FOR PUBLICATION

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

FRIENDS OF ANIMALS, *Plaintiff-Appellant*, v. UNITED STATES FISH AND WILDLIFE SERVICE, an agency of the United States; MARTHA WILLIAMS, in her official capacity as the Director of the United States Fish and Wildlife Service, *Defendants-Appellees*.	No. 21-35062 D.C. No. 6:17-cv-00860-AA OPINION

Appeal from the United States District Court
for the District of Oregon
Ann L. Aiken, District Judge, Presiding

Argued and Submitted November 17, 2021
Pasadena, California

Filed March 4, 2022

Before: Johnnie B. Rawlinson and Kenneth K. Lee, Circuit Judges, and Matthew F. Kennelly,[*] District Judge.

Opinion by Judge Lee

[*] The Honorable Matthew F. Kennelly, United States District Judge for the Northern District of Illinois, sitting by designation.

SUMMARY[**]

Environmental Law

The panel affirmed the district court's summary judgment in favor of the U.S. Fish and Wildlife Service in an action brought by an environmental group challenging the Service's "barred owl removal experiment," which was designed to protect the northern spotted owl, a threatened species under the Endangered Species Act ("ESA").

Barred owls have encroached on the spotted owl's habitat. The barred owl removal experiment is a proposed lethal removal of barred owls from certain areas to measure their environmental and demographic effect on northern spotted owls. To complete the experiment, the Service issued permits and entered into Safe Harbor Agreements with four non-federal landowners within the Oregon coast ranges study area.

Plaintiff alleged that the ESA prohibited the government from taking action that may incidentally harm spotted owls or their habitat unless it provided a "net conservation benefit," and the barred owl removal experiment will not yield a net conservation benefit because it does not likely lead to the recovery of the spotted owl population or its habitat.

Affirming the district court, the panel held that the barred owl removal experiment will produce a "net conservation benefit" under the ESA's implementing regulations because

[**] This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.

it allowed the agency to obtain critical information to craft a policy to protect threatened or endangered species. The panel also held that the Service reasonably described baseline conditions/"resident" owl survey data. In addition, the panel held that the Service adequately analyzed the small portion of critical habitat affected by the Oregon permit/Safe Harbor Agreements.

The panel held that the Service complied with the National Environmental Policy Act ("NEPA"), and did not have to conduct a supplemental environmental impact statement under NEPA because it had adequately contemplated this experiment in its earlier analysis. In addition, the permits and the experiment need not be analyzed in a single environmental impact statement because they were not "connected actions."

COUNSEL

Jennifer Best (argued) and Michael Ray Harris, Friends of Animals, Centennial, Colorado, for Plaintiff-Appellant.

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OPINION

LEE, Circuit Judge:

This case is a tale of two owls. For the northern spotted owl, it has been the worst of times: It remains a threatened species, and its population continues to dwindle in the Pacific Northwest and Northern California. But it has been the best of times for the barred owl: Its abundant population burgeoning, the barred owl has expanded westward and encroached on the spotted owl's habitat. And barred owls have even been spotted attacking their brethren bird.

Trying to usher in a spring of hope for the northern spotted owls, the United States Fish and Wildlife Service (FWS) introduced a "barred owl removal experiment." It proposed lethally removing barred owls from certain areas to measure their environmental and demographic effect on the northern spotted owls. Friends of Animals ("Friends"), an environmental group, sued the FWS, claiming that this experiment violates the Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA). Friends mainly argues that the ESA prohibits the government from taking action that may incidentally harm spotted owls or their habitat unless it provided a "net conservation benefit." On top of harming some spotted owls as scientists enter their habitat, the experiment will not yield a "net conservation benefit" because it does not directly lead to the recovery of the spotted owl population or its habitat, according to Friends.

We affirm the district court's grant of summary judgment for FWS. We hold that this experiment will produce a "net conservation benefit" under the plain language of the ESA's implementing regulations because it allows the agency to obtain critical information to craft a policy to protect threatened or endangered species. We also

hold that FWS did not have to conduct a supplemental environmental impact statement under NEPA because it had adequately contemplated this experiment in its earlier analysis.

BACKGROUND

I. Background

a. The barred owl threatens the northern spotted owl.

The northern spotted owl is one of three subspecies of spotted owls (Northern, California, and Mexican). The species generally lives in mature and old-growth forests around southwest British Columbia through the Cascade Mountains and coastal ranges in Washington, Oregon, and Northern California. Since 1990, FWS has listed the northern spotted owl as a threatened species under the ESA.

The barred owl, in contrast, is an abundant species native to eastern North America. Over the past century, the barred owl has moved west, expanding its range across the continent to the west coast. And in the process, the barred owl has encroached on the northern spotted owl's range, becoming an invasive species. The barred owl's and spotted owl's ranges now completely overlap, and the two species' food needs and habitats share significant similarities as well.

In its most recent 2011 Recovery Plan for the northern spotted owl, FWS stated that "[s]trong evidence indicates that barred owls negatively affect spotted owls and their populations" by displacing spotted owls from their habitat and reducing spotted owl survival and reproduction. Barred owls have also sometimes attacked the northern spotted owl.

b. FWS designs a barred owl removal experiment.

FWS identified "barred owl management" as one of the four basic steps to protect the northern spotted owl. The 2011 Recovery Plan noted that while evidence suggests that "barred owls compete with spotted owls for nesting sites, roosting sites, and food, and possibly predate spotted owls," there are still "substantial information gaps." To fill these informational gaps, the Recovery Plan called for FWS to "[d]esign and implement large-scale control experiments to assess the effects of barred owl removal on spotted owl site occupancy, reproduction, and survival."

FWS then issued a Record of Decision in 2013 authorizing the lethal barred owl removal experiment. FWS expected the experiment to provide "needed information" such as "the effects of barred owls on spotted owl vital rates of occupancy, survival, reproduction, and population trend"; the "feasibility of removing barred owls from an area"; the "level of effort required to maintain reduced barred owl population levels"; the "cost of barred owl removal"; and the overall utility of barred owl removal for "management of barred owls."

FWS' experiment designated four study areas spread across the northern spotted owl's range. Relevant here is the Oregon Coast Ranges study area, which covers just over 500,000 acres. Within the study area, FWS designated "treatment areas" from which about 3,600 barred owls would be removed. FWS expected removal to be completed in four years, though the overall experiment, including conducting surveys and gathering data, could last up to ten years.

FWS also issued an Environmental Impact Statement (EIS) in 2013 for the experiment, as required by NEPA.

NEPA is "a procedural statute intended to ensure Federal agencies consider the environmental impacts of their actions in the decision-making process." 40 C.F.R. § 1500.1.[1] For major actions that will significantly affect the environment, NEPA requires federal agencies to inform the public of their analysis in an EIS. *See* 42 U.S.C. § 4332(C); 40 C.F.R. § 1502.4(a). Additionally, an agency may need to issue a supplemental environmental impact statement (Supplemental EIS) to augment a prior EIS if the agency makes "substantial changes" to the action, or "significant new circumstances or information" arises. 40 C.F.R. §1502.9(d)(1).[2]

The EIS for the barred owl removal experiment concluded that it would have a negligible effect on the barred owl population, given the species' abundance. The EIS also acknowledged that the northern spotted owl could experience "minor and short-term negative effects" because of the intrusions by scientists into its habitat. But the main anticipated effect would be a potential "positive change in

[1] In the time between the filing of the lawsuit and our decision today, NEPA's regulations were updated. *See* Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 Fed. Reg. 43,304 (July 16, 2020) (to be codified at 40 C.F.R. §§ 1500–1508, 1515–1518). We cite the current version of the regulations throughout our decision. The old and new versions of the cited regulations are substantively the same.

[2] If the proposed action on its face does not appear to have a significant impact, an agency may prepare a less-intensive environmental assessment (EA) to determine whether the action's effects would be significant. *See* 40 C.F.R. § 1501.5(a)–(c). If the agency concludes in its EA that the proposed action will not significantly affect the human environment, the agency may issue a "finding of no significant impact" (FONSI) rather than produce a full-scale EIS. *Id.* § 1501.6(a).

spotted owl demographic performance" because of decreased competition from the barred owl. More broadly, the major benefit of the experiment would be obtaining data necessary to craft long-term recovery strategies for the northern spotted owl.

c. Endangered Species Act bars actions that harm threatened or endangered species and their habitats unless they provide a "net conservation benefit."

Before FWS could begin this experiment, it had to comply with the ESA's many requirements. Section 7(a)(2) of the ESA requires each federal agency to consult an expert wildlife agency to ensure "that any action authorized, funded, or carried out . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification" of the critical habitat. 16 U.S.C. § 1536(a)(2).

Section 7 and its implementing regulations detail the consultation process for determining the biological impacts of a proposed action, leading to a Biological Opinion (BiOp). *Id.* § 1536(b)(3)(A); 50 C.F.R. § 402.14(h). In the Biological Opinion, the expert agency (here, FWS) renders its opinion whether the proposed action will likely "jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat." 50 C.F.R. § 402.14(g)(4).

Along with requiring cross-agency consultation, the ESA broadly prohibits the "take" of any endangered or threatened species in the United States. 16 U.S.C. § 1538. "Take" means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." *Id.* § 1532(19). The ESA's implementing

regulations also define "harm" in the definition of "take" to include "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." 50 C.F.R. § 17.3(c)(3).

Despite this general prohibition on take, the ESA provides a few exceptions. Relevant here, FWS may issue "Enhancement of Survival Permits" that authorize take "for scientific purposes or to enhance the propagation or survival of the affected species . . . ." 16 U.S.C. § 1539(a)(1)(A). FWS may issue these permits and enter into corresponding Safe Harbor Agreements with non-federal landowners whose lands that the agency seeks to use for conservation efforts. *See* 50 C.F.R. § 17.32(c)(1). The Safe Harbor Agreements set the terms of the permits and try to incentivize non-federal property owners to voluntarily undertake conservation activities on their property. *Id.* In exchange, FWS assures property owners that it will "not require additional or different management activities" and will allow the property to return to its previous condition at the agreement's conclusion. *Id.* § 17.32(c)(5).

To issue a permit, FWS must find that:

> "The implementation of the terms of the Safe Harbor Agreement is reasonably expected to provide a *net conservation benefit* to the affected listed species by contributing to the recovery of [the] listed species included in the permit, and the Safe Harbor Agreement otherwise complies with the Safe Harbor policy available from the Service."

Id. § 17.32(c)(2) (emphasis added). In 1999, FWS issued its Safe Harbor Policy that fleshed out the requirements for

issuing permits. *See* Announcement of Final Safe Harbor Policy, 64 Fed. Reg. 32,717 (June 17, 1999) (the Policy).

d. FWS issues Enhancement of Survival Permits and enters into Safe Harbor Agreements with four non-federal landowners.

The Oregon Coast Ranges study area is a checkerboard of federal, state, and private land. To create contiguous areas for the experiment, FWS sought cooperation from non-federal landowners to gain access to their lands. Though not strictly necessary to complete the experiment, such access would help FWS complete the experiment in the most efficient and complete manner. Failure to gain such access could reduce the ability to detect changes in the spotted owl population caused by barred owl removal.

To that end, FWS issued permits and entered into Safe Harbor Agreements with four non-federal landowners within the Oregon Coast Ranges study area: Roseburg Resource Company (Roseburg), Weyerhaeuser Company (Weyerhaeuser), Oxbow Timber I, LLC (Oxbow), and the Oregon Department of Forestry (Oregon).[3]

Each permittee agreed to allow FWS to access their property and roads to remove barred owls and agreed to conduct or support spotted owl surveys on their lands. In exchange, the permittees may keep harvesting timber on their property in areas where no northern spotted owls resided when the parties entered into the Safe Harbor Agreements ("non-baseline sites") without incurring

[3] After FWS issued the permits, Roseburg acquired Oxbow. Because of this acquisition, there are now only three permits for the Oregon Coast Ranges study area that are being challenged (Roseburg-Oxbow, Weyerhaeuser, and Oregon).

liability for incidentally taking any spotted owls that later reoccupy those locations. The permittees, however, receive no liability protection for any incidental take in areas where the owls already resided ("baseline sites").

FWS used survey data to designate any site in which a "resident" northern spotted owl had been detected in the previous three to five years as a baseline site. Thus, the permits authorized incidental take only in non-baseline sites (*i.e.*, areas where no "resident" northern spotted owls have been observed in the past three to five years). And even in those non-baseline sites, the permits restricted the land during nesting and rearing season.

As required by the ESA's implementing regulations, FWS determined that each permit was "reasonably expected to provide a net conservation benefit" to the northern spotted owl. *See* 50 C.F.R. § 17.32(c)(2). Although FWS acknowledged that there was potential for "take of spotted owls on the temporarily reoccupied" non-baseline sites, FWS concluded such take would be "more than offset by the value of the information gained from the Experiment and potential contribution to long-term barred owl management strategy."

e. FWS prepares Biological Opinions and EAs to comply with the ESA and NEPA, respectively.

As required by the ESA, FWS issued a series of Biological Opinions simultaneously with the permits and Safe Harbor Agreements. The Biological Opinions determined that the Roseburg, Oxbow, and Weyerhaeuser permits would neither jeopardize the northern spotted owl nor adversely modify its critical habitat. Given each permit's small effect on spotted owl habitat, FWS concluded that the potential harm caused by the experiment would

likely be offset by the information gained if the experiment succeeded.

FWS' analysis differed slightly for the Oregon permit because of its potential effect on a small portion of critical habitat. In total, the Oregon permit authorized up to 3,345 acres of critical habitat loss. This represented less than 0.04 percent of total range-wide spotted owl critical habitat. FWS still believed that such habitat destruction was justified because it would aid the barred owl removal experiment. FWS thus concluded that the Oregon permit was unlikely to jeopardize the northern spotted owl or its critical habitat.

And as required by NEPA, FWS also prepared an Environmental Assessment for each permit. Each Environmental Assessment made a Finding of No Significant Impact, concluding that the permit is "not likely to have a significant impact on the spotted owl." The permits only authorized incidental take in non-baseline sites that do not currently have spotted owls and are unlikely to be recolonized without barred owl removal. Thus, northern spotted owls would be taken only if the experiment facilitated spotted owl recolonization in previously unoccupied areas.

f. Friends sues FWS, alleging violations of the ESA and NEPA.

In June 2017, Friends sued FWS, challenging the issuance of the Enhancement of Survival permits and Safe Harbor Agreements in the Oregon Coast Ranges and Klamath study areas. The district court held that Friends lacked standing to bring either claim. *See Friends of Animals v. Sheehan*, 2018 WL 6531676, *5 (D. Or. Dec. 11, 2018). This court reversed in part, holding that Friends had standing to challenge permits issued in the Oregon Coast

Ranges, but not the Klamath, study area. *Friends of Animals v. U.S. Fish & Wildlife Serv.*, 789 F. App'x 599, 600–01 (9th Cir. 2020).

On remand, the district court considered the merits and granted summary judgment for FWS. *Friends of Animals v. Sheehan*, 2021 WL 150011, *1 (D. Or. Jan. 15, 2021). Friends alleged FWS violated the ESA by "(1) issuing a permit that fails to achieve a 'net conservation benefit,' (2) failing to use the best biological and habitat information in forming baseline conditions, and (3) failing to analyze the SHA's effect on critical habitat." *Id.* at *3. Additionally, Friends claimed FWS violated NEPA because it (1) failed to conduct a Supplemental EIS after issuing the permits, and (2) failed to discuss the experiment and permits in a single EIS as required for "connected actions." *Id.* at *13.

For the first ESA claim, the district court determined that the regulation specifying that a Safe Harbor Agreement should be "reasonably expected to provide a net conservation benefit," *see* 50 C.F.R. § 17.32(c)(2), was ambiguous. *Id.* at *3. Because the district court found that the Safe Harbor Policy referenced by § 17.32 did not carry the force of law, it held that the Safe Harbor Policy—which elaborates on the meaning of "net conservation benefit"—could not be used to resolve the ambiguity. *Id.* at *5. Because § 17.32 was ambiguous, the district court applied *Auer*[4] deference to FWS' interpretation that "information" may constitute a "net conservation benefit" and found the agency's interpretation reasonable. *Id.* at *3, *6. The district court also noted that the Policy supported FWS' interpretation. *See id.* at *6–7.

[4] *See Auer v. Robbins*, 519 U.S. 452 (1997).

The district court next held that FWS reasonably defined baseline conditions as suggested in the Safe Harbor Policy because the agency used the best techniques and information available. *Id.* at *8. The district court held that FWS' reliance on "resident" owl populations, rather than "floater" (*i.e.*, young and displaced) owls, tracked the Safe Harbor Policy. *Id.* at *10. The district court also rejected Friends' argument that FWS' survey data could not establish that non-baseline sites were "abandoned" because neither the Safe Harbor Policy nor other agency guidance requires baseline conditions to be designated based on "abandonment." *Id.* at *11.

Lastly, the district court found that FWS adequately considered impacts to critical habitat affected by the Oregon permit in the issued Biological Opinions. *Id.* at *12. The court rejected Friends' argument that the Biological Opinions insufficiently analyzed important subsets of critical habitat because the Biological Opinions did "consider and assess[] the foraging, transience, and colonization value of the affected critical habitat . . . ." *Id.*

The district court then turned to Friends' NEPA claims. The district court held that FWS did not have to conduct a Supplemental EIS because the "2013 EIS accounted for the possibility that nonfederal lands could be included in the experiment" and the authorization of incidental take in non-baseline sites did "not constitute a substantial change relevant to environmental concerns." *Id.* at *13. The district court also held that FWS did not have to analyze the experiment and permits in a single EIS. *Id.* at *14. Because "each action could exist without the other," the experiment and the permits were not "connected actions." *Id.*

On appeal, Friends presses the same ESA and NEPA claims.

STANDARD OF REVIEW

We review a district court's grant of summary judgment de novo. *Native Ecosystems Council v. Marten*, 883 F.3d 783, 789 (9th Cir. 2018). "We review an agency's compliance with the ESA . . . and NEPA under the 'arbitrary and capricious' standard of the APA." *Id.* at 788; *see also* 5 U.S.C. § 706(2)(A). Under this standard, we "must determine whether the agency considered the relevant factors and articulated a rational connection between the facts found and the choices made." *Ranchers Cattlemen Action Legal Fund v. U.S. Dep't of Agric.*, 499 F.3d 1108, 1115 (9th Cir. 2007) (internal quotation marks omitted). Arbitrary and capricious review is "highly deferential" and presumes that the agency action is valid if "a reasonable basis exists" for the agency's decision. *Id.* (citation omitted).

ANALYSIS

I. FWS complied with the ESA.

Friends renews its same ESA arguments rejected by the district court. We reject them and conclude that FWS complied with the ESA.

a. The "informational benefit" from the experiment may constitute a "net conservation benefit" under ESA regulations.

As noted above, the ESA generally bars anyone—including the federal government—from "taking" endangered or threatened species or making significant modifications to their habitat that kill or injure wildlife. 16 U.S.C. § 1538 (prohibiting the "take" of threatened or endangered species); 50 C.F.R. § 17.3(c)(3) (defining

"harm" under the "take" definition to include significant modification of habitat).

The ESA, however, carves out a few exceptions. Relevant here, FWS can issue a permit allowing someone to "take" an endangered or threatened species if it is "for scientific purposes or to enhance the propagation or survival of the affected species . . . ." 16 U.S.C. § 1539(a)(1)(A). And ESA regulations permit the agency to enter into Safe Harbor Agreements with non-federal landowners whose lands the agency wants to use for conservation efforts if the proposed actions are "reasonably expected to provide a *net conservation benefit* to the affected listed species" and "otherwise compl[y] with the Safe Harbor policy." *See* 50 C.F.R. § 17.32(c)(1); (c)(2)(ii) (emphasis added).

FWS designed its barred owl removal experiment relying on its authority to issue these permits and to enter into Safe Harbor Agreements. But Friends argues FWS cannot authorize this experiment because it does not provide a "net conservation benefit." Their argument proceeds as follows: Because the ESA regulation does not define "net conservation benefit," that term is ambiguous. The Safe Harbor Policy, however, defines "net conservation benefit." 64 Fed. Reg. at 32,722. And according to Friends, that definition of "net conservation benefit" in the Safe Harbor Policy supposedly requires direct recovery of the species, and thus does not include the "informational benefit" that FWS expects from its experiment.

We disagree with Friends' reading of "net conservation benefit." For starters, "net conservation benefit" is not ambiguous—at least on whether that term includes informational benefit. The ESA defines "conservation" as "all methods and procedures" necessary for the recovery of the species, which "include, but are not limited to, all

activities associated with scientific resources management such as *research*." 16 U.S.C. § 1532(3) (emphasis added). "Research" means "the collecting of information about a particular subject." Merriam-Webster Dictionary, https://www.merriam-webster.com/dictionary/research. And we generally assume that a word in an implementing regulation tracks the meaning of that same word in the authorizing statute. *See Decker v. Nw. Envtl. Def. Ctr.*, 568 U.S. 597, 609 (2013) (regulations must be interpreted consistently with statute they implement).

So the definition of "conservation" in the ESA—and, by extension, in the ESA regulation at issue—includes activities aimed at collecting information (such as the efficacy of barred owl removal as a conservation strategy). And thus "net conservation benefit" includes informational and research benefit contemplated by the barred owl removal experiment. Whether this informational benefit outweighs the harm done from any incidental take is an expert judgment that we generally defer to the agency. *San Luis & Delta-Mendota Water Auth. v. Locke*, 776 F.3d 971, 994 (9th Cir. 2014).

Ignoring the definition of "conservation" in the ESA, Friends insists that we should look at the definition of "net conservation benefit" in the agency's Safe Harbor Policy:

> "the cumulative benefits of the management activities identified in a Safe Harbor Agreement that provide for an increase in a species' population and/or the enhancement, restoration, or maintenance of the covered species' suitable habitat within the enrolled property, taking into account the length of the Agreement and any off-setting adverse effects attributable to the incidental taking

> allowed by the enhancement of survival permit. Net conservation benefits must be sufficient to contribute, either directly or indirectly, to the recovery of the covered species."

64 Fed. Reg. at 32,722. According to Friends, the Policy's definition requires that the permits directly cause an "increase" in either the northern spotted owl's population or its suitable habitat. And because the information from the experiment does neither on its own, Friends argues that the experiment cannot qualify as a "net conservation benefit."

But even if we assume that the Safe Harbor Policy has the force of law, Friends' reading of "net conservation benefit" remains unconvincing.[5] *See W. Radio Servs. Co., Inc.*, *v. Espy*, 79 F.3d 896, 900 (9th Cir. 1996) ("[W]e will review an agency's alleged noncompliance with an agency pronouncement only if that pronouncement actually has the force and effect of law."). To begin, the last sentence of the Policy's definition states that "net conservation benefit" must "directly or *indirectly*" contribute to the recovery of the species. *Id.* at 32,722 (emphasis added). The experiment here "indirectly" aids the recovery of the northern spotted owl.

Other parts of the Safe Harbor Policy also undermine Friends' cramped reading of "net conservation benefit." Much like we review an entire statute to determine a specific provision's meaning under traditional canons of statutory interpretation, we must examine the entire Policy to discern the meaning of "net conservation benefit." *Cf. U.S. Nat'l*

[5] While the Safer Harbor Policy underwent a notice-and-comment process, it was not codified in the Code of Federal Regulations.

Bank of Or. v. Indep. Ins. Agents of America, Inc., 508 U.S. 439, 455 (1993) (When "expounding a statute, we must not be guided by a single sentence or member of a sentence, but look to the provisions of the whole law, and to its object and policy.") (internal quotation marks omitted). And in responding to public comments asking to clarify the meaning of "net conservation benefit," FWS stated three times that "net conservation benefits may result from . . . creating areas for *testing* and implementing new conservation strategies." 64 Fed. Reg. at 32,719 (Response 5), 32,720 (Response 11), 32,722 (Purpose of the Policy) (emphasis added). FWS here is testing new conservation strategies by conducting the barred owl removal experiment.

In short, we hold that "net conservation benefit" as used in the ESA regulation includes informational benefit provided by the barred owl removal experiment.[6]

b. FWS reasonably described baseline conditions using "resident" owl survey data.

Friends also claims that FWS improperly defined baseline sites where it cannot remove the barred owls.[7] The

[6] It does not necessarily mean that the agency can justify an incidental take of a threatened or endangered species based on speculative or questionable research. That issue goes to the "*net* conservation benefit"—*i.e.,* whether the research data outweighs the harm caused by the take. Friends, however, does not appear to challenge FWS' determination that the experiment will provide useful data.

[7] As with its "net conservation benefit" argument, Friends' "baseline conditions" claim presumes non-compliance with the Safe Harbor Policy and other agency guidance. We do not review claims of non-compliance with an agency's own pronouncement unless that pronouncement carries the force of law. *See W. Radio*, 79 F.3d at 900. Here, we need not decide

Safe Harbor Policy requires that each Safe Harbor Agreement fully describe "the agreed upon baseline conditions" for the covered species within the property. 64 Fed. Reg. at 32,723. "Baseline conditions" are the "population estimates and distribution and/or habitat characteristics and determined area of the enrolled property that sustain seasonal or permanent use by the covered species . . . ." *Id.* at 32,722.

For the Roseburg, Oxbow, and Weyerhaeuser Safe Harbor Agreements, FWS designated a site as "baseline"—and thus not subject to the permits' incidental take authorizations—whenever a *single resident spotted owl* had been spotted on that site in annual surveys from 2013 to 2015. For the Oregon Safe Harbor Agreement, FWS used the same methodology but relied on surveys from 2011 to 2015.

Friends argues that FWS' methodology suffered two flaws. First, Friends claims that FWS determined that baseline sites were "effectively abandoned" but that the agency's own policy statements show three to five years of survey data cannot establish "abandonment." This "abandonment" argument is a red herring. There is simply no requirement—in either the Safe Harbor Policy or the agency's other guidance—that FWS designate baseline conditions based on "abandonment." The Safe Harbor Policy does not mention "abandonment" in its discussion of baseline conditions. *See* 64 Fed. Reg. at 32,722–24. And the Safe Harbor Agreements make no such finding either. Each Safe Harbor Agreement determined that baseline sites were "unoccupied," not "abandoned." The guidance relied

whether the Policy and other guidance carry the force of law because FWS in any event complied with both.

on by Friends explicitly distinguishes between "unoccupied" and "abandoned" sites. The guidance states that "[o]ccupancy is an annual rate and is not equivalent to 'abandoned,' which is a permanent status." And the guidance says unoccupied sites should be determined by using at least "3 years of survey." FWS complied with this methodology by using three to five years of surveys in designating the Safe Harbor Agreements' baseline conditions.

Second, because the Safe Harbor Policy defines "baseline conditions" as including areas that sustain "seasonal" use, Friends alleges FWS erred in limiting baseline sites to only those areas where a "resident" spotted owl was detected and not considering "floaters" (young and displaced spotted owls). The Safe Harbor Policy instructs that determination of baseline conditions should be flexible and based on agreement between FWS and the landowner. 64 Fed. Reg. at 32,719. Given the flexibility granted to the parties, we cannot say exclusion of "floater" owls violates the Safe Harbor Policy. As FWS explained, there is "no evidence that floaters (young and displaced territorial spotted owls) successfully breed unless they first become established on a territory" and are thus unlikely to contribute to the recovery of the species. It was reasonable for FWS and the parties to set baseline sites based on "resident" owls that are of primary conservation importance. Moreover, the Safe Harbor Agreements include special protections during nesting and roosting seasons in non-baseline areas, requiring permittees to "refrain from removal or alteration of habitat" within the core area containing nesting trees.

c. FWS adequately analyzed the small portion of critical habitat affected by the Oregon permit.

The ESA requires federal agencies to ensure that their actions will not destroy or adversely modify a species' designated critical habitat. 16 U.S.C. § 1536(a)(2). To this end, FWS issued a Biological Opinion for each permit. Each Biological Opinion concluded that the permit was unlikely to destroy or adversely modify the northern spotted owl's critical habitat. 50 C.F.R. § 402.14(h)(iv)(A)–(B).

Friends objects to the Biological Opinions for two reasons. First, Friends claims that the permits at issue "overlap with critical habitat on state lands" and that FWS failed to analyze this fact in the Biological Opinions. But Friends cannot point to anything in the administrative record showing that FWS failed to analyze affected critical habitat. Only the Oregon permit/Safe Harbor Agreement overlaps with critical habitat. Because the actual amount of critical habitat that would be destroyed by the experiment was unknown, FWS took a conservative approach, assuming the entire 3,345 acres of critical habitat in the Oregon lands would be removed. Even under this conservative assumption, less than 0.04 percent of the spotted owl's total critical habitat would be destroyed. FWS concluded such a "low level of potential loss would not impair the overall recovery of the spotted owl . . . ." We cannot say such a conclusion was erroneous.

Second, Friends argues that the Biological Opinions were arbitrary and capricious because they analyze only one subset of designated critical habitat—nesting/roosting habitat—and ignore impacts to other subsets such as "habitat for foraging and/or transience or colonization stages of dispersal." We agree with FWS that the Biological Opinions sufficiently analyzed the relevant subsets of critical habitat.

Contrary to Friends' claim, the Oregon Biological Opinions did analyze the permit's effect on foraging, transience, and colonization habitat, but still concluded that the effect would not appreciably reduce such subsets because of their "scattered nature" throughout the Oregon lands.

But even without such an analysis, we would not consider the agency's focus on nesting/roosting habitat to be arbitrary and capricious. FWS said in the Biological Opinion that nesting/roosting habitat is "likely the most important habitat in determining whether spotted owls can support themselves within a specific area." Given its importance to spotted owl survival, we cannot say that the agency acted improperly by focusing its analysis on a vital habitat subset. *See San Luis & Delta-Mendota*, 776 F.3d at 994 (agency's scientific judgments owed great deference). We thus reject Friends' critical habitat claims.

II. FWS complied with NEPA.

In 2013, FWS issued an Environmental Impact Statement (EIS) analyzing the experiment's environmental impacts. Later, when FWS issued the permits and Safe Harbor Agreements, it conducted a less-intensive Environmental Assessment (EA) for each permit. All EAs concluded that the spotted owl would not be significantly affected. Friends contends FWS' environmental analyses did not meet NEPA requirements in two ways. First, although FWS issued an initial EIS, Friends claims FWS had to issue a Supplemental Environmental Impact Statement (Supplemental EIS), instead of the lesser EAs, when it later issued the permits. Second, Friends argues FWS should have considered environmental effects of each permit with those from other permits and the broader experiment. We find FWS properly complied with its NEPA obligations.

a. FWS did not have to conduct a Supplemental EIS when it issued the permits.

NEPA does not expressly address when an agency must prepare a Supplemental EIS. *Marsh v. Or. Nat. Res. Council*, 490 U.S. 360, 370 (1989). But "NEPA cases have generally required agencies to file [a Supplemental EIS] when the remaining governmental action would be environmentally 'significant.'" *Id.* at 372 (quoting *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 188 n.34 (1978)). Whether an action, such as issuing the permits at issue, has environmental significance is a "classic example of a factual dispute" that "implicates substantial agency expertise" to which "we must defer." *Id.* at 376–77.

While NEPA does not squarely address Supplemental EIS obligations, the Council on Environmental Quality (CEQ) has issued regulations that "impose a duty on all federal agencies to prepare" a Supplemental EIS if "(i) the agency makes substantial changes to the proposed action that are relevant to environmental concerns; or (ii) there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." *Id.* at 372; 40 C.F.R. § 1502.9(d)(1).

CEQ has published more guidance, which our circuit has adopted as the proper framework for applying § 1502.9(d)(1). *Russell Country Sportsmen v. U.S. Forest Serv.*, 668 F.3d 1037, 1045 (9th Cir. 2011) (citing Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, 46 Fed. Reg. 18,026, 18,035 (Mar. 23, 1981)). Under this framework, a Supplemental EIS is not required if: "(1) the new alternative is a '*minor variation* of one of the alternatives discussed in the [original] EIS,' and (2) the new alternative is

'*qualitatively within the spectrum of alternatives* that were discussed in the [original EIS].'" *Id.*

Friends argues that FWS had to issue a Supplemental EIS under either prong of § 1502.9(d)(1). First, Friends maintains that FWS made "substantial changes" to the "heart" of the barred owl removal experiment because the goal of the experiment was to conserve the northern spotted owl but the permits authorized the take of spotted owls. Second, Friends contends that the specifics of each permit and Safe Harbor Agreement constitute "significant new information" that was not considered in the initial EIS. We disagree on both points.

First, the incidental take of northern spotted owls authorized by the permits is only a "minor variation" of the broader barred owl removal experiment analyzed in the original EIS. The central component of the action was and still is the removal of barred owls from treatment areas. The permits help the removal of barred owls. Though FWS stated that the permits would allow the experiment to proceed in the most efficient and complete manner, the experiment would still be possible without access to any non-federal lands. We thus agree with FWS that the permits were an ancillary aspect of the experiment and constitute a "minor variation." *See Russell*, 668 F.3d at 1048–49 (holding supplementation not required where variation is a "secondary rather than primary" aspect of the action).

Additionally, the permits and Safe Harbor Agreements were clearly "within the spectrum of alternatives" discussed in the 2013 EIS. *Id.* at 1048. In the original EIS, FWS stated that "[w]here possible, we would seek cooperation from nonfederal landowners," although "nonfederal lands would be included in the active experiment only if the landowners are willing." Thus, the EIS adequately contemplated FWS'

later issuance of the permits. And because issuance of the permits ultimately depended on the cooperation of non-federal parties, it "would be incongruous" with NEPA to conclude FWS was without power to proceed with the experiment until such specifics of the Safe Harbor Agreements were fully fleshed out and assessed in a Supplemental EIS. *Cf. Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 352–53 (1989).

We are also satisfied that FWS conducted the required "hard look" review in determining that the permits were not environmentally significant. *See Cal. ex rel. Imperial Cty. Air Pollution Control Dist. v. U.S. Dep't of the Interior*, 767 F.3d 781, 792 (9th Cir. 2014). FWS conducted an EA for each permit. Each EA determined the authorized incidental take of northern spotted owls was likely to be small because it would only occur if spotted owls repopulated non-baseline sites after barred owls were removed. In other words, spotted owls would be taken only if the experiment managed to increase the spotted owl's population and range. And FWS concluded that such gains would be temporary, as barred owls would resume displacing the spotted owls after the experiment. In FWS' opinion, the environmental effects of the experiment were the same with or without the permits. A Supplemental EIS is not required.

b. The permits and the experiment need not be analyzed in a single EIS because they are not "connected actions."

An agency must discuss "connected actions" in a single EIS. 40 C.F.R. § 1501.9(e)(1). Friends claims that the broader experiment and the permits were "connected actions." As Friends sees it, each permit and SHA depends on the experiment's informational benefit to satisfy the "net conservation benefit" requirement. Friends thus claims that

FWS erred in analyzing the experiment separately from the permits and addressing each permit in isolation from the other permits.

Actions are connected if they "[c]annot or will not proceed unless other actions are taken previously or simultaneously" or are "interdependent parts of a larger action and depend on the larger action for their justification." *Id*. In applying § 1501.9(e)(1), we employ an "independent utility" test. *Great Basin Mine Watch v. Hankins*, 456 F.3d 955, 969 (9th Cir. 2006). "When one of the projects might reasonably have been completed without the existence of the other, the two projects have independent utility and are not 'connected' for NEPA's purposes." *Id.* (citation omitted).

The permits are not "connected" to the broader experiment because the experiment would proceed without the permits. Friends claims that each permit's legality depends on the experiment. But access to any of the non-federal lands (let alone all of them) was not considered necessary by FWS to complete the experiment. While failure to gain access to non-federal lands could delay the result of the experiment, it would not altogether inhibit it. Put another way, "*one* of the projects"—the barred owl removal experiment—would be completed without the other, meaning the experiment and the permits have "independent utility" and are not "connected." *Id.* (emphasis added).

The permits are also not "connected" to each other. Each permit has "independent utility" because the issuance of one permit did not depend on the issuance of any other permit. The EIS stated that each permit depended on "cooperation from nonfederal landowners" and "nonfederal lands would be included in the active experiment only if the landowners are willing." FWS issued the permits individually to each

landowner, and irrespective of whether the other permits would issue, so the permits are not "connected." *Id.* Because the permits and the experiment were not "connected actions," FWS did not have to assess their environmental impacts together in a single document.[8]

CONCLUSION

We hold that FWS complied with the ESA and NEPA in issuing the permits and Safe Harbor Agreements. We **AFFIRM** the district court's grant of summary judgment for FWS.

[8] In the Roseburg-Oxbow final EA, FWS analyzed the cumulative effects of the Roseburg-Oxbow, Weyerhaeuser, and Oregon SHAs to "ensure a robust NEPA analysis."