

IDAHO CONSERVATION LEAGUE and)
FRIENDS OF THE CLEARWATER)
)
Plaintiffs,)
v.)
)
K. LYNN BENNETT, Idaho State Director)
of the Bureau of Land Management;)
BUREAU OF LAND MANAGEMENT)
ABIGAIL KIMBALL, Regional Forester;)
and UNITED STATES FOREST)
SERVICE,)
)
Defendants,)
and)
)
BENNETT FOREST INDUSTRIES, INC.)
)
Defendant-Intervenor.)
)

CASE NO. CV 04-447-S-MHW

**MEMORANDUM DECISION
AND ORDER**

Memorandum Decision and Order - Page 1

I. Background.

On December 18, 2002, the Bureau of Land Management (BLM) and the United States Forest Service agreed to cooperate on a project known as the Whiskey South Integrated Resource Project, with the BLM as lead agency. The project area includes approximately 2500 acres of forested land located about three miles southwest of Elk City, Idaho and is bordered by the South Fork Clearwater River as well as two of its tributaries, Red River and Crooked River. The goals of the project are to reduce the risk that a high intensity wildfire may pose to the community of Elk City, improve elk habitat, and restore forest health in areas significantly impacted by various diseases and insect infestations. To accomplish these goals, the BLM and Forest Service developed an action plan that includes a number of silvicultural methods, such as road closure and stabilization, timber harvest, prescribed burning, precommercial thinning, and tree planting, among others. After drafting a predecisional Environmental Analysis (EA) and making it available to the public for comment, the Agencies issued a final EA and a Finding of No Significant Impact (FONSI), concluding that the project would have no significant impact on the environment and therefore no Environmental Impact Statement (EIS) need be prepared.

Thereafter, pursuant to authority granted under 16 U.S.C. § 2104 and expanded in Public Law 108-7 § 323, the BLM and Forest Service entered into a Stewardship contract with Defendant-Intervenor, Bennett Forest Industries, a private logging company. Under such authority, the BLM and Forest Service “may enter into stewardship contracting projects with private persons or other public or private entities to perform services to achieve land management goals for the national forests and the public lands that meet local and rural community needs.” 16 U.S.C. § 2104 (2000) *as amended by* Pub. L. No. 108-7, § 323 (2004).

The stewardship contract for the Whiskey South Project allows Bennett Industries to log approximately ten million board feet of timber from Forest Service and BLM land within the project area in exchange for Bennett's performance of several environmental management objectives, including destruction of roads, replacement of culverts for fish passage, and riparian restoration, among others. As these objectives are completed, Bennett will earn "conservation credits," which are intended to offset the cost of timber harvested, with any surplus being paid in cash. The contract was completed and signed in August of 2004 and work began on the project in September of 2004.

Notwithstanding the project's aims at environmental restoration, Plaintiffs are concerned with the effect that the timber harvest component of the project will have on the environment, especially given the already degraded habitat conditions of the South Fork Clearwater and its tributaries due to past logging, road construction, and dredge mining. Because of this past degradation, above normal levels of sediment and temperature have led to the South Fork Clearwater River being listed as "water quality impaired" by the State of Idaho under section 303(d) of the Clean Water Act. Plaintiffs believe that logging 10 million board feet of timber within the project area will worsen the habitat conditions of the area waterways rather than improve them.

This case began when, after exhausting all required administrative remedies, Plaintiffs filed a complaint in the U.S. District Court on September 7, 2004, challenging the Whiskey South Stewardship Contract as approved by the U.S. Forest Service and the BLM. Plaintiffs contend that the contract violates the National Environmental Policy Act (NEPA) because the FONSI was based on a suspect EA that failed to take into account the cumulative impact of the

project, when considered in conjunction with past and future projects in the same general area, and was based on unreliable scientific methods and stale scientific data. In addition, Plaintiffs assert that the contract violates both the Federal Land Policy and Management Act (FLPMA) and the National Forest Management Act (NFMA) by failing to meet applicable aquatic habitat monitoring standards within the project area. Plaintiffs seek an injunction that would halt all activity within the project area pending compliance with the above standards.

Shortly after filing their initial complaint, Plaintiffs filed a motion for preliminary injunctive relief aimed at halting work already begun on the Whiskey South project. On November 15, 2004, this Court, pursuant to Rule 65(a)(2) of the Federal Rules of Civil Procedure, issued an order consolidating the application of the request for a preliminary injunction with a final hearing on the merits of Plaintiffs' prayer for injunctive relief. Pursuant to that order, an evidentiary hearing aimed at illuminating some of the more complex scientific evidence was held January 10-14, 2005. At that hearing, testimony was offered by several experts on both sides about various forestry issues and supplemental briefing was submitted by the parties.

II. Standard of Review.

When reviewing an agency decision, the general rule is that the reviewing court is limited to the administrative record. *Florida Power & Light Co. v. Lorion*, 470 U.S. 729, 743-44, 105 S. Ct. 1598, 84 L.Ed.2d 643 (1985). The Ninth Circuit has stated that "judicial review of an agency decision typically focuses on the administrative record in existence at the time of the decision and does not encompass any part of the record that is made initially in the reviewing

court.” *Southwest Ctr. for Biological Diversity v. U.S. Forest Service*, 100 F.3d 1443, 1450 (9th Cir. 1996). There is, however, a narrow exception to the general rule. In limited circumstances, district courts may admit evidence outside the administrative record if: 1) admission is necessary to determine “whether the agency has considered all relevant factors and has explained its decision,” 2) “the agency has relied on documents not in the record,” 3) “when supplementing the record is necessary to explain technical terms or complex subject matter,” or 4) “when plaintiffs make a showing of bad faith.” *Id.* at 1450 (internal citations omitted). Due to the complexity of the scientific evidence in this case, the first and third circumstances apply and a limited amount of evidence in the form of expert testimony was admitted in order to aid the Court in its decision.

The standard of review in determining whether agency action should be set aside is the “arbitrary and capricious” standard outlined in the Administrative Procedure Act (APA). *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 375, 109 S.Ct. 1851, 1861 (1989); 5 U.S.C. § 706(2)(A). The APA instructs reviewing courts to set aside agency actions, findings and conclusions found to be “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law.” *Id.* This standard is a narrow one and thus the precise meaning of “arbitrary and capricious” is critical to this court’s analysis. As the Ninth Circuit has stated:

An agency’s action is arbitrary and capricious if the agency fails to consider an important aspect of a problem, if the agency offers an explanation for the decision that is contrary to the evidence, if the agency’s decision is so implausible that it could not be ascribed to a difference in view or be the product of agency expertise, or if the agency’s decision is contrary to the governing law.

Lands Council v. Powell, 395 F.3d 1079, 1026 (9th Cir. 2005) (citation omitted). In cases such as this one, where a court must make a factual determination as to whether an agency decision is

arbitrary and capricious, “the reviewing court must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment.”

Marsh, 490 U.S. at 378. This stringent standard reflects a key principle under NEPA – agencies must have the “discretion to rely on the reasonable opinions of [their] own qualified experts even if . . . a court might find contrary views more persuasive.” *Id.* With this standard in mind, we turn to the merits of the specific violations alleged by Plaintiffs.

III. NEPA Analysis.

“The National Environmental Policy Act (NEPA) is our basic national charter for protection of the environment.” 40 C.F.R. § 1500.1. Its purpose is to protect the environment by imposing procedural requirements on the government prior to the commencement of any action that may have a significant impact on the environment. 42 U.S.C. § 4332. These requirements include the preparation of various “environmental documents” such as an Environmental Impact Statement (EIS) or, in the alternative, an Environmental Analysis (EA) and Finding of No Significant Impact (FONSI). 40 C.F.R. §§ 1508.09 - 1508.13. An EA is a concise public document prepared by the relevant government agency, the purpose of which is to provide sufficient evidence and analysis to determine whether a finding of no significant impact is warranted or an EIS is needed to move forward with the project in compliance with NEPA. 40 C.F.R. § 1508.09.

These procedural requirements are meant to ensure that the government take a “hard look” at any project that may impact the environment and to explore alternatives that might reduce any negative environmental consequences. *Lands Council*, 395 F.3d at 1026-27. In

addition, the environmental documents prepared in accordance with NEPA serve to inform the public about steps that have been taken to alleviate environmental concerns and provide the necessary information for meaningful public comment. 40 C.F.R. § 1500.2; *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349-50, 109 S. Ct. 1835, 1845-46 (1989). Thus, while NEPA places no mandate on substantive decisions made by government agencies, it inserts procedural safeguards that provide for “broad dissemination of relevant environmental information.” *Id.* at 1837.

In this case, Plaintiffs challenge the adequacy of the EA prepared by the BLM and Forest Service, asserting that the FONSI was not warranted and that an EIS is required to adequately assess the true impact of the Whiskey South project on the environment. Specifically, Plaintiffs take issue with the cumulative impact analysis provided in the EA, as well as the scientific methodology employed by the government agencies.

If the Plaintiffs were successful in their arguments on either front, they would be entitled to injunctive relief and a remand to the BLM and Forest Service for further compliance with their statutory obligations. Plaintiffs’ arguments regarding cumulative impact are more of a legal challenge to the completeness of the EA and decision not to do an EIS, while the arguments regarding the scientific methodology are driven more by the testimony from the experts witnesses presented during the evidentiary hearing. The Court will first address the legal challenge based on cumulative impact, and then scientific methodology.

A.
Cumulative Impact Analysis.

NEPA requires agencies undertaking environmental projects to assess the cumulative impact of those projects in conjunction with “other past, present, and reasonably foreseeable future actions.” *Klamath-Siskiyou Wildlands Center v. BLM*, 387 F.3d 989, 993 (9th Cir. 2004); 40 C.F.R. § 1508.7. In assessing the cumulative effects of multiple actions affecting the environment, environmental documents should contain “some quantified or detailed information” suitable for analysis of the total impact of all projects that might affect a given area. *Klamath-Siskiyou*, 387 F.3d at 993.

The Ninth Circuit has made it quite clear that a merely perfunctory cumulative impact analysis will not pass muster under NEPA. *See, Id.*; *Lands Council*, 395 F.3d at 1026-27; *Ocean Advocates v. U.S. Army Corps of Engineers*, 402 F.3d 846, 868 (9th Cir. 2005); *Neighbors of Cuddy Mountain v. USFS*, 137 F.3d 1372, 1379-80 (9th Cir. 1998). “The purpose of NEPA is to require disclosure of relevant environmental considerations that were given a ‘hard look’ by the agency, and thereby to permit informed public comment on proposed action and any choices or alternatives that might be pursued with less environmental harm.” *Lands Council*, 395 F.3d at 1027. In *Lands Council*, the court made explicit that proper cumulative impact analysis requires some cataloguing of past projects and their effect on the current project area.¹ *Id.* Furthermore,

¹In its briefing, the BLM emphasizes what it sees as a key distinction between this case, where an EA was prepared, and *Lands Council*, where an EIS was prepared. It is clear that an EA is to be concise and brief, while an EIS is more detailed and thus lengthier. However, it is also clear that all environmental documents under NEPA, at the very least, require enough quality information and accurate scientific analysis to support their conclusions. Any suggestion that an EA is somehow excused from such a mandate while an EIS is not, ignores the purpose of an EA, which is to determine whether there will be a significant impact on the environment and thus whether an EIS is required. Allowing a lower standard for quality information and analysis in an EA than in an EIS would create a dichotomy whereby agencies could avoid doing a detailed EIS by first doing a poor EA. This court believes NEPA intends to present no such conundrum.

such cataloguing must be done in sufficient detail to allow for analysis of the differences between prior projects and ongoing projects, which could provide the information necessary to consider alternatives that might have less impact on the environment. *Id.*

Plaintiffs argue that the Whiskey South EA contained inadequate detail and analysis of the cumulative effects of past activities and reasonably foreseeable future projects within the project area. Plaintiffs contend that because of the lack of information and analysis necessary to critically assess the impacts of these other activities, the public was deprived of the type of relevant information necessary to allow for meaningful public comment. Plaintiffs concerns are well-founded.

1. Past Actions.

Out of the 82 pages in the Whiskey South EA, the section entitled “Cumulative Impacts,” covers all of two pages. Notwithstanding NEPA’s mandate for “brief and concise” environmental assessments, the Whiskey South EA provides inadequate information for the public to assess or analyze the cumulative impact of the project combined with past activities. Although the Whiskey South EA does provide some general statements about past degradation due to mining, timber harvest, human use, and fire suppression; the EA provides no analysis of what effect the current project may have on the area given the past degradation that has already occurred. Simply stating that past degradation has in fact occurred, while providing no analysis of how the proposed project itself may impact that already degraded environment, falls in the category of merely perfunctory analysis. With such general statements supported by little or no

analysis, the BLM's conclusion that there will be "no significant cumulative impacts" (EA, 73.) carries little weight.

The BLM contends that prior environmental degradation from past activities is taken into account by the utilization of an "environmental baseline" approach. Under this approach, environmental effects of the project were estimated using the current condition of the environment, expressed in terms such as "percent over base" to indicate, for example, the percentage increase over the "natural" amount of sediment in a streambed. Likewise, the BLM utilized a similar baseline approach in its analysis of the project's effect on vegetative structure, road density, and lynx habitat. Utilizing this approach, the BLM argues, necessarily takes into account the cumulative effect of past activity.

While this argument may have some validity in that current conditions will obviously reflect in some measure the effects of past environmental degradation, it ignores the failure of the Whiskey South EA to discuss in sufficient detail the connection between prior activities and the current project, which is critical to understanding what alternatives may produce the least environmental harm while still meeting project goals. For example, the Whiskey South EA makes no mention of past projects in the area despite its concession that activities such as timber harvest and fire suppression have had a cumulative effect on the environment in the Whiskey South area. This lack of highly relevant information and analysis runs afoul of the Ninth Circuit's clear mandate of quantifiable and detailed information suitable for public comment and analysis.

2.
Reasonably Foreseeable Future Actions.

Perhaps an even more glaring defect in the BLM's cumulative impact analysis is its treatment of reasonably foreseeable future actions which, when considered in conjunction with the Whiskey South project, may have a significant effect on the environment. Appendix 3 to the Whiskey South EA provides a list of reasonably foreseeable future projects within the same watershed as the Whiskey South project. In that list, projects such as the Red River Salvage project, the Red Pines project, the American and Crooked River projects, and the Eastside Township project are briefly discussed.² Despite the fact that each of these projects are identified in the EA as "reasonably foreseeable," neither the EA nor the FONSI contain any discussion of how the effect of those projects, when combined with the effects of the Whiskey South project, may cumulatively impact the environment.³

The BLM responds by arguing that these future projects were not definite enough to be considered for any possible future cumulative impact they might have if the Whiskey South project were to proceed ahead. This argument is simply not supported by the record.

Scoping documents for both the Red Pines project and the American-Crooked River project had been issued by September of 2003, well before the final Whiskey South EA was issued in March of 2004. This was also within the same time frame as the pre-decisional

²Three of these projects - American, Crooked River, and Red Pines - actually overlap with the Whiskey South project area.

³ One paragraph of discussion is devoted to the Red River Salvage project in Appendix 3 but it provides nothing more than general information about the project and an indication that NEZSED modeling was utilized in estimating the cumulative impact of both projects. It is unclear whether those NEZSED results are reflected in the Whiskey South EA.

Whiskey South EA, issued in September of 2003.⁴ These scoping documents contain significant detail about each project, including the number of acres to be harvested, types of harvest methods to be used, miles of roads to be built, decommissioned, or closed, and specific habitat improvements to be made.

While these projects may not have contained detailed information in terms of sediment modeling and equivalent clearcut area (ECA) percentages, both projects were foreseeable since they had been proposed and scoping had begun. That these projects, when combined with the Whiskey South project, might have a cumulative effect on the environment is not difficult to foresee. For example, the Whiskey South EA indicates that project activities will likely cause a significant increase in sediment delivered to area streams in the short term (the first three years of the project) but result in an overall reduction in sediment levels in the long term (four to seven years). But if other activities, like the Red Pines, American, and Crooked River projects are likely to produce additional sediment to be delivered to streams in the same watershed over the same time period or shortly thereafter, it seems foreseeable, if not likely, that all three projects combined will have a cumulative impact on area streams. This is precisely the kind of potential effect that cumulative impact analysis should seek to address.

Here, however, the BLM, despite being fully aware of several reasonably foreseeable projects within the same watershed as Whiskey South, apparently chose to ignore them under the

⁴Scoping is “an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.” 40 C.F.R. § 1501.7. The documents referred to here contain detailed information about the project, including proposed activities, the purpose and need of the project, and some discussion of the methods to be used in carrying out the project. The stated purpose of the letters is to seek comments on *proposed* activities.

guise of “indefiniteness.”⁵ Thus, the BLM failed to adequately address the potentially cumulative impact of the reasonably foreseeable projects within the Whiskey South project area.

By failing to provide adequate information and analysis of the cumulative impact of past and reasonably foreseeable future actions, the BLM not only failed to consider an important aspect of the Whiskey South project, it offered an explanation for its decision contrary to the evidence found in the record. Because no meaningful past or future cumulative impact analysis was undertaken, the BLM’s conclusions in this regard were arbitrary and capricious and must be set aside.

B. Scientific Analysis.

The information provided in NEPA documents must be of high quality, possess accurate scientific analysis, and be subject to public scrutiny before decisions are made or action taken. 40 C.F.R. § 1500.1(b). In addition, where incomplete or unavailable relevant data exists, NEPA requires up-front disclosure of such shortcomings or omissions in the appropriate environmental document. *Lands Council*, 395 F.3d at 1031. A government agency cannot avoid taking the requisite “hard look” at a project by conducting an EA that fails to set forth a “convincing statement of reasons” explaining why the project will have no significant impact on the

⁵In an email dated July 15, 2003 and sent to several BLM and Forest Service employees, BLM’s Whiskey South project lead, Mark Craig, gave the strong impression that any real analysis of reasonably foreseeable future actions would not seriously be undertaken. The content of that email is as follows:

We have to look at the reasonably foreseeable future actions ... that’d be the Crooked - American Haz Fuels EA, Red R. Salvage EA, Red Pines EIS, Bennett PVT logging/roading. I’m trying to develop a catchall for the FS projects to state they are in draft, no decision, various alts, can’t analyze specific without decision. The only one that may grab us is Red R salvage as it’s decision is closely timed to ours.

(AR 12756.)

environment. *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998); *see also*, *Ocean Advocates v. U.S. Army Corps of Engineers*, 361 F.3d 1108, 1124 (9th Cir. 2004). On the other hand, the purpose of an EA is not to collect massive amounts of needless detail but to provide analysis on the most significant aspects of an action in a brief and concise manner. 40 C.F.R. §§ 1500.1(b), 1508.9. And while government agencies must take a “hard look” at the environmental consequences of a project, judicial review of an agency’s scientific methodology requiring a high level of technical expertise must always be done through the lens of deference to “the informed discretion of the responsible federal agencies.” *Marsh*, 490 U.S. at 377.

Plaintiff’s take issue with the scientific methodology utilized in three key areas of analysis in the Whiskey South Project, arguing that in each area NEPA’s mandate of high quality information and accurate scientific analysis was breached. Since the Court has already found that Defendants have violated NEPA, this opinion need not contain an in depth discussion of each aspect of the conflicting expert testimony presented at the hearing. However, since this matter is being sent back to the Defendants, the Court will offer some guidance as to what areas might contain inadequate information or suspect scientific analysis with the hope that such guidance might be utilized on remand.

1. Tree Mortality.

Plaintiffs argue that the BLM failed to gather sufficient data to support its conclusions about tree mortality resulting from various diseases and insect infestations within the project

area, including root rot, Douglas-Fir bark beetle, and Mountain Pine beetle.⁶ Plaintiffs maintain that the BLM's use of aerial surveys and field surveys to assess the level of infestation did not properly utilize scientific methods and were not carried out by qualified experts. While both sides agree that the area is indeed undergoing an outbreak of Mountain Pine beetle that is killing resident Lodgepole Pine, there is disagreement over how far the outbreak has progressed in its natural cycle. Plaintiffs believe the outbreak is at the end of its cycle while the BLM believes the outbreak continues to worsen, making more and more trees susceptible to mountain pine beetle infestation, which could provide additional fuel for a potentially devastating forest fire. Plaintiffs also take issue with the BLM's contention that mortality in the Douglas-Fir is increasing due to root rot and Douglas-Fir Bark beetle.

**i.
Douglas-Fir Bark Beetle and root rot.**

The Whiskey South EA contends that “[m]ortality in the Douglas-Fir is increasing due to Douglas-Fir bark beetle and root rot. This mortality, coupled with an understory of shade tolerant species, makes the stands increasingly susceptible to stand-replacing fire.” (AR 13718, 13755.) This increasing mortality, the BLM contends, leads to “increasing fuel loads which can be linked to an increasing potential for a stand replacing fire.” (AR 13755.) The court finds these contentions perplexing for two reasons. First, only one of the silvicultural prescriptions⁷

⁶ According to the Whiskey South EA, Douglas-Fir bark beetle and root rot are having an effect primarily on the Douglas-Fir in the project area while Mountain Pine beetle is affecting primarily the Lodgepole Pine. The Stewardship contract calls for the harvest of almost 2 million board feet of Douglas Fir and nearly 4 million board feet of Lodgepole Pine, about half of which is dead Lodgepole Pine.

⁷ The EA contains a brief description of each stand, including the type of trees, what mortality agents are prevalent, and what silvicultural methods will be used in treating the stand. While none of the stand descriptions in the EA makes any mention of Douglas-Fir bark beetle, a more detailed silvicultural prescription contained in the

contained in the Whiskey South EA mentions anything about mortality resulting from Douglas-Fir bark beetle. And while several of the stands are noted to contain root rot, only one stand gives any quantifiable measure of trees affected by it.⁸ In sum, the silvicultural prescriptions contained in the EA and elsewhere do not support the contention of “increasing mortality” due to Douglas-Fir bark beetle and root rot.

Second, project lead Mark Craig testified on direct examination that neither root rot nor Douglas-Fir bark beetle were a major cause of mortality within the project area and that both are a natural part of the system, affecting less than 5% of the project area. Mr. Craig further testified on cross examination that no historical data existed with which to determine any trends that might indicate whether mortality due to root rot or Douglas-Fir bark beetle was increasing over time within the project area. This testimony is consistent with Plaintiffs’ expert testimony from Dr. Arthur Partridge,⁹ who testified that neither root rot nor Douglas-Fir bark beetle were causing increasing mortality within the project area. This evidence, combined with the lack of data contained in the EA and accompanying silvicultural prescriptions to support the contention that mortality is increasing due to these two agents gives the court pause in determining whether or not quality information was gathered and utilized in assessing the mortality resulting from root rot and Douglas-Fir bark beetle. This is especially true where such conclusions are used as

administrative record notes the beetle’s occurrence in one twenty-acre stand. It does not say to what extent the beetle is causing mortality. (AR 12649.)

⁸The silvicultural prescription for stand 9 describes several 1/4 to 2 acre pockets of root rot.

⁹Dr. Partridge is a Professor Emeritus of Forest Disease and Insect Problems at the University of Idaho, where he has taught courses in forest pathology and disease control for over forty years. He has published over 80 articles on forest disease and insect problems.

a basis for projecting an increased risk of a stand-replacing forest fire - a key justification for timber harvest within the Whiskey South area.

ii.
Mountain Pine Beetle.

The BLM's analysis of tree mortality due to Mountain Pine beetle infestation is much more thorough and provides an adequate basis on which to rest its conclusion that increased mortality among Lodgepole Pine is contributing to a greater fuel load and increased risk of wildfire. To estimate the mortality rate of trees within the project area, the BLM utilized aerial surveys, followed by walk-throughs as a way to "ground-truth" the results provided by the aerial surveys. In conducting the walk-throughs, project lead Mark Craig testified that he used a field guide¹⁰ to diagnose specific pockets of root rot and particular types of beetles. Those surveys showed that mortality resulting from Mountain Pine beetle increased significantly from 1999 to 2002.

Plaintiffs argue that although the area may be experiencing an increase in mortality due to an outbreak of Mountain Pine beetle, the outbreak has reached the end of its cycle and is therefore no longer a major threat to surviving Lodgepole Pine within the area. Dr. Partridge testified that where a Mountain Pine beetle epidemic occurs, the beetles will leave, on average, forty percent of the stand but on cross examination admitted that less than forty percent could be

¹⁰ SUSAN K. HAGEL ET AL., FIELD GUIDE TO DISEASES AND INSECT PESTS OF IDAHO AND MONTANA FORESTS 37-38, 48 (1987).

left after a severe attack.¹¹ Mr. Craig then testified that the average Lodgepole Pine stand in the area was currently at an approximate 30% mortality rate, leaving a large percentage of Lodgepole Pine susceptible to attack. This testimony, combined with the aerial and ground surveys showing an increasing trend in Mountain Pine beetle caused mortality, provides ample information from which to conclude that the beetle infestation has not run its course. And since Plaintiffs produced no evidence aside from Dr. Partridge's dissenting opinion to dispute that an attack was indeed occurring, that the infestation had reached epidemic proportions, or that a significant number of trees were susceptible to Mountain Pine beetle infestation, the court is hesitant to depart from the informed discretion of the BLM experts on this issue. This is especially true where, as here, despite the use of similar data, agency and outside experts simply disagree over a scientific issue that inherently requires some element of prediction.

2.

Increased Sediment Estimation based on the NEZSED model.

Plaintiffs next argue that NEZSED, the model used by the BLM to estimate the increased sediment yield routed to area watersheds as a result of project activities, is inadequate because it fails to take into account key variables such as management-induced mass wasting events greater than ten cubic yards and sediment produced from activities such as mining and grazing.

Plaintiffs further assert that despite its shortcomings, the BLM failed to fully disclose the weaknesses of the NEZSED model in its EA, thus violating NEPA's mandate of up-front

¹¹Dr. Partridge also testified that some Lodgepole pine may be genetically resistant to Mountain Pine beetle attack and that any silvicultural prescriptions should attempt to leave such trees in place. However, on cross examination, Dr. Partridge admitted that there exists no conclusive evidence of such genetic superiority and that there would be no way to determine whether particular trees were, in fact, genetically predisposed to resisting Mountain Pine Beetle attacks.

disclosure in addition to the requirement of quality information and accurate scientific analysis. The BLM, on the other hand, argues that NEZSED is the best sediment prediction model available and since it was used properly in this case, its use should be upheld. The BLM relies on the D.C. Circuit in asserting that an agency's choice of scientific model may be rejected "only when the model bears no rational relationship to the characteristics of the data to which it is applied." *National Wildlife Federation v. EPA*, 286 F.3d 554, 565 (D.C. Cir. 2002).

Since the court has already found that NEPA has been violated, there will be no attempt to decipher whose expert was more accurate in their praise or criticism of the BLM's use of the NEZSED model.¹² However, the court is cognizant, as are Plaintiffs and Defendants, of the recent Ninth Circuit decision in *Lands Council*, which was critical of the WATBAL sediment modeling method¹³ on precisely the same grounds that Plaintiffs critique the NEZSED method; namely, the model's failure to account for mass erosion resulting from large storm events and the like. *Lands Council*, 395 F.3d at 1031-32. Although *Lands Council* was indeed critical of the WATBAL model, the court in that case seemed most disturbed by the failure to disclose the known limitations of the model. *Id.* at 1032.

¹²Plaintiff's expert, Al Espinosa, testified that NEZSED's failure to account for mass erosion greater than ten cubic yards, its (somewhat disputed) tendency to under-predict sediment yields in managed watersheds, and its failure to deal with random storm events, makes NEZSED a poor model in predicting effects on fisheries habitat and therefore NEZSED should be limited to measuring differences between broad management alternatives rather than to predict actual sediment yields. Defendant's expert, Nicholas Gerhardt, on the other hand, testified that despite NEZSED's limitations, it is likely the best sediment yield prediction method available, a claim somewhat substantiated by Mr. Espinosa's failure to suggest a better alternative.

¹³The WATBAL method, according to both Espinosa and Gerhardt, is a sediment modeling method developed under the same guidelines as the NEZSED model. These guidelines are known as the R1/R4 Sediment Yield Guidelines, which are commonly used to develop area-specific models within forested lands in Idaho and Montana. For example, the NEZSED model was developed for use in the Nez Perce National Forest while WATBAL was designed for use in the Clearwater National Forest.

In this case, while there is little evidence to suggest that NEZSED was used in an arbitrary or capricious manner, there is little in the way of disclosure of NEZSED's limitations contained in the EA or other public documents. Although Mr. Gerhardt points out in his declaration that the limitations of NEZSED are discussed in the South Fork Clearwater Landscape Assessment, there is no mention of those limitations in any environmental documents required by NEPA. Given the current state of the law in the Ninth Circuit under *Lands Council*, Defendants would do well to remedy this apparent defect on remand.

3. Effect on Fish Habitat.

Plaintiffs argue that the BLM failed to adequately assess the impact of the Whiskey South project on fish habitat.¹⁴ This argument is based on the assertion that the BLM had either insufficient or outdated data on fish populations and habitat conditions with which to make a valid assessment of the current condition of fisheries habitat, thus precluding any meaningful analysis of the effect of the project on the various fish species within the watershed. The BLM responds by pointing to data collected on area watersheds, including percentages of cobble embeddedness, surface fines, and core sampling.¹⁵ The BLM argues that based on this data and visual observations gathered during walk-through surveys by agency experts like fisheries

¹⁴Area watersheds contain habitat for several species of fish, including bull trout, steelhead trout, cutthroat trout, and chinook salmon.

¹⁵According to Kathy Stangl, Fisheries Biologist for the BLM, cobble embeddedness measures the percentage of cobbles (small stones) that are embedded in sediment, percent surface fines measures the amount of free sediment on top of the cobbles, and core sampling monitors the surface subtrait from top to bottom to determine the percentage of surface fines at various depths within the subtrait.

biologist, Kathy Stangl, they were able to conclude that although summer Steelhead would suffer adverse affects in the short term, no other fish species would be adversely affected.

The court in *Lands Council* suggested fish surveys six years old were “suspect” and that without current habitat information, it is impossible to determine what impact, if any, the current project will have on fish species within the project area. 395 F.3d at 1031. And although the Ninth Circuit pointed out that NEPA does not require all information to be immediate, a failure to gather up-to-date data on an issue as relevant as fish habitat, especially where some fish species are threatened,¹⁶ runs afoul of NEPA’s mandate of high quality information and accurate scientific analysis.

In this case, the information on fish habitat contained in the EA and accompanying documents is mostly concerning stream sediment, which Plaintiffs contend is too old to be useful. The BLM’s sediment data for the South Fork of the Clearwater and American River is from 2000, data from Red River is from 1996, and data from Big and Little Campbell Creeks is from 1986. Although data from Red River and both Campbell Creeks may seem a bit outdated, Ms. Stangl testified that the older data was verified by her own personal observations of the watershed in preparation for the project. Ms. Stangl indicated that since her own visual estimates verified the older data, she saw no need to gather additional data. As such, the court is willing to defer to Ms. Stangl’s expertise in this area since the BLM did compare the current condition of the stream against older survey data, and using that data determined through scientific analysis whether or not the current project would adversely effect fish habitat.

¹⁶Steelhead Trout and Bull Trout are listed as threatened species under the Endangered Species Act.

However, Plaintiffs also point out that data on key habitat variables such as measurements of large woody debris, pool frequency, and fish counts are missing from the EA and accompanying documents, making it impossible to determine the current condition of fish habitat and thus the potential impact of the current project on that habitat. Plaintiffs' fisheries expert, Al Espinosa, testified that some population data is required in order to indicate any trends that might be taking place within the system. But Ms. Stangl testified that fish counts were not done because the streams within the project area were too swift for electroshocking or otherwise not conducive to snorkeling, thus making it difficult to gather fish population data. And while habitat conditions such as pool frequency and large woody debris were observed during her walk-throughs of the area, such data was neither quantified nor analyzed in the Whiskey South EA or accompanying documents, thus preventing meaningful analysis or public scrutiny.

While the court is hesitant to depart from the well-informed discretion of the BLM's experts, the lack of quantifiable data and analysis of several key variables reflecting fish habitat is disturbing. Without such information, it seems that Mr. Espinosa's assertion is correct. Lacking the proper data and analysis required to assess population or habitat trends taking place within area streams, there is no way to assess the impact that the Whiskey South project will have on a number of fish species. Given this omission, especially in light of the weight placed on fish population data in *Lands Council*, the court would urge the BLM to take a closer look at this particular area of analysis on remand.

4. Fire Regime.

The Whiskey South EA, as well as testimony from BLM fire ecology experts, Christa Gollnick-Wade and David Overcast, make it clear that the primary purpose of the Whiskey South project is to protect Elk City from wildfire. The Court notes from the outset that given the potential risk to human life, this area of analysis is not undertaken lightly.

Plaintiffs argue that critical errors in the BLM's analysis of the project area's natural fire cycle, or Historic Fire Regime (HFR), resulted in an over-simplified depiction of the natural fire cycle, thus leading to the erroneous conclusion that much of the project area is up to four cycles removed from the HFR. As a basis for this argument, Plaintiffs assert that the BLM's method of rating the various vegetative cover types found within the project area was flawed and that key variables such as slope, aspect, and elevation were not sufficiently taken into account in developing the HFR. Furthermore, Plaintiffs maintain that the BLM's method of classification of fire regimes is at odds with the Forest Service's method and since this discrepancy was not disclosed in the EA, the BLM's analysis was suspect. The BLM responds by pointing out that regardless of the scale used to classify the HFR, a fire has not occurred in the project area for approximately 110 years and as a result, fuels have built up to a level making the danger to Elk City and its residents very high. The BLM maintains that this fact, coupled with its conclusion that most of the project area is well outside its historic fire regime is well-supported by quality information and accurate analysis. The following is a very brief summary of the method used by the BLM to establish the HFR for the Whiskey South project area.

To develop an estimate of the HFR for the Whiskey South project area, the BLM classified the vegetation within the project area based on "gap data" (vegetation data gained from

satellite imagery) and field surveys into twelve types of vegetation, including mixed xeric forest, Lodgepole Pine, and Douglas-fir, among others. These twelve vegetation types were then aggregated into five general cover types described as dry conifer, wet/cold conifer, grass/shrub, riparian, and other. Each of these cover types were then assigned the following: a condition class rating, which described the level of departure from the HFR, a historic fire regime classification rating, which described each cover type and its natural fire cycle in terms of a time interval and severity level, and a hazard rating of high, medium, or low. Each of these variables was then entered into a grid that the BLM referred to as a “crosswalk” and from that, a color-coded map of the area was produced, showing that about sixty percent of the project area consists of dry conifer and about forty percent consists of wet/cold conifer, grass/shrub, riparian, and other. Those areas predominantly containing dry conifer corresponded with a natural fire cycle where low severity fires historically occurred at an interval of 0 to 35 years, and those areas predominantly containing any of the other cover types corresponded with a natural fire cycle where either mixed severity or stand replacing fires occurred at an interval of 35 to 100+ years.

Plaintiffs first take issue with the BLM’s vegetation classification because it apparently contradicts with the vegetation description in the wildlife section of the EA, which describes 80% of the project area as consisting of cold basin species such as subalpine fir and grand fir habitat types. The vegetation classifications for that section of the EA came from the Southfork Clearwater Landscape Assessment, which indicated that within such vegetative structures, medium to large stand replacing fires could be expected to occur at 75 to 150 year intervals.

Plaintiffs further assert that the HFR suffers from a failure to take into account key variables, such as slope, aspect, and elevation in assessing the risk of wildfire.

While this apparent contradiction does cast some doubt on the BLM's conclusions, it is not enough to deem the BLM's methodology arbitrary and capricious because the Southfork Landscape Assessment was conducted on a very large scale (approximately 750,000 acres) whereas the information gathered on the Whiskey South area was done on a much smaller and thus more detailed scale. According to the BLM's fire ecologist, David Overcast, in using available gap data on vegetation types within the area, much of that data was ground-proofed by conducting surveys of 120 one-third acre plots within the project area. That information was then checked by Mr. Overcast and Krista Gollnick-Wade, the statewide fire planning lead for the BLM. The BLM's reliance on data gained from "on-the-ground" observations, which were analyzed by experts in the field, cannot be said to be arbitrary and capricious, nor can it be said that this method produced low quality information or inaccurate scientific analysis, especially in light of the great weight accorded agency experts.

As for the failure to consider variables other than vegetation, Mr. Overcast testified that the topography of the area was taken into account because it is reflected in the type of vegetation that exists in a particular area (some tree species grow better on east facing slopes at higher elevations, etc.). In addition, Overcast testified that topographical information was factored into the ratings assigned to each cover type and then entered into the "crosswalk." This was verified by Ms. Gollnick-Wade in her testimony and undisputed by plaintiffs in either briefing or at the hearing. And while plaintiffs introduced evidence suggesting that Forest Service methodology tended to take topographical features into account to a greater degree, such evidence does little

to undermine the BLM's methods, especially where the Forest Service, as a partner agency for the project, signed off on the Whiskey South EA and the information contained in it.

The Plaintiffs next take issue with the scale used by the BLM in determining the HFR for the project area. While the BLM uses a time interval for mixed severity and stand replacing fires of 35 to 100+ years, Plaintiffs introduced evidence showing the Forest Service uses either a time interval of 75 to 150 or 35 to 100+ years for mixed severity fires and has no category titled "stand replacing," although the Forest Service does have categories with greater time intervals, such as 200+ for high severity fires. While this may show some variation in the time intervals used, the use of the 35 to 100+ time interval in and of itself is unremarkable, especially where, again, the Forest Service signed off on the methodology employed in the Whiskey South EA.

What is somewhat confusing is the BLM's interpretation of that scale. Throughout the EA, the "+" is removed from the interval, despite testimony by David Overcast - on direct examination - that the term "100+" *included* any interval up to 200 years. Thus, dropping the plus symbol from the time interval in the EA leads to some erroneous conclusions, including one particularly misleading statement, which states that "approximately 95 percent of the analysis area is up to four fire cycles removed from its historic fire regime." (EA, page 70.) This statement is clearly false given the BLM's own assertion that 40 percent of the project area is in the 35-100+ time interval, and therefore not removed from its historic fire regime at all. This would seem to constitute inaccurate scientific analysis and since this statement is used in the EA to provide a basis for rejecting an action alternative discussed in the EA, the BLM is encouraged to reevaluate this statement and others like it on remand.

IV. FLPMA and NFMA.

While the court need not decide this issue since it has already been determined that Defendants failed to meet the applicable standards under NEPA's requirements for cumulative impact analysis, some guidance will be offered for use on remand.

Plaintiffs' final assertions of error rest with arguments that the Whiskey South project does not comply with the Federal Land Policy and Management Act (FLPMA) and the National Forest Management Act (NFMA), both of which require agency action to be consistent with applicable land management plans. 43 U.S.C. § 1732; 16 U.S.C. § 1604(i). Like NEPA, challenges to the NFMA are reviewed via the Administrative Procedure Act for determination of whether agency action was arbitrary and capricious. Thus, the same standard of review applies in this analysis as in the above NEPA analysis. *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1149 (9th Cir. 1998).

In this case, the applicable land management plans are the Forest Service's Nez Perce Forest Plan ("Nez Perce Plan") and the BLM's Chief Joseph Management Framework Plan ("Chief Joseph Plan"), which set forth various quality objectives for fisheries and watersheds and provide monitoring standards for species such as summer steelhead and spring Chinook salmon. Plaintiffs main point of contention rests with the perceived failure of the project to meet the requirements of these plans as amended by the "Interim Strategies for Managing Anadromous

Fish-producing Watersheds in Eastern Oregon, Washington, Idaho, and Portions of California,” otherwise known as PACFISH.¹⁷

PACFISH is a regional aquatic conservation strategy designed to protect and restore riparian habitat conditions by establishing habitat goals for stream channels within various watersheds, including fish-bearing streams and permanently flowing non fish-bearing streams, among others. These goals include the establishment of Riparian Management Objectives (RMOs) and delineation of Riparian Habitat Conservation Areas (RHCAs). RMOs establish measurable parameters of quality habitat for anadromous fish based on stream characteristics including pool frequency, large woody debris, bank stability and lower bank angle, and width to depth ratio. RHCAs facilitate attainment of the RMOs by establishing “buffer zones” around riparian areas, including 300 foot buffer zones along each side of fish-bearing streams and 150 foot buffer zones along each side of permanently flowing non-fish-bearing streams.

Generally, timber harvest within RHCAs is prohibited under PACFISH unless 1) “catastrophic events such as ... insect damage result in degraded habitat conditions,” in which case cutting may be allowed “where present and future woody debris needs are met, where cutting would not retard or prevent attainment of other Riparian Management Objectives, and where adverse effects on listed anadromous fish can be avoided” or 2) silvicultural practices are applied “in a manner that does not retard attainment of Riparian Management Objectives and that avoids adverse affects on listed anadromous fish.” (PACFISH regulations, AR 4003.) In

¹⁷ Defendants contend, without rebuttal, that although PACFISH amended the Nez Perce Plan, it did not modify the Chief Joseph Plan, but simply established general guidelines for BLM employees - guidelines lacking the force of law. 60 Fed. Reg. 11655 (March 2, 1995); *Friends of the River*, 146 IBLA 157 (1998). Where Plaintiffs failed to rebut this argument despite the opportunity to do so, and where persuasive authority exists for the proposition, the Court is inclined to agree. Thus, this Memorandum Decision will address only those activities scheduled to occur in the Crooked River RHCA, which is located on Forest Service land.

addition, RHCAs generally may not be modified unless a Watershed Analysis is first completed. “However, RHCAs may be modified in the absence of Watershed Analysis where stream reach or site-specific data support the change.” *Id.* at 4002.

The BLM proposes a number of activities that are to take place within the Crooked River RHCA, including commercial harvest, precommercial thinning, and a moderate severity prescribed burn. They contend that these activities will have no negative impact on Crooked River RMO’s because the trees within 300 feet of the stream are not functioning in the capacity of a riparian buffer since they do not provide bank stability, contribute to large woody debris recruitment, or modify temperature.

Plaintiffs, on the other hand, assert that the EA contains inadequate information with which to assess whether entrance into the RHCAs would in fact have an impact on the RMOs. Plaintiffs have the better of this argument. First, it is unclear from the EA whether cutting in the Crooked River RHCA will be done in response to some catastrophic event such as insect infestation or whether live trees will be harvested. In addition, the EA provides no information about the current status of Crooked River RMOs. Al Espinosa testified without rebuttal that without such information it would be impossible to assess the impact of the current activities on those RMOs.

In any case, even if the Forest Service were able to show that the proposed timber harvest is in response to a catastrophic event, it appears that PACFISH requires a complete Watershed Analysis in watersheds with listed salmon or designated critical habitat, prior to any timber

harvest within an RHCA.¹⁸ Since the Crooked River provides habitat for both Bull Trout and spring Chinook Salmon, it seems that a complete Watershed Analysis of the Crooked River is necessary in this case. Thus, on remand, the BLM is encouraged to address those areas that may be lacking with respect to its entry into the Crooked River RHCA.

V. Conclusion.

The court concludes that the BLM and Forest Service failed to complete a sufficiently detailed analysis of the cumulative impact that the Whiskey south Project may have on the environment when considered in conjunction with past and reasonably foreseeable future projects, as required by NEPA. The failure to do so made the Finding of No Significant Impact arbitrary and capricious. In addition, on remand, the court encourages the BLM to take a closer look at the scientific aspects outlined in the opinion as being inadequate or suspect, as well as the information regarding entry into the Crooked River RHCA for timber harvest purposes.

¹⁸The section relevant to timber management in RHCA's under PACFISH reads as follows:

Prohibit timber harvest, including fuelwood cutting, in Riparian habitat Conservation Areas, except as described below...

a. Where catastrophic events such as fire, flooding, volcanic, wind, or insect damage result in degraded riparian conditions, allow *salvage* and *fuelwood* cutting in Riparian Habitat Conservation Areas only where present and future woody debris needs are met, where cutting would not retard or prevent attainment of other Riparian Management Objectives, and where adverse effects on listed anadromous fish can be avoided. *For watersheds with listed salmon designated critical habitat, complete Watershed Analysis prior to salvage cutting in RHCAs.*

b. Apply silvicultural practices for Riparian Habitat conservation Areas to acquire desired vegetation characteristics where needed to attain Riparian Management Objectives. Apply silvicultural practices in a manner that does not retard attainment of Riparian Management Objectives and that avoids adverse effects on listed anadromous fish.

(PACFISH regulations, AR 4005, emphasis added.)

ORDER

Based on the foregoing, the Court being otherwise fully advised in the premises, **IT IS HEREBY ORDERED that:**

Plaintiffs request for injunctive relief is **GRANTED**. Further work pursuant to the Whiskey South Stewardship Contract is permanently enjoined pending compliance with its obligations under NEPA and pursuant to this order.



DATED: **April 29, 2005**

A handwritten signature in black ink, reading "Mikel H. Williams". The signature is written in a cursive, flowing style.

Honorable Mikel H. Williams
United States Magistrate Judge