



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX**

75 Hawthorne Street
San Francisco, CA 94105

August 25, 2009

J. Sharon Heywood
Forest Supervisor
Shasta-Trinity National Forest
3644 Avtech Parkway
Redding, CA 96002

Subject: Draft Environmental Impact Statement for Shasta-Trinity National Forest
Motorized Travel Management, Humboldt, Modoc, Shasta, Siskiyou, Tehama,
and Trinity Counties, CA (CEQ# 20090179)

Dear Ms. Heywood:

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 our NEPA review authority under Section 309 of the Clean Air Act. Our detailed comments are enclosed.

EPA commends the Forest Service for its efforts to address the many challenges inherent in developing a balanced Public Motorized Travel Management Plan that responds to recreational and resource management demands. We acknowledge that the Travel Management Plan process is a positive step in addressing resource impacts from motorized uses. The permanent prohibition of cross country travel off designated routes and implementation of seasonal restrictions on newly authorized routes to protect wildlife and reduce erosion will result in significant environmental benefits.

We commend the Forest Service on the data collection and analysis contained in the document. We have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "*Summary of Rating Definitions*") due to our concerns regarding the scope of the travel management planning process and potential effects on water and cultural resources. Additional information is necessary to fully describe monitoring and enforcement commitments, effects of climate change, and future planning for specific designated routes.

EPA is aware of the decision by the Pacific Southwest Region of the Forest Service to limit the scope of the travel management planning process to prohibition of motorized vehicle travel off designated routes, addition of existing unauthorized roads and trails to the National Forest Transportation System (NFTS) so they may be designated for motor vehicle use, and changes in vehicle class and season of use. The rationale for the limited scope of this process is schedule constraints and limited funding and resources.

We acknowledge the constraints of funding and resources, and the current efforts to address NFTS maintenance requirements; nevertheless, we had hoped the Forest Service would take this opportunity to review and rationalize the NFTS, pursuant to Travel Management Rule direction to identify the minimum road system needed (36 CFR Part 212 Subpart A); to address known road-related resource impairments and use conflicts of both the existing NFTS and unauthorized user-created system; and to align the transportation system with maintenance and enforcement capabilities. We note a similar request has been made by Senator Feinstein (see attached letter) and Congress (H.R. 1105 Omnibus Appropriations Act, 2009 Conference Report).¹

Route designations are only part of what is needed to reduce the ongoing adverse impacts to water quality and other resources from the NFTS. We continue to believe a more holistic approach to travel management planning, whereby route designations are guided by travel analysis, known locations of resource impairment, and prior determination of the minimum road system needed, would better serve the long-term interests of the public, Forest Service, and National Forest resources.

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send one hard copy and one electronic copy to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3521, or Carolyn Mulvihill, the lead reviewer for this project, at (415) 947-3554 or mulvihill.carolyn@epa.gov.

Sincerely,

/s/ Connell Dunning for

Kathleen M. Goforth, Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosures:

Detailed Comments

Summary of Rating Definitions

Excerpt from H.R. 1105 Omnibus Appropriations Act

Letter from Senator Dianne Feinstein to Regional Forester, December 18, 2008

cc: Steve Thompson, California Operations, US Fish and Wildlife Service
Angela Wilson, North Coast Regional Water Quality Control Board (R1)
Gary Stacey, Regional Manager, Northern Region, California Department of Fish and Game

¹ H.R. 1105 – Omnibus Appropriations Act, 2009 Conference Report, Division E – Department of the Interior, Environment, and Related Agencies, Page 1146, March 11, 2009.

EPA DETAILED DEIS COMMENTS – SHASTA-TRINITY NATIONAL FOREST MOTORIZED TRAVEL MANAGEMENT, HUMBOLDT, MODOC, SHASTA, SISKIYOU, TEHAMA, AND TRINITY COUNTIES, CA, AUGUST 25, 2009

Scope of the Alternatives Analysis

Provide information on the minimum road system needed and how this information was used to formulate the alternatives. The scope of the proposed action includes prohibition of motorized vehicle travel off designated routes, the addition of unauthorized user-created roads and trails to the National Forest Transportation System (NFTS), and the opening of areas below the high-water mark on Shasta and Trinity Lakes for highway-legal vehicles. The draft environmental impact statement (DEIS) also states that unauthorized routes not included in this proposal are not precluded from future consideration for addition to the NFTS and inclusion on the Motor Vehicle Use Map. We commend the Forest Service on the surveying of unauthorized routes that it has conducted and the consideration of resource impacts in the selection of routes to add to the NFTS. However, we believe a holistic approach to travel management planning, whereby route designations are guided by travel analysis and prior determination of the minimum road system needed, would best serve the long-term interests of the public, Forest Service, and National Forest resources.

Recommendations:

The final environmental impact statement (FEIS) should describe the relationship of the information that was used to formulate the alternatives to the requirement to identify the minimum road system needed for safe and efficient travel and administration of National Forest System lands (36 CFR Part 212 Subpart A, Section 212.5(b)). The FEIS should describe how the minimum road system needed will be identified pursuant to the requirements of the Travel Management Rule (36 CFR Part 212 Subpart A).

The FEIS should describe the factors that would be used in the consideration of future additions of unauthorized routes. We recommend that such factors include travel analysis and identification of the minimum road system needed.

Expand the scope of the action to include current NFTS roads and trails with known impacts. The DEIS states that some of the greatest impacts to riparian areas stem from existing NFTS roads and that there are 203 miles of roads and trails within riparian reserve areas and 6,999 stream crossings (p. 116). The estimate of deferred road maintenance in the Shasta-Trinity National Forest, based on the national sample, is approximately \$217 million. EPA is concerned with the Forest Service's ability to adequately address road- and trail-related resource impairments, given the amount of existing deferred maintenance and limited availability of maintenance funds, and the current proposal to add additional miles of roads and trails to the NFTS. For this reason, we believe that the scope of this action should include current NFTS roads and trails with known impacts.

Recommendation:

We recommend the Forest Service expand the scope of this action to consider, for seasonal or permanent closure to public motorized use, current NFTS roads and trails with known resource impacts, particularly those located in riparian reserves and other sensitive resource areas.

Alternative Selection

Implement Alternative 4 or a modified Alternative 2 to minimize impacts to natural resources and roadless areas. The DEIS states that Alternative 4 would provide access for dispersed recreation and connections for loop rides, while also protecting natural resources and minimizing impacts to the nonmotorized recreation experience. While we recognize that Alternative 2 would add a small portion of the current unauthorized routes to the NFTS, EPA believes that Alternative 4 would better balance the interests of resource protection and recreation opportunities than the proposed action, Alternative 2.

Recommendation:

EPA recommends implementation of Alternative 4 or a modified Alternative 2, including avoidance of routes in late-successional reserves, riparian reserves, inventoried roadless areas, citizen-inventoried areas, key watersheds, habitat for threatened, endangered, and sensitive species, and other environmentally sensitive areas. We also support the proposed speed limit of 10 miles per hour for vehicles traveling in the areas below the high-water mark in Shasta and Trinity Lakes, included in Alternative 4, to minimize disturbance of lake bottom sediments and subsequent water quality impacts.

Water Resources

Reduce routes and miles on roads in areas of existing water quality and listed species impacts, and in hydrologically sensitive areas. The DEIS states that the State of California has identified the South Fork of the Trinity River, the East Fork of the Trinity River, Trinity Reservoir, and Shasta Lake as having pollution levels or impacts that exceed State standards, particularly due to elevated levels of sediment and water temperature. Trinity River Watershed was judged to exceed the existing water quality standards necessary to protect the beneficial uses of the basin, particularly the cold water fishery. The South Fork of the Trinity River has an established total maximum daily load (TMDL) for sedimentation and water temperature. The TMDL calls for a 30% reduction in sediment load for the South Fork of the Trinity River and Hayfork Creek. The East Fork of the Trinity River from its headwaters to Trinity Reservoir, and Trinity Reservoir are both scheduled to have TMDLs completed by 2019. Shasta Lake is scheduled to have a TMDL completed by 2020.

The DEIS also states that road densities within riparian reserves tend to be higher in the South Fork Trinity River and Hayfork Creek Watersheds. Because of this, it is particularly important to minimize the number of routes added to the NFTS in these areas.

We commend the Forest Service on proposing to close almost 95% of routes with severe erosion risk, but we encourage more than the 27% proposed reduction in erosion-prone unauthorized routes. We also encourage elimination of the remaining miles of unauthorized routes in hydrologically sensitive areas from addition to the NFTS. The amount of routes proposed for addition under Alternative 2 in hydrologically sensitive areas is either 2.8 miles as stated on page 121, or 6.45 miles as stated in Table 3.02-4 on page 125. Please clarify in the FEIS which figure is correct.

The DEIS also states that 18 routes proposed for addition under Alternative 2 are located in riparian reserves adjacent to known habitat areas and designated critical habitat for the threatened Southern Oregon/Northern California coho (SONCC) salmon. Three of these routes have direct access to SONCC salmon-occupied habitat and the use of these routes contributes to sedimentation in Trinity River.

Recommendations:

Reconsider designation of unauthorized routes and trails in areas of impaired waterbodies, existing high road densities, and erosion risk. If route designations in these areas continue to be proposed, the FEIS should include data that clearly demonstrates that additional routes in these areas would not contribute to continued or additional impairment under 303(d) of the Clean Water Act.

We recommend reducing the number of routes and miles added to the NFTS that pass through hydrologically sensitive areas, or that are at risk of losing hydrologic function. In the FEIS, quantify the miles of routes reduced in each of these areas. Where feasible, we recommend elimination of routes with hydrologically connected segments. Clarify the amount of routes proposed in these areas under the preferred alternative.

We recommend elimination of routes adjacent to habitat areas for SONCC salmon from addition to the NFTS.

Demonstrate that the Preferred Alternative will contribute to the reduction of water quality impairment of Section 303(d) Clean Water Act listed water bodies and potential TMDL requirements. Pursuant to future TMDLs, the Forest Service may be obligated to meet temperature or sediment load reductions from dirt roads and trails.

Recommendations:

The FEIS should include data that demonstrates the Preferred Alternative will help contribute to the reduction of water quality impairment of Section 303(d) listed waterbodies.

We recommend the Forest Service consult the North Coast Regional Water Quality Control Board regarding potential Forest Service obligations to meet required sediment or temperature reductions. If such load reductions may not be achieved, than additional Best Management Practices (BMPs) and mitigation measures should be considered and incorporated into the Preferred Alternative to

meet current and potential future TMDL requirements. See <http://epa.gov/owow/nps/unpavedroads.html> for a Recommended Practices Manual for Maintenance and Service of Unpaved Roads.

Cultural Resources

Minimize and mitigate impacts to priority heritage sites and other cultural resources.

The DEIS states that all routes proposed for addition to the NFTS and with “greater than light use” will require survey prior to a project decision being signed. Alternative 2 has six routes in or near priority heritage sites, which would require amendment of the Forest Plan to allow addition of those routes. Alternatives 3 and 4 have no routes proposed for addition in or near priority heritage sites.

Recommendation:

EPA recommends that information from past and future required surveys be used to determine addition of routes. We recommend that addition of routes in or near priority heritage sites be minimized. Where routes will be added, we recommend aggressive methods, including barriers and vegetative screening, to protect cultural resources that may be impacted. We also recommend aggressive enforcement of vehicle and speed restrictions in proposed open lake areas to minimize potential impacts to cultural resources within those areas.

Naturally Occurring Asbestos

Do not add routes on land containing naturally occurring asbestos. Disturbance of rocks and soils that contain naturally occurring asbestos (NOA), such as serpentinite soils, can result in the release of asbestos fibers to the air and exposure to the public. Asbestos is a known human carcinogen and represents a potential human health risk for those exposed while using roads or trails where it occurs.

Recommendations:

Any routes on serpentinite soils proposed for addition should be tested for the presence of NOA. If NOA is present, we recommend these routes not be added to the NFTS. If such routes are added to the NFTS, the FEIS should provide the rationale for their addition and include data to demonstrate that these routes would not significantly increase the risk of adverse health effects. The FEIS should also verify whether Alternative 2 includes any proposed routes near serpentinite rock formations, as the text on page 510 and Tables 3.12-1 and 3.13-2 indicate that it does not, but the text on page 519 states that it does.

For heavily-used existing NFTS and unauthorized roads and trails on land “most likely” to contain NOA, we recommend assessing the potential for exposure to elevated levels of NOA. This information should be provided in the FEIS. We recommend prohibition of public motorized use and closure of roads and trails where monitoring indicates the potential for significant NOA exposure. The Forest should post signs informing visitors that NOA is present, what the risks are, and how visitors can avoid exposure. These measures should be incorporated into the preferred alternative and committed to in the Record of Decision (ROD).

Climate Change

Address climate change and its potential effects on proposed route designations. The DEIS does not consider the effects of climate change on route designations. A number of studies specific to California have indicated the potential for significant environmental impacts as a result of changing temperatures and precipitation.² Climate change effects and the need to adapt to climate change are emerging issues which should be considered in this action. According to the Government Accountability Office (GAO) report entitled, “Climate Change: Agencies Should Develop Guidance for Addressing the Effects on Federal Land and Water Resources”³ (August 2007), federal land and water resources are vulnerable to a wide range of effects from climate change, some of which are already occurring. A change in the timing and quantity of precipitation may increase the vulnerability of native surface roads and trails to erosion and sedimentation. Roads and their use also contribute to species stress through habitat fragmentation, increased disturbance, introduction of competing invasive species, and increased fire risk; which may further exacerbate species’ ability to adapt to the changing climate.

Recommendations:

The FEIS should include a discussion of climate change and its potential effects on the Forest as they relate to route designation decisions and the final NFTS. Of specific interest are potential cumulative effects of climate change and the NFTS on the connectivity of wildlife and threatened and endangered species habitat, air quality, water quality and quantity, fire management, invasive species management, and road maintenance.

We recommend the discussion include a short summary of applicable climate change studies, including their findings on potential environmental effects and their recommendations for climate change adaptation and mitigation measures.

Monitoring and Enforcement

Develop, describe, and implement a Travel Management Plan Monitoring and Enforcement Strategy. It is important that wildlife protection, vegetation management, and erosion control goals be achieved to minimize the potential adverse effects of the Travel Management Plan. We believe the public and decision makers would benefit if a strategy is developed that includes specific information on funding, monitoring and enforcement criteria, thresholds, and priorities.

Recommendations:

We recommend development of a detailed Travel Management Plan Monitoring and Enforcement Strategy. Such a strategy should include specific information on monitoring and enforcement priorities, focus areas (e.g., issues, specific locations), personnel needs, costs, and funding sources. We recommend the FEIS demonstrate that the proposed monitoring and enforcement strategy is adequate to assure that motorized vehicle use will not violate access restrictions or exacerbate

² For example: Draft 2009 Climate Action Team Biennial Report to the Governor and Legislature. See internet address: <http://www.climatechange.ca.gov/publications/cat/index.html>.

³ <http://www.gao.gov/products/GAO-07-863>

already identified road-related resource impacts. We recommend the monitoring and enforcement strategy be periodically updated (e.g., annually or biennially).

Describe enforcement of seasonal restrictions and closure of unauthorized routes. The DEIS states that seasonal restrictions would apply to certain routes and to the lake areas to protect wildlife and reduce erosion. EPA commends the Forest Service on these proposed restrictions. For the Travel Management Plan to adequately protect natural resources, the Forest Service must ensure the enforceability of the designated route network. Research regarding OHV use has demonstrated that signs and barriers are not always effective in closing roads and trails or in reducing impacts and protecting forest resources.⁴ We are concerned with the enforceability of proposed seasons of use periods and closure of unauthorized routes.

Recommendation:

We recommend the FEIS describe in detail how seasonal restrictions and route closure will be enforced and what enforcement approaches have been successful. EPA encourages the Forest Service to consider enforcement as a significant issue driving the design and analysis of alternatives for motorized travel management.

Plan for decommissioning and restoration of unauthorized routes that have known significant resource impairments. All action alternatives prohibit travel, rather than physical removal or restoration, on unauthorized routes. Therefore, the density of roads and trails at the watershed scale, and associated resource impacts, may not substantially change for a significant period of time due to the rate of natural restoration.

Recommendation:

Where feasible, we recommend decommissioning and restoring unauthorized routes not designated for motorized vehicle use that have known significant resource impairments. At a minimum, the FEIS should list and prioritize, for future rehabilitation, the unauthorized prohibited routes that require active management to address significant resource issues.

⁴ “Learning to Live with Off-Highway Vehicles: Lessons Learned from the Dixie National Forest” presented at the “Proceedings of the Fourth Social Aspects and Recreation Research Symposium,” San Francisco State University, Aaron K. Divine and Pamela E. Foti, 2004.