



July 15, 2019

Don Morgan, Chief
Branch of Delisting and Foreign Species, Ecological Services
U.S. Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3803

RE: Proposed Rule; Removing the Gray Wolf (*Canis lupus*) from the List of Endangered and Threatened Wildlife

Dear Mr. Morgan:

Defenders of Wildlife (“Defenders”) and the Sierra Club, on behalf of over 5 million members and supporters, submit the following comments on the U.S. Fish and Wildlife Service’s (“FWS” or “the Service”) Proposed Rule Removing the Gray Wolf (*Canis lupus*) from the List of Endangered and Threatened Wildlife, 84 Fed. Reg. 9648 (Mar. 15, 2019) (“Proposed Rule”).

Defenders advocates for restoration of wolf populations to ecologically and evolutionarily effective levels and distribution so that they may fulfill their natural keystone role of ecosystem regulation, supporting the diversity and health of native flora and fauna. Defenders strongly supports expanding existing wolf populations in the northern Rockies and Great Lakes regions and restoring viable populations of gray wolves in suitable areas across the United States, including the Northeast, Pacific Northwest, southern Rockies and Southwest.

Over the last four decades, Defenders has played a leading role in the recovery of wolves across the country. Defenders supported the Service’s decision to list gray wolves as a single species under the Endangered Species Act (“ESA”) in 1978. We assisted with the restoration of gray wolves to the Rocky Mountains region and the desert southwest in the 1990s, and hosted training workshops and annual interagency wolf management conferences for state, tribal and federal agencies in that region from 1999 to 2013.

In 1998, we created the Defenders of Wildlife Proactive Carnivore Conservation Fund, which assists ranchers and farmers with nonlethal, proactive information and methods that help reduce or prevent livestock losses to wolves. These methods include sharing the cost of range riders, livestock guarding dogs, predator deterrent fencing, alternative grazing, and more.

Sierra Club is dedicated to exploring, enjoying, and protecting the wild places of the Earth; to practicing and promoting the responsible use of the Earth's resources and ecosystems; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. One of the Sierra Club's main national initiatives, the Our Wild America campaign, tackles pressing environmental problems, including threats to wildlife. Sierra Club has long advocated for protections for the gray wolf and has litigated in the past to ensure the protections provided by the ESA are not stripped unlawfully.

I. INTRODUCTION

The gray wolf (*Canis lupus*) is the largest wild member of the *Canidae*, or dog family. Historically, gray wolves were the nation's most common large carnivore, with a historic range generally thought to include nearly all of North America. Wolves numbered approximately 2 million prior to European settlement in North America. Due to habitat loss and widespread killing by humans, by the 1950s gray wolves had nearly been extirpated from the wild in the contiguous 48 States except for a small population in northeastern Minnesota and on Isle Royale, Michigan.

Federal legal protection for gray wolves began as early as 1967 under the Endangered Species Preservation Act of 1966. At that time, the subspecies *C. l. lycaon* or Eastern Timber Wolf was listed, 32 Fed. Reg. 4001 (Mar. 11, 1967), followed in 1973 by *C. l. irremotus* in the northern Rocky Mountains, 38 Fed. Reg. 14,678 (June 4, 1973). In January 1974, these subspecies were listed under the Endangered Species Act of 1973, 16 U.S.C. §§ 1531-1544. 39 Fed. Reg. 1171 (January 4, 1974). In 1976, the Service listed an additional two subspecies as endangered under the Act: *C. l. baileyi* in the southwestern United States, 41 Fed. Reg. 17736 (Apr. 28, 1976) and *C. l. monstrabilis* in Texas and Mexico, 41 Fed. Reg. 24,061 (June 14, 1976). In 1978, the Service reclassified gray wolves as endangered at the species level, *C. lupus*, throughout the contiguous United States, except for the Minnesota population, which was listed as a threatened species. 43 Fed. Reg. 9607 (Mar. 9, 1978). In 2015, the Mexican gray wolf was listed separately as an endangered subspecies. 80 Fed. Reg. 2488 (Jan. 16, 2015).

The Service established three recovery areas for the gray wolf: the northern Rocky Mountains, the western Great Lakes and the Southwest, and developed recovery plans for each to prioritize recovery criteria and actions given local conditions. In 1994, the Service designated the Yellowstone Experimental Population Area, 59 Fed. Reg. 60,252 (Nov. 22, 1994), and the Central Idaho Experimental Population Area, 59 Fed. Reg. 60,266 (Nov. 22, 1994), to allow for limited reintroductions of "nonessential experimental populations" of gray wolves under section 10(j) of the ESA. Subsequently, 66 wolves were introduced to these areas between 1995 and 1996. In 1998, the FWS designated the Mexican Gray Wolf Experimental Population

Area. 63 Fed. Reg. 1752 (Jan. 12, 1998). Currently, the gray wolf is listed as a threatened species in Minnesota and as an endangered species everywhere else throughout its historic range in the lower 48 states, except for Idaho, Montana, Wyoming and the eastern portions of Washington and Oregon. The Mexican gray wolf remains listed as an endangered subspecies.

Since the gray wolf first received federal protection in 1967, the number of wolves in the wild in the contiguous U.S. has grown to several thousand concentrated in the western Great Lakes and northern Rocky Mountains. Despite this progress, the gray wolf exists on a fraction of its historic range and at population numbers well below historical levels. The gray wolf remains unrecovered in significant areas where it had been extirpated, including areas where the species has been federally-protected for more than 50 years and that contain unique ecosystems and habitat types that could support robust wolf populations, including the southern Rocky Mountains, Pacific Northwest and Northeast. Although a great deal of progress has been made towards recovering wolves in the lower 48 states, the job is incomplete. Restoring wolves to these other ecosystems would more faithfully align with Congress's intent, reestablish the species' ecological role and ensure that gray wolves are adequately represented and recovered throughout the lower 48 states.

Unfortunately, the Service's Proposed Rule would effectively write-off these areas by eliminating ESA protections for gray wolves everywhere in the lower 48 states, except for the subspecies Mexican gray wolf. As discussed in greater detail below, the Proposed Rule, like virtually every FWS action to reduce or eliminate legal protections for wolves in the lower 48 states for the past nearly 20 years, violates the ESA, and is arbitrary and capricious.¹

II. DISCUSSION

The Service's Proposed Rule writes off gray wolves outside of the Great Lakes states by ignoring the suitable wolf habitat in the southern Rockies and Northeast altogether and dismissing the gray wolf populations in the Pacific Northwest as unimportant to wolf recovery. This approach violates the ESA and is otherwise arbitrary and capricious in multiple ways. First, the Service's "significant portion of its range" ("SPR") analysis is fatally flawed because it ignores major geographical areas in which the gray wolf is no longer viable but once was. Second, the Service's SPR analysis violates the ESA's statutory language and well-established case law. Third, the Service relies on a definition of "range" in addressing whether wolves are threatened

¹ See Humane Society of the U.S. v. Zinke, 865 F.3d 585 (D.C. Cir. 2017) ("Humane Society"); Defenders of Wildlife v. Salazar, 729 F. Supp. 2d 1207 (D. Mont. 2010); Humane Society of the U.S. v. Salazar, 1:09-CV-1092-PLF (D.D.C. 2009); Defenders of Wildlife v. Hall, 565 F. Supp. 2d 1160 (D. Mont. 2008); Humane Society of the U.S. v. Kempthorne, 579 F. Supp. 2d 7 (D.D.C. 2008); Defenders of Wildlife v. Secretary, U.S. Dep't of the Interior, 354 F. Supp. 2d 1156 (D. Or. 2005); National Wildlife Fed'n v. Norton, 386 F. Supp. 2d 553 (D. Vt. 2005).

or endangered in a significant portion of its range that is arbitrary and capricious. Fourth, the Service's failure to assess the status of the entire lower-48 listed wolf entity violates the ESA and several court decisions. Finally, the Service's rejection of potential Distinct Population Segments ("DPSs") based on a lack of "discreteness" from Canada and the northern Rocky Mountains is arbitrary and capricious.

A. The FWS's SPR Analysis Violates the ESA and is Arbitrary and Capricious

1. FWS arbitrarily failed to analyze significant portions of the gray wolf's range

The ESA requires the Service to determine if a species is endangered or threatened in "all or a significant portion of its range." 16 U.S.C. § 1532(6), (20). In perhaps the seminal case interpreting the term "significant portion of its range," the 9th Circuit ruled that "a species can be extinct 'throughout . . . a significant portion of its range' if there are major geographical areas in which it is no longer viable but once was." Defenders of Wildlife v. Norton, 258 F.3d 1136, 1145 (9th Cir. 2001); see Ctr. for Biological Diversity v. Zinke, 900 F.3d 1053, 1065 (9th Cir. 2018) (reaffirming the principle in Defenders of Wildlife v. Norton that a species can be threatened or endangered in significant portions of its range if there are major geographical areas in which it is no longer viable but once was). In that case, the Service had suggested an interpretation of SPR that would make a species eligible for protection under the ESA if it "faces threats in enough key portions of its range that the *entire species* is in danger of extinction or will be within the foreseeable future." Defenders of Wildlife v. Norton, 258 F.3d at 1141 (emphasis in original). As the court pointed out, however, if "the effect of extinction throughout 'a significant portion of its range' is the threat of extinction everywhere, then the threat of extinction throughout 'a significant portion of its range' is equivalent to the threat of extinction throughout all its range." Id. (emphasis in original). In other words, the court held that the government's definition conflated the standard for listing a species based on the threat of extinction in just a SPR with the threat of extinction throughout its entire range. In so doing, the government's approach rendered SPR superfluous and violated the rule of statutory construction requiring that effect be given to all a statute's provisions.

The court explained further that where "it is on the record apparent that the area in which [a species] is expected to survive is much smaller than its historical range, the Secretary must at least explain her conclusion that the area in which the species can no longer live is not a 'significant portion of its range.'" Id. at 1145. Here, FWS failed its threshold duty to analyze why vast portions of the gray wolf's historic range in which the species is no longer present but once was, including the northeast and southern Rocky Mountains, are not significant portions of the species' range. As the 9th Circuit made clear, the Service has a duty to analyze whether portions of a species' lost historical range are significant. Here, the Service failed to complete this analysis with respect to two regions of the species' historic range that once supported viable wolf populations – the southern Rocky Mountains and northeast – and which could do so again.

There is ample scientific reason for the Service to consider these regions. In his peer review of the Proposed Rule, expert Dr. Carlos Carroll states, “For those regions (Colorado/Utah, the northeastern US) where breeding pairs or packs are not yet documented, but multiple exploratory dispersals have been recorded, the ESA’s mandate for ‘institutionalized caution’ towards preventing extinction would suggest in-depth consideration and potentially inclusion within the definition of ‘range.’”² Based on his own research, Dr. Carroll explains, “Habitat modeling has suggested that Colorado alone could support a population of over 1000 wolves, which would constitute the second or third largest state wolf population in the contiguous US, and thus a ‘core’ population for sustaining the species’ viability.”³ Further, the Colorado/Utah region, as previously recognized by the Service, is a “key location connecting northern gray wolves with southwestern wolf populations.”⁴ Such north-south connectivity is a “positive factor due to its potential to ... enhance adaptive potential” and “is also likely to be important in facilitating range shifts under climate change, thus increasing resiliency .”⁵ Dr. Carroll states, “Both the Colorado/Utah region and the northeastern US hold areas of suitable habitat which may merit significance due to their unique ecological setting and the fact that loss of the population would result in a significant gap in the range of the taxon.”⁶ Peer reviewer Dr. Adrian Treves also found that the Proposed Rule lacked any “reasoned analysis about dispersers” and failed to evaluate presently “vacant habitat,” despite the potential to do so based on information about allied species.⁷ Further, as discussed in more detail below, peer

² Summary Report of Independent Peer Reviews for the U.S. Fish and Wildlife Service Gray Wolf Delisting Review (May 2019), Appendix C, Peer Review of USFWS’s Draft Biological Report and Proposed Delisting Rule by Dr. Charles (Carlos) Carroll, at 20 (hereafter “Carroll Peer Review”).

³ Carroll Peer Review at 19 (citing Carlos Carroll, et al., *Defining Recovery Goals and Strategies for Endangered Species: The Wolf as a Case Study*, 56 *Bioscience*, 25-37 (2006)).

⁴ Id. (discussing the Structured Decision Making (“SDM”) process to develop a National Wolf Strategy initiated by FWS in 2008); see also id. at 14 (contrasting FWS evaluation of Colorado/Utah and northeast in SDM process with failure to analyze in Proposed Rule). Peer reviewers also pointed out omissions in the Service’s discussion of wolf presence in the northeast. See id. at 4 (“This omits mention of the fact that dispersal of wolves (not wolf-coyote hybrids) from Quebec to the northeastern US has been documented since 2004 (Villemure & Jolicoeur 2004).”); Summary Report of Independent Peer Reviews for the U.S. Fish and Wildlife Service Gray Wolf Delisting Review (May 2019), Appendix C, Peer Review of USFWS’s Draft Biological Report and Proposed Delisting Rule by Adrian P. Wydeven, at 6 (“In the Northeast lone gray wolves were also found dead in New York and Vermont [...] Kays and Feranec (2011) verified that wild gray wolves had been killed in New York (1) and Vermont (2) in 1990s and early 2000s.”).

⁵ Id. at 19–20.

⁶ Id. at 20.

⁷ Summary Report of Independent Peer Reviews for the U.S. Fish and Wildlife Service Gray Wolf Delisting Review (May 2019), Appendix C, Peer Review of USFWS’s Draft Biological

reviewer Dr. Daniel MacNulty found that it would have been “more logical” for the Proposed Rule to include areas of past dispersal within the analysis of the current range.⁸ Peer reviewers also pointed out that the Proposed Rule is not even internally consistent in terms of its treatment of unoccupied suitable habitat.⁹ The peer reviews make clear that omission of any analysis of these regions of substantial suitable habitat, where dispersals have occurred, cannot be justified.

The failure to complete this legally required analysis appears to be the result of the Service’s conclusion that the only significant portion of the gray wolf’s range in the lower 48 states is the combined three Great Lakes states. This conclusion is also contrary to the ESA and well-established case law.

2. The Service’s Determination that the Viability of the Great Lakes Wolf Population Renders All Other Portions of the Wolf’s Range Insignificant Violates the ESA and is Arbitrary and Capricious

The Service’s SPR analysis is unlawful also because it relies on the viability of a single core population in the Great Lakes to find that all other portions of the wolf’s range are insignificant to the species’ recovery under the ESA. In 2014 the Service and the National Marine Fisheries Service published their Final Policy on Interpretation of the Phrase “Significant Portion of its Range” in the Endangered Species Act’s Definitions of “Endangered Species” and “Threatened Species.” (“SPR Policy”). 79 Fed. Reg. 37,578 (July 1, 2014). As the Service notes in its proposed rule, the agency’s definition of “significant” in its policy interpreting “significant portion of its range” has been invalidated. Proposed Rule at 9684; Desert Survivors v. U.S. Dep’t of the Interior, 321 F. Supp. 3d 1011, 1074 (N.D. Cal. 2018) (holding that “the definition of ‘significant’ in the SPR Policy is an impermissible interpretation of the ‘significant portion of its range’ language in the ESA”); see also Ctr. for Biological Diversity, v. Jewell, 248 F. Supp. 3d 946, 958 (D. Ariz. 2017) (holding that “[t]he SPR interpretation set forth in the Final SPR Policy

Report and Proposed Delisting Rule by Dr. Adrian Treves, at 6–7 (hereafter “Treves Peer Review”).

⁸ Summary Report of Independent Peer Reviews for the U.S. Fish and Wildlife Service Gray Wolf Delisting Review (May 2019), Appendix C, Peer Review of USFWS’s Draft Biological Report and Proposed Delisting Rule by Dr. Daniel MacNulty, at 8 (hereafter “MacNulty Peer Review”).

⁹ See Carroll Peer Review at 18 (“The rule is inconsistent in its treatment of unoccupied suitable habitat. For example, areas currently unoccupied by wolves such the Olympic Range of Washington or unoccupied areas within the Great Lakes region are described and considered in detail (p 9663-4), but other regions holding large areas of suitable wolf habitat which were considered in depth in earlier wolf rulemaking, particularly Colorado/Utah and the northeast US, are only mentioned in passing in the current rule.”); MacNulty Peer Review at 8 (A final point of confusion related to the spatial extent of the Service’s threats analysis are statements in the Proposed Rule that suggest the Service in some cases did analyze threats outside the current range/distribution of wolves within the gray wolf entity...”).

impermissibly clashes with the rule against surplusage and frustrates the purposes of the ESA” and “is not a permissible administrative construction of the ESA’s SPR language”).

The FWS’s invalidated SPR Policy states that “a portion is ‘significant’ in the context of the Act’s ‘significant portion of its range’ phrase if its contribution to the viability of the species is so important that, without that portion, the species would be in danger of extinction.” SPR Policy at 37,593. This definition of SPR, as with the approach followed by the Service in Defenders of Wildlife, improperly conflates the term “significant” with the viability of the entire species. As the court in Center for Biological Diversity noted:

[I]t appears that the Service’s goal in creating the Final SPR Policy was to give as little substantive effect as possible to the SPR language of the ESA in order to avoid providing range-wide protection to a species based on threats in a portion of the species’ range. This goal is arguably at odds with the conservation purposes of the ESA and, in pursuing this goal, the Service chose a definition of significance that renders the SPR phrase superfluous by limiting it to situations in which it is unnecessary.

248 F. Supp. 3d at 958.

Defining SPR solely in terms of the viability of a listed entity’s core population is also contrary to the goals and purposes of the ESA. While the ESA was enacted to prevent the extinction of species, Congress intended to incorporate a broader geographical or ecological concept into the goal of listing and recovering endangered and threatened species. Accordingly, a principal purpose of the ESA is to “provide a means whereby *the ecosystems* upon which threatened and endangered species depend may be conserved . . .” 16 U.S.C. § 1531(b) (emphasis added). Additionally, the ESA declares that species “are of *aesthetic, ecological*, educational, historical, *recreational*, and scientific value to the Nation and its people.” 16 U.S.C. § 1531(a)(3) (emphasis added). It is difficult to reconcile a definition of SPR that would disqualify a species that has been eliminated from the overwhelming majority of its historic range from the protections of the ESA, so long as the viability of the species was relatively secure on some small remaining percentage of its range, with Congress’ interest in conserving the ecosystems upon which species’ depend and the aesthetic, ecological, historical, and recreational values of species.

Acknowledging that it has “not yet determined the best way to interpret ‘significant’ in light of the decision in Desert Survivors, for the purposes of the analysis here,” the FWS states that it will “apply ‘significant’ in a way that is consistent with that court’s opinion, and with other relevant case law,” and “by looking for portions of the species’ range that could be significant under any reasonable definition of “‘significant’” that relates to the conservation of the gray wolf entity. To do this, we look for any portions that may be biologically important in terms of the resiliency, redundancy, or representation of the species.” Proposed Rule at 9684. The FWS’s “significant portion of its range” analysis here fails the agency’s own test by applying an interpretation that is effectively identical to its invalidated policy. The Service’s approach here

also directly conflicts with other case law interpreting the phrase “significant portion of its range” and otherwise is unreasonable and biologically unsound.

The Service has determined that there are no “significant” portions of the gray wolf’s range because the single gray wolf population that resides in the western Great Lakes is viable and not threatened or endangered. Proposed Rule at 9685 (concluding “portions peripheral to the Great Lakes metapopulation” are “not ‘significant’ under any reasonable definition of that term because they are not biologically important to the gray wolf entity in terms of its resiliency, redundancy, or representation”). Stated differently, under the Service’s approach the viability of the western Great Lakes population of gray wolves renders all other portions of the species’ range, including the Northeast, Southern Rockies and Pacific Northwest, insignificant. Relying on a core population to render insignificant all other portions of a species’ range has repeatedly been struck-down by the courts and is contrary to the ESA.

More than 15 years ago in litigation challenging a rule very similar to the Proposed Rule here, two federal courts determined that FWS’s decision to downlist legal protections for gray wolves in large portions of the species’ range where it had not recovered based on the viability of two core populations was contrary to the plain meaning of the ESA. In Defenders of Wildlife v. Secretary, U.S. Dep’t of the Interior, 354 F. Supp. 2d 1156 (D. Or. 2005), plaintiffs challenged the Service’s decision creating and downlisting two wolf DPSs – the Eastern DPS consisting of the western Great Lakes states and the northeast states, and the Western DPS encompassing the Rocky Mountains region and Pacific Northwest – which collectively comprised a 30-state area. Both DPSs were downlisted from endangered to threatened based on the Service’s determinations that currently unoccupied historical range outside of two core wolf recovery areas – the northern Rockies for the Western DPS and the western Great Lakes for the Eastern DPS – was insignificant because it was not necessary for long-term viability of the species. Id. at 1163-64. In other words, the Service determined that the then current range of the wolf in the lower 48 states, i.e., the western Great Lakes and Northern Rockies, were the only significant portions of the species’ range. Id. at 1167. In rejecting this determination, the court reasoned that “[t]he Secretary’s conclusion that the viability of two core populations in the Eastern and Western DPSs makes all other portions of the wolf’s historical or current range insignificant and unworthy of stringent protection is contrary to Ninth Circuit precedent and the ESA.” Id. at 1168. Moreover, the court held that “[b]y ruling out all other portions of the wolf’s range because a core population ensures the viability of a DPS, the Secretary’s interpretation ‘has the effect of rendering the phrase [SPR] superfluous,’” and is therefore not a reasonable interpretation of the ESA. Id.

Courts have reached similar conclusions for other species. In Defenders of Wildlife v. Norton, 239 F. Supp. 2d 9 (D.D.C. 2002), the court held that the FWS’s determination that three of four Canada lynx regions constituting the lynx lower 48 DPS were insignificant because the species viability or persistence was secure in the fourth region, was contrary to the ESA and its legislative history and was not a reasonable interpretation of the term SPR. The court reasoned that the FWS’s singular focus on the one region of the species’ range where it was relatively

secure and to effectively write-off the remaining three-quarters of the species' range where it was most imperiled and possibly even extirpated, "is antithetical to the ESA's broad purpose to protect endangered and threatened species," and "contrary to the expansive protection intended by the ESA." Id. at 19.

Here, FWS has determined that within the two listed wolf entities, there is only one core viable population -- the population of wolves within the three Great Lakes states -- and that the significance of all other portions of the wolf's range must be measured against whether they contribute to the conservation of that one core population. This precisely is the approach adopted in the FWS's invalidated SPR policy and rejected repeatedly by multiple courts.

The Service's approach is also inconsistent with the "three Rs" of conservation biology; resilience, redundancy, and representation, which the FWS claims it uses to guide recovery recommendations. As originally articulated by Shaffer and Stein (2000)¹⁰ and here summarized by Carroll, et al., (2010):

Those authors defined representation as a species' presence across the diversity of ecosystems inhabited by the species and by the species' role in ecosystem processes. Representation applies primarily to a population itself (e.g., by examining whether the species' absence in a portion of its range would have significant ecological consequences or whether a given portion of a species' range includes ecosystem types not found elsewhere in the species' range) rather than to a population's contribution to the entire species.¹¹

As Dr. Carroll states in his peer review of the Proposed Rule, the Service's conclusion that no portion of the range outside the three Western Great Lakes is significant "misinterpret[s] both wolf ecology and the 3Rs themselves."¹² For the gray wolf in the lower 48 states -- like any ESA-listed species -- a proper interpretation of the 3Rs means more than just intrinsic representation (e.g., genetic representation); see Proposed Rule at 9685 (concluding that portions peripheral to the Great Lakes population "are also not important to the representation of the gray wolf entity because they lack genetic uniqueness relative to other wolves in the Great Lakes metapopulation").¹³ The absence of wolves in key parts of their historic and listed range -- the Southern Rockies and the Northeast, where there is sufficient habitat -- and their

¹⁰ M. L. Shaffer & B. A. Stein, Safeguarding Our Precious Heritage, in Precious Heritage: The Status of Biodiversity in the United States 301-21 (Bruce A. Stein, Lynn S. Kutner & Jonathan S. Adams eds, 2000).

¹¹ Carlos Carroll et al., Geography and Recovery Under the U.S. Endangered Species Act, 24 Conservation Biology, 395, 400 (2010).

¹² Carroll Peer Review at 11.

¹³ See Id. at 12 ("Although representation and preservation of genetic diversity and genetic evolutionary potential are important goals, they form only part of Shaffer and Stein (2000)'s concept of representation, which they defined as a species' presence across the diversity of ecosystems inhabited by the species and by the species' role in ecosystem processes.").

tenuous existence in the Pacific Northwest means that the species is not secure in all significant portions of their range. This does not require interpreting significance in terms of acres or percentages, but ecological or biological significance: *wolves are currently absent or underrepresented in ecosystems where they played a key role*. For example, research shows the critical role wolves can play in reducing the prevalence of tuberculosis in ecosystems,¹⁴ the kind of service they cannot do if absent or only at very low numbers.¹⁵ This concept is further supported by a large body of ecological literature that show how one species' effects on other species is a fundamental aspect of ecological communities.¹⁶ Even if the Service believes that SPR must be interpreted in terms of current populations rather than historical range, they have erred in dismissing representation of the wolves in the Pacific Northwest as simply an extension of the Northern Rockies Mountains wolf populations. The ecosystems of the Pacific Northwest are different from the Rockies under any ecosystem classification we are aware of, and wolves are not secure in this significant portion of its range.

The Service's conclusion that "the west coast portion of the gray wolf entity, where wolves exist in small numbers in California, western Oregon, and western Washington... is not biologically important to the gray wolf entity in terms of resiliency, redundancy, or representation" turns on "misinterpretations of the 3Rs...and wolf biology."¹⁷ The Service concludes that "[t]his portion is not important to the gray wolf entity in terms of resiliency or redundancy because wolves occur in small numbers in this portion and include only a few breeding pairs...and do not contribute meaningfully to the ability of any population, in the NRM or Great Lakes area, to withstand stochastic events, nor to the entire entity's ability to withstand catastrophic events."¹⁸ As Dr. Carroll explains in the peer review, those statements are erroneous because:

[The] current size of these recolonizing populations does not indicate their size and demographic contribution to the metapopulation over the long term, which will be determined by extent of suitable habitat and other factors. Despite the current small population size, the existence of such a peripheral (and likely larger) population at a future time could well contribute to metapopulation resiliency, e.g., by its differential exposure to disease outbreaks or climate change. Even if the Service considers 'range' (spatial distribution) only in terms of 'current range', that does not imply that they should only consider population abundance as of the year of the proposed rule, rather than over the foreseeable future.¹⁹

¹⁴ Tanner et al., Wolves Contribute to Disease Control in a Multi-Host System. Scientific Reports 9:7940 (2019).

¹⁵ William J. Ripple et al., Status and Ecological Effects of the World's Largest Carnivores, Science 343:1241484 (2014).

¹⁶ Jonathan M. Chase & Matthew A. Leibold, Ecological Niches: Linking Classical and Contemporary Approaches, 212 (2003).

¹⁷ Carroll Peer Review at 15–16.

¹⁸ Proposed Rule at 9685.

¹⁹ Carroll Peer Review at 16.

The Service also asserts that the west coast wolves are “not important in terms of representation, because (1) gray wolves are a highly adaptable generalist carnivore capable of long-distance dispersal, and (2) the gray wolves in this area are an extension of a large metapopulation of wolves in the northern Rocky Mountains and western Canada (i.e., they are not an isolated population with unique or markedly different genetic or phenotypic traits that is evolving separate from other wolf populations).”²⁰ This assertion is also faulty, as Dr. Carroll explains:

characterization of the gray wolf simply as a ‘generalist; and vagile species, as if this implies lack of significant variation within the continental extent of the species’ distribution, is not consistent with data showing substantial genetic and ecotypic variation within the metapopulation. Hendricks et al. (2019) reviews the multiple studies demonstrating that North American wolves are morphologically and genetically differentiated on a local scale. Rather than erroneously claiming that wolves form an undifferentiated continent-wide metapopulation, the Service should use information on the extent and nature of local adaptation to inform conservation actions to preserve the evolutionary potential and adaptive capacity of gray wolf populations.²¹

3. The FWS’s definition of “range” is not reasonable.

In determining that the gray wolf is no longer threatened or endangered in any portion of its range, the Service implicitly defines the gray wolf’s range to mean current populations. As with its SPR analysis, the Service’s interpretation of “range” here is inconsistent with prior agency decisions and contrary to Congressional intent and the ESA.

FWS policy defines “range” as “the general geographical area within which the species is currently found, including those areas used throughout all or part of the species’ life cycle, even if not used on a regular basis.” SPR Policy at 37,583. Notably, the policy does not restrict a species’ range to known populations. The Service confirms that since the early 2000s, wolves have been documented outside of core populations in North Dakota, South Dakota, Utah, Colorado, Nevada, Missouri, Indiana, Illinois, Nebraska, and Kansas. Proposed Rule at 9656. Also, Colorado Parks and Wildlife recently confirmed the presence of a lone dispersing wolf in Colorado.²² Moreover, although dispersal of wild wolves from Canada south of the St. Lawrence River is rare, recent records of known or suspected wild wolves from New Brunswick

²⁰ Proposed Rule at 9685.

²¹ Carroll Peer Review at 17.

²² <https://twitter.com/COParksWildlife/status/1149026398222217216>;
<https://www.thedenverchannel.com/news/local-news/cpw-investigating-possible-wolf-sighting-in-northern-colorado>.

and areas adjacent to Maine show that dispersal is possible²³. The Service does not consider much of this area to be part of the gray wolf's current range, however, because it exists outside of wolf populations in the Great Lakes and Pacific Northwest. Proposed Rule at 9659 (“Our analysis of threat factors below does not consider the potential for effects to *C. lupus* in areas where the species has been extirpated—rather, effects are considered in the context of the present population.”)

Limiting current range in such a way is not consistent with FWS policy that defines range to encompass the “general geographical area within which the species” – not populations of the species – “is currently found, including those areas used throughout all *or part* of the species’ life cycle, *even if not used on a regular basis*.” SPR Policy at 37,583 (emphasis added). The Service has failed to offer a rational explanation for why the gray wolf's current range should be limited to the small fraction of historic range with wolf populations and should exclude other areas where wolves recently have been documented and could repopulate with continued protections under the ESA.

As peer reviewer Dr. Carroll explains, the Proposed Rule's adoption of a definition of “current range” that excludes areas of dispersal without breeding pairs is “inherently problematic.”²⁴ “Occasional dispersing wolves have been documented in several states in the western, midwestern, and northeastern US. Given that many of these wolves are not collared, there is inherent uncertainty as to occupancy status in these areas in the period between initial exploratory dispersals and first establishment of a breeding pair...[with a matter of years] it is likely that breeding pairs will exist in some areas which are now experiencing exploratory dispersals[.]”²⁵ Narrowly defining “range” via a “snapshot” of a feature that is temporally dynamic is irrational, and improperly excludes consideration of threats to wolves in suitable habitat where wolves recently have been present, and likely will soon be present again; this narrow definition also improperly dodges consideration of the status of those wolves, and their significance.

Moreover, the Service's limited interpretation of “current range” does not square with its reliance on meta-population structure.²⁶ As peer reviewer Dr. Daniel MacNulty explains:

²³ Donald F. McAlpine et al., Recent Occurrences of Wild-origin Wolves (*Canis spp.*) in Canada South of the St. Lawrence River Revealed by Stable Isotope and Genetic Analysis, 129 *Canadian Field-Naturalist* 386, 392 (2015).

²⁴ Carroll Peer Review at 9.

²⁵ *Id.* at 9.

²⁶ See, e.g., *Id.* at 6 (the Proposed Rule “justifies [its] inconsistency with previous Service actions regarding gray wolf listing and delisting based on two conclusions (p 9685): 1) wolves disperse widely, and therefore can be treated as a single metapopulation spanning the entire continent, and 2) any peripheral populations such as those in the Pacific Northwest are connected to larger populations outside the US (e.g., in Canada) which will purportedly ensure their continued viability.”).

Recognition of meta-population structure suggests that it is more logical to classify the interconnecting ‘historical range’ as ‘current range’ given that these interconnections reflect contemporary corridors of regular movement and occurrence, which are themselves subject to potential pack establishment. And because the sink areas of a meta-population can contribute to the viability of the meta-population (Howe et al. 1991; Heinrichs et al. 2015), some sinks may also logically qualify as ‘current range.’ Potential examples include the area in northern California where a pack with 2 adults and 5 pups (Shasta Pack) established in 2015 and apparently dissolved in 2016 (USFWS 2018, p. 15), as well as areas that are destinations for dispersing wolves including ‘North Dakota, South Dakota, Utah, Colorado, Nevada, Missouri, Indiana, Illinois, Nebraska, and Kansas’ (84 FR 9648, p. 9656).²⁷

It is arbitrary for the Service to rely on meta-population structure to justify its approach while excluding the geographic areas supporting the maintenance of such structure from the “current range,” and thereby ignoring the reality that “[d]elisting, due to its potential effect on anthropogenic mortality in dispersing wolves, could be reasonably projected to reduce metapopulation connectivity.”²⁸

The Services’ definition of gray wolf range here is also inconsistent with the nearly 50-year history of Congressional and administrative action to protect and recover the gray wolf in significant portions of its historic range in the lower 48 states. Beginning with the first federal action to protect gray wolves it was apparent that Congress and the FWS intended to protect and restore the species to significant portions of its historic range from which it had been extirpated and did not intend to limit protection to portions of the species’ current range or to current populations. The gray wolf first received federal protection pursuant to the Endangered Species Preservation Act of 1966. At that time, the gray wolf had been extirpated throughout all its historic range in the lower 48 states except northeastern Minnesota, and there were fewer than a thousand wolves occupying less than 1% of the species’ historic range in the lower 48 states.²⁹ On March 11, 1967, the FWS determined that the eastern timber wolf, *Canis lupus lycaon*, was threatened with extinction including in the Northeast United States where the subspecies was considered extirpated. 32 Fed. Reg. at 4001. On June 4, 1973, the FWS listed *Canis lupus irremotus*, the Northern Rocky Mountain wolf, as an endangered species

²⁷ Summary Report of Independent Peer Reviews for the U.S. Fish and Wildlife Service Gray Wolf Delisting Review (May 2019), Appendix C, Peer Review of USFWS’s Draft Biological Report and Proposed Delisting Rule by Dr. Daniel McNulty, at 8.

²⁸ Carroll Peer Review at 8.

²⁹ See Carroll et al., supra note 3 (2006); Steven H. Fritts & Ludwig N. Carbyn, Population Viability, Nature Reserves, and the Outlook for Gray Wolf Conservation in North America, 3 Restoration Ecology 26-38 (1995); L. David Mech, The Wolf: The Ecology and Behavior of an Endangered Species (1970); Michael K. Phillips et al., Grey Wolves – Yellowstone: Extermination and Recovery of Red Wolf and Grey Wolf in the Contiguous United States, in Biology and Conservation of Wild Canids 297-309 (David W. MacDonald & Claudio Sillero-Zubiri eds. (2004).

under the ESA. 38 Fed. Reg. at 14,678. At the time of its listing *Canis lupus irremotus* was considered possibly extirpated from the lower 48 states. On April 21, 1975, the FWS proposed listing the subspecies Mexican gray wolf, *Canis lupus baileyi*, as an endangered species in Mexico, Arizona, New Mexico and Texas, notwithstanding that “[i]n the United States, the Mexican wolf now occurs only as a rare wanderer, there have been few reports of its presence since 1960.” 40 Fed. Reg. 17,590 (Apr. 21, 1975). On April 28, 1976, the Mexican wolf was listed as an endangered species. 41 Fed. Reg. at 17,736. In support of its listing decision, the FWS cited to comments from the Texas Parks and Wildlife Department that the Mexican wolf “is considered an extremely scarce, peripheral animal in [Texas].” *Id.* at 17,738. The State of New Mexico reported that the “Mexican wolf is extremely rare . . . in New Mexico at present” and “doubts that a resident population exists in our state though occasional individuals do wander the southwestern area from time to time.” *Id.* In 1978, the FWS determined that “the gray wolf is listed everywhere to the south of the Canadian border, but nowhere to the north,” and reclassified the separate gray wolf subspecies listings into two listed entities; a threatened entity representing the only significant population of gray wolves in the lower 48 states in Minnesota, and an endangered entity representing the remainder of the gray wolf’s historic range in the lower 48 states where wolves had been almost entirely extirpated. 43 Fed. Reg. 9607 (Mar. 9, 1978).

Had Congress intended the ESA to protect only significant remaining populations of species and not lost historical range or habitat, it could have so directed. Had Congress or the Service applied the agency’s interpretation of range here to wolves in 1978, wolves likely never would have been protected outside of Minnesota; the endangered lower 48 listed entity would never have been listed and wolves would have been left without any federal protection in most of the species’ historical range in the lower 48 states. This is inconsistent with Congressional intent.

Restricting what is considered gray wolf range only to areas that currently support wolf populations is also inconsistent with agency practice. In proposing listing of the wolverine as a threatened species, FWS determined that “the species range is the area that *may* support viable populations” and was not limited simply to known current populations. 78 Fed. Reg. 7864, 7870 (Feb. 4, 2013) (emphasis added). The Service stated that:

We, therefore, consider the current range of wolverines to include *suitable habitat* in the North Cascades of Washington, the northern Rocky Mountains of Idaho, Wyoming, Montana, and eastern Oregon, the southern Rocky Mountains of Colorado and Wyoming, and the Sierra Nevada of California. *We here include the Sierra Nevada and Southern Rocky Mountains in the current range of wolverines despite the probability that functional populations do not exist in these areas. They are included due to the known existence of one individual in each area and possibility that more, as yet undetected, individuals inhabit these areas.*

Id. 7873 (emphasis added).

In its rule listing Canada lynx as a threatened species, the FWS noted that “the Act, and the Service in administering the Act, do not make a distinction between resident populations, breeding populations, and transient or breeding individuals when considering a species for listing.” 65 Fed. Reg. 16,052, 16,063 (Mar. 24, 2000). In designating critical habitat for lynx, FWS noted that “there may be times . . . when lynx may be absent or at very low numbers even in the best lynx habitat within the range of the [species].” 79 Fed. Reg. 54,782, 54,787 (Sept. 12, 2014).

The Service listed jaguar as an endangered species in the United States, notwithstanding that at the time of listing there was “no known resident population of jaguars in the United States, though they still occur in northern Mexico.” 62 Fed. Reg. 39,147, 39,147 (July 22, 1997). FWS also noted that “whether a breeding population is wholly supported within the United States is not relevant.” *Id.* at 39,150.

Given that Congressional intent and agency practice dictate that the recovery of a formerly wide-ranging species should include restoration to suitable areas of its historical range, the Service should retain ESA protections for gray wolves until the species has recovered in other areas including the Northeast, Southern Rockies and Pacific Northwest.

B. The Service’s Failure to Assess the Status of the Entire Lower-48 DPS Violates the ESA and is Arbitrary and Capricious

The Proposed Rule violates the ESA for an additional reason: instead of applying the section 4 listing factors to the entire lower 48 DPS, as required by the statute, the Service simply ignored the status of wolves outside of the Great Lakes states and Pacific Northwest. The Service has twice before tried to downlist or delist all or a portion of the lower 48 gray wolf DPS without analyzing the entire DPS; each time the Service’s approach has been rejected by federal courts because it violates the ESA.

To determine whether a “species,” here a DPS, warrants listing, downlisting, or delisting, the ESA requires the Service to evaluate the five section 4 listing factors: the present or threatened destruction, modification, or curtailment of the species’ habitat or range; overutilization for commercial, recreational, scientific, or educational purposes; disease or predation; the inadequacy of existing regulatory mechanism; or other natural or manmade factors affecting its continuing existence. 16 U.S.C. § 1533(a)(1); 50 C.F.R. § 424.11. See also 16 U.S.C. § 1532(16) (defining “species” to include a distinct population segment). The Service must make this determination based on the best available science. 16 U.S.C. § 1533(b)(1).

To revise the status of all or part of a DPS that is already listed, the statute requires “a comprehensive review of the *entire listed species and its continuing status.*” Humane Society, 865 F.3d at 601 (citing 16 U.S.C. § 1533(c)(2)(A), (1)) (emphasis added). This comprehensive review must be “grounded in the five statutory listing factors” and the best available science. *Id.* at 596-97 (“the statute requires the Service to attend to both parts of the listing process—the initial listing, and the revisions or delisting—with equal care”).

Here, the two relevant listed species are: (1) *C. lupus* in Minnesota; and (2) *C. lupus* in all or portions of 44 states (the “lower 48 DPS”). 50 C.F.R. § 17.11; Proposed Rule at 9653. Thus, the analysis must focus on these two entities.

The Proposed Rule fails to do so. Instead, the Proposed Rule claims that neither entity currently qualifies as a DPS under the DPS Policy and should be removed from the list for that reason. Proposed Rule at 9686; see id. at 9653 (asserting that the agency’s “policies and practices have ... changed since the 1978 reclassification” and “these entities do not conform with our current policies and standard practice”). The ESA does not permit the Service to delist a species because the agency’s policies have changed. ESA implementing regulations provide that the Service may delist a threatened or endangered species if one or more of the following reasons apply: (1) the species is determined to be extinct; (2) the species is determined to be recovered; or (3) the original scientific data available at the time of listing were in error. 50 C.F.R. § 424.11(d). The Proposed Rule does not assert that the original data was in error (nor that wolves are extinct). Accordingly, the Service may only delist the currently listed entities if they are recovered.

Nonetheless, based on the theory that neither entity is a valid DPS, the Service arbitrarily combined them for the purposes of delisting. The ESA does not allow the Service to combine two listed entities for the purposes of delisting them; the analysis must be of “species included in a list.” 16 U.S.C. § 1533(c)(2)(A). The Service attempts to justify combining the two entities by stating that “even if we had analyzed [the two listed entities] separately, neither would meet the Act’s definitions of ‘threatened species’ or ‘endangered species.’” Proposed Rule at 9686. This is a conclusion without an analysis and does not support the Service’s approach. See Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv., 378 F.3d 1059, 1074 (9th Cir. 2004), amended by 387 F.3d 968 (9th Cir. 2004) (courts cannot “imply[] an analysis that is not shown in the record”); Getty v. Fed. Sav. & Loan Ins. Corp., 805 F.2d 1050, 1055 (D.C. Cir. 1986) (“Stating that a factor was considered ... is not a substitute for considering it.”).

Even if the Service properly combined the two listed entities, the Proposed Rule only assesses the threats to wolves in the Great Lakes states and the Pacific Northwest—ignoring vast areas of suitable habitat outside of those areas, particularly in the Southern Rockies and the Northeast. See Proposed Rule at 9659 (acknowledging that the analysis excludes areas outside of the “present populations”). The ESA does not permit the Service to assess the status of *portions* of a DPS; to revise a listing, the Service must conduct a “comprehensive review” that addresses the entire listed entity. Humane Society, 865 F.3d at 600-03.

The Service has tried to avoid these requirements in two prior wolf rules. In 2003, as described above, the Service attempted to divide the lower 48 DPS into three new gray wolf DPSs and downlist two of them, but only assessed the status of portions of the new DPSs—the areas where the core populations lived—and did not apply the statutory listing factors outside of those areas. Defenders of Wildlife, 354 F. Supp. 2d at 1170–72; Nat’l Wildlife Fed’n, 386 F. Supp. 2d at 564–65. Two courts found that the Service’s failure to assess the status of the non-core populations violated the ESA’s mandate to base a downlisting decision on the section 4 listing factors. Defenders of Wildlife, 354 F. Supp. 2d at 1170–72 (“The Final Rule is arbitrary and capricious because FWS downlisted major geographic areas without assessing the threats

to the wolf by applying the statutorily mandated listing factors.”); Nat’l Wildlife Fed’n, 386 F. Supp. 2d at 564–65 (finding that the rule “is bypassing the application of the ESA in the non-core populations areas”).

In 2011, the Service created and delisted the Great Lakes wolf DPS without assessing the status of the remainder of the lower 48 DPS. 76 Fed. Reg. 81,666 (Dec. 28, 2011). This rule was also struck down, in part (and again) for failing to apply the section 4 listing factors throughout the DPS. Humane Society, 865 F.3d at 600–03. The D.C. Circuit held that the Service must assess the status of the *entire* listed entity when it proposes to revise the status of any portion of the listed entity. *Id.* The Court was concerned that absent an analysis of the current status of the “remnant”—and assurances the remnant would remain a protectable and protected species—the Service would later attempt to delist those wolves on the theory that they no longer comprise a listable entity, regardless of whether delisting would have been warranted under the statutory listing factors. *Id.* This outcome would violate the ESA. *Id.* at 602 (the Service’s “disregard of the remnant’s status would turn ... [the DPS] process into a backdoor route to the *de facto* delisting of already listed species, in open defiance of the Endangered Species Act’s specifically enumerated requirements for delisting”). To guard against that result, the Court held that the Service “must make it part and parcel of its segment analysis to ensure that the remnant, if still endangered or threatened, remains protectable under the Endangered Species Act.” *Id.*

Here, the Proposed Rule attempts a slightly different version of the 2003 and 2011 wolf rules—but commits the same fundamental error. Instead of dividing the larger entity into multiple DPSs to downlist them (as in 2003) or carving out a DPS from the larger entity to delist the new DPS (as in 2011), the Service proposes to delist two combined entities. But the Service never applied the statutory listing factors to large areas of the lower 48 DPS and instead relied on the status of core populations to justify delisting a much larger area. As with the prior rules, if the Proposed Rule is finalized, portions of the lower 48 DPS will lose ESA protections even though the Service never assessed the status of those wolves under the statutory listing factors and even though those wolves remain endangered. As one peer reviewer noted, “[t]he proposed rule pooled the northeastern canids with the gray wolf entity to delist, but did so without providing evidence such as data on dispersal, analysis of status, or an analysis of discreteness in either the proposed rule or the draft biological report.”³⁰ The Service’s approach violates the ESA and is plainly at odds with Humane Society, Defenders of Wildlife, and National Wildlife Federation.

C. The Service’s Rejection of Potential DPSs Based on a Lack of “Discreteness” from Canada and the Northern Rockies is Arbitrary and Capricious

The Service’s DPS analysis is also arbitrary because the agency’s rationale for its conclusion that the currently listed entities (or some portion of the currently listed entities) do not qualify as DPSs fails to comply with the agency’s own DPS Policy and is unsupported. The proposed rule concludes that the two entities do not qualify as DPSs primarily because: (1) they are not

³⁰ Treves Peer Review at 6.

“markedly separated” from each other under the first discreteness condition in the DPS Policy; and (2) the Pacific Northwest wolves are not “markedly separated” from the Northern Rocky Mountain DPS. Proposed Rule at 9653.³¹ Neither conclusion is adequately analyzed or supported.

The proposed rule entirely fails to analyze whether smaller DPSs should be recognized to ensure that wolves are protected throughout the existing lower 48 DPS where they continue to be imperiled. The next logical step after the Humane Society decision would have been for the Service to evaluate whether it would be appropriate to designate new DPSs outside of the Western Great Lakes region to determine if it is possible to: (1) delist the Western Great Lakes population of wolves as a separate DPS; and (2) ensure continuing ESA protections for gray wolves outside of the Western Great Lakes. The Service should then have proceeded with a new proposal to delist the Western Great Lakes DPS if, and only if, the wolves outside the new DPS would remain protected. The Service did not conduct this analysis and instead is relying on its new theory that the currently listed entities are invalid.

In general, the DPS Policy requires the Service to compare the “discreteness” and “significance” of a specific population to the taxon as a whole through a case-by-case analysis of several factors under each category. 61 Fed. Reg. 4725 (Feb. 7, 1996). A population may be “discrete” if it: (1) “is markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors. . . .” or (2) “is delimited by international governmental boundaries within which differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist that are significant in light of section 4(a)(1)(D) of the Act.” Id. A population may be “significant” if it is biologically or ecologically important to the taxon as a whole, based on the consideration, at a minimum, of four listed factors. Id. Once the Service determines that a population segment is discrete and significant and therefore qualifies as a DPS, the agency evaluates the status of that DPS under the statutory listing factors (16 U.S.C. § 1533(a)(1)), to determine if the DPS should be listed as a threatened or endangered species. Id.

The DPS Policy makes clear that the Service is required to conduct a careful, on-the-record analysis of a species’ qualifications for DPS status, pursuant to the criteria listed in the DPS Policy, and to explain the reasons a population qualifies or fails to qualify for DPS status. 61 Fed. Reg. at 4723 (“At the time any distinct population is recognized or not recognized the reasons for which it is believed to satisfy or not satisfy the conditions of the policy will be fully explained.”). This is also true for those populations that were listed prior to the promulgation of the DPS Policy. Id. at 4725 (“Any DPS of a vertebrate taxon that was listed prior to implementation of this policy will be reevaluated on a case-by-case basis as recommendations are made to change the listing status for that distinct population segment.”); see Coos County Bd. Of County Comm’rs v. Kempthorne, 531 F.3d 792, 798 (9th Cir. 2008) (quoting DPS Policy

³¹ The proposed rule also states that the lower 48 DPS is invalid because it overlaps with the Mexican wolf’s range, a separately listed subspecies. Proposed Rule at 9653. The existence of the Mexican wolf experimental area supports re-drawing the geographic line of the lower 48 DPS to omit that area. It does not serve as a basis to determine that the entire lower 48 DPS is invalid.

and noting that Service applied the Policy to the 1992 tri-state murrelet DPS determination when the original determination came up for review).

The Service's only citation for the idea that the two entities are no longer "markedly separated" from each other is the Biological Report, which does not even mention the DPS Policy, let alone address whether the populations are "markedly separated" pursuant to that Policy. Proposed Rule at 9654 (citing Biological Report, pp. 22–23). The Service is not free to ignore its own policy. Rather, "[h]aving chosen to promulgate the DPS Policy, the FWS must follow that policy." Nat'l Ass'n of Home Builders v. Norton, 340 F.3d 835, 852 (9th Cir. 2003) (citing Steenholdt v. FAA, 314 F.3d 633, 639 (D.C. Cir. 2003) (federal agencies must follow their own rules); U.S. ex rel. Accardi v. Shaughnessy, 347 U.S. 260 (1954)). In addition, basic administrative law principles mandate that a reasoned decision regarding whether a population qualifies as a DPS under the DPS Policy must, at a minimum, discuss the application of the specific criteria in the DPS Policy. See Nat. Res. Def. Council v. Rauch, 244 F. Supp. 3d 66, 97–100 (D.D.C. 2017) (Service's decision was arbitrary in part because agency failed to consider one of the four significance factors in DPS Policy).

To the extent the Service is relying on the Biological Report's observation that the populations in Minnesota, Wisconsin and Michigan are "interconnected" (Biological Report at 22), it does not necessarily follow that the populations are not "markedly separated" from each other within the meaning of the DPS Policy. The DPS Policy explicitly states that discreteness does not require "absolute separation of a DPS from other members of its species." 61 Fed. Reg. at 4724. ("The Services do not consider it appropriate to require absolute reproductive isolation as a prerequisite to recognizing a distinct population segment."). Thus, a conclusion that certain portions of the populations at issue are "interconnected" is not the end of the inquiry. See Modesto Irrigation Dist. v. Gutierrez, 619 F.3d 1024, 1031–32 (9th Cir. 2010) (interbreeding is not the "sole defining characteristic" of a DPS and interbreeding populations of a species need not be in the same DPS). Rather, the Service must analyze whether the two existing listed entities, as a whole, are "markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors." 61 Fed. Reg. at 4725 (emphasis added). The Service did not conduct this analysis.

The Service's proposed rule also fails to analyze whether either of the two listed entities are discrete from the Canada populations of gray wolves under the second discreteness condition in the DPS Policy.³² The Biological Report mentions that there is "connectivity" with Canada generally, but connectivity is not part of the test for discreteness between populations separated by an international border. Rather, the DPS Policy requires the Service to evaluate and compare the conditions on both sides of the border and decide based on the "differences in

³² To conduct such an analysis, the Service must consider each listed entity separately. The DPS Policy requires the Service to compare the status of the listed entity to the taxon as a whole, an impossible task if two listed entities are combined into one, as the Service has done here. 61 Fed. Reg. at 4725. See Humane Society, 865 F.3d at 601 (DPS Policy requires the agency to conduct a comparative analysis between the population segment and the taxon as a whole).

control of exploitation, management of habitat, conservation status, or regulatory mechanisms ... that are significant in light of section 4(a)(1)(D) of the Act.” 61 Fed. Reg. at 4725 (emphasis added). See Nat’l Ass’n of Home Builders, 340 F.3d at 842–44 (upholding Service’s determination that Arizona population of pygmy owls are discrete from northwestern Mexico pygmy owls because the conservation status of each population differs significantly). Indeed, the Service has found that populations of other species are valid DPSs even where they are connected to populations across an international border. See e.g., 79 Fed. Reg. 54,782, 54,804 (Sept. 12, 2014) (finding lower 48 DPS for Canada lynx to be discrete from Canadian populations despite movement between populations); Grizzly Bear (*Ursus arctos horribilis*) 5-Year Review: Summary and Evaluation, August 2011, at 7–8 (finding that lower 48 DPS of grizzly bears is discrete based on second discreteness factor even though there was “no evidence of marked biological separation” between the populations in the lower 48 population and Canada); 64 Fed. Reg. 26,725, 26,726 (May 17, 1999) (finding Cabinet-Yaak and Selkirk grizzly bear populations were “discrete” from Canada populations despite “population connectivity” between the U.S. and Canada populations).

Similarly, the Service’s conclusory assertion that the Pacific Northwest wolves are not discrete from the wolves in the Northern Rocky Mountain DPS is insufficient. The Service relies on a DPS analysis conducted in 2013. Proposed Rule at 9653–54 (citing 78 Fed. Reg. 35,664, 35,711–13 (June 13, 2013)). In that analysis, the Service concluded that based on expected trends, “a future wolf population in the Pacific Northwest is not likely to be discrete from wolves in the NRM DPS.” 78 Fed. Reg. at 35,713. At the time, the Service had not yet documented two breeding pairs successfully raising young for two consecutive years in the Pacific Northwest. Id. at 35,711. In 2017, by contrast, there were at least 22 packs in Washington, 12 packs in Oregon, and one confirmed pack in California (Biological Report at 23). The proposed rule does not provide any updated scientific evidence or information regarding whether the agency’s 2013 predictions are still valid. The Service’s reliance on 2013 predictions of a future population in lieu of reviewing any science regarding the present population violates the best available science standard. Cf. Seattle Audubon Society v. Espy, 998 F.2d 699, 703–04 (9th Cir. 1993) (holding that the Forest Service violated NEPA where it relied on “stale scientific evidence” without addressing more recent, contradictory population data); Sw. Ctr. for Biological Diversity v. Babbitt, 926 F. Supp. 920, 927 (D. Ariz. 1996) (“The Secretary is mandated to make his decision ‘solely on the basis of the best scientific and commercial data available.’ Reliance on an earlier draft policy without considering the most recent data [in the current draft policy] violates this provision.”) (citation omitted). Indeed, as peer reviewer Dr. Carroll states, the best available science indicates that the marked separation of the Pacific Northwest wolves from other wolves within the taxon “can be established as a consequence of up to four factors [including] ... discontinuity in neutral molecular genetic data as established by Hendricks et al. (2018).”³³

³³ Carroll Peer Review at 18; see also Sarah A. Hendricks et al., Natural Re-Colonization and Admixture of Wolves (*Canis lupus*) in the US Pacific Northwest: Challenges for the Protection and Management of Endangered Taxa, 122 *Heredity*, 133–149 (2019).

In addition, the Northern Rocky Mountain DPS was carved from the lower 48 listing on the basis that it was discrete from any wolves that could repopulate the Pacific Northwest states due to the stretches of unsuitable habitat between them. 73 Fed. Reg. 10,514, 10,519 (Feb. 27, 2008). Yet just five years later, the Service concluded that the wolves in the coastal states “likely originated from the NRM DPS,” and, as a result, the Pacific Northwest wolves cannot qualify as a DPS. 78 Fed. Reg. at 35,712. This sequence of events is, at best, troubling.³⁴ Carving a DPS out of a larger listing only to turn around and declare that the remnant is no longer a valid DPS and therefore unlistable, violates the ESA. Humane Society, 865 F.3d at 603 (“The Service cannot circumvent the Endangered Species Act’s explicit delisting standards by riving an existing listing into a recovered sub-group and a leftover group that becomes an orphan to the law.”).

III. Conclusion

The Service’s proposal to delist the gray wolf nationwide is fatally flawed. The proposal writes-off vast portions of suitable gray wolf habitat and gray wolf populations and individuals outside of a single core population in the Great Lakes. The Service’s conclusion that the gray wolf is recovered is biologically unsound and contrary to the ESA. We urge the Service to abandon its current proposal and instead focus on a strategy for the restoration of the gray wolf to the large areas of suitable habitat that exist in the lower 48 states, including the southern Rocky Mountains, Pacific Northwest and Northeast.

Sincerely,



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³⁴ See Carroll Peer Review at 16–17 (“discreteness and significance of a population does not require complete reproductive isolation from other populations... [having determined in 2007 that despite] occasional individual wolves or packs dispers[ing] among populations, the NRM DPS could still display the required discreteness...It is inconsistent and illogical for the Service to now argue that such occasional dispersal prevents recognition of a DPS.”)

