UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

July 1, 2005

Jeffrey E. Bailey, Supervisor, Inyo National Forest
Edward C. Cole, Supervisor, Sierra National Forest
Attn: Trail and Commercial Pack Stock DEIS
c/o Inyo National Forest
351 Pacu Lane, Suite 200
Bishop, CA 03514

Subject: Draft Environmental Impact Statement (DEIS) for Trail and Commercial Pack Stock Management in the Ansel Adams and John Muir Wildernesses, Inyo and Sierra National Forests, California (CEQ# 20050151)

Dear Mr. Bailey and Mr. Cole:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508) and Section 309 of the Clean Air Act. Our comments are provided in accordance with the EPA-specific extension to the deadline date from June 15, 2005 to July 1, 2005 granted by Mary Beth Hennessy, Inyo National Forest Wilderness Planner (telephone conversation between Laura Fujii and Mary Beth Hennessy, May 26, 2005).

EPA commends the Forest Service effort to balance the multiple uses of the popular Ansel Adams and John Muir Wildernesses. Of note is the use of both internal and external controls that will enable more effective management of temporal and spacial use of the wilderness areas by commercial pack stock. EPA supports management actions that will address degraded meadows, campsites, stock holding areas, and trail conditions that contribute to water quality and ecosystem impairment. Based on our review, the internal controls specified in Alternative 2 allow for more precise resource management.

Based on our review and the above concerns, we have rated the DEIS as Environmental Concerns - Insufficient Information (EC-2). Please see the enclosed Detailed Comments for a description of these concerns and our recommendations. A *Summary of EPA Rating Definitions* is enclosed.

The description of the affected environment clearly states that many areas contain meadows, streams, and trails with degraded conditions and hydrological functions which may adversely affect water quality and sensitive critical areas. Although the action alternatives

include elements to protect critical areas and reduce adverse impacts, the alternatives do not significantly improve the degraded conditions of these areas. We recognize the contribution of historic high-levels of grazing, mining, and other wilderness uses to current environmental degradation. However, EPA remains concerned with the minimal water quality and ecological improvements provided by the proposed action alternatives.

EPA recommends additional management actions be integrated into the preferred alternative to ensure full compliance with water quality standards and more rapid restoration of degraded meadows, streams, and trails. We urge the Forest Service to consider stock night quotas that are aligned with meadow hydrological conditions, closure of meadows with stream segments assessed as functional at-risk with a downward trend, and exclusion of stock from standing water and saturated areas occupied by the Yosemite toad during the breeding and rearing season.

A detailed description and commitment to monitoring measures and enforcement is not provided in the DEIS. The lack of this information is of significant concern. Projected improvements to degraded resources is based upon compliance with new, more stringent use standards. We understand that more detailed enforcement and monitoring measures and commitments may be provided in subsequent NEPA analyses for individual Pack Stock Special Use Permits (p. I-2 and telephone conversation with Mary Beth Hennessy, June 23, 2005). If this is the case, we recommend the Forest Service describe the general framework for enforcement and monitoring in the Final Environmental Impact Statement (FEIS) for the Use Authorization action and commit to NEPA analyses for the individual Pack Stock Special Use Permits. These individual Special Use Permit NEPA analyses should include a detailed description and evaluation of monitoring and enforcement measures that will be applied to each permit.

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send two copies to the address above (mailcode: CED-2). If you have questions, please contact me or Laura Fujii, the lead reviewer for this project. Laura can be reached at 415-972-3852 or fujii.laura@epa.gov

Sincerely,
/s/

Nova Blazej, Acting Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosures:
Summary of EPA Rating Definitions
EPA's Detailed Comments

cc:
Doug Feay, Lahontan Region, RWQCB
Jacob Martin, US Fish and Wildlife Service, Sacramento

EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR TRAIL AND COMMERCIAL PACK STOCK MANAGEMENT IN THE ANSEL ADAMS AND JOHN MUIR WILDERNESSES, INYO AND SIERRA NATIONAL FORESTS, CA., JULY 1, 2005

Water Quality

1. As the designated water quality management agency under the Clean Water Act Section 208 Management Agency Agreement, the Forest Service is required to implement Best Management Practices (BMPs) and other measures to achieve full compliance with all applicable State water quality standards. Implementation of BMP measures alone do not necessarily ensure full compliance with State water quality standards. For instance, the 2002 Clean Water Act Section 303(d) list identified over 50 streams impaired by excessive sediment, nutrients or pathogens associated with roads, silvicultural activities and/or grazing throughout the Sierra Nevada. Additional management actions beyond BMPs may be required to achieve full compliance with all applicable water quality standards.

> Recommendation:
> The Final Environmental Impact Statement (FEIS) should describe water quality standards and BMPs for the project area, including standards for pathogens and Clean Water Act antidegradation requirements. Evaluate the Forest Service's ability to ensure full compliance with water quality standards through the use of BMPs and identify additional measures that may be necessary to achieve compliance.

2. Survey results of meadow hydrologic function alteration, properly functioning stream conditions, soil compaction, sod fragmentation, campsite and stock holding area conditions, grazing effects, and trail conditions clearly demonstrate the potential for continued water quality and ecosystem impairment under all alternatives (Chapter 3 and Chapter 4). For example, 8% of trails analyzed are causing severe alteration of soil or hydrologic processes (p. III-25). Under Alternative 2, the Proposed Action, five meadows determined suitable for grazing would continue to have a high potential for increased sod fragmentation (p. IV-115). Continuing current practices where commercial pack stock use appears to be contributing to adverse water quality effects is of concern, especially given the adverse effects of past grazing and mining practices.

> Recommendation:
> EPA recommends that destination quotas, grazing allocations, daily and seasonal stock quotas, and other levels of use controls be aligned with management direction to improve resource conditions. Where commercial pack stock use is clearly contributing to continued impairment of water quality and ecological function, we recommend implementation of more stringent use limits, temporary closures, grazing rotation systems, and other management practices to reduce and eliminate these impacts. We recommend all meadows with severe hydrologic

function alteration, nonfunctioning streams, or streams with functional at-risk downward trends be designated not suitable for grazing and closed to grazing.

3. The DEIS states that some meadows might continue to have a minor reduction in hydraulic function under Alternative 2 if the recommended number of grazing nights are fully utilized (p. IV-111). However, the DEIS states that it is unlikely that proposed stock nights would all be used in all meadows. Meadows with streams that are functional at-risk with downward trend would continue to have a high number of grazing nights similar to, or more than, recent use (p. IV-113).

Recommendations:
We recommend the number of maximum grazing nights be allocated based on reduction of hydrologic function alteration and functional at-risk criteria, whether or not these grazing nights are used in their entirety in all meadows. Use limits should not be determined on the assumption that an area will not be grazed at the allocated high stock night numbers (e.g., p. IV-262). We recommend the grazing night allocations respond more aggressively to recorded sod compaction, functional at-risk and other identified water quality and ecosystem impairments.

The number of maximum stock nights should be aligned with the carrying capacity of the resource or, if use is low, with current practice. For example, the proposed stock nights for Johnston Meadow is 193 stock nights. Even though current reported use is 20 stock nights, the stream is incised, and the meadow has moderate vegetation alteration and is expected to trend away from its potential under Alternative 2 (pps. IV-262 to 263). Because of these degraded conditions, the maximum number of stock nights at Johnston Meadow should be 20 nights or less.

4. Most of the analyzed campsites within 50 feet of water, regardless of the site type, are contributing sediment and/or manure to surface water (p. III-34) with significant local adverse effects (pps. III- 27 to 34). Furthermore, of 9 stockholding sites and 11 spot/dunnage sites located less than 50 feet from water, over 90% are contributing substances to water and are water quality concerns (pps. III-33, III-34). These adverse water quality effects are of significant concern given the high use of surface waters by other wilderness users.

Recommendations:
The Forest Service should work closely with pack operators to address water quality impacts caused by stockholding sites and campsites less than 50 feet from water. Of specific concern is Fish Camp in Mono Creek which is located within 10 feet of the water with observable water quality degradation (p. III-34). Other sites causing water quality concerns should be addressed (e.g., Waterfall Camp in French Canyon, p. III-34; specific problems identified at the stockholding campsite near the junction of Shadow Creek and Nydiver Creek, p. III-60).

We recommend closure or relocation of campsite and stockholding areas with significant and observable adverse effects to water quality.

5. The DEIS does not describe existing environmental conditions at the Pack Stock Stations. Nor does the DEIS evaluate potential environmental effects of these Pack Stock Stations or the effect of commercial pack stock use authorizations on the environmental conditions at the Pack Stock Stations.

Recommendation:
The FEIS should include a description of existing conditions at Pack Stock Stations, especially those located on Forest Service land. Evaluate the potential environmental effects of action alternatives and use authorization on existing conditions. For example, describe existing conditions and potential effects of reduced or increased use authorization on water quality, meadow conditions, and threatened and endangered species habitat at Pack Stock Stations locations.

6. Although the DEIS describes concerns with water quality inputs from campsites, eroded/incised trails, stockholding, and grazing areas, it states the assumption that water quality in general is very good with impacts locally moderate to severe (p. III-27). The DEIS does not describe water quality monitoring or quantitative data to support this assumption.

Recommendation:
The FEIS should describe current water quality monitoring, if any. EPA recommends implementing a monitoring program in areas with known moderate to severe water quality degradation and high use. If funding and staffing resources are limited, the Forest Service should consider a limited, one-time water quality sampling project to validate water quality assumptions and determine if human health risks are present in drinking water sources (e.g. e-coli, guardia, other bacterial pollutants).

The Forest Service should commit to the development of subsequent NEPA analyses for specific Pack Stock Special Use Permits. These NEPA documents should include water quality and management effectiveness monitoring plans.

7. The DEIS does not appear to describe or address packstock watering practices which could contribute to water quality impacts.

Recommendation:
The FEIS should describe packstock watering practices and the potential for environmental impacts to water quality, threatened and endangered species, fish and wildlife, and sensitive aquatic habitat. If potential impacts are likely, describe alternate stock management practices and mitigation measures to reduce these impacts.

Monitoring and Enforcement

1. The DEIS states that there is a high degree of uncertainty in some locations regarding the feasibility of keeping grazing pack stock out of critical areas in accordance with the proposed 5% inadvertent trampling standard (p. IV-111). For instance, Alternative 2 would continue to allow grazing in Upper Spooky Meadow at levels similar to current grazing, even though trampling to the spring with fen characteristics would be difficult to keep at less than 5% without changes to stock management (p. IV-291). Monitoring, compliance, and enforcement of proposed management measures are key in ensuring that projected improvements are achieved. The Forest Service needs to demonstrate that proposed management measures are feasible and enforceable and that management direction will be fully implemented.

Recommendations:
The FEIS should describe present and future management, monitoring, and enforcement measures to ensure that proposed use limitations in meadows, campsites, critical areas, and trails are adequately implemented. Describe and evaluate grazing and stock management practices that can be used to keep pack stock out of critical areas and in compliance with use restrictions (e.g., portable electric fences, drift fences, pack lines). Include a list of mitigation measures that will be implemented if impacts are in excess of the allowable inadvertent level of use.

We recommend monitoring to validate the assumption that packers can control grazing stock to prevent their use of critical and unsuitable areas from exceeding inadvertent use levels. The FEIS should include a commitment to implement an adaptive management program which can respond to changing conditions. We recommend working closely with pack operators to maximize implementation of proposed use limitations to prevent excess grazing impacts.

The NEPA analysis for individual Pack Stock Special Use Permits should include a specific monitoring and enforcement plan.

Wetlands

1. Many of the high elevation, mountain meadows may meet the definition of jurisdictional wetlands under the Clean Water Act. We are particularly concerned that significant impacts to seasonal wetlands may occur due to uncontrolled trampling by packstock in the early season when soils are saturated during, and immediately following, snowmelt. No specific grazing start dates are described in the DEIS.

Recommendations:
The Forest Service should identify the location, extent, and functions and values of jurisdictional wetlands within the project areas and potential impacts to these wetlands from the proposed project.

The FEIS should establish adjustable grazing start dates that prevent adverse impacts to the hydrology and biology of wetlands and meadows. These start dates should be based upon range readiness and monitoring results.

2. EPA is concerned with the potential impacts to associated aquatic-dependent wildlife such as the Yosemite toad. Potential impacts to Yosemite toad are of specific concern because the U.S. Fish and Wildlife Service has concluded that the Yosemite toad may warrant protection under the Endangered Species Act. More than 90% of Yosemite toad habitat occurs within Forest Service wilderness areas and National Park Service lands, especially around Yosemite National Park. Fifty-eight (58) meadow areas identified as suitable for commercial pack stock grazing under Alternative 2 would overlap Yosemite toad breeding areas and could result in trampling and chiseling of Yosemite toad breeding pool habitats (p. IV-167).

Recommendation:
We recommend the Forest Service exclude stock from standing water and saturated soils in wet meadows and associated streams and springs occupied by the Yosemite toad during their breeding and rearing season. The FEIS should include management measures and a commitment to minimize potential impacts to Yosemite toads and their critical habitat.

Alternatives

1. Action alternatives are made up of discrete management elements including destination quotas, daily and seasonal quotas on stock and people, trailhead quotas, trail class and use designations, grazing use levels, campfire closures, and campsite locations. The criteria used for determining the parameters of the elements of each alternative is not well described in the DEIS. For example, the reason for allowing trail sanding on only one pass in Alternative 2, while it is unrestricted in Alternative 3, is not provided.

Recommendation:
The FEIS should describe each management element, its role in the use authorization action, and the environmental effects of the specific element. For instance, describe each type of quota and the likely effect of the specific quota on operator use patterns and operations, client experience, and on-the-ground impacts. Describe how the parameters of each element in each alternative were developed and chosen. Also explain how internal and external use controls affect use patterns and environmental effects.

General Comments

1. Alternative 2 allows use of packed in wood for open campfires at stock camps above the current elevation fire closure zone (II-80). This alternative would have the highest risk of introduction of pathogens and/or weed seeds into the wilderness areas and increased unauthorized gathering of wood and campfires by non-packer clients. Any campsite used by pack stock clients in the fire closure zone, up to 450 campsites, would be open for campfires with packed in wood. Potential effects could be long-term, moderate to severe, and potentially widespread (IV-230).

Recommendation:
Given the potential for long-term, severe, and widespread adverse effects, we recommend the Forest Service reconsider the decision providing an exemption for commercial pack stock operators to the elevation fire closure zone.

The FEIS should describe the actual and perceived importance of campfires to clients' experience of the wilderness. If exemptions to the elevation fire closure zone are provided, the FEIS should describe and commit to specific monitoring and mitigation measures to reduce potential adverse effects.

2. Table 2.2, Effects Summary, provides a good narrative summary of the impacts of each alternative. However, there is no simple comparative chart highlighting the key differences between the impacts of the five alternatives.

Recommendation:
The FEIS should provide a one to two page comparative chart highlighting the differences between the impacts of each alternative on key resources and management issues. Include a comparison of the temporal, spacial, and intensity of effect of each alternative. For example, while Alternative 4 may reduce the spacial effects of commercial pack stock use, it could increase the intensity of adverse effects by concentrating use into smaller high use destinations. The goal should be to highlight environmental and management tradeoffs between alternatives.

3. The DEIS states that the designated campsites by alternative are as follows: Alternative 2 - 94 sites, Alternative 3 - 101 sites, and Alternative 4 - 59 sites (p. IV-116).

Recommendation:
The FEIS should provide the justification and rationale for the number and location of designated sites for each alternative.

4. Although the DEIS includes a number of terms and acronyms unique to commercial pack stock use, trail designations, and recreation management, a glossary and acronym list is not provided.

Recommendation:
The FEIS should include a glossary and acronym list that describes and explains specific terms such as trail class, recreation category, spot trips, dunning trips, full service trips, service days, grazing night allocations, and properly functioning conditions.