

March 17, 2020

Christopher M. Wolpert
Clerk of Court

PUBLISH

UNITED STATES COURT OF APPEALS
FOR THE TENTH CIRCUIT

NEW MEXICO FARM AND
LIVESTOCK BUREAU; NEW MEXICO
CATTLEGROWERS' ASSOCIATION;
NEW MEXICO FEDERAL LANDS
COUNCIL,

Plaintiffs - Appellants,

v.

UNITED STATES DEPARTMENT OF
INTERIOR; RYAN ZINKE, in his official
capacity as Secretary of the United States
Department of Interior; UNITED STATES
FISH AND WILDLIFE SERVICE;
DANIEL M. ASHE, in his official capacity
as Director of the United States Fish and
Wildlife Service,

Defendants - Appellees,

and

CENTER FOR BIOLOGICAL
DIVERSITY; DEFENDERS OF
WILDLIFE,

Intervenor Defendants - Appellees.

No. 17-2211

Appeal from the United States District Court
for the District of New Mexico
(D.C. No. 2:15-CV-00428-KG-CG)

Christina M. Martin, Pacific Legal Foundation, Palm Beach Gardens, Florida (Anthony L. François, Pacific Legal Foundation, Sacramento, California, with her on the briefs), for Plaintiffs-Appellants.

Mark R. Haag, Environment and Natural Resources Division, U.S. Department of Justice, Washington, D.C. (Jeffrey Bossert Clark, Assistant Attorney General, Eric Grant, Deputy Assistant Attorney General, Joan M. Pepin, and Nicole M. Smith, Attorneys, Environment and Natural Resources Division, U.S. Department of Justice, Washington, D.C.; Frank Lupo, Of Counsel, Office of the Solicitor, Southwest Region, U.S. Department of the Interior, Albuquerque, New Mexico, with him on the brief), for Defendants-Appellees.

John Buse, Center for Biological Diversity, Oakland, California, and McCrystie Adams, Defenders of Wildlife, Denver, Colorado, filed a brief for Intervenors-Appellees.

Before **LUCERO**, **HARTZ**, and **MATHESON**, Circuit Judges.

LUCERO, Circuit Judge.

This case involves the designation by the U.S. Fish and Wildlife Service (“the Service”) of critical habitat for the jaguar, pursuant to the Endangered Species Act (“ESA”). Plaintiffs filed suit, contending the Service’s designation was arbitrary and capricious. The district court ruled in favor of the Service. Exercising jurisdiction under 28 U.S.C. § 1291, we reverse and remand to the district court.

I

The jaguar (*Panthera onca*) is a large felid found in the southwestern United States, Mexico, Central America, and South America. See Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Jaguar, 79 Fed. Reg. 12,572, 12,573 (Mar. 5, 2014) (hereinafter “Final Critical Habitat

Designation”). The Service listed the jaguar as a foreign endangered species in 1972 under the Endangered Species Conservation Act (“ESCA”), a precursor to the ESA. List of Endangered Foreign Fish and Wildlife, 37 Fed. Reg. 6476 (Mar. 30, 1972) (hereinafter “Foreign Jaguar Listing”). After the ESA took effect in 1973, the Service relisted as endangered foreign jaguar populations, but did not include domestic ones. In a 1980 proposed rulemaking, the Service acknowledged this “inadvertent oversight,” stated it had been the Service’s intention to list all jaguar populations as endangered, and proposed adding domestic jaguar populations to the list. Endangered and Threatened Wildlife and Plants, Proposed Endangered Status for U.S. Populations of Five Species, 45 Fed. Reg. 49,844, 49,844 (July 25, 1980) (hereinafter “1980 Proposed Rule”). Ultimately, the agency listed both foreign and domestic jaguar populations as endangered in 1997. Endangered and Threatened Wildlife and Plants; Final Rule to Extend Endangered Status for the Jaguar in the United States, 62 Fed. Reg. 39,147 (July 22, 1997) (hereinafter “Final Jaguar Listing”).

In 2014, the Service published a final rule designating 764,207 acres in New Mexico and Arizona as critical jaguar habitat. Final Critical Habitat Designation, 79 Fed. Reg. at 12,572. The area was divided into six units. Id. Units 5 and 6 are the subject of this litigation. Unit 5, the Peloncillo Unit, covers 102,724 acres in the Peloncillo Mountains in Cochise County, Arizona, and Hidalgo County, New Mexico. Id. Unit 6, the San Luis Unit, covers 7714 acres in the San Luis Mountains in Hidalgo County, New Mexico. Id. In assessing whether Units 5 and 6 were

occupied by jaguars at the time they were listed, the Service used data on undisputed Class I jaguar sightings¹ between 1962 and 2013.² There were Class I jaguar sightings in the Units in 1995, 1996, and 2006, but no Class I sightings there between 1962 and the 1990s. Id. at 12,579-80. Nonetheless, the Service found Units 5 and 6 “may have been occupied” by jaguars in 1972 because “[j]aguars were rare on the landscape and distributed over large, rugged areas,” “jaguars are cryptic and nocturnal by nature,” and “no survey effort was made to detect them in 1972.” Id. at 12,582.

Based on this finding, the agency categorized Units 5 and 6 as “[o]ccupied at time of listing.” Id. at 12,592.³ It found the Units satisfied the ESA’s requirements for occupied critical habitat but noted there was substantial uncertainty in the finding

¹ Jaguar sighting reports are sorted into “classes” based on the degree of certainty that a jaguar was sighted; the Service considers only undisputed Class I reports as valid records of jaguar sightings in its critical habitat designation. Id. at 12,579. The Service notes several disputed Class I records, id. at 12,580-81, but these are not relevant to our analysis because they did not occur in Units 5 and 6.

² Based on a finding that the average jaguar lifespan is ten years, the agency stated that jaguar sightings between 1962 and 1982—from ten years before to ten years after the 1972 listing date—could indicate the presence of jaguars in 1972. Id. at 12,581. The Service also concluded that Class I sightings from 1982 to 2013 were relevant evidence of jaguar occupancy in 1972. Id.

³ The Final Critical Habitat Designation alternately stated that Units 5 and 6 were occupied at the time of listing and that they may have been occupied at that time. For example, in a table describing all the units, Units 5 and 6 are in a column labeled “Occupied at time of listing,” but a description of the table states the column includes units that “may have been occupied at the time of listing.” Id. at 12,591.

that the Units were occupied. Id. at 12,587. Accordingly, it alternatively determined that the Units qualified as unoccupied critical habitat under the ESA. Id. at 12,582.

Plaintiffs filed suit, challenging the designation of Units 5 and 6 as arbitrary and capricious. The district court concluded that although it owes deference to the Service on matters of scientific expertise, the evidence was insufficient to support a finding that jaguars occupied the Units in 1972. Nevertheless, because the Service alternatively determined that the Units could be designated as unoccupied critical habitat under the ESA, the court held the designation of the Units as critical habitat was not arbitrary and capricious. Plaintiffs timely appealed.

II

Our review of the Service's actions under the ESA is governed by the Administrative Procedure Act, and we review the district court's decision de novo. See N.M. Cattle Growers Ass'n v. U.S. Fish & Wildlife Serv., 248 F.3d 1277, 1281 (10th Cir. 2001). "We cannot set aside an agency decision unless it fails to meet statutory, procedural or constitutional requirements, or unless it is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." Id. (quotation omitted).

The ESA sets forth a procedure by which the Service designates critical habitat for endangered species. 16 U.S.C. § 1533. It must do so "on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impact, of specifying any

particular area as critical habitat.” § 1533(b)(2). The ESA defines “critical habitat for a threatened or endangered species” as:

(i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 1533 of this title, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and

(ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 1533 of this title, upon a determination by the Secretary that such areas are essential for the conservation of the species.

§ 1532(5)(A).

A

As a threshold matter, we address the time at which the jaguar was “listed in accordance with the provisions of section 1533.” Id. The Final Critical Habitat Designation stated:

While the jaguar was not explicitly listed in the United States until July 22, 1997, we are using the date the jaguar was listed throughout its range as endangered in accordance with the Endangered Species Conservation Act, which is March 30, 1972. Our rationale for using this date is based on our July 25, 1979, publication in which we asserted that it was always the intent of the Service that all populations of seven species, including the jaguar, deserved to be listed as endangered, whether they occurred in the United States or in foreign countries. Therefore, our intention was to consider the jaguar endangered throughout its entire range when it was listed as endangered in 1972, rather than only outside of the United States.

79 Fed. Reg. at 12,581 (citations omitted). Intervenors argue that the Service was required to use 1997, the date of the Final Jaguar Listing, instead.

The ESA expressly requires the agency to consider occupancy at the time a species “is listed,” §§ 1532(5)(A)(i), (ii) (emphasis added), not at the time the Service intended to list it or to consider it endangered. Accordingly, we reject the Service’s explanation that it was “always the intent of the Service . . . to consider the jaguar endangered throughout its entire range,” Final Critical Habitat Designation, 79 Fed. Reg. at 12,581. To determine whether the agency was required to use the 1997 listing, we look to the complex regulatory history of the jaguar’s listing as an endangered species.

Under the Endangered Species Preservation Act of 1966 (“ESPA”), the Secretary of the Interior maintained a list of “native fish and wildlife” that were “threatened with extinction.” Pub. L. No. 89-669, § 1(c), 80 Stat. 926, 926 (1966), repealed by ESA, Pub. L. No. 93-205, § 14, 87 Stat. 884, 903 (1973). The ESPA required the Secretary to “consult[] with the affected States” before designating native species as threatened with extinction. Id.

In 1969, Congress passed the ESCA. That statute required the Secretary to designate “species or subspecies of fish or wildlife” that are “threatened with worldwide extinction.” Pub. L. No. 91-135, § 3(a), 83 Stat. 275, 275 (1969), repealed by ESA, § 14, 87 Stat. at 903. Pursuant to the ESCA, the Service maintained a “U.S. List of Endangered Foreign Fish and Wildlife” at 50 C.F.R., app. A. It added the jaguar to this list of foreign endangered species in 1972. Foreign Jaguar Listing, 37 Fed. Reg. at 6476. Because the ESCA did not repeal the

ESPA, the ESPA's requirement for the Service to maintain a list of "native fish and wildlife" remained in effect.

In 1973, Congress passed the ESA, which repealed both the ESPA and the ESCA. ESA, § 14, 87 Stat. at 903. The ESA requires the Secretary to maintain "a list of all species determined . . . to be endangered species and a list of all species determined . . . to be threatened species." *Id.*, § 4(c)(1), 87 Stat. at 887 (codified at § 1533(c)(1)). It eliminated the requirement for maintaining separate lists of native species under the ESPA and foreign species under the ESCA. As enacted, the ESA further provided:

[A]ny list in effect on the day before the date of the enactment of [the ESA] of species of fish or wildlife determined by the Secretary of the Interior, pursuant to the [ESCA], to be threatened with extinction shall be republished to conform to the classification for endangered species or threatened species, as the case may be, provided for in this Act, but until such republication, any such species so listed shall be deemed an endangered species within the meaning of this act. The republication of any species pursuant to this paragraph shall not require public hearing or comment

Id., § 4(c)(3), 87 Stat. at 888 (codified at § 1533(c)(3)) (repealed 1982).

In accordance with this provision, the Service promulgated a list of endangered and threatened species in 1975, consolidating the formerly separate lists of native and foreign species. Reclassification of the American Alligator and Other Amendments, 40 Fed. Reg. 44,412 (Sept. 26, 1975) (hereinafter "Consolidated Listing"). The agency confirmed that the ESA list "br[ought] together in one place all of the endangered and threatened species" previously listed. *Id.* at 44,413. The Consolidated Listing included the jaguar (*Panthera onca*) and stated its "Known

Distribution” is “Central and South America.” *Id.* at 44,418.⁴ It also included the original listing date of the species under the ESCA.⁵

In 1979, the Service issued a notice stating that because the jaguar and other species had been listed only as foreign, not native, endangered species under the pre-ESA framework, their domestic populations were “not currently listed” under the ESA. Notification that the populations of seven endangered species are not currently protected by the [ESA], 44 Fed. Reg. 43,705, 43,705 (July 25, 1979).⁶ The agency acknowledged this “inadvertent” failure again the following year; it stated it had

⁴ We observe that in the 1978 republication of the endangered species list, the Service amended the Known Distribution to read, “U.S. (Southwestern) to South America.” Republication of the List of Species, 43 Fed. Reg. 58,030, 58,033 (Dec. 11, 1978). In 1980, this was again amended to read, “U.S.A. (TX, NM, AZ), Central and South America.” Republication of the Lists of Endangered and Threatened Species and Correction of Technical Errors in Final Rules, 45 Fed. Reg. 33,768, 33,770 (May 20, 1980) (hereinafter “1980 Republication”).

⁵ In the column for “When Listed,” the Consolidated Listing erroneously stated the jaguar was listed in a 1970 rulemaking, List of Endangered Foreign Fish and Wildlife, 35 Fed. Reg. 18,319 (Dec. 2, 1970). Consolidated Listing, 40 Fed. Reg. at 44,418. This appears to be a clerical error; it should have referred to the 1972 Foreign Jaguar Listing. The entries for most of the other species listed along with the jaguar in 1972—the cheetah, leopard, tiger, snow leopard, ocelot, and margay—correctly referred to the 1972 listing. *Id.* at 44,418-19. The entry for the tiger cat, like the entry for the jaguar, erroneously referred to the 1970 listing. *Id.* at 44,418.

This error was corrected between the 1979 and 1980 republications of the endangered species list. Compare Republication of List of Species, 44 Fed. Reg. 3636, 3639 (Jan. 17, 1979) with 1980 Republication, 45 Fed. Reg. at 33,770.

⁶ This notice stated that the Service had not consulted with the governors of any state, as required under the pre-ESA framework. *Id.* The agency stated it “intend[ed] to take action as quickly as possible to propose the U.S. populations of these species for listing.” *Id.*

intended to list all jaguar populations as endangered under the ESA and proposed amending the list of endangered species to state that the jaguar's "Historic Range" was "Texas, New Mexico, Arizona, South through Central America to South America." 1980 Proposed Rule, 45 Fed. Reg. at 49,844, 49,847.⁷ The 1980 Proposed Rule was withdrawn in 1982. Endangered and Threatened Wildlife and Plants: Notice of Withdrawal of an Expired Proposal for Listing of the U.S. Populations of the Thick-Billed Parrot, Short-Tailed Albatross, Margay Cat, and Jaguar, 47 Fed. Reg. 41,145, 41,145 (Sept. 17, 1982).

Twelve years later, in 1994, the agency again proposed listing domestic jaguar populations as endangered. Endangered and Threatened Wildlife and Plants; Proposed Endangered Status for the Jaguar In the United States, 59 Fed. Reg. 35,674 (July 13, 1994). In 1997, it issued a final rulemaking listing foreign and domestic jaguar populations as endangered. Final Jaguar Listing, 62 Fed. Reg. at 39,147.

B

In light of this complex regulatory history, we address whether the jaguar was "listed in accordance with the provisions of section 1533" in 1972 or 1997. §§ 1532(5)(A)(i), (ii). The statute does not directly address which time of listing the Service must consider in a case such as this one, in which a species' foreign and

⁷ The list of endangered species already in effect at the time of the 1980 Proposed Rule stated that the jaguar's "Known Distribution" was "U.S.A. (TX, NM, AZ), Central and South America." 1980 Republication, 45 Fed. Reg. at 33,770.

domestic populations were listed on different dates under different statutory schemes. To resolve this issue, we must first determine the meaning of the term “species.”

The ESA offers little guidance on this issue. It does not actually define the term “species”; rather, it merely states that the term “includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature.” § 1532(16) (emphasis added).⁸

We therefore look to the ordinary meaning of the word “species.” “[A]bsent evidence to the contrary, the ordinary meaning of the words used [in a statute] expresses legislative intent. When Congress has used technical words or terms of art, the term must be given its technical or scientific meaning.” United States v. Easter, 981 F.2d 1549, 1558 (10th Cir. 1992) (citations omitted). A “species” is defined as:

a category of biological classification ranking immediately below the genus or subgenus, comprising related organisms or populations potentially capable of interbreeding, and being designated by a binomial that consists of the name of a genus followed by a Latin or latinized uncapitalized noun or adjective agreeing grammatically with the genus name.

Species, Merriam-Webster Dict., <http://www.merriam-webster.com/dictionary/species> (last visited Mar. 3, 2020).

The binomial designation of the jaguar is Panthera onca. See 50 C.F.R. § 17.11(h). Panthera is the genus, onca the species. The foreign and domestic populations of the jaguar belong to the same Panthera onca species. There is no

⁸ In contrast, almost all the other provisions in the definitions section of the statute state what a particular term “means.” See generally § 1532.

indication in the record that these populations would be incapable of interbreeding. To the contrary, the Final Critical Habitat Designation stated that the only breeding populations of jaguars are foreign populations. The domestic population is therefore comprised of individual jaguars dispersing from the nearest breeding population, which is in Mexico. See 79 Fed. Reg. at 12,589.

We acknowledge that the 1980 Proposed Rule and the 1997 Final Jaguar Listing state that domestic jaguars were not subject to the ESA's protections. 45 Fed. Reg. at 49,844; 47 Fed. Reg. at 41,145. But the question before us is what year the jaguar—Panthera onca—was listed as endangered for purposes of §§ 1532(5)(A)(i), (ii).

We conclude that year was 1972. The foreign and domestic jaguar populations listed by the Service comprise one species under the ESA. That species was listed as a foreign endangered species under the ESCA in 1972. When the ESA was enacted in 1973, § 1533 provided that the ESCA list would be republished. ESA, § 4(c)(3), 87 Stat. at 888 (repealed 1982). The entry for the jaguar species in the republished list referred to the original listing date of the jaguar species under the ESCA. Consolidated Listing, 40 Fed. Reg. at 44,418. Additionally, the 1978 and 1980 republications list domestic ranges for the jaguar. See Republication of the List of Species, 43 Fed. Reg. at 58,033; 1980 Republication, 45 Fed. Reg. at 33,770. The current listing of endangered species includes both the Foreign Jaguar Listing and the Final Jaguar Listing under “Listing citations and applicable rules.” 50 C.F.R. § 17.11(h).

Our conclusion aligns with the Final Critical Habitat Designation’s finding that “the jaguar was listed throughout its range as endangered” in 1972. 79 Fed. Reg. at 12,581. It is also consistent with the legislative history of § 1532(5)(A). The ESA did not originally include a definition of “critical habitat.” 87 Stat. 884. That definition was added in a 1978 amendment. ESA Amendments of 1978, Pub. L. No. 95-632, § 2, 92 Stat. 3751, 3751 (1978). The proponent of the amendment stated that a critical habitat designation “must be made at the time [a species is] placed on the list.” 124 Cong. Rec. S11,042 (daily ed. July 18, 1978) (statement of Sen. McClure). He explained the definition was a response to the prospect of human displacement if an endangered species were to expand out of the area it occupied at the time of listing, offering the example of the grizzly bear’s expansion out of Yellowstone National Park. *Id.* at S11,043.⁹

Thus, Congress intended to ensure that even if the range of a species expands, the Service designates critical habitat under § 1532(5)(A)(i) only for areas occupied at the initial time of listing. For areas unoccupied at the time of listing into which a species has expanded, the Service designates critical habitat under the more stringent

⁹ The definition of critical habitat appears to be modeled on language proposed by a representative of the National Forest Products Association, who also expressed concerns about the consequences of the expansion of the grizzly bear’s range. Endangered Species Oversight: Hearing Before the S. Comm. on Fisheries and Wildlife Conservation and the Env’t, 95th Cong. 726, 728 (1978) (statement of William Haselton, representing Nat’l Forest Prods. Ass’n). The timber industry representative’s proposed definition of unoccupied critical habitat referred to areas “essential to the continued existence of the species,” *id.*, whereas the enacted version of § 1532(5)(A)(ii) discusses areas “essential for the conservation of the species.”

criteria in § 1532(5)(A)(ii). Our holding that the Service must use the initial listing date, not a later listing date after the jaguar's range has expanded, is consistent with this intent.

C

Having concluded that the jaguar was initially listed as endangered in 1972, we turn to whether Units 5 and 6 were occupied by jaguars at that time.¹⁰ We must determine whether the Service's finding that the jaguar occupied Units 5 and 6 in 1972 was supported by "substantial evidence in the administrative record," meaning "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." Colo. Wild, Heartwood v. U.S. Forest Serv., 435 F.3d 1204, 1213 (10th Cir. 2006) (quotations omitted).

The ESA and its implementing regulations do not define "occupancy," and the Tenth Circuit has not directly addressed how the term is defined. Plaintiffs contend that "occupy" is synonymous with "reside." We disagree. A species "occupies" an area if it "uses [the area] with sufficient regularity that it is likely to be present during any reasonable span of time." Ariz. Cattle Growers' Ass'n v. Salazar, 606 F.3d 1160, 1165 (9th Cir. 2010). "Determining whether a species uses an area with

¹⁰ Plaintiffs appear to contend the Service forfeited the argument that jaguars occupied Units 5 and 6. Because the district court ultimately entered judgment in the Service's favor, it could not appeal this issue. See United States v. Am. Ry. Exp. Co., 265 U.S. 425, 435 (1924) (holding a party cannot appeal from a favorable judgment). This argument is therefore not forfeited. Further, we may affirm the "lower court's ruling on any grounds adequately supported by the record, even grounds not relied upon by the district court." United States v. Mabry, 728 F.3d 1163, 1165 n.1 (10th Cir. 2013).

sufficient regularity that it is ‘occupied’ is a highly contextual and fact-dependent inquiry.” Id. at 1164.

We turn to the Service’s factual findings regarding whether jaguars used Units 5 and 6 with sufficient regularity for the Units to be considered occupied in 1972. Because the average jaguar lifespan is ten years, the agency stated that jaguar sightings between 1962 and 1982—from ten years before to ten years after the 1972 listing date—could indicate the presence of jaguars in 1972. Final Critical Habitat Designation, 79 Fed. Reg. at 12,581. There were no Class I jaguar sightings in the units between 1962 and 1982, however, and no other evidence of jaguar presence during that time period. Id.

The Service also concluded that Class I sightings from 1982 to 2013 are relevant evidence of presence in 1972 because it is “likely those areas were occupied at the time of the original listing, but jaguars had not been detected because of their rarity, the difficulty in detecting them, and a lack of surveys for the species.” Id. at 12,581. It lists three jaguar sightings in Units 5 and 6: a jaguar track in Unit 5 in 1995, a photograph of a jaguar in Unit 5 in 1996, and a photograph of a jaguar in Unit 6 in 2006. Id. at 12,579-80. The Service observed that “[j]aguars are difficult to detect due to their rarity, cryptic appearance, elusive behavior, and habitat complexity.” Id. at 12,581. Further, there were no concerted efforts to detect jaguars before 1997, when the Borderlands Jaguar Detection Project set up remote camera stations and conducted track and scat surveys. Id. Considering the inadequacy of the available data regarding jaguar occupancy, the agency found that these three

sightings provided sufficient evidence Units 5 and 6 “may have been occupied by jaguars” in 1972. Id. at 12,582. It therefore concluded that Units 5 and 6 satisfied the requirements for occupied critical habitat under § 1532(5)(A)(i).

On appeal, the agency argues that we must affirm its finding that Units 5 and 6 were occupied in 1972 because we must defer to its scientific expertise. Though we are mindful that the agency need only base its determinations on the “best scientific data available,” § 1533(b)(2), not the best scientific data possible, our review of the Final Critical Habitat Designation reveals that the Service did not make a factual finding that Units 5 and 6 were occupied by jaguars in 1972. Rather, the agency expressed uncertainty about that question and ultimately found only that jaguars may have occupied the units at that time.

Moreover, there is no evidence in the record that any jaguars were present in Units 5 and 6 between 1962 and 1982. In fact, there is no evidence that jaguars were present in Units 5 and 6 at any time before 1995. The agency’s use of the sightings between 1962 and 1982 was based on expert opinion that the average jaguar lifespan is ten years; this determination is entitled to our deference. See Colo. Wild, 435 F.3d at 1214 (“[O]ur deference to the agency is greatest when reviewing technical matters within its area of expertise, particularly its choice of scientific data and statistical methodology.” (quotation omitted)). In contrast, the Service’s reliance on sightings in 1995, 1996, and 2006 to support a conclusion of occupation in 1972 is not based on expert opinion and is purely speculative.

Although we acknowledge the difficulty in ascertaining whether jaguars were present in Units 5 and 6 in 1972, we conclude that any finding that jaguars occupied the Units at that time is speculative and not based on substantial evidence. We therefore agree with the district court that the Service’s designation of Units 5 and 6 as occupied critical habitat was arbitrary and capricious.

III

In the alternative, the Service determined that Units 5 and 6 met the requirements for unoccupied critical habitat under § 1532(5)(A)(ii) and designated them as such. Plaintiffs challenge this designation. Designation of areas as unoccupied critical habitat must be based “upon a determination by the Secretary that such areas are essential for the conservation of the species.” *Id.* The statute defines “conservation” as “the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this [Act] are no longer necessary.” § 1532(3). “Under this definition, conservation encompasses recovery.” *Ctr. for Native Ecosystems v. Cables*, 509 F.3d 1310, 1322 (10th Cir. 2007).

A

The ESA regulations in effect at the time the Service issued the Final Critical Habitat Designation provided, “The Secretary [of the Interior] shall designate as critical habitat areas outside the geographical area presently occupied by a species only when a designation limited to its present range would be inadequate to ensure the conservation of the species.” 50 C.F.R. § 424.12(e) (2013). When it

promulgated this rule, the agency addressed comments “express[ing] concern over the perceived possibility that Critical Habitat could be designated in an unwarranted manner for areas outside the geographical area occupied by the species at the time of listing.” Rules for Listing Endangered and Threatened Species, Designating Critical Habitat, and Maintaining the Lists, 45 Fed. Reg. 13,010, 13,011 (Feb. 27, 1980). The agency expressly rejected the suggestion that it develop “precise criteria . . . to [e]nsure that these areas truly constitute Critical Habitat,” finding “further criteria are unnecessary.” Id. It stated it would “closely scrutinize” any unoccupied areas and designate them as critical habitat “only if necessary to ensure the conservation of the species.” Id.¹¹

From the language of the regulatory text and the final rulemaking accompanying it, we conclude that under § 424.12(e) (2013),¹² before the Service

¹¹ In 1984, the agency rejected a suggestion that it designate critical habitat outside a species’ known range only when required to prevent the species’ extinction. Listing Endangered and Threatened Species and Designating Critical Habitat; Amended Procedures for Listing Endangered and Threatened Species and Designating Critical Habitat, 49 Fed. Reg. 38,900, 38,904 (Oct. 1, 1984). Concluding that such a limitation would be “inconsistent with the Act’s purpose of conserving and recovering species,” the agency reiterated that critical habitat outside of the species’ known range would be designated “when essential for the species’ conservation.” Id.

¹² The regulation discussed the areas “presently occupied by a species” and the species’ “present range.” Id. (emphases added). Although this seems to imply that the Service should consider the species’ range at the time of designation, such a reading would be inconsistent with the statutory requirement that the Service consider only the “geographical area occupied by the species at the time it is listed,” § 1532(5)(A)(ii). See also Listing Endangered and Threatened Species and Designating Critical Habitat; Implementing Changes to the Regulations for

designates an area as unoccupied critical habitat, it must find designation of occupied critical habitat “inadequate to ensure the conservation of the species.” See Markle Interests, L.L.C. v. U.S. Fish & Wildlife Serv., 827 F.3d 452, 470 (5th Cir. 2016) (“Under the regulations in effect at the time that Unit 1 was designated, the Service had to find that the species’[] occupied habitat was inadequate before it could even consider designating unoccupied habitat as critical.”), vacated on other grounds, 139 S. Ct. 590 (2018). But cf. Bear Valley Mut. Water Co. v. Jewell, 790 F.3d 977, 994 (9th Cir. 2015) (holding requirements that unoccupied areas be “essential [for] the conservation of the species” and “that the designated occupied areas are inadequate to ensure the conservation of the species” are “identical”). The Final Critical Habitat Designation confirmed this understanding of the regulation; it stated that unoccupied critical habitat is designated “only when a designation limited to [the species’] range would be inadequate to ensure the conservation of the species.” 79 Fed. Reg. at 12,578.

Subsequent rulemakings further reflect that under the version of § 424.12(e) in effect at the time the Service issued the Final Critical Habitat Designation, the Service must find designation of occupied areas inadequate before designating unoccupied critical habitat. In 2016, the agency amended the regulation and

Designating Critical Habitat, 81 Fed. Reg. 7414, 7434 (Feb. 11, 2016) (acknowledging this “confusion”). We read § 424.12(e) (2013) to require the Service to consider a species’ range at the time of listing, as provided in § 1532(5)(A)(ii).

recodified it at 50 C.F.R. § 424.12(b)(2).¹³ The final rulemaking accompanying the amendment explained:

[W]e have learned from years of implementing the critical habitat provisions of the Act that often a rigid step-wise approach, i.e., first designating all occupied areas that meet the definition of “critical habitat” (assuming that no unoccupied habitat is designated) and then, only if that is not enough, designating essential unoccupied habitat, does not necessarily serve the best conservation strategy for the species and in some circumstances may result in a designation that is geographically larger, but less effective as a conservation tool. Our proposed change will allow us to consider the inclusion of occupied and unoccupied areas in a critical habitat designation following at minimum a general conservation strategy for the species.

Implementing Changes to the Regulations for Designating Critical Habitat, 81 Fed. Reg. at 7427. The Service thus explicitly acknowledged that the prior version of the regulation—the one at issue in this case—required a “rigid step-wise approach” under which it must first designate occupied areas, then designate unoccupied areas only if designation of the occupied areas is insufficient.

The Service amended the provision yet again in 2019.¹⁴ The final rulemaking

¹³ The amended version provided, “The Secretary will identify, at a scale determined by the Secretary to be appropriate, specific areas outside the geographical area occupied by the species that are essential for its conservation, considering the life history, status, and conservation needs of the species based on the best available scientific data.” § 424.12(b)(2) (2016).

¹⁴ The amended regulation now provides:

The Secretary will designate as critical habitat, at a scale determined by the Secretary to be appropriate, specific areas outside the geographical area occupied by the species only upon a determination that such areas are essential for the conservation of the species. When designating critical habitat, the Secretary will first evaluate areas occupied by the

accompanying that amendment characterized the 2016 amendment as “chang[ing] the step-wise approach we had been using since 1984” and “eliminating the sequenced approach to considering occupied habitat before unoccupied habitat.” Endangered and Threatened Wildlife and Plants; Regulations for Listing Species and Designating Critical Habitat, 84 Fed. Reg. 45,020, 45,043 (Aug. 19, 2019). Both the 2016 and 2019 rulemakings therefore support our conclusion that § 424.12(e) (2013) required a sequential, “step-wise” approach, under which the Service must find designation of occupied areas inadequate as a prerequisite to designating unoccupied areas.¹⁵

B

Before considering whether the Service complied with § 424.12(e) (2013), we note that on appeal, plaintiffs cite the regulation but do not argue that the Service failed to comply with it. As an initial matter, we conclude that the issue is administratively exhausted. “Parties must exhaust available administrative remedies before the [agency] prior to bringing their grievances to federal court.” Ark Initiative

species. The Secretary will only consider unoccupied areas to be essential where a critical habitat designation limited to geographical areas occupied would be inadequate to ensure the conservation of the species. In addition, for an unoccupied area to be considered essential, the Secretary must determine that there is a reasonable certainty both that the area will contribute to the conservation of the species and that the area contains one or more of those physical or biological features essential to the conservation of the species.

§ 424.12(b)(2) (2019).

¹⁵ We emphasize that our resolution of this case requires only an interpretation of § 424.12(e) (2013). The 2016 and 2019 amendments to the regulation do not affect the outcome of this case.

v. U.S. Forest Serv., 660 F.3d 1256, 1261 (10th Cir. 2011) (quotation omitted). In promulgating the Final Critical Habitat Designation, the Service considered the following comment:

The Service states in the proposed rule that [it] designate[s] critical habitat in areas outside the geographical area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species. The area currently occupied by the jaguar outside the United States is adequate for the conservation of the jaguar.

79 Fed. Reg. at 12,615. Although the comment did not cite § 424.12(e) (2013), it questioned the agency’s failure to find designation of occupied areas inadequate before designating unoccupied areas as critical habitat. Because the issue was raised “in sufficient detail to allow the agency to rectify the alleged violation,” it is administratively exhausted. Ark Initiative, 660 F.3d at 1261.

We turn to whether we may address the Service’s compliance with the regulation, given that plaintiffs did not specifically brief the issue. Plaintiffs argue that the Service’s designation of unoccupied jaguar habitat was arbitrary and capricious because it did not comport with the statutory requirement that such areas be “essential for the conservation of the species.” § 1532(5)(A)(ii). The Service promulgated § 424.12(e) (2013) to interpret this statutory provision. See Rules for Listing Endangered and Threatened Species, Designating Critical Habitat, and Maintaining the Lists, 45 Fed. Reg. at 13,011. At the district court, plaintiffs and the Service quoted the regulation in their briefs. Further, plaintiffs requested “declaratory judgment and injunctive relief against the Defendants for violating . . .

50 C.F.R. § 424.12(e).” On appeal, plaintiffs and the Service quote the regulation in their briefs. Plaintiffs do not challenge the validity of the regulation, thereby acknowledging that it defines the agency’s obligations when designating unoccupied critical habitat. But they do not request that we overturn the Final Critical Habitat Designation because it did not comply with § 424.12(e) (2013). Rather, plaintiffs challenge the agency action only on statutory grounds. They ask us to define the word “essential” restrictively, not raising the narrower, related issue of whether the Service complied with the regulation.

In the context of arguments raised before us but not before the district court, we have held that the “general waiver rule is not absolute, . . . and we may depart from it in our discretion, particularly when we are presented with a strictly legal question, the proper resolution of which is beyond doubt or when manifest injustice would otherwise result.” Sussman v. Patterson, 108 F.3d 1206, 1210 (10th Cir. 1997) (alteration and quotation omitted); see also Greene v. Safeway Stores, Inc., 210 F.3d 1237, 1243 (10th Cir. 2000) (exercising discretion to consider waived argument because “the issue presented is one of law”). In such cases, we may exercise discretion when “the record is sufficient to resolve the issue on its merits.” Hooker v. Mullin, 293 F.3d 1232, 1241 n.7 (10th Cir. 2002). Similarly, in cases in which appellate briefs are deficient because they do not comply with the Federal Rules of Appellate Procedure, we have held that “the court in its discretion may scrutinize the merits of the case insofar as the record permits.” MacArthur v. San Juan Cty., 495 F.3d 1157, 1161 (10th Cir. 2007); see also Burke v. Regalado, 935 F.3d 960, 1031

(10th Cir. 2019) (relying on a “detailed motion . . . filed in the district court” because the appellate briefing was inadequate).

Plaintiffs do not challenge the validity of § 424.12(e) (2013), which interprets § 1532(5)(A)(ii); they only contest the Service’s compliance with the statute. But when we consider an agency action made pursuant to a statute and an implementing regulation, we cannot ignore the regulatory context when determining whether that action was arbitrary and capricious. In this case, whether the Service complied with the regulation is a strictly legal question that we are fully capable of resolving on the administrative record alone. As set forth below, that record leads us to conclude the agency did not comply with the regulation, and our resolution of this issue is beyond doubt. Further, the agency had a chance to rectify this error, but failed to do so. Thus, instead of addressing plaintiffs’ statutory argument—that the Service’s designation of Units 5 and 6 as unoccupied critical habitat is arbitrary and capricious because the areas were not “essential for the conservation of the species” under § 1532(5)(A)(ii)—we exercise our discretion to consider whether the Service complied with the requirements of § 424.12(e) (2013).

C

Turning to the merits of the issue, we have held that “[a]gencies are under an obligation to follow their own regulations, procedures, and precedents, or provide a rational explanation for their departure.” Utahns for Better Transp. v. U.S. Dep’t of Transp., 305 F.3d 1152, 1165 (10th Cir. 2002). When an agency does not comply with its own regulations, it acts arbitrarily and capriciously. Id. at 1178; see also

Cherokee Nation of Okla. v. Norton, 389 F.3d 1074, 1078 (10th Cir. 2004) (“[The APA] require[s] agencies, on pain of being found to have acted arbitrarily and capriciously, to comply with their own regulations.”).¹⁶

In the Final Critical Habitat Designation, the Service “acknowledge[d] that the lack of jaguar sightings at the time the species was listed as endangered in 1972 . . . suggest[ed] that jaguars in the United States had declined to such an extent by that point as to be effectively eliminated.” 79 Fed. Reg. at 12,588 (citation omitted). It continued:

To the extent that areas described above may not have been occupied at the time of listing, we determine that they are essential to the conservation of the species for the following reasons: (1) They have demonstrated recent (since 1996) occupancy by jaguars; (2) they contain features that comprise suitable jaguar habitat; and (3) they contribute to the species’ persistence in the United States by allowing the normal demographic function and possible range expansion of the proposed Northwestern Recovery Unit, which is essential to the conservation of the species.

Id.

To the extent that any Units were occupied in 1972, the Service was required to find that their designation as critical habitat was inadequate to ensure jaguar conservation before it designated Units 5 and 6, which were unoccupied, as critical habitat. It did not so do. The Service did not find that the designation of areas occupied by jaguars in 1972 would be inadequate to ensure the conservation of the

¹⁶ An agency’s interpretation of its own regulations may be entitled to deference if the regulation is “genuinely ambiguous.” Kisor v. Wilkie, 139 S. Ct. 2400, 2414 (2019). But § 424.12(e) (2013) is not ambiguous.

species. Nor did it make findings about whether any individual unit designated as unoccupied was essential for the conservation of the species.¹⁷ Rather, it addressed all the units together, finding that to the extent they were not occupied, they were essential for the conservation of the species.

We conclude the agency did not comply with its obligation to designate unoccupied critical habitat “only when a designation limited to its present range would be inadequate to ensure the conservation of the species.” § 424.12(e) (2013). Because it did not follow its own regulations or provide a rational explanation for failing to do so, its designation of Units 5 and 6 as critical habitat was arbitrary and capricious.

IV

Plaintiffs also argue that because Units 5 and 6 are “secondary,” “marginal” habitat and constitute only a small portion of the jaguar’s range, they cannot be essential for the conservation of the species. We disagree. The Service convened a Jaguar Recovery Team, which prepared a Recovery Outline for the jaguar. See Final Critical Habitat Designation, 79 Fed. Reg. at 12,573-74. The Recovery Outline maps the “Northwestern Recovery Unit,” including jaguar habitat in the United States and

¹⁷ The Final Critical Habitat Designation did include specific findings pertaining to Units 1b, 4b, and 4c, for which there was no evidence of jaguar occupation at any time. Id. at 12,591-92. The Service found that “maintaining travel corridors to Mexico is essential for the conservation of jaguars in the Northwestern Recovery Unit, and, therefore, for the species as a whole.” Id. at 12,589. Because Units 1a and 4a do not border Mexico, the Service specifically found Units 1b, 4b, and 4c were essential for the conservation of the species because they connected Units 1a and 4a to Mexico. Id. at 12,593-94.

northwestern Mexico. See id. at 12,574. The Northwestern Recovery Unit comprises only a small portion of the jaguar’s range and is divided into so-called “core” and “secondary” areas. See id. Core areas exhibit evidence of consistent jaguar presence and recent reproduction, whereas secondary areas are characterized by recent records of jaguar presence but little evidence of reproduction. The portion of the Northwestern Recovery Unit in the United States, which encompasses all of Units 1 to 6, is part of the Borderlands Secondary Area; the nearest core area—the Sonora Core Area—is about 130 miles south of the U.S.-Mexico border. Id. “The more open, dry habitat of the southwestern United States has been characterized as marginal habitat for jaguars in terms of water, cover, and prey densities.” Id. at 12,573-74.

In the Final Critical Habitat Designation, the Service stated that the areas designated as critical habitat contribute to jaguar conservation because they “support some individuals during dispersal movements, provide small patches of habitat (perhaps in some cases with a few resident jaguars), and provide areas for cyclic expansion and contraction of the nearest core area.” Id. at 12,574. Jaguars “dispersing into the United States are important,” the Service explained, “because they occupy habitat that serves as a buffer to zones of regular reproduction and are potential colonizers of vacant range.” Id. “[A]s such, areas supporting them are important to maintaining normal demographics, as well as allowing for possible range expansion.” Id. The agency also found that “the Northwestern Recovery Unit is essential for the conservation of the species,” and that “[c]ritical habitat in the

United States contributes to recovery across the species' entire range.” Id. at 12,574, 12,605. In our view, it is not inconsistent for the Service to find both that Units 5 and 6 are “secondary” or “marginal” habitat and that they are essential for the conservation of the jaguar.

V

Finally, plaintiffs contend that because the ESA limits “conservation” to those methods and procedures necessary to bring a species “to the point at which the measures provided pursuant to this chapter are no longer necessary,” § 1532(3), the Service was required to identify this “point” when it designated the jaguar’s critical habitat. But the ESA’s detailed provisions regarding designation of critical habitat include no such requirement. See Markle Interests, 827 F.3d at 469 (“The ESA’s critical-habitat provisions do not require the Service to know when a protected species will be conserved as a result of the designation.”), vacated on other grounds, 139 S. Ct. at 590; Home Builders Ass’n of N. Cal. v. U.S. Fish & Wildlife Serv., 616 F.3d 983, 989 (9th Cir. 2010) (“[T]here is no reason why [the Service] cannot determine what elements are necessary for conservation without determining exactly when conservation will be complete. . . . [T]he statute actually runs contrary to [this] argument.”). Moreover, in a different provision governing recovery plans, the ESA requires the Service to identify “objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of this section, that the species be removed from the list.” § 1533(f)(1)(B)(ii). This requirement is entirely separate from the requirements for the designation of critical habitat. See

Hamdan v. Rumsfeld, 548 U.S. 557, 578 (2006) (“Where Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion” (alteration and quotation omitted)).

Accordingly, we hold the ESA does not require the Service to identify the point at which a species will be considered to have recovered when it designates critical habitat for that species.¹⁸

VI

For the foregoing reasons, we **REVERSE** the decision of the district court and **REMAND** for proceedings consistent with this decision.

¹⁸ Plaintiffs also argue that the Service’s designation of Unit 6 as critical habitat was arbitrary and capricious because the unit does not contain the “physical and biological features essential to the conservation of the species” under § 1532(5)(A)(i). They misread the statute, which unambiguously imposes this requirement only on occupied areas designated as critical habitat, not on unoccupied areas. Further, this argument was forfeited because it was not raised during the notice-and-comment period. See Dep’t of Transp. v. Pub. Citizen, 541 U.S. 752, 764-65 (2004).

17-2211, NM Farm & Livestock Bureau v. U.S. Department of Interior

HARTZ, J., Circuit Judge, concurring

I join in full Judge Lucero's opinion. I add only one observation. The administrative record raises concerns about whether the Service defined *essential* to mean merely convenient or helpful. But I am confident that it will be more careful after remand.