FILED
United States Court of Appeals
Tenth Circuit

April 15, 2019

Elisabeth A. Shumaker
Clerk of Court

PUBLISH

UNITED STATES COURT OF APPEALS

FOR THE TENTH CIRCUIT

WILDEARTH GUARDIANS,

Plaintiff - Appellant,

v.

TAMARA CONNER, in her official capacity as District Ranger, Leadville Ranger District, San Isabel National Forest, United States Forest Service; UNITED STATES FOREST SERVICE, a federal agency of the United States Department of Agriculture,

Defendants - Appellees.

No. 17-1334

Appeal from the United States District Court
for the District of Colorado
(D.C. No. 1:15-CV-00858-CMA)

John R. Mellgren, (Peter M.K. Frost, with him on the briefs), Western Environmental Law Center, Eugene, Oregon, for Plaintiff-Appellant.

Sommer H. Engels (Jeffrey H. Wood, Acting Assistant Attorney General, Eric Grant, Deputy Assistant Attorney General, Andrew C. Mergen, Allen M. Brabender, and Barclay T. Samford, Attorneys, United States Department of Justice, Environment & Natural Resources Division, Washington, D.C., and Tyler Clarkson, Deputy General Counsel, and Kenneth Capps, Office of General Counsel, United States Department of Agriculture, with her on the brief), United States Department of Justice, Environment & Natural Resources Division, Washington, D.C for Defendants-Appellees.

Before **HARTZ**, **SEYMOUR**, and **EID**, Circuit Judges.

HARTZ, Circuit Judge.

The dispute before us concerns the Tennessee Creek Project (the Project), an effort of the United States Forest Service (the Service) in the San Isabel and White River National Forests to protect the forest from insects, disease, and fire; improve wildlife habitat; and maintain watershed conditions. In 2014 the Service published an environmental assessment (EA) of the Project, followed by a Decision Notice (DN) and Finding of No Significant Impact (FONSI). One of the EA's many conclusions was that the Project was unlikely to adversely affect Canada lynx, and the DN/FONSI declared that the Project would not significantly impact the human environment.

WildEarth Guardians sought review in the United States District Court for the District of Colorado, arguing that the Service had violated the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 et seq., by failing in its EA to adequately assess the Project's effects on lynx and by failing to prepare an environmental impact statement (EIS). The district court upheld the agency action. Exercising jurisdiction under 28 U.S.C. § 1291, we affirm. The Service satisfied its NEPA obligations when it reasonably concluded in its EA that under a worst-case scenario the lynx would not be adversely affected by the Project and reasonably concluded that an EIS was not necessary.

I. BACKGROUND

A. NEPA framework

We have called NEPA the "centerpiece of environmental regulation in the United States." *New Mexico ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 703

(10th Cir. 2009). The statute's "twin aims" are to ensure that agencies consider the environmental effects of their actions and inform the public of having done so. *Baltimore Gas & Elec. Co. v. Nat. Res. Def. Council*, 462 U.S. 87, 97 (1983). It does not compel "agencies to elevate environmental concerns over other appropriate considerations." *Id*. Instead, NEPA's mandate is that agencies "pause before committing resources to a project and consider the likely environmental impacts of the preferred course of action as well as reasonable alternatives." *Richardson*, 565 F.3d at 703; *see also Marsh v. Oregon Nat. Res.'s Council*, 490 U.S. 360, 371 (1989). It "merely prohibits uninformed—rather than unwise—agency action." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 351 (1989).

If an agency is considering an action that might affect the environment, it must follow a process prescribed by NEPA and its implementing regulations. *See* 42 U.S.C. § 4321 et seq.; 40 C.F.R. § 1500 et seq. First, "the agency must determine whether the proposed action will *significantly* affect the environment." *Western Watersheds Project v. Bureau of Land Mgmt.*, 721 F.3d 1264, 1269 (10th Cir. 2013) (emphasis added). Unless the answer is "immediately apparent," the agency must prepare an EA, which is "a concise public document that briefly provides sufficient evidence and analysis for determining the appropriate next step." *Western Watersheds Project*, 721 F.3d at 1269 (internal quotation marks omitted); *see* 40 C.F.R. § 1508.9. "If the EA concludes that the proposed action will have no significant effect on the environment, the agency may issue a [FONSI] and move forward with the proposed action." *Western Watersheds Project*, 721 F.3d at 1269; *see* 40 C.F.R. §§ 1501.4(e), 1508.13. Otherwise, the agency must

prepare an EIS—a more extensive analysis assessing all the predicted impacts on the environment and comparing the proposed action to all reasonable alternatives. *See Richardson*, 565 F.3d at 703–04; 40 C.F.R. § 1502.14.

Because NEPA provides no private cause of action, *see Utah Envtl. Congress v. Russell*, 518 F.3d 817, 823 (10th Cir. 2008), challenges to an EA or FONSI must be brought under the Administrative Procedure Act (APA), which instructs us to review whether an agency's action was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law," 5 U.S.C. § 706(2)(A). *See Russell*, 518 F.3d at 823; *Utah Shared Access All. v. United States Forest Serv.*, 288 F.3d 1205, 1213 (10th Cir. 2002).

B. Factual Background

1. The Canada lynx

The Canada lynx is native to the snowy, high-altitude coniferous forests of Colorado's Southern Rockies. These mountains provide the conditions necessary for lynx habitat: elevated forests dominated by spruce-fir, lodgepole pine, and aspen-conifer mix, and populated by snowshoe hare for lynx to prey on. The U.S. Fish and Wildlife Service (FWS) designated the lynx as a threatened species in 2000. *See* 65 Fed. Reg. 16052 (March 24, 2000). A year earlier the Colorado Division of Wildlife began releasing lynx into the wild to augment the very small population. By 2007, it had released 218 lynx.

From 1998 to 2000, biologists from the Service, Bureau of Land Management, National Park Service, and the FWS jointly compiled information on lynx in the

contiguous United States, culminating in the 2000 publication of the *Canada Lynx Conservation Assessment and Strategy* (LCAS). The LCAS instructed agencies to map Lynx Analysis Units (LAUs), which are geographic areas approximating the size of the home range of a female lynx to be used "to begin the analysis of potential direct and indirect effects of projects or activities on individual lynx, and to monitor habitat changes." Bill Ruediger et al., USDA Forest Service, USDI Fish and Wildlife Service, USDI Bureau of Land Management, and USDI National Park Service, *Canada Lynx Conservation Assessment and Strategy*, 6-2 (2d ed. 2000). It also recommended various conservation measures to protect lynx habitat on federal lands. For example, if an agency intended to take management action within an LAU, the LCAS instructed it to map lynx denning and foraging habitat and to ensure that at least 10% of the lynx habitat in the LAU would remain denning habitat. *See* LCAS at 7-4. And because the lynx population in the Southern Rockies is limited by the availability of snowshoe hare (the primary prey for lynx), the LCAS also recommended various measures to maintain the horizontal cover (e.g., shrubs, understory trees, and low limbs) necessary for snowshoe-hare habitat. *See* LCAS at pp. 7-4–7-6. A month after the LCAS was published, regional managers of the Service and the FWS in the Southern Rockies signed the Lynx Conservation Agreement, committing themselves to consider the LCAS's recommendations before undertaking new actions in lynx habitat. The agreement was revised and extended in 2005, and amended in 2006.

In 2008 the Service adopted the Southern Rockies Lynx Amendment (SRLA). This document superseded the Lynx Conservation Agreement, and it amended the Land

and Resource Management Plans of eight National Forests in the Southern Rockies. Its purpose was to strike "a reasonable balance in providing for the conservation of lynx habitat while also allowing appropriate levels of human uses to occur." Aplt. App. at 227. The SRLA imposes seven standards on agencies, such as a standard stating that "[t]imber management projects shall not regenerate[1] more than 15 percent of lynx habitat on [National Forest System] lands within an LAU in a ten-year period." Aplee. App. at GA7 (footnotes omitted). The SRLA also includes nonmandatory guidelines that recommend "actions that will normally be taken to meet [SRLA] objectives." Aplt. App. at 227.

The standards and guidelines of the SRLA were adopted only after completion of an EIS. The draft EIS for the SRLA (issued in 2004) and the supplemental draft EIS (issued in 2006) received nearly 300 comments. The final EIS explored five different alternatives, at least one of which—Alternative B—would have included greater protection for lynx denning habitat than Alternative F, which the Forest Service ultimately adopted. For one thing, Alternative B would have included a standard similar to the one in the LCAS that 10% of lynx habitat in each LAU must be maintained as denning habitat. The Service explained in its EIS that such a standard was probably unnecessary because most LAUs already have between 20% and 40% denning habitat, in which case the availability of denning habitat would not be a limiting factor for lynx.

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[1] The SRLA defines *regeneration harvesting* as "[t]he cutting of trees and creating an entire new age class; an even-age harvest. The major methods are clearcutting, seed tree, shelterwood, and group selective cuts." Aplt. App. at 237.

Indeed, research after the study that led to the 10% standard in the LCAS concluded that lynx use "a greater variety of habitat for denning" than previously thought. Aplt. App. at 232. The research showed that lynx den sites "are found in both mature and younger forests that have a large amount of cover and downed, large woody debris. . . . [L]ynx have used all kinds of deadfall for den sites, so it is likely almost any forest does supply denning habitat. . . . The research does not indicate a certain minimum amount of denning habitat is required for lynx." Aplee. Fed. R. App. P. 28(j) Letter of 11/17/2018, attachment at T01678.

Yet the SRLA still protected denning habitat. Guideline VEG G11 states that "[i]f denning habitat appears to be lacking in the LAU, then projects should be designed to retain some coarse woody debris, piles, or residual trees to provide denning habitat in the future." Aplee. App. at GA9 (footnotes omitted). The SRLA also advises agencies to protect certain types of vegetation that are beneficial to lynx and their prey, and to ensure that lynx denning habitat is near snowshoe-hare winter habitat:

> Guideline VEG G1: Vegetation management projects should be planned to recruit a high density of conifers, hardwoods, and shrubs where such habitat is scarce or not available. Priority for treatment should be given to stem-exclusion, closed-canopy structural stage stands to enhance habitat conditions for lynx or their prey (e.g. mesic, monotypic lodgepole stands). Winter snowshoe hare habitat should be near denning habitat.

Aplee. App. at GA9 (footnotes omitted).

The SRLA's standards and guidelines also aim to protect the winter habitat of snowshoe hare, which are the primary source of food for lynx. The SRLA describes snowshoe-hare winter habitat as "places where young trees or shrubs grow densely—

thousands of woody stems per acre—and tall enough to protrude above the snow during winter, so snowshoe hare can browse on the bark and small twigs." Aplt. App. at 239. Several studies have identified spruce-fir stands as providing the highest snowshoe-hare densities of forest types in the region, but snowshoe hare can also populate aspen and lodgepole-pine stands, so long as the stands provide enough *horizontal cover*, which the SRLA defines as "visual obscurity provided by vegetation that extends to the ground or snow surface." Aplt. App. at 655.

Further, the SRLA Implementation Guide provides clarification and guidance on how agencies should remap LAUs. An LAU should approximate the size of the home range of a female lynx in the Southern Rockies (one study reported that this averaged about 18,500 acres). It also must contain at least 6,400 acres of "primary vegetation," Aplee. App. at GA45, which typically consists of spruce-fir, Douglas-fir, aspen-mix, and seral lodgepole-pine stands—forest types that can support lynx denning, rearing, and foraging. *See* Aplee. App. at GA43–45.

2. The Tennessee Creek Project

a. Scope

The Project is a response to a mountain-pine-beetle epidemic that impacted forest stands on the White River and San Isabel National Forests, and an associated threat to headwaters that serve communities along Colorado's Front Range. It will be implemented over 10 to 15 years "to create forest conditions that are more resilient to outbreaks of insects, disease and wildfire; to improve habitat for threatened, endangered and sensitive species and other important wildlife species; and to provide for sustainable

watershed conditions." Aplt. App. at 506. Planned action involves a mix of clearcutting, thinning, and prescribed burns.

The dominant forest type in the 16,450-acre Project area is lodgepole pine (11,096 acres), although there are also significant spruce-fir stands (2,177 acres) and aspen stands (564 acres). The lodgepole pines are currently vulnerable to beetle infestations and the spread of dwarf mistletoe. In 2014, 40% of the lodgepole-pine stands were already infected by dwarf mistletoe. The spruce-fir and aspen stands currently have a low incidence of insects and disease, but they will become more susceptible as they age.

b. Lynx habitat in the project area

Each of the three main forest types in the Project area—lodgepole-pine, spruce-fir, and aspen—can provide lynx habitat (although lodgepole-pine stands are not considered habitat once they develop into mature monocultures). About 9,480 acres of the Project area are mapped lynx habitat falling within one of two LAUs—the Tennessee Pass LAU and the Massive LAU. Most of the Project area also falls within the 67,500-acre Tennessee Pass Linkage Area, an area connecting blocks of lynx habitat. During a 2013 two-month research project, three lynx were trapped and released within the spruce-fir and lodgepole forests of the LAUs that overlap with the Project area.

The Project will include conservation measures to protect this lynx habitat and to follow the standards and guidelines of the SRLA:

- The Service will not treat spruce-fir stands (which often provide lynx denning habitat and high snowshoe-hare densities) in mapped lynx habitat, except that dead

trees will be removed from areas affected by beetles or disease (always leaving 10% for denning habitat).

- The Service will exclude from treatment any tree stands with greater than 35% dense horizontal cover. Such stands provide lynx denning habitat and the highest-quality winter habitat for snowshoe hare.
- Most clearcutting will take place in climax lodgepole stands and in mature lodgepole monocultures, which are either low-quality habitat or uninhabitable for lynx and snowshoe hare.
- Any adjacent clear-cuts will be kept at least 200 feet apart to allow travel corridors for wildlife.
- Thinning will be "in a mosaic fashion that would mimic natural disturbances," Aplt. App. at 587.
- The Service will track the acreage of lynx habitat treated by the Project and report that data to the FWS as required by the SRLA.
- In the event that mechanical trampling or other harvest or salvage activity damages lynx or snowshoe-hare winter habitat, the Service will track that damage and count it toward any limits imposed by the SRLA.

c. The Project's EA

In 2013 the Service issued a draft EA, as well as a draft biological assessment (BA) that primarily analyzed the Project's effects on lynx. *See* 16 U.S.C. § 1536 (a)(2), (c)(1) (providing that agencies should conduct biological assessments to determine if

actions will adversely affect threatened or endangered species). In early 2014 the Service released the final EA and final BA together with a draft DN/FONSI. The final EA examined three alternatives for treating the Project area, including a no-action alternative. The Service's chosen alternative will involve 2,370 acres of clearcutting, 6,765 acres of thinning, 345 acres of precommercial thinning, and 6,040 acres of prescribed burns (some of which will overlap with the clearcutting and thinning), as well as the creation of about 21 miles of temporary roads. The EA also describes how much those treatments—spaced out over 10 to 15 years—will impact each forest type. Of the 9,480 acres of lodgepole-pine stands that are treatable (not limited by slope, accessibility, or other factors preventing treatment), 6,765 will be targeted for thinning and 345 will be targeted for precommercial thinning (a process of thinning stands that were clear-cut 20-30 years earlier, so that growth can be concentrated on the more commercially valuable trees). And the Service will use clearcutting and prescribed burns to create openings in lodgepole-pine stands, but on no more than 25% of the 9,480 acres of treatable pine, and with clear-cuts limited to irregularly shaped 40-acre patches. Those clear-cuts will "essentially eliminate" the risk of beetle infestation in treated stands and will allow new stands to regenerate "mistletoe free." Aplt. App. at 555. As for the 455 acres of treatable aspen stands, 115 acres will be treated through a combination of cutting and burning, which will promote younger aspen that are less susceptible to various forest pathogens. And, as mentioned above, the 2,177 acres of spruce-fir stands (which are prime lynx habitat) will not be treated unless infested by insects or infected by disease.

Although the EA quantified the amount of each type of treatment, it did not specify the treatment locations. Rather, the Service intends to identify 300 to 500 acres for thinning and clearcutting each year over the next 10 to 15 years. It has asserted that this flexible approach is necessary for reacting to on-the-ground conditions, such as a beetle infestation or fire risk.

The EA includes nine pages analyzing the proposed action's possible effects on lynx, as well as an appendix assessing its adherence to each SRLA objective, standard, and guideline. Because the Service does not yet know precisely which of the 9,480 acres of mapped lynx habitat will be treated, it took the conservative approach of assuming that *all* lynx habitat in the Project area will be treated.

In that worst-case scenario, the Service found, clearcutting would temporarily convert 6% of lynx habitat in each LAU to nonhabitat—well below the SRLA's 15% limit on how much lynx habitat within an LAU may be regenerated in a 10-year period. Further, the clear-cut area would become habitat in 15 to 30 years, when trees would have grown enough to be available to snowshoe hare above the snow level, although denning habitat that is clear-cut would take more than 150 years to regenerate fully. The Service also found that thinning treatments could cause lynx habitat to be temporarily degraded but not rendered unsuitable, and within 30 years those thinning treatments will have created more snowshoe-hare winter habitat by allowing light to reach the forest floor and nurture new vegetation to provide horizontal cover. And precommercial thinning—for which targeted stands have been preidentified—would affect only 65 acres of lynx habitat, or no more than 0.2% of lynx habitat in each LAU (far short of the

SRLA's 1% cap on how much lynx habitat within an LAU may be subject to precommercial thinning). The Service concluded in its EA that even in this worst-case scenario the Project would satisfy all SRLA standards and guidelines, and the FWS concurred. Moreover, the actual effects will be less severe than those depicted in the worst-case-scenario analysis because of the Project's many measures to protect lynx habitat discussed above. The EA determined that the proposed action was consistent with the SRLA and that it "may affect, [but is] not likely to adversely affect," lynx. Aplt. App. at 595.

After reviewing objections to the EA and the draft DN/FONSI, Leadville District Ranger Tamara Conner issued a final (slightly revised) DN/FONSI in November 2014. It announced that an EIS was not necessary and that the Service would proceed with the EA's proposed alternative.

3. Procedural History

WildEarth brought this action in the United States District Court for Colorado against the Service and Tamara Conner (in her official capacity as the Leadville District Ranger) for allegedly violating NEPA. WildEarth claimed that the Service's EA and FONSI were inadequate because they did not "disclose, analyze, and otherwise take a hard look" at the Project's environmental effects, particularly its effects on lynx. Aplt. App. at 051. The district court granted judgment in favor of the agency.

II. DISCUSSION

On appeal WildEarth raises two claims: (1) the Service violated NEPA because its EA did not adequately assess the Project's effects on lynx; and (2) the Service violated NEPA by not producing an EIS. We address each in turn.

A. Standard of Review

WildEarth brings its challenges to the Service's actions under the APA. Our task is therefore to determine whether those actions were "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(a). *See Richardson*, 565 F.3d at 704 ("[W]e review an agency's NEPA compliance to see whether it is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." (internal quotation marks omitted)). An agency's decision under NEPA is arbitrary and capricious if the agency "(1) entirely failed to consider an important aspect of the problem, (2) 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, (3) failed to base its decision on consideration of the relevant factors, or (4) made a clear error of judgment." *Id.* (internal quotation marks omitted). We have described this standard of review as assessing whether the agency took a "hard look" at the issue before it.[2] *See id*. ("When called upon to review factual determinations made by an agency as part of its NEPA process,

[2] Of course, it would be improper to view "hard look" as a requirement going beyond the APA standard of review. As the Supreme Court explained in *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 513–16 (2009), courts should not impose a heightened standard of review not found in the text of the APA.

short of a clear error of judgment we ask only whether the agency took a 'hard look' at information relevant to the decision." (further internal quotation marks omitted)).

In accordance with this standard, we assess the adequacy of the Service's action by asking whether its method of analyzing environmental effects "had a rational basis and took into consideration the relevant factors." *Utah Shared Access Alliance*, 288 F.3d at 1212–13. The analysis need not have used the best possible methodology, nor do we ask whether it could have discussed environmental impacts in more detail. *See id.* at 1212–13. Instead, we review whether the agency's decision was reasoned, and we defer to the agency's expertise and discretion. *See id.* at 1213; *see also Utah Envtl. Cong. v. Russell*, 518 F.3d 817, 824 (10th Cir. 2008) ("Deference to the agency is especially strong where the challenged decisions involve technical or scientific matters within the agency's area of expertise." (internal quotation marks omitted)).

B. Environmental Assessment

WildEarth argues that the EA was inadequate because it did not sufficiently evaluate the Project's effects on lynx. We disagree.

Before even beginning work on the EA, the Service had devoted a great deal of attention to the lynx, assessing what type of habitat was needed and what actions would imperil them. The LCAS, published in 2000, presented a number of recommendations. It was incorporated in the Lynx Conservation Agreement of regional managers of the Service and the FWS in the Southern Rockies, and the agreement was updated in 2005 and 2006. Then, after considerable input from the public, the Service in 2008 promulgated the SRLA, which superseded the Agreement and amended Land and

Resource Management Plans for eight national forests in the southern Rockies. Based on an EIS, it contained a number of standards and guidelines. With this scientific knowledge in hand, the Service could reasonably assess the maximum impact that the Project could have on the lynx and conclude it was unlikely to adversely affect them. In particular, it could conclude that the Project will not violate any SRLA standards even in a worst-case scenario in which every acre of mapped lynx habitat in the Project area is treated.

WildEarth nonetheless argues that the Service needed to collect and disclose several additional types of data. We address each of its arguments.

1. Need to specify treatment locations

First, WildEarth argues that the Service was obligated to specify the sizes, locations, and treatment planned for each of the treatment units and the locations of the 21 miles of temporary road expected to be built. According to WildEarth, our decision in *Richardson* holds that an environmental assessment must include such "site-specific" detail about a project area so that a proper analysis can be performed. Aplt. Reply Br. at 9. Sometimes. But that depends on the circumstances.

In *Richardson* the federal Bureau of Land Management (BLM) produced a draft EIS proposing a land-use plan that would allow drilling on New Mexico's Otero Mesa. *See* 565 F.3d at 688, 690. The plan limited drilling to within 492 feet of existing roadways to protect desert grassland from habitat fragmentation. *See id.* at 690. Three years later, the BLM issued a final EIS adopting a modified plan that did not limit drilling to areas close to existing roadways. *See id*. at 692. Instead, this alternative opened most

of the Mesa to drilling, so long as only 5% of the surface area of the Mesa was subject to drilling at any one time. *See id.* Despite this major change to the plan, the BLM barely updated the sections of the draft EIS assessing the effects on vegetation and wildlife. *See id.* at 692–94. We held that the EIS was inadequate, reasoning that "the location of development greatly influences the likelihood and extent of habitat preservation. Disturbances on the same total surface acreage may produce wildly different impacts on plants and wildlife depending on the amount of contiguous habitat between them." *Id*. at 706. We analogized the difference between the two plans to the difference between "building a dirt road along the edge of an ecosystem" and "building a four-lane highway straight down the middle." *Id.* at 707. According to WildEarth, the lesson of *Richardson* is that the "'location, not merely total surface disturbance, affects habitat fragmentation,'" so the EA's analysis must identify specific treatment locations and assess their importance to lynx. Aplt. Reply Br. at 9 (quoting *Richardson*, 565 F.3d at 707).

But *Richardson* did not hold that an agency's EA or EIS always must specify the precise locations within a project area that will be affected. The problem in *Richardson* was simply that there had been no environmental assessment of the ultimate plan. The earlier assessment contemplated a significantly different project from what was later selected. That is hardly the case here. The EA analyzed what could happen whatever sites were eventually chosen for treatment by the Project, so long as the Project restrictions were satisfied. The Service's analysis accounted for the uncertainty about treatment locations by evaluating the Project's effects on lynx in a worst-case scenario in which all the mapped lynx habitat in the Project area is treated, and by including

conservation measures to protect high-quality lynx habitat, such as not treating healthy spruce-fir stands or any stands with greater than 35% dense horizontal cover. Moreover, the Service had a valid reason for not identifying specific treatment sites in its EA: it intends to select treatment units based on changing on-the-ground conditions over the 10 to 15 years of the Project. NEPA leaves "substantial discretion to an agency to determine how best to gather and assess information" about a project's environmental impacts. *Biodiversity Conservation Alliance v. U.S. Forest Serv.*, 765 F.3d 1264, 1270 (10th Cir. 2014). The Service used that discretion reasonably, assessing the Project's maximum possible effect on lynx habitat while also conserving agency resources and retaining flexibility to respond to changing conditions. *See Utah Shared Access Alliance*, 288 F.3d at 1213 ("By conducting an EA, an agency considers environmental concerns yet reserves its resources for instances where a full EIS is appropriate." (internal quotation marks omitted)). We note that the Service was not postponing the requisite environmental analysis until it picks the specific sites for treatment under the Project; rather, it was saying that such future analysis would be unnecessary because, in its expert opinion, whatever sites it ultimately chooses (within the constraints imposed by the Project), there would not be a negative impact on the lynx.[3]

[3] WildEarth quotes various comments from Forest Service personnel in its argument that greater location specificity was required in the EA. We are not sure that the comments support WildEarth's argument. But in any event, unanimity within an agency is not required, so long as the *agency* analysis is reasonable.

2. Disclosure of precommercial thinning

Repeating the same error just discussed, WildEarth specifically argues that the Service violated NEPA by not disclosing the locations of its preidentified precommercial thinning units. But such disclosure was not material to determining whether the Project would adversely affect the lynx. The EA specifies that precommercial thinning will affect no more than 0.2% of lynx habitat in each LAU—far below the SRLA's 1% cap on how much lynx habitat within an LAU may be subject to precommercial thinning.

Relatedly, WildEarth contends in its reply brief that the Service failed to adhere to the SRLA's VEG S5 standard governing precommercial thinning, because it did not specify the amount of precommercial thinning that would affect snowshoe-hare winter habitat. But this argument is waived because it was not raised in the opening brief. *See Silverton Snowmobile Club v. U.S. Forest Serv.*, 433 F.3d 772, 783 (10th Cir. 2006) ("The failure to raise an issue in an opening brief waives that issue." (brackets and internal quotation marks omitted)).

3. Need to identify denning habitat

WildEarth also argues that the Service could not truly understand the Project's impact on lynx without knowing how much affected habitat would be denning habitat. It ignores, however, the expert opinion relied on by the Service that denning habitat is not a constraint on the lynx in the Project area. In particular, a study conducted shortly before issuance of the EIS prepared for the SRLA noted how adept lynx are in creating dens: "[L]ynx have used all kinds of deadfall for den sites, so it is likely almost any forest does supply denning habitat. . . . The research does not indicate a certain minimum amount of

denning habitat is required for lynx." Aplee. Fed. R. App. P. 28(j) Letter of 11/17/2018, attachment at T01678. Lynx denning habitat is therefore not expected to be a "limiting factor" for lynx in the Southern Rockies. Aplt. App. at 232 (SRLA). Moreover, to further ensure that lynx in the Project area will not suffer from any shortage of denning habitat, the Project will avoid treating healthy spruce-fir stands or any tree stands with greater than 35% dense horizontal cover. In light of those conservation measures and the low likelihood of LAUs having insufficient denning habitat to begin with, the Service did not need to quantify denning habitat to conclude that the Project will not adversely affect lynx. *See Utah Shared Access Alliance*, 288 F.3d at 1212–13 (the Service must use a methodology with a "rational basis" but does not need to use the best possible methodology or create the most detailed EA possible).

4. Need to quantify winter habitat

WildEarth contends that the Service should have quantified the amount of *winter* lynx habitat that will be affected. But such habitat analysis in the EA was not necessary, because the Service reasonably found that the Project will preserve existing high-quality winter habitat, target stands that provide poor or no winter habitat, and even generate new winter habitat in those treated areas. As discussed above, lynx winter habitat is closely correlated with snowshoe-hare winter habitat, which exists in areas with horizontal cover above the snowline. Such conditions tend to exist in healthy spruce-fir stands as well as in other forest stands with greater than 35% dense horizontal cover—all of which the Service will exclude from treatment. The Service will instead target stands considered nonhabitat or poor habitat for lynx and snowshoe hare. Clearcutting will generally occur

in climax lodgepole stands and in mature lodgepole monocultures, which provide only "marginal to poor horizontal cover for snowshoe hare." Aplt. App. at 588. The Service therefore anticipates that this clearcutting will "not have an effect on snowshoe hare" other than *improving* winter foraging conditions within 15 to 30 years by allowing new horizontal cover to develop. Aplt. App. at 588. Likewise, thinning treatments will generally be restricted to low-quality stands, and treatments of those stands will improve snowshoe-hare winter habitat in the course of 15 to 30 years. Given this project design, the Service concluded that the Project satisfied SRLA objectives, standards, and guidelines designed to protect winter habitat.

WildEarth argues that the Service's approach to winter habitat is nonetheless inadequate because it treats snowshoe-hare winter habitat as a proxy for lynx winter habitat instead of accounting for the distinct needs of lynx in winter. To show that snowshoe-hare winter habitat is *not* a proxy for lynx winter habitat, WildEarth points to a single sentence in the third edition of the LCAS that states, "Winter habitat may be more limiting for lynx." Aplt. App. at 374. But that sentence is not conveying that *lynx* winter habitat may be more limiting than *snowshoe-hare* winter habitat; it is conveying that lynx *winter* habitat may be more limiting than lynx habitat *in other seasons*. Indeed, the article cited by that sentence specifically ties lynx winter habitat to snowshoe-hare winter habitat, explaining that lynx in winter are particularly dependent on the availability of snowshoe hare. WildEarth has failed to point to any source contradicting the statement in the EA that "[l]ynx winter habitat is not exactly the same as snowshoe hare winter habitat though the two are very closely associated." Aplt. App. 494. We are not

persuaded that it was unreasonable for the EA to treat snowshoe-hare availability as the key factor for lynx winter habitat.

5. Need for baseline data

Next, WildEarth makes two arguments that the EA was inadequate for failing to include "baseline data" regarding lynx denning and winter habitat in the Project area. Aplt. Br. at 25. First, relying on two Ninth Circuit cases, it contends that agencies have a general duty to ascertain baseline data during the NEPA process to determine the likely impacts of their actions. *See N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067 (9th Cir. 2011) and *Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722 (9th Cir. 2001), *abrogated on other grounds by Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 157 (2010). Those cases, however, are readily distinguishable. In *Northern Plains Resource Council* there was no dispute that the EIS prepared for the Surface Transportation Board failed to include studies necessary to determine the impact of the planned railroad on, among other things, the pallid sturgeon (an endangered fish) and the sage grouse; rather, what was planned was to study the effects as part of mitigation measures during execution of the project. *See N. Plains Res. Council, Inc.*, 668 F.3d at 1083–85. The circuit court held that these delayed studies were not "sufficient to meet the Board's NEPA obligations to determine the projected extent of the environmental harm to enumerated resources *before* a project is approved." *Id*. at 1084. It pointed out that "an agency must support its conclusions with studies that the agency deems reliable," and "[s]uch analyses must occur before the proposed action is approved, not afterward." *Id*. at 1083. In the case before us, in contrast, the Service determined,

based on data and studies it deemed reliable, that the Project would not have an adverse impact on the lynx. Similarly, in *National Parks* the circuit court held that the EA was inadequate because it described various environmental effects as "unknown" but proposed only future research and monitoring to determine those effects. 241 F.3d at 732–33. The court said, "That is precisely the information and understanding that is required before a decision that may have a significant adverse impact on the environment is made, and precisely why an EIS must be prepared in this case." *Id*. at 733. Again, that is not the situation here. The Service reasonably determined that it had sufficient information to conclude that the lynx would not be adversely affected by the Project.

WildEarth's second argument is that more baseline data about the Project area is necessary to monitor (what WildEarth calls "ground-truth") the Service's commitment not to treat areas of mapped lynx habitat with greater than 35% dense horizontal cover. Aplt. Br. at 22. In essence, WildEarth is saying that it does not trust the Service to do what it promises and needs additional information at this time so that it can later investigate whether the Service has lived up to its commitments. WildEarth does not provide any authority supporting its argument, and we are aware of none. We generally presume that government agencies comply with the law and NEPA creates no exception to this presumption. *See Pit River Tribe v. U.S. Forest Service*, 615 F.3d 1069, 1082 (9th Cir. 2010) ("[W]e presume that agencies will follow the law."); *cf*. *Poe v. Gerstein*, 417 U.S. 281, 281–82 (1974) (it was appropriate for district court to issue a declaratory judgment but not an injunction against the State because court would not assume that

State would decline to acquiesce in the decision). We decline to require additional steps to facilitate monitoring of whether the Service complies with what it proposes to do.

In sum, the record shows that the Service made a reasoned evaluation of how the Project will affect lynx. WildEarth contends that the Service needed to state in the EA precisely where the Project would do what and then evaluate the specific effects of those actions on the lynx. But the nature of the Project, which requires responding to conditions on the ground as they develop over the course of 10 to 15 years, makes such precision impracticable. And the Service's long study of the lynx and the requirements for its habitat enabled it to reasonably conclude that even in the worst-case scenario, the Project would not adversely affect that animal.

C. The FONSI

WildEarth's second claim is that the Service erred by issuing a FONSI instead of conducting an EIS. An agency may issue a FONSI only if, after reviewing the direct and indirect effects of a proposed action, it concludes that the action "will not have a significant effect on the human environment." 40 C.F.R. § 1508.13; *see also* 40 C.F.R. § 1508.8. To determine whether the effects of a proposed action on the human environment are significant enough to require an EIS instead of a FONSI, an agency must consider the "context and intensity" of the action. 40 C.F.R. § 1508.27. Factors affecting the "intensity" of an action include effects "that may be both beneficial and adverse," effects that are "individually insignificant but cumulatively significant," effects on "unique characteristics" of the project area such as "cultural resources" and "ecologically critical areas," the "degree to which the effects . . . are likely to be highly controversial,"

the "degree to which the possible effects . . . are highly uncertain or involve unique and unknown risks," and the degree to which endangered and threatened species will be affected. 40 C.F.R. § 1508.27(b)(1), (3)–(5), (7), (9). The obligation to conduct an EIS can be triggered by an effect on one of those significance factors, but the simple existence of an effect does not trigger that obligation—the "relevant analysis is the *degree* to which the proposed action affects" a listed factor. *Hillsdale Envtl. Loss Prevention, Inc. v. U.S. Army Corps of Eng'rs*, 702 F.3d 1156, 1180 (10th Cir. 2012) (emphasis added).

WildEarth argues that, contrary to the Service's DN/FONSI, the Project will have a significant effect in several respects listed in § 1508.27(b). As in our review of an EA, we apply the arbitrary-and-capricious standard in assessing an agency's decision to issue a DN/FONSI instead of preparing an EIS. *See Utah Shared Access Alliance*, 288 F.3d at 1213. We address each of WildEarth's arguments about these significance factors and conclude that the Service was not arbitrary or capricious in deciding that they do not individually or cumulatively demonstrate the need for an EIS.

First, WildEarth contends that the sheer size of the Project—over 2,000 acres of clearcutting and 7,000 acres of thinning—bears on two significance factors. *See* 40 C.F.R. § 1508.27(b)(1) (agency should consider both "beneficial and adverse" impacts and a "significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial"); *id*. § 1508.27(b) (7) ("Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment"). Citing *Colorado Environmental Coal. v. Dombeck*, 185 F.3d 1162 (10th Cir. 1999), WildEarth argues that a project affecting this much acreage of National Forest requires an EIS. To be sure,

Dombeck considered an EIS for a project involving significantly less acreage than is involved here; it analyzed the impacts of expanding a ski resort by roughly 2,000 acres in the White River National Forest. *See id*. at 1165. But that opinion does not address whether an EIS was required. The issue before us was whether the EIS was adequate. The plaintiffs argued that the EIS was inadequate for several reasons, including that it did not include sufficient data about how the expansion would affect lynx or adequate analysis of the socioeconomic impact of 200,000 additional skier visits each year. *See id.* at 1172, 1176. We rejected those arguments. *See id*. at 1178. Nothing in the opinion suggests that a project of more than 2,000 acres necessarily requires an EIS, as WildEarth seems to argue here. Size in itself does not establish significance. As the D.C. Circuit stated in *TOMAC v. Norton*, 433 F.3d 852, 862 (D.C. Cir. 2006):

> TOMAC offers no support for the proposition that an EIS is *required* when a project reaches a certain size. The relevant benchmark is whether the federal action "significantly affect[s] the quality of the human environment." 42 U.S.C. § 4332(2)(C). Large federal projects may, on the average, be more likely to meet this threshold. But there is no categorical rule that sizable federal undertakings *always* have a significant effect on the quality of the human environment.

Context is an important consideration. *See* 40 C.F.R. § 1508.27(a). Here, suffice it to say that treatment by the Project will encompass less than .1% of the Holy Cross Ranger District and only 5.4% of the Leadville Ranger District (slightly more than 1% of the San Isabel National Forest). Thus, we must turn to the other factors.

WildEarth next argues that the Project's direct and cumulative impacts on lynx and lynx habitat will be significant because the Project will destroy some denning habitat for 150 years, degrade other winter and denning habitat, degrade linkage area, and render

some lynx habitat unsuitable for up to 25 years. *See* 40 C.F.R. § 1508.27(b)(1), (b)(7). But, as explained in our treatment of the EA, the Service reasonably determined that this worst-case scenario would not significantly hurt the lynx, and WildEarth ignores how the Project's priorities and restrictions will limit the impact on denning and winter habitat and eventually produce some new habitat.

WildEarth further argues that the Project "would be implemented in and near areas with 'unique characteristics,' including in and near areas with proximity to 'ecologically critical areas' and historic resources." Aplt. Br. at 38 (quoting 40 C.F.R. § 1508.27(b)(3)). The "ecologically critical areas," according to WildEarth, include lynx, wolverine, and elk habitat, as well as federally designated wilderness and various trails. And the "historic resources" that might be affected are six 10th Mountain Division huts. But the Service concluded that the effects on the lynx, wolverine, and elk would not be significant. For reasons discussed above, we cannot reject the Service's conclusions about the unlikelihood of a significant detrimental impact on lynx habitat, and WildEarth gives us no reason to doubt the Service's conclusions about the wolverine and elk. Regarding impact on wilderness areas, the Project is only adjacent to (not overlapping with) wilderness and roadless areas, so the Service concluded that the sole anticipated impact would be that wilderness visitors would be subjected to a short-term increase in noise and visual disturbances. And as for the 10th Mountain Division huts, the Service explained in its FONSI that it had designed the Project to ensure that there would be no direct effect—and only slight risk of indirect effect—on cultural resources. The Service reported that it consulted with the Colorado Historic Preservation Office to confirm that

any adverse effect on heritage resources was unlikely. WildEarth has not attempted to rebut any portion of the Service's analysis on these matters.

WildEarth also argues that the Project's effects on lynx are "highly controversial" and "highly uncertain"—two other significance factors under § 1508.27(b)(4)–(5). Even in the absence of substantial public opposition, an action may be "highly controversial" if there is "a substantial dispute as to the size, nature, or effect of the action." *Middle Rio Grande Conservancy Dist. v. Norton*, 294 F.3d 1220, 1229 (10th Cir. 2002). According to WildEarth, the Project's effects are controversial and uncertain because the Service has not specified the size or location of the Project's treatment units or their effects on lynx habitat, and the Service could resolve this controversy and reduce uncertainty simply by agreeing to conduct an EIS addressing these issues. But given that the Service reasonably concluded that the Project was unlikely to harm lynx regardless of treatment locations, it could properly conclude that there was no legitimate controversy.

The final significance factor that WildEarth directs us to is the "degree to which the action may adversely affect an endangered or threatened species or its habitat," 40 C.F.R. § 1508.27(b)(9). WildEarth points out that even under the Service's conclusion that the Project is *unlikely* to adversely affect lynx, there is a possibility of *some* effect on lynx. So even if the possibility of adversely affecting lynx is not independently sufficient to compel an EIS, it contributes to the need for an EIS arising from cumulative significance factors. *See* 40 C.F.R. § 1508.27(b)(7) (one factor affecting an action's "intensity" is whether "the action is related to other actions with individually insignificant but cumulatively significant impacts"). We therefore turn to the ultimate issue, whether

the cumulation of the factors set forth in the regulations shows that the Service was arbitrary and capricious in concluding that the Project "will not have a significant effect on the human environment." 40 C.F.R. § 1508.13. Given that WildEarth has not challenged any of the reasoning of the Service supporting its rejection of any of the non-lynx factors as significant, we conclude that the Service's conclusion must stand. WildEarth has utterly failed to show what could be accomplished through an EIS that would be material to whether the Project should proceed as planned. We see no "clear error of judgment" in the Service's conclusion that, based on the relevant factors, the effects of the Project were not significant enough to require an EIS. *Utah Shared Access Alliance*, 288 F.3d at 1213 (internal quotation marks omitted).

III. CONCLUSION

We **AFFIRM** the district court's order rejecting WildEarth's objections to the Project.