

**THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF NORTH CAROLINA
ASHEVILLE DIVISION
CIVIL CASE NO. 1:24-cv-00118-MR-WCM**

**DEFENDERS OF WILDLIFE,
MOUNTAINTRUE, SIERRA CLUB,
and CENTER FOR BIOLOGICAL
DIVERSITY**

Plaintiff,

vs.

**U.S. FOREST SERVICE, FOREST
SUPERVISOR JAMES MELONAS,
U.S. FISH AND WILDLIFE SERVICE,
and PAUL SOUZA, REGIONAL
DIRECTOR of the U.S. FISH AND
WILDLIFE SERVICE, REGION 8,
exercising the delegated authority
of the DIRECTOR of the U.S. FISH
AND WILDLIFE SERVICE,**

Defendants.

**MEMORANDUM OF
DECISION AND ORDER**

THIS MATTER is before the Court on the Defendants’ Motion for Summary Judgment [Doc. 32], the Plaintiffs’ Motion for Summary Judgment, [Doc. 34], and the Defendants’ Motion to Strike [Doc. 38].

I. PROCEDURAL HISTORY

The Plaintiffs—Defenders of Wildlife, MountainTrue, Sierra Club, and Center for Biological Diversity (collectively, the “Conservation Groups”)—are

organizations that work to protect publicly owned national forests and the endangered and threatened species that inhabit them. [Doc. 1 at ¶ 18]. The Defendants—the U.S. Forest Service (“USFS”), USFS Supervisor James Melonas, the U.S. Fish and Wildlife Service (“FWS”), and FWS Regional Director Paul Souza (collectively, “the Agencies”)—are federal agencies, and officials of those agencies, that manage national forests and administer the Endangered Species Act (“ESA”).¹ [Id. at ¶¶ 52-59]. This litigation arises from USFS’s development of a revised Land and Resource Management Plan (“Revised Forest Plan”) for the Nantahala and Pisgah National Forests (“Forests”) and USFS’s formal consultation with FWS pursuant to the Revised Forest Plan’s development.

On April 18, 2024, the Conservation Groups filed a Complaint [Doc. 1] challenging a Biological Opinion (“BiOp”) produced by FWS pursuant to FWS’s formal consultation with USFS regarding the Revised Forest Plan. The Complaint asserts that USFS and FWS violated the ESA and the Administrative Procedure Act (“APA”) and asks the Court to vacate the BiOp and enjoin USFS and FWS from relying on the BiOp. [Doc. 1 at 89]. The Defendants filed an Answer on June 28, 2024. [Doc. 12].

¹ On April 25, 2025, Defendant Paul Souza, then exercising the delegated authority of the FWS Director, was automatically substituted for Martha Williams as the Defendant FWS officer pursuant to Federal Rule of Civil Procedure 25(d). [Doc. 30 at 1 n.1].

The Defendants filed the Administrative Record on September 6, 2024, a Supplemental Administrative Record on November 8, 2024, and a Second Supplemental Record on April 25, 2025. [Docs. 16, 21, 30]. Both the Plaintiffs and the Defendants filed Motions for Summary Judgment on July 11, 2025, [Docs. 32, 34], Responses on August 21, 2025, [Docs. 36, 37], and Replies on September 11, 2025, [Docs. 42, 43]. On August 21, the Defendants also filed a Motion to Strike. [Doc. 38]. The Plaintiffs filed a Response on September 11, 2025, [Doc. 41], and the Defendants filed a Reply on September 25, 2025, [Doc. 45].

Having been fully briefed, this matter is ripe for disposition.

II. STANDARD OF REVIEW

A BiOp is a final agency action that is reviewable under § 704 of the APA. Dow AgroSciences LLC v. Nat'l Marine Fisheries Serv., 637 F.3d 259, 264-65 (4th Cir. 2011) (applying Bennett v. Spear, 520 U.S. 154 (1997)). Under the APA, the Court must “hold unlawful and set aside agency action, findings, and conclusions” that the Court finds “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A). An agency action is arbitrary and capricious if “the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation

for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” Motor Vehicle Mfrs. Ass’n of U.S. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). The Court’s “scope of review under the ‘arbitrary and capricious’ standard is narrow”: the Court must neither “substitute its judgment for that of the agency” nor “attempt itself to make up for [an agency action’s] deficiencies” by “supply[ing] a reasoned basis for the agency’s action that the agency itself has not given.” Id. Instead, the Court asks “only whether the agency action was reasonable and reasonably explained.” Seven Cnty. Infrastructure Coal. v. Eagle Cnty., Colo., 605 U.S. 168, 180 (2025).

The Fourth Circuit recently explained the application of the arbitrary and capricious standard in the context of a challenge to a BiOp:

Review under this standard is highly deferential, with a presumption in favor of finding the agency action valid. Nevertheless, we must conduct a searching and careful review to determine whether the agency’s decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment. In determining whether such an error was made, the reviewing court may look only to [the agency’s] *contemporaneous* justifications for its actions.

Appalachian Voices v. U.S. Dep’t of Interior, 25 F.4th 259, 269 (4th Cir. 2022)

(citations and internal quotation marks omitted) (emphasis in original).

III. FACTUAL BACKGROUND

A. Statutory and Regulatory Background

Two sources of statutory and regulatory law govern this case: (1) the National Forest Management Act (“NFMA”), 16 U.S.C. § 1600 et seq., and its applicable implementing regulations, 36 C.F.R. § 219; and (2) the Endangered Species Act (“ESA”), 16 U.S.C. § 1531 et seq., and its applicable implementing regulations, 50 C.F.R. § 402.

1. National Forest Management Act

USFS manages the national forest system under the NFMA, which “establishes a two-step procedure for managing National Forest System Lands.” Sierra Club, Inc. v. U.S. Forest Serv., 897 F.3d 582, 600 (4th Cir. 2008). First, USFS must “develop, maintain, and, as appropriate, revise land and resource management plans,” otherwise known as forest plans. 16 U.S.C. § 1604(a). Such forest plans are programmatic in nature: they “provide a framework for where and how certain activities can occur in national forests,” but they do not implement site-specific, on-the-ground projects. Sierra Club, 897 F.3d at 600; see also 36 C.F.R. § 219.2(1) (“A land management plan provides a framework for integrated resource management and for guiding project and activity decisionmaking on a national forest.”); id. § 219.2(2) (“A plan does not authorize projects or

activities or commit the Forest Service to take action.”). Second, “USFS then implements forest plans through site-specific individual projects.” Defs. of Wildlife v. U.S. Forest Serv., 94 F.4th 1210, 1218 (10th Cir. 2024). In doing so, USFS must ensure that all “[r]esource plans and permits, contracts, and other instruments for the use and occupancy of National Forest System lands [are] consistent with the [forest plans].” 16 U.S.C. § 1604(i). “A project or activity approval document must describe how the project or activity is consistent with applicable plan components.” 36 C.F.R. § 219.15. The development of forest plans and the approval of projects implemented under them are agency actions that must comply with the ESA. Id. § 219.1.

Congress provided that forest plans should be revised “at least every fifteen years” and that such revisions are subject to consultation with other federal agencies as required by law. 16 U.S.C. §§ 1604(f)(4)-(5), (d)(2)(C). “A plan revision creates a new plan for the entire plan area,” which encompasses all National Forest System lands covered by the relevant forest plan, and the development of a plan revision must follow the process expressly established by regulation. 36 C.F.R. § 219.7; id. § 219.9 (defining “Plan area”). A plan revision also “requires preparation of an environmental impact statement” and ESA consultation regarding the plan revision’s effect. Id. § 219.5; 16 U.S.C. §§ 1536(a)(2), 1604(d)(2)(C)(ii)(II), (f)(4)-(5).

2. Endangered Species Act

Congress enacted the ESA for the conservation of endangered and threatened species and the ecosystems upon which those species depend, 16 U.S.C. § 1531(b), and directed “all Federal departments and agencies” to “utilize their authorities in furtherance” of such conservation, *id.* § 1531(c)(1). “To that end, the Endangered Species Act requires federal agencies ‘to afford first priority to the declared national policy of saving endangered [or threatened] species’—even when this goal conflicts with agencies’ ‘primary missions.’” Appalachian Voices, 25 F.4th at 264 (quoting Tenn. Valley Auth. v. Hill, 437 U.S. 153, 185 (1978)).

Section 7(a)(2) of the ESA requires federal agencies to ensure that agency actions are “not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species.” 16 U.S.C. § 1536(a)(2). If a federal agency determines that an agency action may adversely affect listed species or critical habitat, the action agency must engage in “formal consultation” with a consulting agency—either the Fish and Wildlife Service or the National Marine Fisheries Service, depending on which species or habitat may be affected. 50 C.F.R. 402.14(a), (b)(1).

At the outset of a formal consultation, the action agency (e.g., USFS) must provide the consulting agency (e.g., FWS) “with the best scientific and commercial data available,” as well as all relevant information regarding the agency’s proposed action, its expected effects, and any measures intended to mitigate those effects. Id. § 402.14(c)-(d). The consulting agency must then (1) “[r]eview all relevant information provided by the Federal agency or otherwise available,” (2) “[e]valuate the current status and environmental baseline of the listed species or critical habitat,” (3) “[e]valuate the effects of the action and cumulative effects on the listed species or critical habitat,” (4) “[a]dd the effects of the action and cumulative effects to the environmental baseline and . . . formulate [an] opinion as to whether the action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of habitat,” and (5) discuss its findings and draft opinion with the action agency. Id. § 402.14(g)(1)-(5). This process culminates in the consulting agency’s “biological opinion,” which summarizes the information the agency reviewed, provides a “detailed discussion” of its evaluations, and states an opinion about whether the agency action at issue is likely to jeopardize a listed species or adversely modify a critical habitat. Id. § 402.14(h)(1). The consulting agency’s biological opinion is a final agency action. Dow AgroSciences, 637 F.3d at 265.

B. The Revised Forest Plan and the BiOp

USFS manages the Forests, which cover more than one million acres of public land across eighteen counties in western North Carolina. [Doc. 1 at ¶ 52]. The original land and resource management plan for the Forests was signed in 1987, and the plan's last significant amendment—prior to the Revised Forest Plan at issue here—came in 1994. FS41800.

In 2013, USFS began developing the Revised Forest Plan. FS41814-15. In November 2021, USFS's draft biological assessment determined that the Revised Forest Plan may affect but was not likely to adversely affect any listed species. [Doc. 30-4 at 9]. However, in January 2022, after informal consultation with FWS, USFS's revised draft biological assessment reversed course and concluded that the Revised Forest Plan was likely to adversely affect four endangered bat species—the Indiana bat, the gray bat, the northern long-eared bat, and the Virginia big-eared bat (collectively, “the bats”). FWS6376. The continued existence of the bats is under threat due to adverse habitat modification, climate change, human disturbance, and, most significantly, white nose syndrome, a fungal disease first documented in North Carolina in 2011. FWS6611-31. For example, northern long-eared bats “are predicted to become functionally extinct in the next few decades,” and the ongoing decline in the Indiana bat population is “predicted to

continue.” [Doc. 12 at ¶¶ 12, 336]. Cave-dwelling bats, including the gray bat and Virginia-big-eared bat, have already suffered “dramatic declines in Western North Carolina.” FWS6629.

USFS’s revised determination that the Revised Forest Plan was likely to adversely affect endangered bats triggered formal consultation between USFS and FWS. FWS6573-74. In June 2022, that consultation culminated in FWS’s BiOp regarding the Revised Forest Plan’s effect on the bats. FWS6785-866. FWS concluded that the Revised Forest Plan was not likely to jeopardize the continued existence of the bats. FWS6849. Instead, FWS determined that the “Revised Forest Plan includes plan components that would directly or indirectly enhance and/or restore habit” for the bats, and that “ecozone conditions” for the bats would “generally improve or stay the same compared to existing conditions with implementation of the Revised Forest Plan.” FWS6849.

In January 2023, USFS informed FWS that it had made changes to the Revised Forest Plan in response to objections lodged as part of the administrative process. FWS7324-26. After reviewing the changes, FWS concluded that none of the changes altered its conclusions in the BiOp. FWS7327-28. In April 2024, the Conservation Groups initiated this action challenging the BiOp. [Doc. 1].

IV. DISCUSSION

A. Motion to Strike

As a preliminary matter, the Agencies have moved to strike two of the Conservation Groups' summary judgment Exhibits [Docs. 35-10, 35-11], as well as the portions of the Conservation Groups' Memorandum in Support of Motion for Summary Judgment [Doc. 35] that rely on those exhibits, on grounds that the challenged Exhibits are extra-record materials outside the proper scope of the Court's review.² See [Docs. 38, 39, 45].

One of the challenged Exhibits is a twenty-five-year-old FWS BiOp (the "2000 BiOp") assessing the effects of an earlier amendment to the Forest Plan on the Indiana bat. [Doc. 35-10 at 5]. BiOps, however, are public records because they are statements of a federal agency produced under the duty imposed by Section 7(a)(2) of the ESA. See Fed. R. Evid. 803(8); see also Coal. for a Sustainable Delta v. Fed. Emergency Mgmt. Agency, 812 F. Supp. 2d 1089, 1095 (E.D. Cal. 2011). Therefore, courts may take judicial notice of BiOps regardless of whether they are presented to the court as an Exhibit. See Wishtoyo Found. v. United Water Conservation Dist., 795 F. App'x 541, 542 (9th Cir. 2020) ("The introduction of the biological opinion

² The Agencies initially moved to strike a third Exhibit [Doc. 35-1], but the Agencies abandoned their motion as to that Exhibit after discovering that the Exhibit was "inadvertently included in the Forest Service's administrative record." [Doc. 45 at 1].

was proper under the public records exception to the hearsay rule.”). Accordingly, the Court takes judicial notice of the 2000 BiOp and will deny the Agencies’ motion to strike the 2000 BiOp [Doc. 35-10] as moot.

The Court need not address the Agencies’ motion as to the other Exhibit because the Court has not relied upon that Exhibit in ruling on the parties’ motions for summary judgment. Accordingly, the Court will also deny the Agencies’ motion to strike that Exhibit [Doc. 35-11] as moot.

B. Challenges to the BiOp

1. The Predicates of the No-Jeopardy Determination

During formal consultation, FWS must evaluate “the current status and environmental baseline of the listed species” and “the effects of the action and cumulative effects on the listed species.” 50 C.F.R. § 402.14(g)(2)-(3). The regulatory definitions for “environmental baseline” and “cumulative effects,” however, are both limited in scope by the relevant “action area.” Id. § 402.02. Therefore, before evaluating the environmental baseline or cumulative effects, FWS must first define the action area. The action area must include “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.” Id. Without properly defining the action area, FWS cannot properly evaluate the environmental baseline or cumulative effects *in the action area*. See

Appalachian Voices, 25 F.4th at 271. Even when the action area is well-defined, evaluations of the environmental baseline and of cumulative effects must be directly tied to the action area. Id. at 271-75, 279-80 (rejecting an environmental baseline evaluation as arbitrary and capricious when FWS evaluated conditions “at the population level” and of geographic region larger than the action area rather than conditions of the relevant species within the well-defined action area).

The Conservation Groups contend that the BiOp’s action area definition (Claim 1) and its evaluations of the environmental baseline (Claim 2) and of cumulative effects (Claim 3) were arbitrary and capricious.

a. Claim 1: Action Area

“Courts should afford substantial deference” to an agency’s “fact-dependent, context-specific, and policy-laden choices about the depth and breadth of its inquiry” into an agency action’s “significant environmental effects and feasible alternatives,” so long as those choices “fall within a broad zone of reasonableness.” Seven Cnty. Infrastructure Coal., 605 U.S. at 182-83. Here, FWS’s choice about how to define an action area determines the depth and breadth of its evaluations of the environmental baseline, the effects of the action, and the cumulative effects of the action. 50 C.F.R. §§ 402.02, 402.14(g)-(h); see also U.S. Fish & Wildlife Serv. & Nat’l Marine

Fisheries Serv., Endangered Species Consultation Handbook (“Handbook”) at 4-15 to 4-16 (1998) (“Subsequent analyses of the environmental baseline, effects of the action, and levels of incidental take are based upon the action area as determined by the services.”). The limits on those inquiries, in turn, constrain the scope of FWS’s BiOp. Id. § 402.14(g)(4). As a result, FWS’s action area definition deserves “substantial deference” so long as it falls within “a broad zone of reasonableness.” Seven Cnty. Infrastructure Coal., 605 U.S. at 182-83; see also Appalachian Voices, 25 F.4th at 279-80 (affording deference to FWS’s action area definition); Nat’l Fam. Farm Coal. v. U.S. Env’t Prot. Agency, 966 F.3d 893, 927 (9th Cir. 2020) (“We accord deference to EPA in the way it chose to define the action area.”); Sierra Club v. U.S. Dep’t of Interior, 990 F.3d 909, 916 (5th Cir. 2021) (“[FWS’s] decision regarding the action area is thus entitled to deference.”). However, action area definitions that are “unreasonably narrow” are arbitrary and capricious. Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv., 254 F.Supp.2d 1196, 1212 (D. Or. 2003); see also Ctr. for Biological Diversity v. Regan, 734 F. Supp. 3d 1, 59 (D.D.C. 2024), appeal filed, Ctr. for Biological Diversity v. Zeldin, No. 24-5101 (D.C. Cir. June, 12, 2024) (finding action area definition arbitrary and capricious because it did not encompass areas indirectly affected by the action and the agency failed to provide a “reasoned basis for

that omission”); Env't Prot. Info. Ctr. v. Van Atta, 692 F. Supp. 3d 879, 897-98 (N.D. Cal. 2023) (finding action area definition arbitrary and capricious because it failed to “contemplate[] the direct or indirect effects” of one aspect of the agency action); Defs. of Wildlife v. Babbitt, 130 F. Supp. 2d 121, 128-30 (D.D.C. 2001) (concluding that an action area definition confined to the “immediate area involved” in the action was “explicitly reject[ed]” by the “expansive regulatory definition of action area”).

In Appalachian Voices, the only Fourth Circuit case to address a challenge to an action area definition, the court concluded that FWS’s action area definition for a pipeline construction project was entitled to deference. 25 F.4th at 279. In that case, which concerned a single site-specific project, FWS relied on scientific modeling and scientific studies to determine the project’s effects, and then FWS “conservatively expand[ed] the action area to ensure that it [was] capturing all possible effects to the[] imperiled species.” Id. The Fourth Circuit characterized FWS’s decisions as “precisely the sort of judgment calls that are entitled to our deference.” Id. Other courts reviewing action area definitions at the project level have taken a similar approach. The Ninth Circuit, for example, requires an agency to “provide support for its choice of analysis area,” “show that it considered the relevant factors,” and discuss the “scientific methodology, relevant facts, or rational

connections linking the project's potential impacts" with the action area's boundaries so that a court can determine whether the action area was properly defined. Native Ecosystems Council v. Dombeck, 304 F.3d 886, 902 (9th Cir. 2002); see also S.C. Coastal Conservation League v. U.S. Army Corps of Eng'rs, No. 2:22-CV-2727-RMG, 2024 WL 4249236, at *6 (D.S.C. Sept. 19, 2024) (finding that FWS's action area definition was not arbitrary and capricious because FWS sufficiently explained its reasoning for selecting the relevant boundaries); Sierra Club, 990 F.3d at 915-16 (5th Cir. 2021) (same).

Neither side in this matter, however, has cited to any authority that addresses the proper manner for a court to review action area definitions at the *programmatic* level. Because a forest plan governs the entirety of a forest, see 36 C.F.R. § 219.2(b), a plan directly affects the entirety of the forest. However, because a forest plan does not authorize any specific projects, see id., the indirect effects of a forest plan beyond the forest's borders are largely speculative. As a result, action area definitions for forest plans are meaningfully distinct from action area definitions for site-specific projects implemented under those plans. The question for the Court is whether the BiOp's action area definition for the programmatic action at

issue herein falls within the “broad zone of reasonableness.” Seven Cnty., 605 U.S. at 183.

The BiOp’s definition of the action area—which the BiOp refers to as the “project area,” FWS6792—is not a model of clarity or thoroughness. Rather, the BiOp merely assumes that the Forests constitute the project area. Id. The BiOp then refers to an “18-county assessment area” encompassing “approximately 4,795,098 acres (ac), with over 77% forest land,” and states that the “Forests are within a much larger matrix of forest land, predominantly privately owned forest land.” FWS6792-93. The remainder of the project area description includes a map of the Forests, lists the Forests’ “six Ranger Districts” and notes that the Forests also include “large, designated wilderness areas.” FWS6793. Despite indications in the administrative record that indirect effects of the Revised Forest Plan on physical resources may extend beyond the Forests’ boundaries,³ the BiOp offers no indication that FWS considered whether any of the land adjacent to the Forests or waters downstream from the Forests would be indirectly affected by the Plan.

³ See, e.g., FWS5701-05 (noting that prescribed fires release fine particulate matter and reviewing the monitoring of ambient fine particulate matter both on and off the Forests); FWS5753-54 (noting that Forest roads may be contributing to the impairment of the Upper Chattooga River watershed outside the Forests).

Notwithstanding any ambiguity in the definition, the action area does encompass the entirety of the Forests. Given the substantial deference owed to the BiOp's action area definition and the speculative nature of the Revised Forest Plan's indirect effects, the Court concludes that the BiOp's action area definition falls within the "broad zone of reasonableness" and is not arbitrary and capricious. Seven Cnty. Infrastructure Coal., 605 U.S. at 183. Accordingly, the Court will grant summary judgment in favor of the Agencies as to Claim One.

b. Claim 2: Environmental Baseline

A BiOp must include a "detailed discussion of the environmental baseline of the listed species." 50 C.F.R. § 402.14(h)(ii). The environmental baseline is the current "condition of the listed species or its designated critical habitat in the action area," without considering the potential consequences of the agency action at issue. Id. § 402.02. The environmental baseline includes (1) "the past and present impacts of all Federal, State, or private actions and other human activities in the action area," (2) "the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation," and (3) "the impact of State or private actions which are contemporaneous with the consultation in process." Id. Additionally, it must include the "impacts to listed species or

designated critical habitat from Federal agency activities or existing Federal agency activities that are not within the agency's discretion to modify." Id.

An environmental baseline evaluation must be directly tied to the relevant action area. Id.; see also Handbook at 4-22 to 4-23 (describing the environmental baseline analysis as a "subset of the preceding rangewide status discussion" that "describes factors affecting the environment of the species or critical habitat in the action area" (emphasis in original)). FWS cannot "pass off [a] summary of range-wide conditions and threats as an action-area analysis," nor can a description of "conditions at the population level" for a given species substitute for an analysis "focus[ed] on the specific action area." Appalachian Voices, 25 F.4th at 272-73. Instead, FWS must explain "the specific causes or extent" of the "local degradation" of the action area. Id. at 272. Although population-level data may help predict conditions within the action area, FWS "must at least explain why it believes these population-level [data] reflect conditions within the action area." Id. at 274.

Additionally, an agency cannot satisfy its responsibility to account for the past and present impacts of all private, state, and Federal activities by "merely listing activities" relevant to the action area. Appalachian Voices, 25 F.4th at 273; see also Defs. of Wildlife, 130 F. Supp. 2d at 127 ("There must be an analysis of the status of the environmental baseline given the listed

impacts, not simply a recitation of the activities of the agencies.”). For example, in Appalachian Voices, the defendants acknowledged that there were “*numerous* state and private activities currently occurring within the action area” and “*immediately adjacent*” to the action area, but the defendants failed to inform the court “what these activities are, or what impact they may be having.” Id. at 272 (emphasis in original). Accordingly, the Fourth Circuit held that FWS’s deficient environmental baseline evaluation was arbitrary and capricious. Id. at 274; see also Am. Rivers v. FERC, 895 F.3d 32, 46-47 (D.C. Cir. 2018) (finding environmental baseline arbitrary and capricious because it failed to consider historic and continuing impacts of a federal project on the action area).

The question before the Court on summary judgment is whether FWS reasonably evaluated and reasonably explained the environmental baseline in the action area.

Here, first, the BiOp neither mentions nor accounts for the impacts of a single federal, state, or private activity in the action area as part of its environmental baseline evaluation. FWS6843-46. The Agencies do not explain this absence, nor do they argue that the environmental baseline evaluation accounts for such impacts. Instead, the Agencies contend only that “FWS considered three elements in assessing the baseline for the

Revised Plan: the occurrence, habitat, and status of the bats.” [Doc. 33 at 31]. None of the subsequent discussion of those elements, however, indicates that FWS accounted for the past and present impacts of relevant activities. Therefore, the BiOp “entirely failed to consider an important aspect of the problem.” State Farm Mut. Auto. Ins. Co., 463 U.S. 29 at 43.

Second, the environmental baseline evaluation’s discussion of bat occurrence, habitat, and status provides hardly any information about the environmental baseline for the bats *in the Forests*. Regarding occurrence of the bats in the Forests, the BiOp merely notes that “[b]ats have been documented (mist-net captures or acoustic surveys) using the Forests.” FWS6843. The BiOp’s environmental baseline evaluation neither offers nor explains any other information regarding bat occurrence in the Forests. Regarding bat habitat and status, the BiOp’s environmental baseline analysis (1) notes that bats have been documented using the Forests, (2) describes in general terms the suitable habitats for each type of bat, (3) divides the Forests into eleven ecozones and concludes that all of them provide suitable habitat for forest-dwelling bats and six of them provide suitable habitat for cave-obligate bats, and (4) discusses range-wide status and trends for each bat because “there is no data to contradict the expectation that status and trends on the Forests would be consistent with

status and trends of bats range-wide for the species.” FWS6843-46. Other than the general and unexplained conclusions that bats use the Forests and that the Forests contain suitable habitat for the bats, the environmental baseline offers no assessment of the conditions of the bats that are specific to the action area. Therefore, as in Appalachian Voices, the environmental baseline evaluation in the BiOp focuses primarily on range-wide conditions rather than on conditions local to the action area. See 25 F.4th at 273 (“Though the agency admirably describes conditions at the population level, it never narrows its analysis to focus on the specific action area.”).

The Agencies argue that Appalachian Voices is inapposite because “it involved a specific project (a pipeline) with a known footprint,” whereas the BiOp at issue here concerned a programmatic forest plan, such that “a broader approach was appropriate given the nature of the action.” [Doc. 33 at 33]. However, the ESA implementing regulations do not establish that an environmental baseline evaluation for a programmatic action like the Revised Forest Plan is subject to different or less stringent requirements than an environmental baseline evaluation for a particular project.⁴ See 50 C.F.R.

⁴ The only references to “programmatic” consultations indicate otherwise. In 50 C.F.R. § 402.14(c)(4), the regulations establish that a programmatic consultation “does not relieve the Federal agency of the requirements for considering the effects of the action or actions as a whole.” In the only other references in § 402.14 to a programmatic action, the regulations establish that the Federal agency need not issue an “incidental take statement” for programmatic actions. § 402.14(h)(7).

§ 402.14; see also Alliance for the Wild Rockies v. Marten, 685 F. Supp. 3d 971, 981-87 (D. Mont. 2023) (concluding that a forest plan BiOp failed to adequately assess the environmental baseline). Accordingly, the Court declines the Agencies' unsupported invitation to narrow the scope of Appalachian Voices. A "broader approach" may be appropriate, but that broader approach must still account for conditions specific to the action area in the environmental baseline evaluation.

The BiOp for the Revised Forest Plan fails to provide any such account. FWS appears to concede that it "applied the range-wide status of the listed bat species to the Forests," [Doc. 33 at 31], and argues instead that the BiOp reasonably concluded that no data contradicts "the expectation that status and trends on the Forests would be consistent with status and trends of bats range-wide for the species," FWS6845-46. However, the BiOp never explains or provides support for that expectation of consistency in the first place. Moreover, the administrative record reveals that FWS possessed information about at least some of the specific conditions faced by the bats in the Forests. See FWS5967-93; FWS6611-31; FS72468-84; FS72502-04.

The environmental baseline evaluation in the BiOp provides less action-area-specific information than did the environmental baseline evaluation that the Fourth Circuit found arbitrary and capricious in

Appalachian Voices. 25 F.4th at 273 (observing that the BiOp “notes the genetic importance” of two populations of the listed species in the action area and “extensively describes the ecological conditions in these areas”). As a result, the Fourth Circuit’s conclusion in Appalachian Voices applies at least as strongly here: “We conclude that while the BiOp ably describes the range-wide conditions of the [bats], it fails to adequately evaluate the environmental baseline for these species within the action area itself.” Id. at 271.

Finally, a comparison to the environmental baseline in the 2000 BiOp is instructive. In the 2000 BiOp, FWS “consider[ed] all USFS projects approved prior to the initiation of formal consultation with [FWS]” and noted its consultations and determinations regarding the effects of “ongoing and proposed projects.” [Doc. 35-10 at 29]. FWS also specifically considered the effect of past timber harvesting projects in the Forests on the bat habitat and made projections about the effects of similar future projects. [Id. at 34-35]. Moreover, FWS considered the available data regarding canopy cover, live and dead tree density and size, and tree species in the Forests, and the effect of that data on bat habitat. [Id. at 31-34, 36-39]. By contrast, in the BiOp at issue here, FWS’s only analysis of the conditions local to the action area derived from its use of an “Ecological Sustainability Evaluation (ESE) tool.” FWS6844. The ESE analysis concluded that 100% of the Forests

provided “suitable or potentially suitable habitat” for forest-dwelling bats and that 42% of the Forests provided “suitable or potentially suitable habitat” for cave-obligate bats. Id. Those conclusions, however, are of almost no value, given that they effectively group suitable habitat not just with potentially suitable habitat, but also with potentially *unsuitable* habitat, and provide no mechanism for distinguishing between them. Id. The only firm conclusion that may be drawn from the ESE analysis, as provided in the BiOp, is that 58% of the Forests do *not* provide suitable habitat for cave-obligate bats. Id. To the extent that the ESE analysis is capable of yielding a more thorough or detailed evaluation, FWS has failed to offer such explanation in the BiOp.

The BiOp’s environmental baseline evaluation fails to sufficiently describe the conditions in the action area and fails to account for the impacts of any past or present federal, state, or private actions in the action area. Those failures are arbitrary and capricious. Accordingly, the Court will grant summary judgment in favor of the Conservation Groups as to Claim Two.

c. Claim 3: Cumulative Effects

The ESA implementing regulations define “cumulative effects” as the “effects of future State or private activities, not involving Federal activities that are reasonably certain to occur within the action area of the Federal action subject to consultation.” 50 C.F.R. § 402.02. The “reasonably certain

to occur” requirement excludes wholly speculative non-Federal actions, but actions need not be guaranteed to occur to warrant inclusion. Appalachian Voices, 25 F.4th at 270 (citing Handbook at 4-30). When documents in the record “suggest that the the action area is likely to be impacted by numerous non-Federal activities,” those impacts must be addressed in the BiOp’s cumulative effects evaluation. Id. at 276.

Although ESA consultation regarding programmatic actions will be subsequently supplemented by project-specific consultation, programmatic actions must still render “comprehensive” BiOps that analyze “the effect of the *entire* agency action.” Pac. Coast Fed'n of Fishermen's Ass'ns v. Nat'l Marine Fisheries Servs., 482 F. Supp. 2d 1248, 1266 (W.D. Wash. 2007) (quoting Conner v. Burford, 848 F.2d 1441, 1453 (9th Cir. 1988)). After all, “incomplete information as to the precise location and extent of future activities does not excuse the failure to produce a comprehensive [BiOp].” Id. (citing Conner, 848 F.2d at 1453-54); see also Alliance for the Wild Rockies, 685 F. Supp. 3d at 985-87 (finding that the unpredictability or uncertainty of future activities within the action area do not relieve the agency of its obligation to thoroughly assess cumulative effects of a forest plan). Even when FWS lacks comprehensive information, it may still determine whether “activities in particular areas [are] fundamentally incompatible with

the continued existence of the species” and, in light of that determination, recommend constraints on certain activities in particular areas as needed. Conner, 848 F.2d at 1454. “Congress, in enacting the ESA did not create an exception to the statutory requirement of a comprehensive biological opinion on th[e] basis” of “inexact information about [future] activities.” Id. Under some circumstances, or example, FWS “may be required to make projections, based on *potential* locations [of future activity], of the impact [of that activity] on protected species.” Id. (citing Roosevelt Campobello Int’l Park Comm’n v. EPA, 684 F.2d 1041, 1052-55 (1st Cir. 1982)). As a result, FWS cannot “adopt[] a wholesale deferral of analysis to the project levels” because such deferral “necessarily improperly curtails the discussion of cumulative effects.” Pac. Coast Fed’n of Fishermen’s Ass’ns, 482 F. Supp. 2d at 1267. But see Cooling Water Intake Structure Coal. v. U.S. Env’t Prot. Agency, 905 F.3d 49, 73-76 (2d Cir. 2018) (allowing for deferral of analysis when the agency action was a final rule promulgated by the EPA).

The question before the Court on summary judgment is whether FWS reasonably evaluated the cumulative effects of future state and private activities in the action area, rather than deferring analysis of those effects to the project level.

The BiOp's ten-sentence cumulative effects evaluation acknowledges that "[f]uture non-federal activities will occur within and surrounding the action area" and gives a general list of the types of activities that will occur: "state highway maintenance and improvement projects, utility corridor construction and maintenance, residential and recreational development and use, timber harvest, fuel reduction around private developments, livestock grazing and other actions." FWS6849. The BiOp predicts that such activities "will continue and presumably increase." Id. However, the BiOp asserts that "specific actions being considered or proposed that could have cumulative effects are not known" and notes that such actions will be considered when future federal actions "undergo separate analysis and consultation." Id. Nevertheless, documents in the record indicate that FWS had at least more information about proposed future activities and the general potential effects of expected future activities than the BiOp's cumulative effects evaluation suggests. See, e.g., FS72477-78 ("A road-widening project in North Carolina is proposed in an area between known [Virginia big-eared bat] hibernacula and maternity sites."); FS72503; FWS4666-759 (considering in part the potential effects of future highway maintenance and potential state transportation projects). Moreover, the BiOp does not attempt to evaluate even the general impacts of the activities it predicts will occur, nor does the

BiOp make any projections or provide any analysis of any potential future projects. As a result, the BiOp's cumulative effects evaluation amounts to an improper wholesale deferral of the requisite cumulative effects analysis.

By deferring the cumulative effects analysis until project-level consultations, the BiOp "entirely failed to consider an important aspect of the problem." State Farm Mut. Auto. Ins. Co., 463 U.S. 29 at 43. That failure was arbitrary and capricious. Id. Accordingly, the Court will grant summary judgment in favor of the Conservation Groups as to Claim Three.

2. The No-Jeopardy Determination

The crux of a BiOp is the jeopardy determination. "A jeopardy evaluation must determine whether a proposed action 'reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species.'" Def. of Wildlife, 931 F.3d at 354 (quoting 50 C.F.R. § 402.02). The Conservation Groups contend that the BiOp arbitrarily and capriciously failed to analyze effects of the Revised Forest Plan on the bats' recovery (Claim 4), failed to draw a rational connection between facts in the record and its no-jeopardy determination (Claim 5), and failed to add the effects of the action to the environmental baseline and cumulative effects and consider those aggregate effects in light of the current status of the species (Claim 6).

i. Claim 4: Recovery Analysis

The effect of an agency action on an endangered species' potential for recovery is an essential component of a BiOp's jeopardy determination. 50 C.F.R. § 402.02 (requiring the jeopardy evaluation to consider "both survival and recovery"); see also Nat'l Wildlife Fed'n, 524 F.3d at 931-32. The ESA implementing regulations define "recovery" as "improvement in the status of listed species to the point at which listing is no longer appropriate." 50 C.F.R. § 402.02. The Fourth Circuit, however, has recognized that it is "hard to draw clear-cut distinctions between survival and recovery" and has agreed with "other courts [that] have not required 'an independent analysis of recovery'" in the context of "a programmatic-level BiOp." Def. of Wildlife, 931 F.3d at 354 (quoting Cooling Water, 905 F.3d at 76).

Here, the question on summary judgment is whether FWS sufficiently addressed recovery in the BiOp.

The BiOp makes several references to recovery. The BiOp notes the relevant recovery plans for the bats and two conservation measures in the Revised Forest Plan that are intended to promote recovery. FWS6821-22 (noting recovery plan for the Indiana bat); FWS6834, FWS6837 (noting recovery plan for the gray bat); FWS6839 (noting recovery plan for the Virginia big-eared bat); FWS6813, FWS6815-16 (noting conservation

measures targeting recovery). Although the BiOp’s jeopardy determination does not specifically refer to the recovery of the bats, the BiOp does conclude that Revised Forest Plan components “would directly or indirectly enhance and/or restore habitat for federally listed species, including bats on the Forests.” FWS6849. These references indicate that FWS did, at least minimally, analyze the effect of the Revised Forest Plan on the bats’ potential for recovery in the process of developing the BiOp. On this basis, and because an independent analysis of recovery is not required for a programmatic BiOp like the one at issue here, the Court concludes that the BiOp’s treatment of recovery was not arbitrary and capricious.⁵

Accordingly, the Court will grant summary judgment in favor of the Agencies as to Claim Four.

ii. Claims 5 and 6: Drawing Rational Connections and Aggregating Effects

Claims Five and Six present distinct but overlapping challenges to the BiOp’s determination that the Revised Forest Plan is not likely to jeopardize the bats’ continued existence. In Appalachian Voices, the Fourth Circuit held

⁵ The Conservation Groups’ complaints regarding shortcomings in the BiOp’s recovery analysis—e.g., regarding whether and how the Revised Forest Plan’s conservation measures will promote the bats’ recovery from the effects of white nose syndrome and climate change—may nevertheless “be aired and addressed in the renewed agency process” on remand. Appalachian Voices, 25 F.4th at 283 (requiring FWS “to address not only the flaws [the court] identified but also any additional matters that may be raised on remand”).

that no-jeopardy determinations based on “flawed evaluations” of the environmental baseline and cumulative effects are “necessarily arbitrary.” 25 F.4th at 278. As a result, the Fourth Circuit concluded that it was “unnecessary” to analyze the no-jeopardy determination independently. Id. In light of the Court’s conclusions supra that the environmental baseline and cumulative effects evaluations in the BiOp were flawed, the Court may draw the same conclusion here. Nevertheless, the Court will briefly address the substance of the Conservation Groups’ claims.

Claim Five challenges the BiOp on grounds that the BiOp failed to draw the requisite rational connection between facts in the record and the BiOp’s no-jeopardy determination. [Doc. 1 at ¶¶ 328-30]. The Conservation Groups identify three factual predicates in the record that they claim cannot be reconciled with the BiOp’s no-jeopardy determination: (1) that the local populations of the northern long-eared bat and Indiana bat are predicted to decline, (2) that the Virginia big-eared bat has a limited range within the Forests, and (3) that the bats exhibit site fidelity, have slow reproductive rates, prefer interior forest habitat, and avoid large forest openings. [Id. at ¶¶ 331-63; Doc. 35 at 32-41]. Claim Six challenges the BiOp on grounds that the BiOp failed to add the effects of the action to the environmental

baseline and cumulative effects of the action and consider the aggregate effects of the action in light of the bats' current status. [Doc. 1 at ¶¶ 364-70].

In response, the Agencies contend, among other things, that the Conservation Groups have misunderstood the nature of a no-jeopardy determination by conflating the impact on local populations with the continued existence of the bats generally. [Doc. 33 at 37; Doc. 37 at 14]. The Agencies rely on the standard articulated in the Endangered Species Consultation Handbook, which provides that “[t]he determination of jeopardy or adverse modification is based on the effects of the action on the continued existence of the entire population of the listed species or on a listed population, and/or the effect on critical habitat as designated in a final rulemaking.” Handbook at 4-36. However, the standard articulated in the Handbook also provides that while “[a]dverse effects on individuals of a species or constituent elements or segments of critical habitat generally do not result in jeopardy or adverse modification determinations,” such effects may result in a jeopardy determinations if, “when added to the environmental baseline, [they are] likely to result in significant adverse effects throughout the species’ range, or appreciably diminish the capability of the critical habitat to satisfy the essential requirements of the species.” Id.

Here, the biological assessment that USFS provided FWS states that preserving suitable habitat in the Forests for the bats is “critical” for the “persistence into the future” of the Virginia big-eared bat, the northern long-eared bat, and the Indiana bat. FWS6622-23; FWS6629-31. Moreover, the, the Conservation Groups’ claims regarding local population declines of the northern long-eared bat and Indiana bat, habitat preservation for the Virginia big-eared bat, and elements of the bats’ behavior and life cycle concern adverse effects on the bats in the Forests that could “result in significant adverse effects throughout the species’ range.” Handbook at 4-36. The BiOp, however, does not address how the Agencies reached a no-jeopardy determination in light of the conclusions in the biological assessment and the factual predicates identified by the Conservation Groups. Because of that shortcoming, and because of antecedent shortcomings in the BiOp’s environmental baseline and cumulative effects evaluations, the Court concludes that the BiOp’s no-jeopardy determination was not “reasonable and reasonably explained.”⁶ Seven Cnty., 605 U.S. at 180.

⁶ As the Fourth Circuit noted in Appalachian Voices, “[i]n determining whether . . . an error was made, the reviewing court may look only to [the agency’s] *contemporaneous* justifications for its actions. Because an agency’s action must be upheld, if at all, on the basis articulated by the agency itself, courts may not accept . . . counsel’s *post hoc* rationalizations for agency action.” 25 F.4th at 269 (alterations and emphases in original) (internal quotation marks and citations omitted). Therefore, in considering whether the no-jeopardy determination has been reasonably explained, the Court has examined the justifications available in the BiOp itself and found them insufficient. For example, the

Accordingly, the Court will grant summary judgment in favor the Conservation Groups as to Claims Five and Six.

B. Challenges to USFS

The Conservation Groups also contend that USFS violated the ESA by failing to provide FWS with the best scientific and commercial data available (Claim 7) and by relying on an unlawful biological opinion (Claim 8).

1. Claim 7: Best Available Scientific Data

Section 7 of the ESA provides that, during formal consultation, “each agency shall use the best scientific and commercial data available.” 16 U.S.C. § 1536(a)(2). The ESA implementing regulations further provide that the “Federal agency requesting formal consultation shall provide the Service with the best scientific and commercial data available or which can be obtained during the consultation for an adequate review of the effects that an action may have upon listed species or critical habitat.” 50 C.F.R. § 402.14(d). Agency decisions regarding “which data and studies are the best available” are “reviewed under a deferential standard.” Defs. of Wildlife, 931 F.3d at 345.

BiOp’s reliance on the ESE tool, FWS6850, suffers from the antecedent shortcomings in the BiOp’s environmental baseline evaluation, which fails to provide an adequate mechanism for distinguishing unsuitable, potentially suitable, and suitable habitat. See supra at 26.

The Conservation Groups assert in their Complaint that USFS failed to satisfy this requirement in three ways: (1) by providing inaccurate information about future natural disturbances to the Forests, (2) by erroneously informing FWS that future road construction authorized by the Plan will be negligible, and (3) by failing to present FWS with available material information on logging on state and private lands. [Doc. 1 at ¶¶ 371-89]. In their summary judgment briefing, however, the Conservation Groups appear to have abandoned the third component about available material logging information. See [Doc. 35 at 44-47 (discussing only the first two components); Doc. 44-1 at 20-22 (same); Doc. 43 (not discussing the merits of Claim 7)].

The Conservation Groups' remaining two challenges miss the mark. Although they purport to hold USFS accountable for failing to provide FWS with the best scientific and commercial *data* available, they in fact challenge *conclusions* that USFS drew about data it provided to FWS. The Conservation Groups argue that USFS inaccurately informed FWS that natural disturbances in the Forests would decline during the life of the Revised Forest Plan and that roadbuilding authorized by the Revised Forest Plan would be negligible, but they cite to data in FWS's administrative record to show the alleged inaccuracy of those statements. [Doc. 35 at 45-47]. This reveals that the Conservation Groups' challenge is not, strictly speaking,

about the *provision* of the relevant data, but about how to *interpret* that data (e.g., whether new roads built in preexisting road corridors should count toward the overall gain in road mileage). Moreover, the Court gives deference to USFS's technical judgments about which data to provide to FWS.

Accordingly, the Court will grant summary judgment in favor of the Agencies as to Claim 7.

2. Claim 8: Reliance on an Unlawful BiOp

“Section 7 of the ESA imposes a substantive duty on [a federal agency] to ensure that its actions are not likely to jeopardize the continued existence of the listed [species] or result in destruction or adverse modification of critical habitat.” Ctr. for Biological Diversity v. U.S. Bureau of Land Mgmt., 698 F.3d 1101, 1127 (9th Cir. 2012) (citing 16 U.S.C. § 1536(a)(2)). “An agency cannot meet its Section 7 duties by relying on a legally flawed biological opinion.” Ctr. for Biological Diversity v. Bernhardt, 982 F.3d 723, 751 (9th Cir. 2020). Because the Court has concluded that the BiOp is legally flawed, USFS's reliance on it is unlawful. See id.

Accordingly, the Court will grant summary judgment in favor of the Conservation Groups as to Claim 8.

C. Remedy

When the Fourth Circuit concludes that a BiOp is arbitrary and capricious, it vacates the BiOp and remands to the agency for further proceedings consistent with the vacatur. See Appalachian Voices, 25 F.4th at 283; Defs. of Wildlife, 931 F.3d at 366; Dow AgroSciences LLC, 707 F.3d at 475. Accordingly, the proper remedy is for the Court to “vacate the BiOp in its present form and require [FWS] to address not only the flaws [the Court] identified but also any additional matters that may be raised on remand.” Dow AgroSciences LLC, 707 F.3d at 475. Moreover, because “vacating a biological opinion voids authority for the proposed action,” vacating the BiOp at issue here voids authority for the Revised Forest Plan. Sierra Club v. Nat'l Marine Fisheries Serv., 797 F. Supp. 3d 440, 496 (D. Md. 2024).

The Court recognizes that vacatur may cause some disruption to ongoing projects in the Forests, “but the Endangered Species Act’s directive to federal agencies could not be clearer: ‘halt and reverse the trend toward species extinction, whatever the cost.’” Appalachian Voices, 25 F.4th at 282 (quoting Tenn. Valley Auth., 437 U.S. at 184). “On remand, the Fish and Wildlife Service should consider this mandate carefully.” Id. at 282-83. Finally, in reaching the conclusions articulated herein, the Court “ha[s] addressed what [it] consider[s] to be the more obvious flaws [with the BiOp],

but others are claimed to exist.” Dow AgroSciences LLC, 707 F.3d at 475. The Court “has[s] not addressed all of the [Plaintiffs] complaints because, on remand, they can be aired and addressed in the renewed agency process.” Id.

V. CONCLUSION

For the foregoing reasons, the Court will grant summary judgment in favor of the Plaintiff Conservation Groups as to Claims 2, 3, 5, 6, and 8, and the Court will grant summary judgment in favor of the Defendant Agencies as to Claims 1, 4, and 7. The BiOp will be vacated and remanded to the Defendant Agencies for further proceedings. The Court will also deny the Defendant Agencies’ motion to strike as moot.

ORDER

IT IS, THEREFORE, ORDERED that the Defendants’ Motion for Summary Judgment [Doc. 32] is **GRANTED IN PART** as to Claims 1, 4, and 7, and **DENIED IN PART** as to Claims 2, 3, 5, 6, and 8.

IT IS FURTHER ORDERED that the Plaintiffs’ Motion for Summary Judgment [Doc. 34] is **GRANTED IN PART** as to Claims 2, 3, 5, 6, and 8, and **DENIED IN PART** as to Claims 1, 4, and 7.

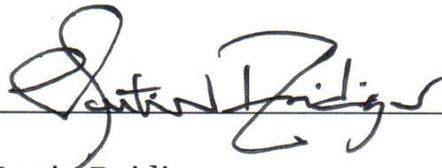
IT IS FURTHER ORDERED that the Biological Opinion is hereby **VACATED** and **REMANDED**.

IT IS FURTHER ORDERED the Defendants' Motion to Strike [Doc. 38] is **DENIED AS MOOT**.

A Judgment shall be entered contemporaneously herewith. The Clerk is respectfully requested to close this civil case.

IT IS SO ORDERED.

Signed: March 31, 2026

A handwritten signature in black ink, appearing to read "Martin Reidinger", written over a horizontal line.

Martin Reidinger
Chief United States District Judge

