September 12, 2003

Sierra Nevada Forest Plan Amendment
DSEIS
P.O. Box 221090
Salt Lake City, UT  84122-1090
(Also submitted via email)

Subject: The Western Section of The Wildlife Society Comments on the Draft Supplemental Environmental Impact Statement for Changes to the Sierra Nevada Forest Plan Amendment

The Wildlife Society is an international organization comprising professional wildlife biologists employed in the private and public sectors, natural resource management agencies, and academia. The Western Section of The Wildlife Society (TWS–WS) currently consists of about 1,000 members in nine chapters in California, Nevada, Hawaii, and the Pacific Islands. TWS–WS members include field biologists, wildlife managers, academicians, researchers, and policymakers from a broad range of disciplines who are regularly engaged in resolving land use and conservation issues stemming from impacts on wildlife and the habitats on which they depend.

Our goals are to enhance the capability of wildlife professionals in conserving natural diversity, sustaining productivity, and ensuring responsible use of wildlife resources for society's benefit. The principal objectives of The Wildlife Society are developing and promoting sound stewardship of wildlife resources and of the environments on which wildlife and humans depend, taking an active role in preventing human-induced environmental degradation, increasing awareness and appreciation of wildlife values, and seeking the highest standards in all activities of the wildlife profession.

The Sierra Nevada Forest Plan Amendment (SNFPA) was adopted in January 2001 as a guidance and policy document for managing 11 national forests and 11.5 million acres of National Forest lands. Appeals to the adoption of the SNFPA resulted in the Regional Forester assembling a team to review specific elements of the SNFPA for compatibility with other programs and implementation flexibility. The Draft Supplemental Environmental Impact
Statement (DSEIS) presents new information developed by this review team. In addition, the DSEIS seeks to identify and evaluate the significance of impacts resulting from proposed project actions.

The National Environmental Policy Act (NEPA) and implementing regulations (40 C.F.R. 1500) require evaluation of the context and intensity of impacts when assessing impact significance. When an Environmental Impact Statement (EIS) is required under NEPA, it should contain a thorough description and analysis of project alternatives including those eliminated from consideration because they would not meet the project need. NEPA and the Council on Environmental Quality (CEQ) also advocate a rigorous comparison and evaluation of alternatives that identifies both the preferred alternative and the environmentally superior alternative. The programs and changes in the DSEIS are identified as the preferred alternative (Alternative S2) and are compared to other alternatives, including Alternative S1, which is the current direction described in the SNFPA.

Our comments are based on 1) our review of the SDEIS and selected sections of the SNFPA, 2) our knowledge of forest species in the Sierra Nevada, and 3) our knowledge of U.S. Forest Service (USFS) policies relating to forest management activities. Despite identification of inadequacies in the NEPA process and weaknesses in the organization and presentation of the SDEIS, our comments are limited to the potential impacts on forest wildlife species.

**Pacific Fisher and American Marten**

The Pacific fisher (fisher) is a habitat specialist whose distribution in the Sierra Nevada is strongly tied to late-successional forests characterized by a multilayered and closed canopy with relatively few openings and, in particular, old forest elements, including large trees, snags, and abundant woody debris. Current distribution includes a southern Sierra Nevada population separated widely from a northern California population. The California populations were considered for listing under the federal Endangered Species Act (ESA) based on perceived population declines and the strong possibility of extirpation of the isolated southern Sierra Nevada population. Habitat loss has been implicated in fisher declines as the cessation in trapping since 1945 has not stemmed population declines (Aubry and Lewis 2003).

The American marten (marten) is more widespread in the Sierra Nevada than the fisher and occupies higher elevation forest types, especially red fir and lodgepole pine forests. Habitat for this species includes dense, closed-canopy forests with relatively few forest openings and significant large woody debris and snags. The marten is also considered a habitat specialist, relying on forests with late-successional characteristics. Based on information in the DSEIS, it appears marten populations in the Sierra Nevada are significantly reduced over historical levels, possibly as a result of reduced late-successional forest stands.
Reductions in the amount of late-successional forests may be the result of a combination of several factors, including historical timber-harvesting practices and possibly the overstocked condition of many Sierra Nevada forests as a result of disrupted fire regimes. The historical open nature of many old-growth Sierra Nevada forests, especially in the pine-dominated types, has been replaced by dense thickets of shade-tolerant species such as white fir and suppressed understory pine. Despite the current situation and the undisputed assessment that forest conditions differ significantly from pre-settlement conditions, the USFS is obligated to select an environmentally superior alternative that results in the fewest impacts. We believe Alternative S1 should be identified as the preferred and environmentally superior alternative.

Based on information contained in the DSEIS, we believe that alternative S2 would reduce habitat for the fisher and marten and contribute to continued population declines in the Sierra Nevada. We believe significant impacts, which may not be mitigable within the framework as it is currently outlined in the SDEIS, are likely.

Alternative S2 would eliminate the SNFPA requirement for retention of all trees greater than 30 inches (dbh) and the requirement that forests maintain at least 50% canopy closure over 60% of each watershed within the area contemplated by the SDEIS. We believe the elimination of this requirement is appropriate only 1) when applied to forest habitats that were historically more open than is this threshold and 2) if the new threshold can be applied without impacts (habitat loss or degradation included) on sensitive wildlife. Within the confines described above, late-successional stands that developed into open “park-like” stands because of frequent low-intensity fire regimes should be managed to mimic their pre-settlement conditions; however, in forest types that historically comprised dense stands of large trees, overstory canopy closure should be maintained at >50%.

The change in retention requirements described above would include the Southern Sierra Fisher Conservation Area (SSFCA) established by the SNFPA. The loss of large trees, which are important fisher and marten denning and resting habitat (Mazzoni 2002, Truex et al. 1998), and late-successional forest elements within the SSFCA would result in a direct loss of habitat for the fisher and the marten. Moreover, because the Kings River Demonstration Project and Sequoia National Forest compose 29% of the SSFCA and would be subject to slightly higher harvest levels, impacts on the fisher and marten could be even greater.

Another threat to maintaining viable fisher populations in the Sierra Nevada is the fact that their population is isolated from remaining California fisher populations by approximately 400 km. The DSEIS makes no provisions for fishers outside the SSFCA even though habitat north of Yosemite is critical for the long-term persistence of fishers in California. The remaining southern
Sierra Nevada population is relatively small and isolated and therefore more susceptible to extinction. Furthermore, a recent study showed that southern Sierra Nevada fishers are demographically isolated from, and far less genetically diverse than, other populations across North America (Drew et al. 2003).

The DSEIS also eliminates canopy cover standards in eastside pine-forest types and raises the maximum diameter of trees that may be cut from 24” to 30” dbh. Alternative S1 defines cover standards of no greater than a 20% reduction from existing conditions and retention of 60% canopy cover within 60% of planning watersheds, including those supporting eastside pine-forest habitat types. Lifting canopy cover standards and increasing tree-diameter harvest thresholds would result in impacts on martens occupying these forest types. Impacts would consist of direct and indirect habitat loss, habitat degradation, and potential loss of corridors and dispersal opportunities. As described in the SNFPA, the marten occupies eastside pine forests within the SSFCA and would be directly affected by this change in policy.

Actions proposed in the DSEIS would result in a substantial increase in overall management activity and relaxation of tree-diameter and canopy-cover standards and guidelines. As habitat specialists, the fisher and marten are dependent on specific features for reproduction and cover and could be directly affected by the actions contemplated in Alternative S2. We recommend that projects be evaluated and habitat elements (large trees, snags, LWD) be identified for retention at the project scale before project implementation. Each fuel treatment project should include a monitoring component that measures both implementation and effectiveness for all habitat-retention aspects of implemented projects.

**California Spotted Owl**

The California spotted owl also uses late-successional Sierra Nevada forests for breeding and cover and, as the fisher and marten, relies on woody debris, snags, and large trees as key habitat elements. Recent demographic studies cited in the DSEIS indicate that the population of this subspecies is declining and advised caution in conservation planning until additional habitat and climatic information could be analyzed in combination with demographic information.

The California spotted owl was recently petitioned for listing under the ESA; however, the U.S. Fish and Wildlife Service (USFWS) determined the subspecies did not warrant listing, citing “no clear statistical evidence of decline throughout its range”. In contrast to the USFWS ruling, results of analysis conducted for the DSEIS indicate declining owl populations in the Sierra Nevada.

As acknowledged in the DSEIS, changes in logging standards from those described in the SNFPA could directly impact the California spotted owl by
reducing the extent and quality of foraging, nesting, and cover habitat. If adopted, the DSEIS would reduce canopy cover targets from 50% to 40% and could further reduce the extent of closed-canopy late-successional forest in the Sierra Nevada. The DSEIS contains no project-level implementation guidelines or assurances that projects would be implemented consistent with USFS policies relating to impacts on sensitive species. Furthermore, the DSEIS lacks specific measures to ensure that impacts on sensitive species would be minimized. Alternative S2 could result in removal or degradation of snags, woody debris, and other habitat elements contributing to owl habitat quality.

Inappropriate management of Old Forest Emphasis Areas (OFEA) within the area contemplated by the DSEIS could also result in loss of habitat for the California spotted owl. The DSEIS describes a shift in standards that would treat owl core areas as “general forest”, providing for timber harvest within these areas above levels described in the SNFPA. In addition, under the revised standards of the DSEIS, timber harvest would be allowed in owl Protected Activity Areas (PAC) within both the defense (first ¼ mile) and threat (next ½ mile) zones of the Wildland Urban Interface (WUI). In contrast, the SNFPA would allow logging only in the defense zone of the WUI. The change in standards would result in potential logging and fuel treatment activities in 51% of all known PACs. As a result, Alternative S2 could have a direct impact on owl foraging, nesting, and cover habitat.

We recognize that long-term fire exclusion has changed the structure of old forests and the dynamics of fire threat to owls, but believe that Alternative S2 is an excessive response to the issue. We believe that Alternative S1 combines more reasonable and attainable fuel-reduction goals, reasonably accommodates multiple forest uses, and offers superior protection against habitat loss and degradation over the level of protection described in Alternative S2.

We are concerned with the potential for direct impacts on California spotted owls as described above and with the long-term consequences of forestalling a listing action based on protection standards in the SNFPA that are now being considered for removal. We recommend retaining late-successional standards in the SNFPA by identifying Alternative S1 as the environmentally superior alternative and selecting it as the preferred alternative.

We are certain that the USFS recognizes that careless logging can adversely affect forest wildlife and that early logging in the U.S. was not conducted in a sustainable or ecologically sensitive manner; however, we strongly believe that properly applied forest science and management can be used to restore ecosystems to a more natural condition while completely avoiding, or minimizing to the maximum extent practicable, impacts on sensitive wildlife species.
Willow Flycatcher

The Southwestern willow flycatcher is currently listed as endangered under the ESA but its range is mostly outside the area considered under this DSEIS; however, all subspecies within California are listed under the California Endangered Species Act (CESA). In the Sierra Nevada, the willow flycatcher uses, and is dependent on, Sierran meadow vegetation communities for reproduction, foraging, and cover. Because Sierran meadow communities are primarily low-gradient riparian habitat, flycatcher distribution is rare and naturally patchy across the rugged Sierra Nevada topography. Maintenance of high-quality meadows, distributed to provide sufficient connectivity for sustaining willow flycatcher populations, is essential for willow flycatcher population viability in the Sierra Nevada.

Both the SNFPA and the DSEIS consider the impacts of changes in grazing regulations on special-status species and on permittees. Grazing impacts on Sierran meadow habitats include alteration of hydrological functions as a result of mechanical damage to meadow soils and topography; reduction in water quality as a result of introduction of waste material from cattle; direct loss of vegetation (primarily willow) from grazing; indirect loss of vegetation from trampling and other mechanical damage; probable modification of nest-predator communities; and association of livestock with brown-headed cowbirds, a nest parasite that can reduce fledging success. Grazing in Sierran meadow vegetative communities reduces the quality of these communities as willow flycatcher habitat.

The DSEIS analyzes 47 grazing allotments within the SNFPA area, many of which support and, indeed, are located directly on Sierran meadow habitats. Changes in requirements between the SNFPA and the standards and guidelines in the DSEIS would allow grazing within “known” willow flycatcher habitat after August 15, when young birds have presumably fledged. In addition, changes in the definition of “occupied” willow flycatcher habitat would exclude historical grazing sites from protections enjoyed by current willow flycatcher breeding sites. Both of these conditions have the potential to have an impact on willow flycatchers during the breeding season, possibly reducing productivity of late nesters, and by deteriorating or preventing the recovery of nesting habitat. This could lead to continued declines and lack of recovery in Sierra Nevada willow flycatcher populations.

The DSEIS requires development of a management strategy designed to protect breeding habitat within the allotment and provide for long-term habitat suitability. The strategy would be developed in cooperation with the permittee and would require approval before an August 15 grazing entry.

We are concerned that simple approval of a strategy does not guarantee implementation, may not include the appropriate expertise in its development,
and may not result in direct benefits to willow flycatcher habitat at the subject grazing sites. We recommend making development, implementation, monitoring, and reporting of the effectiveness of strategy implementation a condition of each grazing lease. This would provide incentives for permittees to implement a strategy and establish a clear authority for lease revocation if conditions are not met.

Other Taxa Potentially Affected by Grazing

As discussed above for the willow flycatcher, grazing duration and intensity would increase under the preferred alternative (Alternative S2). Increased grazing, changes in grazing entry times, proposed Sierran meadow management strategies (Alternative S2), and proposed vegetation management could adversely affect both the Yosemite toad and great gray owl.

The Yosemite toad was recently the focus of a listing action under the ESA, culminating in a March 2003 decision by the USFWS that, while warranted, the listing was precluded by administrative and budgetary constraints. This taxon uses wet meadows, ponds, and lake shores in the central and southern Sierra Nevada for breeding, foraging, and cover. The great gray owl is currently listed as endangered under CESA, and nests in dense forests composed primarily of large trees adjacent to or near Sierran meadows.

As a condition of each grazing allotment in areas potentially supporting these taxa, the DSEIS requires development of a management strategy designed to protect wet-meadow habitat within grazing allotments and provide for long-term habitat suitability. The objectives of the management strategy ostensibly focus on the taxa that could be affected by allotment changes. For example, objectives for strategies developed within Yosemite toad habitat include preventing cattle from entering standing water in wet-meadow areas. Similarly, objectives for the great gray owl include maintaining wet-meadow habitat vegetation at heights supported by local conditions and consistent with habitat needs for great gray owl prey species.

Again, we are concerned that simple approval of a strategy does not guarantee implementation and may not result in direct benefits to Yosemite toad and great gray owl populations within the area contemplated by the DSEIS. We recommend making implementation, monitoring, and reporting of the effectiveness of strategy implementation a condition of each grazing lease. This would provide incentives for permittees to implement a strategy and establish a clear authority for lease revocation if conditions are not met.

Thank you for considering these comments. Please contact me to discuss our comments, answer questions related to our recommendations, or provide technical assistance as required.
Sincerely,

Lowell Diller, President  
The Wildlife Society–Western Section


