

FOR PUBLICATION
UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

THE LANDS COUNCIL,
Plaintiff-Appellant,
and

WILD WEST INSTITUTE,
Plaintiff,

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. 09-36026

D.C. No.
2:06-cv-00425-EJL

OPINION

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

Argued and Submitted
October 5, 2010—Seattle, Washington

Filed December 28, 2010

Before: Sidney R. Thomas and Milan D. Smith, Jr.,
Circuit Judges, and Michael R. Hogan, District Judge.*

*The Honorable Michael R. Hogan, United States District Judge for the
District of Oregon, sitting by designation.

Opinion by Judge Milan D. Smith, Jr.

COUNSEL

Thomas J. Woodbury, Forest Defense P.C., for plaintiff-appellant Lands Council.

Ignacia S. Moreno, Assistant Attorney General; David C. Shilton, Susan L. Pacholski, Brian C. Toth (argued), Attorneys, U.S. Department of Justice, Environmental and Natural Resources Division; and Alan J. Campbell, Office of the General Counsel, U.S. Department of Agriculture (Of Counsel); for defendants-appellees Ranotta McNair and the United States Forest Service.

Scott W. Horngren (argued) and Julie A. Weis, Haglund Kelley Horngren Jones & Wilder LLP, for defendants-intervenors-appellees Boundary County, et al.

OPINION

M. SMITH, Circuit Judge:

The Lands Council and Wild West Institute challenged the United States Forest Service's (Forest Service) decision to thin 277 acres of old-growth forest in the Mission Brush Project (Project) area, located in the Idaho Panhandle National Forest (IPNF), claiming that the Project violates the National Forest Management Act (NFMA), 16 U.S.C. § 1600 *et seq.*, the IPNF Plan, and the National Environmental Policy Act (NEPA), 42 U.S.C. § 4231 *et seq.* On cross-motions for summary judgment, the district court granted summary judgment in favor of the Forest Service and denied Lands Council and Wild West Institute's motion for summary judgment. Lands Council appeals. We affirm the decisions of the district court.

FACTUAL AND PROCEDURAL BACKGROUND

A. The Mission Brush Project

The Mission Brush Project area is located in the northern portion of the Bonners Ferry Ranger District in the IPNF. The project assessment area encompasses approximately 31,350 acres and includes the Mission and Brush Creek watersheds. Historically, the forest was primarily composed of ponderosa pine, western larch, and western white pine. However, the forest's composition has shifted as the result of a number of factors, including fire suppression, past logging practices and white pine blister rust fungus. Presently, the forest is densely crowded with stands of younger, shade-tolerant species of trees that are more prone to insect infestation, disease, drought, and stand replacing fires than was previously the case. The Forest Service determined in its Supplemental Final Environmental Impact Statement (SFEIS) that “[t]he densely stocked stands we see today are causing a general health and vigor decline in all tree species.”

The Forest Service estimated that without intervention old growth and mature forests would continue to decline and, choosing among plan alternatives, decided to harvest 3,829 acres of forest. The Forest Service decided, as part of the Project, to thin 277 acres of old-growth forest by removing younger, smaller-diameter understory trees and fuel ladders (vegetation that conveys fire from the ground to old-growth canopy).¹ The Forest Service plan leaves large trees unaffected by not cutting trees over twenty-one inches in diameter within the old-growth stands. Lands Council and Wild West Institute challenged the Project.

¹The parties' briefing states that 277 acres are involved in the Project, whereas the record indicates that the correct number is 279 acres. We adopt the 277 acres figure for purposes of this opinion.

B. Prior Proceedings

In May 2004, the Forest Service issued the Mission Brush Final Environmental Impact Statement (FEIS) and Record of Decision (ROD). Lands Council administratively appealed the ROD. We then issued a decision in *Lands Council v. Powell*, 395 F.3d 1019, 1037 (9th Cir. 2005), holding that the Timber Stand Management Record System (TSMRS) database was inaccurate and unreliable. In response to the *Powell* decision, the Forest Service updated the TSMRS database and prepared a supplemental EIS.

On April 20, 2006, the Forest Service issued the SFEIS and ROD. Responding to the *Powell* ruling, the SFEIS contained additional information on cumulative effects and the methodologies for analyzing forest conditions, including wildlife analysis and stands of old-growth trees. The SFEIS also evaluated three alternative actions and one no-action alternative. The Forest Service chose Alternative 2, which included harvesting smaller trees within the 277 acres of old growth in the Project.

Lands Council administratively appealed the ROD, but its appeal was denied. In October 2006, Lands Council and Wild West Institute filed suit against the Forest Service alleging violations of the IPNF Plan, NFMA, and NEPA. Contemporaneously, Lands Council and Wild West Institute sought a temporary restraining order and a preliminary injunction to halt the Project. Boundary County, City of Bonners Ferry, City of Moyie Springs, Everhart Logging, Inc., and Regehr Logging, Inc. (collectively, Intervenor) intervened on behalf of the Forest Service.

The district court denied Lands Council's motion for a temporary restraining order as moot, and also denied its motion for a preliminary injunction. Lands Council appealed, and we reversed the district court's decision in *Lands Council v. McNair*, 494 F.3d 771 (9th Cir. 2007). However, after rehear-

ing the case en banc in *Lands Council v. McNair* (*Lands Council*), 537 F.3d 981 (9th Cir. 2008) (en banc), we unanimously affirmed the district court’s denial of injunctive relief.

Following the issuance of our decision en banc, the parties filed cross-motions for summary judgment in the district court. The district court granted the Forest Service’s motion for summary judgment, and denied Lands Council’s motion for summary judgment. Lands Council filed this appeal.²

STANDARD OF REVIEW

We have jurisdiction under 28 U.S.C. § 1291. We review a grant of summary judgment de novo. *Swanson v. U.S. Forest Serv.*, 87 F.3d 339, 343 (9th Cir. 1996). Section 706 of the Administrative Procedure Act (APA) governs judicial review of agency decisions under the NFMA and NEPA. 5 U.S.C. § 706; *City of Sausalito v. O’Neill*, 386 F.3d 1186, 1205 (9th Cir. 2004) (“Because the statutes . . . do not contain separate provisions for judicial review, our review is governed by the APA.”). An agency’s action must be upheld unless it is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A).

“Review under the arbitrary and capricious standard is narrow and we do not substitute our judgment for that of the agency.” *Lands Council*, 537 F.3d at 987 (internal quotations marks and brackets omitted) (quoting *Earth Island Inst. v. U.S. Forest Serv.*, 442 F.3d 1147, 1156 (9th Cir. 2006), *abrogated on other grounds by Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7 (2008)). A decision is arbitrary and capricious “only if the agency relied on factors Congress did not intend it to consider, entirely failed to consider an important aspect of the problem, or offered an explanation that runs counter to the evidence before the agency or is so implausible that it could not be ascribed to a difference in view or the

²Co-Plaintiff Wild West Institute did not join in this appeal.

product of agency expertise.” *Lands Council*, 537 F.3d at 987 (citations and internal quotation marks omitted). Agency action is valid if the agency “considered the relevant factors and articulated a rational connection between the facts found and the choices made.” *Arrington v. Daniels*, 516 F.3d 1106, 1112 (9th Cir. 2008) (citations and internal quotation marks omitted).

Moreover, we generally must be “at [our] most deferential” when reviewing scientific judgments and technical analyses within the agency’s expertise. *See Balt. Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 103 (1983). We are not to “act as a panel of scientists, instructing the agency, choosing among scientific studies, and ordering the agency to explain every possible scientific uncertainty.” *Lands Council*, 537 F.3d at 988 (internal quotation marks and brackets omitted). And “[w]hen specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive.” *Id.* at 1000 (quoting *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 378 (1989)).

STATUTORY AND REGULATORY FRAMEWORK

A. The National Forest Management Act and Idaho Panhandle National Forest Plan

The Forest Service manages national forests pursuant to the NFMA. *See* 16 U.S.C. § 1604. The NFMA imposes both substantive and procedural requirements. The Forest Service is required to develop guidelines providing “for diversity of plant and animal communities.” 16 U.S.C. § 1604(g)(3)(B). The Forest Service is also procedurally required to develop forest plans for each unit in the national forest system, which must meet the standards imposed by NFMA. 16 U.S.C. § 1604(a), (f). The IPNF Plan is one such plan.

Section 10(b) of the IPNF Plan provides that “[a]pproximately 10 percent of the Forest will be maintained in old growth as needed to provide for viable populations of old-growth dependent and management indicator species.” U.S. Dep’t of Agric., Forest Plan, Idaho Panhandle National Forests, at II-5 (1987).³ Moreover, the IPNF Plan requires the Forest Service to “[m]anage the habitat of species listed in the Regional Sensitive Species List to prevent further declines in populations which could lead to federal listing under the Endangered Species Act.” *Id.* at II-28. The Mission Brush Project is required to comply with the standards and goals of the IPNF Plan. *See* 16 U.S.C. § 1604(g)(1).

B. The National Environmental Policy Act

NEPA imposes a procedural requirement on federal agencies to “‘take[] a “hard look” at the potential environmental consequences of the proposed action.’” *Or. Natural Res. Council v. Bureau of Land Mgmt.*, 470 F.3d 818, 820 (9th Cir. 2006) (quoting *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 993 (9th Cir. 2004)). NEPA’s purpose is twofold: (1) ensure that agencies carefully consider information about significant environmental impacts, and (2) guarantee that relevant information is available to the public. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989); *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1185 (9th Cir. 2008). Federal agencies are required to prepare an environmental impact statement to assess the impact of federal actions “significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(c); *Ctr. for Biological Diversity*, 538 F.3d at 1185. “In contrast to NFMA, NEPA exists to ensure a process, not to mandate particular results.” *Neighbors of Cuddy Mountain v. Alexander*, 303 F.3d 1059, 1063 (9th Cir. 2002) (citations omitted).

³Available at http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsm9_018609.pdf (last visited Nov. 11, 2010).

DISCUSSION

Lands Council makes three claims on appeal in its challenge to the Mission Brush Project. Specifically, it asserts that: (1) the “proxy-on-proxy” methodology utilized by the Forest Service has failed and that, as a result, the IPNF Plan’s 10(b) provision requiring 10% old-growth forest is insufficient; (2) the Forest Service cannot demonstrate that it is in compliance with the IPNF Plan’s 10%-old-growth standard because the databases consulted by the Forest Service are flawed; and (3) the Forest Service has applied flawed habit suitability models. We disagree.

A. Methodology and the IPNF Plan’s 10%-old-growth standard

1. Exhaustion of the challenge to the IPNF Plan’s 10%-old-growth standard

Before addressing Lands Council’s claim on this issue, we first address the Forest Service’s contention that Lands Council failed to exhaust its challenge to the 10%-old-growth standard.

[1] The purpose of the exhaustion doctrine is to permit administrative agencies to utilize their expertise, correct any mistakes, and avoid unnecessary judicial intervention in the process. *Buckingham v. U.S. Dep’t of Agric.*, 603 F.3d 1073, 1080 (9th Cir. 2010). A party forfeits arguments that are not raised during the administrative process. *See Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 763-65 (2004). However, a claimant need not raise an issue using precise legal formulations, as long as enough clarity is provided that the decision maker understands the issue raised. *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 899 (9th Cir. 2002). Accordingly, alerting the agency in general terms will be enough if the agency has been given “a chance to bring its expertise to bear to resolve [the] claim.” *Id.* at 900.

[2] Here, Lands Council raised the study authored by Lesica in its administrative challenge, arguing that the Forest Service did not scientifically justify why 10% old-growth habitat is sufficient to maintain viability for old-growth-dependent species. In addition, before the district court, Lands Council argued that the proxy-on-proxy methodology is unreliable because it fails to provide enough habitat for 40% of a species-maximum population potential. Before us, Lands Council combined these two arguments. While Lands Council's arguments are now more fully developed than they were in prior proceedings, Lands Council clearly put the Forest Service on notice that it challenged the 10%-old-growth standard, claiming that it is insufficient to ensure enough habitat for old-growth-dependent species. We therefore find that Lands Council exhausted below its general argument that the 10%-old-growth standard is insufficient.

2. The Forest Service's reliance on the IPNF Plan's 10%-old-growth standard

The IPNF Plan requires that “[a]pproximately 10 percent of the Forest will be maintained in old growth as needed to provide for viable populations of old-growth dependent and management indicator species.” Lands Council argues, however, that because the Forest Service utilizes the proxy-on-proxy methodology, the minimum old-growth habitat should be 14% of the forest. Lands Council arrives at this figure by asserting that, historically, the old-growth acreage average was at 35% and then multiplies that figure by the 40%-maximum-population-potential figure for indicator species identified in the IPNF Plan. Lands Council also relies on the “Lesica” paper to argue that the 10%-old-growth standard is flawed.

We do not “act as a panel of scientists that instructs the Forest Service how to validate its hypotheses regarding wildlife viability, chooses among scientific studies in determining whether the Forest Service has complied with the underlying Forest Plan, and orders the agency to explain every possible

scientific uncertainty. . . . [T]his is not a proper role for a federal appellate court.” *Lands Council*, 537 F.3d at 988. Rather, we defer to the agency’s technical expertise where the record demonstrates that the agency reasonably relied on data in concluding the Project meets the standards imposed by the NFMA. *See id.* at 993-94.

[3] Here, we conclude that the Forest Service reasonably relied on the 10%-old-growth standard as set forth in the IPNF Plan. First, the IPNF Plan’s goal of maintaining a 40% population potential is an objective, not a requirement, unlike the 10%-minimum-old-growth standard. *Norton v. S. Utah Wilderness Alliance*, 542 U.S. 55, 71-72 (2004). Moreover, many species use a variety of habitats and do not rely exclusively on old-growth forest. For example, the pileated woodpecker thrives in different forest types and the northern goshawk lives in a mix of landscape stages. Thus, simply applying a flat standard of 40% population viability within old-growth forest does not account for the reality that wildlife use a variety of habitats. Furthermore, while the Forest Service is not required to meet the 14% level old-growth standard advocated by Lands Council, we note that the area where the Project is located actually meets a 14% threshold.

[4] Second, we have already rejected Lesica’s study in a similar challenge based on the Kootenai National Forest Plan. *Ecology Ctr. v. Castaneda*, 574 F.3d 652, 659 (9th Cir. 2009). In particular, we determined that “Lesica’s conclusion does not bear directly on the ‘viable population’ standard. The fact that levels of old-growth forest were significantly higher prior to European settlement in no way disproves the conclusion that ten percent is enough to support ‘viable populations.’ ” *Id.* Because the Lesica study did not directly challenge the Forest Service’s conclusion that 10% was sufficient to sustain viable populations of old-growth species, the agency was not required to respond to it. *Id.*

[5] In light of the foregoing, we conclude that the Forest reasonably relied on the 10%-old-growth standard as set forth in the IPNF Plan.

B. The Forest Service's compliance with the IPNF Plan's 10%-old-growth standard

Lands Council contends that the Forest Service cannot demonstrate that it is in compliance with the IPNF Plan's 10% requirement because the FIA and TSMRS databases are unreliable. Lands Council's contention fails.

"When specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive." *Lands Council*, 537 F.3d at 1000 (quoting *Marsh*, 490 U.S. at 378). It is within the Forest Service's discretion to rely on its own data and to discount the alternative evidence proffered by Lands Council. *Id.* As discussed *infra*, the Forest Service reasonably relied on the FIA database and, after updating, the TSMRS database to conclude that more than 10% of the IPNF is old-growth. Moreover, because the Project does not contemplate the removal of old-growth trees, it does not affect the amount of old-growth forest in the IPNF.

1. The Forest Inventory and Analysis Database

[6] The FIA database's design and methodology are scientific, publicly disclosed, and repeatable with stringent quality control standards and procedures. *Lands Council*, 537 F.3d at 999. Based on the FIA database, the Forest Service estimated that in 2004 the percentage of old-growth forest in the IPNF was 12.85% with a 90% degree of certainty. This exceeds the 10%-minimum-old-growth forest requirement under the IPNF Plan. Even though Lands Council disagrees with this conclusion, the Forest Service is entitled to reasonably rely on its own scientific data and analysis. *See id.* at 1000.

Lands Council contends that the FIA database is flawed because it overestimates old-growth habitat due to the fact that actual stands are not examined. Instead, Lands Council argues, the FIA database is based on surveys of sample plots that are one-sixth of an acre in size and, therefore, does not accurately represent the fragmented IPNF or meet the IPNF Plan's minimum 25-acre old-growth size requirement. Lands Council further claims that the FIA's 90% confidence level is undermined because the 2006 Monitoring Report had a 10% reduction in two years in old-growth estimates, and that the Forest Service cannot meet the 10%-minimum-old-growth standard as the 2006 Monitoring Report had a confidence interval range of 9.5% to 14%. According to Lands Council, these alleged flaws mean that the FIA database cannot validate the TSMRS database's old-growth estimates.

Contrary to Lands Council's assertions, the Forest Service reasonably relied on the FIA database as a scientifically valid measure of old-growth forest. First, the IPNF Plan does not require a 25-acre stand in order to count towards the 10% minimum. Section 10(f) of the IPNF Plan states that "one or more old-growth stand per old-growth unit should be 300 acres or larger. . . . The remaining old-growth management stands should be at least 25 acres in size. Preferred size is 80 acres." This Plan objective is to be used as a guide for planning purposes, but does not prohibit counting stands less than 25-acres as old growth. *See, e.g., Ecology Ctr.*, 574 F.3d at 660-61 (concluding plan language was suggestive of how old growth should be managed, but was not mandatory). Additionally, even if only 25-acre or larger stands were counted, there is still enough old growth to meet the requirement for old growth management units.

Further, the Forest Service is not mandated to follow a particular methodology in determining whether or not the Project is in compliance with the 10% required old-growth forest. *See Lands Council*, 537 F.3d at 998, 1000. It is within the Forest

Service's discretion to choose its methodology, as long as it explains why it is reliable. *Id.* at 994.

Here, a 10% reduction from the 2004 to the 2006 Monitoring Report does not undermine the Forest Service's reliance on the FIA's 90% confidence level. The 2006 Report (variance from 9.5% to 14%) was only at slight variance with the 2004 Report (variance from 10.55% to 15.27%). It is reasonable to expect some variance over the years as the forest is dynamic, not static. Moreover, the FIA estimated in 2006 that the old growth was 11.8%, which meets the 10% requirement. Because this calculation is provided with a 90% confidence measure, there is a very small chance that the old growth forest is actually less than 10%, at 9.5%. The measure of confidence serves to suggest the level of accuracy in determining the 11.8% number. Just because the outer possible, though unlikely, range is just under 10% does not mean that it was unreasonable for the Forest Service to rely on the more probable calculation of 11.8% in determining plan compliance.

Moreover, Lands Council did not administratively exhaust, either in its administrative appeal or before the district court, its argument that the FIA database is unreliable because the Forest Service examined only 8.3 acres of old-growth forest. *See Dombeck*, 304 F.3d at 900. Nor does Lands Council provide any scientific or reasoned analysis of why the FIA database is unreliable because only eight acres of old-growth forest have actually been examined.

The Forest Service reasonably concluded that the FIA database is statistically sound and scientifically valid for measuring forests at large and medium scales. Expert opinion supports this conclusion. For example, Dr. Czaplewski, senior research mathematical statistician for the Forest Service Rocky Mountain Research Station concluded that the FIA database "can produce a scientifically defensible estimate of the proportion of forest within a National Forest that meets the Norther Region's definition of old-growth."

[7] The Forest Service's determination that the FIA database is reliable—based on independent, public, and scientifically verifiable information—is entitled to substantial deference. *Lands Council*, 537 F.3d at 993, 999. In light of the foregoing considerations, it was not arbitrary and capricious for the Forest Service to rely on the FIA database in reaching the conclusion that the Project is in compliance with the IPNF Plan requirement of 10% old growth.

2. Timber Stand Management Record System Database

[8] In *Powell*, we held that the TSMRS database was unreliable for estimating old growth in the IPNF. 395 F.3d at 1036. In response, the Forest Service updated the database and issued a supplemental FEIS to address the issues raised in *Powell*. To the extent that the Forest Service ensured that its conclusions were based on updated and reliable evidence, its reasonable reliance on the TSMRS database is entitled to deference. *See Lands Council*, 537 F.3d at 999.

Lands Council argues that the Forest Service's update is insufficient because there is no documentation of field verification on a statistically significant number of stands.⁴ Lands

⁴Lands Council also argues that the 10% standard is not met because the Project area verification found a 22% reduction in code 9 old growth. Lands Council's position is that this reduction in the Project area should be applied forest-wide, which would demonstrate that the IPNF Plan 10(b) standard is not met. However, this argument was not exhausted in either the administrative appeal or before the district court. *See Buckingham*, 603 F.3d at 1080-81. As such, this issue is not properly before us.

Lands Council also does not demonstrate by citation to the record that it exhausted its argument that the Forest Service has failed to provide adequate information related to its review of old-growth forest that began in 2001. The Forest Service disclosed information related to the review, and it is incumbent on Lands Council to bring any alleged deficiencies to the Forest Service's attention at the administrative level so that it can correct them. *See Dombeck*, 304 F.3d at 900.

Council also argues that the database does not provide information about snags or canopy closure and thus does not confirm the quality of the old growth.

Because the TSMRS database was updated and verified by the FIA database, and the Forest Service obtained snag and canopy data in other ways, the Forest Service reasonably relied on the TSMRS database to conclude the Project was in compliance with the 10%-old-growth standard.

First, the Forest Service specifically updated the TSMRS database in response to the *Powell* decision. This included spending \$320,000 for updates, stand reviews, and field verification of old-growth stand information in the Project area. The forest-wide verification was conducted on a sample basis, which was a method approved by *Lands Council*. 537 F.3d at 991-92. Moreover, the Forest Service conducted field verification of the old-growth stands in the Project area.

Having conducted its update with new data, the TSMRS database indicated that 12.1% of the IPNF forested areas are allocated as old growth, with 98.5% of these stands being field verified. Based on these conclusions, the SFEIS determined that the IPNF old-growth requirements were met.

Moreover, the TSMRS is an independent database from the FIA, using different design samples and developed by a different group. Both the FIA and TSMRS found that old-growth inventory was approximately 12%, which is sufficient to meet the IPNF Plan 10(b) standard of 10%. In sum, having updated and field verified the TSMRS database, the Forest Service reasonably relied on conclusions that the quantity of old growth meets the 10% IPNF Plan requirement, particularly when such results are consistent with the independent conclusions under the FIA database.

Second, the fact that the TSMRS database does not calculate snags or canopy closure does not mean that the Forest

Service ignored the quality of the habitat. The TSMRS does not use snags or canopy closure data because these characteristics are not recognized as minimum criteria for determining whether a stand is old growth. The Forest Service relies on widely accepted standards for determining whether a stand is old growth. P. Green, et al., “Old-Growth Forest Types of the Northern Region,” R-1 SES 4/92 U.S. Forest Service, Northern Region (April 1992, errata corrected Feb. 2005). And, of course, the Forest Service is not mandated to follow a particular methodology, as long as it explains why its methodology is reliable. *See Lands Council*, 537 F.3d at 994.

Moreover, the FIA database, which was also used to calculate old-growth inventory for the Project SEIS, provides forest-wide snag data. Canopy cover is stand-specific criteria, based on the habitat needs of particular species. As such, the Forest Service reviewed the canopy cover for this Project when examining the habitat suitability for species.

[9] Accordingly, based on the TSMRS database updates, which were verified by the FIA database, the Forest Service reasonably relied on the TSMRS database to conclude the Project was in compliance with the 10%-old-growth standard. It further accounted for snag data through the FIA database and reviewed habitat needs for particular species, even though such indicators are not characteristics of minimum old-growth forest. Thus, the Forest Service did not arbitrarily and capriciously rely on the TSMRS database in determining that the IPNF meets the 10%-old-growth standard.

3. The Project does not remove old-growth forest

[10] It is also significant that the Project does not allow for the removal of any old-growth trees; only smaller-diameter trees will be removed to facilitate the growth of older trees. Lands Council does not dispute this. We already decided this issue when we held en banc that “because no old growth forest is to be harvested under the Project, . . . it cannot be said

that the Project itself violates the IPNF Plan's requirement to maintain ten percent of the forest acreage as old growth forest." *Lands Council*, 537 F.3d at 1000 (internal quotation marks omitted). Therefore, the record supports the Forest Service's conclusion that the Project is in compliance with the IPNF Plan's 10%-old-growth requirement.

C. Habitat suitability models, based on the proxy-on-proxy methodology, for maintaining old-growth dependent species populations

Lands Council next argues that the Forest Service applied flawed habitat suitability models based on the TSMRS. In particular, Lands Council contends that the Forest Service could not document the presence of a single flammulated owl, an indicator species, during a ten-year period. Moreover, Lands Council alleges, other old-growth-dependent species such as the northern goshawk, fisher, marten, pileated woodpecker, and black-backed woodpecker could also suffer from the Project.

[11] Forest plans must "provide for diversity of plant and animal communities . . . in order to meet overall multiple-use objectives." 16 U.S.C. § 1604(g)(3)(B). The IPNF Plan requires that the Forest Service manage the habitat of regional sensitive species and prevent a decline in their populations that could lead to a federal listing under the Endangered Species Act. The Plan also requires monitoring population trends of management indicator species and evaluating each project alternative for impacts on both indicator species habitat and population.

[12] "[N]either the NFMA and its regulations nor the IPNF Forest Plan specify precisely how the Forest Service must demonstrate that its site-specific plan adequately provide for wildlife viability. . . . Thus, we defer to the Forest Service as to what evidence is, or is not, necessary to support wildlife viability analyses." *Lands Council*, 537 F.3d at 992 (internal

footnote omitted). For example, the Forest Service may use “the amount of suitable habitat for a particular species as a proxy for the viability of that species” (habit-as-proxy approach) and may also use “habitat as a proxy to measure a species’ population, and then to use that species’ population as a proxy for the population of other species” (proxy-on-proxy approach). *Id.* at 996-97 & n.10. Additionally, viability analysis that uses all currently available scientific data is considered sound. *Inland Empire Pub. Lands v. U.S. Forest Serv.*, 88 F.3d 754, 762 (9th Cir. 1996). While the Forest Service may rely on reliable proxies for species’ viability, it “nevertheless must both describe the quantity and quality of habitat that is necessary to sustain the viability of the species in question and explain its methodology for measuring this habitat.” *Lands Council*, 537 F.3d at 987-88.

For this Project, the Forest Service considered the wildlife that could be affected by the proposed activities. The Forest Service assessed both capable and suitable habitat, as well as the quality and quantity of habitat necessary to support each species. In reaching its conclusions, the Forest Service relied on “scientific literature, wildlife databases, professional judgment, recent field surveys, and habitat evaluations.” The Forest Service’s methodology was validated as reliable and accurate through site visits of representative capable habitat, with an emphasis on stands considered “currently suitable.” Indirect and cumulative impacts on the species were investigated and assessed. After this analysis, the Forest Service concluded that the Project would likely not contribute to federal listing under the Endangered Species Act or cause a loss of viability.

Lands Council’s first challenge to the Forest Service’s habitat suitability analysis is that it is based on the TSMRS database. As discussed *supra*, the Forest Service reasonably relied on the TSMRS and FIA database estimates for old-growth habitat. In addition to utilizing the databases, the Forest Ser-

vice also conducted site-specific examinations to confirm the database models.

Lands Council further contends that because the Forest Service has not documented the presence of a single flammulated owl, an indicator species, over the course of ten years, the habitat suitability analysis is flawed.

Recently, we held that the proxy-on-proxy approach was unreliable where the management indicator species (there the sage grouse) had not been seen in the project area for fifteen years, and the Forest Service had not cited any “monitoring difficulties.” *Native Ecosystems Council v. Tidwell*, 599 F.3d 926, 933-35 & n.9 (9th Cir. 2010) (citing *Lands Council*, 537 F.3d at 998). However, *Tidwell* is distinguishable from the circumstances here.

[13] We previously considered flammulated owl detection in the Project area and held that the viability analysis was not unreliable where the species was difficult to detect. *Lands Council*, 537 F.3d at 998 (“[M]onitoring difficulties do not render a habitat-based analysis unreasonable, so long as the analysis uses all the scientific data currently available.”) (internal quotation marks omitted). The Forest Service used available scientific data that flammulated owls prefer open old-growth stands and examined how the project would support a more viable habitat for the owls. The Forest Service further relied on other surveys that detected flammulated owls in post-treatment areas, and determined that fire suppression has been a negative influence on flammulated-owl habitat. Thus, even though there were no owls detected in the area, the proxy-on-proxy method does not fail in this case where the flammulated owls are difficult to detect, and the Forest Service used available scientific data to reach its conclusions. *See Lands Council*, 537 F.3d at 998.

The record indicates that northern goshawks were using suitable habitat in the Project area and other active territories.

The SFEIS evaluated the environmental consequences of the Project on the goshawks. Further, the Forest Service based its conclusions regarding goshawk habitat on published scientific literature.

Similarly, the SFEIS discussed the scientific material and basis for concluding that fishers, while currently rare, should see improved habitat overall with the implementation of the Project, even if there was some degrading of fisher habitat. This conclusion was based on existing scientific literature and an evaluation of the Project's potential impact on the fishers.

The Forest Service also considered available scientific literature and the potential impact of the Project on the pileated woodpecker and black-backed woodpecker. The analysis concluded that the Project would likely result in some effect on the pileated woodpecker (which lives in a variety of forest habitat beyond old growth), but that adjacent locations would provide suitable feeding habitat. With regard to the black-backed woodpecker, the Forest Service considered that while the Project would create a reduction in snags by removing unhealthy trees, a sufficient quantity of snags would remain to meet the guidelines' recommended levels. Thus, the Forest Service concluded that the black-backed woodpecker would remain viable.

CONCLUSION

[14] For the reasons noted *supra*, the district court did not err when it granted the Forest Service's motion for summary judgment and denied Lands Council's motion for summary judgement.

AFFIRMED.