

FOR PUBLICATION
UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

NATIVE ECOSYSTEMS COUNCIL,
Plaintiff-Appellant,

v.

LESLIE WELDON, in her official
capacity as Regional Forester of
Region One of the U.S. Forest
Service; UNITED STATES FOREST
SERVICE, an agency of the U.S.
Department of Agriculture,
Defendants-Appellees.

No. 11-35659

D.C. No.

9:10-cv-00057-

DWM

OPINION

Appeal from the United States District Court
for the District of Montana
Donald W. Molloy, District Judge, Presiding

Argued and Submitted
July 9, 2012—Seattle, Washington

Filed September 21, 2012

Before: Stephen Reinhardt, Andrew J. Kleinfeld and
Milan D. Smith, Jr., Circuit Judges.

Opinion by Judge Milan D. Smith, Jr.

COUNSEL

John Philip Meyer (argued), Cottonwood Environmental Law Center, Bozeman, Montana, for the plaintiffs-appellants.

Mark Steger Smith (argued), Assistant United States Attorney, Michael W. Cotter, United States Attorney, Billings, Montana, for the defendants-appellees.

OPINION

M. SMITH, Circuit Judge:

This case arises out of Native Ecosystems Council's (Native Ecosystems Council) appeal of the district court's grant of summary judgment in favor of the United States Forest Service (Forest Service) in an action regarding the Ettien Ridge Fuels Reduction Project (the Project) in the Lewis and Clark National Forest, located in Montana. The Project was designed to reduce the spread and intensity of potential future wildfires in the Judith Basin County Wildland-Urban Interface by removing naturally occurring wildfire fuels. Native Ecosystems Council alleges that the Forest Service violated the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331 (NEPA), and the National Forest Management Act, 16 U.S.C. §§ 1600-14 (NFMA), when it issued a Finding of No Significant Impact (FONSI) and Decision Notice approving the Project.

We hold that the Forest Service took the requisite “hard look” at the environmental impact of the Project on the elk hiding cover, and goshawk populations, in the manner required by NEPA. *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1075 (9th Cir. 2011) (quoting *Bering Strait Citizens for Responsible Dev. v. U.S. Army Corps of Eng’rs*, 524 F.3d 938, 947 (9th Cir. 2008)). We further hold that the district court did not err in granting summary judgment to the Forest Service on Native Ecosystems Council’s NFMA claims, because the Forest Service reasonably considered the “relevant factors” that could have impacted the elk hiding cover and goshawk populations in its analysis of the Project. *Forest Guardians v. U.S. Forest Serv.*, 329 F.3d 1089, 1097 (9th Cir. 2003). Accordingly, we affirm.

FACTUAL AND PROCEDURAL BACKGROUND

The Project is a small fuels-reduction project that involves understory thinning (cutting and logging) and burning¹. The Project was approved by the Forest Service on September 29, 2009.

The Project was initiated to benefit the Middle Fork Judith Wilderness Study Area (WSA), and to mitigate wildfire danger, particularly to Sapphire Village. The Project benefits the WSA by reducing the danger of stand-replacing crown fires²

¹The Forest Service defines “understory fire” as: “Fire regime in which fires are generally not lethal to the dominant vegetation and do not substantially change the structure of the dominant vegetation. Most of the aboveground dominant vegetation survives fires (75% according to Hann and others 2004, 80% according to Smith (2000). Applies mostly to forest and woodland vegetation types (Smith 2000).” U.S. Forest Service, *Fire Effects Information System Glossary* (2012), available at [http://www.fs.fed.us/database/feis/glossary.html#ULTRAMAFIC SOILS](http://www.fs.fed.us/database/feis/glossary.html#ULTRAMAFIC_SOILS).

²The Forest Service defines “crown fire” as: “Fire that burns in the crowns of trees and shrubs. Usually ignited by a surface fire. Crown fires are common in coniferous forests and chaparral-type shrublands.” U.S. Forest Service, *Fire Effects Information System Glossary* (2012), available

to the Project area. The WSA is particularly important because it provides adjacent cover for elk and other large game animals that may be temporarily displaced during Project implementation.

The Project also benefits Sapphire Village by reducing the risk of fire danger. Sapphire Village was already identified by the Federal Register as a “high risk” wildland-urban interface community, which has historically suffered from crown fires. The Project was designed to restore the Project area to its historical natural stand composition—a more open understory maintained by more frequent, low intensity fires.

The absence of fire for more than 100 years has significantly changed the Project area: Douglas-fir conifers (a high fuel load type of evergreen) have become established in stands of ponderosa pine, and the fire condition of the Project area has changed from condition class 1 (no deviation from natural vegetation) to condition classes 2 and 3 (moderate and high departure from natural vegetation characteristics). The Project treatments are intended to help restore natural maintenance of the Project area.

Following an administrative appeal by Native Ecosystems Council, the Project was reduced in size so that the total area of treatment was decreased from 1,655 acres to 832 acres. Thinning was reduced from 632 acres to 243 acres. All treatment in unroaded lands was eliminated. Temporary roads were decreased by about 70% so that only one half mile of

at [http://www.fs.fed.us/database/feis/glossary.html#ULTRAMAFIC SOILS](http://www.fs.fed.us/database/feis/glossary.html#ULTRAMAFIC_SOILS).

The Forest Service defines “stand replacement fire” as: “Fire that kills or top-kills aboveground parts of the dominant vegetation, changing aboveground structure substantially. The majority . . . of the aboveground, dominant vegetation is either consumed or dies as a result of the fire. Applies to forests, shrublands, and grasslands . . . though not often used to describe grasslands.” *Id.*

temporary road was planned to be constructed, decommissioned and subsequently rehabilitated. The Forest Service estimated that the Project would take six to ten years to complete.

In the district court for the District of Montana, Native Ecosystems Council challenged several aspects of the Project on NEPA and NFMA grounds. Count I of Native Ecosystems Council's complaint alleged that the Forest Service violated NEPA when it failed to give renewed consideration to the Native Ecosystems Council's proposed Alternative C, following the agency's decision to reduce the scope of the Project according to Alternative B. Counts II through V of the complaint related to the effects of the Project on elk habitat and hiding cover. Specifically, Count II alleged that the Project violated NFMA because it allowed for logging in mapped elk winter range during the winter months, in violation of the Lewis and Clark National Forest Plan (Forest Plan). Count III alleged that the Forest Service violated the NFMA by failing to adhere to the Forest Plan when it neglected to analyze big game hiding cover at the drainage level. Count IV alleged a companion NEPA claim stating that the failure to analyze hiding cover at the drainage level meant that the Forest Service relied upon inaccurate or unreliable scientific information. Count V alleged a NFMA claim charging that the Project would cause higher road density than the Forest Plan allows.

Counts VI through VIII dealt with the effects of the Project on goshawk habitat.³ Count VI alleged that the Forest Service violated NFMA because it failed to adhere to the Forest

³The goshawk is a bird of prey that "tend[s] to nest in mature forests . . . building large nests that are used by the original pair or successors for many years . . . A variety of forest types and structural stages are used as foraging habitat, but the important role of mature forests as long-term nesting sites has placed considerable attention on the goshawk." See U.S. Dep't of Agric., *Northern Goshawk Inventory and Monitoring Technical Guide*, available at <http://www.fs.fed.us/wildecology/GoshawkTechGuideJuly06.pdf> (July 2006).

Plan's monitoring requirements for the goshawk population. Count VII alleged both NFMA and NEPA violations on the grounds that the Forest Plan failed to ensure that habitat is available to maintain viable populations of goshawks. It also alleged that the Forest Service's failure to implement a scientifically reliable monitoring protocol also violated NEPA's requirement that the Forest Service act with scientific integrity in the NEPA analysis. Count VIII alleged a NEPA violation on the grounds that the agency arrived at inconsistent conclusions regarding the canopy cover and goshawk foraging habitat that will remain after the completion of the Project.

On June 7, 2011, the district court granted summary judgment in favor of the Forest Service. Specifically, the district court held that Native Ecosystems Council failed to present arguments addressing the claims set forth in Counts I, VII, and VIII of the Complaint, and therefore, that such claims were deemed abandoned.⁴ The district court then granted summary judgment to the Forest Service on the remainder of the claims, on the merits. Native Ecosystems Council timely appealed on August 4, 2011.

JURISDICTION AND STANDARD OF REVIEW

We have jurisdiction pursuant to 28 U.S.C. § 1291.

The Administrative Procedure Act (APA) provides that we “shall . . . hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, and an abuse of discretion, or otherwise not in accordance with law” or “without observance of procedure required by law” 5 U.S.C. § 706(2). In our determination of compliance, we conduct a “searching and careful” inquiry. *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 378 (1989). A decision

⁴Native Ecosystems Council conceded abandonment of these claims and does not raise them again on appeal.

is arbitrary and capricious if the agency “relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision 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 product of agency expertise.” *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Ins. Co.*, 463 U.S. 29, 43 (1983).

DISCUSSION

I. Waiver

As an initial matter, we address the question of waiver:

We will review an issue that has been raised for the first time on appeal under certain narrow circumstances: (1) to prevent miscarriage of justice; (2) when a change in law raises a new issue while an appeal is pending; and (3) when the issue is purely one of law. The decision to consider an issue not raised below is discretionary, and such an issue should not be decided if it would prejudice the other party.

MacDonald v. Grace Church Seattle, 457 F.3d 1079, 1086 (9th Cir. 2006) (internal citations and quotations omitted). “The matter of what questions may be taken up and resolved for the first time on appeal is one left primarily to the discretion of the courts of appeals, to be exercised on the facts of the individual cases.” *Singleton v. Wulff*, 428 U.S. 106, 120-21 (1976)

In light of the interests of justice and our discretion to review issues raised on appeal, we proceed to address each of Native Ecosystems Council’s challenges on the merits.

II. NEPA Claims

[1] NEPA is a procedural statute that requires the federal government to carefully consider the impacts of and alternatives to major environmental decisions. 42 U.S.C. §§ 4321, 4331. Its purpose is to ensure that federal agencies take a “hard look” at the environmental consequences of their proposed actions before deciding to proceed. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350-51 (1989). A court generally must be “at its most deferential” when reviewing scientific judgments and technical analyses within the agency’s expertise under NEPA. *Northern Plains*, 668 F.3d at 1075 (quoting *Balt. Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 103 (1983)). Although NEPA establishes procedures by which agencies must consider the environmental impacts of their actions, it does not dictate the substantive results of agency decision making. *Robertson*, 490 U.S. at 350. Courts may not impose themselves “as a panel of scientists that instructs the [agency] . . . , chooses among scientific studies . . . , and orders the agency to explain every possible scientific uncertainty.” *Lands Council v. McNair*, 537 F.3d 981, 988 (9th Cir. 2008) (*en banc*), *rev’d on other grounds by Winter v. Natural Res. Def. Council, Inc.*, 555 U.S. 7 (2008). 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 (internal citations and quotations omitted).

“At a minimum, an agency must support its conclusions with studies that the agency deems reliable.” *Tri-Valley CAREs v. U.S.D.O.E.*, 671 F.3d 1113, 1124 (9th Cir. 2012) (citing *Lands Council*, 537 F.3d at 994). An agency will have acted arbitrarily and capriciously only when “the record plainly demonstrates that [the agency] made a clear error in judgment in concluding that a project meets the requirements” of NEPA. *Id.* (quoting *Lands Council*, 537 F.3d at 994).

A. Elk Hiding Cover Methodology

Native Ecosystems Council contends that the Forest Service's aerial photo interpretation (PI Type) methodology is invalid and unreliable because the Forest Service can slash and burn an understory without affecting what would be seen on an aerial photo due to canopy cover. Native Ecosystems Council contends that the PI Type methodology fails to consider the possibility that the removal of understory may not be cognizable aerially if a forest has very dense vegetation and thick canopy cover.

Native Ecosystems Council's challenge fails to prove that the Forest Service acted arbitrarily and capriciously in selecting the PI Type methodology to analyze elk hiding cover. The Forest Service based its selection of the PI Type methodology upon a rigorous and scientific 1982 elk logging study involving the use of a life-sized, two dimensional cutout of an elk in various types of forest stands.⁵ The Forest Service noted the characteristics of each stand in the various areas in which hiding cover was measured. The stand characteristics were then classified into different PI Types. Based upon those descriptions, a "Montana Rule" was developed to calculate an average percentage hiding cover by type. For any given area, the percentage of effective cover was then determined by multiplying the acres of each PI Type by the Montana Rule percentages, totaling the acres providing hiding cover, and then dividing by total acres. The "Montana Rule" percentages were tested for accuracy in the elk logging study of 1982; in that comparison of over 22 sites, the Montana Rule estimated

⁵The Rocky Mountain Research Station of the U.S. Forest Service (which includes the Lewis and Clark National Forest) defines "stand" as: "a biotic community, particularly of trees, possessing sufficient uniformity of composition, age, and spatial arrangement to be distinguishable from adjacent communities. Stand structure refers to the composition, age, and arrangement of the trees in a delimited biotic community." Rocky Mountain Research Station, *Glossary*, http://www.rmrs.nau.edu/publications/rm_gtr_295/glossary.html (last visited August 16, 2012).

hiding cover at 46.7% (+/- 2.4%) and actual observation determined 46.2% hiding cover. Based upon those findings, the Forest Service determined that PI Type analysis, as applied using the Montana Rule, is reliable. Moreover, and in addition to the classic PI Type/Montana Rule analysis, in order to specifically address concerns that aerial photos would not reflect the effects of thinning on lower understory due to canopy cover, the Forest Service created new criteria for determining whether the understory treatments would change the PI types. These new criteria provided that PI Type would also be changed by the existence of “cutover,” which was characterized as “areas with obvious evidence of man’s recent cutting activities, such as cutting unit boundaries, characteristic roading systems, etc.”

[2] Native Ecosystems Council fails to present any compelling evidence that the Forest Service’s reliance on the elk logging study was arbitrary or capricious. To the contrary, Native Ecosystems Council fails to assert any distinguishing facts between the 1982 elk logging study and the instant case that would render the PI Type methodology inapposite. Native Ecosystems Council presented no evidence that understory removal had not occurred prior to 1982 in any of the 11 sample areas analyzed in the elk logging study. Moreover, Native Ecosystems Council has not proffered any evidence that the PI Type methodology is predicated on only assessing stands in which no understory treatment has occurred. In contrast, the Forest Service has demonstrated that the PI Type methodology accounts for stocking levels and understory density because the PI Type/Montana Rule calculation is determined by the number of trees in a given area. Thus, regardless of whether the understory was previously treated, the Forest Service was not arbitrary or capricious in selecting the PI Type methodology because it reasonably relied upon the 1982 elk logging study and the Montana Rule to conclude that the methodology adequately gauged stand density.

[3] The mere fact that Native Ecosystems Council disagrees with the methodology does not constitute a NEPA vio-

lation. In reviewing Native Ecosystems Council's NEPA appeal, we may not insert our opinions in the place of those of forest biologists. *Lands Council*, 537 F.3d at 988. Rather, we are required to apply the highest level of deference in our review of the Forest Service's scientific judgments in selecting the elk hiding cover methodology. *Northern Plains*, 668 F.3d at 1075. Given the paucity of Native Ecosystems Council's factual distinctions, and the substantial deference owed to the Forest Service's determinations, we hold that the Forest Service's selection of the PI Type methodology did not violate NEPA. *Lands Council*, 537 F.3d at 987-88.

B. Flawed Conclusions in Elk Hiding Cover Analysis

An agency decision is arbitrary and capricious if, among other things, it "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 product of agency expertise." *Lands Council*, 537 F.3d at 987 (internal citation and quotation marks omitted). Under NEPA, the purpose of an Environmental Assessment (EA) is simply to create a workable public document that briefly provides evidence and analysis for an agency's finding regarding an environmental impact." *Tri-Valley CAREs*, 671 F.3d at 1129. We do not require the agency "to compile an exhaustive examination of each and every tangential event that potentially could impact the local environment. Such a task is impossible, and never-ending. The purpose of the EA is simply to create a workable public document that briefly provides evidence and analysis for an agency's finding regarding an environmental impact." *Id.* The EA must only "provide the public with sufficient environmental information, considered in the totality of the circumstances, to permit members of the public to weigh in with their views and thus inform the agency decision-making process." *Bering Strait Citizens*, 524 F.3d at 953. We thus defer to agency decisions so long as those conclusions are supported by studies "*that the agency deems reliable.*" *N. Plains Res. Council*, 66 F.3d at 1075 (emphasis added).

Native Ecosystems Council contends that the Forest Service's elk cover hiding analysis violated NEPA because it was contradicted by the record based upon the following three arguments: (1) the agency's logging conclusion that the Project would not thin stands below 40% density ("moderately stocked") was contradicted by a 2007 Forest Service silvicultural report, which stated that the Project would thin stands from being "moderately stocked" to being "poorly stocked"; (2) the agency's conclusion that the Project would not change the PI Types of stands treated by prescribed burning was contradicted by the fact that burning would *per se* alter the height, texture, and stocking of a stand; and (3) the agency's conclusion that slashing will not produce cutover was contradicted by the fact that slashing will produce tree stumps. We address each of Native Ecosystems Council's arguments in turn.

1. Logging and Thinning

Native Ecosystems Council challenges the Forest Service's commercial logging findings based on a 2007 silvicultural report on the impacts of the Project that indicated that the project goal of reducing the risk of crown fire would be met by reducing canopy cover to less than 40 percent. Because the threshold between a "moderately stocked" stand and a "poorly stocked" stand is 40 percent, and a change from "moderately stocked" to "poorly stocked" would result in a change in PI Type, Native Ecosystems contends that the Forest Service's conclusion that the logging and thinning aspects of the Project would not change PI Type is contradicted by the record.

[4] We disagree. The Forest Service based its analysis of the impacts of logging and thinning on a 2009 revision of the original 2007 silvicultural report upon which Native Ecosystems Council relies. The 2007 silvicultural report was thus superseded by the final 2009 version, which corrected previous errors⁶ and reflected more accurate data about the Proj-

⁶The 2007 report had originally indicated that no trees greater than 15" in diameter would be cut. This was in error. In fact, the final limitation on

ect's impacts on canopy cover. In the final 2009 silvicultural report, which was subsequently incorporated into the third chapter of the EA, entitled "Affected Environment and Environmental Consequences," the Forest Service specifically considered the direct and indirect consequences of past, present and reasonably foreseeable future project related activities based upon two different alternatives: (1) no agency action and (2) proposed action by the Project. In that chapter alone, the Forest Service cited over thirty different studies upon which it based its findings. Based upon those studies and its own revised analysis in 2009, the Forest Service thus reasonably concluded that the Project goals could be accomplished by reducing canopy cover to 40 percent (or lower), and therefore it was not necessary to thin stands below the "moderately stocked" category.

Moreover, a separate February 2010 report supplementing the elk hiding cover analysis confirmed the findings of the final 2009 silvicultural report included in the EA. There, the Forest Service concluded that the project would not change "Effective Hiding Cover" for elk from the existing condition ("moderately stocked") and that broadcast burning, as well as cutting and slashing, would not alter the PI type.

[5] Under *Lands Council*, the 2007 silvicultural report does not prove that the Forest Service's conclusion was "implausible" because it was superseded by more accurate predictions. 537 F.3d at 987. Nor does the 2007 report demonstrate that the Forest Service's reliance on the 2009 revisions or 2010 biologist report was contradicted by facts in the record because the Forest Service reasonably determined the 2009 and 2010 reports were based upon corrected and more recent data and various different studies. *Id.* Accordingly, because

trees subject to the thinning aspects in the final 2009 report was actually *more* restrictive: prohibiting cutting of any trees greater than 14" in diameter.

the Forest Service supported its findings with multiple different studies and analyses, we defer to the Forest Service's conclusion that the slashing and thinning activities would not alter the PI of the Project area. *Id.*

2. Prescribed Burning

Native Ecosystems Council contends that the prescribed burning of the Project area *per se* changes the character of the treated stand by altering its height and texture, thus changing the stand's PI Type. Besides the outdated 2007 silvicultural report, Native Ecosystems Council cites minimal evidence, if any, to support its position. It contends, based on the report, that: "Removing trees indisputably alters their height. Reducing stand density has the potential to alter the texture and stocking of the stand." However, Native Ecosystems Council fails to appreciate that the Project actually serves to *preserve* the distinguishing features of the PI Types of the burned stands by removing the invasive fauna that has caused the increased fire risk.

[6] Specifically, Native Ecosystems Council ignores the fact that the prescribed burns will occur only "within and adjacent to meadows," which are assigned at PI Type of 93 ("nonforest," defined as having generally 10 percent cover from shrubs, grass, riparian trees, etc.) Such meadows and adjacent areas in the Project area were actually threatened by the invasive conifers and shrubs causing the fire danger. Thus, the Forest Service demonstrated that the prescribed burning would restore the status quo by limiting the shrubs and conifers presently invading the meadows. Accordingly, we hold that the Forest Service's conclusion that the prescribed burning "preserves the meadow and does not change its PI Type," is supported, rather than contradicted by the evidence in the record, and therefore does not violate NEPA. *Lands Council*, 537 F.3d at 987.

3. Cutting and Slashing

[7] Native Ecosystems Council contends that hand slashing will produce stumps, and that stumps are “evidence of man’s recent cutting activities,” thus rendering Project areas “cutover,” and changing their PI type. However, the very document upon which Native Ecosystems Council relies defines “cutover” as “areas with obvious evidence of man’s cutting activities, such as cutting unit boundaries, characteristic roading systems, etc.” The mere fact that some stumps may exist does not rise to the level of rendering a stand “cutover”—that is why the report emphasizes “cutting unit boundaries,” because the cutting has to be significant and widespread. We hold that the Forest Service is entitled to substantial deference in this interpretation of its own regulations. *Forest Guardians*, 329 F.3d at 1097. Moreover, Native Ecosystems Council has presented no evidence that some stumps would constitute true “cutover.” Indeed, the record indicates that larger trees would be retained and “the spatial arrangement (horizontal structure) would be irregular and random to feature groups of larger diameter trees of similar age.” And contrary to Native Ecosystems Council’s contentions, the temporary road to be constructed during the project would not constitute a “roading system” because it would be decommissioned and rehabilitated after the Project is completed.

[8] Given these considerations, the Forest Service does not rely upon facts that are contradicted by the record; rather, Native Ecosystems Council attempts to distort the meaning of “evidence of man’s recent cutting activities” by ignoring the technical definitions of cutover in the EA. Such logic fails to prove a NEPA violation. *Lands Council*, 537 F.3d at 987. Accordingly, we hold that the Forest Service did not violate NEPA in concluding that the slashing would not render the Project area cutover.

III. NFMA Claims

[9] The NFMA and its implementing regulations provide for forest planning and management by the Forest Service on

two levels: (1) forest level and (2) individual project level. *See generally* 16 U.S.C. § 1604; *see also Ohio Forestry Ass'n v. Sierra Club*, 523 U.S. 726, 729-30 (1998). On the forest level, the Forest Service develops a Land and Resource Management Plan (forest plan), which consists of broad, long-term plans and objectives for the entire forest. Forest plans are designed to manage forest resources by balancing the consideration of environmental and economic factors. *Citizens for Better Forestry v. U.S. Dep't of Agric.*, 341 F.3d 961, 966 (9th Cir. 2003). The NFMA's purpose is to require that the Forest Service "provide for diversity of plant and animal communities" in managing national forests. 16 U.S.C. § 1604(g)(3)(B).

After a forest plan is approved, the Forest Service implements the forest plan when approving or denying site-specific projects. *Forest Guardians*, 329 F.3d at 1092. Site specific actions may include resource plans, permits, contracts, and other instruments for occupancy or use of forest lands. *Inland Empire Pub. Lands Council v. U.S. Forest Serv.*, 88 F.3d 754, 757 (9th Cir. 1996). While NFMA requires that the proposed site-specific actions be consistent with the governing Forest Plan, the Forest Service's interpretation and implementation of its own forest plan is entitled to substantial deference. *Forest Guardians*, 329 F.3d at 1097. The Forest Service's failure to comply with the provisions of a Forest Plan is a violation of the NFMA. *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 961 (9th Cir. 2005). Agency decisions challenged under the NFMA may be set aside only if they are arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law. *Forest Guardians*, 329 F.3d at 1096-97; 5 U.S.C. § 706(2)(A). In determining whether a decision is arbitrary or capricious, we "must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment." *Morongo Band of Mission Indians v. Fed. Aviation Admin.*, 161 F.3d 569, 573 (9th Cir. 1998) (internal quotation marks and citation omitted).

A. Flawed Assumptions in Elk Hiding Cover Analysis

Native Ecosystems Council contends that the Forest Service's elk cover hiding analysis violates NFMA because it would reduce elk hiding cover beyond a "threshold level," as required under the Forest Plan. Specifically, Native Ecosystems Council contends that because the Project would change the PI Type of treated stands, it would therefore reduce elk hiding cover in violation of the Forest Plan's requirement that elk hiding cover be "maintained." Native Ecosystems Council relies upon the same three "flawed assumptions" challenged under NEPA in their NFMA claims regarding logging and thinning, prescribed burning and cutting and slashing. As was the case under NEPA, each of Native Ecosystems Council's challenges under NFMA also fails.

1. Logging and Thinning

[10] Native Ecosystems Council's first challenge regarding the Forest Service's assumptions about commercial logging fails because, as we held under its NEPA challenge, the 2007 silvicultural report was corrected, updated and revised in the final 2009 silvicultural report incorporated into the EA. The final version of the report made clear that the Project would not change effective hiding cover and that the burning, cutting and slashing would not change the PI Type. Thus, for the reasons discussed in our rejection of Native Ecosystems Council's NEPA challenge, and because of the inherent "substantial deference" owed to agency in interpreting its own plans, we hold that the 2009 report and confirming 2010 report support a finding that the Forest Service did not violate its own plan. *Forest Guardians*, 329 F.3d at 1097, 1099.

2. Prescribed Burning

[11] Native Ecosystems Council next contends that prescribed burning will change PI type, in violation of the Forest

Plan, because it will alter the height and texture of forest vegetation. In so doing, however, Native Ecosystems Council fails to overcome the fact that burning will, in fact, retain the defining characteristics of “nonforest” PI Type of 93. Based upon this logic, we hold that the Forest Service was neither arbitrary nor capricious in concluding that removing the encroaching conifers, seedlings and saplings “preserves the meadow and does not change its PI Type.” As was the case in our review of Native Ecosystems Council’s first NFMA challenge, we hold that the Forest Service did not violate the NFMA in its analysis of the impact of prescribed burning on PI Type. *Forest Guardians*, 329 F.3d at 1097.

3. Cutting and Slashing

[12] Finally, Native Ecosystems Council contends that cutting and slashing treatments that may produce stumps render an area “cutover,” thus altering its PI Type in violation of the Forest Plan. As we rejected this argument in Native Ecosystems Council’s NEPA challenge, we also do so here. Accordingly, we hold that the Forest Service complied with NFMA and its Forest Plan. *Forest Guardians*, 329 F.3d at 1097.

B. Goshawk Population

Under the NFMA, Native Ecosystems Council must show a “specific connection” between the challenged site-specific action and the alleged violation. *Ecology Ctr. v. Castaneda*, 574 F.3d 652, 658 (9th Cir. 2009). Although the threshold for establishing a site-specific connection is not a high bar, we may only consider “challenges to the lawfulness of a forest plan . . . to the extent that the contested portion of the plan ‘plays a causal role with respect to the [Project].’ ” *Hapner v. Tidwell*, 621 F.3d 1239, 1250 (9th Cir. 2010).

Under the Forest Plan, the goshawk is a Management Indicator Species (MIS) under the “Old Growth Forest” category. The Forest Plan standard for MIS provides:

Monitor population levels of all Management Indicator Species on the Forest and determine the relationship to habitat trends. Population levels will be monitored and evaluated as described in the monitoring plan (Chapter V).

Chapter V monitoring item C-8 requires annual measurement of “active nesting territories.” If there is a decrease of more than 10% in active nesting territories, the Forest Service is required to conduct “further evaluation” to determine why. Native Ecosystems Council contends the Forest Service violated the NFMA by failing to satisfy the Forest Plan’s standards regarding the goshawk population on two grounds: (1) by failing to monitor 100% of the goshawk population in the annual monitoring reports; and (2) by failing to conduct further studies on the goshawk nesting rates following population decreases in excess of 10%. We address each of Native Ecosystems Council’s arguments in turn.

1. Annual Monitoring Requirement

[13] Native Ecosystems Council may not challenge the Forest Service’s compliance with the NFMA on the grounds that the agency does not comply with its C-8 monitoring requirements because there is not a sufficient site-specific challenge. The Forest Service does not dispute that it, at some points, failed to monitor all populations (in 2007 and 2008 the agency left out Indian Point Territory in their monitoring report on the grounds that it was located in a remote location in the Bob Marshall Wilderness, thus only monitoring 98% of populations; in 2009 the agency also neglected to monitor the Indian Point, Lower Blacktail and Badger Junction territories, thus monitoring only 94% of goshawk nesting territories). However, the unmonitored territories are not in the vicinity of the Project area, and the only nesting territory in the Project area has always been monitored as required by the Forest Plan. Accordingly, Native Ecosystems Council failed to prove

a site-specific challenge based upon the annual monitoring report claims. *Ecology Ctr.*, 574 F.3d at 658.

2. “Further Evaluation” Requirement

[14] In contrast, Native Ecosystems Council’s second NFMA challenge to the “further evaluation” requirements for 10 percent or greater declines in goshawk nesting populations demonstrates a sufficient, albeit tenuous, site-specific connection. We find a sufficient site specific connection here because stand treatment has been shown to affect goshawk nesting territories, and the Project requires significant stand treatment in known goshawk nesting territories. *See, e.g., Neighbors of Cuddy Mountain v. Alexander*, 303 F.3d 1059, 1067-68 (9th Cir. 2002). Thus, whereas the violations with regard to the annual monitoring reports never fell within the ambit of the Project area, there is a sufficient nexus between the alleged violations for monitoring declining goshawk populations and the prospective Project stand treatments.

[15] In their challenge to the Forest Service’s compliance with its “further evaluation” requirement, Native Ecosystems Council contends that there was an 11 percent decrease in goshawk occupancy in 2007 and a 25 percent decrease in goshawk occupancy between 2007 and 2008, but that the Forest Service never completed the “further evaluation” required under the Forest Plan. Specifically, Native Ecosystems Council contends that the Forest Service failed to determine how vegetation management activities were affecting the goshawk population or habitat in 2007 and 2008. We disagree. In the 2007 report, the Forest Service concluded:

Many factors contribute to variability. Annual variations in weather and climate occur . . . Predation of nests, fledglings, and adults can also affect nesting success. These factors and others yet to be identified all affect the annual change in percentage of active nest areas. As outlined in our 2006 monitoring

report, the direction to conduct further evaluation when a 10% decrease is identified and does not address any of the potential reasons for variability.

The 2007 evaluation specifically attributed the variability to such natural conditions as “[c]old and wet weather while the eggs are being incubated and [while] nestlings are young” and the fact that “[w]eather also affects . . . the . . . availability of prey.” Following the 2008 decline, the Forest Service applied a similar analysis. Specifically, the Forest Service concluded that “[t]he reduction was likely due to unusually cold, wet, harsh weather during the 2008 nesting period. Wet, heavy snow and cold, wind-driven rain occurred frequently throughout the spring season and into early summer and probably resulted in an unusually high failure rate.” Given the Forest Service’s weather-based explanation for the goshawk nesting population declines, we conclude that the Forest Service reasonably conducted the requisite “further evaluation” required under the Forest Plan.

[16] Native Ecosystems Council’s reliance on various scholarly papers emphasizing the importance of monitoring prey habitat for the welfare of goshawk populations fails to prove that the Forest Service violated its own Plan when it attributed the 2007 and 2008 declines to natural variability and weather. Under the NFMA, the Forest Service’s interpretation and implementation of its own Forest Plan is entitled to substantial deference. *Forest Guardians*, 329 F.3d at 1097. We reject Native Ecosystems Council’s argument that the Forest Service violated the NFMA simply because the Forest Service failed to arrive at the same conclusion regarding the causes and need for further investigation of goshawk nesting failure rates. All that is necessary is that the Forest Service reasonably consider the “relevant factors” involved in the goshawk population decreases in 2007 and 2008. *Id.* We find that it did. Accordingly, the Forest Service complied with the NFMA in its evaluation of goshawk population decreases, as required under the Forest Plan.

CONCLUSION

For the foregoing reasons, we AFFIRM the decision of the district court.