FOR PUBLICATION

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

GIFFORD PINCHOT TASK FORCE, an Oregon non-profit organization; CASCADIA WILDLANDS PROJECT, an Oregon non-profit organization; NORTHWEST ENVIRONMENTAL DEFENSE CENTER, an Oregon non-profit organization; OREGON NATURAL RESOURCES COUNCIL FUND, an Oregon non-profit organization; AMERICAN LANDS ALLIANCE, an Oregon non-profit organization; BARK, an Oregon non-profit organization; KLAMATH-SISKIYOU WILDLANDS CENTER, an Oregon non-profit organization; NORTHWEST ECOSYSTEM ALLIANCE, a Washington non-profit organization; PACIFIC CREST BIODIVERSITY PROJECT, a Washington non-profit organization,

Plaintiffs-Appellants,

v.

UNITED STATES FISH & WILDLIFE SERVICE,

Defendant-Appellee,

AMERICAN FOREST RESOURCE COUNCIL,

Defendant-Intervenor-Appellee.

No. 03-35279

D.C. No. CV-00-05462-FDB

OPINION

Appeal from the United States District Court
for the Western District of Washington
Franklin D. Burgess, District Judge, Presiding

Argued and Submitted
June 7, 2004—Seattle, Washington

Filed August 6, 2004

Before: Melvin Brunetti, M. Margaret McKeown, and
Ronald M. Gould, Circuit Judges.

Opinion by Judge Gould

COUNSEL

Stephanie M. Parent, Pacific Environmental Advocacy Center, Portland, Oregon, for the plaintiffs-appellants.

R. Justin Smith, United States Department of Justice, Environmental and Natural Resources Division, Washington, D.C., for the defendant-appellee.

James P. Walsh, Davis Wright Tremaine LLP, San Francisco, California, for defendant-intervenor-appellee American Forest Resource Council.

OPINION

GOULD, Circuit Judge:

This is a record review case in which the Appellants, an assortment of environmental organizations, challenge six bio-

logical opinions (BiOps) issued by the United States Fish and Wildlife Service (USFWS or FWS) pursuant to the Endangered Species Act (ESA), 16 U.S.C. § 1531 *et seq.* The BiOps in question allowed for timber harvests in specified Northwest forests and also authorized incidental "takes" of the Northern spotted owl (spotted owl), a threatened species under the ESA. This case will bear on how the USFWS conducts its duties under the ESA in light of the comprehensive Northwest Forest Plan (NFP) that was implemented, in part, to protect the spotted owl.

I

A

We begin by explaining the legal regime created by the ESA. For any federal action that may affect a threatened or endangered species (or its habitat), the agency contemplating the action (the action agency) must consult with the consulting agency[1] to ensure that the federal action is not likely to jeopardize "the continued existence of" an endangered or threatened species and that the federal action will not result in the "destruction or adverse modification" of the designated critical habitat of the listed species. 16 U.S.C. § 1536(a)(2). These consultations are known as "Section 7" consultations. The action agency typically makes a written request to the consulting agency, 50 C.F.R. § 402.14(c), and, after formal consultation, the process concludes with the consulting agency issuing a biological opinion. *See generally Ariz. Cattle Growers' Assoc. v. United States Fish and Wildlife Serv.*, 273 F.3d 1229, 1239 (9th Cir. 2001). The BiOp should address both the jeopardy and critical habitat prongs of Section 7 by considering the current status of the species, the environmen-

[1]For ESA consultation on freshwater or land-based species, such as the spotted owl, the consulting agency is the FWS. For marine or anadromous species, the consulting agency is the National Marine Fisheries Service (NMFS or NOAA Fisheries). *See* 50 C.F.R. § 402.01.

tal baseline, the effects of the proposed action, and the cumulative effects of the proposed action. 50 C.F.R. § 402.14(g)(2)-(3).

If the BiOp concludes that jeopardy is not likely and that there will not be adverse modification of critical habitat, or that there is a "reasonable and prudent alternative" to the agency action that avoids jeopardy and adverse modification, the FWS can issue an Incidental Take Statement (ITS) which, if followed, exempts the action agency from the prohibition on takings found in Section 9 of the ESA. 16 U.S.C. § 1536(b)(4). If jeopardy or adverse modification cannot be avoided, the BiOp would exempt the action agency from Section 9's prohibition on taking and the strict civil and criminal penalties associated with such unlawful takings.

B

We next discuss the Northwest Forest Plan and this litigation. The crux of the challenge revolves around protection of the northern spotted owl, *strix occidentalis caurina*, a cavity nester that tends to live its adult life in the same territory. As a result of prior litigation, in 1990 the spotted owl was listed by the FWS as threatened. 55 Fed. Reg. 26,114 (June 26, 1990); *N. Spotted Owl v. Hodel*, 716 F. Supp. 479 (W.D. Wash. 1988). After being required to do so by a court order, *N. Spotted Owl v. Lujan*, 758 F. Supp. 621 (W.D. Wash. 1991), the FWS delineated the critical habitat for the spotted owl in 1992.

In response to further litigation, the federal government adopted a comprehensive forest management plan for the entire range of the spotted owl known as the "Northwest Forest Plan." The NFP survived litigation, *see Seattle Audubon Soc'y v. Moseley*, 80 F.3d 1401 (9th Cir. 1996), and currently controls the use of the forests at the heart of this challenge. Relevant to this appeal, the NFP allocated the forests into "late successional reserves" (LSRs), "matrix" lands, and

"adaptive management areas," with different harvesting rules applied to each area. The LSR allows less harvesting than matrix lands.[2] An interagency analysis of the NFP found that it would provide for stable and well-distributed owl populations, though owl populations were projected to decline in the short-term. The NFP was subject to a Section 7 consultation and the resulting BiOp concerning this broad forest plan found no jeopardy or adverse modification. Because the NFP covered such a wide area, from Northern Washington to Northern California, involving virtually all of the federal government's forested land in this expansive area, the NFP BiOp explicitly declined to address the unique impacts of any particular action or implementation of the NFP. The NFP BiOp did not authorize incidental takes, deferring such consideration instead to future BiOps that would address specific projects.

Since the government approval of the NFP, the FWS has issued at least 298 BiOps and incidental take statements for spotted owls in the lands covered by the NFP. A total of 1080 incidental takes of spotted owls have been authorized, and 82,000 acres of spotted owl habitat have been removed, downgraded, or degraded. Six representative BiOps are the subject of this litigation. The first three are "programmatic" BiOps that addressed multiple timber harvest projects covering multiple years.

The first BiOp is the province-wide Coos Bay BiOp, completed on February 18, 1998. This BiOp authorized the removal of 2000 acres of suitable owl habitat and 1043 acres of "critical habitat," and the incidental take of at least eight spotted owls.

The second programmatic BiOp is the province-wide Willamette BiOp, completed on September 29, 1998. This BiOp allowed the modification of about 29,276 acres of spotted owl

[2]About 70% of the spotted owl's critical habitat falls within a LSR.

habitat, with more than 9000 acres completely removed. 13,000 acres of critical habitat were to be affected, with 1809 acres completely removed. The FWS authorized the incidental take of "all" spotted owls associated with the project.

The third programmatic BiOp is the province-wide Rogue Valley BiOp for timber sales in southwest Oregon and northern California. The BiOp authorized the removal of about 28,000 acres of suitable spotted owl habitat and the degrading of 4000 more acres. The BiOp allowed the incidental take of "all spotted owl pairs or resident singles" affected by the action. The BiOp also authorized the likely removal or degradation of 6870 acres of critical habitat for spotted owls.

The fourth BiOp is the Upper Iron Timber Sale BiOp, completed (as amended) on January 20, 1999. This BiOp notes four owl pairs, but does not say how many acres of critical habitat will be impacted, though it states that 165 acres of suitable habitat for a specific owl pairing would be affected. The entire project area is classified as critical habitat. The FWS authorized the incidental take of two spotted owl pairs.

The fifth BiOP is Acci BiOp, completed on September 23, 1999. This BiOp allows harvesting of 1,000 acres, degradation of 227 acres of critical habitat, and incidental take of "all" spotted owls associated with the project.

The sixth BiOp is the La Roux timber sale, approved on April 30, 1998. This BiOp allows for removal of 148 acres of critical habitat, the incidental take of one known owl pair, and well as the incidental take of any owl in the non-surveyed area.

In November 2000, Appellants challenged many of the BiOps issued by the FWS in the United States District Court for the Western District of Washington. The challenged BiOps included the six at issue here. American Forest Resource Council (AFRC) sought, and was granted, permis-

sion to intervene. A temporary restraining order sought by Appellants to stop these six and other projects was denied, as was the FWS's and AFRC's motion to dismiss on finality grounds. In March 2002, the parties filed cross motions for summary judgment as to the six BiOps in this case. On July 12, 2002, the district court granted summary judgment to the FWS and on August 7, 2002, the district court entered judgment. Subsequent proceedings led the district court to issue "final judgment" on the six BiOps in this case on March 17, 2003. Appellants timely appealed. We have jurisdiction pursuant to 28 U.S.C. § 1291, and we affirm in part, reverse in part, and remand.

II

We review the grant of summary judgment de novo, thus reviewing directly the agency's action under the Administrative Procedure Act's (APA) arbitrary and capricious standard. 5 U.S.C. § 706(2)(A); *Nev. Land Action Ass'n v. United States Forest Serv.*, 8 F.3d 713, 716 (9th Cir. 1993). Our review is "narrow" but "searching and careful," *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 378 (1989) (quoting *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402, 416 (1971)), and we must ensure that the FWS's decisions are based on a consideration of relevant factors and we assess whether there has been a clear error of judgment. *Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 42-43 (1983). The FWS must state a rational connection between the facts found and the decision made. *Or. Natural Res. Council v. Lowe*, 109 F.3d 521, 526 (9th Cir. 1997).

III

The Appellants challenge the six BiOps[3] on both the jeop-

[3]The six BiOps in this case appear to have been specifically selected by Appellants as representative and these six BiOps present common issues. Our discussion of the BiOps applies to all six unless specifically noted.

ardy analysis and the critical habitat requirements of a Section 7 consultation. Appellants also challenge whether the FWS's "amendments" to the BiOps are properly before us.

A

The first requirement of an ESA BiOp is to determine whether the proposed action is likely to jeopardize the continuing existence of the species. Here, Appellants challenge the FWS jeopardy analysis, arguing that the methods employed by the FWS do not lead to an accurate picture of the true jeopardy posed to the spotted owl by the approved projects protected by the BiOps.

1

Appellants' first contention is that the FWS may not use the changes to the spotted owl's habitat as a proxy for the jeopardy that the spotted owl may face from any given proposed project. The FWS concedes that it tracks a project's effect on the spotted owl "primarily by monitoring status and trends in the owl's habitat," but argues that such an approach is permissible.

The FWS contends that predicting species jeopardy based on habitat degradation is within the realm of agency discretion, is scientifically sound, and has been approved by this court in other contexts. An agency's scientific methodology is owed substantial deference, *United States v. Alpine Land and Reservoir Co.*, 887 F.2d 207, 213 (9th Cir. 1989), and in the context of deference to scientific methodology, the holding of *Inland Empire Pub. Lands Council v. United States Forest Serv.*, 88 F.3d 754, 761 (9th Cir. 1996), is apposite. In that case, we deferred to the agency's expertise in allowing this "proxy on proxy" approach.[4]

[4]We recognize that the statute at issue in *Inland Empire* was the National Forest Management Act, 16 U.S.C. § 1601 *et seq.*, not the ESA.

[1] The test for whether the habitat proxy is permissible in this case is whether it "reasonably ensures" that the proxy results mirror reality. *See Idaho Sporting Cong., Inc. v. Rittenhouse*, 305 F.3d 957, 972-73 (9th Cir. 2002) (holding that deference to proxy on proxy approaches is not warranted when the proxy method does not "reasonably ensure" accurate results); *Ariz. Cattle Growers'*, 273 F.3d at 1250 ("[T]he use of ecological conditions as a surrogate for defining the amount or extent of incidental take is reasonable so long as these conditions are linked to the take of a protected species.") (quotation marks omitted). Though it is a close case, we conclude that the habitat models used here reasonably ensure that owl population projections from the habitat proxy are accurate.

[2] Based on a consideration of the entire record, the use of habitat as a proxy for species in this case makes sense. The habitat analysis here is not just a simplistic "x number acres = y number of owls" type of equation. Rather, the habitat proxy takes into account type of land, extent of degradation of the habitat, relationship between different habitats, the owls' distribution, and the owls' range. The jeopardy analysis also takes into account non-habitat factors, including competition from other species, forest insects, and disease. This detailed model for owl population is sufficient to ensure that the FWS's habitat proxy reasonably correlates to the actual population of owls. Finally, the habitat proxy does not exist in a vacuum: The FWS has a program of demographic studies that supplements and verifies the habitat results. Bearing in mind the deference owed the FWS's scientific judgment,

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While the statutes at issue may be different, the principle of allowing an agency to use proxy modeling to evaluate species population so long as that proxy has a high correlation with the relevant species' population is equally applicable in the ESA context. If the modeling approach was reasonable in ensuring an accurate population estimate of a species for NFMA purposes, it follows that a similar modeling approach to estimate species population for ESA purposes is permissible.

Alpine Land, 887 F.2d at 213, we cannot say that use of a habitat proxy was impermissible.

Second, Appellants argue that the statutory scheme does not allow a habitat proxy method for jeopardy assessment even if habitat proxy is a sound method. The ESA is concerned with two variables in the context of species preservation, the amount of species and the amount of species habitat. *See, e.g.*, 16 U.S.C. § 1536(a)(2) (stating that BiOps focus on species jeopardy and adverse modification of critical habitat); *Greenpeace v. Nat'l Marine Fisheries Serv.*, 55 F. Supp. 2d 1248, 1265 (W.D. Wash 1999) (noting that there are two standards, species and habitat). Appellants argue that because "habitat" is already accounted for in the adverse modification prong of Section 7 analysis, any analysis of jeopardy to species must look to the actual species themselves instead of simply analyzing habitat, or at the very least, must continually verify habitat models by on-the-ground population verifications.

[3] We reject this argument. Focus on actual species count is an overly narrow interpretation of what is required under the jeopardy prong. The FWS asserts that it uses different methodologies when it analyzes habitat under jeopardy and adverse modification, limiting potential overlap. Importantly, if the habitat proxy is used correctly, it can evaluate a species's habitat that has not been designated as "critical habitat," and thus is indirectly evaluating species that live outside the critical habitat. In the ordinary course, any endangered or threatened species may have some habitat that is not deemed critical habitat. *See* 16 U.S.C. § 1532(5)(C) (noting that, except for circumstances established by the Secretary of the Interior, "critical habitat shall not include the entire geographical area which can be occupied by the threatened or endangered species."). Further, if habitat models are sufficiently accurate and are robust, in the sense that the results are accurate in many cases, then the models function as if the FWS were counting spotted owls. Because the ESA does not pre-

scribe how the jeopardy prong is to be determined, nor how species populations are to be estimated, we hold that it is a permissible interpretation of the statute to rest the jeopardy analysis on a habitat proxy.

2

Appellants next argue that the FWS could not substitute the NFP for independent jeopardy analysis. At the heart of the jeopardy portion of the BiOp is the interaction of the NFP with the ESA. Compliance with the NFP is the FWS's primary justification for its ultimate jeopardy analysis. In the BiOps at issue, while explicitly not assessing whether the specified projects comply with the NFP,[5] the FWS relies on the habitat allocation of the NFP (especially LSRs) for the FWS's "no jeopardy" conclusion. The NFP BiOp did not authorize incidental takes, promising that future project specific BiOps would consider the issue. The NFP BiOp said that the NFP would be adjusted based on information developed through future Section 7 consultations. Now, the project BiOps are relying on compliance with the NFP to find "no jeopardy." Appellants argue that this feels like a "shell game."

[4] We disagree. It is undisputed that the NFP was developed on sound scientific analysis as an effective method to conserve the spotted owl, and that the associated BiOps implement this method. Moreover, the six BiOps at issue in their jeopardy analyses did not rely solely on the NFP, but conducted independent analyses of site-specific data. We have previously approved programmatic environmental analysis

[5]The purported amendments to the BiOps, considered in Part III.C *infra*, were designed to show that the projects were in compliance with the NFP, perhaps in response to *Pacific Coast Federation of Fishermen's Ass'n, Inc. v. National Marine Fisheries Service*, 71 F. Supp. 2d 1063, 1065-66 (W.D. Wash. 1999) (*PCFFA II*) (holding arbitrary and capricious a BiOp that did not analyze compliance with a different standard in the NFP), *aff'd in part and vacated in part*, 265 F.3d 1028 (9th Cir. 2001). We hold below that this evidence should not be admitted.

supplemented by later project-specific environmental analysis. *See Salmon River Concerned Citizens v. Robertson*, 32 F.3d 1346, 1356 (9th Cir. 1994) (approving such an approach in the NEPA context). It should be borne in mind that the NFP is not an ordinary government land-management strategy; instead, the history and care in its creation bespeak the massive effort that led to its birth. *See Seattle Audubon Soc'y v. Lyons*, 871 F. Supp. 1291, 1303 (W.D. Wash. 1994) (noting that the NFP was "the result of a massive effort by the executive branch of the federal government to meet the legal and scientific needs of forest management" and "reflect[s] unprecedented thoroughness in doing this complex and difficult job"). The NFP is a unique land-management plan that has already been approved by this court, *see Moseley*, 80 F.3d 1401 (9th Cir. 1996), and we are hesitant to fault the agency for relying on it in the context of this case.

Appellants respond that the NFP lacks effectiveness monitoring results and that the NFP predicted that its effectiveness could not be precisely measured in the early years of implementation. While the lack of effectiveness monitoring coupled with reliance on the NFP for these BiOps is somewhat troubling, we are reassured that such monitoring is currently being conducted with a report due in 2004. If such effectiveness monitoring were not taking place, or if the on-going monitoring reveals that the NFP is not meeting expectations, we would not allow the FWS to rely simply upon the NFP's predictions. Without such affirmative evidence, however, we refrain from punishing the FWS for relying on the unique and extensive Northwest Forest Plan.

[5] The agency summed it up accurately: "Our defense/analysis remains fundamentally at a level analogous to implementation monitoring for the NFP. Anyone skeptical about the adequacy of the NFP will not be moved by this defense." Without more evidence that reliance on the NFP is problematic, we will not order the FWS to reinvent the wheel for every BiOp. We hold that, in the absence of affirmative evi-

dence showing why reliance on the NFP is inadequate or incorrect, the FWS may permissibly rely, in part, on the projections and assumptions of the NFP in its jeopardy analysis.

3

Appellants finally allege that there are analytical flaws in the jeopardy analysis. Appellants argue that the BiOps' "current status" analysis is insufficient because it does not discuss the current status of the spotted owl in terms of "population size, variability, and stability" or "the status and distribution of the listed species." Second, Appellants argue that the environmental baseline (i.e., the environmental condition pre-project) is insufficient because the BiOps do not take into account past incidental takes. Finally, Appellants argue that the cumulative effects sections of the BiOps lack detail and do not explain how changes in the environmental baseline, combined with other potential actions, justify the cumulative effects analysis.

The problem with these arguments is that they attempt to put old wine into new bottles: These arguments attack reliance on habitat and the NFP for jeopardy determinations. As we have rejected Appellants' direct challenge on both these accounts, Appellants' indirect challenges fail as well. We affirm the district court's grant of summary judgment to the FWS on the jeopardy analysis.

B

We next turn to the critical habitat portion of the challenged BiOps. It is here that the picture is complicated by error and, on our analysis, becomes less rosy for the FWS.

1

[6] Appellants first argue that the FWS's interpretation of "adverse modification," 50 C.F.R. § 402.02, is unlawful. ESA

Section 7 consultations require that in every biological opinion, the consulting agency (here the FWS) ensure that the proposed action "is not likely to jeopardize the continued existence of" an endangered or threatened species and that the federal action will not result in the "destruction or adverse modification" of the designated "critical habitat" of the listed species. 16 U.S.C. § 1536(a)(2).

The FWS, in turn, defined "destruction or adverse modification" as:

> [A] direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.

50 C.F.R. § 402.02. This regulation requires a close reading to grasp its import. Appellants argue that the regulatory definition sets the bar too high because the adverse modification threshold is not triggered by a proposed action until there is an appreciable diminishment of the value of critical habitat for both survival and recovery.[6]

[7] We agree. Here, the FWS has interpreted "destruction or adverse modification" as changes to the critical habitat "that appreciably diminish[ ] the value of critical habitat for *both* the survival *and* recovery of a listed species." 50 C.F.R. § 402.02 (emphases added). This regulatory definition explicitly requires appreciable diminishment of the critical habitat necessary for survival before the "destruction or adverse modification" standard could ever be met. Because it is logical

[6]This claim, which challenges the FWS regulation, is reviewed under the familiar *Chevron U.S.A., Inc. v. Natural Resource Defense Council, Inc.*, 467 U.S. 837 (1984), framework.

and inevitable that a species requires more critical habitat for recovery than is necessary for the species survival, the regulation's singular focus becomes "survival." Given this literal understanding of the regulation's express definition of "adverse modification," we consider whether that definition is a permissible interpretation of the ESA.

[8] To answer that question, there is no need to go beyond *Chevron*'s first step in analyzing the permissibility of the regulation; the regulatory definition of "adverse modification" contradicts Congress's express command. As the Fifth and Tenth Circuits have already recognized, the regulatory definition reads the "recovery" goal out of the adverse modification inquiry; a proposed action "adversely modifies" critical habitat if, and only if, the value of the critical habitat for *survival* is appreciably diminished. *See N.M. Cattle Growers Ass'n v. United States Fish and Wildlife Serv.*, 248 F.3d 1277, 1283 & n.2 (10th Cir. 2001); *Sierra Club v. United States Fish and Wildlife Serv.*, 245 F.3d 434, 441-42 (5th Cir. 2001). The FWS could authorize the complete elimination of critical habitat necessary only for recovery, and so long as the smaller amount of critical habitat necessary for survival is not appreciably diminished, then no "destruction or adverse modification," as defined by the regulation, has taken place. This cannot be right. If the FWS follows its own regulation, then it is obligated to be indifferent to, if not to ignore, the recovery goal of critical habitat.

[9] The agency's controlling regulation on critical habitat thus offends the ESA because the ESA was enacted not merely to forestall the extinction of species (i.e., promote a species survival), but to allow a species to recover to the point where it may be delisted. *See* 16 U.S.C. § 1532(3) (defining conservation as all methods that can be employed to "bring any endangered species or threatened species to the point at which the measures provided pursuant to this [Act] are no longer necessary"); *Sierra Club*, 245 F.3d at 438. The ESA also defines critical habitat as including "the specific areas . . .

occupied by the species . . . which are . . . essential to the *conservation* of the species" and the "specific areas outside the geographical area occupied by the species . . . that . . . are essential for the *conservation* of the species . . . ." 16 U.S.C. § 1532(5)(A) (emphases added). By these definitions, it is clear that Congress intended that conservation and survival be two different (though complementary) goals of the ESA. *See* 16 U.S.C. § 1533(f)(1) ("The Secretary shall develop and implement plans . . . for the *conservation* and *survival* of endangered species and threatened species.") (emphasis added). Clearly, then, the purpose of establishing "critical habitat" is for the government to carve out territory that is not only necessary for the species' survival but also essential for the species' recovery.

Congress, by its own language, viewed conservation and survival as distinct, though complementary, goals, and the requirement to preserve critical habitat is designed to promote both conservation and survival. Congress said that "destruction or adverse modification" could occur when sufficient critical habitat is lost so as to threaten a species' recovery even if there remains sufficient critical habitat for the species' survival. The regulation, by contrast, finds that adverse modification to critical habitat can only occur when there is so much critical habitat lost that a species' very survival is threatened. The agency's interpretation would drastically narrow the scope of protection commanded by Congress under the ESA. To define "destruction or adverse modification" of critical habitat to occur only when there is appreciable diminishment of the value of the critical habitat for both survival *and* conservation fails to provide protection of habitat when necessary only for species' recovery. The narrowing construction implemented by the regulation is regrettably, but blatantly, contradictory to Congress' express command. Where Congress in its statutory language required "or," the agency in its regulatory definition substituted "and." This is not merely a technical glitch, but rather a failure of the regulation to implement Congressional will.

[10] The Fifth Circuit reached this same conclusion in *Sierra Club*. Reviewing the "critical habitat" language and the same regulatory definition of "destruction or adverse modification," the court held:

> "Conservation" is a much broader concept than mere survival. The ESA's definition of "conservation" speaks to the recovery of a threatened or endangered species. Indeed, in a different section of the ESA, the statute distinguishes between "conservation" and "survival." Requiring consultation only where an action affects the value of critical habitat to both the recovery *and* survival of a species imposes a higher threshold than the statutory language permits.

Sierra Club, 245 F.3d at 441-42 (footnotes omitted). The court bolstered its conclusion from the legislative history where Congress had considered an earlier critical habitat regulation that required effects on both recovery and survival and had rejected such an interpretation. *Id*. at 443 ("The [FWS's] definition of the destruction/adverse modification standard in terms of survival and recovery is consequently an attempt to revive an interpretation that was rejected by Congress."). We agree with the Fifth Circuit, and with the Tenth Circuit's analogous reasoning, and hold that the regulatory definition of "adverse modification" gives too little protection to designated critical habitat.

In circumstances where an agency errs, we may evaluate whether such an error was harmless. *See* 5 U.S.C. § 706. In applying harmless error analysis, our precedent dictates that the agency must demonstrate that its error on the controlling regulation was harmless:

> If the record is not complete, then the requirement that the agency decision be supported by "the record" becomes almost meaningless. Indeed, where the so-called "record" looks complete on its face and

> appears to support the decision of the agency but there is a subsequent showing of impropriety in the process, that impropriety creates an appearance of irregularity which the agency must then show to be harmless.

Portland Audubon Soc'y v. Endangered Species Comm., 984 F.2d 1534, 1548 (9th Cir. 1993) (internal citation omitted). Here, the incorrect definition created an "impropriety in the process," and the FWS — if it is to answer Appellants' claims about critical habitat — must now demonstrate that the definition was harmless.

In the context of agency review, the role of harmless error is constrained. The doctrine may be employed only "when a mistake of the administrative body is one that *clearly* had *no bearing* on the procedure used or the substance of decision reached." *Buschmann v. Schweiker*, 676 F.2d 352, 358 (9th Cir. 1982) (internal quotation marks omitted) (emphases added). In the context of non-formal agency decision-making, like a BiOp, "we must exercise great caution in applying the harmless error rule in [informal agency adjudications including notice and comment rulemaking] . . . . To avoid gutting the APA's procedural requirements, harmless error analysis in administrative rulemaking must therefore focus on *the process* as well as *the result*." *Riverbed Farms, Inc. v. Madigan*, 958 F.2d 1479, 1487 (9th Cir. 1992) (emphases added).[7]

That the agency was operating under a regulation that we now hold was impermissible has an inescapable bearing on the requisite showing of whether the FWS considered recov-

[7]If the FWS's error is not harmless, the "preferred course" is a remand to the agency for the necessary explanation. *Pension Benefit Guar. Corp. v. LTV Corp.*, 496 U.S. 633, 654 (1990). In no case are we to hypothesize the FWS's rationales; nor are we to accept the FWS's post hoc rationalizations because such explanations provide an inadequate basis for judicial review of the BiOps. *Overton Park*, 401 U.S. at 419.

ery in its critical habitat inquiry. Here, the Supreme Court demands that we afford the agency a presumption of regularity. *Overton Park*, 401 U.S. at 415. In other words, the FWS must be presumed to have followed the adverse modification regulation. Thus, when analyzing the BiOps' critical habitat analysis, we must presume, unless rebutted by evidence in the record, that the FWS followed its definition of adverse modification and thereby ignored the evaluation of whether adequate critical habitat would remain to ensure species recovery.

This conclusion that the agency is here bound by the presumption of regularity is only reinforced by the surprising fact that at oral argument the FWS asserted that it still believes that its regulation is correct. With the Fifth Circuit having previously addressed the regulatory infirmity, but with the FWS continuing to assert its regulation's validity, we have even more reason here to credit the presumption of regularity as dispositive in this case. If the government argues that its regulation is correct, why should we presume anything but that the FWS followed it?

The FWS could show harmless error by proving that, even if it ignored recovery on the record by following its regulation, it did not affect the result of the critical habitat analysis. If this argument is advanced, the agency is no longer entitled to deference in its defense of the BiOps. An explanation that 'even if the FWS had not used the incorrect regulatory definition, the same outcome would have resulted' is a post-hoc decision explanation that is disfavored.[8] *Overton Park*, 401 U.S. at 419. Perhaps this is the reason that the government adopts a slightly more refined position: In its brief and at oral argument, the FWS asserted that it implicitly recognized the

[8]This is so because the FWS (or we) would have to craft a hypothetical critical habitat analysis that took into account species recovery in order to compare process and outcome to the non-recovery analysis in the BiOps. But this hypothetical analysis would be post hoc and deserving of no deference under *Overton Park*.

"central role of recovery" in its critical habitat analysis and cites to the Federal Register where the FWS created the northern spotted owl's critical habitat. Thus, the FWS is not arguing that it relied on the regulation and that reliance was harmless. Instead, the FWS argues that consideration of recovery was implicit in its critical habitat analysis, that no matter how we interpret the adverse modification regulatory definition, the FWS meets that standard. We now evaluate that contention by examining the critical habitat analysis in each of the challenged BiOps.[9]

Rogue Valley BiOp

Recovery is mentioned twice in the critical habitat analysis, and both mentions are in the introductory paragraph. The BiOp specifies that "[t]he purpose of critical habitat is to identify those lands that may require special management to maintain recovery options" and "[t]he recovery strategy (USDI

[9]In considering the BiOps, we may only rely on what the agency said in the record to determine what the agency decided and why. "[W]e cannot infer an agency's reasoning from mere silence or where the agency failed to address significant objections and alternative proposals. Rather, 'an agency's action must be upheld, if at all, on the basis articulated by the agency itself.' " *Beno v. Shalala*, 30 F.3d 1057, 1073-74 (9th Cir. 1994) (quoting *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 50) (internal citation omitted). Here, fundamental principles of administrative law focus attention on what the agency *actually said* in the critical habitat analysis in the six BiOps. Even if "conservation" is implied by the NFP's attention to habitat and by the NFP referenced in the BiOps, we cannot assume that the FWS considered species recovery unless the FWS, in the BiOps, said that it was making this consideration. Accepting "implied" consideration of recovery would reject the bedrock concept of record review. *See SEC v. Chenery Corp.*, 318 U.S. 80, 94-95 (1943) (holding that an agency decision may only be sustained based on the reasons given by the agency). It would create a double standard to give the agency a free pass when private litigants are routinely constrained to show error by focusing on the record created by the agency; we will not delve into the unexpressed thought processes of an agency. *See Morgan v. United States*, 304 U.S. 1, 18 (1938) (holding that it is "not the function of the court to probe the mental processes of the Secretary").

1992a) [the 'final draft recovery plan'] was incorporated into the NFP which was adopted by the Federal government as its contribution to the recovery of the species." This discussion of "recovery" is descriptive. This section defers analysis of recovery benefit of critical habitat to the consideration of LSRs created by the NFP. Moreover, the BiOp says that the loss of "suitable acres would have an adverse effect on the ability of the critical habitat network to function as intended," while also stating that the action "would constitute an adverse effect to the critical habitat but would not likely result in adverse modification." This language, seemingly following the incorrect logic of the regulation, cannot be read to declare that the agency considered recovery when its regulation told it not to do so. The remainder of critical habitat discussion in this BiOp revolves around the protections that the NFP, through the LSRs, will give the owls.[10]

Willamette Province BiOp

Similar to the Rouge Valley BiOp, there is almost a word-for-word recitation of the role of critical habitat, the draft recovery plan, and the incorporation of that recovery plan within the NFP. This is again descriptive, and, like the Rouge Valley BiOp, cannot be considered an adequate evaluation of the impact of the proposed action. The BiOp notes that non-LSR critical habitat would be lost, but because the non-critical habitat LSRs would compensate, the loss would not cause adverse modification.

CoosBay BiOp

There is *no* discussion of the purpose of critical habitat; the words recovery and conservation are not mentioned. The only analysis is the number of acres cut and a reliance on LSRs to compensate for loss of critical habitat.

[10]As will be discussed in Part III.B.2, the reliance on LSRs to compensate for lost critical habitat is an independent ground for reversal.

Upper Iron Timber Sale

There is scant discussion of the effect on the owl's habitat, and there is no mention of "critical habitat," much less mention of recovery or conservation.

Acci, Gnat, and Smooth Juniper Timber Sales

In the summary of the effects of these three sales, there is no discussion of recovery or conservation. The analysis gives a percentage loss of certain forest types (e.g., critical habitat and LSRs). There is also a section on critical habitat, which discusses the loss of LSR and critical habitat without mentioning, or conducting analysis on, "recovery" or "conservation."

La Roux Timber Sale

This timber sale discusses the number of acres of "suitable" habitat lost and talks about dispersal across LSRs. There is a brief discussion of effect on CHU WA-41, but this is mainly limited to discussion of the amount of habitat lost and that the critical habitat would not lose its overall characteristics. The words "recovery" or "conservation" do not appear nor is there specific analysis of these concepts. We cannot infer that analysis was conducted but not described in the BiOp.

Looking at what the FWS said in the last four BiOps, the definitional error is not harmless. The presumption is that the agency, by its own regulation, ignored the recovery aspect of critical habitat analysis. Nowhere in the four opinions is there a hint of recovery discussion, or any hint that the agency went beyond its regulation. Under the rule of *Chenery*, we cannot impute an agency rationale; under the rationale of *Morgan*, we cannot look into the mind of the FWS; and as dictated by *Overton Park*, the FWS post hoc justification — urging to us that concern about conservation infused the critical habitat analysis — must be rejected, and the agency's argument

found lacking. For the last four BiOps, concern about species recovery has left no footprint in the critical habitat analysis. The Supreme Court's precedents prohibit us from implying an analysis that is not shown in the record. For the last four BiOps, the FWS has not clearly shown that the error was harmless.

The question is a bit more difficult for the first two BiOps. Here, the FWS twice mentioned recovery: That the purpose of critical habitat is to preserve recovery options and that the NFP is the government's "contribution" to the spotted owl's recovery. The BiOps conclude that the logging will not affect the purpose of the LSRs, even if there is loss of critical habitat. This, however, is not enough discussion or analysis on the lost recovery value of critical habitat. First, the agency is operating under the presumption of regularity, that it followed its regulation. If Appellants were arguing that the agency had failed to follow the regulation, we would not accept that challenge based on such flimsy evidence. We will not hold the FWS to any lesser standard when it argues that it ignored its own regulatory procedures.

Second, how the agency discusses recovery is telling: It uses the language of "recovery" to transition from analysis of loss of critical habitat to analysis of compliance with the NFP — which incorporates the government's draft recovery plan for the owl. Thus, even the mention of "recovery" does not indicate analysis of recovery in the context of critical habitat, the sense in which recovery evaluation is required by the ESA, but only talks of recovery as it is promoted by the NFP. This is a distinction with an important difference, when considered in the context of the agency's regulation and the presumption of regularity.

Most important, the only analysis of "adverse modification" says: "[I]mpacts to the primary constituent elements of critical habitat which occur outside LSRs would constitute an adverse effect to critical habitat but would not likely result in

adverse modification." This conclusion is then supported by detailing the percentage loss of critical habitat. There is no discussion of the specific impact on recovery and no evidence that the FWS looked beyond its regulation when it made the "adverse modification" conclusion.[11] We cannot substitute our analysis as the work of the agency, *see INS v. Ventura*, 537 U.S. 12, 16 (2002) (per curiam), nor can we infer any overarching concern for recovery from the silence of this text, *Morgan*, 304 U.S. at 18; *Beno*, 30 F.3d at 1073-74. Simply put: The text of the first two BiOps does not provide any sound basis for us to conclude, as a matter of law, that the agency has rebutted the presumption of regularity, ignored their own regulation, and thus considered species recovery when it concluded "no adverse modification" to critical habitat.

[11] We conclude that the FWS has not shown that its erroneous regulatory definition of "adverse modification" was harmless. The critical habitat analysis is therefore irredeemably flawed.

2

Appellants level three additional challenges to the critical habitat analysis in the six BiOps. First, they argue that the FWS recognized that the projects will adversely affect the critical habitat, but wrongly decided that no adverse modification will take place. This contests the FWS's determination that the amount of critical habitat lost is not an "appreciab[le] diminish[ment]." 50 C.F.R. § 402.02. Appellants' argument, however, has minimal force because when, or indeed if, the

[11]In the Willamette BiOp the FWS explicitly acknowledged that it was relying entirely on the LSRs and that it did not know of the "functionality of critical habitat at the local and provincial levels" in non-LSR critical habitat. It could not be more clear that, if the FWS was concerned about recovery at all, it is in the context of LSRs, not critical habitat. The ESA, however, requires analysis of adverse modification on critical habitat within the meaning of the ESA. There is no evidence that the FWS did this.

FWS considered "appreciab[le] diminish[ment]" it did so under the incorrect legal standard enforced by its regulation that required the diminishment to impact both survival and conservation. *See* Part III.B.1 *supra*.

Second, Appellants object to the scale of the critical habitat analysis area used for the three "programmatic" BiOps. Using the "landscape" scale in the BiOps, the FWS examined degradation to the critical habitat but, because of the huge scale of untouched forest, considered that the critical habitat would not be adversely modified. Focusing solely on a vast scale can mask multiple site-specific impacts that, when aggregated, do pose a significant risk to a species. *Pac. Coast Fed. of Fishermen's Ass'ns v. Nat'l Marine Fisheries Serv.*, 265 F.3d 1028, 1035-37 (9th Cir. 2001). Here, the three programmatic BiOps evaluated the impact of the loss or degradation of 20,000 acres of critical habitat within the context of six million acres of federal land. We consider whether this masked the true impact of the approved projects.

The FWS responds that the BiOps did consider local impacts, including, most importantly, connectivity issues. After a careful review of the record, we conclude that the FWS is correct. The BiOps considered the important local effects, analyzing critical habitat more broadly when individual effects were not important. Appellants do not show that material local effects were missed, but merely point out that large scale analysis can pose a risk of masking. The possibility of risk alone here does not mean that the agency's decision-making was arbitrary and capricious, an abuse of discretion, or contrary to law. Without evidence in the record supporting that some localized risk was improperly hidden by use of large scale analysis, we will not second-guess the FWS.

Finally, Appellants claim that the critical habitat analysis relies, in part, on alternative habitat in the LSRs and that such reliance on the LSR to compensate for a loss of critical habitat is unlawful. The FWS responds that the LSR is not used as

a substitute, but as a mutually overlapping regime. The rule that designated the critical habitat for the spotted owl specifically provided that adverse modification analysis should take into account consistency with other conservation plans.

[12] There is little doubt that there is overlap and complementation between critical habitat areas and LSRs. In our view, however, Appellants have the better of the argument as to why LSRs cannot stand in for critical habitat within the meaning of the ESA. First, the plain language of the ESA requires that the adverse modification inquiry examine a given project's effect on critical habitat, that is, the land specifically designated by the Secretary of Interior for that purpose. 16 U.S.C. § 1536(a)(2). The purpose of designating "critical habitat" is to set aside certain areas as "essential" for the survival and recovery of the threatened species. 16 U.S.C. § 1532(5). To create critical habitat, there is extensive study, detailed analysis, and ultimately notice and comment rulemaking. Once designated, critical habitat receives its legal protection because it is subject to the exact Section 7 consultations at issue in this case. *See Sierra Club*, 245 F.3d at 439. If we allow the survival and recovery benefits derived from a parallel habitat conservation project (the NFP and its LSRs) that is not designated critical habitat to stand in for the loss of designated critical habitat in the adverse modification analysis, we would impair Congress' unmistakable aim that critical habitat analysis focus on the actual critical habitat. We would also be approving a transition away from ESA protections to mere compliance with the broader but perhaps less rigorous NFP. Compliance with the NFP, as important as it is, does not in itself generate the same protection for habitat as Section 7 compliance. Congressional intent is clear, and existing or potential conservation measures outside of the critical habitat cannot properly be a substitute for the maintenance of critical habitat that is required by Section 7.

[13] This conclusion, which is borne out by analysis of the ESA, is mandated by the Supreme Court. *See TVA v. Hill*, 437

U.S. 153, 171-72 (1978) (holding that the potential to transplant the endangered snail darter to suitable habitat does not circumvent the ESA's bar on destruction of critical habitat). Suitable alternative habitat, here LSRs, is no substitute for designated critical habitat. If it were, then the Court in *TVA* would have allowed the completion of the Tellico Dam and simply required that the snail darter be moved to the suitable alternative habitat. However, the Court held that the ESA's plain language precluded such a result. *Id.* In our case, the result is the same: That the spotted owl has suitable alternative habitat (e.g., non-critical habitat LSRs) has, strictly speaking, no bearing on whether there is adverse modification of critical habitat. *See also N. Spotted Owl v. Lujan*, 758 F. Supp. at 629 (holding "[t]hat [a committee] was working to develop conservation strategies for the spotted owl did not relieve [FWS] of its obligation under the ESA to designate critical habitat").

[14] If the FWS wants to change the boundaries of the critical habitat, it might do so if permitted by law after notice and comment procedures. But it cannot rely on a conservation program that has the same goal as critical habitat to change the boundaries of the spotted owl's critical habitat. Congress told the FWS to designate critical habitat and ensure that the designated critical habitat is not adversely modified. It matters not if there is worthwhile and possibly suitable habitat outside of the designated "critical habitat;" what mattered to Congress, and what must matter to the agency, is to protect against loss or degradation of the designated "critical habitat" itself. We hold that the agency's finding that loss of critical habitat was not an "adverse modification" because of the existence of suitable external habitat is arbitrary and capricious and is contrary to law.[12]

[12]We also hold that such an error was not harmless as reliance on the LSR pervades the BiOps in question.

C

The Appellants' final challenge is to the FWS's "amendments" to the BiOps, which include the range-wide "baseline report," three province-wide "baseline updates," and a "baseline update" for the Gifford Pinchot National Forest. As a general rule, such "updates" are prohibited because they would render the consultation process "meaningless" and would allow the FWS to issue "unsupported Biological Opinions knowing that it could search for evidentiary support if the opinion was later challenged." *Ariz. Cattle Growers' Ass'n*, 273 F.3d at 1245. As we have recognized, the discovery of new facts does not justify an "amendment" to the BiOp, but mandates reinitiating formal consultations. *Id.* (citing 50 C.F.R. § 402.16).

The FWS responds that the general rule does not apply here because, unlike *Arizona Cattle Growers*, the FWS did not supplement the record, but formally amended the BiOps and it is the amended BiOps that are at issue. The FWS argues that it has the flexibility to do just that, "implicitly" interpreting a regulation. By the same token, the FWS asserts that this is not new evidence, but just data summarized from previously existing data.

We reject the FWS's argument. If the data is new and the new data may affect the jeopardy or critical habitat analysis, then the FWS was obligated to reinitiate consultation pursuant to 50 C.F.R. § 402.16. If the data was preexisting, then the FWS is to be faulted for not generating the information in time for the initial BiOp. Stated another way, the evidence either was old and cumulative, added to the administrative record to bolster support, or was new data that mandated reconsideration. Neither scenario allows for the admission of the new evidence.

[15] The FWS's citation to *City of Waltham v. United States Postal Service*, 11 F.3d 235, 239 (1st Cir. 1993) is

inapposite: There, the USPS changed its NEPA analysis and findings from "no significant impact" to a finding of sufficient impact to warrant an EIS. In *City of Waltham*, the First Circuit allowed consideration of the later assessment, especially because its finding subsumed the relief sought by the plaintiffs. *Id.*[13] Here, the FWS did not change its mind, but simply piled on more evidence. This is impermissible, whether termed an amendment or not. *Arizona Cattle Growers*, 273 F.3d at 1245.

IV

[16] We conclude that the jeopardy analysis conducted by the FWS in the six BiOps at issue in this case was permissible and within the agency's discretion. We affirm the district court's grant of summary judgment to the agency in this respect. However, we conclude that the critical habitat analysis in the six BiOps was fatally flawed because it relied on an unlawful regulatory definition of "adverse modification" and it impermissibly substituted LSRs for critical habitat. Neither of these errors was harmless. We reverse the judgment of the district court and we remand, directing the district court to grant summary judgment to the Petitioners on the critical habitat inquiry.

AFFIRMED IN PART, REVERSED IN PART, AND REMANDED WITH INSTRUCTIONS.

Each party shall bear its own costs.

[13]Additionally, the First Circuit held that the assessment was owed no deference and had to be read with a skeptical eye for post hoc rationalizations. *Id.* at 239.