

NOTICE OF APPEAL
and
STATEMENT OF REASONS

NORTH 49 PROJECT
LASSEN NATIONAL FOREST
HAT CREEK RANGER DISTRICT

ACTING FOREST SUPERVISOR JEFF WITHROE, DECIDING OFFICER
REGIONAL FORESTER JACK BLACKWELL, APPEAL DECIDING OFFICER

OCTOBER 4, 2004

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**Notice of Appeal and Statement of Reasons
North 49 Project, Lassen National Forest, Hat Creek Ranger District
October 4, 2004**

Appellants, Sierra Nevada Forest Protection Campaign (“SNFPC”), Lassen Forest Preservation Group, and the Yahi Group of the Sierra Club hereby appeal the Decision Notice (DN) and Finding of No Significant Impact (FONSI) for the North 49 Project signed by Acting Forest Supervisor Jeff Withroe on August 20, 2004, pursuant to 36 CFR 215. Public notice appeared in the Lassen County Times on August 20, 2004. The appeal deadline is October 4, 2004, and this appeal is timely filed.

SNFPC filed timely scoping comments on this project dated March 30, 2004. The Lassen Forest Preservation Group, with the Yahi Group of the Sierra Club, filed timely scoping comments dated March 28, 2004. Because the Forest Service did not circulate a draft environmental assessment (EA) for comment, the opportunity to comment on the project and its environmental impacts in detail was not provided.

The North 49 project implements the 2004 Sierra Nevada Framework ROD (USDA Forest Service 2004a), and tiers to the accompanying FSEIS (USDA Forest Service 2004b). As demonstrated in our appeal of the 2004 ROD and FSEIS (SNFPC et al. 2004), both the new plan and the FSEIS fail to comply with the National Forest Management Act, the National Environmental Policy Act, and other environmental laws. Therefore, for the reasons set forth in our appeal of the 2004 ROD and FSEIS (a copy of which is attached hereto as an exhibit and incorporated by reference herein), the North 49 project is also contrary to law.

In addition, for the specific reasons set forth below, the Decision Notice and FONSI are contrary to law and policy. We request that the decision be overturned and that a new decision be issued that complies fully with NEPA, NFMA, and all other applicable laws.

I. OVERVIEW OF NORTH 49 PROJECT AND ITS ENVIRONMENTAL CONSEQUENCES

North 49 is an enormous project with significant environmental impacts. The Project involves construction of 12,165 acres of defensible fuel profile zones (DFPZs), 1,186 acres of group selection logging, and 1,105 acres of thinning outside of DFPZs. (DN, p. 1). The Forest Service anticipates that 124,510 ccf of lumber will be logged (Silvicultural Effects Analysis, p. 20), which translates into approximately 68 million board feet.¹ The FSEIS for the 2004 Framework ROD projected 329 million board feet of green timber logging annually for all Sierra Nevada national forests during the first decade of plan implementation. (USDA Forest Service 2004b, p. 319). Therefore, this project alone constitutes approximately 20 percent of planned annual logging in the entire Sierra Nevada, and over half of the projected annual logging on the Lassen National Forest.

The project area provides critical habitat for sensitive and imperiled species including the California spotted owl, the American marten, and the Pacific fisher. For example, most of the project area is within Area of Concern (AOC) 1 for the California spotted owl, meaning that it is

¹ We used an approximate conversion of 1mbf = 183 cubic feet.

“characterized by habitat fragmentation that decreases the density of owl pairs, makes successful dispersal more difficult, and reduces the likelihood of quick replacement of owls in vacated habitat.” (Verner et al. 1992, p. 45). A significant portion of the project was formerly designated as a habitat management area (HMA) for the marten and fisher and was set aside from scheduled logging based on the Forest Service’s conclusion that “there is no research data or other empirical evidence to suggest that we can harvest within furbearer areas and still maintain suitable habitat conditions.” (Lassen National Forest 1992, p. T-2). Most of the area will be included as an old forest emphasis area (OFEA) once the Quincy Library Group (QLG) project expires. (See generally Britting 2004 for an analysis of how the treatment units overlap with these land allocations and zones.) Finally, the project area will log the only remaining biological corridor connecting Lassen National Park, the Thousand Lakes Wilderness, and areas to the north.

Remarkably, the EA fails to disclose that the project area is within the owl AOC, within the former fisher and marten HMA, and within the Framework OFEA. Therefore, the environmental significance of the area has not been adequately disclosed, and the project’s adverse impacts have not been sufficiently analyzed, contrary to NEPA.

The North 49 project area includes a significant portion of the Red Management Area. According to the Red Ecosystem Analysis, old forest characteristics are greatly depleted in the area. The number of large trees (24” diameter or greater) and the number of large snags have declined significantly. (Lassen National Forest 1995). The EA (p. 5) acknowledges that the amount of high quality old growth within the project area (CWHR 5M, 5D, and 6) is below the 5 percent requirement in the Lassen forest plan.

Despite the fact that the project area is already lacking in large trees, the North 49 project will remove remaining structural characteristics of old forests and therefore will degrade habitat for old forest associated species like the California spotted owl, American marten, northern goshawk, and Pacific fisher. Logging within DFPZs and groups will remove trees up to 30” diameter in many stands. Within DFPZs and most individual tree selection units, canopy cover will be reduced to an average of 40 percent. Large snags and down wood will also be removed. Overall, 29 percent of the forested acres within the project area, outside of plantations, will be logged. (Silvicultural Effects Analysis, p. 7).

The environmental impacts of this huge project will be significant. The Biological Evaluation (BE, p. 27) estimates that 8,130 acres of foraging habitat for the California spotted owl, approximately 25 percent of the current foraging habitat within the analysis area, will be rendered unsuitable.² In particular, approximately 5,335 acres of owl home range core areas (HRCAs), over half of the HRCA acreage within the project area, would be degraded. (BE, pp. 27-28). 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).

² The EA (p. 32), inconsistently, states that only 6,920 acres of owl foraging habitat would be lost. This significant discrepancy – over 1,200 acres of owl foraging habitat -- is not explained and hampers the public’s ability to understand the project’s environmental impacts.

The BE (pp. 41-43) projects that approximately 7,983 acres of habitat for the marten will be rendered unsuitable, which could destroy den sites and reduce north-south habitat connectivity. Similarly, with respect to fisher – a candidate for listing under the Endangered Species Act -- the BE (pp.14-19) concludes that the project will render potential habitat unsuitable, reduce habitat connectivity, and “make the recovery of fisher populations more problematic in the future.

The Decision Notice argues that the North 49 project is necessary to reduce the risk of stand-replacing wildfire. Although we support the goal of reducing the risk of catastrophic wildfire, the Forest Service has failed to demonstrate that the intensity of proposed logging is needed to achieve this goal. The Fuels Report (pp. 4-5) shows virtually no difference in impact on fire between a 12” dbh or 20” dbh limit and the 30” dbh limit included in the proposed action. For example, thinning under all three scenarios would result in a surface fire rather than a crown fire and would produce virtually identical flame lengths and rates of spread. Moreover, the group selection cuts “would have little to no effect on an approaching crown fire” and in fact “could contribute to spotting, torching, and fire spread.” (Fuels Report, pp. 2, 6). Finally, “the analysis area was rated low to moderate for ignition risk in the HFQLG FEIS” (BE, p. 27), indicating that the risk of catastrophic wildfire does not warrant intensive logging that will degrade habitat for sensitive species.

It therefore appears that an alternative based upon the 2001 ROD – utilizing a 12” or 20” dbh limit and requiring retention of 50 percent canopy cover rather than 40 percent as under the proposed action – would achieve the Forest Service’s fuels reduction goals with less adverse impacts on habitat for old forest associated species. Unfortunately, the EA fails to analyze an alternative consistent with the 2001 ROD, despite the fact that the U.S. Environmental Protection Agency and the Lassen Forest Preservation Group explicitly requested consideration of such an alternative in its scoping comments. This failure to consider a reasonable alternative in the EA violates NEPA.

The North 49 project will have significant, adverse impacts on the California spotted owl, American marten, and Pacific fisher. Therefore, the Forest Service’s failure to prepare an environmental impact statement to analyze these impacts violates NEPA.

II. THE NORTH 49 PROJECT THREATENS THE DISTRIBUTION AND VIABILITY OF WILDLIFE ASSOCIATED WITH OLD FORESTS, CONTRARY TO LAW

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.” (*Ibid.*) All management prescriptions, including timber sales that implement forest plans, must comply with this viability requirement. 36 CFR 219.27(a)(6). 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 ensure their viability and to preclude trends toward endangerment that would result in the need for Federal listing.” (Forest Service Manual 2672.1).

As described in this section, the North 49 project would threaten the viability and distribution of numerous species, including the California spotted owl, American marten, and Pacific fisher. Moreover, the project would contribute to a trend towards federal listing of these same species, contrary to law.

The EA and BE rely heavily on the 2004 Framework to conclude that the North 49 project will not threaten the viability of sensitive species. However, as demonstrated in the appeal of the 2004 Framework filed by appellant Sierra Nevada Forest Protection Campaign and other groups (SNFPC et al. 2004), that conclusion is unwarranted.

A. California Spotted Owl.

As described in detail in the attached critique of spotted owl biologist Monica Bond (Bond 2004), the North 49 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 2001 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 2001 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.³ (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 2001 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.

³ 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).

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 Lassen National Forest strongly suggests that the owl's population is declining in the area. 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.

Site-specific information from the North 49 project area exacerbates these concerns. As reported in the BE (p. 22), “known reproductive success is low in all of the [owl] territories” within the project area. Of the five groups of owl territories within the project area, owl pairs were present only 28 percent of the years surveyed, and owls reproduced only 6 percent of the years surveyed, on average. (BE, p. 22) Moreover, according to owl biologist Bond, “the fact that only one ‘territory complex’ of five in the project area was confirmed to be reproductive in 1998, 1999, and 2002 (and no reproduction was identified in any other year) indicates that the population is clearly vulnerable.” (Bond 2004, p. 2).

In sum, there is substantial cause for concern regarding the owl's population throughout the Sierra Nevada, within the Lassen National Forest, and within the North 49 project area.

2. Impacts of the Project on the California Spotted Owl

The North 49 Project will adversely affect the California spotted owl and its habitat by logging medium and large trees up to 30” diameter, reducing canopy cover to 40 percent within defensible fuel profile zones (DFPZs) and individual tree selection (ITS) units and lower within group selection units, simplifying forest canopy, and reducing the number of large snags and down logs. (Bond 2004, p. 3). As discussed in the BE, the Project would eliminate or degrade 8,130 acres of owl foraging habitat, or approximately 25 percent of the total foraging habitat available in 1993.⁴ “This is an enormous loss of habitat that is likely to impact the owl's fecundity, juvenile survivorship, and other factors that contribute to the health of the population.” (Bond 2004, p. 3).

The loss of habitat is a particular concern when it occurs within owl home range core areas (HRCAs), which are designed to include “the best available California spotted owl habitat in the closest proximity to the owl activity center.”⁵ (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

⁴ Given that logging has apparently occurred in the area since 1993, the percentage of the current foraging habitat that will be removed is likely even higher.

⁵ HRCAs are particularly important within the North 49 project area because the owl protected activity centers have relatively little suitable nesting habitat. (BE, p. 25).

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).

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). However, the FSEIS projected that only 20 percent of total HRCA acres would be logged within the first two decades across the region. (USDA Forest Service 2004b, p. 270). By comparison, in the North 49 project, approximately 5,335 acres of owl home range core areas, or over half of the HRCA acreage within the project area, would be degraded. (BE, pp. 27-28). Thus, the adverse impacts to owl habitat within the North 49 project are substantially greater than projected in the 2004 Framework FSEIS. Therefore, as Bond concludes, “there is a very real possibility that the North 49 project will adversely affect the owl’s use and occupancy of existing home ranges, which could reduce the owl’s distribution and threaten the owl’s viability in the area.” (Bond 2004, pp. 3-4).

Although the BE does not discuss the fact, most of the project area is located within an “area of concern” (AOC) identified by spotted owl biologists. (Britting 2004). AOC 1, which includes most of the project area, is “characterized by habitat fragmentation that decreases the density of owl pairs, makes successful dispersal more difficult, and reduces the likelihood of quick replacement of owls in vacated habitat.” (Verner et al. 1992, p. 45). Therefore, the owl population in this area is particularly vulnerable to additional habitat loss and fragmentation that will result if the North 49 project is implemented. Because the project area is surrounded on the west by industrial timberlands that have been heavily logged, on the east by lava flows, and on the south by brushfields and plantations (BE, p. 23), it likely provides essential habitat connectivity for the spotted owls in the northern Sierra Nevada. As Bond concludes, “the habitat loss that will occur if the project is implemented could therefore have adverse impacts outside the project area, potentially isolating owl populations to the north and south and increasing the possibility of local extirpation.” (Bond 2004, p. 4).

The BE acknowledges that the North 49 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 and unsupported by the analysis in the BE.” (Bond 2004, p. 4).

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 North 49 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.

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 North 49 and similar projects. Rather, the FSEIS deferred detailed analysis of environmental impacts to future site-specific projects, such as North 49. 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 North 49 project will not threaten owl viability, despite the fact that it is being carried out pursuant to the 2004 ROD.

In short, as Bond concludes in her review, “the North 49 project is likely to threaten the distribution and viability of the California spotted owl within the project area and beyond, contributing to the present trend towards federal listing.” (Bond 2004, p. 4).

B. American Marten.

As described in detail in the attached declaration of forest carnivore expert Tom Kucera (Kucera 2004), the North 49 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). It is disconcerting that 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 North 49 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. As noted in the BE (p. 41), research indicates that martens avoid stands with less than 50 percent canopy cover. 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 North 49 Project will adversely affect the marten and its habitat, threatening the marten's viability and distribution in the planning area. As discussed in the BE, logging pursuant to the Project has the potential to destroy marten den sites. The Project would reduce canopy cover to below 50 percent in 7,983 acres (BE, p. 42), which is a significant portion of the area. The Project will also remove trees up to 30" diameter which are an important element of marten habitat. (Kucera 2004a, p. 2).

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 martens 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. Because the area west of the project is industrial timberland that has been heavily logged and the area east of the project includes lava flows and open pine forests that are not suitable for martens, "marten

connectivity between northern populations and southern populations appears to be limited to pathways in the North 49 analysis area.” (BE, p. 43).

The Forest Service has in other contexts repeatedly acknowledged the importance of the North 49 area for marten. For example, under the Lassen National Forest Land and Resource Management Plan that predated the current plan, much of the project area was included within a marten “habitat management area” within which scheduled timber harvest was prohibited. The purpose of protecting these areas was to “provide for late seral habitat in sufficient quantity and spatial arrangement to maintain the Lassen’s contribution to population viability” for this species. (Lassen National Forest 1992, p. 4-13). Similarly, under the 2004 Framework, the project area will be managed as an “old forest emphasis area” after the Quincy Library Group pilot project ends. “In other words, there is every reason to believe that the North 49 area plays a critical role in maintaining the marten’s distribution and viability in the northern Sierra Nevada.” (Kucera 2004a, p. 3).

The Lassen forest plan acknowledged the lack of suitable habitat for marten and fisher and urged that no scheduled harvest take place within the furbearer management areas.

Based on existing information, we have limited suitable furbearer habitat on the Forest right now. Existing habitat is being fragmented by continued logging and, in most instances, no longer meets the medium habitat capability for marten and fisher. At our current rate of harvest, suitable habitat to maintain population viability will be jeopardized. Using the Regional Office’s literature review as a guide, 33 percent of our furbearer areas are deficit in suitable habitat and do not meet the medium habitat capability model defined by this review. We recommend a policy of no scheduled harvest until suitable habitat is available. (Lassen National Forest 1992, p. T-2).

The BE acknowledges that the North 49 Project could destroy marten den sites, would degrade marten habitat, and is likely to disrupt north-south habitat connectivity for marten.⁶ 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 North 49 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).

⁶ 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 North 49 project would further impair habitat connectivity for the marten, implementing the project would be contrary to the QLG ROD.

Full implementation of the QLG pilot project, as carried out in North 49 and other planned timber sales, would have the following adverse impacts on the marten and its habitat:

- 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 North 49 project implements the 2004 ROD in no way ensures the marten’s viability.

Beyond that, the 2004 ROD and FSEIS did not analyze the site-specific impacts of logging pursuant to the North 49 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. In short, as Dr. Kucera finds, “the conclusion in the BE that the North 49 Project is not likely to threaten the viability of the marten or contribute to a trend towards federal listing under the Endangered Species Act is not supported by analysis in the record.” (Kucera 2004a, p. 3).

C. Pacific Fisher.

As described in the attached declaration of forest carnivore expert Tom Kucera (Kucera 2004), the North 49 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 North 49 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 North 49 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. The BE correctly states (p. 19) that because of this distribution, “Maintenance of connectivity is the premier issue for fisher populations.”

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 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 North 49 project area appears to be particularly important in reestablishing habitat connectivity for the fisher. First, fisher have apparently been observed within the project area, though not in recent years.⁷ (See BE, Map 5). Second, as described in the BE (p. 19), the North 49 project and logging on adjacent national forest and private lands “have reduced fisher connectivity options.” Because the project area is surrounded on the west by heavily logged industrial timberlands, and on the east by lava flows and other habitat not suitable for fisher, the project area appears to provide the only potential habitat providing north-south connectivity for fisher and marten. Therefore, as Dr. Kucera concludes, “degrading the habitat that currently exists, as proposed in the North 49 project, is likely to increase risks to the fisher and reduce the

⁷ Fisher have also apparently been sighted, though not confirmed, on the Feather River Ranger District of the Plumas National Forest, south of the project area within the Basin Group Selection project area.

likelihood of establishing a viable population within the project area and throughout the Sierra Nevada.” (Kucera 2004a, p. 6).

The BE acknowledges that implementing the North 49 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 North 49 project would further impair habitat connectivity for the fisher, implementing the project would also be contrary to the QLG ROD.

The conclusion in the BE (p. 20) that “the North 49 project...is not likely to change current viability for the fisher” is not supported by the analysis in the BE. As explained by Dr. Kucera, “this determination is startlingly inconsistent with the immediately preceding four pages of text describing the fisher’s status, distribution, and habitat needs, and impacts to it from the North 49 project and similar projects on nearby lands.” (Kucera 2004a, p. 6). Moreover, the next sentence in the BE concedes that “the effects of this project and others like it would make the recovery of fisher populations more problematic in the future.” Therefore, as Dr. Kucera finds, “it is apparent that the North 49 project will in fact increase the threat to the fisher’s viability and contribute to the present trend towards federal listing under the Endangered Species Act.” (Kucera 2004a, p. 6).

The EA (p. 41) states that the North 49 project would “not contribute to a change in trend” of the fisher’s status in California because it is “consistent with 2004 SNFPA ROD.” However, the forest carnivore experts who have reviewed that plan have uniformly concluded that it fails to ensure the fisher’s viability and in fact contributes to the present trend towards extinction. (Barrett 2004; Kucera 2004b; Lewis 2003a, 2003b; Buskirk 2003) Moreover, as demonstrated in the BE, the North 49 project in particular will exacerbate the fisher’s plight. Therefore, the assertion in the EA that the North 49 project will maintain the fisher’s viability in the Sierra Nevada is unfounded and unsupported by the record in this case.

III. THE FOREST SERVICE HAS FAILED TO COMPLY WITH THE NATIONAL ENVIRONMENTAL POLICY ACT

A. The EA Fails to Include Important Information and Necessary Analysis.

Although in some respects the EA and BE frankly acknowledge that the North 49 project will have significant, adverse environmental impacts, the planning documents fail to include important information and analysis necessary to a full and accurate assessment of impacts.

1. The EA Fails to Disclose the Ecological Significance of the Project Area.

The EA and BE fail to disclose the ecological significance of the project area. As described in the attached report by Dr. Susan Britting, the project area appears to provide critical old forest habitat for species like the California spotted owl and American marten. As detailed in her report, approximately 84 percent of the proposed treatments (not including group selection) occur within Area of Concern (AOC) 1 for the California spotted owl, meaning that it is

“characterized by habitat fragmentation that decreases the density of owl pairs, makes successful dispersal more difficult, and reduces the likelihood of quick replacement of owls in vacated habitat.” (Verner et al. 1992, p. 45). A significant portion of the project was formerly designated as a habitat management area (HMA) for the marten and fisher and was set aside from scheduled logging based on the Forest Service’s conclusion that “there is no research data or other empirical evidence to suggest that we can harvest within furbearer areas and still maintain suitable habitat conditions.” (Lassen National Forest 1992, p. T-2). Much of the area overlaps with a polygon that was identified during the SNEP process as having 35 percent of LSOG rank 4 or 5, which is the highest quality late-successional forest. Finally, most of the area will be included as an old forest emphasis area (OFEA) once the Quincy Library Group (QLG) project expires. (See generally Britting 2004 for an analysis of how the treatment units overlap with these land allocations and zones.)

Remarkably, the EA fails to disclose that the project area is within the owl AOC, within the former fisher and marten HMA, within the SNEP polygon containing high quality old growth, or within the Framework OFEA. Therefore, the environmental significance of the project area has not been adequately disclosed, and the project’s adverse impacts have not been sufficiently analyzed, contrary to NEPA.

2. The EA Lacks Accurate Information and Analysis Regarding Owl Nesting Habitat and Remaining Older Forests.

The EA and BE fail to include accurate information and analysis regarding the amount of suitable spotted owl nesting habitat currently within the project area and the amount that will be rendered unsuitable if the project is implemented. The EA (p. 23, Table 5) states that there is less than 1,000 acres of CWHR class 5 within the project area, and that the same amount will remain after logging, apparently implying that there will be little or no logging or degradation of these stands.⁸ However, nothing in the project description requires that such stands be protected from logging, so it is reasonable to assume that any such stands within the project area will be logged and rendered unsuitable. The BE acknowledges that nesting habitat occurs outside of PACs and SOHAs within the analysis area but states that it “is sporadic in distribution.” (BE, p.23). The BE goes on to say that, according to stand exam data, there are no stands suitable for owl nesting. Yet, according to 1993 Landsat imagery, the BE (p. 24) reports 5,900 acres of owl nesting habitat within the analysis area. It is not clear from the BE how much of this habitat is within the project area. Finally, GIS analysis by Britting (2004) revealed that there are approximately 2,200 acres of timber strata 4N and 4G (roughly equivalent to CWHR with moderate and dense canopy cover) within the project area, not including group selection units, and that much of the project area is within a SNEP polygon that contains a substantial amount of high quality LSOG 4 and 5.

Research indicates that small pockets of large trees and old forest are important for associated wildlife like the California spotted owl (Blakesley 2003; Moen and Gutierrez 1997), Pacific fisher (USDA Forest Service 2004b, p. 139), and American marten. “Pacific fishers, American martens, and California spotted owls use small aggregates of large trees for denning, resting, and

⁸ The EA does not specify the canopy closure of these stands, but given that most of the project area has relatively dense canopy, it is reasonable to assume that some, if not most, of this CWHR 5 class is suitable owl nesting habitat.

nesting sites,” even within larger stands that do not constitute old growth. (USDA Forest Service 2001a, Volume 2, Chapter 3, part 3.2, p. 131). Failure to protect these small but important stands could degrade potential owl nesting habitat and reduce the likelihood of nesting success (Verner 2003, p. 4; Blakesley and Noon 2003) and eliminate potential denning and resting sites for fisher (Barrett 2004).

Because of their ecological importance, the 2001 Framework protected these small old growth stands from intensive logging. The 2004 Framework’s removal of protection for old growth stands of 1 acre or larger was strongly 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.” (Gladen 2003, pp. 10-11). According to the Fish and Wildlife Service, this change 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 2003, pp. 4-5). Therefore, it is critically important that the BE and EA contain accurate information and analysis regarding these small old growth stands and how they will fare if the North 49 project is implemented.

According to the EA (p. 5), CWHR class 5 and 6 is relatively rare within the project area and is “below the 5% minimum” established in the forest plan. Therefore, the remaining owl nesting habitat “likely provides an important ecological function,” especially given the fact that the project occurs within an area of concern where owl habitat is already fragmented. (Bond 2004, p 4). “By failing to identify the location of all suitable owl nesting habitat, to assess how much nesting habitat will be logged, and to analyze the impacts of such habitat loss on owl viability, the BE and EA fail to provide essential information that is necessary to a full assessment of the project’s environmental impacts.” (Bond 2004, p. 5).

3. The EA Fails to Analyze Impacts to Individual Owl HRCAs and Home Ranges.

As described earlier, California spotted owl home range core areas (HRCAs) are ecologically important because they include “the best available California spotted owl habitat in the closest proximity to the owl activity center.” (USDA Forest Service 2004a, p. 39). The 2001 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 owl 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).

Because of the ecological importance of HRCAs, the Pacific Southwest Research Station’s Science Consistency Review has urged the Forest Service to reveal the number of HRCAs that would be logged and the amount of habitat that would be degraded within individual HRCAs. (Stine and Keane 2003, pp. 4, 6). Unfortunately, neither the 2004 FSEIS nor the North 49 planning documents include this essential information. The BE states the cumulative total of habitat loss within all HRCAs but fails to analyze impacts to individual HRCAs. As stated in the

FSEIS for the 2004 Framework: “The SEIS spatial analysis could only provide an approximation of potential treatments to HRCAs because the exact location of treatments units (and the amount of treatment overlap with HRCAs and the amount of suitable habitat affected) would only be known during site-specific planning.” (USDA Forest Service 2004b, Vol. 2, p. 45).

Only by assessing impacts to individual owl HRCAs can the Forest Service determine the likelihood of adversely affecting owl pairs and the resulting impact on the broader owl population. As owl biologist Zach Peery explains: “For example, will the proposed action result in loss of occupied owl nest sites and an increase in nearest-neighbor distance? Will the degradation of owl habitat within areas of concern interfere with owl dispersal, potentially isolating subpopulations and reducing the owl’s current distribution? Such landscape-scale questions need to be addressed if the effect of the proposed action on Spotted Owl viability is to be assessed in a rigorous manner.” (Peery 2004, p. 7).

Without analyzing habitat loss in individual HRCAs, it is impossible to assess accurately the project’s potential impacts on the owls utilizing the HRCAs. Thus, as Bond concludes, “the possibility that the North 49 project will disproportionately impact particular HRCAs is not disclosed, and this potentially severe impact is effectively swept under the rug.” (Bond 2004, p. 5).

Not only did the EA fail to disclose impacts to individual owl HRCAs, but it also did not analyze impacts at the broader owl home range areas. As noted in the scoping comments of the Lassen Forest Preservation Group, this is a particular concern because many owl home ranges in the project area “have had marginal habitat quality.” For example, in the QLG FEIS process, the Forest Service analyzed the percentage of suitable habitat within each owl home range, compared to a desired goal of 50 percent suitable habitat. (USDA Forest Service 1999a, pp. 76-82). The Forest Service then estimated the number of owl home ranges that would have less than 50 percent suitable habitat after project implementation as part of the assessment of likely impacts on the owl population. A similar analysis should have been undertaken for the North 49 project.

4. The EA Fails to Analyze the Percentage of Forest Openings that will Occur if the Project is Implemented Compared to the Marten’s Habitat Threshold.

Although the BE acknowledges that the marten is highly sensitive to forest fragmentation and does not appear to tolerate habitat characterized by 25 percent or greater forest openings, the BE fails to analyze the extent to which the Project will create additional forest openings, potentially exceeding the marten’s threshold. Information in the record suggests that this may be a serious concern. The Silvicultural Effects Analysis (pp. 1, 17) reveals that 6 percent of the project area is barren, an additional 12 percent is shrub vegetation, and 2 percent is seedlings (less than 1” dbh). Thus, the percentage of openings across the project area is currently approximately 20 percent. When the project’s group selection openings are included, the total is approximately 23 percent. Thus, on a project-wide basis, the percentage of openings is very close to the marten’s habitat threshold. Given that group selection treatments are concentrated in portions of the project area, and that barren areas and other existing openings may be similarly concentrated,

there is a good possibility that the percentage of openings will exceed 25 percent in portions of the project area. However, as Dr. Kucera concludes, “the EA and BE completely fail to analyze this important issue.” (Kucera 2004a, p. 4).

5. The Analysis of Cumulative Impacts is Inadequate.

Appellants, in their scoping comments, specifically requested a detailed cumulative effects analysis that examined the impacts of past, present, and planned logging on sensitive species, taking into account both public and private lands. The EA and BE include some discussion of potential cumulative impacts. However, as both Bond (2004) and Kucera (2004a) conclude in their reviews, the analysis is insufficient to adequately inform the public and decision maker regarding the scope and magnitude of likely cumulative effects. For example, the BE does not include a map displaying the location of past, present, and planned projects in the vicinity of North 49 that are likely to affect owl or marten habitat. As a result, the BE does not adequately disclose the extent to which such other projects may cumulatively affect the distribution and connectivity of habitat for these species. It is likely that logging adjacent to the North 49 project area will exacerbate the north-south habitat connectivity problem identified in the BE. However, the BE does not include the information that would be necessary to assess this issue. (Bond 2004; Kucera 2004a). Similarly, although the BE indicates the amount of marten habitat that may be degraded in other projects, it does not disclose the extent to which these projects will create additional forest openings, thereby potentially exceeding the marten’s habitat threshold.

With respect to the California spotted owl, the EA (p. 33) cites projects that are currently being planned and implemented in adjoining Ranger Districts. However, rather than analyzing how these projects may affect owl habitat and connectivity, the EA simply states: “It is unknown to what extent suitable spotted owl habitat would be affected. It is reasonable to presume loss of some habitat.” This hardly constitutes an adequate assessment of cumulative impacts as required by NEPA.

Similarly, with respect to fisher habitat, the EA (p. 32) cites concerns about the sufficiency of fisher habitat within the project area, but then asserts that “suitable habitat does exist adjacent and contiguous to the analysis area.” However, the EA goes on to state that “the extent of contiguous habitat is unknown due to the unavailability of information for private lands and Latour State Forest.” Clearly, the information about habitat on adjoining lands is important to an adequate assessment of the project’s cumulative impacts on fisher habitat, particularly given the apparent paucity of suitable habitat within the project area. Therefore, the failure to obtain and analyze this important information violates the Forest Service’s duty under NEPA to gather missing information or to analyze likely environmental consequences if the data cannot reasonably be obtained. 40 CFR 1502.22.

The Ninth Circuit has recently clarified NEPA’s cumulative effects analysis requirement as applied to timber sales proposed by the Forest Service. The Lands Council v. Powell, 379 F.3d 738 (9th Cir. 2004). As the Ninth Circuit held in overturning a timber sale EIS, “for the public and agency personnel to adequately evaluate the cumulative effects of past timber harvests, the Final Environmental Impact Statement should have provided adequate data of the time, type, place, and scale of past timber harvests and should have explained in sufficient detail how

different project plans and harvest methods affected the environment.” Here, as in The Lands Council, the EA “generally describes the past timber harvests ... and asserts that timber harvests have contributed to the environmental problems in the Project area.” But, as the Ninth Circuit ruled, such a general discussion is not adequate to satisfy NEPA’s cumulative effects requirement.

In sum, the cumulative effects analysis in the North 49 project EA, with respect to past, present, and reasonably foreseeable future logging, fails to comply with NEPA.

B. The Forest Service’s Failure to Consider an Alternative Consistent with the 2001 Framework Violates NEPA.

The Forest Service should have considered in detail an alternative that implements the 2001 Framework. Such an alternative would allow implementation of the QLG project while ensuring consistency with environmental laws. It would also achieve the Forest Service’s objectives for fuels reduction and meet the other purposes and need of the project.

The U.S. Environmental Protection Agency, in its scoping comments on this project, specifically requested that the Forest Service evaluate an alternative that would implement the 2001 Framework and “include a description of the various environmental, social and economic issues, and the pros and cons of each management approach.” (U.S. EPA 2004). As noted by EPA, “public debate continues regarding the scientific basis for; the fuel management, environmental and social benefits of; and the adverse effect associated with the 2004 SNFPA ROD versus the Sierra Nevada Framework.” Therefore, EPA urged the Forest Service to “reconsider whether to evaluate an alternative which would implement the 2001” Framework. Similarly, appellant Lassen Forest Preservation Group requested that the Forest Service study and consider in the EA an alternative consistent with the 2001 Framework.

Although EPA as well as appellants asked that an alternative consistent with the 2001 Framework be developed, the Forest Service chose not to analyze such an alternative. As explained by the Forest Supervisor in the Decision Notice (p. 4):

There was a request to develop an alternative that implemented the 2001 SNFPA ROD. The 2001 SNFPA ROD, however, has been superceded by the 2004 SNFPA ROD. The 2001 SNFPA ROD no longer provides Forest Plan direction. This alternative would not be consistent with the Lassen LRMP, as amended by the 2004 SNFPA ROD. Therefore, this alternative was not considered in detail.

These reasons do not withstand careful scrutiny. First, it is not the case that implementing the 2001 Framework would be inconsistent with the Lassen LRMP, as amended by the 2004 SNFPA ROD.⁹ Both the 2004 ROD and the 2001 ROD share essentially the same land allocations. The 2001 ROD requires lower diameter limits for logging and higher standards for canopy cover.

⁹ Even if implementing the 2001 ROD required a change in law or policy, NEPA would still require that such an alternative be considered, as long as it is reasonable.

However, nothing in the 2004 ROD prevents the Forest Service from doing less intensive logging, consistent with the 2001 Framework.¹⁰

Beyond that, implementing the 2001 ROD would address the North 49 project's purpose and need. The 2001 ROD allowed the QLG project to be implemented, consistent with environmental laws. Moreover, as shown in the Fuels Report (pp. 4-5), implementing a 12" or 20" diameter logging limit would generally achieve the same fuels goals as utilizing a 30" limit. An alternative consistent with the 2001 ROD would reduce surface fuel loading, reduce tree stocking, maintain areas with higher canopy closure for late-successional species, and achieve the other purposes and needs set forth in the Decision Notice (p. 3).

In sum: "Because the 2001 Framework would have far fewer adverse impacts to owl habitat and would be as effective in reducing wildfire risk, an alternative consistent with the 2001 Framework should have been considered in the EA." (Bond 2004, p. 5).

C. The Forest Service's Failure to Prepare an EIS Violates NEPA.

As demonstrated throughout this appeal, the North 49 project will have significant environmental impacts. For example, implementing the project is likely to threaten the viability and distribution of the California spotted owl, American marten, and Pacific fisher, contributing to the need for listing under the ESA. NEPA therefore requires that the Forest Service prepare an EIS, not an EA, before approving the project.

The Forest Service's Finding of No Significant Impact (DN, pp. 5-7) is not persuasive. First, as described in this appeal, the impacts of implementing the North 49 project will largely be negative. Any beneficial impacts could more reasonably be achieved implementing the 2001 Framework. Second, contrary to the finding in the FONSI, the project area does in fact contain unique and important characteristics. As described above, the project area overlaps with an "area of concern" for California spotted owl, with a marten habitat management area identified in the Lassen forest plan, and with an old forest emphasis area in the 2001 and 2004 Framework. Moreover, it appears to provide a critical biological corridor for old forest associated species, which the courts have recognized as an important factor requiring consideration in an EIS. Marble Mountain Audubon Society v. Rice, 914 F.2d 179 (9th Cir. 1990). Third, the project poses significant risk to sensitive species associated with old forests. Fourth, as just shown, the North 49 project together with other present and planned logging in the area will have significant cumulative impacts. Finally, as demonstrated throughout this appeal, the North 49 project is not consistent with the National Forest Management Act and other federal laws. For all these reasons, the finding of no significant impact is arbitrary and unsupported by the record, and the Forest Service should prepare an EIS before proceeding with this project.

D. The Forest Service's Failure to Circulate a Draft EA for Public Comment Violates NEPA and the Appeals Reform Act.

¹⁰ In fact, in other QLG projects, such as the Meadow Valley project on the Plumas National Forest, the Forest Service is utilizing a 20" diameter limit (as called for in the 2001 ROD) rather than the 30" limit established in the 2004 ROD. The Shirttail project on the Foresthill Ranger District of the Tahoe National Forest is also apparently consistent with the 2001 Framework in important respects.

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), 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.

1. 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 ensure 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's." 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." *Citizens for Better Forestry v. U.S. Dept. of Agriculture*, 341 F.3d 961, 970 (9th Cir. 2003) (quoting *Anderson v. Evans*, 314 F.3d 1006, 1016 (9th Cir. 2002)). In *Citizens for Better Forestry*, 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 'ensure 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. By failing to do so, this Project violates NEPA and is thus 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.")

2. 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). 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.

IV. THE NORTH 49 PROJECT VIOLATES OTHER ENVIRONMENTAL LAWS

A. The Analysis of Management Indicator Species is Inadequate.

The analysis of impacts on management indicator species (MIS), particularly the pileated woodpecker, is legally inadequate. The pileated woodpecker is associated with mature conifer forests dominated by large trees and large snags. (Biological Report on Terrestrial Wildlife Management Indicator Species, p. 16)(hereinafter cited as “MIS Report”). Rather than attempting to analyze how implementation of the North 49 project would affect the pileated woodpecker population, the MIS Report generally discussed potential impacts on acreage of habitat for the species. The analysis of impacts on other MIS species is similarly flawed.

As the Ninth Circuit recently affirmed, NFMA “requires that the Forest Service identify [MIS], monitor their population trends, and evaluate each project alternative in terms of the impact on both [MIS] habitat and [MIS] populations.” The Lands Council v. Powell, 379 F.3d 738 (9th Cir. 2004). In certain circumstances, the Ninth Circuit has allowed the Forest Service to utilize the so-called “proxy on proxy” approach, in which analysis of habitat trends for MIS can substitute for analysis of actual population trends. “Crucial to this approach, however, is that the methodology for identifying the habitat proxy be sound.... If the habitat trend data is flawed, the proxy on proxy result, here species population trends, will be equally flawed.” Ibid.; see also Sierra Club v. Eubanks, Civ. S 03-1238, Memorandum and Order, p. 21 (E.D. Cal. August 20, 2004)(“Habitat analysis is an acceptable substitute for population trend data if there is enough underlying data to support such an analysis, along with any resulting conclusion that the project area includes enough habitat essential for survival of the MIS species in question.... Here there appears to be a lack of such underlying data.”).

Here, there is evidence that the underlying data regarding old growth forests is flawed. As discussed in the BE (p. 23), one methodology for analyzing old forest habitat – 1993 Landsat imagery -- “has substantial errors that overestimate” old growth (BE, p. 23), and the data are outdated. Yet another methodology, using stand exam data, is said to “underestimate” high quality old growth. (BE, p. 23). Therefore, the situation is analogous to that in The Lands Council v. Powell, where the court found evidence that the Forest Service’s methodology was inaccurate. The Ninth Circuit’s ruling applies equally here: “The Forest Service has not ensured that there are no adverse viability concerns to the relevant MISs because the Forest Service did not monitor MIS population trends, and its proxy on proxy approach was flawed as applied here.

In fact, the situation in the North 49 project is, if anything, more egregious. The planning records do not appear to measure the current amount of suitable habitat for the pileated woodpecker, nor does the MIS report analyze the amount of habitat that will remain if the project is implemented. Therefore, even assuming that a “proxy on proxy” approach is defensible, the

Forest Service has not met its minimum obligation under NFMA in this case with respect to the pileated woodpecker or other MIS.

B. The Group Selection Logging Violates the QLG Act.

Section 401(d)(2) of the Herger-Feinstein Quincy Library Group Forest Recovery Act provides that group selection logging under the pilot project must “achieve a desired future condition of ... fire resilient forests.” The group selection units in the North 49 project do not meet this legal standard because they remove relatively large, fire resilient trees and open the forest canopy in a way that will increase growth of shrubs, small trees, and other surface and ladder fuels, thereby increasing fire risk. As stated in the Fuels Report (p. 1), “the groups are not a fuels management treatment.” In fact, groups could actually contribute to fire risk:

For the first 10 years following planting, group selections will not cause problems in the event of a wildfire. However, as the seedlings within the groups grow and shade-tolerant white fir seeds in naturally, they will resemble 2-acre thickets of trees. Left untreated (e.g. precommercially thinned), this higher density of trees and ladder fuels per acre could contribute to spotting, torching, and fire spread. (Fuels Report, p. 2, emphasis added).

Therefore, because group selection is not a fire management strategy and could actually increase the risk of stand-replacing wildfire, the use of groups in the North 49 project is not consistent with the requirement of the QLG Act that logging result in “fire resilient forests.”

C. Logging of any CWHR 5 or 6 Stands Would Violate the Lassen Forest Plan.

As noted previously, the planning documents do not make clear if any owl nesting habitat, including any CWHR 5 or 6 stands within the project area, will be logged, and the decision notice lacks direction that would protect such stands. However, the Forest Service has acknowledged that the project area does not currently meet the Lassen Forest Plan’s requirement that 5 percent of each seral stage be maintained. (EA, p. 5). Therefore, to the extent that the North 49 project will log any remaining owl habitat or CWHR 5 or 6 stands – including small stands or pockets of greater than 1 acre – the project fails to comply with the Lassen Forest Plan. To prevent such a violation, the Forest Service must, at a minimum, clarify that all CWHR 5 and 6 stands of 1 acre or greater, and all owl nesting habitat, will be protected from logging.

V. REQUEST FOR RELIEF

For the foregoing reasons, the North 49 decision notice, finding of no significant impact, environmental assessment, and related documents fail to comply with the National Forest Management Act, the National Environmental Policy Act, and other federal laws. Therefore, we request that the Regional Forester overturn the decision notice and remand the decision to the Forest Supervisor for further consideration. The Regional Forester should direct that the North 49 project be revised to comply with all environmental laws, and that the revised project be accompanied by an EIS that includes an alternative consistent with the 2001 Framework.

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Respectfully submitted,

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