



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105
October 26, 2009

Ramiro Villalvazo
Forest Supervisor
Eldorado National Forest
100 Forni Road
Placerville, CA 95667

Subject: Draft Environmental Impact Statement (DEIS) Freds Fire Reforestation, El
Dorado County, CA (CEQ# 20090313)

Dear Mr. Villalvazo,

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.

The proposed action would take place on 3,320 acres in the Eldorado National Forest. The preferred alternative (Alternative 1) proposes to reestablish a forested landscape, control or eradicate invasive plant species using herbicides, reduce fuel, and restore spotted owl travel corridors.

Based on our review, we have rated the DEIS as Environmental Concerns - Insufficient Information (EC-2). We commend the Forest Service on a thorough analysis of pesticide risk; but we have identified a source of toxicity data that should be useful, and suggest an additional comparison. Our other concerns include future herbicide limitations, clarification of herbicide use, and climate change. Please see the enclosed Detailed Comments for a description of our concerns and recommendations. A *Summary of EPA Rating Definitions* is also enclosed.

We appreciate the opportunity to review this document. We are available to discuss our comments. If you have any questions, please contact Tom Kelly, the lead reviewer for this project, at 415-972-3856 or kelly.thomasp@epa.gov, or me at (415) 972-3521.

Sincerely,

/S/

Kathleen M. Goforth, Manager
Environmental Review Office

Enclosures:
Summary of EPA Rating Definitions
Detailed Comments

EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) FOR FREDS FIRE REFORESTATION, EL DORADO COUNTY, CA, OCTOBER 26, 2009

Additional Aquatic Toxicity Data and Analysis

Improve Aquatic Toxicity Data. The 50% lethal concentration (LC50) levels in Table 3-30 and 3-31 do not appear comprehensive. The Forest Service should review EPA's ECOTOX database (<http://cfpub.epa.gov/ecotox/>) for aquatic toxicity values. For example, ECOTOX contains over 1300 acute and chronic toxicity values for nonylphenol for a wide range of plant, vertebrate and invertebrate species. The Forest Service should evaluate the most appropriate values for comparison to the expected concentrations based on Water Contamination Rates shown in Tables 3-17a and 3-17b.

Recommendation:

The FEIS should review the ECOTOX database for additional toxicity data for herbicides, surfactants and additives, and compare appropriate toxicity data with water contamination rates.

Future Herbicide Limitations

Review potential future herbicide use limitations posted by EPA. Although the project concludes that no federally threatened, endangered or proposed species or their habitat would be impacted (pg. 197), the Forest Service should be aware that EPA continues to conduct consultations on effects of pesticides to listed species. EPA has completed assessment of effects to certain species from uses of glyphosate, hexazinone, and triclopyr. Results of these effect determinations/ consultations can be found at <http://www.epa.gov/oppfead1/endanger/litstatus/effects/>. EPA may require future use limitations as a result of these ESA consultations. If required, these limitations would be implemented through pesticide product labels.

Recommendation:

The Forest Service should review EPA's website (<http://www.epa.gov/oppfead1/endanger/litstatus/effects/>) to ensure additional limitations have not been placed on pesticides planned for use.

Clarification of Herbicide Use

Clarify Comparison of Alternatives Table. The (unnumbered) Comparison of Alternatives Table, on page xvii, states the following short term impacts: "Herbicides (and surfactants and additives) may reach streams under several worse-case scenarios. These concentrations would be below Maximum Contaminant Levels for humans." However, Maximum Contaminant Levels do not exist for many of the pesticides, surfactants and additives evaluated. Instead, the Forest Service used hazard quotients derived from estimated concentrations and reference doses to estimate herbicide, surfactants and additive risk (e.g. Table 3-19a-2). While EPA supports this approach, we recommend the Comparison of Alternatives Table more accurately reflect the discussion of the DEIS.

State the EPA Registration Number of any products anticipated to be used for the project. Forest Service proposes to apply several types of herbicide, which include glyphosate, triclopyr, hexazinone, clopyralid and chlorosulfuron, to competing vegetation on approximately 3,200 acres within the Freds Fire area to hasten the development of a structurally diverse conifer forest.

Recommendation:

The FEIS should state the EPA Registration Number of any products anticipated to be used for the project. The pesticides used must be registered with EPA and the California Department of Pesticide Regulation and used according to the label directions and Federal and State pesticide laws (Executive Order 12088). Since the regulatory status of chemicals can change, a review of the current status of all herbicides considered for use should be conducted prior to each application season.

Climate Change

Describe climate change and its effects on forest management practices, habitat, and biodiversity. It is believed significant changes in weather patterns could have important implications for how we manage our forests. Currently, research indicates that climate change could impact California's forests through changes in water supply, timing of snowmelt runoff, and distribution of wildlife, vegetation, and harmful timber insects and diseases; by increasing the length and severity of the fire season; and by altering the growth rates of forest trees and vegetation. The California Climate Action Team recently released a report¹ on the impacts of climate change to California, the latest research, and State efforts to adapt to impacts. The report estimates that the long-term risks of large wildfires in California are substantial, with increases in occurrences statewide ranging from 58% to 128% in 2085.

Recommendation:

We recommend the FEIS include a detailed description of climate change and its implications for effective management of forest resources and the ability to meet requirements of the Forest Land and Resources Management Plan. For example, describe and evaluate projected climate change consequences, such as frequency of high intensity storms, amplified rain events, and the severity and frequency of insect outbreaks, droughts, and fire seasons, and their effects on the success of reforestation efforts and adaptive forest management.

¹Draft 2009 Climate Action Team Biennial Report to the Governor and Legislature. See web page: <http://www.climatechange.ca.gov/publications/cat/index.html>.