

FOR PUBLICATION
UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

OREGON NATURAL RESOURCES
COUNCIL FUND; KLAMATH-SISKIYOU
WILDLANDS CENTER; NORTHWEST
ENVIRONMENTAL DEFENSE CENTER;
CASCADIA WILDLANDS PROJECT;
UMPQUA WATERSHEDS,

Plaintiffs-Appellees,

v.

ELAINE BRONG, State Director,
Bureau of Land Management; A.
BARRON BAIL, Acting Associate
State Director, Bureau of Land
Management,

Defendants,

and

TIMBER PRODUCTS Co., an Oregon
limited partnership; SWANSON
GROUP, INC., an Oregon
corporation; AMERICAN FOREST
RESOURCE COUNCIL, an Oregon
nonprofit corporation,

*Defendants-Intervenors-
Appellants.*

No. 05-35063
D.C. No.
CV-04-00693-AA

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Defendants-Intervenors.

No. 05-35092
D.C. No.
CV-04-00693-ALA
OPINION

Appeal from the United States District Court
for the District of Oregon
Ann L. Aiken, District Judge, Presiding

Argued and Submitted
December 7, 2005—Portland, Oregon

Filed July 24, 2007

Before: James R. Browning, Dorothy W. Nelson, and
Diarmuid F. O'Scannlain, Circuit Judges.

Opinion by Judge D.W. Nelson;
Dissent by Judge O'Scannlain

COUNSEL

Ellen J. Durkee, United States Department of Justice, Washington, D.C., argued and briefed the case for the federal appellants.

Scott W. Horngren and Julie A. Weis, Haglund, Kelley, & Horngren, Jones & Wilder LLP, Portland, Oregon, briefed the case, and Mr. Horngren argued the case for the intervenors-appellants.

Susan Jane Brown, Pacific Environmental Advocacy Center, Portland, Oregon, argued and briefed the case for the appellees.

OPINION

D.W. NELSON, Senior Circuit Judge:

Elaine Brong, Oregon State Director of the Bureau of Land Management (“BLM”), and other parties¹ appeal the district court’s decision invalidating the Timbered Rock Fire Salvage and Elk Creek Watershed Restoration Project (“Timbered Rock Project” or “Project”), a plan developed by the BLM to log nearly a thousand acres of protected land in southwest Oregon after a major forest fire. The district court held that the Timbered Rock Project violated both the Federal Land Policy and Management Act (“FLPMA”) and the National Environmental Policy Act (“NEPA”). We affirm.

¹Timber Products Co., Swanson Group, Inc., and the American Forest Resource Council intervened as defendants in this suit and join the BLM in this appeal.

I. FACTUAL & PROCEDURAL BACKGROUND

Following a series of lightning strikes, on July 13, 2002, the Medford District of the BLM was devastated by the “Timbered Rock” fire. This fire burned approximately 12,000 acres of land in the district, all within an area known as the Elk Creek Watershed.² Under federal law, Elk Creek is a “Late-Successional Reserve,” which entitles the area to heightened environmental protection.

Following the Timbered Rock fire, the BLM began considering a range of options of how to revitalize the Elk Creek area.³ The BLM considered the environmental impacts of various alternatives, ultimately devising the Timbered Rock Project. On August 15, 2003, the BLM announced the availability of a Draft Environmental Impact Statement for the Timbered Rock Project, and indicated that it would accept public comment until October 14, 2003. On January 30, 2004, the BLM made public the Project’s Final Environmental Impact Statement (“Timbered Rock FEIS”), and on March 23, 2004, the BLM issued its Record of Decision for the Timbered Rock Project (“Timbered Rock ROD”).

Pursuant to the Project, the BLM proposes to log more than 961 acres of environmentally-protected land affected by the fire. Timbered Rock ROD at 3. Of the 961 acres, 282 are designated as “research units” for investigating the influence of post-fire salvage and salvage intensity on wildfire response, while the remaining acreage is designated for area salvage. *Id.* As a whole, the Project would allow salvage of approximately 23.4 million board feet of timber to be sold to private companies. *Id.*

²The fire also burned approximately 15,000 acres of land owned by private entities adjacent to the Elk Creek Watershed.

³Boise Corporation—the primary owner of the private land also affected by the Timbered Rock Fire—completed salvage logging of its land prior to the determination by the BLM to pursue the Timbered Rock Project. This is relevant to the NEPA discussion in Section IV, *infra*.

The Oregon Natural Resources Council and other parties (collectively “ONRC”)⁴ challenged the Timbered Rock Project via an administrative protest filed on April 12, 2004. On May 18, 2004, the BLM responded to ONRC’s protest and affirmed its decision to proceed with the Project. ONRC challenged the agency’s decision in district court. ONRC argued that the BLM violated the Medford District Bureau of Resource Management Plan, as amended by the Northwest Forest Plan, which the BLM is required to follow pursuant to FLPMA. 43 U.S.C. § 1732; 43 C.F.R. § 1610.5-3(a). Specifically, ONRC alleged that the Project violated the Plan because it proposed the excessive removal of large diameter dead or dying trees, impermissible research logging, and timber removal in “non-suitable woodlands.” ONRC also alleged that the BLM failed to designate properly certain areas as “riparian reserves.”

ONRC also alleged the Project violated NEPA because (1) the BLM failed to analyze the cumulative effects of fire suppression activities, private salvage logging, and salvage logging in deferred watersheds, and (2) the BLM employed a flawed methodology by using an unreliable tool, known as the Decayed Wood Advisor (“DecAID”), to calculate the effect of the Project on certain species.⁵

On June 15, 2004, the district court granted ONRC’s motion for a temporary restraining order. On November 10, 2004, the district court entered an opinion and order in favor of ONRC, and on November 23, 2004, it entered a judgment granting ONRC a permanent injunction. *See Or. Natural Res.*

⁴Klamath-Siskiyou Wildlands Center, Northwest Environmental Defense Center, Cascadia Wildlands Project, and Umpqua Watersheds are the additional plaintiffs-appellees in this case.

⁵ONRC also argued that the BLM violated NEPA by failing to assess adequately and disclose the effects of the Project on soils in the area of the proposed salvage. The district court disagreed, and ONRC has not appealed the district court’s finding.

Council Fund v. Brong, No. Civ. 04-693-AA, 2004 WL 2554575 (D. Or. Nov. 8, 2004). The BLM timely appealed.

II. STANDARD OF REVIEW

We review the BLM's compliance with FLPMA and NEPA de novo. *See Or. Natural Res. Council v. U.S. Bureau of Land Mgmt.*, 470 F.3d 818, 820 (9th Cir. 2006); *Klamath Siskiyou Wildlands Ctr. v. Boody*, 468 F.3d 549, 554 (9th Cir. 2006). Decisions that allegedly violate NEPA and FLPMA are reviewed under the Administrative Procedure Act ("APA"), which "dictates that we should 'hold unlawful and set aside agency action . . . [that is] arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.'" *Natural Res. Def. Council v. Nat'l Marine Fisheries Serv.*, 421 F.3d 872, 877 (9th Cir. 2005) (quoting 5 U.S.C. § 706(2)(A)).

While the APA requires that we not substitute our own judgment for that of the agency, it nevertheless requires us to "engage in a substantial inquiry" and a "thorough, probing, in-depth review." *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 960 (9th Cir. 2005) (quoting *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 415-16 (1971)). As we have said before, "[t]o have not acted in an arbitrary and capricious manner, the agency must present a 'rational connection between the facts found and the conclusions made.'" *Id.* (quoting *Nat'l Wildlife Fed'n v. U.S. Army Corps of Eng'rs*, 384 F.3d 1163, 1170 (9th Cir. 2004)). Though we normally afford deference to an administrative agency's interpretation of its own regulations, "an agency's interpretation 'does not control, where . . . it is plainly inconsistent with the regulation at issue.'" *Id.* (quoting *Friends of Southeast's Future v. Morrison*, 153 F.3d 1059, 1069 (9th Cir. 1998)).

III. THE FLPMA CLAIMS

[1] The Federal Land Policy & Management Act, 43 U.S.C. §§ 1701-1785 (2006), establishes requirements for land use

planning on public land. FLPMA requires that the BLM, under the Secretary of the Interior, “develop, maintain, and when appropriate, revise land use plans” to ensure that land management be conducted “on the basis of multiple use and sustained yield.” 43 U.S.C. §§ 1701(a)(7), 1712(a); *see also Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d 1062, 1067 (9th Cir. 2002) (holding that FLPMA “requires the BLM to prepare [resource management plans] for the various districts under its control”). The process for developing, maintaining, and revising resource management plans is controlled by federal regulations at 43 C.F.R. §§ 1601.0-1610.8 (2006). Once a land use plan is developed, “[a]ll future resource management authorizations and actions . . . shall conform to the approved plan.” 43 C.F.R. § 1610.5-3(a).

The land use plan governing the Timbered Rock Project is the Medford District Resource Management Plan (“Medford RMP”), as amended significantly by the Northwest Forest Plan (“NFP” or “Plan”).⁶ The BLM interpreted the NFP as permitting the Timbered Rock Project. For the following reasons, however, we disagree.

A. The BLM’s Interpretation of the Northwest Forest Plan is Inconsistent with the Plan’s Mandate to Prioritize the Maintenance and Preservation of Late-Successional Ecosystems.

Because the NFP embodies the substantive management directives with which the BLM must comply under FLPMA, our review must start with, and remain anchored in, an understanding of the NFP. A careful reading shows that while the NFP as a whole seeks to strike a balance between environmental protection and resource extraction, its management

⁶The official title of the Plan is the “Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl.” Except where otherwise noted, we refer to the mandates of the Plan and the Medford RMP collectively.

directives for specified reserve areas give priority to environmental concerns. The BLM's interpretation of the Plan is plainly inconsistent with these directives.

Consider the NFP's history. The Plan is a comprehensive response to a long and bitter legal battle over the scope of logging in old-growth forests, home to the endangered northern spotted owl. *See Seattle Audubon Soc'y v. Lyons*, 871 F. Supp. 1291, 1300-01 (W.D. Wa. 1994), *aff'd*, *Seattle Audubon Soc'y v. Moseley*, 80 F.3d 1401 (9th Cir. 1996) (*per curiam*). Indeed, “[i]t should be borne in mind that the NFP is not an ordinary government land-management strategy; instead, the history and care in its creation bespeak the massive effort that led to its birth.” *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Serv.*, 378 F.3d 1059, 1068 (9th Cir. 2004).

To ensure that national forest timber sales would comply with legal conservation requirements, the NFP divided the approximately 24.5 million acres of federal land within the northern spotted owl's range into several hierarchical allocations designated by the type of land use in each allocation. *See id.*; Northwest Forest Plan Standards and Guidelines (“NFP S&G”)⁷ at A-1-A-7, B-1. This hierarchy is the fundamental means by which the NFP achieves its primary goal of protecting and enhancing habitat for late-successional and old-growth forest-related species. *See Seattle Audubon Soc'y*, 871 F. Supp. at 1304-05; NFP S&G at A-1. Six of the allocations are “reserve areas in which logging and other ground-disturbing activities are generally prohibited.” *Seattle Audubon Soc'y*, 871 F. Supp. at 1304-05; *see also* NFP S&G at A-

⁷The Plan's Standards and Guidelines are officially entitled “Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl; Attachment A to the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl.”

4-A-5 (summarizing what activities are permitted within each classification). The Plan designates the remaining “unreserved areas as ‘matrix,’ in which timber harvest may go forward subject to environmental requirements.” *Seattle Audubon Soc’y*, 871 F. Supp. at 1305.

[2] As explained in Section I, *supra*, the Timbered Rock Project would permit logging in the Elk Creek Watershed (“Elk Creek”). Elk Creek is designated as a Late-Successional Reserve (“LSR”)—a protected area—under the NFP. LSRs lie at the heart of the NFP’s ecosystem-based conservation strategy for the northern spotted owl and other endangered species. “The objective of Late-Successional Reserves is to protect and enhance conditions of late-successional and old-growth forest ecosystems, which serve as habitat for late-successional and old-growth related species including the northern spotted owl.” NFP S&G at C-9. The NFP plainly states that LSRs “are to be managed to protect and enhance conditions of late-successional and old-growth forest ecosystems.” NFP S&G at C-11; *see also* Northwest Forest Plan Record of Decision (“NFP ROD”)⁸ at 8 (“Late-successional reserves are to be managed to protect and enhance old-growth forest conditions.”).

[3] Pursuant to these goals, the NFP makes programmed “stand management” activities, such as logging, impermissible in LSRs. *See* NFP ROD at 8 (“No programmed timber harvest is allowed inside the reserves.”). The NFP recognizes a narrow exception, however, following a stand-disturbing event, such as a massive fire. In these specific circumstances, the Plan contains “Guidelines for Salvage”⁹ that prescribe the

⁸The official title of the decision is “Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl.”

⁹Salvage logging “is defined as the removal of trees from an area following a stand-replacing event such as those caused by wind, fires, insect infestations, volcanic eruptions, or diseases.” NFP S&G at C-13.

extent to which limited logging within the LSRs is permitted. NFP S&G at C-13-C-16. We must determine whether the Timbered Rock Project's salvage plan is consistent with these guidelines.

[4] Of crucial importance, however, is that the NFP does *not* in any way relax its LSR management goals for salvage operations. Instead, the LSR salvage guidelines reiterate that “[b]ecause Late-Successional Reserves have been established to provide high quality habitat for species associated with late-successional forest conditions, management following a stand-replacing event should be designed to accelerate or not impede the development of those conditions.” *Id.* at C-14; *see also* NFP ROD at 8 (“Salvage guidelines are intended to prevent negative effects on late-successional habitat.”). Moreover, the guidelines state that “[w]hile priority should be given to salvage in areas where it will have a positive effect on late-successional forest habitat, salvage operations should not diminish habitat suitability now or in the future.” *Id.* at C-13. Thus, while it permits salvage logging in limited circumstances, the NFP clearly prioritizes the preservation of LSR ecosystems over commercial benefits.

[5] The BLM's interpretation of the LSR salvage guidelines is inconsistent with the NFP's clear direction. The BLM construes the guidelines as balancing environmental concerns and economic factors equally. To be sure, the Forest Service may consider economic interests in choosing how it will conduct LSR salvage operations; that it may do so is not only a matter of common sense, but it is also something explicitly contemplated by the Plan. *See* NFP S&G at C-13-C-14 (“[M]anagement planning for Late-Successional Reserves must acknowledge the considerable value of retaining dead and dying trees in the forest as well as the benefits from salvage activities.”). However, the NFP does not permit a salvage project in an LSR for the purpose of recovering the economic value of timber without at least explaining—in the administrative record—how such action is compatible with

the NFP's direction to protect and enhance late-successional ecosystems. Not only would doing so run afoul of the NFP's clear priority of protecting LSR ecosystems, but it would contradict the Plan's directive:

In all cases, planning for salvage should focus on long-range objectives, which are based on desired future condition of the forest. Because Late-Successional Reserves have been established to provide high quality habitat for species associated with late-successional forest conditions, management following a stand-replacing event should be designed to accelerate or not impede the development of those conditions.

Id. at C-14.

[6] In sum, “[s]alvage activities must be intended to prevent negative effects on late-successional habitat,” NFP ROD at 63, and the BLM's interpretation is inconsistent with this directive. Therefore, it is not entitled to deference, *Native Ecosystems*, 418 F.3d at 960, and we must independently evaluate the Project to determine whether its specific elements comply with the NFP.

B. The Timbered Rock Project Violates the NFP.

ONRC challenges four components of the Timbered Rock Project, two of which warrant attention here: snag retention and research logging.¹⁰ Because the BLM relied on an erroneous interpretation of the NFP's managing directives for LSRs when developing the Project, it is not surprising that both of these components are inconsistent with the Plan and, consequently, violate FLPMA.

¹⁰We do not decide ONRC's claims regarding riparian reserves and non-suitable woodlands because we find the Project unlawful under the NFP on other grounds.

1. *Snag Retention*

[7] As we explained in Section I, *supra*, the Timbered Rock Project proposes substantial salvage logging in the acreage affected by the fire in an effort to recover economic value from the timber therein. The salvage would remove from the Elk Creek LSR a significant number of large, standing dead or dying trees, known as “snags.”¹¹ This is significant because snags play an integral role in the ecology of old-growth forests. Indeed, the NFP expressly states:

Tree mortality is an important and natural process within a forest ecosystem. Diseased and damaged trees and logs are key structural components of late-successional and old-growth forests. Salvage of dead trees affects the development of future stands and habitat quality for a number of organisms. Snag removal may result in long-term influences on forest stands because large snags are not produced in natural stands until trees become large and begin to die from natural mortality. Snags are used extensively by cavity-nesting birds and mammals such as woodpeckers, nuthatches, chickadees, squirrels, red tree voles, and American marten. Removal of snags following disturbance can reduce the carrying capacity for these species for many years.

NFP S&G at B-8; *see also id.* at B-9 (“[T]rees injured by disturbance may develop cavities, deformed crowns, and limbs which are habitat components for a variety of wildlife species.”).

[8] Given the importance of snags in late-successional eco-

¹¹Specifically, the Project would only leave up to six snags per acre greater than twenty inches in diameter at breast height (“dbh”) in the research units, and between eight to twelve snags per acre greater than fourteen dbh in the non-research units.

systems, it is not surprising the NFP restricts removal of snags in LSRs. In fact, the NFP's salvage guideline no. 3 expressly limits the removal of such snags:

Snags provide a variety of habitat benefits for a variety of wildlife species associated with late-successional forests. Accordingly, following stand-replacing disturbance, management should focus on *retaining snags that are likely to persist until late-successional conditions have developed and the new stand is again producing large snags*. Late-successional conditions are not associated with stands less than 80 years old.

Id. at C-14 (emphasis added). Despite this clear directive against removing large snags (i.e., those likely to persist until late-successional conditions have developed), the BLM asserts that the Project, which entails the removal of a significant number of large snags in late-successional areas, is nonetheless consistent with the NFP. We disagree, and find the BLM's reasoning lacking in multiple respects.

The BLM asserts that removing a significant number of large snags is consistent with the NFP because leaving some large snags—between eight and twelve per acre in the non-research units—would provide sufficient habitat for species that rely upon large snags for survival (i.e., a “some-is-enough” standard). The BLM supports this conclusion with data produced by the DecAID Wood Advisor. DecAID is a newly-developed model designed to “help managers evaluate effects[] of forest conditions and existing or proposed management activities on organisms that use snags and down wood.” Timbered Rock FEIS at D-16. However, “DecAID does not specifically address effects of fire,” *id.* at D-17, and it “is not intended to predict occurrence of wildlife species at the scale of individual forest stands or specific locations,” *id.* at D-19.

ONRC argues that the BLM's use of DecAID is arbitrary and capricious,¹² yet even if we assume, *arguendo*, that using DecAID is permissible, the BLM's argument that the Project, in employing the model's recommended snag-retention levels, complies with the NFP still fails for two principal reasons. First, the BLM can point to no part of the NFP to support its argument that using the some-is-enough standard satisfies the Plan. In light of the Plan's clear directive against removing snags that will remain until the late-successional forest regenerates, this is not surprising. Indeed, the salvage guidelines expressly state that snags likely to persist "until late-successional conditions have developed and the new stand is again producing large snags" should not be removed. NFP S&G at C-14.¹³

Moreover, the importance of developing and retaining snags is emphasized in other parts of the NFP. For example, when discussing the role of silviculture in preserving LSRs, the Plan states that the "development of old-growth forest characteristics including snags" is a "principal objective." NFP S&G at B-5. The Plan similarly states that "[d]esired late-successional and old-growth characteristics that will be created as younger stands change through successional devel-

¹²The district court agreed with ONRC, finding the use of DecAID arbitrary and capricious and, therefore, a violation of NEPA. Because we find the Project's proposal for retaining only "some" large snags a violation of the NFP, we need not decide whether the use of the model was itself unlawful.

¹³Our dissenting colleague seems to suggest that the burden is on us to show that retaining "some snags is never enough." Dissenting Opin. at 8958. However, by mandating that land management agencies must "focus on retaining" large snags, the Plan clearly places a burden on the BLM to (at least) explain how retaining only a handful of large snags per acre is sufficient to sustain late-successional habitat. The dissent's colorful assertions notwithstanding, we do not "divine an 'express limitation'" on removing large snags. *Id.* We merely endeavor to ensure that the BLM complies with the requirements of the Northwest Forest Plan and that its actions do not substitute economic interests for the paramount goal of preserving late-successional ecosystems.

opment include . . . moderate-to-high accumulations of large logs and snags.” *Id.* Again, the NFP’s emphasis on retaining snags in LSRs is not surprising given the Plan’s clear prioritization of preserving LSR ecosystems, *see* Section III.A, *supra*, and the key role snags play in that process.

Second, the amount of large snag retention the BLM claims to be “enough” to satisfy the NFP is only achieved by averaging salvaged and non-salvaged areas together across *all* the acres included in the logging. The Timbered Rock FEIS states:

The snags would be concentrated in portions of the units that receive no harvest. Approximately 1,004 acres would be included as harvest units, with 679 acres receiving harvest of all fire-killed trees and the remaining 325 acres retaining all trees, accounting for the 8-12 snags per acre.

Timbered Rock FEIS at 3-112. Thus, the BLM’s representation that between eight and twelve large snags per acre will still be standing after the logging occurs is grossly misleading, as over two-thirds of the affected acreage will be *completely* stripped of all salvageable trees.

The BLM’s attempt to dilute the effects of its proposed activities by averaging the snag retention over such a wide area is inconsistent with the NFP and improper under our precedent. *See Pac. Coast Fed’n of Fishermen’s Ass’ns v. Nat’l Marine Fisheries Serv.*, 265 F.3d 1028, 1035-37 (9th Cir. 2001) (holding that an agency cannot try to “minimize” the environmental impact of an activity by simply adopting a scale of analysis so broad that it marginalizes the site-level impact of the activity on ecosystem health). In fact, if using such an approach was permitted, the Project could clear-cut all 1,004 acres and still claim to be retaining eight to twelve snags per acre by merely expanding the Project to “include”

more land.¹⁴ Clearly, this would be unreasonable, as any adverse environmental effect could be “diluted to insignificance.”¹⁵ *Id.* at 1036.

Furthermore, even if the DecAID recommendations for snag density happen to approximate the density actually required to sustain late-successional forests, the BLM offers no evidence that a wide-scale averaging approach is compatible with these recommendations. The BLM notes it relied on two studies that recommended leaving snags in clumps rather than scattered across the landscape. The BLM does not explain, however, how it achieves the desired distribution of clumps by leaving roughly thirty large snags per acre in less than one-third of the land covered by the Project while clear-cutting the remaining lion’s share.

The BLM cites a specific passage in the NFP to support its argument that salvaging large snags at the level proposed in the Project is consistent with the Plan. The passage states:

Salvage is not required to be beneficial, but is designed to permit the recovery of timber volume in those instances where catastrophic events clearly kill more trees (resulting in more snags and down logs in the short and long term) than are needed to maintain late-successional conditions. For example, if a major blowdown event leaves dead trees 15 feet deep over the landscape, a determination could be made that only a portion of those logs are needed to meet the

¹⁴Although the dissent attempts to mitigate the illustrative import of this example by characterizing it as a “straw man,” Dissenting Opin. at 8958, the fact remains that averaging snag removal in this fashion is grossly misleading.

¹⁵Justice Brandeis creatively captured the illogic of this approach: “I abhor averages. . . . A man may have six meals one day and none the next, making an average of three meals per day, but that is not a good way to live.” *THE WORDS OF JUSTICE BRANDEIS* 32 (Solomon Goldman ed., 1953).

objectives of the reserve. The rest . . . might be available for salvage.

NFP ROD at 66. Thus, under certain limited circumstances, salvage can occur in LSRs; indeed, we noted this in Section III.A, *supra*. However, the BLM does not claim or offer evidence to demonstrate that the Timbered Rock Fire “clearly kill[ed] more trees than are needed to maintain late-successional conditions,” or that only a portion of dead trees “are needed to meet the objectives of the reserve.” Instead, the BLM relies on its some-is-enough argument without making the threshold findings required by the NFP.

The BLM also cites the NFP’s statement that “some commercial wood volume removal” is permitted in LSRs. *See* NFP S&G at C-13. But again, the NFP clearly states that salvaging should be minimal, that environmental concerns ought to take priority over potential commercial benefits, and that large snags should be retained so as to ensure the development and preservation of late-successional habitat. Despite these numerous mandates emphasizing that logging snags should not harm LSRs, the BLM neglects to explain how the Timbered Rock Project avoids doing just that.

[9] In sum, we require an agency to “present a rational connection between the facts found and the conclusions made.” *Native Ecosystems*, 418 F.3d at 960 (internal quotation marks omitted). The BLM’s decision to preserve a baseline number of snags is insufficient in a fundamental way: it neglects to explain why the snag removal it *does* authorize, which undisputably harms late-successional habitat in the short term, will somehow maintain overall habitat suitability now or in the future, as expressly required by the NFP. *See* NFP S&G at B-8, C-14. Consequently, the Timbered Rock Project violates FLPMA.

2. *Research Logging*

[10] ONRC also challenges the Project's proposed research logging, which would occur on 282 acres of land affected by the fire within the Elk Creek LSR.¹⁶ The NFP establishes narrow guidelines identifying the circumstances in which research is permissible in LSRs, similar to the guidelines regarding salvage logging. Specifically, the Plan states:

A variety of wildlife and other research activities may be ongoing and proposed in late-successional habitat. These activities must be assessed to determine if they are consistent with Late-Successional Reserve objectives. Some activities (including those with experimental forests) not otherwise consistent with the objectives may be appropriate, particularly if the activities will test critical assumptions of these standards and guidelines, will produce results important for habitat development, or if the activities represent continuation of long-term research. These activities should only be considered if there are no equivalent opportunities outside Late-Successional Reserves.

NFP S&G C-18. Thus, the NFP creates a two-step inquiry for assessing whether research activities are permitted in an LSR.

[11] First, the research activity is examined to determine whether it is "consistent with Late-Successional Reserve objectives." One of the NFP's stated goals for LSRs is "the development of old-growth forest characteristics including snags." NFP S&G at B-5. However, the research logging pro-

¹⁶The study would include twelve research units, each of thirty acres or more, in which three treatment levels would be implemented: no salvage (control group); moderate salvage, resulting in the retention of timber on thirty percent of the unit; and heavy salvage, which would entail logging the entire unit. Timbered Rock ROD at 3.

posed in the Project would itself result in the removal of hundreds (if not thousands) of snags, a fundamental component of LSRs. Moreover, the BLM states it is attempting to ensure that two-thirds of the dead trees in all size classes greater than twenty inches dbh would be maintained, but the BLM presents no evidence to support a claim that removing the remaining one-third would in fact assist with the “development of old-growth forest characteristics.” Thus, for the same reasons the Project falls short with regard to snag retention, it is also lacking with regard to its proposed research activities.

[12] Under the second step of the inquiry, even if the proposed activities are inconsistent with these objectives, they might still be permitted if they “test critical assumptions . . . , produce results important for habitat development, or . . . represent continuation of long-term research” *and* there are “no equivalent opportunities outside Late-Successional Reserves.” The NFP mandates that while “[a]n important component of [the Plan] is the facilitation of research activities to gather information and test hypotheses in a range of environmental conditions, . . . every effort should be made to locate non-conforming [research] activities in land allocations where they will have the least adverse effect upon the objectives of the applicable standards and guidelines.” NFP ROD at 15. The BLM has failed to satisfy this requirement.

[13] Even if the BLM is correct that the Project would test various assumptions in the NFP,¹⁷ it has provided no evidence that equivalent opportunities are unavailable in non-LSR areas. What is more, although the Project’s “research proposals are related to post-fire conditions and must be conducted

¹⁷For example, the BLM argues that the “wildlife-snag research will evaluate snag levels that may be more appropriate to the drier portions of the NFP area,” and “reforestation research will address method of reforestation that may be more appropriate in land use allocations.” Timbered Rock FEIS at 1-12.

in a recently burned area,” the BLM concedes “a number of these areas exist within southwest Oregon,” and the BLM makes little more than the conclusory statement that “conducting this research in an LSR is appropriate” in supporting its proposed research projects. Timbered Rock FEIS at 1-12. Thus, the research proposed under the Project fails to comply with the NFP’s guidelines.

[14] In sum, the BLM’s interpretation of the Plan is plainly inconsistent with the NFP’s directives regarding Late-Successional Reserves. As a result, the snag removal and research activities proposed in the Timbered Rock Project are at odds with the Plan and, consequently, violate FLPMA.

IV. THE NEPA CLAIMS

[15] In addition to its claims under FLPMA, ONRC also alleges the Timbered Rock Project violates the National Environmental Policy Act. NEPA requires agencies considering “major Federal actions significantly affecting the quality of the human environment” to prepare and issue an environmental impact statement. 42 U.S.C. § 4332(2)(C) (2006); *Nw. Env’tl. Advocates v. Nat’l Marine Fisheries Serv.*, 460 F.3d 1125, 1133 (9th Cir. 2006). The statement “shall provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. § 1502.1; *Nw. Env’tl. Advocates*, 460 F.3d at 1134. Thus, it is more than a mere “disclosure document.” 40 C.F.R. § 1502.1. Our job in reviewing an EIS “is to ensure that the agency has taken a ‘hard look’ at the potential environmental consequences of the proposed action.” *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 993 (9th Cir. 2004) (citing *Churchill County v. Norton*, 276 F.3d 1060, 1072 (9th Cir. 2001)). By focusing agency and public attention on the environmental effects of proposed agency action, “NEPA ensures that the agency will not act on incomplete

information, only to regret its decision after it is too late to correct.” *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 371 (1989).

[16] One of the specific requirements under NEPA is that an agency must consider the effects of the proposed action in the context of all relevant circumstances, such that where “several actions have a cumulative . . . environmental effect, this consequence must be considered in an EIS.” *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1378 (9th Cir. 1998) (quoting *City of Tenakee Springs v. Clough*, 915 F.2d 1308, 1312 (9th Cir. 1990)). A cumulative effect 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 regardless of what agency (Federal or non-Federal) or person undertakes such other actions.”¹⁸ 40 C.F.R. § 1508.7.

ONRC asserts that the BLM failed to analyze in the FEIS the cumulative impact of the Timbered Rock Project and three other categories of activity—fire suppression efforts, salvage logging on interspersed private lands, and salvage logging on deferred watersheds. Our cases firmly establish that a cumulative effects analysis “must be more than perfunctory; it must provide a *useful analysis* of the cumulative impacts of past, present, and future projects.” *Klamath-Siskiyou*, 387 F.3d at 994 (emphasis added) (quoting *Ocean Advocates v. U.S. Army Corps of Eng’rs*, 361 F.3d 1108, 1128 (9th Cir. 2004)). To this end, we have recently noted two critical features of a cumulative effects analysis. First, it must not only describe related projects but also enumerate the environmental effects of those projects. *See Lands Council v. Powell*, 395 F.3d 1019, 1028 (9th Cir. 2005) (holding a cumulative effects analysis violated NEPA because it failed to provide “adequate data of the time, place, and scale” and did not explain in detail

¹⁸In this context, “effect” and “impact” are synonymous. *See* 40 C.F.R. § 1508.7.

“how different project plans and harvest methods affected the environment”). Second, it must consider the interaction of multiple activities and cannot focus exclusively on the environmental impacts of an individual project. *See Klamath-Siskiyou*, 387 F.3d at 996 (finding a cumulative effects analysis inadequate when “it only considers the effects of the very project at issue” and does not “take into account the combined effects that can be expected as a result of undertaking” multiple projects).

We are not persuaded that the Timbered Rock FEIS includes an adequate discussion of the direct effects of fire suppression activities or salvage logging on private lands. The FEIS mentions that fire suppression efforts increased erosion and sedimentation, that they might have increased fish mortality, and that private logging has had an impact on fish, aquatic insects, and the accumulation of woody debris—but this is not enough. The BLM must do more than merely state that past projects contributed to environmental harms. *See Lands Council*, 395 F.3d at 1027-28. In *Lands Council*, we found a cumulative effects analysis inadequate because it “should have provided adequate data of the time, type, place, and scale of past timber harvest and should have explained in sufficient detail how different project plans and harvest methods affected the environment.”¹⁹ *Id.* at 1028.

[17] The efforts to suppress the Timbered Rock Fire involved the construction of nearly thirty-three miles of new firelines and the aerial application of nearly 40,000 gallons of chemical retardant. After the fire, Boise Corporation logged

¹⁹The dissent asserts that *Lands Council* is distinguishable because here the BLM has provided several pages “of cumulative effects analysis.” Dissenting Op. at 8964. But the BLM cannot fulfill its responsibility to conduct a cumulative effects *analysis* by merely reciting what effects have occurred, no matter how many pages it fills by doing so. As we explained in *Lands Council* in no uncertain terms, the time, type, place, and scale of past activities must be included. The BLM’s analysis does not meet this standard.

nearly 6,000 acres of private land interspersed with the Elk Creek LSR, requiring new roads to be constructed to reach the private holdings. Although the Timbered Rock FEIS recites these facts, it does not contain the level of detailed explanation required by *Lands Council*.²⁰ The FEIS contains a table summarizing cumulative effects in broad terms, but it does not offer quantified or detailed data about these effects. As we have observed on multiple occasions, “general statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided.” *Klamath-Siskiyou*, 387 F.3d at 993-94 (quoting *Ocean Advocates*, 361 F.3d at 1128). Even if the BLM was unable to indicate with any great degree of certainty the results of the Project, because the cumulative effects analysis requires an agency to predict future conditions, uncertainty is an inherent part of the process. Therefore, a general statement about uncertainty does not satisfy the procedural requirement that an agency take a hard look at the environmental effects of an action. The BLM can certainly explain specific projections with reference to uncertainty; however, it may not rely on a statement of uncertainty to avoid even attempting the requisite analysis.

²⁰Contrary to BLM’s assertions, the Supreme Court’s decision in *Department of Transportation v. Public Citizen*, 541 U.S. 752 (2004), did not allow the BLM to disregard the impacts of the Boise Corporation’s logging activities. Unlike the federal agency in *Public Citizen* (the Federal Motor Carrier Safety Administration), which had no authority to regulate the private activity at issue in that case (i.e., the entry of Mexican trucks onto United States highways under the North American Free Trade Agreement), the BLM has significant authority (under FLPMA) to regulate private activities on public land, including Boise Corporation’s use of public roads. See 43 U.S.C. §§ 1763-64 (establishing guidelines for granting rights-of-way to private entities across federal lands). Thus, *Public Citizen*’s limitation on NEPA does not apply in this case. See *Defenders of Wildlife v. U.S. Envtl. Prot. Agency*, 420 F.3d 946, 963 (9th Cir. 2005) (noting that *Public Citizen* applies only in those situations where “an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions”) (quoting *Pub. Citizen*, 541 U.S. at 770).

Finally, the BLM's analysis of cumulative effects in deferred watersheds presents a distinct problem. Deferred watersheds are areas identified in the Medford RMP as already sustaining significant cumulative effects. In light of these effects, the RMP defers further management activities in these areas for a period of time, although it notes that salvage and other limited activities "could be permitted if the effects will not increase the cumulative effects." Medford RMP Record of Decision at 42. By virtue of this specific direction, the BLM is required to analyze the cumulative effects of additional logging in the five deferred watersheds in the Timbered Rock Project area. This analysis appears nowhere in the FEIS. While the FEIS does mention background facts about deferred watersheds, it fails to consider what the likely impact on the watersheds will be when the environmental impacts of the Timbered Rock Project are added to the pre-existing deteriorated state of the watersheds, which led to the initial "deferred" designation. Thus, as in *Lands Council*, the FEIS is inadequate because "there is no discussion of the connection between individual harvests and the prior environmental harms from those harvests that the [agency] now acknowledges." *Lands Council*, 395 F.3d at 1027.

[18] In sum, the BLM failed to analyze the impact of the Timbered Rock Project when combined with previous fire suppression efforts, salvage logging on interspersed private lands, and salvage logging on deferred watersheds. Because the BLM is required to consider these effects, *Neighbors of Cuddy Mountain*, 137 F.3d at 1378, by failing to do so it did not take the requisite "hard look" at the impact the Project would have on the environment, *Klamath-Siskiyou*, 387 F.3d at 993. Consequently, the BLM violated NEPA.

V. CONCLUSION

For the foregoing reasons, we hold that in developing the Timbered Rock Project, the BLM violated (1) the NFP and, consequently, FLPMA, and (2) NEPA. Because the APA

“dictates that we should ‘hold unlawful and set aside agency action . . . not in accordance with law,’ ” *Natural Res. Def. Council*, 421 F.3d at 877 (quoting 5 U.S.C. § 706(2)(A)), we affirm the district court’s decision to enjoin the Project from going forward.

AFFIRMED.

O’SCANNLAIN, Circuit Judge, dissenting:

Both the district court and our court have now ruled that the Bureau of Land Management (“BLM”) violated the Federal Land Policy and Management Act (“FLPMA”) and the National Environmental Policy Act (“NEPA”) in proposing the Timbered Rock Fire Salvage and Elk Creek Watershed Restoration Project (“Timbered Rock Project” or “Project”) to salvage the remains of a disastrous fire in the Elk Creek Watershed.

With respect, I am unpersuaded that BLM violated either Act when the question is viewed under the proper standard of review. Because it appears that both courts have inappropriately substituted their own policy views for the BLM’s, I cannot concur. The majority opinion recognizes that we must not invalidate agency action where the agency can present “a rational connection between the facts found and the conclusions made.” *Ante*, at 8937. Unfortunately, because I can discern no rational connection between this extremely deferential standard of review and the majority’s conclusions in this case, I must respectfully dissent.

I

FLPMA authorizes the BLM to “develop, maintain, and, when appropriate, revise land use plans which provide by tracts or areas for the use of the public lands.” 43 U.S.C.

§ 1712(a). Once such plans are in place, FLPMA mandates that the BLM act “in accordance” with them. 43 U.S.C. § 1732(a). In the instant case, the governing land use plans are the Medford District Bureau of Resource Management Plan (“Medford RMP” or “RMP”), as amended by the Northwest Forest Plan (“NFP”). Our task is to determine whether the Timbered Rock Project is consistent with the Medford RMP and the NFP.

Our review must be deferential, because the BLM was interpreting its own guidelines. *Forest Guardians v. U.S. Forest Service*, 329 F.3d 1089, 1098 (9th Cir. 2003) (“[F]ederal courts are required to defer to an agency’s reasonable interpretation of its own guidelines.”). Furthermore, we owe heightened deference where, as here, the agency’s interpretation involves its own technical expertise and complex scientific methodologies. *See, e.g., Envtl. Def. Ctr., Inc. v. EPA*, 344 F.3d 832, 869 (9th Cir. 2003) (“We treat EPA’s decision with great deference because we are reviewing the agency’s technical analysis and judgments, based on an evaluation of complex scientific data within the agency’s technical expertise.”).

II

The majority mistakenly reads the NFP’s requirement that the Forest Service (“Service”) “focus on” snag retention as one that “expressly limits the removal” of snags. *Ante*, at 8944. One searches in vain for any such express limitation; a requirement to “focus on” retention, I suggest, more naturally reflects a presumption that snags will indeed need to be removed. The insistence upon its own best vision for silviculture, rather than upon the language of Congress or the professional expertise of the Service, pervades today’s majority opinion, which far exceeds our limited role in reviewing agency action.

I concede that if the NFP posed an absolute bar to any and all snag removal, then the Forest Service has not made a

showing that would overcome such a prohibition. But of course the NFP contains no such requirement, not by its plain language nor by any reasonable inference therefrom. The majority maintains that the BLM can “point to no part of the NFP to support its argument that using the some-is-enough standard satisfies the Plan.” *Ante*, at 8945. On the contrary, the “some is enough” standard is implicit in the language the majority relies upon. It is the majority, rather, that can point to no language in the NFP stating that “some is never enough”—rather, it simply quotes “focus on” to divine an “express limitation.”

Perhaps the majority has a better idea than the BLM about how many large snags to retain; our task, however, only requires—and only permits—us to review whether the BLM’s determination is “arbitrary and capricious,” and this the majority utterly fails to demonstrate. The majority derides the BLM’s use of averaging in analyzing snag retention levels, *ante*, at 8945, though it acknowledges, *ante*, at 8946-47, that the BLM cites to two scientific studies supporting the practice. Rather than demonstrating, as it must but cannot, that the BLM has failed to establish a rational connection between the facts in the record and its conclusions, the majority constructs its own straw man example of an egregious abuse of averaging and quotes a Justice Brandeis aphorism to boot. *Ante*, at 8945 n.13. Yet, the record demonstrates that 87 % of snags on BLM land would still be present after the Timbered Rock Project, and that no salvage logging would occur on roughly 63 % of the forest areas affected by the fires. Justice Brandeis was a wise man, but application of his aphorism to silviculture is surely inapposite.

The folly of the majority’s analysis is also apparent in its discussion of the NFP’s explicit allowance for non-beneficial recovery of timber volume after catastrophic events. *See ante* at 8946. Though the majority opinion repeatedly derides the principle that “some is enough,” it does not seem to recognize that the only alternative to that truism is an absolute prohibi-

tion on snag removal. Yet it acknowledges that such a reading is untenable and that “salvage can occur in LSRs.” *Ante*, at 8948. Therefore, it too believes that *some*, but not all, large snags must be maintained.

Further, the majority chides the BLM for purportedly failing to “claim or offer evidence” that the Timbered Rock fire killed more trees than are needed to maintain late successional conditions. *Ante*, at 8948. On the contrary, the Final Environmental Impact Study (“FEIS”) provides multiple scientific references supporting its proposed level of snag retention—specifically relying upon the DecAID Wood Advisor, as well as upon separate 2002 studies by Rose, et al., and Ohmann.¹

¹The district court also decided that the BLM violated the National Environmental Policy Act (“NEPA”) by using the DecAID tool as part of its analysis; the majority declines to reach this issue. I review the BLM’s decision to use DecAID very deferentially, because “[a]n agency’s scientific methodology is owed substantial deference.” *Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv.*, 378 F.3d 1059, 1066 (9th Cir. 2004); see also *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 377 (1989) (“[A]n agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive.”).

We must consider not whether the use of DecAID was proper, but whether the use of DecAID rendered BLM’s ultimate decision arbitrary and capricious. I conclude that it does not. Most fundamentally, ONRC cannot persuasively explain why DecAID differs from other forms of modeling which we have approved implicitly or explicitly in previous cases. ONRC cites to *Idaho Sporting Congress, Inc. v. Rittenhouse*, 305 F.3d 957 (9th Cir. 2002), which rejected the Forest Service’s modeling approach, but *Rittenhouse* did so because the model employed by the Forest Service there did not accurately estimate the actual habitat. *Id.* at 972. While ONRC alleges that DecAID is inaccurate, it does not allege errors comparable to those in *Rittenhouse*, where “the Forest Service’s methodology for dedicating old growth is so inaccurate that it turns out there is no old growth at all in [the studied areas].” *Id.*

The FEIS explicitly states that the BLM is not exclusively “using the DecAID Wood Advisor.” The BLM states that “a number of references were considered.” It proceeds to spend substantial space discussing other

It follows, therefore, that the BLM has indeed argued, and to my mind demonstrated, that the Timberland Rock Fire killed more trees than are needed to maintain late successional conditions. It is baffling, and in any event demonstrably false, to contend that the BLM “does not claim or offer evidence to this end.” The majority, so eager to lampoon the BLM’s position as “some is enough,” is apparently unwilling to concede that enough is enough.

Because the BLM has easily demonstrated its compliance with the NFP’s general requirement to “focus on” snag retention, and because it has shown the requisite rational connection between the facts in the record and its conclusions about how many snags to retain, I cannot join the court’s naked imposition of its own preference under the guise of a review for arbitrariness and capriciousness. With respect, I would reverse the district court.

III

The majority undertakes to reject the post-fire research logging proposed by the BLM under either of two tests permitting logging: first, that the activity is consistent with Late-Successional Reserve (“LSR”) objectives, or second, if the proposal meets any of a series of alternate criteria *and* no equivalent opportunities outside of the LSR exist. The majority contends that the BLM’s proposal fails the first test “for

sources *besides* DecAID. At the very most, exclusive reliance on DecAID, without disclosure of its limitations and without consultation of other sources of information, might be arbitrary and capricious. Here, however, I conclude that while DecAID has limitations, the Forest Service fully disclosed those limitations. Therefore, the criticisms of DecAID itself are insufficient to overcome the deference granted to the agency’s decision to rely on a particular scientific methodology or tool.

The Service’s decision to use such particular methodology is entitled to deference, and I cannot say that reliance on such methodology renders the Timbered Rock Project arbitrary and capricious.

the same reasons the Project falls short with regard to snag retention.” *Ante*, at 8950. As I have already shown, only by ignoring the studies relied upon by the BLM and by distorting the instruction to “focus upon” snag retention into an “express limitation” upon snag removal does the majority reach its erroneous conclusion concerning snag retention. Thus, I cannot agree that the proposed research logging is inconsistent with LSR objectives.

Although it is not necessary to my dissent on this score, let me add that the BLM has also demonstrated that the research logging would be permissible under the NFP *even if* inconsistent with LSR objectives. This is so first because the research logging would test critical assumptions concerning salvage of fire-killed trees and second because the BLM demonstrated that there were no “equivalent opportunities outside Late-Successional Reserves.” Specifically, the BLM stated that while there are other recently burned areas in southwest Oregon, the Medford District was the only recently burned LSR. The BLM stated that research in an LSR is critical because of the manner in which LSR land is treated. These types of scientific and technical decisions are owed our deference. *See Env'tl. Def. Ctr., Inc. v. EPA*, 344 F.3d 832, 869 (9th Cir. 2003) (“We treat [this] decision with great deference because we are reviewing the agency’s technical analysis and judgments, based on an evaluation of complex scientific data within the agency’s technical expertise.”).

IV

Because the majority agrees with the district court’s finding of FLPMA violations with respect to snag removal and research logging, it does not reach the district court’s further finding of a violation in the BLM’s decision not to designate 92 acres as “riparian reserves.” I would reverse the district court’s decision here as well, as the BLM persuasively argues that the district court erroneously assumed that all “unstable or potentially unstable areas” must be designated as riparian

reserves, whereas the NFP indicates that the BLM should decide if an area is a riparian reserve by focusing on “when watershed analysis determines that present and future coarse woody debris needs are met.” The NFP also discusses riparian reserves in terms of their proximity to streams and rivers, not simply their stability. Because the BLM determined that the 92 acres in question were not adjacent to or related to streams or rivers, I would hold that the BLM was not in error in deciding not to designate them as riparian reserves.

Finally, the district court agreed with ONRC’s contention that the project violates the Medford RMP by providing for salvage logging on lands that might be designated “nonsuitable woodlands.” Although the RMP does state that nonsuitable woodlands “are not suitable for timber harvest,” elsewhere it permits such logging for various purposes, including “reduc[ing] road construction,” improving the “safety of forest users,” and for “research studies.” Thus, the RMP’s discouragement of logging is not absolute, and the BLM’s proposed logging here would be consistent with the RMP’s discussion of permissible logging.

In sum, the district court erroneously found that the Project violated the FLPMA with respect to the removal of large snags, research logging, timber removal from nonsuitable woodlands, and the non-designation of riparian reserves, and I would reverse as to each.

V

The majority faults the BLM’s FEIS and holds that it violated NEPA. But the BLM’s FEIS is entitled to a “presumption of regularity.” *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 415 (1971). Contrary to the majority’s analysis, we ask only “whether the . . . decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment.” *Akiak Native Cmty. v. U.S. Postal Serv.*, 213 F.3d 1140, 1146 (9th Cir. 2000).

The majority relies principally on two cases to support its view that the Timbered Rock Project violates NEPA. First, it cites *Klamath-Siskiyou Wildlands Center v. BLM*, 387 F.3d 989, 993-94 (9th Cir. 2004), where this court concluded that the BLM’s Environmental Impact Statement (“EIS”) was insufficient. However, the EIS in *Klamath-Siskiyou* neglected *all* discussion of cumulative effects. Rather than specifically analyzing environmental impacts, the BLM merely listed possible environmental concerns in generic terms. From this, the *Klamath-Siskiyou* court had no difficulty concluding that in a cumulative impact statement, “[g]eneral statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided.” *Id.* at 993-94 (citation and quotation marks omitted); *see also id.* at 996 (“In sum, the only mention of cumulative effects in the two EAs comes in the form of generalized conclusory statements that the effects are not significant or will be effectively mitigated.”).

Second, the majority points to *Lands Council v. Powell*, 379 F.3d 738, 745 (9th Cir. 2004). *Lands Council* found insufficient an EIS that referenced pertinent facts, but did not contain analysis that “set forth in sufficient detail to promote an informed assessment of environmental considerations and policy choices by the public and agency personnel upon review of the [EIS].” *Id.* at 745.

The FEIS in this case violates neither *Klamath-Siskiyou* nor *Lands Council*. The discussion of the cumulative impacts runs 13 lengthy and detailed paragraphs. The FEIS states, for example, that:

- the fire suppression activities “increased the amount of erosion and subsequent sedimentation”;
- “[a]nother area that could potentially deliver sediment would be roads in moderate to high burn

severity areas hydrologically-connected to streams”;

- “[particular fire suppression activities] aid in reducing the amount of erodible sediment by keeping water from channeling on the firelines”;
- “[t]he potential for sediment delivery from roads paralleling streams would be greatest where cross drain spacing is insufficient . . . [which] is common in the watershed”;
- “[s]ediment would also be delivered to streams from salvage logging through hauling on natural surface roads”.

The second set of cumulative effects analysis is similarly detailed, spanning 12 paragraphs.

The question, indeed, is whether the FEIS shows that the agency took a “hard look” at the environmental consequences and provided sufficient analysis such that it “foster[s] both informed decision-making and informed public participation.” *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 960 (9th Cir. 2005) (citations omitted). But the FEIS satisfies those requirements here—the agency provided a sufficient analysis such that a reader could understand the likely environmental impact of the activities under consideration.

Finally, the majority holds, as did the district court, that deferred watersheds “present a distinct problem.” *Ante*, at 8955. The FEIS did not separately discuss the cumulative impact of logging activities on deferred watersheds, which the district court concluded was error. The majority’s analysis is logically faulty: an EIS discusses the cumulative impacts of agency sponsored *activities*, not the effects on particular geographic *areas*. For example, the FEIS discusses the cumulative impact on the environment of fire suppression and private

logging. There is no further requirement that an EIS separately detail the impact of activities on areas classified as deferred watersheds. In any event, the FEIS did address the background facts related to deferred watersheds, and also discussed mass wasting, sedimentation, fisheries, soil, hydrology, vegetation, and special habitats. There is ample evidence that the BLM's decisions in the Timbered Rock Project were indeed based on a consideration of the relevant factors, and that no clear error of judgment has been shown. *Akiak*, 213 F.3d at 1146. NEPA requires no more. Accordingly, I disagree with the conclusion that the BLM violated NEPA in this case, and would reverse the district court as to the alleged NEPA violations as well.

VI

For the foregoing reasons, I am convinced that the BLM has made an ample showing to demonstrate a rational connection between the facts found and the conclusions made in formulating its Timbered Rock Project. Therefore, I respectfully dissent.