United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued February 3, 2025 Decided August 22, 2025

No. 24-5075

NEW MEXICO CATTLE GROWERS' ASSOCIATION,
APPELLANT

v.

UNITED STATES FISH AND WILDLIFE SERVICE, ET AL.,
APPELLEES

Appeal from the United States District Court
for the District of Columbia
(No. 1:21-cv-03263)

Charles T. Yates argued the cause for appellant. With him on the briefs were *Paige E. Gilliard* and *Damien M. Schiff*.

Amelia G. Yowell, Attorney, U.S. Department of Justice, argued the cause for federal appellees. With her on the brief were *Todd Kim*, Assistant Attorney General, and *Joan M. Pepin*, Attorney.

Ryan A. Shannon argued the cause for appellees Center for Biological Diversity and Maricopa Audubon Society. With him on the brief was *Margaret E. Townsend.*

Before: PILLARD, RAO and CHILDS, *Circuit Judges*.

Opinion for the Court filed by *Circuit Judge* PILLARD.

PILLARD, *Circuit Judge*: Since 1995, the Fish and Wildlife Service has recognized the southwestern willow flycatcher—a small, migratory songbird—as an endangered subspecies of the willow flycatcher. The New Mexico Cattle Growers' Association petitioned the Service to remove that designation, arguing that the southwestern willow flycatcher is not a valid subspecies and thus does not qualify for listing as an endangered species. When the Service rejected that argument and reaffirmed the bird's subspecies classification, Cattle Growers sued, and the district court ruled against it on summary judgment.

On appeal, Cattle Growers argues that the Service's determination was arbitrary and capricious because it failed to articulate any discernible standard for evaluating subspecies validity. In particular, Cattle Growers insists that the Service used a "non-falsifiable," impermissibly manipulable method of evaluating scientific research that rendered its decision inherently arbitrary and capricious.

Cattle Growers' arguments have no merit. It decries the Service's standard as "non-falsifiable" merely because the Service relied on studies the results of which were affected by the researchers' data selection and study design. But that is in the nature of empirical research, and there is no requirement that agencies somehow evaluate data using standards that do not reflect accepted scientific research methodology. Well-established principles of arbitrary and capricious review require only that the Service's determination be reasonable and reasonably explained—a bar that the Service's thorough determination easily clears.

I.

A.

The Endangered Species Act "provide[s] a program for the conservation of . . . endangered species and threatened species." 16 U.S.C. § 1531(b). To that end, the Act directs the Secretary of the Interior—who has delegated his responsibility (as relevant here) to the Fish and Wildlife Service, 50 C.F.R. § 402.01(b)—to maintain a list of threatened and endangered species. *See* 16 U.S.C. §§ 1533(a)(1), (c)(1). Listed species are afforded a host of protections under the Act. For instance, it is generally illegal to harass, harm, capture, or kill an animal that belongs to a species listed as "endangered." *Id.* §§ 1538(a)(1)(B), 1532(19).

Only animal populations that qualify as a "species"—defined by the Act to include subspecies, *id.* § 1532(16)—can be listed as threatened or endangered. *See id.* § 1533(c)(1); 50 C.F.R. § 424.11(a). The Service's regulations specify that, "[i]n determining whether a particular taxon or population is a species for the purposes of the Act, the [Service] shall rely on standard taxonomic distinctions and the biological expertise of the Department [of the Interior] and the scientific community concerning the relevant taxonomic group." 50 C.F.R. § 424.11(a). The Act requires the Service to make that determination "solely on the basis of the best scientific and commercial data available." 16 U.S.C. § 1533(b)(1)(A).

Any "interested person" may petition the Service under the Endangered Species Act to add, remove, or reclassify a species (including a subspecies) from the list of threatened and endangered species. *Id.* § 1533(b)(3)(A). Within 90 days of receiving such a petition, the Service must determine "whether the petition presents . . . substantial information" that the requested status change "may be warranted." *Id.* If the Service

decides the petition meets that threshold, it must issue a finding within 12 months as to whether the requested status change is in fact warranted. *Id*. § 1533(b)(3)(B).

B.

The southwestern willow flycatcher was first described as a subspecies of the willow flycatcher in 1948. Final Rule Determining Endangered Status for the Southwestern Willow Flycatcher, 60 Fed. Reg. 10,694, 10,696 (Feb. 27, 1995). Further taxonomic studies conducted by ornithologists in the 1980s and 1990s supported that subspecies classification. They found, for example, that the southwestern willow flycatcher had a paler color, different wing length, and "more protracted, slurred 'fit-za-bew'" song compared to the "sneezy 'fitz-bew'" song of the four northern subspecies of willow flycatcher. *Id.* at 10,694-96. In 1995, consistent with the "majority opinion" among ornithologists at the time, the Service determined that the southwestern willow flycatcher was a valid subspecies, even as it "acknowledge[d] that taxonomy of [the southwestern willow flycatcher] continues to pose questions and may be revised in the future." *Id.* at 10,698. The Service also concluded that the southwestern willow flycatcher was endangered and listed it as an endangered species. *Id*. at 10,713.

Scientists continued to study the southwestern willow flycatcher's taxonomy following its 1995 listing as an endangered species. To that end, researchers collected and evaluated southwestern willow flycatcher DNA, plumage coloration measurements, and song samples using more advanced, quantitative techniques than those used in the pre-listing studies. The post-listing studies concluded that subspecies classification was warranted, supporting the Service's 1995 subspecies designation. In 2015, however,

biologist Robert Zink reanalyzed the data that other researchers had used to confirm the southwestern willow flycatcher's subspecies designation, critiqued those previous studies' research methods and conclusions, and concluded that the Service's subspecies designation was wrong. *See* Robert M. Zink, *Genetics, morphology, and ecological niche modeling do not support the subspecies status of the endangered Southwestern Willow Flycatcher (Empidonax traillii extimus*), 117 THE CONDOR: ORNITHOLOGICAL APPLICATIONS 76 (2015) (J.A. 478); *see also* Notice of 12-Month Petition Finding and 5-Year Review (Notice) 6 (J.A. 580). Zink did not collect any new data to support his analysis.

Shortly after Zink's article was published, a number of organizations, including the New Mexico Cattle Growers' Association (Cattle Growers), jointly petitioned the Service to remove the southwestern willow flycatcher from the endangered species list. Petition to Remove the "Southwestern" Willow Flycatcher (Empidonax traillii "extimus") (SWWF) From the List of Endangered Species Under the Endangered Species Act Due to Significant New Data that Demonstrates Original Data Error (Petition) 1 (J.A. 490). The petition argued that neither pre-listing nor post-listing data supported subspecies classification, as demonstrated by Zink's reanalyses of those data. *See id.* at 12 (J.A. 501). The petition relied heavily on Zink's article, adopting its conclusions as well as its critiques of the sampling choices and hypothesis design of post-listing studies that validated the subspecies designation.

The Service determined that the petition presented substantial information suggesting that the southwestern willow flycatcher's subspecies designation may have been incorrect and accordingly initiated a 12-month review. Evaluation of a Petition to Remove the Southwestern Willow

Flycatcher From the List of Endangered and Threatened Wildlife, 81 Fed. Reg. 14,070 (Mar. 16, 2016) (J.A. 567). After inviting public comment, reviewing the body of existing scientific literature evaluating the validity of the subspecies classification—including a published, peer-reviewed paper authored by Tad Theimer rebutting Zink's analyses—and consulting with experts, the Service concluded that delisting was not warranted, as the best available evidence continued to support subspecies classification. 12-Month Findings on Petitions to List a Species and Remove a Species from the Federal Lists of Endangered and Threatened Wildlife and Plants, 82 Fed. Reg. 61725, 61726-27 (Dec. 29, 2017) (J.A. 668-69); Notice 7-8 (J.A. 581-82).

The Service laid out its reasoning in a detailed, 91-page report. First, the Service explained the framework and criteria it used to determine whether the "best available scientific and commercial information" supported subspecies classification, as required under the Endangered Species Act. Notice 8 (J.A. 582); *see also* 16 U.S.C. § 1533(b)(1)(A). In accord with its regulatory obligation to "rely on standard taxonomic distinctions and the biological expertise of the Department [of the Interior] and the scientific community" in "determining whether a particular taxon or population is a species[, including a subspecies,] for the purposes of the Act," 50 C.F.R. § 424.11(a), the Service adopted a "common" definition of subspecies to refer to two sets of organisms of the same species that are "capable of interbreeding and producing fertile offspring, but usually do not interbreed in nature due to geographic isolation, sexual selection, or other factors." Notice 9 (J.A. 583). The Service then explained that in avian taxonomy, scientists often determine whether that definition of subspecies is met by identifying instances of "non-clinal geographic variation." *Id.*

Because the concept of "non-clinal geographic variation" is key to understanding the Service's analysis as well as Cattle Growers' arguments, it is worth explaining in some detail. When scientists plot a given trait (*e.g.*, size) as observed across a species' geographic range, the data typically produce a gradual slope, called a smooth cline, indicating incremental adaptation to environmental changes across the species' range. *See* Tad C. Theimer et al., *Available data support protection of the Southwestern Willow Flycatcher under the Endangered Species Act*, 118 THE CONDOR: ORNITHOLOGICAL APPLICATIONS 289, 290 (2016) (Theimer 2016) (J.A. 535). For example, within the same species of bird, specimens might typically be larger in cooler climates and smaller in warmer climates, with gradual differences in specimen size corresponding to climate variation across the species' range. Specimen size plotted on a graph from north to south would show a smooth downslope.

"Non-clinal" change, by contrast, appears irregular or interrupted rather than smooth, reflecting relatively rapid variation in specimens' traits within a small geographic area. "Non-clinal geographic variation" thus refers to abrupt changes in species traits over short geographic distances, which—critically—indicates the existence of a subspecies. *See* Notice 9, 17 (J.A. 583, 591).

Turning back to the Service's analysis of Cattle Growers' petition, the Service first reviewed the body of relevant scientific studies, explaining how the data collected and analyzed post-listing—but before Zink's critique—had revealed statistically significant differences in willow flycatcher song, plumage, and genetics, supporting subspecies classification. Against that backdrop, the Service found that Zink's reanalyses of that data contained significant "errors, incorrect analyses, and limitations," and that it thus did "not

represent the best available scientific information sufficient to restructure the taxonomy of [the willow flycatcher] and negate recognition of the southwestern subspecies." *Id.* at 23-24 (J.A. 597-98).

For instance, a genetic study from 2007 had analyzed southwestern willow flycatcher DNA samples and found a "sharp change of genetic frequencies at the subspecies [geographic] boundary" supporting subspecies classification. *Id.* at 17 (J.A. 591). Zink maintained that the 2007 study had graphed the data incorrectly and concluded that, when the data were graphed correctly, they showed only a "gradual transition" inconsistent with subspecies classification. *Id.* But the Service found that "it was actually Zink [] who had graphed the data incorrectly," and Theimer's correct reanalysis of the raw data "indicate[d] a transition in haplotype frequencies consistent with a step cline rather than the smooth cline suggested by Zink." *Id.* at 17 (J.A. 591); *see also id*. at 23 (J.A. 597). The Service thus concluded that "the best available information currently still demonstrates that the genetic information supports separation of [the southwestern willow flycatcher] from other willow flycatcher subspecies." *Id.* at 18 (J.A. 592).

Similarly, a study of southwestern willow flycatcher plumage coloration conducted in 2010 found "strong statistical differences among the willow flycatcher subspecies" within a defined geographic range. *Id.* at 20 (J.A. 594). Zink faulted the study for not including bird specimens from the subspecies boundary regions and conducted a reanalysis that included those specimens, finding a "linear relationship consistent with a smooth cline in plumage variation" and inconsistent with subspecies classification. *Id.* But Theimer's subsequent reanalysis, which also included the boundary specimens but employed more advanced statistical techniques, "found

evidence for a step-cline along the subspecies boundary." *Id.* The Service noted that, while both reanalyses "provided reasonable opinions and analysis," Theimer's analysis "us[ed] methods specific to the evaluation of morphology, clines, and hybrid zones," thereby adding "further rigor" to the original plumage information and "contribut[ing] to the best available information" demonstrating non-clinal geographic variation in plumage coloration. *Id.* at 20-21 (J.A. 594-95).

The Service also found that Zink's reanalysis of birdsong data was of "uncertain[]" value in contributing toward the "best scientific information" because the original song data were not fully available. *Id.* at 19 (J.A. 593). Because of that limitation, the Service determined that the original study, which found statistically significant differences between the songs of southwestern willow flycatchers and another subspecies of willow flycatcher, remained the "best available commercial and scientific information." *Id.* at 19-20 (J.A. 593-94).

In sum, after analyzing in detail and ultimately rejecting the petition's critiques of individual studies, the Service determined that the best available information showed non-clinal geographic variation in southwestern willow flycatcher genetics and plumage coloration and statistically significant differences in southwestern willow flycatcher birdsong as compared to the willow flycatcher species, all of which supported subspecies classification. The Service also explained that its conclusion that the southwestern willow flycatcher remained a valid subspecies was informed by the "large body of literature developed by the scientific community that has shaped willow flycatcher and subspecies classification." *Id.* at 24 (J.A. 598). The Service noted that the studies comprising that body of literature

> have originated, been reviewed, and withstood debate among independent, university, and state and federal scientists, and their results have been reviewed, reported, and also published in ornithological scientific journals. These materials have subsequently been evaluated by the various sources that track, evaluate, and make taxonomic decisions that currently support the recognition of [willow flycatcher] subspecies.

Id. In contrast to that well-supported consensus, the Service explained that "the petition's critiques of other scientist's work [were] comprised of questionable analyses" and reached "inaccurate conclusion[s]." *Id.* As such, the Service found that neither Zink's article nor the petition's commentary "represent[ed] the best available scientific information sufficient to . . . negate recognition of the southwestern subspecies" of willow flycatcher. *Id.*

Cattle Growers sued in district court, arguing that the Service's determination was arbitrary and capricious in violation of the APA because the Service failed to define "subspecies," provided "no governing criteria for determining whether any given population . . . qualifies as a subspecies," and ignored relevant evidence. *See N.M. Cattle Growers' Ass'n v. U.S. Fish & Wildlife Serv.*, No. 21-cv-3263, 2024 WL 894911, at *7 (D.D.C. Feb. 28, 2024). The Center for Biological Diversity and the Maricopa Audubon Society intervened on behalf of the Service. *Id*. The district court entered summary judgment in favor of the Service and the intervenors, and Cattle Growers timely appealed.

II.

Cattle Growers' disagreement with the Service's determination is narrow: It argues only that the Service failed

to use a "non-arbitrary" standard for evaluating the appropriateness of subspecies classification for the southwestern willow flycatcher. According to Cattle Growers, the non-clinal geographic variation standard used by the Service is impermissibly indeterminate; a "majority opinion" standard is arbitrary; and a "best available evidence" standard is not a standard at all, but rather an evidentiary requirement. **[CG Br. 28-30.]** None of those challenges succeeds. Cattle Growers' critique of the non-clinal geographic variation standard boils down to disagreement with the Service's reasonable assessment of competing scientific studies, which comfortably survives arbitrary and capricious review. And, contrary to Cattle Growers' contentions, the Service did not use a "majority opinion" or "best available evidence" standard to guide its subspecies determination. The Service's determination is neither arbitrary nor capricious.

We review *de novo* the district court's grant of summary judgment. *See Safari Club Int'l v. Zinke*, 878 F.3d 316, 325 (D.C. Cir. 2017). Much judicial review under the APA is deferential, asking only whether the agency's action was "arbitrary, capricious, [or] an abuse of discretion." *Loper Bright Enters. v. Raimondo*, 603 U.S. 369, 392 (2024) (alteration in original) (quoting 5 U.S.C. § 706(2)(a)). Agency action is arbitrary and capricious "if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Motor Vehicle Mfrs. Ass'n of the U.S., Inc. v. State Farm Mut. Auto. Ins. Co*., 463 U.S. 29, 43 (1983). We must ensure that the agency "examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a rational connection between the facts found and the choice

made." *Id*. (internal quotation marks omitted). But the scope of our review under the arbitrary and capricious standard is "narrow," and we cannot "substitute [our] judgment for that of the agency." *Id*. We therefore must "avoid[] . . . direct[ing] the agency in a choice between rational alternatives." *Shafer & Freeman Lakes Env't Conservation Corp. v. FERC*, 992 F.3d 1071, 1090 (D.C. Cir. 2021) (internal quotation marks omitted).

Cattle Growers principally argues that the non-clinal geographic variation standard used by the Service is arbitrary and capricious because it is "inherently non-falsifiable"—that is, it can be manipulated "to inevitably produce an affirmative subspecies conclusion (or not), based purely on the information [the study author] decides to assess." Reply Br. 12-13. In essence, Cattle Growers contends that the non-clinal geographic variation model is indeterminate because its results depend on which datapoints are included in a study, allowing the Service to manufacture an "affirmative subspecies conclusion" by relying on studies that exclude data that would undermine a subspecies determination. *See* Cattle Growers Br. 41-45. Cattle Growers asserts that any such "non-falsifiable" standard necessarily fails arbitrary and capricious review because the regulated public has no way to "perceive the principles which are guiding agency action," *Pearson v. Shalala*, 164 F.3d 650, 661 (D.C. Cir. 1999), and courts have no way to "assess the validity" of the agency's decision making. Cattle Growers Br. 46-47.

To begin with, that argument is forfeited, as no critique of the non-clinal geographic variation standard was raised before the agency. *See Advocs. for Highway & Auto Safety v. Fed. Motor Carrier Safety Admin.,* 429 F.3d 1136, 1150 (D.C. Cir. 2005). To the contrary, Cattle Growers' petition to the agency relied on that very standard to argue that the *absence* of non-

clinal geographic variation in willow flycatcher traits invalidated the Service's subspecies classification. *See, e.g.,* Petition 4 (J.A. 493) ("[G]enetic data . . . support the existence of a genetic cline, rather than clearly defined . . . subspecies"); *id*. at 5 (J.A. 494) ("The reanalysis reveals a gradual genetic transition from one geographic location to another and does not support the subspecies limits of the [southwestern willow flycatcher]"); *id*. at 17 (J.A. 506) (arguing that putative boundaries "are merely gradations in changes in color patterns rather than diagnostic breaks that would allow non-arbitrary subspecies limits"); *id*. at 18 (J.A. 507) ("Zink (2015) showed that the pattern of genetic variation is gradual, rather than there being two distinctive subspecies.").

Even if it were properly before us, Cattle Growers' argument would fail. The Administrative Procedure Act does not require agencies to use a "falsifiable" standard in the sense that Cattle Growers uses the term. What Cattle Growers calls "non-falsifiable" is simply the reality that differences in data choices and study design influence the outcome of scientific studies of empirical phenomena, including those applying the non-clinal geographic variation standard. For instance, Cattle Growers asserts that the "falsifiability problem is demonstrated" by the fact that Zink and Theimer "came to markedly different conclusions regarding non-clinal geographic variation" depending on whether they chose to "analyze[] either narrow (Theimer (2016)) or broad (Zink (2017)) subsets of the southwestern willow flycatcher's genetic and morphological data." Cattle Growers Br. 42.

Every scientific study, in fields ranging from ornithology to oncology, suffers from what Cattle Growers sees as a problem of "non-falsifiability." It is elementary that a study's conclusions necessarily depend on the data that the study's authors gather and analyze, and the tools they use to analyze it.

Indeed, a model that produces the same results regardless of differences in its data inputs is of little use. But the fact that study results are influenced by discretionary decisions regarding data inputs and study design does not shield researchers' conclusions from scrutiny or invite agencies to baselessly rely on shoddy studies. Rather, the peer review process and the discipline provided by competing research studies guard against cherry-picking or poor design by forcing scientists to identify, explain, and submit for public scrutiny the discretionary choices that are inevitable in research design. At the same time, the APA's prohibition on arbitrary and capricious decision making, coupled with the Endangered Species Act's requirement that the Service make its determinations "solely on the basis of the best scientific and commercial data available," 16 U.S.C. § 1533(b)(1)(A), require the Service to "articulate a satisfactory explanation" as to which studies represents the "best" scientific data. *State Farm*, 463 U.S. at 43.

We reject Cattle Growers' contention that the inherent reliance of empirical analysis on data selection (and the attendant risk of manipulation) changes the narrow reasonableness standard imposed by the APA. The Service's thorough explanation of its determinations as to which studies represented the best available data, as well as its explanation of its conclusion that those studies supported subspecies classification, comfortably meet the APA's requirement that agency action be "reasonable and reasonably explained." *FCC v. Prometheus Radio Project*, 592 U.S. 414, 423 (2021). Faced with competing studies, the Service analyzed their strengths and weaknesses point by point. It concluded that Theimer's reanalysis of the relevant data was more rigorous and thus more persuasive than Zink's because Zink's conclusions drew on incorrectly graphed data and analytical methods that were not tailored to avian subspecies analysis. *See* Notice 18, 21 (J.A.

592, 595). Based on its careful review, the Service concluded that, according to the best available science, the subspecies designation of the southwestern willow flycatcher should stand. That determination is scientifically and legally sound.

Cattle Growers' concern that the non-clinal geographic variation standard leaves the regulated public and the courts without a meaningful way to understand and evaluate the Service's decision making is unfounded. After determining which studies represented the best available data, the Service straightforwardly applied the non-clinal geographic variation standard to discern that those studies, which provided evidence of a "break" in plumage coloration and genetic markers "consistent with a step cline," supported subspecies classification. Notice 17-18, 20-21 (J.A. 591-92, 594-95). Cattle Growers' own petition demonstrates that it understands how the non-clinal geographic variation standard operates: Its petition relied on that very standard to argue that gradual differences in willow flycatchers' genetic makeup and plumage coloration across their range, as opposed to "sharp breaks," undermined subspecies classification. *See, e.g.,* Petition 4-5, 17-19 (J.A. 493-94, 506-08). There is thus no merit to Cattle Growers' contention that the Service impermissibly relied on an "unarticulated . . . standard" in violation of the APA. Cattle Growers Br. 34 (quoting *Pearson*, 164 F.3d at 660). To the contrary, the Service explicitly set forth the non-clinal geographic variation standard, and it explained how that standard informed its evaluation of the relevant data. *See, e.g.,* Notice 9, 17, 20 (J.A. 583, 591.

Using the language of "non-falsifiability," Cattle Growers attempts to manufacture a more favorable standard for its underlying disagreement with the Service's determination that Zink's analysis was less rigorous and persuasive than that of other scientific studies. Cattle Growers argues that the

Service's reliance on studies that "omitt[ed] intermediary data" illustrates the "non-falsifiable" nature of the non-clinal geographic variation standard, and that the Service's use of such a "non-falsifiable" standard necessarily makes the Service's decision arbitrary and capricious. Reply Br. 16-17; *see also* Cattle Growers Br. 43-44. As explained above, "falsifiability"—in the sense that Cattle Growers uses that term—has nothing to do with whether an agency's decision was arbitrary and capricious. And it is firmly established that the mere presence of "[c]ompeting views about scientific data and policy choices" is insufficient to show that the agency acted arbitrarily. *Defs. of Wildlife v. Zinke,* 849 F.3d 1077, 1089 (D.C. Cir. 2017). Particularly "when the science is uncertain," arbitrary and capricious review does not allow the reviewing court to "direct the agency in a choice between rational alternatives." *Shafer*, 992 F.3d at 1090. Rather, the court "simply ensures that the agency has acted within a zone of reasonableness and, in particular, has reasonably considered the relevant issues and reasonably explained the decision." *Prometheus Radio Project*, 592 U.S. at 423.

The Service's decision not to delist the southwestern willow flycatcher was reasonable, reasonably supported, and adequately explained, and its decision as to what constitutes the best available scientific evidence is well within its zone of expertise. The Service set forth its definition of a subspecies; explained how scientists operationalize that definition; examined the relevant studies and rationally explained why it found some more convincing than others; and reasonably explained why it found the petition's counterarguments unpersuasive. That is all the ESA and APA require. We therefore decline Cattle Growers' invitation to "step into the [agency's] shoes and reassess its scientific judgments—a role that we are ill-equipped to play under the guise of the APA's arbitrary and capricious standard." *Pharm. Mfg. Rsch. Servs.,*

Inc. v. Food & Drug Admin., 957 F.3d 254, 265 (D.C. Cir. 2020) (internal quotation marks omitted).

Cattle Growers further argues that allowing the Service to rely on non-clinal geographic variation in making its subspecies determination "raises serious nondelegation and due process concerns, counseling that it be rejected pursuant to the canon of constitutional avoidance." Cattle Growers Br. 47. That argument is forfeited by Cattle Growers' failure to raise it before the district court. *Huron v. Cobert*, 809 F.3d 1274, 1280 (D.C. Cir. 2016). It is also misdirected. Cattle Growers invokes the concept of constitutional avoidance, but that is a canon of statutory construction that "comes into play only when, after the application of ordinary textual analysis, the statute is found to be susceptible of more than one construction." *Jennings v. Rodriguez*, 583 U.S. 281, 296 (2018). This is a case brought under the APA's arbitrary and capricious action standard that does not involve statutory construction. In fact, Cattle Growers did not make a statutory construction argument at all until its appellate reply brief, rendering this argument forfeited many times over. *See N.Y. Rehab. Care Mgmt., LLC v. NLRB.,* 506 F.3d 1070, 1076 (D.C. Cir. 2007). Cattle Growers' constitutional claims have no place here.

Cattle Growers' remaining arguments are contradicted by the record. It asserts that the Service relied on the "majority opinion" of scientists to affirm the validity of subspecies classification for the southwestern willow flycatcher and argues that such a "'majority opinion' standard is inherently arbitrary." Cattle Growers Br. 39-40. But the Service did not rely on a "majority opinion" standard. The "majority opinion" language that Cattle Growers quotes is not from the 2017 determination that it challenges, but from the original 1995 rule. Notice 12 (J.A. 586). In the 2017 determination—the

only agency decision at issue here—the Service explained that the large body of "peer-reviewed studies/reports and conclusions by taxonomists" supporting subspecies classification informed its determination that Zink's outlier analysis, which was "comprised of questionable analyses" and reached inaccurate conclusions, did not represent the best scientific evidence and thus did not warrant rescission of subspecies classification. *Id.* at 24 (J.A. 598). The Service thus did not merely "count[] academic heads," as Cattle Growers contends, Cattle Growers Br. 39; rather, it reasonably considered Zink's analysis in context with other studies as one of many factors informing its evaluation of whether that paper represented the best available evidence.

Last, Cattle Growers argues that, in the district court, the Service incorrectly asserted that the Endangered Species Act's requirement that it base its determination on the "best scientific and commercial data available" sufficed as a standard for determining the validity of the southwestern willow flycatcher's subspecies classification. Cattle Growers Br. 50-51; 16 U.S.C. § 1533(b)(1)(A). The Service made no such assertion, either here or in the district court. Instead, as explained above, the Service evaluated which sources contributed to the best available evidence and applied the non-clinal geographic variation standard to assess whether those sources supported subspecies classification.

* * *

For the foregoing reasons, the district court's judgment is affirmed.

So ordered.