FOR PUBLICATION

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

THE LANDS COUNCIL; WILD WEST INSTITUTE,

Plaintiffs-Appellants,

v.

RANOTTA McNair, Forest
Supervisor for the Idaho
Panhandle National Forests;
United States Forest Service,

Defendants-Appellees,

BOUNDARY COUNTY; CITY OF BONNERS FERRY; CITY OF MOYIE SPRINGS; EVERHART LOGGING, INC.; REGEHR LOGGING, INC.,

Defendants-Intervenors-Appellees. No. 07-35000 D.C. No. CV-06-00425-EJL OPINION

Appeal from the United States District Court for the District of Idaho Edward J. Lodge, District Judge, Presiding

Argued and Submitted April 17, 2007—San Francisco, California

Filed July 2, 2007

Before: Warren J. Ferguson, Stephen Reinhardt, and Milan D. Smith, Jr., Circuit Judges.

Opinion by Judge Ferguson; Concurrence by Judge Milan D. Smith, Jr.; Concurrence by Judge Ferguson

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COUNSEL

Karen Lindholdt, University Legal Assistance, Spokane, Washington, for the plaintiffs-appellants.

Thomas W. Swegle, United States Department of Justice, Environment & Natural Resources Division, Washington, D.C., for the defendants-appellees.

Scott W. Horngren, Haglund, Kelley, Horngren, Jones, and Wilder LLP, Portland, Oregon, for the intervenors-appellees.

OPINION

FERGUSON, Circuit Judge:

The Lands Council and the Wild West Institute (collectively, "Lands Council") appeal the district court's denial of their motion for a preliminary injunction to halt the Mission Brush Project ("Project"). Under the Project, the United States Forest Service ("Forest Service" or "Service") plans to allow the selective logging of 3,829 acres of forest in the Idaho Panhandle National Forests ("IPNF") for the purpose of restoring portions of the forest to historic conditions. Lands Council alleges that the Project violates the Administrative Procedure Act (APA), 5 U.S.C. § 706 et seq., the National Forest Management Act (NFMA), 16 U.S.C. § 1600 et seq., the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 et seq., and Standard 10(b) of the IPNF Forest Plan. The district court held that Lands Council was unlikely to prevail on its claims and that the balance of hardships favored the Forest Service. We reverse.

FACTUAL BACKGROUND

The Mission Brush Area

The Project assessment area is in the Bonners Ferry Ranger District in the northern portion of the IPNF. The area is home to abundant plant and animal species, including grizzly bears, Canada lynx, and flammulated owls. Due to decades of unsustainable forestry practices, however, the area has deviated significantly from its historical composition and structure, which consisted of open ponderosa pine and Douglas-fir stands. For decades, logging companies cut down these old growth trees and, along with the Forest Service, suppressed the frequent, low-intensity fires that formerly contributed to the cyclical process of healthy forest ecology. As a result, much of the historic forest conditions have been replaced by dense, crowded stands of younger Douglas-firs and other mid-

and late-successional species. These overcrowded forests, dominated by shade-tolerant trees, can lead to insect infestations, diseases, and stand-replacing fires. According to the Forest Service, "the densely stocked stands we see today are causing a general health and vigor decline in all tree species." U.S. Forest Serv., Mission Brush Supplemental Final Environmental Impact Statement 3-15 (2006) [hereinafter SFEIS].

The Mission Brush Project

The Project would perform silvicultural treatments and commercial logging on 3,829 acres of forest, including restoration cutting within 277 acres of old growth stands, with the goal of trending the forest toward historic conditions. The Forest Service has divided the Project into three commercial timber sales, the Brushy Mission Sale, the Haller Down Sale, and the Mission Fly By Sale, comprising in total 23.5 million board feet of timber. The first two sales have been sold to private timber companies, but there were no bids on the third. The Service's contracting officer has stated that he does not intend to award the Mission Fly By Sale until this litigation concludes, although logging under the Brushy Mission and Haller Down sales began several months ago.

PROCEDURAL HISTORY

In June 2004, the Forest Service released the Mission Brush Final Environmental Impact Statement ("EIS") and the Record of Decision, which adopted the Project. Lands Council, along with several other environmental groups, appealed to the Regional Forester, who upheld the Project in August 2004 but ordered the preparation of a supplemental EIS in light of our decision in *Lands Council v. Powell (Lands Council I)*, 379 F.3d 738 (9th Cir. 2004), *amended by* 395 F.3d 1019 (2005). In April 2006, the Forest Service released its

¹Lands Council I involved a different project in a different area of the IPNF, 395 F.3d 1019.

Supplemental Final EIS ("SFEIS") and Record of Decision ("ROD"). Lands Council filed an administrative appeal, which the Forest Service denied in July 2006.

In October 2006, Lands Council filed suit challenging the Project in the U.S. District Court for the District of Idaho. Lands Council filed a motion for a temporary restraining order and preliminary injunction to halt the Project. The district court denied the motion on December 18, 2006, and Lands Council timely appealed.

DISCUSSION

I. Preliminary Injunction Standard

We review a district court's denial of a preliminary injunction for an abuse of discretion. *Earth Island Inst. v. U.S. Forest Serv.* (*Earth Island Inst. II*), 442 F.3d 1147, 1156 (9th Cir. 2006). A district court abuses its discretion if it "base[s] its decision on an erroneous legal standard or clearly erroneous findings of fact." *Id*.

A preliminary injunction should issue when the plaintiff shows "either: (1) a likelihood of success on the merits and the possibility of irreparable injury; or (2) that serious questions going to the merits were raised and the balance of hardships tips sharply in [the plaintiff's] favor." Lands Council v. Martin (Lands Council II), 479 F.3d 636, 639 (9th Cir. 2007) (quoting Clear Channel Outdoor Inc. v. City of Los Angeles, 340 F.3d 810, 813 (9th Cir. 2003)). These two alternatives are "extremes of a single continuum" in which "the greater the relative hardship to the party seeking the preliminary injunction, the less probability of success must be shown." Clear Channel Outdoor Inc., 340 F.3d at 813 (internal punctuation and quotation omitted).

II. Likelihood of Success on the Merits

National Forest Management Act

NFMA requires the Forest Service to develop a forest plan for each unit of the National Forest System. 16 U.S.C. § 1604(a). These plans must include provisions for public participation, while adopting "a systematic interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences." § 1604(b), (d). Once a forest plan is developed, subsequent agency actions must be consistent with the plan. § 1604(i).

[1] In addition to these procedural components, NFMA imposes substantive requirements on the Forest Service. In particular, "the forest plan must comply with substantive requirements of the Forest Act designed to ensure continued diversity of plant and animal communities and the continued viability of wildlife in the forest." *Idaho Sporting Cong. v. Rittenhouse*, 305 F.3d 957, 961 (9th Cir. 2002) (citing 16 U.S.C. § 1604(g)(3)(B)). The Forest Service must also "demonstrate the reliability of its scientific methodology." *Ecology Ctr. v. Austin*, 430 F.3d 1057, 1064 (9th Cir. 2005). A reliable scientific methodology is one that the Forest Service has "verified with observation" and "on the ground analysis." *Lands Council I*, 395 F.3d at 1035. The Forest Service may not rely on a methodology that "is predicated on an unverified hypothesis." *Ecology Ctr.*, 430 F.3d at 1064.

[2] The Forest Service has not proven the reliability of its scientific methodology with regard to wildlife habitat restoration in the Mission Brush Project. In particular, the Service has failed to demonstrate that the Project will not harm the flammulated owl, the northern goshawk, the fisher, and the western toad, all of whom the Forest Service has designated as "sensitive species" whose viability is of special concern. See Friends of the Clearwater v. Dombeck, 222 F.3d 552, 556 n.2 (9th Cir. 2000) (explaining "sensitive species" designa-

tion). As in *Ecology Center*, the Forest Service is relying on the "unverified hypothesis" that "treating old-growth forest is beneficial to dependent species." *Ecology Ctr.*, 430 F.3d at 1064.

In *Ecology Center*, the Forest Service, as part of another project, sought to engage in rehabilitative treatment of old growth stands "to correct uncharacteristic forest development resulting from years of fire suppression." *Id.* at 1063. We concluded that the Forest Service did "not offer proof that the proposed treatment benefits—or at least does not harm—old-growth dependent species." *Id.* We held that the Forest Service's methodology was unreliable since it had not been verified, and that the treatments therefore violated NFMA. *Id.* at 1063-64.

The Forest Service argues that the present case is distinguishable from *Ecology Center* because the Service has provided sufficient scientific data on the effects of the Project on wildlife habitat. None of the documents it cites, however, demonstrates the reliability of the Forest Service's hypothesis that restoration treatment will benefit dependent species.

The Forest Service relies primarily on the Dawson Ridge Study, Dawson Ridge Flammulated Owl Habitat Monitoring (2006) [hereinafter Dawson Ridge Study], the only study it has conducted since our decision in *Ecology Center*. The Dawson Ridge Study monitored a "relatively small area" of flammulated owl habitat: five 1/5 acre plots in an area totaling only eighteen acres. *Id.* at 2-3. The researchers received a single response in the 2006 survey. *Id.* at 1. Based on this solitary hoot, and the fact that the area had been logged in 2000 and underburned in 2002, the report concluded that "owls are using the area after harvest." *Id.* at 3. The report admitted that it was "inappropriate" to conclude that the treatments had improved owl habitat, but found it "encouraging" that an owl response had been received in the area. *Id.* Such responses, it

concluded, "imply" that the harvesting practices "are at least *maintaining* suitable habitat." *Id*.

[3] This report is insufficient to meet the requirements of Ecology Center. See 430 F.3d at 1063 (single report of observation of bird species in formerly-treated old growth stand was insufficient to prove reliability of scientific methodology). Lands Council rightly points out that the Dawson Ridge Study made no ultimate conclusion about one of the underlying hypotheses of the Project: "that treating old-growth forest is beneficial to dependent species." Ecology Ctr., 430 F.3d at 1064. The study also says nothing about whether such treatment can create suitable habitat that dependent species will actually use. Its conclusion that such treatment could maintain habitat is circumspect at best. By its own statement, there is merely an "encouraging" "impl[ication]." Dawson Ridge Study at 3. This is hardly sufficient to justify "grant[ing] [the Forest Service] the license to continue treating old-growth forests while excusing it from ever having to verify that such treatment is not harmful." Ecology Ctr., 430 F.3d at 1064.2

[4] The other studies fall even shorter of meeting the *Ecology Center* standards. In none of those studies was any observation made of the actual dependent species in order to determine whether the species will use the habitat if the Forest Service engages in the process it proposes. *Compare* R. Richard Howie and Ralph Ritcey, *Distribution, Habitat Selection, and Densities of Flammulated Owls in British Columbia*, USDA Forest Serv. General Technical Report RM-142 (1987) (twenty-year-old study from Canadian forest) *with Lands Council I*, 395 F.3d at 1034, 1035, 1031 (holding that Forest Service methodology was unreliable because it did not "walk

²The Forest Service argues that continued monitoring pursuant to the ROD will confirm the reliability of its methodology. While ongoing monitoring is certainly a good idea, this "authorize first, verify later" approach was roundly rejected in *Ecology Center* as inconsistent with both NFMA and NEPA. 430 F.3d at 1071.

. . . the land," it relied on a "model with no on-site inspection," and its data was "stale"). Other documents relied on by the Forest Service are not studies at all, but rather position papers and "conservation plans." *See, e.g.*, Montana Partners in Flight, Montana Bird Conservation Plan (2000); Idaho Partners in Flight, Idaho Bird Conservation Plan (2000). These documents are not "on the ground analysis" sufficient to prove the reliability of the Project's methodology. *Lands Council I*, 395 F.3d at 1035.³

[5] Accordingly, the Forest Service has not demonstrated the reliability of its methodology. We conclude that Lands Council was, therefore, likely to succeed on its NFMA claim.

National Environmental Policy Act

[6] NEPA requires federal agencies to take a "hard look" at the potential environmental impacts of their actions. *Idaho Sporting Cong.*, 305 F.3d at 963. An agency must prepare a detailed EIS for each action "significantly affecting the quality of the human environment." 42 U.S.C. § 4332(C). The EIS must "provide full and fair discussion of significant environmental impacts" so as to "inform decisionmakers and the public of the reasonable alternatives which would avoid or

³Intervenors contend that "the proxy on proxy method" of using changes to old growth habitat to assess environmental effects on wildlife is a reliable methodology. However, we have never held that manufacturing wildlife habitat through invasive commercial harvesting allows the Forest Service to assume that such habitat will subsequently be occupied by the species at issue. Rather, the proxy on proxy method permits the Service to assume only that "maintaining the acreage of habitat necessary for survival would in fact assure a species' survival." Envtl. Prot. Info. Ctr. (EPIC) v. U.S. Forest Serv., 451 F.3d 1005, 1017 (9th Cir. 2006) (emphasis added); see also Native Ecosystems Council v. U.S. Forest Serv., 428 F.3d 1233, 1250 (9th Cir. 2005) ("Our case law permits the Forest Service to meet the wildlife species viability requirements by preserving habitat") (emphasis added); Ecology Ctr., 430 F.3d at 1064 (distinguishing between "maintaining . . old-growth habitat" and "altering the composition of old-growth habitat through an invasive process").

minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. § 1502.1. The EIS must "be supported by evidence that the agency has made the necessary environmental analyses," *id.*, and must "address in [a] meaningful way the various uncertainties surrounding the scientific evidence." *Ecology Ctr.*, 430 F.3d at 1065 (quoting *Seattle Audubon Soc'y v. Espy*, 998 F.2d 699, 704 (9th Cir. 1993)).

Lands Council contends that the Project violates NEPA because the Forest Service failed to include a full discussion of the scientific uncertainty surrounding its strategy for improving wildlife habitat. For the reasons already stated, *supra* at 7784-85, we agree. As in *Ecology Center*, "[t]he EIS . . . treats the prediction that treatment will benefit old-growth dependent species as a fact instead of an untested and debated hypothesis." *Id*.

[7] In responding to the public comment that the Service had "failed to [c]ite any evidence that its managing for old growth habitat strategy will improve old growth species habitat over the short-term or long-term," the SFEIS does not address the scientific uncertainty described above, nor does it cite the sources now relied on by the Forest Service. SFEIS at F-3. The SFEIS cites only sources discussing the historical conditions of the forest, the role of fire in the forest's ecology, and the health of old growth trees following treatment. *Id.* There is no discussion of the uncertainties regarding *wildlife* and their use of these habitats following treatment. *Id.* In fact, the SFEIS's direct and indirect effects analysis simply "assumes that active management through regeneration and selective tree cutting can help restore natural processes in an ecological system." SFEIS at 4-68 (emphasis added).

[8] For these reasons, Lands Council was likely to succeed on its NEPA claim.

IPNF Plan Standard 10(b)

[9] NFMA requires the Forest Service to comply with the forest management plan for each national forest. 16 U.S.C.

§ 1604(i). Standard 10(b) of the IPNF Forest Plan requires the Forest Service to maintain at least ten percent old growth throughout the forest. IPNF Forest Plan Standard 10(b).

Lands Council contends that the IPNF is not currently meeting the ten percent requirement and that the Forest Service therefore must address how cutting mature, future old-growth trees will affect its future compliance with Standard 10(b). Lands Council bases its contention on its own report, which concluded that seventy percent of designated old growth stands did not actually meet the Forest Service's own standards for old growth. Ellen Picken, The Lands Council, Lost Forests: An Investigative Report on the Old-Growth of North Idaho (2005).

The Forest Service disagrees with these results. In determining the percentage of old growth in the IPNF, the Service has used two independent monitoring tools, each of which concluded that approximately twelve percent of the forest met old growth criteria. Arthur C. Zack, Review of Old Growth Assessments for the Idaho Panhandle National Forest 6 (2006) (referencing the Forest Inventory Analysis data, finding 11.8 percent old growth, and the IPNF stand map, finding 12.1 percent old growth). The Forest Service's expert, Dr. Arthur Zack, specifically considered and evaluated Lands Council's report, but disagreed with its methodology and conclusions.

[10] Where an agency is presented with conflicting data, it "must have discretion to rely on the reasonable opinions of its own qualified experts." *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 378 (1989). Accordingly, "[a]t this stage, the record does not allow us to conclude that the Forest Service acted arbitrar[il]y and capriciously in relying on its own data and discounting the alternative evidence offered by the [p]laintiffs." *Earth Island Inst. v. U.S. Forest Serv.* (*Earth Island Inst. I*), 351 F.3d 1291, 1302 (9th Cir. 2003). The Service explained the differences between its findings and those

of Lands Council, and it "is entitled to use the data it collected." *Id.*⁴

[11] Accordingly, the district court properly concluded that Lands Council was not likely to succeed on the merits of its Standard 10(b) claim.

III. Balance of Hardships

[12] Because Lands Council has demonstrated a strong probability of success on the merits of its NFMA and NEPA claims, "it need only show the possibility of irreparable injury if preliminary relief is not granted, and that the balance of hardships tips in its favor." *Earth Island Inst. II*, 442 F.3d at 1177 (internal punctuation omitted). "Environmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, *i.e.*, irreparable." *Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 545 (1987). In addition to balancing the hardships to the parties, we must also consider the public interest. *Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094, 1125 (9th Cir. 2002).

[13] The Project, if not enjoined, would allow treatment of 2,326 acres of capable flammulated owl habitat and 202 acres of suitable flammulated owl habitat, the latter of which is more than half of the owls' 364 current suitable habitat acres within the Project area. The Project would treat 2,503 acres of capable northern goshawk habitat and 561 acres of suitable northern goshawk habitat. It would convert 255 acres of suitable goshawk habitat to unsuitable habitat and would prevent

⁴Lands Council may nevertheless revisit this issue on the merits before the district court should further development on remand be appropriate. *Infra* at 7791; *see Earth Island Inst. I*, 351 F.3d at 1302 ("We note, however, that if Plaintiffs are able to convince the district court that the agency unreasonably relied upon inaccurate data, they may be able to succeed on the merits of this claim.").

757 acres of capable goshawk habitat from becoming suitable. The Project would also treat 1,839 acres of capable fisher habitat and 449 acres of suitable fisher habitat.

On the other side of the balance are the potential environmental harms to the forest caused by delaying the Project, as well as the potential economic harms to the local community from enjoining logging.

[14] As to the risk to the forest of delaying the project, the permanent and certain harm of violating the environmental laws outweighs the speculative harm that might result from a failure to engage in a statutorily prohibited activity. That determination was made by Congress when it enacted the statutes which prohibit the type of activity in which the Forest Service wishes to engage unless and until the Service complies with those statutes.

[15] The potential economic hardships, however, are more troubling. According to Intervenors, enjoining the project will force the timber companies that purchased the sales to lay off some or all of their workers. One of the companies employs fifteen people and the other employs twenty-two. The Project area is located in Boundary County, which has one of Idaho's highest unemployment rates and an average wage that is below the national average. Since 2003, the county has lost two major employers (accounting for 400 jobs), including a Louisiana Pacific mill. These concerns implicate the public interest.

[16] While balancing environmental harms and economic harms is not easy, it is not unprecedented. We have held time and again that the public interest in preserving nature and avoiding irreparable environmental injury outweighs economic concerns. Earth Island Inst. II, 442 F.3d at 1177; Earth Island Inst. I, 351 F.3d at 1308-09; National Parks & Conservation Ass'n v. Babbitt, 241 F.3d 722, 738 (9th Cir. 2001); see also Sierra Nev. Forest Prot. Campaign v. Tippin, No. 06-

00351, 2006 WL 2583036, at *21 (E.D. Cal. August 16, 2006) ("The environment is a vital constituent public interest that must be recognized and protected by federal law even in the face of adverse economic consequences.").

Accordingly, Lands Council demonstrated a threat of irreparable injury sufficient to warrant granting the preliminary injunction.

CONCLUSION

[17] Lands Council demonstrated a probability of success on the merits and a possibility of irreparable injury. Lands Council further showed that the balance of hardships and the public interest favored granting the preliminary injunction. For these reasons, we reverse the district court and remand for entry of a preliminary injunction of the contested portions of the Mission Brush Project.

To the extent that either party believes that any further factual development is required and appropriate in light of this opinion, the district court may engage in such further factual determinations, including by way of trial, as it deems proper.

The mandate shall issue forthwith.

REVERSED and REMANDED.

MILAN D. SMITH, JR., Circuit Judge, specially concurring:

Ecology Center v. Austin, 430 F.3d 1057 (9th Cir. 2005) is binding law in this circuit and dictates the outcome of this case. See Gen. Constr. Co. v. Castro, 401 F.3d 963, 975 (9th Cir. 2005) ("[W]e are bound by decisions of prior panels unless an en banc decision, Supreme Court decision or subsequent legislation undermines those decisions."). However, I

write a separate concurrence in this case because, like Judge Margaret McKeown, I believe that *Ecology Center* was wrongly decided. *See Ecology Ctr.*, 430 F.3d at 1071-78 (McKeown, dissenting). Following *Ecology Center* in this instant matter, compounds already serious errors of federal law because "the majority's extension of *Lands Council v. Powell*, 379 F.3d 738 (9th Cir. 2004), *amended by* 395 F.3d 1019, 1024 (9th Cir. 2005), [to *Ecology Center*] represents an unprecedented incursion into the administrative process and ratchets up the scrutiny we apply to the scientific and administrative judgments of the Forest Service. . . . [T]he majority has, in effect, displaced 'arbitrary and capricious' review for a more demanding standard." *Id.* at 1072.

In Lands Council v. Powell (Lands Council I), 379 F.3d 738 (9th Cir. 2004), amended by 395 F.3d 1019 (9th Cir. 2005), the court reviewed the Forest Service's approval of a timber harvest as part of a watershed restoration project in the Idaho Panhandle National Forest (IPNF). 395 F.3d at 1024. The project was "designed to improve the aquatic, vegetative, and wildlife habitat in the Project area." Id. at 1025. The Lands Council challenged the project's compliance with the National Forest Management Act (NFMA) because the project was allegedly inconsistent with the IPNF Forest Plan, and because it questioned the reliability of the Forest Service's scientific methodology underlying its analysis of disturbed soil conditions. Id. at 1032-34. The Forest Service did not take soil samples from the activity area, but instead relied on samples from other areas in the Forest and aerial photographs to determine the quality of the soil in the project area. *Id.*

Even though our rules provided that the Forest Service was entitled to deference for its technical expertise, the *Lands Council I* court rejected the Forest Service's choice of scientific methodology because it was based entirely on a spreadsheet model with no on-site inspection or verification. *Id.* at 1035. The court explained that "[u]nder the circumstances of this case, the Forest Service's basic scientific methodology, to

be reliable, required that the hypothesis and prediction of the model be verified with observation. The predictions of the model . . . were not verified with on the ground analysis." *Id.* Thus, the court held that the "Forest Service's reliance on the spreadsheet models, unaccompanied by on-site spot verification of the model's predictions, violated NFMA." *Id.* As Judge McKeown observed, *Lands Council I* made "compliance with NFMA and NEPA a moving target." *Id.* at 1073.

Ecology Center was erroneously decided, in part, because the majority applied the court's criticism of the Forest Service's soil analysis in Lands Council I to its review of the Forest Service's soil quality analysis conducted as part of the Lolo National Forest Post Burn Project. The Ecology Center majority's reliance on Lands Council I is faulty because the Lands Council I court's determination that "on-site spot verification" was required for soil analysis was in direct response to the specific record and circumstances of that case. As Judge McKeown explained, "there is no legal basis to conclude that the NFMA requires an on-site analysis where there is a reasonable scientific basis to uphold the legitimacy of modeling. NFMA does not impose this substantive requirement, and it cannot be derived from the procedural parameters of NEPA." Ecology Ctr., 430 F.3d at 1073.

Furthermore, the *Ecology Center* majority's application of *Lands Council I* is also erroneous because the Forest Service did conduct on-site analysis in the activity area of the Lolo National Forest. Even if the majority had been correct in reading *Lands Council I* to require on-site analysis in every case, the Forest Service complied with this requirement. In fact, there are specific reports indicating that soil analysis was conducted in the activity area. Nevertheless, the majority rejected these reports on the grounds that they were "too few and of poor quality." *Id.* It complained that "[t]he record provides little information that enables us to assess the reliability or significance of these reports; for example, we do not know the qualifications of the person conducting the field review, the

methodology utilized, or whether the field observations confirmed or contradicted the Service's estimates." *Id.* at 1070. Judge McKeown observed that "[f]rom this judgment, we are left to conclude that not only does the court of appeals set bright-line rules, such as requiring an on-site, walk the territory inspection, but it also assesses the detail and quality of that analysis-even in the absence of contrary scientific evidence in the record." *Id.* at 1073. She also noted that "*Lands Council* [*I*] does not direct us to assess the sufficiency of the Forest Service's on-site soil quality analysis beyond the traditional arbitrary and capricious standard; it only asks us to verify that there is such an on-site sampling." *Id.* at 1075.

Additionally, "the [Ecology Center] majority generalizes the 'unverified hypothesis' principle articulated in Lands Council [I] beyond the soil analysis to other scientific findings made by the Forest Service. In so doing, the majority demonstrates the dangers of extending a reference-abstracted from a single technically detailed, fact-specific decision-to unrelated factual contexts." Id. at 1076. For example, the majority applied Lands Council I to find that the Forest Service's conclusion that treating old-growth forest is beneficial to dependent species is predicated on an unverified hypothesis. Id. at 1064. The majority criticized the Forest Service for not taking the time to test its theory that thinning of old-growth stands via commercial logging and prescribed burning would improve, or at least not harm, old-growth dependent species. Id.

Judge McKeown concluded that "[a]pparently we no longer simply determine whether the Forest Service's methodology involves a 'hard look' through the use of 'hard data,' but now are called upon to make fine-grained judgments of its worth." *Id.* at 1077. This is in direct contradiction to basic administrative law principles— "we reverse agency decisions only if they are arbitrary and capricious." *Id.* "This standard of review does not direct us to literally dig in the dirt (or soil, as it were), get our fingernails dirty and flyspeck the agency's

analysis." *Id.* Finally, "[t]he majority's rationale cannot be reconciled with our case law requiring '[d]eference to an agency's technical expertise and experience,' particularly 'with respect to questions involving engineering and scientific matters.' "*Id.* (quoting *United States v. Alpine Land & Reservoir Co.*, 887 F.2d 207, 213 (9th Cir. 1989)).

I believe that our reasoning and holding in the instant matter perpetuates the majority's faulty reasoning in *Ecology Center*. Had the majority in *Ecology Center* not erroneously stretched the court's reasoning and analysis in *Lands Council I*, we might have upheld the district court's decision in this case because of our obligation to defer to the scientific expertise of the Forest Service and to overrule only determinations that are "arbitrary and capricious."

First, in examining the adequacy of the Forest Service's scientific data concerning the effects of the Project on wildlife habitat, we would not be bound by the requirement that the Forest Service's hypothesis and prediction must be "verified with observation" and "on the ground analysis." Lands Council I, 395 F.3d at 1035. As Judge McKeown explained, the court in Lands Council I concluded that under the record and circumstances in that case the "Forest Service's reliance on the spreadsheet models, unaccompanied by on-site spot verification of the model's predictions, violated NFMA." Ecology Ctr., 430 F.3d at 1073 (quoting Lands Council I, 395 F.3d at 1035). There is no indication in the text of the Lands Council I opinion that the court sought to create an on-site analysis verification requirement for all soil quality analyses, and there is even less support for the proposition that the on-site verification requirement should be extended to "all scientific hypotheses adopted by the Forest Service regardless of context." Id. at 1076. Thus, but for Ecology Center's on-site verification requirement, we would have at least been able to consider the Forest Service's documentary support for its hypothesis that restoration treatment will benefit dependent species. As it stands, we summarily dismiss the Forest Service's reliance on the R. Richard Howie and Ralph Ritcey study entitled Distribution, Habitat Selection, and Densities of Flammulated Owls in British Columbia simply because it is a survey of the flammulated owls' habitat in British Columbia. Op. at 7785-86. Although the Howie and Ritcey study admittedly does not conclude that logging improves flammulated owl habitat, it does document a flammulated owl presence within logged old-growth stands. We also would have been able to examine the Montana Partners in Flight, Montana Bird Conservation Plan, Idaho Partners in Flight, and Idaho Bird Conservation Plan. Again, even though none of these reports unequivocally state that logging will improve flammulated owl habitat, they do demonstrate that flammulated owls can inhabit selectively-logged stands. Ultimately, we might not have changed our conclusion that the "Forest Service has not proven the reliability of its scientific methodology with regard to wildlife habitat restoration in the Mission Brush Project," but it should have been based on the content of the reports themselves—not the mere fact that they did not constitute "on the ground analysis." Op. at 7783-86.

Even if one assumes, arguendo, that Ecology Center did not err in adopting the Lands Council I's "verified with observation" and "on the ground analysis" requirement or in applying it to all of the Forest Service's scientific hypotheses, Lands Council I certainly did not empower the majority in Ecology Center "to assess the detail and quality of," Ecology Center, 430 F.3d at 1073, the Forest Service's analysis and to "make fine-grained judgments of its worth," Id. at 1078. Just as Judge McKeown believes that the majority should have held that the Forest Service's soil analysis was in compliance with Lands Council I because it was on-site analysis and challenges the appropriateness of the majority's criticism of the soil evaluators' qualifications, I question whether, without Ecology Center, we would be able to scrutinize how many owl hoots were heard in the Dawson Ridge Study. Op. at 7784-85. The Forest Service already considered this report and determined that there is sufficient support for its hypothesis that treating old-growth forest will maintain habitat and benefit dependent species. Judge McKeown captures my concern with her statement that "[i]n faulting the Forest Service's soil quality and concluding that old-growth forest will not be impaired, the majority changes our posture of review to one where we sit at the table with Forest Service scientists and second-guess the minutiae of the decision making process." *Ecology Ctr.*, 430 F.3d at 1072. Similarly, by counting owl hoots, we are abandoning our role as reviewers under an "arbitrary and capricious" standard and supplanting the Forest Service as decision makers. If we do not grant the Forest Service appropriate deference in areas of scientific expertise, we defeat the purpose of permitting the Forest Service to make administrative decisions in the first place, and we intrude into areas far beyond our competence.

Finally, not only is *Ecology Center* problematic from an administrative law perspective, but the injunction commanded in that case continues the pattern by some courts in this circuit of issuing injunctions based upon misconstructions of federal law that frustrate the careful legal balance struck by the democratic branches of our government between important environmental protections and carefully regulated logging within our national forests. It is not presently, and has never been, the policy of our national government under any administration to ban all logging in all of our national forests, and yet, cases like *Ecology Center* make it virtually impossible for logging to occur under any conditions because the Forest Service can never satisfy the constantly moving legal targets created by our circuit, sometimes out of whole cloth.

When federal law truly forbids logging in a particular area, we have appropriately held that "the public interest in preserving nature and avoiding irreparable environmental injury outweighs economic concerns," Op. at 7790 (citing *Earth Island Inst. v. U.S. Forest Serv.*, 442 F.3d 1147, 1177 (9th Cir. 2006); *Earth Island Inst. v. U.S. Forest Serv.*, 351 F.3d 1291, 1308-09; *Nat'l Parks & Conservation Ass'n v. Babbitt*, 241

F.3d 722, 738 (9th Cir. 2001); see also Sierra Nev. Forest Prot. Campaign v. Tippin, No. 06-00351, 2006 WL 2583036, at *21 (E.D. Cal. August 16, 2006)), but, as noted, I do not believe that the majority in Ecology Center correctly construed applicable federal law. When we misconstrue federal law and compound the effects of that misconstruction by affirming or requiring the issuance of a blunderbuss injunction banning all logging in a particular area instead of using a finely crafted legal scalpel based upon correct legal interpretations, we needlessly create great hardship in the lives of many people, harm the economic interests of our country, and foster disrespect for our courts. We must remember that an injunction is an equitable remedy that "must be narrowly tailored to give *only* the relief to which plaintiffs are entitled." Orantes-Hernandez v. Thornburgh, 919 F.2d 549, 558 (9th Cir. 1990) (emphasis added). An injunction should "remedy only the specific harms shown by the plaintiffs, rather than to enjoin all possible breaches of the law," Price v. City of Stockton, 390 F.3d 1105, 1117 (9th Cir. 2004) (internal quotation marks omitted), and it "should be no more burdensome to the defendant than necessary to provide complete relief to the plaintiffs," Califano v. Yamasaki, 442 U.S. 682, 702 (1979).

Although I readily acknowledge that injunctions are sometimes required and appropriate in interdicting certain violations of federal law (and especially environmental law), in my view the pattern of some courts within our circuit to occasionally hand down over-broad injunctions based upon incorrect constructions of federal law has substantially contributed to (even though it is not entirely responsible for) the decimation of the logging industry in the Pacific Northwest in the last two decades and the commensurate growth of logging in our neighbor to the north. Scholars with far more time available than I have can trace the case-by-case results on a region-by-region basis, but the following governmental statistical data are illustrative of the damage suffered, at least part of which,

in my opinion, is properly attributable to the effects of improperly granted or over-broad federal court injunctions.

In Oregon, which has traditionally been one of the country's leading producers of wood and paper products, timber harvests on federal lands decreased by more than 89% between 1988 and 1998. Krista M. Gebert, et al., U.S. Dept. of Agric., *Utilization of Oregon's Timber Harvest and Associated Direct Economic Effects*, 1998 2 (2002). The number of primary lumber mills in Oregon went from 360 in 1988 to 200 in 1998, and overall log consumption was cut nearly in half. *Id.*

Similar effects were felt throughout the Pacific Northwest. In the area covered by the Northwest Forest Plan, which encompasses northwest California as well as the western portions of Oregon and Washington, 30,000 direct lumber industry jobs were lost between 1990 and 2000. 1 Susan Charnley, et al., U.S. Dept. of Agric., *Socioeconomic Monitoring Results* 13 (2006). The communities closest to the forest lands have been hit the hardest. The Department of Agriculture reports that 40% of the communities within five miles of federal forests in this region suffered decreases in socioeconomic well-being during this period. *Id.* at 12. Although logging was a vital source of economic stability in these communities during the 1970s and 1980s, it "had become minor or negligible" in much of this area by 2003. *Id.* at 15.

Furthermore, in my view there is a correlation between sometimes over-broad court injunctions halting the flow of lumber and the dramatic decrease of employment in logging communities throughout the Pacific Northwest. For example in Quilcene, Washington, the number of people working in the national forest dropped by 59% between 1993 and 2003. 3 Susan Charnley, et al., U.S. Dept. of Agric., *Socioeconomic Monitoring Results* 127, 131 (2006). Also, in the Mid-Klamath region in northern California, where logging went from providing 30% of the area's jobs in 1990 to only 4% in

2000, the economic impact was devastating. *Id.* "Many mill workers, loggers, and F[orest] S[ervice] employees moved away in search of work elsewhere, taking their families with them. As a consequence, housing prices dropped, stores and service centers that supported these workers shut down, and school enrollment declined precipitously. . . . Not only did the community lose its economic base, but it also lost productive people who were hard-working and contributed much to the community." *Id.* at 131.

The effects of the severe decline in logging at least partially brought about by sweeping federal court injunctions incorrectly applying federal law are apparent on a national scale as well. From 1965 to 1988, lumber exports from the United States enjoyed steady growth. James L. Howard, U.S. Dept. of Agric., U.S. Timber Production, Trade, Consumption, and Price Statistics 1965 to 1999 4 (2001). After 1988, the Department of Agriculture reports that lumber exports suddenly spiraled downward at the same time that lumber imports reached unprecedented highs. Id. at 52. In 1988, before our circuit began to aggressively issue extremely broad injunctions against the logging industry, lumber exports peaked at 4.5 billion board feet and the United States imported 13.8 billion board feet. Id. By 1999, lumber exports had plummeted to just 2.5 billion board feet while imports soared to 19.9 billion board feet. Id.

Judge Ferguson asserts a contrary view in his concurrence. He cites as authority for that view a 2003 tome by Messrs. Derrick Jensen and George Draffan entitled *Strangely Like War: The Global Assault on Forests*, which attributes the decline of logging in the Northwest almost entirely to corporate consolidation and cost-cutting within the timber industry. Every citizen has the constitutional right to express his or her views on any subject and have the value of what he or she says, and any works cited, evaluated by the hearer or reader, but, in my view, writers who say extreme things should not be surprised that many of the things they say will be heavily

discounted because of that very extremism. According to Wikipedia, "Jensen is often labeled an 'anarcho-primitivist,' who is quoted as saying in his book A Language Older Than Words that "[e]very morning when I awake I ask myself whether I should write or blow up a dam. I tell myself I should keep writing, though I'm not sure that's right." Wikipedia, http://en.wikipedia.org/wiki/Derrick Jensen. Mr. Draffan is described by Aric McBay in an interview published in In the Wake as a "forest activist, public interest investigator and corporate muckracker." Aric McBay, An Interview with George Draffan, In the Wake, available at http:// www.inthewake.org/draffan1.html. He is a frequent contributor to Endgame.org and the compiler of Activist Research Manual published in January 1999 by the Public Information Network. I respectfully suggest that the views of persons who, for example, fantasize about blowing up dams (a form of ecoterrorism and criminal act that potentially threatens the lives and property of thousands of people) deserve a healthy skepticism because they are so skewed and are so far from the mainstream of knowledgeable discourse.

As federal judges, we have a weighty responsibility to properly construe and apply federal environmental laws in order to protect our national parks and endangered species from undisciplined and unregulated timber harvesting, but we may not properly ignore the well-established standards that govern our own role in reviewing the laws and regulations enacted by the representative branches of our government and the agencies empowered to implement those laws.

Because I respectfully contend that it was wrongly decided, I would (if the occasion arises) reverse the majority's holding in *Ecology Center*, which would likely change the result in this case. However, because I am legally bound by *Ecology Center*, I reluctantly join my colleagues in reversing the lower court.

FERGUSON, Circuit Judge, concurring, in which Judge Reinhardt also concurs:

I write separately to respond to Judge Smith's special concurrence.

At the outset, I disagree with Judge Smith that *Ecology Center* was wrongly decided. I see little controversy in holding that an agency's failure to confirm its hypotheses in a project area is arbitrary and capricious. I also note that the Supreme Court denied certiorari in that case. *Mineral County v. Ecology Ctr.*, 127 S. Ct. 931 (2007).

More importantly, however, I take issue with the part of his special concurrence that, with no evidence whatsoever, assigns to the courts of our circuit culpability for the status of the timber industry and impugns the last several decades of our circuit's environmental law jurisprudence. Judge Smith takes the plain fact that district courts in our circuit have enjoined logging projects in the past, adds the claim that the timber industry is declining, and asserts a causal relation between the two. In doing so, Judge Smith commits a textbook logical fallacy: post hoc, ergo propter hoc (after this, therefore because of this). See, e.g., Robert J. Gula, Nonsense: A Handbook of Logical Fallacies 95 (2002). The mere fact that there has been a "severe decline in logging" does not mean that it has been "brought about by sweeping federal court injunctions." Judge Smith cites no evidence for this claim.

Judge Smith's two premises, first, that there has been something amiss in the issuance of injunctions, and, second, that the timber industry has declined as a result, are entirely erroneous.

First, Judge Smith provides little evidence for his contention that district courts have issued injunctions that are "blunderbuss," "over-broad," "sweeping," or "aggressive." Judge

Smith discusses no particular injunctions, aside from that in *Ecology Center*, yet he nevertheless asserts that we have "aggressively issue[d] extremely broad injunctions against the logging industry." Judge Smith contends that there is a "pattern by some courts in this circuit of issuing injunctions based upon misconstructions of federal law that frustrate the careful legal balance struck by the democratic branches of our government."

Respect for "the democratic branches of our government," however, requires that courts enjoin conduct that violates the environmental laws passed by Congress. A pattern of injunctions means that there has been a pattern of illegal conduct, not that there is something wrong with the courts' handling of environmental cases. In Earth Island Inst. v. U.S. Forest Serv., 442 F.3d 1147, 1177-78 (9th Cir. 2006), our colleague Judge William Fletcher "noticed a disturbing trend in the [Forest Service's] recent timber-harvesting and timber-sale activities" and suggested that the Forest Service has "been more interested in harvesting timber than in complying with our environmental laws." See id. (citing numerous recent cases in which federal courts have reversed or enjoined Forest Service timber sales). District courts must not shy away from enjoining illegal activity by administrative agencies. The fact that we have upheld or required such injunctions in the past, and will continue to do so in the future, is required by, not contrary to, our role as an appellate court. The frequency of injunctions is evidence of the frequency of unlawful agency actions, nothing more and nothing less.

Second, Judge Smith's assertion that such injunctions are substantially responsible for "the decimation of the logging industry in the Pacific Northwest" is unsupported. As with many sectors of our economy, it is the practices of the timber industry itself that have caused massive unemployment, not the practices of those who would check its unhindered "progress." Derrick Jensen and George Draffan rightly argue that debates about forest protection should never have been posi-

tioned as "jobs versus owls," but rather "jobs versus automation, mergers, and downsizing." Derrick Jensen & George Draffan, *Strangely Like War: The Global Assault on Forests* 51 (2003). They explain the impact of industry practices on employment as follows:

As companies continue to merge in order to reduce industry overcapacity and boost market share, they shed jobs. In the 1970s and 1980s, the number of paper mills in the United States decreased by 21 percent, but the average output per mill increased by 90 percent. Paper production in that period increased by 42 percent, while employment in the industry decreased by 6 percent. The amount of timber cut increased 55 percent, while the number of logging and milling jobs decreased by 10 percent, or 24,000 jobs. In just one decade (1987-1997), employment in pulp mills decreased by 2,900 jobs, and employment in paper mills decreased by 12,100 jobs. Output per employee in the U.S. paper industry has increased fourfold in the last fifty years. The wave of consolidation in the pulp and paper industry that began in the late 1990s is expected to cost another 50,000 iobs.

Id. at 50-51 (citing Miller Freeman, Inc., Pulp & Paper 1998 North American Factbook 71, 72, 76 (1998), Maureen Smith, The U.S. Paper Industry and Sustainable Production 40, 43, 72 (1997), and Michael Jaffe, Industry Surveys: Paper & Forest Products 4 (1998)). We can see such impacts in this very

¹Judge Smith's *ad hominem* attack against Jensen and Draffan does not address the merits upon which the authors base their contentions. Regardless of how one feels about these two individuals, their argument quoted herein is a quantitative analysis, citing other studies. It has nothing to do with blowing up dams. Furthermore, I do not think politically engaged individuals are disqualified from contributing to the analysis of an issue. It is certainly not our role to determine who we think is or is not in the political "mainstream" and to credit their research accordingly.

case: much of the economic decline near Boundary County, Idaho was caused by the 2003 decision of Louisiana-Pacific, a leading manufacturer of building products, to close its mill in Bonners Ferry. That closure, which left 130 workers unemployed, resulted from the decision of the corporation, not an injunction from our courts.

Contrary to Judge Smith's suggestion, it appears that too much logging, rather than not enough, has caused the economic decline in Boundary County. A spokesperson for Riley Creek Lumber Company, the company that bought the mill site from Louisiana-Pacific, explained why the mill would not reopen: "There's not enough raw material to support a mill operation at Bonners Ferry." A Louisiana-Pacific spokesperson also explained the closure, stating, "In the lumber business, we continue to see an *oversupply* situation, with historic low prices." By depleting the "raw materials" and depressing the price of lumber through oversupply, the industry has put people out of work.

I have the utmost sympathy for those left unemployed by these recent trends, but I cannot accept Judge Smith's assertion that the judiciary, rather than the industry, is primarily to blame.⁴

²Dan Hansen, *Bonners Ferry Mill Won't Reopen*, Spokesman Rev. (Spokane, WA), July 23, 2003, at A8.

³Becky Kramer, *Timber Town May Buy Two L-P Sawmills*, Spokesman Rev. (Spokane, WA), May 30, 2003, at A1 (emphasis added).

⁴Notably, while low-income workers have been laid-off, the world's largest paper companies have provided multi-million dollar pay packages to their CEOs. Louisiana-Pacific's CEO received a ten-percent salary increase and a package worth \$3.6 million in 2006. Louisiana-Pacific, *Notice of Annual Meeting of Stockholders* 21, 25 (2007), *available at* http://library.corporate-ir.net/library/73/730/73030/items/237173/2006%20proxy.pdf. International Paper's CEO received a package worth \$13.7 million in 2006. International Paper, *Notice of Annual Meeting of Shareholders* 50 (2007), *available at* http://www.internationalpaper.com/PDF/PDFs_for_Our_Company/2007_Proxy_Statement.pdf.

Weyerhaeuser's CEO received a package worth \$4 million in 2006. Weyerhaeuser, *Notice of 2007 Annual Meeting of Shareholders and Proxy Statement* 27 (2007), *available at* http://library.corporate-ir.net/library/92/922/92287/items/235323/WY2007ProxyStatement.pdf. Georgia-Pacific's former CEO received a \$92 million package when the multi-billion dollar Koch Industries acquired Georgia-Pacific in 2005 to become the largest privately owned company in the United States. Emily Thornton, *Fat Merger Payouts For CEOs*, Bus. Wk., Dec. 12, 2005, at 34; *Koch Industries Inc.: Acquisition of Georgia-Pacific For \$13.2 Billion Is Completed*, Wall St. J., Dec. 24, 2005, at B2.