

FOR PUBLICATION
UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

KLAMATH-SISKIYOU WILDLANDS
CENTER, an Oregon non-profit
organization,

Plaintiff-Appellant,

v.

BUREAU OF LAND MANAGEMENT, an
agency of the United States
Department of the Interior;
RICHARD DREHOBL, in his official
capacity as the Field Manager of
the Ashland Resource Area of the
Bureau of Land Management's
Medford District,

Defendants-Appellees.

No. 03-35461
D.C. No.
CV-02-03062-HO
OPINION

Appeal from the United States District Court
for the District of Oregon
Michael R. Hogan, District Judge, Presiding

Argued and Submitted
May 5, 2004—Portland, Oregon

Filed October 28, 2004

Before: Stephen Reinhardt, Barry G. Silverman, and
Richard R. Clifton, Circuit Judges.

Opinion by Judge Clifton;
Partial Concurrence and Partial Dissent by Judge Reinhardt

COUNSEL

Brenna Bell, Klamath-Siskiyou Wildlands Center, Williams,
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Roger W. Nesbit, U.S. Department of the Interior, Office of the Regional Solicitor, Portland, Oregon; Thomas L. Sansonetti, Assistant Attorney General; Andrew Mergen, Ellen J. Durkee, Tamara N. Rountree (argued), U.S. Department of Justice, Environment & Natural Resources Division, Washington, D.C., for the defendants-appellees.

OPINION

CLIFTON, Circuit Judge:

Appellant Klamath-Siskiyou Wildlands Center (“KS Wild”), an environmental organization, challenges two timber sales — the Indian Soda and the Conde Shell — proposed by the Bureau of Land Management (“BLM”) in the South Fork Little Butte Creek (“SFLBC”) watershed in the Cascade Mountains of southwest Oregon. Pursuant to the National Environmental Policy Act (“NEPA”), 42 U.S.C. § 4321 *et seq.*, the BLM conducted environmental assessments (“EAs”) to assess the potential environmental impacts posed by the Conde Shell and Indian Soda sales. KS Wild claims that the EAs are legally insufficient because (1) they fail to adequately evaluate and discuss the potential cumulative environmental impacts posed by the sales in combination with other major activities in the watershed, and (2) the environmental effects of the two sales, along with two other adjacent proposed sales, should all have been discussed in a single NEPA document.

The district court entered summary judgment in favor of the BLM. To make an informed decision about how or whether to proceed with the proposed projects and to comply with NEPA, an agency must identify their potential combined environmental impacts and make that information available to the public. We reverse the judgment of the district court because the analyses performed by the BLM do not sufficiently consider the cumulative impacts posed by the timber sales.

I. BACKGROUND

The SFLBC watershed is classified as a Tier 1 Key Watershed under the Northwest Forest Plan, a comprehensive plan adopted in 1994 for the management of all federal forest lands in Washington, western Oregon, and northern California. Tier 1 Watersheds are river basins that are deemed to contribute directly to the survival and restoration of at-risk salmonids. The SFLBC watershed contains designated critical habitat for two endangered species, the coho salmon and the northern spotted owl.

In 1998, the BLM began planning a project on the 373 square miles of the Little Butte Creek watershed aimed at improving forest health by restoring the forest habitat to a “pre-European condition,” while also providing a sustainable supply of timber. For the South Fork Little Butte Creek watershed, the BLM adopted a single silvicultural prescription, titled “SFLBC Project Timber Sales (FY 2000-2003).” The plan to harvest SFLBC timber was originally conceived as a single project, but in the summer and fall of 1999, the BLM decided to divide the analysis for at first two, then four nominally separate (but immediately adjacent) timber sales that would be harvested over a four-year period. The reason for dividing the project is not entirely clear, but the record indicates that the BLM’s primary motivation was the desire to proceed expediently with the project or projects.

The BLM decided to prepare a separate EA for each of the four projects: the Indian Soda, Conde Shell, Deer Lake, and Heppsie sales. The first analyses to be completed were for the Indian Soda and Conde Shell sales. In each EA, the BLM determined that the given project did not pose a risk of significant environmental impact and therefore issued a Finding of No Significant Impact, which allowed the sale to proceed. While KS Wild objects to the analyses performed for all four sales, it only specifically challenged the Indian Soda and Conde Shell projects, because those were the only two for

which a final agency action (the BLM's issuance of a Record of Decision) had been taken at the time of the complaint.

On cross-motions for summary judgment, the district court entered judgment in favor of the BLM. While there was no immediate harvest activity on the Conde Shell project, harvesting began on the Indian Soda project, extending to fifteen of the sixteen individual harvest areas. KS Wild moved the district court to enjoin further harvest activities in both areas. The court issued the injunction pending the resolution of this appeal.

II. STANDARDS OF REVIEW

A “district court’s determination on summary judgment that the BLM complied with NEPA is reviewed *de novo*.” *Kern v. Bureau of Land Mgmt.*, 284 F.3d 1062, 1069-70 (9th Cir. 2002). The agency’s actions, findings, and conclusions will be set aside if they are “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” *Ocean Advocates v. U.S. Army Corps of Eng’rs*, 361 F.3d 1108, 1118 (9th Cir. 2004) (quoting 5 U.S.C. § 706(2)(A)). Courts apply a “rule of reason” standard in reviewing the adequacy of a NEPA document. *Churchill County v. Norton*, 276 F.3d 1060, 1071 (9th Cir. 2001). Through the NEPA process, federal agencies must “carefully consider[] detailed information concerning significant environmental impacts,” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989), but they are “not require[d] to do the impractical.” *Inland Empire Public Lands Council v. United States Forest Serv.*, 88 F.3d 754, 764 (9th Cir. 1996). Alternatively phrased, the task is to ensure that the agency has taken a “hard look” at the potential environmental consequences of the proposed action. *Churchill County*, 276 F.3d at 1072.

The NEPA statute is accompanied by implementing regulations promulgated by the Council on Environmental Quality (“CEQ”) and found at 40 C.F.R. §§ 1501.1-1508.28. Courts

must “to the fullest extent possible” interpret these regulations consistently with the policies embodied in NEPA. *Churchill County*, 276 F.3d at 1072 (quoting *Lathan v. Brinegar*, 506 F.2d 677, 687 (9th Cir. 1974) (en banc)).

Although an agency’s actions under NEPA are subject to careful judicial scrutiny, courts must also be mindful to defer to agency expertise, particularly with respect to scientific matters within the purview of the agency. *See Anderson v. Evans*, 371 F.3d 475, 489 (9th Cir. 2004). As the Supreme Court stated in *Citizens to Preserve Overton Park, Inc. v. Volpe*, “the ultimate standard of review is a narrow one,” and “[t]he court is not empowered to substitute its judgment for that of the agency.” 401 U.S. 402, 416 (1971).

III. NATIONAL ENVIRONMENTAL POLICY ACT

NEPA “is our basic national charter for protection of the environment.” 40 C.F.R. § 1500.1(a). It is a procedural statute that requires the Federal agencies to assess the environmental consequences of their actions before those actions are undertaken. For “major federal actions significantly affecting the quality of the human environment,” 42 U.S.C. § 4332(2)(C), the agency is required to prepare an environmental impact statement (“EIS”). An EIS is a thorough analysis of the potential environmental impacts that “provide[s] full and fair discussion of significant environmental impacts and . . . inform[s] 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.

Where an agency is unsure whether an action is likely to have “significant” environmental effects, it may prepare an EA: a “concise public document” designed to “[b]riefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement” 40 C.F.R. § 1508.9. If the EA concludes that the action will not have a

significant effect on the environment, the agency may issue a Finding of No Significant Impact and may then proceed with the action. 40 C.F.R. § 1508.13. That is the route taken by the BLM for the timber sales at issue here.

IV. ADEQUACY OF THE ENVIRONMENTAL ASSESSMENTS

A. Cumulative Impacts

[1] KS Wild contends that the EAs are legally inadequate because they fail to properly consider the cumulative impacts of the sales. A cumulative impact is defined in NEPA's implementing regulations as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7.

[2] A proper consideration of the cumulative impacts of a project requires " 'some quantified or detailed information; . . . [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.' " *Ocean Advocates*, 361 F.3d at 1128 (quoting *Neighbors of Cuddy Mountain v. United States Forest Serv.*, 137 F.3d 1372, 1379-80 (9th Cir. 1998)). The analysis "must be more than perfunctory; it must provide a useful analysis of the cumulative impacts of past, present, and future projects." *Id.* (internal quotations and citations omitted). The Indian Soda and Conde Shell EAs both fall short of this standard.

Cumulative impacts of multiple projects can be significant in different ways. The most obvious way is that the greater total magnitude of the environmental effects — such as the total number of acres affected or the total amount of sediment to be added to streams within a watershed — may demon-

strate by itself that the environmental impact will be significant. Sometimes the total impact from a set of actions may be greater than the sum of the parts. For example, the addition of a small amount of sediment to a creek may have only a limited impact on salmon survival, or perhaps no impact at all. But the addition of a small amount here, a small amount there, and still more at another point could add up to something with a much greater impact, until there comes a point where even a marginal increase will mean that *no* salmon survive.

Although each of the EAs contains a section of more than a dozen pages under the heading “Cumulative Effects,” a close read reveals that those sections do not adequately discuss the subject. A considerable portion of each section discusses only the direct effects of the project at issue on its own minor watershed. In the parts of the section where the other projects are contemplated, there is no quantified assessment of their combined environmental impacts. Because the sections are similar in each of the EAs, it will suffice to use the Indian Soda EA as an illustration.

The purported “cumulative effects” analysis begins with a table that consumes three pages in describing the current condition and desired future condition of, as the title indicates, “the Indian Soda Project Area” without regard to the other projects in the SFLBC watershed. That description is followed by another table that, although described as presenting in “graphic form the cumulative impacts of the SFLBC projects . . . on an extensive list of criteria,” does not actually provide a useful analysis of the impacts. The first column of the table describes the effects of the Indian Soda sale on its own watershed (Soda Creek). The second and third columns apparently include consideration of the projected impacts from the three other timber sales. But the problem with the entire table is that it does not provide any objective quantification of the impacts. Instead, the reader is informed only that a particular environmental factor will be “unchanged,” “improved,” or

“degraded” and whether that change will be “minor” or “major.” The reader is not told what data the conclusion was based on, or why objective data cannot be provided.¹ Such an analysis does not satisfy the admonition in *Neighbors of Cuddy Mountain* that “[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.” 137 F.3d at 1380.

The next subsection of the EA is titled “Future Foreseeable Actions,” but the only substance of the section is a tabulated list of five upcoming projects in the area and an estimate of the number of acres to be harvested. A calculation of the total number of acres to be harvested in the watershed is a necessary component of a cumulative effects analysis, but it is not a sufficient description of the actual environmental effects that can be expected from logging those acres.

The “Future Foreseeable Actions” subsection continues with a three-paragraph comparison of the road and fence construction that is expected to take place on the Indian Soda project and on another sale called the Bieber Wasson project, which is located in an adjacent watershed. It is not clear why the BLM chose to consider the amount of road construction on the out-of-watershed Bieber Wasson project but not that anticipated on the Conde Shell, Deer Lake, and Heppsie projects, all of which are planned for the *same* watershed as Indian Soda. Moreover, while a tally of the total road construction anticipated in the SFLBC watershed is definitely a good start to an adequate analysis, stating the total miles of roads to be constructed is similar to merely stating the sum of

¹For some of the factors, it is understandable why a qualitative description such as “improved” or “degraded” is suitable. For example, the factor “Balance of community condition” is probably not susceptible to easy measurement. Factors such as “Amount of suitable and dispersal spotted owl habitat” and “Road density,” on the other hand, are clearly variables that can be quantified.

the acres to be harvested — it is not a description of *actual* environmental effects.

The last sentence of the “Future Foreseeable Actions” subsection states, “The estimated cumulative effects of the future foreseeable actions are broken down further in Table 12.” That table, like the preceding ones, however, does not contain a useful analysis; it is simply a list of environmental concerns such as air quality, water quality, and endangered species, with a “Yes” and “No” checkbox to indicate whether the respective condition, described as a “critical element,” will be “affected.” The “No” box is checked for each factor, leaving the impression that there will be no impact from the project. Yet, four of the fourteen checkmarks in the “No” boxes are accompanied by asterisks signifying, according to a note under the table, that “[t]hese affected critical elements would be impacted by implementing the proposed action.” Three more checkmarks are accompanied by a note that says “[t]hese affected critical elements could be impacted by [] implementing the proposed action. Impacts are being avoided by project design.” Thus, even though all of the boxes are checked “No” to indicate that the critical elements in question will not be affected, the report actually states that fully half of the elements either would be or could be in fact “impacted,” without giving any details or explanation. It is unclear how the conditions would be “impacted” but not “affected.” The EA is silent as to the degree that each factor will be impacted and how the project design will reduce or eliminate the identified impacts. This conclusory presentation does not offer any more than the kind of “general statements about possible effects and some risk” which we have held to be insufficient to constitute a “hard look.” *Ocean Advocates*, 361 F.3d at 1128.

There are a few pages of purported cumulative analysis in an appendix, which the district court described as “contain[ing] an analysis of cumulative impacts.” The conclusion that the appendix considers the cumulative effects of the several

projects is belied by the fact that it begins with a table titled “canopy closure calculations by prescription type for the *Indian Soda Project*.” An identical appendix is attached to the Conde Shell EA, except the words “Indian Soda” have been replaced with the words “Conde Shell” throughout. Oddly, the content of the two tables is entirely identical, down to the “Grand Total Acres” of 2,028.²

Finally, this table is followed in both EAs by a section titled “Aquatic Conservation Strategy Objectives.” That section lists various water quality related objectives and explains how the Indian Soda project will affect those objectives. It indicates that while the project will have certain effects on its own minor watershed, those effects will appear increasingly minor when viewed from the scale of increasingly larger watersheds. The problem with this section is the same problem that pervades the bulk of the cumulative effects discussion — it only considers the effects of the very project at issue. It does not appear to take into account the combined effects that can be expected as a result of undertaking the Heppsie, Deer Lake, Conde Shell, and other foreseeable projects, in addition to the Indian Soda project itself.

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. At oral argument, counsel for the BLM assured us that to the eye of the “agency specialists,” the scant information included in the EAs is sufficient to determine what the cumulative environmental impacts will be and supports the conclusory statements that they will not be significant. But while the conclusions of agency experts are surely entitled to deference, NEPA documents are inadequate if they contain only narra-

²There is no telling what this number represents. The total treated acres for Indian Soda are 1,775, and Conde Shell is to be treated on 1,915 acres. The total number of treated acres for all four projects is approximately 7,562.

tives of expert opinions. *Idaho Sporting Cong. v. Thomas*, 137 F.3d 1146, 1150 (9th Cir. 1998) (“[A]llowing the Forest Service to rely on expert opinion without hard data either vitiates a plaintiff’s ability to challenge an agency action or results in the courts second guessing an agency’s scientific conclusions. As both of these results are unacceptable, we conclude that NEPA requires that the public receive the underlying environmental data from which a Forest Service expert derived her opinion.”). Indeed, under the CEQ regulations, agencies are told that “public scrutiny [is] essential,” 40 C.F.R. § 1500.1(b), and are charged to “encourage and facilitate public involvement in decisions,” *id.* § 1500.2(d), so that “environmental information is available to public officials and citizens before decisions are made,” *id.* § 1500.1(b). They are also told that NEPA documents “shall be written in plain language . . . so that decisionmakers and the public can readily understand them.” 40 C.F.R. § 1502.8. Even accepting the BLM’s representation that “specialists” can understand the information in these EAs, the documents are unacceptable if they are indecipherable to the public.

Although it might ultimately be appropriate for the agency to conclude, after a proper analysis, that the projects would not have significant cumulative effects, the potential for such serious cumulative impacts is apparent here, such that the subject requires more discussion than these EAs provide. The Indian Soda EA states, for example, that the project will pose a “slight to moderate increase in risk of a higher magnitude [runoff] event” (with consequent damage to soils and endangered salmon habitat) and that this risk will be present for five to fifteen years. The Conde Shell EA likewise states that it will pose a “slight to moderate increase in risk of a higher magnitude [runoff] event.” Since Indian Soda and Conde Shell are in the same watershed, there is plainly the potential for a combined effect from the combined runoffs, but nowhere is the combined effect of these two “slight to moderate” increases contemplated, let alone the additional risks

posed by the planned Heppsie and Deer Lake sales in the same watershed.

More broadly, Oregon already lists the South Fork of Little Butte Creek as not meeting water quality standards under the Clean Water Act due to “flow modification, habitat modification, sediment, [and high] temperature.” Each of the EAs notes that the individual project may have short term adverse impacts on water quality, but nowhere are the combined water quality effects of the four proposed sales contemplated.

Another example of cumulative effect not properly considered in the EAs concerns the habitat for the northern spotted owl. Each of the EAs recognizes that the proposed sales will adversely affect the habitat of spotted owls in a critical habitat unit which the BLM describes as “the single most important link connecting the Oregon Cascades Province to the Klamath Mountains Province.” In percentage terms, 33%, 6%, and 20% of the total suitable owl habitat within the Deer Lake, Conde Shell, and Indian Soda project areas, respectively, will be lost. Those percentages amount to a total of 1,881 acres of critical habitat. But this total number is not presented in either the Conde Shell or Indian Soda EA. More importantly, there is no discussion in any of the EAs about the effect of this loss on the spotted owl throughout the watershed or on the “most important” link between the Cascades and the Klamath Mountains.

[3] In sum, the EAs at issue here do not sufficiently identify or discuss the incremental impact that can be expected from each successive timber sale, or how those individual impacts might combine or synergistically interact with each other to affect the SFLBC environment. As a result, they do not satisfy the requirements of the NEPA.

B. Tiering

[4] The BLM argues that even if the EAs themselves do not adequately consider the cumulative effects of the actions, that

shortcoming is cured because the EAs are “tiered” to other documents. “Tiering” is described in the CEQ regulations at 40 C.F.R. § 1508.28:

“Tiering” refers to the coverage of general matters in broader environmental impact statements (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basinwide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared.

In this case, the BLM points to two other documents that the EAs tier to: the EIS prepared for the Medford District’s Regional Management Plan (“RMP-EIS”) and the Little Butte Creek Watershed Analysis.

[5] Tiering to the RMP-EIS cannot save the EAs. We accept the BLM’s argument that the RMP-EIS contains general statements about the cumulative effects of logging across the Medford District. And the EAs at issue here contain general statements about the cumulative effects of logging in the SFLBC watershed. What is missing in the documentation, however, is any *specific* information about the cumulative effects. Neither in the RMP-EIS nor in the EAs does the agency reveal the incremental impact that can be expected on the SFLBC watershed as a result of each of *these* four successive timber sales.³

³Even the generalizations about cumulative impacts contained in the RMP-EIS may no longer be valid in light of a watershed-altering 1997 flood, which occurred after the RMP-EIS was published. In *Blue Mountains Biodiversity Project v. Blackwood*, where a fire of historic magnitude occurred subsequent to the publication of the Forest Plan, we held that “[t]he Forest Plan EIS does not, and could not, evaluate the impacts of this catastrophic fire, or the additional environmental impacts that large scale

In *Muckleshoot Indian Tribe v. United States Forest Service*, the Forest Service proposed to swap certain land with a timber company in an effort to consolidate the holdings of both organizations. 177 F.3d 800, 803 (9th Cir. 1999). In challenging the EIS done for the exchange of one particular parcel, the plaintiffs contended that the Forest Service failed to adequately assess the cumulative impacts of that exchange. *Id.* at 809-10. As the BLM does here, the Forest Service attempted to save the EIS⁴ by tiering it to the Forest Service's programmatic Land and Resource Management Plan ("LRMP"). *Id.* at 810. We reviewed the LRMP and found that while it did discuss the land exchange program in general and mentioned the particular exchange at issue by name, it could not save the challenged EIS because it did not "account for the specific impacts of the Exchange" *Id.* The Indian Soda and Conde Shell EA suffer from the same shortcoming.

In addition, tiering to the Watershed Analysis cannot save the EAs, because the Watershed Analysis is not a NEPA document.⁵ A NEPA document cannot tier to a non-NEPA document. *Kern*, 284 F.3d at 1073 (holding that "tiering to a document that has not itself been subject to NEPA review is

logging of severely burned areas could bring." 161 F.3d 1208, 1214 (9th Cir. 1998). The Watershed Analysis proclaims that streams in the watershed "were heavily impacted by the 1997 flood," which caused "landslides and general slope failures," and that "these types of landslide events are more frequent in areas where road-building and timber harvest is common."

⁴Like the EAs at issue here, the EIS in *Muckleshoot* was inadequate because, although it contained "twelve sections titled 'cumulative effects,' [those] sections merely provide very broad and general statements devoid of specific, reasoned conclusions." 177 F.3d at 811.

⁵The introductory paragraph to the Watershed Analysis plainly states, "This document is not a decision document under the National Environmental Policy Act (NEPA) and there is no action being implemented with this analysis. Site-specific analysis incorporating National Environmental Policy Act (NEPA) process would occur prior to any project implementation."

not permitted”); *Muckleshoot*, 177 F.3d at 811 (“The appellees also attempt to tier the Exchange EIS to the Green River Watershed Report to cure the deficiencies of the cumulative impact analysis of the Exchange EIS. Such reliance is impermissible under the NEPA regulations, which only permit tiering to prior EIS’s.”).

C. Single Document Requirement

[6] KS Wild contends that the BLM also violated NEPA by evaluating each individual timber project in a separate EA, rather than together in a single document. It points to the language in 40 C.F.R. § 1502.4(a) that “[p]roposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.” Section 1502.4(a) directs the agency to use the “scoping” provisions contained in 40 C.F.R. § 1508.25 to determine whether nominally separate proposals are a “single course of action.”

[7] The BLM responds that because § 1508.25 only mentions “impact statements,” it is inapplicable where only EAs are at issue. That position is not supported by our caselaw, however. As the government recognizes, we have previously stated that the CEQ regulations implementing NEPA “require that an agency consider ‘connected actions’ and ‘cumulative actions’ within a single *EA or EIS*.” *Wetlands Action Network v. United States Army Corps of Eng’rs*, 222 F.3d 1105, 1118 (9th Cir. 2000) (emphasis added) (citing 40 C.F.R. § 1508.25).

[8] Under § 1508.25, two or more agency actions must be discussed in the same impact statement where they are “connected” or “cumulative” actions. 40 C.F.R. § 1508.25(a)(1), (2); *see also Earth Island Inst. v. United States Forest Serv.*, 351 F.3d 1291, 1306 (9th Cir. 2003). Where the proposed actions are “similar,” the agency “may wish” to assess them in the same document and “should do so” when a single docu-

ment provides “the best way to assess adequately the combined impacts of similar actions” 40 C.F.R. § 1508.25(a)(3). KS Wild does not contend that the four sales in the SFLBC watershed are “connected” actions, but it does argue that they are “cumulative” and “similar.”

1. Cumulative Actions

Cumulative actions are tautologically defined in the pertinent regulation as those that “when viewed with other proposed actions have cumulatively significant impacts.” 40 C.F.R. § 1508.25(a)(2). In turn, as noted above, a cumulative impact is defined by the CEQ regulations as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. § 1508.7.

Part of the problem in determining whether the four SFLBC timber sales constitute cumulative actions that must be analyzed together is caused by the circular nature of the definition — since an adequate assessment has not been done (as detailed above), it is not yet known whether the projects will have “cumulatively significant impacts.” We have previously dealt with this problem by requiring that the analysis be done in a single document when the record raises “substantial questions” about whether there will be “significant environmental impacts” from the collection of anticipated projects. See *Blue Mountains Biodiv. Project v. Blackwood*, 161 F.3d 1208, 1215 (9th Cir. 1998); *Thomas v. Peterson*, 753 F.2d 754, 759 (9th Cir. 1985).

In *Blue Mountains*, the Forest Service planned to conduct five timber sales in a single watershed as part of a post-fire forest recovery effort. When the EA for the first sale was released, the plaintiffs promptly challenged it. 161 F.3d at 1210. The flaw in that EA was remarkably similar to the main

flaw in the Conde Shell and Indian Soda EAs — it failed to consider the cumulative impacts of the other four sales. *Id.* at 1214-15. We held that “[a]t the very least, these sales raise substantial questions that they will result in significant environmental impacts. A single EIS, therefore, was required to address the cumulative effects of these proposed sales.” *Id.* at 1215.⁶

Blue Mountains did not specifically cite to § 1508.25(a)(2) to support its conclusion. In a case where § 1508.25(a)(2) was directly at issue though, we analogized to the discussion in *Blue Mountains* in considering whether a single document was required. See *Native Ecosys. Council v. Dombeck*, 304 F.3d 886, 895 (9th Cir. 2002). In *Native Ecosystems*, the challenged agency actions were a series of decisions to waive maximum road density rules on certain areas of Forest Service land to permit the construction of sufficient roads to proceed with timber harvest activities. *Id.* at 890-91. We found it significant that, as with the SFLBC timber sales at issue here, the decisions to waive the road density rules were scheduled to be made incrementally, instead of being approved together simultaneously. *Id.* at 895. Emphasizing that the challenged actions were the waivers themselves and not approval of the actual timber sales, “we [could] not say, on the record before us, that the series of road density amend-

⁶The opinion did not explicitly detail how it reached the conclusion that there were substantial questions about whether the effects were cumulatively significant, other than to note that the sales “would yield 40-55 million board feet from the same watershed, require approximately 20 miles of road construction and involve tractor-skid logging on steep slopes.” *Blue Mountains*, 161 F.3d at 1215. Although that observation may represent an imprecise measure of actual cumulative effects, we note that similar conditions are present here, where the four sales comprise 30 million board feet, five miles of new roads, dozens of miles of reconstructed roads, and tractor-skid logging on steep slopes. Thus, there is a possibility that “substantial questions” as to the significance of the projects’ cumulative environmental effects exist here, such that the regulation would require an evaluation in a single document.

ments are cumulative actions under Section 1508.25(a)(2) so as to require their consideration together in a single NEPA review document.” *Id.*

[9] We reach a similar conclusion here. Mindful of the deference that agencies are to be accorded in scientific matters, in these circumstances we decline at this time to require the BLM to produce a single document. Given the incomplete discussion of cumulative impacts contained in the Conde Shell and Indian Soda EAs, we are not in a position to reach a conclusion on that issue now or to review the BLM’s apparent decision that it was unnecessary to evaluate the cumulative effects of these timber sales in a single document. We simply do not know enough about the cumulative impacts to determine whether they will be significant or whether there are substantial questions as to their significance.⁷ If the BLM goes forward with these projects, however, it should give serious consideration to evaluating the projects in a single document, since that will be an open issue once the cumulative effects have been better determined.

2. Similar Actions

[10] KS Wild contends that the SFLBC projects must be evaluated in a single NEPA document because, in addition to being “cumulative,” they are “similar” actions under 40

⁷In his partial dissent, Judge Reinhardt concludes that the existence of “substantial questions” here has already been sufficiently established, such that a single NEPA review document should be required. As the discussion above indicates, there are legitimate questions here about possible cumulative effects. The point at which questions become “substantial,” such that actions are deemed to be “cumulative” actions that need to be analyzed in a single document, is not so clear, though. The current lack of information about the cumulative impact leads us to conclude, unlike Judge Reinhardt, that the line has not necessarily been crossed yet. That determination can better be made once more information has become available. If and when it becomes apparent that these projects should be deemed “cumulative” actions, then the single document requirement would apply.

C.F.R. § 1508.25(a)(3). Section 1508.25(a)(3) defines “similar actions” as those “which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.” It states that an agency “may wish” to analyze such actions in a single document and “should do so” when that is the “*best way* to assess adequately the combined impacts.” (emphasis added).

The only occasion we have had to squarely consider § 1508.25(a)(3)’s “similar actions” language is *Earth Island Institute v. United States Forest Service*, 351 F.3d 1291 (9th Cir. 2003). That case highlights the different language used in § 1508.25(a) with respect to “connected,” “cumulative,” and “similar actions.” *Id.* at 1306. For the first two categories, the agency is told that it “should” analyze them in a single impact statement, which we interpret as a mandatory requirement. *Id.* For “similar” actions, on the other hand, we held that an agency should be accorded more deference in deciding whether to analyze such actions together. *Id.*

[11] Here, we agree with KS Wild that the proposed projects are similar in many respects: they are adjacent to each other in the same watershed; are to be harvested under an identical silvicultural prescription; and are supervised by the same personnel. The primary differences between the projects are in their timing and in the fact that they take place on different pieces of land. Keeping in mind the deference that is to be accorded agency decisions, we are unable to conclude that analyzing the projects together is necessarily the “best way” to evaluate them. More precisely, we cannot say that the BLM acted arbitrarily in thinking otherwise.

V. CONCLUSION

The Conde Shell and Indian Soda EAs do not adequately discuss the potential cumulative impacts posed by the four

anticipated timber sales in the SFLBC watershed. The EAs do not reflect a hard look at the effects from proceeding with all of the anticipated projects and do not provide sufficient information to permit meaningful public scrutiny. The BLM cannot simply offer conclusions. Rather, it must identify and discuss the impacts that will be caused by each successive timber sale, including how the combination of those various impacts is expected to affect the environment, so as to provide a reasonably thorough assessment of the projects' cumulative impacts.

REVERSED AND REMANDED.

REINHARDT, Circuit Judge, concurring in part and dissenting in part:

I concur in the majority opinion, except with respect to Part IV C. I agree that the BLM did not sufficiently consider the potential cumulative impacts posed by the four anticipated timber sales. I do not agree, however, with the majority's decision not to require the BLM to produce a single NEPA review document at this time. Although federal agencies have considerable discretion to define the scope of NEPA review, "[a] single NEPA review document is required for distinct projects when there is a single proposal governing the projects, or when the projects are 'connected,' 'cumulative' or 'similar' actions under the regulations implementing NEPA." *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 893-94 (9th Cir. 2002) (internal citations omitted). In this case, there is both a single proposal governing the four anticipated projects and the projects constitute cumulative actions under the implementing regulations. Therefore, I would require a single NEPA analysis.¹

¹Because I conclude that the timber sales are "cumulative actions" under 40 C.F.R. § 1508.25(a)(2), I do not reach the issue of whether the timber sales are "similar actions" under 40 C.F.R. § 1508.25(a)(3).

I. A Single Proposal Governs the Timber Sales

In early 1999, the BLM created a plan to actively manage the South Fork Little Butte Creek (“SFLBC”) watershed under a single silvicultural prescription, titled “SFLBC Project Timbers Sales (FY 2000-2003).” The proposal described the forest management objectives and methods for harvesting and maintaining the SFLBC portion of the watershed. After completing 85% of the environmental review on the project as a whole, the BLM found that it was unable “to complete the protocol for Survey and Managed (mullock) species” as scheduled. In order to avoid delaying the proposed sales while it finished the protocol, the agency decided to split the environmental review of the project into multiple parts. Significantly, even after formally splitting the project into four parts, BLM staff continued to treat the four areas together as part of a single watershed management project, maintaining a “project map” of the four areas and discussing the projects jointly as the “Little Butte Creek” project.

Because the project was conceived as a single project and continued to be discussed and planned as a single project even after division into four parts, I would hold that “a single proposal govern[ed] the projects,” and therefore would require a single NEPA review document. *Cf. Earth Island Inst. v. U.S. Forest Serv.*, 351 F.3d 1291, 1305 (9th Cir. 2003) (“In this case, because there is no comprehensive plan covering both forests, Plaintiffs may only prevail by showing that the separate actions are ‘connected, cumulative or similar’”); *Native Ecosystems*, 304 F.3d at 894 (holding that a single NEPA review document was not necessary in part because “there [wa]s no Gallatin II-wide proposal to amend road density standards”).

II. The Four Timber Sales Qualify as “Cumulative Actions”

A single NEPA analysis is also required when several actions qualify as “cumulative actions,” under the regulations

— that is, when the actions will have “cumulatively significant impacts.” 40 C.F.R. § 1508.25(a)(2); *see also Earth Island*, 351 F.3d at 1305-06; *Thomas v. Peterson*, 753 F.2d 754, 758 (9th Cir. 1985). This requirement exists in order “to prevent an agency from ‘dividing a project into multiple ‘actions,’ each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.’ ” *Earth Island*, 351 F.3d at 1305 (citing *Thomas*, 753 F.2d at 758). Significantly, the regulations recognize that “[c]umulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. § 1508.7.

Of course, it is not possible to know definitively whether agency actions will have cumulatively significant impacts before an environmental assessment is completed because the very purpose of an EA is to determine what effect a project will have on the environment. As the majority recognizes, *see op.* at 15280, our circuit has addressed this problem by requiring that a single analysis be performed when the record “raise[s] substantial questions that [the proposed agency actions] will result in significant environmental impacts.” *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1215 (9th Cir. 1998); *see also Sierra Club v. U.S. Forest Serv.*, 843 F.2d 1190, 1194-95 (9th Cir. 1988); *Thomas*, 753 F.2d at 759-61.

For example, in *Blue Mountains*, we required a single analysis even though the Forest Service had attempted to assess five distinct timber sales separately. The sales at issue were located in one watershed, were part of a “coordinated” forest management project, were reasonably foreseeable, and an estimated time line was established before the first EA was complete. *Id.* at 1214-15. Although the Forest Service’s cumulative impact analysis was flawed — making it impossible to know definitively the extent of the potential cumulative impact — we concluded that “[a]t the very least, these sales raise[d] substantial questions that they [would] result in sig-

nificant environmental impacts.” *Blue Mountains*, 161 F.3d at 1215. As a result, we held that a single NEPA document was necessary. *Id.*

As in *Blue Mountains*, the four sales at issue in this case are located in one watershed, are part of a coordinated project, are reasonably foreseeable, and an estimated time line was established before the first EA was complete. *See op.* at 15266, 15282. Also as in *Blue Mountains*, there is at least a substantial question as to whether the four sales will result in cumulatively significant environmental impacts.² *See op.* at 15274-75. Both of the EAs recognize that each individual timber sale will increase the risk of higher magnitude flow events within the single watershed causing damage to soil and to the habitat of endangered salmon. The EAs also both recognize that each individual sale will adversely affect what the BLM itself identifies as a particularly crucial habitat for the threatened northern spotted owl. In fact, as the majority recognizes, 59% of the total suitable owl habitat within the critical link between the Cascades and the Klamath Mountains — a total of 1,881 acres — will be lost when just three of the projects are considered. Finally, the EAs state that each sale will be detrimental, at least in the short term, to water quality in the area — water quality that is already substandard under the Clean Water Act. Because individually the sales will have adverse impacts on soil, water quality, and the habitats of endangered salmon, the threatened northern spotted owl, and other special status species,³ and because the sales are within

²Without denying the similarities between this case and *Blue Mountains*, the majority dismisses *Blue Mountains* simply because it does “not specifically cite § 1508.25(a)(2) to support its conclusion.” *Op.* at 15280. However, numerous Ninth Circuit cases cite *Blue Mountains* as authority when interpreting § 1508.25(a)(2). *See, e.g., Earth Island*, 351 F.3d at 1305; *Native Ecosystems*, 304 F.3d at 895; *Wetlands Action Network v. U.S. Army Corps of Eng’rs*, 222 F.3d 1105, 1119 (9th Cir. 2000).

³Special status species are those species that are federally listed as endangered, threatened, proposed, or candidate, or that the Oregon State

a single watershed, there is, at the least, a substantial question as to whether the cumulative environmental harm will be significant. Therefore, I would hold that a single NEPA document is required.

In concluding otherwise, the majority relies on *Native Ecosystems*, 304 F.3d at 805. However, *Native Ecosystems* is factually distinct. Unlike both *Blue Mountains* and the present case, the plaintiffs in *Native Ecosystems* were not challenging the environmental review of timber sales. Rather, they challenged the Forest Service's site-specific decisions to waive the maximum road density rules on certain areas of Forest Service land to permit the construction of sufficient roads to proceed with timber harvest activities. *Id.* at 890-91. The timber sales themselves were already approved in compliance with NEPA. Furthermore, in *Native Ecosystems*, unlike in both *Blue Mountains* and the present case, the road density amendments were not within a single watershed. *Id.* at 894. Finally, in *Native Ecosystems*, unlike in this case and *Blue Mountains*, the challenged actions were not part of a single decision or plan by the agency.

The majority cites only one similarity between *Native Ecosystems* and this case: the incremental timing of the decisions at issue. But *Native Ecosystems* discussed timing only within its broader point that the challenged actions were not part of a single decision or plan. Furthermore, the NEPA regulations do not require "cumulative actions" to occur simultaneously, but instead define cumulative impacts as "collectively signifi-

Office of BLM lists as sensitive or assessment species. Other special status species present in the SFLBC watershed that would be adversely affected by the timber sales include: long-legged myotis, fringed myotis, Yuma myotis, western bluebird, pileated woodpecker, great gray owl, western pond turtle, California mountain kingsnake, common kingsnake, bald eagle, northern goshawk, flammulated owl, northern saw-whet owl, Lewis' woodpecker, western meadowlark, Townsend's big-eared bat, long-eared myotis, pacific pallid bat, and silver-haired bat.

cant actions *taking place over a period of time.*” 40 C.F.R. § 1508.7 (emphasis added).

Indeed, to require agency actions to be simultaneous in order for them to fall within the definition of “cumulative actions,” would undermine the purpose of § 1508.25(a)(2). An agency could avoid a single NEPA analysis that fully considers a plan’s impact on the environment simply by breaking the project into phases. This is exactly what the regulations of § 1508.25(a)(2) were meant to avoid. *See Earth Island*, 351 F.3d at 1305; 40 C.F.R. § 1508.27(b)(7) (“Significance cannot be avoided by . . . breaking [an action] down into small component parts.”).⁴

III. Conclusion

Because the four sales were governed by a single proposal and because there are “substantial questions” about the potential cumulative impacts posed by the sales, I would require the BLM to analyze the sales in single NEPA document.

⁴Given the factors that tend to show a substantial question as to cumulatively significant impacts and our conclusion that the agency erred significantly with respect to its environmental assessments, I would not afford dispositive weight to the concept of deference. It is significant that, as the majority points out, less deference is afforded for “cumulative actions” than for “similar actions,” *op. at* 15282; *see also Earth Island*, 351 F.3d at 1306, and that a single NEPA analysis is *mandatory* under the regulations when the agency engages in cumulative actions. *Op. at* 15282.