

Notice of Appeal

To

Jack Blackwell, Regional Forester
USDA, Forest Service—PSW

The Sierra Nevada Forest Protection
Campaign and the Sierra Club

Appellants,
v.

James Pena, Supervisor
Plumas National Forest
159 Lawrence Street
P.O. Box 11500
Quincy, CA 95971-6025
Decision-maker.

) In RE: Appeal of the Decision
) Notice and FONSI for the Basin
) Group Selection Project (8/25/04)
) Environmental Assessment
)
) on the Feather River Ranger
) District of the Plumas
) National Forest.
)
)
)
) Appeal Deciding Officer,
) Jack Blackwell, Regional
) Forester, Pacific Southwest
) Region, 1323 Club Drive,
) Vallejo, California 94592

Notice of Appeal

And

Statement of Reasons

Appellants

Michael Graf, Attorney
Sierra Nevada Forest Protection Campaign
915-20th Street
Sacramento, CA 95814
510/525-7222
mgraf@aol.com

Craig Thomas, Director
Sierra Nevada Forest Protection
Campaign
915-20th Street
Sacramento, CA 95814
530/622-8718
cthomas@innercite.com

Pat Gallagher, Director
Sierra Club Environmental Law Program
85 Second Street, 4th Floor
San Francisco, CA 94105
415.977.570
pat.gallagher@sierraclub.org

John Preschutti
Plumas Forest Protect
P.O. Box 11
Blairsden, CA 96103
530-836-0461
always@psln.com

Dated: October 12, 2004

I. Notice of Appeal and Statement of Reasons

Notice is hereby given that, pursuant to the U.S.D.A. Forest Service Regulation 36 CFR § 215, the Sierra Nevada Forest Protection Campaign, the Sierra Club – Mother Lode Chapter, and the Plumas Forest Project (collectively, “appellants”) appeal to Jack Blackwell, Regional Forester, Pacific Southwest Region, U.S.D.A. Forest Service, for relief from Plumas National Forest Supervisor James Peña's Decision Notice, Finding of No Significant Impact (“FONSI”), and Environmental Assessment for the Basin Group Selection Project (“Basin project”) on the Feather River Ranger District, signed on August 25, 2004.

Public Notice appeared in the Feather River Bulletin, Quincy, CA, a paper of record, on August 25, 2004 setting the 45-day appeal deadline at October 12, 2004. 36 CFR § 215.5(b)(2.).

This appeal is consistent with 36 C.F.R. § 215.13 because appellants submitted substantive comments during the initial scoping period and additional comments prior to the issuance of the final decision notice for this project. As discussed below, the Forest Service did not provide an opportunity to comment on the environmental assessment and other environmental documents prepared for this project prior to the decision being signed.

This appeal is consistent with 36 C.F.R. § 215.14 because appellants have submitted herein substantial evidence of violations of law, regulation, and policy committed by the Forest Supervisor in approving the Basin project Decision Notice, FONSI and Environmental Assessment, requiring remand or reversal of the project.

The Basin project also implements the 2004 Record of Decision for the Sierra Nevada Forest Plan Amendment (“2004 ROD”) (USDA Forest Service 2004a), and tiers to the accompanying Final Supplemental Environmental Impact Statement (“FSEIS”) (USDA Forest Service 2004b). As demonstrated in our appeal of the 2004 ROD and FSEIS (SNFPC 2004), both the new plan and the FSEIS fail to comply with the National Forest Management Act (“NFMA”), the National Environmental Policy Act (“NEPA”), and other environmental laws. Therefore, for the reasons set forth in our appeal of the 2004 ROD and FSEIS (a copy of which is has been submitted as part of the record for this project and is incorporated by reference herein), the Basin project is also contrary to law.

II. Description of Appellants

The Sierra Nevada Forest Protection Campaign is an 86-member group coalition formed in 1996 to protect old growth forests, at-risk wildlife and rivers and streams in the Sierra Nevada. The Campaign and/or its member groups have provided a strong voice for protection and conservation of Sierra Nevada National Forest lands since the late-1980's.

The Sierra Club-Mother Lode Chapter encompasses the Sierra Nevada and Cascade ranges from Yosemite to the Oregon boarder. The chapter's 18,000 members desire that our National Forests be managed to enhance forest ecology and provide appropriate fuels treatments near communities.

The Plumas Forest Project is a non-profit grassroots environmental organization formed in 1989 to monitor activities on the Plumas National Forest. The Plumas Forest Project focuses primarily on logging, with its main goal being to ensure that forest Service projects protect all old growth stands as well as individual, larger, fire-resilient trees important to wildlife and watersheds. Throughout the 1990s, Plumas forest Project cooperated with other groups interested in similar protections for the Sierra Nevada through its public involvement in the Regional planning process that culminated in the 2001 Sierra Nevada Forest Plan Amendment, otherwise known as the Sierra Framework. Plumas Forest Project seeks to ensure that the best science available is used by the Forest Service to address concerns about wildlife, watersheds, and wildfire.

III. Description of the Basin project

The Basin project proposes group selection on 1,215 acres in approximately 800 units in an ecologically critical area for a number of wildlife species that require un-fragmented patches of older forest habitat to survive. The project eliminates nesting, denning, and foraging habitat for these species, while creating openings in the forest which limit habitat value, increase fire danger, and risk altering the ecological balance in the project area..

The project's group selection allows the removal of conifers up to 30" diameter in and oaks up to 23" diameter, with remaining canopy cover ranging from 4-14%. (DN, p. 5.) Appellants' observation of other GS units indicates that group selection will for all practical purposes remove any vestige of usable habitat for the areas proposed to be harvested. (*See* Photos, attached hereto.)

The project proposes to harvest spotted owl nesting and foraging habitat, including forest within owl home ranges and home range core areas. For example, the project acknowledges that group selection will eliminate 1,190 acres of suitable owl nesting and foraging habitat (BE, p. 50). This total is approximately 98% of the total group selection harvest. In particular, the Basin group selection will remove 943 acres of suitable owl nesting habitat and 247 acres of foraging habitat, and 399 acres of owl home range core areas (HRCAs) within the project area. (BE, p. 50.) HRCAs are designed to include "the best available California spotted owl habitat in the closest proximity to the owl activity center." (USDA Forest Service 2004a, p. 39). Extensive logging within HRCAs is likely to adversely affect owl reproduction and occupancy. (Bond 2004). However, the Basin project provides no information about the amount of suitable habitat that will remain within owl HRCAs and home ranges once harvest is completed.

Further, the Basin project states that it will have adverse impacts on marten habitat within the Forest Carnivore Network ("FCN"), removing 424 acres or (2.4%) of the overall network, which "could result in habitat fragmentation within this subwatershed." (BE, p. 54.) Similarly, with respect to fisher – a candidate for listing under the Endangered Species Act -- the project will render potential habitat unsuitable, reduce habitat connectivity, and make the recovery of fisher populations more problematic in the future.

The Basin project is also one of a number of DFPZ, ITT and group selection projects that are planned for this region in the foreseeable future. The Basin project is also part of the implementation of the larger QLG pilot project and its impacts must be considered cumulatively with those foreseeable QLG projects to be implemented in the next 5 years.

The Decision Notice states that the purpose of the Basin project group selection is to 1) to achieve desired future conditions for an all aged, multistory, fire resilient forest; 2) contribute to the economic stability of rural communities; and 3) improve and maintain the ecological health of the forest. (DN.p. 3.) The Decision Notice states that no alternatives to the proposed project were identified that would meet the project purposes, but the Basin EA only analyzes the no project alternative and does not assess whether implementation of a more environmentally protective harvest prescription consistent with the standards of the 2001 Sierra Nevada Forest Plan Amendment ("Sierra Nevada Framework") would be able to meet these project purposes while also providing more habitat protection to the owl, marten and other old forest species. Further, the Basin project does not even explain how it can achieve two of the project purposes, including establishing a fire resilient forest and improve the ecological health of the forest by replacing mature forest habitat with ecologically poor, fire prone plantations of young trees scattered throughout the Forest.

Finally, the Basin project fails to provide adequate information for the public to analyze the effects of the proposed group selection in this ecologically critical area. The project does not provide detailed information regarding the habitat either within or in the vicinity of the project area. The project provides little to no discussion of how owls or forest carnivores use habitat in the project area, and which portions of such habitat are most crucial for continued viability.

The Forest Service also fails to provide a consistent description of the harvesting and impacts of this project. For example, in one section, the project states that 942 acres of owl nesting habitat will be logged (and even more foraging habitat) (BE, p. 50), but in another section states that only 690 acres of owl habitat will be logged. DN, pp. 7, 11.) The Decision Notice further states that 78 acres of CWHR 5 class stands will be logged, (DN, p. 7) but the EA states that only 3 acres of CWHR 5 would be rendered unsuitable. As part of our review, the Forest Service provide a map with 29 polygons of timber strata class 4 (>70% cover, ave dbh > 24" trees, i.e., owl nesting habitat). The Basin project includes 29 units in this category, which do not add up to 934, 690, 28 or 3 acres, as represented by different parts of the Basin environmental review documents.

IV. Statement of Position

We, the undersigned appellants, object to the Basin project's implementation of the 2004 ROD and the Quincy Library Group ("QLG") pilot project. In addition, appellants object to the Forest Supervisor's decision to conduct group selection in the project area without an adequate analysis of the site-specific and cumulative impacts that will occur from this and other past, present and reasonably foreseeable future projects on wildlife species such as the California spotted owl, which require older forest habitat for nesting and foraging. It is our position that the Basin project fails to maintain the diversity and continued viability of animal species, 16 U.S.C.

1604 § 6(g) (3)(B), 36 C.F.R. § 219 *et seq.*, and will produce a substantial and permanent impairment of the productivity of the land, 16 U.S.C. 1604 § 6(g) (3)(C), in violation of NFMA.

In addition, the Basin project fails to comply with NEPA, which requires an EIS

based on the significant impacts of this project on both an individual and cumulative basis. The Basin project proposes to harvest spotted owl nesting and foraging habitat, including forest within owl home ranges and home range core areas. As discussed below, this is "ecologically critical" habitat for sensitive species/MIS such as the owl, goshawk, pileated woodpecker, marten and fisher. Thus, an EIS is required. 40 C.F.R. § 1508.27(b) (3.) In addition, the cumulative impacts of the QLG pilot project must be assessed as part of the review of this Project. This cumulative impact assessment also requires an EIS. *See* 40 C.F.R. § 1508.27(b)(7) As discussed below, we note that the all comprehensive impact analyses conducted regarding implementation of the QLG pilot project identified significant reductions in habitat for these species, particularly in the immediate future. Thus, an EIS is required. *See* 40 C.F.R. § 1508.27(a) (short- and long-term effects are relevant).

We also find that the Basin project's failure to adequately describe the environmental setting, project description or an adequate range of alternatives violates NEPA and makes it impossible for the Forest Service to assess accurately the impacts of this project while also precluding the public from conducting an informed review of the Forest Service's findings and analysis.

Finally, we reiterate our objection to the streamlined and unlawful decision-making procedure used by the Forest Service on this and other projects, which precludes appellants from providing substantive comments on a proposed project prior to issuance of the final Decision Notice and environmental review document.

V. Statement of Reasons

We assert the following violations of law, regulation and policy committed by the Forest Supervisor in approving the Basin project Decision Notice, FONSI, and Environmental Assessment: (1) violations of the NFMA, 16 USC 1600 *et seq.*, and its implementing regulations, including failure to assess cumulative impacts to sensitive wildlife species and management indicator species, failure to monitor (at the forest plan or project level) populations of management indicator species and species at risk, failure to maintain diversity and insure viability of animal species, failure to avoid actions that will produce a substantial and permanent impairment of the productivity of the land, and failure to consider and use the best available science; and (2) violations of NEPA, 42 USC 4321-4370) and its implementing regulations including failure to circulate the EA for public review and comment, failure to describe fully the environmental setting, failure to describe the project, failure to provide accurate scientific information, failure to assess the individual impacts of this project, and failure to consider the cumulative impacts of this project in combination with other past, present and reasonably foreseeable future projects (including projects that are foreseeable as part of the QLG pilot project) segmentation of existing projects and use of an analysis area that is too small.

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VI. Specific Appeal Issues:

A. The Basin Project Does Not Comply with NFMA

1. The Basin Project does not Insure Continued Diversity and Viability of Wildlife Species.

The National Forest Management Act (NFMA) directs the Forest Service to "provide for diversity of plant and animal communities" in the planning process. 16 USC 1604(g)(3)(B). The Forest Service's regulations that implement this statutory mandate require that "[f]ish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species." 36 CFR 219.19. "For planning purposes, a viable population shall be regarded as one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area." (*Id.*) With respect to Forest Service designated sensitive species – which includes the California spotted owl, American marten, northern goshawk, and Pacific fisher -- the agency is further required "to insure their viability and to preclude trends toward endangerment that would result in the need for Federal listing." (Forest Service Manual 2672.1.) Through these steps in this process, NFMA imposes substantive constraints on the management of forest lands to insure biological diversity. *See Neighbors of Cuddy Mountain, supra*, 137 F.3d at 1379-80.

The Basin project does not insure the viability of old growth species for three reasons.

First, as discussed below, the Plumas National Forest has not completed population trend analyses, either based on monitoring or meaningful habitat analysis, and thus by definition cannot "insure" the continued viability of wildlife species diversity either within the Basin project area or in the PNF. In short, without this analysis, the PFN is simply guessing as to whether current management policies are insuring viability.

Second, the Basin project attempts to tier its assessment of environmental impacts, and of viability, to the 2004 Framework FSEIS. As discussed at length in the SNFPC 2004, however, 2004 Framework FSEIS does not insure the viability of the California spotted owl (SNFPC 2004, pp. 9-26), the Pacific fisher (*id.*, pp 28-41), and American marten (pp. 41-45.) As discussed above, the effects of the Basin project are cumulative to other QLG projects approved under the 2004 Framework, the fact that the 2004 programmatic review does not insure viability means that this project also does not do so for these species.

Third, even if one assumed that viability were insured at the programmatic level, this does not preclude the necessary viability analysis at the project specific level, as discussed above. *See e.g.*, USDA 2004(a) Vol. 2, p. 43 ("The analysis for the SEIS recognizes that actual effects to resources must be evaluated site-specifically while considering larger scale cumulative effects.") In addition, the Forest Service "must put in place and observe with respect to each site specific action a valid forest-wide standard for ensuring viable populations of old growth dependent species," *Idaho Sporting Cong., Inc. v. Rittenhouse, supra*, 305 F.3d at, 97 fn.1. Finally, species viability and diversity protections under NFMA cannot be demonstrated simply by demonstrating project area compliance with a Forest Plan standard, as the FS has attempted to

do in this case. *Neighbors of Cuddy Mountain v. Alexander*, 303 F.3d 1059, 1069 (9th Cir. 2002) ("...the approval of a sale may conflict with the Forest Service's mandate to insure species viability even though the logging would not violate Forest Plan standards for the areas directly affected by the sale.")

Viability is not a product of site-specific factors, or even cumulative effects in the watershed where the project is situated. Instead, as defined by law (in accordance with the best available science), it is a product of two factors – adequate habitat evenly distributed throughout the forest. Here, the Basin project does not cite to any reference that would clarify that there is adequate, evenly distributed habitat for the spotted owl, American marten and Pacific fisher in either the project area or the Forest as a whole.

a. California Spotted Owl.

As described in detail in the attached critique of spotted owl biologists Jennifer Blakesley (Blakesley 2004) and Monica Bond (Bond 2004), the Basin project threatens the viability and distribution of the California spotted owl both within the project area and in the surrounding national forest.

(1) Overview of Owl's Status.

The California spotted owl is threatened with extinction and requires protection under the Endangered Species Act. In April 2000, the Sierra Nevada Forest Protection Campaign and other groups petitioned the U.S. Fish and Wildlife Service to list the owl. The petition was denied, in large part because the U.S. Forest Service had adopted the Sierra Nevada Framework in 2001. Based on the substantial protection for the owl's habitat in the Sierra Nevada Framework, the Fish and Wildlife Service concluded that listing was not warranted. The Campaign and other groups have challenged that decision in court.

Earlier this year, the Forest Service revised and greatly weakened the Sierra Nevada Framework. The 2004 ROD will result in substantial loss and degradation of habitat for the California spotted owl by allowing harvest of medium and large trees, reduction in canopy cover, and removal of large snags and down logs. The leading owl biologists who have reviewed the 2004 Framework have uniformly concluded that the new plan threatens the owl's viability throughout the Sierra Nevada and contributes to a trend towards federal listing.¹ (Verner 2003; Blakesley and Noon 2003; Noon 2004; Peery 2004; Bond 2003; Franklin et al. 2003). Because the Forest Service has revised and weakened the Sierra Nevada Framework, which served as a basis for the Fish and Wildlife Service's determination that the owl did not require listing, the Campaign and other groups recently filed an updated listing petition to the Fish and Wildlife Service. (Center for Biological Diversity et al. 2004). The updated petition is currently pending before the Fish and Wildlife Service.

As detailed in the updated listing petition, there is substantial cause for concern regarding the owl's status in the Sierra Nevada. More specifically, ongoing demographic research in the

¹ These reviews are included as part of the Notice of Appeal and Statement of Reasons filed by appellant Sierra Nevada Forest Protection Campaign and other groups, challenging the 2004 ROD. (SNFPC et al. 2004).

Lassen National Forest strongly suggests that the owl's population is declining in this region. For example, Blakesley and Noon (2003) found that four measurements of population trends for California spotted owls in the Lassen study area from 1990—2001 showed declines over time, and no analyses showed increasing trends. The leading author of these studies concludes that "[t]ogether, these results cause significant concern regarding the viability of the California spotted owl population in the northern Sierra Nevada, including the project area." (Blakesley, 2004.) In sum, there is substantial cause for concern regarding the owl's population throughout the Sierra Nevada, within the Plumas National Forest, and within the Basin project area.

(2) Impacts of the Project on the California Spotted Owl

The Basin group selection will eliminate 399 acres of California spotted owl home range core area (HRCA) within the project area, 943 acres of suitable owl nesting habitat and 247 acres of foraging habitat. (BE, p. 50.) This elimination of spotted owl home range and home range core area and valuable nesting and foraging habitat harms the quality and connectivity of home range and home range core habitat not only at the landscape level, but also within the project area itself. In the absence of reliable data showing how remaining habitat will be adequate, this approach fails to ensure viability, as described by the Sierra Nevada Framework:

Vegetation treatments that create openings or reduce suitable habitat will widen the gaps between habitat patches. Increases in the amount of discontinuous habitat and isolation of habitat patches are concerns within known owl home ranges as well as across the landscape. A reduction in the continuity of habitat between owl activity centers, including the habitat outside known owl home ranges, could limit successful mate finding and dispersal, increasing nearest neighbor distances and affecting population trends. In fragmented landscapes, the high survival costs associated with searching for low-density habitat can create a situation where populations may go extinct in the presence of suitable habitat due to constraints on successful dispersal. Reducing habitat fragmentation and maintaining patches of suitable but unoccupied habitat particularly in areas already identified as geographic areas of concern, is important from this standpoint.

(USDA Forest Service, 2001a, Chap. 3, part 4.4, p. 97.) Here, the Basin project provides little information as to how owls can survive in the project area, much less the surrounding region encompassed by the QLG pilot project.

The BE acknowledges that many owl HRCAs in the project area will be reduced in quality due to group selection logging, (*see* Basin BE, p. 50, Table 6) but provides no assessment regarding the quality of the overall canopy or connectivity of the remaining habitat. Thus, viability is not insured. The HRCA is intended to encompass "the best available spotted owl habitat in the closest proximity to the owl PACs where the most concentrated owl foraging activity is likely to occur." (2001 ROD, p. 39.) Blakesley (2003) studied the relationship between site occupancy and habitat within the owl's nest area and home range core area on the Lassen National Forest. She found that "site occupancy was positively correlated with the amount of the nest area dominated by large trees and high canopy cover within the nest area." (Ibid., p. iii). "Although owls were found nesting and roosting in a variety of forest stand types, site occupancy, apparent survival, and nesting success all increased with increasing amount of

forest cover types known to be selected by the owl at the landscape scale." (Ibid., p. 15). These selected cover types, as described by Verner et al. (1992), include timber strata 4N and 4G, i.e., forests characterized by trees greater than 24" dbh with canopy closure 40 percent or greater.

Analysis by Bart (1995) of the relation between the proportion of a pair's home range that is in suitable habitat and the productivity and survivorship of northern spotted owls "suggests that removing any suitable habitat within the vicinity of the nest tends to reduce the productivity and survivorship of the resident owls." The Forest Service has stated: "In the absence of clear reasons why these results would not apply to the California spotted owl as well, they need to be considered in planning for the owls in the Sierra Nevada." (USDA Forest Service 1998, p. 24). This suggests that reducing canopy cover below 50 percent and removing medium and large trees from within the owl's home range would likely reduce the productivity and survivorship of California spotted owls.

A key component of the Sierra Nevada Framework's strategy to provide environmental conditions likely to maintain viable populations of California spotted owl well-distributed across Sierra Nevada national forests was "protecting and managing spotted owl home range core areas to provide moderate to high levels of tree canopy cover." (USDA Forest Service, 2001a, Vol. 1, Ch. 2, p. 166.)² The 2004 Framework recognizes the importance of protecting HRCAs by requiring the HRCA to be managed for canopy closures of at least 50-70 percent. (2004 ROD, p. 7.)

The project EA does not provide the location of HRCAs or owl home ranges within the project area, nor provide any discussion of how the HRCAs function as a necessary habitat complement to the PACs in the project area. This lapse is critical, however, due to the importance of this habitat to owl survival and the owl's precarious viability in this Forest. (See Franklin et al. 2004, Blakesley 2004; Blakesley and Noon 2003.)

The Sierra Nevada Framework strictly limited logging within HRCAs based on the recognition that spotted owls preferentially use core areas within their home ranges (Bingham and Noon 1997) and that degrading habitat within HRCAs will likely reduce survival and reproductive success (Bart 1995; USDA Forest Service 2001a, Volume 3, Chapter 3, part 4.4, pp. 92-93). As stated in the Framework FEIS, "increasing the number of owl sites with desired amounts of habitat is likely important to stabilizing current population declines." (Ibid., p. 92). The FSEIS recognizes that "California spotted owl occurrence and productivity appears to be significantly correlated with canopy cover composition within own home ranges." (FSEIS, p. 270). Yet the Basin project would allow group selection logging throughout owl home range core areas in the project and analysis area, which will "result in the removal of habitat attributes that provide quality nesting and foraging habitat." (FSEIS, p. 270). This approach is directly contrary to the cautious approach recommended by experts to maintain "as much suitable habitat

² Both the 2001 and 2004 Framework decisions described home range core areas (HRCAs) as the overused 20% of an owl's home range. (See USDA Forest Service, 2001a, Vol. 3, pt. 4.4, p. 85, USDA Forest Service, 2004a, p.39.) Both the 2001 and 2004 Framework decisions establish HRCA sizes of 1,000 acres on the Plumas. (USDA Forest Service, 2001b, p. 4; USDA Forest Service, 2004a, p. 39.)

as possible within the HRCAs would provide the best conditions for survival and reproduction, which is particularly important for this at-risk population." (Bond, 2004.)

The importance of protecting old growth elements within larger forest stands has been criticized by the Fish and Wildlife Service and by the Forest Service's Washington Office. The Washington Office specifically cited this weakening of the Framework as a factor in its conclusion that the new standards "do not maintain owl habitat and substantially increase the risk that self sustaining owl populations will not be maintained." (Gladden 2003, pp. 10-11). According to the Fish and Wildlife Service, this change allowing for cutting of old forest patches may "have significant effects on old forest habitats used by the owl" by allowing "reduction of structural complexity within treated habitats," which "could allow stands of potential owl nesting habitat to be removed." (USDI Fish and Wildlife Service 2003c, pp. 4-5).

The Basin group selection project eliminates present value habitat for spotted owls for the foreseeable future. As discussed in the BE, group selection will result in the creation of forest openings and gaps in which all conifers below 30" and all oaks below 21" dbh are removed, little to no forest overstory remains, and, due to operability and safety, "it is anticipated that the majority of snags would be felled and few snags retained in the 1215 acres of groups." (Basin BE, p. 38.) The Basin BE acknowledges that the average canopy coverage provided within a group would be approximately 10%, which would be "unsuitable for foraging and nesting habitat." (Basin BE, p. 50.) In sum, for decades after this harvest, these plots will provide little to no habitat value for owls.

The loss of habitat is a particular concern when it occurs within HRCAs, which are designed to include "the best available California spotted owl habitat in the closest proximity to the owl activity center." (USDA Forest Service 2004a, p. 39). Extensive logging within HRCAs is likely to adversely affect owl reproduction and occupancy. For example, a study by Bart (1995) of 102 northern spotted owl sites in Oregon found that fecundity and adult survival decreased with decreasing amounts of suitable habitat around the core activity centers, and there was no threshold above which no increase in fecundity or survival occurred. The author concluded that "removing any suitable habitat within the vicinity of the nest tends to reduce the productivity and survivorship of the resident owls." As stated in the Forest Service's Sierra Nevada Science Review: "In the absence of clear reasons why these results would not apply to the California spotted owl as well, they need to be considered in planning for the owls in the Sierra Nevada." (USDA Forest Service 1998, p. 24). One of the leading experts in this area, Dr. Jennifer Blakesley (2004, p. 2) states that "both spotted owl site occupancy and reproductive output decreased with increasing amounts of non-habitat within 500 acre areas around site centers. Furthermore, spotted owl site occupancy decreased with increasing amount of area dominated by small trees (FS size class 3 stands with canopy cover >70%) and increased with increasing amount of area dominated by large trees (FS size class 4 stands with canopy cover >70) within 500 acre areas. Consequently, timber harvest within HRCAs may have significant impacts on spotted owl survival, reproduction and/or site occupancy."

The Forest Service has previously recognized that the 2004 Framework "would reduce the amount of multi-story canopy, stand complexity and canopy closure" within owl home range core areas, "which could affect owl reproductive output." (USDA Forest Service 2003, p. 187).

As spotted owl biologist, Moncia Bond concludes, “The loss of 1,190 acres of suitable habitat within HRCAs and in the matrix between PACs – combined with additional habitat loss from ongoing adjacent logging projects and extensive previous timber harvest during the past century (listed but not properly analyzed in the BA/BE at page 42) – would likely result in further population declines and threaten the viability of the owls in the project area.” (Bond 2004, pp. 3-4).

The BE acknowledges that the Basin project would degrade and remove suitable owl habitat, including extensive habitat within owl home range core areas. However, because the project implements the 2004 Framework, the BE concludes that the project “would not contribute to a trend toward listing nor cause a loss of viability.” As Bond demonstrates in her review, “this conclusion is unfounded.” (Bond 2004, p. 7).

First, as demonstrated in the critiques of leading spotted owl biologists (Verner 2003; Blakesley and Noon 2003; Noon 2004; Peery 2004; Bond 2003; Franklin et al. 2003), the 2004 Framework threatens the owl’s distribution and viability by allowing logging of medium and large trees, reduction in canopy cover, and reduction in large snags and down logs, particularly within the Quincy Library Group pilot project where the Basin project is located.

The Forest Service prepared an EIS and biological assessment/biological evaluation (BA/BE) to analyze the impacts of implementing the QLG project, which found that the project would significantly degrade owl habitat. (USDA Forest Service 1999b). Of all the alternatives considered, full implementation of the QLG project posed the greatest overall risks to the spotted owl. (USDA Forest Service 1999a, p. 82). The BA/BE concluded as follows:

Alternative 2 [the pilot project] would reduce the amount of California spotted owl ... nesting habitat by 7% over the life of the pilot project, and reduce the amount of foraging habitat by 8.5%. Such reductions in suitable habitat would decrease the number of owl home ranges with more than 50% suitable habitat by 11% over the term of the project. Alternative 2 also rated the lowest among the alternatives in minimizing habitat fragmentation and impacting spotted owl Areas of Concern.

In light of the recent demographic studies showing declining spotted owl populations, such impacts to owl habitat could pose a serious risk to the viability of the owl in the planning area, thereby making the implementation of Alternative 2 inconsistent with the National Forest Management Act and its implementing regulations.

In order to minimize the threat to the viability of the owl in the planning area, it is necessary to add mitigation, beyond the minimum CASPO interim guideline requirements to maintain suitable habitat within the planning area. (USDA Forest Service 1999a, emphasis added).

The BA/BE therefore recommended that “no timber harvesting ... be permitted in suitable owl habitat unless and until a new owl strategy for the Sierra Nevada is released.” (Ibid.).

The U.S. Fish and Wildlife Service reviewed the QLG project in response to the Forest Service's request for comments and consultation. (USDI Fish and Wildlife Service 1999). The Fish and Wildlife Service expressed concerns "that the proposed action will negatively affect spotted owl survival and/or reproduction for the following reasons: (1) habitat loss, (2) habitat fragmentation, and (3) changes in prey base." Specifically, the Fish and Wildlife Service set forth the following concerns:

- "The Service is concerned that loss of spotted owl habitat will occur through DFPZ construction, thinning, individual tree selection and group selection treatments." (pp. 6-7)
- Protecting only PACs and SOHAs "may result in the loss of suitable habitat in a significant portion of an owl's home range and in dispersal habitat outside and between home ranges. The Service agrees that management actions that reduce habitat suitability within home ranges can accelerate population declines." (p. 7)
- The project "does not take into account the juxtaposition of suitable nesting, roosting, and foraging habitat and other vegetation types, which may result in assemblages of habitat that do not promote fitness of owls." (p. 7)
- "A reduction in habitat quality could reduce owl densities ..., limiting successful mate finding and dispersal and increasing nearest-neighbor distance." (p. 7)
- "The Service is concerned that reduction of suitable configurations of nesting, roosting, and foraging habitats in combination with declining populations and unforeseen contingencies (e.g., fire, disease and insect outbreaks, and drought) within spotted owl home ranges will have significant adverse effects on spotted owl population viability." (p. 8)
- "The Service is concerned that implementation of [the pilot project] may cause negative impacts to California spotted owls due to habitat fragmentation." (p. 9)
- "Due to the level of snag and large woody debris removal as proposed, the Service is concerned that [the pilot project] will remove suitable den sites and food sources of northern flying squirrels and consequently reduce the prey base for California spotted owls." (p. 10)

In sum, the Fish and Wildlife Service concluded as follows: "The Service believes the implementation of Alternative 2 poses a significant threat to the long-term viability of the California spotted owl, Pacific fisher, and American marten due to the loss, degradation, and fragmentation of suitable habitat." (USDI Fish and Wildlife Service 1999, p. 16, emphasis added).

The Record of Decision approving the QLG project reiterated these concerns about owl viability and adopted the mitigation measure recommended in the BA/BE. Specifically, the ROD found that fully implementing the QLG project "could pose a serious risk to the viability of the California spotted owl in the planning area." (USDA Forest Service 1999c).

The Forest Service reconsidered the impacts of fully implementing the QLG project during the process of adopting the Sierra Nevada Framework. The Forest Service again concluded that fully implementing the QLG project would significantly increase the risks to the owl, compared to the Framework alternative. In particular, the Forest Service found as follows:

- “Over the 5-year timeframe of this project, there would be greater potential for increasing nearest neighbor distances between owl sites on these forests, increasing uncertainties associated with effective dispersal and mate-finding.” (USDA Forest Service 2001a, Volume 3, Chapter 3, part 4.4, p. 86).
- “If management activities reduce owl occupancy and productivity across this area (as expected under alternative 2 of the HFQLG), opportunities to stabilize population declines could be substantially compromised.” (USDA Forest Service 2001a, Volume 3, Chapter 3, part 4.4, p. 94).
- “Population declines that would occur within the three geographic areas of concern located within the HFQLG project area, exacerbate the overall risk to spotted owl population.... Actions proposed under Alternative 2 of the HFQLG will widen gaps between habitat parcels and probably reduce the densities of owls within [Area of Concern 1.” (USDA Forest Service 2001a, Volume 3, Chapter 3, part 4.4, p. 94).
- Overall, the FEIS concluded with respect to the QLG project: “The high rates of vegetation treatments occurring over a short time period would result in substantial risk to the distribution and abundance of California spotted owls and owl habitat in the northern Sierra Nevada.” (USDA Forest Service 2001a, Volume 3, Chapter 3, part 4.4, p. 99).

Regional Forester Brad Powell, in the Framework ROD, stated his intention “to carry out as much of the [QLG] pilot project as possible.” (USDA Forest Service 2001b, p. 50). However, he concluded that “the entire level of management activity specified in the HFQLG legislation cannot be implemented without degrading owl habitat without increasing risk to owl viability. The provisions for excessive canopy closure reductions, large tree removals, and substantial acreages in group selection treatments are factors contributing to this conclusion.” (USDA Forest Service 2001b, p. 51).

The owl biologists have consistently expressed serious concerns about fully implementing the QLG project. See, for example, Blakesley and Noon 1999 (expressing “particular concern” about planned logging within QLG pilot project area); Verner 2003, p. 6 (implementation of QLG project “will lower the viability of the owl population in affected national forests); Blakesley and Noon 2003, p. 5 (full implementation of QLG project deemed “inexplicable” and “unacceptable”); Peery 2004. To the best of our knowledge, no owl biologist has expressed support for fully implementing the QLG project. Monica Bond states that “Given the conclusions of the 1999 QLG FEIS, there is no legitimate basis for concluding that the Basin Project will not threaten owl viability, despite the fact that it is being carried out pursuant to the 2004 ROD.” (Bond 2004, p. 7.)

In sum, there is substantial evidence indicating that full implementation of the QLG project pursuant to the 2004 ROD would threaten the viability of the California spotted owl and other species, contrary to law. Therefore, the fact that this project implements the 2004 ROD in no way ensures the owl’s viability.

Beyond that, the 2004 ROD and FSEIS did not analyze the site-specific impacts of logging pursuant to the Basin and similar projects. Rather, the FSEIS deferred detailed analysis

of environmental impacts to future site-specific projects, such as Basin. Given that the analysis in the BE demonstrates the possibility of significant adverse impacts to the owl and its habitat, there is no legitimate basis for concluding that the Basin project will not threaten owl viability, despite the fact that it is being carried out pursuant to the 2004 ROD. As stated by Dr. Blakesley "the EA relies on compliance with the 2004 Sierra Nevada Forest Plan Amendment, which did not analyze the specific impacts of the Basin project nor other foreseeable projects in the HFQLG area, to conclude that the effects of the Basin Project would not threaten spotted owl viability. As I and other owl biologists have concluded, the 2004 Framework is a risky strategy that may threaten the owl's viability" (Blakesley and Noon 2004; Noon 2004).

In short, as Bond concludes in her review, the Basin project "combined with additional habitat loss from ongoing adjacent logging projects and extensive previous timber harvest during the past century (listed but not properly analyzed in the BA/BE at page 42) – would likely result in further population declines and threaten the viability of the owls in the project area. (Bond 2004, p. 4; *See also* Blakesley 2004 (Decision Notice's statement that individual spotted owls may be affected 'but the effects will not threaten species viability' "is not scientifically defensible."))

b. American Marten

As described in detail in the attached declaration of forest carnivore expert Tom Kucera (Kucera 2004), the Basin project threatens the viability and distribution of the American marten within the project area and the surrounding national forest.

(1) Overview of Marten's Status.

Kucera et al. (1995), in their paper describing the current distribution of the American marten in California, noted the marten's apparent absence in much of Plumas County, despite considerable survey effort there. Subsequent survey efforts have reaffirmed the conclusion that martens are absent from much of their historic range in the northern Sierra Nevada, especially on the Plumas and Lassen national forests (USDA Forest Service 2001a, Vol. 3, Chap. 3, Part 4.4, p. 22; Zielinski 2002). This important information is neither referenced nor discussed in the EA, despite the fact that the Forest Service is proposing significant reductions in marten habitat in the project area.

By nature a relatively uncommon species, American martens are inherently vulnerable to local extirpation and extinction for several reasons, as noted in the Sierra Nevada Framework EIS (USDA Forest Service 2001a, Vol. 3, Chap. 3, part 4.4, pp. 22-23). First, martens have low reproductive potential; second, they have an affinity for dense overhead cover and tend to avoid forest openings; and third, martens have very large home ranges relative to their body size. Thus, habitat changes that would alter the marten's preferred habitat, such as the changes that would result from the Basin project, could reduce the marten's range and distribution and lead to local extirpation.

(2) Habitat Associations of Martens

Throughout their range, American martens are associated with late-seral coniferous forests with abundant large structure, including live trees, snags, and logs, and relatively closed canopy cover. As described by Dr. Kucera, medium and large trees with diameter 20" and greater constitute an important structural element of marten habitat. (Kucera 2004a, p. 2). Particularly on the west slope of the Sierra Nevada, martens are closely associated with dense canopy forests. In general, martens prefer dense forests with canopy cover of 70 percent or greater and avoid relatively open forests with canopy cover of 40 percent or less. Reducing canopy cover to 40 percent in such forests is likely to adversely affect the marten's use of the area.

Martens are also known to avoid fragmented forest, that is, forest with many open areas. Hargis and Bissonette (1997) and Hargis et al. (1999) found that martens did not occur in forests that contained more than 25% openings, including natural openings and those resulting from timber harvests. Additional research (e.g., Chapen et al. 1998, Potvin et. al. 2000) also documents the deleterious effects of extensive forest openings on marten distribution and habitat use.

(3) Impacts of the Project on the Marten

The Basin Project will adversely affect the marten and its habitat, threatening the marten's viability and distribution in the planning area. (See Kuchera 2004a.) The Basin project acknowledges that it will have adverse impacts on habitat within the Forest Carnivore Network ("FCN"), removing 424 acres or (2.4%) of the overall network, which "could result in habitat fragmentation within this subwatershed." (BE, p. 54.) The EA simply states, however, that "protection of .PACs, consideration of the designated carnivore corridor, and protection of RHCAs would continue to provide connectivity between large blocks of suitable habitat for these carnivores." (EA, p. 59.) The preservation of PACs alone cannot avoid habitat fragmentation, and the Basin project does not appear to have given any particular consideration to the cumulative impacts of timber harvesting within the project area on the FCN. In sum, the EA does not provide information as how "connectivity between large blocks of habitat" (BE, p. 55) shall be maintained.

In addition, the Basin project will eliminate large numbers of oaks and "would diminish snags and habitat." (EA, p. 57.) Marten and fisher are each dependent on the presence of large snags distributed evenly across the landscape. (See e.g., SNFPC 2004; USDI Fish and Wildlife Service 1999, p. 11 ("[F]or the fisher and marten, the removal of 'legacy elements' such as large snags and logs is of particular concern because these elements are important denning and/or travel areas.")) The Basin project acknowledges that "past management practices, including logging, firewood cutting, road construction, and other activities, have probably led to a decline in the number of large diameter trees and snags in the project area, with a detrimental effect on associated wildlife" (Basin BE, p. 22). Further, as discussed, the Basin project is vague as to the extent of snag removal as part of the overall project, stating that 4 snags 15" or greater shall be retained be acre, but not acknowledging the actual size of the snags that will be retained, nor whether such snags will even be retained (See Basin BE, p. 38 ("it is anticipated that the majority of snags would be felled and few snags retained in the 1215 acres of groups.")).

Survey efforts have reaffirmed the conclusion that martens are absent from much of their historic range in the northern Sierra Nevada and southern Cascade Range, especially on the Plumas and Lassen national forests (USDA Forest Service 2001, FEIS, Vol. 3, Chap. 3, Part 4.4, p. 22; Zielinski 2002). Here the apparent absence of the marten within the Basin planning area despite “suitable denning and foraging habitat” (EA, p. 32) raises a broader concern regarding the marten’s viability and distribution in the surrounding area and in the northern Sierra Nevada more generally. (Kuchera 2004a.) The marten’s absence in the planning area is likely linked to the history of extensive logging in the area, which has substantially reduced the amount of large trees and large snags (EA, pp. 23, 57). Particularly given that marten have historically been observed near the project area (BE, p. 33), it is reasonable to assume that marten formerly inhabited the Basin area as well. Although protection and restoration of marten habitat within the Basin planning area would increase the likelihood of marten becoming reestablished in the area, the Basin project will further degrade remaining marten habitat, reducing the possibility of marten occupying the area and diminishing the connectivity of marten habitat in the region. (Kuchera 2004a.)

As described by Dr. Kucera, the project area appears to be extremely important to the marten population at a landscape scale. First, the fact that marten have been detected in the project area is significant, given that the marten has apparently been extirpated elsewhere in the northern Sierra Nevada. Second, as discussed in the BE, the project area appears to play a key role by providing habitat connectivity between marten populations north and south of the area.

The BE acknowledges that the Basin Project will degrade marten habitat, and is likely to disrupt north-south habitat connectivity for marten.³ However, because the Project implements the 2004 ROD, the BE concludes that the Project is not likely to threaten the owl’s viability. As Dr. Kucera explains in his review, this conclusion is unfounded.

First, the forest carnivore experts who have reviewed the 2004 Framework have uniformly concluded that the new plan threatens the marten’s distribution and viability by allowing logging of medium and large trees, reduction in canopy cover, and reduction in large snags and down logs, particularly within the Quincy Library Group pilot project where the Basin Project is located. (Barrett 2004; Kucera 2004b; Buskirk 2003). The U.S. Fish and Wildlife Service has already concluded that full implementation of the QLG project “poses a significant threat to the long-term viability of the ... American marten due to the loss, degradation, and fragmentation of suitable habitat” (USDI Fish and Wildlife Service 1999, p.16), and according to marten experts “there is no new information that would change these conclusions.” (Barrett 2004, p. 11).

Full implementation of the QLG pilot project, as carried out in Basin and other planned timber sales, would have the following adverse impacts on the marten and its habitat:

³ The QLG ROD requires that “habitat connectivity ... would be maintained to allow movement of old forest ... dependent species between areas of suitable habitat.” (USDA Forest Service 1999c, p. 9). Because the Basin project would further impair habitat connectivity for the marten, implementing the project would be contrary to the QLG ROD.

- Reduction in suitable habitat. The pilot project would potentially log approximately 64,000 acres of the currently suitable habitat for the marten. (USDA Forest Service 1999a, p. 116). Most of the logged areas will likely be rendered unsuitable for the marten, given the new standards allowing logging of large trees and eliminating protection for canopy closure. As expressed by the Fish and Wildlife Service, “the unrestricted reduction in canopy cover and significant reduction of snags and logs on the eastside would reduce potential forest carnivore denning and resting sites.” (USDI Fish and Wildlife Service 1999, p. 12).
- Increase in forest openings. The new plan allows 8,700 acres per year of group selection openings in the QLG area. (USDA Forest Service 2004b, p. 259). As described above, martens are highly vulnerable to forest fragmentation and are generally not found “in landscapes with greater than 25 percent of the area in openings, even where suitable habitat connectivity exists.” (USDA Forest Service 2001a, Volume 3, Chapter 3, part 4.4, p. 19). As summarized by Dr. Kucera, as a result of the group selection openings, “any martens that may occur in these forests will be negatively affected, and such fragmentation will inhibit or prevent future recolonization.” (Kucera 2004b, p. 3).
- Construction and maintenance of DFPZs. The 2004 Framework allows construction of tens of thousands of acres of DFPZs throughout the pilot project area, reducing and degrading suitable habitat and further fragmenting the remaining habitat. First, DFPZs are expected to result in “relatively open stands” in which “the forest floor would usually be relatively open, with the exception of occasional large logs” (USDA Forest Service 1999b, p. 2-20), which is antithetical to suitable marten resting and foraging habitat. (Barrett 1999, p. 6). In general, the creation of DFPZs would decrease denning and foraging habitat within the pilot project area. With DFPZ maintenance, this decrease in habitat would be perpetuated. Second, “constructing the DFPZs will also result in significant road construction, which will additionally fragment marten habitat and potentially lead to an increase in marten mortality from vehicles.” (Kucera 2004, p. 3). The Fish and Wildlife Service expressed concerns that “marten may not move across linear DFPZs, limiting population expansion and colonization of unoccupied habitat ... thus precluding future recovery options.” (USDI Fish and Wildlife Service 1999, p. 12). As a consequence, “the pilot project could lead to the isolation and local extirpation of marten.” (Barrett 1999, p. 6).
- Construction of new roads. Full implementation of the QLG project will involve approximately 100 miles of new road construction. (USDA Forest Service 2004b, p. 325). The best available research indicates that roads can directly affect marten through road-related mortality and indirectly affect marten by fragmenting habitat and discouraging marten movement. As acknowledged in the Framework FEIS: “Roads can impact martens in the following ways: (1) vehicles can kill animals and potentially increase mortality rates; (2) roads can fragment habitat and affect the ability of animals to use otherwise suitable habitat on opposing sides of the road; (3) roads, and the presence of vehicles and humans, can cause wildlife to modify their behavior in the vicinity of roads; and (4) roads allow human access to wildlife habitat and can increase the direct impacts of human activities.” (USDA Forest Service 2001a, Volume 3, Chapter 3, part

4.4, p. 27). Therefore, alternatives that increase road density increase risk to martens. (Ibid., p. 30).

In short, by significantly increasing both the amount and intensity of logging in the northern Sierra, and by weakening existing protection for marten habitat in the QLG area and in eastside forests, the 2004 Framework threatens the viability and distribution of the marten in the planning area, contrary to law. According to marten expert Dr. Steve Buskirk, “the proposed changes would substantively weaken protection ... for the American marten. Marked declines in population size and fitness can be reasonably foreseen if the proposal is implemented.” (Buskirk 2003). As summarized by Dr. Kucera:

The plan would change management to increase logging and allow reduction in the number of medium- and large-sized trees, reduction of canopy cover, and reduction of snags and logs. These are precisely the habitat characteristics associated with later-seral stage forests and the presence of martens.... Taken together, these changes would further degrade marten habitat in the northern Sierra, leading to a significant risk of adverse impacts to marten reproduction, survival, and occupancy of the area. Given that the marten’s population is already depleted in the northern Sierra Nevada, the proposal would further threaten the marten’s viability and distribution in the area.” (Kucera 2004b, pp. 2-3, emphasis added).

Therefore, the fact that the Basin project implements the 2004 ROD in no way ensures the marten’s viability. As stated by Dr. Kucera, "I have previously reviewed the QLG project and concluded that it is likely to threaten the viability and distribution of the marten in the northern Sierra Nevada (Kucera 2004b). The Basin project will substantially contribute to these adverse impacts." (Kucera 2004a.)

Beyond that, the 2004 ROD and FSEIS did not analyze the site-specific impacts of logging pursuant to the Basin and similar projects. For example, as stated in Volume 2 of the FSEIS (p. 40): “Since the extent of openings will be dependent upon site-specific vegetation conditions and the placement of strategically placed area treatments, the effects to local marten populations will need to be evaluated at the project and forest level.” Given that the analysis in the BE demonstrates the possibility of significant adverse impacts to the marten and its habitat, relying upon the 2004 ROD to “presume” marten viability is unjustified.

c. Pacific Fisher.

As described in the attached declaration of forest carnivore expert Tom Kucera (Kucera 2004a), the Basin project threatens the viability and distribution of the Pacific fisher within the project area and the surrounding national forest.

(1) Overview of Fisher’s Status.

The Pacific fisher is a forest carnivore that is closely associated with older forests with medium and large trees, dense canopy cover, and abundant large snags and down wood. The Basin project would degrade fisher habitat by logging medium and large trees, reducing canopy

cover, and removing large snags and down logs. The USDI Fish and Wildlife Service has concluded that the fisher warrants protection under the Endangered Species Act. The Fish and Wildlife Service (2004, p. 18788) cited loss and fragmentation of habitat and further decline and isolation of populations as the primary threats to the fisher, and questioned the adequacy of the 2004 Sierra Nevada Forest Plan Amendment to protect fisher habitat. The Service specifically mentioned “timber harvest, fuels reduction treatments, and road construction” on federal lands as threats to fisher “distribution, abundance, and recovery/recolonization potential.” Under these circumstances, the fisher’s habitat in the Sierra Nevada requires protection and restoration, not further degradation. Unfortunately, as Dr. Kucera concludes, “the Basin project will further degrade fisher habitat, threatening the fisher’s viability and contributing to the present trend towards extinction.” (Kucera 2004a, p. 5).

As discussed in the BE, the fisher’s current distribution in California appears to comprise two populations, one in the southern Sierra Nevada and the other in the Klamath Province, separated by some 260 miles. This isolated population structure is a major reason that the USDI Fish and Wildlife Service decided the fisher warranted listing as threatened or endangered.

There is widespread agreement that the southern Sierra fisher population is not viable in the long term in the absence of efforts to expand the current range and to connect the population with the fisher population in northwestern California. (Barrett 2004, p. 6; Buskirk 2003). “The inability of extant fisher populations to support one another demographically, including those that are isolated by relatively small distances, or to colonize currently unoccupied areas within their historical range, are significant conservation concerns.” (Aubry and Lewis 2003, p. 88). “Recolonization of the central and northern Sierra Nevada may be the only way to prevent fisher extinction in the isolated southern Sierra Nevada population.” (Truex et al. 1998, p. ii).

Facilitating the fisher’s dispersal to, and recolonization of, the central and northern Sierra Nevada requires that habitat be provided to promote connectivity and reduce fragmentation. “Retaining suitable habitat within and outside of the Southern Sierra Fisher Conservation Area is necessary to maintain linkage between the southern Sierra Nevada population and the population in northwest California.” (USDI Fish and Wildlife Service 2001, p. 134). “To facilitate recolonization, the Forest Service must provide sufficient habitat for fisher denning, resting, and foraging, and that habitat must be located in a manner that will promote the fisher’s occupation of, and movement throughout, the region.” (Barrett 2004a, p. 6). “The curtailment of habitat connectivity and genetic interchange between the southern Sierra Nevada fisher population and those in northwestern California ... may also result in the isolation of the southern Sierra Nevada fisher population, subjecting it to stochastic events and possible extirpation.” (USDI Fish and Wildlife Service 2001, p. 134).

The need to promote fisher habitat in the central and northern Sierra is particularly acute given that old forests are “considerably more vulnerable” in this region and generally “occur in scattered, isolated blocks and small patches.” (USDA Forest Service 2000, p. 3-7). “The loss of structurally complex forest and the loss and fragmentation of suitable habitat by roads and residential development have likely played significant roles in both the loss of fishers from the central and northern Sierra Nevada and the fisher’s failure to recolonize these areas.” (USDI Fish and Wildlife Service 2004, p. 18778).

(2) Impacts of the Project on the Fisher.

The Basin project allows for reduction of Forest Carnivore Network habitat, as well as eliminating canopy cover, snags and oaks from over 1,000 acres within the project area. As discussed in the SNFPC (2004), this habitat is crucial for fisher, yet the Basin project essentially provides no analysis of how fisher can survive in the project area given the QLG timber projects that will occur.

The implementation of group selection harvesting and other pilot projects is of particular concern in regards to the Pacific fisher, which needs to utilize precisely this habitat to reconnect its existing Northern and Southern sierra populations in order to avoid extirpation in the Sierra Nevada. (*See* SNFPC 2004, pp 28-41; (*See* 2001 ROD, App. A-4 (critical elements for Pacific fisher conservation include providing for suitable habitat linkages between southern and northern Sierra Nevada.)

The critical nature of the habitat affected by the Basin project is demonstrated by the detection of a fisher in the project area in 2002. (EA, p. 32.) The presence of fisher in this project area or nearby indicates that this area may ultimately provide a crucial corridor between Northern and Southern populations. As stated by Dr. Kucera, the "occurrence of this imperiled species within the project area increases the importance of protecting and restoring the remaining fisher habitat. Unfortunately, by allowing significant reduction of fisher habitat – particularly within the forest carnivore network that was established to enhance habitat connectivity – the Basin project will reduce the likelihood that the project area can support fisher or contribute to a viable and well-distributed fisher population in the northern Sierra."

The 2004 ROD directs the Forest Service to "minimize old forest habitat fragmentation," to assess fragmentation issues in the biological evaluation, to assess potential impacts on habitat connectivity, and to consider retaining forested linkages as part of "project-level analysis." (2004 ROD, pp. 53-54). Here, however, the Basin project simply states that 3 acres of old growth forest will be removed from the project, (Basin BE, App. D), without any description of whether existing habitat is adequate to allow for fisher (or marten) survival or whether adequate corridors exist to allow these species to move from one old forest area to the next. Thus, viability is not insured.

At the landscape scale, the 2004 Framework significantly weakens protection of fisher habitat in the central and northern Sierra. As forest carnivore expert Jeff Lewis concluded: "Fuel reduction treatments ... to the north of the occupied fisher area ... could prevent the expansion and recovery" of the southern Sierra population. (Lewis 2003a, p. 2). More specifically, the plan allows full implementation of the QLG pilot project, which will significantly increase the amount and intensity of logging in the northern Sierra Nevada.

The U.S. Fish and Wildlife Service has expressed its view that full implementation of the QLG project "poses a significant threat to the long-term viability of the California spotted owl, Pacific fisher, and American marten due to the loss, degradation, and fragmentation of suitable habitat." (USDI Fish and Wildlife Service 1999, p. 16). As stated by the Fish and Wildlife

Service in its consultation on the QLG pilot project, “the proposed action will disproportionately affect suitable habitat for [the fisher].... The Service is concerned that the proposed project will preclude recovery of this species within the project area and throughout the Sierra Nevada.” (*Ibid.*, p. 11). The Service expressed concerns regarding habitat loss, habitat fragmentation, and effects on prey species. (*Ibid.*, p. 11). The Service expressed particular concerns about construction of DFPZs in the QLG area, which may fragment habitat and limit fisher movement and dispersal, “limiting population expansion and colonization of unoccupied habitat ..., thus precluding future recovery options.” (*Ibid.*, pp. 11-12).

In sum, by allowing significantly increased logging in the central and northern Sierra Nevada, particularly within the QLG pilot project area, the 2004 Framework will reduce the likelihood of the fisher’s dispersal to and recolonization of this area, thereby threatening the viability of the fisher throughout the Sierra Nevada. (Barrett 2004; Kucera 2004b).

The BE acknowledges that implementing the Basin project will further reduce habitat connectivity for the fisher. The QLG ROD requires that “habitat connectivity ... would be maintained to allow movement of old forest ... dependent species between areas of suitable habitat.” (USDA Forest Service 1999c, p. 9). Because the Basin project would further impair habitat connectivity for the fisher, implementing the project would also be contrary to the QLG ROD.

2. The Basin Project Does Not Comply with NFMA’s Requirement to Conduct Monitoring to Evaluate Population Trends of At Risk or Management Indicator Species

To ensure the forest biological diversity is maintained, NFMA requires that the Forest Service identify Indicator Species, monitor their population trends, and evaluate each project alternative in terms of the impact on both Indicator Species habitat and Indicator Species populations. 16 USC 1604(g)(3)(B); *Idaho Sporting Cong., Inc. v. Rittenhouse*, 305 F.3d 957, 971-74 (9th Cir. 2002).

The 2004 ROD readopts Appendix E of the 2001 SNFPA FEIS, including the annual monitoring plan for various Management Indicator Species and Species At Risk (“MIS/SAR”) that are considered particularly vulnerable to impacts from National Forest management. (*See* 2004 ROD, p. 70; USDA Forest Service, 2001a, App. E, pp. 29, 63.)

The QLG FEIS states that a “fine filtered approach” is required at the project level to identify the specific effects to local wildlife species and populations, including information relating to evaluative factors such as CWHR habitat stage, habitat components and habitat trends. (QLG FEIS, App. AA, p. 7.) Thus, the Forest Service is required to provide this information for each MIS/SAR affected by this Project, including amounts and changes in habitat and all population trend data to support findings under NFMA.

The Basin Project does not meet these requirements for two reasons.

First, the Basin project provides little to no information whether there is sufficient quality habitat within the project area and within the PNF to insure positive population trends for identified MIS species. For "at risk species such as the spotted owl, marten, goshawk and fisher, this requires Appendix E requires detailed, forest wide habitat assessments relating to terrestrial system such as canopy gap characteristics, canopy cover layers, cover by species, snag and log density by decay class, decadent tree characteristics, microclimate characteristics, broken top live trees, trees with loose bark, stumps by decay class, presence of small, medium or large slash piles, density stumps by decay class, litter depth etc. (USDA Forest Service 2001a, Appendix E, p. E-20, Table E-6.)

The Basin project does not assess these characteristics. Nor does the Basin project direct such as assessment to particular sensitive species, such as the quality of spotted owl home ranges, or whether owl home range core areas will retain canopy coverage and connectivity after implementation of group selection, particularly in connection with future projects scheduled for the project area and the region. The Basin project does not assess the overall connectivity of the PNF's Forest Carnivore Network given the cumulative harvests that are being proposed. The Basin project does not provide forest-wide, or even project area information regarding whether the amount of remaining old growth forest or snag habitat is adequate for MIS identified in the BE.

Since the Basin project's habitat trend data is flawed, any species population trends based on such data are equally flawed. *See also Lands Council v. Powell*, 379 F.3d at 753-754. In *Lands Council*, the court rejected habitat data that was fifteen years old, with inaccurate canopy closure estimates, and insufficient data on snags. Here, the Basin project presents no data on these types of habitat attributes. Further, to the extent the Forest Service attempts to make this conclusion anyway, NEPA requires that "the public receive the underlying environmental data from which a Forest Service expert derived her opinion." *Idaho Sporting Cong. v. Thomas*, *supra*, 137 F.3d 1146, 1150 (9th Cir. 1998.)⁴

Second, the Basin project BE provides a description of MIS species including the California spotted owl, American marten, pileated woodpecker, Northern goshawk, mountain and foothill yellow-legged frogs, and western pond turtle. However, neither the BE, nor the EA or other project documents present population trend information for any of these species as required by NFMA, as necessary to establish an adequate environmental baseline for assessing project specific and cumulative impacts. Recent studies (*see e.g.*, Bock and Jones 2004), for example, indicate that the mere presence or absence – or relative abundance -- of a species in an area is not necessarily indicative of the trend of the local and regional population, a fact implicitly recognized in the Sierra Nevada Framework. (*See* USDA Forest Service 2001a, App. E, p. E-19, Table E-5.)

⁴ An agency must also "identify any methodologies used" and "make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the [EIS]." *40 C.F.R. § 1502.24*. Failure to provide this information "either vitiates a plaintiff's ability to challenge an agency action or results in the courts second guessing an agency's scientific conclusions." *Idaho Sporting Cong.*, 137 F.3d at 1150.

For the California spotted owl the BE states only that the USFWS found in 2002 that a listing of the spotted owl was not warranted, based on the protections provided to the owl by the Sierra Nevada Framework, that this finding was subject to a subsequent “management review” of the Framework decision and the results of an “Administrative Study” of the QLG pilot project, that management for the spotted owl is now controlled by the 2004 Framework ROD, that surveys have been conducted at a project level basis and a two year survey was conducted in the analysis area in 2002 and 2003, that there are 24 owl PACs in the analysis area, that 20 PACs are within 1/4 mile of a “treatment polygon, and that there are 22,929 acres of suitable owl nesting habitat and 7,660 acres of foraging habitat in the assessment area outside the PACs and SOHAs. (Basin BE, p. 30-31) This is not an adequate presentation of population trend information for the Forest.

For the American marten, the BE states that several thousand acres of carnivore habitat across the forest has been surveyed and that no observations of marten have been made or recorded within the analysis area. (BE, p. 32-33) This is not an adequate presentation of population trend information for the Forest.

For the pileated woodpecker Appendix B of the BE states that pileated woodpeckers are most found in association with remnant patches of old growth forest and areas of second growth forest with significant legacy of residual old growth trees, including large snags, require live tree canopy cover surrounding snag habitat for nesting, snag and downed woody material guidelines in 2004 Framework ROD are designed to protect snag dependent species. (BE, Appendix B.) This is not an adequate presentation of population trend information for the Forest.

For Northern goshawk, the BE states that surveys conducted in 2004 revealed active goshawk nesting and 4 additional PACs were created in 2004 (for a total in the analysis area of 13), and that there are 23,088 acres of suitable goshawk nesting habitat and 12,204 acres of foraging habitat in the assessment area outside the owl and goshawk PACs and SOHAs. (BE, p. 31-32) This is not an adequate presentation of population trend information for the Forest.

The surveys conducted do not conform to the annual forest wide monitoring required by Appendix E of the Sierra Nevada Framework FEIS, as adopted by the 2004 FSEIS. Nor do such surveys provide any basis for determining the relationship to between MIS viability and to ongoing habitat changes. *See* 36 C.F.R. § 219.19(a)(6). Moreover, spot surveys “do not ...begin to qualify as an accurate monitoring of population trends nor “vitate the Forest Service's reliance on the proxy on proxy method as a monitoring of population trends.” *Lands Council, supra*, 379 F.3d at 754.

3. The Basin Project is Inconsistent with Forest Plan

NFMA prohibits any site-specific activities that are inconsistent with the Forest Plan. *Inland Empire Pub. Lands Council v. United States Forest Serv.*, 88 F.3d 754, 757 (9th Cir. 1996 (“Site-specific projects must be consistent with the stage-one, forest-wide plan”); 16 U.S.C. § 1604(i.)

The Basin project does not comply with the 2004 Framework, which adopts the annual monitoring requirements of the Sierra Nevada Framework for MIS.

The Basin project also does not comply with the forest plan for the Plumas National Forest, which requires the Forest Service to maintain diversity and viability of resident wildlife species.

The Basin project also does not comply with the Forest Plan requirements for retention of oaks in group selection units. The Basin project acknowledges the value of oaks in the project area, noting that "individual oaks and oak communities profoundly affect the variety and abundance of wildlife." (BE, p.22.) Further, the "physical structure of oak communities determines the availability of shelter, nesting sites, and corridors for travel. Wildlife utilize oaks as places to hide, shade, and escape from predators and from fires." (*Id.*)

Despite the value of oaks to sensitive wildlife such as the spotted owl, marten and fisher, as well as various woodpecker species (*see* SNFPC 2004; BE, App. B), the Basin Decision Notice adopts an interpretation of the OLG FEIS/ROD and the 2004 ROD that allows the Forest Service to dispense with any oak retention standards in group selection units. (DN, p. 5.) This is unlawful for several reasons.

First, the 2004 ROD states that the Plumas National Forest shall implement the QLG pilot project consistent with Alternative 2 of the HFQLG EIS. (USDA Forest Service, 2004a, p. 66.) Alternative 2 of the HFQLG EIS requires that a minimum basal area of medium sized oaks be retained. The Forest Service's findings that Table 2 of the 2004 ROD conflicts with this retention standard because it does not address it is unfounded and not supported by the background polices supporting these documents.

Second, to the extent that the QLG oak retention standards are superseded by the 2004 ROD, because the 2004 ROD does not expressly address oak retention in its directive for the OLG pilot project, then the 2004 SEIS ROD oak retention standards must apply to this and other QLG projects. (*See* USDA Forest Service, 2004a, p. 53.) The Basin project currently violates this 2004 ROD standard.

Finally, if oak retention standards actually do not apply to the QLG pilot project, than the Forest Service has failed to conduct a cumulative impact analysis on the effects of future harvesting that will eliminate oak trees without compliance with former standards. We have reviewed, but seen no discussion of the environmental impacts of such a regulatory change in the 2004 Framework amendment documents nor the effects of species viability of dispensing with oak retention.

As noted above, appellants have established in their appeal of the 2004 Framework ROD that the forest plan amendment itself is illegal. However, that does not absolve the Forest Service of its responsibility to ensure that site-specific projects are consistent with the applicable forest plan.

RELIEF REQUESTED

Based upon information above, reverse the Plumas National Forest DN/FONSI for the Basin project and develop an alternative consistent with the Sierra Nevada Framework that avoids the negative impacts to habitat fostered by the 1998 QLG pilot project and the 2004 SNFPA ROD. Develop an alternative that minimizes the impacts to the spotted owl and other old forest dependent species while reaching fuels objectives and delivering resulting economic benefits without the negative impacts from increased logging.

B. The Basin Project Environmental Assessment, FONSI, and Decision Notice Do Not Comply with NEPA

1. The Basin Project has the Potential for Significant Impacts and thus an Environmental Impact Statement is Required

NEPA requires the preparation of a detailed Environmental Impact Statement ("EIS") for all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(C). To determine whether this project will have a significant effect, the Forest Service must prepare an EA. If the EA determines that there will be no significant effect, then an EIS need not be prepared. *Idaho Sporting Congress v. Rittenhouse*, 305 F.3d 957, 972 (9th Cir. 2002.) If the Forest Service finds that impacts are significant, however, an EIS is required. *Id.*

The Forest Service cannot avoid preparing an EIS by making conclusory assertions that an activity will have only an insignificant impact on the environment. *See Alaska Ctr. for Env't v. United States Forest Serv.*, 189 F.3d 851, 859 (9th Cir. 1999). Instead, the Forest Service must take a "hard look" at the potential impacts of a proposed timber plan, and, if it opts not to prepare an EIS, it must put forth a "convincing statement of reasons" that explain why the project will impact the environment no more than insignificantly. *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998).

Further, an "EIS must be prepared if 'substantial questions are raised as to whether a project . . . may cause significant degradation of some human environmental factor.'" *Idaho Sporting Cong. v. Thomas*, 137 F.3d 1146, 1149 (9th Cir. 1998) Thus, the public need not show that significant effects will in fact occur, but rather must raise "substantial questions whether a project may have a significant effect" for an EIS to be required, *Id.* at 1150. *See also* Greenpeace Action v. Franklin, 14 F.3d 1324, 1332 (9th Cir. 1992)).

In determining whether a federal action requires an EIS because it significantly affects the quality of the human environment, an agency must consider what "significantly" means. The regulations give it two components: context and intensity. 40 C.F.R. § 1508.27. Context refers to the setting in which the proposed action takes place. 40 C.F.R. § 1508.27(a). Intensity means "the severity of the impact." *Id.* § 1508.27(b). Here, the Forest Service must prepare an EIS for this project based on these factors.

In considering the severity of the potential environmental impact, a reviewing agency may consider up to ten factors that help inform the "significance" of a project, including the degree of impact on public health and safety, impacts on unique characteristics of the geographic

area, including proximity to an ecologically sensitive area, whether the action bears some relationship to other actions with individually insignificant but cumulatively significant impacts, the level of uncertainty of the risk and to what degree it involves unique or unknown risks, the level of controversy surrounding the environmental effects, and the degree to which the project may establish a precedent for future actions with significant effects. 40 C.F.R. § 1508.27(b) (2), (3), (4), (5), (6), & (7). Any one of these factors may be sufficient to require preparation of an EIS in appropriate circumstances. *See Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 731 (9th Cir. 2001).

This project will eliminate almost 1,200 acres of habitat suitable to California spotted owls and other forest wildlife. As discussed below, the impacts from this and other similar projects are significant and thus require the preparation of an EIS.

a. The Basin Group Selection Project Will Have Significant Impacts on California Spotted Owls

(1) Basin Project will Have Significant Impacts On Core Habitat

The Basin group selection will eliminate 399 acres of California spotted owl home range core area (HRCA) within the project area, 943 acres of suitable owl nesting habitat and 247 acres of foraging habitat. (BE, p. 50.) This elimination of spotted owl home range and home range core area and valuable nesting and foraging habitat, will have significant impacts on the environment.

The project EA does not provide the location of HRCAs or owl home ranges within the project area, nor provide any discussion of how the HRCAs function as a necessary habitat complement to the PACs in the project area. This lapse is critical, however, due to the importance of this habitat to owl survival and the owl's precarious viability in this Forest. (*See* Blakesley 2004; Verner 2003; Blakesley and Noon 2003; Noon 2004; Peery 2004; Bond 2003; Franklin et al. 2003.) As stated by Dr. Blakesley, "timber harvest within HRCAs may have significant impacts on spotted owl survival, reproduction and/or site occupancy. These potential impacts have not been adequately analyzed or disclosed in the EA." (Blakesley, 2004.)

The Sierra Nevada Framework strictly limited logging within HRCAs based on the recognition that spotted owls preferentially use core areas within their home ranges (Bingham and Noon 1997) and that degrading habitat within HRCAs will likely reduce survival and reproductive success (Bart 1995; USDA Forest Service 2001a, Volume 3, Chapter 3, part 4.4, pp. 92-93). The FSEIS recognizes that "California spotted owl occurrence and productivity appears to be significantly correlated with canopy cover composition within own home ranges." (FSEIS, p. 270). Yet the Basin project would allow group selection logging throughout owl home range core areas in the project and analysis area, which will "result in the removal of habitat attributes that provide quality nesting and foraging habitat." (FSEIS, p. 270).

(2) The Basin Project will Have Significant Cumulative Impacts on Owls Within Project Area

40 CFR § 1508.27 (b) (6) states that “whether the action is related to other actions with individually insignificant but cumulatively significant impacts” should be a factor in determining whether the potential effects of a project are significant. This regulation notes that “significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts should be a factor in determining whether the potential effects of a project are significant.” (*Id.*)

The group selection project eliminates present value habitat for spotted owls for the foreseeable future by eliminating conifers below 30" and all oaks below 21" dbh, and due to operability and safety removing "the majority of snags" in the 1215 acres of groups.” (Basin BE, p. 38.) The EA states that the amount of harvesting represents only a small fraction of the overall project area. (Basin EA, p. 18.) However, as discussed below, the cumulative impacts of this and other projects on the spotted owl are significant.

First, the EA does not present information showing how the Forest Service can conclude that the removal of 1,190 acres of nesting and foraging habitat will not have significant impacts to local owl populations by reducing the amount of habitat within their home range to less than 50% canopy cover over the project area.

The Framework found that productivity was positively correlated with the proportion of individual owl home ranges having greater than 50% canopy-cover and negatively correlated with the proportion having less than 50% canopy cover. (USDA Forest Service, 2001a, Chap. 3, part 4.4, p. 73 (owl’s preference for 50% canopy cover for foraging); p. 75 (“[T]he authors conclude that the threshold between canopy cover values that contribute to or detract from occurrence and productivity is a value near 50 percent.”) By allowing for harvesting of owl home range habitat, however, the Basin Project risks reducing owl home range area below the 50% threshold for canopy cover. The EA does not address this issue, nor provide any information regarding the overall canopy cover nor other habitat quality characteristics of remaining owl home ranges in the project area.

The scientific team assembled to assess the impacts of timber harvesting under the QLG has acknowledged that “[p]roposed landscape treatments may have effects at either, or both, the individual territory or owl site scale as expressed through change in occupancy, diet, use of vegetation patches, survival or reproduction.” (*See* Fire and Fuels Management, Landscape Dynamics, and Fish and Wildlife Resources: Study Design for Integrated Research on the Plumas and Lassen National Forests June 11, 2003 (“Administrative Study”), p. 19.) (cited as USDA Forest Service 2003b.)

The Administrative Study suggests that the sighting of a few group selection units within an HRCAs might not have significant impacts, but that a greater amount of harvesting, or any group selection units that harvested important foraging habitat in CSO territories, had the potential for significant impacts. (USDA Forest Service 2003b.) Here, however, the Basin Project proposes anywhere from 5 to over 30 groups within HRCAs in the project area, without any assessment of whether such habitat is important or crucial for foraging. (*See* BE, p. 50,

Table 6.) Appellants have conducted their own analysis and determined that many of the group selection units are located in high quality core foraging and even nesting habitat for owls. (*See* Britting 2004, Exs. 2-3.)

Moreover, as discussed above, many of the spotted owl PAC areas appear to be located near one another, implying that owls may be sharing home ranges and even home range core areas. Where such habitat is shared, the competition for resources is even greater, and the elimination of such habitat almost certain to cause significant impacts. (*See* Britting 2004, Exs. 2-3.)

Second, the EA does not present information showing how the Forest Service can conclude that owl pairs will not be isolated and fragmented in existing PACs within the project area. As stated in the Sierra Nevada Framework, the “degree to which 300 acre PACs will be adequate to maintain owl territories will depend on the distribution and abundance of suitable habitat surrounding PACs.” (USDA Forest Service, 2001a, Chap. 3, part 4.4, p. 85.) The QLG FEIS specifically recognizes the importance of avoiding habitat fragmentation due to timber harvest.

Distribution of habitat is as important as relative amounts of habitat because of the potential risks of habitat fragmentation and the subsequent isolation of wildlife populations. Short-term, rapid change in the distribution of habitat can lead to the isolation of individuals and populations. This can make mate location, pair bonding, juvenile dispersal, colonization or recolonization of suitable habitat, and genetic interchange more difficult. Particularly vulnerable are wildlife that are habitat specialists or have limited mobility, such as spotted owls (habitat specialist) and amphibians (habitat specialists with limited mobility).

(QLG FEIS Appendix AA, p. 13.) (emphasis added.) Appellants are unaware of any Forest Service analysis which explains how the removal of additional home range core habitat will not have potentially significant impacts on owl populations. As noted by the Framework:

PACs alone are not an adequate conservation strategy for maintaining a viable population of owls. They are important because they do provide protection to nest sites. However, the distribution and abundance of owl habitat around PACs and across the landscape are critical considerations that will determine the ultimate adequacy of a PAC-based conservation strategy for maintaining owl viability in the Sierra Nevada.

(USDA Forest Service, 2001a, Chap. 3, part 4.4, p. 85.) This finding is a continuation of the prior rejection by federal scientists of the SOHA strategy of isolating blocks of habitat from each other, which was found not to be a viable strategy for preserving owl populations. (*See* Verner 1992, p. 15 (“we expect that owl pairs in SOHAs would disappear at a relatively high rate, leaving the SOHAs unoccupied and at least temporarily nonfunctional.”))

The EA also states that owls (and other species) will be protected where “new nesting birds found.” However, as noted by the Sierra Nevada Framework. “protecting occupied, as well as suitable but unoccupied habitat, over the long term is important” to insure species viability. (USDA Forest Service, 2001a, Chap. 3, part 4.4, p. 82.) According to the Framework,

“[c]onservation efforts should therefore consider not only occupied habitat, but also suitable unoccupied habitats, in developing conservation strategies for species for which dispersal may function as a primary limiting factor.” (*Id.*)

In sum, as stated by owl biologist Monica Bond, forest "management should ensure: 1) that spotted owl PACs and HRCAs contain a sufficient amount of suitable nesting, roosting, and foraging habitat in as compact a spatial configuration as possible to maximize adult survival and reproduction, and 2) that a sufficient amount of suitable matrix habitat exists to maintain the population of floaters, allow for connectivity between home ranges, provide for juvenile dispersal, and minimize edge effects. In this way, spotted owl population declines might be halted and reversed. Unfortunately, the Basin Project is a step firmly in the wrong direction." (Bond 2004.)

(3) Basin Project May Cause Significant Impacts by Increasing the Presence of Barred Owls

The Basin project does not adequately address the potential for significant impacts from creating a mosaic of forest openings to which barred owls, a spotted owl predator, are better adapted. The BE acknowledges this threat by noting that barred owls have been detected in the area and that the potential for barred owls to “become established and compete with California spotted owls within the Basin project area is a possible additional cumulative effect, but at this point it is unknown as to what the extent of this effect will be.” (BE, p. 52; *See also* EA, p. 58.)

Concern for the California spotted owl population on the northern Sierra Nevada forests in interaction with barred owls is an important management issue. Competitive exclusion, increased aggression, predation, and hybridization between barred and spotted owls raise serious concerns for spotted owl survival in the Sierra Nevada. Barred owls have reached the Eldorado National Forest in the central Sierra Nevada in 2003, and the Sequoia National Forest in 2004 (G. Steger, pers. comm.). Barred owls have the potential to invade as far south as 38° N latitude (Peterson and Robins 2003). The authors recognize the effects of habitat fragmentation related to habitat invasion of Barred owl and also recommend more direct measures for combating the species invasion (*Id.* p. 1164)

Kelly *et al.* (2002), found dramatically increasing numbers of barred owls in her study area in western Oregon. She identified 706 barred Owl territories in Oregon between 1974 and 1998, with an average of 60 new territories found each year between 1989 and 1998. Kelly *et al.* results suggest, "that land managers and regulatory agencies should regard barred owls as a threat to spotted owls, particularly if barred owls continue to increase in numbers as they have during the past 25 years," (Kelly *et al.* p.45)

The Forest Service has confirmed increased sightings of barred owl recorded on the Plumas National Forest since 1992 (Feather River Ranger District, 2003). The Basin EA acknowledges that a male barred owl was located in the project area in 2004. (EA, p. 58) The EA states that an increase in barred owls due to forest fragmentation in combination with reduced habitat “could cumulatively reduced spotted owl numbers in the area.” (*Id.*) The reduction of spotted owl numbers in the area is a significant impact. As stated by Monica Bond

(2004), the "increased forest fragmentation in the Basin Group Selection Project is likely to facilitate the invasion of barred owls and lead to potentially significant impacts to spotted owls in the planning area and beyond." Since the Basin BE, and the evidence, demonstrate the potential for significant impacts, which may place the local spotted owl population at risk, from this invasive species, an EIS is required for this project.

(4) Basin Project May Cause Significant Impacts to Spotted Owls by Decreasing Flying Squirrel Populations

The EA does not acknowledge the impacts of group selection on flying squirrels, which are spotted owls preferred prey based in the mixed conifer and red-fir forest habitat above 4,000 feet. (Verner 1992, p.69.) The BE does acknowledge, however, that flying squirrels "would likely be absent within the group selection openings" and that "these small openings within the forest may be marginal for foraging spotted owls due to isolation from the forest interior." (Basin BE, p. 51.) This finding is consistent with the findings of the Fish and Wildlife service, which found that "[d]ue to the level of snag and large woody debris removal as proposed, the Service is concerned that [the pilot project] will remove suitable den sites and food sources of northern flying squirrels and consequently reduce the prey base for California spotted owls." (USDI Fish and Wildlife Service 1999, p. 10)

(5) Basin Project May Cause Significant Impacts by Increasing Predation by Great Horned Owls

The EA does not acknowledge that group selection may allow for predation on spotted owls by great horned owls, which are known to occupy the open habitat. The BE makes this assessment, however, noting that "[e]dges created by groups within suitable owl habitat may reduce the use of foraging habitat by spotted owls and increase use by great horned owls (an effective competitor and predator of the spotted owl." (Basin BE, p. 51.)

b. The Project Will Have Significant Impacts on Other Wildlife that Requires Old-Forest Habitat

The Basin project will eliminate forest habitat for other forest-dependent species such as the Northern goshawk, pileated woodpecker and American marten.

(1) Elimination of Canopy Cover Harms Forest Dependent Species

A number of species in addition to the spotted owl, including Northern goshawk, pileated woodpecker, American marten and Pacific fisher require high-canopy coverage for high quality habitat. Here, the Basin project estimates that canopy coverage within the group selection units will be approximately 10%. Our on-site observations indicate that many units will be essentially clear cuts, with no canopy cover whatsoever. Thus, this habitat will provide no useful nesting or foraging habitat for these forest species. The Basin project conducts no analysis to assess whether the creation of approximately 800 forest "openings" within the project area may serve to fragment existing blocks of habitat used by these species. This is true, as discussed above, as to

the project's failure to assess impacts to owl HRCAs, but it is also true with regard to other species, which also require a certain percentage of quality habitat within their home range to insure viability and avoid significant impacts.

(2) Elimination of Snags Harms Forest Dependent Species

For snag dependent species, the Basin project "would diminish snags and habitat." (EA, p. 57.) As discussed above, numerous forest species, including the owl, goshawk, marten and fisher and a number of woodpecker species are dependent on the presence of large snags distributed evenly across the landscape. (*See e.g.*, SNFPC 2004; USDI Fish and Wildlife Service 1999, p. 11 ("[F]or the fisher and marten, the removal of 'legacy elements' such as large snags and logs is of particular concern because these elements are important denning and/or travel areas.")); Basin BE, App. B ("The condition of snag dependent species is indicated by the woodpecker group, which includes 10 species on the Plumas NF," 8 of which "occur near or in the Basin project.")

The Basin project acknowledges that "past management practices, including logging, firewood cutting, road construction, and other activities, have probably led to a decline in the number of large diameter trees and snags in the project area, with a detrimental effect on associated wildlife" (Basin BE, p. 22). Further, as discussed, the Basin project is vague as to the extent of snag removal as part of the overall project, stating that 4 snags 15" or greater shall be retained be acre, but not acknowledging the actual size of the snags that will be retained, nor whether such snags will even be retained (*See* Basin BE, p. 38 ("it is anticipated that the majority of snags would be felled and few snags retained in the 1215 acres of groups.")).

Moreover, a number of these species, including the pileated woodpecker, white headed and downy woodpeckers, and the Williamson's sapsuckers, require larger snags surrounded by live tree cover. Since many snags have already been removed from the project area in past projects, there is no support for the Forest Service's finding that the loss of additional snags on the project will not have significant impacts on these species. Indeed, studies show that pileated woodpeckers, as an example, use at least four snag cavities each year, with only one of these being used for nesting purposes, and that the preferred size for such snags is approximately 30" (The Nature Conservancy 1999); Shroeder's (1982.)

(3) Impacts of this Project On Forest Carnivores are Significant

The Basin project acknowledges that it will have adverse impacts on habitat within the Forest Carnivore Network("FCN"), removing 424 acres or (2.4%) of the overall network, which "could result in habitat fragmentation within this subwatershed." (BE, p. 54.) The EA simply states, however, that "protection of ..PACs, consideration of the designated carnivore corridor, and protection of RHCAs would continue to provide connectivity between large blocks of suitable habitat for these carnivores." (EA, p. 59.) As discussed above, however, the preservation of PACs alone cannot avoid habitat fragmentation, and the Basin project does not appear to have given any particular consideration to the cumulative impacts of timber harvesting

within the project area on the FCN. In sum, the EA does not provide information as how “connectivity between large blocks of habitat” (BE, p. 55) shall be maintained.

(4) Project Area Level Cumulative Impacts are Significant

The EA does not assess the degree to which this project, in combination with other projects, will reduce habitat for other wildlife such as the Northern goshawk, American marten, Pacific fisher or pileated woodpecker. The loss of oak trees, as measured cumulatively across the project area in combination with other projects in the area will substantially reduce habitat for fisher and marten, as well as cavity nesting species. Another example is the lack of any analysis of the amount of old-growth habitat, snags or downed logs across the project area. Appendix D to the Basin BE states that only 3 acres of “old forest habitat” is affected by this project, but nowhere clarifies the amount of existing old growth within the project area that is available for wildlife species requiring such habitat for nesting, denning and roosting. As discussed below, the Basin “R-5 Strata Size 4” map in the Basin project file shows 29 group selection units in old forest strata >24” diameter trees, which is inconsistent with the above description of effects to old forest habitat.

In assessing these impacts, the EA and BE essentially rely on the avoidance of PACs, SOHAs and RHCAs to conclude that no significant cumulative impacts will occur. As discussed, however, the preservation of this habitat alone does not insure sufficient or connected (unfragmented) habitat for forest wildlife in the project area. Thus, this form of “tiering” is inadequate to demonstrate no significant impacts.

(5) Landscape Level Cumulative Impacts are Significant

As discussed below, projects at the landscape level, including at the scale of the QLG pilot project are both foreseeable and likely to have significant cumulative effects on forest wildlife species. Thus, an EIS is required.

c. This Project May Have Significant Impacts Due to Increase in Fire Risk in the Project Area

The proposed group selection will result in the virtual elimination of the forest canopy for approximately 800 units covering 1,215 acres. This change will create hotter, drier conditions on the ground, will allow increased wind speeds, and will accelerate the growth of flammable brush and of dense, flammable stands of small conifers. These conditions will not result in a more fire resilient forest but instead will increase the potential for and risk of severe fire in the Project area.

In addition, the Basin project proposes to replant group areas with “up to 435 trees per acre,” (EA, p. 9), an approach that is likely to establish an even-aged, single story canopy highly prone to crown fires. The Basin EA acknowledges this point, stating that “as new stands grow and pass the pole size class, fuel conditions would tend to become more hazardous.” (EA, p. 20.) The embedding of plantations in the existing and proposed DFPZs will increase the flammability and potential fire severity of the overall area.

In a recent fire severity study in the Klamath Mountains of California, researchers found “tree plantations experienced twice as much severe fire and multi-aged forests. Fire severity tended to increase with plantation age”, Odion et al. (2004 p.933). The Basin Group Selection Project proposes to embed 800 group selection openings (1,215 acres) in the forested landscape under the proposed action. These group selection cuts resemble small clear cuts (*see* Photo attached hereto) and will remove the majority of vegetation (regeneration harvest) and subsequently be reforested as plantations.

In the recent fire-severity study mentioned above, it was found that closed-forest vegetation had significantly less high severity fire than the burned landscape as a whole. Open forest and non-forest vegetation had considerably more high fire severity (Ibid.). Key (2000) studying the Dillon Creek Fire 1994, found that plantations and nearby vegetation burned more severely than natural forests. Stephens (1998) found that group selection cuts with slash treatments but without area treatments (such as the Basin project) exhibited spotting, torching and passive crown fire characteristic of severe fire behavior under 95 percentile fire weather conditions.

The Basin project proposes to simplify forest structure and increase fire susceptibility by implementing the group selection harvests in the proposed action. The Basin project, with plantations embedded in the current and planned DFPZs and remaining forested landscape, will be at greater risk of catastrophic fire, in stark contrast to the stated desired condition cited in the Basin EA p.10 and QLG FEIS at 2-19 calling for an “all-aged, multistoried, fire-resilient forest.” This action violates NEPA and is contrary to the best available fire science and is a prime example of the conflicted and arbitrary nature of this project. As noted by Dr. Blakesley, "group selections would remove suitable spotted owl habitat and create local areas with increased risk of fire in the short term." (Blakesley 2004, p. 4.) Further, embedding group selection units within thinned areas of forest, as the Basin project has done, "would decrease the effectiveness of the thinned areas as fuel breaks (Odian et al. 2004), while simultaneously removing suitable spotted owl habitat." (Blakesley 2004, p. 5.)

d. An EIS is Required Due to the Highly Uncertain and Unique Risks Posed by Group Selection in Sensitive Habitat Areas

40 CFR § 1508.27 (b) (5) states that “the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks’ should be a factor in determining whether the potential effects of a project are significant. Similarly, court decisions find that "general statements about ‘possible" effects’ and ‘some risk’ do not constitute a ‘hard look’ absent a justification regarding why more definitive information could not be provided." *Neighbors of Cuddy Mountain v. United States Forest Service*, 137 F.3d 1372, 1380 (9th Cir. 1998). Nor is it appropriate to defer consideration of cumulative impacts to a future date since "NEPA requires consideration of the potential impact of an action before the action takes place." *Id.*

Here, the EA, BE and other NEPA review documents demonstrate the uncertainty regarding the degree of significant environmental effects from this and other group selection projects in the region to wildlife species in the region. As noted by the Administrative Study:

The reason that a rigorous study design is required to address group selection effects is because it is not possible to detect the effects of 1-2 acre openings scattered in relatively small numbers across the 500-1000 acre core area or 2000-4000 acre home range of a CSO pair. A few groups scattered across a core area or home range will likely not have detectable effects as determined by monitoring CSO survival and reproduction unless the groups are concentrated in specific nesting patches or happen to be located within important foraging habitat in CSO territories areas where it is rare.

(USDA Forest Service 2003b.) Here, however, the Basin Project proposes from approximately 5 to over 30 groups within HRCAs in the project area, and provides no information whether such habitat is important for foraging. *See* BE, p. 50, Table 6. Thus, at best, the Forest Service must find considerable uncertainty whether owl populations can be protected.

This uncertainty is even greater at the landscape level of cumulative impacts. (USDA Forest Service 2001a, Chap. 3, part 4.4, p. 112. ("Uncertainty exists regarding how the distribution and abundance of habitat at landscape or regional spatial scales affects the number and distribution of owl territories across the landscape and connectivity and dispersal among territories. Understanding these dynamics is important because research on population dynamics at larger scales has suggested the possible existence of habitat thresholds, below which populations may go extinct in the presence of suitable habitat due to constraints on successful dispersal."))

The Basin project BE acknowledges the uncertain impacts from this project, stating that the project "may add to cumulative effects in a way that would affect individual California spotted owls and change their distribution of habitat" because it is part of the larger QLG pilot project.(BE, p. 52.) This finding is consistent with the findings of the Administrative Study, which acknowledge that:

Key uncertainties regard the effects of landscape-scale fuels treatments strategies that thin large areas of forest on CSO density, population trends, and habitat suitability at the landscape scale and how thinning effects habitat quality at the core area/home range scale.

(USDA Forest Service 2003b.) Indeed, the very fact that such a study acknowledging the uncertainty of impacts is occurring indicates the need for the Forest Service to prepare an EIS on the cumulative impacts of this project.

The Basin project also acknowledges the potential threat from barred owls, which "could" have significant impacts on spotted owls in the project area and beyond:

The potential for barred owls to become established and compete with California spotted owls within the Basin project area is a possible additional cumulative effect, but at this point it is unknown as to what the extent of this effect will be."

(Basin BE, p. 52.)

Other points of uncertainty regarding the potential for significant impacts from this project include:

- The risk of increasing fire danger in the project area due to increasing gap openings and by replacing such openings over time with crowded pine plantations;
- The uncertain effects of group selection on FCNs in the absence of information regarding local presence and population trends for fisher and marten.
- The lack of required monitoring and population trend analysis generally for species at risk and MIS.

e. An EIS is Required Due to the Significant Public Controversy Surrounding the Implementation of the QLG Pilot Project

40 CFR § 1508.27 (b) (5) states that “the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks” should be a factor in determining whether the potential effects of a project are significant.

Here the evidence in the record demonstrating extensive disagreement within the scientific community regarding the impacts of implementing the 1998 H-F QLG Pilot Project (*See* SNFPA 2003 DSEIS comments and SNFPA appeal of the 2004 ROD/FSEIS.) This controversy requires the preparation of an EIS. (*See also* Bond 2004; Blakesley 2004.)

f. An EIS is Required Since this Project May Establish a Precedent for Future Actions with Significant Effects or Represents a Decision in Principle about a Future Consideration

40 CFR § 1508.27 (b) (6) states that “the degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration” should be a factor in determining whether the potential effects of a project are significant.

This project establishes a precedent for future group selection and implementation of the QLG pilot project without an adequate cumulative impact assessment in place. Thus, an EIS is required.

g. An EIS is Required for this Project Since it Threatens to Violate Federal Law

40 CFR § 1508.27 (b) (10) states that “whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment” should be a

factor in determining whether the potential effects of a project are significant. Here, the Basin project threatens to violate a number of federal laws, as discussed in this appeal, including:

- NFMA requirement that Forest Service insure continued diversity of plant and animal communities and the continued viability of populations of existing native and desired nonnative vertebrate species in the planning area." 16 U.S.C. § 1604(g)(3)(B); 36 C.F.R. § 219.19.
- QLG ROD requirement that "habitat connectivity...be maintained to allow movement of old forest ...species between areas of suitable habitat." (QLG ROD, p. 9.)
- QLG FEIS and 2004 SEIS Oak Retention standards not being followed in these group selections

h. The Forest Service Must Take into Account Short Term Impacts of Logging Projects on Local Wildlife

In considering whether an action will "significantly" affect the environment, 40 C.F.R. § 1508.27 requires the Forest Service to assess "[b]oth short- and long-term effects."

The Basin project asserts that "long term projections for the amount of suitable habitat in the Sierra Nevada...are favorable to these old-forest dependent species" (Basin EA, p. 18), but does not make any assessment of short term impacts from removing substantial amounts of forest habitat and replacing it with groups of planted young trees.

As discussed below, Appellants do not believe there is any valid scientifically based, programmatic environmental assessment upon which the Forest Service can rely to assert that in the long term, impacts to wildlife from QLG projects will be insignificant. However, even if that were the case, short term impacts may well be significant to sensitive species such as the spotted owl, goshawk, marten and fisher. Framework scientists specifically found that timber harvesting poses serious short term risks to the owl due to habitat fragmentation:

[R]etaining existing suitable habitat and improving habitat conditions over the next couple of decades may be particularly important for stabilizing owl populations. Research into population dynamics at larger scales has suggested the possible existence of habitat thresholds, below which populations may go extinct in the presence of suitable habitat due to constraints on successful dispersal. With current population declines, vegetation treatment impacts over a short time period may involve risks to the spotted owl population that are not evident by considering longer-term habitat projections alone.

(*See e.g.*, USDA Forest Service, 2001a, Chap. 3, part 4.4, p. 95. *See also id.* at p. 96 ("[W]here a greater proportion of owl home ranges have less than desired amounts of habitat to begin with, reducing the amount of habitat within the few home ranges that exceed the habitat threshold, prior to increasing amounts of habitat in other owl home ranges, could increase the risk of worsening conditions and increasing nearest neighbor distances for owl sites within these areas.)) These same findings apply to other sensitive forest species. (*See e.g.*, SNFPC 2004.)

Thus, the Forest Service may not ignore the short term impacts of removing valuable forest habitat, including portions of sensitive species' home ranges, through this and other related timber projects.

RELIEF REQUESTED

Reverse the Plumas National Forest DN/FONSI for failing to address the potential significant impacts of the Basin project.

2. Basin Project EA Did Not Proceed in a Lawful Manner in Assessing Cumulative Impacts

NEPA requires the Forest Service to assess the cumulative impacts of a proposed project in light of that project's interaction with the effects of past, current, and reasonably foreseeable future projects. *See* 40 C.F.R. §§ 1508.7, 1508.25; 1508.27(b)(7). *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 894-895 (9th Cir. 2002); *Neighbors of Cuddy Mountain v. United States Forest Serv.*, 137 F.3d 1372, 1379-80 (9th Cir. 1998); *Muckleshoot Indian Tribe v. United States Forest Serv.*, 177 F.3d 800, 809-10 (9th Cir. 1999.) Cumulative impact "is the impact on the environment which results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions." 40 C.F.R. §§ 1508.7 Cumulative impacts "can result from individually minor but collectively significant actions taking place over a period of time." *Id.*

The Forest Service must assess cumulative impacts when it prepares an EA. *Native Ecosystems Council, supra*, 304 F.3d at 895-896; *Kern v. United States Bureau of Land Management*, 284 F.3d 1062, 1078 (9th Cir. 2002); 40 C.F.R. § 1508.9(a.)

In addition, the Forest Service must assess cumulative impacts not only on the local project level scale, but also on whatever larger geographical area is appropriate given the impact being assessed. *See Native Ecosystems Council, supra*, 304 F.3d at 897 (forest service must assess cumulative impacts within an area that encompasses additive effects of project.)

Here, the cumulative effects of this project and other past of past, current, and reasonably foreseeable future projects may have significant impacts on the owl and other sensitive forest species, both within the project area, the QLG Pilot Project area, and at the landscape level.

The EA assesses cumulative impacts within the project area, which is defined by the group selection polygons and totals 38,893 acres (EA, p. 1). The EA states that the project will contribute to cumulative impacts due to habitat modification and removal of snags and oaks (EA, pp. 58-59). The EA states, however, that "the proposed action is not expected to materially contribute to loss or degradation of suitable habitat or disturbance effects, because direct/indirect effects previously described would be small." As discussed below, this procedure is unlawful, since it does not address the cumulative impacts of timber harvesting in the project area.

In addition, the EA deflects all cumulative impact analysis under the Basin project by tiering to the 1999 QLG FEIS and 2004 Framework FEIS. As discussed below, this procedure is also unlawful since the Framework's analysis is incomplete and uncertain, and even if adequate as a programmatic document, would not substitute for a project specific cumulative impact analysis. (Section V.B.5.3, *infra.*) Indeed, the QLG EIS also acknowledges the potential for cumulative impacts from implementation of logging projects under the QLG plan, stating that "[f]urther cumulative effects analysis on wildlife habitat will be conducted at the project level." QLG App. AA, 12-13.

In sum, the EA does not even consider the fact that the cumulative impacts of the Basin project, combined with other past, present and foreseeable future actions in the project area will be significant. Instead, the Basin EA describes the impacts of prior timber harvests in general terms (pp. 55-58) as having "changed the tree species composition and structure of the forest." According to the EA, the "most important effect is the loss of large trees and snags, which decreases the habitat values" for all a number of forest wildlife including spotted owls. (*Id.* at 57.) Despite this acknowledgment, however, the EA does not provide additional information as to why additional removal of nesting and foraging habitat for such species does not have the potential for significant environmental effects. (*See* USDA Forest Service, 2001a, Chap. 3, part 4.4, p. 75.) The EA does not estimate the cumulative effects of changes to these "vegetation type, timber age classes, community composition, rotation age, and year-long suitability of habitat related to mobility" of sensitive species such as the spotted owl," 36 C.F.R. § 219.19(a)(1), which is required under NEPA. *See Neighbors of Cuddy Mountain v. United States Forest Service*, 137 F.3d 1372, 1380 (9th Cir. 1998).

a. Forest Service Improperly Compared Size of Project to Non-Project Area to Assess Cumulative Impacts

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." 40 C.F.R. § 1508.7 . "Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." *Id.*

The Basin EA states that "the proposed action is not expected to materially contribute to loss or degradation of suitable habitat or disturbance effects, because direct/indirect effects previously described would be small." (EA, p. 58.) The Basin EA provides support for this argument by comparing the size of the Basin project to the overall acreage covered by the Sierra Nevada Forest Plan Amendment (11,535,000 acres), the HFQLG Pilot Project area (2,422,000 acres) and the Plumas National Forest (1,168,000 acres.) This comparison is irrelevant for the purposes of assessing cumulative impacts and thus cannot provide the basis for finding that the cumulative impacts of this project, added to other past, present, and reasonably foreseeable future actions, is insignificant.

As set forth in 40 C.F.R. § 1527(b)(7), significance cannot be avoided by terming an action temporary or by breaking it down into small component parts. Instead, it is the magnitude of the cumulative effect of the project in question, when *added* to other past, present, and reasonably foreseeable future actions that determines whether an impact is potentially

significant. 40 C.F.R. § 1508.7 . Thus, numerous case decisions have found the potential for cumulative impacts from “*individually minor* but collectively significant actions taking place over a period of time.” *Id.* (emphasis added.) See *Muckleshoot Indian Tribe v. United States Forest Serv.*, *supra*, 177 F.3d 800 (requiring EIS for land exchange that totaled less than one percent of national forest); *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208 (requiring EIS for timber sale that represented less than 3/10ths of one percent of the land area within the Umatilla National Forest); *Idaho Sporting Cong. v. Thomas*, *supra*, 137 F.3d 1146,(requiring EIS for timber sale that represented less than 5/100ths of one percent of the land area within the Targhee National Forest.)

Thus, the Forest Service cannot rely on the small size of this project, in comparison to Sierra Nevada or region wide projects, to avoid a cumulative impact analysis.

b. Forest Service Did Not List Past Projects Contributing to Habitat Degradation within Project Area

The Forest Service must include a "useful analysis of past, present and future projects. This requires ‘discussion of how [future] projects together with the proposed project...will affect [the environment].’” *Muckleshoot Indian Tribe v. United States Forest Serv.*, *supra*, 177 F. 3d at 810. Detail is therefore required in describing the cumulative effects of a proposed action with other proposed actions. *Id.*

The failure to identify specific projects prevents the decision-maker from knowing what projects have been included and therefore from making an informed decision. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). This incomplete analysis violates NEPA, which requires that an EIS "catalogue adequately the relevant past projects in the area". *Muckleshoot*, *supra*.

The EA lists several past projects, including 5260 acres of Defensible Fuel Profile Zone (thinning) and 800 acres of group selection planned in 4 projects within the Basin Project area (Haskins Oak-Interface, Big Sky, Four Granite and Letterbox,) but does not assess the cumulative impacts that may occur, referring instead to vague or uncertain statements such as “changes in species composition have mixed effects” (EA, p. 57) or cumulative impacts of project “could cumulatively reduce spotted owl numbers in the area.” (EA, p. 58.) General statements about "possible" effects and "some risk," however, do not constitute a "hard look" absent a justification regarding why more definitive information could not be provided. See, e.g., *Neighbors of Cuddy Mountain*, *supra*, 137 F.3d at 1380. *Lands Council v. Powell*, 379 F.3d 738 (9th Cir. 2004) *Muckleshoot Indian Tribe v. United States Forest Serv.*, *supra*, 177 F.3d at 809-10.

To the extent the Basin project lists past, present and future projects within the project area, it does little more than simply point to their existence, without any analysis that would allow a decision-maker to make an informed decision regarding the potential for cumulative impacts, nor does it inform the public in any meaningful way how prior project have caused impacts to the project area. Here, the Basin project is essentially prescribing more timber harvest to remedy the harmful effects of past timber harvest. If it is forced to actually detail the harm

caused by past timber harvest, then the Forest Service will be unable to explain why this timber harvest will not cause similar harm.

c. Forest Service Unlawfully Segmented Environmental Review of this and Other Connected Projects in the Area

A single NEPA review document is required for distinct projects when there is a single proposal governing the projects or when the projects are connected, cumulative, or similar actions under the regulations implementing NEPA. 40 C.F.R. § 1508.25(a)(1); *Native Ecosystems, supra*, 304 F.3d at 893-94; *Thomas v. Peterson*, 753 F.2d 754, 758 (9th Cir. 1985).

Here, the Basin project was part of the 2004 implementation of the QLG pilot project in this region of the Plumas National Forest, which includes the projects occurring in the vicinity of the Basin project, as listed on pages 44-45 of the Basin BE, as well as a host of other projects within the geographic scope of the QLG pilot project. In addition, the Basin project and future group selection, ITS and DFPZ projects promulgated as component parts of the QLG Act pilot project are connected actions within the meaning of 40 C.F.R. § 1508.25(a)(1) because they are closely related interdependent parts of a larger action (the QLG pilot project) and thus depend on the larger action for their justification, and are also cumulative and similar within the meaning of 40 C.F.R. § 1508.25(a)(2)-(3.) These projects include Projects in proximity to one another (Basin, Meadow Valley, Upper and Lower Slate, South Fork, Bald Onion, Brush Creek, Slapjack, Watdog, Sugar Etals, and Bald Mountain; BA/BE pp. 44-45). (*See* BA/BE p. 44; Blakesley 2004.)

Because all these projects are connected, cumulative and similar under 40 C.F.R. § 1508.25(a), their impacts on the regional environmental should have been considered in a single EIS. As discussed below, the Forest Service may not tier to the 1999 QLG FEIS or the 2004 Framework FSEIS to avoid this requirement.

d. Basin Project Fails to Consider Cumulative Impacts at the Appropriate Scale

Under NEPA, the Forest Service is required to consider cumulative effects of projects and activities outside of a proposed project area, where such projects are foreseeable and likely to affect the resource in question. *Native Ecosystems Council v. Dombeck, supra*, 304 F.3d at 897 (“Because the amendments are reasonably foreseeable and may have cumulative impacts within the Gallatin National Forest, the Forest Service has a duty to consider them in its analysis of impacts within the Darroch-Eagle EA.”); *Kern v. U.S. Bureau of Land Management*, 284 F. 3d 1062, 1078-1079 (9th Cir. 2002) (holding that cumulative impact analysis must include “reasonably foreseeable future actions” outside the geographic area but within the range of the Port Orford Cedar, the affected resource at issue); 40 C.F.R. § 1508.7.

As discussed, the Basin project will have cumulative impacts at the project, owl home range and landscape levels. Here, the EA does not list any projects outside the project area, which precluded any meaningful cumulative impact analysis of effects at the owl home range

and landscape level. This approach is contrary to law because projects at these larger scales are 1) reasonably foreseeable; and 2) likely to affect spotted owls and other forest sensitive species.

(1) Future Projects are Foreseeable at the Home Range and Landscape Scale

At the home range scale, there are a number of projects occurring within the immediate vicinity of the of spotted owls, goshawks, fishers, martens and other forest species. The BE lists a number of other projects occurring adjacent or in the near vicinity of the project area (BE, p. 44- 45) but the Basin project does not include these projects within its assessment of cumulative impacts. These projects are foreseeable, however, and thus must be considered in a cumulative impact assessment to the extent they may contribute to cumulative effects .

At the landscape scale, the implementation of the QLG pilot project is a foreseeable event, which the Forest Service has already planned for and scheduled through 2009. The QLG pilot supports a network of DFPZs, Group Selection and Individual Tree Selection units with potential significant impacts to the environment. The list of currently planned projects is contained in the OLG Pilot Project FY2004 Program of Work and the FY2005 to FY2009 Implementation Plan at www.fs.fed.us/r5/hfqlg/impplan/index.shtml. and include a number of projects in proximity to one another (Basin, Meadow Valley, Upper and Lower Slate, South Fork, Bald Onion, Brush Creek, Slapjack, Watdog, Sugar Etals, and Bald Mountain; BA/BE pp. 44-45). These projects are foreseeable (with both acreage and sawlog volumes identified for the projects) and thus must be considered in any cumulative impact analysis to the extent relevant to assessing impacts to the affected resource. *Kern v. U.S. Bureau of Land Management, supra*, 284 F. 3d at 1078-1079 (reasonably foreseeable timber sales outside of a project area combined with sales inside a project area, could constitute "collectively significant actions.....over a period of time.")

(2) Cumulative Impacts Will Affect Owls, Fishers and Other Forest Wildlife at the Home Range and Landscape Scale

The Sierra Nevada Framework also found that the California spotted owl utilizes and selects habitat at three different spatial scales: nest, roost, or foraging stand; home range or core area; and landscape. (USDA Forest Service 2001a, Volume 3, Chapter 3, part 4.4, p. 72. *See also id.* at 82 ("Conservation measures must consider habitat distribution, abundance, and quality at the landscape, home range, and stand-level scales."))

The Sierra Nevada Framework also found that timber harvesting could have significant impacts only detectable at the home range scale:

Reproduction would drop below replacement rate at some threshold percentage of suitable habitat between 30 and 50 percent in home ranges and in the larger landscape in general. Recently completed analysis in the Sierra National Forest demographic study area concludes that canopy cover composition within owl home ranges is significantly correlated with owl occurrence and productivity Productivity was positively correlated with the proportion of

the analysis area having greater than 50% canopy cover and negatively correlated with the proportion having less than 50% canopy cover. The values ranged from 75% of the smallest analysis area (178 acres) with greater than 50% canopy cover to 60% of the largest analysis area (1,062 acres) having greater than 50% canopy cover.

(USDA Forest Service, 2001a, Chap. 3, part 4.4, p. 76.)

At the landscape scale, suitable habitat must be distributed across the Sierra Nevada in a manner that is consistent with spotted owl life history. The spatial distribution of owl home ranges was an important consideration in the development of both the conservation strategy for the northern Spotted Owl (Thomas et al. 1990) and the interim guidelines for the California Spotted Owl (Verner et al. 1992). Both plans considered it important that enough home ranges be located in close proximity so that dispersing juveniles had a high probability of locating vacant territories and recruiting into the population.

The Framework states the importance of assessing impacts to the owl at a regional landscape level:

At the landscape scale, the issue is to provide for sufficient amounts and distribution of high quality habitat to facilitate natal and breeding dispersal among territories and to maintain California spotted owls well-distributed throughout their historic range in the Sierra Nevada. For this purpose, protecting occupied, as well as suitable but unoccupied habitat, over the long term is important at this scale. A species with obligate dispersal and experiencing habitat limitation would be expected to show a pattern of less than full occupancy of habitat due to the uncertainty of the search process and the survival costs associated with searching for low-density habitat. [] Conservation efforts should therefore consider not only occupied habitat, but also suitable unoccupied habitats, in developing conservation strategies for species for which dispersal may function as a primary limiting factor.

(USDA Forest Service, 2001a, Chap. 3, part 4.4, p. 82.) The need for a landscape level identification of suitable habitat is in part due to the recognition by federal scientists that owls may disperse across large areas encompassing many watersheds and that such dispersal can be expected to occur "in random directions, with no relation between dispersal direction and the geographic orientation of drainages or ridges." (*See e.g.*, Verner 1992, p. 66 (Technical Report describes dispersing juvenile owls ranging from 2.1 to 68 miles from natal area).

Thus, the regional Framework assessment was designed to maintain interconnected habitat to allow for successful dispersal between populations so as to avoid population fragmentation. The Technical Report describes the importance of dispersal to spotted owl viability:

Successful dispersal is essential for population viability. Without it, a population will slowly decline to extinction, because deceased individuals in the breeding population will not be replaced by recruits from dispersing juveniles or adults that have been displaced or have not yet secured a territory. ...The distance between adjacent pairs or groups of breeding owls

should be such that dispersal of juveniles can replace losses (deaths or emigrations) among existing pairs and provide for colonization of suitable, unoccupied habitats.

(Verner, 1992, p. 66.)

The federal recognition regarding the importance of avoiding habitat fragmentation was recognized by the QLG planners, who required that “habitat connectivity... would be maintained to allow movement of old forest ...species between areas of suitable habitat.” (QLG ROD, p. 9.) In fact, the QLG planners specifically noted the “risk of habitat fragmentation and isolation” from “the changes in *landscape* patterns and habitat connectivity” and “changes to habitat conditions for forest interior species (such as the California spotted owl). (QLG ROD, App. AA, p. 13 (emphasis added).)

Finally, the Administrative Study, designed to assess impacts of the QLG Pilot Project, acknowledges the necessity of assessing impacts from forest management at the landscape level.

Landscape fuels treatment strategies are implemented at large spatial scales and will be the dominant management activity affecting CSOs and the forest landscape. Resulting changes in vegetation structure and composition from treatments may affect [California spotted owls] and their habitat at multiple spatial and temporal scales. Key uncertainties regard the effects of landscape-scale fuels treatments strategies that thin large areas of forest on CSO density, population trends, and habitat suitability at the landscape scale and how thinning effects habitat quality at the core area/home range scale....It is necessary that research address management effects on CSOs at the appropriate scales at which management is being conducted. Proposed landscape treatments may have effects at either, or both, the individual territory or owl site scale as expressed through change in occupancy, diet, use of vegetation patches, survival or reproduction, or at the population level as expressed through change in the density or spatial distribution of territorial breeding pairs at the landscape-scale. The individual site scale and population level perspectives are complementary in that the population level provides context for interpreting change at the site scale. Most importantly, both perspectives are required by managers concerned with managing for high habitat quality sites, as well as, well-distributed, viable populations across landscapes while implementing management strategies to deal with large-scale fire and fuels issues.

(USDA Forest Service 2003b.)

Thus, the Forest Service is required to assess the cumulative impacts of the Basin project as the home range and landscape scales, which extend beyond the “project area” identified for the Basin project cumulative impact assessment.

e. Forest Service May Not Avoid Meaningful Cumulative Impact Assessment by Simply Tiering this Project to the 2004 Framework FSEIS or the 1999 QLG FEIS

CEQ regulations allow the Forest Service to “tier” the environmental analysis in a specific project to a previously completed program-level EIS. *See* 40 C.F.R. § 1508.28.

("Tiering refers to the coverage of general matters in broader environmental impact statements . . . with subsequent narrower statements or environmental analyses.") However, the existence of a programmatic EIS for a forest plan does not obviate the need for a future project-specific EIS, without regard to the nature or magnitude of a project. *See Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1214 (9th Cir. 1998.) Instead, a subsequent EIS is required where a project has the potential to cause impacts not previously addressed or found to be insignificant in prior environmental review documents prepared in compliance with NEPA requirements. *See e.g., Blue Mountains Biodiversity Project, supra*, 161 F.3d at 1214; *Muckleshoot Indian Tribe v. United States Forest Serv., supra*, 177 F.3d at 810 ("Our review of the Forest Plan and its accompanying EIS reveals that those documents do not account for the specific impacts of the Exchange and do not remedy the Forest Service's failure to account for the impacts of the Exchange in the Huckleberry Exchange EIS"); *Resources Ltd. v. Robertson*, 35 F.3d 1300, 1306 (9th Cir. 1993) ("specific analysis is better done when a specific development action is to be taken, not at the programmatic level.")

The Basin project does not conduct a meaningful cumulative impact analysis, based on its finding that all necessary programmatic review for the project was conducted in the 1999 QLG FEIS and the 2004 Framework SFEIS. This approach is unlawful, however, since these documents cannot preclude a meaningful cumulative impact assessment at the project and landscape level for several reasons.

First, the documents themselves envision that the Forest Service will conduct meaningful cumulative impact review when assessing the impacts of individual projects. For example, the QLG FEIS acknowledges the potential for cumulative impacts from implementation of logging projects under the QLG plan, stating that "[f]urther cumulative effects analysis on wildlife habitat will be conducted at the project level." QLG App. AA, 12-13.

In addition, both the 2004 Framework FSEIS and the accompanying biological evaluation clearly recognized the limitations of the bio-regional modeling presented in the FSEIS and the need for need for site-specific analysis during project planning. As the Forest Service stated in the FSEIS:

The modeling for the SNFPA provides a relative comparison of bioregional-scale effects of the alternatives on vegetation and habitat over time. It also provides information to the decision maker and public regarding potential spatial effects, for example numbers of PACs potentially treated, acres in home range core areas potentially treated, and so forth. However, the SEIS presents a programmatic level analysis. *Site-specific effects will be analyzed and mitigation measures will be developed when actual projects are planned and designed on the ground. Biological evaluations will also be developed at the site-specific project scale.*

(USDA Forest Service 2004a, Volume 2, Response to Comments, p. 118, emphasis added) Similarly, in the November 25, 2003 biological opinion that accompanied the FSEIS, the Forest Service stated:

The documentation in the FSEIS and this letter constitutes the programmatic Biological Evaluation for sensitive animal and plant species that are known or are suspected to occur within the planning area . . . Forest Service policy specifies that Biological Evaluations will be prepared for all project-level actions that are proposed to implement the selected alternative. The programmatic Biological Evaluation will provide a baseline to consider bioregional cumulative effects in these project-level analyses. *These project-level Biological Evaluations will be able to consider the spatial and temporal direct, indirect, and cumulative effects at the local scale and will make independent determinations for each affected sensitive species.*

(Biological Evaluation, p. 2, emphasis added) *See also* USDA 2004(a) Vol. 2, p. 43 ("The analysis for the SEIS recognizes that actual effects to resources must be evaluated site-specifically while considering larger scale cumulative effects.")

Accordingly, relying upon the FSEIS to support such a site-specific finding, particularly when the FSEIS failed to address site-specific impacts or adequately to consider cumulative impacts, would be legally inadequate. Instead, the environmental review document prepared for this Project must assess the impacts of this project as one segment of the overall QLG pilot project on sensitive species, including determinations at the project level with respect to species viability and the potential trend towards federal listing. *See, e.g., Sierra Club v. Block*, 576 F. Supp. 959 (D. Or. 1983) ("A programmatic EIS will often be insufficient as it relates to site-specific actions. This may be because it does not contain sufficient detail to satisfy NEPA requirements, or because new information is revealed subsequent to its preparation.").

Second, to the extent there are differences in assumptions or information between previous programmatic environmental review and the review necessary for this project, the Forest Service may not tier to these programmatic documents. For example, the Forest Service made numerous assumptions in modeling the 2004 ROD in the FSEIS that were not incorporated into the plan's standards and guidelines (SNFPC *et al.* 2004, pp. 110-113), and thus the Forest Service must disclose the extent to which this project is consistent or inconsistent with the 2004 ROD *as modeled in the FSEIS*. To the extent that this project is not consistent with the 2004 ROD, as modeled in the FSEIS, the environmental assessment must carefully analyze the differences, including cumulative impacts.

In addition, the Forest Service should disclose other important Standards and Guidelines contained in the specific Land and Resource Management Plan that are not identified in the 2004 Framework ROD. An explanation of forest plan consistency should be provided with each site-specific analysis.

Finally, as discussed more fully in SNFPC (2004), the 2004 Framework decision did not adequately respond to the findings of the 1999 QLG FEIS BE and Sierra Nevada Framework decision that full implementation of the QLG pilot project would have significant adverse impacts on wildlife, particularly the spotted owl, fisher and marten, and would not insure viability for these species. As discussed, the 1999 QLG FEIS BE found that implementation of the OLG pilot project would lead to a reduction of 7% nesting habitat and 8.5% foraging for

spotted owls, which would lead to an increase of 11% in spotted owls in the pilot area having <50% suitable habitat in their home range (160 owls/36% QLG FEIS, App. AA-44.) In response to these and other adverse findings, the Fish and Wildlife Service concluded that implementation of the pilot project posed “a significant threat to the long-term viability of the California spotted owl, Pacific fisher, and American marten due to the loss, degradation, and fragmentation of suitable habitat.” (USDI Fish and Wildlife Service 1999, p. 16, emphasis added). The Record of Decision approving the QLG pilot project reiterated these concerns about owl viability, concluding that fully implementing the QLG pilot project “could pose a serious risk to the viability of the California spotted owl in the planning area.” (USDA Forest Service 1999c). Similar concerns were expressed by the Regional Forester in adopting the Sierra Nevada Framework. (USDA Forest Service 2001b, p. 51).

As discussed in SNFPC *et al.* 2004, pp. 20-24, the Forest Service has failed to cite any new information that would warrant changing these findings in its 2004 Framework amendment. Instead, the study implemented by the Forest Service in 2003 itself acknowledges that “key uncertainties” remain regarding “the effects of landscape-scale fuels treatments strategies” on the viability of the spotted owl and other forest species. (USDA Forest Service 2003b.) Thus, the Forest Service may not tier to these ostensible programmatic documents to avoid cumulative impact analysis for this project.

RELIEF REQUESTED

Reverse the Plumas National Forest DN/FONSI for failing to assess cumulative impacts of the Basin project according to law or for failing to complete an EIS that includes the Basin project with other connected, similar or cumulative actions.

3. The Consideration of Alternatives to the Basin Project EA Is Inadequate

The EA for this Project must suggest and analyze the environmental impact of alternatives to the proposed action that can meet the project purpose . 42 U.S.C. §§ 4332(C) & (E); 40 C.F.R. 1508.9(b.) *See Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 895-896 (9th Cir. 2002.) *Muckleshoot Indian Tribe v. United States Forest Serv.*, 177 F.3d 800, 810 (9th Cir. 1999) (“Forest Service failed to consider an adequate range of alternatives. The EIS considered only a no action alternative along with two virtually identical alternatives.”)

Here, instead of considering a range of alternatives to the proposed project, the Basin EA only assesses the impacts of the proposed project and the “no project alternative” (EA, p. 15). The EA states that because “the proposed action is the only action is the only action alternative presently identified that meets the project purpose and need,” no other alternatives need be considered. (*Id.*) This approach is contrary to NEPA. *See also Lands Council v. Powell*, 379 F.3d 738 (9th Cir. 2004) (“NEPA was passed by Congress to protect the environment by requiring that federal agencies carefully weigh environmental considerations and consider potential alternatives to the proposed action before the government launches any major federal action.”)

The stated purpose of the Basin project, as it relates to group selection, is:

- to achieve desired future conditions for an all aged, multistory, fire resilient forest;
- contribute to the economic stability of rural communities;
- improve and maintain the ecological health of the forest.

(Basin EA, p. 10) Here, however, the Basin EA only assesses the project alternative and the no-project alternative. This discussion is inadequate to present the public with a range of alternatives for public review and comment for a number of reasons.

First, the environmental review document must assess an alternative that implements the 2001 ROD standards that do not allow group selection harvesting in HRCAs. (*See* USDA Forest Service 2001b, App. A, 40-44.) The environmental impact statement and/or environmental assessment for this Project should analyze an alternative that fully implements the 2001 ROD. Such an alternative is necessary to allow the public and the decision maker to compare directly the environmental impacts and consequences of implementing the 2001 ROD as opposed to the less protective 2004 ROD. This comparison would also allow the public to review the potential that the more ecologically protective 2001 ROD standards would also meet project purposes of establishing a fire resilient forest and providing economic benefit to the local community while meeting other ecological goals of protecting old forest dependent wildlife species.

Second, the project fails to discuss alternative measures arguably superior to the group selection and reforestation proposed to insure an “all aged, multistory, fire resilient” forest. Here, the Basin project proposes to replant group areas with “up to 435 trees per acre.” (EA, p. 9.) Yet this approach is likely to establish an even-aged, single story canopy highly prone to crown fires. The Basin EA even acknowledges this point, stating that “as new stands grow and pass the pole size class, fuel conditions would tend to become more hazardous.” (EA, p. 20.) The EA claims that this condition could be remedied by stand thinning, but does not address the obvious alternative, which would be to consider stand thinning from the outset on the existing parcels slated for group selection. The Basin EA fails to address the value of stand thinning and the acceleration of old forest conditions verses regeneration harvest in light of the fact that of the westslope “spotted owl” forests, the Plumas National Forest has the least amount of old growth forest in Sierra Nevada (SNFPA FEIS Volume 2, Chapter 3, part 3.2, page 138). Appellants note that many of these parcels were subjected to thinning projects in the 1990s for these reasons. By implementing group selection on these previously treated stands, the Forest Service is simply restarting the cycle of even-aged, dense, small tree forest, with little habitat value and high potential for crown fire. (*See* Key, J. 2000; Odion *et al.* 2004; Stephens, 1998, Blakesley 2004.)

Third, the project fails to discuss alternative measures arguably superior to the group selection and reforestation proposed to “improve and maintain the ecological health of the forest.” As discussed below, the proposed project will eliminate home range and home range core habitat for owls and other sensitive forest species and replace it with even-aged blocks of young forest habitat, with likely significant impacts to these species.

For this reason, the environmental review document should have discussed the environmentally superior alternative of a thinning project that retains conifers over 20" dbh

and/or oaks over 15" dbh. This alternative would satisfy the need to establish an "all aged, multistory, fire resilient" forest, while also leaving more big trees on these parcels for future recruitment as old forest. (Blakesley 2004 ("Harvesting trees 20-29.9 inches in diameter is not necessary for achieving" fire resilient forest); Stephens 2004))

RELIEF REQUESTED

Reverse the Plumas National Forest DN/FONSI for failing to consider an adequate range of alternatives to the Basin project as required by NEPA.

4. Basin Project Environmental Review Documents Do Not Meet NEPA Informational Requirements

The EA must provide adequate support for the Forest Service's decision that the Basin Project complies with NEPA and NFMA. *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1213-1214 (9th Cir. 1998) ("EA ... is where the Forest Service's defense of its position must be found. *See also* 40 C.F.R. § 1508.9(a) (an environmental assessment is "a concise public document" that "briefly provides sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact").

a. The Description of the Affected Environment in the EA is Inadequate

The Forest Service's review of environmental impacts must provide a detailed description of the environment likely to be affected by this project. 40 C.F.R. Section 1502.15. Further, NEPA requires that the environmental review document to contain high-quality information and accurate scientific analysis. 40 C.F.R. § 1500.1(b). If there is incomplete or unavailable relevant data, the Forest Service must disclose this fact. 40 C.F.R. § 1502.22.

Here, an adequate description of the affected environment should include, at a minimum 1) discussion of the current population trend information (based on required annual monitoring) of threatened, endangered and sensitive species and Management Indicator Species ("MIS") within the Basin project area and in the vicinity likely to be affected by this project; 2) a discussion of how wildlife in the project area uses the habitat types described in this plan, including biologically relevant land use characterizations such as PACs, HRCAs, SOHAs, Old Forest Emphasis Areas, migration and dispersal corridors, wetlands, riparian zones, and the extent to which any comprehensive fuels reduction plans that may apply to this project; 3) a discussion of how habitat and wildlife use of this habitat in the project area interacts with other available habitat in the region, the extent of regional fragmentation of such habitat, and the location and habitat characterization of any private lands in the region.

The Basin project fails to meet these criteria as follows:

- (1) Project fails to describe population trend information based on current monitoring of threatened, endangered,**

sensitive and Management Indicator Species likely to be affected by this project

NFMA requires the Forest Service to insure continued diversity of plant and animal communities and the continued viability of wildlife in the forest, including the requirement that "wildlife habitat shall be managed to maintain viable populations of existing native and desired nonnative vertebrate species in the planning area." 16 U.S.C. § 1604(g)(3)(B); 36 C.F.R. § 219.19. Thus, "planning alternatives shall be stated and evaluated in terms of both amount and quality of habitat and of animal population trends of the management indicator species." 36 CFR § 219.19(a)(2.) *See also Idaho Sporting Cong., Inc. v. Rittenhouse*, 305 F.3d 957, 971-74 (9th Cir. 2002).

The 2004 ROD readopts Appendix E of the 2001 SNFPA FEIS, including the annual monitoring plan for various Management Indicator Species and Species At Risk ("MIS/SAR") that are considered particularly vulnerable to impacts from National Forest management. (*See* 2004 ROD, p. 70; USDA Forest Service, 2001a, App. E.)

The Basin project provides a general description of MIS species and available habitat, but neither the BE, nor the EA or other project documents present population trend information for any of these species as required by NFMA, as necessary to establish an adequate environmental baseline for assessing project specific and cumulative impacts, as specifically required by Appendix E of the USDA Forest Service, 2001a, incorporated into the 2004 ROD at p. 70. No trend analysis is presented for either at risk species or MIS.

Moreover, the project's general description on habitat types is not sufficient to meet NEPA requirements to take a "hard look" at the impacts of the proposed action. *See Neighbors of Cuddy Mountain v. United States Forest Serv.*, 137 F.3d 1372, 1380 (9th Cir. 1998) ("General statements about "possible" effects and "some risk" do not constitute a 'hard look' absent a justification regarding why more definitive information could not be provided.")

(2) Project fails to Describe Habitat Value and Function of Parcels Proposed for Group Selection

When estimating the effects of a particular project on fish and wildlife populations, the Forest Service "shall estimate the effects of changes in vegetation type, timber age classes, community composition, rotation age, and year-long suitability of habitat related to mobility of management indicator species." 36 C.F.R. § 219.19(a)(1.)" (QLG FEIS, App. AA, p. 7.) Appendix E of the 2001 FEIS requires detailed habitat information ranging from canopy gap characteristics and canopy cover layers to snag and log density by decay class, decadent tree characteristics, microclimate characteristics, broken top live trees, trees with loose bark, stumps by decay class, presence of small, medium or large slash piles, density stumps by decay class, litter depth etc. (USDA Forest Service 2001a, Appendix E, p. E-20, Table E-6.) Thus, the Forest Service is required to provide this information for each MIS/SAR affected by this Project, including amounts and changes in habitat and all population trend data to support findings under NFMA.

The EA does not provide an accurate description of the habitat value of the approximately 800 groups identified by the project for group selection, totaling 1,215 acres of forest. The EA does not provide information regarding the quality of habitat proposed to be harvested, including the amount of snags, the number of large (> 24" dbh) conifers, the number of large (> 15" dbh) oaks within each of the group parcels, or how any of this habitat is used by or presently suitable for MIS and other sensitive wildlife.

Instead, the Basin project averages vegetation composition changes (*see* BE, pp. 39-40, Table 3), which makes it impossible to identify the nature of the habitat being removed from the description provided. The EA states that "group selection would be conducted primarily in small- tree stands...rather than more fire resilient medium and large tree stands." (EA, p. 20.) However, the Basin BE acknowledges that group selection will eliminate 1,190 acres of suitable owl nesting and foraging habitat (BE, p. 50). This total is approximately 98% of the total group selection harvest (1,190 acres/1215 acres).

Table 3 in the BE implies that minimal amounts of trees falling within CWHR class 5 (stands of trees with > 24" dbh) will be affected by the proposed group harvest selection, but this conclusion is unsupported since 1) there is no description of the amount of class 5 trees occurring within each group selection unit; and 2) the group selection unit is itself not considered as "individual timber stands" for purposes of Table 3's measurement. Thus, the project fails to provide an accurate assessment of the habitat that is being removed.

Moreover, the Forest Service contradicts itself in attempting to describe the harvesting and impacts of this project. For example, in one section, the project states that 942 acres of owl nesting habitat will be logged (BE, p. 50), but in another section states that only 690 acres of owl habitat will be logged. (DN, pp. 7, 11.) The Decision Notice further states that 78 acres of CWHR 5 class stands will be logged, (DN, p. 7) but the EA states that only 3 acres of CWHR 5 would be rendered unsuitable. Further a Forest Service map in the project file contains 29 polygons of timber strata class 4 (>70% cover, avg dbh > 24" trees, i.e., owl nesting habitat), totaling 29 group selection units, which, however, do not add up either to 934, 690, 28 or 3 acres, as represented by different parts of the Basin environmental review documents.

These discrepancies and lack of detailed habitat information is failure is problematic since research indicates that these small inclusions of habitat are important for the California spotted owl (Blakesley 2003; Moen and Gutierrez 1997), and they were protected under the 2001 ROD. Both the U.S. Fish and Wildlife Service and the Forest Service's Washington Office have expressed concerns about the elimination of protection for small stands of old forest habitat under the 2004 ROD. (USDI Fish and Wildlife Service 2003c, pp. 4-5; Gladen 2003, pp. 10-11). As noted by Dr. Blakesley, "[d]ue to the lack of analysis, there is significant uncertainty surrounding the effects of the Basin Project on spotted owls." (Blakesley 2004.)

The Basin project is also non-specific regarding the elevations of the group selection units, which precludes the public from assessing various site specific characteristics of the project impacts on forest composition, understory species and on prey species. For example, flying squirrels are typically the main prey item of California spotted owls above 4,000 feet. (*See e.g.*, Verner 1992) However, the Basin project does not provide specific information

regarding how many group selection units are above this elevation, and/or whether such units are presently occupied by flying squirrels.

The EA also does not provide information delineating the habitat that is used by sensitive and management indicator species, including home ranges and home range core habitats, old growth elements, forest carnivore networks etc. As described more fully below, without this information, it is impossible for the Forest Service, much less the public, to assess whether this and other proposed harvests will retain sufficient adequate habitat within the project area to maintain viable populations of owls and other sensitive species such as the Northern Goshawk, Pacific fisher and marten, which also share affinity for older forests with multiple canopies and high canopy coverage.

(3) Basin Project fails to Describe Location, Status and Function of Spotted Owl Home Ranges and Home Range Core areas at the Project and Landscape Level

Research has documented that the California spotted owl utilizes and selects habitat at three different spatial scales: nest, roost, or foraging stand; home range or core area; and landscape. (USDA Forest Service 2001a, Volume 3, Chapter 3, part 4.4, p. 72). At all three scales, the owl is associated with forests characterized by large trees, large snags and down wood, and relatively dense, multi-storied canopies. Blakesley (2003) and (2004) provides additional confirmation of the owl's strong relationship to old forest structures. (Blakesley and Noon 2003).

A key component of the Sierra Nevada Framework's strategy to provide environmental conditions likely to maintain viable populations of California spotted owl well-distributed across Sierra Nevada national forests was "protecting and managing spotted owl home range core areas to provide moderate to high levels of tree canopy cover." (USDA Forest Service, 2001a, Vol. 1, Ch. 2, p. 166.) HRCAs were specifically included as part of the Sierra Nevada Framework's "old forest and associated species conservation strategy," which was "designed to maintain and develop habitat capable of supporting existing old forest associated populations (particularly the California spotted owl) at landscape scales" (2001 ROD App.-4). Thus, the Framework found that to assess impacts to owls, it would be necessary to "identify potential home range core areas for California spotted owls...within the landscape" and that "[f]inal home range core areas will be delineated at the project level." (2001 ROD, App. A, p.20.)

The Science Consistency Review also emphasized the importance of assessing impacts at the home range core area scale and urged an improved analysis of these impacts in the FSEIS. (Stine and Keane 2003, pp. 4, 6).

The Basin project states that while the HRCA designation is used to track land allocations within the Project Area, "standards and guidelines for HRCA are not used for the Basin Project." (Basin BE, p. 50, n. 1.) Even if the project does not intend to protect HRCAs according to the standards of the 2004 Framework, NEPA still requires a more robust description of this critical habitat type and how it will be affected by this project. For example, the Basin Project states that group selection will eliminate 399 acres of California spotted owl home range core area (HRCA)

within the project area, 943 acres of suitable owl nesting habitat and 247 acres of foraging habitat (BE, p. 50). Yet the EA provides no information as to how these habitat areas interact with existing PACs, HRCAs or home ranges, nor the amount of suitable habitat that will remain within owl HRCAs and home ranges once harvest is completed. Moreover, the EA does not provide the location of HRCAs at the landscape scale – i.e., outside the project area.

As noted by owl biologist Monica Bond, "a simple listing of the amount of acres affected at each PAC does not constitute a sufficient analysis. Some home ranges may currently have less suitable habitat in a less optimal spatial configuration than others; therefore, some owls may be less able to tolerate losses of suitable habitat within their ranges (Bart 1995). This site-specific home range analysis was key to the findings in the 1999 H-F QLG BE showing significant harm to spotted owls from the proposed Quincy Plan, Alternative II. (11% of owls saw a decrease in suitable habitat, below 50% suitable in their home range, as a result of the QLG logging program)."

The EA's failure to identify and describe how HRCAs are distributed across the project area and landscape, creates the potential for significant impacts in three ways.

First, the EA fails to describe how or whether owls can survive in the project area, and at the landscape level once additional HRCA habitat has been removed, both as to this project individually and in combination with other past, present and foreseeable future projects. *See* (USDA Forest Service, 2001a, Chap. 3, part 4.4, p. 85.) The Sierra Nevada Framework found that owl productivity was positively correlated with the proportion of individual owl home ranges having greater than 50% canopy-cover and negatively correlated with the proportion having less than 50% canopy cover. (USDA Forest Service, 2001a, Chap. 3, pt. 4.4, p. 73.) Yet here, without an accurate delineation of owl home ranges and HRCAs, it is impossible to determine the degree to which this group selection project, in combination with other projects, may cause certain blocks of owl habitat, as presently delineated by existing PACs, to cross below the 50% threshold. (*See also* 2001 ROD, App. A, p. 34 (to assess impacts to owls, "[f]inal home range core areas will be delineated at the project level."))

Second, the lack of information regarding the delineation of HRCAs across the landscape means there is no information regarding habitat connectivity for owls. The Forest Service has acknowledged the need to assess impacts to the spotted owl at a regional landscape level. (*See* USDA Forest Service, 2001a, Chap. 3, part 4.4, p.82 ("At the landscape scale, the issue is to provide for sufficient amounts and distribution of high quality habitat to facilitate natal and breeding dispersal among territories and to maintain California spotted owls well-distributed throughout their historic range in the Sierra Nevada."))

The need for a landscape level identification of suitable habitat was based in part on the finding of the 1992 Technical Report that successful dispersal is "essential for population viability. Without it, a population will slowly decline to extinction, because deceased individuals in the breeding population will not be replaced by recruits from dispersing juveniles or adults that have been displaced or have not yet secured a territory." (Verner, 1992, p. 66.) Research has shown, however, that owls may disperse across large areas "in random directions, with no relation between dispersal direction and the geographic orientation of drainages or ridges." (*Id.*;

See also id. (Technical Report describes dispersing juvenile owls ranging from 2.1 to 12.7 miles from natal area); (Dispersing juvenile owls found 15 miles away from natal area.) (Technical Report describes dispersing juvenile owls ranging from 2.1 to 68 miles from natal area).

Thus, the Sierra Nevada Framework cautioned against “future management increasing the mean nearest neighbor distances among spotted owl sites” since, if “suitable habitat is allowed to decline and become fragmented, the uncertainty of successful dispersal will become progressively more relevant to the subspecies long term population dynamics and likelihood for persistence.” (*See* USDA Forest Service, 2001a, Chap. 3, part 4.4, p. 79, (citing Verner 1992, p. 184.))

The federal recognition regarding the importance of avoiding habitat fragmentation was recognized by the QLG planners, who required that “habitat connectivity...would be maintained to allow movement of old forest ...species between areas of suitable habitat.” (QLG ROD, p. 9.) The Basin project presents this information regarding habitat connectivity as a form set forth as Appendix D to the BE. Appendix D, however, merely lists “3 acres” of old forest habitat affected, and concludes that there will be no changes to habitat connectivity for Old Forest dependent species. Nowhere in the Basin EA, the BE, or any of its appendices, does the Forest Service present information as to connectivity between areas of suitable habitat – which must include nesting and foraging habitat, as well as habitat specifically designated as “old forest.”

This approach undermines the requirement of the QLG ROD since it assumes that there is no habitat connectivity in the absence of “old forest habitat.” This assumption is contradicted by considerable evidence that forest habitat not technically qualifying as “old growth” may constitute high quality connective habitat for purposes of maintaining wildlife populations. In fact, the Forest Service makes this exact assertion in arguing that species viability is being maintained in the project area. Nor, as discussed above, is it even clear the amount of old forest habitat occurring in the project area. As shown by the report and mapping done by Sue Britting, a considerable number of the group selection units occur in high quality habitat for old forest species, yet none of such information is provided by the Basin documents.

Third, the ES does not describe the degree to which HRCAs overlap with one another within the project and analysis area. The high number of owl sites in the project area suggests a substantial degree of overlap between owl pair home ranges, including overlap of HRCAs. This degree of overlap is highly relevant to the Forest Service’s obligation to assess impacts from group selection since the amount of overlap may indicate increased density and competition for the habitat that is available. Moreover, to the extent that group selections eliminate shared or overlapping sections of HRCAs, the potential for significant impacts is exponentially increased.

(4) Project fails to Describe Location and Value of Habitat for other Wildlife Species within the Project Area that Prefer Old-Growth

In a similar manner to the failure to described spotted owl home ranges or HRCAs, the project fails to identify the location and use of key habitat elements preferred by wildlife such as the Northern goshawk, American marten, Pacific fisher and woodpecker species.

(a) Northern Goshawk

The northern goshawk breeds throughout the ponderosa pine/mixed conifer, red fir and lodgepole pine vegetation types, and in eastside pine forests on the east slope. (USDA Forest Service 2001, Volume 3, Chapter 3, part 4.4, p. 113). "Northern goshawks require mature conifer and deciduous forests with large trees, snags, downed logs, dense canopy cover, and open understories for nesting, and use forests with dense to moderately open overstories, open understories interspersed with meadows, brush patches, riparian areas, or other natural or artificial openings for foraging." (Id., p. 117).

The FSEIS identified that the 2004 ROD could adversely affect goshawk habitat by reducing basal area without a canopy cover limit, reducing canopy cover and simplification of stand structure. (2004 Framework FSEIS, pp. 284-285.) The FSEIS states that "mitigation to retain higher levels of stand basal area or canopy cover to insure adequate foraging and nesting habitat within a project area could be incorporated into individual projects" to maintain viability. (Id., p. 284).

Here, however, the Basin project does not provide a description of the amount of suitable nesting and foraging and post-fledging habitat for each of the identified goshawk areas affected by the Basin project. Similar to the spotted owl, as described above, the Basin project assumes that protection of Goshawk PACs will be adequate to protect goshawks, and thus does not provide information regarding goshawk home range habitat and thus no information to determine the degree to which group selection may be isolating goshawk PACs by eliminating required habitat elements over a large percentage of home range territory, thereby increasing the potential for habitat and population gaps to occur. (See 2004 Framework FSEIS, p. 286.)

(b) American Marten

The Basin project does not provide a description of the environmental setting relevant to the habitat needs of the marten. This would include a description and characterization of the old forest habitat -- as opposed to complete stands -- still remaining within the Basin project, including the amount of marten denning/resting and traveling/foraging habitat currently within the project area. (See Kucera 2004a.) In addition, the Basin project fails to provide a discussion of how martens use the "Forest Carnivore Network," that will be affected by group selection. This failure is problematic since a number of recent studies have demonstrated that the marten is highly sensitive to forest fragmentation. Thompson and Harestad (1994, p. 363) developed a habitat suitability model for marten, which predicted that "once logging reaches a particular threshold, which we predict at about 20-30% removal, ... carrying capacity for American martens declines precipitously." USDI Fish and Wildlife Service 1999) ("marten are ... sensitive to forest openings, tolerating a landscape that has no greater than 20-25 percent openings"); USDA Forest Service 2001, Volume 3, Chapter 3, part 4.4, p. 19 ("martens have not been found in landscapes with greater than 25 percent of the area in openings, even where suitable habitat connectivity exists.") Because the marten is highly sensitive to forest fragmentation, relatively small losses in habitat may have an exponential impact on the marten's population:

(c) Pacific Fisher

The status of the Pacific fisher in the Sierra Nevada is highly imperiled and is a candidate for Federal listing. (SNFPC et al. 2004, pp. 31-32). Researchers agree that ensuring the fisher's long term viability in the Sierra Nevada requires protecting and restoring habitat north of the southern Sierra fisher conservation area to facilitate the fisher's recolonization of and expansion to the central and northern Sierra. Here in particular, the Basin project refers to a fisher sighting within the project area. Thus, the need to identify and maintain an adequate and connected fisher habitat network in the project area is crucial.

The Basin project does not, however, describe the habitat currently present within the project area in a fashion that allows for a meaningful assessment of this project's group selection on the ability of fishers to survive in this area. For example, the Basin project does not disclose the acreage of old growth stands 1 acre or larger in the project area, though these small inclusions of habitat are important for the fisher (FSEIS, p. 139), and were protected under the 2001 ROD. Logging of these small but important areas could eliminate potential denning and resting sites for fisher (Barrett 2004a), especially given the documented use of numerous resting sites within a particular home range. (SNFPC et al. 2004, p. 30).

The Basin project also does not disclose the amount of potential fisher denning/resting and traveling/foraging habitat currently within the project planning area nor the amount of such habitat that will be logged. In addition, the Basin project does not describe the current connectivity and/or fragmentation of existing habitat in the project area, and in the immediate vicinity. The 2004 ROD directs the Forest Service to "minimize old forest habitat fragmentation," to assess fragmentation issues in the biological evaluation, to assess potential impacts on habitat connectivity, and to consider retaining forested linkages as part of "project-level analysis." (2004 ROD, pp. 53-54). Here, however, the Basin project simply states that 3 acres of old growth forest will be removed from the project, (Basin BE, App. D), without any description of existing valuable habitat elsewhere in the project area.

(d) Snag-Dependent Species

Numerous forest species, including the owl, goshawk, marten and fisher are dependent on the presence of large snags distributed evenly across the landscape. (*See e.g.*, SNFPC 2004.) To insure viability for snag dependent species, the Plumas National Forest lists a number of woodpeckers as MIS for snag dependent species, including the pileated woodpecker. (*See* Basin BE, App. B ("The condition of snag dependent species is indicated by the woodpecker group, which includes 10 species on the Plumas NF," 8 of which "occur near or in the Basin project."))

The Basin project's description of snag habitat within the project area is inadequate to determine the potential impacts of group selection on these woodpecker species. The Basin project does not provide information regarding the distribution of large snags within the Project area, the size of such snags, and whether snags will continue to be surrounded by live tree cover, as is required for the pileated woodpecker, white headed and downy woodpeckers, and the Williamson's sapsuckers, as well as owls, goshawks, martens and fishers. (*See e.g.*, Basin BE,

App. B (“Other species require some form of live tree cover surrounding snag habitat for nesting.”)

The pileated woodpecker is an old growth species that prefers woodlands that have a tall, closed canopy and a high basal area. Shroeder (1982) assumed that optimum habitats for Pileated Woodpeckers contain canopy closures of 75% or greater; and that stands with less than 25% canopy closure have no suitability for the species. The Basin project notes that pileated woodpeckers are “most found in association with remnant patches of old growth, including large snags.” (BE, App. B.)

Similar to the discussions above on the spotted owl and goshawk, the Basin project fails to provide descriptions of habitat used by the pileated woodpecker and thus there is no basis for comparing the degree of impacts that will occur from group selection. The BE, Appendix D, notes that three acres of “old-growth” stands in the project area will be reduced but the Basin project does not describe where the remaining old growth stands occur and whether they are sufficient for this species.

Further, studies show that pileated woodpeckers use at least four cavities each year, with only one of these being used for nesting purposes (The Nature Conservancy 1999). Because of their foraging, nesting, and drumming habits, pileated woodpeckers depend on habitats that have an abundance of standing live, dead, or dying trees, snags, and stumps. Habitats with high densities of down logs and snags are preferred. Over a 10-month period, individual birds may utilize an average of seven (range 4-11) different trees for roosting purposes (Bull and Jackson 1995). Conditions are considered to be best when the average dbh of all snags greater than 20" is 30". (Shroeder 1982.)

The White-headed woodpeckers are found in the Sierra Nevada breeding range in forest stands dominated by ponderosa pine, sugar pine, white fir, Douglas fir, red fir and black oak...trees common to the Basin project area. The best habitat information suggests the White-headed woodpecker prefers canopies >51% (50-70%), and a preference for large diameter old-growth, large-cone pines, abundant snags, and with black oaks common in the mixed conifer forests (Garret et al. 1996). Marshall (1997) found ongoing habitat loss from timber harvest of old growth pine (mean nest tree size 22"-31.5"), fire suppression and livestock grazing poses “a threat to the continued existence of the species.” The Basin project fails to disclose project-specific or cumulative effects to this at-risk member of the woodpecker group identified in the Plumas Forest Plan.

The Basin project provides only a general reference to the presence of snags in the project area, and instead states that “past management practices, including logging, firewood cutting, road construction, and other activities, have probably led to a decline in the number of large diameter trees and snags in the project area, with a detrimental effect on associated wildlife.” (Basin BE, p. 22.) This is not an adequate description to determine whether snag dependent species are being further affected by the group selection proposed for this project.

(5) Project fails to Describe Affected Regional Environment

The Sierra Nevada Framework found that to identify impacts to wildlife, it would be necessary to “identify “specific areas within the landscape that provide suitable habitat based on aerial photo interpretation, soil maps, or local knowledge for other threatened, endangered, and sensitive plant and animal species.” (2001 ROD, App. A.) As discussed below, a landscape level cumulative impact analysis is necessary to identify potential impacts on wide ranging species at the population level such as the spotted owl, goshawk, marten and fisher. Here, however, no information is given regarding habitat conditions within the vicinity of the project, the Plumas National Forest, or the overall area encompassing the QLG pilot project.

(6) Project fails to Describe Effects of Past Projects in Project Area

The Basin project provides only a general reference to past logging activities and how such logging has affected present habitat. Further, a number of the Basin Project’s group selection units have been previously treated by the Forest Service for purposes of fire risk reduction. These treatments occurred over the last several years and have included significant thinning and/or prescribed fire to burn underbrush. This information is relevant in considering the degree to which the project meets project purposes and the degree of environmental impacts that may occur from further treatment of these units. (See Britting 2004, Exs. 1-3)

RELIEF REQUESTED

Reverse the Plumas National Forest DN/FONSI for failing to adequately describe the environmental setting of the Basin project as required by NEPA.

c. The Description of the Basin Project in the EA Is Inadequate

The Forest Service should provide a clear and detailed description of the project, including the nature, intensity, and extent of planned logging by unit. The Basin Project fails to meet these criteria as follows.

(1) Project Does Not Describe Habitat that will be removed on Group Selection Parcels

As discussed, the Forest Service’s averaging of vegetation composition changes (*see* BE, pp. 39-40, Table 3), makes it impossible to identify the nature of the habitat being removed from the description provided. This deficiency is furthered by the Basin project’s failure to describe the environment to be affected by the group selection, as discussed above. Since the project does not describe in any detail the nature of the forest that will be removed by the group selection, it also does not provide an adequate description of the project itself.

The project also does not describe the extent to which conifers larger than 30" dbh or oaks greater than 23" dbh may be removed in the group selection units for the purposes of “operability.” The EA discusses operability as timber removal necessary to allow for the construction of landings, roads and skid trails to access the approximately 800 groups proposed for harvesting. The EA contains no information on precisely where these operational access

routes will be constructed or on how many of the largest trees will be removed, nor how or who will make these judgments.

Finally, the project is vague as to the extent of snag removal as part of the overall project. Thus, while the EA states that 4 snags 15" or greater shall be retained be acre, the BE notes that due to operability and safety, "it is anticipated that the majority of snags would be felled and few snags retained in the 1215 acres of groups." (Basin BE, p. 38.) This ambiguity, in combination with the project's failure, as discussed above, to describe the amount, size and distribution of snags across the project area, makes it impossible to assess the number and size of snags that will be removed from this project, thereby precluding any meaningful analysis of this project's impact on snag-dependent species.

(2) Project Does Not Describe Amount of Habitat that will be retained on Group Selection Parcels

The Basin project also does not describe the habitat that will be retained within the project as follows:

- failure to delineate with surveys the numbers of large (>30") conifers retained on each group selection unit;
- failure to clarify the size and number of snags that will be retained within each group selection unit;
- failure to delineate with surveys the vegetative composition and character of the replacement conifers in comparison to the composition and of each group selection unit;
- failure to delineate with surveys the number of large oaks (>23" dbh) retained on each group selection unit;

(3) Project fails to Describe How it will Impact and fragment Wildlife Habitat within Project Area

Since the Basin project does not describe the affected environment, as discussed above, in terms of how such habitat is used by wildlife and how such habitat has been designated for wildlife, the project description also fails. The Basin project does not describe how it may fragment spotted owl home ranges and home range core areas or reduce the quality of such habitat below threshold levels. The Basin project does not describe how it may fragment Forest Carnivore networks or continuous core foraging habitat for other sensitive wildlife such as the marten, fisher, goshawk, pileated woodpecker etc.

(4) Project fails to Describe How it Interacts with Other Projects within Project Area and in the Region

The Basin project does not describe how it interacts with other ITS, group selection and DFPZ projects that have occurred and/or are foreseeable within the project area and in the region. As discussed below, the Basin project's failure to delineate these relationships makes it impossible to assess the cumulative impacts of this project.

RELIEF REQUESTED

Reverse the Plumas National Forest DN/FONSI for failing to describe adequately the Basin project as required by NEPA.

5. Forest Service Violated Procedural Requirements of NEPA and the Appeals Reform Act by Failing to Circulate a Draft EA for Public Comment.

The Forest Service did not provide appellants, or any other member of the general public, with an opportunity to review and comment on the environmental assessment, biological evaluation and assessments, silvicultural report and other related environmental documents prepared for this project. This procedure violates NEPA, 42 U.S.C. § 4321 et seq., and the Appeals Reform Act, Pub. L. 102-381, title III, Sec. 322, 106 Stat. 1419 (1992) (reproduced at 16 U.S.C. § 1612, Note), each of which require the Forest Service to provide the public with an opportunity to review and comment on the final environmental review document, including an environmental assessment, for a proposed action affecting the National Forest System before a final decision is made.

To the extent that the Notice, Comment, and Appeal Procedures promulgated by the Forest Service on June 4, 2003 ("Appeal Regulations") purport to grant the Forest Service the authority to determine the most effective timing for the publication of the legal notice of proposed actions. 36 CFR § 215.5 (a)(2), Appellants claim that these Appeal Regulations do not give the Forest Service the authority to abrogate its responsibilities under NEPA and the Appeals Reform Act and thus are invalid as applied by the Forest Service in this case.

a. Forest Service Approval Procedure Violates NEPA

Council on Environmental Quality ("CEQ") regulations implementing NEPA require the Forest Service to involve the public throughout the NEPA process. *See* 40 C.F.R. § 1500.1(b) ("NEPA procedures must insure that environmental information is available to the public officials and citizens before decisions are made and before actions are taken," and, furthermore, that "public scrutiny [is] essential to implementing NEPA"); § 1500.2(c) ("Federal agencies shall to the fullest extent possible . . . encourage and facilitate public involvement in decisions which affect the quality of the human environment.") 40 C.F.R. §§ 1506.6(a), (b) (Forest Service must "[m]ake diligent efforts to involve the public in preparing and implementing their NEPA procedures" and "[p]rovide public notice of NEPA-related hearings, public meetings, and the availability of environmental documents so as to inform those persons and agencies who may be interested or affected.")

These procedural requirements are not limited to proposals that require an environmental impact statement, but also apply to proposals that require only an environmental assessment. The CEQ regulations specifically provide that agencies "shall involve environmental agencies, applicants, and the public, to the extent practicable, in preparing [environmental] assessments." 40 C.F.R. § 1501.4(b). CEQ has further explained that: "Section 1506.6 requires agencies to involve the public in implementing their NEPA procedures, and this includes public involvement in the preparation of EAs and FONSI." 46 Fed. Reg. 18,026 (March 23, 1981) (Forty Most Asked Questions Concerning CEQ's NEPA Regulations).

The Ninth Circuit has correctly interpreted the CEQ regulations cited above to mean that the public must given an opportunity to comment on draft EAs and EISs. *Anderson v. Evans*, 314 F.3d 1006, 1016 (9th Cir. 2002.) In *Citizens for Better Forestry v. U.S. Dept. of Agriculture*, 341 F.3d 961, 970 (9th Cir. 2003), the Ninth Circuit recently ruled:

It is evident . . . that a complete failure to involve or even inform the public about an agency's preparation of an EA and a FONSI . . . violates [the CEQ] regulations. Th[e] wholesale neglect of the regulations' mandatory inclusion of the public in the process results in procedural injury. Moreover, it undermines the very purpose of NEPA, which is to 'insure that federal agencies are informed of environmental consequences before making decisions and that the information is available to the public.'

Id. (quoting *Okanogan Highlands Alliance v. Williams*, 236 F.3d 468, 473 (9th Cir. 2000)). See also *Save Our Ecosystems v. Clark*, 747 F.2d 1240, 1247 (9th Cir. 1984) (holding that an agency's decision to allow only a five-day public comment period on an EA was inadequate and in violation of NEPA and the CEQ regulations); *Friends of Walker Creek Wetlands v. BLM*, 19 ELR 20852, 20854 (D. Or. 1988) (ruling that federal defendants "did not adequately provide for public participation to the extent practicable").

The Forest Service was required to invite and consider public comment on its environmental assessment prior to approving this project and issuing a final Decision Notice. Further, the Forest Service's "Response to Comments" for the Basin Project demonstrates that the Forest Service intended that the information and analysis required under NEPA, including description of the affected environment, project description, consideration of alternatives and assessment of environmental impacts on an individual project and cumulative scale, would be presented after the conclusion of public comment, in the final EA/Decision Notice for the project. (See Basin Group Selection Project Public Comments and FRRD Responses to Comments, pp. 5- 18; see e.g., p. 11, Response to Comment B25 ("These effects will be evaluated and summarized in the project EA."))

By failing to present its evaluation of environmental impacts for public review, the Forest Service has precluded the public from reviewing and commenting upon the Forest Service's analysis and methodology in determining that this project will not have significant impacts and will insure species viability throughout the Forest. Since this procedure violates NEPA, it is subject to remand by the courts. See *Save the Yaak Committee v. Block*, 840 F.2d 714, 717 (9th Cir. 1988) (holding that because "NEPA is primarily a procedural statute . . . agency action taken without observance of the procedure required by law will be set aside.")

b. Basin Approval Procedure Violates Appeals Reform Act

The Forest Service's approval procedure also violates the Appeals Reform Act, enacted in response to the Forest Service's attempts to exempt project-level decisions from the administrative appeal process. *See Idaho Sporting Congress v. U.S. Forest Service*, 843 F. Supp. 1373, 1375 (D. Idaho 1994). Of particular concern to Congress was ensuring that the public be allowed to participate in the Forest Service's decision-making process. See, e.g., 138 Cong. Rec. S11, 643 (Aug. 4, 1992) (statement of Sen. Fowler, the principal sponsor of the Appeals Reform Act). Accordingly, the Appeals Reform Act specifically provides that "a person who was involved in the public comment process . . . through submission of written or oral comments or by otherwise notifying the Forest Service of their interest in the proposed action may file an appeal." See § 322(c).

The Appeal Regulations promulgated under the Appeals Reform Act provide that only members of the public who submit "specific substantive written or oral comments" during the comment period will be allowed to appeal the decision. See 36 C.F.R. § 215.13(a). As stated in our second scoping letter, the Appeal Regulations facially violate the Appeals Reform Act by precluding appeals by members of the public who notify the Forest Service of their interest in the proposed action but who do not submit "substantive comments."

To the extent the Appeal Regulations are valid, the procedure used by the Forest Service in approving this project violates the Appeals Reform Act since it limits public comment to the scoping period, thereby substantially hindering the public's opportunity to provide "substantive comments" for purposes of 36 C.F.R. § 215.2. Instead, members of the public wishing to comment on the proposal lack the very information - information that would normally be included in a draft environmental assessment and accompanying documentation such as a biological evaluation for sensitive species - that is necessary to prepare the requisite "substantive comments." In sum, under the current regulations, by prohibiting the public from reviewing the environmental assessment until after the decision is made, the Forest Service can impermissibly limit the submission of precisely those comments that are most specific and substantive and thereby limit the number of persons eligible to appeal. This procedure violates the Appeals Reform Act and thus provides further basis for setting aside the decision.

RELIEF REQUESTED:

Because the public interest and NEPA's intent are harmed by the Plumas National Forest's abuse of discretion in failing to supply critical information in a timely manner and by denying the public an opportunity to review a completed draft EA or EIS, the Basin Group selection project Decision Notice and FONSI must be set aside and this project remanded for further public review as required by law.

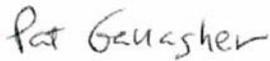
This appeal of the Basin Project was filed via priority mail on October 12, 2004.

Sincerely,

Michael Graf, Attorney
The Sierra Nevada Forest Protection Campaign
915-20th Street
Sacramento, CA 95814



Craig Thomas, Director
The Sierra Nevada Forest Protection Campaign
915-20th Street
Sacramento, CA 95814



Pat Gallagher, Director
Sierra Club Environmental Law Program
85 Second Street, 4th Floor
San Francisco, CA 94105

John Preschutti
Plumas Forest Protect
P.O. Box 11
Blairsden, CA 96103

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7. Britting, S. 2004. Analysis of vegetation and land allocations on the Basin Project, Plumas National Forest, October 11, 2004, with attached map Exhibits 1-3.
8. Kucera, T.E. 2004a. Comments on the Basin Project, Plumas National Forest. October 11, 2004.
9. Group Selection Photos in Basin project area taken by appellants:
10. Conifer plantation Photo in Basin project area taken by appellants.