

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued November 16, 2015

Decided March 1, 2016

No. 14-5284

DEFENDERS OF WILDLIFE AND CENTER FOR BIOLOGICAL
DIVERSITY,
APPELLANTS

v.

SALLY JEWELL, ET AL.,
APPELLEES

Appeal from the United States District Court
for the District of Columbia
(No. 1:13-cv-00919)

Jason C. Rylander argued the cause for appellants. With him on the briefs were *Karimah Schoenhut*, *Michael P. Senatore*, and *Collette L. Adkins*.

Brian C. Toth, Attorney, U.S. Department of Justice, argued the cause for appellees. With him on the brief was *John C. Cruden*, Assistant Attorney General.

Wayne J. D'Angelo and *Michael B. Wigmore* were on the brief for intervenor-defendants-appellees American Petroleum Institute, et al. *David E. Frulla* entered an appearance.

Nancie G. Marzulla and *Roger J. Marzulla* were on the brief for intervenor/defendant-appellee Glenn Hegar, Texas Comptroller of Public Accounts.

M. Reed Hopper and *Jonathan C. Wood* were on the brief for *amicus curiae* Pacific Legal Foundation in support of appellees.

Before: HENDERSON, ROGERS and KAVANAUGH, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* ROGERS.

ROGERS, *Circuit Judge*: The issue in this appeal concerns when a voluntary state conservation agreement may be considered in deciding whether or not to list a species under the Endangered Species Act. In 2012, the Fish and Wildlife Service withdrew its 2010 proposal to list the dunes sagebrush lizard, whose habitat is in New Mexico and Texas, as endangered. The Defenders of Wildlife and the Center for Biological Diversity (together “Appellants”) sued and now appeal the grant of summary judgment to the Secretary of Interior. They contend the withdrawal decision was arbitrary and capricious because (1) the voluntary plan by the State of Texas to engage private businesses in conservation efforts was neither sufficiently certain to be implemented nor to be effective under the Service’s evaluation policy, and (2) the Service’s decision unreasonably elevates unenforceable voluntary State agreements over the statute’s required consideration of the adequacy of “existing regulatory mechanisms.” For the following reasons, we conclude the first contention is unpersuasive and the second was affirmatively waived by appellants in the district court.

Between the time the Service proposed listing the lizard and the time it decided to withdraw that proposal, the Service

received updated information about the conservation efforts in the two States and by the Bureau of Land Management in New Mexico. Based on this information, the Service concluded that “current and future threats are not of sufficient imminence, intensity, or magnitude to indicate that the . . . lizard is in danger of extinction (endangered), or likely to become endangered within the foreseeable future (threatened), throughout all or a significant portion of its range.” *Withdrawal of the Proposed Rule to List Dunes Sagebrush Lizard* (“*Withdrawal*”), 77 Fed. Reg. 36,872, 36,897–98 (June 19, 2012). Appellants fail to show the Service did not rationally apply its policy in evaluating the Texas plan inasmuch as the Service’s factual conclusions are supported by substantial evidence in the record. Accordingly, we affirm.

I.

The Endangered Species Act (“ESA”) “provide[s] a program for the conservation of . . . endangered species and threatened species.” 16 U.S.C. § 1531(b). Acting on behalf of the Secretary of the Interior, the Fish and Wildlife Service must determine whether to list a species as being “threatened” or “endangered.” 16 U.S.C. § 1533(a)(1); 50 C.F.R. § 402.01(b); *see also Am. Wildlands v. Kempthorne*, 530 F.3d 991, 994 (D.C. Cir. 2008). Once a species is listed, it is unlawful for any person to “take” the listed species (except in narrow circumstances), 16 U.S.C. § 1538(a)(1)(B), *i.e.*, to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct,” *id.* § 1532(19). Federal agencies must “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence” of a listed species, *id.* § 1536(a)(2).

An “endangered species” under the ESA is one “in danger of extinction throughout all or a significant portion of its range”

while a “threatened species” is “likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” *Id.* § 1532(6), (20). A danger of species extinction exists where there is evidence of:

- (A) the present or threatened destruction, modification, or curtailment of its habitat or range;
- (B) overutilization for commercial, recreational, scientific, or educational purposes;
- (C) disease or predation;
- (D) *the inadequacy of existing regulatory mechanisms*; or
- (E) other natural or manmade factors affecting its continued existence.

Id. § 1533(a)(1)(A)–(E) (emphasis added). The extent of the dangers of extinction is to be determined “solely on the basis of the best scientific and commercial data available to [the Service] after conducting a review of the status of the species and after *taking into account those efforts, if any, being made by any State or foreign nation, or any political subdivision . . . to protect such species,*” including “predator control, protection of habitat and food supply, or other conservation practices.” *Id.* § 1533(b)(1)(A) (emphasis added).

The Service adopted the *Policy for Evaluation of Conservation Efforts when Making Listing Decisions* (“*Policy*”), 68 Fed. Reg. 15,100, 15,113 (March 28, 2003), to assist it in making predictive evaluations about the persistence of a species where there are “formalized conservation efforts that have not yet been implemented or have been implemented, but have not yet demonstrated whether they are effective at the time of a listing decision.” The policy is designed to “ensure consistent and adequate evaluation of recently formalized conservation efforts when making listing decisions,” *Withdrawal*, 77 Fed. Reg. at 36,885, by identifying criteria for assessing whether such an effort “provides a high level of certainty that the effort will

be implemented and/or effective and results in the elimination or adequate reduction of the threats” posed to any species being considered for a listing, *see Policy*, 68 Fed. Reg. at 15,114–15.¹ When the Service’s decision not to list a species is based in part on consideration of a formalized conservation effort, the Service will monitor the “progress of implementation and effectiveness of the conservation effort.” *Id.* at 15,114. If it determines the conservation effort lags behind schedule, does not achieve its objectives, is not modified to respond to changed circumstances, or new information comes to light, the Service will reevaluate

¹ To evaluate the certainty of implementation, the Service identified nine, non-exclusive criteria: (1) “[t]he conservation effort, the party(ies) to the agreement or plan that will implement the effort, and the staffing, funding level, funding source, and other resources necessary to implement the effort,” (2) the legal authority to implement the effort and the commitment to do so, (3) the status of legal procedural requirements (*e.g.*, environmental review) that must be done to implement, (4) whether necessary authorizations – like permits – have been identified and the likelihood of obtaining them, (5) the type and level of voluntary participation needed to implement is both identified and likely to occur (including review of incentives to join the plan), (6) regulatory mechanisms needed for implementation, (7) funding requirements, (8) implementation schedule, and (9) approval by parties involved. *Policy*, 68 Fed. Reg. at 15,114–15.

To evaluate the effectiveness of implementation, the six non-exclusive criteria are: (1) the nature and extent of the threats to the species and the efforts designed to reduce them, (2) explicit incremental objectives for achieving those goals, (3) the steps necessary to implement the effort, (4) scientific factors that can be used to measure achievement objectives and the standard against which success will be measured, (5) provisions for monitoring progress on implementation and effectiveness, (6) how adaptive management principles will be implemented. *Id.* at 15,115.

whether the species needs be listed. *Id.*

Appellants challenge the Service's application of the *Policy* in deciding it could rely on a state voluntary conservation agreement as a basis for withdrawing its proposed listing of the dunes sagebrush lizard as endangered. *Endangered Status for Dunes Sagebrush Lizard* ("NPRM Listing"), 75 Fed. Reg. 77,801 (Dec. 14, 2010). The lizard lives in a specific habitat in southeastern New Mexico and western Texas, and the lizard's survival is "directly linked to the quality and quantity of available shinnery oak dune habitat," which is a dynamic dune system created by a shinnery oak tree and the large root and stem system that surrounds it. *NPRM Listing*, 75 Fed. Reg. at 77,802–03. By 2004, surveys of the New Mexico habitat indicated extirpation of the lizard in areas where there was shinnery oak removal (caused by herbicide treatments and oil-and-gas development). *See 12-Month Findings on Resubmitted Petitions to List the Southern Idaho Ground Squirrel, Sand Dune Lizard, and Tahoe Yellow Cress*, 69 Fed. Reg. 77,167, 77,172 (Dec. 27, 2004). If those activities continued, the Service expected further destruction of the lizard's habitat and the threat to the lizard to increase. *See id.* By 2010, these activities had persisted, and the Service once again was concerned about the threats to the shinnery oak habitat in terms of its total destruction and its fragmentation. *See NPRM Listing*, 75 Fed. Reg. at 77,809–10.

At the time it proposed listing, the Service had concluded that the federal, State, and local conservation efforts were "not adequate to protect the dunes sagebrush lizard from known threats." *Id.* at 77,811; *see* 16 U.S.C. § 1533(a)(1)(D) ("Factor D"). The Interior Department's Bureau of Land Management ("BLM") administered a land-use plan in New Mexico to help protect the lizard on federal lands, and there were voluntary conservation agreements for private lands, *NPRM Listing*, 75

Fed. Reg. at 77,810–11, but the Service considered these efforts inadequate. Although BLM’s plan “addresses the threats of shinnery oak removal,” the Service was concerned that the plan “provides for a variety of exceptions and has no schedule or planned monitoring to ensure that the protections are being provided.” *Id.* at 77,810. The Service concluded that the efficacy of BLM’s plan would be determined only following future implementation. *Id.* at 77,811. The New Mexico voluntary agreements consisted of a Candidate Conservation Agreement and Candidate Conservation Agreements with Assurances; the former allowed private landowners to participate voluntarily in lizard conservation efforts (including limiting habitat modification and protecting habitat between shinnery oak complexes) and the latter provided assurances that, in view of such voluntary efforts, “additional conservation measures will not be required and additional land, water, or resource use restrictions will not be imposed should the species become listed in the future.” *Announcement of Final Policy for Candidate Conservation Agreements with Assurances*, 64 Fed. Reg. 32,726, 32,727 (June 17, 1999). These agreements might have been promising, but the Service was concerned that there were no similar agreements in Texas. *NPRM Listing*, 75 Fed. Reg. at 77,811. “[F]or the agreements to benefit the dunes sagebrush lizard,” the Service was of the view that “oil and gas operators need to enroll throughout the lizard’s range.” *Id.* Because this had not happened, “the efficacy of these conservation agreements has not yet been fully implemented and determined to be effective.” *Id.* A listing was therefore needed.

In response to publication of the *NPRM Listing*, the Service received new information about these conservation efforts. *Withdrawal*, 77 Fed. Reg. at 36,898. Comments about the BLM plan afforded the Service a better understanding of the plan, and upon reconsideration the Service concluded that the BLM plan provided a standard that would consistently guide the protection

of the lizard and reduce or eliminate threats to the species and its habitat on BLM lands in New Mexico. *See id.* at 36,879. The Service found that this, coupled with the preliminary success of the voluntary agreements in New Mexico, had resulted in 95% of the sagebrush lizard’s habitat in New Mexico being removed from oil and gas leasing, enrolled in the conservation agreements, or covered by the BLM plan. *Id.* at 36,885. The Service also noted that it had “identified more known occupied sites for the lizard, especially in Texas, where 28 new sites were found.” Fish & Wildlife Serv., *Summary of Dunes Sagebrush Lizard Final Determination* (2012); *see also Withdrawal*, 77 Fed. Reg. at 36,784–85.

Additionally, stakeholders with an interest in the lizard’s range in Texas — including the Texas Comptroller, industry, landowners, and agricultural interests — had developed with the Service a Texas Candidate Conservation Agreement with Assurances and a Habitat Conservation Plan (together, the “Texas plan”). *Id.* at 36,885; TEXAS CONSERVATION PLAN (2012); *see also Proposed Endangered Status for the Dunes Sagebrush Lizard*, 77 Fed. Reg. 11,061, 11,061–62 (Feb. 24, 2012). The focus of the Texas plan is to guide development away from lizard habitat and permit development in lizard habitat only when there is no feasible alternative. Any habitat loss must be reported and mitigated through specified mitigation activities; mitigation credits can be “banked” for future use. Total lizard habitat loss is limited to one percent during the first three years and can be increased to up to a ten percent cap over the life of the 30-year plan. And like the New Mexico agreements, the Texas plan permits an entity to agree to undertake voluntary measures to benefit the lizard in exchange for assurances that if the species is listed, the entity will not be required to undertake additional conservation efforts to restrict activities on its property.

Upon applying its *Policy* criteria, the Service concluded that the States's voluntary conservation agreements were sufficiently "certain to be implemented and effective," 68 Fed. Reg. at 15,114–15, to be relied upon in determining whether listing was appropriate. Fish & Wildlife Serv., *Policy for Evaluation of Conservation Efforts Evaluation for the New Mexico CCA/CCAA and Texas Conservation Plan* ("2012 Evaluation") 20–21, 38–40 (2012); *see also Withdrawal*, 77 Fed. Reg. at 36,885–86. Based on the high enrollment and compliance under the New Mexico agreements and the anticipated effectiveness of the New Mexico and Texas efforts to reduce and eliminate threats to the lizard by moving further impacts outside occupied dune complexes, the Service was satisfied the monthly and annual monitoring and reporting requirements would ensure conservation measures are implemented as planned and are effective at removing threats to the lizard and its habitat. *2012 Evaluation* 20–21, 38–40; *see Withdrawal*, 77 Fed. Reg. at 36,899.

Given the States's conservation agreements and other evidence necessary for evaluating the threat to the lizard (such as studies of the lizard's current habitat and distribution of the species), the Service concluded that withdrawal of the *NPRM Listing* was appropriate under the statutory factors, *see* 16 U.S.C. § 1533(a)(1)(A)–(E). *Withdrawal*, 77 Fed. Reg. at 36,885–97. Although listing in 2010 had been an "appropriate conclusion based on the best scientific and commercial information available at that time," the Service explained that the "significant ongoing and future conservation efforts, in combination with new information on the status and distribution of the species, have reduced the magnitude of potential impacts now and in the future such that the species no longer meets the definition of an endangered or threatened species." *Id.* at 36,898. Conservation measures covered 95% of the habitat in New Mexico and 71% of habitat in Texas and would therefore

ameliorate further habitat loss. *Id.* at 36,894. Surveys and other data indicated that “the species currently has adequate habitat to persist into the future.” *Id.* at 36,895. Notwithstanding the historical and potential threat to the lizard’s habitat as a result of habitat loss and fragmentation caused by oil-and-gas development and other human behavior, the Service concluded that the States’s agreements indicated that habitat loss will not continue at historical rates. *Id.* at 36,894. The Service was convinced that the “discontinuation of habitat loss and fragmentation, and the restoration of already fragmented habitat, will have the benefit of decreasing edge habitat and increasing interior habitat.” *Id.* In other words, the conservation agreements were critical to the Service’s analysis; absent reliable conservation agreements throughout the lizard’s range in both states, the Service anticipated the threats of oil and gas development would have continued, but “with the conservation agreements, the current habitat conditions will be maintained or improved, such that [the Service] no longer find[s] this factor to be a threat, either now or in the future.” *Id.* at 36,895. If these circumstances changed, the Service stated that it would consider re-listing, whether on an emergency basis or otherwise. *Id.* at 36,899.

Appellants unsuccessfully challenged the Service’s withdrawal decision in the district court, *Defs. of Wildlife v. Jewell*, 70 F. Supp. 3d 183, 199 (D.D.C. 2014), and now appeal. Our review is *de novo*. *Am. Wildlands*, 530 F.3d at 998.

II.

Appellants contend the Service’s decision to withdraw its proposal for listing the lizard as endangered was arbitrary and capricious because, first, consideration of the Texas plan violated the *Policy* in finding the plan was sufficiently certain to be implemented and effective, and second, the decision

unreasonably elevates unenforceable, voluntary state agreements over the ESA's required consideration of the adequacy of "existing regulatory mechanisms." Notably, appellants do not challenge any of the Service's determinations under the five statutory factors regarding the status of the species, *see* 16 U.S.C. § 1533(a)(1), beyond how the Texas plan may have altered the Service's consideration of those factors. Nor do appellants challenge the Service's consideration of the New Mexico agreements or the BLM plan as part of its ESA determination regarding the threat of extinction pursuant to section 1533(b)(1). Because we conclude that appellants are bound by their affirmative waiver of their statutory challenge to the *Policy*, the only question is whether the Service could properly rely on the Texas plan in determining whether or not to withdraw its proposed listing of the lizard. That question cannot be resolved on the basis that the Service's reliance on the Texas plan was harmless, for in deciding in 2010 to list the lizard, the Service explained that the absence of a conservation agreement in Texas was significant, *see NPRM Listing*, 75 Fed. Reg. at 77,811, and in deciding in 2012 that listing was no longer needed the Service was similarly clear that the Texas plan was critical to its decision, *see Withdrawal*, 77 Fed. Reg. at 36,894–95, 36,898–99.

A.

Taking appellants' contentions in reverse order — if the *Policy* violates the ESA, a challenge to its application becomes moot — we hold that they affirmatively waived their statutory challenge to the Service's interpretation of the *Policy* as allowing consideration of voluntary conservation agreements in determining that a species need not be listed. On appeal, appellants contend that even if the Texas plan satisfied the requirements of the Service's *Policy*, the court must nonetheless evaluate whether the outcome complied with the ESA. In their view, the *Policy* "criteria cannot wholly substitute for the ESA's

five factor evaluation,” Appellants’s Br. 54, because any voluntary conservation agreement should be considered under both Factor D (“the inadequacy of existing regulatory mechanisms”), 16 U.S.C. § 1533(a)(1)(D), and the *Policy* in order for such an agreement to affect a listing decision. *See* Appellants’s Br. 55.

Appellants’s contention that the Service unlawfully considered “voluntary” actions and “unenforceable restrictions” in violation of Factor D is in essence a challenge to the interpretation of the *Policy*, which envisions consideration of voluntary agreements, *see* 68 Fed. Reg. at 15,113–14. Yet in the district court, appellants stated in their pleadings that they “are not challenging the [*Policy*] so *neither* [the *Chevron* nor *Skidmore*] standard is applicable here. [Rather, they] are merely challenging the Service’s application of its [*Policy*] to the lizard. *The issue is whether the Texas and New Mexico Agreements were ‘sufficiently certain to be implemented and effective.’*” Pls. Sum. J. Reply Br. 7 n.5 (emphasis added). The district court noted their waiver in granting summary judgment to the Secretary. *See Defs. of Wildlife*, 70 F. Supp. 3d at 196 n.19, 198 n.24. Having waived this challenge in the district court, appellants ordinarily may not revive it on appeal. *See United States v. Volvo Powertrain Corp.*, 758 F.3d 330, 338–39 (D.C. Cir. 2014); *cf. United States v. Olejiya*, 754 F.3d 986, 992 (D.C. Cir. 2014).

Appellants attempt to refocus this contention in their appellate reply brief, stating that they are not challenging the *Policy* but maintaining that “the Service cannot rely on an agreement or mechanism, regulatory or otherwise, under [ESA] section 4(b)(1)(A) [16 U.S.C. § 1553(b)(1)(A)] or the [*Policy*] that would be rejected under Factor D as too speculative and uncertain.” *See* Appellants’s Reply Br. 26–27. This is a non-starter. Both parties agree that the *Policy* does not permit the

Service to rely upon speculative conservation agreements. Indeed, the point of the *Policy* was to establish criteria for determining when the Service could deem otherwise incomplete and unproven voluntary conservation efforts sufficiently certain to be implemented and effective to be relied on in evaluating ESA's listing factors. *See* 68 Fed. Reg. at 15,113–14. Here the Service found that the Texas plan was sufficiently certain to be implemented and be effective. Consequently, if its findings are supported by substantial evidence, there was no risk that the Service relied on an overly speculative agreement when it considered the Texas plan.

To the extent appellants resist application of the policy on the basis that the Texas plan and New Mexico agreements “fail a reasonable analysis under Factor D because they are by definition not regulatory mechanisms and are too speculative to ensure the conservation of the species,” Appellants’s Reply Br. 27, this amounts to an attempt to supplement the *Policy* with a requirement that is not in it. Whether appellants are contending that the *Policy* must incorporate Factor D, or otherwise interpret its existing requirements in light of Factor D, appellants have simply rephrased their waived statutory challenge to the *Policy*. The court thus has no occasion to address whether the *Policy*’s criteria for evaluating voluntary conservation agreements are inconsistent with the ESA, and we turn to appellants’s remaining challenge.

B.

In addressing the merits of appellants’s challenge to the Service’s application of the *Policy*, our review is limited to determining whether the Service’s consideration of the Texas plan in deciding to withdraw the proposed listing was “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” *Am. Wildlands*, 530 F.3d at 997–98 (quoting 5 U.S.C. § 706(2)(A)). Such review is “highly

deferential” and “presumes agency action to be valid.” *Id.* (quoting *Ethyl Corp. v. EPA*, 541 F.2d 1, 34 (D.C. Cir. 1976)). An agency acts arbitrarily or capriciously if it has relied on factors Congress did not intend it to consider, entirely failed to consider an important aspect of the problem, or offered an explanation either contrary to the evidence before the agency or so implausible as not to reflect either a difference in view or agency expertise. *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983). An agency’s factual findings must be upheld when supported by substantial evidence in the record considered as a whole. *Ctr. for Auto Safety v. Fed. Highway Admin.*, 956 F.2d 309, 313–14 (D.C. Cir. 1992). “Substantial evidence” means enough evidence “to justify, if the trial were to a jury, a refusal to direct a verdict when the conclusion sought to be drawn . . . is one of fact for the jury.” *NLRB v. Columbian Enameling & Stamping Co.*, 306 U.S. 292, 300 (1939); see *INS v. Elias-Zacarias*, 502 U.S. 478, 481 (1992).

Appellants maintain that the Service failed to establish that the Texas plan is “sufficiently certain to be implemented and effective” under the criteria in the *Policy*, 68 Fed. Reg. at 15,114–15. As regards implementation, appellants point to two of the nine implementation criteria, arguing that the lack of an implementation schedule in the Texas plan permits habitat loss to continue with no certainty of conservation benefit and the absence of evidence the necessary level of voluntary participation would be achieved. As regards effectiveness, appellants point to two of the six effectiveness criteria, arguing that the Texas plan neither reduced specific threats to the lizard species nor had the requisite incremental objectives. In particular, appellants maintain the Service did not evaluate whether the limit on habitat destruction was sufficient, relied on speculative estimates of future enrollment, and did not appreciate the effect of being unable to determine which

individual properties are enrolled in the conservation effort and the conservation measures to be undertaken by enrollees.

Appellants' objections present a variety of narrow, fact-based challenges that are refuted by the record as interpreted by the Service based on its experience and expertise. In addressing appellants' criteria-based contentions, we recognize the Service emphasized that the analysis under its *Policy* may vary across agreements and that the purpose of its criteria is merely to "direct" its analysis; the Service has not identified any one criterion or set of criteria as necessary or sufficient. *See Policy*, 68 Fed. Reg. at 15,114; *see also PDK Labs. Inc. v. Drug Enforcement Admin.*, 438 F.3d 1184, 1194–95 (D.C. Cir. 2006). Upon reviewing the Service's consideration of the Texas plan, the success it had already achieved, and its likely continued success based on the progress under the New Mexico agreements, we conclude that the Service adequately explained its basis for relying on the Texas plan.

1. Sufficiently certain to be implemented: Appellants cite criterion five, on the need for an agreement to identify the type and level of voluntary participation needed to implement the plan and explain how such participation is likely to occur, in maintaining the Service improperly analyzed whether the requisite level of participation would be achieved and sustained. It is true that the Service did not explain how the Texas plan has identified the specific level of participation necessary for the plan's success, but the administrative record indicated that the level of participation would be high and consistent with the levels the Service previously identified as being necessary for the lizard's survival. At the time it published the *NPRM Listing*, the Service stated that "participation throughout the majority of the dunes sagebrush lizard habitat would be necessary for the conservation of the species." 75 Fed. Reg. at 77,811. By 2012, Texas had adopted a voluntary conservation plan to achieve that

conservation goal in Texas. The Service was convinced that a high level of participation in that plan would come about after finding that 71% of lizard habitat was already enrolled in Texas, including a significant portion (a little over half) of some of the most important habitat, and that Texas enrollees had paid over \$773,000 in participation fees. Also, two major operators that had been instrumental to the success of the New Mexico conservation effort were enrolled in the Texas plan. Overall, then, there was substantial evidence that the level of implementation and success found in New Mexico, which had achieved 83% enrollment, would also be found in Texas. *2012 Evaluation* 33–34; *see also Withdrawal*, 77 Fed. Reg. at 36,886.

To the extent appellants assert that the Service failed to consider that any future determination not to list the lizard might be a disincentive to further enrollment and cause *current* enrollees to opt out of the plan — inasmuch as the only benefits an enrollee might lose would be fees already paid to enroll and accrued habitat destruction credits — they overlook the rulemaking and policy records. First, the Service emphasized in deciding not to list the lizard that the threat of listing persists even after a decision not to list is made. *Withdrawal*, 77 Fed. Reg. at 36,899. The Service explained:

If at any time data indicate that the protective status under the Act should be reinstated, including, but not limited to, information that enrollment in the voluntary agreements has declined substantially, or if [the Service] become[s] aware of noncompliance issues with the conservation measures, or if there are new or increasing threats, [the Service] can initiate listing procedures, including, if appropriate, emergency listing pursuant to section 4(b)(7) of the Act.

Id. Based on the continued threat of listing, the Service had reason to conclude that incentives for joining the Texas plan remain and current enrollees would be unlikely to wish to surrender benefits already received and fees already paid under the plan. Appellants speculate that the lizard would suffer as a result of the Service's limited resources to reinstate listing proceedings, yet the Service made clear it would reconsider listing the lizard should its initial analysis prove to be overly optimistic and emphasized it had the authority to reinstate listing proceedings on its own initiative or in response to a petition for listing based on new information showing listing was appropriate. *Id.*; see also 16 U.S.C. § 1533(b)(3)(A), (b)(6)(B)(ii). Indeed, the Service noted it can initiate, as necessary, an emergency listing. *Withdrawal*, 77 Fed. Reg. at 36,899 (citing 16 U.S.C. § 1533(b)(7)).

Second, in developing the *Policy*, the Service considered how to address the effect listing decisions have on the incentives to enroll in voluntary conservation efforts. Because it is not a foregone conclusion that an agreement satisfying the *Policy* will preclude a need to list, the Service suggested that it was unnecessary to consider the impact the later listing decision might have on the implementation of a voluntary agreement. See *Policy*, 68 Fed. Reg. at 15,107, 15,114. That is, the *Policy* assumes that implementation will continue and that the Service will reevaluate its listing decision should there be a "failure to implement the conservation effort" for *any* reason. *Id.* at 15,114. In view of the possibility of listing a species if voluntary conservation efforts are not successfully implemented, the Service rejected the idea posed in a comment that "parties lack incentives to develop conservation programs until after the species is listed." *Id.* at 15,107 (Response to Comment Issue 36).

Where, as here, the Service was aware that withdrawing the proposed listing could weaken the incentive for operators to enroll but determined, in view of updated information about efforts in New Mexico, that a high level of participation was likely under the Texas plan, appellants fail to show that it was arbitrary or capricious for the Service not to subject the Texas plan to scrutiny beyond that contemplated by the *Policy*.

Appellants' objection that the Service should have required the Texas plan to specify enrollment goals at a granular level appears to have been forfeit. Because not all lizard habitat is treated equally under the Texas plan, appellants maintain that the Service should have considered how successful the plan would be in enrolling the most valuable habitat. (The plan classifies lizard habitat as being in one of four categories, from very low likelihood of occurrence to very high likelihood of occurrence.) Appellants also maintain that the Service should have considered how total enrollment would be affected by habitat being owned by more than one entity in order to make sure that all individuals with an interest in the property (including sub-surface rights) were enrolled in the project. *See NPRM Listing*, 75 Fed. Reg. at 77,811. Appellants failed to raise these challenges in the district court and offer no basis to excuse their forfeiture because "injustice might otherwise result." *Meijer, Inc. v. Biovail Corp.*, 533 F.3d 857, 867 (D.C. Cir. 2008) (quoting *Ben-Kotel v. Howard Univ.*, 319 F.3d 532, 535 (D.C. Cir. 2003)); *Blackmon-Malloy v. U.S. Capitol Police Bd.*, 575 F.3d 699, 707 (D.C. Cir. 2009); *cf. United States ex rel. Davis v. District of Columbia*, 793 F.3d 120, 126 (D.C. Cir. 2015). Nor does the record support their position that they are now merely refining arguments relating to claims they made in the district court. *See* Appellants' Reply Br. 5–6 (citing *Teva Pharm., USA, Inc. v. Leavitt*, 548 F.3d 103, 105 (D.C. Cir. 2008), and *Koch v. Cox*, 489 F.3d 384, 391 (D.C. Cir. 2007), which both cite *Yee v. City of Escondido*, 503 U.S. 519, 534

(1992)). Most of their district court pleadings on which they rely focus on whether the Texas plan was sufficiently certain to be effective — not implemented. Their only challenge to implementation was that enrollment will slow once the proposed listing was withdrawn. To reach the theory raised on appeal would require this court to “recast [a]ppellant[s]’s position in the district court.” See *In re Harman Int’l Indus., Inc. Sec. Litig.*, 791 F.3d 90, 101 (D.C. Cir. 2015).

In any event, the record demonstrates that the Service appreciated the importance of the different occupancy categories, focusing on enrollment in three types of habitat where a lizard was most likely to be found. *2012 Evaluation* 33. Because survey information for this species is limited and does not conclusively establish the lizard’s abundance in certain areas, see *Withdrawal*, 77 Fed. Reg. at 36,876, the Service reasonably lumped together these three categories. Indeed, even the fourth category, which carries only a very low likelihood of lizard occurrence, is in most respects “good quality” lizard habitat. See TEXAS CONSERVATION PLAN fig. 1-2. The comments by a random Service employee about a need for higher enrollment levels among the top-three habitat categories at best indicate a lack of consensus within the Service; they do not bind the Service, see *Comcast Corp. v. FCC*, 526 F.3d 763, 769 (D.C. Cir. 2008), which had previously stated that “participation throughout the majority” of lizard habitat was all that was necessary for “the conservation of the species,” see *NPRM Listing*, 75 Fed. Reg. at 77,811. Appellants speculate that a pattern of relatively higher enrollment in the low-likelihood habitat categories demonstrates that Texas and the in-State operators are gaming the system, but the enrollment pattern does not make bad faith so clear that it was arbitrary for the Service not to address such concerns, particularly in view of its relisting authority.

Appellants also failed to object in the district court that the Service was required by the *Policy* to separately analyze the level of participation in the Texas plan by mineral and surface estate owners. On appeal, the Service does respond that the Texas plan makes explicit some of the difficulties posed by split-estate ownership, but maintains this argument is forfeit and that the *Policy* does not provide so specific a rule. Whether because forfeited or because deference is owed to the Service's interpretation of its *Policy*, see, e.g., *Christopher v. SmithKline Beecham Corp.*, 132 S. Ct. 2156, 2166 (2012), the court need not conclude that the Service acted arbitrarily. The rulemaking record shows that the Service considered the problem and remained confident that overall enrollment would be high. See *supra* Part II.B.1; *2012 Evaluation* 32–35.

Appellants also point to criterion eight regarding an implementation schedule (including incremental completion dates). *Policy*, 68 Fed. Reg. at 15,115. The Texas plan does not include an implementation schedule as such. The Service recognized this, and it was not unreasonable for it to conclude nonetheless that the plan has “sufficient structure, regulatory mechanisms, and planning to achieve the necessary conservation benefit.” See *2012 Evaluation* 35. The Service concluded that the plan's design “requires that a positive biological response must precede habitat loss authorized by the [Certificates of Inclusion].” *Id.* By design, habitat will be reconnected at a higher rate than habitat lost during the 30-year life of the Texas plan. To that end, there is “stringent monitoring and research to develop conservation actions that benefit the species prior to any further habitat loss.” *Id.* Further, there are many schedule-like elements to the plan, including habitat loss limits of 1% and 10% set at three- and thirty-year marks. The Service stated that it intends to strictly monitor the implementation of the Texas plan for the first three years and then evaluate effectiveness and determine whether and how much additional habitat loss above

the 1% may be authorized under the Texas plan.

Appellants's objection that the Texas plan contains a "loophole" allowing habitat loss to continue with no certainty of conservation benefit also appears to be forfeit. They claim the Service erred in stating "the plan's design requires that a positive biological response must precede habitat loss authorized by the [Certificates of Inclusion]." Appellants's Br. 36 (citing *2012 Evaluation* 35). Instead, they read the plan to permit those engaging in such activities to receive 50% of the value of the recovery activity *before* biological effectiveness is demonstrated. Nowhere in their district court pleadings did appellants refer to the "loophole theory" or their concerns about delayed determinations of biological effectiveness. In moving for summary judgment, appellants noted at most the plan's lack of an implementation schedule generally and argued that there was no factual support for the Service's conclusion that "the plan has sufficient structure, regulatory mechanisms, and planning to achieve the necessary conservation benefit." Pls. Sum. J. Br. 30 & n.12. Moreover, appellants ignore the Service's statement in a related section of its evaluation explaining why it was confident that a positive biological response would result:

Mitigation credits will be generated by implementing on-the-ground conservation actions prior to authorizing any activities that may result in habitat loss. A positive biological response must first be demonstrated before *full credit* is given for a mitigation activity. Despite not having an implementation schedule, the plan and the permit have requirements that will ensure that mitigation results in positive biological responses

2012 Evaluation 37 (emphasis added). As noted, the Service relied on the requirement of strict monitoring, the goal of

restoring habitat at a much greater rate than habitat loss, and the limits to habitat loss over the life of the Texas plan. *See id.* at 35–36, 38.

2. Sufficiently certain to be effective. Here, appellants challenge the adequacy of the Service’s analysis under two criteria, contending that the Service failed to analyze how the Texas plan reduces specific threats to the lizard and to identify the explicit incremental objectives for the conservation effort. *See Policy*, 68 Fed. Reg. at 15,115; *supra* note 1. The Secretary maintains that the effectiveness of the Texas plan is shown by the fact that it: (1) prioritizes avoidance of habitat loss; (2) limits (on a percentage basis) overall habitat loss; (3) specifically identifies efforts to remove threats to shinnery oak (removal of mesquite and moving of oil-and-gas infrastructure); (4) identifies efforts to eliminate other threats like predator perches and threats from roads; (5) requires each individual certificate to list conservation measures specific to each site; and (6) details provisions for mitigation and adaptive management, both of which should ensure active management and monitoring of the conservation effort. *2012 Evaluation* 36–37. Appellants contend the Service’s analysis was deficient because (a) the Texas plan’s limit on habitat destruction was insufficient to ensure its effectiveness in protecting the lizard, (b) the plan’s effectiveness was assessed on the basis of speculative future full enrollment rather than the current level of enrollment, and (c) state confidentiality laws would interfere with the Service receiving the information on enrolled properties necessary to protect the lizard from habitat fragmentation, including the actual conservation measures that enrollees agreed to undertake. Appellants fail to show the Service’s conclusions were unreasonable or arbitrary or capricious.

(a) Appellants maintain that the Service should have determined whether the plan’s 1% cap actually reduces the

threat to the lizard in light of its determination in 2010 that the lizard “faces immediate and significant threats due to oil and gas activities, and herbicide treatments,” *NPRM Listing*, 75 Fed. Reg. at 77,813. In their view, any cap that permits oil-and-gas development to occur at the same level it could have occurred without the cap cannot rationally be described as reducing the threat to the lizard. Assuming the cap was based on the maximum potential amount of gas and oil development as of 2012, a cap system appears from the record to have been the only available method given the difficulty of determining “how large habitat patches need to be in order to maintain viable populations of dunes sagebrush lizards.” *Withdrawal*, 77 Fed. Reg. at 36,887; *see also id.* at 36,881 (discussing how it had been impossible to calculate the lizard’s critical habitat “because the location and distribution of physical and biological features that may be considered essential to the conservation of the species were not sufficiently understood at that time”). Because predicting the future status of wildlife is a difficult task, the court has acknowledged deference is appropriate to the agency’s evaluation of scientific data within its technical expertise. *See Am. Wildlands*, 530 F.3d at 1000–01. Appellants point to no superior habitat evidence that the Service should have considered. *Cf. City of Las Vegas v. Lujan*, 891 F.2d 927, 932–33 (D.C. Cir. 1989) (citing 16 U.S.C. § 1533(b)(1)(A)).

Further, even though the cap may suggest that development will continue at historical rates, appellants are not correct that the cap system necessarily permits developers to destroy habitat at the same rate as the historical trend. Although the Service could authorize as much as 10% habitat loss over the 30-year life of the Texas plan, it is not a foregone conclusion it will do so. The Service must first authorize any additional habitat loss above the initial 1% cap, and whether it does will depend on the outcome of its study of the success of the Texas plan over its first three years. *Withdrawal*, 77 Fed. Reg. at 36,885; *see also*

2012 Evaluation 35. Moreover, habitat loss is authorized only to the extent it cannot be avoided, and the cap structure limits how much may be lost in specific categories of habitat, potentially limiting the loss of the most valuable habitat. Significantly, the conclusion that the cap would be effective at limiting habitat loss is further supported by the Service's determination that the lizard is not threatened by any further oil and gas development, in part because "more than 50 percent of the dunes sagebrush lizard's habitat is not fragmented," *Withdrawal*, 77 Fed. Reg. at 36,889; *see also id.* at 36,881, 36,895. The Service recognized that there is *currently* enough lizard habitat such that "if future development and activities involving oil and gas exploration . . . are placed outside of the dunes sagebrush lizard's habitat . . . the species currently has adequate habitat to persist into the future." *Id.* at 36,895. With the conservation plans in place, the Service did "not anticipate future development to mirror the historical development that has already occurred" and concluded that "oil and gas development will not continue within dunes sagebrush lizard habitat at historical rates." *Id.* at 36,894.

Notwithstanding the combination of the Texas plan's avoidance, mitigation, and recovery strategies, appellants maintain that enrollees will never be forced to avoid habitat loss because avoidance is necessary only "when feasible" or based on some other undefined, open-textured phrases, under the loss avoidance principles. In fact, the plan includes criteria for unavoidable habitat loss, *see* TEXAS CONSERVATION PLAN app. H, and those involved in the conservation process understand the standard to be demanding, such that loss is available only "[i]f avoidance of lizard habitat cannot be accomplished," *Withdrawal*, 77 Fed. Reg. at 36,885. Oil-and-gas producers have stated that most production will likely occur outside of suitable habitat; only smaller, less flexible operators may need to take advantage of the need to engage in habitat loss. *2012*

Evaluation 23. To further ensure that loss avoidance is not easily skirted, the plan contemplates more stringently applying the relevant criteria in the event that habitat loss reaches 75% of the 1% cap.

Even when loss is permitted, those engaging in the loss must “adopt conservation measures that minimize habitat impacts, and as a last resort, mitigate for the loss of lizard habitat.” *Withdrawal*, 77 Fed. Reg. at 36,885. Appellants suggest that any mitigation efforts would be valueless, either because shinnery oak cannot be created or (repeating the “loophole” argument) because operators can get the benefit of mitigation prior to showing that it provided some real benefit to the lizard. The science before the Service supports its view that many conservation efforts may improve existing habitat, in part by removing obstacles to expansion of existing shinnery oak. *See id.* at 36,894–95. In this context, the “loophole” argument, assuming it is not forfeit, is even less persuasive. Regardless of the biological response to the mitigation ultimately, the operator is required to complete the entirety of the mitigation activity prior to engaging in any habitat loss. Further, operators are not free to select whichever mitigation and recovery activities they might want; some examples of available mitigation activities are enumerated in the Texas plan and operators must work with those administering the plan to develop a management plan that lays out which mitigation and recovery activities are appropriate for each property. *See TEXAS CONSERVATION PLAN 47*, 51–52, 85–86. To the extent that these *completed* activities might prove to have less biological value than initially anticipated, the Service was persuaded that with the “robust feedback mechanisms . . . there is a high degree of certainty that the biological objectives will be accomplished through implementation, research, and then adjustment of the strategy, as appropriate.” *2012 Evaluation 37*. And in the meantime, the Service concluded that a net positive response is more likely

because of the need to “secure commensurate mitigation, often at a rate higher than that which is impacted, prior to habitat disturbance.” *Id.* Even if the biological response rate later turns out to be less than 100%, the Service could reasonably view the need to engage in mitigation at greater than a one-to-one level to help ensure appropriate offsets.

(b) Appellants are correct that the Texas plan cannot constrain those who are not enrolled. But the cap already assumes that under a reasonable worst-case scenario, there could be development in 10% of the lizard’s habitat. More fundamentally, appellants’s concerns about the level of enrollment merely repackage their challenge to the Service’s predictions about the likelihood that the Texas plan will be successfully implemented. As noted, *see supra* Part II.B.1, substantial evidence supports the conclusion that Texas enrollment will approach the enrollment level in New Mexico, thereby mitigating concern about unenrolled land. Contrary to appellants’s view, nothing in the *Policy* precludes the Service from estimating future enrollment so long as the Service explains the basis for its view that the level of enrollment is sufficiently certain to come about. *See* 68 Fed. Reg. at 15,114–15.

(c) Appellants emphasize the problems posed by Texas’s confidentiality law, *see* Tex. Gov’t Code § 403.454, and the confidentiality provisions in the Texas plan itself. Based on these provisions, the Service will not know the specific location of enrolled land as information is disclosed only at the aggregate, dune complex habitat-polygon level. A dune complex may include both unenrolled and enrolled lands, which appellants maintain permits unchecked habitat fragmentation — the greatest threat to the lizard. Further, they maintain that the Service could not have determined that sufficient reclamation and restoration activities would take place because it had no way

of knowing which reclamation and restoration measures enrollees agreed to undertake as the individual Certificates of Inclusion are confidential. Appellants also assume that because enrollees need not report conservation efforts to the Service, enrollees will not engage in conservation efforts.

The problems posed by the confidentiality requirement are not as extreme as appellants suggest. First, the Texas plan requires the State to provide the Service with all information it needs to monitor plan compliance. *See* TEXAS CONSERVATION PLAN 32–33 § 8.2.4. Although this information will be provided at the dune complex level, the Service was satisfied that this is “at a scale-of-resolution appropriate for assessing status/trends as well as operational decisions regarding compliance, effectiveness and adaptive management.” *2012 Evaluation* 31. Contrary to appellants’s view, the Service did not merely “[s]tat[e] that a factor was considered’ — or found,” *Gerber v. Norton*, 294 F.3d 173, 185 (D.C. Cir. 2002) (first alteration in original) (quoting *Getty v. Fed. Savs. & Loan Ins. Corp.*, 805 F.2d 1050, 1055 (D.C. Cir. 1986)), but rather evaluated, in the Service’s judgment, the scale of resolution necessary for it to carry out its monitoring efforts.

Second, the Service can expect to learn, based on the plan’s reporting requirements, the overall number of enrollees, the activities taken by enrollees (as a group) in a dune complex, information about the quantity and quality of lizard habitat, the amount of incidental “take,” issues of noncompliance, and the overall effectiveness of the plan. *See* TEXAS CONSERVATION PLAN 31–32 § 8.2.3. The Service will have data on non-compliance events and not be wholly unable to determine whether observed habitat loss is the result of non-compliance or non-enrollment. Although the Service may not know in advance the details about the conservation efforts agreed to by an individual enrollee, it will have information about when

conservation efforts were necessary in an individual dune complex because an operator wished to engage in an activity that would result in habitat loss. To the extent the lack of knowledge about the precise location of unenrolled and enrolled property increases the risk of fragmentation, the record provides substantial evidence supporting the Service's evaluation regarding the scope of information it requires, inasmuch as the Service concluded that prevention of all fragmentation is unnecessary because "more dunes sagebrush lizards were found in large areas of abundant habitat, regardless of whether the overall landscape was fragmented." *Withdrawal*, 77 Fed. Reg. at 36,888.

The confidentiality provisions may limit the Service's ability to monitor individual parcels, but that does not mean that individual enrollees' compliance with the Texas plan goes unverified. For the Texas plan to have legal effect, the Service recognized that it must meet the conditions for obtaining a permit under ESA section 10(a), 16 U.S.C. § 1539(a)(1); *see* 50 C.F.R. §§ 17.22(d)(2), 17.32(d)(2). Under the Texas plan, an administrator — and not the Service — is responsible for enforcing the terms of the individual Certificate of Inclusion by which an operator agreed to join the plan. If the administrator finds that an operator is not in compliance, the administrator may revoke the benefits the operator receives by joining the Texas plan. If, however, the Service concludes the plan administrator is not appropriately tracking mitigation activities and engaging in compliance monitoring and reporting, it has authority to suspend or revoke the permit, thereby limiting the benefits of the Texas plan for all enrollees. *See* 50 C.F.R. §§ 13.27, 13.28; TEXAS CONSERVATION PLAN 56. Consequently, it was not unreasonable for the Service to agree to receive data at the dune complex level; such information is sufficient, in its judgment, for the Service to monitor the administrator's implementation of the plan and determine

whether plan terms need modification. Nor, in view of the Texas administrator's role in that process, was it unreasonable for the Service to conclude that the confidentiality provisions would not interfere with ensuring enforcement of the conditions of enrollment.

The Texas plan may not be foolproof, but neither is every regulatory regime. The evaluation of the adequacy of the Texas plan involves the Service's judgment based on its expertise and experience. Appellants have failed to demonstrate that the Service was arbitrary and capricious in exercising that judgment to rely on the Texas plan. Accordingly, we affirm the grant of summary judgment.