispersal habitat in the watershed,” consistent with the Watershed Assessment.

V. THE FOREST SERVICE HAS NOT USED THE BEST AVAILABLE SCIENCE FOR THE PORCUPINE PROJECT.

Objectors raised this issue in its April 4, 2014 comments beginning on page 1.

Under the transition planning rule, which is in effect for the Shasta-Trinity National Forest (STNF), the best available science must be considered in designing projects:

Projects implementing land management plans and plan amendments, as appropriate, must be developed considering the best available science in accordance with § 219.35(a).

36 CFR 219.35 Appendix B, Interpretive Rule. The relevant portion of section 219.35(a) referenced above reads as follows:

During the transition period, the responsible official must consider the best available science in implementing and, if appropriate, amending the current plan.

The Conservation Congress provides the following to refute STNF’s assertion that commercial thinning is a necessary and valid treatment for the Porcupine project area.

A. FIRE

The Forest desires restoration of the natural fire regime for the Porcupine Project area (Fuels Report at 2), but the treatment areas “are highly susceptible to high fire intensity”. Draft EA at 80. The project as designed will not meet the desired “restoration.”

The STNF should be aware of an important new study that was just published by the high-profile science journal PLOS ONE. The article, titled “Examining Historical and Current Mixed-Severity Fire Regimes in Ponderosa Pine and Mixed-Conifer Forests of Western North America”, was co-authored by 11 scientists from various regions of the western US and Canada. Their study found that there is extensive evidence from multiple data sources that big, intense forest fires were a natural part of ponderosa pine and mixed-conifer ecosystems prior to modern fire suppression. These findings refute the claims frequently made by the Forest Service and private logging industry that modern mixed-severity forest fires (erroneously called “catastrophic” fires) are an unnatural aberration that should be prevented through more logging (“thinning”) and that more biomass facilities should be built to take the resulting material from

the forest. In contrast to these claims, logging done ostensibly to reduce fire severity now appears to be not only unnecessary, but also potentially detrimental when it is based on erroneous notions about historic forest conditions and fire regimes.

The full article in PLOS ONE is available at:

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0087852>

Here are a few key points from the abstract and conclusion:

Abstract, p. 1

“There is widespread concern that fire exclusion has led to an unprecedented threat of uncharacteristically severe fires in ponderosa pine and mixed-conifer forests of western North America. These extensive montane forests are considered to be adapted to a low/moderate-severity fire regime that maintained stands of relatively old trees. However, there is increasing recognition from landscape-scale assessments that, prior to any significant effects of fire exclusion, fires and forest structure were more variable in these forests...”

We compiled landscape-scale evidence of historical fire severity patterns in the ponderosa pine and mixed-conifer forests from published literature sources and stand ages available from the Forest Inventory and Analysis program in the USA. The consensus from this evidence is that the traditional reference conditions of low-severity fire regimes are inaccurate for most forests of western North America...

Our findings suggest that ecological management goals that incorporate successional diversity created by fire may support characteristic biodiversity, whereas current attempts to “restore” forests to open, low-severity fire conditions may not align with historical reference conditions in most ponderosa pine and mixed-conifer forests of western North America.”

Conclusion: p. 12

“Our findings suggest a need to recognize mixed-severity fire regimes as the predominant fire regime for most of the ponderosa pine and mixed-conifer forests of western North America...”

For management, perhaps the most profound implication of this study is that the need for forest “restoration” designed to reduce variation in fire behavior may be much less extensive than implied by many current forest management plans or promoted by recent legislation. Incorporating mixed-severity fire into management goals, and adapting human communities to fire by focusing fire risk reduction activities adjacent to homes, may help maintain characteristic biodiversity, expand opportunities to manage fire for ecological benefits, reduce management costs, and protect human communities.”

We emphasize the critical role and benefits of fire (including high-intensity fire) in western forests, a fact that is now supported by numerous peer-reviewed scientific reports. In addition, we assert that Wildland Urban Interface designation is unfounded for this project area, and concur with climatologists who now recommend a hands-off land management approach in light of changing regional and global climate patterns. Fire is intrinsic to this forest ecosystem and can be used as an effective management tool for both insect and disease populations (See Miller et al, 2012).

The Forest disregarded this new science (along with all the other science we mentioned in our comments) in favor of its long standing archaic reliance on old science to justify continued commercial logging.

B. REVISED RECOVERY PLAN

The Forest also failed to comply with the 2011 Revised Recovery Plan for the Northern spotted owl as outlined in our arguments above.

C. PROTOCOL SURVEYS

The Forest failed to conduct the 2011 protocol surveys as directed by the USFWS.

D. BARRED OWLS

The Forest failed to analyze any potential impacts from Barred owl intrusion.

SUGGESTED REMEDIES

Given the violations of law in the analyses, as well as the adverse impacts to NSO habitat, Objectors request the following changes in the proposed project:

1. Withdraw the Draft Decision Notice.
2. If any action in the project area is still contemplated, remove the northernmost units from the project, especially the four units within NSO critical habitat. All foraging, dispersal, capable and suitable owl habitat should also be dropped from the project.
3. Drop all timber units within the 1.3 mile radius of the Six Shooter Territory.
3. Before any action is approved conduct full NSO surveys using the 2011 protocol, and require surveys every year.
4. Before a new proposed decision is issued, an alternative that does not treat any NSO habitat must be fully considered, and should be selected as the proposed action.
5. Any analysis for a project in the Porcupine area must include a full cumulative impacts analysis that examines impacts to NSO in an area much larger than 1.3 miles around the project area.

REFERENCES

- Bond, Monica L., Derek E. Lee, James P. Ward, Jr., and Rodney B. Siegel, 2009. Habitat Use and Selection by California Spotted Owls in a Postfire Landscape. *Journal of Wildlife Management* 73(7):1116–1124, 2009.
- Dugger, K.M., R. G. Anthony, and L.S. Lawrence. 2011. Transient dynamics of invasive completion: barred owls, spotted owls, habitat, and the demons of competition present. *Ecological Applications* 27: 2459-2468.
- Forsman, E.D., R.G. Anthony, K.M. Dugger, A.B. Franklin, D.R. Anderson, E.M. Glenn, K.P. Burnham, G.C. White, C.J. Schwarz, K.P. Burnham, J.D. Nichols, J.E. Hines, S.H. Ackers, J.B. Lint, R. J. Davis, L.S. Andrews, B.L. Biswell, P.C. Carlson, L.V. Diller, D.R. Herter, J.M. Higley, R.B. Horn, J.A. Reid, J. Rockweit, J. Schaberl, T.J. Snetsinger and S.G. Sovern. 2011. Population demography of northern spotted owls: 1985-2008. *Studies in Avian Biology*. Cooper Ornithological Society.
- FWS (U.S. Fish and Wildlife Service), 2011. Revised Recovery Plan for the Northern Spotted Owl (*Strix occidentalis caurina*). U.S. Fish and Wildlife Service, Portland, Oregon. xvi + 258 pp.
- Lee, Derek, E., Monica L. Bond, and Rodney B. Siegel, 2012. Dynamics of Breeding-season Site Occupancy of the California Spotted Owl in Burned Forests. *The Condor* 114(4):792–802. The Cooper Ornithological Society, 2012.
- Miller, J. D., C. N. Skinner, H. D. Safford, E. E. Knapp, and C. M. Ramirez, 2012. Trends and Causes of Severity, Size, and Number of Fires in Northwestern California, USA. *Ecological Applications* 22(1) 184-203.
- Odion et al. 2014. Examining Historical and Current Mixed-Severity Fire Regimes in Ponderosa Pine and Mixed-Conifer Forests of Western North America. *PLOS ONE*. February 2014 Volume 9 Issue 2.
- Olson, David, Dominick A. Dellasalla, Reed F. Noss, James R. Strittholt, Jamie Kass, Marni E. Koopman, and Thomas F. Allnut, 2012. Climate Change Refugia for Biodiversity in the Klamath-Siskiyou Ecoregion.
- Rhodes, Jonathan J., and William L. Baker, 2008. Fire Probability, Fuel Treatment Effectiveness and Ecological Tradeoffs In Western U.S. Public Forests. *Open Forest Science Journal*, 2008, Volume 1. Bentham Science Publishers, Ltd.

Six et al. 2014. Management for Mountain Pine Beetle Outbreak Suppression: Does Relevant Science Support Current Policy? *Forests* 2014, 5, 103-133; doi:10.3390/f5010103.

Skinner, C. N., A. H. Taylor, and J. K. Agee. 2006. Klamath Mountains Bioregion. Pages 170–194 in N. G. Sugihara, J. W. Van Wagtendonk, J. A. Fites-Kaufman, K. E. Shaffer, and A. E. Thode, editors. *Fire in California Ecosystems*. University of California, Berkeley, California, USA.

ATTACHMENTS

Exhibit 1 – Map showing recent and foreseeable future projects in areas adjacent to and near the Porcupine Project area. Each dot on the map represents one section of land in a timber sale. Each timber sale has a different colored dot as well as the name of the sale. The circles are NSO territories.

