UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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Brad Powell, Regional Forester, Pacific Southwest Region
Jack Blackwell, Regional Forester, Intermountain Region
c/o USDA Forest Service–CAET
Sierra Nevada Framework Project
PO Box 7669
200 E. Broadway, Room 301
Missoula, MT 59807

Dear Mr. Powell and Mr. Blackwell:

The U.S. Environmental Protection Agency (EPA) has reviewed Draft Environmental Impact Statement (DEIS) for the **Sierra Nevada Forest Plan Amendment** [CEQ #000132] in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309, independent of NEPA, directs EPA to review and comment in writing on the potential environmental impacts associated with all major federal actions. In addition, EPA is directed to assess the adequacy of EISs in the context of meeting NEPA's procedural requirements. EPA's assessment is expressed in written comments and an alpha-numeric rating system which summarizes our views concerning potential environmental impacts and document adequacy.

The Sierra Nevada Framework for Collaboration and Conservation (Sierra Framework) was initiated in February 1998. The stated goal of the Sierra Framework is to address land management issues through interagency cooperation at a eco-regional scale. EPA has been an active participant in the Framework since its inception. The present EIS is a component of the Sierra Framework, intended to address inadequacies and inconsistencies in the Forest Plans for the Sierra Nevada and Modoc Plateau. EPA supports the overall goals of the EIS, and commends the Forest Service for its efforts to incorporate recent scientific findings from the Sierra Nevada Ecosystem Project (SNEP) and other sources into its Forest Plans. The Forest Service also deserves praise for its efforts to engage key agency and political stakeholders and the general public. Through these efforts, the Forest Service has helped to frame the debate on some very challenging ecological and social issues.

The DEIS seeks to address five problem areas which the Forest Service has identified as requiring immediate attention in the form of amendments to the Forest Plans for 11 National Forests in the Sierra Nevada and Modoc Plateau: old forest ecosystems; aquatic, riparian, and meadow ecosystems; fire and fuels; noxious weeds; and lower Westside hardwood ecosystems. The DEIS analyzes eight alternatives for addressing the five problem areas, including "no action" as required by NEPA. The Forest Service has identified two alternatives–Alternatives 6 and 8–as preferred alternatives. Alternative 6 proposes "a network of emphasis areas that are managed to achieve ecological goals, combined with implementation of strategic fuels treatments." Alternative 8 proposes "cautious management of sensitive wildlife habitat as new information is developed."

In cases where lead agencies have identified a preferred alternative at the Draft stage, EPA focuses its review on the agency's preferred alternative, and the "alpha" component of our rating reflects our assessment of the environmental impacts associated specifically with the preferred alternative.

Although we believe that both of the preferred alternatives represent positive changes relative to "no action," we have identified numerous issues in the course of our review which raise environmental concerns, and a limited number of issues which meet the standard for "objections" as defined in our Policy and Procedures Manual. Our principal objections relate to the decision to defer consideration of strategies to address continuing adverse environmental impacts associated with the Forest Service road system. EPA has also identified numerous opportunities for the Forest Service to improve its analysis and documentation of potential environmental effects. Accordingly, we have assigned a rating of **EO-2 (Environmental Objections–Insufficient Information)** to the DEIS. Please consult the enclosed documents for more information on EPA's review process and our rating system.

Our detailed comments are enclosed. Our comments include specific suggestions for modifying the preferred alternatives to address our concerns and objections. We request that each modification be incorporated into the preferred alternative identified in the Final EIS, and the final selected alternative identified in the Record of Decision. Our comments also include recommendations for including additional necessary information in the Final EIS. These recommendations are provided to assist the Forest Service to develop a Final EIS which can withstand procedural challenges so that implementation can proceed without delay.

EPA appreciates the opportunity to review and offer comments on this project. If you have any questions concerning this letter, please contact me, or have you staff contact Leonidas Payne of the Federal Activities Office [phone: (415) 744-1571; e-mail: payne.leonidas@epa.gov]. Please send three copies of the Final EIS to the Federal Activities Office when it becomes available.

Yours,

Felicia Marcus
Regional Administrator

Enclosures:

Ratings Summary
Detailed Comments

Detailed Comments

Purpose and Need

40 CFR 1502.13 states that EISs "shall *briefly* specify the underlying purpose and need to which the agency is responding in producing the alternatives including the proposed action." (emphasis added) EPA is concerned that the DEIS lacks a sufficiently concise statement of purpose and need. The purpose and need statement included in the DEIS is two pages long, and includes numerous statements which are better suited to the "affected environment" section or sections which describe the "issues" to be addressed in the DEIS. EPA recommends the following statement of purpose and need:

> Based on a scientific review of current conditions and trends in the Sierra Nevada and Modoc Plateau, a need exists to amend 11 Forest Plans which provide insufficient or inconsistent direction to address degraded resource conditions, negative ecological trends, and the risk of potentially catastrophic events. The Forest Service has identified five problem areas which require immediate attention to prevent excessive resource degradation or a trend toward extirpation or extinction of certain species. The problem areas to be addressed are: old forest ecosystems; aquatic, riparian, and meadow ecosystems; fire and fuels; noxious weeds; and lower Westside hardwood ecosystems. Other issues considered to be of lower priority will be dealt with through subsequent amendments or the Forest Plan revision process.

Alternative Development and Analysis

In our scoping comments on the DEIS, we suggested that the Forest Service use a matrix format[1] when developing and analyzing potential alternatives for the Forest Plan Amendment. In our experience, a matrix format provides a superior method for analyzing complex projects with multiple environmental objectives. In our scoping comments, EPA offered to work with the FS to develop an appropriate alternative matrix, but the Forest Service instead opted to group suggestions offered during scoping into "themed" alternatives for dealing with the five problem areas. Using a matrix format would have: 1) given the public a greater say in matters which are "assumed" for the purpose of the analysis (e.g. desired conditions for old forest resources; the desirability of implementing an adaptive management strategy); 2) increased the likelihood that the Forest Service could have identified a single preferred alternative prior to the release of the DEIS; and 3) provided a "cleaner" mechanism for identifying desired elements of the final selected alternative. EPA recommends that the Forest Service consider arraying the various alternative components in a matrix in the FEIS. We repeat our offer to assist the Forest Service to develop this matrix.

[1] In a matrix format, the lead agency identifies one or more alternatives for dealing with each specific issue. Except in the context of selecting a "preferred alternative" and the "environmentally preferable alternative," and making the final decision, it is not necessary to group these sub-alternatives into a set of comprehensive alternatives that address all of the identified issues.

Water Quality and Related Issues

1. On July 24, 1998, the Forest Service released the Sierra Nevada Science Review, which identified 7 focus areas which may require new or different management approaches: 1) evolving demographic and socioeconomic conditions; 2) fire and fuels; 3) old-forest ecosystems (includes forest conditions, spotted owl, and forest carnivores); 4) aquatic, riparian, and meadow ecosystems (including low to mid elevation, high elevation, frogs and toads, and willow flycatcher); 5) mature hardwoods; 6) roads; and 7) bighorn sheep. At page vi, the Science Review states that "[e]ach [issue] is considered to be of urgent concern at broad geographic scales and requires a common conception and coordinated approach to problem analysis and evaluation, planning, and monitoring."

Prior to the publication of the Notice of Intent, the Forest Service narrowed the scope of issues to be addressed in the DEIS, and excluded roads from the list of problem areas to be addressed in the EIS. Page S-3 of the DEIS includes a summary of the rationale used in narrowing the scope of the DEIS: "These [five] problem areas are considered to need urgent attention at a range-wide scale for four reasons: there is new scientific information about the extent, intensity, and duration of the problem; the problem occurs at broad geographic scales; environmental risk, as judged by concerns raised from the public or science community, indicate that action to address the problem should be taken now; or, the problem is not addressed well elsewhere." In light of the "urgent concern at broad geographic scales" language quoted above, it appears that the fourth factor ("not addressed well elsewhere") was a key factor in the Forest Service's decision to exclude roads from the list of problem areas to be addressed in the EIS.[2]

The decision to defer analysis of roads presents numerous problems in the context of this analysis. First

[2] Presumably, the Forest Service believes that roads issues will be adequately addressed through a series of national initiatives, most notably the development of guidance for analyzing roads in the context of planning (the Roads Analysis procedure), updated Forest Service regulations regarding transportation system planning (the Transportation Rule), and the Roadless EIS. EPA has tracked these national efforts for the past two years, and we believe that it may be overly optimistic to assume that the national initiatives will adequately address the specific water-quality issues identified in SNEP and the Science Review. The proposed transportation rule outlines procedures for incorporating transportation analysis into forest planning, but contains few action forcing mechanisms which will ensure that unneeded roads are actually decommissioned. For additional information, see the highlighted portion of EPA's comments on the proposed Transportation Rule, which are attached.

and foremost, deferring analysis of roads raises a fundamental question of whether the EIS reflects the "best available science." Page 46 of the Science Review states: "Roads cumulatively constitute a major cause of accelerated erosion in the Sierra Nevada, creating both physical impacts (e.g., soil and slope alterations and failures, increased sediment yield, change in channel shape and function, water flow rate and temperature) and impacts to aquatic and terrestrial biota." The SNEP report reaches a similar conclusion, stating: "Excessive sediment yield into streams remains a widespread water-quality problem in the Sierra Nevada. The main sources of sediments are roads of poor design, location, construction, and maintenance and riparian areas that have been devegetated by logging, fire, grazing, mining, and construction. These problems remain despite attempts at correction. Future population growth will dramatically increase the potential for significant sedimentation problems unless effective mitigation occurs. Preventative practices are much less costly than attempts at rehabilitating damaged sites." Given the scientific consensus for aggressive action to address this urgent problem, the DEIS' relatively weak commitment to address road-related water quality issues is disturbing.

Another important factor to consider is the need to integrate transportation and access planning with the range-wide management strategies proposed to address old forest; aquatic, riparian, and meadow ecosystems; and fire and fuels. Considering the fact that the Roads Analysis procedure has been available to the interdisciplinary team since August 1999, it should have been possible for these issues to be addressed concurrently, at least to the degree of identifying potential conflicts between road decommissioning priorities and access needs for fuels treatment and fire response. It is unclear how range-wide issues can be addressed if the management of specific roads "would require a local assessment of desired conditions for the location and need for access as well as the degree of road-related environmental effects" (p. 2-39) Given the controversy associated with motorized access issues, we are concerned that reliance on "local" processes will only perpetuate the existing situation.

To address these issues, EPA recommends the following:

* The ROD should include a commitment to prepare one or more[3] Supplemental EISs to address roads and motorized access issues throughout the Framework planning area, to be initiated as soon as practicable, and completed within two years. These assessments would seek to define an "optimal" transportation system in the context of evolving resource protection goals and a new focus on diverse recreational opportunities, with special attention given to the need to reduce road densities across the landscape to address habitat fragmentation. Roads and motorized trails that are no longer necessary or are associated with significant resource degradation should be identified for closure or decommissioning.[4]

[3] Although we believe a single SEIS addressing these issues would be preferable from the standpoint of linking directly to the Forest Plan Amendment ROD and conserving planning resources, we recognize that splitting the planning area up into sub-regions (e.g. Southern Sierra, Central Sierra, Northern Sierra/Quincy Pilot area, Modoc Plateau) may be preferable given the variability of issues and conditions present in different parts of the Sierra and the Modoc Plateau. In either case, efforts must be made to engage the broadest possible range of stakeholders, as has been done in the context of the present EIS.

[4] Regardless of the terminology used, the key factor which EPA looks for is whether a particular road has been "hydrologically closed." This entails the following: 1) culverts have been removed and natural drainage patterns restored; 2) cut slopes have been restored to the extent necessary to reduce the risk of landslides and other extreme erosion events; 3) revegetation has been addressed through natural or other means; 4) motorized access has been effectively curtailed; and 5) the road in question has been removed from the transportation system inventory. Except in flat terrain with limited stream crossings,

Site specific closure and decommissioning decisions should be made to the degree that accurate information on the location of roads and motorized trails is available. In addition, these assessments would resolve the status of any "unroaded" areas left unprotected by the national Roadless EIS.

* The preferred alternative identified in the FEIS and the selected alternative identified in the ROD should include all of the protective standards and guidelines for roads and recreation (categories R and RD) included in Alternative 8, plus the following standards and guidelines from Alternatives 3 and 5: R03D, R09B, R09C, RD01, RD04, RD05A RD06, RD07A, RD08, RD08A, RD09, RD10, RD12, RD16A.

2. All action alternatives should include a specific commitment to meet the water quality objectives outlined in the applicable Basin Plans within a specified time frame, which could potentially vary by alternative. All activities which are found to be inconsistent with the achievement of water quality objectives, to be determined through interagency coordination with appropriate federal and state regulatory authorities, should be suspended.

3. The ACS should be expanded to specifically address Forest Service responsibilities to work with the state to develop and implement Total Maximum Daily Loads (TMDLs). Landscape/watershed analysis activities should be coordinated with TMDL development so that federal and state resources are better aligned and management activities meet the goals of the TMDL. In cases where the TMDL allocations will require more protective management than allowed under the standards and guidelines approved pursuant to the ROD, the standards and guidelines should be revised accordingly.

4. Clean Water Action Plan (CWAP) action item #20 sets yearly numerical targets for road relocation and decommissioning activities involving federal forest roads. Although these targets are national in scope, EPA recommends that lead agencies commit to meet a theoretical "fair share" of these targets (i.e. the national target pro-rated to the planning area) in the context of multi-issue management plans that affect large planning areas (e.g. the Interior Columbia Basin Plan, the Quincy Pilot Project, etc.), as a means of ensuring that CWAP goals will be met. Table 5.5e at page 3-549 reveals that these pro-rated yearly road decommissioning targets will only be met under Alternatives 2, 3, and 5. This table should be revised to show that all alternatives, including no action, will meet these targets. The targets themselves should not vary due to "expected increases in road maintenance funding" or "higher levels of active management that rely on road access." (P. 3-549) EPA further recommends that these targets be construed as "net" rather than "gross" decommissioning mileage, to account for any unexpected construction necessary to accomplish fuels management objectives.

5. Information concerning annual rates of road construction is found in Table 5.7d on page 3-575, in the section on Visual Quality and Scenic Integrity. This information should be moved to section 5.5 discussing Roads.

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some level of active remediation will generally be necessary to achieve these objectives.

6. Section 5.5 presents an inaccurate picture of the future Forest Service transportation system in the planning area. Table 5.5f projects that road system mileage will remain substantially the same over the next ten years. This projection does not appear to take into account anticipated road decommissioning pursuant to the Chief's Natural Resources Agenda, the proposed transportation rule, TMDL determinations, and other efforts intended to downsize the current transportation system in light of available maintenance funding and evolving resource protection goals. While it is impossible to predict exactly how many miles of roads will be decommissioned pursuant to these efforts, it is a safe assumption that the net effect of these efforts will be more than a 1.3 to 2.8% reduction[5] in total road system mileage over the next decade.

7. At public meetings, the Forest Service has presented information from Table 5.5f to make the point that the action alternatives will have a limited effect on motorized access in the planning area. For the reasons stated in the comment above, we believe such claims are unsupportable given the anticipated cumulative impact of road decommissioning pursuant to CWAP, the Chief's Natural Resources Agenda, the proposed transportation rule, TMDL determinations, etc. It is more accurate to say that there *will* be a significant reduction of overall motorized access over time, but that impacts specifically to motor-dependent recreation will be minimal since the current transportation system was designed largely to support timber harvest rather than recreational access. EPA looks forward to working with the Forest Service and interested stakeholders under the auspices of the Framework to develop a range-wide strategy that provides appropriate recreational access but also accommodate the amount of road decommissioning necessary to achieve resource protection goals.

8. Both of the preferred alternatives propose to follow Science Advisory Team (SAT) guidelines from the NW Forest Plan in setting riparian buffers rather than the riparian buffer strategy described in SNEP. The SNEP buffers, which incorporate a slope component, appear to be more protective. More importantly, they are derived from a study of the Sierra Nevada, not a different area. We encourage the Forest Service to incorporate the SNEP methodology into the preferred alternative identified in the FEIS, and the selected alternative identified in the ROD. In the alternative, we request that the Forest Service provide a detailed explanation why it believes the SAT guidelines are more protective than SNEP in terms of water quality and aquatic health and represent the "best available science" on this issue, as applied to the Sierra.

9. EPA is concerned that the preferred alternatives to do not provide sufficient protection to unroaded areas (roadless areas smaller than 5000 acres in size) which could potentially be protected through the Roadless EIS and follow-up analysis pursuant to the transportation rule. Road penetration into the Sierra is currently so extensive that any remaining roadless areas, regardless of size, are a rare and important resource, particularly in the Central and Northern Sierra. These areas of undisturbed habitat provide a critical function in supplying clean water for beneficial uses--their preservation represents a "down payment" for future efforts to address water quality through TMDLs. They are also critically important for the purpose of ensuring appropriate levels of suitable habitat for various sensitive species.

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[5] These percentages were calculated from the information in Table 5.5f. The percentages refer to Alternatives 4 and 2, respectively, which predict the lowest and highest reductions in system road mileage, projected over ten years.

EPA recommends that the ROD provide interim protection of all unroaded areas 1000 acres or more in size (i.e. the "ecologically critical roadless areas" as defined in Alternative 5), including such areas in the Quincy pilot area, pending the completion of one or more transportation and motorized access SEISs as described above in comment #1. Such protection should entail: 1) no new road construction; 2) no motorized access for recreational purposes (unless part of winter sports area designated following NEPA analysis, in which case use by snowmobiles could continue); 3) use of the least damaging practicable method where thinning is necessary to address extreme conditions that cannot be addressed through prescribed fire; 4) work in these areas should be prioritized below work in urban interface and general forest, unless FS determines that significant resources (e.g. old growth, cultural resources) face an imminent threat.

10. The FEIS should include a description (and a map, if available) of the California Unified Watershed Assessment priority setting exercise, which is intended to guide allocation of new federal resources for watershed protection. The FEIS should address whether restoration priorities under the various alterative are consistent with this assessment.

Air Quality

1. The section titled, "Health Effects of PM10", should only discuss actual health effects of PM10 (and other pollutants caused by burning for which federal health standards are set). A separate, distinct section on smoke management with its own subheading should be created.

In addition to smoke management program (SMP) elements mentioned in the existing text, this section should specifically reference the USDA Forest Service adherence to the principles and measures contained in the EPA "Interim Air Quality Policy on Wildland and Prescribed Burning (May 1998)", of which the Forest Service is a signator. This section should also specifically discuss California's recently revised statewide smoke management guidelines contained in Title 17 of the Health & Safety Code and the USDA Forest Service's *commitment* to develop a smoke management program in accordance with those guidelines. (Note: the Title 17 guidelines are consistent with the EPA policy). This commitment should be clearly stated and less vague than the current statement in the DEIS on page 226 which says, "Coordination with State smoke management programs...are required".

In addition to PM10, the DEIS should address air quality impacts of smoke for other pollutants which impact federal health standards or visibility/regional haze, including PM2.5 and ozone precursors.

2. Under the section "Effects on Visibility", the section is vague with respect to actual visibility impacts to Class I areas especially for visitors who observe smoke from prescribed burns while visiting Class I wilderness areas. These effects should be more clearly described. The section also states that "The effect of smoke in the Class I airsheds and populated areas *could* be mitigated by burning under prescribed conditions that would avoid these areas". While this statement is true, it falls far short of a commitment by the USDA Forest Service to implement smoke management measures to prevent these impacts. In cases where unavoidable conflicts may occur due to competing demands - ie, the need to burn in a particular area which may cause some smoke impacts, other prescribed burning and smoke management measures (eg, public notification procedures, contingency actions in the event of fire escape, monitoring, etc) should be described or referred to in a SMP. While these measures may be too detailed for the DEIS, nevertheless the Forest Service *commitment* to implement its SMP should be clearly stated.

3. Under the sections "Cumulative Impacts" and Conformity Determination in Nonattainment Areas",

statements relating to PM10 emission impacts are made which are contradictory. For example, under Cumulative Impacts the statement is made that “PM10 atmospheric concentrations do not exceed national standards.” In the absence of more complete air monitoring in areas affected by prescribed burning or more rigorous analysis, this statement is overly optimistic. The same is true for the statement in the next paragraph which says, “...the cumulative impacts of prescribed fire and wildfire on PM10 emissions is positive”. Under the Conformity discussion several alternatives are discussed which describe large increases in projected burn acreages and emissions from prescribed fire. These statements lead the reader to different conclusions than the one the Forest Service is attempting to convey; namely, that fire emissions and potential smoke impacts will increase.

4. Under “Emission Reductions” on page 230, the use of the term “offsets” to describe emission reductions is an inappropriate use of the term. Under the Clean Air Act, offsets are emission reductions which must be *obtained* elsewhere by a new or modified major source in a nonattainment area to “offset” any growth in emissions caused by the source. In the graph on page 230, the reductions characterized under each of the alternatives should simply be the emissions estimates for each alternative.

5. Similarly, the section states that "Coordination with state smoke management programs... are required". This section should *specifically* state that the USDA Forest Service will *comply* with applicable CA smoke management guidelines under the recently revised Health and Safety Code Title 17 revisions.

6. The DEIS provides very little detail on emissions inventory and modeling methodologies and calculations used in estimating the air impacts of the alternatives. For example, page 3-226 gives very little information on the application of the NFSPUFF model. What were the "worst-case scenarios", what meteorology was assumed, where were impacts evaluated, were different portions of the Sierra Nevada with their different characteristics considered individually? As a result of the lack of information, it is difficult for a reader to have confidence in the estimates.

Total PM-10 emissions were used as an indicator for visibility. Though better than nothing, this very crude procedure leaves out many factors that could affect visibility. For example, the alternatives affect forest density and species composition, with resulting change in emitted particle size distribution; they change the location of burns vis à vis Class I areas; they vary in fire intensity and its effect on dispersion. Again, either more refined estimates should be developed for the DEIS alternatives, or a convincing justification provided on the adequacy of the crude method used.

Page 3-229, dealing with conformity, states that the San Joaquin Valley SIP included emissions from the Sierra National Forest and the Sequoia National Forest emissions. But since these emissions vary under the alternatives, it begs the question of which particular emission level was included. The same applies to SIPs for Great Basin and its inclusion of Inyo National Forest emissions.

7. The Forest Service’s conformity determination is based on a demonstration that the PM-10 emissions from the prescribed burns are included in the San Joaquin Valley PM-10 Plan (for the Sierra and Sequoia National Forests) and the Great Basin's SIP (for Inyo National Forest) and that the ozone precursors (VOC and NOx) are unknown at this point and will be evaluated for conformity in the future at the time of "project planning".

Section 93.158(a)(1) of the conformity rule allows conformity to be met by showing that "...for any criteria pollutant, the total of direct and indirect emissions from the action are specifically identified and accounted for in the applicable SIP's attainment or maintenance demonstration...". The applicable SIP is

the EPA approved SIP. The Forest Service's conformity determination for PM-10 does not satisfy 93.158(a)(1) because there is no EPA approved PM-10 SIPs for San Joaquin. Also, there are three PM-10 SIPs under the jurisdiction of the Great Basin Unified APCD (Mammoth Lakes/Owens Lake, Mono Basin, Searles). Of these three SIPs, EPA has only approved the Mammoth Lakes/Owens Lake SIP. EPA has acknowledged the difficulties of dealing with prescribed burns and conformity and has considered including an exemption for certain prescribed burn activities from general conformity requirements; however, at this time, there is no regulatory exemption for prescribed burning activities from conformity.

Relationship to the Quincy Pilot Project

1. In letters dated July 26 and November 18, 1999, EPA has expressed our reservations about implementation of the Quincy Pilot project as described in the legislation. EPA assigned an Environmental Objections rating to the preferred alternatives identified by the Forest Service at both the Draft and Final EIS stage. Our concerns were lessened somewhat by the spotted owl mitigation imposed in the ROD, but we note that this issue may be revisited following the Forest Plan Amendment decision.

On page 1-3, the DEIS states that "[a]ll alternatives will be consistent with decisions made from the environmental impact statement to implement the Herger-Feinstein Quincy Library Group Forest Recovery Act." In making this statement, the Forest Service has indicated its intention to "exempt" the Quincy Pilot project area from any specific amendments to the Lassen, Plumas, and Tahoe National Forests for the duration of the 5 year pilot, with the exception of amendments related to "land management strategies for any plant or wildlife species for which viability may be a concern." (Quincy Pilot ROD, page 9) Unfortunately, this statement limits the ability of Forest Supervisors in the Quincy Pilot project area to immediately update their Forest Plans to include amendments that do not specifically concern species viability. In some cases, this means that forest managers in the Quincy Pilot area will not be able to take advantage of the newest science.

EPA believes the decision to exempt the Quincy Pilot project area raises similar issues identified by the 1997 FACA report (the need to incorporate available science into decisionmaking), and should be revisited. EPA recommends that the Quincy Pilot ROD be revised to reflect all aspects of the Forest Plan Amendment ROD, including protective land designations and standards and guidelines not directly related to species viability. In cases where the Forest Plan Amendment provides more specific direction or provides additional protection (including protective land designations and standards and guidelines) in the context of a particular resource (e.g. old growth, riparian areas, aquatic refuges, sensitive species, roadless and unroaded areas, etc), the Forest Service should amend the Quincy Pilot project decision to reflect the Forest Plan Amendment.

2. The maps provided with the DEIS should depict land designations that will be in place in the Quincy Pilot area *after* the five-year Quincy Pilot period, since these are the land designations being discussed in the context of the Forest Plan Amendment. The maps provided with the DEIS show land designations pursuant to the Quincy legislation for all alternatives. This prevents a full comparison and review of the alternatives. It would be appropriate for land designations included in the Quincy decision to be mapped for the "no action" alternative, since these designations are part of the existing management framework for the pilot area, but all other action alternatives should be mapped over the entire project area, including the Quincy Pilot area.

Analysis of Cumulative Impacts

1. EPA recommends that the analysis of cumulative impacts be expanded to include a more thorough description of continuing environmental impacts associated with the operation of hydropower facilities on Forest Service land. The SNEP report concluded that "aquatic/riparian systems are the most altered and impaired habitats of the Sierra" and "[d]ams and diversions throughout most of the Sierra Nevada have profoundly altered stream-flow patterns (timing and amount of water) and water temperatures, with significant impacts to aquatic biodiversity." EPA believes that hydropower is one of the most important issues to be tackled in the context of the broader Framework. We look forward to working with the Forest Service and other interested stakeholders to identify dams and diversions that can be removed for the benefit of water quality, fish passage, and riparian health.

2. The Forest Service should expand the analysis of cumulative effects to address Sierra Pacific Industries' recent decision to use clear cutting as the preferred silvicultural system for its private holdings in the Sierra.

Response to Comments

While we understand the need to use a "content analysis" process to compile and categorize comments received during the official comment period given the large number of comments the Forest Service expects to receive, we urge the Forest Service to avoid providing "summary responses" to specific points raised in comment letters prepared by state and federal regulatory agencies. Agencies such as EPA and the Fish and Wildlife Service have unique responsibilities for upholding and enforcing the nation's environmental laws, and accordingly their comments should be addressed individually for the benefit of the agencies and the general public. EPA, in particular, must track the responsiveness of the Forest Service to our specific comments in order to meet our reporting obligations under the Government Performance Results Act (GPRA). This becomes nearly impossible in situations where EPA's comments are grouped with other comments and given a summary response.