IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF COLUMBIA

CENTER FOR ENVIRONMENTAL SCIENCE, ACCURACY & RELIABILITY, et al.,	)	No. 1:17-cv-02313-JDB
Plaintiffs,	)	
v.	)	
UNITED STATES DEPARTMENT OF INTERIOR, et al.,	)	
Defendants,	)	
NATURAL RESOURCE DEFENSE COUNCIL, INC., et al.,	)	
Defendant-Intervenors.	)	

PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT

Pursuant to Federal Rule of Civil Procedure 56 and Local Rule 7(h), Plaintiffs Center for Environmental Science, Accuracy & Reliability, *et al*., hereby move for summary judgment on their complaint's two claims against Defendants United States Department of Interior, *et al*. Plaintiffs are entitled to judgment as a matter of law on those claims because: (i) Defendants' denial of Plaintiffs' delisting petition contains no articulated standard for the decision, and is therefore arbitrary and capricious and in violation of the Endangered Species Act and

Administrative Procedure Act; and (ii) Defendants' denial of Plaintiffs' delisting petition is founded upon a science "workshop" report produced in violation of the Federal Advisory Committee Act. The motion is based upon the accompanying memorandum of points and authorities and standing declarations, as well as the certified administrative record.

Pursuant to Local Rule 7(f), Plaintiffs request that the Court set this motion for oral argument. The motion is based upon an administrative record that contains a wealth of complex, technical, and sometimes arcane material, such that a hearing may assist the Court in understanding the bases for Plaintiffs' motion.

DATED: June 22, 2018.

Respectfully submitted,

s/ Damien M. Schiff

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Barker, Allyson, *et al.*, *The Role of Collaborative Groups in Federal Land and Resource Management: A Legal Analysis*, 23 J. Land Resources & Envtl. L. 67 (2003) 36-37

Brosi, Berry J. & Biber, Eric G., *Statistical inference, Type II error, and decision making under the US Endangered Species Act*, 7 Front. Ecol. Environ. 487 (2009) 31-32

Doremus, Holly, *Listing Decisions Under the Endangered Species Act: Why Better Science Isn't Always Better Policy*, 75 Wash. U. L.Q. 1029 (1997) 5, 9, 21, 31, 39

Doremus, Holly, *The Endangered Species Act: Static Law Meets Dynamic World*, 32 Wash. U. J.L. & Pol'y 175 (2010) 1-2

George, Anna L. & Mayden, Richard L., *Species Concepts and the Endangered Species Act: How a Valid Biological Definition of Species Enhances the Legal Protection of Biodiversity*, 45 Nat. Resources J. 369 (2005) 20-21

Holmes, O.W., *The Common Law* (1881) 30

Johnston, Jason Scott, *Introduction, in Institutions and Incentives in Regulatory Science* 1 (Jason Scott Johnston ed., 2012) 31

Mayr, Ernst, *Populations, Species and Evolution* (1970) 12

Mayr, Ernst, *Principles of Systematic Zoology* (1969) 1

Morrison, Gregory, Essay, *Science in the Modern Administrative State: Examining Peer Review Panels and the Federal Advisory Committee Act*, 82 Geo. Wash. L. Rev. 1654 (2014) 34

Ramey, II, Rob Roy, *On the Origin of Species, in Institutions and Incentives in Regulatory Science* 77 (Jason Scott Johnston ed., 2012) 31

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INTRODUCTION

This case concerns the intersection of the Endangered Species Act, 16 U.S.C. §§ 1531-1544, with the science of taxonomy,[1] and highlights the importance to both of transparent decision-making.

"No taxonomic rank has been more maligned or misunderstood than the subspecies." AR023517 (Patten 2015). Subspecies designations frequently are capricious because scientists do not agree on the standard for making them. *See* AR023523 (Patten & Unitt 2002). The advent in recent decades of sophisticated methods of DNA analysis has only intensified the subspecies controversy. These new analytical tools have revealed that long-accepted divisions among some subspecies based on their physical appearance (for example, plumage color in birds) are not genetically based, AR025265-66 (Zink 2004), and therefore are likely the result of arbitrary—and evolutionarily inconsequential—classification. *See* AR019116 (Haig *et al*. 2006); AR023540 (Phillimore & Owens 2016). The Endangered Species Act is not immune to this controversy because the statute explicitly authorizes the protection of endangered and threatened "subspecies." *See* 16 U.S.C. §§ 1532(16), 1533(a). *See generally* Holly Doremus, *The Endangered Species Act: Static Law Meets Dynamic World*, 32 Wash. U. J.L. & Pol'y 175, 188 (2010)

[1] Taxonomy—also known as "systematics"—is the science of classifying all living things in an ordered fashion. *See* Ernst Mayr, *Principles of Systematic Zoology* 2 (1969).

("Fights about [Endangered Species Act] protection resting on taxonomy are frequent."). Just what precisely constitutes a protectable "subspecies" under the Act is the central question of this lawsuit.

Since 1993, the coastal California gnatcatcher—a small, grayish-blue songbird that dwells in the coastal sage scrub of Southern California and northern Baja California, Mexico—has been listed as a threatened subspecies. *See* AR024007-22 (original listing rule). In 2014, Plaintiffs Center for Environmental Science, Accuracy, and Reliability, *et al*.—a coalition of sound science, property rights, and home builder advocates[2]—submitted a petition to delist the gnatcatcher. AR00001-85. The petition argued that, based on recent genetic research, AR025355-65 (Zink *et al*. 2013), the coastal California gnatcatcher should not be considered its own subspecies, but instead should be deemed a single species that includes the plentiful and thriving gnatcatcher populations in

[2] Among the members of Plaintiff Center is Dr. Robert Zink, Sagouspe Decl. ¶ 4, an expert in molecular systematics of birds and conservation biology, currently at the University of Nebraska School of Natural Resources, Zink Decl. ¶ 2. As discussed *infra*, Dr. Zink's 2013 nuclear DNA study of the gnatcatcher formed the basis of the delisting petition, the denial of which is the focus of this action. AR000035-39. A remand of the Service's delisting denial requiring the Service to articulate a clear standard for what—if anything—constitutes a gnatcatcher subspecies would vindicate Dr. Zink's interest in the gnatcatcher taxonomic debate, as well as help direct future genetic and other studies that Dr. Zink may undertake. Zink Decl. ¶ 8. These interests are directly germane to the Center's interest in promoting sound science and fair implementation of the Endangered Species Act. Sagouspe Decl. ¶¶ 2-3, 10.

southern Baja California. *See* AR000015-16. In 2016, Defendant United States Fish and Wildlife Service denied the petition, concluding instead that the coastal California gnatcatcher is properly considered its own subspecies and should remain listed. *See* AR002813. That determination is illegal, for two reasons.

First, the Service's affirmance of the gnatcatcher's dubious subspecies taxonomy violates the basic administrative law principle of reasoned decision-making. *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). According to that principle, an agency may not "move the goalposts" in the course of ruling on a matter, much less decide an issue without articulating a standard or measure to explain the agency's decision. *See Qwest Corp. v. FCC*, 689 F.3d 1214, 1228 (10th Cir. 2012). Yet, in rejecting Plaintiffs' delisting petition, the Service did precisely that. Conceding that there is no scientific consensus on the definition of "subspecies" generally, or as applied to birds in particular, AR002809, the agency should have—but did not—articulate a definition for what constitutes a gnatcatcher "subspecies." The need for an agency-articulated definition is especially pronounced given the extreme degree of discord among professional taxonomists about how to diagnose subspecies. *See* AR017496 (Science Workshop Panelist #5 Memo) ("[I]n a recent review of 1,313 avian taxonomic studies, no single taxonomic criterion . . . was considered necessary or sufficient to designate taxa."). Without an agency-selected definition, the Service

had no stable criteria to guide its handling of the delisting petition, to measure the soundness of that decision, or to alert the public—as well as the courts—to the relevant taxonomic standard informing that decision. Such a standardless action is necessarily arbitrary and capricious. *See generally Pac. Nw. Newspaper Guild, Local 82 v. NLRB*, 877 F.2d 998, 1003 (D.C. Cir. 1989) (preventing standardless "'ad hocery' . . . is the core concern underlying the prohibition of arbitrary or capricious agency action").

Second, the Service violated the Federal Advisory Committee Act, 5 U.S.C. App. 1, §§ 1-16, by relying on a privately convened, privately conducted "workshop" panel of experts to critique the data that the petition presented to support the gnatcatcher's delisting. *See* AR002807. The panel report played a critical role in the Service's decision to maintain the gnatcatcher's listing; indeed, the Service cited the report over two dozen times in attempting to justify its denial of the delisting petition. *See* AR002807-13. Yet, despite the outsized importance that the panel played in the Service's decision-making, and the agency's very early determination to rely upon such a panel, AR000207 (October, 2014, Service project plan providing that the agency would convene "a scientific panel to evaluate whether delisting the coastal California gnatcatcher is warranted or not based on taxonomy and/or genetics"), the public was given no opportunity to attend the workshop, or to participate in its work, *see* Fed. Def. Ans. ¶ 63. These

failures violated the Act's mandates that the public be given notice of and the opportunity to attend advisory committee meetings, like the Service's science panel. *See* 5 U.S.C. App. 1, § 10(a)(1)-(3). The agency's failures were particularly consequential here, given that additional analysis supporting the delisting petition was published after the panel had convened, *see* AR025366-76 (Zink *et al*. 2016), analysis that was never provided to it, AR002811.

The adjudication of Plaintiffs' claims entails more, however, than resolving an academic dispute about taxonomy, or easing the negative economic impact of gnatcatcher regulation—as significant as these goals are. *See* AR025374 (Zink *et al*. 2016) ("[D]ebates will continue unless a consensus is reached on minimal standards for subspecies recognition."); AR024121-22 (Service economic analysis conservatively estimating gnatcatcher regulation to cost approximately $1 *billion*). Ensuring that taxonomic decisions under the Endangered Species Act are made according to reasonable, consistent, and transparent rules is essential to maintaining public confidence in federal wildlife conservation policy. *See* Holly Doremus, *Listing Decisions Under the Endangered Species Act: Why Better Science Isn't Always Better Policy*, 75 Wash. U. L.Q. 1029, 1105 (1997) (noting that the Services' unexplained inconsistency in employing taxonomic standards "invites the charge that caprice or political pressure, rather than objective, value-neutral standards, drive their decisions"). As exemplified by the gnatcatcher, protecting a spurious

subspecies drains scarce conservation resources away from evolutionarily significant populations that truly need—and deserve—the help. *See* AR025374 (Zink *et al*. 2016) ("[E]nvironmentalists need to concentrate on other species or other ways to preserve this [coastal sage scrub] habitat, rather than risking the erosion of scientific credibility by attempting to defend the validity of [the coastal California gnatcatcher]."). *See also* Rob Roy Ramey II, *et al*., *Genetic relatedness of the Preble's meadow jumping mouse (*Zapus hudsonius preblei*) to nearby subspecies of* Z. hudsonius *as inferred from variation in cranial morphology, mitochondrial DNA and microsatellite DNA: implications for taxonomy and conservation*, 8 Animal Conservation 329, 341 (2005) (the listing of "an invalid taxon . . . affects other species because limited conservation resources are then misallocated").

Thus, requiring the Service to make its taxonomic decisions according to coherent and publicly articulated definitions will benefit wildlife, the agency, and the regulated public. For the reasons stated herein, Plaintiffs are entitled to a fair review of their petition as a matter of law.

STATEMENT OF FACTS

The Endangered Species Act provides a comprehensive framework for the preservation of endangered and threatened species. *TVA v. Hill*, 437 U.S. 153, 180 (1978). The manner in which a species becomes entitled to the Act's protections—the listing process—entails a two-step procedure. First, the Service must

determine whether a given population of animal or plant qualifies as a listable entity. If it does, the Service must then determine whether the population is sufficiently imperiled to merit listing. As to the first step, the Act establishes "species" as the listable entity, *see* 16 U.S.C. § 1533(a)(1), and explains that the "term 'species' 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," *id*. § 1532(16). As to the second step, a "species" may be listed if it is: (i) an "endangered species," *i.e*., "in danger of extinction throughout all or a significant portion of its range," *id*. § 1532(6); or (ii) a "threatened species," *i.e*., "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range," *id*. § 1532(20). *See id*. § 1533(a)(1). This second-step determination is made with reference to a variety of factors, including curtailment of a species' habitat, as well as the species' susceptibility to disease or predation. *See id*. § 1533(a)(1)(A)-(E).

Once a species is listed, the Act and its implementing regulations forbid anyone to "take" members of it. *Id*. § 1538(a)(1)(B) (endangered species); 50 C.F.R. § 17.31(a) (threatened species). The statute defines "take" broadly as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct," 16 U.S.C. § 1532(19). Violation of this take prohibition creates significant civil and even criminal liability. *See id*. § 1538(a)-(b). The Act also directs federal agencies to ensure that their discretionary actions—such as federal permitting—do not jeopardize a listed species' continued existence, or destroy or adversely modify its critical habitat, *id*. § 1536(a)(2), the latter defined as those physical or biological features or areas essential to the species' conservation, *see id*. § 1532(5)(A). This prohibition on modification of critical habitat can, depending on the species, produce significant economic drag. *See*, *e.g*., AR024121-22 (Service's gnatcatcher critical habitat economic analysis).

In 1993, the Service listed a segment of the gnatcatcher species—that portion of the bird's range from Ventura, California, south to 30° north latitude in Baja California—as the threatened "coastal California gnatcatcher" subspecies under the Endangered Species Act. AR024007-22. The Service's taxonomic division at 30° north latitude was critical to its conclusion that the coastal California gnatcatcher merits listing, given that the gnatcatcher species as a whole is healthy. *See* AR000015 (delisting petition noting that there are two million

gnatcatchers in Baja California south of the thirtieth parallel). *See also* AR025368 (Zink *et al*. 2016) ("At the species level, Birdlife International (2015) categorizes the California Gnatcatcher as a species of Least Concern.").

The Service's decision to consider the coastal California gnatcatcher as a separate subspecies was based principally on a 1991 study of the bird's morphology—*i.e*., its physical appearance—executed by Dr. Jonathan Atwood. *See* AR024009-10 (original listing rule). Dr. Atwood's study analyzed a number of morphological "characters," such as the gnatcatcher's plumage and tail color, and concluded that at least some of these characters across the gnatcatcher's range change abruptly, rather than smoothly along a clinal gradient. *Id*. Important to the Service's determination that the gnatcatcher qualifies as a separate subspecies was Dr. Atwood's conclusion that an abrupt change or "step" occurs at 30° north latitude with respect to some of the analyzed characters. *See* AR024010. But just what distinguishes such a subspecies-making "step" from a species-continuing "cline," i.e., a gradual change, the Service's 1993 listing determination does not say. *See* Doremus, *Listing Decisions*, *supra*, at 1104-05 (noting that the gnatcatcher's listing was based on morphological differences, but that the Service "ha[s] not explained how [it] determine[s] whether the morphological differences justify recognition of a distinct species or subspecies"). *Cf*. AR023729 (Remsen 2010) (observing that "broad geographic patterns of smoothly clinal differences in

coloration and, especially, morphometrics" do not support a subspecies designation); AR023523 (Patten & Unitt 2002) (criticizing the naming of subspecies "along perfectly smooth clines" because it could result in "a near limitless number" of subspecies). Neither does the original listing set forth any standard for diagnosing gnatcatchers at the level of individual, rather than population. *Cf.* AR023524 (Patten & Unitt 2002) ("A valid subspecies should be diagnosably different from all other populations, not merely exhibit mean differences. Otherwise, individuals cannot be identified, predictability is lost, and the category is deprived of its most useful applications.").

Shortly after the Service's initial listing decision, a coalition of home builders brought suit in this Court, arguing that the decision should be vacated because the Service had failed to make Dr. Atwood's data available to the public. *Endangered Species Comm. v. Babbitt*, 852 F. Supp. 32 (D.D.C. 1994). In holding that the Service's failure was significant enough to require a redo, the Court highlighted that Dr. Atwood had published two papers concerning the gnatcatcher's taxonomy—one in 1988, and one in 1991 (the latter forming the basis for the Service's listing). Although both studies analyzed the same raw data, the two came to markedly different conclusions. The 1988 study found the subspecies-distinguishing "step" at 25° north latitude, whereas the 1991 study found the step at 30° north latitude. The difference "was vital" in deciding

whether the coastal California gnatcatcher should be listed, because of the gnatcatcher's plenteousness south of 30° north latitude. *Id*. at 33-34. Not surprisingly, Dr. Atwood's about-face created significant controversy,[3] which in the Court's view "distinguishe[d] this from other cases where a scientific report alone has been considered sufficient for [Endangered Species Act] purposes." *Id*. at 37. The Service therefore had the obligation to make the underlying Atwood data publicly available, and the court remanded the matter for that purpose. *Id*. at 38.

On remand, the Service reaffirmed its view that the coastal California gnatcatcher is its own subspecies. AR024032-38. The Service noted that Dr. Atwood had reanalyzed his data, and had again found a "grouping" or "step" at 30° north latitude with respect to three characters. AR024035. The agency acknowledged that the new study's methods "do not show whether individual birds can be placed correctly into" northern and southern groups. AR024035. But this absence of diagnosability was not sufficient, in the Service's view, to overcome the additional statistical analyses of the Atwood data, done not only by Atwood himself but also by outside specialists. These all had "found evidence for

[3] *See generally* AR019120 (Haig *et al*. 2006) ("[L]isting a poorly defined or invalid subspecies could have unwarranted economic impact on private landowners, developers, and other interests . . . .").

a break at 30° north latitude," which finding supported "groupings of birds rather than a cline." AR024036. Yet the Service did not explain how—even setting aside the problem of diagnosability—the studies' inconsistent statistical methods still allowed the agency to rely upon their results to support a non-arbitrary subspecies determination. *See* AR024036 ("Each author utilized different statistical methods to analyze the data and draw conclusions."). Perhaps the Service's lack of explanation was because even the agency itself did not consider the statistical evidence to be decisive. *See id*. ("Statistics do not remove or supplant the need to make informed decisions with respect to any data set."). Ultimately, in affirming the gnatcatcher's subspecies status, the Service dodged altogether the nettle of defining subspecies by merely citing the number of taxonomists who would affirm the gnatcatcher's subspecies designation. *See* AR024037 (reciting favorably the proposition that "the magnitude of taxonomic difference necessary to appropriately decide when subspecies should be delimited 'can be determined only by agreement among working taxonomists'" (quoting Ernst Mayr, *Populations*, *Species and Evolution* (1970)), and concluding that "[t]he consensus among working taxonomists supports recognition" of the gnatcatcher as a separate subspecies). But the Service at least conceded that "additional taxonomic work," when "published and accepted by the ornithological community," could change its mind. AR024037.

Accepting the Service's invitation, in 2010, several of the Plaintiffs in this action submitted a petition to delist the gnatcatcher, relying in part on a 2000 mitochondrial DNA study produced by a team of researchers headed by Dr. Robert Zink, AR025340 (Zink *et al*. 2000). *See* AR024367 (Service's finding on petition). The 2000 Zink study, which included the participation of Dr. Atwood, analyzed mitochondrial DNA of 64 specimens collected from 13 locations across the gnatcatcher species' range, *i.e*., from Southern California to the tip of Baja California. *See* AR025343 (Zink *et al*. 2000). Employing a variety of statistical analyses, the study concluded that gene flow throughout the species' range is substantial. AR025346. This finding in turn supported the conclusion that the gnatcatcher should be viewed as one, well-mixed species without subspecies. *Id*. The data also supported the conclusion that the gnatcatcher's expansion to Southern California is relatively recent. AR025348. For that reason, "it is unlikely that any current isolating barriers (except distance) will result in future genetic division of the northern population," and thus "northern populations do not appear to constitute a unique component of gnatcatcher biodiversity." AR025348-49. The results of the genetic analysis also suggested that "there probably is no general pattern of variation in morphological characters consistent with historical isolation and independent evolution of populations." AR025349. Rather, the "inconsistent patterns of variation among single morphological characters caused

conflicting taxonomic opinions [including Dr. Atwood's] because different authors emphasized different characters." *Id*.

Disagreeing with the study's taxonomic conclusion, the Service in 2011 denied the delisting petition. The agency relied principally on the results of a previously conducted internal review of the 2000 Zink study. *See* AR024367-68. That review advanced two objections. First, the review pointed out that many prior studies had affirmed the gnatcatcher's subspecies status, AR016261-62, a critique consistent with the Service's adherence to the argument-by-popularity, *see* AR024037. Second, the review declared that mitochondrial DNA analysis is, standing alone, insufficient to overturn an existing subspecies classification, AR016261-62, a view somewhat stronger than the agency's previously expressed position that the "traditional" (but presumably not the exclusively valid) approach to avian taxonomy has focused on morphological characters "irrespective of whether these differences have a demonstrated genetic origin." AR024010. Although the Service's 2011 denial acknowledges that Dr. Zink's work created "uncertainty in the subspecies status of the coastal California gnatcatcher," AR024367, the denial appears to affirm the conclusion of the agency's internal review panel "that further decision on the status of the taxon should wait for analyses of a variety of morphological, genetic (including nuclear and mtDNA),

and behavioral evidence."[4] AR024368. Other than this passing reference to a possible evidentiary standard—a standard notably broader than that employed by the Service in the original listing, which was based on morphological data alone, *see* AR024009-10—the Service provided no rule for advising the public and reviewing courts, or for guiding its own decision-making, as to *what* such analyses would have to show to confirm or disprove the gnatcatcher's subspecies status. Instead, the agency merely declared its continued allegiance to the "recognition of the coastal California gnatcatcher as a distinct taxon."[5] AR024369.

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[4] That conclusion is consistent with the Service's 2010 status review of the gnatcatcher. AR024314-64. *Cf.* 16 U.S.C. § 1533(c)(2) (requiring the review of listed species every five years). The status review acknowledged that Dr. Zink's mitochondrial DNA study substantiated "a general concern that subspecies defined by morphological variations may not reflect underlying genetic structure and phylogenies," but nevertheless held firm to "previous and subsequent morphological work" which purported to demonstrate the gnatcatcher's "distinctiveness." AR024318. As with the Service's other gnatcatcher pronouncements, the status review articulates no standard for determining or disproving subspecies status. Rather, the status review simply allows that the Service "will consider any new scientific information, including published taxonomic revisions." AR024319.

[5] Naturally, what is distinct to one scientist (or agency official), is not necessarily distinct to another. AR024367 (noting the views of some public commenters that the gnatcatcher's subspecies designation is purportedly supported by "100 years of previously published taxonomic treatments recognizing morphological distinctiveness to *varying* degrees") (emphasis added). Of the value of such "historic" taxonomic studies, *see* AR023735 (Remsen 2010) (observing that "the majority of subspecies were described in a prestatistical era," and thus "the chances that any of these classifications would not require modification after a modern reanalysis are also minute"). *Cf.* AR017521 (Science Workshop Panelist #6 Memo) (noting that "rigorous statistical analysis of morphological clines (and the

Taking a cue from the Service's 2011 petition denial, in 2013 another research team headed by Dr. Zink published a new, nuclear DNA analysis of the gnatcatcher. AR025356-65 (Zink *et al*. 2013). This study analyzed eight genetic markers of over 40 specimens collected from throughout the gnatcatcher species' range. *See* AR025357. The study's results were consistent with the mitochondrial DNA analysis. Nucleotide diversity did not differ across sampled localities, and the level of genetic divergence among them was negligible. AR025360. Moreover, "no geographic groupings that corresponded with any previously suggested subspecies, [or] any other significant evolutionary divisions" were found. *Id*. To be sure, owing to the "lag time inherent in all molecular markers," mitochondrial and nuclear DNA studies might miss "recent geographic isolation" between populations that could indicate "evolutionarily significant morphological units." AR025362. But that likely would not be true with respect to the gnatcatcher's genetic studies, "which suggest[ ] that the [bird's] subspecies [designations] were arbitrary divisions of idiosyncratic morphological gradients, and not equivalent to discrete evolutionary (listable) entities." AR025363. Thus, the study's nuclear DNA analysis confirmed what the mitochondrial DNA study already had

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presence or absence of abrupt breaks) is [still] needed for all traits proposed to vary among [California gnatcatcher] subspecies").

shown—namely, "no evolutionarily significant divisions exist within the species." AR025361.

In 2014, relying on Dr. Zink's nuclear DNA study, a new coalition of interested parties submitted to the Service a renewed delisting petition, contending that the 2013 Zink study constitutes the best available data on the gnatcatcher's taxonomy. *See* AR000035-39. *Cf.* 16 U.S.C. § 1533(b)(1)(A) (requiring the Service to use the best available data when making listing determinations). Shortly thereafter, the Service made a positive initial determination. AR016255-58. *Cf.* 16 U.S.C. § 1533(b)(3)(A) (requiring the Service to make an initial finding as to whether a petitioned action "may be warranted").

But in August, 2016, the Service denied the petition. AR002803-26. The Service conceded that "there are no universally agreed-upon criteria for delineating, defining, or diagnosing subspecies boundaries," and that "there is no consensus in the literature for defining subspecies criteria for avian taxa." AR002809. The agency then revealed that, given the lack of taxonomic guidance, it had contracted the prior year with a private firm to conduct a closed-door peer review of the 2013 Zink study and its critics. AR002807. Based largely on the review's critique, the Service rejected the petition's anti-subspecies arguments, on three broad grounds. First, the standard for differentiation in genetic analysis

that the 2013 Zink study used—reciprocal monophyly[6]—is too strict to distinguish subspecies. AR002810. Second, the genetic markers chosen for analysis are not broad enough because they cannot capture recent divergence. AR002811-12. And third, the study relied excessively on genetic data and failed to give sufficient attention to morphological and ecological data. AR002810. Yet, while rejecting the standard for subspecies designation that the delisting petition offered, the Service provided no standard of its own. The agency merely restated its evidentiary preferences, AR002811-12 ("[W]e consider multi-evidence criteria involving multiple lines of genetic, morphological, and ecological scientific data to provide the best approach to determining the taxonomic status of the coastal California gnatcatcher."), and articulated the unexplained conclusion that "the best scientific and commercial information available indicate that the coastal California gnatcatcher is a distinguishable subspecies," AR002813, again without providing any standard for what makes the subspecies "distinguishable" from other gnatcatcher populations. Indeed, the Service went out of its way to underscore the ad hoc—or, less charitably, the unpredictable—nature of its taxonomic decision-making. *See* AR002810 ("We note that our evaluation applies

[6] Reciprocal monophyly occurs when "all individuals in a given group have a common ancestor not shared by any other group, and all individuals in that group should be genetically distinct and distinguishable from members of other populations." AR002810.

specifically to the coastal California gnatcatcher and not to avian subspecies in general. Each possible subspecies has been subject to unique evolutionary forces . . . ; as such, the methods for detecting each will be different."). This lawsuit followed about a year later.

STANDARD OF REVIEW

A motion for summary judgment must be granted when there is no genuine issue of material fact, such that the movant is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(a). When summary judgment is sought in an action that is based on an administrative record, the motion "serves as the mechanism for deciding, as a matter of law, whether the agency action is supported by the administrative record and otherwise consistent with the [Administrative Procedure Act] standard of review." *Alston v. Lew*, 950 F. Supp. 2d 140, 143 (D.D.C. 2013).

Agency decisions made under the Endangered Species Act and governed by an administrative record are reviewed according to the standards of the Administrative Procedure Act. *See Union Neighbors United, Inc. v. Jewell*, 831 F.3d 564, 574 (D.C. Cir. 2016). Under the latter act, a court must set aside agency action that is determined to be, among other things, arbitrary and capricious. *See Safari Club Int'l v. Zinke*, 878 F.3d 316, 325 (D.C. Cir. 2017) (citing 5 U.S.C. § 706(2)(A)). An agency action is arbitrary and capricious if the agency relied on impermissible

factors, failed to consider an important aspect of the problem, offered an unsubstantiated explanation for its decision, or simply failed to draw a rational connection between the facts found and the choice made. *Safari Club Int'l*, 878 F.3d at 325-26 (citing *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43).

Although an agency's reasonable construction of ambiguous language found in a statute that it administers is controlling, *Safari Club Int'l*, 878 F.3d at 326 (citing, inter alia, *Chevron U.S.A. Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 842 (1984), and *United States v. Mead Corp.*, 533 U.S. 218, 226-27, 229 (2001)), no heightened deference is afforded an ad hoc interpretation, one which varies according to agency decision, *Good Samaritan Hosp. v. Shalala*, 508 U.S. 402, 417 (1993).

ARGUMENT

I. The Service unlawfully denied the delisting petition because the agency failed to articulate any standard or definition to explain how to falsify the hypothesis that the gnatcatcher constitutes its own subspecies.

As noted above, the Endangered Species Act authorizes the Service to list "subspecies," 16 U.S.C. § 1532(16), but the Act does not define the term. *See id. See also* Anna L. George & Richard L. Mayden, *Species Concepts and the Endangered Species Act: How a Valid Biological Definition of Species Enhances the Legal Protection of Biodiversity*, 45 Nat. Resources J. 369, 374 (2005) (observing that the Act's

"definition" for species "does not define a species at all" but "merely provides for protection of groups below the species level."). Although existing regulation requires the Service to consult with its own experts and the outside scientific community when making taxonomic decisions, 50 C.F.R. § 424.11(a), that instruction is unavailing here, because there is no generally accepted definition among taxonomists for subspecies, Doremus, *Listing Decisions*, *supra*, at 1100-01 ("Although many biologists use the word subspecies, it carries no similar, generally recognized biological meaning."). Moreover, the Service has no policy or guidance to determine what constitutes a subspecies. *See* AR000829 (Service PowerPoint slide) ("No legal or policy definition of species or subspecies.").

In the Service's denial of the delisting petition, the agency acknowledged the absence of any authoritative subspecies definition. *See* AR002809. And yet, without articulating a definition of its own, the Service proceeded to deny the delisting petition on the ground that reciprocal monophyly—*i.e.*, when two populations are more closely related to a common ancestor than to each other—is not necessary to subspecies designation.[7] AR002810 ("[W]e do not accept that

[7] No doubt the Service's view was influenced by some of Dr. Zink's critics who questioned whether reciprocal monophyly is consistent with any concept of "subspecies," *see*, *e.g.*, AR017496, AR017501 (Science Workshop Panelist #5 Memo), a view notably misinformed, *see* AR023542 (Phillimore & Owens 2006) ("Across all biogeographic realms, and including both continental and island-dwelling taxa, a total of 94 (36%) of these [avian] subspecies exhibited monophyly.").

reciprocal monophyly is an appropriate criterion for distinguishing subspecies of avian taxa in the case of the coastal California gnatcatcher.").

The Service's denial is arbitrary and capricious. It is illogical, as well as unfair to the regulated public, for the Service to reject a standard for subspecies classification unless it articulates what *does* in fact constitute a valid subspecies. *See Trafalgar Cap. Assocs., Inc. v. Cuomo*, 159 F.3d 21, 34 n.11 (1st Cir. 1998) (an "ad-hoc standardless determination . . . is likely to be arbitrary and capricious"); AR011222 (Patten 2015) ("It is incumbent on any scientist, no matter the field of inquiry, to adhere to (or at least specify) definitions."). *Cf. Mass. ex rel. Div. of Marine Fisheries v. Daley*, 170 F.3d 23, 30 (1st Cir. 1999) ("If no one propose[s] anything better, then what is available is the best."); *Kunkel v. Comm'r*, 821 F.3d 908, 910 (7th Cir. 2016) ("[Y]ou can't beat something with nothing."). Here, the Service rejected the delisting petition without providing any standard for what would have to be shown to disprove the gnatcatcher's subspecies status. If the Service can deny a delisting petition without setting forth a standard, the agency will always be able to insulate its decision-making by keeping the public in the dark as to the relevant goalposts. The agency will also be able to thwart judicial review of its decision-making, as a court will have no yardstick to measure the rationality of the agency's determinations. *See Sierra Club v. Salazar*, 177 F. Supp. 3d 512, 532 (D.D.C. 2016) ("As to transparency, the agency 'must, of course, reveal the reasoning that

underlies its conclusion' [and] 'give the court the rationale underlying the importance of factual distinctions as well as the factual distinctions themselves.'" (quoting respectively *Transcon. Gas. Pipe Line Corp. v. FERC*, 54 F.3d 893, 898 (D.C. Cir. 1995), and *San Luis Obispo Mothers for Peace v. U.S. Nuclear Reg. Comm'n*, 789 F.2d 26, 48 (D.C. Cir. 1986))).

Such unfettered discretion violates basic principles of agency decision-making. All agencies must articulate a satisfactory *explanation* for their actions. *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43. Consequently, the Service may not inexplicably move the goalposts of its decision-making during the course of rule-making, much less fail altogether to set up the goalposts. *See Qwest Corp.*, 689 F.3d at 1228 (citing various authorities). In denying the delisting petition, the Service asserted what it considers to be the relevant *types of data* for making a taxonomic determination. AR002811-12 ("[W]e consider multi-evidence criteria involving multiple lines of genetic, morphological, and ecological scientific data to provide the best approach to determining the taxonomic status of the coastal California gnatcatcher.").[8] *See* AR000830 (Service PowerPoint slide) ("Service follows an

[8] Even that concession provides little guidance. Are the multiple types of evidence equal, or are some preferable to others? *Compare* AR017476 (Science Workshop Panelist #2 Memo) (advocating for a multi-evidence approach without ranking) *with* AR017482 (Science Workshop Panelist #3 Memo) (considering genetic evidence generally to be "subpar").

operational approach and evaluates all data available for listing/delisting as . . . subspecies . . . .") (emphasis removed). The agency also alluded to appropriate *methods* for collecting those data. *See* AR002810 ("[T]he methods for detecting each [subspecies] will be different.").[9] But merely identifying the pertinent evidence and suggesting appropriate methods for collecting that evidence does not define the thing—here, the statutory term "subspecies"—which is to be established by those methods and evidence. Put another way, no one would consider that "eggs, butter, a whisk, and a mixing bowl" is an adequately defined recipe, because these ingredients and tools could just as easily be used for sauce béarnaise as for an omelette. The Service's petition denial suffers from the same informational defect: it gives no explanation for why any of the perceived differences—be they morphological, genetic, or ecological—between the coastal California gnatcatcher and other gnatcatcher populations are significant enough to make the former "a distinguishable subspecies," AR002813.

[9] Again, even this allowance provides little direction. Are certain methods categorically forbidden, or just for certain purposes? *Compare* AR011340 (Zink Comment Letter, March, 2015) (noting that the Service has relied on mitochondrial DNA in over 90 listing determinations, and concluding that the Service's discounting of Zink's mitochondrial DNA study was "cherry-pick[ing]") *with* AR017492 (Science Workshop Panelist #4 Memo) (arguing that, even if the Service has used mtDNA studies only to support subspecies classification, such a practice would not constitute an unfair "double standard" but rather "sound conservation practice rooted in the 'principle of precaution'").

That failure is critical. Even scientists who would support a subspecies designation for the gnatcatcher acknowledge that the differences on which the classification might be based are slight. *See*, *e.g.*, AR017473 (Science Workshop Panelist #1 Memo) (asserting "a subtle . . . difference"); AR017488 (Science Workshop Panelist #4 Memo) (acknowledging that gnatcatcher genetic "divergence is modest"); AR017520 (Science Workshop Panelist #6 Memo) ("[D]ifferences among [gnatcatcher] subspecies appear to be relatively subtle and no amount of additional data collection and analysis will change that basic result."). Mere distinctions among populations, standing alone, are not enough to merit separate classifications for those populations—the perceived differences must be biologically significant. *See* AR017486 (Science Workshop Panelist #4 Memo) ("[N]ot all morphological traits have a genetic basis and geographic variation in avian morphology has also been attributed to phenotypic plasticity and differences in gene expression."); AR017494 (Science Workshop Panelist #5 Memo) (noting the importance of "guard[ing] against recognizing populations that are discrete due to environmentally induced traits"). *Cf.* AR011372 (Zink Comment Letter, June, 2015) ("One can find minor statistically significant differences between a myriad of population groupings."); AR011223 (Patten 2015) ("[S]ome modern methods . . . may yield a surfeit of distinction unsuitable to subspecies diagnosis."); AR010416 (McCormack & Maley 2015) (noting that one could create

a new subspecies within the existing putative gnatcatcher subspecies using "even finer scales" to measure "phenotypic discontinuities"); AR023728 (Remsen 2010) ("Given large enough sample sizes, the means of any two populations likely differ significantly (>95%), even though actual overlap can be nearly complete, and so statistically significant differences in the means alone provide almost no information on how distinctive two populations are in terms of diagnosability, the key theme of the conceptual definitions of subspecies.").

In other words, distinctions must be qualified.[10] Yet, "there is a broad range of possible scenarios in which investigators looking at the same data and results . . . will reach different conclusions" about whether a population qualifies as a subspecies. AR017509 (Science Workshop Panelist #6 Memo). The data do not explain themselves, and so the Service must explain the subspecies criterion which those data purportedly satisfy. Is it the "75% rule" of diagnosability that some of Dr. Zink's critics advanced? *See*, *e.g.*, AR011222 (Patten 2015); AR017482 (Science Workshop Panelist #3 Memo). Or is it the "95% rule" advanced by

[10] Not to qualify them invites an endless (and capricious) subdivision of potentially listable populations. Indeed, Zink *et al*. (2016) shows that, through small sample sizes and a generous measure of statistical significance, one could justify a gnatcatcher subspecies for Los Angeles County and another for Riverside County. AR025370. Moreover, even qualified distinctions must still be *concordant* across characters, otherwise "three characters might show geographic variation, but each character could show three different patterns that would delimit subspecies boundaries in three conflicting ways." AR023729 (Remsen 2010).

another Zink critic? *See* AR023729 (Remsen 2010). Is it an unelaborated preference for "shallow divergences" over "old divergences," AR016285 (Winker Public Comment), or is it an equally unelaborated but easily satisfied standard of population-level statistical significance, *see* AR010414-15 (McCormack & Maley 2015)? What about a standard of "incipient differentiation," AR017473 (Science Workshop Panelist #1), or of "measurably distinguishable genotypes or phenotypes (or both)" indicating "adaptive divergence," AR017475 (Science Workshop Panelist #2 Memo), or a certain "level of agreement among [experts] considering a wide range of information," AR017487 (Science Workshop Panelist #4 Memo)? Should subspecies designations reflect significant units of evolution, as Dr. Zink has advocated, or should they function instead as mere indicators of a species' geographic variation?[11] *See* AR025368 (Zink *et al*. 2016). The regulated public cannot know because the Service has not said.

To be sure, the Service's petition denial does appear to adopt the Science Workshop Panel's principal critique of Dr. Zink's nuclear DNA work—namely, that the genetic markers chosen were not appropriate "for the time scale of likely divergence." AR002811. *See* AR001043 (Service biologist internal critique of Zink

[11] Focusing protection efforts on the latter would invert reasonable conservation priority, because restoration of monophyletic populations requires more effort than populations that exhibit adaptive divergence alone. *See* AR025266-67 (Zink 2004).

et al. (2013) and Zink *et al*. *in litt*. (2016)) ("The question here concerns a shorter timeframe that these markers are likely to address."); AR017381 (Service summary of Science Workshop Panel) ("All panelists noted that any intraspecific divergence in California gnatcatchers would be of recent origin, so neutral genetic variation is likely to have a limited signal with respect to genetic differentiation between subspecies."). But this objection still does not establish a standard.[12] It merely addresses *when* subspecies divergence may occur. It says nothing about *what* makes two populations to be two subspecies. In other words, even assuming that the Service is correct to credit "recent divergence," the Service still has provided no basis for differentiating between (i) recently diverged subspecies and (ii) not yet diverged subspecies.

The Service's failure to articulate such a standard or definition is especially momentous, for several reasons.

First, as noted above, depending on the level of difference or distinction in a character used to distinguish subspecies, one could arbitrarily create any number of overlapping gnatcatcher "subspecies." *See* AR017511 (Science Workshop Panelist #6 Memo) (recognizing the importance of diagnosing an "abrupt

[12] Moreover, the critique fails to acknowledge that "two isolated populations that show adaptive divergence will eventually show reciprocal monophyly." AR017476 (Science Workshop Panelist #1 Memo).

transition in phenotype" in order to "avoid the need to arbitrarily divide continuous clines into an uncertain number of named subspecies"); AR011346 (Zink Comment Letter, March, 2015) ("If the criterion for being a subspecies is to have a significant genetic difference, irrespective of its magnitude (amount of variation explained), it can be observed that there are multiple groupings of samples for each locus that produce the same result."). For example, the Service credited the criticism of McCormack and Maley (2015), AR010414-15, that Dr. Zink's nuclear DNA study does show statistical significance between northern and southern gnatcatchers. AR002811. Yet what the Service did not acknowledge is that, by the same criterion of significance, the gnatcatchers at the very tip of the Baja California peninsula should be combined with the gnatcatchers at the northern end of the bird's range, thereby "creating a leapfrog taxon, which would be inconsistent with traditional taxonomic schemes (including that of Atwood [1991])," on which the original listing is based. AR025370 (Zink *et al*. 2016).

Second, without a standard that can diagnose with a reasonable degree of certitude protected coastal California gnatcatchers from unprotected gnatcatchers, the regulated public will be unable to conform its conduct to the law. *Cf.* AR025371 (Zink *et al*. 2016) (explaining that the McCormack & Maley (2015) standard of statistical significance accurately identifies gnatcatchers at best 26% of the time). To be sure, scientists practicing "pure" taxonomy need not be

so concerned about diagnosability at the individual, as opposed to the population, level. *Cf.* AR023729 (Remsen 2010) (considering various levels of diagnosability from 75% to 100%). But the Service is not an academic body—it must administer a law that imposes significant civil and even criminal penalties on those who violate it. *See* 16 U.S.C. § 1538(a)-(b). Knowing what is and is not regulated—including whether a diminutive songbird pertains to the "coastal California gnatcatcher" or instead to another, unprotected, gnatcatcher subspecies—is essential to the agency's fair implementation of the statute. *Cf. Ramaprakash v. FAA*, 346 F.3d 1121, 1130 (D.C. Cir. 2003) (Roberts, J.) (because "'the tendency of the law must always be to narrow the field of uncertainty,'" an agency's "unexplained departures from precedent" are arbitrary and capricious (quoting O.W. Holmes, *The Common Law* 127 (1881))).

And third, the Service's failure to articulate a subspecies standard or definition radiates uncertainty and invites "ad-hocery" throughout the agency's administration of the Endangered Species Act. The Service itself admonished that the regulated public should not even bother attempting to divine a taxonomic standard based on the agency's gnatcatcher determination—as opaque and obscure as that is—because any such standard would "not [be applicable] to avian subspecies in general," AR002810, much less subspecies as a category. Such unexplained and unprecedented decision-making "invites the charge that caprice

or political pressure, rather than objective, value-neutral standards, drive" the Service's taxonomic decision-making. Doremus, *Listing Decisions*, *supra*, at 1105. That in turn brings the Act itself into disrepute, as the regulated public reasonably begins to believe that the Service is merely practicing "advocacy science." *See generally* Jason Scott Johnston, *Introduction*, in *Institutions and Incentives in Regulatory Science* 1, 3 (Jason Scott Johnston ed., 2012) ("Advocacy science is the practice of culling a complex body of scientific literature for studies or funding new studies that support the decision to regulate . . . ."). Such a charge is dangerously apt when taxonomic decisions are made, as here, without reference to clear definitions. *See* Rob Roy Ramey II, *On the Origin of Specious Species*, in *Institutions and Incentives*, *supra*, at 77, 83 ("If species concepts and definitions can be selected post hoc to fit any set of observations, then just about any group of organisms could potentially qualify (or not qualify) as a species depending on the investigator's whim or regulatory agency's bias."). Sadly, victims of such caprice include not just the mistreated regulated public but also those endangered populations that do not fit the Service's taxonomic standard *du jour*. *See* Berry J. Brosi & Eric G. Biber, *Statistical inference, Type II error, and decision making under the US Endangered Species Act*, 7 Front. Ecol. Environ. 487, 487 (2009) ("Protection of a spurious subspecies (i.e. a population that is not truly biologically distinct from its abundant and widespread conspecifics) takes away resources from other

species, subspecies, or populations that need protection."). Indeed, keeping the public in the dark about just what constitutes a subspecies directly hurts the environmental community as much as property owners beleaguered by spurious-subspecies-precipitated regulation. But these odious consequences of the Service's arbitrary taxonomic decision-making—exemplified by the gnatcatcher's continued listing—can be avoided by forcing the Service to make those judgments according to clear and consistent standards.

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The Service's failure to articulate a standard for falsifying the gnatcatcher subspecies hypothesis effectively reserves to the agency the power to list or delist the gnatcatcher according to whim and fancy. The agency has no such power. *See Pennsylvania v. Surface Transp. Bd.*, 290 F.3d 522, 535 (3d Cir. 2002) ("[A]gencies must apply consistent standards and principles to insure the fairness of the administrative process."). The petition denial should be vacated and the matter remanded to the Service to determine whether, under a clearly articulated and rational standard, the gnatcatcher should no longer be recognized as a separate subspecies and thus whether the Service should initiate rule-making to delist the bird.

II. The Service violated the Federal Advisory Committee Act by convening a private science review panel, and then relying heavily on the panel's recommendations to deny the delisting petition.

In denying the delisting petition, the Service drew largely on the input of the Science Workshop Panel, which the agency had convened in response to "the diverse and conflicting information submitted by the public and members of the scientific community in response to" the agency's initial determination that the gnatcatcher's delisting may be warranted. AR002807. Yet the Service gave no formal public notice of its intent to convene such a panel.[13] Fed. Def. Ans. ¶ 63. Neither did it allow the public to participate in the panel's deliberations. *See id*.

These (as well as other) failures to facilitate public involvement in the panel's work run afoul of the Federal Advisory Committee Act. Designed "to enhance the public accountability of advisory committees established by the Executive Branch," *Pub. Citizen v. U.S. Dep't of Justice*, 491 U.S. 440, 459 (1989), the Act mandates that, among other things, advisory committees provide notice of their meetings in the Federal Register, as well as give the public the opportunity

[13] By mid-2015, the Service had produced a "script" to provide in response to media and other inquiries about the status of the agency's review. *See* AR000358-59, AR000362-63. This script contained a brief reference to the anticipated convening of the Science Workshop Panel and its production of a summary report. AR000359. A version of this script was provided to Plaintiffs' counsel in February, 2016, several months after the Science Workshop Panel had completed its work. *See* AR000737-38.

to attend and to submit testimony. 5 U.S.C. App. 1, § 10(a)(1)-(3). *See Public Citizen v. Nat'l Econ. Comm'n*, 703 F. Supp. 113, 129 (D.D.C. 1989) ("Congress expressly protected [the] right to view the advisory committee's discussion of policy matters in public and the right to confront, through observation, the decision-making process as it occurs . . . ."). An agency-authorized group qualifies as an "advisory committee" subject to the Act if it (i) is "established" or "utilized" by a federal agency, (ii) provides advice or recommendations to the agency, and (iii) has an organized structure and membership guided by a specific purpose. *See* 5 U.S.C. App. 1, § 3(2)(C). *See also Byrd v. U.S. EPA*, 174 F.3d 239, 245 (D.C. Cir. 1999); *Ass'n of Am. Physicians and Surgeons, Inc. v. Clinton*, 997 F.2d 898, 914 (D.C. Cir. 1993). For a number of reasons, the Service's Science Workshop Panel falls within the Act's ambit. *See generally* Gregory Morrison, Essay, *Science in the Modern Administrative State: Examining Peer Review Panels and the Federal Advisory Committee Act*, 82 Geo. Wash. L. Rev. 1654, 1663 (2014) ("Because of [the Federal Advisory Committee Act's] broad definition of 'advisory committee,' scientific peer review panels at many agencies are often ensnared by the Act's requirements.").

First, the Service "established" the Science Workshop Panel. The Service itself—not an outside group—conceived the idea to use an outside expert panel. *See* AR000205 (Service Project Plan noting that, "[i]n order to determine whether delisting the coastal California gnatcatcher is warranted or not based on taxonomy

and/or genetics, *we will convene a panel of experts* to evaluate . . . new scientific information") (emphasis added). The Service itself—not an outside group—drafted the statement of work providing the panel's charter, the required qualifications of the panelists, and the key taxonomic question that the panelists would be asked to answer, AR011613-17, as well as revised the outside contractor's proposal (and draft panel agenda) to conform better to the agency's expectations, AR011800-02; AR011903, AR012303. The Service itself—not an outside group—provided the panel its library of materials, AR014437-AR016376, including specially prepared, agency-authored summaries of key issues, AR017376. Indeed, not only did the panelists convene in a room within the Service's Carlsbad, California office, *id*., agency officials directly communicated with them regarding the morphological data supporting the gnatcatcher's subspecies designation, AR017381, a discussion apparently so persuasive that after it "the panel members determined it was unnecessary to reexamine data." AR017381. And for good measure—the Service reviewed and substantially edited the panel's summary report. *See* AR013036-37; AR013244-63; AR013564-84.

That these "establishing" activities[14] were done indirectly through a contract with a private consulting firm, AR017375, rather than directly by the

[14] These activities demonstrate as well that the Service "utilized" the panel—thus also triggering the Act—by "exercis[ing] actual management or control over its

Service, should not preclude the Act's application.[15] *Cf. Public Citizen*, 491 U.S. at 462 (observing that the Act "applies to advisory committees established by the Federal Government in a generous sense of that term, encompassing groups formed indirectly"). The panel's report played a critical role in the Service's decision-making. AR000591 (Service PowerPoint slide for the December, 2015,

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operation," 41 C.F.R. § 102-3.25. Although "utiliz[ation]" is a "stringent standard," *Wash. Legal Found. v. U.S. Sentencing Comm'n*, 17 F.3d 1446, 1450 (D.C. Cir. 1994), it is satisfied here, given that the Service (i) created the panel's charter, (ii) set the panelists' required qualifications, (iii) identified the precise issues to be addressed by the panel as well as reviewed and edited the panel's agenda and final summary report, and (iv) convinced the panelists not to re-analyze other issues. *Cf. Food Chem. News v. Young*, 900 F.2d 328, 333 (D.C. Cir. 1990) (finding no triggering utilization where the agency did not propose the panel, select its members, set the panel's agenda, schedule its meetings, or otherwise review the panel's work).

[15] In *Byrd v. U.S. EPA*, 174 F.3d 239 (D.C. Cir. 1999), a divided panel of the D.C. Circuit held that an agency does not "establish" an advisory committee so long as the agency does not directly select its members but instead uses an outside contractor for that purpose. *Id.* at 246-47. *See Judicial Watch, Inc. v. U.S. Dep't of Commerce*, 736 F. Supp. 2d 24, 32-33 (D.D.C. 2010). The majority in *Byrd* acknowledged, however, that the mere fact of using an outside contractor does not necessarily avoid the Act's application. *See Byrd*, 174 F.3d at 247 (noting that EPA's agreement with the outside contractor gave the agency "significant potential authority in the panel selection process," and that "[t]he result in this case might have been different if EPA had exercised its authority"). Plaintiffs believe that the evidence discussed in the text demonstrates the exercise of such significant authority over the nature, scope, and direction of the panel that the rule of *Byrd* is inapt. But if the Court believes that *Byrd* controls, Plaintiffs hereby preserve this issue for en banc circuit or Supreme Court review. *See* Allyson Barker, *et al.*, *The Role of Collaborative Groups in Federal Land and Resource Management: A Legal Analysis*, 23 J. Land Resources & Envtl. L. 67, 115-17, 120 (2003) (noting a conflict between the D.C. and Eleventh Circuits in what qualifies as "established" and concluding that "the 'establishment' of a collaborative group under [the Act] could largely depend on the circuit where the case is tried").

Recommendation Team Meeting, indicating that the subspecies determination would be based on "Input from Science Panelists"); AR001229 (Service PowerPoint slide for the March, 2016, Recommendation Team Meeting, noting the same); AR001400 (email from Service's Regional Listing Biologist to other Service officials identifying the "scientific panel report" as among the "key supporting documents" that should be posted on regulations.gov); AR002767-68 (Service press release announcing petition denial, which devotes three paragraphs to describe the Science Workshop Panel's input, while briefly noting that "[i]nformation obtained since a 2010 5-Year Review of the subspecies' status was also reviewed"); AR011782 (Service's statement of work for the Science Panel Workshop) ("[The] Service believes that additional information from the Panel will assist us in making an informed determination regarding the systematics of the coastal California gnatcatcher."). Given the longstanding contentiousness over the gnatcatcher's subspecies designation, allowing the public to participate in the key scientific discussions that would form the basis of the Service's delisting decision is precisely what the Act was intended to accomplish. *See* Allyson Barker, *et al*., *The Role of Collaborative Groups in Federal Land and Resource Management: A Legal Analysis*, 23 J. Land Resources & Envtl. L. 67, 108 (2003) ("[The Act] creates a system whereby experts can advise the government in an open and public manner . . . ."). Frustrating the attainment of that goal through the artifice of indirectly exerted

but nevertheless substantial agency control over a committee would elevate form over substance.

Second, the panel qualifies as an advisory committee under the Act because, as the preceding paragraph demonstrates, the Service expected the panel to provide—and the panel in turn did provide—key advice on how to address the taxonomic issues raised by the delisting petition.[16] To be sure, it is not enough that an advisory committee give advice; the committee must also provide advice "directed to governmental policy." *Judicial Watch, Inc. v. Clinton*, 76 F.3d 1232, 1233 (D.C. Cir. 1996). In other words, if the advice to be given pertains to a question for which there is an "objective answer," then the Act does not apply. *Id*. at 1234. Arguably, many scientific questions that the Service must answer in administering the Endangered Species Act may be subject to the Act's "objective answer" exception. For example, whether the coastal California gnatcatcher exhibits reciprocal monophyly is a purely scientific question that can be easily determined according to objectively produced data. *See* AR017476 (Science Workshop Panelist #1 Memo). But the central question that the panel here was asked to answer—is the coastal California gnatcatcher a separate subspecies?,

[16] For that reason, the case law's exception for the "use of a committee's work product [that] is 'subsequent and optional' in relation to the use by a non-Executive Branch entity," *Cal. Forestry Ass'n v. U.S. Forest Serv.*, 102 F.3d 609, 612 (D.C. Cir. 1996), does not apply here.

AR000205—*is* a matter of policy, precisely because there is no commonly accepted definition of subspecies. AR002809. In other words, for the panel to provide the advice that was solicited, the panelists necessarily had to select a standard for subspecies diagnosis, *see id*., and that selection process necessarily turned upon a value-choice rooted in conservation policy, *see* AR025266-67 (Zink 2004). *See also* Doremus, *Listing Decisions*, *supra*, at 1098 ("The choice of a particular species concept inevitably reflects particular ends, not the kind of value-neutral fact discovery process popularly associated with the term 'scientific.'"). *See generally* AR011385 (Service's information quality and peer review guidelines) (explaining that reliance on a science peer review panel would violate the Act if the panel were to "comment on any aspect of policy or decision-making").

Third, the Science Panel Workshop "in large measure [had] an organized structure, a fixed membership, and a specific purpose," rather than consisting of "a collection of individuals who do not significantly interact with each other." *Ass'n of Am. Physicians & Surgeons*, 997 F.2d at 914-15. As discussed above, the panel's charter, scope of work, agenda, materials, membership, and term of existence were all precisely determined. Moreover, the panel met and discussed as a group, and the Service repeatedly used its work as a group product. *See*, *e.g*., AR002807-08 (listing five "[k]ey" points agreed to by all panelists).

In summary, the Science Panel Workshop satisfies all three elements of an advisory committee: (i) government establishment or utilization, (ii) to give policy recommendations, (iii) as a part of an organized group effort. Therefore, the Service's failure to abide by the Act's requirements for such an advisory committee—in particular the mandates to provide formal notice and an opportunity for the public to participate in the committee's work—violated the Act and therefore vitiates the Service's petition denial.

To be sure, courts typically have been reluctant to set aside a completed agency action that relied upon a committee report produced in violation of the Act. *See, e.g.*, *Idaho Farm Bureau Fed'n v. Babbitt*, 900 F. Supp. 1349 (D. Idaho 1995); *Seattle Audubon Soc'y v. Lyons*, 871 F. Supp. 1291, 1309 (W.D. Wash. 1994), *aff'd sub nom. Seattle Audubon Soc'y v. Moseley*, 80 F.3d 1401 (9th Cir. 1996). But these decisions turn on the finding that the public had adequate opportunity to comment on the pertinent advisory committee report and thereby had the ability to mitigate or eliminate the informational harm caused by noncompliance with the Act. *See Idaho Farm Bureau Fed'n*, 900 F. Supp. at 1366-67 (plaintiffs' consultant participated in the advisory committee meeting and commented upon an early draft of the challenged report); *Seattle Audubon Soc'y*, 871 F. Supp. at 1310 (the challenged report was made available for public comment). *See also Ctr. for Auto Safety v. Tiemann*, 414 F. Supp. 215, 226 (D.D.C. 1976) (plaintiff was able to comment on the challenged

report during the administrative process); *Tucson Rod & Gun Club v. McGee*, 25 F. Supp. 2d 1025, 1030 (D. Ariz. 1998) (same). *Cf. Alabama-Tombigbee Rivers Coal. v. Dep't of Interior*, 26 F.3d 1103, 1106 (11th Cir. 1994) ("If public commentary is limited to retrospective scrutiny, the Act is rendered meaningless.").

Here, however, the public had no meaningful opportunity to comment on, and to rebut, the panel's work or the Service's reliance thereon. As far as Plaintiffs are aware and the record reveals, the panel's report was not made publicly available until the Service announced its denial of the delisting petition. *See* AR002200 (July, 2016, email from Service's Regional Listing Biologist to an official within the Service's electronic records management division, forwarding the final report (among other documents) and stating that the attached documents "will need to be posted on regs.gov once the [not warranted] rule is published"). Indeed, for a time the report was not even generally available *within* the Service. *See* AR013876 (November, 2015, email from Service biologist to gnatcatcher team distributing the final report while cautioning: "**Please do not distribute this document outside of the Core Team at the present time**.") (emphasis in original).

Vacating the petition denial pending full compliance with the Act would be a particularly appropriate remedy, given that the Service initially considered arranging a *public* science workshop, AR011598 (Brosnan Center proposal), but then inexplicably chose to conduct a closed-door review of Dr. Zink's work, and

gave neither Dr. Zink nor any other member of the public the opportunity to weigh in. *Cf. Cal. Forestry Ass'n*, 102 F.3d at 614 ("The need for injunctive relief may be reduced where . . . there has been at least some attempt to ensure public accountability."). Further, setting aside the delisting denial and remanding the matter to the Service to re-open the panel would give Dr. Zink, for example, an opportunity to present his 2016 study—which was not available to the panel—and to explain why the critiques of his work—which were available to the panel—should not be credited. *Cf. Am. Petrol. Inst. v. Costle*, 665 F.2d 1176, 1190 (D.C. Cir. 1981) (declining to invalidate rule based on a report produced in violation of the Act because of the substantial likelihood that the rule would have been the same without the report). Finally, vacating the petition denial would avoid rendering the Act a nullity, for here the public had no opportunity to vindicate its participatory rights under the Act before the Service's reliance on the panel's recommendations. *See Cal. Forestry Ass'n*, 102 F.3d at 614 ("[A]n injunction might be appropriate . . . if the unavailability of an injunctive remedy would effectively render [the Act] a nullity.").

CONCLUSION

"Given that the coastal California Gnatcatcher lacks morphological, genetic, and ecological significance, it becomes difficult to justify its listing." AR025363 (Zink *et al*. 2013). The Service's denial of the delisting petition, which adopts a contrary conclusion but without explaining why, cannot be reconciled with basic norms of administrative decision-making. Moreover, the Service's failure to provide the public formal notice of the panel's convening or an opportunity to observe and participate in the panel's work, in light of the agency's heavy reliance on the science panel's findings, violates the Federal Advisory Committee Act and independently invalidates the petition denial. Therefore, the denial should be set aside.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on June 22, 2018, I electronically filed the foregoing with the Clerk of the Court for the United States District Court for the District of Columbia by using the CM/ECF system, which will serve a copy of the same on the counsel of record.

s/ Damien M. Schiff
DAMIEN M. SCHIFF