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**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION**

SIERRA CLUB, ENVIRONMENTAL PROTECTION)	
INFORMATION CENTER, CALIFORNIA)	Case No. _____
WILDERNESS COALITION, KLAMATH FOREST)	
ALLIANCE, CENTER FOR BIOLOGICAL DIVERSITY,)	
KLAMATH-SISKIYOU WILDLANDS CENTER, and)	
FOREST CONSERVATION COUNCIL,)	
Plaintiffs,)	PLAINTIFFS MEMORANDUM
v.)	IN SUPPORT OF MOTION
DALE BOSWORTH, in his official capacity as Chief of)	FOR TEMPORARY
the United States Forest Service, and UNITED STATES)	RESTRAINING ORDER
FOREST SERVICE, an agency of the Unites States)	AND PRELIMINARY
Department of Agriculture,)	INJUNCTION
Defendants.)	
_____)	

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I. INTRODUCTION

On July 9, 2001, the Forest Service signed the Record of Decision for the Fuels Reduction for Community Protection, Phase 1" logging project (hereinafter, Phase 1 logging project) on the Six Rivers National Forest. The project involves logging over 20 million board feet of timber, or roughly 4,000 log-trucks of trees, from the most severely burned areas of a 1999 wildfire. Nearly two years after the wildfires, the Forest Service suddenly declared an emergency to allow logging to proceed immediately, in disregard of the usual automatic stay during the 45-day administrative appeal period. Logging and road construction is expected to commence any day, and the Forest Service anticipates that all logging will be completed in a matter of months. Contrary to the assertions of the Forest Service, however, there is no emergency, nor any legitimate need to immediately log these trees.

The Forest Service asserts that dead trees in the severely burned areas must be immediately logged to protect communities from future wildfire. The Forest Service admits, however, that there is currently no risk of reburn within the severely burned areas, and that the Phase 1 project would actually *increase* the potential for reburn in the short-term. The decision to proceed with the project ignores the Forest Service's own recently completed review of the available post-fire studies, which found no scientific support for the theory that post-fire logging will reduce the probability or intensity of future reburn. The Forest Service's only basis for the alleged emergency is therefore based on the economic value of the allegedly deteriorating trees. The Forest Service Chief has made it clear in the past, however, that economics is not a legitimate reason to exempt a project from the normal administrative stay period.

The Forest Service's Phase 1 logging proposal is also at direct odds with the 1995 report *Wildfire and Salvage Logging, Recommendations for Ecologically Sound Post-Fire Salvage Management and Other Post-Fire Treatments* (Beschta Report). The Beschta Report, which was prepared by an expert team of agency and university scientists, and which the Forest Service itself has endorsed, found considerable evidence that post-fire salvage logging would likely result in persistent, significant adverse environmental impacts. The Beschta Report recommends

the complete prohibition of salvage logging in severely burned areas, and concludes that there is no ecological need for immediate intervention on the post-fire landscape. According to the Report, by acting quickly, the Forest Service only runs the risk of creating more problems. In direct contradiction to the Beschta Report, the Phase 1 logging project proposes to immediately log thousands of truckloads of trees in the most severely burned areas of the 1999 wildfires.

The Phase 1 logging project, as its name indicates, is just one phase of multiple post-fire projects for this area. The Forest Service has an overall recovery strategy in which it plans to build many miles of fuel breaks across both burned and unburned areas on the Six Rivers and Shasta-Trinity National Forests. Separate environmental impacts statements and assessments are already being prepared for subsequent actions, and still more recovery projects have already taken place. Because the multiple projects of the Forest Service's strategy are related, similar in timing and geography, and will have cumulative impacts, the National Environmental Policy Act (NEPA) requires that they be assessed in a single document. In addition, as the Eastern District of California just held in Californians for Alternatives to Toxics v. Dombeck, No. Civ. S-00-605 LKK/PAN (E.D. Cal., 2001) the Forest Service is required to include within its cumulative effects analysis the inevitable maintenance that will be required for its miles of fuel breaks, including the likely need to apply potentially harmful herbicides in perpetuity.

The Final Environmental Impact Statement (FEIS) for the Phase 1 project is legally inadequate for a number of additional reasons. The FEIS fails to include a cumulative effects analysis for wildlife species, fails to insure that sensitive soils will not be further damaged, and fails to include an analysis of the 1999 fire-suppression tactics, which included miles of bulldozer constructed firelines and the aerial application of tons of toxic fire retardant. Plaintiffs identified these deficiencies in comments, and they will be raised in administrative appeals, but relief on appeal will not be available if the trees are already logged. The Phase 1 project should be temporarily enjoined to ensure that the Forest Service has taken the requisite

hard look at the impacts of its proposal, and to allow plaintiffs the opportunity to present their arguments to the Regional Forester, and/or this Court, before irreversible damage occurs.

II. STATEMENT OF THE ISSUES TO BE DECIDED

1. Is the Forest Service's May 25, 2001, emergency determination for the Phase 1 logging project arbitrary and capricious, and does it violate 36 C.F.R. /215.10(d)?

2. Does the FEIS prepared for the Phase 1 logging project violate NEPA by failing to address the scientific evidence that contradicts the proposal, failing to address the impacts of maintaining the proposed fuel breaks, failing to analyze the cumulative impacts to wildlife species, failing to address soil productivity or the medium and long-term impacts to soils, and failing to consider the impacts of the Forest Service's 1999 fire-fighting tactics?

3. Is the Forest Service required to analyze the environmental impacts of all of its post-fire logging proposals for the analysis area within a single EIS?

4. Have plaintiffs established the possibility of immediate and irreparable injury, or that the balance of hardships tips in their favor?

III. FACTUAL BACKGROUND

On August 23, 1999, a lightning storm ignited a number of wildfires on the Big Bar Ranger District of the Shasta-Trinity National Forest. Declaration of Marc D. Fink (hereinafter, Fink Dec.), Exhibit K, p. 4. The wildfires, referred to cumulatively as the Big Bar Complex Fires, included both the Onion and Megram fires, and eventually spread through significant portions of the Six Rivers and the Shasta-Trinity National Forests. Id., Exhibit M, p. 1. The Megram Fire burned a total of 125,000 acres, including 59,220 acres on the Six Rivers National Forest and 63,340 acres on the Shasta-Trinity National Forest, while the Onion Fire burned 16,000 acres on the Shasta-Trinity National Forest. Id.

The Forest Service fought the Big Bar Complex Fires with aggressive fire-suppression tactics. Bulldozers constructed roughly 50 miles of firelines, and an additional 100 miles of hand lines were constructed. Fink Dec., Ex K, p. 4. The available evidence indicates that these lines were at times constructed on steep slopes, in riparian areas, and through streams. Id., Ex. E, p. 2.

The Forest Service also dumped at least 280 tons of fire retardant on the fires, including over 100 tons of Fire-Trol, which yields ferrous cyanide as a by-product. Id., Ex N, p. 15. Despite these efforts, the fire burned uncontrolled until significant rainfall was received on October 27, 1999.

Soon after the fires were extinguished, the Forest Service began developing a post-fire recovery strategy that encompasses multiple projects. First, on November 9, 1999, the Forest Supervisor for the Shasta-Trinity National Forest submitted an initial funding request to the Regional Forester for Burned Area Emergency Rehabilitation (BAER) for the Big Bar Complex Fires on the Shasta-Trinity and Six Rivers National Forests. Fink Dec., Ex. O. The second component of the strategy was hazard tree removal projects, designed to log trees along Forest Service roads, including those needed to access the proposed timber sales. On July 6, 2000, the Six Rivers National Forest signed the decision for the Megram Roadside Hazard Tree Project, to authorize logging along 114 miles of roads impacted by the Megram Fire. Id., Ex. P., p. 3. The Shasta-Trinity is currently implementing the Big Bar Hazard Tree Removal Project, which authorized logging on an additional 60 miles of roads in the Megram and Onion fire areas.

The third component of the Forest Service's post-fire recovery strategy is by far the most intensive. The Six Rivers and Shasta-Trinity National Forests have proposed multiple logging projects that are purportedly designed to construct many miles of strategic fuel breaks across the Forests, and to reduce fuels in the already burned areas.¹ The Six Rivers National Forest has just signed the Record of Decision for Phase 1" of its fuel break and fuel reduction strategy, which addresses only the most severely burned areas. The Phase 1 FEIS acknowledges that the project is only the first phase of a series of forest fuels reduction projects. Id., Ex. D, p. 4. The Phase 1 project would build and reconstruct 1.7 miles of road, and reopen another 1.4 miles, to log and remove over 20 million board feet of timber. Id., pp. 8, 10. Commercial logging would occur on 820 acres, including 254 acres of tractor logging. Id.

¹ The total miles and acres of the Forest Service's overall fuelbreak strategy for the analysis area ranges from 90 miles (3,610 acres) to 183.49 miles (13,175 acres). See Fink Dec., Ex. E, p. 7; id., Ex. V, pp. 10-12.

The Six Rivers National Forest has already commenced preparation of Phase 2, which will expand and connect the fuel breaks into unburned and moderately burned areas. Id., Ex. D, p. 16. Meanwhile, the Shasta-Trinity National Forest is concurrently preparing NEPA documentation to assess the construction of fuel breaks and the reduction of fuels in adjacent post-fire areas. Id., Ex. Q. In addition, the Six Rivers National Forest recently issued a scoping notice for the Plantation Precommercial Thinning, and Fuels Treatment project, which includes an additional 219 acres of strategic fuel breaks within the recovery strategy area. Id., Ex. R.²

On May 14, 2001, the Six Rivers National Forest requested an emergency situation determination for the Phase 1 project, to allow logging to proceed immediately upon issuance of the Record of Decision, before administrative appeals are received or considered. Fink Dec., Ex. A. Forest Service Chief Dale Bosworth granted the request on May 25, 2001. Id., Ex. B. As result of the exemption, the Forest Service estimates that 85 percent of the project can be logged by mid-September, with the remaining 15 percent cut by mid-October. Id., Ex. A, p. 2.

Plaintiffs have submitted detailed comments throughout the development of the project, strongly objecting to the Forest Service's post-fire approach. The mandatory administrative appeal process has been rendered meaningless due to the emergency exemption, as the trees will be logged before the appeals are considered. Plaintiffs were therefore forced to seek immediate judicial relief and filed this action as soon as possible after the signing of the Record of Decision.

IV. STANDARD FOR ISSUANCE OF A TEMPORARY RESTRAINING ORDER AND PRELIMIN

² Other post-fire logging projects within the Big Bar Complex Fire area include (1) the Happyman Plantation Project, which already logged 191 acres within the Happy Camp Mountain and Waterman Ridge area; (2) the Plantation Planting, Site Preparation, and Fuels Treatment project, which proposed to treat an additional 696 acres within the Phase 1 project area; and (3) substantial post-fire logging that has occurred in the Mill Creek watershed, within the Megram Fire area, on the neighboring Hoopa Indian Reservation. See Fink Dec., Ex. S.

Plaintiffs are entitled to a preliminary injunction if they demonstrate either (1) a likelihood of success on the merits and a possibility of irreparable injury; or (2) the existence of serious questions on the merits and a balance of hardships tipping in their favor. National Wildlife Federation v. Burlington N.R.R., 23 F.3d 1508, 1510 (9th Cir. 1994); Fund for Animals v. Lujan, 962 F.2d 1391, 1400 (9th Cir. 1992). The two tests represent two points on a sliding scale in which the required degree of irreparable harm increases as the probability of success decreases. United States v. Nutri-cology, Inc., 982 F.2d 394, 397 (9th Cir. 1992) (quoting Oakland Tribune, Inc. v. Chronicle Publishing Co., 762 F.2d 1374, 1376 (9th Cir. 1985)).

Plaintiffs are entitled to a temporary restraining order if plaintiffs will suffer immediate and irreparable injury. Fed.R.Civ.P. 65(b). In its emergency request, the Forest Service stated that logging can begin immediately after the Record of Decision is signed. Fink Dec., Ex. A, p. 2. Environmental injury is imminent and will likely occur before the Court can determine the merits of a preliminary injunction. A temporary restraining order is therefore appropriate.

The traditional tests for injunctive relief have been modified in environmental cases. Environmental suits involve the public interest, and therefore, where the balance of hardships tips decidedly toward the plaintiff, the district court need not require a robust showing of likelihood of success on the merits, and may grant preliminary injunctive relief if the plaintiff's moving papers raise serious questions on the merits. Caribbean Marine Services v. Baldrige, 844 F.2d 668, 674 (9th Cir. 1988) (citing Los Angeles Memorial Col. v. Nat'l Football League, 634 F.2d 1197, 1203, n.9 (9th Cir. 1980)); Fund for Animals, 962 F.2d at 1400).³

V. PLAINTIFFS HAVE RAISED SERIOUS QUESTIONS, AND WILL PREVAIL ON THE MERITS

A. Defendants May 25, 2001, Emergency Determination for the Phase I Logging P

³ The nature of public resources involved in an environmental suit also lessens plaintiff's burden of showing irreparable harm. Environmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, i.e., irreparable. If such injury is sufficiently likely, therefore, the balance of harms will usually favor the issuance of an injunction to protect the environment. Amoco Prod. Co. v. Village of Gambell, 480 U.S. 531, 545 (1987).

The Forest Service has promulgated regulations to establish notice, comment, and administrative appeal procedures for proposed actions on national forest lands. 36 C.F.R. Part 215. Pursuant to the regulations, if an administrative appeal of a proposed project is filed with the Forest Service, implementation of the project may not occur until 15 days following the date of the appeal disposition. 36 C.F.R./215.10(b). The regulations provide a limited exception to the automatic stay provision where the Chief of the Forest Service determines that an emergency situation exists, in accordance with the requirements of 36 C.F.R./215.10(d). An emergency is defined as an unexpected event, or a serious occurrence, or a situation requiring urgent action. 36 C.F.R./215.10(d)(1). Examples include hazardous or unsafe situations as a result of wildfire, and sudden outbreaks of forest pests and diseases. 36 C.F.R./215.10(d)(1)(I-v).

On May 14, 2001, the Forest Supervisor for the Six Rivers National Forest requested an emergency situation determination for the 863 acres of commercial timber harvest associated with the Phase 1 logging project. Fink Dec., Ex. A. The administrative stay exemption was requested under section 215.10(d)(1)(ii) hazardous or unsafe conditions as a result of wildfire or other circumstances. Id. According to the May 14 letter, without logging there is a high probability that future wildfires will exhibit the same extreme fire behavior that occurred during the Megram Fire. Id. Forest Service Chief Dale Bosworth granted the request on May 25, 2001. Fink Dec., Ex. B. The request was granted to address the potential significant risk to human health and safety to the local communities in the affected area, including the Hoopa Valley Indian Reservation, if actions are not initiated this summer. Id.

The May 14 and May 25 letters, along with the Phase I FEIS and Record of Decision, fail to provide scientific support for the emergency situation determination, and fail to address the considerable scientific evidence that directly contradicts the determination. First, there is no support for the Forest Service's contention that a hazardous or unsafe situation currently exists, or that immediate commercial logging will reduce the alleged risk to local communities. In fact, the Phase I FEIS readily acknowledges that *there is no immediate threat of future wildfire*. Fink Dec., Ex D, pp. 34 (The risk of a future fire is not high at present); p. 35 (In the short term,

fire behavior would be low). The 1999 wildfires already consumed most of the smaller fuels on the ground, as well as the ladder fuels which are often associated with large wildfires. The FEIS acknowledges that the current fuel loading is mainly in the standing trees, which are generally not available to burn. *Id.*, pp. 31, 43. The FEIS therefore admits that the no action alternative has the lowest fire hazard in the short-term, and that implementing the logging project would elevate the fire hazard in the short-term. *Id.*, p. 22. See also Ingalsbee Dec., *f* 37.

Second, there is no scientific evidence that post-fire logging decreases the threat or intensity of future fire. In January, 2000, the Forest Service's Pacific Northwest Research Station reviewed all available post-fire logging studies and prepared a literature review. Fink Dec., Ex. I. The Forest Service's review *found no studies documenting a reduction in fire intensity in a stand that had previously burned and then been logged.* *Id.*, p. 21 (emphasis added). The literature review considered the 1995 Beschta Report, which was prepared by university and agency scientists. *Id.*, Ex. F. The authors of the Beschta Report were also *aware of no evidence supporting the contention that leaving large dead woody material significantly increases the possibility of reburn.* *Id.*, p. 11 (emphasis added). As recognized by the Beschta Report, it is the fine fuels that carry fire, and not the large trees that are targeted for commercial logging. *Id.*⁴

The Forest Service's literature review also considered the Forest Service's response to the Beschta Report, prepared by Forest Service scientist Richard Everett. Fink Dec., Ex. H. Mr. Everett agreed that [t]here is no support in the scientific literature that the probability for reburn is greater in post-fire tree retention areas than in salvage logged sites. *Id.*, p 4. The [Beschta] authors are correct that the intense reburn concept is not reported in the literature. *Id.* In fact,

⁴ In fact, as explained by Dr. Timothy Ingalsbee, even large *down* trees can dampen a fire's intensity and rate of spread. Ingalsbee Dec., *ff* 39-41. Indeed, the centers of large logs can actually be cool and moist even when the outer shell of a log is on fire; consequently, large logs can provide vital refugia or fire shelters that enable a number of wildlife species, as well as mycorrhizal fungi and other micro-flora and fauna essential to postfire natural recovery, the ability to survive fires. *Id.*, *f* 40.

according to Mr. Everett, current research suggests that salvage logged areas may have *elevated* fire hazard compared to unlogged sites for the first 20 years. *Id.*, p. 5.⁵

As explained by Forest Service scientist Richard Everett, the only urgent need to log after intense wildfire is based on economics. *Id.*, p. 6. The Forest Service has concluded, however, that economics is not a viable reason for a stay exemption under 36 C.F.R./215.10(d). In Kentucky Heartwood v. Worthington, 125 F. Supp.2d 839 (E.D. Ky. 2000), the court enjoined the Forest Service from proceeding with logging pursuant to an emergency situation determination. On reconsideration, Forest Service Chief Dombeck emphasized that economics is not a normally accepted rationale for a stay exemption. Fink Decl., Ex C, p. 2.

The Chief further emphasized that the record must demonstrate an *imminent* risk. Fuel loading does not, in and of itself, satisfy the provisions of 36 CFR 215.10(d) concerning criteria that must be met for granting an exemption of stay from implementation. Those criteria center around demonstrating that an emergency situation exists because of imminent risks to public health and safety, private property, or the environment. The record should demonstrate a reasonable basis for determining that there are imminent risks before the Chief may grant an exemption from stay.

Id., p. 3.⁶ In this case, the Forest Service admits within the record that there is currently no risk of future wildfire in the already severely burned areas.

The Forest Service has failed to disclose or address the fact that there is no scientific evidence to support its future reburn theory. While ignoring its own literature review and evidence, the Forest Service instead provides unsupported assertions that the situation is unsafe unless immediate action is taken.⁷ As recognized by the Ninth Circuit in Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1150 (9th Cir. 1998), the Forest Service cannot rely on

⁵ See Frost Dec., f 4 (All substantive reviews of the available scientific literature relevant to this issue have either concluded that there is no evidence in support of reduced fire risk resulting from post-fire logging, or that post-fire logging may actually increase the probability of large, intense fires.).

⁶ According to Chief Dombeck, the record must adequately show that an emergency situation exists that requires treatment before the end of the appeal period. *Id.*, p. 4.

⁷ See Frost Dec., f 9 (However, in my review of the FEIS and other supporting materials for this project, I could find no actual data, analysis or scientific evidence whatsoever to support the claim that the current post-fire situation represents a dangerous situation requiring immediate action.).

expert opinions without hard data or analysis. NEPA instead requires that the public receive the underlying environmental data from which a Forest Service expert derived her opinion. Id. The Forest Service has provided no objective or scientific support for its opinions in this case because none exist. Instead, its assertions are contradicted by its own review of the available literature.⁸

B. The Phase I FEIS is Legally Insufficient and Violates NEPA

NEPA imposes a procedural requirement that an agency must contemplate the environmental impacts of its actions. Idaho Sporting Congress, 137 F.3d at 1149. A detailed environmental impact statement (EIS) must be prepared for every major federal action significantly affecting the quality of the human environment. 42 U.S.C./4332(C). The FEIS prepared for the Phase 1 logging project fails to meet the minimum NEPA requirements, and a new or supplemental EIS is therefore required before logging can proceed. 40 C.F.R./1500.1(b) (NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken.).

1. The FEIS provides insufficient evidence in support of the stated Purpose

Within an EIS, both the alleged purpose and need for the proposed action and the potential environmental impacts must be discussed. Idaho Sporting Congress v. Rittenhouse, Civ. No. 98-0307-S-BLW (D. Idaho, Feb. 25, 1999) (Memorandum Decision, page 5).⁹ See 40 C.F.R./1502.10(d), 1502.13. The Court must therefore evaluate the sufficiency of both the asserted need for the project and the agency's analysis of potential impacts. Id. The Phase 1 logging project proposes to commercially log dead trees within the most severely burned areas of the 1999 wildfires, supposedly in an attempt to reduce the risk and intensity of future fire. As stated in the FEIS, [t]his project implements the first phase of the Megram Recovery Strategy (Appendix A) aimed at protecting local communities from catastrophic wildfires and extended exposure to smoke. Fink Dec., Ex. D, p. 4. The FEIS, however, provides no hard data or

⁸ A copy of the Decision has been attached hereto, as Exhibit 1.

scientific analysis to support its fundamental assumption that commercial logging in the severely burned areas will somehow decrease the risk or intensity of a future fire. Id.

The Phase 1 FEIS suffers the same defect as the Environmental Assessment at issue in Idaho Sporting Congress v. Rittenhouse. In Rittenhouse, the Forest Service alleged that logging was needed to reduce the bark beetle population, but the agency provided no data or support for its contention that insect populations were high. Similarly, in this case, the Defendant alleges that logging is needed to reduce large fuels and the risk of future fire, but provides no objective data or scientific analysis in support of its contention that there is a fire risk, or that the risk will be alleviated by a commercial logging project. As the Ninth Circuit held in Idaho Sporting Congress v. Thomas, 137 F.3d at 1150, NEPA does not allow an agency to rely on the conclusions and opinions of its employees without providing hard data and analysis for both the public and the court to review. See also Rittenhouse, page 4-5.¹⁰ Instead, NEPA requires that the public receive the underlying environmental data from which a Forest Service expert derived her opinion. 137 F.3d at 1150.¹¹ As in Rittenhouse, the Phase 1 FEIS contains no objective data to allow the public or this Court to do anything more than guess about the accuracy of the premise. Rittenhouse, p. 7. Because the statement of need for the Phase 1 project is premised on unsupported conclusions, the FEIS violates NEPA. Id.

The applicable scientific reports, which the Phase 1 FEIS neglects to disclose or consider, indicate that the Phase 1 purpose and need is in fact unsupported. As set forth above, according to the available reports, there is no evidence that commercial logging in the wake of wildfire will

¹⁰ See also Marble Mountain Audubon Society v. Rice, 914 F.2d 179, 182 (9th Cir. 1990) (agencies cannot make conclusory statements in an environmental impact statement without any apparent study or supporting documentation.); Silva v. Lynn, 482 F.2d 1282, 1285 (1st Cir. 1973) (A conclusory statement unsupported by empirical or experimental data, scientific authorities, or explanatory information of any kind not only fails to crystallize issues, but affords no basis for a comparison of the problems involved with the proposed project and the difficulties involved in the alternatives.) (citations and quotations omitted).

¹¹ The hard data and analysis that supports the agency's opinions must either be found or referenced within the public NEPA document. Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1214 (9th Cir. 1998); Idaho Sporting Congress v. Rittenhouse, p. 6; Grazing Fields Farm v. Goldschmidt, 626 F.2d 1068, 1072-73 (1st Cir. 1980).

decrease the possibility of reburn. See Section IV.A., supra. The Forest Service's January 2000, Literature Review found no studies documenting a reduction in fire intensity in a stand that had previously burned and then been logged. Fink Dec., Ex I, p. 21. The authors of the Beschta Report were aware of no evidence supporting the contention that leaving large dead woody material significantly increases the possibility of reburn. Id., Ex F, p. 11. The Report instead recognized that the fine fuels carry fire, not the large trees that are targeted in a commercial timber sale. Id. And, the Forest Service's Everett Report concluded that there is no support in the scientific literature that the probability for reburn is greater in post-fire tree retention areas than in salvage logged sites. Id., Ex. H, p. 4. At a minimum, the differences between the agency's assertions and the weight of scientific opinion demonstrates the need for additional NEPA analysis and public disclosure before the project may proceed. Seattle Audubon v. Moseley, 798 F.Supp. 1473, 1482 (W.D. Wash. 1992) ([t]he agency's explanation is insufficient under NEPA - not because experts disagree, but because the FEIS lacks reasoned discussion of major scientific objections.), aff'd Seattle Audubon v. Espy, 998 F.2d 699 (9th Cir. 1993).¹²

2. The FEIS fails to disclose or address the available scientific evidence that

NEPA requires the Forest Service to objectively evaluate and disclose credible scientific evidence that contradicts its proposed course of action. 40 C.F.R./1502.9(b) (the agency must discuss any responsible opposing view); Seattle Audubon v. Lyons, 871 F.Supp. 1291, 1318 (W.D. Wash. 1994) ([the agency] must also disclose responsible scientific opinion in opposition to the proposed action, and make a good faith, reasoned response to it.), aff'd Seattle Audubon v. Moseley, 80 F.3d 1401 (9th Cir. 1996); Seattle Audubon 798 F.Supp. at 1482 ([t]he agency's

¹² Similarly, the FEIS provides no hard data or scientific analysis to support its assumed effectiveness of strategic fuel breaks. According to Dr. Timothy Ingalsbee, Director of the Western Fire Ecology Center, there is little documentation that fuelbreaks reduce wildfire losses, and in fact the change to more open stand conditions can instead facilitate more intense, faster spreading wildfires. Ingalsbee Dec., *ff* 14-16. The FEIS failed to disclose the results of recent scientific research - including research conducted by Forest Service scientists and technicians - that challenge the effectiveness of fuelbreaks and highlight their controversial nature. Id., *f* 19.

explanation is insufficient under NEPA - not because experts disagree, but because the FEIS lacks reasoned discussion of major scientific objections.), aff d Seattle Audubon, 998 F.2d 699 (9th Cir. 1993); Silva v. Lynn, 482 F.2d at 1285 (where comments from responsible experts or sister agencies disclose new or conflicting data or opinions that cause concern that the agency may not have fully evaluated the project and its alternatives, these comments may not simply be ignored. There must be good faith, reasoned analysis in response.).

The Phase 1 FEIS is inadequate because it fails to objectively disclose and respond to the findings and recommendations of the directly applicable Beschta Report, and explain why it chose a radically different approach. The Beschta Report, prepared by a team of university and agency scientists, was intended to propose guidelines concerning post-fire logging in order to maintain or improve the integrity of ecosystems. Fink Dec., Ex. F, p. 3. The authors concluded that there is no ecological need for immediate intervention on the post-fire landscape. Id., p. 5. By acting quickly, we run the risk of creating new problems before we solve the old ones. Id.

Contrary to numerous assertions in the Phase 1 FEIS that there will be no significant adverse impacts from logging within the severely burned area, the Beschta Report finds that post-fire logging is likely to cause significant adverse impacts on the environment. Id., page 7.

There is considerable evidence that persistent, significant adverse environmental impacts are likely to result from salvage logging, based on many past cases of salvage projects, plus our growing knowledge of ecosystem functions and land-aquatic linkages. These impacts include soil compaction and erosion, loss of habitat for cavity nesting species, loss of structurally and functionally important large woody debris.

Id. The Report therefore recommends that post-fire logging be prohibited in sensitive areas. Id., page 8-9. Salvage logging by any method must be prohibited on sensitive sites, including: in severely burned areas (areas with litter destruction), on erosive sites, on fragile sites, in roadless areas, in riparian areas, on steep slopes, or any site where accelerated erosion is possible. Id. In addition, the building of new roads in the burned landscape should be prohibited. Id., page 10.

The Forest Service has repeatedly recognized the importance of the Beschta Report for post-fire projects. First, in 1995, the Regional Forester for Region 6 (Oregon and Washington) issued direction for Forest Supervisors, requiring that this report be considered within the NEPA

documentation for site-specific projects. Fink Dec., Ex. G. As stated by Region 6, Clearly this information needs to be considered in ongoing analysis For each project or group of similar projects, review the Beschta paper (along with other information sources) to determine applicability given site-specific conditions and issues in the project area. Id., Ex. G, p. 1.

Second, in 1995, Forest Service scientist Richard Everett completed a formal review of the Beschta Report. Fink Dec., Ex. H. While emphasizing the need to assess the principles of the Beschta Report on a case-by-case basis, Everett commended the authors of the Report for identifying potential problems associated with post-fire salvage logging. Id., Ex. H, p. 1.

Third, the Forest Service's January 2000, Literature Review on post-fire studies further responded to the Beschta-Everett exchange by gathering the limited scientific information on postfire logging into one document. Fink Dec., Ex. I, p. 5. The Literature Review recognized that [g]iven the intensifying public debate on harvest of fire-killed trees, Federal land managers need the best information available on how postfire logging harvest might be expected to influence ecosystem values, such as soils, streams, and wildlife. Id.

The Beschta Report has also been recognized by the Ninth Circuit. In Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1213 (9th Cir. 1998), the Ninth Circuit enjoined a Forest Service post-fire logging project on the Umatilla National Forest in Eastern Oregon. The plaintiffs in Blue Mountains, as in this case, asserted that the NEPA document had failed to disclose and address the Beschta report. The Ninth Circuit agreed that the Forest Service had failed to disclose the report's recommendations in the environmental assessment. Id. While the Ninth Circuit offered no opinion as to whether the omission of the report, alone, would discredit the Forest Service's decision not to prepare an EIS for Big Tower, the court did consider the agency's failure to discuss the report: We do note that its failure to discuss and consider the Beschta report's recommendations lends weight to BMBP's claim that the Forest Service did not take the requisite hard look at the environmental consequences of post-fire logging instead of letting nature do the healing. Id.

Despite the Blue Mountains decision, and the Forest Service's Everett Report and Literature Review, the Forest Service is again attempting to proceed with an intensive post-fire logging project without addressing the findings and recommendations of the Beschta Report. The Phase 1 project proposes over 800 acres of commercial logging within the most severely burned areas of the 1999 Big Bar Complex wildfires, including 254 acres of tractor logging and road construction. As concluded by hydrologist Jon Rhodes, one of the authors of the Beschta Report, the project conflicts with all of the Report's consensus conclusions related to compaction, erosion, and tractor logging, without identifying or discussing this conflict with the available scientific information. Rhodes Dec., *f* 21.¹³ The Phase 1 FEIS violates NEPA by failing to address the Beschta Report, and by failing to disclose the considerable scientific controversy and uncertainty surrounding the potential impacts of post-fire logging.

3. The FEIS fails to adequately analyze the direct and cumulative impacts of creating and maintaining the strategic fuel breaks

As stated in the Phase 1 FEIS, [t]he Six Rivers National Forests is proposing to reduce fuels in high severity burned stands within strategically located fuel breaks and associated fuel treatment areas within [specific areas] burned by the Megram fire. Fink Dec., Ex. D, p. 3.

Fuel breaks and fuel treatment areas would be located strategically on ridges or natural land features, on the upper 1/3 of slopes or along roads. *Id.*, p. 20. The fuel break strategy was apparently developed in the Forest-wide Late-Successional Reserve Assessment and Horse Linto, Mill and Tish Tang Watershed Analysis, neither of which are NEPA documents. *Id.*

The Forest Service admits in the Phase 1 FEIS that this project is just the first phase in an overall strategy to create fuel breaks and protect communities from wildfires.

A future proposal, Phase II, would continue and complement the work that is proposed in Phase I by reducing fuels in unburned and moderately burned areas within the strategic fuel breaks. Connecting the high severity and less severely burned fuel treatment areas would create a more continuous and effective fuel break.

¹³ See also Frost Dec., *f* 8 (Failure to consider the findings of the Beschta Report would not be so egregious were it not for the fact that all of the action alternatives presented for the Phase 1 logging project propose to carry out numerous activities that directly contradict specific recommendation from Beschta et al. (1995) that are designed to maintain or improve the integrity of forest ecosystems in the aftermath of fire.).

Fink Dec., Ex. D, p. 16. See also id., Ex D, p. 57 (This proposal treats only severely burned stands from the Megram fire, so treats only small portions of the identified fuel breaks. Phase 2 will address fuel breaks to a greater degree.). While the FEIS proclaims that foreseeable actions under Phase II have been considered, no specifics are provided.

As clarified by the Ninth Circuit in Neighbors of Cuddy Mountain v. United States Forest Service, 137 F.3d 1372, 1379 (9th Cir. 1998), to consider cumulative effects, some quantified or detailed information is required. Without such information, neither the courts nor the public, in reviewing the Forest Service s decisions, can be assured that the Forest Service provided the hard look that it is required to provide. Id. General statements about possible effects and some risk are generally insufficient. Id. at 1380. Nor is it appropriate to defer consideration of cumulative impacts to a future date. Id. In addressing the cumulative impacts of the overall fuel break strategy, the FEIS fails to include the most basic and necessary information, such as how many phases of fuel breaks will be proposed, how many acres or miles will be cumulatively affected, where the fuel breaks will be located, and the likely effectiveness of the Phase 1 fuel breaks if subsequent phases are not implemented.

Perhaps most importantly, in light of the recent decision in Californians for Alternatives to Toxics v. Dombeck, No. Civ. S-00-605 LKK/PAN (E.D. Cal., June 12, 2001, Order), the Phase 1 FEIS fails to address how the strategic fuel breaks will be maintained over time, or the environmental impacts of necessary maintenance measures.¹⁴ In Alternatives to Toxics, the court held that the Forest Service violated NEPA by failing to address the maintenance of proposed fuel breaks for the Quincy Library Group Community Stability Proposal. Id. The court considered the Forest Service s own evidence that the understory vegetation within the proposed fuel breaks could be as high as three to four feet within three years, and that without proper maintenance, could affect the functional integrity of the fuel breaks, and could actually result in a greater fire risk than existed prior to the creation of the fuel breaks. Id., pp. 6, 29.

¹⁴ A copy of the decision is attached hereto, as Exhibit 2.

Plaintiff's expert in Alternatives to Toxics testified that to be effective, most fuel breaks require maintenance on the order of every two to five years. Id., p. 30.¹⁵ Based on the Forest Service's estimated costs, plaintiff asserted that the only effective method of maintenance would be herbicides, which, according to the Forest Service, is the most cost-effective method. Id., p. 7. As stated by the court, [h]erbicide use can cause adverse impacts to the environment, microorganisms, threatened and endangered species, soils, humans, other mammalian species and aquatic populations, and after use two of the most commonly used herbicides, glyphosate and triclopyr, have been found in both the surface and ground water. Id., p. 8.

The court in Alternatives to Toxics agreed that the environmental impacts of maintaining the fuel breaks were both cumulative effects of, and events connected to, the overall project, and therefore had to be considered. Id., p. 27-28. As stated by the court, the maintenance of the [fuel breaks] is reasonably foreseeable, given the purpose of the pilot project and the growth of understory vegetation attendant to the construction of the [fuel breaks]. Id., p. 30. The EIS was held to be inadequate for failing to consider the impacts of fuel break maintenance. Id., p. 27-28, 33. Similarly, in this case, the Forest Service acknowledges that the proposed fuel breaks would be managed on a long-term basis, and be maintained every 2-10 years depending how quickly brush returns. Fink Dec., Ex. D, p. 58. As in Alternatives to Toxics, the Phase 1 FEIS does not disclose how the fuel breaks will be maintained, even though their creation is a primary purpose of the project. Because the impacts of the inevitable and environmentally harmful maintenance activities have not been considered, the Phase 1 FEIS is inadequate.

4. The FEIS fails to adequately analyze the cumulative impacts to

The National Forest Management Act (NFMA) imposes substantive obligations on the Forest Service, including the duty to provide for diversity of plant and animal species. 16 U.S.C./1604(g)(3)(B); Inland Empire Public Lands v. U.S. Forest Service, 88 F.3d 754, 759 (9th Cir. 1996). Fish and wildlife habitat must therefore be managed to maintain viable

¹⁵ See Ingalsbee Dec., *ff* 20, 21 (Periodic maintenance of fuelbreaks is mandatory and integral to the effectiveness and use of fuelbreaks for fire suppression. . . [W]ithout long-term maintenance for brush control, fuelbreaks would revert to a more hazardous vegetation type.).

populations of existing species in the planning area. 36 C.F.R./219.19.¹⁶ In order to estimate the effects of each alternative on fish and wildlife species, the Forest Service selects certain species as management indicator species (MIS). Id. A species chosen as a management indicator species is used as a bellwether - a class representative, if you will - for the other species that have the same special habitat needs or population characteristics. Inland Empire, 88 F.3d at 762, n.11; see also 36 C.F.R./219.19(a)(1). Planning alternatives must be stated and evaluated in terms of both amount and quality of habitat and of animal population trends of the MIS. 36 C.F.R./219.19(a)(2). The MIS for the Six Rivers National Forest include the Northern spotted owl, pileated woodpecker, black bear, American marten, Pacific fisher, Black-tailed deer, flammulated owl, and white-headed woodpecker. Fink Dec., Ex. T, p. 4.

In addition to MIS, the Forest Service designates sensitive species, defined as those species whose viability is of concern due to significant downward trends in numbers or habitat. FSM/2670.5(19). NFMA's duty to ensure viable, or self sustaining, populations, applies with special force to sensitive species. Inland Empire, 88 F.3d at 759; ONRC v. Lowe, 836 F.Supp. 727, 733 (D.Or. 1993). Sensitive species on the Six Rivers National Forest include the Peregrine falcon, Northern goshawk, American marten, and Pacific fisher. Fink Dec., Ex. D, pp. 23-25.

To comply with NEPA, the Phase 1 logging project FEIS is required to address the direct, indirect, and cumulative impacts of its proposal on the management indicator and sensitive wildlife species. 40 C.F.R./1502.16; Neighbors of Cuddy Mountain, 137 F.3d at 1379. A cumulative impact is defined as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. 40 C.F.R./1508.7. As summarized by the Ninth Circuit:

¹⁶ In order to insure that viable populations will be maintained, habitat must be provided to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area. 36 C.F.R./219.19.

In City of Carmel-By-The-Sea v. U.S. Dept. of Transp., 123 F.3d 1142 (9th Cir. 1997), we noted that an EIS must catalogue adequately the relevant past projects in the area. Id. at 1160. It must also include a useful analysis of the cumulative impacts of past, present and future projects. Id. This requires discussion of how [future] projects together with the proposed . . . project will affect [the environment]. Id. The EIS must analyze the combined effects of the actions in sufficient detail to be useful to the decisionmaker in deciding whether, or how, to alter the program to lessen cumulative impacts. Id. at 1160 (internal citations omitted). Detail is therefore required in describing the cumulative effects of a proposed action with other proposed actions. Muckleshoot Indian Tribe v. U.S. Forest Service, 177 F.3d 800, 809-10 (9th Cir. 1999).

The Forest Service's post-fire Literature Review acknowledges that post-fire logging may have significant impacts on wildlife. Fink Dec., Ex I, p. 22 (Postfire logging normally removes a great percentage of large dead woody structure and thus has the potential for significantly changing postfire habitat for wildlife.).¹⁷ The Phase 1 project proposes to build and reconstruct roads and log approximately 4,000 truckloads of trees, and the FEIS acknowledges that the project will degrade and disturb habitat for certain sensitive species. Fink Dec., Ex. D, pp. 38-41. In addition, multiple other logging projects are planned within and near the planning area, including the Phase 2 project, past hazard tree removal projects, and similar fuel break and fuel reduction projects on the Shasta-Trinity National Forest. For the Phase 1 FEIS, however, the Forest Service fails to include any discussion of cumulative impacts to sensitive or management indicator wildlife species. The FEIS includes no catalogue of past projects, and provides no quantified or detailed description of the cumulative effects of the

¹⁷ See also id. Ex. I, p. 23 (In four recent independent studies conducted in the intermountain West, postfire logging caused significant changes in abundance and nest density of cavity-nesting birds, although the effect differed somewhat by location.); id., Ex. F, p. 9 (Dead trees (particularly large dead trees) generally have multiple ecological roles in the recovering landscape including providing habitat for a variety of species, and functioning as an important element in biological and physical processes.).

proposed project with other proposed actions.¹⁸ The FEIS therefore fails to comply with the minimum NEPA requirements.

5. The FEIS fails to adequately analyze and disclose impacts to soils

The 1995 FEIS for the Six River National Forest Plan acknowledges that soil is a fundamental resource on the Forest, and is the foundation of all terrestrial life. Fink Dec., Ex. U, pp. 2, 5. Soil is the balance wheel of the ecosystem and is the oldest and most important component of the forest system. Id., Ex. U, p. 2. According to the Beschta Report, soils are particularly vulnerable in a burned landscape. Id., Ex. F, p. 8. Soil is considered to be a nonrenewable resource by the Six Rivers National Forest because soil formation can require tens to hundreds of thousands of years. Id., Ex. U, 2. The Beschta Report agrees: Soil and soil productivity are irreplaceable in human timescales; therefore, post-burn management activities that accelerate erosion or create soil compaction must be prohibited. Id., Ex. F, p. 8.

According to the 1995 FEIS for the Six Rivers National Forest Plan, management activities such as logging may reduce soil productivity by increasing soil erosion, reducing soil porosity through compaction, reducing site organic matter, depleting soil nutrients by removal of organic debris, and by removing soil from productive uses for roads and other uses. Fink Dec., Ex. U, p. 3. The forest-wide FEIS acknowledges that [t]imber harvest and road construction have the greatest potential to affect the soil through compaction, displacement, or erosion. Id., Ex. U, pp. 5-6. Because logging in severely burned areas is often associated with accelerated erosion and soil compaction, and involves the removal of large wood which has multiple roles in recovery, the Beschta Report recommends a complete prohibition of post-fire logging in these areas. Id., Ex. F, p. 8-9. See also, id., Ex. H, p. 6 (Scientific literature provides examples of

¹⁸ The FEIS is where the required cumulative effects analysis must be found. Blue Mountains, 161 F.3d at 1214 (We do not find adequate support for the Forest Service s decision in its argument that the 3,000 page administrative record contains supporting data. The EA contains virtually no references to any material in support of or in opposition to its conclusions. That is where the Forest Service s defense of its position must be found.); Grazing Fields Farm v. Goldschmidt, 626 F.2d at 1073 (The now traditional avenue of independent comment on decision-making by public interest organizations would be narrowed if interested parties did not have presented in the EIS the analysis and data supporting an agency s decisions.).

increased soil disturbance and erosion following salvage logging and associated road construction on burned areas.). Due to soil compaction and erosion concerns, the Beschta Report further states that tractor logging should be generally prohibited. *Id.*, Ex. F, p. 9. See also Rhodes., *f* 20 (ground-based logging and temporary road construction compact soils and increase erosion causing significant and persistent losses of soil productivity.).

For the Phase 1 project, which proposes to log approximately 4,000 truckloads of trees from severely burned areas, including significant tractor logging, the FEIS acknowledges that soil productivity is important, and that organic matter is a key soil component. Fink Dec., Ex. D, p. 32. The FEIS fails to disclose, however, the likely amount of soil compaction and reduced soil productivity caused by the road building and logging project.¹⁹ In addition, while focusing on the short term benefits of adding some soil cover to the project area, the FEIS ignores the medium and long term impacts on soil cover, organic matter, and soil productivity that will

inevitably result from removing thousands of large trees. As stated by hydrologist Jon Rhodes: Unfortunately, the FEIS s analysis of soil cover effects are highly misleading, because it only addresses short-term cover and completely fails to address how the project will affect cover and consequent effects on soil productivity and erosion in the longer term. The result is that the FEIS distorts, rather than discloses, the alternatives likely future effects on soils and erosion over a 10-20 year period.

Rhodes Dec., *f* 29. The FEIS also fails to address soil impacts resulting from the proposed construction of roads, along with the landings that will be needed for the timber sale. *Id.*, *f* 35.

The Six Rivers National Forest Plan includes requirements to ensure that soil productivity across the Forest is adequately maintained. For example, for each harvest unit, soil porosity must be maintained to at least 90 percent of its natural condition over at least 85 percent of the project area. Fink Dec., Ex. T, p. 3. In addition, soil organic matter, in the upper 12 inches of soil, must be at least 85 percent of the total soil organic matter found under undisturbed conditions for similar soils. *Id.*, p. 5. And, large woody material include at least 5 logs per acre, in contact with the soil surface. *Id.* For the Phase 1 project, however, the FEIS fails to discuss

¹⁹ See Rhodes, *f* 25 (It appears that the FEIS made no attempt to disclose the likely amount of soil compaction caused by the alternatives, and resultant affects on soil productivity.).

any of these forest-wide standards, and therefore fails to assess how the standards will be maintained. See Rhodes, f 25 (the FEIS fails to assess the existing and likely future compliance within the project area under the various alternatives). An EIS's failure to set forth applicable forest plan standards and demonstrate how they will be maintained is a violation of both NEPA and NFMA. Neighbors of Cuddy Mountain, 137 F.3d at 1376-78; 16 U.S.C. / 1604(I) (the Forest Service must demonstrate that a site specific project will be consistent with the Forest Plan.).

6. The FEIS fails to address and disclose the impacts of the Forest Service's

As stated above, the Phase 1 FEIS must analyze cumulative impacts, defined as the impact on the environment which results from the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions. Section V.B.4, supra. The FEIS must catalogue the relevant past projects in the area, Muckleshoot Indian Tribe, 177 F.3d at 809-10, and then consider reasonably foreseeable projects. To consider cumulative effects, some quantified or detailed information is required. Neighbors of Cuddy Mountain, 137 F.3d at 1379. In assessing impacts to watersheds, fisheries, soils, and wildlife, the Phase 1 FEIS neglects to consider the Forest Service's aggressive fire-fighting tactics during the 1999 wildfires. Most importantly, the FEIS fails to address the many miles of fuel-lines that were constructed, and the many tons of fire retardant that were applied to the project area.

Because the fire-fighting information has been largely undisclosed, plaintiffs are still piecing together the environmentally impactful activities that occurred within the project area in the fall of 1999. The Forest Service does acknowledge, outside of the NEPA process for the Phase 1 project, that bulldozers were used to construct roughly 50 miles of fireline and ranged from approximately 12 to 50 feet wide. Fink Dec., Ex. K, p. 4. These dozer lines consisted of areas where all material was removed down to bare mineral soil. Id. Dozerlines constructed through owl habitat removed the habitat. Id. The Forest Service also constructed roughly 100 miles of hand lines, which range from two to six feet in width. Id. In some locations, dozer and hand lines crossed, or were established within riparian reserves. Id., Ex. L, p. 8.

According to hydrologist Jon Rhodes, erosion from bulldozed firelines can surpass that caused by roads, even though roads are typically considered to be the most significant and persistent management-induced cause of elevated erosion and sedimentation (e.g. USFS et al. 1993). Rhodes Dec., *f* 9. This is because firelines are often built on steep slopes, and in close proximity to streams or through riparian areas. *Id.* When constructed in riparian areas, it is highly likely that the bulldozed firelines had significant negative impacts on riparian conditions, water temperature, and levels of large woody debris. *Id.*, *f* 15. The firelines also greatly increase soil erosion by removing vegetation and cover, and cause significant reductions in soil productivity due to compaction, erosion, and the removal of all organic matter. *Id.*, *f* 18. As summarized by Rhodes, Therefore it is obvious that the failure of the FEIS to substantively discuss and disclose the magnitude, location, and types of firelines constructed wholly undermines credible disclosure of past, present, and likely future effects on erosion, soil productivity, sediment delivery, turbidity and water quality. *Id.*, *f* 8. See also Ingalsbee Dec., *f* 30.

By plaintiffs best estimates, the Forest Service dumped at least 280 tons of chemical fire retardant on the Big Bar Fire, including over 100 tons of the highly toxic Fire-Trol, which contains a potential carcinogen and yields ferrous cyanide as a by-product. The Forest Service acknowledges, outside of the NEPA process for the Phase 1 project, that FireTrol (a more toxic variety) was dropped from aerial tankers on a number of occasions. Fink Dec., Ex. L, p. 8. The Phase 1 FEIS, however, again fails to disclose or consider this information in relation to its logging proposal. Even though the Forest Service claims to have no data as to the locations or quantities of FireTrol that was applied, *id.*, the fact that the Forest Service dumped tons of toxic materials onto the project area less than two years ago is clearly information that must be considered and disclosed within the cumulative impacts analysis for the Phase 1 project.²⁰ This is especially important for Phase 1, since the main purpose for the project is more fuel breaks for future wildfires, where toxic fire retardants may again be applied.

²⁰ Even if relevant information is unavailable or incomplete, this must still be disclosed to the public in the NEPA process. 40 C.F.R./1502.22.

C. The Forest Service Failed to Analyze the Environmental Impacts of the 1999 Big B

NEPA regulations define the circumstances under which multiple related actions must be covered by a single EIS. Thomas v. Peterson, 753 F.2d 754, 758 (9th Cir. 1985). Agencies shall use the criteria for scope (1508.25) to determine which proposal(s) shall be the subject of a particular statement. 40 C.F.R./1502.4. To determine the proper scope of an EIS, agencies must consider three types of actions: 1) connected actions, which means that they are closely related and therefore should be discussed in the same impact statement; 2) cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement; and 3) similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography. 40 C.F.R./1508.25. While the agencies should be given considerable discretion in defining the scope of an EIS, an agency is required to consider more than one action in a single EIS if they are connected actions, cumulative actions, or similar actions. Northwest Resource Info. Ctr. v. National Marine Fisheries Service, 56 F.3d 1060, 1067 (9th Cir. 1995) (citations omitted); see also Thomas v. Peterson, 753 F.2d at 758 (there are situations in which an agency is required to consider several related actions in a single EIS.).

For the areas on the Six Rivers and Shasta-Trinity National Forests that were impacted by the Big Bar Complex Fires, the Forest Service developed an overall recovery strategy that includes several post-fire logging projects. Instead of addressing the overall impacts of the 1999 fires, along with the multiple post-fire recovery projects, the Forest Service has prepared separate NEPA analyses for each individual project. This approach was specifically rejected by the Ninth Circuit in Blue Mountains Biodiversity Project, 161 F.3d at 1215. Because the proposed projects are all reasonably foreseeable, and were developed as part of a comprehensive recovery strategy, a single EIS is required to address the overall, cumulative impacts. Id.

1. The proposed post-fire logging projects designed to create a strategic

The CEQ regulations require connected actions to be considered together in a single EIS. Thomas v. Peterson, 753 F.2d at 758, (citing 40 C.F.R./1508.25(a)(1)). Connected actions include actions that are interdependent parts of a larger action and depend on the larger action for their justification. 40 C.F.R./1508.25(a)(1)(iii). The Phase 1" and Phase 2" post-fire logging projects on the Six Rivers National Forest are connected because they are interdependent parts of a comprehensive fuel break strategy, which is a major component of the overall Megram Fire recovery strategy.²¹

As the Forest Service acknowledges in the Phase 1 FEIS, This proposal is Phase 1 in the overall strategy to protect communities from wildfires and extended exposure to smoke and to restore affected watersheds. A future proposal, Phase II, would continue and compliment the work that is proposed in Phase 1 by reducing fuels in unburned and moderately burned areas within the strategic fuel breaks. Connecting the high severity and less severely burned fuel treatment areas would create a more continuous and effective fuel break.

Fink Dec., Ex. D, p. 16. The two phases were developed as part of a comprehensive, forest-wide strategy, with the fuel breaks to be mapped and strategically located. See id., Ex. V, pp. 9-12. The only difference between the two phases is that Phase 1 targets severely burned areas, while Phase 2 targets unburned and moderately burned areas. Id., p. 14. The Forest Service simply wants to quickly recover the economic value of the severely burned trees; otherwise, the connected phases would likely have been considered together, in a single EIS. As it stands, however, the Phase I EIS provides no assurance that the fuel breaks in the severely burned areas would be effective if not eventually connected to the more extensive fuel breaks that are already proposed for Phase 2. The Phase 1 fuel breaks therefore depend in part on the Phase 2 fuel breaks for their justification, and a single EIS is required. 40 C.F.R./1508.25(a)(1)(iii).

Both phases of the fuel break strategy are also connected to the required maintenance for the proposed fuel breaks. See Californians for Alternatives to Toxics v. Dombeck, Civ. S-00-

²¹ According to the Phase 1 FEIS, the fuel break strategy was first identified in the forest-wide Late-Successional Reserve Assessment, and the Megram Fire Recovery Strategy. Fink Dec., Ex. D, pp. 20, 46-56. Neither the fuel break strategy nor the impacts of the overall Megram Fire recovery strategy have been assessed within a NEPA document.

605-LKK/PAN. The Phase 1 FEIS acknowledges that the proposed fuel breaks are long-term and would be maintained every 2-10 years depending how quickly brush returns. Fink Dec., Ex. D, p. 58. As explained in Californians for Alternatives to Toxics, p. 29, effective maintenance is essential to maintain the integrity of fuel breaks, and this maintenance often involves the application of potentially harmful herbicides.²² The fuel breaks and required maintenance are therefore connected actions that must be considered in a single EIS. Id., p. 30 (Put simply, without maintenance the [fuel breaks] will cease to be effective firebreaks within the life of the pilot project. Thus, it appears from the record that the construction and maintenance of [fuel breaks] are connected as interdependent parts of the Quincy Library Group Act pilot project.); Western Radio v. Glickman, 123 F.3d 1189, 1195 (9th Cir. 1997) (actions connected when one is necessary for the operation of the other); 40 C.F.R./1508.25(a)(1).

2. The multiple post-fire logging projects within the Big Bar Complex Fire

The CEQ regulations also require that cumulative actions be considered together in a single EIS. Thomas v. Peterson, 753 F.2d at 759; 40 C.F.R./1508.25(a)(2). Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. 40 C.F.R./1508.7. As the Ninth Circuit has held, NEPA requires that where several actions have a cumulative or synergistic environmental effect, this consequence must be considered in an EIS. City of Tenakee Springs v. Clough, 915 F.2d 1308, 1312 (9th Cir. 1990). See also, Blue Mountains Biodiversity Project, 161 F.3d at 1214 (If several actions have a cumulative environmental effect, this consequence must be considered in an EIS.); Kleppe v. Sierra Club, 427 U.S. 390, 410 (1976) (When several proposals for . . . related actions that will have cumulative or synergistic environmental impacts upon a region are pending concurrently before an agency, their environmental consequences must be considered together. Only through

²² The necessity of maintenance for the fuel breaks is acknowledged by the Six Rivers National Forest in its Forest-wide LSR Assessment. Fink Dec., Ex. X, p. 2 (Because of the environmental dynamics and long-term use and strategic nature of fuelbreaks, a maintenance and reburn schedule is necessary to keep fuel loading and canopy closure at required standards. Indefinite maintenance of the fuelbreaks to ensure low fuel conditions is essential.).

comprehensive consideration of pending proposals can the agency evaluate different courses of action.).

As was the case in Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d at 1215, the Forest Service has developed a recovery strategy in the aftermath of intense wildfires, and the strategy is comprised of a number of post-fire logging projects. In Blue Mountains, 161 F.3d at 1215, five potential logging projects were identified, but no document was prepared to explore the collective impact of the multiple projects. Because all the multiple post-fire projects were reasonably foreseeable, and developed as part of a comprehensive recovery strategy, the Ninth Circuit held that a single EIS was required to address the projects cumulative impacts. Id.

For the 1999 Big Bar Complex Fire, the Forest Service has proposed at least six post-fire logging projects, with at least five located on the Lower Trinity Ranger District of the Six Rivers National Forest. The Megram Roadside Hazard Tree Project is currently logging over 2000 trees along 114 miles of Forest Service roads throughout the Megram Fire area. Fink Dec., Ex. P. These are the same roads that will be used to access the Phase 1 logging units, and includes roads within or adjacent to the Phase 1 project area. The Happyman Plantation Project logged 191 acres of severely burned areas in the Waterman Ridge and Happy Camp Mountain areas, including units adjacent to Phase 1 units. Id., Ex. S. The Phase 1 and Phase 2 projects have analysis areas that overlap, with Phase 1 focused on logging the severely burned areas, and Phase 2 involving the moderately burned areas of the same fire.²³ The Plantation Precommercial Thinning, Release, and Fuels Treatment project, and the Plantation Planting, Site Preparation, and Fuels Treatment project are two additional logging projects currently proposed for the same Megram Fire area. Id., Ex. R.²⁴ No document has been prepared to explore the collective

²³ As the Forest Service acknowledges in the FEIS for the Phase 1 project, it is only the first phase of a series of forest fuels reduction projects. Fink Dec., Ex. D, p. 4.

²⁴ The New River Community Protection and Burned Area Restoration Project is an additional and related post-fire logging project located on the Shasta-Trinity National Forest. Fink Dec., Ex. Q. This project proposes to enter the burned areas of the Megram and Onion Fires to log and construct fuel breaks. Id. Much of the area is directly adjacent to similar projects on the Six Rivers National Forest, with the only separation an administrative boundary.

impact of these projects. Because they were reasonably foreseeable and part of the same recovery strategy, they must be analyzed together in a single EIS. Blue Mountains, 161 F.3d at 1215.

In Sierra Club v. United States Forest Service, 843 F.2d 1190 (9th Cir. 1988) plaintiff argued that the Forest Service had to consider the cumulative impacts of nine proposed timber sales, located on three separate Ranger Districts of the Sequoia National Forest. 843 F.2d at 1194-95. The court quoted with favor the plaintiff's expert witness:

[It is] essentially axiomatic in forest management that an activity such as a timber sale, which involves significant land disturbance, both in the roads - form of roads and silviculture, will have cumulative effects on at least one resource in that national forest, and I am unaware in my experience of any exceptions to that [W]hen you are talking about commercial logging and road building you will have cumulative effects, and I can't think of an exception.

Id. at 1195. In this case, the timber sales are all post-fire projects located within the same Ranger District. As was the case in Blue Mountains, [a]t the very least, these sales raise substantial questions that they will result in significant environmental impacts and must therefore be considered in a single EIS. 161 F.3d at 1215.

3. The multiple post-fire logging projects within the Big Bar Complex Fire

The NEPA regulations also require that similar actions be considered together in a single EIS. 40 C.F.R./1508.25(a)(3). Similar actions are defined as actions which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography. Id. As the Ninth Circuit has held, where several foreseeable similar projects in a geographical region have a cumulative impact, they should be evaluated in a single EIS. City of Tenakee Springs, 915 F.2d at 1312. See also Kleppe v. Sierra Club, 427 U.S. at 409 ([NEPA] may require a comprehensive impact statement in certain situations where several proposed actions are pending at the same time).

The multiple post-fire logging projects in this case involve the same geographic area, and are very similar in timing. The projects all propose to enter the Megram Fire area, and have all been proposed within the same recovery strategy for the 1999 fires. Logging for the hazard

tree projects is currently ongoing, additional logging is proposed this summer for the Phase 1 project, and the NEPA documentation is currently being prepared for Phase 2" and other related projects. Because the projects are similar in timing and geography, they must be assessed together in a single EIS. 40 C.F.R./1508.25(a)(3).

VI. PLAINTIFFS WILL SUFFER IMMEDIATE AND IRREPARABLE INJURY IN THE ABSENC

Injury to plaintiffs is imminent, as the Forest Service plans to begin logging any day. According to the Beschta Report, the environmental impacts will likely be significant. Fink Dec., Ex. F, p. 7 (There is considerable evidence that persistent, significant adverse environmental impacts are likely to result from salvage logging). Hydrologist Jon Rhodes determined that the project will severely and persistently reduce soil productivity in all treated areas. Rhodes Dec., f 37. According to Rhodes, the project will also increase sediment and water temperatures, and further reduce large woody debris in the already impaired riparian areas. Id., ff 38, 42, 46. See also Fink Dec., Ex. I, p. 14 (Literature Review) (ground-based logging can be expected to cause significant soil disturbance in the postfire environment.).

Further significant impacts to the already sensitive soils would be irreparable, as soils are considered a nonrenewable resource, Fink Dec., Ex. U, p. 2, and irreplaceable in human timescales, id., Ex. F, p. 8. Additional irreparable harm is also likely due the agency s failure to consider the cumulative impacts of its multiple post-fire logging proposals, or to address the findings and recommendations of the Beschta Report. See Amoco Production Co., 480 U.S. at 545, (Environmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, i.e., irreparable.); Thomas v. Peterson, 753 F.2d at 764 (Irreparable damage is presumed to flow from a failure properly to evaluate the environmental impact of a major federal action.).

As in Kettle Range v. U.S. Bureau of Land Management, 150 F.3d 1083 (9th Cir. 1998), this is a case in which the Court s decision as to whether to grant injunctive relief may be determinative of the ultimate outcome of the litigation. In such cases, judges must be particularly sensitive to the practical consequences of their initial action or inaction . . . because

of the need to ensure that the court does not inadvertently lose its ability to enforce an important Congressional mandate. *Id.*, at 1087-88 (concurring opinion). For the Phase 1 project, the Forest Service estimates that 85 percent of the trees may be logged mid-September, with the remaining 15 percent cut by mid-October. Fink Dec., Ex. A, p. 2. If plaintiffs' motion is denied, logging may be completed before plaintiffs' case can be heard. This may be especially egregious in a case such as this, where the Forest Service has not even considered administrative appeals.

The Forest Service has had almost two years since the 1999 wildfires, and now can offer no objective, scientific evidence to support its claim of a sudden emergency. Based on the post-fire studies that are available, the temporary suspension of the logging project will not further impair the area environment. As determined in the Beschta Report, [w]ith respect to the need for management treatments after fires, there is generally no need for urgency, nor is there a universal, ecologically-based need to act at all. . . . Ecologically speaking, fires do not require a rapid human response. Fink Dec., Ex. F, p. 5. In addition, the Forest Service has failed to offer support for its contention that logging is necessary to reduce the threat of a future intense fire in the area. Therefore, the only harm resulting from a temporary suspension of the project is the potential temporary economic injury to a potential bidder for the project. In any event, the mightiest economy on earth can certainly afford a temporary stay from proceeding with one timber sale, on public lands, while the Forest Service ensures that it has properly analyzed and disclosed the environmental impacts. *See Seattle Audubon Society v. Evans*, 771 F.Supp. 1081, 1096 (W.D. Wash. 1991), *aff'd* 952 F.2d 297 (9th Cir. 1991).²⁵

VII. CONCLUSION

There are many similarities between the Phase 1 logging project and the Big Tower project at issue in *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208. The Forest Service has again ignored the Beschta Report for a post-fire logging proposal, and has again divided a comprehensive fire recovery strategy into multiple projects, assessed in separate

²⁵ The public interest also favors an injunction. Defendants' failure to comply with environmental laws invokes a public interest of the highest order: the interest in having government officials act in accordance with the law. *Seattle Audubon*, 771 F.Supp. at 1096.

NEPA documents. A denial of plaintiff s request for an injunction would allow the Forest Service to again succeed with an illegal post-fire strategy. Blue Mountains, 161 F.3d at 1215 (In the two and one-half months between the denial of plaintiffs motion for injunction pending appeal and our injunction following oral argument, over half of the trees in the Big Tower project area have been cut and removed without the benefit of meaningful environmental analysis.). This is a similarity that should not be repeated. As stated in Kettle Range, 150 F.3d at 1088, That is not how our legal system is supposed to work.

For the above stated reasons, plaintiffs respectfully request a temporary restraining order and preliminary injunction enjoining defendants from proceeding with the Fuel Reduction for Community Protection, Phase 1" logging project on the Six Rivers National Forest, until the Court can address the merits of plaintiffs claims in this lawsuit.

Dated this ____ day of July, 2001.

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